ADDENDUM

Public Building Commission of Chicago | Richard J. Daley Center | 50 West Washington Street, Room 200 | Chicago, Illinois 60602 | (312) 744-3090 | pbcchicago.com

ADDENDUM NO.: **01**

PROJECT NAME: **Robert Nathaniel Dett Elementary School Annex and Renovations**

PROJECT NO.: **05445**

CONTRACT NO.: **C1604**

DATE OF ISSUE: **May 23, 2023**

NOTICE OF CHANGES, MODIFICATIONS, OR CLARIFICATIONS TO CONTRACT DOCUMENTS

The following changes, modifications, or clarifications are hereby incorporated and made an integral part of the Contract Documents. Unless clearly expressed otherwise by this Addendum, all terms and conditions defined in the original Contract Documents shall continue in full force and effect and shall have the same meaning in this Addendum. Issued Addenda represent responses/clarifications to various inquiries. Contractors shall be responsible for including all associated labor/material costs in its bid. Drawings/specifications corresponding to inquiry responses will be issued with the Issue for Construction Documents, upon issuance of building permit.

ITEM NO. 1: CHANGE TO KEY DATES

Change 1 **A Site Visit has been scheduled for Thursday, May 25, 2023 between 7:00am and 9:00am.** The school is located at 2131 West Monroe Street, in Chicago, Illinois. Contractors are to enter the school through the Main Entrance and follow sign-in procedures per CPS requirements. Parking is prohibited in the school parking lot and on the south side of Monroe Street. General street parking is available around the site. Please wear appropriate PPE gear.

ITEM NO. 2: REVISIONS TO BOOK 1 – PBC INSTRUCTIONS TO BIDDERS

Change 1 On Page 6 of 44, DELETE Milestone #2, Milestone Date 'August 11, 20224', and REPLACE WITH Milestone #2, Milestone Date 'August 11, 2024'

ITEM NO. 3: REVISIONS TO BOOK 2 – PBC STANDARD TERMS AND CONDITIONS

None.

ITEM NO. 4: REVISIONS TO BOOK 3 – TECHNICAL SPECIFICATIONS

Change 1 **Book 3 – Volume 1 – REVISE** – Specification Section 00 01 02 – Table of Contents

Change 2 **Book 3 – Volume 1 – REVISE** – Specification Section 02 24 00 – Environmental Assessment: added text correcting information for hydraulic conductivity sample, replaced Table 1.d to correct a formatting issue

Change 3 **Book 3 - Volume 1 - REVISE** - Specification Section 10 21 13.19 - Plastic Toilet Partitions: added Phenolic Toilet Compartments (2.03) and modified Accessories (2.04)

Change 4 **Book 3 - Volume 1 - REVISE** - Specification Section 10 28 00 - Toilet, Bath, and Laundry Accessories: removed Paper Towel Dispenser and replaced with Combination Paper Towel Dispenser and Waste Receptacle (2.02I).

Change 5 **Book 3 - Volume 1 - REVISE** - Specification Section 10 51 13 - Metal Lockers: removed single tier configuration and replaced with double tier configuration for all new lockers (2.02A4).

Change 6 **Book 3 - Volume 1 - REVISE** - Specification Section 11 66 23.11 Gymnasium Equipment – Elementary Schools: Paragraph numbering/format was incorrect and has been corrected; content of this section has not changed.

Change 7 **Book 3 - Volume 1 - REVISE** - Specification Section 12 24 96 - Motorized Window Shade: removed single roller motorized shade and replaced with dual roller motorized shade; added Shade Fabric F-1 and F-2 (2.02B)

Change 8 **Book 3 - Volume 1 - REVISE** - Specification Section 12 66 13 - Telescoping Bleachers: removed Wall Attached Telescoping Stands and replaced with Floor Attached, Freestanding Telescoping Stands (2.02B).

Change 9 **Book 3 - Volume 2 - REVISE** - Specification Section 23 09 23 - Direct Digital Control System for HVAC: revise Approved Vendors and Their Product Lines to one approved vendor (3.14).

Change 10 **Book 3 – Volume 2 – REVISE** – Specification Earthwork for Permeable Surface Systems 31 22 15: revised text related to additional subsurface investigation report from 4/27/2023 draft version to finalized 5/17/2023 version, changed reference to CCDD table from Table SMP-01 to Table 5, replaced Table 2.a through Table 2.d to reflect format changes requested by PBC, replaced soil management plan – changed to reflect revised depth of excavation for trees

Change 11 **Book 3 – Volume 2 – REVISE** – Soil, Fill, Backfill, CU Structural Soil & Construction & Demolition Debris Removal 31 23 18.13: replaced soil management plan SMP-01 – changed to reflect revised depth of excavation for trees, changed reference to CCDD table from table SMP-01 to Table 5

Change 12 **Book 3 – Volume 2 – REVISE** – Clean Construction or Demolition Debris and Uncontaminated Soil Disposal 31 23 18.14: replaced soil management plan SMP-01 – changed to reflect revised depth of excavation for trees, changed reference to CCDD table from Table SMP-01 to Table 5

ITEM NO. 5: REVISIONS TO DRAWINGS

Change 1 **REVISE** Drawing no. Cover, COVER SHEET, updated drawing list

Change 2 **REVISE** Drawing No SMP-01, Soil Management Plan, clarified scope for UST

Change 3 **REVISE** Drawing No. C1-00, SITE DEMOLITION PLAN, revised sewer abandonment note near the driveway entrance, revised the ATT duct removal/relocation note, added ATT excavation note

Change 4 **REVISE** Drawing No. C2-00, SITE DIMENSION PLAN, revised sidewalk and planter curb at south vestibule of gym annex, added 5'x5' concrete pad at NW corner of annex

Change 5 **REVISE** Drawing C4-00, SITE UTILITY PLAN, revised the ATT duct removal/relocation note

Change 6 **REVISE** Drawing L1-00, LANDSCAPE PLAN, planting adjusted around the 5x5 concrete pad at NW corner of annex, quantity of VID has been adjusted to (33) along the annex, detail 2 has been renamed GAS ENCLOSURE DETAIL and scale noted as NTS, added note requiring lockable latch to Detail 2

Change 7 **REVISE** Drawing No. S-101, ANNEX FOUNDATION AND GROUND FLOOR PLAN, x-brace removed along FL 7, shear wall note added along FL 7.8

Change 8 **REVISE** Drawing No. S-102, ANNEX ROOF FRAMING PLAN, basketball backstop roof beams added, lower roof decks changed to acoustic to match gym, top of steel elevation changed in link, FL 7.8 to FL12

Change 9 **REVISE** Drawing No. S-104, CLRM WING PARTIAL FOUNDATION AND FRAMING PLAN, details added

Change 10 **REVISE** Drawing No. S-201, FRAMING ELEVATIONS, x-brace removed, tension values updated

Change 11 **REVISE** Drawing No. S-402, SERVICE WING ENLARGED FRAMING PLAN AND DETAILS, overall framing updates, entire sheet

Change 12 **REVISE** Drawing No. S-504, STEEL BRACED FRAME DETAILS, overall dimensional updates to the truss

Change 13 **ADD** Drawing No. S-601, MASONRY DETAILS, new sheet

Change 14 **REVISE** Drawing No. A-100A, Annex Floor Plan, adjusted wall and door locations throughout corridor, added display case at Hall 171A

Change 15 **REVISE** Drawing No. A-100B, Annex RCP, revised ceiling and lighting design for the community room, hallway, vestibules, lobby/pre-function, gender neutral restroom, closet 182, gym, gym storage, gym office

Change 16 **REVISE** Drawing No. A-200, Annex Enlarged Lobby Plan and RCP, revised ceiling & lighting, revised location of west wall, added dimensions

Change 17 **REVISE** Drawing No. A-201, Annex Enlarged Corridor Plan and RCP, revised ceiling & lighting, removed furred partition at north wall, added dimensions

Change 18 **REVISE** Drawing No. A-202, Annex Enlarged Hallway Link Plan and RCP, revised ceiling & lighting, added detail callout for rated vestibule, updated wall tag

Change 19 **REVISE** Drawing No. A-203A, Annex Enlarged Gym Plan, revised location of floor logos

Change 20 **REVISE** Drawing No. A-203B, Annex Enlarged Gym RCP, rotated light fixtures, revised ceiling and lighting at gym office and gym storage areas, motorized window treatments are now dual shade devices with blackout and 5% open

Change 21 **REVISE** Drawing No. A-204, Annex Enlarged Community Room Plan and RCP, revised ceiling and lighting, clarified dimensions of closet

Change 22 **REVISE** Drawing No. A-205, Annex Bathroom Plan and RCP, revised custodial room layout, included ceiling heights

Change 23 **REVISE** Drawing No. A-300, Annex Corridor Interior Elevations, updated elevation to show exposed area above solid surface wall panels, updated display case dimensions, removed window treatments from the lobby corridor areas

Change 24 **REVISE** Drawing No. A-301, Annex Community Room Corridor Interior Elevations, updated elevation to show exposed area above solid surface wall panels, updated display case dimensions, removed window treatments from the lobby corridor areas

Change 25 **REVISE** Drawing No. A-301B, Annex Hallway Link and Service Corridor Elevations, updated to show area above solid surface wall panels, added section references, removed window treatments

Change 26 **REVISE** Drawing No. A-302, Annex Gymnasium Interior Elevations, updated keynote AX.16 for motorized shades to indicate dual shades, adjusted extents of window guards, updated wall finishes to show multiple paint colors, updated keynote AX.22 to include notching wall pads around wall devices

Change 27 **REVISE** Drawing No. A-303, Annex Gymnasium Interior Elevations, updated keynote AX.16 for motorized shades to indicate dual shades, updated wall finishes to show multiple paint colors, updated keynote AX.22 to include notching wall pads around wall devices

Change 28 **REVISE** Drawing No. A-303A, Annex Interior Bathroom Elevations, updated graphics to show solid surface wall panels

Change 29 **REVISE** Drawing No. A-410, Annex Building Section, adjusted location of interior wall

Change 30 **REVISE** Drawing No. A-423, Wall Sections, revised location of interior wall

Change 31 **REVISE** Drawing No. A-430, Exterior Details, revised location of interior wall

Change 32 **REVISE** Drawing No. A-432, Exterior Details, revised plan details near display case

Change 33 **REVISE** Drawing No. A-433, Exterior Details, revised plan detail to reflect relocated interior wall

Change 34 **REVISE** Drawing No. A-501A, Door Schedule, adjusted notes

Change 35 **REVISE** Drawing No. A-501B, Door Schedule, added detail

Change 36 **REVISE** Drawing No. A-502, Finish Schedule, updated finishes

Change 37 **REVISE** Drawing No. A-503, Finish Legend, adjusted equipment basis of design

Change 38 **REVISE** Drawing No. A-700, Interior Details, removed detail for community room ceiling opening, revised details to remove metal panel ceiling in annex corridor, updated storefront head detail for community room, revised operable partition head detail

Change 39 **REVISE** Drawing No. A-701, Interior Details, revised gym floor details, clarified vestibule grate detail, added plan details for solid surface conditions

Change 40 **REVISE** Drawing No. A-703, Interior Details, updated display case millwork

Change 41 **REVISE** Drawing No. MD-201, clarified scope for demolition of existing utility gas meter, revised extent of expected duct demolition per revised MAU S-3 duct layout

Change 42 **REVISE** Drawing No. M-200, relocated exposed VAV/FPB, changed ductwork to spiral, revised diffusers, revised air transfer outlets at exposed areas, added return diffusers in community room, revised CAV 177 location, modified keynotes associated with revisions, changed diffuser types at gym storage, revised gym duct layout to above bottom chords of structural trusses

Change 43 **REVISE** Drawing No. M-200A, removed RTU-4 plenum

Change 44 **REVISE** Drawing No. M-201, Revised MAU S-3 duct layout, revised duct layout at existing gym/stage and added notes for duct installation

Change 45 **REVISE** Drawing No. M-202, removed scope associated with adding CO2 sensors and demand control ventilation

Change 46 **REVISE** Drawing No. M-203, removed scope associated with adding CO2 sensors and demand control ventilation

Change 47 **REVISE** Drawing No. M-204, removed scope associated with adding CO2 sensors and demand control ventilation

Change 48 **REVISE** Drawing No. M-206, Moved MAU-S-3 and CU-3 based on revised platform location

Change 49 **REVISE** Drawing No. M-301, clarified scope for new utility gas meter, cleaned up drawing based on relocated VAV, CAV, FPB
Change 50 **REVISE** Drawing No. M-800, revised fan schedule notes to remove proprietary requirements and spring isolation, revised fan powered box schedule notes to clarify return air filter requirements
Change 51 **REVISE** Drawing No. M-801, changed diffuser type E
Change 52 **REVISE** Drawing No. M-907, removed typical zone and added downstream duct static pressure, revised supply dan airflow measuring station symbol to indicate dan inlet type
Change 53 **REVISE** Drawing No. M-908, added filter at exhaust inlet of energy wheel, revised supply fan airflow measuring station symbol to indicate dan inlet type
Change 54 **REVISE** Drawing No. ED-201, adjusted keynote locations
Change 55 **REVISE** Drawing No. ED-203, revised pull box note
Change 56 **REVISE** Drawing No. ED-204, revised pull box note, adjusted keynote
Change 57 **REVISE** Drawing No. ED-301, adjusted keynote
Change 58 **REVISE** Drawing No. E-010, recircuited electric car chargers and parking lot lights, added new panel LP-1W, added cameras, added visual device
Change 59 **REVISE** Drawing No. E-201, added j-box for drinking fountains, relocated TV in gymnasium, revised waterproof receptacles outside
Change 60 **REVISE** Drawing No. E-201A, added electric water heater, resized feeder sizes
Change 61 **REVISE** Drawing No. E-202, added cameras
Change 62 **REVISE** Drawing No. E-202A, added feeder size to ceiling cassette
Change 63 **REVISE** Drawing No. E-203, added TV/WAP to multipurpose room, added cameras
Change 64 **REVISE** Drawing No. E-205, added disconnect to condenser unit
Change 65 **REVISE** Drawing No. E-206, added disconnect and resized feeder size
Change 66 **REVISE** Drawing No. E-301, revised light fixtures, additional EBUs added, revised circuiting, revised occupancy sensors
Change 67 **REVISE** Drawing No. E-302, added EBU outside elevator
Change 68 **REVISE** Drawing No. E-303, added EBU outside elevator
Change 69 **REVISE** Drawing No. E-304, added EBU outside elevator
Change 70 **REVISE** Drawing No. E-500, moved lighting control panel
Change 71 **REVISE** Drawing No. E-600, changes to one-line diagram, changed feeder sizes
Change 72 **REVISE** Drawing No. E-701, adjusted detail 3
Change 73 **REVISE** Drawing No. E-702, adjusted detail 3
Change 74 **REVISE** Drawing No. E-800, adjusted loads
Change 75 **REVISE** Drawing No. E-801, adjusted loads, added LP-1W panel, added lighting fixtures to schedule
Change 76 **REVISE** Drawing No. PD-100, added notes for existing fixtures
Change 77 **REVISE** Drawing No. PD-201, added notes for existing fixtures
Change 78 **REVISE** Drawing No. PD-202, added notes for existing fixtures
Change 79 **REVISE** Drawing No. PD-203, added notes for existing fixtures
Change 80 **REVISE** Drawing No. PD-204, added notes for existing fixtures
Change 81 **REVISE** Drawing No. P-100A, added vent for floor drains
Change 82 **REVISE** Drawing No. P-100B, added elevator pit pump, revised sanitary piping
Change 83 **REVISE** Drawing No. P-201, added vent for floor drains, revised plumbing tag, revised equipment tag
Change 84 **REVISE** Drawing No. P-202, revised sanitary piping, revised plumbing fixture tag, revised hot water return routing, added OHD, added sump pump discharge pipe
Change 85 **REVISE** Drawing No. P-203, revised riser tag
Change 86 **REVISE** Drawing No. P-204, revised riser tag and notes, revised fixture tag
Change 87 **REVISE** Drawing No. P-500, revised incoming water services
Change 88 **REVISE** Drawing No. P-800, revised plumbing fixture specification
Change 89 **REVISE** Drawing No. FP-000, NFPA codes updated
Change 90 **REVISE** Drawing No. FP-100, Modified incoming water service room valving and risers

ITEM NO. 6: REQUESTS FOR INFORMATION

RFI-1.

Question: **The Bid Form provided in the specifications and Excel Format list (4) four allowances. Site Work, Camera, Environmental and Moisture Mitigation. Book 1, Page 18, Letter D., Additional Allowances list only (3) three, not included is the Site Work Allowance for $150,000.00. Which is correct?**

Response: There are a total of four (4) allowances on the Bid Form for this Project. Please refer to Book 1 (IV)(C) Site Work Allowance Schedule (Pages 15-16) and (IV)(D) Additional Allowance Schedules (Page 17).

RFI-2.

Question: **Drawing E-301, Rm 172 Community Room, along Vestibule's A & B, there are unmarked lighting fixtures in these areas. I checked the RCP drawings and the RCPs do not list fixture types either. Please clarify.**

Response: Fixtures on Drawing E-301 have been identified. Please refer to revised Drawing E-301 included in this addendum.

RFI-3.

Question: **Fixture schedule is missing the following fixtures that were on the drawings:**
•LX3
•LX4
•LP7C

Response: Drawing E-801 Electrical Schedule has been revised and is included in this addendum.

RFI-4.

Question: **Regarding Photo Voltaic, do we need to provide Infrastructure and install Panels or just Infrastructure?**

Response: Photo Voltaic scope is delegated design to the Contractor. Contractor to provide full system, including panels and infrastructure.

RFI-5.

Question: **I was given your (Contract Officer) email to see if you could help us with a site visit at this school.**

Response: Please refer to Item No. 1 Change No. 1 above.

RFI-6.

Question: **The drawings on this project call for 2 tier lockers and the spec calls for a single tier locker, can you please advise?**

Response: Contractors are to provide 2-tier lockers. ADA lockers are single-tier lockers. Please refer to Drawings A102B, A103B, and A104B and revised Specification 10.51.13 - Metal Lockers included in this addendum.

RFI-7.

Question: **The spec calls for wall mounted bleachers, can you please confirm this? The walls are not structural so these should be floor mounted bleachers.**

Response: Bleachers are to be floor-mounted. Please refer to Drawing A701 and Specification 12.66.13 - Telescoping Bleachers revised and included in this addendum.

This Addendum includes the following attached Specifications and/or Documents:

1. Specification Section 00 01 02 – Table of Contents, dated 5/19/23
2. Specification Section 02 24 00 – Environmental Assessment
3. Specification Section 10 21 13.19 - Plastic Toilet Partitions
4. Specification Section 10 28 00 - Toilet, Bath, and Laundry Accessories
5. Specification Section 10 51 13 - Metal Lockers
6. Specification Section 11 66 23.11 - Gymnasium Equipment
7. Specification Section 12 24 96 - Motorized Window Shades
8. Specification Section 12 66 13 - Telescoping Bleachers
9. Specification Section 23 09 23 - Direct Digital Control System for HVAC
10. Specification Section 31 22 15 - Earthwork for Permeable Surface System
11. Specification Section 31 23 18.13 – Soil, Fill, Backfill, CU Structural Soil & Construction & Demolition Debris Removal
12. Specification Section 31 23 18.14 – Clean Construction or Demolition Debris and Uncontaminated Soil Disposal

This Addendum includes the following attached Drawings:

1. COVER, COVER SHEET, dated 05/19/2023
2. SMP-1, SOIL MANAGEMENT PLAN, dated 05/19/2023
3. C1-00, SITE DEMOLITION PLAN, dated 05/19/2023
4. C2-00, SITE DIMENSION PLAN, dated 05/19/2023
5. C4-00, SITE UTILITY PLAN, dated 05/19/2023
6. L1-00, LANDSCAPE PLAN, dated 05/19/2023
7. S-101, ANNEX FOUNDATION AND GROUND FLOOR PLAN, dated 05/19/2023
8. S-102, ANNEX ROOF FRAMING PLAN, dated 05/19/2023
9. S-104, CLRM WING PARTIAL FOUNDATION AND FRAMING PLAN, dated 05/19/2023
10. S-201, FRAMING ELEVATIONS, dated 05/19/2023
11. S-402, SERVICE WING ENLARGED FRAMING PLAN AND DETAILS, dated 05/19/2023
12. S-504, STEEL TRUSS DETAILS, dated 05/19/2023
13. S-601, MASONRY DETAILS, dated 05/19/2023
14. A-100A, ANNEX FLOOR PLAN - LEVEL 1, dated 05/19/2023
15. A-100B, ANNEX RCP - LEVEL 1, dated 05/19/2023
16. A-200, ANNEX ENLARGED LOBBY PLAN & RCP, dated 05/19/2023
17. A-201, ANNEX ENLARGED CORRIDOR PLAN & RCP, dated 05/19/2023
18. A-202, ANNEX ENLARGED HALLWAY LINK PLAN & RCP, dated 05/19/2023
19. A-203A, ANNEX ENLARGED GYMNASIUM PLAN, dated 05/19/2023
20. A-203B, ANNEX ENLARGED GYMNASIUM RCP, dated 05/19/2023
21. A-204, ANNEX ENLARGED COMMUNITY ROOM PLAN & RCP, dated 05/19/2023
22. A-205, ANNEX ENLARGED BATHROOM PLAN AND RCP, dated 05/19/2023
23. A-300, ANNEX CORRIDOR INTERIOR ELEVATIONS, dated 05/19/2023
24. A-301, ANNEX COMMUNITY ROOM AND CORRIDOR INTERIOR ELEVATIONS, dated 05/19/2023
25. A-301B, ANNEX HALLWAY LINK AND SERVICE CORRIDOR INTERIOR ELEVATIONS, dated 05/19/2023
26. A-302, ANNEX GYMNASIUM INTERIOR ELEVATIONS, dated 05/19/2023
27. A-303, ANNEX GYMNASIUM INTERIOR ELEVATIONS, dated 05/19/2023
28. A-303A, ANNEX INTERIOR BATHROOM ELEVATIONS, dated 05/19/2023
29. A-410, ANNEX BUILDING SECTIONS, dated 05/19/2023
30. A-423, WALL SECTIONS, dated 05/19/2023
31. A-430, EXTERIOR DETAILS, dated 05/19/2023
32. A-432, EXTERIOR DETAILS, dated 05/19/2023
33. A-433, EXTERIOR DETAILS, dated 05/19/2023
34. A-501A, DOOR SCHEDULE, dated 05/19/2023
35. A-501B, DOOR DETAILS, dated 05/19/2023
36. A-502, FINISH NOTES AND SCHEDULE, dated 05/19/2023
37. A-503, FINISH LEGEND, PLUMBING, SPECIALTY EQP SCHEDULE, dated 05/19/2023
38. A-700, INTERIOR DETAILS, dated 05/19/2023
39. A-701, INTERIOR DETAILS, dated 05/19/2023

40. A-703, INTERIOR DETAILS, dated 05/19/2023
41. MD-201, SERVICE WING LEVEL 1 - HVAC DEMO PLAN, dated 05/19/2023
42. M-200, ANNEX LEVEL 1 - HVAC FLOOR PLAN, dated 05/19/2023
43. M-200A, ANNEX LEVEL 1 - HVAC RETURN AIR PLENUM FLOOR PLAN, dated 05/19/2023
44. M-201, SERVICE WING LEVEL 1 - HVAC FLOOR PLAN, dated 05/19/2023
45. M-202, CLRM WING LEVEL 1 - HVAC FLOOR PLAN, dated 05/19/2023
46. M-203, CLRM WING LEVEL 2 - HVAC FLOOR PLAN, dated 05/19/2023
47. M-204, CLRM WING LEVEL 3 - HVAC FLOOR PLAN, dated 05/19/2023
48. M-206, SERVICE WING - HVAC ROOF PLAN, dated 05/19/2023
49. M-301, ANNEX & SERVICE WING LEVEL 1 - HVAC PIPING PLAN, dated 05/19/2023
50. M-800, MECHANICAL SCHEDULES, dated 05/19/2023
51. M-801, MECHANICAL SCHEDULES, dated 05/19/2023
52. M-907, BAS - RTU-4, dated 05/19/2023
53. M-908, BAS - RTU-3 & RTU-5, dated 05/19/2023
54. ED-201, FIRST FLOOR ELECTRICAL DEMOLITION PLAN - SERVICE WING, dated 05/19/2023
55. ED-203, SECOND FLOOR ELECTRICAL DEMOLITION PLAN - CLRM WING, dated 05/19/2023
56. ED-204, THIRD FLOOR ELECTRICAL DEMOLITION PLAN - CLRM WING, dated 05/19/2023
57. ED-301, FIRST FLOOR LIGHTING DEMOLITION PLAN - SERVICE WING, dated 05/19/2023
58. E-010, ELECTRICAL SITE PLAN, dated 05/19/2023
59. E-201, FIRST FLOOR POWER PLAN - SERVICE WING, dated 05/19/2023
60. E-201A, FIRST FLOOR MECHANICAL POWER PLAN - SERVICE WING, dated 05/19/2023
61. E-202, FIRST FLOOR POWER PLAN - CLRM WING, dated 05/19/2023
62. E-202A, FIRST FLOOR MECHANICAL POWER PLAN - CLRM WING, dated 05/19/2023
63. E-203, SECOND FLOOR POWER PLAN - CLRM WING, dated 05/19/2023
64. E-205, ROOF LEVEL MECHANICAL POWER PLAN, dated 05/19/2023
65. E-206, ROOF LEVEL MECHANICAL POWER PLAN, dated 05/19/2023
66. E-301, FIRST FLOOR LIGHTING PLAN SERVICE WING, dated 05/19/2023
67. E-302, FIRST FLOOR LIGHTING PLAN - CLRM WING, dated 05/19/2023
68. E-303, SECOND FLOOR LIGHTING PLAN - CLRM WING, dated 05/19/2023
69. E-304, THIRD FLOOR LIGHTING PLAN - CLRM WING, dated 05/19/2023
70. E-500, PARTIAL PLANS dated 05/19/2023
71. E-600, ELECTRICAL ONE LINE DIAGRAM, dated 05/19/2023
72. E-701, ELECTRICAL DETAILS, dated 05/19/2023
73. E-702, ELECTRICAL DETAILS, dated 05/19/2023
74. E-800, ELECTRICAL SCHEDULES, dated 05/19/2023
75. E-801, ELECTRICAL SCHEDULES, dated 05/19/2023
76. PD-100, PLUMBING DEMOLITION PLAN - SERVICE WING, dated 05/19/2023
77. PD-201, FIRST FLOOR PLUMBING DEMOLITION PLAN - SERVICE WING, dated 05/19/2023
78. PD-202, FIRST FLOOR PLUMBING DEMOLITION PLAN - CLRM WING, dated 05/19/2023
79. PD-203, SECOND FLOOR PLUMBING DEMOLITION PLAN - CLRM WING, dated 05/19/2023
80. PD-204, THIRD FLOOR PLUMBING DEMOLITION PLAN - CLRM WING, dated 05/19/2023
81. P-100A, PLUMBING UNDERFLOOR PLAN - SERVICE WING - NEW WORK, dated 05/19/2023
82. P-100B, PLUMBING UNDERFLOOR PLAN - CLRM WING, dated 05/19/2023
83. P-201, FIRST FLOOR PLUMBING PLAN - SERVICE WING - NEW WORK, dated 05/19/2023
84. P-202, FIRST FLOOR PLUMBING PLAN - CLRM WING - NEW WORK, dated 05/19/2023
85. P-203, SECOND FLOOR PLUMBING PLAN - CLRM WING - NEW WORK, dated 05/19/2023
86. P-204, THIRD FLOOR PLUMBING PLAN - CLRM WING - NEW WORK, dated 05/19/2023
87. P-500, PLUMBING ENLARGED VIEWS, dated 05/19/2023
88. P-800, PLUMBING SCHEDULES, dated 05/19/2023
89. FP-000, FIRE PROTECTION LEGENDS, NOTES & ABBREVIATIONS, dated 05/19/2023
90. FP-101, FIRST FLOOR FIRE PROTECTION PLAN - SERVICE WING, dated 05/19/2023

END OF ADDENDUM NO. 01

SECTION 00 01 02

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VOLUME 1 – GENERAL AND ARCHITECTURAL

DIVISION 00 - PROCUREMENT AND CONTRACTING REQUIREMENTS

DIVISION 01 - GENERAL REQUIREMENTS

DIVISION 02 - EXISTING CONDITIONS

VOLUME 3 – ENVIRONMENTAL (ASBESTOS AND LEAD)

END OF SECTION

SECTION 02 24 00

ENVIRONMENTAL ASSESSMENT

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. This environmental summary is for information purposes only. No work is associated with this section.

1.02 AVAILABLE ENVIRONMENTAL ASSESSMENT DOCUMENTS

A. Phase I Environmental Site Assessment (ESA) Report by Environmental Design International inc. (EDI), dated December 20, 2022.

B. Limited Phase II Environmental Site Assessment Report by EDI, dated February 24, 2023.

C. Additional Subsurface Investigation Report by EDI, dated May 17, 2023.

1.03 SITE DESCRIPTION

A. The Subject Property is an approximately 0.95-acre area located immediately east of the existing building at Robert Nathaniel Dett Elementary School (Dett ES) located at 2131 West Monroe Street in Chicago, Illinois. The Subject Property is currently occupied by a paved parking surface, two (2) outdoor basketball courts, a paved walking path, and a portion of a playground. The Subject Property is bounded by West Monroe Street to the north, South Hoyne Avenue to the east, Dett ES to the west, and a playground area and a baseball field for the Touhy Herbert Park to the south. The Subject Property is in the West Loop/East Garfield Park neighborhood of Chicago, Illinois, a predominantly residential and institutional area just west of the United Center.

1.04 SITE HISTORY

A. Historical records indicate the Subject Property, and the surrounding area was developed as primarily residential properties from 1889 through the 1950s. The area immediately west of the subject property was developed as Dett ES by 1962 and has remained as a school through present. The Subject Property has been developed as a playground for the school from 1962 to present day.

B. Construction of the adjacent School structure was completed as early as 1962.

1.05 ENVIRONMENTAL CONDITIONS

A. The 2022 Phase I ESA conducted for the Subject Property identified one onsite Recognized Environmental Conditions (REC), in the form of a 10,000-gallon Heating Oil Underground Storage Tank, along the north face of the school building. The UST also represented a Vapor Encroachment Condition (VEC). No offsite RECs, no Historical REC (HRECs), no Controlled RECs (CRECs), and no Business Environmental Risks (BERs) were identified by the Phase I ESA. A *de minimis* condition, in the form of staining near a floor drain inside the school building, was noted.

B. Based on the findings of the 2022 Phase I ESA, a Limited Phase II ESA was completed on December 15, 2022, with a Limited Phase ESA Report issued on February 2023.

Soil Samples

Six soil borings (SB-01 through SB-06) were installed across the subject property with 12 soil samples being collected (two per boring). The samples were submitted to STAT Analytical Laboratories of Chicago, Illinois for chemical analysis. Specifically, soil samples were analyzed for the following:

- Benzene, toluene, ethyl benzene and total xylenes (BTEX).
- Poly Nuclear Aromatic Compounds (PNAs)/Semi-volatile Organic Compounds (SVOCs).
- Resource Conservation and Recovery Act (RCRA) 8 Metals.

Analytical results from the December 2022 soil samples were evaluated against Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) Remedial Objectives as presented in Title 35 of the Illinois Administrative Code (35 IAC), Part 742. This evaluation revealed that the soil samples contained levels of PNAs and RCRA metals that exceeded their applicable TACO Residential Ingestion standards, Construction Worker Inhalation standards, Soil Component of Groundwater Ingestion Exposure Route standards and Chicago Background Values.

Summary Tables presenting the evaluated result are included as **Tables 1a through Table 1d**.

Groundwater Sample

Soil Boring SB-05 was converted into a temporary groundwater well and sample TW-05 was collected. The collected sample was also submitted to STAT for chemical analysis for the following:

- BTEX
- PNAs
- RCRA 8 Metals

Analytical results from the December 2022 groundwater sample were evaluated against IEPA TACO Remedial Objectives as presented in 35 IAC, Part 742. This evaluation revealed that the groundwater sample contained levels of PNAs that exceeded their applicable TACO Class I groundwater standards.

A Summary Table presenting the evaluated results is included as **Table 3**.

C. Based on these exceedence discussed above, an Additional Subsurface Investigation was completed at the Subject Property from March 21 through March 24, 2023, with draft Additional Subsurface Investigation (ASI) Report issued on April 25, 2023.

Soil Samples

Eighteen (18) soil borings (SB-01A, SB-05 A through SB-05D, SB-06 Resample, SB-06A through SB-06D and SB-07 through SB-14) were installed across the subject property. A total of 35 soil samples were collected (two per boring from all borings, except for the SB-06 Resample boring where only 1 sample was collected). The samples from all the borings, except for the SB-06 Resample boring, were submitted to STAT Analytical Laboratories of Chicago, Illinois (STAT) for chemical analysis. The soil sample collected from SB-06 Resample was submitted to STAT to be analyzed for mercury speciation.

The soil samples designated for chemical analysis were to be analyzed for the following:

- Volatile Organic Compounds (VOCs).
- Semi-volatile Organic Compounds (SVOCs).
- Target Analyte List (TAL) Metals.
- Toxicity Characteristic Leaching Procedure (TCLP) Resource Conservation and Recovery Act (RCRA) 8 Metals
- pH
- Percent Moisture

However, STAT was instructed to hold the samples from SB-05A through SB-05C and SB-06B through SB-06C for analysis pending the results from SB-05D and SB-06A.

Chemical Analytical results from the March 2023 ASI soil samples were evaluated against IEPA TACO Remedial Objectives (ROs) as presented in 35 IAC, Part 742. This evaluation revealed that the soil samples contained levels of PNAs and TAL metals that exceeded their applicable TACO Residential Ingestion standards, Construction Worker Inhalation standards, Soil Component of Groundwater Ingestion Exposure Route standards and Chicago Background Values.

The analytical results from the SB-06 Resample effort determined that the collected sample had a hydraulic conductivity of 2.20×10^{-8} centimeters per second (cm/s). This value, in conjunction with other criteria, means that groundwater at the site is classified as Class II.

Groundwater Sample

Three (3) of the 18 soil borings, SB-10, SB-13, and SB-14, were converted into temporary groundwater wells, developed using a peristaltic pump and tygon tubing, and allowed to recharge overnight. However, only TW-10, the converted well from SB-10, had enough groundwater for a complete groundwater sample to be collected. The sample was submitted to STAT for chemical analysis.

Specifically, the sample was to be analyzed for the following:

- VOCs.
- SVOCs.
- TAL Metals.
- pH

Chemical Analytical results from the March 2023 ASI groundwater sample were evaluated against IEPA TACO ROs as presented in 35 IAC, Part 742. This evaluation revealed that the groundwater sample contained levels of PNAs and TAL metals that exceeded their applicable TACO Class II Groundwater Ingestion values.

A Summary Table presenting the evaluated results is included as **Table 3**.

Soil Gas Samples

Three (3) soil gas probes, SG-01 through SG-03, were installed during the ASI. The samples were submitted to STAT for chemical analysis for VOCs, SVOCs and Tentatively Identified Compounds (TICs).

Analytical results from the March 2023 ASI soil gas samples were evaluated against IEPA TACO ROs for Indoor Inhalation as presented in 35 IAC, Part 742, Appendix B, Table H. This evaluation revealed that no Indoor Inhalation ROs were exceeded.

A Summary Table presenting the evaluated results is included as **Table 4**.

Hydraulic Conductivity
A special sample was collected from the SB-10 soil boring from the 10-foot below ground surface (ft. bgs) to 15 ft bgs interval. The sample was submitted to STAT to under physical testing to determine a site-specific hydraulic conductivity value for the Site. STAT subsequently reported that the collected sample had a hydraulic conductivity of 2.20×10^{-8} centimeters per second (cm/s). This value, in conjunction with other criteria, means that groundwater at the site is classified as Class II.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 02 24 00

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023
			Time Collected :	09:55	10:05	19:15	19:25
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 10.66*	pH = 7.8*	pH = 10.6	pH = 7.8
Acetone	70,000	100,000	25	---	---	< 0.066	< 0.073
Benzene	12	0.8	0.17	< 0.0048	< 0.024	< 0.0044	< 0.0049
Bromodichloromethane	10	3,000	0.6	---	---	< 0.0044	< 0.0049
Bromoform	81	53	0.8	---	---	< 0.0044	< 0.0049
Bromomethane	110	10	1.2	---	---	< 0.0088	< 0.0098
2-Butanone	NC	NC	NC	---	---	< 0.066	< 0.073
Carbon disulfide	7,800	720	160	---	---	< 0.044	< 0.049
Carbon tetrachloride	5	0.3	0.33	---	---	< 0.0044	< 0.0049
Chlorobenzene	1,600	130	6.5	---	---	< 0.0044	< 0.0049
Chloroethane	NC	NC	NC	---	---	< 0.0088	< 0.0098
Chloroform	100	0.3	2.9	---	---	< 0.0044	< 0.0049
Chloromethane	NC	NC	NC	---	---	< 0.0088	< 0.0098
Dibromochloromethane	1,600	1,300	0.4	---	---	< 0.0044	< 0.0049
1,1-Dichloroethane	7,800	1,300	110	---	---	< 0.0044	< 0.0049
1,2-Dichloroethane	7	0.4	0.1	---	---	< 0.0044	< 0.0049
1,1-Dichloroethene	3,900	290	0.3	---	---	< 0.0044	< 0.0049
cis-1,2-Dichloroethene	780	1,200	1.1	---	---	< 0.0044	< 0.0049
trans-1,2-Dichloroethene	1,600	3,100	3.4	---	---	< 0.0044	< 0.0049
1,2-Dichloropropane	9	15	0.15	---	---	< 0.0044	< 0.0049
cis-1,3-Dichloropropene	6.4	1.1	0.02	---	---	< 0.0018	< 0.0020
trans-1,3-Dichloropropene	6.4	1.1	0.02	---	---	< 0.0018	< 0.0020
Ethylbenzene	7,800	400	19	< 0.0048	< 0.024	< 0.0044	< 0.0049
2-Hexanone	NC	NC	NC	---	---	< 0.018	< 0.020
4-Methyl-2-pentanone	NC	NC	NC	---	---	< 0.018	< 0.020
Methylene chloride	85	13	0.2	---	---	< 0.0088	< 0.0098
Methyl tert-butyl ether	780	8,800	0.32	---	---	< 0.0044	< 0.0049
Styrene	16,000	1,500	18	---	---	< 0.0044	< 0.0049
1,1,2,2-Tetrachloroethane	NC	NC	NC	---	---	< 0.0044	< 0.0049
Tetrachloroethene	12	11	0.3	---	---	< 0.0044	< 0.0049
Toluene	16,000	650	29	< 0.0048	< 0.024	< 0.0044	< 0.0049
1,1,1-Trichloroethane	NC	1,200	9.6	---	---	< 0.0044	< 0.0049
1,1,2-Trichloroethane	310	1,800	0.3	---	---	< 0.0044	< 0.0049
Trichloroethene	58	5	0.3	---	---	< 0.0044	< 0.0049
Vinyl chloride	0.46	0.28	0.07	---	---	< 0.0044	< 0.0049
Xylenes, Total	16,000	320	150	< 0.015	< 0.073	< 0.013	< 0.015

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-005	22120464-006	22120464-003	22120464-004
			Client Sample ID :	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:15	09:25	08:50	09:00
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 9.26*	pH = 8.31*	pH = 8.17*	pH = 7.86*
Acetone	70,000	100,000	25	---	---	---	---
Benzene	12	0.8	0.17	< 0.026	< 0.022	< 0.0050	< 0.026
Bromodichloromethane	10	3,000	0.6	---	---	---	---
Bromoform	81	53	0.8	---	---	---	---
Bromomethane	110	10	1.2	---	---	---	---
2-Butanone	NC	NC	NC	---	---	---	---
Carbon disulfide	7,800	720	160	---	---	---	---
Carbon tetrachloride	5	0.3	0.33	---	---	---	---
Chlorobenzene	1,600	130	6.5	---	---	---	---
Chloroethane	NC	NC	NC	---	---	---	---
Chloroform	100	0.3	2.9	---	---	---	---
Chloromethane	NC	NC	NC	---	---	---	---
Dibromochloromethane	1,600	1,300	0.4	---	---	---	---
1,1-Dichloroethane	7,800	1,300	110	---	---	---	---
1,2-Dichloroethane	7	0.4	0.1	---	---	---	---
1,1-Dichloroethene	3,900	290	0.3	---	---	---	---
cis-1,2-Dichloroethene	780	1,200	1.1	---	---	---	---
trans-1,2-Dichloroethene	1,600	3,100	3.4	---	---	---	---
1,2-Dichloropropane	9	15	0.15	---	---	---	---
cis-1,3-Dichloropropene	6.4	1.1	0.02	---	---	---	---
trans-1,3-Dichloropropene	6.4	1.1	0.02	---	---	---	---
Ethylbenzene	7,800	400	19	< 0.026	< 0.022	< 0.0050	< 0.026
2-Hexanone	NC	NC	NC	---	---	---	---
4-Methyl-2-pentanone	NC	NC	NC	---	---	---	---
Methylene chloride	85	13	0.2	---	---	---	---
Methyl tert-butyl ether	780	8,800	0.32	---	---	---	---
Styrene	16,000	1,500	18	---	---	---	---
1,1,2,2-Tetrachloroethane	NC	NC	NC	---	---	---	---
Tetrachloroethene	12	11	0.3	---	---	---	---
Toluene	16,000	650	29	< 0.026	< 0.022	< 0.0050	< 0.026
1,1,1-Trichloroethane	NC	1,200	9.6	---	---	---	---
1,1,2-Trichloroethane	310	1,800	0.3	---	---	---	---
Trichloroethene	58	5	0.3	---	---	---	---
Vinyl chloride	0.46	0.28	0.07	---	---	---	---
Xylenes, Total	16,000	320	150	< 0.077	< 0.067	< 0.015	< 0.077

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010
			Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	08:25	08:35	10:25	10:35
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 8.17*	pH = 7.86*	pH = 8.29*	pH = 7.96*
Acetone	70,000	100,000	25	---	---	---	---
Benzene	12	0.8	0.17	< 0.024	< 0.023	< 0.0051	< 0.0063
Bromodichloromethane	10	3,000	0.6	---	---	---	---
Bromoform	81	53	0.8	---	---	---	---
Bromomethane	110	10	1.2	---	---	---	---
2-Butanone	NC	NC	NC	---	---	---	---
Carbon disulfide	7,800	720	160	---	---	---	---
Carbon tetrachloride	5	0.3	0.33	---	---	---	---
Chlorobenzene	1,600	130	6.5	---	---	---	---
Chloroethane	NC	NC	NC	---	---	---	---
Chloroform	100	0.3	2.9	---	---	---	---
Chloromethane	NC	NC	NC	---	---	---	---
Dibromochloromethane	1,600	1,300	0.4	---	---	---	---
1,1-Dichloroethane	7,800	1,300	110	---	---	---	---
1,2-Dichloroethane	7	0.4	0.1	---	---	---	---
1,1-Dichloroethene	3,900	290	0.3	---	---	---	---
cis-1,2-Dichloroethene	780	1,200	1.1	---	---	---	---
trans-1,2-Dichloroethene	1,600	3,100	3.4	---	---	---	---
1,2-Dichloropropane	9	15	0.15	---	---	---	---
cis-1,3-Dichloropropene	6.4	1.1	0.02	---	---	---	---
trans-1,3-Dichloropropene	6.4	1.1	0.02	---	---	---	---
Ethylbenzene	7,800	400	19	< 0.024	< 0.023	< 0.0051	< 0.0063
2-Hexanone	NC	NC	NC	---	---	---	---
4-Methyl-2-pentanone	NC	NC	NC	---	---	---	---
Methylene chloride	85	13	0.2	---	---	---	---
Methyl tert-butyl ether	780	8,800	0.32	---	---	---	---
Styrene	16,000	1,500	18	---	---	---	---
1,1,2,2-Tetrachloroethane	NC	NC	NC	---	---	---	---
Tetrachloroethene	12	11	0.3	---	---	---	---
Toluene	16,000	650	29	< 0.024	< 0.023	< 0.0051	< 0.0063
1,1,1-Trichloroethane	NC	1,200	9.6	---	---	---	---
1,1,2-Trichloroethane	310	1,800	0.3	---	---	---	---
Trichloroethene	58	5	0.3	---	---	---	---
Vinyl chloride	0.46	0.28	0.07	---	---	---	---
Xylenes, Total	16,000	320	150	< 0.071	< 0.070	< 0.015	< 0.018

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030736-011	23030736-012	22120464-011	22120464-012
			Client Sample ID :	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
			Date Collected :	03/21/2023	03/21/2023	12/15/2022	12/15/2022
			Time Collected :	16:50	17:00	10:50	11:00
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 8.29	pH = 7.96	pH = 8.09	pH = 8.08
Acetone	70,000	100,000	25	< 0.10	< 0.075	---	---
Benzene	12	0.8	0.17	< 0.0067	< 0.0050	< 0.0060	< 0.0049
Bromodichloromethane	10	3,000	0.6	< 0.0067	< 0.0050	---	---
Bromoform	81	53	0.8	< 0.0067	< 0.0050	---	---
Bromomethane	110	10	1.2	< 0.013	< 0.010	---	---
2-Butanone	NC	NC	NC	< 0.10	< 0.075	---	---
Carbon disulfide	7,800	720	160	< 0.067	< 0.050	---	---
Carbon tetrachloride	5	0.3	0.33	< 0.0067	< 0.0050	---	---
Chlorobenzene	1,600	130	6.5	< 0.0067	< 0.0050	---	---
Chloroethane	NC	NC	NC	< 0.013	< 0.010	---	---
Chloroform	100	0.3	2.9	< 0.0067	< 0.0050	---	---
Chloromethane	NC	NC	NC	< 0.013	< 0.010	---	---
Dibromochloromethane	1,600	1,300	0.4	< 0.0067	< 0.0050	---	---
1,1-Dichloroethane	7,800	1,300	110	< 0.0067	< 0.0050	---	---
1,2-Dichloroethane	7	0.4	0.1	< 0.0067	< 0.0050	---	---
1,1-Dichloroethene	3,900	290	0.3	< 0.0067	< 0.0050	---	---
cis-1,2-Dichloroethene	780	1,200	1.1	< 0.0067	< 0.0050	---	---
trans-1,2-Dichloroethene	1,600	3,100	3.4	< 0.0067	< 0.0050	---	---
1,2-Dichloropropane	9	15	0.15	< 0.0067	< 0.0050	---	---
cis-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0027	< 0.0020	---	---
trans-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0027	< 0.0020	---	---
Ethylbenzene	7,800	400	19	< 0.0067	< 0.0050	< 0.0060	< 0.0049
2-Hexanone	NC	NC	NC	< 0.027	< 0.020	---	---
4-Methyl-2-pentanone	NC	NC	NC	< 0.027	< 0.020	---	---
Methylene chloride	85	13	0.2	< 0.013	< 0.010	---	---
Methyl tert-butyl ether	780	8,800	0.32	< 0.0067	< 0.0050	---	---
Styrene	16,000	1,500	18	< 0.0067	< 0.0050	---	---
1,1,2,2-Tetrachloroethane	NC	NC	NC	< 0.0067	< 0.0050	---	---
Tetrachloroethene	12	11	0.3	< 0.0067	< 0.0050	---	---
Toluene	16,000	650	29	< 0.0067	< 0.0050	< 0.0060	< 0.0049
1,1,1-Trichloroethane	NC	1,200	9.6	< 0.0067	< 0.0050	---	---
1,1,2-Trichloroethane	310	1,800	0.3	< 0.0067	< 0.0050	---	---
Trichloroethene	58	5	0.3	< 0.0067	< 0.0050	---	---
Vinyl chloride	0.46	0.28	0.07	< 0.0067	< 0.0050	---	---
Xylenes, Total	16,000	320	150	< 0.020	< 0.015	< 0.018	< 0.015

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002
			Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:25	18:30	19:20	19:25
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 8.09	pH = 8.08	pH = 8.19	pH = 8.09
Acetone	70,000	100,000	25	< 0.072	< 0.068	< 0.077	< 0.067
Benzene	12	0.8	0.17	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Bromodichloromethane	10	3,000	0.6	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Bromoform	81	53	0.8	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Bromomethane	110	10	1.2	< 0.0095	< 0.0091	< 0.010	< 0.0089
2-Butanone	NC	NC	NC	< 0.072	< 0.068	< 0.077	< 0.067
Carbon disulfide	7,800	720	160	< 0.048	< 0.045	< 0.051	< 0.045
Carbon tetrachloride	5	0.3	0.33	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Chlorobenzene	1,600	130	6.5	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Chloroethane	NC	NC	NC	< 0.0095	< 0.0091	< 0.010	< 0.0089
Chloroform	100	0.3	2.9	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Chloromethane	NC	NC	NC	< 0.0095	< 0.0091	< 0.010	< 0.0089
Dibromochloromethane	1,600	1,300	0.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045
1,1-Dichloroethane	7,800	1,300	110	< 0.0048	< 0.0045	< 0.0051	< 0.0045
1,2-Dichloroethane	7	0.4	0.1	< 0.0048	< 0.0045	< 0.0051	< 0.0045
1,1-Dichloroethene	3,900	290	0.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045
cis-1,2-Dichloroethene	780	1,200	1.1	< 0.0048	< 0.0045	< 0.0051	< 0.0045
trans-1,2-Dichloroethene	1,600	3,100	3.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045
1,2-Dichloropropane	9	15	0.15	< 0.0048	< 0.0045	< 0.0051	< 0.0045
cis-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0019	< 0.0018	< 0.0021	< 0.0018
trans-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0019	< 0.0018	< 0.0021	< 0.0018
Ethylbenzene	7,800	400	19	< 0.0048	< 0.0045	< 0.0051	< 0.0045
2-Hexanone	NC	NC	NC	< 0.019	< 0.018	< 0.021	< 0.018
4-Methyl-2-pentanone	NC	NC	NC	< 0.019	< 0.018	< 0.021	< 0.018
Methylene chloride	85	13	0.2	< 0.0095	< 0.0091	< 0.010	< 0.0089
Methyl tert-butyl ether	780	8,800	0.32	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Styrene	16,000	1,500	18	< 0.0048	< 0.0045	< 0.0051	< 0.0045
1,1,2,2-Tetrachloroethane	NC	NC	NC	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Tetrachloroethene	12	11	0.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Toluene	16,000	650	29	< 0.0048	< 0.0045	< 0.0051	< 0.0045
1,1,1-Trichloroethane	NC	1,200	9.6	< 0.0048	< 0.0045	< 0.0051	< 0.0045
1,1,2-Trichloroethane	310	1,800	0.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Trichloroethene	58	5	0.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Vinyl chloride	0.46	0.28	0.07	< 0.0048	< 0.0045	< 0.0051	< 0.0045
Xylenes, Total	16,000	320	150	< 0.014	< 0.014	< 0.015	< 0.013

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030736-003	23030736-004	23030736-005	23030736-006
			Client Sample ID :	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:00	19:10	17:10	17:15
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 8.42	pH = 7.69	pH = 8.47	pH = 8.18
Acetone	70,000	100,000	25	0.077	< 0.066	< 0.066	< 0.072
Benzene	12	0.8	0.17	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Bromodichloromethane	10	3,000	0.6	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Bromoform	81	53	0.8	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Bromomethane	110	10	1.2	< 0.010	< 0.0089	< 0.0088	< 0.0095
2-Butanone	NC	NC	NC	< 0.076	< 0.066	< 0.066	< 0.072
Carbon disulfide	7,800	720	160	< 0.051	< 0.044	< 0.044	< 0.048
Carbon tetrachloride	5	0.3	0.33	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Chlorobenzene	1,600	130	6.5	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Chloroethane	NC	NC	NC	< 0.010	< 0.0089	< 0.0088	< 0.0095
Chloroform	100	0.3	2.9	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Chloromethane	NC	NC	NC	< 0.010	< 0.0089	< 0.0088	< 0.0095
Dibromochloromethane	1,600	1,300	0.4	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,1-Dichloroethane	7,800	1,300	110	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,2-Dichloroethane	7	0.4	0.1	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,1-Dichloroethene	3,900	290	0.3	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,2-Dichloroethene	780	1,200	1.1	< 0.0051	< 0.0044	< 0.0044	< 0.0048
trans-1,2-Dichloroethene	1,600	3,100	3.4	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,2-Dichloropropane	9	15	0.15	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0020	< 0.0018	< 0.0018	< 0.0019
trans-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0020	< 0.0018	< 0.0018	< 0.0019
Ethylbenzene	7,800	400	19	< 0.0051	< 0.0044	< 0.0044	< 0.0048
2-Hexanone	NC	NC	NC	< 0.020	< 0.018	< 0.018	< 0.019
4-Methyl-2-pentanone	NC	NC	NC	< 0.020	< 0.018	< 0.018	< 0.019
Methylene chloride	85	13	0.2	< 0.010	< 0.0089	< 0.0088	< 0.0095
Methyl tert-butyl ether	780	8,800	0.32	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Styrene	16,000	1,500	18	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,1,2,2-Tetrachloroethane	NC	NC	NC	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Tetrachloroethene	12	11	0.3	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Toluene	16,000	650	29	< 0.0051	0.0047	0.0060	< 0.0048
1,1,1-Trichloroethane	NC	1,200	9.6	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,1,2-Trichloroethane	310	1,800	0.3	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Trichloroethene	58	5	0.3	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Vinyl chloride	0.46	0.28	0.07	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Xylenes, Total	16,000	320	150	< 0.015	< 0.013	< 0.013	< 0.014

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030736-007	23030736-008	23030736-009	23030736-010
			Client Sample ID :	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	17:40	17:50	19:40	19:45
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 7.72	pH = 7.96	pH = 8.28	pH = 7.86
Acetone	70,000	100,000	25	< 0.080	< 0.068	< 0.077	< 0.076
Benzene	12	0.8	0.17	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Bromodichloromethane	10	3,000	0.6	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Bromoform	81	53	0.8	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Bromomethane	110	10	1.2	< 0.011	< 0.0091	< 0.010	< 0.010
2-Butanone	NC	NC	NC	< 0.080	< 0.068	< 0.077	< 0.076
Carbon disulfide	7,800	720	160	< 0.053	< 0.045	< 0.051	< 0.050
Carbon tetrachloride	5	0.3	0.33	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Chlorobenzene	1,600	130	6.5	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Chloroethane	NC	NC	NC	< 0.011	< 0.0091	< 0.010	< 0.010
Chloroform	100	0.3	2.9	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Chloromethane	NC	NC	NC	< 0.011	< 0.0091	< 0.010	< 0.010
Dibromochloromethane	1,600	1,300	0.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050
1,1-Dichloroethane	7,800	1,300	110	< 0.0053	< 0.0045	< 0.0051	< 0.0050
1,2-Dichloroethane	7	0.4	0.1	< 0.0053	< 0.0045	< 0.0051	< 0.0050
1,1-Dichloroethene	3,900	290	0.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050
cis-1,2-Dichloroethene	780	1,200	1.1	< 0.0053	< 0.0045	< 0.0051	< 0.0050
trans-1,2-Dichloroethene	1,600	3,100	3.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050
1,2-Dichloropropane	9	15	0.15	< 0.0053	< 0.0045	< 0.0051	< 0.0050
cis-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0021	< 0.0018	< 0.0020	< 0.0020
trans-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0021	< 0.0018	< 0.0020	< 0.0020
Ethylbenzene	7,800	400	19	< 0.0053	< 0.0045	< 0.0051	< 0.0050
2-Hexanone	NC	NC	NC	< 0.021	< 0.018	< 0.020	< 0.020
4-Methyl-2-pentanone	NC	NC	NC	< 0.021	< 0.018	< 0.020	< 0.020
Methylene chloride	85	13	0.2	< 0.011	< 0.0091	< 0.010	< 0.010
Methyl tert-butyl ether	780	8,800	0.32	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Styrene	16,000	1,500	18	< 0.0053	< 0.0045	< 0.0051	< 0.0050
1,1,2,2-Tetrachloroethane	NC	NC	NC	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Tetrachloroethene	12	11	0.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Toluene	16,000	650	29	< 0.0053	0.0047	< 0.0051	< 0.0050
1,1,1-Trichloroethane	NC	1,200	9.6	< 0.0053	< 0.0045	< 0.0051	< 0.0050
1,1,2-Trichloroethane	310	1,800	0.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Trichloroethene	58	5	0.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Vinyl chloride	0.46	0.28	0.07	< 0.0053	< 0.0045	< 0.0051	< 0.0050
Xylenes, Total	16,000	320	150	< 0.016	< 0.014	< 0.015	< 0.015

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030838-001	23030838-002	23030787-001	23030787-002
			Client Sample ID :	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
			Date Collected :	03/23/2023	03/23/2023	03/22/2023	03/22/2023
			Time Collected :	16:55	17:05	21:00	21:10
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 9.49	pH = 8.18	pH = 8.17	pH = 7.86
Acetone	70,000	100,000	25	< 0.081	< 0.071	< 0.077	< 0.067
Benzene	12	0.8	0.17	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Bromodichloromethane	10	3,000	0.6	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Bromoform	81	53	0.8	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Bromomethane	110	10	1.2	< 0.011	< 0.0094	< 0.010	< 0.0088
2-Butanone	NC	NC	NC	< 0.081	< 0.071	< 0.077	< 0.067
Carbon disulfide	7,800	720	160	< 0.054	< 0.047	< 0.051	< 0.044
Carbon tetrachloride	5	0.3	0.33	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Chlorobenzene	1,600	130	6.5	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Chloroethane	NC	NC	NC	< 0.011	< 0.0094	< 0.010	< 0.0088
Chloroform	100	0.3	2.9	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Chloromethane	NC	NC	NC	< 0.011	< 0.0094	< 0.010	< 0.0088
Dibromochloromethane	1,600	1,300	0.4	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1-Dichloroethane	7,800	1,300	110	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,2-Dichloroethane	7	0.4	0.1	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1-Dichloroethene	3,900	290	0.3	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,2-Dichloroethene	780	1,200	1.1	< 0.0054	< 0.0047	< 0.0051	< 0.0044
trans-1,2-Dichloroethene	1,600	3,100	3.4	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,2-Dichloropropane	9	15	0.15	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0022	< 0.0019	< 0.0020	< 0.0018
trans-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0022	< 0.0019	< 0.0020	< 0.0018
Ethylbenzene	7,800	400	19	< 0.0054	< 0.0047	< 0.0051	< 0.0044
2-Hexanone	NC	NC	NC	< 0.022	< 0.019	< 0.020	< 0.018
4-Methyl-2-pentanone	NC	NC	NC	< 0.022	< 0.019	< 0.020	< 0.018
Methylene chloride	85	13	0.2	< 0.011	< 0.0094	< 0.010	< 0.0088
Methyl tert-butyl ether	780	8,800	0.32	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Styrene	16,000	1,500	18	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1,2,2-Tetrachloroethane	NC	NC	NC	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Tetrachloroethene	12	11	0.3	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Toluene	16,000	650	29	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1,1-Trichloroethane	NC	1,200	9.6	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1,2-Trichloroethane	310	1,800	0.3	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Trichloroethene	58	5	0.3	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Vinyl chloride	0.46	0.28	0.07	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Xylenes, Total	16,000	320	150	< 0.016	< 0.014	< 0.015	< 0.013

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.a. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for VOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030838-003	23030838-004
			Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023
			Time Collected :	17:50	18:25
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	3-4' bgs	7-8' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 9.26	pH = 8.31
Acetone	70,000	100,000	25	< 0.082	< 0.071
Benzene	12	0.8	0.17	< 0.0054	< 0.0047
Bromodichloromethane	10	3,000	0.6	< 0.0054	< 0.0047
Bromoform	81	53	0.8	< 0.0054	< 0.0047
Bromomethane	110	10	1.2	< 0.011	< 0.0094
2-Butanone	NC	NC	NC	< 0.082	< 0.071
Carbon disulfide	7,800	720	160	< 0.054	< 0.047
Carbon tetrachloride	5	0.3	0.33	< 0.0054	< 0.0047
Chlorobenzene	1,600	130	6.5	< 0.0054	< 0.0047
Chloroethane	NC	NC	NC	< 0.011	< 0.0094
Chloroform	100	0.3	2.9	< 0.0054	< 0.0047
Chloromethane	NC	NC	NC	< 0.011	< 0.0094
Dibromochloromethane	1,600	1,300	0.4	< 0.0054	< 0.0047
1,1-Dichloroethane	7,800	1,300	110	< 0.0054	< 0.0047
1,2-Dichloroethane	7	0.4	0.1	< 0.0054	< 0.0047
1,1-Dichloroethene	3,900	290	0.3	< 0.0054	< 0.0047
cis-1,2-Dichloroethene	780	1,200	1.1	< 0.0054	< 0.0047
trans-1,2-Dichloroethene	1,600	3,100	3.4	< 0.0054	< 0.0047
1,2-Dichloropropane	9	15	0.15	< 0.0054	< 0.0047
cis-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0022	< 0.0019
trans-1,3-Dichloropropene	6.4	1.1	0.02	< 0.0022	< 0.0019
Ethylbenzene	7,800	400	19	< 0.0054	< 0.0047
2-Hexanone	NC	NC	NC	< 0.022	< 0.019
4-Methyl-2-pentanone	NC	NC	NC	< 0.022	< 0.019
Methylene chloride	85	13	0.2	< 0.011	< 0.0094
Methyl tert-butyl ether	780	8,800	0.32	< 0.0054	< 0.0047
Styrene	16,000	1,500	18	< 0.0054	< 0.0047
1,1,2,2-Tetrachloroethane	NC	NC	NC	< 0.0054	< 0.0047
Tetrachloroethene	12	11	0.3	< 0.0054	< 0.0047
Toluene	16,000	650	29	< 0.0054	< 0.0047
1,1,1-Trichloroethane	NC	1,200	9.6	< 0.0054	< 0.0047
1,1,2-Trichloroethane	310	1,800	0.3	< 0.0054	< 0.0047
Trichloroethene	58	5	0.3	< 0.0054	< 0.0047
Vinyl chloride	0.46	0.28	0.07	< 0.0054	< 0.0047
Xylenes, Total	16,000	320	150	< 0.016	< 0.014

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance
---	Not analyzed
NC	No evaluation criteria available

Table 1.b. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for SVOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030838-005	23030838-006	23030736-011	23030736-012	23030736-013	23030736-014
			Client Sample ID :	SB-01A (4-5)	SB-01A (7-8)	SB-05D (4-5)	SB-05D (5-6)	SB-06A (2-3)	SB-06A (11-12)
			Date Collected :	03/23/2023	03/23/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:15	19:25	16:50	17:00	18:25	18:30
Analyte	Residential Exposure Route Values for Soil		SCGW Ingestion Exposure Route Values	4-5' bgs	7-8' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 10.6	pH = 7.80	pH = 8.29	pH = 7.96	pH = 8.09	pH = 8.08
Aniline	NC	NC	NC	< 0.39	< 0.40	< 0.41	< 0.40	< 0.38	< 0.40
Benzidine	NC	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38	< 0.40
Benzoic acid	310,000	NC	400	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
Benzyl alcohol	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Bis(2-chloroethoxy)methane	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Bis(2-chloroethyl)ether	0.6	0.2	0.0004	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Bis(2-ethylhexyl)phthalate	46	31,000	31,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
4-Bromophenyl phenyl ether	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Butyl benzyl phthalate	16,000	930	930	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
Carbazole	32	NC	2.8	< 0.20	< 0.20	0.79	< 0.21	< 0.19	< 0.21
4-Chloroaniline	310	NC	0.7	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
4-Chloro-3-methylphenol	NC	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38	< 0.40
2-Chloronaphthalene	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2-Chlorophenol	390	53,000	4	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
4-Chlorophenyl phenyl ether	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Dibenzofuran	NC	NC	NC	< 0.20	< 0.20	0.44	< 0.21	< 0.19	< 0.21
1,2-Dichlorobenzene	7,000	560	43	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
1,3-Dichlorobenzene	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
1,4-Dichlorobenzene	NC	11,000	11	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
3,3´-Dichlorobenzidine	1	NC	0.033	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2,4-Dichlorophenol	230	NC	1	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Diethyl phthalate	63,000	2,000	470	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
2,4-Dimethylphenol	1,600	NC	9	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Dimethyl phthalate	NC	NC	NC	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
4,6-Dinitro-2-methylphenol	NC	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38	< 0.40
2,4-Dinitrophenol	160	NC	0.2	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
2,4-Dinitrotoluene	0.9	NC	0.0008	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038	< 0.040
2,6-Dinitrotoluene	0.9	NC	0.0007	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038	< 0.040
Di-n-butyl phthalate	7,800	2,300	2,300	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
Di-n-octyl phthalate	1,600	10,000	10,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95	< 1.0
Hexachlorobenzene	0.4	1	11	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Hexachlorobutadiene	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Hexachlorocyclopentadiene	550	10	2,200	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Hexachloroethane	78	NC	2.6	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Isophorone	15,600	4,600	8	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2-Methylnaphthalene	NC	NC	NC	< 0.20	< 0.20	0.25	< 0.21	< 0.19	< 0.21
2-Methylphenol	3,900	NC	15	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
4-Methylphenol	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2-Nitroaniline	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
3-Nitroaniline	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
4-Nitroaniline	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2-Nitrophenol	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
4-Nitrophenol	NC	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38	< 0.40
Nitrobenzene	39	92/9.4*	0.1	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038	< 0.040
N-Nitrosodi-n-propylamine	0.09	NC	0.00005	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038	< 0.040
N-Nitrosodimethylamine	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
N-Nitrosodiphenylamine	130	NC	5.6	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2, 2'-oxybis(1-Chloropropane)	NC	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Pentachlorophenol	3	NC	0.14	< 0.079	< 0.081	< 0.082	< 0.081	< 0.077	< 0.081
Phenol	23,000	NC	100	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
Pyridine	NC	NC	NC	< 0.79	< 0.81	< 0.82	< 0.81	< 0.77	< 0.81
1,2,4-Trichlorobenzene	780	3,200 / 920*	53	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2,4,5-Trichlorophenol	7,800	NC	1,400	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21
2,4,6-Trichlorophenol	58	200	0.77	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19	< 0.21

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance and
---	Not analyzed
NC	No evaluation criteria available

Table 1.b. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for SVOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005	23030736-006
			Client Sample ID :	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:20	19:25	19:00	19:10	17:10	17:15
Analyte	Residential Exposure Route Values for Soil		SCGW Ingestion Exposure Route Values	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 8.19	pH = 8.09	pH = 8.42	pH = 7.69	pH = 8.47	pH = 8.18
Aniline	NC	NC	NC	< 0.39	< 0.39	< 0.38	< 0.41	< 0.37	< 0.42
Benzidine	NC	NC	NC	< 0.38	< 0.39	< 0.37	< 0.41	< 0.37	< 0.41
Benzoic acid	310,000	NC	400	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Benzyl alcohol	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Bis(2-chloroethoxy)methane	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Bis(2-chloroethyl)ether	0.6	0.2	0.0004	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Bis(2-ethylhexyl)phthalate	46	31,000	31,000	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
4-Bromophenyl phenyl ether	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Butyl benzyl phthalate	16,000	930	930	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Carbazole	32	NC	2.8	0.31	< 0.20	0.31	< 0.21	0.29	< 0.21
4-Chloroaniline	310	NC	0.7	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
4-Chloro-3-methylphenol	NC	NC	NC	< 0.38	< 0.39	< 0.37	< 0.41	< 0.37	< 0.41
2-Chloronaphthalene	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2-Chlorophenol	390	53,000	4	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
4-Chlorophenyl phenyl ether	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Dibenzofuran	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,2-Dichlorobenzene	7,000	560	43	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,3-Dichlorobenzene	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,4-Dichlorobenzene	NC	11,000	11	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
3,3´-Dichlorobenzidine	1	NC	0.033	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2,4-Dichlorophenol	230	NC	1	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Diethyl phthalate	63,000	2,000	470	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dimethylphenol	1,600	NC	9	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Dimethyl phthalate	NC	NC	NC	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
4,6-Dinitro-2-methylphenol	NC	NC	NC	< 0.38	< 0.39	< 0.37	< 0.41	< 0.37	< 0.41
2,4-Dinitrophenol	160	NC	0.2	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dinitrotoluene	0.9	NC	0.0008	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
2,6-Dinitrotoluene	0.9	NC	0.0007	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
Di-n-butyl phthalate	7,800	2,300	2,300	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Di-n-octyl phthalate	1,600	10,000	10,000	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Hexachlorobenzene	0.4	1	11	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachlorobutadiene	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachlorocyclopentadiene	550	10	2,200	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachloroethane	78	NC	2.6	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Isophorone	15,600	4,600	8	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2-Methylnaphthalene	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2-Methylphenol	3,900	NC	15	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
4-Methylphenol	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2-Nitroaniline	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
3-Nitroaniline	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
4-Nitroaniline	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2-Nitrophenol	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
4-Nitrophenol	NC	NC	NC	< 0.38	< 0.39	< 0.37	< 0.41	< 0.37	< 0.41
Nitrobenzene	39	92/9.4*	0.1	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
N-Nitrosodi-n-propylamine	0.09	NC	0.00005	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
N-Nitrosodimethylamine	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
N-Nitrosodiphenylamine	130	NC	5.6	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2, 2'-oxybis(1-Chloropropane)	NC	NC	NC	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Pentachlorophenol	3	NC	0.14	< 0.078	< 0.079	< 0.076	< 0.083	< 0.075	< 0.084
Phenol	23,000	NC	100	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Pyridine	NC	NC	NC	< 0.78	< 0.79	< 0.76	< 0.83	< 0.75	< 0.84
1,2,4-Trichlorobenzene	780	3,200 / 920*	53	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2,4,5-Trichlorophenol	7,800	NC	1,400	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2,4,6-Trichlorophenol	58	200	0.77	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance and
---	Not analyzed
NC	No evaluation criteria available

Table 1.b. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for SVOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002
			Client Sample ID :	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023
			Time Collected :	17:40	17:50	19:40	19:45	16:55	17:05
Analyte	Residential Exposure Route Values for Soil		SCGW Ingestion Exposure Route Values	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 7.72	pH = 7.96	pH = 8.28	pH = 7.86	pH = 9.49	pH = 8.18
Aniline	NC	NC	NC	< 0.39	< 0.41	< 0.39	< 0.40	< 0.40	< 0.42
Benzidine	NC	NC	NC	< 0.39	< 0.41	< 0.38	< 0.40	< 0.39	< 0.41
Benzoic acid	310,000	NC	400	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
Benzyl alcohol	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Bis(2-chloroethoxy)methane	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Bis(2-chloroethyl)ether	0.6	0.2	0.0004	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Bis(2-ethylhexyl)phthalate	46	31,000	31,000	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
4-Bromophenyl phenyl ether	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Butyl benzyl phthalate	16,000	930	930	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
Carbazole	32	NC	2.8	< 0.20	< 0.21	0.34	< 0.21	0.88	< 0.21
4-Chloroaniline	310	NC	0.7	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
4-Chloro-3-methylphenol	NC	NC	NC	< 0.39	< 0.41	< 0.38	< 0.40	< 0.39	< 0.41
2-Chloronaphthalene	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2-Chlorophenol	390	53,000	4	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
4-Chlorophenyl phenyl ether	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Dibenzofuran	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	0.56	< 0.21
1,2-Dichlorobenzene	7,000	560	43	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
1,3-Dichlorobenzene	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
1,4-Dichlorobenzene	NC	11,000	11	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
3,3´-Dichlorobenzidine	1	NC	0.033	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2,4-Dichlorophenol	230	NC	1	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Diethyl phthalate	63,000	2,000	470	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
2,4-Dimethylphenol	1,600	NC	9	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Dimethyl phthalate	NC	NC	NC	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
4,6-Dinitro-2-methylphenol	NC	NC	NC	< 0.39	< 0.41	< 0.38	< 0.40	< 0.39	< 0.41
2,4-Dinitrophenol	160	NC	0.2	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
2,4-Dinitrotoluene	0.9	NC	0.0008	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041
2,6-Dinitrotoluene	0.9	NC	0.0007	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041
Di-n-butyl phthalate	7,800	2,300	2,300	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
Di-n-octyl phthalate	1,600	10,000	10,000	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0
Hexachlorobenzene	0.4	1	11	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Hexachlorobutadiene	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Hexachlorocyclopentadiene	550	10	2,200	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Hexachloroethane	78	NC	2.6	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Isophorone	15,600	4,600	8	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2-Methylnaphthalene	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2-Methylphenol	3,900	NC	15	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
4-Methylphenol	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2-Nitroaniline	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
3-Nitroaniline	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
4-Nitroaniline	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2-Nitrophenol	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
4-Nitrophenol	NC	NC	NC	< 0.39	< 0.41	< 0.38	< 0.40	< 0.39	< 0.41
Nitrobenzene	39	92/9.4*	0.1	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041
N-Nitrosodi-n-propylamine	0.09	NC	0.00005	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041
N-Nitrosodimethylamine	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
N-Nitrosodiphenylamine	130	NC	5.6	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2, 2'-oxybis(1-Chloropropane)	NC	NC	NC	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Pentachlorophenol	3	NC	0.14	< 0.079	< 0.083	< 0.078	< 0.081	< 0.080	< 0.084
Phenol	23,000	NC	100	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
Pyridine	NC	NC	NC	< 0.79	< 0.83	< 0.78	< 0.81	< 0.80	< 0.84
1,2,4-Trichlorobenzene	780	3,200 / 920*	53	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2,4,5-Trichlorophenol	7,800	NC	1,400	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21
2,4,6-Trichlorophenol	58	200	0.77	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance and
---	Not analyzed
NC	No evaluation criteria available

Table 1.b. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for SVOCs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030787-001	23030787-002	23030838-003	23030838-004
			Client Sample ID :	SB-13 (3-4)	SB-13 (7-8)	SB-14 (3-4)	SB-14 (7-8)N:AB
			Date Collected :	03/22/2023	03/22/2023	03/23/2023	03/23/2023
			Time Collected :	21:00	21:10	17:50	18:25
Analyte	Residential Exposure Route Values for Soil		SCGW Ingestion Exposure Route Values	3-4' bgs	7-8' bgs	3-4' bgs	7-8' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 8.17	pH = 7.86	pH = 9.26	pH = 8.31
Aniline	NC	NC	NC	< 0.41	< 0.39	< 0.39	< 0.40
Benzidine	NC	NC	NC	< 0.41	< 0.39	< 0.39	< 0.40
Benzoic acid	310,000	NC	400	< 1.0	< 0.98	< 0.97	< 0.99
Benzyl alcohol	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
Bis(2-chloroethoxy)methane	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
Bis(2-chloroethyl)ether	0.6	0.2	0.0004	< 0.21	< 0.20	< 0.20	< 0.20
Bis(2-ethylhexyl)phthalate	46	31,000	31,000	< 1.0	< 0.98	< 0.97	< 0.99
4-Bromophenyl phenyl ether	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
Butyl benzyl phthalate	16,000	930	930	< 1.0	< 0.98	< 0.97	< 0.99
Carbazole	32	NC	2.8	< 0.21	< 0.20	< 0.20	< 0.20
4-Chloroaniline	310	NC	0.7	< 0.21	< 0.20	< 0.20	< 0.20
4-Chloro-3-methylphenol	NC	NC	NC	< 0.41	< 0.39	< 0.39	< 0.40
2-Chloronaphthalene	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
2-Chlorophenol	390	53,000	4	< 0.21	< 0.20	< 0.20	< 0.20
4-Chlorophenyl phenyl ether	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
Dibenzofuran	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
1,2-Dichlorobenzene	7,000	560	43	< 0.21	< 0.20	< 0.20	< 0.20
1,3-Dichlorobenzene	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
1,4-Dichlorobenzene	NC	11,000	11	< 0.21	< 0.20	< 0.20	< 0.20
3,3´-Dichlorobenzidine	1	NC	0.033	< 0.21	< 0.20	< 0.20	< 0.20
2,4-Dichlorophenol	230	NC	1	< 0.21	< 0.20	< 0.20	< 0.20
Diethyl phthalate	63,000	2,000	470	< 1.0	< 0.98	< 0.97	< 0.99
2,4-Dimethylphenol	1,600	NC	9	< 0.21	< 0.20	< 0.20	< 0.20
Dimethyl phthalate	NC	NC	NC	< 1.0	< 0.98	< 0.97	< 0.99
4,6-Dinitro-2-methylphenol	NC	NC	NC	< 0.41	< 0.39	< 0.39	< 0.40
2,4-Dinitrophenol	160	NC	0.2	< 1.0	< 0.98	< 0.97	< 0.99
2,4-Dinitrotoluene	0.9	NC	0.0008	< 0.041	< 0.039	< 0.039	< 0.040
2,6-Dinitrotoluene	0.9	NC	0.0007	< 0.041	< 0.039	< 0.039	< 0.040
Di-n-butyl phthalate	7,800	2,300	2,300	< 1.0	< 0.98	< 0.97	< 0.99
Di-n-octyl phthalate	1,600	10,000	10,000	< 1.0	< 0.98	< 0.97	< 0.99
Hexachlorobenzene	0.4	1	11	< 0.21	< 0.20	< 0.20	< 0.20
Hexachlorobutadiene	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
Hexachlorocyclopentadiene	550	10	2,200	< 0.21	< 0.20	< 0.20	< 0.20
Hexachloroethane	78	NC	2.6	< 0.21	< 0.20	< 0.20	< 0.20
Isophorone	15,600	4,600	8	< 0.21	< 0.20	< 0.20	< 0.20
2-Methylnaphthalene	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
2-Methylphenol	3,900	NC	15	< 0.21	< 0.20	< 0.20	< 0.20
4-Methylphenol	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
2-Nitroaniline	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
3-Nitroaniline	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
4-Nitroaniline	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
2-Nitrophenol	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
4-Nitrophenol	NC	NC	NC	< 0.41	< 0.39	< 0.39	< 0.40
Nitrobenzene	39	92/9.4*	0.1	< 0.041	< 0.039	< 0.039	< 0.040
N-Nitrosodi-n-propylamine	0.09	NC	0.00005	< 0.041	< 0.039	< 0.039	< 0.040
N-Nitrosodimethylamine	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
N-Nitrosodiphenylamine	130	NC	5.6	< 0.21	< 0.20	< 0.20	< 0.20
2, 2'-oxybis(1-Chloropropane)	NC	NC	NC	< 0.21	< 0.20	< 0.20	< 0.20
Pentachlorophenol	3	NC	0.14	< 0.081	< 0.079	< 0.079	< 0.080
Phenol	23,000	NC	100	< 0.21	< 0.20	< 0.20	< 0.20
Pyridine	NC	NC	NC	< 0.81	< 0.79	< 0.79	< 0.80
1,2,4-Trichlorobenzene	780	3,200 / 920*	53	< 0.21	< 0.20	< 0.20	< 0.20
2,4,5-Trichlorophenol	7,800	NC	1,400	< 0.21	< 0.20	< 0.20	< 0.20
2,4,6-Trichlorophenol	58	200	0.77	< 0.21	< 0.20	< 0.20	< 0.20

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
*	Nearest pH data value by distance and
---	Not analyzed
NC	No evaluation criteria available

Table 1.c. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for PNAs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 10.66*	pH = 7.8*	pH = 10.6	pH = 7.8	pH = 9.26*	pH = 8.31*	pH = 8.17*
Acenaphthene	4,700	NC	2,900	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
Acenaphthylene	NC	NC	NC	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
Anthracene	23,000	NC	59,000	< 0.038	< 0.040	0.097	< 0.040	< 0.040	< 0.041	< 0.039
Benz(a)anthracene	1.1[a]	NC	8	0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039
Benzo(a)pyrene	1.3[a]	NC	82	0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039
Benzo(b)fluoranthene	1.5[a]	NC	25	0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039
Benzo(g,h,i)perylene	NC	NC	NC	0.20	< 0.040	0.25	< 0.040	< 0.040	< 0.041	< 0.039
Benzo(k)fluoranthene	9	NC	250	0.28	< 0.040	0.33	< 0.040	< 0.040	< 0.041	< 0.039
Chrysene	88	NC	800	0.28	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039
Dibenz(a,h)anthracene	0.20[a]	NC	7.6	0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039
Fluoranthene	3,100	NC	21,000	0.47	< 0.040	0.76	< 0.040	< 0.040	< 0.041	< 0.039
Fluorene	3,100	NC	2,800	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
Indeno(1,2,3-cd)pyrene	0.86[a]	NC	69	0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039
Naphthalene	1,600	170	18	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
Phenanthrene	NC	NC	NC	0.14	< 0.040	0.37	< 0.040	< 0.040	< 0.041	< 0.039
Pyrene	2,300	NC	21,000	0.47	< 0.040	0.69	< 0.040	< 0.040	< 0.041	< 0.039

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
[a]	City of Chicago background values used
*	Nearest pH data value by distance and interval was used
---	Not analyzed
NC	No evaluation criteria available

Table 1.c. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for PNAs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-004	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012
			Client Sample ID :	SB-03 (7'-8')	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023
			Time Collected :	09:00	08:25	08:35	10:25	10:35	16:50	17:00
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	7-8' bgs	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 7.86*	pH = 8.17*	pH = 7.86*	pH = 8.29*	pH = 7.96*	pH = 8.29	pH = 7.96
Acenaphthene	4,700	NC	2,900	< 0.039	< 0.041	< 0.040	0.53	< 0.040	0.72	< 0.040
Acenaphthylene	NC	NC	NC	< 0.039	< 0.041	< 0.040	< 0.037	< 0.040	0.91	< 0.040
Anthracene	23,000	NC	59,000	< 0.039	0.044	< 0.040	1.0	< 0.040	3.1	< 0.040
Benz(a)anthracene	1.1[a]	NC	8	< 0.039	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040
Benzo(a)pyrene	1.3[a]	NC	82	< 0.039	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040
Benzo(b)fluoranthene	1.5[a]	NC	25	< 0.039	0.11	< 0.040	**2.1**	< 0.040	**4.8**	< 0.040
Benzo(g,h,i)perylene	NC	NC	NC	< 0.039	0.073	< 0.040	1.5	< 0.040	4.9	< 0.040
Benzo(k)fluoranthene	9	NC	250	< 0.039	0.12	< 0.040	1.8	< 0.040	6.6	< 0.040
Chrysene	88	NC	800	< 0.039	0.14	< 0.040	2.3	< 0.040	7.6	< 0.040
Dibenz(a,h)anthracene	0.20[a]	NC	7.6	< 0.039	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040
Fluoranthene	3,100	NC	21,000	< 0.039	0.29	< 0.040	4.5	< 0.040	15	< 0.040
Fluorene	3,100	NC	2,800	< 0.039	< 0.041	< 0.040	0.49	< 0.040	1.1	< 0.040
Indeno(1,2,3-cd)pyrene	0.86[a]	NC	69	< 0.039	0.074	< 0.040	**1.4**	< 0.040	**4.3**	< 0.040
Naphthalene	1,600	170	18	< 0.039	< 0.041	< 0.040	0.81	< 0.040	0.33	< 0.040
Phenanthrene	NC	NC	NC	< 0.039	0.22	< 0.040	4.2	< 0.040	12	< 0.040
Pyrene	2,300	NC	21,000	< 0.039	0.24	< 0.040	3.7	< 0.040	15	< 0.040

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
[a]	City of Chicago background values used
*	Nearest pH data value by distance and interval was used
---	Not analyzed
NC	No evaluation criteria available

Table 1.c. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for PNAs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-011	22120464-012	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003
			Client Sample ID :	SB-06 (2'-3')	SB-06 (11'-12')	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)
			Date Collected :	12/15/2022	12/15/2022	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	10:50	11:00	18:25	18:30	19:20	19:25	19:00
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	2-3' bgs	11-12' bgs	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 8.09	pH = 8.08	pH = 8.09	pH = 8.08	pH = 8.19	pH = 8.09	pH = 8.42
Acenaphthene	4,700	NC	2,900	0.42	< 0.040	0.060	< 0.040	0.22	< 0.039	0.19
Acenaphthylene	NC	NC	NC	0.32	< 0.040	0.20	< 0.040	0.30	< 0.039	0.15
Anthracene	23,000	NC	59,000	1.7	< 0.040	0.40	< 0.040	1.1	< 0.039	0.65
Benz(a)anthracene	1.1[a]	NC	8	**5.8**	< 0.040	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**
Benzo(a)pyrene	1.3[a]	NC	82	**5.8**	< 0.040	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**
Benzo(b)fluoranthene	1.5[a]	NC	25	**4.4**	< 0.040	**1.6**	< 0.040	**3.7**	< 0.039	**2.1**
Benzo(g,h,i)perylene	NC	NC	NC	3.1	< 0.040	1.1	< 0.040	2.2	< 0.039	1.3
Benzo(k)fluoranthene	9	NC	250	3.8	< 0.040	1.8	< 0.040	3.4	< 0.039	1.8
Chrysene	88	NC	800	5.6	< 0.040	1.9	< 0.040	4.5	< 0.039	2.4
Dibenz(a,h)anthracene	0.20[a]	NC	7.6	**1.5**	< 0.040	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**
Fluoranthene	3,100	NC	21,000	12	< 0.040	2.8	< 0.040	7.0	< 0.039	4.5
Fluorene	3,100	NC	2,800	0.56	< 0.040	0.095	< 0.040	0.31	< 0.039	0.24
Indeno(1,2,3-cd)pyrene	0.86[a]	NC	69	**2.8**	< 0.040	**1.1**	< 0.040	**2.0**	< 0.039	**1.2**
Naphthalene	1,600	170	18	0.19	< 0.040	0.053	< 0.040	0.081	< 0.039	0.11
Phenanthrene	NC	NC	NC	8.0	< 0.040	1.1	< 0.040	4.0	< 0.039	3.2
Pyrene	2,300	NC	21,000	11	< 0.040	2.6	< 0.040	6.1	< 0.039	3.8

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
[a]	City of Chicago background values used
*	Nearest pH data value by distance and interval was used
---	Not analyzed
NC	No evaluation criteria available

Table 1.c. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for PNAs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030736-004	23030736-005	23030736-006	23030736-007	23030736-008	23030736-009	23030736-010
			Client Sample ID :	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:10	17:10	17:15	17:40	17:50	19:40	19:45
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	5-6' bgs	2-3' bgs	14-15' bgs	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 7.69	pH = 8.47	pH = 8.18	pH = 7.72	pH = 7.96	pH = 8.28	pH = 7.86
Acenaphthene	4,700	NC	2,900	< 0.041	0.19	< 0.041	< 0.039	< 0.041	0.24	< 0.040
Acenaphthylene	NC	NC	NC	< 0.041	2.1	< 0.041	< 0.039	< 0.041	0.24	< 0.040
Anthracene	23,000	NC	59,000	< 0.041	3.5	< 0.041	0.13	< 0.041	0.97	< 0.040
Benz(a)anthracene	1.1[a]	NC	8	< 0.041	**14**	< 0.041	0.37	< 0.041	**3.7**	< 0.040
Benzo(a)pyrene	1.3[a]	NC	82	< 0.041	**14**	< 0.041	0.40	< 0.041	**3.5**	< 0.040
Benzo(b)fluoranthene	1.5[a]	NC	25	< 0.041	**11**	< 0.041	0.34	< 0.041	**3.1**	< 0.040
Benzo(g,h,i)perylene	NC	NC	NC	< 0.041	8.2	< 0.041	0.22	< 0.041	2.0	< 0.040
Benzo(k)fluoranthene	9	NC	250	< 0.041	**11**	< 0.041	0.29	< 0.041	2.9	< 0.040
Chrysene	88	NC	800	< 0.041	13	< 0.041	0.38	< 0.041	3.7	< 0.040
Dibenz(a,h)anthracene	0.20[a]	NC	7.6	< 0.041	**3.6**	< 0.041	0.12	< 0.041	**1.1**	< 0.040
Fluoranthene	3,100	NC	21,000	< 0.041	29	< 0.041	0.67	0.067	7.3	< 0.040
Fluorene	3,100	NC	2,800	< 0.041	0.45	< 0.041	0.051	< 0.041	0.32	< 0.040
Indeno(1,2,3-cd)pyrene	0.86[a]	NC	69	< 0.041	**7.2**	< 0.041	0.19	< 0.041	**1.8**	< 0.040
Naphthalene	1,600	170	18	< 0.041	0.20	< 0.041	< 0.039	< 0.041	0.093	< 0.040
Phenanthrene	NC	NC	NC	< 0.041	7.4	< 0.041	0.46	0.052	4.2	< 0.040
Pyrene	2,300	NC	21,000	< 0.041	26	< 0.041	0.59	0.058	6.0	< 0.040

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
[a]	City of Chicago background values used
*	Nearest pH data value by distance and interval was used
---	Not analyzed
NC	No evaluation criteria available

Table 1.c. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for PNAs
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	23030838-001	23030838-002	23030787-001	23030787-002	23030838-003	23030838-004
			Client Sample ID :	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023	03/22/2023	03/22/2023	03/23/2023	03/23/2023
			Time Collected :	16:55	17:05	21:00	21:10	17:50	18:25
Analyte	Residential Route Specific Values for Soil		SCGW Ingestion Exposure Route Values	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs	3-4' bgs	7-8' bgs
	Ingestion (mg/kg)	Inhalation (mg/kg)	Class II (mg/kg)	pH = 9.49	pH = 8.18	pH = 8.17	pH = 7.86	pH = 9.26	pH = 8.31
Acenaphthene	4,700	NC	2,900	0.67	< 0.041	< 0.041	< 0.039	< 0.039	< 0.040
Acenaphthylene	NC	NC	NC	1.4	< 0.041	< 0.041	< 0.039	< 0.039	< 0.040
Anthracene	23,000	NC	59,000	3.4	< 0.041	0.085	< 0.039	0.047	< 0.040
Benz(a)anthracene	1.1[a]	NC	8	**9.7**	< 0.041	0.31	< 0.039	0.14	< 0.040
Benzo(a)pyrene	1.3[a]	NC	82	**9.1**	< 0.041	0.28	< 0.039	0.14	< 0.040
Benzo(b)fluoranthene	1.5[a]	NC	25	**6.8**	< 0.041	0.29	< 0.039	0.13	< 0.040
Benzo(g,h,i)perylene	NC	NC	NC	5.0	< 0.041	0.18	< 0.039	0.085	< 0.040
Benzo(k)fluoranthene	9	NC	250	8.2	< 0.041	0.19	< 0.039	0.12	< 0.040
Chrysene	88	NC	800	10	< 0.041	0.32	< 0.039	0.15	< 0.040
Dibenz(a,h)anthracene	0.20[a]	NC	7.6	**2.7**	< 0.041	0.087	< 0.039	0.043	< 0.040
Fluoranthene	3,100	NC	21,000	19	< 0.041	0.64	< 0.039	0.30	< 0.040
Fluorene	3,100	NC	2,800	1.1	< 0.041	< 0.041	< 0.039	< 0.039	< 0.040
Indeno(1,2,3-cd)pyrene	0.86[a]	NC	69	**4.8**	< 0.041	0.15	< 0.039	0.077	< 0.040
Naphthalene	1,600	170	18	0.24	< 0.041	< 0.041	< 0.039	< 0.039	< 0.040
Phenanthrene	NC	NC	NC	13	< 0.041	0.35	< 0.039	0.21	< 0.040
Pyrene	2,300	NC	21,000	16	< 0.041	0.55	< 0.039	0.24	< 0.040

Bold	Exceeds Residential Ingestion, Residential Inhalation, or Soil Component of Groundwater (Class II)
a	City of Chicago background values used
*	Nearest pH data value by distance and interval was used
---	Not analyzed
NC	No evaluation criteria available

Table 1.d. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for Inorganics
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

							Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003	22120464-004	22120464-001	22120464-002	22120464-009	22120464-010
							Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')
							Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022
							Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50	09:00	08:25	08:35	10:25	10:35
		Residential Exposure Route Values for Soil		Soil Component of Groundwater Ingestion Exposure Route Values†															
				Background	pH Specific SCGW Ingestion Route Values														
					Class II (mg/kg)														
	Analyte	Ingestion (mg/kg)	Inhalation (mg/kg)	Values§ (mg/kg)	pH 7.25-7.74	pH 7.75-8.24	pH 8.25-8.74	pH 8.75-9.0	2-3' bgs pH = 10.66*	9-10' bgs pH = 7.8*	4-5' bgs pH = 10.6	7-8' bgs pH = 7.8	5-6' bgs pH = 9.26*	12-13' bgs pH = 8.31*	2-3' bgs pH = 8.17*	7-8' bgs pH = 7.86*	2-3' bgs pH = 8.17*	11-12' bgs pH = 7.86*	4-5' bgs pH = 8.29*	5-6' bgs pH = 7.96*
TOTALS	Aluminum	NC	NC	NC	NC	NC	NC	NC	---	---	7100	13000	---	---	---	---	---	---	---	---
	Antimony	31	NC	4	20	20	20	20	---	---	< 2.4	< 2.3	---	---	---	---	---	---	---	---
	Arsenic	13.0/11.3	750	13	120	120	130	130	7.7	9.5	6.4	11	13	9.5	3.1	13	10	7.2	3.3	9.7
	Barium	5,500	690,000	110	1,800	2,100	NC	NC	79	30	41	52	82	49	34	34	38	40	**200**	38
	Beryllium	160	1,300	0.59	130,000	1,000,000	NC	NC	---	---	< 0.59	**0.66**	---	---	---	---	---	---	---	---
	Cadmium	78	1,800	0.60	590	4,300	NC	NC	**0.74**	< 0.52	< 0.59	< 0.58	< 0.52	< 0.56	< 0.52	< 0.55	< 0.56	< 0.53	0.6	< 0.60
	Calcium	NC	NC	9300.00	NC	NC	NC	NC	---	---	**39000**	**54000**	---	---	---	---	---	---	---	---
	Chromium	230	270	16.2	NC	NC	NC	NC	6.2	**20 T**	13	**23 T**	**19 T**	**22 T**	10	13	**20 T**	**18 T**	10	**19 T**
	Cobalt	4,700	NC	8.9	NC	NC	NC	NC	---	---	7.4	**16**	---	---	---	---	---	---	---	---
	Copper	2,900	NC	19.6	330,000	330,000	NC	NC	---	---	**21**	**31**	---	---	---	---	---	---	---	---
	Cyanide	1,600	NC	0.51	120	120	120	120	---	---	< 0.60	< 0.60	---	---	---	---	---	---	---	---
	Iron	NC	NC	15900	NC	NC	NC	NC	---	---	14000	**35000**	---	---	---	---	---	---	---	---
	Lead	400	NC	36	1,420	1,420	1,420	3760	**41**	16	**49**	16	17	16	18	21	36	15	**410**	23
	Magnesium	325,000	NC	4820	NC	NC	NC	NC	---	---	**19000**	**27000**	---	---	---	---	---	---	---	---
	Manganese	1,600	69,000	636	NC	NC	NC	NC	---	---	270	560	---	---	---	---	---	---	---	---
	Mercury	23	10	0.06	32	40	NC	NC	**0.13**	0.022	**0.1**	< 0.019	0.024	< 0.023	0.039	0.023	0.06	< 0.023	**0.22**	0.028
	Nickel	1,600	13,000	18	14,000	76,000	NC	NC	---	---	18	**41**	---	---	---	---	---	---	---	---
	Potassium	NC	NC	1268.00	NC	NC	NC	NC	---	---	**1600**	**3000**	---	---	---	---	---	---	---	---
	Selenium	390	NC	0.48	3.3	2.4	1.8	1.3	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.2
	Silver	390	NC	0.55	NC	NC	NC	NC	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.2
	Sodium	NC	NC	130.00	NC	NC	NC	NC	---	---	**1100**	**1000**	---	---	---	---	---	---	---	---
	Thallium	6.3	NC	0.32	34	38	44	49	---	---	< 1.2	< 1.2	---	---	---	---	---	---	---	---
	Vanadium	550	NC	25.2	NC	NC	NC	NC	---	---	18	25	---	---	---	---	---	---	---	---
	Zinc	23,000	NC	95	32,000	110,000	NC	NC	---	---	55	67	---	---	---	---	---	---	---	---
								Class II (mg/L)												
TCLP	Arsenic	NC	NC	NC	NC	NC	NC	0.2	---	---	< 0.010	< 0.010	---	---	---	---	---	---	---	---
	Barium	NC	NC	NC	NC	NC	NC	2	---	---	0.38	0.57	---	---	---	---	---	---	---	---
	Cadmium	NC	NC	NC	NC	NC	NC	0.05	---	---	< 0.0050	< 0.0050	---	---	---	---	---	---	---	---
	Chromium	NC	NC	NC	NC	NC	NC	1	---	---	< 0.010	< 0.010	---	---	---	---	---	---	---	---
	Cobalt	NC	NC	NC	NC	NC	NC	1	---	---	---	---	---	---	---	---	---	---	---	---
	Iron	NC	NC	NC	NC	NC	NC	5	---	---	---	---	---	---	---	---	---	---	---	---
	Lead	NC	NC	NC	NC	NC	NC	0.1	---	---	0.0056	< 0.0050	---	---	---	---	---	---	---	---
	Manganese	NC	NC	NC	NC	NC	NC	10	---	---	---	---	---	---	---	---	---	---	---	---
	Mercury	NC	NC	NC	NC	NC	NC	0.01	---	---	< 0.00020	< 0.00020	---	---	---	---	---	---	---	---
	Selenium	NC	NC	NC	NC	NC	NC	0.05	---	---	< 0.010	< 0.010	---	---	---	---	---	---	---	---
	Silver	NC	NC	NC	NC	NC	NC	---	---	---	< 0.010	< 0.010	---	---	---	---	---	---	---	---
	Vanadium	NC	NC	NC	NC	NC	NC	0.1	---	---	---	---	---	---	---	---	---	---	---	---

†	If no data is available for pH specific value, non-pH specific values are used
§	City of Chicago background values used
*	Nearest pH data value by distance and interval was used for evaluation
---	Not analyzed
NC	No evaluation criteria available
Bold	Above background values
Bold	Exceeds Residential Ingestion or Residential Inhalation SROs
Bold	Exceeds pH-specific Soil Component of Groundwater (Class I or II) ROs
Bold	Exceedance of Background values due to unavailability of data for pH-specific SCOGIER values
T	TCLP used for evaluation, see footnote "m" of 35 IAC 742, App. B, Table A
P	pH used for evaluation, see footnote "m" of 35 IAC 742, App. B, Table A

Table 1.d. - Residential SROs and Soil Component to Groundwater ROs
Soil Analtical Results for Inorganics
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

							Laboratory ID :	23030892-003	23030892-005	23030892-007	23030736-011	23030736-012	22120464-011	22120464-012	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004
							Client Sample ID :	SB-05A (4-5)	SB-05B (4-5)	SB-05C (4-5)	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)
							Date Collected :	03/24/2023	03/24/2023	03/24/2023	03/21/2023	03/21/2023	12/15/2022	12/15/2022	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
							Time Collected :	18:10	18:25	18:40	16:50	17:00	10:50	11:00	18:25	18:30	19:20	19:25	19:00	19:10
		Residential Exposure Route Values for Soil		Soil Component of Groundwater Ingestion Exposure Route Values†					4-5' bgs	4-5' bgs	4-5' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs
				Background	pH Specific SCGW Ingestion Route Values																
					Class II (mg/kg)																
	Analyte	Ingestion (mg/kg)	Inhalation (mg/kg)	Values§ (mg/kg)	pH 7.25-7.74	pH 7.75-8.24	pH 8.25-8.74	pH 8.75-9.0		pH = 7.96*	pH = 7.96*	pH = 8.29	pH = 7.96	pH = 8.09	pH = 8.08	pH = 8.09	pH = 8.08	pH = 8.19	pH = 8.09	pH = 8.42	pH = 7.69
TOTALS	Aluminum	NC	NC	NC	NC	NC	NC	NC	---	---	---	10000	14000			6000	13000	8200	12000	9900	14000
	Antimony	31	NC	4	20	20	20	20	---	---	---	< 2.2	< 2.4			< 2.0	< 2.3	< 2.2	< 2.2	< 2.1	< 2.1
	Arsenic	13.0/11.3	750	13	120	120	130	130	---	---	---	**16**	**19**	**14**	9.1	7.1	13	8.6	**14**	8.5	5.4
	Barium	5,500	690,000	110	1,800	2,100	NC	NC	---	---	---	**380**	39	**250**	61	21	57	**220**	46	**140**	37
	Beryllium	160	1,300	0.59	130,000	1,000,000	NC	NC	---	---	---	**0.71**	**0.76**			< 0.50	**0.69**	< 0.55	**0.62**	0.57	**0.67**
	Cadmium	78	1,800	0.60	590	4,300	NC	NC	---	---	---	**2.3**	< 0.60	**7.4**	< 0.52	< 0.50	< 0.57	**1.3**	< 0.55	**0.67**	< 0.53
	Calcium	NC	NC	9300.00	NC	NC	NC	NC	---	---	---	**35000**	**55000**			2300	**62000**	**52000**	**62000**	**27000**	**24000**
	Chromium	230	270	16.2	NC	NC	NC	NC	---	---	---	**27 T**	**24 T**	**18 T**	**21 T**	10	**23 T**	**17 T**	**21 T**	16	**24 T**
	Cobalt	4,700	NC	8.9	NC	NC	NC	NC	---	---	---	7.7	**14 T**			6	**15 T**	5.9	**19 T**	7.5	**10 T**
	Copper	2,900	NC	19.6	330,000	330,000	NC	NC	---	---	---	**110**	**37**			9.5	**31**	**65**	**28**	**37**	**29**
	Cyanide	1,600	NC	0.51	120	120	120	120	---	---	---	< 0.61	< 0.61			< 0.58	< 0.61	< 0.58	< 0.60	< 0.57	< 0.62
	Iron	NC	NC	15900	NC	NC	NC	NC	---	---	---	**23000 T**	**42000 T**			13000	**35000 T**	**16000 T**	**30000 T**	**16000 T**	**22000 T**
	Lead	400	NC	36	1,420	1,420	1,420	3760	**47**	30	**910**	**840**	22	**1300**	18	9.7	17	**880**	17	**270**	20
	Magnesium	325,000	NC	4820	NC	NC	NC	NC	---	---	---	**12000**	**26000**			1700	**30000**	**20000**	**32000**	**9200**	**18000**
	Manganese	1,600	69,000	636	NC	NC	NC	NC	---	---	---	390	410			68	470	380	600	500	230
	Mercury	23	10	0.06	32	40	NC	NC	---	---	---	**0.56**	0.03	**0.88**	0.026	**0.22**	0.027	**0.83**	0.03	**0.53**	0.028
	Nickel	1,600	13,000	18	14,000	76,000	NC	NC	---	---	---	**21**	**43**			12	**38**	16	**36**	16	**33**
	Potassium	NC	NC	1268.00	NC	NC	NC	NC	---	---	---	1200	**2600**			800	**3100**	860	**2800**	1200	**2400**
	Selenium	390	NC	0.48	3.3	2.4	1.8	1.3	---	---	---	< 1.1	< 1.2	< 1.2	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1
	Silver	390	NC	0.55	NC	NC	NC	NC	---	---	---	< 1.1	< 1.2	< 1.2	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1
	Sodium	NC	NC	130.00	NC	NC	NC	NC	---	---	---	**330**	130			**300**	**180**	**350**	**150**	**210**	**200**
	Thallium	6.3	NC	0.32	34	38	44	49	---	---	---	< 1.1	< 1.2			< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1
	Vanadium	550	NC	25.2	NC	NC	NC	NC	---	---	---	**27 T**	**29 T**			20	25	24	22	23	**26 T**
	Zinc	23,000	NC	95	32,000	110,000	NC	NC	---	---	---	**550**	60			19	49	**350**	52	**180**	90
								Class II (mg/L)													
TCLP	Arsenic	NC	NC	NC	NC	NC	NC	0.2	---	---	---	< 0.010	< 0.010	---	---	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium	NC	NC	NC	NC	NC	NC	2	---	---	---	0.93	0.22	---	---	0.19	0.85	1.7	1	1	0.21
	Cadmium	NC	NC	NC	NC	NC	NC	0.05	---	---	---	**0.025 P**	< 0.0050	---	---	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
	Chromium	NC	NC	NC	NC	NC	NC	1	---	---	---	0.032	< 0.010	---	---	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Cobalt	NC	NC	NC	NC	NC	NC	1	---	---	---	---	---	---	---	---	---	---	---	---	---
	Iron	NC	NC	NC	NC	NC	NC	5	---	---	---	---	---	---	---	---	---	---	---	---	---
	Lead	NC	NC	NC	NC	NC	NC	0.1	0.0051	0.0054	**0.15 P**	**0.81 P**	< 0.0050	---	---	0.0087	< 0.0050	**0.14 P**	0.013	0.1	< 0.0050
	Manganese	NC	NC	NC	NC	NC	NC	10	---	---	---	---	---	---	---	---	---	---	---	---	---
	Mercury	NC	NC	NC	NC	NC	NC	0.01	---	---	---	< 0.00020	< 0.00020	---	---	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium	NC	NC	NC	NC	NC	NC	0.05	---	---	---	< 0.010	< 0.010	---	---	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver	NC	NC	NC	NC	NC	NC	---	---	---	---	< 0.010	< 0.010	---	---	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium	NC	NC	NC	NC	NC	NC	0.1	---	---	---	---	---	---	---	---	---	---	---	---	---

†	If no data is available for pH specific value, non-pH specific values are used
§	City of Chicago background values used
*	Nearest pH data value by distance and interval was used for evaluation
---	Not analyzed
NC	No evaluation criteria available
Bold	Above background values
Bold	Exceeds Residential Ingestion or Residential Inhalation SROs
Bold	Exceeds pH-specific Soil Component of Groundwater (Class I or II) ROs
Bold	Exceedance of Background values due to unavailability of data for pH-specific SCOGIER values
T	TCLP used for evaluation, see footnote "m" of 35 IAC 742, App. B, Table A
P	pH used for evaluation, see footnote "m" of 35 IAC 742, App. B, Table A

Table 1.d. - Residential SROs and Soil Component to Groundwater ROs
Soil Anaitical Results for Inorganics
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

							Laboratory ID :	23030736-005	23030736-006	23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002	23030838-003	23030838-004
							Client Sample ID :	SB-09 (2-3)	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)	SB-14 (3-4)	SB-14 (7-8)
							Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023	03/23/2023	03/23/2023
							Time Collected :	17:10	17:15	17:40	17:50	19:40	19:45	16:55	17:05	21:00	21:10	17:50	18:25
		Residential Exposure Route Values for Soil		Soil Component of Groundwater Ingestion Exposure Route Values†															
				Background	pH Specific SCGW Ingestion Route Values														
					Class II (mg/kg)														
	Analyte	Ingestion (mg/kg)	Inhalation (mg/kg)	Values§ (mg/kg)	pH 7.25-7.74	pH 7.75-8.24	pH 8.25-8.74	pH 8.75-9.0	2-3' bgs pH = 8.47	14-15' bgs pH = 8.18	3-4' bgs pH = 7.72	6-7' bgs pH = 7.96	0-1' bgs pH = 8.28	6-7' bgs pH = 7.86	3-4' bgs pH = 9.49	11-12' bgs pH = 8.18	3-4' bgs pH = 8.17	7-8' bgs pH = 7.86	3-4' bgs pH = 9.26	7-8' bgs pH = 8.31
TOTALS	Aluminum	NC	NC	NC	NC	NC	NC	NC	8100	13000	8900	11000	6900	15000	8500	11000	11000	10000	10000	13000
	Antimony	31	NC	4	20	20	20	20	< 2.1	< 2.3	< 2.2	< 2.1	< 2.2	< 2.1	< 2.2	< 2.2	< 2.3	< 2.4	< 2.3	< 2.3
	Arsenic	13.0/11.3	750	13	120	120	130	130	7.8	8.1	7.5	13	**15**	10	**15**	11	**25**	8.8	9.9	6.7
	Barium	5,500	690,000	110	1,800	2,100	NC	NC	38	57	73	69	**830**	57	**350**	81	**160**	27	83	31
	Beryllium	160	1,300	0.59	130,000	1,000,000	NC	NC	< 0.52	**0.69**	< 0.56	< 0.53	**0.75**	**0.77**	< 0.54	**0.8**	**1.1**	**0.64**	**0.63**	**0.6**
	Cadmium	78	1,800	0.60	590	4,300	NC	NC	< 0.52	< 0.57	< 0.56	< 0.53	**2.7**	< 0.52	**2.9**	< 0.54	**0.89**	< 0.59	< 0.58	< 0.56
	Calcium	NC	NC	9300.00	NC	NC	NC	NC	**12000**	**66000**	6800	**39000**	**36000**	**55000**	**71000**	**54000**	**31000**	**57000**	**44000**	**55000**
	Chromium	230	270	16.2	NC	NC	NC	NC	14	**23 T**	14	**20 T**	**24 T**	**26 T**	**18 T**	**20 T**	**24 T**	**21 T**	**19 T**	**23 T**
	Cobalt	4,700	NC	8.9	NC	NC	NC	NC	7.7	**14 T**	6.7	**15 T**	**9.1 T**	**14 T**	6.1	**12 T**	**52 T**	**13 T**	**12 T**	**20 T**
	Copper	2,900	NC	19.6	330,000	330,000	NC	NC	14	**29**	**24**	**25**	**100**	**31**	**110**	**25**	**46**	**36**	**33**	**36**
	Cyanide	1,600	NC	0.51	120	120	120	120	< 0.56	< 0.62	< 0.59	< 0.62	< 0.58	< 0.61	< 0.60	< 0.63	< 0.62	< 0.60	< 0.59	< 0.61
	Iron	NC	NC	15900	NC	NC	NC	NC	**16000 T**	**26000 T**	**16000 T**	**30000 T**	**22000 T**	**35000 T**	**19000 T**	**35000 T**	**41000 T**	**28000 T**	**22000 T**	**22000 T**
	Lead	400	NC	36	1,420	1,420	1,420	3760	**39**	18	**100**	17	**850**	18	**740**	15	**44**	20	**110**	17
	Magnesium	325,000	NC	4820	NC	NC	NC	NC	**6800**	**32000**	4300	**21000**	**16000**	**26000**	**22000**	**27000**	**19000**	**30000**	**21000**	**28000**
	Manganese	1,600	69,000	636	NC	NC	NC	NC	180	490	150	590	330	350	280	400	**2100**	420	380	410
	Mercury	23	10	0.06	32	40	NC	NC	0.039	0.029	**0.57**	0.038	**0.52**	0.031	**0.38**	< 0.021	0.059	< 0.019	**0.28**	< 0.022
	Nickel	1,600	13,000	18	14,000	76,000	NC	NC	16	**37**	16	**35**	**24**	**41**	**21**	**34**	**66**	**38**	**31**	**41**
	Potassium	NC	NC	1268.00	NC	NC	NC	NC	1100	**3300**	**1400**	**2200**	1100	**3200**	1200	**2500**	**2700**	**2400**	**2400**	**3200**
	Selenium	390	NC	0.48	3.3	2.4	1.8	1.3	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Silver	390	NC	0.55	NC	NC	NC	NC	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Sodium	NC	NC	130.00	NC	NC	NC	NC	100	**200**	84	**140**	**450**	**170**	**550**	**170**	**1200**	**2400**	**2200**	**340**
	Thallium	6.3	NC	0.32	34	38	44	49	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Vanadium	550	NC	25.2	NC	NC	NC	NC	21	25	23	21	**28 T**	**28 T**	20	23	**36 T**	24	22	25
	Zinc	23,000	NC	95	32,000	110,000	NC	NC	39	53	81	49	**880**	60	**420**	53	**160**	57	**98**	55
								Class II (mg/L)												
TCLP	Arsenic	NC	NC	NC	NC	NC	NC	0.2	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium	NC	NC	NC	NC	NC	NC	2	0.2	0.92	0.32	0.19	2	0.27	0.86	0.71	0.16	0.63	0.37	0.55
	Cadmium	NC	NC	NC	NC	NC	NC	0.05	< 0.0050	< 0.0050	< 0.0050	< 0.0050	**0.0093 P**	< 0.0050	**0.0088 P**	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
	Chromium	NC	NC	NC	NC	NC	NC	1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.017	0.022	< 0.010	< 0.010
	Cobalt	NC	NC	NC	NC	NC	NC	1	---	---	---	---	---	---	---	---	< 0.010	---	---	---
	Iron	NC	NC	NC	NC	NC	NC	5	---	---	---	---	---	---	---	---	< 0.25	---	---	---
	Lead	NC	NC	NC	NC	NC	NC	0.1	0.02	< 0.0050	0.016	< 0.0050	0.097	< 0.0050	**0.16 P**	< 0.0050	< 0.0050	< 0.0050	0.079	0.0064
	Manganese	NC	NC	NC	NC	NC	NC	10	---	---	---	---	---	---	---	---	0.65	---	---	---
	Mercury	NC	NC	NC	NC	NC	NC	0.01	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium	NC	NC	NC	NC	NC	NC	0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver	NC	NC	NC	NC	NC	NC	---	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium	NC	NC	NC	NC	NC	NC	0.1	---	---	---	---	---	---	---	---	<0.010	---	---	---

†	If no data is available for pH specific value, non-pH specific values are used
§	City of Chicago background values used
*	Nearest pH data value by distance and interval was used for evaluation
---	Not analyzed
NC	No evaluation criteria available
Bold	Above background values
Bold	Exceeds Residential Ingestion or Residential Inhalation SROs
Bold	Exceeds pH-specific Soil Component of Groundwater (Class I or II) ROs
Bold	Exceedance of Background values due to unavailability of data for pH-specific SCOGIER values
T	TCLP used for evaluation, see footnote "m" of 35 IAC 742, App. B, Table A
P	pH used for evaluation, see footnote "m" of 35 IAC 742, App. B, Table A

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023
			Time Collected :	09:55	10:05	19:15	19:25
	Analyte	Construction Worker Route		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	---	---	< 0.066	< 0.073
	Benzene	2,300	2.2	< 0.0048	< 0.024	< 0.0044	< 0.0049
	Bromodichloromethane	2,000	3,000	---	---	< 0.0044	< 0.0049
	Bromoform	16,000	140	---	---	< 0.0044	< 0.0049
	Bromomethane	1,000	3.9	---	---	< 0.0088	< 0.0098
	2-Butanone	NC	NC	---	---	< 0.066	< 0.073
	Carbon disulfide	20,000	9.0	---	---	< 0.044	< 0.049
	Carbon tetrachloride	410	0.90	---	---	< 0.0044	< 0.0049
	Chlorobenzene	4,100	1.3	---	---	< 0.0044	< 0.0049
	Chloroethane	NC	NC	---	---	< 0.0088	< 0.0098
	Chloroform	2,000	0.76	---	---	< 0.0044	< 0.0049
	Chloromethane	NC	NC	---	---	< 0.0088	< 0.0098
	Dibromochloromethane	41,000	1,300	---	---	< 0.0044	< 0.0049
	1,1-Dichloroethane	200,000	130	---	---	< 0.0044	< 0.0049
	1,2-Dichloroethane	1,400	0.99	---	---	< 0.0044	< 0.0049
	1,1-Dichloroethene	10,000	3.0	---	---	< 0.0044	< 0.0049
	cis-1,2-Dichloroethene	20,000	1,200	---	---	< 0.0044	< 0.0049
	trans-1,2-Dichloroethene	41,000	3,100	---	---	< 0.0044	< 0.0049
	1,2-Dichloropropane	1,800	0.50	---	---	< 0.0044	< 0.0049
	cis-1,3-Dichloropropene	1,200	0.39	---	---	< 0.0018	< 0.0020
	trans-1,3-Dichloropropene	1,200	0.39	---	---	< 0.0018	< 0.0020
	Ethylbenzene	20,000	58	< 0.0048	< 0.024	< 0.0044	< 0.0049
	2-Hexanone	NC	NC	---	---	< 0.018	< 0.020
	4-Methyl-2-pentanone	NC	NC	---	---	< 0.018	< 0.020
	Methylene chloride	12,000	34	---	---	< 0.0088	< 0.0098
	Methyl tert-butyl ether	2,000	140	---	---	< 0.0044	< 0.0049
	Styrene	41,000	430	---	---	< 0.0044	< 0.0049
	1,1,2,2-Tetrachloroethane	NC	NC	---	---	< 0.0044	< 0.0049
	Tetrachloroethene	2,400	28	---	---	< 0.0044	< 0.0049
	Toluene	410,000	42	< 0.0048	< 0.024	< 0.0044	< 0.0049
	1,1,1-Trichloroethane	NC	1,200	---	---	< 0.0044	< 0.0049
	1,1,2-Trichloroethane	8,200	1,800	---	---	< 0.0044	< 0.0049
	Trichloroethene	1,200	12	---	---	< 0.0044	< 0.0049
	Vinyl chloride	170	1.1	---	---	< 0.0044	< 0.0049
	Xylenes, Total	41,000	5.6	< 0.015	< 0.073	< 0.013	< 0.015

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-005	22120464-006	22120464-003	22120464-004
			Client Sample ID :	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:15	09:25	08:50	09:00
	Analyte	Construction Worker Route		5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	---	---	---	---
	Benzene	2,300	2.2	< 0.026	< 0.022	< 0.0050	< 0.026
	Bromodichloromethane	2,000	3,000	---	---	---	---
	Bromoform	16,000	140	---	---	---	---
	Bromomethane	1,000	3.9	---	---	---	---
	2-Butanone	NC	NC	---	---	---	---
	Carbon disulfide	20,000	9.0	---	---	---	---
	Carbon tetrachloride	410	0.90	---	---	---	---
	Chlorobenzene	4,100	1.3	---	---	---	---
	Chloroethane	NC	NC	---	---	---	---
	Chloroform	2,000	0.76	---	---	---	---
	Chloromethane	NC	NC	---	---	---	---
	Dibromochloromethane	41,000	1,300	---	---	---	---
	1,1-Dichloroethane	200,000	130	---	---	---	---
	1,2-Dichloroethane	1,400	0.99	---	---	---	---
	1,1-Dichloroethene	10,000	3.0	---	---	---	---
	cis-1,2-Dichloroethene	20,000	1,200	---	---	---	---
	trans-1,2-Dichloroethene	41,000	3,100	---	---	---	---
	1,2-Dichloropropane	1,800	0.50	---	---	---	---
	cis-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	trans-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	Ethylbenzene	20,000	58	< 0.026	< 0.022	< 0.0050	< 0.026
	2-Hexanone	NC	NC	---	---	---	---
	4-Methyl-2-pentanone	NC	NC	---	---	---	---
	Methylene chloride	12,000	34	---	---	---	---
	Methyl tert-butyl ether	2,000	140	---	---	---	---
	Styrene	41,000	430	---	---	---	---
	1,1,2,2-Tetrachloroethane	NC	NC	---	---	---	---
	Tetrachloroethene	2,400	28	---	---	---	---
	Toluene	410,000	42	< 0.026	< 0.022	< 0.0050	< 0.026
	1,1,1-Trichloroethane	NC	1,200	---	---	---	---
	1,1,2-Trichloroethane	8,200	1,800	---	---	---	---
	Trichloroethene	1,200	12	---	---	---	---
	Vinyl chloride	170	1.1	---	---	---	---
	Xylenes, Total	41,000	5.6	< 0.077	< 0.067	< 0.015	< 0.077

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010
			Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	08:25	08:35	10:25	10:35
	Analyte	Construction Worker Route		2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	---	---	---	---
	Benzene	2,300	2.2	< 0.024	< 0.023	< 0.0051	< 0.0063
	Bromodichloromethane	2,000	3,000	---	---	---	---
	Bromoform	16,000	140	---	---	---	---
	Bromomethane	1,000	3.9	---	---	---	---
	2-Butanone	NC	NC	---	---	---	---
	Carbon disulfide	20,000	9.0	---	---	---	---
	Carbon tetrachloride	410	0.90	---	---	---	---
	Chlorobenzene	4,100	1.3	---	---	---	---
	Chloroethane	NC	NC	---	---	---	---
	Chloroform	2,000	0.76	---	---	---	---
	Chloromethane	NC	NC	---	---	---	---
	Dibromochloromethane	41,000	1,300	---	---	---	---
	1,1-Dichloroethane	200,000	130	---	---	---	---
	1,2-Dichloroethane	1,400	0.99	---	---	---	---
	1,1-Dichloroethene	10,000	3.0	---	---	---	---
	cis-1,2-Dichloroethene	20,000	1,200	---	---	---	---
	trans-1,2-Dichloroethene	41,000	3,100	---	---	---	---
	1,2-Dichloropropane	1,800	0.50	---	---	---	---
	cis-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	trans-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	Ethylbenzene	20,000	58	< 0.024	< 0.023	< 0.0051	< 0.0063
	2-Hexanone	NC	NC	---	---	---	---
	4-Methyl-2-pentanone	NC	NC	---	---	---	---
	Methylene chloride	12,000	34	---	---	---	---
	Methyl tert-butyl ether	2,000	140	---	---	---	---
	Styrene	41,000	430	---	---	---	---
	1,1,2,2-Tetrachloroethane	NC	NC	---	---	---	---
	Tetrachloroethene	2,400	28	---	---	---	---
	Toluene	410,000	42	< 0.024	< 0.023	< 0.0051	< 0.0063
	1,1,1-Trichloroethane	NC	1,200	---	---	---	---
	1,1,2-Trichloroethane	8,200	1,800	---	---	---	---
	Trichloroethene	1,200	12	---	---	---	---
	Vinyl chloride	170	1.1	---	---	---	---
	Xylenes, Total	41,000	5.6	< 0.071	< 0.070	< 0.015	< 0.018

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-011	23030736-012	22120464-011	22120464-012
			Client Sample ID :	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
			Date Collected :	03/21/2023	03/21/2023	12/15/2022	12/15/2022
			Time Collected :	16:50	17:00	10:50	11:00
	Analyte	Construction Worker Route		4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.10	< 0.075	---	---
	Benzene	2,300	2.2	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	Bromodichloromethane	2,000	3,000	< 0.0067	< 0.0050	---	---
	Bromoform	16,000	140	< 0.0067	< 0.0050	---	---
	Bromomethane	1,000	3.9	< 0.013	< 0.010	---	---
	2-Butanone	NC	NC	< 0.10	< 0.075	---	---
	Carbon disulfide	20,000	9.0	< 0.067	< 0.050	---	---
	Carbon tetrachloride	410	0.90	< 0.0067	< 0.0050	---	---
	Chlorobenzene	4,100	1.3	< 0.0067	< 0.0050	---	---
	Chloroethane	NC	NC	< 0.013	< 0.010	---	---
	Chloroform	2,000	0.76	< 0.0067	< 0.0050	---	---
	Chloromethane	NC	NC	< 0.013	< 0.010	---	---
	Dibromochloromethane	41,000	1,300	< 0.0067	< 0.0050	---	---
	1,1-Dichloroethane	200,000	130	< 0.0067	< 0.0050	---	---
	1,2-Dichloroethane	1,400	0.99	< 0.0067	< 0.0050	---	---
	1,1-Dichloroethene	10,000	3.0	< 0.0067	< 0.0050	---	---
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0067	< 0.0050	---	---
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0067	< 0.0050	---	---
	1,2-Dichloropropane	1,800	0.50	< 0.0067	< 0.0050	---	---
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0027	< 0.0020	---	---
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0027	< 0.0020	---	---
	Ethylbenzene	20,000	58	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	2-Hexanone	NC	NC	< 0.027	< 0.020	---	---
	4-Methyl-2-pentanone	NC	NC	< 0.027	< 0.020	---	---
	Methylene chloride	12,000	34	< 0.013	< 0.010	---	---
	Methyl tert-butyl ether	2,000	140	< 0.0067	< 0.0050	---	---
	Styrene	41,000	430	< 0.0067	< 0.0050	---	---
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0067	< 0.0050	---	---
	Tetrachloroethene	2,400	28	< 0.0067	< 0.0050	---	---
	Toluene	410,000	42	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	1,1,1-Trichloroethane	NC	1,200	< 0.0067	< 0.0050	---	---
	1,1,2-Trichloroethane	8,200	1,800	< 0.0067	< 0.0050	---	---
	Trichloroethene	1,200	12	< 0.0067	< 0.0050	---	---
	Vinyl chloride	170	1.1	< 0.0067	< 0.0050	---	---
	Xylenes, Total	41,000	5.6	< 0.020	< 0.015	< 0.018	< 0.015

Legend:

Bold Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.

--- Not analyzed

NC No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002
			Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:25	18:30	19:20	19:25
	Analyte	Construction Worker Route		2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.072	< 0.068	< 0.077	< 0.067
	Benzene	2,300	2.2	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Bromodichloromethane	2,000	3,000	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Bromoform	16,000	140	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Bromomethane	1,000	3.9	< 0.0095	< 0.0091	< 0.010	< 0.0089
	2-Butanone	NC	NC	< 0.072	< 0.068	< 0.077	< 0.067
	Carbon disulfide	20,000	9.0	< 0.048	< 0.045	< 0.051	< 0.045
	Carbon tetrachloride	410	0.90	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Chlorobenzene	4,100	1.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Chloroethane	NC	NC	< 0.0095	< 0.0091	< 0.010	< 0.0089
	Chloroform	2,000	0.76	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Chloromethane	NC	NC	< 0.0095	< 0.0091	< 0.010	< 0.0089
	Dibromochloromethane	41,000	1,300	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1-Dichloroethane	200,000	130	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,2-Dichloroethane	1,400	0.99	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1-Dichloroethene	10,000	3.0	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,2-Dichloropropane	1,800	0.50	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0019	< 0.0018	< 0.0021	< 0.0018
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0019	< 0.0018	< 0.0021	< 0.0018
	Ethylbenzene	20,000	58	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	2-Hexanone	NC	NC	< 0.019	< 0.018	< 0.021	< 0.018
	4-Methyl-2-pentanone	NC	NC	< 0.019	< 0.018	< 0.021	< 0.018
	Methylene chloride	12,000	34	< 0.0095	< 0.0091	< 0.010	< 0.0089
	Methyl tert-butyl ether	2,000	140	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Styrene	41,000	430	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Tetrachloroethene	2,400	28	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Toluene	410,000	42	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1,1-Trichloroethane	NC	1,200	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1,2-Trichloroethane	8,200	1,800	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Trichloroethene	1,200	12	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Vinyl chloride	170	1.1	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Xylenes, Total	41,000	5.6	< 0.014	< 0.014	< 0.015	< 0.013

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-003	23030736-004	23030736-005	23030736-006
			Client Sample ID :	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:00	19:10	17:10	17:15
	Analyte	Construction Worker Route		1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	0.077	< 0.066	< 0.066	< 0.072
	Benzene	2,300	2.2	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Bromodichloromethane	2,000	3,000	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Bromoform	16,000	140	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Bromomethane	1,000	3.9	< 0.010	< 0.0089	< 0.0088	< 0.0095
	2-Butanone	NC	NC	< 0.076	< 0.066	< 0.066	< 0.072
	Carbon disulfide	20,000	9.0	< 0.051	< 0.044	< 0.044	< 0.048
	Carbon tetrachloride	410	0.90	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Chlorobenzene	4,100	1.3	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Chloroethane	NC	NC	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Chloroform	2,000	0.76	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Chloromethane	NC	NC	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Dibromochloromethane	41,000	1,300	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1-Dichloroethane	200,000	130	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,2-Dichloroethane	1,400	0.99	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1-Dichloroethene	10,000	3.0	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,2-Dichloropropane	1,800	0.50	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0020	< 0.0018	< 0.0018	< 0.0019
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0020	< 0.0018	< 0.0018	< 0.0019
	Ethylbenzene	20,000	58	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	2-Hexanone	NC	NC	< 0.020	< 0.018	< 0.018	< 0.019
	4-Methyl-2-pentanone	NC	NC	< 0.020	< 0.018	< 0.018	< 0.019
	Methylene chloride	12,000	34	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Methyl tert-butyl ether	2,000	140	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Styrene	41,000	430	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Tetrachloroethene	2,400	28	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Toluene	410,000	42	< 0.0051	0.0047	0.0060	< 0.0048
	1,1,1-Trichloroethane	NC	1,200	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1,2-Trichloroethane	8,200	1,800	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Trichloroethene	1,200	12	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Vinyl chloride	170	1.1	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Xylenes, Total	41,000	5.6	< 0.015	< 0.013	< 0.013	< 0.014

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-007	23030736-008	23030736-009	23030736-010
			Client Sample ID :	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	17:40	17:50	19:40	19:45
	Analyte	Construction Worker Route		3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.080	< 0.068	< 0.077	< 0.076
	Benzene	2,300	2.2	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Bromodichloromethane	2,000	3,000	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Bromoform	16,000	140	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Bromomethane	1,000	3.9	< 0.011	< 0.0091	< 0.010	< 0.010
	2-Butanone	NC	NC	< 0.080	< 0.068	< 0.077	< 0.076
	Carbon disulfide	20,000	9.0	< 0.053	< 0.045	< 0.051	< 0.050
	Carbon tetrachloride	410	0.90	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Chlorobenzene	4,100	1.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Chloroethane	NC	NC	< 0.011	< 0.0091	< 0.010	< 0.010
	Chloroform	2,000	0.76	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Chloromethane	NC	NC	< 0.011	< 0.0091	< 0.010	< 0.010
	Dibromochloromethane	41,000	1,300	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1-Dichloroethane	200,000	130	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,2-Dichloroethane	1,400	0.99	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1-Dichloroethene	10,000	3.0	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,2-Dichloropropane	1,800	0.50	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0021	< 0.0018	< 0.0020	< 0.0020
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0021	< 0.0018	< 0.0020	< 0.0020
	Ethylbenzene	20,000	58	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	2-Hexanone	NC	NC	< 0.021	< 0.018	< 0.020	< 0.020
	4-Methyl-2-pentanone	NC	NC	< 0.021	< 0.018	< 0.020	< 0.020
	Methylene chloride	12,000	34	< 0.011	< 0.0091	< 0.010	< 0.010
	Methyl tert-butyl ether	2,000	140	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Styrene	41,000	430	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Tetrachloroethene	2,400	28	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Toluene	410,000	42	< 0.0053	0.0047	< 0.0051	< 0.0050
	1,1,1-Trichloroethane	NC	1,200	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1,2-Trichloroethane	8,200	1,800	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Trichloroethene	1,200	12	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Vinyl chloride	170	1.1	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Xylenes, Total	41,000	5.6	< 0.016	< 0.014	< 0.015	< 0.015

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-001	23030838-002	23030787-001	23030787-002
			Client Sample ID :	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
			Date Collected :	03/23/2023	03/23/2023	03/22/2023	03/22/2023
			Time Collected :	16:55	17:05	21:00	21:10
	Analyte	Construction Worker Route		3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.081	< 0.071	< 0.077	< 0.067
	Benzene	2,300	2.2	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Bromodichloromethane	2,000	3,000	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Bromoform	16,000	140	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Bromomethane	1,000	3.9	< 0.011	< 0.0094	< 0.010	< 0.0088
	2-Butanone	NC	NC	< 0.081	< 0.071	< 0.077	< 0.067
	Carbon disulfide	20,000	9.0	< 0.054	< 0.047	< 0.051	< 0.044
	Carbon tetrachloride	410	0.90	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Chlorobenzene	4,100	1.3	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Chloroethane	NC	NC	< 0.011	< 0.0094	< 0.010	< 0.0088
	Chloroform	2,000	0.76	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Chloromethane	NC	NC	< 0.011	< 0.0094	< 0.010	< 0.0088
	Dibromochloromethane	41,000	1,300	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1-Dichloroethane	200,000	130	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,2-Dichloroethane	1,400	0.99	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1-Dichloroethene	10,000	3.0	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,2-Dichloropropane	1,800	0.50	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019	< 0.0020	< 0.0018
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019	< 0.0020	< 0.0018
	Ethylbenzene	20,000	58	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	2-Hexanone	NC	NC	< 0.022	< 0.019	< 0.020	< 0.018
	4-Methyl-2-pentanone	NC	NC	< 0.022	< 0.019	< 0.020	< 0.018
	Methylene chloride	12,000	34	< 0.011	< 0.0094	< 0.010	< 0.0088
	Methyl tert-butyl ether	2,000	140	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Styrene	41,000	430	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Tetrachloroethene	2,400	28	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Toluene	410,000	42	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,1-Trichloroethane	NC	1,200	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,2-Trichloroethane	8,200	1,800	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Trichloroethene	1,200	12	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Vinyl chloride	170	1.1	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Xylenes, Total	41,000	5.6	< 0.016	< 0.014	< 0.015	< 0.013

Legend:

Bold Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.

--- Not analyzed

NC No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-003	23030838-004
			Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023
			Time Collected :	17:50	18:25
	Analyte	Construction Worker Route		3-4' bgs	7-8' bgs
		Ingestion	Inhalation		
VOCs	Acetone	NC	100,000	< 0.082	< 0.071
	Benzene	2,300	2.2	< 0.0054	< 0.0047
	Bromodichloromethane	2,000	3,000	< 0.0054	< 0.0047
	Bromoform	16,000	140	< 0.0054	< 0.0047
	Bromomethane	1,000	3.9	< 0.011	< 0.0094
	2-Butanone	NC	NC	< 0.082	< 0.071
	Carbon disulfide	20,000	9.0	< 0.054	< 0.047
	Carbon tetrachloride	410	0.90	< 0.0054	< 0.0047
	Chlorobenzene	4,100	1.3	< 0.0054	< 0.0047
	Chloroethane	NC	NC	< 0.011	< 0.0094
	Chloroform	2,000	0.76	< 0.0054	< 0.0047
	Chloromethane	NC	NC	< 0.011	< 0.0094
	Dibromochloromethane	41,000	1,300	< 0.0054	< 0.0047
	1,1-Dichloroethane	200,000	130	< 0.0054	< 0.0047
	1,2-Dichloroethane	1,400	0.99	< 0.0054	< 0.0047
	1,1-Dichloroethene	10,000	3.0	< 0.0054	< 0.0047
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0054	< 0.0047
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0054	< 0.0047
	1,2-Dichloropropane	1,800	0.50	< 0.0054	< 0.0047
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019
	Ethylbenzene	20,000	58	< 0.0054	< 0.0047
	2-Hexanone	NC	NC	< 0.022	< 0.019
	4-Methyl-2-pentanone	NC	NC	< 0.022	< 0.019
	Methylene chloride	12,000	34	< 0.011	< 0.0094
	Methyl tert-butyl ether	2,000	140	< 0.0054	< 0.0047
	Styrene	41,000	430	< 0.0054	< 0.0047
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0054	< 0.0047
	Tetrachloroethene	2,400	28	< 0.0054	< 0.0047
	Toluene	410,000	42	< 0.0054	< 0.0047
	1,1,1-Trichloroethane	NC	1,200	< 0.0054	< 0.0047
	1,1,2-Trichloroethane	8,200	1,800	< 0.0054	< 0.0047
	Trichloroethene	1,200	12	< 0.0054	< 0.0047
	Vinyl chloride	170	1.1	< 0.0054	< 0.0047
	Xylenes, Total	41,000	5.6	< 0.016	< 0.014

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-005	23030838-006	23030736-011	23030736-012	23030736-013
			Client Sample ID :	SB-01A (4-5)	SB-01A (7-8)	SB-05D (4-5)	SB-05D (5-6)	SB-06A (2-3)
			Date Collected :	03/23/2023	03/23/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:15	19:25	16:50	17:00	18:25
	Analyte	Construction Worker Route		4-5' bgs	7-8' bgs	4-5' bgs	5-6' bgs	2-3' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.39	< 0.40	< 0.41	< 0.40	< 0.38
	Benzidine	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	Benzoic acid	820,000	NC	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Benzyl alcohol	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Bis(2-chloroethoxy)methane	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Bis(2-chloroethyl)ether	75	0.66	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	4-Bromophenyl phenyl ether	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Butyl benzyl phthalate	410,000	930	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Carbazole	6,200	NC	< 0.20	< 0.20	0.79	< 0.21	< 0.19
	4-Chloroaniline	820	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Chloro-3-methylphenol	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	2-Chloronaphthalene	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Chlorophenol	10,000	53,000	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Chlorophenyl phenyl ether	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Dibenzofuran	NC	NC	< 0.20	< 0.20	0.44	< 0.21	< 0.19
	1,2-Dichlorobenzene	18,000	310	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	1,3-Dichlorobenzene	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	1,4-Dichlorobenzene	NC	340	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	3,3´-Dichlorobenzidine	280	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2,4-Dichlorophenol	610	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Diethyl phthalate	1,000,000	2,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	2,4-Dimethylphenol	41,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Dimethyl phthalate	NC	NC	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	2,4-Dinitrophenol	410	NC	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	2,4-Dinitrotoluene	180	NC	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	2,6-Dinitrotoluene	180	NC	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	Di-n-butyl phthalate	200,000	2,300	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Di-n-octyl phthalate	4,100	10,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Hexachlorobenzene	78	2.6	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Hexachlorobutadiene	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Hexachlorocyclopentadiene	14,000	1.1	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Hexachloroethane	2,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Isophorone	410,000	4,600	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Methylnaphthalene	NC	NC	< 0.20	< 0.20	0.25	< 0.21	< 0.19
	2-Methylphenol	100,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Methylphenol	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Nitroaniline	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	3-Nitroaniline	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Nitroaniline	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Nitrophenol	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Nitrophenol	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	Nitrobenzene	1,000	9.4	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	N-Nitrosodi-n-propylamine	18	NC	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	N-Nitrosodimethylamine	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	N-Nitrosodiphenylamine	25,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Pentachlorophenol	520	NC	< 0.079	< 0.081	< 0.082	< 0.081	< 0.077
	Phenol	61,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Pyridine	NC	NC	< 0.79	< 0.81	< 0.82	< 0.81	< 0.77
	1,2,4-Trichlorobenzene	2,000	920	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2,4,5-Trichlorophenol	200,000	---	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2,4,6-Trichlorophenol	11,000	540	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004
			Client Sample ID :	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:30	19:20	19:25	19:00	19:10
	Analyte	Construction Worker Route		11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.40	< 0.39	< 0.39	< 0.38	< 0.41
	Benzidine	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	Benzoic acid	820,000	NC	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Benzyl alcohol	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Bis(2-chloroethoxy)methane	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Bis(2-chloroethyl)ether	75	0.66	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	4-Bromophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Butyl benzyl phthalate	410,000	930	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Carbazole	6,200	NC	< 0.21	0.31	< 0.20	0.31	< 0.21
	4-Chloroaniline	820	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Chloro-3-methylphenol	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	2-Chloronaphthalene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Chlorophenol	10,000	53,000	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Chlorophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Dibenzofuran	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	1,2-Dichlorobenzene	18,000	310	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	1,3-Dichlorobenzene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	1,4-Dichlorobenzene	NC	340	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	3,3´-Dichlorobenzidine	280	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2,4-Dichlorophenol	610	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Diethyl phthalate	1,000,000	2,000	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	2,4-Dimethylphenol	41,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Dimethyl phthalate	NC	NC	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	2,4-Dinitrophenol	410	NC	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	2,4-Dinitrotoluene	180	NC	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	2,6-Dinitrotoluene	180	NC	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	Di-n-butyl phthalate	200,000	2,300	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Di-n-octyl phthalate	4,100	10,000	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Hexachlorobenzene	78	2.6	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Hexachlorobutadiene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Hexachlorocyclopentadiene	14,000	1.1	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Hexachloroethane	2,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Isophorone	410,000	4,600	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Methylnaphthalene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Methylphenol	100,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Methylphenol	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	3-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Nitrophenol	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Nitrophenol	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	Nitrobenzene	1,000	9.4	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	N-Nitrosodi-n-propylamine	18	NC	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	N-Nitrosodimethylamine	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	N-Nitrosodiphenylamine	25,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Pentachlorophenol	520	NC	< 0.081	< 0.078	< 0.079	< 0.076	< 0.083
	Phenol	61,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Pyridine	NC	NC	< 0.81	< 0.78	< 0.79	< 0.76	< 0.83
	1,2,4-Trichlorobenzene	2,000	920	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2,4,5-Trichlorophenol	200,000	---	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2,4,6-Trichlorophenol	11,000	540	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-005	23030736-006	23030736-007	23030736-008	23030736-009
			Client Sample ID :	SB-09 (2-3)	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	17:10	17:15	17:40	17:50	19:40
	Analyte	Construction Worker Route		2-3' bgs	14-15' bgs	3-4' bgs	6-7' bgs	0-1' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.37	< 0.42	< 0.39	< 0.41	< 0.39
	Benzidine	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	Benzoic acid	820,000	NC	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Benzyl alcohol	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Bis(2-chloroethoxy)methane	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Bis(2-chloroethyl)ether	75	0.66	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	4-Bromophenyl phenyl ether	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Butyl benzyl phthalate	410,000	930	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Carbazole	6,200	NC	0.29	< 0.21	< 0.20	< 0.21	0.34
	4-Chloroaniline	820	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Chloro-3-methylphenol	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	2-Chloronaphthalene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Chlorophenol	10,000	53,000	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Chlorophenyl phenyl ether	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Dibenzofuran	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	1,2-Dichlorobenzene	18,000	310	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	1,3-Dichlorobenzene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	1,4-Dichlorobenzene	NC	340	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	3,3´-Dichlorobenzidine	280	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2,4-Dichlorophenol	610	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Diethyl phthalate	1,000,000	2,000	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	2,4-Dimethylphenol	41,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Dimethyl phthalate	NC	NC	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	2,4-Dinitrophenol	410	NC	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	2,4-Dinitrotoluene	180	NC	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	2,6-Dinitrotoluene	180	NC	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	Di-n-butyl phthalate	200,000	2,300	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Di-n-octyl phthalate	4,100	10,000	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Hexachlorobenzene	78	2.6	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Hexachlorobutadiene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Hexachlorocyclopentadiene	14,000	1.1	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Hexachloroethane	2,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Isophorone	410,000	4,600	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Methylnaphthalene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Methylphenol	100,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Methylphenol	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Nitroaniline	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	3-Nitroaniline	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Nitroaniline	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Nitrophenol	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Nitrophenol	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	Nitrobenzene	1,000	9.4	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	N-Nitrosodi-n-propylamine	18	NC	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	N-Nitrosodimethylamine	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	N-Nitrosodiphenylamine	25,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Pentachlorophenol	520	NC	< 0.075	< 0.084	< 0.079	< 0.083	< 0.078
	Phenol	61,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Pyridine	NC	NC	< 0.75	< 0.84	< 0.79	< 0.83	< 0.78
	1,2,4-Trichlorobenzene	2,000	920	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2,4,5-Trichlorophenol	200,000	---	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2,4,6-Trichlorophenol	11,000	540	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
			Client Sample ID :	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
			Date Collected :	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
			Time Collected :	19:45	16:55	17:05	21:00	21:10
	Analyte	Construction Worker Route		6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.40	< 0.40	< 0.42	< 0.41	< 0.39
	Benzidine	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	Benzoic acid	820,000	NC	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Benzyl alcohol	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Bis(2-chloroethoxy)methane	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Bis(2-chloroethyl)ether	75	0.66	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	4-Bromophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Butyl benzyl phthalate	410,000	930	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Carbazole	6,200	NC	< 0.21	0.88	< 0.21	< 0.21	< 0.20
	4-Chloroaniline	820	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Chloro-3-methylphenol	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	2-Chloronaphthalene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Chlorophenol	10,000	53,000	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Chlorophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Dibenzofuran	NC	NC	< 0.21	0.56	< 0.21	< 0.21	< 0.20
	1,2-Dichlorobenzene	18,000	310	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	1,3-Dichlorobenzene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	1,4-Dichlorobenzene	NC	340	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	3,3´-Dichlorobenzidine	280	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4-Dichlorophenol	610	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Diethyl phthalate	1,000,000	2,000	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	2,4-Dimethylphenol	41,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Dimethyl phthalate	NC	NC	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	2,4-Dinitrophenol	410	NC	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	2,4-Dinitrotoluene	180	NC	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	2,6-Dinitrotoluene	180	NC	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	Di-n-butyl phthalate	200,000	2,300	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Di-n-octyl phthalate	4,100	10,000	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Hexachlorobenzene	78	2.6	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Hexachlorobutadiene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Hexachlorocyclopentadiene	14,000	1.1	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Hexachloroethane	2,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Isophorone	410,000	4,600	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Methylnaphthalene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Methylphenol	100,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Methylphenol	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	3-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Nitrophenol	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Nitrophenol	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	Nitrobenzene	1,000	9.4	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	N-Nitrosodi-n-propylamine	18	NC	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	N-Nitrosodimethylamine	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	N-Nitrosodiphenylamine	25,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Pentachlorophenol	520	NC	< 0.081	< 0.080	< 0.084	< 0.081	< 0.079
	Phenol	61,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Pyridine	NC	NC	< 0.81	< 0.80	< 0.84	< 0.81	< 0.79
	1,2,4-Trichlorobenzene	2,000	920	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4,5-Trichlorophenol	200,000	---	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4,6-Trichlorophenol	11,000	540	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-003	23030838-004
			Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023
			Time Collected :	17:50	18:25
	Analyte	Construction Worker Route		3-4' bgs	7-8' bgs
		Ingestion	Inhalation		
SVOCs	Aniline	NC	NC	< 0.39	< 0.40
	Benzidine	NC	NC	< 0.39	< 0.40
	Benzoic acid	820,000	NC	< 0.97	< 0.99
	Benzyl alcohol	NC	NC	< 0.20	< 0.20
	Bis(2-chloroethoxy)methane	NC	NC	< 0.20	< 0.20
	Bis(2-chloroethyl)ether	75	0.66	< 0.20	< 0.20
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 0.97	< 0.99
	4-Bromophenyl phenyl ether	NC	NC	< 0.20	< 0.20
	Butyl benzyl phthalate	410,000	930	< 0.97	< 0.99
	Carbazole	6,200	NC	< 0.20	< 0.20
	4-Chloroaniline	820	NC	< 0.20	< 0.20
	4-Chloro-3-methylphenol	NC	NC	< 0.39	< 0.40
	2-Chloronaphthalene	NC	NC	< 0.20	< 0.20
	2-Chlorophenol	10,000	53,000	< 0.20	< 0.20
	4-Chlorophenyl phenyl ether	NC	NC	< 0.20	< 0.20
	Dibenzofuran	NC	NC	< 0.20	< 0.20
	1,2-Dichlorobenzene	18,000	310	< 0.20	< 0.20
	1,3-Dichlorobenzene	NC	NC	< 0.20	< 0.20
	1,4-Dichlorobenzene	NC	340	< 0.20	< 0.20
	3,3´-Dichlorobenzidine	280	NC	< 0.20	< 0.20
	2,4-Dichlorophenol	610	NC	< 0.20	< 0.20
	Diethyl phthalate	1,000,000	2,000	< 0.97	< 0.99
	2,4-Dimethylphenol	41,000	NC	< 0.20	< 0.20
	Dimethyl phthalate	NC	NC	< 0.97	< 0.99
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.39	< 0.40
	2,4-Dinitrophenol	410	NC	< 0.97	< 0.99
	2,4-Dinitrotoluene	180	NC	< 0.039	< 0.040
	2,6-Dinitrotoluene	180	NC	< 0.039	< 0.040
	Di-n-butyl phthalate	200,000	2,300	< 0.97	< 0.99
	Di-n-octyl phthalate	4,100	10,000	< 0.97	< 0.99
	Hexachlorobenzene	78	2.6	< 0.20	< 0.20
	Hexachlorobutadiene	NC	NC	< 0.20	< 0.20
	Hexachlorocyclopentadiene	14,000	1.1	< 0.20	< 0.20
	Hexachloroethane	2,000	NC	< 0.20	< 0.20
	Isophorone	410,000	4,600	< 0.20	< 0.20
	2-Methylnaphthalene	NC	NC	< 0.20	< 0.20
	2-Methylphenol	100,000	NC	< 0.20	< 0.20
	4-Methylphenol	NC	NC	< 0.20	< 0.20
	2-Nitroaniline	NC	NC	< 0.20	< 0.20
	3-Nitroaniline	NC	NC	< 0.20	< 0.20
	4-Nitroaniline	NC	NC	< 0.20	< 0.20
	2-Nitrophenol	NC	NC	< 0.20	< 0.20
	4-Nitrophenol	NC	NC	< 0.39	< 0.40
	Nitrobenzene	1,000	9.4	< 0.039	< 0.040
	N-Nitrosodi-n-propylamine	18	NC	< 0.039	< 0.040
	N-Nitrosodimethylamine	NC	NC	< 0.20	< 0.20
	N-Nitrosodiphenylamine	25,000	NC	< 0.20	< 0.20
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.20	< 0.20
	Pentachlorophenol	520	NC	< 0.079	< 0.080
	Phenol	61,000	NC	< 0.20	< 0.20
	Pyridine	NC	NC	< 0.79	< 0.80
	1,2,4-Trichlorobenzene	2,000	920	< 0.20	< 0.20
	2,4,5-Trichlorophenol	200,000	---	< 0.20	< 0.20
	2,4,6-Trichlorophenol	11,000	540	< 0.20	< 0.20

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50
	Analyte	Construction Worker Route		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs
		Ingestion	Inhalation							
PNAs	Acenaphthene	120,000	NC	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Acenaphthylene	NC	NC	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Anthracene	610,000	NC	< 0.038	< 0.040	0.097	< 0.040	< 0.040	< 0.041	< 0.039
	Benz(a)anthracene	170	NC	0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(a)pyrene	17	NC	0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(b)fluoranthene	170	NC	0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(g,h,i)perylene	NC	NC	0.20	< 0.040	0.25	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(k)fluoranthene	1,700	NC	0.28	< 0.040	0.33	< 0.040	< 0.040	< 0.041	< 0.039
	Chrysene	17,000	NC	0.28	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039
	Dibenz(a,h)anthracene	17	NC	0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039
	Fluoranthene	82,000	NC	0.47	< 0.040	0.76	< 0.040	< 0.040	< 0.041	< 0.039
	Fluorene	82,000	NC	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Indeno(1,2,3-cd)pyrene	170	NC	0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039
	Naphthalene	4,100	1.8	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Phenanthrene	NC	NC	0.14	< 0.040	0.37	< 0.040	< 0.040	< 0.041	< 0.039
	Pyrene	61,000	NC	0.47	< 0.040	0.69	< 0.040	< 0.040	< 0.041	< 0.039

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-004	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011
			Client Sample ID :	SB-03 (7'-8')	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022
			Time Collected :	09:00	08:25	08:35	10:25	10:35	16:50	17:00	10:50
	Analyte	Construction Worker Route		7-8' bgs	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs
		Ingestion	Inhalation								
PNAs	Acenaphthene	120,000	NC	< 0.039	< 0.041	< 0.040	0.53	< 0.040	0.72	< 0.040	0.42
	Acenaphthylene	NC	NC	< 0.039	< 0.041	< 0.040	< 0.037	< 0.040	0.91	< 0.040	0.32
	Anthracene	610,000	NC	< 0.039	0.044	< 0.040	1.0	< 0.040	3.1	< 0.040	1.7
	Benz(a)anthracene	170	NC	< 0.039	0.14	< 0.040	2.1	< 0.040	6.9	< 0.040	5.8
	Benzo(a)pyrene	17	NC	< 0.039	0.13	< 0.040	2.3	< 0.040	7.0	< 0.040	5.8
	Benzo(b)fluoranthene	170	NC	< 0.039	0.11	< 0.040	2.1	< 0.040	4.8	< 0.040	4.4
	Benzo(g,h,i)perylene	NC	NC	< 0.039	0.073	< 0.040	1.5	< 0.040	4.9	< 0.040	3.1
	Benzo(k)fluoranthene	1,700	NC	< 0.039	0.12	< 0.040	1.8	< 0.040	6.6	< 0.040	3.8
	Chrysene	17,000	NC	< 0.039	0.14	< 0.040	2.3	< 0.040	7.6	< 0.040	5.6
	Dibenz(a,h)anthracene	17	NC	< 0.039	< 0.041	< 0.040	0.68	< 0.040	2.3	< 0.040	1.5
	Fluoranthene	82,000	NC	< 0.039	0.29	< 0.040	4.5	< 0.040	15	< 0.040	12
	Fluorene	82,000	NC	< 0.039	< 0.041	< 0.040	0.49	< 0.040	1.1	< 0.040	0.56
	Indeno(1,2,3-cd)pyrene	170	NC	< 0.039	0.074	< 0.040	1.4	< 0.040	4.3	< 0.040	2.8
	Naphthalene	4,100	1.8	< 0.039	< 0.041	< 0.040	0.81	< 0.040	0.33	< 0.040	0.19
	Phenanthrene	NC	NC	< 0.039	0.22	< 0.040	4.2	< 0.040	12	< 0.040	8.0
	Pyrene	61,000	NC	< 0.039	0.24	< 0.040	3.7	< 0.040	15	< 0.040	11

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-012	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005
			Client Sample ID :	SB-06 (11'-12')	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)
			Date Collected :	12/15/2022	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	11:00	18:25	18:30	19:20	19:25	19:00	19:10	17:10
	Analyte	Construction Worker Route		11-12' bgs	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs
		Ingestion	Inhalation								
PNAs	Acenaphthene	120,000	NC	< 0.040	0.060	< 0.040	0.22	< 0.039	0.19	< 0.041	0.19
	Acenaphthylene	NC	NC	< 0.040	0.20	< 0.040	0.30	< 0.039	0.15	< 0.041	2.1
	Anthracene	610,000	NC	< 0.040	0.40	< 0.040	1.1	< 0.039	0.65	< 0.041	3.5
	Benz(a)anthracene	170	NC	< 0.040	2.0	< 0.040	4.2	< 0.039	2.2	< 0.041	14
	Benzo(a)pyrene	17	NC	< 0.040	2.1	< 0.040	4.1	< 0.039	2.3	< 0.041	14
	Benzo(b)fluoranthene	170	NC	< 0.040	1.6	< 0.040	3.7	< 0.039	2.1	< 0.041	11
	Benzo(g,h,i)perylene	NC	NC	< 0.040	1.1	< 0.040	2.2	< 0.039	1.3	< 0.041	8.2
	Benzo(k)fluoranthene	1,700	NC	< 0.040	1.8	< 0.040	3.4	< 0.039	1.8	< 0.041	11
	Chrysene	17,000	NC	< 0.040	1.9	< 0.040	4.5	< 0.039	2.4	< 0.041	13
	Dibenz(a,h)anthracene	17	NC	< 0.040	0.69	< 0.040	1.2	< 0.039	0.71	< 0.041	3.6
	Fluoranthene	82,000	NC	< 0.040	2.8	< 0.040	7.0	< 0.039	4.5	< 0.041	29
	Fluorene	82,000	NC	< 0.040	0.095	< 0.040	0.31	< 0.039	0.24	< 0.041	0.45
	Indeno(1,2,3-cd)pyrene	170	NC	< 0.040	1.1	< 0.040	2.0	< 0.039	1.2	< 0.041	7.2
	Naphthalene	4,100	1.8	< 0.040	0.053	< 0.040	0.081	< 0.039	0.11	< 0.041	0.20
	Phenanthrene	NC	NC	< 0.040	1.1	< 0.040	4.0	< 0.039	3.2	< 0.041	7.4
	Pyrene	61,000	NC	< 0.040	2.6	< 0.040	6.1	< 0.039	3.8	< 0.041	26

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-006	23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002
			Client Sample ID :	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023
			Time Collected :	17:15	17:40	17:50	19:40	19:45	16:55	17:05
	Analyte	Construction Worker Route		14-15' bgs	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs
		Ingestion	Inhalation							
PNAs	Acenaphthene	120,000	NC	< 0.041	< 0.039	< 0.041	0.24	< 0.040	0.67	< 0.041
	Acenaphthylene	NC	NC	< 0.041	< 0.039	< 0.041	0.24	< 0.040	1.4	< 0.041
	Anthracene	610,000	NC	< 0.041	0.13	< 0.041	0.97	< 0.040	3.4	< 0.041
	Benz(a)anthracene	170	NC	< 0.041	0.37	< 0.041	3.7	< 0.040	9.7	< 0.041
	Benzo(a)pyrene	17	NC	< 0.041	0.40	< 0.041	3.5	< 0.040	9.1	< 0.041
	Benzo(b)fluoranthene	170	NC	< 0.041	0.34	< 0.041	3.1	< 0.040	6.8	< 0.041
	Benzo(g,h,i)perylene	NC	NC	< 0.041	0.22	< 0.041	2.0	< 0.040	5.0	< 0.041
	Benzo(k)fluoranthene	1,700	NC	< 0.041	0.29	< 0.041	2.9	< 0.040	8.2	< 0.041
	Chrysene	17,000	NC	< 0.041	0.38	< 0.041	3.7	< 0.040	10	< 0.041
	Dibenz(a,h)anthracene	17	NC	< 0.041	0.12	< 0.041	1.1	< 0.040	2.7	< 0.041
	Fluoranthene	82,000	NC	< 0.041	0.67	0.067	7.3	< 0.040	19	< 0.041
	Fluorene	82,000	NC	< 0.041	0.051	< 0.041	0.32	< 0.040	1.1	< 0.041
	Indeno(1,2,3-cd)pyrene	170	NC	< 0.041	0.19	< 0.041	1.8	< 0.040	4.8	< 0.041
	Naphthalene	4,100	1.8	< 0.041	< 0.039	< 0.041	0.093	< 0.040	0.24	< 0.041
	Phenanthrene	NC	NC	< 0.041	0.46	0.052	4.2	< 0.040	13	< 0.041
	Pyrene	61,000	NC	< 0.041	0.59	0.058	6.0	< 0.040	16	< 0.041

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030787-001	23030787-002	23030838-003	23030838-004
			Client Sample ID :	SB-13 (3-4)	SB-13 (7-8)	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/22/2023	03/22/2023	03/23/2023	03/23/2023
			Time Collected :	21:00	21:10	17:50	18:25
	Analyte	Construction Worker Route		3-4' bgs	7-8' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation				
PNAs	Acenaphthene	120,000	NC	< 0.041	< 0.039	< 0.039	< 0.040
	Acenaphthylene	NC	NC	< 0.041	< 0.039	< 0.039	< 0.040
	Anthracene	610,000	NC	0.085	< 0.039	0.047	< 0.040
	Benz(a)anthracene	170	NC	0.31	< 0.039	0.14	< 0.040
	Benzo(a)pyrene	17	NC	0.28	< 0.039	0.14	< 0.040
	Benzo(b)fluoranthene	170	NC	0.29	< 0.039	0.13	< 0.040
	Benzo(g,h,i)perylene	NC	NC	0.18	< 0.039	0.085	< 0.040
	Benzo(k)fluoranthene	1,700	NC	0.19	< 0.039	0.12	< 0.040
	Chrysene	17,000	NC	0.32	< 0.039	0.15	< 0.040
	Dibenz(a,h)anthracene	17	NC	0.087	< 0.039	0.043	< 0.040
	Fluoranthene	82,000	NC	0.64	< 0.039	0.30	< 0.040
	Fluorene	82,000	NC	< 0.041	< 0.039	< 0.039	< 0.040
	Indeno(1,2,3-cd)pyrene	170	NC	0.15	< 0.039	0.077	< 0.040
	Naphthalene	4,100	1.8	< 0.041	< 0.039	< 0.039	< 0.040
	Phenanthrene	NC	NC	0.35	< 0.039	0.21	< 0.040
	Pyrene	61,000	NC	0.55	< 0.039	0.24	< 0.040

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50
	Analyte	Construction Worker Route Specific		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs
		Ingestion	Inhalation							
INORGANICS	Aluminum	NC	NC	---	---	7100	13000	---	---	---
	Antimony	82	NC	---	---	< 2.4	< 2.3	---	---	---
	Arsenic	61	25,000	7.7	9.5	6.4	11	13	9.5	3.1
	Barium	14,000	870,000	79	30	41	52	82	49	34
	Beryllium	410	44,000	---	---	< 0.59	0.66	---	---	---
	Cadmium	200	59,000	0.74	< 0.52	< 0.59	< 0.58	< 0.52	< 0.56	< 0.52
	Calcium	NC	NC	---	---	39000	54000	---	---	---
	Chromium	4,100	690	6.2	20	13	23	19	22	10
	Cobalt	12,000	NC	---	---	7.4	16	---	---	---
	Copper	8,200	NC	---	---	21	31	---	---	---
	Cyanide	4,100	NC	---	---	< 0.60	< 0.60	---	---	---
	Iron	NC	NC	---	---	14000	35000	---	---	---
	Lead	700	NC	41	16	49	16	17	16	18
	Magnesium	730,000	NC	---	---	19000	27000	---	---	---
	Manganese	4,100	8,700	---	---	270	560	---	---	---
	Mercury [E]	61	0.1	**0.13**	0.022	0.1	< 0.019	0.024	< 0.023	0.039
	Nickel	4,100	440,000	---	---	18	41	---	---	---
	Potassium	NC	NC	---	---	1600	3000	---	---	---
	Selenium	1,000	NC	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0
	Silver	1,000	NC	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0
	Sodium	NC	NC	---	---	1100	1000	---	---	---
	Thallium	160	NC	---	---	< 1.2	< 1.2	---	---	---
	Vanadium	1,400	NC	---	---	18	25	---	---	---
	Zinc	61,000	NC	---	---	55	67	---	---	---
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

	Analyte	Construction Worker Route Specific							
		Ingestion	Inhalation						
	Laboratory ID :			22120464-004	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012
	Client Sample ID :			SB-03 (7'-8')	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)
	Date Collected :			12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023
	Time Collected :			09:00	08:25	08:35	10:25	10:35	16:50	17:00
				7-8' bgs	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs
INORGANICS	Aluminum	NC	NC	---	---	---	---	---	10000	14000
	Antimony	82	NC	---	---	---	---	---	< 2.2	< 2.4
	Arsenic	61	25,000	13	10	7.2	3.3	9.7	16	19
	Barium	14,000	870,000	34	38	40	200	38	380	39
	Beryllium	410	44,000	---	---	---	---	---	0.71	0.76
	Cadmium	200	59,000	< 0.55	< 0.56	< 0.53	0.60	< 0.60	2.3	< 0.60
	Calcium	NC	NC	---	---	---	---	---	35000	55000
	Chromium	4,100	690	13	20	18	10	19	27	24
	Cobalt	12,000	NC	---	---	---	---	---	7.7	14
	Copper	8,200	NC	---	---	---	---	---	110	37
	Cyanide	4,100	NC	---	---	---	---	---	< 0.61	< 0.61
	Iron	NC	NC	---	---	---	---	---	23000	42000
	Lead	700	NC	21	36	15	410	23	**840**	22
	Magnesium	730,000	NC	---	---	---	---	---	12000	26000
	Manganese	4,100	8,700	---	---	---	---	---	390	410
	Mercury [E]	61	0.1	0.023	0.06	< 0.023	**0.22**	0.028	**0.56**	0.03
	Nickel	4,100	440,000	---	---	---	---	---	21	43
	Potassium	NC	NC	---	---	---	---	---	1200	2600
	Selenium	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2
	Silver	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2
	Sodium	NC	NC	---	---	---	---	---	330	130
	Thallium	160	NC	---	---	---	---	---	< 1.1	< 1.2
	Vanadium	1,400	NC	---	---	---	---	---	27	29
	Zinc	61,000	NC	---	---	---	---	---	550	60
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-011	22120464-012	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003
			Client Sample ID :	SB-06 (2'-3')	SB-06 (11'-12')	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)
			Date Collected :	12/15/2022	12/15/2022	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	10:50	11:00	18:25	18:30	19:20	19:25	19:00
	Analyte	Construction Worker Route Specific		2-3' bgs	11-12' bgs	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs
		Ingestion	Inhalation							
INORGANICS	Aluminum	NC	NC	---	---	6000	13000	8200	12000	9900
	Antimony	82	NC	---	---	< 2.0	< 2.3	< 2.2	< 2.2	< 2.1
	Arsenic	61	25,000	14	9.1	7.1	13	8.6	14	8.5
	Barium	14,000	870,000	250	61	21	57	220	46	140
	Beryllium	410	44,000	---	---	< 0.50	0.69	< 0.55	0.62	0.57
	Cadmium	200	59,000	7.4	< 0.52	< 0.50	< 0.57	1.3	< 0.55	0.67
	Calcium	NC	NC	---	---	2300	62000	52000	62000	27000
	Chromium	4,100	690	18	21	10	23	17	21	16
	Cobalt	12,000	NC	---	---	6.0	15	5.9	19	7.5
	Copper	8,200	NC	---	---	9.5	31	65	28	37
	Cyanide	4,100	NC	---	---	< 0.58	< 0.61	< 0.58	< 0.60	< 0.57
	Iron	NC	NC	---	---	13000	35000	16000	30000	16000
	Lead	700	NC	**1300**	18	9.7	17	**880**	17	270
	Magnesium	730,000	NC	---	---	1700	30000	20000	32000	9200
	Manganese	4,100	8,700	---	---	68	470	380	600	500
	Mercury [E]	61	0.1	**1.4**	0.026	**0.22**	0.027	**0.83**	0.03	**0.53**
	Nickel	4,100	440,000	---	---	12	38	16	36	16
	Potassium	NC	NC	---	---	800	3100	860	2800	1200
	Selenium	1,000	NC	< 1.2	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0
	Silver	1,000	NC	< 1.2	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0
	Sodium	NC	NC	---	---	300	180	350	150	210
	Thallium	160	NC	---	---	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0
	Vanadium	1,400	NC	---	---	20	25	24	22	23
	Zinc	61,000	NC	---	---	19	49	350	52	180
SPECIA-TION	Mercury [S]	61	0.1	**0.21**	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

	Analyte	Construction Worker Route Specific							
		Ingestion	Inhalation						
	Laboratory ID :			23030736-004	23030736-005	23030736-006	23030736-007	23030736-008	23030736-009	23030736-010
	Client Sample ID :			SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)
	Date Collected :			03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
	Time Collected :			19:10	17:10	17:15	17:40	17:50	19:40	19:45
				5-6' bgs	2-3' bgs	14-15' bgs	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs
INORGANICS	Aluminum	NC	NC	14000	8100	13000	8900	11000	6900	15000
	Antimony	82	NC	< 2.1	< 2.1	< 2.3	< 2.2	< 2.1	< 2.2	< 2.1
	Arsenic	61	25,000	5.4	7.8	8.1	7.5	13	15	10
	Barium	14,000	870,000	37	38	57	73	69	830	57
	Beryllium	410	44,000	0.67	< 0.52	0.69	< 0.56	< 0.53	0.75	0.77
	Cadmium	200	59,000	< 0.53	< 0.52	< 0.57	< 0.56	< 0.53	2.7	< 0.52
	Calcium	NC	NC	24000	12000	66000	6800	39000	36000	55000
	Chromium	4,100	690	24	14	23	14	20	24	26
	Cobalt	12,000	NC	10	7.7	14	6.7	15	9.1	14
	Copper	8,200	NC	29	14	29	24	25	100	31
	Cyanide	4,100	NC	< 0.62	< 0.56	< 0.62	< 0.59	< 0.62	< 0.58	< 0.61
	Iron	NC	NC	22000	16000	26000	16000	30000	22000	35000
	Lead	700	NC	20	39	18	100	17	**850**	18
	Magnesium	730,000	NC	18000	6800	32000	4300	21000	16000	26000
	Manganese	4,100	8,700	230	180	490	150	590	330	350
	Mercury [E]	61	0.1	0.028	0.039	0.029	**0.57**	0.038	**0.52**	0.031
	Nickel	4,100	440,000	33	16	37	16	35	24	41
	Potassium	NC	NC	2400	1100	3300	1400	2200	1100	3200
	Selenium	1,000	NC	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0
	Silver	1,000	NC	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0
	Sodium	NC	NC	200	100	200	84	140	450	170
	Thallium	160	NC	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0
	Vanadium	1,400	NC	26	21	25	23	21	28	28
	Zinc	61,000	NC	90	39	53	81	49	880	60
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-001	23030838-002	23030787-001	23030787-002	23030838-003	23030838-004
			Client Sample ID :	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023	03/22/2023	03/22/2023	03/23/2023	03/23/2023
			Time Collected :	16:55	17:05	21:00	21:10	17:50	18:25
	Analyte	Construction Worker Route Specific		3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation						
INORGANICS	Aluminum	NC	NC	8500	11000	11000	10000	10000	13000
	Antimony	82	NC	< 2.2	< 2.2	< 2.3	< 2.4	< 2.3	< 2.3
	Arsenic	61	25,000	15	11	25	8.8	9.9	6.7
	Barium	14,000	870,000	350	81	160	27	83	31
	Beryllium	410	44,000	< 0.54	0.80	1.1	0.64	0.63	0.60
	Cadmium	200	59,000	2.9	< 0.54	0.89	< 0.59	< 0.58	< 0.56
	Calcium	NC	NC	71000	54000	31000	57000	44000	55000
	Chromium	4,100	690	18	20	24	21	19	23
	Cobalt	12,000	NC	6.1	12	52	13	12	20
	Copper	8,200	NC	110	25	46	36	33	36
	Cyanide	4,100	NC	< 0.60	< 0.63	< 0.62	< 0.60	< 0.59	< 0.61
	Iron	NC	NC	19000	35000	41000	28000	22000	22000
	Lead	700	NC	**740**	15	44	20	110	17
	Magnesium	730,000	NC	22000	27000	19000	30000	21000	28000
	Manganese	4,100	8,700	280	400	2100	420	380	410
	Mercury [E]	61	0.1	**0.38**	< 0.021	0.059	< 0.019	**0.28**	< 0.022
	Nickel	4,100	440,000	21	34	66	38	31	41
	Potassium	NC	NC	1200	2500	2700	2400	2400	3200
	Selenium	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Silver	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Sodium	NC	NC	550	170	1200	2400	2200	340
	Thallium	160	NC	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Vanadium	1,400	NC	20	23	36	24	22	25
	Zinc	61,000	NC	420	53	160	57	98	55
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 3
Groundwater Data Summary Groundwater Objectives
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-013	23030892-011
			Client Sample ID :	TW-05	TW-10
			Date/Time Collected :	12/15/2022 11:40	03/23/2023 16:15
			Date/Time Collected :		03/24/2023 16:00
	Analyte	Units	Remediation Objective		
			Class II		
VOC	Acetone	mg/L	6.3	---	< 0.020
	Benzene	mg/L	0.025	< 0.0050	< 0.0050
	Bromodichloromethane	mg/L	0.0002	---	< 0.0050
	Bromoform	mg/L	0.001	---	< 0.0010
	Bromomethane	mg/L	0.049	---	< 0.0050
	2-Butanone	mg/L		---	< 0.020
	Carbon disulfide	mg/L	3.5	---	< 0.010
	Carbon tetrachloride	mg/L	0.025	---	< 0.0050
	Chlorobenzene	mg/L	0.5	---	< 0.0050
	Chloroethane	mg/L		---	< 0.010
	Chloroform	mg/L	0.001	---	< 0.0010
	Chloromethane	mg/L		---	< 0.010
	Dibromochloromethane	mg/L	0.14	---	< 0.0050
	1,1-Dichloroethane	mg/L	3.5	---	< 0.0050
	1,2-Dichloroethane	mg/L	0.025	---	< 0.0050
	1,1-Dichloroethene	mg/L	0.035	---	< 0.0050
	cis-1,2-Dichloroethene	mg/L	0.2	---	< 0.0050
	trans-1,2-Dichloroethene	mg/L	0.5	---	< 0.0050
	1,2-Dichloropropane	mg/L	0.025	---	< 0.0050
	cis-1,3-Dichloropropene	mg/L	0.005	---	< 0.0010
	trans-1,3-Dichloropropene	mg/L	0.005	---	< 0.0010
	Ethylbenzene	mg/L	1.0	< 0.0050	< 0.0050
	2-Hexanone	mg/L		---	< 0.020
	4-Methyl-2-pentanone	mg/L		---	< 0.020
	Methylene chloride	mg/L	0.05	---	< 0.0050
	Methyl tert-butyl ether	mg/L	0.07	---	< 0.0050
	Styrene	mg/L	0.5	---	< 0.0050
	1,1,2,2-Tetrachloroethane	mg/L		---	< 0.0050
	Tetrachloroethene	mg/L	0.025	---	< 0.0050
	Toluene	mg/L	2.5	< 0.0050	< 0.0050
	1,1,1-Trichloroethane	mg/L	1.0	---	< 0.0050
	1,1,2-Trichloroethane	mg/L	0.05	---	< 0.0050
	Trichloroethene	mg/L	0.025	---	< 0.0050
	Vinyl chloride	mg/L	0.01	---	< 0.0020
	Xylenes, Total	mg/L	10.0	< 0.015	< 0.015

Table 3
Groundwater Data Summary Groundwater Objectives
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-013	23030892-011
			Client Sample ID :	TW-05	TW-10
			Date/Time Collected :	12/15/2022 11:40	03/23/2023 16:15
			Date/Time Collected :		03/24/2023 16:00
	Analyte	Units	Remediation Objective		
			Class II		
PNA	Acenaphthene	mg/L	2.1	< 0.0010	< 0.0010
	Acenaphthylene	mg/L	---	< 0.0010	< 0.0010
	Anthracene	mg/L	10.5	< 0.0010	< 0.0010
	Benz(a)anthracene	mg/L	0.00065	**0.0026**	0.00020
	Benzo(a)pyrene	mg/L	0.002	**0.0031**	< 0.00010
	Benzo(b)fluoranthene	mg/L	0.0009	**0.0029**	< 0.00010
	Benzo(g,h,i)perylene	mg/L	---	0.0019	< 0.0010
	Benzo(k)fluoranthene	mg/L	0.00085	**0.0026**	< 0.00010
	Chrysene	mg/L	0.0075	0.0029	< 0.0010
	Dibenz(a,h)anthracene	mg/L	0.0015	< 0.00010	< 0.00010
	Fluoranthene	mg/L	1.4	0.0054	< 0.0010
	Fluorene	mg/L	1.4	< 0.0010	< 0.0010
	Naphthalene	mg/L	0.22	0.0018	< 0.0010
	Indeno(1,2,3-cd)pyrene	mg/L	0.00215	< 0.0010	< 0.00010
	Phenanthrene	mg/L	---	0.0023	< 0.0010
	Pyrene	mg/L	1.05	0.0046	< 0.0010
SVOC	Aniline	mg/L	---	---	< 0.0050
	Benzidine	mg/L	---	---	< 0.0050
	Benzoic acid	mg/L	28	---	< 0.025
	Benzyl alcohol	mg/L	---	---	< 0.0050
	Bis(2-chloroethoxy)methane	mg/L	---	---	< 0.0050
	Bis(2-chloroethyl)ether	mg/L	0.01	---	< 0.0050
	Bis(2-ethylhexyl)phthalate	mg/L	0.06	---	< 0.0050
	4-Bromophenyl phenyl ether	mg/L	---	---	< 0.0050
	Butyl benzyl phthalate	mg/L	7.0	---	< 0.0050
	Carbazole	mg/L	---	---	< 0.00010
	4-Chloroaniline	mg/L	0.028	---	< 0.0050
	4-Chloro-3-methylphenol	mg/L	---	---	< 0.0050
	2-Chloronaphthalene	mg/L	---	---	< 0.0050
	2-Chlorophenol	mg/L	0.035*	---	< 0.0050
	4-Chlorophenyl phenyl ether	mg/L	---	---	< 0.0050
	Dibenzofuran	mg/L	---	---	< 0.0050
	1,2-Dichlorobenzene	mg/L	1.5	---	< 0.0050
	1,3-Dichlorobenzene	mg/L	---	---	< 0.0050
	1,4-Dichlorobenzene	mg/L	0.375	---	< 0.0050
	3,3´-Dichlorobenzidine	mg/L	0.1	---	< 0.010
	2,4-Dichlorophenol	mg/L	0.021	---	< 0.0050
	Diethyl phthalate	mg/L	5.6	---	< 0.0050
	2,4-Dimethylphenol	mg/L	0.14	---	< 0.0050
	Dimethyl phthalate	mg/L	---	---	< 0.0050
	4,6-Dinitro-2-methylphenol	mg/L	---	---	< 0.025
	2,4-Dinitrophenol	mg/L	0.014	---	< 0.025
	2,4-Dinitrotoluene	mg/L	0.00002	---	< 0.00010

Table 3
Groundwater Data Summary Groundwater Objectives
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-013	23030892-011
			Client Sample ID :	TW-05	TW-10
			Date/Time Collected :	12/15/2022 11:40	03/23/2023 16:15
			Date/Time Collected :		03/24/2023 16:00
	Analyte	Units	Remediation Objective		
			Class II		
SVOC	2,6-Dinitrotoluene	mg/L	0.00031	---	< 0.00010
	Di-n-butyl phthalate	mg/L	3.5	---	< 0.0050
	Di-n-octyl phthalate	mg/L	0.7	---	< 0.0050
	Hexachlorobenzene	mg/L	0.0003	---	< 0.0050
	Hexachlorobutadiene	mg/L	---	---	< 0.0050
	Hexachlorocyclopentadiene	mg/L	0.5	---	< 0.0050
	Hexachloroethane	mg/L	0.035	---	< 0.0050
	Isophorone	mg/L	1.4	---	< 0.0050
	2-Methylnaphthalene	mg/L	---	---	< 0.0050
	2-Methylphenol	mg/L	0.35	---	< 0.0050
	4-Methylphenol	mg/L	---	---	< 0.0050
	2-Nitroaniline	mg/L	---	---	< 0.025
	3-Nitroaniline	mg/L	---	---	< 0.025
	4-Nitroaniline	mg/L	---	---	< 0.025
	2-Nitrophenol	mg/L	---	---	< 0.0050
	4-Nitrophenol	mg/L	---	---	< 0.025
	Nitrobenzene	mg/L	0.0035	---	< 0.0010
	N-Nitrosodi-n-propylamine	mg/L	0.0018	---	< 0.00010
	N-Nitrosodimethylamine	mg/L	---	---	< 0.0050
	N-Nitrosodiphenylamine	mg/L	0.016	---	< 0.0050
	2, 2'-oxybis(1-Chloropropane)	mg/L	---	---	< 0.0050
	Pentachlorophenol	mg/L	0.005	---	< 0.00050
	Phenol	mg/L	0.1	---	< 0.0050
	Pyridine	mg/L	---	---	< 0.0050
	1,2,4-Trichlorobenzene	mg/L	0.7	---	< 0.0050
	2,4,5-Trichlorophenol	mg/L	0.7*	---	< 0.010
	2,4,6-Trichlorophenol	mg/L	0.01*	---	< 0.0050

Table 3
Groundwater Data Summary Groundwater Objectives
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-013	23030892-011
			Client Sample ID :	TW-05	TW-10
			Date/Time Collected :	12/15/2022 11:40	03/23/2023 16:15
			Date/Time Collected :		03/24/2023 16:00
	Analyte	Units	Remediation Objective		
			Class II		
Inorganics (Unfiltered)	Aluminum	mg/L	---	---	3.7
	Antimony	mg/L	0.024		< 0.0060
	Arsenic	mg/L	0.2	0.0093	0.0079
	Barium	mg/L	2.0	0.29	0.057
	Beryllium	mg/L	0.5	---	< 0.0020
	Cadmium	mg/L	0.05	< 0.0020	< 0.0020
	Calcium	mg/L	---	---	200
	Chromium	mg/L	1.0	0.025	0.0075
	Cobalt	mg/L	1.0	---	0.0084
	Copper	mg/L	0.65	---	0.015
	Cyanide	mg/L	0.6	---	< 0.010
	Iron	mg/L	5.0	---	**6.2**
	Lead	mg/L	0.1	0.36	0.011
	Magnesium	mg/L	---	---	99
	Manganese	mg/L	10.0	---	0.25
	Mercury	mg/L	0.01	< 0.00020	< 0.00020
	Nickel	mg/L	2.0	---	0.024
	Potassium	mg/L	---	---	10
	Selenium	mg/L	0.05	0.0080	< 0.0040
	Silver	mg/L	---	< 0.0040	< 0.0040
	Sodium	mg/L	---	---	55
	Thallium	mg/L	0.02	---	< 0.0020
	Vanadium	mg/L	0.1	---	0.0085
	Zinc	mg/L	10	---	0.052

Table 3
Groundwater Data Summary Groundwater Objectives
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

			Laboratory ID :	22120464-013	23030892-011
			Client Sample ID :	TW-05	TW-10
			Date/Time Collected :	12/15/2022 11:40	03/23/2023 16:15
			Date/Time Collected :		03/24/2023 16:00
	Analyte	Units	Remediation Objective		
			Class II		
Inorganics (Dissolved)	Aluminum	mg/L	---	---	---
	Antimony	mg/L	0.024	---	---
	Arsenic	mg/L	0.2	< 0.0040	---
	Barium	mg/L	2.0	0.039	---
	Beryllium	mg/L	0.5	---	---
	Cadmium	mg/L	0.05	< 0.0020	---
	Calcium	mg/L	---	---	---
	Chromium	mg/L	1.0	< 0.0040	---
	Cobalt	mg/L	1.0	---	---
	Copper	mg/L	0.65	---	---
	Iron	mg/L	5.0	< 0.10	---
	Lead	mg/L	0.1	< 0.0020	---
	Magnesium	mg/L	---	---	---
	Manganese	mg/L	10.0	---	---
	Mercury	mg/L	0.01	< 0.00020	---
	Nickel	mg/L	2.0	---	---
	Potassium	mg/L	---	---	---
	Selenium	mg/L	0.05	0.0077	---
	Silver	mg/L	---	< 0.0040	---
	Sodium	mg/L	---	---	---
	Thallium	mg/L	0.02	---	---
	Vanadium	mg/L	0.1	---	---
	Zinc	mg/L	10	---	---

* Class II objective may be higher depending on sample pH
Bold Exceedance of Groundwater RO

Table 4
Soil Gas Indoor Inhalation Objectives
Phase II ESA - Additional Site Investigation
2131 W. Monroe St.
Chicago, Illinois 60612

		Laboratory ID :	23030787-004	23030787-005	23030787-006
		Client Sample ID :	SG-01	SG-02	SG-03
		Date Collected :	03/22/2023 19:41	03/22/2023 19:07	03/22/2023 18:13
Analyte	Indoor Inhalation Route - Tier 1 Soil Gas Remediation Objectives				
	Diffusion and Advection	Diffusion Only			
	Residential (mg/m^3)				
Acetone	750,000	750,000	0.10	0.21	0.027
Benzene	0.37	41	< 0.0020	0.0067	< 0.0018
Bromodichloromethane	450,000	450,000	< 0.0044	< 0.0041	< 0.0039
Bromoform	11	1,800	< 0.018	< 0.016	< 0.016
2-Butanone	6,400	380,000	0.0095	0.064	< 0.0046
Carbon disulfide	780	81,000	< 0.0021	0.012	< 0.0019
Carbon tetrachloride	0.21	24	< 0.0044	< 0.0041	< 0.0039
Chlorobenzene	69	8,300	< 0.0031	< 0.0029	< 0.0027
Dibromochloromethane	57,000	57,000	< 0.0058	< 0.0054	< 0.0052
Chloroform	0.11	12	< 0.0034	< 0.0032	< 0.0030
1,2-Dibromoethane	0.0078	1.1	< 0.0051	< 0.0048	< 0.0046
1,2-Dichlorobenzene	290	11,000	< 0.0041	< 0.0038	< 0.0036
1,4-Dichlorobenzene	1,200	8,400	< 0.0041	< 0.0038	< 0.0036
Dichlorodifluoromethane	270	32,000	< 0.017	< 0.016	< 0.015
1,1-Dichloroethane	690	81,000	< 0.0027	< 0.0025	< 0.0024
1,2-Dichloroethane	0.099	10	< 0.0027	< 0.0025	< 0.0024
1,1-Dichloroethene	240	27,000	< 0.0027	< 0.0025	< 0.0024
cis-1,2-Dichloroethene	1,100,000	1,100,000	< 0.0027	< 0.0025	< 0.0024
trans-1,2-Dichloroethene	85	10,000	< 0.0027	< 0.0025	< 0.0024
1,2-Dichloropropane	0.31	36	< 0.0031	< 0.0029	< 0.0027
cis-1,3-Dichloropropene	0.90	110	< 0.0031	< 0.0029	< 0.0027
trans-1,3-Dichloropropene	0.90	110	< 0.0031	< 0.0029	< 0.0027
1,4-Dioxane	0.22	15	< 0.0061	< 0.0057	< 0.0055
Ethylbenzene	1.3	150	< 0.0031	0.0080	< 0.0027
Bromomethane	6.9	830	< 0.0064	< 0.0060	< 0.0058
Methyl tert-butyl ether	3,700	420,000	< 0.0024	< 0.0022	< 0.0021
Methylene chloride	5.6	590	< 0.023	< 0.022	< 0.021
Naphthalene	0.11	14	< 0.0034	< 0.0032	< 0.0030
Styrene	1,400	34,000	< 0.0031	< 0.0029	< 0.0027
Tetrachloroethene	0.55	66	0.0085	< 0.0044	< 0.0043
Toluene	6,200	140,000	0.0040	0.21	< 0.0024
1,2,4-Trichlorobenzene	5.4	800	< 0.0051	< 0.0048	< 0.0046
1,1,1-Trichloroethane	6,600	770,000	< 0.0037	< 0.0035	< 0.0033
1,1,2-Trichloroethane	170,000	170,000	< 0.0037	< 0.0035	< 0.0033
Trichloroethene	1.5	180	< 0.0037	< 0.0035	< 0.0033
Trichlorofluoromethane	860	97,000	< 0.0037	< 0.0035	< 0.0033
Vinyl acetate	250	28,000	< 0.024	< 0.022	< 0.021
Vinyl chloride	0.29	30	< 0.0017	< 0.0016	< 0.0015
o-Xylene	120	14,000	< 0.0031	0.0055	< 0.0027
m,p-Xylene	140/130	17,000/16,000	< 0.0058	0.031	< 0.0052
Xylenes, Total	140	17,000	< 0.0088	0.037	< 0.0079

Bold	Exceedance of Indoor Inhalation Remediation Objectives

Diffusion and Advection Objectives - Based on 35 IAC Part 742 Appendix B Table H.
Diffusion Only Objectives - Based on 35 IAC Part 742 Appendix B Table I.

SECTION 10 21 13.19

PLASTIC TOILET COMPARTMENTS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Solid polymer plastic toilet compartments, overhead-braced.

B. Urinal screens.

1.02 REFERENCE STANDARDS

A. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar; 2015.

B. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth; 2015.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide data on panel construction, hardware, and accessories.
   1. Submit full line of color charts for color selections by the Architect/Engineer of Record.

C. Shop Drawings: Indicate partition plan, elevation views, dimensions, details of wall and floor supports, door swings.

D. Maintenance Data: Submit maintenance and cleaning data for inclusion in Maintenance Manual.

1.04 PROJECT CONDITIONS

A. Field Measurements: Verify actual locations of walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication and indicate measurements on Shop Drawings.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Manufacturers: Subject to compliance with specification requirements and availability of product, provide products by one of the following:
   1. Accurate Partitions Corp.; ASI Group.
   2. Ampco Products LLC.
   3. Bobrick Washroom Equipment, Inc.
   4. Bradley Corporation.
   5. GAMCO, a division of Bobrick Washroom Accessories.
   6. General Partitions Mfg. Corp.
   7. Global Partitions; ASI Group.
   8. Metpar Corp.
   9. Scranton Products.

B. Phenolic Toilet Compartments:
1. Accurate Partitions; ASI Group.
2. All American Metal Corp - AAMCO: www.allamericanmetal.com/#sle.
3. Partition Systems International of South Carolina; Phenolic Toilet Partitions: www.psisc.com/#sle.

2.02 SOLID POLYMER PLASTIC TOILET COMPARTMENTS

A. Location: Standard partitions in Service and Classroom Wings.

B. Toilet Compartments: Factory fabricated doors, pilasters, and divider panels made of solid molded high density polyethylene (HDPE) or polypropylene (PP), tested in accordance with NFPA 286, floor-mounted headrail-braced, seamless, with eased edges, and with homogenous color and pattern throughout thickness of material.
1. Color and Pattern: As selected by Architect/Engineer of Record from manufacturer's full range of colors and patterns.

C. Doors:
1. Thickness: 1 inch.
2. Width, Typical: 24 inch, unless otherwise indicated, in-swinging.
3. Width for Wheelchair Accessible or Ambulatory Toilet Compartments: Clear opening Min 32 inch, measured to face of door open at 90 degrees. Out-swinging.(ADA 2010 404.2.3).
4. Height: 55 inch.

D. Panels:
1. Thickness: 1 inch.
2. Height: 55 inch.

E. Pilasters:
1. Thickness: 1 inch.
2. Width: As required to fit space; minimum 3 inch.

F. Heat-Sink Strip: Manufacturer's standard continuous, extruded-aluminum strip fastened to exposed bottom edges of solid-polymer components to prevent burning

2.03 PHENOLIC TOILET COMPARTMENTS

A. Location: Tall partitions in Annex.

B. Basis of Design: Accurate Partitions; ASI Group.

C. Toilet Compartments: Factory fabricated doors, pilasters, and divider panels made of solid phenolic core panels with integral melamine finish on both sides fused to substrate during panel manufacture (not separately laminated), and with eased and polished edges, floor-mounted headrail-braced.
1. Facing Sheet Color: Selected by Architect/Engineer of Record from manufacturer's full range of colors for each room.
2. Core Color: Manufacturer's standard dark color

D. Doors:
1. Thickness: 3/4 inch.
2. Width, Typical: 24 inch, unless otherwise indicated, in-swinging.
3. Width for Wheelchair Accessible or Ambulatory Toilet Compartments: Clear opening Min 32 inch, measured to face of door open at 90 degrees. Out-swinging. (ADA 2010 404.2.3)
4. Height: 84” with valance above door.

E. Panels:
1. Thickness: 1/2 inch.
2. Height: 9’-0”, extended height achieved by stacking panels.

F. Pilasters:
1. Thickness: 3/4 inch.
2. Width: As required to fit space; minimum 3 inch.

2.04 ACCESSORIES

A. Pilaster Shoes: Formed ASTM A666, Type 304 stainless steel with No. 4 finish, 3 inch high, concealing floor fastenings.
1. Provide adjustment for floor variations with screw jack through steel saddles integral with pilaster.

B. Head Rails: Extruded aluminum, anti-grip profile.

C. Wall and Pilaster Brackets: Stainless steel; manufacturer's standard type for conditions indicated on drawings.

D. Door Sightline - No-Sight System (at Phenolic Partitions): Doors and pilasters to be routed to allow overlapping edges and providing no sight lines into compartment.
1. Valance fabricated from 3/4” phenolic to be mounted above door between pilasters using flat alcove clips to provide more private environment. Valance to be mounted at height desired above door and extend to bottom of trim shoe. Valance to be installed after trim shoe installation.
2. Stacked panel height extender to be mounted above panel, Height of panel extension as required for privacy.

E. Door Sightline Guards (at Solid Polymer Plastic Partitions): Provide 1/4” x 2” full length aluminum or stainless-steel strap secured to the out swing edge of both side of door secured at 4” centers and each end with one way screws to eliminate sight lines.

F. Attachments, Screws, and Bolts: Stainless steel, tamper proof type.

G. Hinges: Stainless steel, manufacturer's standard finish.
1. Pivot hinges, gravity type, adjustable for door close positioning; two per door.

H. Door Hardware: Stainless steel, manufacturer's standard finish.
1. Door Latch: Slide type with exterior emergency access feature. Provide units that comply with accessibility requirements of authorities having jurisdiction at compartments indicated to be accessible to people with disabilities.
2. Door Strike and Keeper with Rubber Bumper: Mount on pilaster in alignment with door latch.
3. Provide door pull for outswinging doors. Comply with accessibility requirements of authorities having jurisdiction. Provide units on both sides of doors at compartments indicated to be accessible to people with disabilities

I. Coat Hook with Rubber Bumper: One per compartment, mounted on door.

J. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that field measurements are as indicated.

B. Verify correct spacing of and between plumbing fixtures.

C. Verify correct location of built-in framing, anchorage, and bracing.

3.02 INSTALLATION

A. Install partitions secure, rigid, plumb, and level in accordance with manufacturer's instructions.
   1. Maximum Clearances:
      a. Pilasters and Panels: 1/2 inch.
      b. Panels and Walls: 1 inch.
      c. Door Edges: 1/4 inch nominal.

B. Attach panel brackets securely to walls using anchor devices.

C. Attach panels and pilasters to brackets. Locate head rail joints at pilaster center lines. Secure continuous head rail to each pilaster with not less than two fasteners. Hang doors to align tops of doors with tops of panels and adjust so tops of doors are parallel with overhead brace when doors are in closed position.

3.03 TOLERANCES

A. Maximum Variation From True Position: 1/4 inch.

B. Maximum Variation From Plumb: 1/8 inch.

3.04 ADJUSTING

A. Adjust and align hardware to uniform clearance at vertical edge of doors, not exceeding 3/16 inch.

B. Adjust hinges to position inswinging doors in partial opening position when unlatched. Return out-swinging doors to closed position.

C. Adjust adjacent components for consistency of line or plane.

END OF SECTION 10 21 13.19

SECTION 10 28 00

TOILET, BATH, AND LAUNDRY ACCESSORIES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Commercial toilet accessories.

1.02 REFERENCE STANDARDS

A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.

B. ASTM A123/A123M - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products 2017.

C. ASTM A269/A269M - Standard Specification for Seamless and Welded Austenitic Stainless Steel Tubing for General Service 2015a (Reapproved 2019).

D. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process 2020.

E. ASTM A666 - Standard Specification for Annealed or Cold-Worked Austenitic Stainless Steel Sheet, Strip, Plate, and Flat Bar 2015.

F. ASTM B456 - Standard Specification for Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium 2017.

G. ASTM C1036 - Standard Specification for Flat Glass 2021.

H. ASTM F446 - Standard Consumer Safety Specification for Grab Bars and Accessories Installed in the Bathing Area 1990.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordinate the work with the placement of internal wall reinforcement, concealed ceiling supports, and reinforcement of toilet partitions to receive anchor attachments.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Submit data on accessories describing size, finish, details of function, and attachment methods.

C. Product Schedule: Indicating types, quantities, sizes, and installation locations by room of each accessory required. Use designations indicated in the Drawings for each accessory and room numbering.

D. Maintenance Data: For toilet accessories to be included in Operations and Maintenance Manuals.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Commercial Toilet Accessories:

1. American Specialties, Inc: www.americanspecialties.com/#sle.
2. Bobrick Washroom Equipment, Inc: www.bobrick.com
3. Bradley Corporation: www.bradleycorp.com/#sle.
4. Gamco Commercial Restroom Accessories; a division of Bobrick Washroom Equipment, Inc.: www.gamcousa.com

2.02 TOILET ACCESSORY SCHEDULE

A. Toilet Tissue Dispensers:

1. Single-Roll Dispenser:

a. Location: At accessible water closets, where indicated.

1) Description: Surface mounted single-roll toilet tissue dispenser with non control delivery and theft-resistant spindles.

(a) ASI: 0263-1A.
(b) Bobrick: B-2730.
(c) Bradley: 5071-50.
(d) Gamco: 813-NRC.

2. Dual-Roll Dispenser:
   a. Location: At each water closet.
   b. Description: Surface mounted double-roll toilet tissue dispenser with non control delivery and theft-resistant spindles.
      1) ASI: 0264-1A.
      2) Bobrick: B-2740.
      3) Bradley: 5241-50.
      4) Gamco: 814-NRC.
3. Jumbo-Roll Dispenser:
   a. Location: At water closets, where indicated.
   b. Description: Surface mounted single-roll toilet tissue dispenser with locked cover.
      1) ASI: 0042.
      2) Bobrick: B-2890.
      3) Bradley: 5424.
      4) Gamco: TTD-13.

B. Sanitary Napkin Dispenser:
   1. Recessed:
      a. Description: Recessed sanitary napkin/tampon dispenser at no cost to students; keyed lock.
         1) ASI: 0468-F.
         2) Bobrick: B-37063C.
         3) Bradley: 407-40.
   2. Surface Mounted:
      a. Description: Surface mounted sanitary napkin/tampon dispenser at no cost to students; keyed lock.
         1) ASI: 0864-F
         2) Bobrick: B-2706C
         3) Bradley: 407-11-40

C. Sanitary Napkin Disposal
   1. Recessed:
      a. Location: All-Gender, single user toilet rooms.
      b. Description: Recessed stainless steel sanitary napkin disposal unit with self-closing panel, removable leak-proof receptacle, and keyed lock door.
         1) ASI: 6471.
         2) Bobrick: B-353.
         3) Bradley: 4737.
         4) Gamco: ND-4.
   2. Surface Mounted:
      a. Location: Individual toilet stalls at rear wall, adjacent to flush valve, where indicated.
         1) Description: Surface mounted, stainless steel sanitary napkin disposal unit with self-closing panel, removable leak-proof receptacle, and keyed lock access.
            (a) ASI: 0473-1A.

(b) Bobrick: B-254.
(c) Bradley: 4722-15.
(d) Gamco: ND-5.

D. Mirrors:
1. Frame: One piece, roll formed, 18 gauge stainless steel angle frame; corners fully welded and ground smooth; finish grain to be vertical on all exposed surfaces.
2. Glass: Laminated mirror glass.
3. Mounting: Mirror to be wall-mounted on concealed hanging bracket.
4. Size: Size of over-lavatory mirrors shall be as indicated in the Drawings. Full length units shall be 24 inches wide x 60 inches tall.
a. ASI: 0600-L.
b. Bobrick: B-2909.
c. Bradley: 780-3.
d. Gamco: A series mirror (A-L).

E. Warm-Air Dryers: ADA Compliant, surface mounted hand dryer with electronic sensor, providing hands-free operation and automatic shut off, and fixed air-outlet; cover to be fabricated from stainless steel; electrical requirements: maximum 115 V, 20 amp.
1. ASI: 0185-93.
2. Bobrick: 7128.
3. Bradley: 2902-2874.

F. Grab Bars:
1. Stainless steel tubing, 1-1/2 inch o.d., uniformly bent, with welded flanges and snap-flange cover plates; 0.050 inch minimum wall thickness; satin finish; fabricated in configurations and dimensions as indicated on Drawings.
a. ASI: 3800 Series.
b. Bobrick: B-6806 Series.
c. Bradley: 812 Series.
d. Gamco: 150 Series.

G. Undersink Protective Pipe Covers: Refer to Division 22 Section, "Plumbing Fixtures." Provide pipe covers at all lavatories and sinks indicated to be accessible.

H. Utility Shelf: 8 inch deep shelf with return bend and end brackets, four (4) double hook strips, and three (3) mop holders with spring-loaded rubber cams; fabricated from stainless steel.
1. ASI: 1308-3.
2. Bobrick: B-239 x 34.
3. Bradley: 9933.
4. Gamco: US-5.

I. Combination Paper Towel Dispenser and Waste Receptacle
1. Location: Provide paper hand towel dispensers in each toilet room as indicated, or as directed by the Architect/Engineer of Record. In food preparation and kitchen areas, provide paper towel dispenser at each hand sink and in each toilet room as indicated, or as directed by the Architect/Engineer of Record.
2. Description: Fully recessed paper towel dispenser, with a minimum capacity of 600C-fold or 800 multifold towels without special adaptor, 4-6 gallon waste receptacle, tumbler lock, and hinged front cover with full width piano hinge; fabricated from stainless steel.
a. ASI: 9467.
b. Bobrick: B-3940.
c. Bradley: 235.

J. Soap Dispenser:
   1. Location: Provide soap dispensers in each toilet room as indicated, or as directed by the Architect/Engineer of Record. In food preparation and kitchen areas, provide soap dispenser at each hand sink and in each toilet room as indicated, or as directed by the Architect/Engineer of Record.
   2. Description: Surface mounted, refillable liquid soap dispenser, with a capacity of not less than 40 ounces; fabricated from stainless steel.
      a. ASI: 0347.
      b. Bobrick: B-2111.
      c. Bradley: 6563.
      d. Gamco: G-16AP.

2.03 MATERIALS

A. Accessories - General: Shop assembled, free of dents and scratches and packaged complete with anchors and fittings, steel anchor plates, adapters, and anchor components for installation.
   1. Grind welded joints smooth.
   2. Fabricate units made of metal sheet of seamless sheets with flat surfaces.
B. Keys: Provide minimum of 6 keys for each accessory to Board; master key lockable accessories.
C. Stainless Steel Sheet: ASTM A666, Type 304.
D. Stainless Steel Tubing: ASTM A269/A269M, Grade TP304 or TP316.
E. Galvanized Sheet Steel: Hot-dipped galvanized steel sheet, ASTM A653/A653M, with G60/Z180 coating.
F. Laminated Mirror Glass: ASTM C1036, Type I (transparent glass, flat), Class 1 (clear), Quality q2, nominal 6 mm thick, with silvering, electroplated copper coating, and protective organic coating complying with FS DD-M-411.
   1. Interlayer: Minimum 0.03 inch thick interlayer material with a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after laminating glass lites and installation.
G. ABS Plastic: Acrylonitrile-butadiene-styrene resin formulation.
H. Adhesive: Two component epoxy type, waterproof.
I. Fasteners, Screws, and Bolts: Hot dip galvanized; tamper-proof; security type.
J. Expansion Shields: Fiber, lead, or rubber as recommended by accessory manufacturer for component and substrate.

2.04 FABRICATION

A. Framed Glass-Mirror Units: Fabricate frames for glass-mirror units to accommodate glass edge protection material. Provide mirror backing and support system that permits rigid, tamper-resistant glass installation and prevents moisture accumulation.
   1. Provide galvanized steel backing sheet, not less than 0.034 inch and full mirror size, with nonabsorptive filler material. Corrugated cardboard is not an acceptable filler material.
B. Mirror-Unit Hangers: Provide mirror-unit mounting system that permits rigid, tamper- and theft-resistant installation, as follows:
   1. One-piece, galvanized steel, wall-hanger device with spring-action locking mechanism to hold mirror unit in position with no exposed screws or bolts.

2.05 FINISHES

A. Stainless Steel: Satin finish, unless otherwise noted.
B. Chrome/Nickel Plating: ASTM B456, SC 2, polished finish, unless otherwise noted.

C. Baked Enamel: Pretreat to clean condition, apply one coat primer and minimum two coats epoxy baked enamel.
D. Galvanizing for Items Other than Sheet: Comply with ASTM A123/A123M; galvanize ferrous metal and fastening devices.
E. Back paint components where contact is made with building finishes to prevent electrolysis.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify existing conditions, with Installer present, before starting work.
B. Verify exact location of accessories for installation.
C. For electrically-operated accessories, verify that electrical power connections are ready and in the correct locations.

3.02 PREPARATION

A. Deliver inserts and rough-in frames to site for timely installation.
B. Provide templates and rough-in measurements as required.

3.03 INSTALLATION

A. Install accessories in accordance with manufacturers' instructions in locations indicated on drawings.
B. Install plumb and level, securely and rigidly anchored to substrate.
C. Mounting Heights: As required by accessibility regulations, unless otherwise indicated.
D. Secure mirrors to walls in concealed, tamper-resistant manner with special hangers, toggle bolts, or screws. Set units level, plumb, and square at locations indicated, according to manufacturer's written instructions for substrate indicated.
E. Install grab bars to withstand a downward load of at least 250 lbf, when tested according to method in ASTM F446.

3.04 PROTECTION

A. Protect installed accessories from damage due to subsequent construction operations.

END OF SECTION

SECTION 10 51 13

METAL LOCKERS

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Metal student lockers.

1.02 REFERENCE STANDARDS

A. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design 2010.

B. ASTM A1008/A1008M - Standard Specification for Steel, Sheet, Cold-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, Required Hardness, Solution Hardened, and Bake Hardenable 2021a.

C. ICC A117.1 - Accessible and Usable Buildings and Facilities 2017.

1.03 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.

B. Product Data: Manufacturer's published data on locker construction, sizes, and accessories.

1. RFID Lock Product Data for accessible lockers.

C. Shop Drawings: Indicate locker plan layout, numbering plan and combination lock code.

D. Samples: Submit manufacturer's color charts showing full range of available color selections.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Do not deliver lockers until spaces to receive them are clean, dry, and ready for locker installation.

B. Protect locker finish and adjacent surfaces from damage.

1.05 CLOSEOUT

A. Deliver Contactless RFID Media to Building Engineer: 2 for each accessible locker.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Metal Lockers:

1. Art Metal Products: www.artmetalproducts.com
2. DeBourgh Manufacturing Co: www.debourgh.com
3. Lyon Workspace Products: www.lyonworkspace.com
4. Penco Products, Inc: www.pencoproducts.com/
5. Republic Storage Systems Co: www.republicstorage.com

2.02 LOCKER APPLICATIONS

A. Student Lockers: Metal lockers, recessed mounted.

1. Width: 12 inches.
2. Depth: 15 inches.
3. Height: 66 inches for Elementary School.
4. Configuration: Double Tier.
5. Fittings: Size and configuration as indicated on drawings.
   a. Hat shelf.
   b. Hooks: Two single prong.
6. Accessible Lockers: Provide accessible lockers in quantity of 5% of total lockers to be installed. Accessible lockers shall have top and bottom shelves and coat hooks within the following reach ranges:

a. CPC, Pre-K, K:
   1) Low shelf reach: 20 inches AFF.
   2) High shelf reach: 36 inches AFF.
b. Elementary School:
   1) Low shelf reach: 19 inches AFF, recommended. 18 inches minimum AFF.
   2) High shelf reach: 39 inches AFF recommended. 40 inches, maximum AFF.
c. Grades 3 through 8:
   1) Low shelf reach: 16 inches AFF.
   2) High shelf reach: 44 inches AFF.

7. Ventilation: Louvers at top and bottom of door panel.
8. Locking: Padlock hasps, for padlocks provided by Owner.
9. Hardware for accessible lockers shall comply with ADA Standards 4.27.4 Operation. Controls and operating mechanisms shall be operable with one hand and shall not require tight grasping, pinching or twisting of the wrist. The force required to activate controls shall be no greater than 5 lbs. The hardware shall be designed to provide resistance to overcome the closing device and not exceed 5 lbs. Touch latches, flush pulls, lever handles and U-shaped pulls are acceptable.
10. Provide sloped top where recessed mounting is not possible.
11. Color: To be selected from manufacturer's full range by Architect/Engineer of Record.

2.03 METAL LOCKERS

A. Accessibility: Design units indicated on drawings as 'accessible' to comply with ICC A117.1 and ADA Standards.
B. Locker Case Construction:
   1. Heavy-Duty, Welded Construction: Made of formed and welded together sheet steel; metal edges finished smooth without burrs; powder coat finished inside and out.
      a. Assembly: Do not use bolts, screws, or rivets to assemble locker bodies.
      b. Locker Body Components: Formed and flanged from steel sheet of the following type and minimum thicknesses:
         1) Unperforated Steel Sheet: Commercial Steel (CS), Type B, supplied for exposed applications and complying with ASTM A1008/A1008M.
         2) Body and Shelves: 16 gauge, 0.0598 inch.
         3) Backs: 18 gauge, 0.0478 inch.
         4) Base (where indicated): 16 gauge, 0.0598 inch. Channel or zee profiled for stiffness, fabricated in lengths as long as practicable to enclose base and base ends of lockers without additional fastening devices.
      c. Frames: Formed channel shape, welded and ground flush, welded to body, resilient gaskets and latching for quiet operation.
         1) Door Frame: 16 gauge, 0.0598 inch, minimum.
      d. Where ends or sides are exposed, provide flush panel closures.
      e. Provide filler strips where indicated or required, securely attached to lockers.
C. Doors: Channel edge; welded construction, manufacturer's standard stiffeners, grind and finish edges smooth.
   1. Door Thickness: 14 gauge, 0.0747 inch, minimum.
   2. Form recess for operating handle and locking device.
D. Latches and Door Handles: Manufacturer's standard.
   1. Latching: Manufacturer's standard for locking arrangement selected.
      a. Three-Point Lift Handle Gravity Latch: Pocket-mounted, provide for doors 18 inches or taller.

1) Handle Pocket, Recess: Stainless steel flush-mounted cup recessed into face of door.
2) Rubber bumpers riveted to door stops for silent operation.

E. Cup, Pocket: Stainless steel, with integral pull, and recessed surface punched for installation of lock, latch lift mechanism, and number plate.
F. Hinges: Continuous piano hinge with powder coat finish to match locker color.
G. Sloped Top for surface mounted lockers: 16 gauge, 0.0598 inch, with closed ends.
H. Coat Hooks: Stainless steel or zinc-plated steel.
I. Number Plates: Provide rectangular shaped aluminum plates. Form numbers 3/8 inch high of block font style, in contrasting color. Attach plates to each locker door, near top, centered, with at least 2 fasteners of same finish as number plate.
J. Accessibility Plates: Provide square shaped 2 inch x 2 inch plastic or aluminum plates. Blue plate with white symbol. Attach plates to each accessible locker door, centered over lock, with at least 2 fasteners of same finish as plate.
K. Locks: Locker manufacturer's standard type indicated in Applications article above.
L. Accessible Locks: RFID Lock System Components and Accessories for accessible lockers only.
1. Contactless RFID Media: Cards, wristbands, key fobs, and other NFC connected devices.
2. Power: Battery operated.
3. Provide RFID locks compatible with locker manufacturer by the following or similar:
a. Zephyr RFID Locker Lock System
b. Digilock Electronic Lock
M. Built-In Lock Boxes: Same material as locker, manufacturer's standard size, with padlock hasps, for padlocks provided by Owner.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that prepared bases are in correct position and configuration.
B. Verify bases and embedded anchors are properly sized.

3.02 INSTALLATION

A. Install in accordance with manufacturer's instructions.
B. Place and secure on prepared base.
C. Install lockers plumb and square.
D. Secure lockers with anchor devices to suit substrate materials. Minimum Pullout Force: 100 pounds.
E. Bolt adjoining locker units together to provide rigid installation.
F. Install end panels, filler panels, and sloped tops.
G. Install fittings if not factory installed.
H. Replace components that do not operate smoothly.

3.03 CLEANING

A. Clean locker interiors and exterior surfaces.

END OF SECTION

SECTION 11 66 23.11

GYMNASIUM EQUIPMENT - ELEMENTARY SCHOOL

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Basketball backboards, goals, and support framing.
B. Floor sleeves for net and goal posts.
C. Wall mounted protection pads.
D. Gym divider curtains.
E. Volleyball nets and posts.

1.02 REFERENCE STANDARDS

A. ASTM E84 - Standard Test Method for Surface Burning Characteristics of Building Materials 2021a.
B. AWS D1.1/D1.1M - Structural Welding Code - Steel 2020.
C. NFPA 101 - Life Safety Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
D. NFPA 286 - Standard Methods of Fire Tests for Evaluating Contribution of Wall and Ceiling Interior Finish to Room Fire Growth 2019.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Large Components: Ensure that large components can be moved into final position without damage to other construction.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
B. Product Data: Provide manufacturer's data showing configuration, sizes, materials, finishes, hardware, and accessories; include:
   1. Fire rating certifications.
   2. Structural steel welder certifications.
   3. Manufacturer's installation instructions.
C. Shop Drawings: For custom fabricated equipment indicate, in large scale detail, construction methods; method of attachment or installation; type and gage of metal, hardware, and fittings; plan front elevation; elevations and dimensions; minimum one cross section; utility requirements as to types, sizes, and locations.
   1. Verify capacity of members and connections to support loads and verify loads, point reactions, and locations for attachment of gymnasium equipment to structure with those indicated on Drawings.
D. Samples: Submit samples of wall pad coverings in manufacturer's available range of colors.
   1. Pads: Submit full line color swatches of fabrics for selections by Architect/Engineer of Record.
E. Operating and maintenance data, for each operating equipment item.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of the type specified with minimum 5 years of experience.
B. Standards: Provide gymnasium equipment complying with or exceeding requirements of Illinois High School Athletic Association.

1.06 COORDINATION

A. Coordinate installation of floor inserts with structural floors and finish flooring installation and with court layout and game lines and markers on finish flooring.

B. Coordinate layout and installation of overhead-supported gymnasium equipment and suspension system components with other construction that penetrates ceilings or is supported by them, including light fixtures, HVAC equipment, fire-suppression-system components, and partition assemblies.

1.07 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to project site in manufacturer's original packaging with factory original labels attached.

B. Store products indoors and elevated above floor; prevent warping, twisting, or sagging.

C. Store products in accordance with manufacturer's instructions; protect from extremes of weather, temperature, moisture, and other damage.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Gymnasium Equipment:

1. AALCO Manufacturing: www.aalcomfg.com
2. American Athletic Inc: www.americanathletic.com
3. Draper, Inc: www.draperinc.com.
4. Jaypro Sports, LLC: www.jayprosports.com
5. Performance Sports Systems: www.perfsports.com
6. Porter Athletic Equipment Company: www.porterathletic.com

2.02 GENERAL REQUIREMENTS

A. See drawings for sizes and locations, unless noted otherwise.

B. Where mounting dimensions or sizes are not indicated, comply with applicable requirements of the following:

1. National Federation of State High School Associations (NFHS) sports rules.

C. Provide mounting plates, brackets, and anchors of sufficient size and strength to securely attach equipment to building structure; comply with requirements of contract documents.

D. Hardware: Heavy duty steel hardware, as recommended by manufacturer.

E. Structural Steel Fabrications: Welded in accordance with AWS D1.1/D1.1M, using certified welders.

2.03 DIVIDER CURTAINS

A. Gymnasium Divider Curtains:

1. Curtain Material: Class A rated, self-extinguishing vinyl coated polyester meeting NFPA 101.
   a. Upper Section: Vinyl or PVC coated polyester mesh with a minimum breaking strength of 270 pounds per mesh, approximately 50% open area. Bound on all edges and permanently sewn to lower section. A pocket shall be sewn to the top of the netting to accommodate a continuous support pipe, the length of the curtain.
   b. Lower Section: 18 oz/sq yd solid vinyl coated polyester with roller encased in pocket and machine sewn in lower edge of curtain. All edges folded and double machine sewn.
2. Operation: Vertical lift, roll-up, using compensating type worm gear winch, with travel equalizing 6:1 ration speed control with integral limit switches to automatically control upper and lower limits of curtain travel, flush key switches mounted in stainless plate, 115V single-phase reversing motor with built-in overload protection.
3. Controls: Wall switch.
4. Size: As indicated on drawings.

2.04 BASKETBALL

A. Basketball System: Backstop assembly, backboard, and goal.

1. Main Court: Two (2) single mast, forward folding overhead supported, rectangular glass backboards, adjustable goal height, electrically operated from one key switch..
2. Cross Courts: Four (4) single mast, fixed wall mounted one end, side folding overhead supported electrically operated individually one end, fiberglass square backstop, adjustable goal.

B. Wall-Mounted Backstop Assemblies: Wall-mounted steel frame assembly capable of mounting both rectangular and fan-shaped backboards.

C. Ceiling-Suspended Backstop Assemblies: Capable of mounting both rectangular and fan-shaped backboards.
1. Location: Wall mounted.
2. Folding Control System: Manual winch with safety catch and automatic reset.
3. Height Adjuster: Raises or lowers assembly by 2 feet to adjust goal height.
a. Height Control System: Manual winch.
4. Framing Color: As selected from manufacturer's standard selection.

D. Backboards:
1. Main Court: Tempered glass, rectangular shaped.
2. Cross Courts: Fiberglass, rectangular shaped.
3. Size: 72 inches wide x 42 inches high
4. Thickness:
a. Tempered Glass: 1/2 inch minimum.
b. Fiberglass: 1/2 inch minimum.
5. Markings:
a. Glass Backboards: Etched in white color.
b. Fiberglass Backboards: Painted.
6. Provide safety padding for bottom edge of backboard.
7. Provide mounting kit.

E. Goals: Steel rim, mounted to directly and indecently to center mast, with attached white nylon anti-whip 12 loop mesh net between 15 and 18 inches long; complete with mounting hardware.
1. Net Attachment Device: No-tie loops for attaching net to rim without tying.
2. Breakaway mechanism, adjustable.
3. Finish: Powder coat orange.

2.05 FLOOR-MOUNTED EQUIPMENT

A. Floor Sleeves for Volley Ball Posts: Metal sleeve, with latch cover, cast into concrete subfloor to hold poles for nets and goals; installed flush with finish floor surface.
1. Latch Cover: Brass, round; tamper resistant lock with key.
2. Sleeve: Steel.
3. Round Pole Diameter: 3-1/2 inches.
4. Depth of Sleeve: 9 inches from floor surface to bottom, including latch cover.

2.06 WALL PADDING

A. Wall Padding: Foam filling bonded to backing board, wrapped in covering; each panel fabricated in one piece.
1. Surface Burning Characteristics: Flame spread index (FSI) of 25 or less, smoke developed index (SDI) of 450 or less, Class A, when tested in accordance with ASTM E84 as a complete panel.
2. Flammability: Comply with NFPA 286.
3. Covering: Vinyl-coated polyester fabric, mildew and rot resistant; stapled to back of board.

a. Color: As selected from manufacturer's standard range for two colors.

4. Foam: Urethane, soft, 3.5 pcf nominal density.
5. Foam Thickness: 2 inches.
6. Backing Board: Plywood.
   a. Thickness: 3/8 inch.
7. Mounting: Removable; Z-clips fixed to wall and to padding.

PART 3 EXECUTION

3.01 EXAMINATION

A. Take field measurements to ensure proper fitting of work. If taking field measurements before fabrication will delay work, allow for adjustments within recommended tolerances.

B. Inspect areas and conditions before installation. Notify Architect/Engineer of Record in writing of unsatisfactory or detrimental conditions. Do not proceed until conditions have been corrected. Commencing installation constitutes acceptance of work site conditions.

3.02 INSTALLATION

A. Install in accordance with contract documents and manufacturer's instructions.

B. Coordinate installation of inserts and anchors that must be built in to flooring or subflooring.

C. Install equipment rigid, straight, plumb, and level.

D. Secure all equipment with manufacturer's recommended anchoring devices.

E. Install wall padding securely, with edges tight to wall and without wrinkles in fabric covering.

F. Separate dissimilar metals to prevent electrolytic corrosion.

3.03 ADJUSTING

A. Verify proper placement of equipment.

B. Verify proper placement of equipment anchors and sleeves. Use actual movable equipment to be anchored if available.

C. Adjust operating equipment for proper operation; remove and replace equipment causing noise or vibration. Lubricate equipment if recommended by manufacturer.

3.04 CLEANING

A. Remove masking or protective covering from finished surfaces.

B. Clean equipment in accordance with manufacturer's recommendations.

3.05 PROTECTION

A. Protect installed products until Date of Preliminary Acceptance.

B. Replace damaged products before Date of Preliminary Acceptance.

END OF SECTION

SECTION 12 24 96

MOTORIZED WINDOW SHADES

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Interior motorized roller shades.
B. Motor controls.

1.02 REFERENCE STANDARDS

A. ASTM G21 - Standard Practice for Determining Resistance of Synthetic Polymeric Materials to Fungi 2015.
B. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
C. NFPA 701 - Standard Methods of Fire Tests for Flame Propagation of Textiles and Films 2019.
D. WCMA A100.1 - Safety of Window Covering Products 2018.

1.03 ADMINISTRATIVE REQUIREMENTS

A. Coordination:
   1. Where motorized shade controls are to be integrated with other building system controls provided under other sections, coordinate the work with other trades to provide compatible products.
   2. Coordinate the work with other trades to provide rough-in of electrical wiring as required for installation of hardwired motorized shades.
   3. Coordinate the work with other trades to provide the necessary blocking and support as required for installation of all window shades.
B. Preinstallation Meeting: Convene one week prior to commencing work related to products of this section; require attendance of Architect/Engineer of Record, Board Representative, and affected installers.
   1. Ensure required submittals have been provided with sufficient time for review prior to scheduling the Preinstallation Meeting.
   2. Review the detailed requirements for the work of this section and to review the drawings and specifications for this work
      a. Require attendance by all affected installers including but not limited to
      b. Contractor's Superintendent
      c. Installer
      d. Manufacturer/Fabricator Representative
      e. Other affected Subcontractors
      f. Architect/Engineer of Record
      g. Board Representative
C. Sequencing:
   1. Do not fabricate shades until field dimensions for each opening have been taken with finished field conditions in place.
   2. If recessed pockets are part of the scope, coordinate installation of pockets in conjunction with ceiling work, and ahead of shade installation.
   3. Do not install shades until final surface finishes and painting are complete.

1.04 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Provide manufacturer's standard catalog pages and data sheets, including materials, finishes, fabrication details, dimensions, profiles, mounting requirements, and accessories.
   1. Motorized Shades: Include power requirements, switch details, and standard wiring diagrams for specified products.

C. Shop Drawings: Include shade schedule indicating size, location and keys to details, head, jamb and sill details, mounting dimension requirements for each product and condition, and operation direction. Indicate any windows requiring fabric to be railroaded or seamed, and match fabric orientation for all shades within each room.
   1. Motorized Shades: Provide schematic system riser diagram indicating component interconnections. Include requirements for interface with other systems.

D. Certificates: Manufacturer's documentation that line voltage components are UL listed or UL recognized.

E. Samples: Include fabric samples in full range of available colors and patterns. Minimum 6 inches square, representing actual materials, color and pattern.
   1. Motorized Shades: Include finish selections for controls.

F. Operation and Maintenance Data: List of all components with part numbers, sources of supply, and operation and maintenance instructions; include copy of shop drawings.

G. Warranty: Submit sample of manufacturer's warranty and documentation of final executed warranty completed in Board's name and registered with manufacturer.

1.05 QUALITY ASSURANCE

A. Installer Qualifications: Company specializing in performing work of this type with minimum five years of documented experience with shading systems of similar size and type.
   1. Factory training and demonstrated experience.

1.06 DELIVERY, STORAGE, AND HANDLING

A. Deliver shades in manufacturer's unopened packaging, labeled to identify each shade for each opening.

B. Handle and store shades in accordance with manufacturer's recommendations.

1.07 FIELD CONDITIONS

A. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.08 WARRANTY

A. See Section 01 78 00 - Closeout Submittals, for additional warranty requirements.

B. Provide manufacturer's warranty from Date of Substantial Completion, covering the following:
   1. Shade Hardware (non-electrical components): 25 years.
   2. Electronic Control Equipment, including electronic motors and controls: 10 years.
   3. Shade Fabric: 25 years.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Interior Motorized Roller Shades, Motors and Motor Controls:
   1. Chicago Shade Makers / Evergreen Specialties & Design Inc.: www.evergreenshades.com
   2. Draper, Inc: www.draperinc.com/#sle.
   3. Hunter Douglas Architectural: www.hunterdouglasarchitectural.com/#sle.
   4. Lutron Electronics Co., Inc: www.lutron.com/#sle.
   5. MechoShade Systems LLC: www.mechoshade.com/#sle.
   6. WT Shade: www.wtshade.com

B. Source Limitations: Furnish products produced by a single manufacturer and obtained from a single supplier.

2.02 ROLLER SHADES

A. General:

1. Provide motorized window shades only at windows indicated in drawings.
2. Provide shade system components that are easy to remove or adjust without removal of mounted shade brackets.
3. Provide shade system that operates smoothly when shades are raised or lowered.
4. Motorized Shades: Motor system housed inside roller tube, controlling shade movement via motor controls indicated; listed or recognized to UL 325.
   a. Comply with NFPA 70.
   b. Electrical Components: Listed, classified, and labeled as suitable for the purpose intended. Where applicable, system components to be FCC compliant.
   c. Motors: Size and configuration as recommended by manufacturer for the type, size, and arrangement of shades to be operated; integrated into shade operating components and concealed from view; fully compatible with controls to be installed.
   d. Provide access panels for any concealed equipment or controls.
   e. Audible Noise: Maximum 39 dBA measured 3 feet from the line voltage motor unit and 44 dBA from the low voltage motor unit; no audible clicks when motor starts and stops.
   f. Both AC and DC motors are acceptable; provide required transformers for DC motors.
   g. RTS Radio Controlled Technology
   h. Furnish with wireless wall switch.
   i. Options:
      1) Interior Sun & Temperature Sensor. Refer to drawings.
      2) RTS Repeater. Refer to drawings.
      3) Timer and Sun Sensor. Refer to drawings.
      4) Universal RTS Interface for 3rd Party Integration. Refer to drawings.

B. Motorized Roller Shades Type MRS-1: Dual Roller (standard and room darkening) shade.

1. Description - Interior Roller Shades: Dual roller, motor operated fabric window shade system complete with mounting brackets, roller tubes, hembars, hardware, and accessories.
   a. Basis-of-Design: Draper Dual Roller Motorized Flexshade.
   b. Drop Position: Regular roll.
   c. Roll Direction: Roll down, closed position is at window sill.
   d. Mounting: As indicated in drawings, and if not indicated, as directed by Architect/Engineer of Record.
   e. Size: As indicated on drawings and verified by field measurement.
   f. Fabric: As indicated under Shade Fabric article.
2. Brackets and Mounting Hardware: As recommended by manufacturer for mounting indicated and to accommodate shade fabric roll-up size and weight.
   a. Multiple Shade Operation: Provide hardware as necessary to operate more than one shade using a single motor operator.
3. Roller Tubes: As required for type of shade operation.
   a. Size: As recommended by manufacturer; selected for suitability for installation conditions, span, and weight of shades.
4. Hembars: Designed to maintain bottom of shade straight and flat.

a. Style: Full wrap fabric covered bottom bar, flat profile with heat sealed closed ends.

5. Accessories:
   a. Fascia: Extruded aluminum, size as required to conceal shade mounting, attachable to brackets without exposed fasteners; baked enamel finish.
      1) Color: As selected from Manufacturer's full range..
      2) Profile: Square with coordinating end caps.
   b. Ceiling Pockets: Where indicated shades to be installed in drywall pocket. Provide removable bottom closure plate to conceal underside of brackets and roller tubes.

2.03 SHADE FABRIC

A. Fabric - Type F-1 (south and west façade): 3% Open-ness, nonflammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
   1. Location: Windows with south and west exposure
   2. Material: Vinyl coated fiberglass or vinyl coated polyester; Basketweave pattern.
   3. Performance Requirements:
      a. Flammability: Pass NFPA 701 large and small tests.
      b. Fungal Resistance: No growth when tested according to ASTM G21.
   4. Openness Factor: 3%.
   5. Weight: Minimum 11.5 ounces per square yard.
   6. Color: As selected by Architect of Record from manufacturer’s full range of colors.

B. Fabric - Type F-2 (north and east façade): 5% Openness, nonflammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
   1. Location: Windows with north and east exposure
   2. Material: Vinyl coated fiberglass or vinyl coated polyester; Basketweave pattern.
   3. Performance Requirements:
      a. Flammability: Pass NFPA 701 large and small tests.
      b. Fungal Resistance: No growth when tested according to ASTM G21.
   4. Openness Factor: 5%.
   5. Weight: Minimum 10.5 ounces per square yard.
   6. Color: As selected by Architect of Record from manufacturer’s full range of colors

C. Fabric - Type F-3: Room Darkening, nonflammable, color-fast, impervious to heat and moisture, and able to retain its shape under normal operation.
   1. Location: Where indicated for room darkening shades
   2. Material: Vinyl coated fiberglass.
   3. Performance Requirements:
      a. Flammability: Pass NFPA 701 large and small tests.
      b. Fungal Resistance: No growth when tested according to ASTM G21.
   4. Opacity: Opaque, shadow proof.
   5. Weight: 12 ounces per square yard.
   6. Color: As selected by Architect/Engineer of Record from manufacturer’s full range of colors. Street side fabric to be neutral color.

2.04 MOTOR CONTROLS

A. All motorized shades to be controlled by wall mounted controls.

B. Unless specifically indicated to be excluded, provide all required equipment, conduit, boxes, wiring, connectors, hardware, supports, accessories, software, system programming, etc. as necessary for a complete operating system that provides the control intent indicated.

C. Provide all components and connections necessary to interface with other systems as indicated.

D. Manual Controls:

1. Control Functions:
    a. Open: Automatically open controlled shade(s) to fully open position when button is pressed.
    b. Close: Automatically close controlled shade(s) to fully closed position when button is pressed.
    c. Raise: Raise controlled shade(s) only while button is pressed.
    d. Lower: Lower controlled shade(s) only while button is pressed.
    e. Presets: For selection of predetermined shade positions.
    f. Multiple Shade Groups: Provide individual controls for each shade group as indicated.
2. Wall Controls: Provided by shade manufacturer.
    a. Finish: To be selected by Architect.
    b. Button Engraving: Manufacturer's standard engraving, unless otherwise indicated.

2.05 ROLLER SHADE FABRICATION

A. Field measure finished openings prior to ordering or fabrication.
B. Dimensional Tolerances: Fabricate shades to fit openings within specified tolerances.
    1. Vertical Dimensions: Fill openings from head to sill with 1/2 inch space between bottom bar and window stool.
    2. Horizontal Dimensions - Inside Mounting: Fill openings from jamb to jamb.
    3. Horizontal Dimensions - Outside Mounting: Cover window frames, trim, and casings completely.
C. At openings requiring continuous multiple shade units with separate rollers, locate roller joints at window mullion centers; butt rollers end-to-end.

PART 3 EXECUTION

3.01 EXAMINATION

A. Examine finished openings for deficiencies that may preclude satisfactory installation.
B. If substrate preparation is the responsibility of another installer, notify Architect/Engineer of Record of unsatisfactory preparation before proceeding.
C. Start of installation shall be considered acceptance of substrates.

3.02 PREPARATION

A. Prepare surfaces using methods recommended by manufacturer for achieving best result for substrate under the project conditions.
B. Coordinate with window installation and placement of concealed blocking to support shades.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions and approved shop drawings, using mounting devices as indicated.
B. Replace shades that exceed specified dimensional tolerances at no extra cost to Board.
C. Adjust level, projection, and shade centering from mounting bracket. Verify there is no telescoping of shade fabric. Ensure smooth shade operation.

3.04 SYSTEM STARTUP

A. Motorized Shade System: Provide services of a manufacturer's authorized representative to perform system startup.

3.05 CLEANING

A. Clean soiled shades and exposed components as recommended by manufacturer.
B. Replace shades that cannot be cleaned to "like new" condition.

3.06 CLOSEOUT ACTIVITIES

A. Demonstration: Demonstrate operation and maintenance of window shade system to Board's personnel.
B. Training: Train Board's personnel on operation and maintenance of system.
   1. Use operation and maintenance manual as training reference, supplemented with additional training materials as required.

3.07 PROTECTION

A. Protect installed products from subsequent construction operations.
B. Touch-up, repair, or replace damaged products before Substantial Completion.

END OF SECTION

SECTION 12 66 13

TELESCOPING BLEACHERS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Telescoping bleachers.

B. Electric motor operators, controls, and internal wiring.

1.02 SUBMITTALS

A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's data sheets on each product to be used, including:
1. Preparation instructions and recommendations.
2. Storage handling and requirements.
3. Installation methods.
4. Wiring diagrams.

C. Shop Drawings: Complete layout with dimensions, seat heights, row spacing and rise, aisle widths and locations, points of connection to substrate, assembly dimensions, and material types and finishes.
1. Provide drawings customized to this project.
2. Include Professional Engineer certification.
3. Wiring Diagrams: Show locations of motors, electrical wiring, and rough-in connections.

D. Selection Samples: For each material for which color selection is required, submit samples, 2 by 2 inches in size, illustrating colors and finishes available.

E. Verification Samples: For each custom colored finish, submit samples of actual finish or product, for verification of color selection.

F. Operation and Maintenance Data: Manufacturer's operation and maintenance instructions, including annual inspection and maintenance and bi-annual inspection by a Professional Engineer or manufacturer factory service personnel.

1.03 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section, with not less than three years of documented experience.

B. Installer Qualifications: Manufacturer's installation crew.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Store, in original packaging, under cover and elevated above grade.

PART 2 - PRODUCTS

2.01 MANUFACTURERS

A. Telescoping Bleachers:
1. Interkal LLC: www.interkal.com/#sle.
2. Irwin Telescopic Seating Company: www.irwintelescopicseating.com/#sle.
3. Hussey Seating Company: www.husseyseating.com/#sle.

2.02 TELESCOPING STANDS

A. Description: Operable systems of multiple-tiered seating on interconnected folding platforms that close, without being dismantled, into a nested stack for storing or moving. Stand units permit opening and closing of adjacent rows, allow individual and collective rows to be locked open for use and close with vertical faces of upper skirts on the same vertical plane.

B. Floor-Attached, Freestanding Telescoping Stands: Rear of understructure permanently attaches to floor construction, and stand unit closes by moving the front to the rear for storage.

1. Operation: Manual

2.03 HANDRAILS AND RAILINGS

A. Provide the following railings:
1. Aisle Handrails: Single post folding railing segment mounted in center of aisle at every other row beginning at row 2.
2. End of Row Guardrails: Self-storing, at open ends of sections beginning at row 2.
3. Top Row Rear Guardrail: Non-removable self-storing, mounted behind rear seat with tubular supports, running full width of section.
4. Height: 42 inches above adjacent platform or tread.
5. Removable Railings: Provide steel post sockets attached to platform supports.

B. Design handrails and railings to withstand the following loads:
1. Concentrated Load on Handrails: 200 pounds in any direction.
2. Concentrated Load on Guardrails: 200 pounds in any direction along top rail.
3. Live Load on Handrails: 50 pounds per linear foot, applied in any direction.
4. Live Load on Guardrails:
a. Horizontal: 50 pounds per linear foot, applied at the guardrail height.
b. Vertical: 100 pounds per linear foot, applied vertically to top of guardrail.

C. Railing Construction: Round steel or aluminum pipe or tube, with formed elbows at corners and caps at ends of straight runs.
1. Steel: 1-1/2 inch minimum outside diameter, with 11 gage, 0.12 inch minimum wall thickness; textured powder coat epoxy finish.

2.04 ACCESSORIES

A. Slip-resistant, abrasive tread surfaces at vertical aisles.

B. Intermediate aisle steps, fully enclosed, at each vertical aisle.

C. Transitional top step, fully enclosed, at each vertical aisle where last row of telescoping stands is adjacent to a cross aisle.

D. Removable front steps, fully enclosed, at each vertical aisle, that engage with front row to prevent accidental separation or movement and are equipped with a minimum of four skid-resistant feet.

E. Folding, nonremovable mid-aisle handrails located at centerline of each vertical aisle with seating on both sides.

F. End rails (guards) that are telescoping and self-storing.

G. Front rails (guards) along front of units where required by referenced safety standard.

H. Rear fillers including supports for closing openings between top row and rear wall of adjoining construction.

I. Gap fillers for closing openings between stand units or between stand units and adjoining construction.

J. End panels covering exposed ends of stands in stored position.

K. Removable scorer's table that attaches to mounting sockets installed in telescoping stand unit.

L. Fasteners: Provide hardware and fasteners in accordance with manufacturer's recommendations.

M. Anchorage: As indicated on drawings; provide hardware in accordance with manufacturer's recommendations.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Verify that field measurements are consistent with those on the shop drawings.

B. Verify that electrical rough-ins have been installed and are accessible.

C. Do not begin installation until substrates have been properly prepared and area has been cleared of obstructions.

D. If substrate preparation is the responsibility of another installer, notify Architect/Engineer of Record of unsatisfactory preparation before proceeding.

3.02 PREPARATION

A. Clean surfaces thoroughly prior to installation.

B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.03 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Do not field cut or alter seats, fascia, or structural members without approval.

C. Provide manufacturer's field representative to inspect completed installation.

3.04 ADJUSTING

A. Lubricate, test, and adjust each moving assembly to ensure proper operation in compliance with manufacturer's recommendations.

3.05 CLEANING

A. Clean exposed and semi-exposed assembly surfaces.

B. Touch up finishes on damaged or soiled areas.

3.06 CLOSEOUT ACTIVITIES

A. Demonstration and Training: Provide manufacturer's field representative to demonstrate to and train Board's operating personnel in proper operation of equipment.
1. Location: On site using installed equipment.
2. Time: As agreed between Board and Contractor.

3.07 PROTECTION

A. Protect installed products until completion of project.

B. Touch-up, repair, or replace damaged products before Date of Preliminary Acceptance.

END OF SECTION

SECTION 23 09 23

DIRECT-DIGITAL CONTROL SYSTEM FOR HVAC

PART 1 GENERAL

1.01 SECTION INCLUDES

A. System description.
B. Operator interface.
C. Controllers.
D. Power supplies and line filtering.
E. System software.
F. Controller software.
G. HVAC control programs.

1.02 REFERENCE STANDARDS

A. ASHRAE Std 135 - A Data Communication Protocol for Building Automation and Control Networks 2020, with Errata and Amendments (2021).
B. ASHRAE Std 147 - Reducing the Release of Halogenated Refrigerants from Refrigerating and Air-Conditioning Equipment and Systems 2019, with Addendum (2020).
C. Bluetooth CS - Bluetooth Core Specification 2016, Addendum 2017.
D. CTA-709.1 - Control Network Protocol Specification Revision D, 2014.
E. IEEE 802.11 - IEEE Standard for Information Technology--Telecommunications and Information Exchange between Systems - Local and Metropolitan Area Networks--Specific Requirements - Part 11: Wireless LAN Medium Access Control (MAC) and Physical Layer (PHY) Specifications 2020, with 2021 Amendments.
F. MIL-STD-810 - Environmental Engineering Considerations and Laboratory Tests 2019h.
G. NFPA 70 - National Electrical Code Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.
H. UL (DIR) - Online Certifications Directory Current Edition.

1.03 DESCRIPTION OF WORK

A. Contractor shall provide all interface devices and software to provide an integrated system connecting Advanced Application Controllers, Application Specific Controllers, Building Controllers, and Gateways. The Control System Server provided by CPS will also be connected to the CPS's WAN. When it is a retrofit the contractor will install all the cabling per CPS Spec. For new schools the contractor will patch the controller to a data jack from the nearest "C" Box or MDF / IDF whichever is closest. CPS will patch that controller in the corresponding "C" Box, MDF, and IDF

1.04 APPLICATION OF OPEN PROTOCOLS

A. Subject to the detailed requirements provided throughout the specification, the BAS and digital control and communications components installed, as work of this contract shall be an integrated distributed processing system utilizing one of the following standards:
   1. BACnet: System components shall communicate using native BACnet in accordance with ASHRAE Standard 135 and current addenda and annexes, including all workstations, all BACnet building controllers (B-BC), advanced application controllers (B-AAC) and all application specific controllers (B-ASC). Gateways to other

communication protocols are not acceptable. All controllers must be BACnet Testing Labs listed for their required profile (B-BC, B-AAC or B-ASC).

2. Each component of the system, including the LANs and software, shall be in full compliance with ASHRAE Standard 135, commonly referred to as BACnet. The BAS shall use native BACnet MS/TP, BACnet TCP/IP (wired and wireless to CPS' wireless Enterprise network) architecture and be in strict accordance with ASHRAE Standard 135. All controllers shall be BACnet Testing Labs (BTL) Certified. All BACnet points shall only use native BACnet BTL Certified standardized PICS (Protocol Implementation Conformance Statement) and BIBBS (BACNET Interoperability Building Blocks). All physical and virtual points shall be programmed as BACnet Objects and Events without any exceptions.
3. The contractor will provide all software licenses, software products, hardware connectors, hardware products to become self-maintainer if they choose to. CPS shall be free to direct the modification of any software license, regardless of supplier. In addition, CPS shall receive ownership of all job specific software configuration documentation, data files, and application-level software developed for the project. This shall include all custom, job specific software code and documentation for all configuration and programming that is generated for a given project. Any and all required Ids and passwords for access to any component or software program shall be provided to CPS.
4. CPS shall provide license naming detail to the contractor.

1.05 DEFINITIONS

A. Acknowledged: Data is broadcast repeatedly until an acknowledgement is received. Used for critical data using one to one bindings only. This type of service shall not be used for one to many bindings.
B. Adjustable (ADJ): A characteristic of a control logic parameter such that it can be varied by the operator without downloading the program.
C. Analog Calibration Offsets: For all analog input measured variables, with the exception of velocity pressure, the value measured by the hardware based analog input point shall be adjusted to match the value reported by a certified test instrument. An analog calibration offset is a parameter that can be added or subtracted from the raw value measured by the sensor to produce a calibrated value used by the control logic and reported to the operator workstations. The initial value of this parameter is set at zero and it is adjusted when the calibration process is executed. This adjustment is referred to as a single point calibration. These parameters are mandatory for all analog inputs except velocity pressure sensors. These offset values are configuration parameters and shall be written to EEPROM. It shall be possible to change the value of these parameters from a graphic page.
D. Advanced Application Controller (AAC): A device with limited resources relative to the Building Controller (BC). It may support a level of programming and may also be intended for application specific applications. A fully programmable control module. This control module shall be capable of certain advanced features found in Building Controllers (e.g. storing trends, and initiating read and write requests) but it shall not serve as a master controller. Advanced Application Controllers may reside on either the Ethernet/IP backbone or on a subnet. A BACnet device to be used as an AAC will meet the requirements of ASHRAE 135, Annex L and will be listed as an AAC by BACnet Testing Labs. A BTL listed device will carry the BTL Mark.
E. AHU: A factory-made encased assembly consisting of a fan or fans and other necessary equipment to perform one or more of the functions of circulating, cleaning, heating, cooling, humidifying, dehumidifying and mixing of air

F. Application Programming Tool: A vendor unique software tool used to create applications for programmable controllers.
G. Application Protocol Data Unit (APDU): A unit of data specified in an application protocol and consisting of application protocol control information and application user data (ISO 9545).
H. Application Specific Controller (ASC): A device with limited resources relative to the Advanced Application Controller (AAC). A pre-programmed control module, intended for use in a specific application. ASCs shall have limited configurability, allowing the user to select various pre-programmed options, but it shall not be fully customizable. A BACnet device used as an ASC will meet the requirements of ASHRAE 135, Annex L and will be listed as an ASC by BACnet Testing Labs. A BTL listed device will carry the BTL Mark.
I. BACnet/BACnet Standard: BACnet communication requirements, as defined by ASHRAE/ANSI 135, current version including all annexes and addenda.
J. Bandwidth Utilization: The average utilization of the network capacity. Network loading is controlled by the use of event driven broadcast based data propagation and the use of appropriate binding services.
K. Binding Services: When the network management tool within Niagara or Plexus is used to establish a binding, one of the following three types of binding services shall be selected:
    1. Unacknowledged: The data being broadcast is sent one time and an acknowledgement of receipt is not required. Used for non-critical data where there is no significant impact should the receiving device have to wait for the next broadcast.
    2. Unacknowledged Repeated: The data being broadcast is sent three times and an acknowledgement of receipt is not required. Used for most process control related data requiring timely receipt of the data.
    3. Acknowledged: The data is broadcast repeatedly until an acknowledgement is received. Used for critical data using one to one bindings only. This type of service shall not be used for one to many bindings.
L. Binding: The concept of associating an output network variable from one device to the input network variable of a second device. There are three types of bindings:
    1. One to One: A single output network variable is bound to a single input network variable
    2. One to Many: A single output network variable is bound to input network variables on multiple devices.
    3. Many to One: Output network variables from multiple devices are bound to a single input network variable on a different device.
M. Broadcasting: The propagation of data from a device to the control network. Software objects that broadcast data to the network shall include the following parameters:
N. Building Automation System (BAS): The entire integrated energy management and control system.
O. Building Controller (BC): The BC is a Server that is either a physical server provided by CPS or a virtual machine provided by CPS to run the BAS software from connected to the CPS Enterprise WAN that can communicate with the vendor provided hardware / software.
P. Typically this controller is located on the Ethernet/IP backbone of the BAS. A BACnet device to be used as a BC shall meet the requirements of ASHRAE 135, Annex L and will be listed as a BC by BACnet Testing Labs. A BTL listed device will carry the BTL Mark.
Q. Change of Value (COV): An event that occurs when a measured or calculated analog value changes by a predefined amount (ASHRAE/ANSI 135-current version)
R. Client: A device that is the requester of services from a server. A client device makes requests of, and receives responses from, a server device.
S. Configuration Parameter: An input network variable to a controller that is written to the EEPROM.

T. Continuous Monitoring: Sampling and recording of a variable based on time or change of state (e.g. trending an analog value, monitoring a binary change of state).
U. Control System Server (CSS), Web Server (WS): Provides access to the control system. This device will allow access to the control system with a web browser over the CPS WAN. As the BAS network devices are on the CPS Enterprise Network, the CSS is not required for communications to occur. The webserver will be provided by Owner and connected to the CPS Enterprise Network on the same VLAN as the BAS network devices.
V. Controller or Control Unit (CU): Intelligent stand-alone control panel. Controller is a generic reference and is a PCU.
W. CPS WAN: Reference to Chicago Public Schools Information Technology network, used for normal business-related e-mail and Internet communication.
X. Direct Digital Control (DDC): Microprocessor-based control including Analog/Digital conversion and program logic
Y. Error Rate: A measurement of communication quality that assesses the number of defective data packets as a percentage of the total number of data packets. Defective data packets are generally the result of poor installation practices or improper cable selection.
Z. Event Driven Communication: A term used to describe the propagation of data from a device to the network based on broadcasting rather than polling. The send on delta parameter is used to define the event and the data propagation is further controlled by the minimum and maximum send time parameters.
AA. Fully Open BAS: Building Automation System that all materials, hardware, firmware, and software can be procured through open market non-proprietary vendor warehouse distribution channels, in addition to being installed and maintained by any Tridium Niagara Framework factory authorized/qualified Building Automation and Controls Company.
BB. Free Topology: A data wiring topology that allows for loops, tees, y-connections etc. When this topology is used only one terminator of a specific design is required and allowable cable lengths are significantly reduced.
CC. Functional Profile: A collection of variables required to define a the key parameters for a standard application. As this applies to the HVAC industry, this would include applications like VAV terminal, fan coil units, and the like.
DD. Gateway (GTWY): A device, which contains two or more dissimilar networks/protocols, permitting information exchange between them (ASHRAE/ANSI 135-1995).
EE. Hand Held Device (HHD): Manufacturer's microprocessor based device for direct connection to a Controller.
FF. Host-Based Controller: Applicable only to Lon-based controllers where the on-board Neuron chip is used solely as the Communications Interface and a processor independent from the Neuron chip to is used to execute Application control and I/O processes.
GG. JACE: Java Application Control Engine. Term used within the Niagara Framework to describe a component that serves several key functions:
HH. Serve as the LANID.
II. Transmission of data to operator workstations on the TCP/IP network.
JJ. Location for time schedules to support all of the devices.
KK. Location for trend logs for all data to be trended from the devices.
LL. Location for alarm handling software. The JACE shall process event broadcasted data from the devices (alarm indication) and enter the appropriate alarm information in the alarm reporting system at the TCP/IP level.
MM. Local Supervisory LAN Interface Device (LANID): Device used to facilitate communication and sharing of data throughout the BAS and CPS WAN
NN. Media Access Control address (MAC): Hardware address that uniquely identifies each node of a network. Each different type of network medium requires a different MAC layer.
OO. Managed Communication: Transmission of data from a controller to a data manager, which in turn re-broadcasts the data to a second controller.

PP. Manual Control: Where the operator takes control of an end device and forces a specific position or state. The manual mode and the desired manual position or states are parameters that are set by the operator.

QQ. Many to One: Output network variables from multiple devices are bound to a single input network variable on a different device.

RR. Maximum Send Time Parameter: Parameter used to ensure the periodic update of network data. If a time period equal to the value of this parameter has expired without a broadcast of the variable, a re-broadcast of the current value shall be executed. See also "Send on Delta" and "Maximum Send Time."

SS. Maximum Send Time: Adjustable parameter that defines the maximum time period between broadcasts of a software object's data to the network. Should the value of a software object remain constant over an extended period of time, the value will be rebroadcast once every maximum time period.

TT. Minimum Send Time Parameter: Parameter used to control unnecessary broadcasting of data onto the network. Broadcast of an updated value shall not occur unless a time period equal to the value of this parameter has expired. The expiration of the time period does not mandate a re-broadcast. See also "Send on Delta" and "Maximum Send Time" definitions.

UU. Minimum Send Time: Adjustable parameter that defines a mandatory time period during which no broadcasting of data will occur. Once this time period has been exceeded without a broadcast, the send on delta parameter or the maximum send time parameter shall determine when a broadcast is initiated.

VV. Multiple Controller Integrated Control (MCIC): Where multiple controllers with I/O are used to control a single mechanical system, which is sub-divided into a collection of processes to be controlled. All primary measured variables and the end device associated with a single process along with the primary control logic for the process shall be contained within a single controller. Secondary data from one process that affects the control of another process may be sent from one controller to the primary controller controlling the process. When data is sent from one controller to another controller, broadcasting concepts as defined above must be used. If the data being received over the network only affects the general thermodynamic or psychometric performance of the process but does not have a significant affect on safety or equipment protection then unacknowledged repeated binding services shall be used. If the data being received over the network has a safety or equipment protection impact, then acknowledged repeated binding services shall be used. In both cases peer-to-peer communication is mandatory. All controllers must be on the same channel. Managed communication shall not be used to move data between the multiple controllers.

WW. One to Many: A single output network variable is bound to input network variables on multiple devices.

XX. One to One: A single output network variable is bound to a single input network variable.

YY. Open Database Connectivity (ODBC): Open standard application-programming interface (API) for accessing a database, making access to any data, regardless of which database management system (DBMS) is handling the data, possible.

ZZ. Operator Interface (OI): A device used by the operator to manage the BAS.

AAA. Operator Workstation (OWS): Used to interface with the BAS system.

BBB. Peer-to-Peer Communication: Data is broadcast from its origin and is received by the final device requiring the data without being received and retransmitted by a third device.

CCC. Polling Communication: The concept of a control device requesting a network variable from a second control device at a specified interval. Polling communication is typically used to populate dynamic data on an active graphic page and for temporary or short term trending of data where the trend data is not stored at the controller level.

DDD. Portable Operators Terminal (POT): Laptop PC used both for direct connection to a controller.

EEE. Primary Control Unit (PCU): A fully programmable device capable of carrying out a number of tasks including control and monitoring via direct digital control (DDC) of specific systems.

FFF. Protocol Implementation Conformance Statement (PICS): A written document, created by the manufacturer of a device, identifying the particular options specified by BACnet that are implemented in the device.

GGG. Router: A device that connects two or more networks at the network layer.

HHH. Send on Delta Parameter: A parameter used to control unnecessary broadcasting of data onto the network. For binary data the send on delta parameter is assumed to be a change of state.

III. Send on Delta: Adjustable parameter that defines a requirement to broadcast when the data generated by the software object changes by an amount that exceeds this parameter's value. For binary data this parameter defaults to a change of state. The broadcast of data is initiated when this criteria and the minimum send time requirement have been met.

JJJ. Smart Device: A control I/O device such as a smart sensor (SS) or smart actuator (SA) that can directly communicate with the controller network to which it is connected rather than through a binary or analog signal.

KKK. Standardized Query Language (SQL): Standardized means for requesting information from a database.

LLL. Stand-Alone Controller: A stand-alone controller has provisions for all of the physical inputs and physical outputs associated with a single mechanical component such as a terminal unit, air handling unit, chiller or boiler. The controller shall also have embedded in it all of the control logic that associated the physical inputs to the physical outputs. A stand-alone controller may rely on other networked devices for time schedule inputs and trend data storage.

MMM. Supervisory Logic: The concept of gathering performance data from multiple terminal units to determine if a specific condition exists within the family of terminal devices.

NNN. Terminator: An electronic component that consists of a resistive and capacitive circuit specifically designed to enhance the quality of communications on a segment. On a bus topology, a terminator is connected to each end of a segment. For a channel consisting of two bus topology segments, a total of 4 terminators are required, one at each end of each segment.

OOO. Test Mode: A concept where the operator from the operator workstation can interrupt the flow of data from a sensor to the control logic and insert a mandatory test value or test state to be used by the control logic. The test mode and the desired test value or states are parameters that are set by the operator.

PPP. Unacknowledged Repeated: The data being broadcast is sent three times and an acknowledgement of receipt is not required. This type of service shall be used for most process control related data requiring timely receipt of the data.

QQQ. Unacknowledged: The data being broadcast is sent one time and an acknowledgement of receipt is not required. This type of service shall be used for non-critical data where there is no significant impact should the receiving device have to wait for the next broadcast.

RRR. Web Server: Refer to "Control System Server."

SSS. WiFi: The facility allowing computers, smartphones, or other devices to connect to the Internet or communicate with one another wirelessly within a particular area.

TTT. Wireless: Refers to WiFi application to CPS WiFi Enterprise Network.

UUU. XML (Extensible Markup Language): A specification developed by the World Wide Web Consortium.

1.06 FUNCTIONAL INTENT

A. Where detailed functional or performance requirements are specified, products intended for the Project, conforming to the specified requirements, must be submitted to, and approved by, CPS prior to shipment to the Project site.

1.07 SUBMITTALS / DELIVERABLES

A. See Section 01 30 00 - Administrative Requirements for submittal procedures.
B. Electronic Submittals: While all requirements for hard copy submittal apply, control submittals and O&M information shall also be provided in electronic format as follows.
   1. Drawings and Diagrams: Shop drawings shall be provided on electronic media as an AutoCAD 2014 or later version drawing file and/or Adobe Portable Document Format file. All 'x reference' and font files must be provided with AutoCAD files.
   2. Other Submittals: All other submittals shall be provided in Adobe Portable Document Format (PDF). Provide documents, such as Cheat Sheets and TroubleShooting Guide, in rich text format (rtf) or Microsoft Word format as required.
C. Product Data: For each control device, panel, and accessory indicated or furnished. Include dimensions, capacities, performance and electrical characteristics, and material finishes. Include installation and start-up instructions. When manufacturer's cutsheets apply to a product series rather than a specific product, clearly indicate applicable data by highlighting or by other means. General catalogs shall not be accepted as cutsheets to fulfill submittal requirements.
D. Shop Drawings: Submit shop drawings for each control system, including a complete drawing for each air handling unit, system, pump, device, etc. with all point descriptors, addresses and point names indicated. Each shop drawing shall contain the following information:
   1. System Architecture and System Layout:
      a. One-line diagram indicating schematic locations of all control units, workstations, LAN interface devices, thermostats/sensors, gateways, etc. Indicate network number, device ID, address, device instance, MAC address, drawing reference number, and controller type for each control unit. Indicate media, protocol, baud rate, and type of each LAN. Indicate media, protocol, baud rate, and type of each LAN. All optical isolators, repeaters, end-of-line resistors, junctions, terminators, ground locations etc. shall be located on the diagram.
      b. Provide floor plans locating all control units, thermostats/sensors, workstations, servers, LAN interface devices, gateways, etc. Include all WAN and LAN communication wiring routing, power wiring, power originating sources, and low voltage power wiring. Indicate network number, device ID, address, device instance, MAC address, drawing reference number, and controller type for each control unit. Indicate media, protocol, baud rate, and type of each LAN. All optical isolators, repeaters, end-of-line resistors, junctions, ground locations etc. shall be located on the floor plans. Wiring routing as-built conditions shall be maintained accurately throughout the construction period and the drawing shall be updated to accurately reflect accurate, actual installed conditions.
   2. Schematic flow diagram of each air and water system showing fans, coils, dampers, valves, pumps, heat exchange equipment and control devices. Include contractor written description of sequence of operation.
   3. All physical and virtual points on the schematic flow diagram shall be indicated with names, descriptors, and point addresses identified as listed in the point summary table.

4. With each schematic, provide a point summary table listing building number and abbreviation, system type, equipment type, full point name, point description, Ethernet backbone network number, network number, device ID, object ID (object type, instance number). See Division 23 Section “Building Automation System (BAS) - Software and Programming," PART 3 for additional requirements.
5. Label each control device with setting.
6. Label each input and output with the appropriate range.
7. Provide a Bill of Materials with each schematic. Indicate device identification to match schematic and actual field labeling, quantity, actual product ordering number, manufacturer, description, size, voltage range, pressure range, temperature range, etc. as applicable. Also identify the specification section and specification reference.
8. Provide a valve or damper and the associated actuator information including size, Cv, design flow, design pressure drop, manufacturer, model number, close off rating, etc. Indicate normal (fail) positions of spring return valves and dampers. This is the valve or damper position with no power to the actuator.
9. Indicate all required electrical wiring. Electrical wiring diagrams shall include both ladder logic type diagram for motor starter, boiler burner, chiller, RTU, control, and safety circuits and detailed digital interface panel point termination diagrams with all wire numbers and terminal block numbers identified. Provide panel termination drawings on separate drawings. Ladder diagrams shall appear on system schematic. Clearly differentiate between portions of wiring, which are existing, factory-installed and portions to be field-installed. For all devices with safety circuits, including burners and chillers, field wiring will be labeled and all added devices will be properly mounted. Any internal wiring changes shall be approved by the manufacturer in writing. If for example a gas booster needs to be tied into the burner circuit the manufacturer shall identify the terminal points and provide an updated control diagram.
10. Sample Operator Interface Graphic Screens for each unique type of system, with final screens to be received 60 days prior to system startup.
11. Details of control panels, including controls, instruments, and labeling shown in plan or elevation indicating the installed locations.
12. Sheets shall be consecutively numbered.
13. Each sheet shall have a title indicating the type of information included and the HVAC system controlled.
14. Table of Contents listing sheet titles and sheet numbers.
15. Legend and list of abbreviations.
16. Provide an operating schedule for review. The schedule will have a schedule for each AHU/RTU and the associated equipment. Terminal units serving the principal’s office and associated administrative areas will have a separate schedule from the classrooms.

E. **Product Line Demonstrated History: The product line being proposed for the project must have an installed history of demonstrated satisfactory operation for a length of 1 year since date of final completion in at least 10 installations of comparative size and complexity. Submittals shall document this requirement with references.**
F. Qualifications: For manufacturer, companies, Contractor and key personnel.
G. Checkout and Testing Forms: Submit a blank copy of the forms that will be used during Point-to-Point Checkout, Prefunctional Checkout, and Functional Performance Testing as outlined in Division 23 Section "Building Automation System (BAS) - Commissioning." Those forms should be structured to capture the following information at a minimum during each particular testing phase.
    1. Point-to-Point Checkout Form containing the following information:

a. Each point is addressed, labeled and that proper communication exists between the controller and the field device.
b. Documents that installed condition match the control drawings and that any changes or differences are noted on the drawings.

2. Pre-functional Checkout Forms containing the following information:
   a. Documents correct voltage and or current present as well as verifying circuits are free from grounds or faults for each control device.
   b. Obtain and Record Test and Balance settings and incorporate into the BAS. Information from the TAB contractor shall include:
   c. Water and air system differential pressure and flow settings.
   d. AHU minimum outside air control point or damper setting.
   e. Calibration data for all sensing and actuating devices recording final measured and displayed value. Record the type and model of the meter(s) that determined the measured value for analog inputs.
   f. For analog outputs record both the displayed output as well state of the receiving device.
   g. For digital input/outputs record the signal at the controller and the state of the sensing/control device.
   h. For actuators:
      1) Check to ensure that actuated device moves smoothly, and results are repeatable thru full range and seals tightly when the appropriate signal is applied to the operator.
      2) Check for appropriate fail position, and that the stroke and range is as required.
      3) For sequenced electronic actuators, calibrate in accordance with manufacturer's instructions to required ranges. Record final settings.
   i. For all valves and actuators, verify the actual position against the Operator Interface readout. Set pumps to normal operating mode. With command valve closed, verify that valve is closed, and adjust output zero signal as required. With command valve open, verify position is full open and adjust output signal as required. Command the valve to not less than three (3) intermediate positions. If actual valve position doesn't correspond correctly, replace actuator.
   j. Valve leak check: Verify proper close-off of the valves. Ensure the valve seats properly by simulating the maximum anticipated pressure difference across the circuit.
   k. For air and water flow measuring stations the data recorded will include the independent flow measurement, area, and the independently measured output of the flow station. The BAS input from the flow station and any factors used to calculate the flow including area and any constants used in the calculation of flow. Two sets of data shall be collected. The first at design flow and the second at 50% of design flow. It is not acceptable to simply add a correction factor to address differences between the flow station and the independent reading.
   l. For Operator Interfaces and Web accessible display:
      1) Verify that all elements on the graphics are functional and are properly bound to physical devices and/or virtual points, and that hot links or page jumps are functional and logical.
      2) Output all specified BAS reports for review and approval.
      3) Verify that the alarm pop ups, printing, and logging are functional and in accordance with requirements.
      4) Verify that all points are trended and are archiving to disk. Provide a sample to the Commissioning Authority and CPS for review.
      5) Verify that paging/dial-out alarm annunciation is functional.

6) Verify the functionality of remote Operator Interfaces and that a robust connection can be established consistently.
7) Verify that required third party software applications required with the bid are installed and are functional.

m. For all actuating devices record final settings for device.
n. Document verification of point to graphics binding for all points displayed on the workstation and that webserver display have been mapped correctly and display the correct information.
o. Document that the webserver is on the CPS Enterprise LAN and can be viewed from off site (another school), and that the BAS is accessible via the current CPS web browsers without the use of any extra system runtimes (like java, flash, etc.).

3. Functional Performance Forms shall contain:
   a. List of all sequences, modes of operation and setpoint that initiates each sequence and/or mode. For each confirm that proper sequence of operation. Document any variance between designed sequence and actual condition.
   b. Record tuning parameters and response time for each control loop.
   c. Document all alarm and safeties test and final results.
   d. Results of trends including controlled points, setpoints, actual readings and other point defined by the Boards Authorized Representative.

H. Testing Plan:
   1. Submit a plan for executing all phases of testing and completion of checkout forms. This includes the following: manufacturers' normal testing, point-to-point testing, pre-functional testing, and functional performance testing. The testing plan shall show the overall milestones of the controls work and testing of the controls system.
   2. Provide the schedule for completing each phase of testing for each system or set of equipment including, but not limited to, air handlers, chillers, boilers, unit-vents, VAV boxes, network wiring, and operator workstations. Schedules shall show the time frame needed to complete the tasks.
   3. The testing plan shall identify other trade milestones that impact the successful completion of during each phase of testing.
   4. This plan is not meant to take precedence over any other plan but is intended to provide coordination assistance to all trades as the project is scheduled.

I. Open Protocol Information:
   1. General: Provide all information necessary for review of the proposed system, including information required by the authority maintaining the protocol standard to determine if the product selected for implementation complies with the protocol standards specified.
   2. BACnet Systems:
      a. BACnet object description, object ID, and device ID, for each I/O point.
      b. Documentation for any non-standard BACnet objects, properties, or enumerations used detailing their structure, data types, and any associated lists of enumerated values.
      c. Submit PICS indicating the standardized BACnet device profile, functionality and configuration of each controller along with proof of BTL listing.

J. Framed or Laminated and digital Control Drawings: After completion of installation and check out, but prior to training, digital and laminated control drawings including system control schematics, sequences of operation, and panel termination drawings, shall be provided in panels for major pieces of equipment. Terminal unit drawings shall be located in the central plant equipment panel or mechanical room panel. Digital control drawings will be accessible via the BAS front end.

K. Control Logic Documentation (to be received and updated prior to training):

1. Submit control logic program listings (for graphical programming) and logic flow charts illustrating (for line type programs) to document the control software of all control units.
2. Control logic shall be annotated to describe how it accomplishes the sequence of operation. Annotations shall be sufficient to allow an operator to relate each program component (block or line) to corresponding portions of the specified Sequence of Operation.
3. Include written description of each control sequence.
4. Include control response, settings, setpoints, throttling ranges, gains, reset schedules, adjustable parameters, and limits.
5. Sheets shall be consecutively numbered.
6. Each sheet shall have a title indicating the controller designations and the HVAC system controlled.
7. Include Table of Contents listing sheet titles and sheet numbers
8. Submit one complete set of programming and operating manuals for all digital controllers concurrently with control logic documentation. This set will count toward the required number of Operation and Maintenance materials specified below.

L. Training Plan:
1. Training shall be provided in eight, four-hour sessions and digitally recorded with CPS retaining a copy remitted to CPS upon completion via Google Drive and the graphic front end. This recording can be substituted for approved manufacturer training if CPS approves. A training plan is not required for opposite season or refresher training. Screen recording with voiceover is acceptable in lieu of digital recording.
2. The material to be covered shall be further sub-divided into descriptions of the material to be covered in every 15 minutes. See Division 23 Section "Building Automation System (BAS) – Commissioning," for specific items to be addressed.
3. The descriptions shall include not only the material to be covered but also its location in the Operation and Maintenance Manual or the Training Manual including Section and page number.

M. Operation and Maintenance Manual: (All documentation to be received and updated prior to training)
1. In addition to other copies required, submit one copy of the materials directly to Chicago Public School's (CPS) projects management or operations staff.
2. The reviewed and accepted version of this manual will also be available on the enterprise server for the project.
3. Submit maintenance instructions and spare parts lists for each type of control device, control unit, and accessory.
4. Submit BAS User's Guides (Operating Manuals) for each controller type and for all workstation hardware and software and workstation peripherals.
5. Submit BAS advanced Programming Manuals for each controller type and for all workstation software.
6. Include all as built submittals (product data, shop drawings, control logic documentation, hardware manuals, software manuals, installation guides or manuals, maintenance instructions, and spare parts lists) in maintenance manual, in accordance with requirements of Division 01 Section "Operations and Maintenance Manual."

N. Training Manual: Submit training manual electronically for review. Once accepted, provide three hard copies and one electronic copy of the training manual at the start of training. Note only the initial 8 hours of training which include the Cheat Sheets will occur before the Cx demonstration is completed. Provide a link to the Training Manual must be available on the Operator's Interface. Include the following:
1. Cheat Sheets or quick reference section with step-by-step guidance with a level of detail that will allow someone with minimal experience with the control system to follow the instructions. The quick reference guidance can be provided one of two ways:

screen prints with bubbled text describing the navigation required or written description of the steps to be taken with screen prints provided to facilitate the written explanation. This will also be stored on the enterprise server for the project. The required cheat sheets shall include:

a. Logins and logoffs of the BAS System.
b. Adjust and restore setpoints.
c. Overrides and releasing overrides. Include instructions for running a report to list all points currently overridden.
d. Start, group, plot and export Trends.
e. Adjust and add schedules and add holidays.
f. Processing of alarms including acknowledgement, review of alarm report, and clearing of alarm history.
g. Backup and restoration of system BAS data.
h. Demonstrate how to clear/reset all field devices that may require manual intervention.
i. Demonstrate how to reset motor starter and the significance of Hand-Off-Auto switch position on motor starters.
j. Demonstration of each input and output device. Provide a picture of each input or output device with a brief narrative on its operation.
k. Demonstrate how to place the boiler or chiller system into manual control and boiler control, and how to restore the system to BAS control.
l. Demonstrate how to reset variable speed or frequency drives.

2. Operating instructions including system startup and shutdown, seasonal and emergency instruction.
3. Trouble Shooting Guide. Include actions to be taken to trouble shoot problems with the OWS, PCU's CSS, and local control devices.
4. Setpoint Table
5. Preventative maintenance instructions.
6. Color print of each unique screen.
7. Final Sequence of Operations. This document shall be printed but shall also be provided electronically in Portable Document Format (PDF). The sequence shall provide not only the original design sequence from the specifications and drawings but also the any changes to the sequence.
8. Complete set of the design control drawings (on 11"x17" sheets). The manual will have a TAB for these drawings. List of all alarm points and alarm priority.

O. Video Training: The following training shall be recorded on a USB 3.0 thumb drive in a common video file format with screen capture software additionally it will be stored on the enterprise server for the project. The cadence of the video training shall be such that an inexperienced person can listen to the narrative and execute those steps on controls system while watching the Video. Include a screen view recording the actual video feed to the monitor for the workstation while narrating the associated steps. Provide a link on the graphics home page for the training archive that is playable by modern video player software.

1. Quick reference procedures. The taping of these procedures must include both a screen view preferably recording the actual video feed to the monitor while narrating the associated steps.
   a. Login and logoff to the BAS system;
   b. Adjust and restore setpoints.
   c. Overrides and releasing overrides, as well as running a report to list all points currently overridden.
   d. Start, group, plot and export Trends.
   e. Adjust and add schedules and add holidays.

f. Processing of alarms including acknowledgement, review of alarm report and clearing of alarm history.
g. Demonstrate workstation menu penetration and broad overview of the various workstation features.
h. Demonstrate all operations and functions that can be performed at the supervisory or local controllers as well as system display artifacts such as the indication that a point has failed or lost communication.

P. Demonstration of portable operator interface device display capabilities.
Q. Manufacturers Certificates: For all listed and/or labeled products, provide certificate of conformance. Product Warranty Certificates: Submit manufacturers product warranty certificates covering the hardware provided.
R. **Engineering Tools: All Front End and all Field Level programming tools shall be installed on the CPS Asset designated for the site. The contractor shall provide the appropriate quantity of legal copies of all software tools, configuration tools, management tools, and utilities used during system commissioning and installation. Contractor shall convey all software tools and their legal licenses at project close out.**

1.08 LICENSING

A. Include licensing for all software packages at all required Control System Server (CSS Operator Work Stations (OWS) and Portable Operator Terminal (POT).
B. Any operator interface, programming environment, networking, database management and any other software used by the Contractor to install the system or needed to operate the system to its full capabilities shall be licensed and provided to Chicago Public Schools (CPS).
C. Include licensing for all software packages at all required Web Server and OWS's and POT's. Licensing shall allow access to all aspects of the system including system access, workstations, points, programming, database management, graphics etc. No restrictions shall be placed on the licensing. All operator interfaces, programming environment, networking, database management and any other software used by the Contractor to install the system or needed to operate the system to its full capabilities shall be licensed and provided to Chicago Public Schools (CPS).
D. All software should be available on all Web Servers and OWS's provided, and on all Portable Operator Terminals. Hardware and software keys to provide all rights shall be installed on all workstations. At least 2 sets of CDs shall be provided with backup software for all software provided, so that CPS may reinstall any software as necessary. Include all licensing for workstation operating systems, and all required third-party software licenses. These backup disks will include a backup of all program data files, graphics etc. and shall allow the owner to completely restore the system in the case of a computer malfunction
E. Provide evidence of licensing including version and original software copies for each WEB Server OWS's and POT's. Licenses shall allow for access to any site device and shall not be restricted to accessing, database management, configuring, etc. the LANs included in this project. The licensing and registration proof will be provided when the system is installed on site.
F. Upgrade all software packages to the release (version) in effect at the end of the Warranty Period and provide a letter indicating the current release/version date at the end of the warranty.

1.09 PROJECT RECORD DOCUMENTS

A. The Project Record documents that have not already been submitted as part of the Operating and Maintenance Manual or Training Manual are to be submitted with the Record Documents. Any documents in the Operating and Maintenance Manual or Training Manual that have changed since they were submitted will need to be re-submitted as part of the Project record documents. All of these documents may be submitted electronically.
B. Record copies of product data and control shop drawings updated to reflect the final installed condition.
C. Graphic Software: Record copies of approved project specific graphic software on USB 3.0+ Thumb drives.
D. For BACnet systems provide as-built network architecture drawings showing all BACnet nodes including a description field with specific controller identification, description, and location information.
E. Include individual floor plans with controller locations with all interconnecting wiring routing including space sensors, LAN wiring, power wiring, low voltage power wiring. Indicate device instance, MAC address, device hostnames and drawing reference number.
F. Provide record riser diagram showing the location of all controllers.
G. Maintain project record documents throughout the warranty period and submit final documents at the end of the warranty period

1.10 QUALITY ASSURANCE

A. Perform work in accordance with NFPA 70.
B. Manufacturer Qualifications: Company specializing in manufacturing products specified in this section with minimum five years of documented experience.
C. Installer Qualifications: Company specializing in performing work of the type specified and with minimum five years of documented experience.
D. Products Requiring Electrical Connection: Listed and classified by UL (DIR) as suitable for purpose specified and indicated.

1.11 WARRANTY

A. See Section 01 78 00 - Closeout Submittals for additional warranty requirements.
B. Contractor shall warranty all products and labor for a period of three (2) years after Final Acceptance.
C. Chicago Public Schools reserves the right to make changes to the BAS during the warranty period. Such changes do not constitute a waiver of warranty. The Contractor shall warrant parts and installation work regardless of any such changes made by CPS, unless the Contractor provides clear and convincing evidence that a specific problem is the result of such changes to the BAS.
D. At no cost to CPS, during the warranty period, the Contractor shall provide maintenance services for software and hardware components as specified below:
    1. Maintenance services shall be provided for all devices and hardware specified in Division 23 Section "Direct - Digital Control System (BAS)" Sections. Service all equipment per the manufacturer’s recommendations. All devices shall be calibrated within the last month of the warranty period.
    2. Emergency Service: Any malfunction, failure, or defect in any hardware component or failure of any control programming that would result in property damage or loss of comfort control shall be corrected and repaired following notification by CPS to the Contractor.
        a. Response to any request for service shall be provided within eight (8) hours of the initial request for service.

b. In the event that the malfunction, failure, or defect is not corrected through the communication exchange, at least one (1) hardware and software technician, trained in the system to be serviced, shall be dispatched to the site within eight (8) hours of the initial request for such services, as specified.
c. Emergency service shall be available on a 24-hour, 7-day-a-week, 365 days a year basis.

3. Normal Service: Any malfunction, failure, or defect in any hardware component or failure of any control programming that would not result in property damage or loss of comfort control shall be corrected and repaired following notification by CPS to the Contractor.
   a. Response to any request for service shall be provided within one (1) working hour (contractor specified 40 hr/week normal working period) of the initial request for service.
   b. In the event that the malfunction, failure, or defect is not corrected through the communication exchange, at least one (1) hardware and software technician, trained in the system to be serviced, shall be dispatched to the site within three (3) working days of the initial request for such services, as specified.
4. Request for Service: Contractor shall provide up to three telephone numbers for CPS to call in the event of a need for service. At least one of the lines shall be attended 24 hours a day, 7 days a week. A technician shall respond to every call within 15 minutes.
5. Technical Support: Contractor shall provide technical support throughout the warranty period.
6. Preventive maintenance shall be provided throughout the warranty period in accordance with the hardware component manufacturer's requirements.

1.12 PROTECTION OF SOFTWARE RIGHTS

A. Prior to delivery of software, the Board and the party providing the software will enter into a software license agreement with provisions for the following:
   1. Limiting use of software to equipment provided under these specifications.
   2. Limiting copying.
   3. Preserving confidentiality.
   4. Prohibiting transfer to a third party.
   5. All licenses direct to the Board.

PART 2 PRODUCTS

3.01 SYSTEM SOFTWARE-GENERAL

A. Functionality and Completeness: The Contractor shall furnish and install all software and programming necessary to provide a complete and functioning system as specified. The Contractor shall include all software and programming not specifically itemized in these Specifications, which is necessary to implement, maintain, operate, and diagnose the system in compliance with these Specifications.

3.02 CONTROLLER SOFTWARE

A. All bindings, SNVT's, configuration values, addresses, calibration values, parameters, variables, tuning values, gains, test values, etc. for all software, programs, network configurations etc. shall be exposed and be available for setup, manipulation, adjustment,

calibration, testing, etc. at all workstations, CSS's/OWS's, POT's for use as allowed via applicable password protection for all controllers and devices throughout all networks and the entire BAS.

B. Building Controller (BC) Software Residency: Each BC as defined below shall be capable of control and monitoring of all points physically connected to it. All software including the following shall reside and execute at the BC:
   1. Real-Time Operating System software
   2. Real-Time Clock/Calendar and network time synchronization
   3. BC diagnostic software
   4. LAN Communication software/firmware
   5. Direct Digital Control software
   6. Alarm Processing and Buffering software
   7. Energy Management software
   8. Data Trending, Reporting, and Buffering software
   9. I/O (physical and virtual) database
   10. Remote Communication software

C. Advanced Application Controller (AAC) Application Specific Controller (ASC) Software Residency: Each AAC/ASC as defined below shall be capable of control and monitoring of all points physically connected to it. As a minimum, software including the following shall reside and execute at the AAC/ASC. Other software to support other required functions of the AAC/ASC may reside at the BC or LAN interface device (specified in Division 23 Section "Building Automation System (BAS) - Communication Devices") with the restrictions/exceptions per application provided in Division 23 Section "Building Automation System (BAS) - Field Panels":
   1. Real-Time Operating System software
   2. AAC/ASC diagnostic software
   3. LAN Communication software
   4. Control software applicable to the unit it serves that will support a single mode of operation
   5. I/O (physical and virtual) database to support one mode of operation

D. Stand Alone Capability: BC shall continue to perform all functions independent of a failure in other BC/AAC/ASC or other communication links to other BCs/AACs/ASCs. Trends and runtime totalization shall be retained in memory. Runtime totalization shall be available on all digital input points that monitor electric motor status. Refer also to Division 23 Section "Building Automation System (BAS) - Field Panels" for other aspects of stand alone functionality..

E. Operating System: Controllers shall include a real-time operating system resident in ROM. This software shall execute independently from any other devices in the system. It shall support all specified functions. It shall provide a command prioritization scheme to allow functional override of control functions. Refer also to Division 23 Section "Building Automation System (BAS) - Field Panels" for other aspects of the controller's operating system.

F. Network Communications: Each controller shall include software/firmware that supports the networking of CUs on a common communications trunk that forms the respective LAN. Network support shall include the following:
   1. Controller communication software shall include error detection, correction, and re-transmission to ensure data integrity.
   2. Operator/System communication software shall facilitate communications between other BCs, all subordinate AACs/ASCs, Gateways and LAN Interface Devices or Operator Workstations. Gateways and LAN Interface Devices or CSS's/OWS's. Software shall allow point interrogation, adjustment, addition/deletion, and programming while the controller is on line and functioning without disruption to

unaffected points. The software architecture shall allow networked controllers to share selected physical and virtual point information throughout the entire system.

G. Point Database/Summary Table: All points included in the typical equipment point list must be represented in a common, open protocol format. Naming conventions for these points and network addressing are discussed in PART 3 of this Section. Point/system database creation and modification shall be via a user-friendly, menu-driven program. System software shall support virtual or logic point (points not representing a physical I/O) creation. Software shall support virtual points with all services specified herein. Database software shall support definition of all parameters specified in PART 3 of this Section for a given point type. If database does not support all these parameters, software module shall be created and attached to the points which accomplish the respective function.

H. Diagnostic Software: Controller software shall include diagnostic software that checks memory and communications and reports any malfunctions

I. Alarm/Messaging Software: Controller software shall support alarm/message processing and buffering software as more fully specified below.

J. Application Programs: CUs shall support and execute application programs as more fully specified below:
   1. All Direct Digital Control software, Energy Management Control software, and functional block application programming software templates shall be provided in a 'ready-to-use' state, and shall not require (but shall allow) CPS programming.
   2. Line programs shall supply preprogrammed functions to support these energy management and functional block application algorithms. All functions shall be provided with printed narratives and/or flow diagrams to document algorithms and how to modify and use them.

K. Security: Controller software shall support multiple level password access restriction as more fully specified below.

L. Direct Digital Control: Controller shall support application of Direct Digital Control Logic. All logic modules shall be provided pre-programmed with written documentation to support their application. Provide the following logic modules as a minimum:
   1. Proportional-Integral-Derivative (PID) control with analog, PWM and floating output
   2. Two Position control (Hi or Low crossing with deadband)
   3. Single-Pole Double-Throw relay
   4. Delay Timer (delay-on-make, delay-on-break, and interval)
   5. Hi/Low Selection
   6. Reset or Scaling Module
   7. Logical Operators (And, Or, Not, Xor)

M. Psychrometric Parameters: Controller software shall provide preprogrammed functions to calculated and present psychrometric parameters (given temperature and relative humidity) including the following as a minimum: Enthalpy, Wet Bulb Temperature.

N. Updating/Storing Application Data: Site-specific programming residing in volatile memory shall be uploadable/downloadable from an OWS or CSS connected locally, to the Primary LAN, to the Local Supervisory LAN and remotely via the internet and modem and telephone lines as applicable but all must be available. Initiation of an upload or download shall include all of the following methods; Manually, Scheduled, and Automatically upon detection of a loss or change.

O. Restart: System software shall provide for orderly shutdown upon loss of power and automatic restart upon power restoration. Volatile memory shall be retained; outputs shall go to programmed fail (open, closed, or last) position. Equipment restart shall include a user definable time delay on each piece of equipment to stagger the restart. Loss of power shall be alarmed at operator interface indicating date and time.

P. Time Synchronization: Operators shall be able to set the time and date in any device on the network that supports time-of-day functionality. The operator shall be able to select to

set the time and date for an individual device, devices on a single network, or all devices simultaneously. Automatic time synchronization shall be provided.

Q. Misc. Calculations: System software shall automate calculation of psychometric functions, calendar functions, kWh/kW, and flow determination and totalization from pulsed or analog inputs, curve-fitting, look-up table, input/output scaling, time averaging of inputs and A/D conversion coefficients.

3.03 APPLICATION PROGRAMMING DESCRIPTION

A. The application software shall be user programmable.

B. This specification generally requires a programming convention that is logical, easy to learn, use, and diagnose. General approaches to application programming shall be provided by one, or a combination, of the following conventions:

1. Point Definition: provide templates customized for point type, to support input of individual point information. For LON systems use standard LonWorks SNVTs.
2. Graphical Block Programming: Manipulation of graphic icon ‘blocks’, each of which represents a subroutine, in a functional/logical manner forming a control logic diagram. Blocks shall allow entry of adjustable settings and parameters via pop-up windows. Provide a utility that shall allow the graphic logic diagrams to be directly compiled into application programs. Logic diagrams shall be viewable either off-line, or on-line with real-time block output values.
3. Functional Application Programming: Pre-programmed application specific programs that allow/require limited customization via ‘fill-in-the-blanks’ edit fields. Typical values would be setpoints gains, associated point names, alarm limits, etc.
4. Line Programming: Textual syntax-based programming in a language similar to BASIC designed specifically for HVAC control. Subroutines or functions for energy management applications, setpoints, and adjustable parameters shall be customizable, but shall be provided preprogrammed and documented.

C. Provide a means for testing and/or debugging the control programs both off-line and on-line.

3.04 ENERGY MANAGEMENT APPLICATIONS

A. System shall have the ability to perform all of the following energy management routines via preprogrammed function blocks or template programs. As a minimum provide the following whether or not required in the software:

1. Time-of-Day Scheduling
2. Calendar-Based Scheduling
3. Holiday Scheduling
4. Temporary Schedule Overrides
5. Optimal Start/Optimal Stop-based on space temperature offset, outdoor air temperature, and building heating and cooling capacitance factors as a minimum
6. Night Setback and Morning Recovery Control, with ventilation only during occupancy
7. Economizer Control (enthalpy or dry-bulb)
8. Peak Demand Limiting and Load Shedding. The demand limiting function will use demand data as the basis for the function and the load shedding program will use space temperature adjustment or means acceptable to CPS to provide load shedding response. The function selected for a given school will be made by CPS.
9. Dead Band Control

B. All programs shall be executed automatically without the need for operator intervention, and shall be flexible enough to allow operator customization. For example the load shedding program will allow the operator to determine the spaces to be included in the load shed as

well as the duration of the event. Programs shall be applied to building equipment as described in the Division 23 Section "Building Automation System (BAS) - Sequence of Operation."

3.05 PASSWORD PROTECTION

A. Multiple-level password access protection shall be provided to allow the CPS's authorized BAS Administrator to limit workstation control, display and database manipulation capabilities as deemed appropriate for each user, based upon an assigned user name with a unique password.
B. All passwords for the system shall be provided to CPS including administrator, dealer, or factory level passwords for the systems provided under this project.
C. Passwords shall restrict access to all Control Units.
D. Each user name shall be assigned to a discrete access level. A minimum of five levels of access shall be supported. Alternately, a comprehensive list of accessibility/functionality items shall be provided, to be enabled or disabled for each user.
E. A minimum of 20 user names shall be supported and programmed per CPS's direction. Provide ability to deactivate passwords without removal of the login and password. CPS will be provided with the highest-level login and password so that CPS controls the administrative passwords.
F. Operators shall be able to perform only those commands available for the access level assigned to their user name.
G. User-definable, automatic log-off timers of from 1 to 60 minutes shall be provided to prevent operators from inadvertently leaving interface device software on-line. This timer will not be the windows system screen saver feature.

3.06 ALARM AND EVENT MANAGEMENT REPORTING

A. Alarm management shall be provided to monitor, buffer, and direct alarms and messages to operator devices and memory files. Each BC shall perform distributed, independent alarm analysis and filtering to minimize operator interruptions due to non-critical alarms, minimize network traffic, and prevent alarms from being lost. At no time shall a BC's ability to report alarms be affected by either operator activity at an Operator Workstation or local handheld device, or by communications with other panels on the network.
    1. Alarm Descriptor: Each alarm or point change shall include that point's English language description, and the time and date of occurrence. In addition to the alarm's descriptor and the time and date, the user shall be able to print, display and store an alarm message to more fully describe the alarm condition or direct operator response.
    2. Alarm Prioritization: The software shall allow users to define the handling and routing of each alarm by their assignment to discrete priority levels. A minimum of ten priority levels shall be provided. For each priority level, users shall have the ability to enable or disable an audible tone whenever an alarm is reported and whenever an alarm returns to normal condition. Users shall have the ability to manually inhibit alarm reporting for each individual alarm and for each priority level. Contractor shall coordinate with CPS on establishing alarm priority definitions.
    3. Alarm Report Routing: Each alarm priority level shall be associated with a unique user-defined list of operator devices including any combination of local or remote workstations, printers and workstation disk files. All alarms associated with a given priority level shall be routed to all operator devices on the user-defined list associated with that priority level. For each priority level, alarms shall be automatically routed to a

default operator device in the event that alarms are unable to be routed to any operator device assigned to the priority level.

4. Auto-Dial Alarm Routing: For alarm priority levels that include a remote workstation (accessed by modem) as one of the listed reporting destinations, the BC shall initiate a call to report the alarm, and shall terminate the call after alarm reporting is complete. System shall be capable of multiple retries and buffer alarms until a connection is made. If no connection is made, system shall attempt connection to an alternate dial-up workstation. System shall also be able to dial multiple pagers upon alarm activation.
5. Alarm Acknowledgment: For alarm priority levels that are directed to a workstation screen, an indication of alarm receipt shall be displayed immediately regardless of the application in use at the workstation, and shall remain on the screen until acknowledged by a user having a password that allows alarm acknowledgment. Upon acknowledgment, the complete alarm message string (including date, time, and user name of acknowledging operator) shall be stored in a selected file on the workstation hard disk.
6. Alarm Display: All alarms will popup as described in Alarm Acknowledgement. The owner will have the option to limit the pop up alarms based on alarm priority.

B. It shall be possible for any operator to receive a summary of all alarms, regardless of acknowledgement status; for which a particular recipient is enrolled for notification; based on current event state; based on the particular event algorithm (e.g., change of value, change of state, out of range, and so on); alarm priority; and notification class.

C. Alarm Historical Database: The database shall store all alarms and events object occurrences in an ODBC or an OLE database-compliant relational database. Provide a commercially available ODBC driver or OLE database data provider, which would allow applications to access the data using standard Microsoft Windows Data Services.

3.07 TRENDING

A. The software shall display historical data in both a tabular and graphical format. The requirements of this trending shall include the following:
   1. Trends may be buffered in the BC as long as the trend data in the BC and the historical data stored on hard disk is displayed seamlessly.
   2. Provide trends for all physical points, virtual points and calculated variables.
   3. Trend data shall be stored in relational database format as specified in herein under Data Acquisition and Storage.
   4. In the graphical format, the trend shall plot at least 4 different values for a given time period superimposed on the same graph. The 4 values shall be distinguishable by using unique colors. In printed form the 4 lines shall be distinguishable by different line symbology. Displayed trend graphs shall indicate the engineering units for each trended value.
   5. The sample rate and data selection shall be selectable by the operator.
   6. The trended value range shall be selectable by the operator.
   7. Where trended values on one table/graph are COV, software shall automatically fill the trend samples between COV entries.

B. Control Loop Performance Trends: Controllers incorporating PID control loops shall also provide high resolution sampling in less than six second increments for verification of control loop performance.

C. Data Buffering and Archiving: Trend data may be buffered at the BC, and uploaded to hard disk storage for archiving as needed based on the BC's memory constraints. All archived trends shall be transmitted to the on-site OWS as applicable. Uploads shall occur based

upon a user-defined interval, manual command, or automatically when the trend buffers become full.

D. Time Synchronization: Provide a time master that is installed and configured to synchronize the clocks of all devices supporting time synchronization. Synchronization shall be done using Coordinated Universal Time (UTC). All trend sample times shall be able to be synchronized. The frequency of time synchronization message transmission shall be selectable by the operator.

3.08 DYNAMIC PLOTTING

A. Provide a utility to dynamically plot in real-time at least 4 values on a given 2-dimensional dynamic plot/graph with at least two Y-axes. At least 5 dynamic plots shall be allowed simultaneously.

3.09 DATA ACQUISITION AND STORAGE

A. All points included in the typical equipment point list must be represented in a common, open or accessible format. Naming conventions for these points and network addressing are discussed in the 'Point Naming Conventions' paragraph below.
B. Data from the BAS shall be stored in relational database format. The format and the naming convention used for storing the database files shall remain consistent across the database and across time. The relational structure shall allow for storage of any additional data points, which are added to the BAS in future. The metadata/schema or formal descriptions of the tables, columns, domains, and constraints shall be provided for each database.
C. The database shall allow applications to access the data while the database is running. The database shall not require shutting down in order to provide read-write access to the data. Data shall be able to be read from the database without interrupting the continuous storage of trend data being carried by the BAS.
D. The database shall be ODBC or OLE database compliant. Provide a commercially-available ODBC driver or OLE database data provider, which would allow applications to access the data via Microsoft Windows standard data access services.

3.10 TOTALIZATION

A. The software shall support totalizing analog, digital, and pulsed inputs and be capable of accumulating, storing, and converting these totals to engineering units used in the documents. These values shall generally be accessible to the Operator Interfaces to support management-reporting functions.
B. Totalization of electricity use/demand shall allow application of totals to different rate periods, which shall be user definable.
C. When specified to provide electrical or utility Use/Demand, the Contractor shall obtain from the local utility all information required to obtain meter data, including k factors, conversion constants, and the like.

3.11 EQUIPMENT SCHEDULING

A. Provide a graphic utility for user-friendly operator interface to adjust equipment-operating schedules.
B. Scheduling feature shall include multiple seven-day master schedules, plus holiday schedule, each with start time and stop time. Master schedules shall be individually editable for each day and holiday.

C. Scheduling feature shall allow for each individual equipment unit to be assigned to one of the master schedules.
D. Timed override feature shall allow an operator to temporarily change the state of scheduled equipment. An override command shall be selectable to apply to an individual unit, all units assigned to a given master schedule, or to all units in a building. Timed override shall terminate at the end of an operator selectable time, or at the end of the scheduled occupied/unoccupied period, whichever comes first. A password level that does not allow assignment of master schedules shall allow a timed override feature.
E. A yearly calendar feature shall allow assignment of holidays, and automatic reset of system real time clocks for transitions between daylight savings time and standard time.

3.12 POINT STRUCTURING AND NAMING

A. General: The intent of this Section is to require a consistent means of naming points across the CPS Enterprise. Contractor shall configure the systems from the perspective of the Enterprise, not solely the local project. The following requirement establishes a standard for naming points and addressing Buildings, Networks, Devices, Instances, and the like. The interface shall always use this naming convention. The naming convention shall be implemented as much as practical, and any deviations from this naming convention shall be approved by CPS.
B. Point Summary Table
    1. The term ‘Point’ is a generic description for the class of object represented by analog and binary inputs, outputs, and values.
    2. With each schematic, Contractor shall provide a Point Summary Table listing:
        a. Building number and abbreviation
        b. System type
        c. Equipment type
        d. Point suffix
        e. Full point name (see Point Naming Convention paragraph)
        f. English language point description
        g. Ethernet backbone network number,
        h. Network number
        i. Device ID
        j. Device MAC address
        k. Engineering units
    3. Point Summary Table shall be provided in both hard copy and in electronic format (ODBC-compliant).
    4. Point Summary Table shall also illustrate Network Variables/LonWorks Bindings.
    5. The Contractor shall coordinate with the CPS’s representative and compile and submit a proposed Point Summary Table for review prior to any object programming or project startup.
    6. The Point Summary Table shall be kept current throughout the duration of the project by the Contractor as the Master List of all points for the project. Project closeout documents shall include an up-to-date accurate Point Summary Table. The Contractor shall deliver to CPS the final Point Summary Table prior to final acceptance of the system. The Point Summary Table shall be used as a reference and guide during the commissioning process.
    7. The Point Summary Table shall contain all data fields on a single row per point. The Point Summary Table is to have a single master source for all point information in the building that is easily sorted and kept up-to-date. Although a relational database of Device ID-to-point information would be more efficient, the single line format is required as a single master table that will reflect all point information for the

building. The point description shall be an easily understandable English-language description of the point.

8. Point Summary Table shall also illustrate Network Variables/BACnet Data Links/LonWorks Bindings.
   a. Point Summary Table Example
   b. Row Headers and Examples
   c. (Transpose for a single point per row format)

Building Number	0006 (CPS 4 digit Building Code)
System Type	Cooling
Equipment Type	Chiller
Point Suffix	CHLR1KW
*Point Name (Object Name)	0006.COOLING.CHILLER.CHLR1KW
*Point Description (Object Description)	Chiller 1 kW
Ethernet Network Number	600
Network Number	610
Device ID	1024006
Device MAC address	24
Point Type	AI
Instance Number	4
Engineering Units	KW
Network Variable?	True
Server Device	1024006
Client Devices	1028006
* Represents information that shall reside in the property for the point	

C. Point Naming Convention

1. All point names shall adhere to the format as established below. Said objects shall include all physical I/O points, calculated points used for standard reports, and all application program parameters. For each BAS point, a specific and unique name shall be required.
2. For each point, four (4) distinct descriptors shall be linked to form each unique object name: Building, System, Equipment, and Point. All keyboard characters except a space are allowable. Each of the four descriptors must be bound by a period to form the entire object name. Reference the paragraphs below for an example of these descriptors.
3. CPS shall designate the *Building* descriptor. The *System* descriptor shall further define the object in terms of air handling, cooling, heating, or other system. The *Equipment* descriptor shall define the equipment category; e.g., Chiller, Air Handler, or other equipment. The *Point* descriptor shall define the hardware or software type or function associated with the equipment; e.g., supply temperature, water pressure, alarm, mixed air temperature setpoint, etc. and shall contain any numbering conventions for multiples of equipment; e.g., CHLR1KW, CHLR2KW, BLR2AL (Boiler 2 Alarm), HWP1ST (Hot Water Pump 1 Status).
4. A consistent object (point) naming convention shall be utilized to facilitate familiarity and operational ease across the CPS WAN. Inter-facility consistency shall be maintained to ensure transparent operability to the greatest degree possible. The table below details the object naming convention and general format of the descriptor string.
   a. Point Name Requirements

Descriptors	Comment
Building Number	0006
System	AIRHANDLINGEXHAUSTHEATINGCOOLINGUTILITYENDUSEMISC

Equipment	AHU-1BOILERSCHILLERSFACILITYTOWERSWEATHER
Point Suffix	See Input/Output point summary table for conventions

D. Examples: Within each point name, the descriptors shall be bound by a period. Within each descriptor, words shall not be separated by dashes, spaces, or other separators as follows:
   1. 0006.COOLING.CHILLERS.CHWP1ST
   2. 0006.HEATING.BOILERS.BLR1CFH

E. Device Addressing Convention:
   1. Lontalk - Network numbers and SNVT's shall be unique throughout the network.
   2. BACnet - Network numbers and Device Object IDs shall be unique throughout the network.
   3. BACnet - For each BAS object, a specific and unique BACnet object name shall be required.
   4. All assignment of network numbers and Device Object IDs shall be coordinated with CPS.
   5. Each Network number shall be unique throughout all facilities and shall be assigned in the following manner unless specified otherwise:
      a. **BBBFF**, where: BBB = 1-655 assigned to each building, FF = 00 for building backbone network, 1-35 indicating floors or separate systems in the building.
   6. Each Device Identifier property shall be unique throughout the system and shall be assigned in the following manner unless specified otherwise:
      a. **XXFFBBB**, where: XX = number 0 to 40, FF = 00 for building backbone network, 1-35 indicating floors or separate systems in the building. BBB = 1-655 assigned to each building.
   7. The Contractor shall coordinate with CPS or a designated representative to ensure that no duplicate Device Object IDs occur.
   8. Alternative Device ID schemes or cross project Device ID duplication if allowed shall be approved before project commencement by CPS.

3.13 OPERATOR INTERFACE GRAPHIC SOFTWARE

A. Graphic software shall facilitate user-friendly interface to all aspects of the System Software specified above. The intent of this specification is to require a graphic package that provides for intuitive operation of the systems without extensive training and experience. It shall facilitate logical and simple system interrogation, modification, configuration, and diagnosis.

B. Graphic software shall support multiple simultaneous screens to be displayed and resizable in a 'Windows'-like environment. All functions excepting text entry functions shall be executable with a mouse.

C. Graphic software shall provide for multitasking such that third-party programs can be used while the OWS software is on line. Software shall provide the ability to alarm graphically even when operator is in another software package.

D. Operating system software shall be CPS's Current Support Software Image Via ITS (Information and Technology Services).

E. The software shall allow for CPS creation of user-defined, color graphic displays of geographic maps, building plans, floor plans, and mechanical and electrical system schematics. These graphics shall be capable of displaying all point information from the database including any attributes associated with each point (i.e., engineering units, etc.). In addition, operators shall be able to command equipment or change setpoints from a graphic through the use of the mouse.

F. Screen Penetration: The operator interface shall allow users to access the various system graphic screens via a graphical penetration scheme by using the mouse to select from

menus or 'button' icons. All screens will be accessible out the use of outline type selection screens. Each graphic screen shall be capable of having a unique list of other graphic screens that are directly linked through the selection of a menu item or button icon.

G. Dynamic Data Displays: Dynamic physical point values shall automatically update at a minimum frequency of 6 updates per minute without operator intervention. Point value fields shall be displayed with a color code depicting normal, abnormal, override and alarm conditions.

H. Point Override Feature: Provide the following:
   1. An Operator from a work-station shall have the capability to place an end device under manual control, which shall prevent the control logic from making changes to the end device status, and provide the operator with the ability to position the end device. It must be possible to put a point under manual control and command the point to a specific state or value from a graphic page. Once under manual control the point will be able to be released to automatic operation from the same graphics page. See the definition of Manual Control in the definition of terms Article in this Section.
   2. An Operator from the operator work-station shall have the capability to place a sensor input into test mode. When in test mode, any changes from the physical sensor will no longer be recognized and the value reported to control logic shall take a value that is assigned to it by the operator from the operator work-station. It must be possible to put a point in test and assign a test value from a graphic page. See the definition of Test Mode in the definition of terms Article of this Section.
   3. Points that are overridden shall be reported as an alarm, and shall be displayed in a coded color. The alarm message shall include the operator's user name. A list of points that are currently in an override state shall be available through menu selection. Such overrides or changes shall occur in the control unit, not just in the workstation software. The graphic point override feature shall be subject to password level protection.

I. Dynamic Symbols: Provide a selection of standard symbols that change in appearance based on the value of an associated point.
   1. Analog symbol: Provide a symbol that represents the value of an analog point as the length of a line or linear bar.
   2. Digital symbol: Provide symbols such as switches, pilot lights, rotating fan wheels, etc. to represent the value of digital input and output points.
   3. Point Status Color: Graphic presentations shall indicate different colors for different point statuses. (For instance, green = normal, red = alarm, gray (or '???') for non-response.

J. Graphics Development Package: Graphic development and generation software shall be provided to allow the user to add, modify, or delete system graphic displays. The application of the graphic editing will be controlled by password level at the programmer level or higher.
   1. The Contractor shall provide libraries of pre-engineered screens and symbols depicting standard air handling unit components (e.g. fans, cooling coils, filters, dampers, etc.), mechanical system components (e.g., pumps, chillers, cooling towers, boilers, etc.), complete mechanical systems (e.g. constant volume-terminal reheat, VAV, etc.) and electrical symbols.
   2. The Graphic Development Package shall use a mouse or similar pointing device to allow the user to perform the following:
      a. Define symbols
      b. Position items on graphic screens
      c. Attach physical or virtual points to a graphic
      d. Define background screens
      e. Define connecting lines and curves
      f. Locate, orient, and size descriptive text

g. Define and display colors for all elements
h. Establish correlation between symbols or text and associated system points or other displays.
i. Create hot spots or link triggers to other graphic displays or other functions in the software.

3.14 APPROVED VENDORS AND THEIR PRODUCT LINES (NO SUBSTITUTIONS)

A. Automated Logic Corporation – Approved For WebControl Only
   1. 2400 Ogden Avenue, Suite 100Lisle, IL 60532
   2. Contact: Jeffery Falkner (630)-746-0193
   3. Contact: Dan Schreiber (630)-291-3897
   4. Vendor # 35461

3.15 SYSTEM DESCRIPTION

A. Automatic temperature control field monitoring and control system using field programmable micro-processor based units.
B. The distributed digital control (DDC) and building automation system (BAS) defined herein shall provide a complete open protocol Native BACnet® Building Automation System (BAS) for all mechanical systems and other facility systems as included in the project documents. The contractor shall provide a complete and operational system to perform all sequences of operations stated in the Article "Sequence of Operation" or as shown on the control drawings.
C. The BAS shall utilize open protocol BACnet hardware and software to provide full monitoring (visualization), programming and control of all DDC control systems on the building.
D. BAS shall utilize electronic sensing, microprocessor-based digital control, and electronic actuation of dampers and valves to perform the control sequences and functions specified. The BAS for this project shall consist of monitoring and control of the systems indicated.
E. The BAS system shall include a webserver (control system server CSS), a separate operator workstation (OWS), a laptop (portable operator terminal POT), all the software tools required to maintain or configure the server, OWS, and any local devices. A laptop will be provided by CPS with CPS's current compliant operating system. In addition, CPS will provide server hardware and software consistent with current standards of CPS organization for BAS system to be installed on. The BAS server will exist in CPS's data center on one of the existing Enterprise servers.
F. All interlock wiring for mechanical system equipment shall be by this contractor unless specifically stated otherwise. This shall include, but not be limited to, items such as thermostats for unit heaters, interlock wiring to central boiler control panels, chiller flow switches, and duct smoke detectors.
G. The system installed shall seamlessly connect devices other than HVAC throughout the building regardless of subsystem type, i.e. HVAC, lighting, and security devices should easily coexist on the same network channel without need for gateways.
H. All of the command able physical points shall be exposed to non-proprietary BACnet communication network bus for integration or expansion by the supervisory controller
I. All of the command able physical points shall be exposed from all field level network control devices up to the supervisor level communications bus for 100% Fully Open BAS integrations, two-way communication, and modification/expansion to the system architecture.

J. A “Fully Open BAS” selection defined from Section 1.5 of this document shall be made from the below outlined protocols.
   1. The BAS shall use native BACnet MS/TP, BACnet TCP/IP (wired and wireless to CPS’ wireless Enterprise network) architecture and be in strict accordance with ASHRAE Standard 135.
   2. Wireless systems to be for student/faculty occupied areas. Wireless systems must be approved by CPS IT Infrastructure team.
   3. All controllers shall be BACnet Testing Labs (BTL) Certified. All BACnet points shall only use native BACnet BTL Certified standardized PICS (Protocol Implementation Conformance Statement) and BIBBS (BACNET Interoperability Building Blocks).
   4. 100% of the physical and virtual points shall be programmed as BACnet Objects and Events without any exceptions.

K. The BAS shall use native BACnet MS/TP, BACnet TCP/IP (wired and wireless to CPS’ wireless Enterprise network) architecture and be in strict accordance with ASHRAE Standard 135. All controllers shall be BACnet Testing Labs (BTL) Certified. All BACnet points shall only use native BACnet BTL Certified standardized PICS (Protocol Implementation Conformance Statement) and BIBBS (BACNET Interoperability Building Blocks). 100% of the physical and virtual points shall be programmed as BACnet Objects and Events without any exceptions.

L. Base system on distributed system of fully intelligent, stand-alone controllers, operating in a multi-tasking, multi-user environment on token passing network, with central and remote hardware, software, and interconnecting wire and conduit.

M. Include computer software and hardware, operator input/output devices, control units, local area networks (LAN), sensors, control devices, actuators.

N. Controls for variable air volume terminals, radiation, reheat coils, unit heaters, fan coils, and the like when directly connected to the control units. Individual terminal unit control is specified in Section 23 09 .

O. Provide control systems consisting of thermostats, control valves, dampers and operators, indicating devices, interface equipment and other apparatus and accessories required to operate mechanical systems, and to perform functions specified.

P. Include installation and calibration, supervision, adjustments, and fine tuning necessary for complete and fully operational system.

3.16 SYSTEM ARCHITECTURE

A. Application of Open Protocols:
   1. Subject to the detailed requirements provided throughout the specifications, the BAS and digital control and communications components installed, as work of this contract shall be an integrated distributed processing system utilizing the following standards:
      a. BACnet or Hybrid System: The system architecture shall consist of a BACnet IP Router, a single Local Area Network (LAN) or two-level LANs that support BCs, AACs, ASCs, Operator Workstations (OWS), Smart Devices (SD), and Remote Communication Devices (RCDs) as applicable. In no event shall there be more than two levels of LAN topology within the system, excluding wiring to sensors with no control intelligence.

B. The system provided shall incorporate hardware resources sufficient to meet the functional requirements specified. The Contractor shall include all items not specifically itemized in these Specifications that are necessary to implement, maintain, and operate the system in compliance with the functional intent of these Specifications.

C. The system shall be configured as a distributed processing network(s) capable of expansion as specified below. Refer to the network architecture on the BAS drawings for other requirements and details.

D. The system architecture shall consist of an Ethernet-based, wide area network (WAN), a single Local Area Network (LAN) or multi-leveled that support PCUs, Operator Workstations (OWS), and Remote Communication Devices (RCDs) as applicable. The following indicates a functional description of the BAS structure.
   1. CPS Enterprise WAN: Intranet-based network connecting multiple facilities with a central data warehouse and server, accessible via CPS current standard web-browser(s). This is an existing infrastructure and contractor is not required to configure any components of this WAN.
   2. Local BAS Supervisory LAN: The Local BAS Supervisory LAN shall be an Ethernet-based connected to CPS' Enterprise Network. The LAN serves as the inter-PCU gateway and OWS-to-PCU gateway and communications path and as the connection point for the CPS WAN. There is to be no vendor provided LAN/WAN network equipment. Power-line carrier communication shall not be acceptable for communications. The higher-level layers of this network shall be the following:
      a. BACnet Local Supervisory LAN: BACnet/IP as defined in Addendum A (Annex J) of the BACnet standard, and shall share a common network number for the Ethernet backbone, as defined in BACnet.
   3. Primary Controller LAN ('Primary LAN'): High-speed, peer-to-peer communicating LAN used to connect and Primary Control (PCUs) and communicate exclusively control information. Acceptable technologies include:
      a. BACnet: Network used to connect AACs, ASCs or SDs. These can be Master Slave/ Token Passing or polling, or ARCnet in accordance with IEEE 802.4, in addition to those allowed for Primary Controller LANs. Network speed vs. the number of controllers on the LAN shall be dictated by the response time and trending requirements. The primary network shall communicate at a minimum of 38 kbps. Each secondary network may support up to 32 communicating devices without segmentation or repeaters subject to the requirements for response time, trending, and bandwidth utilization.

E. Dynamic Data Access: Any data throughout any level of the network shall be available to and accessible by all other devices, Controllers and OWS, whether directly connected or connected remotely.

F. Remote Data Access: The system shall support the following methods of remote access to the building data.
   1. Browser-based access: A remote user, connecting via the CPS Enterprise WAN and using a CPS standard web browser shall be able access all control system facilities and graphics with proper username and password. The remote access user will not need to load Java or other runtimes to view the web pages.

G. Network Performance: The communication speed between the controllers, control LAN interface devices, and operator interface devices shall be sufficient to ensure fast system response time under any loading condition. Contractor shall submit guaranteed response times with shop drawings including calculations to support the guarantee. In no case shall delay times between an event, request, or command initiation and its completion be greater than those listed herein. Contractor shall reconfigure LAN as necessary to accomplish these performance requirements. The performance will also include the trending of all AI, AO and DI points at 15-minute intervals. Generally, requirements do not apply when a remote connection must be established via modem:
   1. 5 seconds between a Level 1 (critical) alarm occurrence and annunciation at operator workstation.
   2. 10 seconds between a Level 2 alarm occurrence and annunciation at operator workstation.
   3. 20 seconds between and a Level 3-5 alarm occurrence and annunciation at operator workstation.

4. 10 seconds between an operator command via the operator interface to change a setpoint and the subsequent change in the controller.
5. 5 seconds between an operator command via the operator interface to start/stop a device and the subsequent command to be received at the controller.
6. 10 seconds between a change of value or state of an input and it being updated on the operator interface.
7. Graphic Display, 10 seconds between an operator selection of a graphic and it completely painting the screen and updating all points.
8. Graphic Refresh, every 15 seconds the graphic shall automatically refresh all graphic data.

H. The PCUs shall monitor, control, and provide the field interface for all points specified. Each PCU shall be capable of performing all specified energy management functions, and all DDC functions, independent of other PCUs and operator interface devices as more fully specified in Division 23 Section “Building Automation System (BAS) - Field Panels."

I. Systems Configuration Database: The system architecture shall support maintaining the systems configuration database on a server or workstation on the CPS Enterprise Network. User tools provided to Chicago Public Schools shall allow configuring, updating, and maintaining current configurations and settings whether they are initiated at the server or the end device.
1. Database Schema shall be published and provided to Chicago Public Schools to facilitate easy access to the data.
2. Database shall be ODBC compliant or a data access driver shall be provided to act as an ODBC or OLE DB data provider.

J. Interruptions or fault at any point on any Primary Controller LAN shall not interrupt communications between other nodes on the network. If a LAN is severed, two separate networks shall be formed and communications within each network shall continue uninterrupted.

K. All line drivers, repeaters, terminators, signal boosters, and signal conditioners shall be provided as necessary for proper data communication.

L. Anytime any controller’s database or program is changed in the field, the controller shall be capable of automatically uploading the new data to the OWS and CSS.

3.17 OPERATOR INTERFACE

A. PC Based Work Station:
1. CPS to provide a Desktop Workstation and Laptop Workstation from the Approved CPS End User Device Contract Holder Vendor for each Project, CPS PM/CM team to coordinate with ITS for procurement. NOTE: THERE IS A 45 DAY SLA FOR DEVICE PROCUREMENT

3.18 CONTROLLERS

A. Building Controllers:
1. General:
a. The BC is a Server that is either a physical server provided by CPS or a virtual machine provided by CPS to run the BAS software from connected to the CPS Enterprise WAN that can communicate with the vendor provided hardware / software.
b. BC shall support interrogation, full control, and all utilities associated with all AACs and ASCs under the Primary Controller LAN.

c. All BACnet Interoperability Building Blocks (BIBBs) are required to be supported for each native BACnet device.
d. Manage global strategies by one or more, independent, standalone, microprocessor based controllers.
e. Provide sufficient memory to support controller's operating system, database, and programming requirements.
f. Share data between networked controllers.
g. Controller operating system manages input and output communication signals allowing distributed controllers to share real and virtual object information and allowing for central monitoring and alarms.
h. Utilize real-time clock for scheduling.
i. Continuously check processor status and memory circuits for abnormal operation.
j. Controller to assume predetermined failure mode and generate alarm notification upon detection of abnormal operation.
k. Communication with other network devices to be based on assigned protocol.

2. Communication:
   a. Controller to reside on a BACNET over IP network using BACNET over IP protocol connected to the cps Enterprise network homerun to the MDF/IDF rooms and or nearest concentrator box in accordance to CPS's low voltage standards
   b. Perform routing when connected to a network of custom application and application specific controllers.
   c. Provide service communication port for connection to a portable operator's terminal or hand held device with compatible protocol.
3. External Input-Output (I-O) Data Bus:
   a. Input only modules.
   b. Output only modules.
   c. Variable frequency drives (VFD's).
   d. Universal I-O module (configurable).
   e. Access control module for single door.
   f. Specific wired and wireless data integration modules. NOTE: WIFI WIRELESS IS ONLY ACCEPTABLE IF IT IS A CPS APPROVED WIFI DEVICE
   g. DALI (Digital addressable lighting interface) modules.
   h. Motor control of devices like blinds, roller shutters, and sun protection systems.
   i. Multiple Input Output (I-O) Module:
      1) IAQ: Temperature, humidity, and CO2.
      2) Occupancy: Light and thermal sensing with multi-colored LED feedback.
      3) Wireless interfaced using Bluetooth per Bluetooth CS or Wi-Fi per IEEE 802.11abgn. NOTE: WIFI WIRELESS IS ONLY ACCEPTABLE IF IT IS A CPS APPROVED WIFI DEVICE
4. Anticipated Environmental Ambient Conditions:
   a. Outdoors and/or in Wet Ambient Conditions:
      1) Mount within waterproof enclosures.
      2) Rated for operation at 40 to 150 degrees F.
   b. Conditioned Space:
      1) Mount within dustproof enclosures.
      2) Rated for operation at 32 to 120 degrees F.
5. Provisions for Serviceability:
   a. Diagnostic LEDs for power, communication, and processor.
   b. Make all wiring connections to field removable, modular terminal strips, or to a termination card connected by a ribbon cable.
6. Memory: In the event of a power loss, maintain all BIOS and programming information for a minimum of 72 hours.

7. Power and Noise Immunity:
    a. Maintain operation at 90 to 110 percent of nominal voltage rating.
    b. Perform orderly shutdown below 80 percent of nominal voltage.
    c. Operation protected against electrical noise of 5 to 120 Hz and from keyed radios up to 5 W. at 3 feet.

B. Advanced Application Controller:
1. General:
    a. Provide sufficient memory to support controller's operating system, database, and programming requirements.
    b. Share data between networked, microprocessor based controllers.
    c. Controller operating system manages input and output communication signals allowing distributed controllers to share real and virtual object information and allowing for central monitoring and alarms.
    d. Utilize real-time clock for scheduling.
    e. Continuously check processor status and memory circuits for abnormal operation.
    f. Controller to assume predetermined failure mode and generate alarm notification upon detection of abnormal operation.
    g. Communication with other network devices to be based on assigned protocol.
2. Communication:
    a. Controller to reside on a BACnet over IP network using BACnet over IP protocol connected to the cps Enterprise network homerun to the MDF/IDF rooms and or nearest concentrator box in accordance to CPS's low voltage standards.
    b. Provide service communication port for connection to a portable operator's terminal or hand held device with compatible protocol.
3. Anticipated Environmental Ambient Conditions:
    a. Outdoors and/or in Wet Ambient Conditions:
        1) Mount within waterproof enclosures.
        2) Rated for operation at 40 to 150 degrees F.
    b. Conditioned Space:
        1) Mount within dustproof enclosures.
        2) Rated for operation at 32 to 120 degrees F.
4. Provisions for Serviceability:
    a. Diagnostic LED's for power, communication, and processor.
    b. Make all wiring connections to field removable, modular terminal strips, or to a termination card connected by a ribbon cable.
5. Memory: In the event of a power loss, maintain all BIOS and programming information for a minimum of 72 hours.
6. Power and Noise Immunity:
    a. Maintain operation at 90 to 110 percent of nominal voltage rating.
    b. Perform orderly shutdown below 80 percent of nominal voltage.
    c. Operation protected against electrical noise of 5 to 120 Hz and from keyed radios up to 5 W. at 3 feet.

C. Application Specific Controllers:
1. General:
    a. Not fully user programmable, microprocessor based controllers dedicated to control specific equipment.
    b. Customized for operation within the confines of equipment served.
    c. Communication with other network devices to be based on assigned protocol.
2. Communication:
    a. Controller to reside on a BACnet over IP network using BACnet over IP protocol connected to the cps Enterprise network homerun to the MDF/IDF rooms and or

nearest concentrator box in accordance to CPS's low voltage specifications, see Division 27 Communications for requirements in blue conduit.

b. Provide service communication port for connection to a portable operator's terminal or hand held device with compatible protocol.

3. Anticipated Environmental Ambient Conditions:
   a. Outdoors and/or in Wet Ambient Conditions:
      1) Mount within waterproof enclosures.
      2) Rated for operation at 40 to 150 degrees F.
   b. Conditioned Space:
      1) Mount within dustproof enclosures.
      2) Rated for operation at 32 to 120 degrees F.
4. Provisions for Serviceability:
   a. Diagnostic LEDs for power, communication, and processor.
   b. Make all wiring connections to field removable, modular terminal strips, or to a termination card connected by a ribbon cable.
5. Memory: In the event of a power loss, maintain all BIOS and programming information for a minimum of 72 hours.
6. Power and Noise Immunity:
   a. Maintain operation at 90 to 110 percent of nominal voltage rating.
   b. Perform orderly shutdown below 80 percent of nominal voltage.
   c. Operation protected against electrical noise of 5 to 120 Hz and from keyed radios up to 5 W at 3 feet.

D. Input/Output Interface:
1. Hardwired inputs and outputs tie into the DDC system through building, custom application, or application specific controllers.
2. All Input/Output Points:
   a. Protect controller from damage resulting from any point short-circuiting or grounding and from voltage up to 24 volts of any duration.
   b. Provide universal type for building and custom application controllers where input or output is software designated as either binary or analog type with appropriate properties.
3. Binary Inputs:
   a. Allow monitoring of On/Off signals from remote devices.
   b. Provide wetting current of 12 mA minimum, compatible with commonly available control devices and protected against the effects of contact bounce and noise.
   c. Sense dry contact closure with power provided only by the controller.
4. Pulse Accumulation Input Objects: Comply with all requirements of binary input objects and accept up to 10 pulses per second.
5. Analog Inputs:
   a. Allow for monitoring of low voltage 0 to 10 VDC, 4 to 20 mA current, or resistance signals (thermistor, RTD).
   b. Compatible with and field configurable to commonly available sensing devices.
6. Binary Outputs:
   a. Used for On/Off operation or a pulsed low-voltage signal for pulse width modulation control.
   b. Outputs provided with three position (On/Off/Auto) override switches.
   c. Status lights for building and custom application controllers to be selectable for normally open or normally closed operation.
7. Analog Outputs:
   a. Monitoring signal provides a 0 to 10 VDC or a 4 to 20 mA output signal for end device control.

b. Provide status lights and two position (AUTO/MANUAL) switch for building and custom application controllers with manually adjustable potentiometer for manual override on building and custom application controllers.
c. Drift to not exceed 0.4 percent of range per year.

8. Tri State Outputs:
   a. Coordinate two binary outputs to control three point, floating type, electronic actuators without feedback.
   b. Limit the use of three point, floating devices to the following zone and terminal unit control applications:
   c. Control algorithms run the zone actuator to one end of its stroke once every 24 hours for verification of operator tracking.
9. System Object Capacity:
   a. System size to be expandable to twice the number of input output objects required by providing additional controllers, including associated devices and wiring.
   b. Hardware additions or software revisions for the installed operator interfaces are not to be required for future, system expansions.

3.19 POWER SUPPLIES AND LINE FILTERING

A. Power Supplies:
   1. Provide UL listed control transformers with Class 2 current limiting type or over-current protection in both primary and secondary circuits for Class 2 service as required by the NEC.
   2. Limit connected loads to 80 percent of rated capacity.
   3. Match DC power supply to current output and voltage requirements.
   4. Unit to be full wave rectifier type with output ripple of 5.0 mV maximum peak to peak.
   5. Regulation to be 1 percent combined line and load with 100 microsecond response time for 50 percent load changes.
   6. Provide over-voltage and over-current protection to withstand a 150 percent current overload for 3 seconds minimum without trip-out or failure.
   7. Operational Ambient Conditions: 32 to 120 degrees F.
   8. EM/RF meets FCC Class B and VDE 0871 for Class B and MIL-STD-810 for shock and vibration.
   9. Line voltage units UL recognized and CSA approved.
B. Power Line Filtering:
   1. Provide external or internal transient voltage and surge suppression components for all workstations and controllers.
   2. Minimum surge protection attributes:
      a. Dielectric strength of 1000 volts minimum.
      b. Response time of 10 nanoseconds or less.
      c. Transverse mode noise attenuation of 65 dB or greater.
      d. Common mode noise attenuation of 150 dB or greater at 40 to 100 Hz.

3.20 SYSTEM SOFTWARE

A. Operating System:
   1. Concurrent, multi-tasking capability.
      a. Common Software Applications Supported: Microsoft Excel.
   2. System Graphics:
      a. Allow up to 10 graphic screens, simultaneously displayed for comparison and monitoring of system status.

b. Animation displayed by shifting image files based on object status.
c. Provide method for operator with password to perform the following:
1) Move between, change size, and change location of graphic displays.
2) Modify on-line.
3) Add, delete, or change dynamic objects consisting of:
(a) Analog and binary values.
(b) Dynamic text.
(c) Static text.
(d) Animation files.

3. Custom Graphics Generation Package:
a. Create, modify, and save graphic files and visio format graphics in PCX formats.
b. HTML graphics to support web browser compatible formats.
c. Capture or convert graphics from AutoCAD.

4. Standard HVAC Graphics Library:
a. HVAC Equipment:
b. Ancillary Equipment:

B. BAS Workstation System Applications (NOT COMPUTER):

1. Automatic System Database Save and Restore Functions:
a. Current database copy of each Building Controller is automatically stored on the hard disk.
b. Automatic update occurs upon change in any system panel.
c. In the event of database loss in any system panel, the first workstation to detect the loss automatically restores the database for that panel unless disabled by the operator.

2. Manual System Database Save and Restore Functions by Operator with Password Clearance:
a. Save database from any system panel.
b. Clear a panel database.
c. Initiate a download of a specified database to any system panel.

3. Software provided allows system configuration and future changes or additions by operators under proper password protection.

4. On-line Help:
a. Context-sensitive systems assist operator in operation and editing.
b. Available for all applications.
c. Relevant screen data provided for particular screen display.
d. Additional help available via hypertext.

5. Security:
a. Operator log-on requires username and password to view, edit, add, or delete data.
b. System security selectable for each operator.
c. System supervisor sets passwords and security levels for all other operators.
d. Operator passwords to restrict functions accessible to viewing and/or changing system applications, editor, and object.
e. Automatic, operator log-off results from keyboard or mouse inactivity during user-adjustable, time period.
f. All system security data stored in encrypted format.

6. System Diagnostics:
a. Operations Automatically Monitored:
1) Workstations.
2) Printers.
3) Modems.
4) Network connections.

5) Building management panels.
6) Controllers.

b. Device failure is announced to the operator.

7. Alarm Processing:
   a. All system objects are configurable to "alarm in" and "alarm out" of normal state.
   b. Configurable Objects:
      1) Alarm limits.
      2) Alarm limit differentials.
      3) States.
      4) Reactions for each object.
8. Alarm Messages:
   a. Descriptor: English language.
   b. Recognizable Features:
      1) Source.
      2) Location.
      3) Nature.
9. Configurable Alarm Reactions by Workstation and Time of Day:
   a. Logging.
   b. Printing.
   c. Starting programs.
   d. Displaying messages.
   e. Dialing out to remote locations.
   f. Paging.
   g. Providing audible annunciation.
   h. Displaying specific system graphics.
10. Custom Trend Logs:
    a. Definable for any data object in the system including interval, start time, and stop time.
    b. Trend Data:
       1) Sampled and stored on the building controller panel.
       2) Archivable on hard disk.
       3) Retrievable for use in reports, spreadsheets and standard database programs.
       4) Archival on LAN accessible storage media including hard disk, tape, Raid array drive, and virtual cloud environment.
       5) Protected and encrypted format to prevent manipulation, or editing of historical data and event logs.
11. Alarm and Event Log:
    a. View all system alarms and change of states from any system location.
    b. Events listed chronologically.
    c. Operator with proper security acknowledge and clears alarms.
    d. Alarms not cleared by operator are archived to the workstation hard disk.
12. Object, Property Status and Control:
    a. Provide a method to view, edit if applicable, the status of any object and property in the system.
    b. Status Available by the Following Methods:
       1) Menu.
       2) Graphics.
       3) Custom Programs.
13. Reports and Logs:
    a. Reporting Package:
       1) Allows operator to select, modify, or create reports.

2) Definable as to data content, format, interval, and date.
3) Archivable to hard disk.

b. Real-time logs available by type or status such as alarm, lockout, normal, etc.
c. Stored on hard disk and readily accessible by standard software applications, including spreadsheets and word processing.
d. Set to be printed on operator command or specific time(s).

14. Reports:
a. Standard:
1) Objects with current values.
2) Current alarms not locked out.
3) Disabled and overridden objects, points and SNVTs.
4) Objects in manual or automatic alarm lockout.
5) Objects in alarm lockout currently in alarm.
6) Logs:
(a) Alarm History.
(b) System messages.
(c) System events.
(d) Trends.

b. Custom:
1) Daily.
2) Weekly.
3) Monthly.
4) Annual.
5) Time and date stamped.
6) Title.
7) Facility name.

c. Tenant Override:
1) Monthly report showing total, requested, after-hours HVAC and lighting services on a daily basis for each tenant.
2) Annual report showing override usage on a monthly basis.

d. Electrical, Fuel, and Weather:
1) Electrical Meter(s):
(a) Monthly showing daily electrical consumption and peak electrical demand with time and date stamp for each meter.
(b) Annual summary showing monthly electrical consumption and peak demand with time and date stamp for each meter.
2) Fuel Meter(s):
(a) Monthly showing daily natural gas consumption for each meter.
(b) Annual summary showing monthly consumption for each meter.
3) Weather:
(a) Monthly showing minimum, maximum, average outdoor air temperature and heating/cooling degree-days for the month.

C. Workstation Applications Editors:
1. Provide editing software for each system application at PC workstation.
2. Downloaded application is executed at controller panel.
3. Full screen editor for each application allows operator to view and change:
a. Configuration.
b. Name.
c. Control parameters.
d. Set-points.
4. Scheduling:
a. Monthly calendar indicates schedules, holidays, and exceptions.

b. Allows several related objects to be scheduled and copied to other objects or dates.
c. Start and stop times adjustable from master schedule.

5. Custom Application Programming:
   a. Create, modify, debug, edit, compile, and download custom application programming during operation and without disruption of all other system applications.
   b. Programming Features:
      1) English oriented language, based on BASIC, FORTRAN, C, or PASCAL syntax allowing for free form programming.
      2) Alternative language graphically based using appropriate function blocks suitable for all required functions and amenable to customizing or compounding.
      3) Insert, add, modify, and delete custom programming code that incorporates word processing features such as cut/paste and find/replace.
      4) Allows the development of independently, executing, program modules designed to enable and disable other modules.
      5) Debugging/simulation capability that displays intermediate values and/or results including syntax/execution error messages.
      6) Support for conditional statements (IF/THEN/ELSE/ELSE-F) using compound Boolean (AND, OR, and NOT) and/or relations (EQUAL, LESS THAN, GREATER THAN, NOT EQUAL) comparisons.
      7) Support for floating-point arithmetic utilizing plus, minus, divide, times, square root operators; including absolute value; minimum/maximum value from a list of values for mathematical functions.
      8) Language consisting of resettable, predefined, variables representing time of day, day of the week, month of the year, date; and elapsed time in seconds, minutes, hours, and days where the variable values cab be used in IF/THEN comparisons, calculations, programming statement logic, etc.
      9) Language having predefined variables representing status and results of the system software enables, disables, and changes the set points of the controller software.

3.21 CONTROLLER SOFTWARE

A. All applications reside and operate in the system controllers and editing of all applications occurs at the operator workstation.
B. System Security:
   1. User access secured via user passwords and user names.
   2. Passwords restrict user to the objects, applications, and system functions as assigned by the system manager.
   3. User Log On/Log Off attempts are recorded.
   4. Automatic Log Off occurs following the last keystroke after a user defined delay time.
C. Object or Object Group Scheduling:
   1. Weekly Schedules Based on Separate, Daily Schedules:
      a. Include start, stop, optimal stop, and night economizer.
      b. 10 events maximum per schedule.
      c. Start/stop times adjustable for each group object.
   2. Exception Schedules:
      a. Based on any day of the year.
      b. Defined up to one year in advance.

c. Automatically discarded and replaced with standard schedule for that day of the week upon execution.

3. Holiday or Special Schedules:
   a. Capability to define up to 99 schedules.
   b. Repeated annually.
   c. Length of each period is operator defined.

D. Provide standard application for equipment coordination and grouping based on function and location to be used for scheduling and other applications.

E. Alarms:
1. Binary object is set to alarm based on the operator specified state.
2. Analog object to have high/low alarm limits.
3. All alarming is capable of being automatically and manually disabled.
4. Alarm Reporting:
   a. Operator determines action to be taken for alarm event.
   b. Alarms to be routed to appropriate workstation.
   c. Reporting Options:
      1) Start programs.
      2) Print.
      3) Logged.
      4) Custom messaging.
      5) Graphical displays.

F. Maintenance Management: System monitors equipment status and generates maintenance messages based upon user-designated run-time limits.

G. Sequencing: Application software based upon specified sequences of operation in Section 23 09 93.

H. PID Control Characteristics:
1. Direct or reverse action.
2. Anti-windup.
3. Calculated, time-varying, analog value, positions an output or stages a series of outputs.
4. User selectable controlled variable, set-point, and PED gains.

I. Staggered Start Application:
1. Prevents all controlled equipment from simultaneously restarting after power outage.
2. Order of equipment startup is user selectable.

J. Energy Calculations:
1. Accumulated instantaneous power or flow rates are converted to energy use data.
2. Algorithm calculates a rolling average and allows window of time to be user specified in minute intervals.
3. Algorithm calculates a fixed window average with a digital input signal from a utility meter defining the start of the window period that in turn synchronizes the fixed-window average with that used by the power company.

K. Anti-Short Cycling:
1. All binary output objects protected from short-cycling.
2. Allows minimum on-time and off-time to be selected.

L. On-Off Control with Differential:
1. Algorithm allows binary output to be cycled based on a controlled variable and set-point.
2. Algorithm to be direct-acting or reverse-acting incorporating an adjustable differential.

M. Run-Time Totalization:
1. Totalize run-times for all binary input objects.
2. Provides an operator with capability to assign a high run-time alarm.

3.22 HVAC CONTROL PROGRAMS - SEE SEQUENCE OF OPERATIONS WHERE ITEMS BELOW CONFLICT

3.23 WITH PROJECTS SEQUENCE OF OPERATION, SEQUENCE OF OPERATION SHALL BE FOLLOWED.

A. General:
   1. Support Inch-pounds and SI (metric) units of measurement.
   2. Identify each HVAC Control system.

B. Optimal Run Time:
   1. Control start-up and shutdown times of HVAC equipment for both heating and cooling.
   2. Base on occupancy schedules, outside air temperature, seasonal requirements, and interior room mass temperature.
   3. Start-up systems by using outside air temperature, room mass temperatures, and adaptive model prediction for how long building takes to warm up or cool down under different conditions.
   4. Use outside air temperature to determine early shut down with ventilation override.
   5. Analyze multiple building mass sensors to determine seasonal mode and worse case condition for each day.
   6. Owner Operator commands:
      a. Define term schedule.
      b. Add/delete fan status point.
      c. Add/delete outside air temperature point.
      d. Add/delete mass temperature point.
      e. Define heating/cooling parameters.
      f. Define mass sensor heating/cooling parameters.
      g. Lock/unlock program.
      h. Request optimal run time control summary.
      i. Request optimal run time mass temperature summary.
      j. Request HVAC point summary.
      k. Request HVAC saving profile summary.
   7. Control Summary:
      a. HVAC Control system begin/end status.
      b. Optimal run time lock/unlock control status.
      c. Heating/cooling mode status.
      d. Optimal run time schedule.
      e. Start/Stop times.
      f. Selected mass temperature point ID.
      g. Optimal run time system normal start times.
      h. Occupancy and vacancy times.
      i. Optimal run time system heating/cooling mode parameters.
   8. Mass temperature summary:
      a. Mass temperature point type and ID.
      b. Desired and current mass temperature values.
      c. Calculated warm-up/cool-down time for each mass temperature.
      d. Heating/cooling season limits.
      e. Break point temperature for cooling mode analysis.
   9. HVAC point summary:
      a. Control system identifier and status.
      b. Point ID and status.
      c. Outside air temperature point ID and status.
      d. Mass temperature point ID and point.
      e. Calculated optimal start and stop times.
      f. Period start.

C. Supply Air Reset:
   1. Monitor heating and cooling loads in building spaces, terminal reheat systems, both hot deck and cold deck temperatures on dual duct and multizone systems, single zone unit discharge temperatures.
   2. Adjust discharge temperatures to most energy efficient levels satisfying measured load by:
      a. Raising cooling temperatures to highest possible value.
      b. Reducing heating temperatures to lowest possible level.
   3. Owner Operator commands:
      a. Add/delete fan status point.
      b. Lock/unlock program.
      c. Request HVAC point summary.
      d. Add/Delete discharge controller point.
      e. Define discharge controller parameters.
      f. Add/delete air flow rate.
      g. Define space load and load parameters.
      h. Request space load summary.
   4. Control summary:
      a. HVAC control system status (begin/end).
      b. Supply air reset system status.
      c. Optimal run time system status.
      d. Heating and cooling loop.
      e. High/low limits.
      f. Deadband.
      g. Response timer.
      h. Reset times.
   5. Space load summary:
      a. HVAC system status.
      b. Optimal run time status.
      c. Heating/cooling loop status.
      d. Space load point ID.
      e. Current space load point value.
      f. Control heat/cool limited.
      g. Gain factor.
      h. Calculated reset values.
      i. Fan status point ID and status.
      j. Control discharge temperature point ID and status.
      k. Space load point ID and status.
      l. Air flow rate point ID and status.

D. Enthalpy Switchover:
   1. Calculate outside and return air enthalpy using measured temperature and relative humidity; determine energy expended and control outside and return air dampers.
   2. Owner Operator commands:
      a. Add/delete fan status point.
      b. Add/delete outside air temperature point.
      c. Add/delete discharge controller point.
      d. Define discharge controller parameters.
      e. Add/delete return air temperature point.
      f. Add/delete outside air dew point/humidity point.
      g. Add/delete return air dew point/humidity point.
      h. Add/delete damper switch.
      i. Add/delete minimum outside air.

j. Add/delete atmospheric pressure.
k. Add/delete heating override switch.
l. Add/delete evaporative cooling switch.
m. Add/delete air flow rate.
n. Define enthalpy deadband.
o. Lock/unlock program.
p. Request control summary.
q. Request HVAC point summary.

3. Control summary:
   a. HVAC control system begin/end status.
   b. Enthalpy switchover optimal system status.
   c. Optimal return time system status.
   d. Current outside air enthalpy.
   e. Calculated mixed air enthalpy.
   f. Calculated cooling cool enthalpy using outside air.
   g. Calculated cooling cool enthalpy using mixed air.
   h. Calculated enthalpy difference.
   i. Enthalpy switchover deadband.
   j. Status of damper mode switch.

3.24 NETWORK CONNECTION

A. CPS Enterprise WAN: Internet-based network connecting multiple facilities with a central data warehouse and server, accessible via standard web-browser. This is an existing infrastructure and Contractor is not required to configure any components of this WAN but the contractor needs to work with CPS Network Operations to properly configure the ports and switches for them. Contractor is however required to provide data and services via BACnet over IP to the CPS Enterprise WAN.

PART 3 EXECUTION

4.01 INSTALLERS

A. Reference Section 2.01 "Approved Vendors and Thier Product Lines."

4.02 EXAMINATION

A. Verify existing conditions before starting work.
B. Verify that conditioned power supply is available to the control units and to the operator work station. Verify that field end devices, wiring, and pneumatic tubing is installed prior to installation proceeding.
C. Examine areas and conditions under which control systems are to be installed. Do not proceed with work until unsatisfactory conditions have been corrected.

4.03 SITE-SPECIFIC APPLICATION PROGRAMMING

A. Provide all database creation and site-specific application control programming as required by these Specifications, national and local standards and for a fully functioning system. Contractor shall provide all initial site-specific application programming and thoroughly document programming. Generally meet the intent of the written sequences of operation. If a sequence is not clear, in the contractors opinion, it is the Contractor's responsibility to request clarification..

B. All site-specific programming shall be fully documented and submitted for review and approval, both prior to downloading into the panel, at the completion of functional performance testing, and at the end of the warranty period.
C. All programming, graphics and data files must be maintained in a logical system of directories with self-explanatory file names. All files developed for the project will be the property of CPS and shall remain on the workstation(s)/server(s) at the completion of the project.

4.04 PASSWORD SETUP

A. Set up the following password levels to include the specified capabilities:
   1. Level 1: (CPS's BAS Administrator)
      a. Level 2 capabilities
      b. View, add, change and delete user names, passwords, password levels
      c. All unrestricted system capabilities including all network management functions.
   2. Level 2: (Programmer)
      a. Level 3 capabilities
      b. Configure system software
      c. Modify control unit programs
      d. Modify graphic software
      e. Essentially unrestricted except for viewing or modifying user names, passwords, password levels
   3. Level 3: (Chief Engineer)
      a. Level 4 capabilities
      b. Override output points
      c. Change all setpoints and reset schedules.
      d. Exit BAS software to use third party programs
   4. Level 4: (Assistant)
      a. Level 5 capabilities
      b. Acknowledge alarms
      c. Change equipment schedules
      d. Change room temperature setpoints
   5. Level 5: (View only Access)
      a. Display all graphic data
      b. Trend point data
      c. Unless otherwise directed the Login will the school name and the password will be "cpswebaccess".
B. Contractor shall assist CPS's operators with assigning user names, passwords and password levels. There may be multiple login name and passwords for a given password level. The contractor will be responsible for changing BAS administrator and Programmer level passwords if those are accidentally provided to other contractors or the school engineer.

4.05 POINT PARAMETERS

A. Provide the following minimum programming for each analog input:
   1. Name
   2. Address
   3. Scanning frequency or COV threshold
   4. Engineering units
   5. Offset calibration and scaling factor for engineering units
   6. High and low alarm values and alarm differentials for return to normal condition

7. High and low value reporting limits (reasonableness values), which shall prevent control logic from using shorted or open circuit values.
8. Default value to be used when the actual measured value is not reporting. This is required only for points that are transferred across the primary and/or secondary controlling networks and used in control programs residing in control units other than the one in which the point resides. Events causing the default value to be used shall include failure of the control unit in which the point resides, or failure of any network over which the point value is transferred. All default values will be provided in list format for evaluation by CPS.
9. Selectable averaging function that shall average the measured value over a user selected number of scans for reporting.

B. Provide the following minimum programming for each analog output:
1. Name
2. Address
3. Output updating frequency
4. Engineering units
5. Offset calibration and scaling factor for engineering units
6. Output Range
7. Default value to be used when the normal controlling value is not reporting.

C. Provide the following minimum programming for each digital input:
1. Name
2. Address
3. Engineering units (on/off, open/closed, freeze/normal, etc.)
4. Debounce time delay
5. Message and alarm reporting as specified
6. Reporting of each change of state, and memory storage of the time of the last change of state
7. Totalization of on-time (for all motorized equipment status points), and accumulated number of off-to-on transitions.

D. Provide the following minimum programming for each digital output:
1. Name
2. Address
3. Output updating frequency
4. Engineering units (on/off, open/closed, freeze/normal, etc.)
5. Direct or Reverse action selection
6. Minimum on-time
7. Minimum off-time
8. Status association with a DI and failure alarming (as applicable)
9. Reporting of each change of state, and memory storage of the time of the last change of state.
10. Totalization of on-time (for all motorized equipment status points), and accumulated number of off-to-on transitions.
11. Default value to be used when the normal controlling value is not reporting.

4.06 TRENDS

A. Contractor shall establish and store trend logs. Trend logs shall be prepared for each physical input and output point. All dynamic virtual points such as setpoints subject to a reset schedule, intermediate setpoint values for cascaded control loops, and the like will be trended as directed by the CPS.

B. CPS will analyze trend logs of the system operating parameters to evaluate normal system functionality. Contractor shall establish these trends and ensure they are being stored properly.
   1. Data shall include a single row of field headings and the data thereafter shall be contiguous. Each record shall include a date and time field or single date stamp. Recorded parameters for a given piece of equipment or component shall be trended at the same intervals and be presented in a maximum of two separate 2-dimensional formats with time being the row heading and field name being the column heading.
C. Sample times indicated as COV (±) or change-of-value mean that the changed parameter only needs to be recorded after the value changes by the amount listed. When outputting to the trending file, the latest recorded value shall be listed with any given time increment record. The samples shall be filled with the latest values also if the points include different time intervals. If the BAS does not have the capability to record based on COV, the parameter shall be recorded based on the interval common to the unit.
D. Trending intervals or COV thresholds shall be dictated by CPS, or their representative, upon system start-up.
E. The Contractor shall demonstrate functional trends as specified for a period of 30 days after successful system demonstration before final acceptance of the system. The trend limit is 1 year from demonstration for LEED projects that require trend data for M&V purposes. The limit on the length of trend data will be a function of the storage capacity of the computer.

4.07 TREND GRAPHS

A. Prepare controller and workstation software to display graphical format trends. Trended values and intervals shall be the same as those specified
B. Lines shall be labeled and shall be distinguishable from each other by using either different line types, or different line colors.
C. Provide a legend identifying the line color and symbol along side the point noun name for each point in the trend. Also, indicate engineering units of the y-axis values; e.g. degrees F., inches w.g., Btu/lb, percent open, etc.
D. The y-axis scales shall be chosen so that all trended values are in a readable range. Do not mix trended values on one graph if their unit ranges are incompatible.
E. Trend outside air temperature, humidity, and enthalpy during each period in which any other points are trended except for control loop performance trends.
F. Allow point groups to be saved for future trends. For example, HW supply and return temperatures along with HX stm valve position and pump status.

4.08 ALARMS

A. Override Alarms: Any point that is overridden through the override feature of the graphic workstation software shall be reported as a Level 3 alarm.
B. Analog Input Alarms: For each analog input, program an alarm message for reporting whenever the analog value is outside of the programmed alarm limits. Report a ‘Return-to-Normal’ message after the analog value returns to the normal range, using a programmed alarm differential. The alarm limits shall be individually selected by the Contractor based on the following criteria:
   1. Space temperature, except as otherwise stated in sequence of operation: Level 3
      a. Low alarm: 64°F
      b. Low return-to-normal: 68°F
      c. High alarm: 85°F
      d. High return-to-normal: 80°F

2. Controlled media temperature other than space temperature (e.g. AHU discharge air temperature, steam converter leaving water temperature, condenser water supply, chilled water supply, etc.): Level 3 (If controlled media temperature setpoint is reset, alarm setpoints shall be programmed to follow setpoint)
   a. Low alarm: 3°F below setpoint
   b. Low return-to-normal: 2°F below setpoint
   c. High alarm: 3°F above setpoint
   d. High return-to-normal: 2°F above setpoint.
3. AHU mixed air temperature: Level 4
   a. Low alarm: 45°F
   b. Low return-to-normal: 46°F
   c. High alarm: 90°F
   d. High return-to-normal: 89°F
4. Duct Pressure:
   a. Low alarm: 0.5”w.g. below setpoint
   b. Low return-to-normal: 0.25”w.g. below setpoint
   c. High alarm: 0.5”w.g. above setpoint
   d. High return-to-normal: 0.25”w.g. above setpoint
5. Space humidity:
   a. Low alarm: 35%
   b. Low return-to-normal: 40%
   c. High alarm: 75%
   d. High return-to-normal: 70%

C. Status versus Command Alarms: The Sequences of Operation are based on the presumption that motor starter Hand-Off-Auto (HOA) switches are in the ‘Auto’ position. BAS shall enunciate the following Level 5 alarm message if status indicates a unit is operational when the run command is not present or vice versa:
   1. *DEVICE XXXX* FAILURE: Status is indicated on *{the device}* even though it has been commanded to stop. Check the HOA switch, control relay, status sensing device, contactors, and other components involved in starting the unit. Acknowledge this alarm when the problem has been corrected.

D. Maintenance Alarms: Enunciate Level 5 alarms when runtime accumulation exceeds a value specified by the operator.
   1. *DEVICE XXXX REQUIRES MAINTENANCE*. Runtime has exceeded specified value since last reset.

E. See requirements for additional equipment-specific alarms specified in Division 23 Section "Building Automation System (BAS) - Sequences of Operation."

4.09 GRAPHIC SCREENS

A. Main Screen: The Main screen will be the first screen displayed after login, no navigation required to get to the main screen (see Exhibit A for sample screens). This screen will have the following features:
   1. CPS will have the option of providing a picture of the school as background.
   2. There will be a link button to the floor plans, Summary screen, and system schematic screens. In the event that there are more 10 to 15 AHU, Boiler and Chiller screens a button to groups of AHU’s will be provided.
   3. Manufacturer/Installer Logo or information is not to be included in the screen.
   4. Provide a global command to open heating or cooling valves to facilitate Test Adjust and Balance. The command will be grouped so that an AHU can be balanced as well as total system balancing. The same function will apply for VAV AHU’s were all the boxes can be set at minimum or maximum flow.

B. Floor Plan Screens: The contract document drawings will be made available to the Contractor in AutoCAD format upon request. These drawings may be used only for developing backgrounds for specified graphic screens; however CPS does not guarantee the suitability of these drawings for the Contractor's purpose (see Exhibit B for sample screens). .
   1. Provide graphic floor plan screens for each floor and/or wing of the building. Indicate the location of all equipment that is not located on the equipment room screens.
      a. Indicate the location of temperature sensors associated with each temperature-controlled zone (i.e., VAV terminals, fan-coils, single-zone AHUs, etc.) on the floor plan screens.
      b. . Display the space temperature point adjacent to each temperature sensor symbol along with the room set point. Use a distinct line symbol to demarcate each terminal unit zone boundary. Use distinct background colors for each zone to demarcate the air-handling unit to which it is associated.
      c. Indicate room numbers as provided by CPS. Verify final room number/name assignments, as these are often different than initially assigned room numbers on the contract drawings.
      d. Provide a drawing link from each space temperature sensor symbol and equipment symbol shown on the graphic floor plan screens to each corresponding zone equipment schematic graphic screen. Because the area available for the floor plans varies from system to system, the size of text used to display data such as room number and temperature will be at least 1/8" high on the screen when the entire floor plan section is displayed.
      e. The floor plan graphics will also indicate the location of control panels. For control devices such as duct smoke detectors, system pressure or differential pressure sensors (water or air), airflow stations that are located outside the equipment rooms. All of these devices will be linked to the associated system graphic. For terminal units the link to the associated system graphic is sufficient and the associated unit control devices do not need to be located on the floor plan.
   2. Provide graphic floor plan screens for each mechanical equipment room and a plan screen of the roof. Indicate the location of each item of mechanical equipment. Provide a drawing link from each equipment symbol shown on the graphic plan view screen to each corresponding mechanical system schematic graphic screen.
   3. Provide a graphic building key plan that will allow navigation at a floor level or from floor to floor. Use elevation views and/or plan views as necessary to graphically indicate the location of all of the larger scale floor plans. Link graphic building key plan to larger scale partial floor plans. Provide links from each larger scale graphic floor plan screen to the building key plan and to each of the other graphic floor plan screens.
   4. When there is more than one building, provide a graphic site plan with links to and from each building plan.

C. System Schematic Screens: Provide graphic system schematic screen for each HVAC subsystem (AHU) controlled with each I/O point in the project appearing on at least one graphic screen. System graphics shall be have the same look as the submittal diagrams (do not use three dimensional graphics) with status, setpoints, current analog input and output values, operator commands, etc. as applicable. Input/output devices shall be shown in their schematically correct locations with the associated value, noun name and engineering units. The position of valves or dampers will be % OPEN. For three way valves it will be %OPEN to the device. The noun name (English language descriptors) shall be included for each point on all graphics; this may be accomplished by the use of a pop-up window accessed by selecting the displayed point with the mouse. Indicate all adjustable

setpoints on the applicable system schematic graphic screen or, if space does not allow, on a supplemental linked-setpoint screen. Similar AHU's will have the same organization of information. For example a single zone AHU will not put all the set points across the top and multizone put them on the side or bottom (see Exhibit C for sample screens).

1. Provide graphic screens for each air handling system. Indicate outside air temperature and enthalpy, and mode of operation as applicable (i.e., occupancy mode and heating, cooling, economizer etc based on the sequence of operations). Link screens for air handlers to the heating system and cooling system graphics. Link screens for supply and exhaust systems if they are not combined onto one screen.
2. Provide a graphic screen for each zone with the associated control devices or terminal unit with a link to the associated system schematic screen of the air handling unit that serves the zone.
3. Provide a cooling system graphic screen showing all points associated with the chillers, cooling towers and pumps. Indicate outside air dry-bulb temperature and calculated wet-bulb temperature. Link the chilled water and condenser water systems screens if they cannot fit onto one cooling plant graphic screen.
4. Link the heating and cooling system graphics to utility history reports showing current and monthly electric uses, demands, peak values, and other pertinent values.
5. For each system schematic screen, including AHU, Boiler, Chiller and terminal unit screen, provide a button linked to a text version of the sequence of operation for the device or system. The sequence will be updated with the as-built sequence following completion of the demonstration.

D. System Summary Screens: On each graphic System Screen, provide drawing links to the graphic air handling unit schematic screens (see Exhibit D for sample screens).

1. Provide a chilled water valve screen showing the analog output signal of all chilled water valves with signals expressed as percentage of fully open valve (percentage of full cooling). Indicate the discharge air temperature and setpoint of each air handling unit, cooling system chilled water supply and return temperatures and the outside air temperature and humidity on this graphic. Provide drawing links between the graphic cooling plant screen and this graphic screen.
2. Provide a heating water valve screen showing the analog output signal of all air handling unit heating water valves with signals expressed as percentage of fully open valve (percentage of full heating). Indicate the temperature of the controlled medium (such as AHU discharge air temperature or zone hot water supply temperature) and the associated setpoint and the outside air temperature and humidity.
3. When there are more than four AHU's on the system provide a summary screen with the following type of information for each AHU, each fan command, status, alarms (smoke, freeze, duct static), DAT and duct pressure if applicable. For the heating system provide status and supply water temp or steam pressure and for the chiller provide status and chilled water supply temperature.
4. Provide a BAS system summary screen using the control system riser diagram to show the communication status of all controllers (BC, AAC and ASC's) on the BAS as well as all interface devices such as VFD's, chillers and boiler panels etcetera. Use green board concept, green means communicating, red is not communicating.
5. Provide a terminal unit summary screen grouped by floor or AHU. If the summary is grouped by floor, then the AHU will be shown for each terminal unit and vice versa. The points shown will depend on the type of terminal unit and will include room name, floor or AHU, room set point and temperature, DAT, valve position, command status, alarm, and occupancy state.
6. Exhaust fans will be show in a table format showing the command signal, the status, the alarm condition, and the occupancy state.

E. Alarms: Each programmed alarm shall appear on at least one graphic screen. In general, alarms shall be displayed on the graphic system schematic screen for the system that the alarm is associated with (for example, chiller alarm shall be shown on graphic cooling system schematic screen). For all graphic screens, display analog values that are in a 'high alarm' condition in a red color, 'low alarm' condition in a blue color. Indicate digital values that are in alarm condition in a red color. When an alarm first occurs, it shall "popup" over the current screen so that the operator is immediately aware of an alarm.
   1. Maintenance Alarms
      a. Runtime alarm screen will list all equipment with a BAS status. For each piece of equipment the screen will display the current run time (since the last reset), the runtime alarm limit (adj.), its alarm status (red / green) and the total accumulated runtime. The total accumulated runtime would only be zeroed out if the equipment were replaced. For equipment with internal runtime meters ensure that the total accumulative runtime is synchronized.

F. Utility Metering: Provide a graphic for the gas, electric and water utility data required in the sequence of operations. This may entail multiple screens if submetering of the gas or electric usage is included in the project.

4.10 SYSTEM ACCESS

A. Provide a direct Ethernet connection to CPS Enterprise Network at each panel housing a controller or controllers, meaning all BAS controllers should be direct connected to the CPS Enterprise network via applicable low voltage specifications. If an installation cannot accommodate IP connection such as in an integration scenario CPS must be notified prior to bid otherwise it is assumed the vendor can accommodate and is liable if they cannot. The user shall be able to access each controller on the system using this connection via the Control System Server database for graphics, schedules, programming, controller configuration etc.

B. Contractor shall closely coordinate with CPS Network Operations, or designated representative, to establish IP addresses and communications to assure proper operation of the building control system with the CPS Enterprise WAN, CSS's/OWS's , JACE's and OWSs.

4.11 INSTALLATION

A. General: Install systems and materials in accordance with manufacturer's instructions, roughing-in drawings and details shown on drawings.

B. Individual Digital Control Stations (DCS) are referenced to indicate allocation of points to each DCS and DCS location. Digital control stations shall consist of one or multiple controllers to meet requirements specified.

C. Where a DCS is referenced, Contractor shall provide at least one (1) controller, and additional controllers as required and in sufficient quantity to meet the requirements of this Specification. This Contractor shall extend power to the DCS from an acceptable power panel. If the contractor wishes to further distribute panels to other locations, contractor is responsible for extending power to that location also. Furthermore, contractor is responsible for ensuring adequate locations for the panels that do not interfere with other requirements of the project and maintain adequate clearance for maintenance access.

D. Contractor shall locate DCSs as required. It is the Contractor's responsibility to provide enough controllers to ensure a completely functioning system, according to the point list, trending requirements and sequence of operations.

E. Contractor shall provide the following, as a minimum:

1. One DCS (including at least one controller) in each heating water and chilled water plant mechanical room.
2. One DCS (including at least one controller) for each air handler located in an applicable mechanical room.
3. One controller shall be provided for each terminal unit unless indicated otherwise.

F. Install control units and other hardware in position on permanent walls where not subject to excessive vibration.

G. Install software in control units and in operator work station. Implement all features of programs to specified requirements and appropriate to sequence of operation.

H. Provide with 120v AC, 15 amp dedicated emergency power circuit to each programmable control unit.
1. Extend all power source wiring required for operation of all equipment and devices provided under Division 23 Building Automation System (BAS) Sections and Sequences of Operation.
2. Control panels shall not share a power circuit and should have Isolated Ground (IG) power. IG Power supplied to the panels shall have dedicated circuits and the circuit location shall be documented in the panel.

I. Provide conduit and electrical wiring in accordance with Section 26 05 83. Electrical material and installation shall be in accordance with appropriate requirements of Division 26.

4.12 HARDWARE APPLICATION REQUIREMENTS

A. General: The functional intent of this specification is to allow cost effective application of manufacturers standard products while maintain the integrity and reliability of the control functions. Specific requirements indicated below are required for the respective application. Manufacturer shall apply the most cost-effective unit that meets the requirement of that application.

B. Standalone Capability: Each Control Unit shall be capable of performing the required sequence of operation for the associated equipment. All physical point data and calculated values required to accomplish the sequence of operation shall originate within the associated CU with only the exceptions enumerated below. Refer to Item 2.01 above for physical limitations of standalone functionality. Listed below are functional point data and calculated values that shall be allowed to be obtained from or stored by other CUs or SDs via LAN.

C. Where associated control functions involve functions from different categories identified below, the requirements for the most restrictive category shall be met.

D. Application Category Type 0 (Distributed monitoring)
1. Applications in this category include the following:
   a. Monitoring of variables that are not used in a control loop, sequence logic, or safety.
2. Points on BCs, AACs, and ASCs may be used in these applications as well as Ds and/or general-purpose I/O modules.
3. Where these points are trended, contractor shall verify and document that the network bandwidth is acceptable for such trends and is still capable of acceptable and timely control function.
4. LAN Restrictions: These points may reside on any controller

E. Application Category Type 1
1. Applications in this category include the following:
   a. Fan Coil Units
   b. Airflow Control Boxes (VAV and Constant Volume Terminal Units)
   c. Terminal Control Dampers/Reheat Vales

d. Unitary equipment <15 tons (Package Terminal AC Units, Package Terminal Heat Pumps, Split-System AC Units, Split-System Heat Pumps, and Water-Source Heat Pumps)
e. Induction Units

2. Standalone Capability: Provide capability to execute control functions for the application for a given setpoint or mode, which shall generally be occupied mode control. Only the following data (as applicable) may be acquired from other controllers via LANs. In the event of a loss of communications with any other controller, or any fault in any system hardware that interrupts the acquisition of any of these values, the ASC shall use the last value obtained before the fault occurred. If such fault has not been corrected after the specified default delay time, specified default value(s) shall then be substituted until such fault has been corrected.
   a. Physical/Virtual Point — Default Value
   b. Scheduling Period — Normal
   c. Morning Warm-Up — Off (cold discharge air)
   d. Load Shed — Off (no shedding)
   e. Summer/Winter — Winter
   f. Trend Data — N/A
3. Mounting:
   a. ASCs that control equipment located above accessible ceilings shall be mounted on the equipment in an accessible enclosure and shall be rated for plenum use.
   b. ASCs that control equipment mounted in a mechanical room shall either be mounted in, on the equipment, or on the wall of the mechanical room at an adjacent, accessible location.
   c. ASCs that control equipment mounted outside or in occupied spaces shall either be located in the unit or in a proximate mechanical/utility space.
   d. Contractor for this Section may furnish ASCs to the terminal unit manufacturer for factory mounting.
4. LAN Segment Restrictions:
   a. BACnet Systems: Limit the number of AAC's/ASC's servicing any one of these applications on the LAN Segment to 32.

F. Application Category Type 2
1. Applications in this category include the following:
   a. VAV Air Handlers
   b. Dual Duct Air Handlers
   c. Multizone Air Handlers with 5 or more zones
   d. Self Contained VAV Units
   e. Constant Volume Air Handlers
   f. Unitary Equipment >= 15 tons (Air Conditioners, Heat Pumps, Packaged Heating/Cooling Units, and the like)
   g. Constant Volume Pump Start/Stop
   h. Misc. Equipment (Exhaust Fan) Start/Stop
   i. Misc. Monitoring (not directly associated with a control sequence and where trending is not critical)
   j. Variable Speed Drive (VSD) controllers not requiring safety shutdowns of the controlled device
   k. Multizone Air handlers with fewer than 5 zones
2. Standalone Capability: Only the following data (as applicable) may be acquired from other AACs via LANs. In the event of a loss of communications with any other AACs, or any fault in any system hardware that interrupts the acquisition of any of these values, the AAC shall use the last value obtained before the fault occurred. If such

fault has not been corrected after the specified default delay time, specified default value(s) shall then be substituted until such fault has been corrected.

	Physical/Virtual Point	Default Delay Time	Default Value
a.	Outside Air Temperature	3 minutes	80°F
b.	Outside Air Humidity	3 minutes	60%RH
c.	Outside Air Enthalpy	3 minutes	30 Btu/lb
d.	Trend Data		N/A
e.	Cooling/Heating Requests	3 minutes	None

3. Mounting:
   a. AACs that control equipment located above accessible ceilings shall be mounted on the equipment in an accessible enclosure and shall be rated for plenum use.
   b. AACs that control equipment mounted in a mechanical room may either be mounted in, on the equipment, or on the wall of the mechanical room at an adjacent, accessible location.
   c. AACs that control equipment mounted outside or in occupied spaces shall either be located in the unit or in a proximate mechanical/utility space.
4. LAN Segment Restrictions:
   a. BACnet Systems: Limit the number of AAC's servicing any one of these applications on the LAN Segment to 32.

G. Application Category Type 3
1. Applications in this category include the following:
   a. Central Cooling Plant
   b. Central Heating Plant
   c. Cooling Towers
   d. Sequenced or Variable Speed Pump Control
   e. Local Chiller Control (unit specific)
   f. Local Free Cooling Heat Exchanger Control
2. BACnet Systems: BCs shall be used in these applications.

4.13 STARTUP, COMMISSIONING AND TRAINING

A. Refer to Division 23 Section "Building Automation System (BAS) - Commissioning."

4.14 DEMONSTRATION AND INSTRUCTIONS

A. Refer to Division 23 Section "Building Automation System (BAS) - Sequences of Operation."

4.15 MAINTENANCE

A. See Section 01 70 00 - Execution Requirements, for additional requirements relating to maintenance service.
B. Provide service and maintenance of energy management and control systems for two years from Date of Final Acceptance.
C. Provide two complete inspections, one in each season, to inspect, calibrate, and adjust controls as required, and submit written reports.
D. Provide complete service of systems, including call backs. Make minimum of 4 complete normal inspections of approximately 8 hours duration in addition to normal service calls to inspect, calibrate, and adjust controls, and submit written reports.

4.16 IDENTIFICATION STANDARDS

A. Controller Identification. All controllers shall be identified by a plastic engraved nameplate securely fastened to the outside of the controller enclosure.
B. Panel Identification. All local control panels shall be identified by a plastic engraved nameplate securely fastened to the outside of the controller enclosure.
C. Field Devices. All field devices shall be identified by a typed (not handwritten) securely attached tag label.
D. Panel Devices. All panel devices shall be identified by a typed label securely fastened to the backplane of the local control panel.
E. Raceway Identification. All the covers to junction and pull boxes of the control system raceways shall be painted blue or have identification labels stating "Control System Wiring" affixed to the covers. Labels shall be typed, not hand written.
F. Wire Identification. All low and line voltage control wiring shall be identified by a number, as referenced to the associated control diagram, at each end of the conductor or cable. Identification number shall be permanently secured to the conductor or cable and shall be typed

4.17 SCHEDULES

A. Input/Output Schedule:
    1. Point Description:
    2. Digital Input:
        a. Demand Meter (kW):
        b. Auxiliary Contact:
        c. Switches:
            1) Switch Closing:
            2) Flow Switch:
            3) Optical:
        d. Current:
        e. Pressure:
    3. Digital Output:
        a. Control Relay:
        b. Solenoid:
        c. Contactor:
    4. Analog Input:
        a. Temperature:
        b. Relative Humidity:
        c. Pressure/Vacuum:
        d. Filter:
        e. Flow:
        f. Current:
        g. Liquid Level:
        h. Photocell:
    5. Analog Output:
        a. Pneumatic Transducer:
        b. 4-20 ma Module:
        c. 0-16 v DC:
    6. Alarm:
B. Input/Output Schedule:
    1. Point Description:
    2. Inputs:
        a. Temperature:
        b. Relative Humidity:

c. Pressure:
d. Flow:
e. Level:
f. Position:
g. Energy:
h. Power:

3. Outputs:
   a. Status:
   b. Alarm:
   c. Pneumatic Position:
   d. Electronic Position:
   e. Set Point Adjust:
   f. Start/Stop:
   g. Off/Low/High:
4. Software Features:
   a. PID Control (DDC):
   b. High Limit:
   c. Low Limit:
   d. Run Time Totalization:
   e. Consumption Totalization:
   f. Program Start/Stop:
   g. Load Shed:
   h. Duty Cycle:
   i. Enthalpy Switchover:
   j. Optimal Run Time:
   k. Supply Air Reset:
   l. O.A. Interlock:
   m. O.A. Temperature Reset:
   n. Free Cooling Mode:
   o. Warm-up Mode:
   p. Boiler Interlock:
   q. Chiller Sequencing:
   r. Energy Calculation:

C. Alarm Schedule:
1. High Limit: A1.
2. Low Limit: A2.
3. Run Time: A3.
4. Maintenance: A4.
5. Status: A5.
6. Override: A6.
7. Freeze: A7.
8. Low Pressure: A8.

END OF SECTION

SECTION 31 22 15

EARTHWORK FOR PERMEABLE SURFACING SYSTEMS

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. Excavation, backfill, grading, and finish grading for a synthetic grass or permeable paver surfacing system.

1.02 REFERENCE STANDARDS

A. AASHTO T 88 - Standard Method of Test for Particle Size Analysis of Soils; 2013.

B. AASHTO T 90 - Standard Method of Test for Determining the Plastic Limit and Plasticity Index of Soils; 2016.

C. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft3 (2,700 kN m/m3)); 2012, with Editorial Revision (2015).

D. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2011.

E. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft3 (600 kN-m/m3)); 2012, with Editorial Revision (2015).

1.03 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Conduct a preinstallation meeting one week prior to the start of the work of this section.
   1. Ensure required submittals have been provided with sufficient time for review prior to scheduling the Preinstallation Meeting.
   2. Review the detailed requirements for the work of this section and to review the drawings and specifications for this work.
   3. Require attendance by all affected installers, including, but not limited to:
      a. Contractor's Superintendent.
      b. Installer.
      c. Manufacturer/Fabricator Representative.
      d. Other affected Subcontractors.
      e. Architect/Engineer of Record.
      f. Board’s Representative.
   4. Record minutes and distribute copies within 5 days after meeting. The minutes should be sent to the meeting participants, as well as the Architect/Engineer of Record, the Board, and those parties/entities affected by and decisions that were made.

1.04 SUBMITTALS

A. Product Data: For soil and fill material from borrow sources that are proposed for use on the Project. Include source and gradation/sieve analysis for each material.
   1. Imported Fill - Site History: Submit two copies of required documentation, including Sanborn® maps, aerial photographs, and a regulatory database search, for all soil materials brought onto the Site.

B. Environmental Submittals: Copies of environmental analytical results of all backfill material verifying that these materials do not exceed 35 ILL. ADM. CODE SECTION 742, TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO), APPENDIX B, TABLE A, and 35 ILL. ADM. CODE 740, SITE REMEDIATION PROGRAM, APPENDIX A Target Compound List (TCL) parameters.

For samples from virgin sources, one representative sample must be analyzed for 35 ILL. ADM. CODE SECTION 740, APPENDIX A Target Compound List (TCL) parameters.

For virgin sources, Contractor shall submit a certification letter from the Owner of the source that all imported material is virgin material mined directly from the source quarry.

For samples from recycled sources, one sample per 1,000 tons of material must be analyzed for 35 ILL. ADM. CODE SECTION 740, APPENDIX A Target Compound List (TCL) parameters.

For recycled sources, the Contractor must identify the source of the recycled material, including the owner, the address, imported fill environmental history, and a written demonstration that the property source is not in any regulated environmental related cleanup program.

A copy of the analytical results shall be submitted at least one week prior to depositing backfill or topsoil on site. The date of the analysis shall be within 60 days of importing such material to a school property.

C. Shop Drawings:
1. Submit an Erosion- and Sedimentation-Control Plan, including a written narrative. Indicate types and locations of erosion- and sedimentation-control measures, including written description. The Erosion- and Sedimentation-Control Plan shall comply with EPA 832/R-92-005 “Storm Water Management for Construction Activities: Developing Pollution Prevention Plans and Best Management Practices” and requirements of authorities having jurisdiction.
2. Detail installation of granular fill to receive synthetic surfacing. Include plans, sections through the field, enlarged sections, and enlarged details. Indicate if monolithic or separate courses are proposed and type of material used.

D. Material Certificates:
1. Submit a certificate, signed by the material supplier, certifying that the fill materials provided for the Project comply with the specified requirements, including gradation and environmental.

E. Test Reports: Submit certified test reports from testing agency engaged to perform analytical testing of soil and fill materials from borrow sources that are proposed for use on the Project. The laboratory performing the analyses must be an IEPA-accredited laboratory. The Contractor is responsible for payment of all backfill samples and analytical fees.

F. Tickets: Submit invoices and delivery tickets indicating the amount, type, and source of off-site materials delivered.

G. Qualifications: For Licensed Land Surveyor.

H. Final Survey: Submit two copies of the survey of the completed stone base, with elevations and slopes indicated.

1.05 QUALITY ASSURANCE

A. Earthwork Contractor: Engage a firm experienced in excavating, backfilling, and grading.

B. Installer Qualifications: Engage a single firm experienced in the installation of granular bases that are similar in design and extent to those required for the Project. The firm should have worked on not less than 5 projects of similar scope to that required for the Project in the last 3 years, and whose work has resulted in a record of successful in-service performance.

C. Codes and Standards: Perform Work in compliance with applicable requirements of authorities having jurisdiction.

D. Soil Testing and Inspection Service:
   1. The Board will engage a soil testing and inspection service, to include testing soil materials proposed for use in the Work and initial quality control testing during earthwork operations.
   2. Furnish soil survey for satisfactory soil materials and samples of soil materials to the testing agency.

E. Surveyor: Engage a State of Illinois Licensed Land Surveyor to lay out the field, establish control points and boundaries, and lay out the limits of the Work.

1.06 PERFORMANCE REQUIREMENTS

A. Drainage: The granular field base, following final grading and compaction, shall provide the following vertical flow rate:
   1. Where a single layer/course of fill is utilized, the base shall provide a vertical flow rate of not less than 12 inches of water within a one-hour period.
   2. Where two layers/courses of fill are utilized, the surface course shall provide a vertical flow rate of not less than 10 inches of water within a one-hour period, and the base course shall provide not less than 20 inches of water within a one-hour period.

1.07 PROJECT CONDITIONS

A. Site Information:
   1. A Phase I Environmental Site Assessment (ESA) was completed by Environmental Design International inc. (EDI). On September 28, 2022, a site visit was completed by Lucy Doherty of EDI. The subsequent Phase I ESA report, dated December 20, 2022, presents conclusions of the site conditions based on interpretation of the site reconnaissance, as well as reviewed historical data and environmental records obtained for the Phase I ESA. EDI identified a 10,000-gallon Heating Oil Underground Storage Tank as the only on-site Recognized Environmental Condition (REC) associated with the property. No off-site RECs were identified.

      Fieldwork for a subsequent Phase II ESA was completed on December 15, 2022. The investigation involved advancing six (6) soil borings and collecting twelve (12) soil samples. The analytical results were compared to the Illinois Environmental Protection Agency (IEPA) Tiered Approach to Corrective Action Objectives (TACO) regulations as listed in Title 35 of the Illinois Administrative Code, Part 742, Appendix B, Table A (35 IAC 741, Appendix B, Table A) which indicated numerous exceedances of multiple exposure routes. These exceedances require the Site to be enrolled in the IEPA Site Remediation Program (SRP) in accordance with the regulations presented in 35 IAC 740.800-825 (Subpart H: Requirements Related to Schools).

Additional site characterization samples were collected from March 21, 2023, to March 24, 2023, to generate additional information for the Site's enrollment into the IEPA SRP. Eighteen (18) soil borings were advanced to various depths across the Site with one to two soil samples collected from each boring as part of the Additional Subsurface Investigation (ASI) effort. Based on the planned construction for the Site, analytical results from the December 2022 and March 2023 investigations were compared to Maximum Allowable Concentrations of Chemical Constituents in Uncontaminated Soil Used as Fill Material at Regulated Fill Operations (MAC) Table as presented in 35 IAC 1100. The evaluation indicates that all site soil is excluded from disposal at a Clean Construction and Demolition Debris (CCDD) facility. The comparison table for CCDD MAC values is attached as **Table 5**.

All soil excavated to maximum depths ranging from 6 to 15 feet below ground surface in the vicinity of the soil sample locations (see attached **Figure SMP-01** for depth specifications) must be disposed of at a Subtitle D landfill as defined by the Resource Conservation and Recovery Act (RCRA) in Title 40 of the Code of Federal Regulations, Parts 239 through 282 Subtitle D (40 CFR 239 - 282, Subtitle D).

In addition, tables comparing the soil sample analysis to the IEPA TACO Construction Worker Remediation Objectives (ROs) are presented in **Tables 2a through 2d**. **Figure SMP-01**, Soil Disposal and Construction Worker Precaution, depicts the locations of the soil samples and their associated areas requiring construction worker precautions.

2. The Contractor acknowledges that they have reviewed the report and any addenda thereto.
3. The following documents related to the earthwork can be furnished, for information only and for the convenience of the Contractor, by the Board:
   a. Phase I Environmental Site Assessment (ESA) Report, dated December 20, 2022, as prepared by Lucy Doherty of EDI.
   b. Limited Phase II ESA Report, dated February 24, 2023, as prepared by Lucy Doherty of EDI.
   c. Additional Subsurface Investigation Report, dated May 17, 2023,.as prepared by Nicole Butkus of EDI.

B. Traffic: Minimize interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks, or other occupied or used facilities without approval from the authorities having jurisdiction.

C. Do not commence earth moving or other excavation operations until temporary erosion- and sedimentation-control measures are in place.

D. Protection of Existing Improvements:
   1. Protect existing improvements on and off the site from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
   2. Provide barricades, coverings, or other types of protection necessary to prevent damage to existing improvements to remain in place.
   3. Restore damaged improvements to their original condition, as acceptable to the Board's and other parties or authorities having jurisdiction.

E. Protection of Existing Vegetation:
   1. Protect existing vegetation to remain in place against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary fences, barricades or guards as required to protect vegetation to be left standing.

2. Water vegetation as required to maintain health during the course of construction operations.
3. Protect root systems from damage due to noxious materials in solution caused by runoff or spillage during mixing and placement of construction materials, or drainage from stored materials. Protect root systems from flooding, erosion or excessive wetting resulting from dewatering operations.
4. Provide protection for roots over 1-1/2-inches in diameter that are cut during construction operations. Coat the cut faces with emulsified asphalt or other acceptable coating especially formulated for horticultural use on cut or damaged plant tissues. Temporarily cover all exposed roots with wet burlap to prevent roots from drying out; provide earth cover as soon as possible.
5. Repair or replace vegetation damaged by construction operations, in a manner acceptable to the Architect/Engineer of Record.
6. Repair tree damage by a qualified tree surgeon. Replace trees, which cannot be repaired and restored to full-growth status, as determined by the tree surgeon at no cost to the Board.

F. Existing Utilities:
1. Utility Locator Service: Contact D.I.G.G.E.R. (Chicago Utility Alert Network: 312-744-7000) regarding project Site before beginning earth moving or other excavation operations.
2. Locate existing underground utilities in the areas of Work before starting earthwork operations. If utilities are to remain in place, provide adequate means of protection during earthwork operations.
3. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, immediately notify the Architect/Engineer of Record for directions as to how to proceed.
4. Cooperate with the Board and public and private utility companies in keeping their respective services and facilities in operation.
5. Demolish and completely remove from the site any and all underground utilities indicated to be removed. Coordinate with local utility companies for shutoff of services if lines are active.

PART 2 - PRODUCTS

2.01 MATERIALS

A. General: In addition to requirements specified in this Section, all materials shall comply with requirements specified in other Division 31 Sections.

B. General Fill: Comply with ASTM D2487; soil groups GW, GP, GM, SW, SP or SM or a combination that are free of debris, waste, frozen materials, vegetable, organic and other deleterious matter and having maximum particle size of 2-inches in all dimensions.

C. Drainage Fill: Clean natural, crushed, or fractured stone conforming to State of Illinois Department of Transportation (IDOT) Gradation CA-7.

D. Field Base: Contractor's option if monolithic (one fill throughout) or multiple course construction is employed, subject to review and written approval by the surfacing system manufacturer. Course material shall comply with the following:
1. Field Base Fill: Clean natural, crushed, or fractured stone conforming to the following gradation: CA-7/CA-1.
2. Field Surface Fill: Clean natural, crushed, or fractured stone conforming to the following gradation: McCook 210 or CA-16.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Examine substrates, areas, and conditions where granular fill placement and grading are to be performed, with Installer present, for compliance with requirements for installation and other conditions affecting the Work.
   1. Verify that installation of geotextile fabric and subdrainage system are complete and ready to receive granular fill.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Erosion- and Sedimentation-Control: Before mobilizing and starting Work on the site, institute an Erosion and Sedimentation Control Plan, and maintain it throughout the Work.
   1. Control erosion and sediment damage to roadways, adjacent properties, and water resources through the use of basins, ditch checks, temporary ditches, mulch barriers, mulches, grasses, silt filter fences, hay or straw bales, aggregates, inlet and pipe protection and other appropriate means.
   2. Remove and legally dispose of debris resulting from the Project when no longer required in accordance with other Division 31 Sections.

B. Engage a Licensed Land Surveyor to lay out the Work.

3.03 CLEARING

A. Environmental Hazards:
   1. Before starting Work and thereafter, as appropriate, report conditions indicative of environmental hazards to the Board’s Representative and proceed as directed.

B. General:
   1. Comply with the requirements of other Division 31 Sections.
   2. Remove vegetation, improvements, or obstructions that interfere with installation of new construction. Removal includes new and old stumps and their roots.
   3. Carefully and cleanly cut roots and branches of vegetation to be left standing, where such roots and branches obstruct new construction.
   4. Comply with the environmental protection and safety requirements of authorities having jurisdiction. Keep dust to a minimum. Maintain streets free of mud, dirt, and debris.

C. Topsoil Removal:
   1. Topsoil is defined as friable clay loam surface soil found in a depth of not less than 4-inches. Satisfactory topsoil is reasonably free of subsoil, clay lumps, stones, and other objects, and without weeds, roots, and other objectionable material.
   2. Strip topsoil to whatever depths encountered, and in such manner to prevent intermingling with the underlying subsoil or other objectionable material. Remove heavy growths of grass from areas before stripping.
   3. Where vegetation is to be left standing, stop topsoil stripping at a sufficient distance from such vegetation to prevent damage to the main root system.
   4. Stockpile topsoil in storage piles for reuse or remove from the site in accordance with other Division 31 Sections.

D. Removal of Improvements:
   1. Remove improvements that interfere with construction.
   2. Cap and remove or abandoned underground piping or conduit.
   3. Where uncharted or incorrectly charted below grade improvements are discovered, obtain approval of Architect/Engineer of Record before removal.

3.04 DEWATERING

A. Provide a Storm Water Management Plan prior to commencing with the Work. The plan shall include provisions for dewatering, pumping, collecting, temporary storage, and discharge or disposal of storm water, perched water, and other liquids, contaminated and/or uncontaminated, at the site to facilitate soil removal and minimize disposal costs for contaminated fluids.

B. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding the Project site and surrounding area. Provide and maintain pumps, sumps, suction and discharge lines, and other dewatering system components necessary to convey the water away from the site.

C. Convey water removed from excavations and rainwater to collection areas acceptable to authorities having jurisdiction. Do not use trench excavations for site utilities as temporary drainage ditches.

3.05 EXCAVATION

A. General:
   1. Comply with the requirements of other Division 31 Sections.
   2. Excavation consists of the removal and disposal of materials encountered when establishing the required grade elevations. Such excavation is unclassified regardless of the materials encountered and all materials shall be disposed of in accordance with other Division 31 Sections. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.
   3. Unauthorized excavation consists of removal of materials beyond indicated or required elevations. Replace unauthorized excavation by backfilling and compacting as specified for select fill at no cost to Board.
   4. Excavate as required to comply with cross section, elevations, and grades.
   5. Trenches shall be excavated in widths allowing proper installation of drainage conduit, with trench bottoms graded to required slope and compacted to form a firm, solid bed for the drainage system.

B. Stability of Excavations:
   1. Slope the side of excavations to comply with local codes and requirements of authorities having jurisdiction, and maintain same. Secure, shore, and brace excavations where sloping is not possible either because of space restrictions or stability of material excavated.
   2. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.

C. Removal of Unsatisfactory Soil Materials:
   1. Excavate unsatisfactory soil materials encountered that extend below the required elevations, to the additional depth established by the Board's testing agency and approved by the Board.
   2. If excavated unsatisfactory materials are to be removed from the property, all such materials shall be removed in accordance with other Division 31 Sections.
   3. Such additional excavation, provided it is not due to the fault or neglect of the Contractor, will be measured and paid for as a change in the Work if approved by the Board.

D. Closing Abandoned Underground Utilities: Close open ends of abandoned underground utilities, which are to remain permanently, and with sufficiently strong closures to withstand pressures which may result after closing.

E. Material Storage: Stockpile excavated materials classified as satisfactory soil material until required for use as fill. Do not intermix materials. Place, grade and shape stockpiles for proper drainage. Cover to prevent windblown dust and erosion by water.
   1. Limit height of stockpiles to 72 inches.
   2. Do not stockpile soil material within protection zones.

F. Cold Weather Protection: Protect excavation bottoms against freezing when the atmospheric temperature is less than 35 degrees F. Maintain excavation free of water, ice, and snow.

3.06 PROOF-ROLLING SUBGRADE

A. Following excavation of soil and other materials within the area to receive synthetic surfacing, and prior to placement of fill or other materials, proof-roll entire area of field with a pneumatic roller or heavily loaded dump truck (10-wheel, tandem axle; minimum 25 tons) to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

B. Make at least two (2) passes (second at right angle to first) in the presence of the Architect/Engineer of Record and a representative of the Board's testing agency. Limit vehicle speed to 3 miles per hour (mph).

C. Excavate unsatisfactory soil materials encountered to the additional depth established by the Architect/Engineer of Record or Board's testing agency and approved by the Board, and replace with compacted backfill or fill as directed. Use select fill material.
   1. Following placement and compaction of fill, perform an additional proof-roll of the area.
   2. If additional proof-roll shows unsatisfactory conditions, excavate, fill, compact, and proof-roll area as noted above. Repeat the process until backfilled area is found acceptable to the Board's testing agency.

D. Perform no further Work until subgrade is acceptable to the representative of the Board's testing agency.

3.07 COMPACTION

A. General: Control soil compaction, providing the minimum percentage of density specified.

B. Percentage of Maximum Density Requirements: Provide not less than the following percentages of density of soil material compacted at + 2% optimum moisture content, for the actual density of each layer of soil material:
   1. Subgrade: Compact top 12-inches of subgrade, including fill required, at 95 percent maximum density per ASTM D1557.
   2. Fill: Compact fill materials at 95 percent maximum density per ASTM D1557.

C. Moisture Control:
   1. Where the subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to the surface of subgrade, or layer of soil material, to prevent free water appearing on the surface during or subsequent to compaction operations.
   2. Remove and replace, then scarify and air dry, soil material that is too wet to permit compaction to specified density.

3.08 FIELD BED CONSTRUCTION

A. Engineered barrier specifics are required for permeable pavers and landscaped areas on site. These barriers must include an additional alternative barrier of 1.5 feet clean fill overlaying geotextile.

B. Construction of granular field bed shall not commence until subdrainage system has been successfully tested and is functioning properly. Use placement techniques and procedures that ensure neither geotextile fabric nor subdrainage system is damaged during construction of field drainage bed.
   1. Where damaged, the geotextile fabric shall be repaired or replaced immediately. Repair shall be performed in accordance with 31 22 15 - Earthwork for Permeable Surfacing Systems.

C. Do not place fill materials on surfaces on which there is standing water, that are muddy, frozen, or contain frost or ice.

D. Do not place fill materials until substrates are free of trash and debris.

E. Place granular fill materials in lifts not more than 8-inches in loose depth for materials compacted by heavy compaction equipment and not more than 4-inches in loose depth for materials compacted by hand-operated tampers. Before compaction, moisten each layer as necessary to provide the optimum moisture content of the fill material. Compact each layer to the required minimum percentage of density.

F. Placement of fill material shall commence at designated access point to the field, with materials pushed across the field. Place fill materials uniformly to required elevations and contours, including planarity, across the entire field.

G. Grading: Uniformly grade the area, including adjacent transition areas. Smooth finished surfaces within specified tolerances, compact with uniform levels or slopes between elevation points, or between such points and existing grades.
   1. Grade compacted field granular base to required elevations and contours, including planarity of the base surface.

H. The granular field base material shall be compacted with not less than a 5-ton roller, except for final grading, which shall be compacted with a roller weighing between 1 and 2 tons.

I. Tolerances: Finished field base surfaces shall be within the following:
   1. Elevation: ±1/4-inch (0.02 foot) from required elevation.
   2. Planarity: ±1/4-inch in 10 feet, non-cumulative.

3.09 FIELD QUALITY CONTROL

A. Board will engage a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during earthwork operations.

B. Quality Control Testing During Construction:
   1. The Board's testing agency shall inspect and approve sub-grades and fill layers before further construction work is performed thereon.
   2. If, in the opinion of the Board's testing agency, the subgrade or fills which have been placed are below the specified density, additional compaction and testing will be required until satisfactory results are obtained. The additional work will be done at no additional cost to Board. In such an event, retesting will be paid by the Contractor. The Board's testing agency will present their opinion in a report based on testing results and inspection of the affected area(s).

C. Testing Proposed Fill Materials:
   1. Test fill materials proposed for use in the Work and promptly submit test result reports. Soil samples will be provided by Contractor.
   2. Determine the suitability of materials to be used as fill.

D. Compaction Testing:
   1. Inspect, test, and approve each lift of fill before next lift is placed. Test shall be in accordance with ASTM D698 or ASTM D1557.
   2. A field density test will be taken for each 5,000 sq. ft. of fill.

E. Contractor's Responsibilities:
   1. Notify Agency sufficiently in advance of operations to allow for assignment of personnel and scheduling of tests.
   2. Coordinate with Agencies' personnel; provide access to Work, and, if applicable, to manufacturer's operations.
   3. Provide preliminary representative samples of materials to be tested, in required quantities.
   4. Furnish casual labor and facilities to provide access to Work to be tested to obtain and handle samples at the site to facilitate inspections and tests, and storage and curing of tests.
   5. Arrange with laboratory and pay for additional samples and tests required when initial tests indicate Work does not comply with Contract Documents.

F. Tests for Proposed Soil Materials:
   1. Test soil materials proposed for use in the Work and promptly submit test result reports. Soil samples will be provided by Contractor.
   2. Provide one optimum moisture-maximum density curve for each type of cohesive soil. Determine maximum densities in accordance with ASTM D1557.
   3. Determine the suitability of materials to be used as fill and backfill.
   4. Perform a mechanical analysis (AASHTO T 88), plasticity index (AASHTO T 90), and frost susceptibility analysis.
   5. Supply only soil materials that are in compliance with other Division 31 Sections.

G. Proof-rolling Observation:
   1. Provide continuous observation of proof-rolling of entire area.
   2. Approve subgrade or make recommendations for removal and replacement.

H. Reports: Prepare and submit the following reports:
   1. Certification of drainage fill.
   2. Field density test reports.
   3. One optimum moisture-maximum density curve for each type of soil encountered.
   4. Report of actual unconfined compressive strength and/or results of plate bearing tests of each strata tested.
   5. Other test and material certifications, as required.

3.10 MAINTENANCE AND RESTORATION

A. Protection of Graded Areas:
   1. Protect newly graded areas from traffic and erosion, and keep free of trash and debris and growth of weeds.
   2. Repair and reestablish grades in settled, eroded, and rutted areas to the specified tolerances.

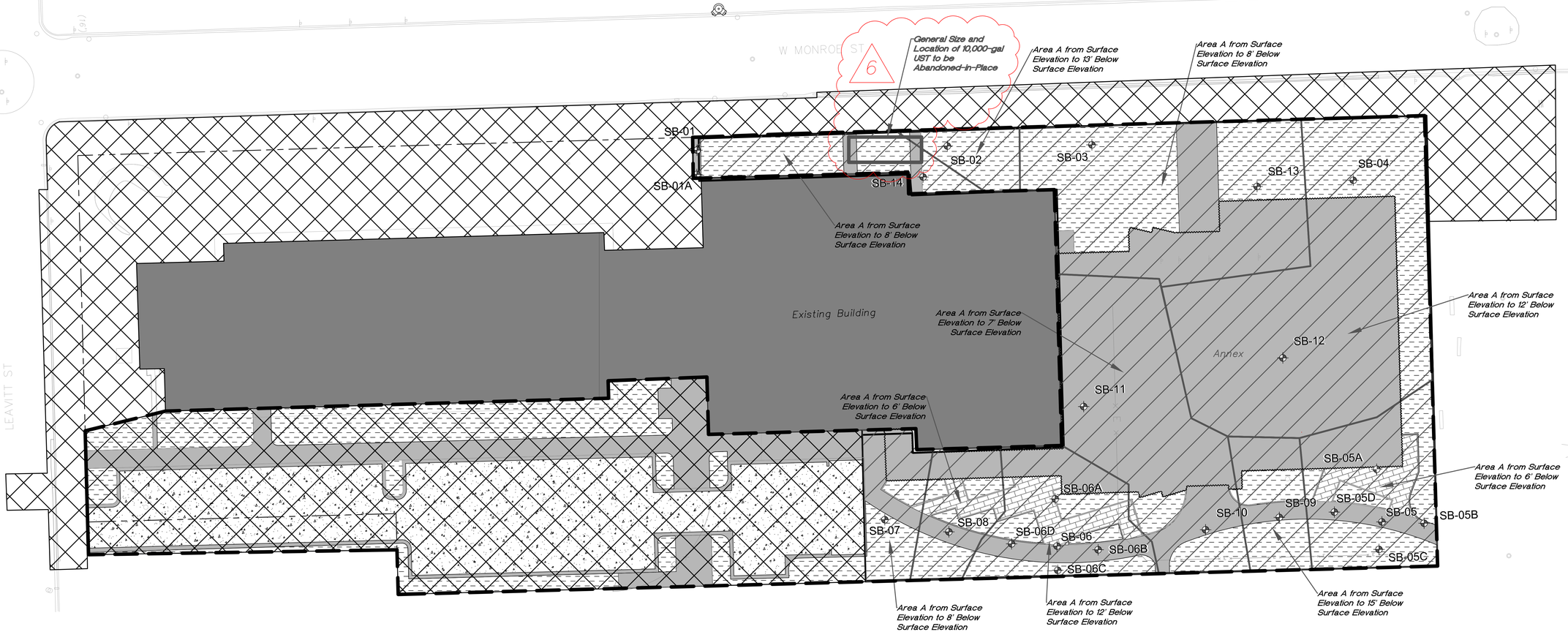
B. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather scarifies the surface, reshape, and compact to the required density prior to further construction.

C. Restoration: Restore all areas affected by construction both on and off Board's property to original condition.

3.11 DISPOSAL OF MATERIALS

A. Remove waste materials, excess excavated materials, and excavated materials classified as unsatisfactory soil material from the Board's property and legally dispose of all materials in accordance with other Division 31 Sections.

END OF SECTION 31 22 15



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Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- LIMITS OF WORK
- SAMPLING LOCATIONS

SOIL DISPOSAL CLASSIFICATION / REMEDIATION AREAS

AREA A - Subtitle D Landfill
Soils aboveTACO Tier 1 SROs (Non-Special)

AREA B - Subtitle D Landfill
Soils ASSUMED above TACO Tier 1 SROs (Non-Special)

ENGINEERED BARRIERS

CONCRETE
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

ASPHALT
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

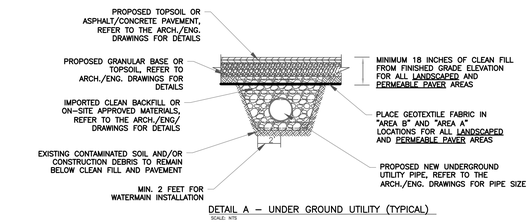
LANDSCAPING
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to finished grade. For trees, see Section 5.3 and 5.4 for details.

PERMEABLE PAVERS
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to the bottom of the pavers.

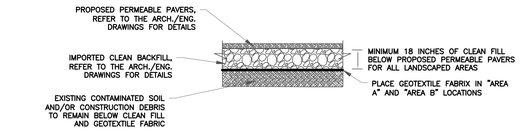
6 See Item 6 in General Notes

GENERAL NOTES

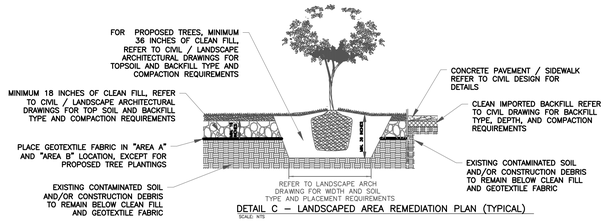
1. THIS DRAWING IS ONLY FOR ENVIRONMENTAL SITE WORK (ILLUSTRATION PURPOSES ONLY.) CONTRACTOR SHALL REFER TO ARCHITECT/ENGINEER DRAWINGS FOR CONSTRUCTION DETAILS AND DIMENSIONS. REFER TO SITE SURVEY FOR EXISTING SURFACE ELEVATIONS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND FIELD CONDITIONS. ALL DIMENSIONS AND DETAILS ARE TAKEN FROM RECORD DRAWINGS AND ARE NOT GUARANTEED TO BE ACCURATE, CONTRACTOR SHALL FIELD VERIFY ACTUAL FIELD DIMENSIONS.
3. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS. HANDLING OF EXCAVATED SOILS ON SITE SHALL REQUIRE CONSTRUCTION WORKER PRECAUTIONS DUE TO EXCEEDANCES OF THE MERCURY INHALATION EXPOSURE ROUTE AND THE LEAD INGESTION EXPOSURE ROUTE FOR CONSTRUCTION WORKERS ACCORDING TO TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE (ILAC), SECTION 742, APPENDIX B, TABLE B.
4. AT A MINIMUM, ALL EXCAVATED SOILS SHALL BE CLASSIFIED AS NON–SPECIAL NON–HAZARDOUS WASTE TO BE DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL AS LICENSED AND PERMITTED BY THE IEPA EXCEPT:
   - 4.1. EXCAVATED MATERIALS WITHIN AREA B AND BELOW REFERENCED DEPTHS IN AREA A ARE NOT SAMPLED AND ANALYZED AND ARE ASSUMED TO BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE NON–HAZARDOUS WASTE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.2. ENVIRONMENTAL SOIL/FILL CONDITIONS IN AREAS OUTSIDE THE CONSTRUCTION AREA ARE NOT KNOWN. SOIL/FILL REMOVED FROM THESE AREAS SHALL BE HANDLED PER SPECIFICATION SECTION 31 23 18.13 AS PART OF CONTRACT WORK AND ARE NOT PERMITTED FOR REUSE ON THE PROPERTY UNLESS SOIL ANALYTICAL DATA INDICATES THAT THEY ARE ACCEPTABLE FOR REUSE. ALL SOIL/FILL FROM THESE AREAS SHALL BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE AND DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.3. CONSTRUCTION DEMOLITION DEBRIS, SUCH AS BURIED CONCRETE SLABS FREE OF STAINING, WHICH MAY BE RECYCLED. ASPHALT AND CLEAN CONCRETE SHOULD BE RECYCLED AT APPROPRIATE RECYCLING FACILITIES PER SPECIFICATION SECTION 31 23 18.14. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF CCDD SHALL BE CONDUCTED IN ACCORDANCE SPECIFICATION SECTION 31 23 18.14.
5. REMEDIATION WORK SHALL INCLUDE PERFORMING EXCAVATION OF SOIL AT THE LOCATION AND ELEVATION SHOW IN THE CIVIL DRAWINGS
   - 5.1. AREA A AND AREA B SOILS IN THE PROPOSED LANDSCAPED AREAS AND PROPOSED PERMEABLE PAVER AREAS SHALL BE EXCAVATED TO A MINIMUM OF 18 INCHES. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 18 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURE FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.2. AREA A AND AREA B SOILS WHERE PROPOSED CONCRETE AND ASPHALT ARE SHALL BE EXCAVATED TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS. INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH IMPORTED CLEAN FILL TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS, THEN INSTALLING CONCRETE OR ASPHALT AS SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS.
   - 5.3. AREA A AND AREA B SOILS SHALL BE EXCAVATED TO A MINIMUM OF 36 INCHES WHERE NEW TREE PLANTINGS ARE PROPOSED. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH AT LEAST 36 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.4. AREA A AND AREA B SOILS LOCATED WITHIN THE DRIP LINES OF EXISTING TREES THAT ARE PROPOSED TO REMAIN SHALL BE EXCAVATED A MINIMUM OF 6 INCHES WHERE POSSIBLE WITHOUT DAMAGING THE ROOT BALL. THE ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 6 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
6. THE KNOWN EXISTING 10,000–GAL HEATING OIL UST SHALL BE ABANDONED–IN–PLACE BY A CONTRACTOR LICENSED FOR SUCH WORK AND IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00, 41 IAC 175 SUBPART C AND 41 IAC 175.840. CONTRACTOR SHALL NOTIFY THE EC AT LEAST 45 DAYS IN ADVANCE PRIOR TO ABANDONMENT FOR FIELD OVERSIGHT OF THE UST ABANDONMENT AND COORDINATION FOR THE UST SITE ASSESSMENT.
7. SOIL EXCAVATION SHALL BE KEPT TO THE EXTENT REQUIRED TO PERFORM THE PROPOSED CONSTRUCTION WORK AS SPECIFIED IN THE CONTRACT DOCUMENTS.
8. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF SOIL/FILL SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14. NO EXCAVATED SOIL SHALL BE REUSED ON SITE.
9. CONTRACTOR SHALL PROVIDE THE NAMES AND ADDRESSES OF ALL SELECTED WASTE/RECYCLE HAULERS, CCDD AND UNCONTAMINATED SOIL FILL OPERATIONS SITES AND/OR RECYCLING FACILITIES AND ACTIVE PERMITTED SUBTITLE D LANDFILL PER SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14 PRIOR TO THE START OF CONTRACTOR WORK.
10. ALL FIELD EQUIPMENT SHALL BE DECONTAMINATED PRIOR TO BEING TAKEN OFFSITE OR USAGE IN UNCONTAMINATED SOIL AREAS.
11. THE CONTRACTOR SHALL NOT INTERMIX ON SITE AND OFF SITE MATERIALS. OFF SITE/ROW SOILS CANNOT BE STOCKPILED ON SITE AND ON SITE MATERIALS CANNOT BE STOCKPILED OFF SITE.
12. CLEAN CONCRETE AND/OR ASPHALT REMOVED DURING EXCAVATION/DEMOLITION WORK CAN BE TRANSPORTED TO THE APPROVED RECYCLING FACILITY. CONCRETE RUBBLE COMMINGLED, MIXED OR CROSS CONTAMINATED WITH GENERAL CONSTRUCTION & DEMOLITION DEBRIS SHALL BE HANDLED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13.
13. SHOULD ANY SOILS OR FILL BE ENCOUNTERED THAT EXHIBIT UNUSUAL OR PETROLEUM/SOLVENT ODORS OR STAINING, CONTRACTOR SHALL STOP WORK IN THAT AREA AND NOTIFY THE COMMISSION REPRESENTATIVE IMMEDIATELY. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COMMISSION REPRESENTATIVE IF ANY MATERIALS (SOIL OR LIQUID) REQUIRING SPECIAL HANDLING (I.E. STAINED SOIL, SOIL WITH ODORS, OR LIQUIDS) ENCOUNTERED DURING EXCAVATION PER SPECIFICATION SECTION 31 23 18.14.
14. NO SOIL SHALL BE EXPORTED OR IMPORTED FROM THE SITE WITHOUT THE PRESENCE OF THE ENVIRONMENTAL CONSULTANT (EC). NOTIFY THE COMMISSION REPRESENTATIVE AND EC AT LEAST 48 HOURS IN ADVANCE FOR FIELD OVERSIGHT AND DOCUMENTATION OF EXPORTED SOILS TO SUBTITLE D LANDFILL AND IMPORTED SOILS PER SPECIFICATION SECTION 02 65 00 AND SPECIFICATION SECTION 31 23 18.13.
15. SHOULD AN UNDERGROUND STORAGE TANK (UST) BE ENCOUNTERED IN THE WORK AREA, CONTRACTOR SHALL STOP WORK AND NOTIFY THE COMMISSION REPRESENTATIVE AND ENVIRONMENTAL CONSULTANT IMMEDIATELY IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00.
16. ALL IMPORTED FILL MATERIALS MUST MEET THE REQUIREMENTS OF SPECIFICATION SECTION 31 23 23. ALL IMPORTED BACKFILL SHALL NOT EXCEED THE TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO) LISTED IN TITLE 35 OF ILAC, SECTION 742, APPENDIX B, TABLE A FOR THE PARAMETERS ON THE TARGET COMPOUND LIST ACCORDING TO TITLE 35 OF ILAC, SECTION 740, APPENDIX A. ALL APPROVED IMPORTED CLEAN FILL STOCKPILED ON SITE FOR FUTURE USE SHALL BE STOCKPILED OUTSIDE OF AREA A AND AREA B UNLESS STOCKPILED ON CONCRETE, ASPHALT, OR VISQUEEN/PLASTIC SHEETING.
17. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE A STORM WATER MANAGEMENT PLAN THAT SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS, AS WELL AS OTHER RELEVANT CONTRACT DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PUMPING PERMIT FROM THE CITY OF CHICAGO DEPARTMENT OF BUILDINGS AND DISCHARGE AUTHORIZATION/APPROVAL FROM METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRDGC) PRIOR TO DISCHARGE OF STORM WATER INTO CITY SEWER SYSTEM IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
18. SEE CIVIL DRAWINGS FOR UTILITY INSTALLATION AND REMOVAL DETAILS INCLUDING EXCAVATION WIDTH AND DEPTHS. IN THE PROPOSED UNDERGROUND UTILITIES AND SEWER TRENCHING AREAS, THE CONTRACTOR SHALL EXCAVATE SOIL TO A DEPTH REQUIRED BY THE NEW DEVELOPMENT. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF ALL SURROUNDING STREET, UNDERGROUND UTILITIES, BUILDINGS, AND STRUCTURES. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN A SAFE CONDITION UNTIL COMPLETION OF BACKFILLING PER SPECIFICATION SECTION 31 23 18.14.
20. CONTRACTOR SHALL NOT UTILIZE ANY SOIL AND FILL MATERIALS EXCAVATED FOR CONSTRUCTION AT ANY OTHER OFF–SITE PROPERTY.
21. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 23 18.13 (SOIL, FILL BACKFILL, AND CU STRUCTURAL SOIL, DEMOLITION DEBRIS REMOVAL), SECTION 31 23 18.14 (CCDD AND UNCONTAMINATED SOIL DISPOSAL), AND SECTION 01 56 11 (REGARDING DUST, FUME, AND ODOR CONTROL).
22. EROSION CONTROL AND APPLICABLE NPDES REQUIREMENTS ARE PROVIDED IN CONTRACT DRAWING C3–02.
23. TREE PROTECTION REQUIREMENTS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 13 00 AND ARE PROVIDED IN CONTRACT DRAWINGS L1–00 AND L2–00.



DETAIL A – UNDER GROUND UTILITY (TYPICAL)
SCALE: NTS



DETAIL B – PERMEABLE PAVER AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS



DETAIL C – LANDSCAPED AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4 th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4 th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

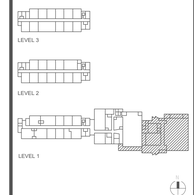
EDI

REVISIONS

NO.	DATE	DESCRIPTION
1	4/04/23	60% SD Draft
2	4/07/23	75% SD
3	4/28/23	100% CD
4	4/28/23	100% CD
5	5/04/23	IFB
6	5/19/23	IFB Addendum 1

DRAWN BY: EDI

SCALE: NTS



PBC Project Name: DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
SOIL MANAGEMENT AND REMEDIATION PLAN

Sheet NOT FOR CONSTRUCTION

SMP-01

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023
			Time Collected :	09:55	10:05	19:15	19:25
	Analyte	Construction Worker Route		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	---	---	< 0.066	< 0.073
	Benzene	2,300	2.2	< 0.0048	< 0.024	< 0.0044	< 0.0049
	Bromodichloromethane	2,000	3,000	---	---	< 0.0044	< 0.0049
	Bromoform	16,000	140	---	---	< 0.0044	< 0.0049
	Bromomethane	1,000	3.9	---	---	< 0.0088	< 0.0098
	2-Butanone	NC	NC	---	---	< 0.066	< 0.073
	Carbon disulfide	20,000	9.0	---	---	< 0.044	< 0.049
	Carbon tetrachloride	410	0.90	---	---	< 0.0044	< 0.0049
	Chlorobenzene	4,100	1.3	---	---	< 0.0044	< 0.0049
	Chloroethane	NC	NC	---	---	< 0.0088	< 0.0098
	Chloroform	2,000	0.76	---	---	< 0.0044	< 0.0049
	Chloromethane	NC	NC	---	---	< 0.0088	< 0.0098
	Dibromochloromethane	41,000	1,300	---	---	< 0.0044	< 0.0049
	1,1-Dichloroethane	200,000	130	---	---	< 0.0044	< 0.0049
	1,2-Dichloroethane	1,400	0.99	---	---	< 0.0044	< 0.0049
	1,1-Dichloroethene	10,000	3.0	---	---	< 0.0044	< 0.0049
	cis-1,2-Dichloroethene	20,000	1,200	---	---	< 0.0044	< 0.0049
	trans-1,2-Dichloroethene	41,000	3,100	---	---	< 0.0044	< 0.0049
	1,2-Dichloropropane	1,800	0.50	---	---	< 0.0044	< 0.0049
	cis-1,3-Dichloropropene	1,200	0.39	---	---	< 0.0018	< 0.0020
	trans-1,3-Dichloropropene	1,200	0.39	---	---	< 0.0018	< 0.0020
	Ethylbenzene	20,000	58	< 0.0048	< 0.024	< 0.0044	< 0.0049
	2-Hexanone	NC	NC	---	---	< 0.018	< 0.020
	4-Methyl-2-pentanone	NC	NC	---	---	< 0.018	< 0.020
	Methylene chloride	12,000	34	---	---	< 0.0088	< 0.0098
	Methyl tert-butyl ether	2,000	140	---	---	< 0.0044	< 0.0049
	Styrene	41,000	430	---	---	< 0.0044	< 0.0049
	1,1,2,2-Tetrachloroethane	NC	NC	---	---	< 0.0044	< 0.0049
	Tetrachloroethene	2,400	28	---	---	< 0.0044	< 0.0049
	Toluene	410,000	42	< 0.0048	< 0.024	< 0.0044	< 0.0049
	1,1,1-Trichloroethane	NC	1,200	---	---	< 0.0044	< 0.0049
	1,1,2-Trichloroethane	8,200	1,800	---	---	< 0.0044	< 0.0049
	Trichloroethene	1,200	12	---	---	< 0.0044	< 0.0049
	Vinyl chloride	170	1.1	---	---	< 0.0044	< 0.0049
	Xylenes, Total	41,000	5.6	< 0.015	< 0.073	< 0.013	< 0.015

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-005	22120464-006	22120464-003	22120464-004
			Client Sample ID :	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:15	09:25	08:50	09:00
	Analyte	Construction Worker Route		5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	---	---	---	---
	Benzene	2,300	2.2	< 0.026	< 0.022	< 0.0050	< 0.026
	Bromodichloromethane	2,000	3,000	---	---	---	---
	Bromoform	16,000	140	---	---	---	---
	Bromomethane	1,000	3.9	---	---	---	---
	2-Butanone	NC	NC	---	---	---	---
	Carbon disulfide	20,000	9.0	---	---	---	---
	Carbon tetrachloride	410	0.90	---	---	---	---
	Chlorobenzene	4,100	1.3	---	---	---	---
	Chloroethane	NC	NC	---	---	---	---
	Chloroform	2,000	0.76	---	---	---	---
	Chloromethane	NC	NC	---	---	---	---
	Dibromochloromethane	41,000	1,300	---	---	---	---
	1,1-Dichloroethane	200,000	130	---	---	---	---
	1,2-Dichloroethane	1,400	0.99	---	---	---	---
	1,1-Dichloroethene	10,000	3.0	---	---	---	---
	cis-1,2-Dichloroethene	20,000	1,200	---	---	---	---
	trans-1,2-Dichloroethene	41,000	3,100	---	---	---	---
	1,2-Dichloropropane	1,800	0.50	---	---	---	---
	cis-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	trans-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	Ethylbenzene	20,000	58	< 0.026	< 0.022	< 0.0050	< 0.026
	2-Hexanone	NC	NC	---	---	---	---
	4-Methyl-2-pentanone	NC	NC	---	---	---	---
	Methylene chloride	12,000	34	---	---	---	---
	Methyl tert-butyl ether	2,000	140	---	---	---	---
	Styrene	41,000	430	---	---	---	---
	1,1,2,2-Tetrachloroethane	NC	NC	---	---	---	---
	Tetrachloroethene	2,400	28	---	---	---	---
	Toluene	410,000	42	< 0.026	< 0.022	< 0.0050	< 0.026
	1,1,1-Trichloroethane	NC	1,200	---	---	---	---
	1,1,2-Trichloroethane	8,200	1,800	---	---	---	---
	Trichloroethene	1,200	12	---	---	---	---
	Vinyl chloride	170	1.1	---	---	---	---
	Xylenes, Total	41,000	5.6	< 0.077	< 0.067	< 0.015	< 0.077

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010
			Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	08:25	08:35	10:25	10:35
	Analyte	Construction Worker Route		2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	---	---	---	---
	Benzene	2,300	2.2	< 0.024	< 0.023	< 0.0051	< 0.0063
	Bromodichloromethane	2,000	3,000	---	---	---	---
	Bromoform	16,000	140	---	---	---	---
	Bromomethane	1,000	3.9	---	---	---	---
	2-Butanone	NC	NC	---	---	---	---
	Carbon disulfide	20,000	9.0	---	---	---	---
	Carbon tetrachloride	410	0.90	---	---	---	---
	Chlorobenzene	4,100	1.3	---	---	---	---
	Chloroethane	NC	NC	---	---	---	---
	Chloroform	2,000	0.76	---	---	---	---
	Chloromethane	NC	NC	---	---	---	---
	Dibromochloromethane	41,000	1,300	---	---	---	---
	1,1-Dichloroethane	200,000	130	---	---	---	---
	1,2-Dichloroethane	1,400	0.99	---	---	---	---
	1,1-Dichloroethene	10,000	3.0	---	---	---	---
	cis-1,2-Dichloroethene	20,000	1,200	---	---	---	---
	trans-1,2-Dichloroethene	41,000	3,100	---	---	---	---
	1,2-Dichloropropane	1,800	0.50	---	---	---	---
	cis-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	trans-1,3-Dichloropropene	1,200	0.39	---	---	---	---
	Ethylbenzene	20,000	58	< 0.024	< 0.023	< 0.0051	< 0.0063
	2-Hexanone	NC	NC	---	---	---	---
	4-Methyl-2-pentanone	NC	NC	---	---	---	---
	Methylene chloride	12,000	34	---	---	---	---
	Methyl tert-butyl ether	2,000	140	---	---	---	---
	Styrene	41,000	430	---	---	---	---
	1,1,2,2-Tetrachloroethane	NC	NC	---	---	---	---
	Tetrachloroethene	2,400	28	---	---	---	---
	Toluene	410,000	42	< 0.024	< 0.023	< 0.0051	< 0.0063
	1,1,1-Trichloroethane	NC	1,200	---	---	---	---
	1,1,2-Trichloroethane	8,200	1,800	---	---	---	---
	Trichloroethene	1,200	12	---	---	---	---
	Vinyl chloride	170	1.1	---	---	---	---
	Xylenes, Total	41,000	5.6	< 0.071	< 0.070	< 0.015	< 0.018

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-011	23030736-012	22120464-011	22120464-012
			Client Sample ID :	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
			Date Collected :	03/21/2023	03/21/2023	12/15/2022	12/15/2022
			Time Collected :	16:50	17:00	10:50	11:00
	Analyte	Construction Worker Route		4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.10	< 0.075	---	---
	Benzene	2,300	2.2	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	Bromodichloromethane	2,000	3,000	< 0.0067	< 0.0050	---	---
	Bromoform	16,000	140	< 0.0067	< 0.0050	---	---
	Bromomethane	1,000	3.9	< 0.013	< 0.010	---	---
	2-Butanone	NC	NC	< 0.10	< 0.075	---	---
	Carbon disulfide	20,000	9.0	< 0.067	< 0.050	---	---
	Carbon tetrachloride	410	0.90	< 0.0067	< 0.0050	---	---
	Chlorobenzene	4,100	1.3	< 0.0067	< 0.0050	---	---
	Chloroethane	NC	NC	< 0.013	< 0.010	---	---
	Chloroform	2,000	0.76	< 0.0067	< 0.0050	---	---
	Chloromethane	NC	NC	< 0.013	< 0.010	---	---
	Dibromochloromethane	41,000	1,300	< 0.0067	< 0.0050	---	---
	1,1-Dichloroethane	200,000	130	< 0.0067	< 0.0050	---	---
	1,2-Dichloroethane	1,400	0.99	< 0.0067	< 0.0050	---	---
	1,1-Dichloroethene	10,000	3.0	< 0.0067	< 0.0050	---	---
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0067	< 0.0050	---	---
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0067	< 0.0050	---	---
	1,2-Dichloropropane	1,800	0.50	< 0.0067	< 0.0050	---	---
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0027	< 0.0020	---	---
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0027	< 0.0020	---	---
	Ethylbenzene	20,000	58	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	2-Hexanone	NC	NC	< 0.027	< 0.020	---	---
	4-Methyl-2-pentanone	NC	NC	< 0.027	< 0.020	---	---
	Methylene chloride	12,000	34	< 0.013	< 0.010	---	---
	Methyl tert-butyl ether	2,000	140	< 0.0067	< 0.0050	---	---
	Styrene	41,000	430	< 0.0067	< 0.0050	---	---
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0067	< 0.0050	---	---
	Tetrachloroethene	2,400	28	< 0.0067	< 0.0050	---	---
	Toluene	410,000	42	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	1,1,1-Trichloroethane	NC	1,200	< 0.0067	< 0.0050	---	---
	1,1,2-Trichloroethane	8,200	1,800	< 0.0067	< 0.0050	---	---
	Trichloroethene	1,200	12	< 0.0067	< 0.0050	---	---
	Vinyl chloride	170	1.1	< 0.0067	< 0.0050	---	---
	Xylenes, Total	41,000	5.6	< 0.020	< 0.015	< 0.018	< 0.015

Legend:

Bold Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.

--- Not analyzed

NC No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002
			Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:25	18:30	19:20	19:25
	Analyte	Construction Worker Route		2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.072	< 0.068	< 0.077	< 0.067
	Benzene	2,300	2.2	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Bromodichloromethane	2,000	3,000	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Bromoform	16,000	140	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Bromomethane	1,000	3.9	< 0.0095	< 0.0091	< 0.010	< 0.0089
	2-Butanone	NC	NC	< 0.072	< 0.068	< 0.077	< 0.067
	Carbon disulfide	20,000	9.0	< 0.048	< 0.045	< 0.051	< 0.045
	Carbon tetrachloride	410	0.90	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Chlorobenzene	4,100	1.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Chloroethane	NC	NC	< 0.0095	< 0.0091	< 0.010	< 0.0089
	Chloroform	2,000	0.76	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Chloromethane	NC	NC	< 0.0095	< 0.0091	< 0.010	< 0.0089
	Dibromochloromethane	41,000	1,300	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1-Dichloroethane	200,000	130	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,2-Dichloroethane	1,400	0.99	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1-Dichloroethene	10,000	3.0	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,2-Dichloropropane	1,800	0.50	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0019	< 0.0018	< 0.0021	< 0.0018
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0019	< 0.0018	< 0.0021	< 0.0018
	Ethylbenzene	20,000	58	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	2-Hexanone	NC	NC	< 0.019	< 0.018	< 0.021	< 0.018
	4-Methyl-2-pentanone	NC	NC	< 0.019	< 0.018	< 0.021	< 0.018
	Methylene chloride	12,000	34	< 0.0095	< 0.0091	< 0.010	< 0.0089
	Methyl tert-butyl ether	2,000	140	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Styrene	41,000	430	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Tetrachloroethene	2,400	28	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Toluene	410,000	42	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1,1-Trichloroethane	NC	1,200	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	1,1,2-Trichloroethane	8,200	1,800	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Trichloroethene	1,200	12	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Vinyl chloride	170	1.1	< 0.0048	< 0.0045	< 0.0051	< 0.0045
	Xylenes, Total	41,000	5.6	< 0.014	< 0.014	< 0.015	< 0.013

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-003	23030736-004	23030736-005	23030736-006
			Client Sample ID :	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:00	19:10	17:10	17:15
	Analyte	Construction Worker Route		1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	0.077	< 0.066	< 0.066	< 0.072
	Benzene	2,300	2.2	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Bromodichloromethane	2,000	3,000	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Bromoform	16,000	140	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Bromomethane	1,000	3.9	< 0.010	< 0.0089	< 0.0088	< 0.0095
	2-Butanone	NC	NC	< 0.076	< 0.066	< 0.066	< 0.072
	Carbon disulfide	20,000	9.0	< 0.051	< 0.044	< 0.044	< 0.048
	Carbon tetrachloride	410	0.90	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Chlorobenzene	4,100	1.3	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Chloroethane	NC	NC	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Chloroform	2,000	0.76	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Chloromethane	NC	NC	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Dibromochloromethane	41,000	1,300	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1-Dichloroethane	200,000	130	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,2-Dichloroethane	1,400	0.99	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1-Dichloroethene	10,000	3.0	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,2-Dichloropropane	1,800	0.50	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0020	< 0.0018	< 0.0018	< 0.0019
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0020	< 0.0018	< 0.0018	< 0.0019
	Ethylbenzene	20,000	58	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	2-Hexanone	NC	NC	< 0.020	< 0.018	< 0.018	< 0.019
	4-Methyl-2-pentanone	NC	NC	< 0.020	< 0.018	< 0.018	< 0.019
	Methylene chloride	12,000	34	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Methyl tert-butyl ether	2,000	140	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Styrene	41,000	430	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Tetrachloroethene	2,400	28	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Toluene	410,000	42	< 0.0051	0.0047	0.0060	< 0.0048
	1,1,1-Trichloroethane	NC	1,200	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1,2-Trichloroethane	8,200	1,800	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Trichloroethene	1,200	12	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Vinyl chloride	170	1.1	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Xylenes, Total	41,000	5.6	< 0.015	< 0.013	< 0.013	< 0.014

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-007	23030736-008	23030736-009	23030736-010
			Client Sample ID :	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	17:40	17:50	19:40	19:45
	Analyte	Construction Worker Route		3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.080	< 0.068	< 0.077	< 0.076
	Benzene	2,300	2.2	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Bromodichloromethane	2,000	3,000	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Bromoform	16,000	140	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Bromomethane	1,000	3.9	< 0.011	< 0.0091	< 0.010	< 0.010
	2-Butanone	NC	NC	< 0.080	< 0.068	< 0.077	< 0.076
	Carbon disulfide	20,000	9.0	< 0.053	< 0.045	< 0.051	< 0.050
	Carbon tetrachloride	410	0.90	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Chlorobenzene	4,100	1.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Chloroethane	NC	NC	< 0.011	< 0.0091	< 0.010	< 0.010
	Chloroform	2,000	0.76	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Chloromethane	NC	NC	< 0.011	< 0.0091	< 0.010	< 0.010
	Dibromochloromethane	41,000	1,300	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1-Dichloroethane	200,000	130	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,2-Dichloroethane	1,400	0.99	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1-Dichloroethene	10,000	3.0	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,2-Dichloropropane	1,800	0.50	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0021	< 0.0018	< 0.0020	< 0.0020
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0021	< 0.0018	< 0.0020	< 0.0020
	Ethylbenzene	20,000	58	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	2-Hexanone	NC	NC	< 0.021	< 0.018	< 0.020	< 0.020
	4-Methyl-2-pentanone	NC	NC	< 0.021	< 0.018	< 0.020	< 0.020
	Methylene chloride	12,000	34	< 0.011	< 0.0091	< 0.010	< 0.010
	Methyl tert-butyl ether	2,000	140	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Styrene	41,000	430	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Tetrachloroethene	2,400	28	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Toluene	410,000	42	< 0.0053	0.0047	< 0.0051	< 0.0050
	1,1,1-Trichloroethane	NC	1,200	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	1,1,2-Trichloroethane	8,200	1,800	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Trichloroethene	1,200	12	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Vinyl chloride	170	1.1	< 0.0053	< 0.0045	< 0.0051	< 0.0050
	Xylenes, Total	41,000	5.6	< 0.016	< 0.014	< 0.015	< 0.015

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-001	23030838-002	23030787-001	23030787-002
			Client Sample ID :	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
			Date Collected :	03/23/2023	03/23/2023	03/22/2023	03/22/2023
			Time Collected :	16:55	17:05	21:00	21:10
	Analyte	Construction Worker Route		3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation				
VOCs	Acetone	NC	100,000	< 0.081	< 0.071	< 0.077	< 0.067
	Benzene	2,300	2.2	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Bromodichloromethane	2,000	3,000	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Bromoform	16,000	140	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Bromomethane	1,000	3.9	< 0.011	< 0.0094	< 0.010	< 0.0088
	2-Butanone	NC	NC	< 0.081	< 0.071	< 0.077	< 0.067
	Carbon disulfide	20,000	9.0	< 0.054	< 0.047	< 0.051	< 0.044
	Carbon tetrachloride	410	0.90	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Chlorobenzene	4,100	1.3	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Chloroethane	NC	NC	< 0.011	< 0.0094	< 0.010	< 0.0088
	Chloroform	2,000	0.76	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Chloromethane	NC	NC	< 0.011	< 0.0094	< 0.010	< 0.0088
	Dibromochloromethane	41,000	1,300	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1-Dichloroethane	200,000	130	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,2-Dichloroethane	1,400	0.99	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1-Dichloroethene	10,000	3.0	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,2-Dichloropropane	1,800	0.50	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019	< 0.0020	< 0.0018
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019	< 0.0020	< 0.0018
	Ethylbenzene	20,000	58	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	2-Hexanone	NC	NC	< 0.022	< 0.019	< 0.020	< 0.018
	4-Methyl-2-pentanone	NC	NC	< 0.022	< 0.019	< 0.020	< 0.018
	Methylene chloride	12,000	34	< 0.011	< 0.0094	< 0.010	< 0.0088
	Methyl tert-butyl ether	2,000	140	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Styrene	41,000	430	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Tetrachloroethene	2,400	28	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Toluene	410,000	42	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,1-Trichloroethane	NC	1,200	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,2-Trichloroethane	8,200	1,800	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Trichloroethene	1,200	12	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Vinyl chloride	170	1.1	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Xylenes, Total	41,000	5.6	< 0.016	< 0.014	< 0.015	< 0.013

Legend:

Bold Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.

--- Not analyzed

NC No evaluation criteria available

Table 2.a. - VOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-003	23030838-004
			Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023
			Time Collected :	17:50	18:25
	Analyte	Construction Worker Route		3-4' bgs	7-8' bgs
		Ingestion	Inhalation		
VOCs	Acetone	NC	100,000	< 0.082	< 0.071
	Benzene	2,300	2.2	< 0.0054	< 0.0047
	Bromodichloromethane	2,000	3,000	< 0.0054	< 0.0047
	Bromoform	16,000	140	< 0.0054	< 0.0047
	Bromomethane	1,000	3.9	< 0.011	< 0.0094
	2-Butanone	NC	NC	< 0.082	< 0.071
	Carbon disulfide	20,000	9.0	< 0.054	< 0.047
	Carbon tetrachloride	410	0.90	< 0.0054	< 0.0047
	Chlorobenzene	4,100	1.3	< 0.0054	< 0.0047
	Chloroethane	NC	NC	< 0.011	< 0.0094
	Chloroform	2,000	0.76	< 0.0054	< 0.0047
	Chloromethane	NC	NC	< 0.011	< 0.0094
	Dibromochloromethane	41,000	1,300	< 0.0054	< 0.0047
	1,1-Dichloroethane	200,000	130	< 0.0054	< 0.0047
	1,2-Dichloroethane	1,400	0.99	< 0.0054	< 0.0047
	1,1-Dichloroethene	10,000	3.0	< 0.0054	< 0.0047
	cis-1,2-Dichloroethene	20,000	1,200	< 0.0054	< 0.0047
	trans-1,2-Dichloroethene	41,000	3,100	< 0.0054	< 0.0047
	1,2-Dichloropropane	1,800	0.50	< 0.0054	< 0.0047
	cis-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019
	trans-1,3-Dichloropropene	1,200	0.39	< 0.0022	< 0.0019
	Ethylbenzene	20,000	58	< 0.0054	< 0.0047
	2-Hexanone	NC	NC	< 0.022	< 0.019
	4-Methyl-2-pentanone	NC	NC	< 0.022	< 0.019
	Methylene chloride	12,000	34	< 0.011	< 0.0094
	Methyl tert-butyl ether	2,000	140	< 0.0054	< 0.0047
	Styrene	41,000	430	< 0.0054	< 0.0047
	1,1,2,2-Tetrachloroethane	NC	NC	< 0.0054	< 0.0047
	Tetrachloroethene	2,400	28	< 0.0054	< 0.0047
	Toluene	410,000	42	< 0.0054	< 0.0047
	1,1,1-Trichloroethane	NC	1,200	< 0.0054	< 0.0047
	1,1,2-Trichloroethane	8,200	1,800	< 0.0054	< 0.0047
	Trichloroethene	1,200	12	< 0.0054	< 0.0047
	Vinyl chloride	170	1.1	< 0.0054	< 0.0047
	Xylenes, Total	41,000	5.6	< 0.016	< 0.014

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-005	23030838-006	23030736-011	23030736-012	23030736-013
			Client Sample ID :	SB-01A (4-5)	SB-01A (7-8)	SB-05D (4-5)	SB-05D (5-6)	SB-06A (2-3)
			Date Collected :	03/23/2023	03/23/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	19:15	19:25	16:50	17:00	18:25
	Analyte	Construction Worker Route		4-5' bgs	7-8' bgs	4-5' bgs	5-6' bgs	2-3' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.39	< 0.40	< 0.41	< 0.40	< 0.38
	Benzidine	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	Benzoic acid	820,000	NC	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Benzyl alcohol	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Bis(2-chloroethoxy)methane	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Bis(2-chloroethyl)ether	75	0.66	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	4-Bromophenyl phenyl ether	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Butyl benzyl phthalate	410,000	930	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Carbazole	6,200	NC	< 0.20	< 0.20	0.79	< 0.21	< 0.19
	4-Chloroaniline	820	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Chloro-3-methylphenol	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	2-Chloronaphthalene	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Chlorophenol	10,000	53,000	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Chlorophenyl phenyl ether	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Dibenzofuran	NC	NC	< 0.20	< 0.20	0.44	< 0.21	< 0.19
	1,2-Dichlorobenzene	18,000	310	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	1,3-Dichlorobenzene	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	1,4-Dichlorobenzene	NC	340	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	3,3´-Dichlorobenzidine	280	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2,4-Dichlorophenol	610	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Diethyl phthalate	1,000,000	2,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	2,4-Dimethylphenol	41,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Dimethyl phthalate	NC	NC	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	2,4-Dinitrophenol	410	NC	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	2,4-Dinitrotoluene	180	NC	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	2,6-Dinitrotoluene	180	NC	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	Di-n-butyl phthalate	200,000	2,300	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Di-n-octyl phthalate	4,100	10,000	< 0.98	< 1.0	< 1.0	< 1.0	< 0.95
	Hexachlorobenzene	78	2.6	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Hexachlorobutadiene	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Hexachlorocyclopentadiene	14,000	1.1	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Hexachloroethane	2,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Isophorone	410,000	4,600	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Methylnaphthalene	NC	NC	< 0.20	< 0.20	0.25	< 0.21	< 0.19
	2-Methylphenol	100,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Methylphenol	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Nitroaniline	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	3-Nitroaniline	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Nitroaniline	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2-Nitrophenol	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	4-Nitrophenol	NC	NC	< 0.39	< 0.40	< 0.40	< 0.40	< 0.38
	Nitrobenzene	1,000	9.4	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	N-Nitrosodi-n-propylamine	18	NC	< 0.039	< 0.040	< 0.040	< 0.040	< 0.038
	N-Nitrosodimethylamine	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	N-Nitrosodiphenylamine	25,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Pentachlorophenol	520	NC	< 0.079	< 0.081	< 0.082	< 0.081	< 0.077
	Phenol	61,000	NC	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	Pyridine	NC	NC	< 0.79	< 0.81	< 0.82	< 0.81	< 0.77
	1,2,4-Trichlorobenzene	2,000	920	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2,4,5-Trichlorophenol	200,000	---	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19
	2,4,6-Trichlorophenol	11,000	540	< 0.20	< 0.20	< 0.21	< 0.21	< 0.19

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004
			Client Sample ID :	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:30	19:20	19:25	19:00	19:10
	Analyte	Construction Worker Route		11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.40	< 0.39	< 0.39	< 0.38	< 0.41
	Benzidine	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	Benzoic acid	820,000	NC	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Benzyl alcohol	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Bis(2-chloroethoxy)methane	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Bis(2-chloroethyl)ether	75	0.66	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	4-Bromophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Butyl benzyl phthalate	410,000	930	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Carbazole	6,200	NC	< 0.21	0.31	< 0.20	0.31	< 0.21
	4-Chloroaniline	820	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Chloro-3-methylphenol	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	2-Chloronaphthalene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Chlorophenol	10,000	53,000	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Chlorophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Dibenzofuran	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	1,2-Dichlorobenzene	18,000	310	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	1,3-Dichlorobenzene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	1,4-Dichlorobenzene	NC	340	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	3,3´-Dichlorobenzidine	280	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2,4-Dichlorophenol	610	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Diethyl phthalate	1,000,000	2,000	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	2,4-Dimethylphenol	41,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Dimethyl phthalate	NC	NC	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	2,4-Dinitrophenol	410	NC	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	2,4-Dinitrotoluene	180	NC	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	2,6-Dinitrotoluene	180	NC	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	Di-n-butyl phthalate	200,000	2,300	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Di-n-octyl phthalate	4,100	10,000	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0
	Hexachlorobenzene	78	2.6	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Hexachlorobutadiene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Hexachlorocyclopentadiene	14,000	1.1	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Hexachloroethane	2,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Isophorone	410,000	4,600	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Methylnaphthalene	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Methylphenol	100,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Methylphenol	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	3-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2-Nitrophenol	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	4-Nitrophenol	NC	NC	< 0.40	< 0.38	< 0.39	< 0.37	< 0.41
	Nitrobenzene	1,000	9.4	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	N-Nitrosodi-n-propylamine	18	NC	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041
	N-Nitrosodimethylamine	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	N-Nitrosodiphenylamine	25,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Pentachlorophenol	520	NC	< 0.081	< 0.078	< 0.079	< 0.076	< 0.083
	Phenol	61,000	NC	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	Pyridine	NC	NC	< 0.81	< 0.78	< 0.79	< 0.76	< 0.83
	1,2,4-Trichlorobenzene	2,000	920	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2,4,5-Trichlorophenol	200,000	---	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21
	2,4,6-Trichlorophenol	11,000	540	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-005	23030736-006	23030736-007	23030736-008	23030736-009
			Client Sample ID :	SB-09 (2-3)	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	17:10	17:15	17:40	17:50	19:40
	Analyte	Construction Worker Route		2-3' bgs	14-15' bgs	3-4' bgs	6-7' bgs	0-1' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.37	< 0.42	< 0.39	< 0.41	< 0.39
	Benzidine	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	Benzoic acid	820,000	NC	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Benzyl alcohol	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Bis(2-chloroethoxy)methane	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Bis(2-chloroethyl)ether	75	0.66	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	4-Bromophenyl phenyl ether	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Butyl benzyl phthalate	410,000	930	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Carbazole	6,200	NC	0.29	< 0.21	< 0.20	< 0.21	0.34
	4-Chloroaniline	820	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Chloro-3-methylphenol	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	2-Chloronaphthalene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Chlorophenol	10,000	53,000	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Chlorophenyl phenyl ether	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Dibenzofuran	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	1,2-Dichlorobenzene	18,000	310	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	1,3-Dichlorobenzene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	1,4-Dichlorobenzene	NC	340	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	3,3´-Dichlorobenzidine	280	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2,4-Dichlorophenol	610	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Diethyl phthalate	1,000,000	2,000	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	2,4-Dimethylphenol	41,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Dimethyl phthalate	NC	NC	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	2,4-Dinitrophenol	410	NC	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	2,4-Dinitrotoluene	180	NC	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	2,6-Dinitrotoluene	180	NC	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	Di-n-butyl phthalate	200,000	2,300	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Di-n-octyl phthalate	4,100	10,000	< 0.92	< 1.0	< 0.98	< 1.0	< 0.96
	Hexachlorobenzene	78	2.6	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Hexachlorobutadiene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Hexachlorocyclopentadiene	14,000	1.1	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Hexachloroethane	2,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Isophorone	410,000	4,600	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Methylnaphthalene	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Methylphenol	100,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Methylphenol	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Nitroaniline	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	3-Nitroaniline	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Nitroaniline	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2-Nitrophenol	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	4-Nitrophenol	NC	NC	< 0.37	< 0.41	< 0.39	< 0.41	< 0.38
	Nitrobenzene	1,000	9.4	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	N-Nitrosodi-n-propylamine	18	NC	< 0.037	< 0.041	< 0.039	< 0.041	< 0.038
	N-Nitrosodimethylamine	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	N-Nitrosodiphenylamine	25,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Pentachlorophenol	520	NC	< 0.075	< 0.084	< 0.079	< 0.083	< 0.078
	Phenol	61,000	NC	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	Pyridine	NC	NC	< 0.75	< 0.84	< 0.79	< 0.83	< 0.78
	1,2,4-Trichlorobenzene	2,000	920	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2,4,5-Trichlorophenol	200,000	---	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20
	2,4,6-Trichlorophenol	11,000	540	< 0.19	< 0.21	< 0.20	< 0.21	< 0.20

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
			Client Sample ID :	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
			Date Collected :	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
			Time Collected :	19:45	16:55	17:05	21:00	21:10
	Analyte	Construction Worker Route		6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation					
SVOCs	Aniline	NC	NC	< 0.40	< 0.40	< 0.42	< 0.41	< 0.39
	Benzidine	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	Benzoic acid	820,000	NC	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Benzyl alcohol	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Bis(2-chloroethoxy)methane	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Bis(2-chloroethyl)ether	75	0.66	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	4-Bromophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Butyl benzyl phthalate	410,000	930	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Carbazole	6,200	NC	< 0.21	0.88	< 0.21	< 0.21	< 0.20
	4-Chloroaniline	820	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Chloro-3-methylphenol	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	2-Chloronaphthalene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Chlorophenol	10,000	53,000	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Chlorophenyl phenyl ether	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Dibenzofuran	NC	NC	< 0.21	0.56	< 0.21	< 0.21	< 0.20
	1,2-Dichlorobenzene	18,000	310	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	1,3-Dichlorobenzene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	1,4-Dichlorobenzene	NC	340	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	3,3´-Dichlorobenzidine	280	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4-Dichlorophenol	610	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Diethyl phthalate	1,000,000	2,000	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	2,4-Dimethylphenol	41,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Dimethyl phthalate	NC	NC	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	2,4-Dinitrophenol	410	NC	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	2,4-Dinitrotoluene	180	NC	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	2,6-Dinitrotoluene	180	NC	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	Di-n-butyl phthalate	200,000	2,300	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Di-n-octyl phthalate	4,100	10,000	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
	Hexachlorobenzene	78	2.6	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Hexachlorobutadiene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Hexachlorocyclopentadiene	14,000	1.1	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Hexachloroethane	2,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Isophorone	410,000	4,600	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Methylnaphthalene	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Methylphenol	100,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Methylphenol	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	3-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Nitroaniline	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2-Nitrophenol	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	4-Nitrophenol	NC	NC	< 0.40	< 0.39	< 0.41	< 0.41	< 0.39
	Nitrobenzene	1,000	9.4	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	N-Nitrosodi-n-propylamine	18	NC	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	N-Nitrosodimethylamine	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	N-Nitrosodiphenylamine	25,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Pentachlorophenol	520	NC	< 0.081	< 0.080	< 0.084	< 0.081	< 0.079
	Phenol	61,000	NC	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Pyridine	NC	NC	< 0.81	< 0.80	< 0.84	< 0.81	< 0.79
	1,2,4-Trichlorobenzene	2,000	920	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4,5-Trichlorophenol	200,000	---	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4,6-Trichlorophenol	11,000	540	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.b. - SVOCs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-003	23030838-004
			Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023
			Time Collected :	17:50	18:25
	Analyte	Construction Worker Route		3-4' bgs	7-8' bgs
		Ingestion	Inhalation		
SVOCs	Aniline	NC	NC	< 0.39	< 0.40
	Benzidine	NC	NC	< 0.39	< 0.40
	Benzoic acid	820,000	NC	< 0.97	< 0.99
	Benzyl alcohol	NC	NC	< 0.20	< 0.20
	Bis(2-chloroethoxy)methane	NC	NC	< 0.20	< 0.20
	Bis(2-chloroethyl)ether	75	0.66	< 0.20	< 0.20
	Bis(2-ethylhexyl)phthalate	4,100	31,000	< 0.97	< 0.99
	4-Bromophenyl phenyl ether	NC	NC	< 0.20	< 0.20
	Butyl benzyl phthalate	410,000	930	< 0.97	< 0.99
	Carbazole	6,200	NC	< 0.20	< 0.20
	4-Chloroaniline	820	NC	< 0.20	< 0.20
	4-Chloro-3-methylphenol	NC	NC	< 0.39	< 0.40
	2-Chloronaphthalene	NC	NC	< 0.20	< 0.20
	2-Chlorophenol	10,000	53,000	< 0.20	< 0.20
	4-Chlorophenyl phenyl ether	NC	NC	< 0.20	< 0.20
	Dibenzofuran	NC	NC	< 0.20	< 0.20
	1,2-Dichlorobenzene	18,000	310	< 0.20	< 0.20
	1,3-Dichlorobenzene	NC	NC	< 0.20	< 0.20
	1,4-Dichlorobenzene	NC	340	< 0.20	< 0.20
	3,3´-Dichlorobenzidine	280	NC	< 0.20	< 0.20
	2,4-Dichlorophenol	610	NC	< 0.20	< 0.20
	Diethyl phthalate	1,000,000	2,000	< 0.97	< 0.99
	2,4-Dimethylphenol	41,000	NC	< 0.20	< 0.20
	Dimethyl phthalate	NC	NC	< 0.97	< 0.99
	4,6-Dinitro-2-methylphenol	NC	NC	< 0.39	< 0.40
	2,4-Dinitrophenol	410	NC	< 0.97	< 0.99
	2,4-Dinitrotoluene	180	NC	< 0.039	< 0.040
	2,6-Dinitrotoluene	180	NC	< 0.039	< 0.040
	Di-n-butyl phthalate	200,000	2,300	< 0.97	< 0.99
	Di-n-octyl phthalate	4,100	10,000	< 0.97	< 0.99
	Hexachlorobenzene	78	2.6	< 0.20	< 0.20
	Hexachlorobutadiene	NC	NC	< 0.20	< 0.20
	Hexachlorocyclopentadiene	14,000	1.1	< 0.20	< 0.20
	Hexachloroethane	2,000	NC	< 0.20	< 0.20
	Isophorone	410,000	4,600	< 0.20	< 0.20
	2-Methylnaphthalene	NC	NC	< 0.20	< 0.20
	2-Methylphenol	100,000	NC	< 0.20	< 0.20
	4-Methylphenol	NC	NC	< 0.20	< 0.20
	2-Nitroaniline	NC	NC	< 0.20	< 0.20
	3-Nitroaniline	NC	NC	< 0.20	< 0.20
	4-Nitroaniline	NC	NC	< 0.20	< 0.20
	2-Nitrophenol	NC	NC	< 0.20	< 0.20
	4-Nitrophenol	NC	NC	< 0.39	< 0.40
	Nitrobenzene	1,000	9.4	< 0.039	< 0.040
	N-Nitrosodi-n-propylamine	18	NC	< 0.039	< 0.040
	N-Nitrosodimethylamine	NC	NC	< 0.20	< 0.20
	N-Nitrosodiphenylamine	25,000	NC	< 0.20	< 0.20
	2, 2'-oxybis(1-Chloropropane)	NC	NC	< 0.20	< 0.20
	Pentachlorophenol	520	NC	< 0.079	< 0.080
	Phenol	61,000	NC	< 0.20	< 0.20
	Pyridine	NC	NC	< 0.79	< 0.80
	1,2,4-Trichlorobenzene	2,000	920	< 0.20	< 0.20
	2,4,5-Trichlorophenol	200,000	---	< 0.20	< 0.20
	2,4,6-Trichlorophenol	11,000	540	< 0.20	< 0.20

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50
	Analyte	Construction Worker Route		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs
		Ingestion	Inhalation							
PNAs	Acenaphthene	120,000	NC	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Acenaphthylene	NC	NC	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Anthracene	610,000	NC	< 0.038	< 0.040	0.097	< 0.040	< 0.040	< 0.041	< 0.039
	Benz(a)anthracene	170	NC	0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(a)pyrene	17	NC	0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(b)fluoranthene	170	NC	0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(g,h,i)perylene	NC	NC	0.20	< 0.040	0.25	< 0.040	< 0.040	< 0.041	< 0.039
	Benzo(k)fluoranthene	1,700	NC	0.28	< 0.040	0.33	< 0.040	< 0.040	< 0.041	< 0.039
	Chrysene	17,000	NC	0.28	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039
	Dibenz(a,h)anthracene	17	NC	0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039
	Fluoranthene	82,000	NC	0.47	< 0.040	0.76	< 0.040	< 0.040	< 0.041	< 0.039
	Fluorene	82,000	NC	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Indeno(1,2,3-cd)pyrene	170	NC	0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039
	Naphthalene	4,100	1.8	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039
	Phenanthrene	NC	NC	0.14	< 0.040	0.37	< 0.040	< 0.040	< 0.041	< 0.039
	Pyrene	61,000	NC	0.47	< 0.040	0.69	< 0.040	< 0.040	< 0.041	< 0.039

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-004	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011
			Client Sample ID :	SB-03 (7'-8')	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')
			Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022
			Time Collected :	09:00	08:25	08:35	10:25	10:35	16:50	17:00	10:50
	Analyte	Construction Worker Route		7-8' bgs	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs
		Ingestion	Inhalation								
PNAs	Acenaphthene	120,000	NC	< 0.039	< 0.041	< 0.040	0.53	< 0.040	0.72	< 0.040	0.42
	Acenaphthylene	NC	NC	< 0.039	< 0.041	< 0.040	< 0.037	< 0.040	0.91	< 0.040	0.32
	Anthracene	610,000	NC	< 0.039	0.044	< 0.040	1.0	< 0.040	3.1	< 0.040	1.7
	Benz(a)anthracene	170	NC	< 0.039	0.14	< 0.040	2.1	< 0.040	6.9	< 0.040	5.8
	Benzo(a)pyrene	17	NC	< 0.039	0.13	< 0.040	2.3	< 0.040	7.0	< 0.040	5.8
	Benzo(b)fluoranthene	170	NC	< 0.039	0.11	< 0.040	2.1	< 0.040	4.8	< 0.040	4.4
	Benzo(g,h,i)perylene	NC	NC	< 0.039	0.073	< 0.040	1.5	< 0.040	4.9	< 0.040	3.1
	Benzo(k)fluoranthene	1,700	NC	< 0.039	0.12	< 0.040	1.8	< 0.040	6.6	< 0.040	3.8
	Chrysene	17,000	NC	< 0.039	0.14	< 0.040	2.3	< 0.040	7.6	< 0.040	5.6
	Dibenz(a,h)anthracene	17	NC	< 0.039	< 0.041	< 0.040	0.68	< 0.040	2.3	< 0.040	1.5
	Fluoranthene	82,000	NC	< 0.039	0.29	< 0.040	4.5	< 0.040	15	< 0.040	12
	Fluorene	82,000	NC	< 0.039	< 0.041	< 0.040	0.49	< 0.040	1.1	< 0.040	0.56
	Indeno(1,2,3-cd)pyrene	170	NC	< 0.039	0.074	< 0.040	1.4	< 0.040	4.3	< 0.040	2.8
	Naphthalene	4,100	1.8	< 0.039	< 0.041	< 0.040	0.81	< 0.040	0.33	< 0.040	0.19
	Phenanthrene	NC	NC	< 0.039	0.22	< 0.040	4.2	< 0.040	12	< 0.040	8.0
	Pyrene	61,000	NC	< 0.039	0.24	< 0.040	3.7	< 0.040	15	< 0.040	11

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-012	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005
			Client Sample ID :	SB-06 (11'-12')	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)
			Date Collected :	12/15/2022	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	11:00	18:25	18:30	19:20	19:25	19:00	19:10	17:10
	Analyte	Construction Worker Route		11-12' bgs	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs
		Ingestion	Inhalation								
PNAs	Acenaphthene	120,000	NC	< 0.040	0.060	< 0.040	0.22	< 0.039	0.19	< 0.041	0.19
	Acenaphthylene	NC	NC	< 0.040	0.20	< 0.040	0.30	< 0.039	0.15	< 0.041	2.1
	Anthracene	610,000	NC	< 0.040	0.40	< 0.040	1.1	< 0.039	0.65	< 0.041	3.5
	Benz(a)anthracene	170	NC	< 0.040	2.0	< 0.040	4.2	< 0.039	2.2	< 0.041	14
	Benzo(a)pyrene	17	NC	< 0.040	2.1	< 0.040	4.1	< 0.039	2.3	< 0.041	14
	Benzo(b)fluoranthene	170	NC	< 0.040	1.6	< 0.040	3.7	< 0.039	2.1	< 0.041	11
	Benzo(g,h,i)perylene	NC	NC	< 0.040	1.1	< 0.040	2.2	< 0.039	1.3	< 0.041	8.2
	Benzo(k)fluoranthene	1,700	NC	< 0.040	1.8	< 0.040	3.4	< 0.039	1.8	< 0.041	11
	Chrysene	17,000	NC	< 0.040	1.9	< 0.040	4.5	< 0.039	2.4	< 0.041	13
	Dibenz(a,h)anthracene	17	NC	< 0.040	0.69	< 0.040	1.2	< 0.039	0.71	< 0.041	3.6
	Fluoranthene	82,000	NC	< 0.040	2.8	< 0.040	7.0	< 0.039	4.5	< 0.041	29
	Fluorene	82,000	NC	< 0.040	0.095	< 0.040	0.31	< 0.039	0.24	< 0.041	0.45
	Indeno(1,2,3-cd)pyrene	170	NC	< 0.040	1.1	< 0.040	2.0	< 0.039	1.2	< 0.041	7.2
	Naphthalene	4,100	1.8	< 0.040	0.053	< 0.040	0.081	< 0.039	0.11	< 0.041	0.20
	Phenanthrene	NC	NC	< 0.040	1.1	< 0.040	4.0	< 0.039	3.2	< 0.041	7.4
	Pyrene	61,000	NC	< 0.040	2.6	< 0.040	6.1	< 0.039	3.8	< 0.041	26

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-006	23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002
			Client Sample ID :	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023
			Time Collected :	17:15	17:40	17:50	19:40	19:45	16:55	17:05
	Analyte	Construction Worker Route		14-15' bgs	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs
		Ingestion	Inhalation							
PNAs	Acenaphthene	120,000	NC	< 0.041	< 0.039	< 0.041	0.24	< 0.040	0.67	< 0.041
	Acenaphthylene	NC	NC	< 0.041	< 0.039	< 0.041	0.24	< 0.040	1.4	< 0.041
	Anthracene	610,000	NC	< 0.041	0.13	< 0.041	0.97	< 0.040	3.4	< 0.041
	Benz(a)anthracene	170	NC	< 0.041	0.37	< 0.041	3.7	< 0.040	9.7	< 0.041
	Benzo(a)pyrene	17	NC	< 0.041	0.40	< 0.041	3.5	< 0.040	9.1	< 0.041
	Benzo(b)fluoranthene	170	NC	< 0.041	0.34	< 0.041	3.1	< 0.040	6.8	< 0.041
	Benzo(g,h,i)perylene	NC	NC	< 0.041	0.22	< 0.041	2.0	< 0.040	5.0	< 0.041
	Benzo(k)fluoranthene	1,700	NC	< 0.041	0.29	< 0.041	2.9	< 0.040	8.2	< 0.041
	Chrysene	17,000	NC	< 0.041	0.38	< 0.041	3.7	< 0.040	10	< 0.041
	Dibenz(a,h)anthracene	17	NC	< 0.041	0.12	< 0.041	1.1	< 0.040	2.7	< 0.041
	Fluoranthene	82,000	NC	< 0.041	0.67	0.067	7.3	< 0.040	19	< 0.041
	Fluorene	82,000	NC	< 0.041	0.051	< 0.041	0.32	< 0.040	1.1	< 0.041
	Indeno(1,2,3-cd)pyrene	170	NC	< 0.041	0.19	< 0.041	1.8	< 0.040	4.8	< 0.041
	Naphthalene	4,100	1.8	< 0.041	< 0.039	< 0.041	0.093	< 0.040	0.24	< 0.041
	Phenanthrene	NC	NC	< 0.041	0.46	0.052	4.2	< 0.040	13	< 0.041
	Pyrene	61,000	NC	< 0.041	0.59	0.058	6.0	< 0.040	16	< 0.041

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.c. - PNAs
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030787-001	23030787-002	23030838-003	23030838-004
			Client Sample ID :	SB-13 (3-4)	SB-13 (7-8)	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/22/2023	03/22/2023	03/23/2023	03/23/2023
			Time Collected :	21:00	21:10	17:50	18:25
	Analyte	Construction Worker Route		3-4' bgs	7-8' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation				
PNAs	Acenaphthene	120,000	NC	< 0.041	< 0.039	< 0.039	< 0.040
	Acenaphthylene	NC	NC	< 0.041	< 0.039	< 0.039	< 0.040
	Anthracene	610,000	NC	0.085	< 0.039	0.047	< 0.040
	Benz(a)anthracene	170	NC	0.31	< 0.039	0.14	< 0.040
	Benzo(a)pyrene	17	NC	0.28	< 0.039	0.14	< 0.040
	Benzo(b)fluoranthene	170	NC	0.29	< 0.039	0.13	< 0.040
	Benzo(g,h,i)perylene	NC	NC	0.18	< 0.039	0.085	< 0.040
	Benzo(k)fluoranthene	1,700	NC	0.19	< 0.039	0.12	< 0.040
	Chrysene	17,000	NC	0.32	< 0.039	0.15	< 0.040
	Dibenz(a,h)anthracene	17	NC	0.087	< 0.039	0.043	< 0.040
	Fluoranthene	82,000	NC	0.64	< 0.039	0.30	< 0.040
	Fluorene	82,000	NC	< 0.041	< 0.039	< 0.039	< 0.040
	Indeno(1,2,3-cd)pyrene	170	NC	0.15	< 0.039	0.077	< 0.040
	Naphthalene	4,100	1.8	< 0.041	< 0.039	< 0.039	< 0.040
	Phenanthrene	NC	NC	0.35	< 0.039	0.21	< 0.040
	Pyrene	61,000	NC	0.55	< 0.039	0.24	< 0.040

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50
	Analyte	Construction Worker Route Specific		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs
		Ingestion	Inhalation							
INORGANICS	Aluminum	NC	NC	---	---	7100	13000	---	---	---
	Antimony	82	NC	---	---	< 2.4	< 2.3	---	---	---
	Arsenic	61	25,000	7.7	9.5	6.4	11	13	9.5	3.1
	Barium	14,000	870,000	79	30	41	52	82	49	34
	Beryllium	410	44,000	---	---	< 0.59	0.66	---	---	---
	Cadmium	200	59,000	0.74	< 0.52	< 0.59	< 0.58	< 0.52	< 0.56	< 0.52
	Calcium	NC	NC	---	---	39000	54000	---	---	---
	Chromium	4,100	690	6.2	20	13	23	19	22	10
	Cobalt	12,000	NC	---	---	7.4	16	---	---	---
	Copper	8,200	NC	---	---	21	31	---	---	---
	Cyanide	4,100	NC	---	---	< 0.60	< 0.60	---	---	---
	Iron	NC	NC	---	---	14000	35000	---	---	---
	Lead	700	NC	41	16	49	16	17	16	18
	Magnesium	730,000	NC	---	---	19000	27000	---	---	---
	Manganese	4,100	8,700	---	---	270	560	---	---	---
	Mercury [E]	61	0.1	**0.13**	0.022	0.1	< 0.019	0.024	< 0.023	0.039
	Nickel	4,100	440,000	---	---	18	41	---	---	---
	Potassium	NC	NC	---	---	1600	3000	---	---	---
	Selenium	1,000	NC	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0
	Silver	1,000	NC	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0
	Sodium	NC	NC	---	---	1100	1000	---	---	---
	Thallium	160	NC	---	---	< 1.2	< 1.2	---	---	---
	Vanadium	1,400	NC	---	---	18	25	---	---	---
	Zinc	61,000	NC	---	---	55	67	---	---	---
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

	Analyte	Construction Worker Route Specific							
		Ingestion	Inhalation						
	Laboratory ID :			22120464-004	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012
	Client Sample ID :			SB-03 (7'-8')	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)
	Date Collected :			12/15/2022	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023
	Time Collected :			09:00	08:25	08:35	10:25	10:35	16:50	17:00
				7-8' bgs	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs
INORGANICS	Aluminum	NC	NC	---	---	---	---	---	10000	14000
	Antimony	82	NC	---	---	---	---	---	< 2.2	< 2.4
	Arsenic	61	25,000	13	10	7.2	3.3	9.7	16	19
	Barium	14,000	870,000	34	38	40	200	38	380	39
	Beryllium	410	44,000	---	---	---	---	---	0.71	0.76
	Cadmium	200	59,000	< 0.55	< 0.56	< 0.53	0.60	< 0.60	2.3	< 0.60
	Calcium	NC	NC	---	---	---	---	---	35000	55000
	Chromium	4,100	690	13	20	18	10	19	27	24
	Cobalt	12,000	NC	---	---	---	---	---	7.7	14
	Copper	8,200	NC	---	---	---	---	---	110	37
	Cyanide	4,100	NC	---	---	---	---	---	< 0.61	< 0.61
	Iron	NC	NC	---	---	---	---	---	23000	42000
	Lead	700	NC	21	36	15	410	23	**840**	22
	Magnesium	730,000	NC	---	---	---	---	---	12000	26000
	Manganese	4,100	8,700	---	---	---	---	---	390	410
	Mercury [E]	61	0.1	0.023	0.06	< 0.023	**0.22**	0.028	**0.56**	0.03
	Nickel	4,100	440,000	---	---	---	---	---	21	43
	Potassium	NC	NC	---	---	---	---	---	1200	2600
	Selenium	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2
	Silver	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2
	Sodium	NC	NC	---	---	---	---	---	330	130
	Thallium	160	NC	---	---	---	---	---	< 1.1	< 1.2
	Vanadium	1,400	NC	---	---	---	---	---	27	29
	Zinc	61,000	NC	---	---	---	---	---	550	60
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-011	22120464-012	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003
			Client Sample ID :	SB-06 (2'-3')	SB-06 (11'-12')	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)
			Date Collected :	12/15/2022	12/15/2022	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	10:50	11:00	18:25	18:30	19:20	19:25	19:00
	Analyte	Construction Worker Route Specific		2-3' bgs	11-12' bgs	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs
		Ingestion	Inhalation							
INORGANICS	Aluminum	NC	NC	---	---	6000	13000	8200	12000	9900
	Antimony	82	NC	---	---	< 2.0	< 2.3	< 2.2	< 2.2	< 2.1
	Arsenic	61	25,000	14	9.1	7.1	13	8.6	14	8.5
	Barium	14,000	870,000	250	61	21	57	220	46	140
	Beryllium	410	44,000	---	---	< 0.50	0.69	< 0.55	0.62	0.57
	Cadmium	200	59,000	7.4	< 0.52	< 0.50	< 0.57	1.3	< 0.55	0.67
	Calcium	NC	NC	---	---	2300	62000	52000	62000	27000
	Chromium	4,100	690	18	21	10	23	17	21	16
	Cobalt	12,000	NC	---	---	6.0	15	5.9	19	7.5
	Copper	8,200	NC	---	---	9.5	31	65	28	37
	Cyanide	4,100	NC	---	---	< 0.58	< 0.61	< 0.58	< 0.60	< 0.57
	Iron	NC	NC	---	---	13000	35000	16000	30000	16000
	Lead	700	NC	**1300**	18	9.7	17	**880**	17	270
	Magnesium	730,000	NC	---	---	1700	30000	20000	32000	9200
	Manganese	4,100	8,700	---	---	68	470	380	600	500
	Mercury [E]	61	0.1	**1.4**	0.026	**0.22**	0.027	**0.83**	0.03	**0.53**
	Nickel	4,100	440,000	---	---	12	38	16	36	16
	Potassium	NC	NC	---	---	800	3100	860	2800	1200
	Selenium	1,000	NC	< 1.2	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0
	Silver	1,000	NC	< 1.2	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0
	Sodium	NC	NC	---	---	300	180	350	150	210
	Thallium	160	NC	---	---	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0
	Vanadium	1,400	NC	---	---	20	25	24	22	23
	Zinc	61,000	NC	---	---	19	49	350	52	180
SPECIA-TION	Mercury [S]	61	0.1	**0.21**	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

	Analyte	Construction Worker Route Specific							
		Ingestion	Inhalation						
	Laboratory ID :			23030736-004	23030736-005	23030736-006	23030736-007	23030736-008	23030736-009	23030736-010
	Client Sample ID :			SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)
	Date Collected :			03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
	Time Collected :			19:10	17:10	17:15	17:40	17:50	19:40	19:45
				5-6' bgs	2-3' bgs	14-15' bgs	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs
INORGANICS	Aluminum	NC	NC	14000	8100	13000	8900	11000	6900	15000
	Antimony	82	NC	< 2.1	< 2.1	< 2.3	< 2.2	< 2.1	< 2.2	< 2.1
	Arsenic	61	25,000	5.4	7.8	8.1	7.5	13	15	10
	Barium	14,000	870,000	37	38	57	73	69	830	57
	Beryllium	410	44,000	0.67	< 0.52	0.69	< 0.56	< 0.53	0.75	0.77
	Cadmium	200	59,000	< 0.53	< 0.52	< 0.57	< 0.56	< 0.53	2.7	< 0.52
	Calcium	NC	NC	24000	12000	66000	6800	39000	36000	55000
	Chromium	4,100	690	24	14	23	14	20	24	26
	Cobalt	12,000	NC	10	7.7	14	6.7	15	9.1	14
	Copper	8,200	NC	29	14	29	24	25	100	31
	Cyanide	4,100	NC	< 0.62	< 0.56	< 0.62	< 0.59	< 0.62	< 0.58	< 0.61
	Iron	NC	NC	22000	16000	26000	16000	30000	22000	35000
	Lead	700	NC	20	39	18	100	17	**850**	18
	Magnesium	730,000	NC	18000	6800	32000	4300	21000	16000	26000
	Manganese	4,100	8,700	230	180	490	150	590	330	350
	Mercury [E]	61	0.1	0.028	0.039	0.029	**0.57**	0.038	**0.52**	0.031
	Nickel	4,100	440,000	33	16	37	16	35	24	41
	Potassium	NC	NC	2400	1100	3300	1400	2200	1100	3200
	Selenium	1,000	NC	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0
	Silver	1,000	NC	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0
	Sodium	NC	NC	200	100	200	84	140	450	170
	Thallium	160	NC	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.1	< 1.0
	Vanadium	1,400	NC	26	21	25	23	21	28	28
	Zinc	61,000	NC	90	39	53	81	49	880	60
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 2.d. - Inorganics/Metals
TACO Tier 1 Construction Worker Soil Remediation Objectives (SROs)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030838-001	23030838-002	23030787-001	23030787-002	23030838-003	23030838-004
			Client Sample ID :	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)	SB-14 (3-4)	SB-14 (7-8)
			Date Collected :	03/23/2023	03/23/2023	03/22/2023	03/22/2023	03/23/2023	03/23/2023
			Time Collected :	16:55	17:05	21:00	21:10	17:50	18:25
	Analyte	Construction Worker Route Specific		3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs	3-4' bgs	7-8' bgs
		Ingestion	Inhalation						
INORGANICS	Aluminum	NC	NC	8500	11000	11000	10000	10000	13000
	Antimony	82	NC	< 2.2	< 2.2	< 2.3	< 2.4	< 2.3	< 2.3
	Arsenic	61	25,000	15	11	25	8.8	9.9	6.7
	Barium	14,000	870,000	350	81	160	27	83	31
	Beryllium	410	44,000	< 0.54	0.80	1.1	0.64	0.63	0.60
	Cadmium	200	59,000	2.9	< 0.54	0.89	< 0.59	< 0.58	< 0.56
	Calcium	NC	NC	71000	54000	31000	57000	44000	55000
	Chromium	4,100	690	18	20	24	21	19	23
	Cobalt	12,000	NC	6.1	12	52	13	12	20
	Copper	8,200	NC	110	25	46	36	33	36
	Cyanide	4,100	NC	< 0.60	< 0.63	< 0.62	< 0.60	< 0.59	< 0.61
	Iron	NC	NC	19000	35000	41000	28000	22000	22000
	Lead	700	NC	**740**	15	44	20	110	17
	Magnesium	730,000	NC	22000	27000	19000	30000	21000	28000
	Manganese	4,100	8,700	280	400	2100	420	380	410
	Mercury [E]	61	0.1	**0.38**	< 0.021	0.059	< 0.019	**0.28**	< 0.022
	Nickel	4,100	440,000	21	34	66	38	31	41
	Potassium	NC	NC	1200	2500	2700	2400	2400	3200
	Selenium	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Silver	1,000	NC	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Sodium	NC	NC	550	170	1200	2400	2200	340
	Thallium	160	NC	< 1.1	< 1.1	< 1.1	< 1.2	< 1.2	< 1.1
	Vanadium	1,400	NC	20	23	36	24	22	25
	Zinc	61,000	NC	420	53	160	57	98	55
SPECIA-TION	Mercury [S]	61	0.1	---	---	---	---	---	---

Legend:

Bold	Exceedance of TACO Tier 1 Construction Worker soil remeidation objectives according to 35 IAC Appendix B Table B.
[E]	Results presented in the mercury line are total mercury results; however, the mercury SRO for construction worker is for elemental mercury. (footnote "s" of 35 IAC 742 App B Table B).
[S]	Speciation results in three test results: extractable mercury, semi-mobile mercury, and non-mobile mercury. Elemental mercury falls within the semi-mobile category (see EPA SW-846 Update V, 2014).
---	Not analyzed
NC	No evaluation criteria available

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003	22120464-004
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50	09:00
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
pH		6.25 - 9.0		---	---	**10.6**	7.80	---	---	---	---
Acenaphthene		570		< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Acetone		25		---	---	< 0.066	< 0.073	---	---	---	---
Anthracene		12,000		< 0.038	< 0.040	0.097	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Antimony		5		---	---	< 2.4	< 2.3	---	---	---	---
Arsenic	within a MSA county	13.0		7.7	9.5	6.4	11	13	9.5	3.1	13
	within a non-MSA county	11.3		7.7	9.5	6.4	11	**13**	9.5	3.1	**13**
Barium		1,500		79	30	41	52	82	49	34	34
Benzene		0.03		< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
Benz(a)anthracene	within Chicago corporate limits	1.1		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	1.8		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzo(b)fluoranthene	within Chicago corporate limits	1.5		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	2.1		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzo(k)fluoranthene		9		0.28	< 0.040	0.33	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzoic acid		400				< 0.98	< 1.0				
Benzo(a)pyrene	within Chicago corporate limits	1.3		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	2.1		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county	0.98		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	outside populated area	0.09		**0.33**	< 0.040	**0.41**	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Beryllium		22		---	---	< 0.59	0.66	---	---	---	---
Bis(2-chloroethyl)ether		0.66		---	---	< 0.20	< 0.20	---	---	---	---
Bis(2-ethylhexyl)phthalate		46		---	---	< 0.98	< 1.0	---	---	---	---
Bromodichloromethane		0.6		---	---	< 0.0044	< 0.0049	---	---	---	---
Bromoform		0.8		---	---	< 0.0044	< 0.0049	---	---	---	---
Butyl benzyl phthalate		930		---	---	< 0.98	< 1.0	---	---	---	---
Cadmium		5.2		0.74	< 0.52	< 0.59	< 0.58	< 0.52	< 0.56	< 0.52	< 0.55
Carbazole		0.6		---	---	< 0.20	< 0.20	---	---	---	---
Carbon disulfide		9		---	---	< 0.044	< 0.049	---	---	---	---
Carbon tetrachloride		0.07		---	---	< 0.0044	< 0.0049	---	---	---	---
4-Chloroaniline		0.7		---	---	< 0.20	< 0.20	---	---	---	---
Chlorobenzene		1		---	---	< 0.0044	< 0.0049	---	---	---	---
Dibromochloromethane		0.4		---	---	< 0.0044	< 0.0049	---	---	---	---
Chloroform		0.3		---	---	< 0.0044	< 0.0049	---	---	---	---
2-Chlorophenol		1.5		---	---	< 0.20	< 0.20	---	---	---	---
Chromium		21		6.2	20	13	**23 T**	19	**22 T**	10	13
Chrysene		88		0.28	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Cobalt		20		---	---	7.4	16	---	---	---	---
Copper		2,900		---	---	21	31	---	---	---	---
Cyanide		40		---	---	< 0.60	< 0.60	---	---	---	---
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	0.42		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county	0.15		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	outside populated area	0.09		0.088	< 0.040	**0.13**	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Di-n-butyl phthalate		2,300		---	---	< 0.98	< 1.0	---	---	---	---
1,2-Dichlorobenzene		17		---	---	< 0.20	< 0.20	---	---	---	---
1,4-Dichlorobenzene		2		---	---	< 0.20	< 0.20	---	---	---	---
3,3′-Dichlorobenzidine		1.3		---	---	< 0.20	< 0.20	---	---	---	---
1,1-Dichloroethane		23		---	---	< 0.0044	< 0.0049	---	---	---	---
1,2-Dichloroethane		0.02		---	---	< 0.0044	< 0.0049	---	---	---	---
1,1-Dichloroethene		0.06		---	---	< 0.0044	< 0.0049	---	---	---	---
cis-1,2-Dichloroethene		0.4		---	---	< 0.0044	< 0.0049	---	---	---	---
trans-1,2-Dichloroethene		0.7		---	---	< 0.0044	< 0.0049	---	---	---	---
2,4-Dichlorophenol		0.48		---	---	< 0.20	< 0.20	---	---	---	---
1,2-Dichloropropane		0.03		---	---	< 0.0044	< 0.0049	---	---	---	---
cis-1,3-Dichloropropene		0.005		---	---	< 0.0018	< 0.0020	---	---	---	---
trans-1,3-Dichloropropene		0.005		---	---	< 0.0018	< 0.0020	---	---	---	---
Diethyl phthalate		470		---	---	< 0.98	< 1.0	---	---	---	---
2,4-Dimethylphenol		9		---	---	< 0.20	< 0.20	---	---	---	---
2,4-Dinitrophenol		3.3		---	---	< 0.98	< 1.0	---	---	---	---
2,4-Dinitrotoluene		0.25		---	---	< 0.039	< 0.040	---	---	---	---
2,6-Dinitrotoluene		0.26		---	---	< 0.039	< 0.040	---	---	---	---
Di-n-octyl phthalate		1,600		---	---	< 0.98	< 1.0	---	---	---	---
Ethylbenzene		13		< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
Fluoranthene		3,100		0.47	< 0.040	0.76	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Fluorene		560		< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Hexachlorobenzene		0.4		---	---	< 0.20	< 0.20	---	---	---	---
Hexachlorocyclopentadiene		1.1		---	---	< 0.20	< 0.20	---	---	---	---
Hexachloroethane		0.5		---	---	< 0.20	< 0.20	---	---	---	---
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6		0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9		0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Iron	within a MSA county	15,900		---	---	14000	**35000**	---	---	---	---
	within a non-MSA county	15,000		---	---	14000	**35000**	---	---	---	---
Isophorone		8		---	---	< 0.20	< 0.20	---	---	---	---
Lead		107		41	16	49	16	17	16	18	21
Magnesium		325,000		---	---	19000	27000	---	---	---	---
Manganese	within a MSA county	636		---	---	270	560	---	---	---	---
	within a non-MSA county	630		---	---	270	560	---	---	---	---
Mercury	elemental (analyzed as total mercury)	0.1 [E]		0.13 E	0.022	0.10	< 0.019	0.024	< 0.023	0.039	0.023
	ionic (analyzed as total mercury)	0.89		0.13	0.022	0.10	< 0.019	0.024	< 0.023	0.039	0.023

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003	22120464-004
		Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
		Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022	12/15/2022
		Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50	09:00
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
TOTALS	Bromomethane		0.2	---	---	< 0.0088	< 0.0098	---	---	---	---
	Methyl tert-butyl ether		0.32	---	---	< 0.0044	< 0.0049	---	---	---	---
	Methylene chloride		0.02	---	---	< 0.0088	< 0.0098	---	---	---	---
	2-Methylphenol		15	---	---	< 0.20	< 0.20	---	---	---	---
	Naphthalene		1.8	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	Nickel		100	---	---	18	41	---	---	---	---
	Nitrobenzene		0.26	---	---	< 0.039	< 0.040	---	---	---	---
	N-Nitrosodiphenylamine		1	---	---	< 0.20	< 0.20	---	---	---	---
	N-Nitrosodi-n-propylamine		0.0018	---	---	< 0.039	< 0.040	---	---	---	---
	Pentachlorophenol		0.02	---	---	< 0.079	< 0.081	---	---	---	---
	Phenol		100	---	---	< 0.20	< 0.20	---	---	---	---
	Pyrene		2,300	0.47	< 0.040	0.69	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	Selenium		1.3	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1
	Silver		4.4	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1
	Styrene		4	---	---	< 0.0044	< 0.0049	---	---	---	---
	Tetrachloroethene		0.06	---	---	< 0.0044	< 0.0049	---	---	---	---
	Thallium		2.6	---	---	< 1.2	< 1.2	---	---	---	---
	Toluene		12	< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
	1,2,4-Trichlorobenzene		5	---	---	< 0.20	< 0.20	---	---	---	---
	1,1,1-Trichloroethane		2	---	---	< 0.0044	< 0.0049	---	---	---	---
	1,1,2-Trichloroethane		0.02	---	---	< 0.0044	< 0.0049	---	---	---	---
	Trichloroethene		0.06	---	---	< 0.0044	< 0.0049	---	---	---	---
	2,4,5-Trichlorophenol		26	---	---	< 0.20	< 0.20	---	---	---	---
	2,4,6-Trichlorophenol		0.66	---	---	< 0.20	< 0.20	---	---	---	---
	Vanadium		550	---	---	18	25	---	---	---	---
	Vinyl chloride		0.01	---	---	< 0.0044	< 0.0049	---	---	---	---
	Xylenes, Total		5.6	< 0.015	< 0.073	< 0.013	< 0.015	< 0.077	< 0.067	< 0.015	< 0.077
	Zinc		5,100	---	---	55	67	---	---	---	---
			mg/L								
TCLP	Arsenic		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Barium		2	---	---	0.38	0.57	---	---	---	---
	Cadmium		0.005	---	---	< 0.0050	< 0.0050	---	---	---	---
	Chromium		0.1	---	---	< 0.010	< 0.010	---	---	---	---
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	---	---	0.0056	< 0.0050	---	---	---	---
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	---	---	< 0.00020	< 0.00020	---	---	---	---
	Selenium		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Silver		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011	22120464-012
		Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
		Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022	12/15/2022
		Time Collected :	08:25	08:35	10:25	10:35	16:50	17:00	10:50	11:00
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
pH		6.25 - 9.0	---	---	---	---	8.29	7.96	---	---
Acenaphthene		570	< 0.041	< 0.040	0.53	< 0.040	0.72	< 0.040	0.42	< 0.040
Acetone		25	---	---	---	---	< 0.10	< 0.075	---	---
Anthracene		12,000	0.044	< 0.040	1.0	< 0.040	3.1	< 0.040	1.7	< 0.040
Antimony		5	---	---	---	---	< 2.2	< 2.4	---	---
Arsenic	within a MSA county	13.0	10	7.2	3.3	9.7	**16**	**19**	**14**	9.1
	within a non-MSA county	11.3	10	7.2	3.3	9.7	**16**	**19**	**14**	9.1
Barium		1,500	38	40	200	38	380	39	250	61
Benzene		0.03	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
Benz(a)anthracene	within Chicago corporate limits	1.1	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
	within a populated area in MSA excluding Chicago	1.8	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
	within a populated area in non-MSA county or outside populated area	0.9	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.11	< 0.040	**2.1**	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
	within a populated area in MSA excluding Chicago	2.1	0.11	< 0.040	2.1	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
	within a populated area in non-MSA county or outside populated area	0.9	0.11	< 0.040	**2.1**	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
Benzo(k)fluoranthene		9	0.12	< 0.040	1.8	< 0.040	6.6	< 0.040	3.8	< 0.040
Benzoic acid		400					< 1.0	< 1.0		
Benzo(a)pyrene	within Chicago corporate limits	1.3	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	within a populated area in MSA excluding Chicago	2.1	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	within a populated area in non-MSA county	0.98	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	outside populated area	0.09	**0.13**	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
Beryllium		22	---	---	---	---	0.71	0.76	---	---
Bis(2-chloroethyl)ether		0.66	---	---	---	---	< 0.21	< 0.21	---	---
Bis(2-ethylhexyl)phthalate		46	---	---	---	---	< 1.0	< 1.0	---	---
Bromodichloromethane		0.6	---	---	---	---	< 0.0067	< 0.0050	---	---
Bromoform		0.8	---	---	---	---	< 0.0067	< 0.0050	---	---
Butyl benzyl phthalate		930	---	---	---	---	< 1.0	< 1.0	---	---
Cadmium		5.2	< 0.56	< 0.53	0.60	< 0.60	2.3	< 0.60	**7.4**	< 0.52
Carbazole		0.6	---	---	---	---	**0.79**	< 0.21	---	---
Carbon disulfide		9	---	---	---	---	< 0.067	< 0.050	---	---
Carbon tetrachloride		0.07	---	---	---	---	< 0.0067	< 0.0050	---	---
4-Chloroaniline		0.7	---	---	---	---	< 0.21	< 0.21	---	---
Chlorobenzene		1	---	---	---	---	< 0.0067	< 0.0050	---	---
Dibromochloromethane		0.4	---	---	---	---	< 0.0067	< 0.0050	---	---
Chloroform		0.3	---	---	---	---	< 0.0067	< 0.0050	---	---
2-Chlorophenol		1.5	---	---	---	---	< 0.21	< 0.21	---	---
Chromium		21	20	18	10	19	**27 T**	**24 T**	18	21
Chrysene		88	0.14	< 0.040	2.3	< 0.040	7.6	< 0.040	5.6	< 0.040
Cobalt		20	---	---	---	---	7.7	14	---	---
Copper		2,900	---	---	---	---	110	37	---	---
Cyanide		40	---	---	---	---	< 0.61	< 0.61	---	---
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	within a populated area in MSA excluding Chicago	0.42	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	within a populated area in non-MSA county	0.15	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	outside populated area	0.09	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
Di-n-butyl phthalate		2,300	---	---	---	---	< 1.0	< 1.0	---	---
1,2-Dichlorobenzene		17	---	---	---	---	< 0.21	< 0.21	---	---
1,4-Dichlorobenzene		2	---	---	---	---	< 0.21	< 0.21	---	---
3,3´-Dichlorobenzidine		1.3	---	---	---	---	< 0.21	< 0.21	---	---
1,1-Dichloroethane		23	---	---	---	---	< 0.0067	< 0.0050	---	---
1,2-Dichloroethane		0.02	---	---	---	---	< 0.0067	< 0.0050	---	---
1,1-Dichloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
cis-1,2-Dichloroethene		0.4	---	---	---	---	< 0.0067	< 0.0050	---	---
trans-1,2-Dichloroethene		0.7	---	---	---	---	< 0.0067	< 0.0050	---	---
2,4-Dichlorophenol		0.48	---	---	---	---	< 0.21	< 0.21	---	---
1,2-Dichloropropane		0.03	---	---	---	---	< 0.0067	< 0.0050	---	---
cis-1,3-Dichloropropene		0.005	---	---	---	---	< 0.0027	< 0.0020	---	---
trans-1,3-Dichloropropene		0.005	---	---	---	---	< 0.0027	< 0.0020	---	---
Diethyl phthalate		470	---	---	---	---	< 1.0	< 1.0	---	---
2,4-Dimethylphenol		9	---	---	---	---	< 0.21	< 0.21	---	---
2,4-Dinitrophenol		3.3	---	---	---	---	< 1.0	< 1.0	---	---
2,4-Dinitrotoluene		0.25	---	---	---	---	< 0.040	< 0.040	---	---
2,6-Dinitrotoluene		0.26	---	---	---	---	< 0.040	< 0.040	---	---
Di-n-octyl phthalate		1,600	---	---	---	---	< 1.0	< 1.0	---	---
Ethylbenzene		13	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
Fluoranthene		3,100	0.29	< 0.040	4.5	< 0.040	15	< 0.040	12	< 0.040
Fluorene		560	< 0.041	< 0.040	0.49	< 0.040	1.1	< 0.040	0.56	< 0.040
Hexachlorobenzene		0.4	---	---	---	---	< 0.21	< 0.21	---	---
Hexachlorocyclopentadiene		1.1	---	---	---	---	< 0.21	< 0.21	---	---
Hexachloroethane		0.5	---	---	---	---	< 0.21	< 0.21	---	---
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.074	< 0.040	1.4	< 0.040	**4.3**	< 0.040	**2.8**	< 0.040
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.074	< 0.040	**1.4**	< 0.040	**4.3**	< 0.040	**2.8**	< 0.040
Iron	within a MSA county	15,900	---	---	---	---	**23000 T**	**42000 T**	---	---
	within a non-MSA county	15,000	---	---	---	---	**23000 T**	**42000 T**	---	---
Isophorone		8	---	---	---	---	< 0.21	< 0.21	---	---
Lead		107	36	15	**410**	23	**840**	22	**1300**	18
Magnesium		325,000	---	---	---	---	12000	26000	---	---
Manganese	within a MSA county	636	---	---	---	---	390	410	---	---
	within a non-MSA county	630	---	---	---	---	390	410	---	---
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.060	< 0.023	0.22 E	0.028	0.56 E	0.030	0.88 E	0.026
	ionic (analyzed as total mercury)	0.89	0.060	< 0.023	0.22	0.028	0.56	0.030	0.88	0.026

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011	22120464-012
		Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
		Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022	12/15/2022
		Time Collected :	08:25	08:35	10:25	10:35	16:50	17:00	10:50	11:00
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
TOTALS	Bromomethane		0.2	---	---	---	---	< 0.013	< 0.010	---	---
	Methyl tert-butyl ether		0.32	---	---	---	---	< 0.0067	< 0.0050	---	---
	Methylene chloride		0.02	---	---	---	---	< 0.013	< 0.010	---	---
	2-Methylphenol		15	---	---	---	---	< 0.21	< 0.21	---	---
	Naphthalene		1.8	< 0.041	< 0.040	0.81	< 0.040	0.33	< 0.040	0.19	< 0.040
	Nickel		100	---	---	---	---	21	43	---	---
	Nitrobenzene		0.26	---	---	---	---	< 0.040	< 0.040	---	---
	N-Nitrosodiphenylamine		1	---	---	---	---	< 0.21	< 0.21	---	---
	N-Nitrosodi-n-propylamine		0.0018	---	---	---	---	< 0.040	< 0.040	---	---
	Pentachlorophenol		0.02	---	---	---	---	< 0.082	< 0.081	---	---
	Phenol		100	---	---	---	---	< 0.21	< 0.21	---	---
	Pyrene		2,300	0.24	< 0.040	3.7	< 0.040	15	< 0.040	11	< 0.040
	Selenium		1.3	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2	< 1.2	< 1.0
	Silver		4.4	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2	< 1.2	< 1.0
	Styrene		4	---	---	---	---	< 0.0067	< 0.0050	---	---
	Tetrachloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
	Thallium		2.6	---	---	---	---	< 1.1	< 1.2	---	---
	Toluene		12	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	1,2,4-Trichlorobenzene		5	---	---	---	---	< 0.21	< 0.21	---	---
	1,1,1-Trichloroethane		2	---	---	---	---	< 0.0067	< 0.0050	---	---
	1,1,2-Trichloroethane		0.02	---	---	---	---	< 0.0067	< 0.0050	---	---
	Trichloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
	2,4,5-Trichlorophenol		26	---	---	---	---	< 0.21	< 0.21	---	---
	2,4,6-Trichlorophenol		0.66	---	---	---	---	< 0.21	< 0.21	---	---
	Vanadium		550	---	---	---	---	27	29	---	---
	Vinyl chloride		0.01	---	---	---	---	< 0.0067	< 0.0050	---	---
	Xylenes, Total		5.6	< 0.071	< 0.070	< 0.015	< 0.018	< 0.020	< 0.015	< 0.018	< 0.015
	Zinc		5,100	---	---	---	---	550	60	---	---
			mg/L								
TCLP	Arsenic		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Barium		2	---	---	---	---	0.93	0.22	---	---
	Cadmium		0.005	---	---	---	---	0.025 T	< 0.0050	---	---
	Chromium		0.1	---	---	---	---	0.032	< 0.010	---	---
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	---	---	---	---	**0.81**	< 0.0050	---	---
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	---	---	---	---	< 0.00020	< 0.00020	---	---
	Selenium		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Silver		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	**0.21**	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005	23030736-006
		Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
		Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
		Time Collected :	18:25	18:30	19:20	19:25	19:00	19:10	17:10	17:15
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
pH		6.25 - 9.0	8.09	8.08	8.19	8.09	8.42	7.69	8.47	8.18
Acenaphthene		570	0.060	< 0.040	0.22	< 0.039	0.19	< 0.041	0.19	< 0.041
Acetone		25	< 0.072	< 0.068	< 0.077	< 0.067	0.077	< 0.066	< 0.066	< 0.072
Anthracene		12,000	0.40	< 0.040	1.1	< 0.039	0.65	< 0.041	3.5	< 0.041
Antimony		5	< 2.0	< 2.3	< 2.2	< 2.2	< 2.1	< 2.1	< 2.1	< 2.3
Arsenic	within a MSA county	13.0	7.1	13	8.6	**14**	8.5	5.4	7.8	8.1
	within a non-MSA county	11.3	7.1	**13**	8.6	**14**	8.5	5.4	7.8	8.1
Barium		1,500	21	57	220	46	140	37	38	57
Benzene		0.03	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Benz(a)anthracene	within Chicago corporate limits	1.1	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
	within a populated area in MSA excluding Chicago	1.8	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
	within a populated area in non-MSA county or outside populated area	0.9	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	**1.6**	< 0.040	**3.7**	< 0.039	**2.1**	< 0.041	**11**	< 0.041
	within a populated area in MSA excluding Chicago	2.1	1.6	< 0.040	**3.7**	< 0.039	2.1	< 0.041	**11**	< 0.041
	within a populated area in non-MSA county or outside populated area	0.9	**1.6**	< 0.040	**3.7**	< 0.039	**2.1**	< 0.041	**11**	< 0.041
Benzo(k)fluoranthene		9	1.8	< 0.040	3.4	< 0.039	1.8	< 0.041	**11**	< 0.041
Benzoic acid		400	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Benzo(a)pyrene	within Chicago corporate limits	1.3	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	within a populated area in MSA excluding Chicago	2.1	2.1	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	within a populated area in non-MSA county	0.98	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	outside populated area	0.09	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
Beryllium		22	< 0.50	0.69	< 0.55	0.62	0.57	0.67	< 0.52	0.69
Bis(2-chloroethyl)ether		0.66	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Bis(2-ethylhexyl)phthalate		46	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Bromodichloromethane		0.6	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Bromoform		0.8	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Butyl benzyl phthalate		930	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Cadmium		5.2	< 0.50	< 0.57	1.3	< 0.55	0.67	< 0.53	< 0.52	< 0.57
Carbazole		0.6	< 0.19	< 0.21	0.31	< 0.20	0.31	< 0.21	0.29	< 0.21
Carbon disulfide		9	< 0.048	< 0.045	< 0.051	< 0.045	< 0.051	< 0.044	< 0.044	< 0.048
Carbon tetrachloride		0.07	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
4-Chloroaniline		0.7	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Chlorobenzene		1	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Dibromochloromethane		0.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Chloroform		0.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
2-Chlorophenol		1.5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Chromium		21	10	**23 T**	17	21	16	**24 T**	14	**23 T**
Chrysene		88	1.9	< 0.040	4.5	< 0.039	2.4	< 0.041	13	< 0.041
Cobalt		20	6.0	15	5.9	19	7.5	10	7.7	14
Copper		2,900	9.5	31	65	28	37	29	14	29
Cyanide		40	< 0.58	< 0.61	< 0.58	< 0.60	< 0.57	< 0.62	< 0.56	< 0.62
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	within a populated area in MSA excluding Chicago	0.42	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	within a populated area in non-MSA county	0.15	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	outside populated area	0.09	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
Di-n-butyl phthalate		2,300	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
1,2-Dichlorobenzene		17	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,4-Dichlorobenzene		2	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
3,3´-Dichlorobenzidine		1.3	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,1-Dichloroethane		23	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,2-Dichloroethane		0.02	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,1-Dichloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,2-Dichloroethene		0.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
trans-1,2-Dichloroethene		0.7	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
2,4-Dichlorophenol		0.48	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,2-Dichloropropane		0.03	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,3-Dichloropropene		0.005	< 0.0019	< 0.0018	< 0.0021	< 0.0018	< 0.0020	< 0.0018	< 0.0018	< 0.0019
trans-1,3-Dichloropropene		0.005	< 0.0019	< 0.0018	< 0.0021	< 0.0018	< 0.0020	< 0.0018	< 0.0018	< 0.0019
Diethyl phthalate		470	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dimethylphenol		9	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2,4-Dinitrophenol		3.3	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dinitrotoluene		0.25	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
2,6-Dinitrotoluene		0.26	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
Di-n-octyl phthalate		1,600	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Ethylbenzene		13	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Fluoranthene		3,100	2.8	< 0.040	7.0	< 0.039	4.5	< 0.041	29	< 0.041
Fluorene		560	0.095	< 0.040	0.31	< 0.039	0.24	< 0.041	0.45	< 0.041
Hexachlorobenzene		0.4	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachlorocyclopentadiene		1.1	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachloroethane		0.5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	1.1	< 0.040	**2.0**	< 0.039	1.2	< 0.041	**7.2**	< 0.041
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	**1.1**	< 0.040	**2.0**	< 0.039	**1.2**	< 0.041	**7.2**	< 0.041
Iron	within a MSA county	15,900	13000	**35000 T**	**16000 T**	**30000 T**	**16000 T**	**22000 T**	**16000 T**	**26000 T**
	within a non-MSA county	15,000	13000	**35000 T**	**16000 T**	**30000 T**	**16000 T**	**22000 T**	**16000 T**	**26000 T**
Isophorone		8	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Lead		107	9.7	17	**880**	17	**270**	20	39	18
Magnesium		325,000	1700	30000	20000	32000	9200	18000	6800	32000
Manganese	within a MSA county	636	68	470	380	600	500	230	180	490
	within a non-MSA county	630	68	470	380	600	500	230	180	490
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.22 E	0.027	0.83 E	0.030	0.53 E	0.028	0.039	0.029
	ionic (analyzed as total mercury)	0.89	0.22	0.027	0.83	0.030	0.53	0.028	0.039	0.029

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005	23030736-006
			Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:25	18:30	19:20	19:25	19:00	19:10	17:10	17:15
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
TOTALS	Bromomethane		0.2	< 0.0095	< 0.0091	< 0.010	< 0.0089	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Methyl tert-butyl ether		0.32	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Methylene chloride		0.02	< 0.0095	< 0.0091	< 0.010	< 0.0089	< 0.010	< 0.0089	< 0.0088	< 0.0095
	2-Methylphenol		15	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Naphthalene		1.8	0.053	< 0.040	0.081	< 0.039	0.11	< 0.041	0.20	< 0.041
	Nickel		100	12	38	16	36	16	33	16	37
	Nitrobenzene		0.26	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
	N-Nitrosodiphenylamine		1	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	N-Nitrosodi-n-propylamine		0.0018	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
	Pentachlorophenol		0.02	< 0.077	< 0.081	< 0.078	< 0.079	< 0.076	< 0.083	< 0.075	< 0.084
	Phenol		100	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Pyrene		2,300	2.6	< 0.040	6.1	< 0.039	3.8	< 0.041	26	< 0.041
	Selenium		1.3	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Silver		4.4	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Styrene		4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Tetrachloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Thallium		2.6	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Toluene		12	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	0.0047	0.0060	< 0.0048
	1,2,4-Trichlorobenzene		5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	1,1,1-Trichloroethane		2	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1,2-Trichloroethane		0.02	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Trichloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	2,4,5-Trichlorophenol		26	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	2,4,6-Trichlorophenol		0.66	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Vanadium		550	20	25	24	22	23	26	21	25
	Vinyl chloride		0.01	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Xylenes, Total		5.6	< 0.014	< 0.014	< 0.015	< 0.013	< 0.015	< 0.013	< 0.013	< 0.014
	Zinc		5,100	19	49	350	52	180	90	39	53
			mg/L								
TCLP	Arsenic		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium		2	0.19	0.85	1.7	1.0	1.0	0.21	0.20	0.92
	Cadmium		0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	**0.0087**	< 0.0050	**0.14**	**0.013**	**0.10**	< 0.0050	**0.020**	< 0.0050
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
		Client Sample ID :	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
		Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
		Time Collected :	17:40	17:50	19:40	19:45	16:55	17:05	21:00	21:10
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
pH		6.25 - 9.0	7.72	7.96	8.28	7.86	**9.49**	8.18	8.17	7.86
Acenaphthene		570	< 0.039	< 0.041	0.24	< 0.040	0.67	< 0.041	< 0.041	< 0.039
Acetone		25	< 0.080	< 0.068	< 0.077	< 0.076	< 0.081	< 0.071	< 0.077	< 0.067
Anthracene		12,000	0.13	< 0.041	0.97	< 0.040	3.4	< 0.041	0.085	< 0.039
Antimony		5	< 2.2	< 2.1	< 2.2	< 2.1	< 2.2	< 2.2	< 2.3	< 2.4
Arsenic	within a MSA county	13.0	7.5	13	**15**	10	**15**	11	**25**	8.8
	within a non-MSA county	11.3	7.5	**13**	**15**	10	**15**	11	**25**	8.8
Barium		1,500	73	69	830	57	350	81	160	27
Benzene		0.03	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Benz(a)anthracene	within Chicago corporate limits	1.1	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
	within a populated area in MSA excluding Chicago	1.8	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
	within a populated area in MSA excluding Chicago	2.1	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
Benzo(k)fluoranthene		9	0.29	< 0.041	2.9	< 0.040	8.2	< 0.041	0.19	< 0.039
Benzoic acid		400	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Benzo(a)pyrene	within Chicago corporate limits	1.3	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	within a populated area in MSA excluding Chicago	2.1	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	within a populated area in non-MSA county	0.98	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	outside populated area	0.09	**0.40**	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	**0.28**	< 0.039
Beryllium		22	< 0.56	< 0.53	0.75	0.77	< 0.54	0.80	1.1	0.64
Bis(2-chloroethyl)ether		0.66	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Bis(2-ethylhexyl)phthalate		46	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Bromodichloromethane		0.6	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Bromoform		0.8	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Butyl benzyl phthalate		930	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Cadmium		5.2	< 0.56	< 0.53	2.7	< 0.52	2.9	< 0.54	0.89	< 0.59
Carbazole		0.6	< 0.20	< 0.21	0.34	< 0.21	**0.88**	< 0.21	< 0.21	< 0.20
Carbon disulfide		9	< 0.053	< 0.045	< 0.051	< 0.050	< 0.054	< 0.047	< 0.051	< 0.044
Carbon tetrachloride		0.07	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
4-Chloroaniline		0.7	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Chlorobenzene		1	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Dibromochloromethane		0.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Chloroform		0.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
2-Chlorophenol		1.5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Chromium		21	14	20	**24 T**	**26 T**	18	20	**24 T**	21
Chrysene		88	0.38	< 0.041	3.7	< 0.040	10	< 0.041	0.32	< 0.039
Cobalt		20	6.7	15	9.1	14	6.1	12	**52 T**	13
Copper		2,900	24	25	100	31	110	25	46	36
Cyanide		40	< 0.59	< 0.62	< 0.58	< 0.61	< 0.60	< 0.63	< 0.62	< 0.60
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	within a populated area in MSA excluding Chicago	0.42	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	within a populated area in non-MSA county	0.15	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	outside populated area	0.09	**0.12**	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
Di-n-butyl phthalate		2,300	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
1,2-Dichlorobenzene		17	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,4-Dichlorobenzene		2	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
3,3´-Dichlorobenzidine		1.3	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,1-Dichloroethane		23	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,2-Dichloroethane		0.02	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1-Dichloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,2-Dichloroethene		0.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
trans-1,2-Dichloroethene		0.7	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
2,4-Dichlorophenol		0.48	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,2-Dichloropropane		0.03	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,3-Dichloropropene		0.005	< 0.0021	< 0.0018	< 0.0020	< 0.0020	< 0.0022	< 0.0019	< 0.0020	< 0.0018
trans-1,3-Dichloropropene		0.005	< 0.0021	< 0.0018	< 0.0020	< 0.0020	< 0.0022	< 0.0019	< 0.0020	< 0.0018
Diethyl phthalate		470	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
2,4-Dimethylphenol		9	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
2,4-Dinitrophenol		3.3	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
2,4-Dinitrotoluene		0.25	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
2,6-Dinitrotoluene		0.26	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
Di-n-octyl phthalate		1,600	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Ethylbenzene		13	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Fluoranthene		3,100	0.67	0.067	7.3	< 0.040	19	< 0.041	0.64	< 0.039
Fluorene		560	0.051	< 0.041	0.32	< 0.040	1.1	< 0.041	< 0.041	< 0.039
Hexachlorobenzene		0.4	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Hexachlorocyclopentadiene		1.1	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Hexachloroethane		0.5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.19	< 0.041	**1.8**	< 0.040	**4.8**	< 0.041	0.15	< 0.039
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.19	< 0.041	**1.8**	< 0.040	**4.8**	< 0.041	0.15	< 0.039
Iron	within a MSA county	15,900	**16000 T**	**30000 T**	**22000 T**	**35000 T**	**19000 T**	**35000 T**	**41000 T**	**28000 T**
	within a non-MSA county	15,000	**16000 T**	**30000 T**	**22000 T**	**35000 T**	**19000 T**	**35000 T**	**41000 T**	**28000 T**
Isophorone		8	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Lead		107	100	17	**850**	18	**740**	15	44	20
Magnesium		325,000	4300	21000	16000	26000	22000	27000	19000	30000
Manganese	within a MSA county	636	150	590	330	350	280	400	**2100**	420
	within a non-MSA county	630	150	590	330	350	280	400	**2100**	420
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.57 E	0.038	0.52 E	0.031	0.38 E	< 0.021	0.059	< 0.019
	ionic (analyzed as total mercury)	0.89	0.57	0.038	0.52	0.031	0.38	< 0.021	0.059	< 0.019

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
	Laboratory ID :			23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
	Client Sample ID :			SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
	Date Collected :			03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
	Time Collected :			17:40	17:50	19:40	19:45	16:55	17:05	21:00	21:10
TOTALS	Bromomethane		0.2	< 0.011	< 0.0091	< 0.010	< 0.010	< 0.011	< 0.0094	< 0.010	< 0.0088
	Methyl tert-butyl ether		0.32	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Methylene chloride		0.02	< 0.011	< 0.0091	< 0.010	< 0.010	< 0.011	< 0.0094	< 0.010	< 0.0088
	2-Methylphenol		15	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Naphthalene		1.8	< 0.039	< 0.041	0.093	< 0.040	0.24	< 0.041	< 0.041	< 0.039
	Nickel		100	16	35	24	41	21	34	66	38
	Nitrobenzene		0.26	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	N-Nitrosodiphenylamine		1	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	N-Nitrosodi-n-propylamine		0.0018	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	Pentachlorophenol		0.02	< 0.079	< 0.083	< 0.078	< 0.081	< 0.080	< 0.084	< 0.081	< 0.079
	Phenol		100	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Pyrene		2,300	0.59	0.058	6.0	< 0.040	16	< 0.041	0.55	< 0.039
	Selenium		1.3	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Silver		4.4	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Styrene		4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Tetrachloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Thallium		2.6	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Toluene		12	< 0.0053	0.0047	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,2,4-Trichlorobenzene		5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	1,1,1-Trichloroethane		2	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,2-Trichloroethane		0.02	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Trichloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	2,4,5-Trichlorophenol		26	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4,6-Trichlorophenol		0.66	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Vanadium		550	23	21	28	28	20	23	36	24
	Vinyl chloride		0.01	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Xylenes, Total		5.6	< 0.016	< 0.014	< 0.015	< 0.015	< 0.016	< 0.014	< 0.015	< 0.013
	Zinc		5,100	81	49	880	60	420	53	160	57
			mg/L								
TCLP	Arsenic		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium		2	0.32	0.19	2.0	0.27	0.86	0.71	0.16	0.63
	Cadmium		0.005	< 0.0050	< 0.0050	0.0093 T	< 0.0050	0.0088 T	< 0.0050	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.017	0.022
	Cobalt		1	---	---	---	---	---	---	< 0.010	---
	Iron		5	---	---	---	---	---	---	< 0.25	---
	Lead		0.0075	**0.016**	< 0.0050	**0.097**	< 0.0050	**0.16**	< 0.0050	< 0.0050	< 0.0050
	Manganese		0.15	---	---	---	---	---	---	**0.65**	---
	Mercury		0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium		0.049	---	---	---	---	---	---	< 0.010	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

				Laboratory ID :	23030838-003	23030838-004
				Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
				Date Collected :	03/23/2023	03/23/2023
				Time Collected :	17:50	18:25
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	7-8' bgs
	pH		6.25 - 9.0	**9.26**	8.31
TOTALS	Acenaphthene		570	< 0.039	< 0.040
	Acetone		25	< 0.082	< 0.071
	Anthracene		12,000	0.047	< 0.040
	Antimony		5	< 2.3	< 2.3
	Arsenic	within a MSA county	13.0	9.9	6.7
		within a non-MSA county	11.3	9.9	6.7
	Barium		1,500	83	31
	Benzene		0.03	< 0.0054	< 0.0047
	Benz(a)anthracene	within Chicago corporate limits	1.1	0.14	< 0.040
		within a populated area in MSA excluding Chicago	1.8	0.14	< 0.040
		within a populated area in non-MSA county or outside populated area	0.9	0.14	< 0.040
	Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.13	< 0.040
		within a populated area in MSA excluding Chicago	2.1	0.13	< 0.040
		within a populated area in non-MSA county or outside populated area	0.9	0.13	< 0.040
	Benzo(k)fluoranthene		9	0.12	< 0.040
	Benzoic acid		400	< 0.97	< 0.99
	Benzo(a)pyrene	within Chicago corporate limits	1.3	0.14	< 0.040
		within a populated area in MSA excluding Chicago	2.1	0.14	< 0.040
		within a populated area in non-MSA county	0.98	0.14	< 0.040
		outside populated area	0.09	**0.14**	< 0.040
	Beryllium		22	0.63	0.60
	Bis(2-chloroethyl)ether		0.66	< 0.20	< 0.20
	Bis(2-ethylhexyl)phthalate		46	< 0.97	< 0.99
	Bromodichloromethane		0.6	< 0.0054	< 0.0047
	Bromoform		0.8	< 0.0054	< 0.0047
	Butyl benzyl phthalate		930	< 0.97	< 0.99
	Cadmium		5.2	< 0.58	< 0.56
	Carbazole		0.6	< 0.20	< 0.20
	Carbon disulfide		9	< 0.054	< 0.047
	Carbon tetrachloride		0.07	< 0.0054	< 0.0047
	4-Chloroaniline		0.7	< 0.20	< 0.20
	Chlorobenzene		1	< 0.0054	< 0.0047
	Dibromochloromethane		0.4	< 0.0054	< 0.0047
	Chloroform		0.3	< 0.0054	< 0.0047
	2-Chlorophenol		1.5	< 0.20	< 0.20
	Chromium		21	19	**23 T**
	Chrysene		88	0.15	< 0.040
	Cobalt		20	12	20
	Copper		2,900	33	36
	Cyanide		40	< 0.59	< 0.61
	Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	0.043	< 0.040
		within a populated area in MSA excluding Chicago	0.42	0.043	< 0.040
		within a populated area in non-MSA county	0.15	0.043	< 0.040
		outside populated area	0.09	0.043	< 0.040
	Di-n-butyl phthalate		2,300	< 0.97	< 0.99
	1,2-Dichlorobenzene		17	< 0.20	< 0.20
	1,4-Dichlorobenzene		2	< 0.20	< 0.20
	3,3′-Dichlorobenzidine		1.3	< 0.20	< 0.20
	1,1-Dichloroethane		23	< 0.0054	< 0.0047
	1,2-Dichloroethane		0.02	< 0.0054	< 0.0047
	1,1-Dichloroethene		0.06	< 0.0054	< 0.0047
	cis-1,2-Dichloroethene		0.4	< 0.0054	< 0.0047
	trans-1,2-Dichloroethene		0.7	< 0.0054	< 0.0047
	2,4-Dichlorophenol		0.48	< 0.20	< 0.20
	1,2-Dichloropropane		0.03	< 0.0054	< 0.0047
	cis-1,3-Dichloropropene		0.005	< 0.0022	< 0.0019
	trans-1,3-Dichloropropene		0.005	< 0.0022	< 0.0019
	Diethyl phthalate		470	< 0.97	< 0.99
	2,4-Dimethylphenol		9	< 0.20	< 0.20
	2,4-Dinitrophenol		3.3	< 0.97	< 0.99
	2,4-Dinitrotoluene		0.25	< 0.039	< 0.040
	2,6-Dinitrotoluene		0.26	< 0.039	< 0.040
	Di-n-octyl phthalate		1,600	< 0.97	< 0.99
	Ethylbenzene		13	< 0.0054	< 0.0047
	Fluoranthene		3,100	0.30	< 0.040
	Fluorene		560	< 0.039	< 0.040
	Hexachlorobenzene		0.4	< 0.20	< 0.20
	Hexachlorocyclopentadiene		1.1	< 0.20	< 0.20
	Hexachloroethane		0.5	< 0.20	< 0.20
	Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.077	< 0.040
		within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.077	< 0.040
	Iron	within a MSA county	15,900	**22000 T**	**22000 T**
		within a non-MSA county	15,000	**22000 T**	**22000 T**
	Isophorone		8	< 0.20	< 0.20
	Lead		107	**110**	17
	Magnesium		325,000	21000	28000
	Manganese	within a MSA county	636	380	410
		within a non-MSA county	630	380	410
	Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.28 E	< 0.022
		ionic (analyzed as total mercury)	0.89	0.28	< 0.022

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030838-003	23030838-004
		Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
		Date Collected :	03/23/2023	03/23/2023
		Time Collected :	17:50	18:25
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	7-8' bgs
TOTALS	Bromomethane		0.2	< 0.011	< 0.0094
	Methyl tert-butyl ether		0.32	< 0.0054	< 0.0047
	Methylene chloride		0.02	< 0.011	< 0.0094
	2-Methylphenol		15	< 0.20	< 0.20
	Naphthalene		1.8	< 0.039	< 0.040
	Nickel		100	31	41
	Nitrobenzene		0.26	< 0.039	< 0.040
	N-Nitrosodiphenylamine		1	< 0.20	< 0.20
	N-Nitrosodi-n-propylamine		0.0018	< 0.039	< 0.040
	Pentachlorophenol		0.02	< 0.079	< 0.080
	Phenol		100	< 0.20	< 0.20
	Pyrene		2,300	0.24	< 0.040
	Selenium		1.3	< 1.2	< 1.1
	Silver		4.4	< 1.2	< 1.1
	Styrene		4	< 0.0054	< 0.0047
	Tetrachloroethene		0.06	< 0.0054	< 0.0047
	Thallium		2.6	< 1.2	< 1.1
	Toluene		12	< 0.0054	< 0.0047
	1,2,4-Trichlorobenzene		5	< 0.20	< 0.20
	1,1,1-Trichloroethane		2	< 0.0054	< 0.0047
	1,1,2-Trichloroethane		0.02	< 0.0054	< 0.0047
	Trichloroethene		0.06	< 0.0054	< 0.0047
	2,4,5-Trichlorophenol		26	< 0.20	< 0.20
	2,4,6-Trichlorophenol		0.66	< 0.20	< 0.20
	Vanadium		550	22	25
	Vinyl chloride		0.01	< 0.0054	< 0.0047
	Xylenes, Total		5.6	< 0.016	< 0.014
	Zinc		5,100	98	55
			mg/L		
TCLP	Arsenic		0.05	< 0.010	< 0.010
	Barium		2	0.37	0.55
	Cadmium		0.005	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010
	Cobalt		1	---	---
	Iron		5	---	---
	Lead		0.0075	**0.079**	0.0064
	Manganese		0.15	---	---
	Mercury		0.002	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010
	Vanadium		0.049	---	---
			mg/kg		
SPECIA-TION	Mercury [S]		0.1	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

SECTION 31 23 18.13

SOIL, FILL, BACKFILL, CU STRUCTURAL SOIL & CONSTRUCTION & DEMOLITION DEBRIS REMOVAL

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. These environmental requirements apply to all Board projects where materials existing on the site will be removed. This specification section applies to Contaminated Soil and General Construction & Demolition Debris that does not meet the definition of the Clean Construction or Demolition Debris (CCDD), Uncontaminated Soil or Hazardous Waste.

B. Description of Work: This specification is for the excavation, stockpiling, loading, hauling, removal, and disposal of any materials including soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, topsoil, CU Structural Soil, and general construction and demolition debris from Board projects. Locations of non-special waste and non-hazardous special waste on the project site shall be determined by the Board, in consultation with the Managing Environmental Consultant (MEC), and are initially identified in the Contract Documents. The Contractor shall perform the work under this section in accordance with all applicable local, county, IEPA, USEPA, and OSHA regulations. The Work shall include the following:

1. Removal and disposal

a. Prior to excavation of any soil (including non-special waste soils and non-hazardous special waste soils), fill, backfill, topsoil, CU Structural Soil, and general construction and demolition debris material, obtain authorization for ultimate disposition of materials from an open and active Subtitle D facility approved by the Board Representative. The Subtitle D facility shall be permitted to accept both non-hazardous special waste and non-special waste soils.

b. The waste characterization analytical must be sent to the Managing Environmental Consultant (MEC) for approval and to the Board Representative for signature prior to send in the profile to the landfill.

c. Perform the analytical testing required by the landfill for waste stream authorizations as necessary to secure all required disposal permits for all materials. All costs associated with collecting waste stream samples and performing analytical tests shall be at contractor’s own expense.

d. Obtain authorization from an open and active Permitted Subtitle D landfill indicating acceptance of materials at the facility. The Authorization must be signed by the owner of the open and active Permitted Subtitle D landfill and state that the facility complies with all local zoning codes and all local, state, and federal rules and regulations, that all required laboratory analyses has been received by the facility, and that the facility has agreed to accept the soils (including non-special waste soils, and non-hazardous special waste soils), fill, backfill, top soil, CU Structural Soil, and general construction and demolition debris materials. The Authorization shall further state that the soils (including non-special waste soils

and non-hazardous special waste soils), fill, backfill, topsoil, CU Structural Soil, general construction and demolition debris materials are being accepted for permanent placement on site under the cap, and that the material will not be removed from the site unless required by a local, state or federal regulations.

e. Prepare daily reports, transport manifests, weight tickets and receipts (as applicable) prior to starting any soil removal activities.

f. Excavation of soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, topsoil, CU Structural Soil, and general construction and demolition debris materials to the depth required to complete the proposed site preparation/construction work activities as specified in the Contract Documents.

g. Load and transport all materials to the approved open and active Permitted Subtitle D landfill in approved containers or vessels.

h. Provide copies of all daily reports, signed transport/waste manifest, signed weight tickets, and disposal receipts (as applicable) to the Board Representative on a daily basis documenting proper disposal of soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, topsoil, CU Structural Soil, and general construction and demolition debris materials.

1.02 DEFINITIONS

A. Agency: Illinois Environmental Protection Agency (IEPA).

B. Backfill: granular or cohesive material used to fill the excavation to design grade as referenced in design plans and specifications.

C. CU Structural Soil: a uniformly blended mixture of crushed stone, clay, loam and hydrogel by weight consisting of approximately 83% crushed limestone (3/4 to 1.5 inch, highly angular with limited fines), 17% clay loam and hydrogel (1 oz. per 200 pounds of stone).

D. Managing Environmental Consultant (MEC): the entity with overall responsibility for the direction and control of the environmental investigations, assessments, designs, and supervision of remediation work.

E. Fill: any earthen or non-earthen materials including, but not limited to, any sediment, granular or cohesive non-native earthen materials, cinders, ash, wood, and brick, concrete, and asphalt fragments, glass, and building debris encountered above naturally occurring undisturbed soils or bedrock in built-up areas.

F. General Construction and Demolition (C&D) Debris: non-hazardous, uncontaminated materials resulting from construction, remodeling, repair, and demolition of utilities, structures, and roads as defined in Public Act 92-0574, the Environmental Protection Act, 415 ILCS 5 Section 3.160 and regulated under Title 35: Environmental Protection; Subtitle G: Waste Disposal; Chapter I: Pollution Control Board; Subchapter i: Solid Waste and Special Waste Hauling. General Construction and demolition (C&D) debris may include soil, wall coverings, reclaimed asphalt pavement, rock, plaster, glass, non-hazardous painted wood, drywall, plastics, non-hazardous coated wood, non-asbestos insulation, bricks, wood products, roofing shingles, concrete, and general roof coverings.

G. Open and Active Permitted Subtitle D Landfill: any open and active solid waste landfill facility in any state licensed and permitted to accept non-hazardous waste including both non-special waste soils and non-hazardous special waste soils, fill, general construction and demolition debris are to be deposited. If the landfill facility is located in Illinois, the landfill must be licensed, open, active, and permitted by the Illinois Environmental Protection Agency and other applicable local regulatory agencies as applicable. If the landfill is located outside of Illinois, the landfill facility must be open, active, and permitted by applicable state and local regulatory agencies.

H. IEPA: Illinois Environmental Protection Agency.

I. IDOT: Illinois Department of Transportation.

J. Manifest: the form provided or prescribed by IEPA and used for identifying name, quality, routing, and destination of special waste during its transportation from point of generation to the point of disposal, treatment, or storage.

K. MSDS/SDS: Material Safety Data Sheet or Safety Data Sheet, required by OSHA for any substances that are toxic, caustic, or otherwise potentially hazardous to workers.

L. OSHA means Occupational Safety and Health Administration.

M. Remediation Area: any area on site where underground storage tanks, non-special waste and/or non-hazardous special waste, or soil that do not meet Tier 1 SROs for residential properties is present.

N. Soil: any granular or cohesive materials designated for removal as specified in the Architect/Engineer drawings and specifications and includes soils that are determined to be non-special and special waste.

O. Special Waste: any wastes as defined in Title 35: Environmental Protection; Subtitle G: Waste Disposal; Chapter I: Pollution Control Board; Subchapter i: Solid Waste and Special Waste Hauling; Part 808: Special Waste Classifications; Subpart A: General Provisions; Section 808.110, AND any wastes as defined in Title 35: Environmental Protection; Subtitle G: Waste Disposal; Chapter I: Pollution Control Board; Subchapter i: Solid Waste and Special Waste Hauling; Part 809: Non-Hazardous Special Waste Classifications; Subpart A: General Provisions; Section 809.103.

P. SROs: Soil Remediation Objectives for various exposure routes identified in 35 Illinois Administrative Code 742: Tiered Approach to Corrective Action Objectives (TACO).

Q. Storm water: water deposited at the site in the form of rain, snow or other natural weather event.

R. TACO: Tiered Approach too Corrective Action Objectives (TACO) per 35 Illinois Administrative Code 742.

S. Topsoil: soils placed to design grade and used to promote vegetative growth, and which meets Top Soil criteria (percentages of organic matter, inorganic matter (silt, clay, and sand)), deleterious material, pH, and mineral and plant-nutrient content as referenced in the contract specifications and drawings.

T. Uncontaminated Soil: soil generated during construction, remodeling, repair or demolition of utilities, structures and roads that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment. [415 ILCS 5/3.160(c)]

U. USEPA: United States Environmental Protection Agency.

V. User or User Agency: the entity for which or on whose behalf the Board has undertaken to cause the Work to be performed.

W. Work: the obligations of the Contractor under the Contract Documents. Work includes, unless specifically excepted by the Contract Documents, the furnishing of all materials, labor, equipment, supplies, plant, tools, scaffolding, transportation, superintendence, permits, inspections, occupancy approvals, insurance, taxes, and all other services, facilities and expenses necessary for the full performance and completion of the requirements of the Contract Documents. Work also means that which is furnished, produced, constructed, or built pursuant to the Contract Documents.

1.03 SUBMITTALS

A. Copies of the following submittals shall be prepared and submitted to the Board Representative at Contractor's own cost and within ten (10) days prior to start of Work:

1. Contractor's Site-Specific Health and Safety Plan for all workers engaged in excavation, stockpiling, loading, hauling, removal, and disposal of any soils (including non-special waste soils and non-hazardous special waste soils), fill, general construction and demolition debris from the property. The plan shall comply with all OSHA requirements utilizing information attained in existing environmental reports. The Work shall be performed under the direct supervision of a trained experienced site supervisor. The plan should at a minimum include the following:

a. Name(s) of key personnel and alternates responsible for site safety.

b. Describe the risks associated with each operation conducted.

c. Describe chemical contaminants to be encountered by employees on work site and specific hazards, if any, to the workers as required by OSHA.

d. Type of personnel training and responsibilities and to handle the specific hazardous situations they may encounter.

e. Describe the protective clothing and equipment to be worn by personnel during various site operations.

f. Describe any site-specific medical surveillance requirements.

g. Describe the program for the periodic air monitoring, personnel monitoring, and environmental sampling, if needed.

h. Describe the actions to be taken to mitigate existing hazards to make the work environment less hazardous.

i. Define site control measures including a site map.

j. Establish procedures for personnel and equipment and transporting trucks to ensure that impacted soils are not tracked off site on to non-impacted areas of the site.

k. Set forth the site Standard Operating Procedures (SOPs). SOPs are those activities that can be standardized (i.e., decontamination procedures and respirator fit testing).

l. Set forth a Contingency Plan for the safe and effective response to emergencies.

2. Soil Management Plan outlining proposed excavation work sequences and procedures to separate each type of material to be removed from the site from clean materials. The Soil Management Plan shall show the locations of each type of material to be stored on site, location of clean materials to be stored at the site for reuse, and location of material to be stored on site for future disposal. The MEC and the Board Representative must review and approve this plan.

3. Based on available analytical results from soil samples collected during the December 2022 Limited Phase II ESA and March 2023 Additional Subsurface investigation (see attached Summary Table [**Table 5**] and **Figure SMP-01**), soils from the Subject Property that may be proposed for disposal at a Clean Construction and Demolition Debris (CCDD) are:

- Soil excavated from below the maximum depths indicated on **Figure SMP-01**.

4. CCDD disposal sites located outside of a Metropolitan Statistical Area (MSA) may reject soils deemed acceptable to CCDD facilities located within MSA.

5. Disposal Facility Information Name, address, and telephone number of the open and active Permitted Subtitle D Landfill facility where soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, topsoil, CU Structural Soil, and general construction and demolition debris materials are to be deposited. The Subtitle D facility shall be permitted to accept both Non-Hazardous Special Waste and non-Special Waste.

   a. This submittal must be made thirty days (30) prior to removal of any materials from the site. This information should include, at a minimum, the following:

      1) Facility Name and Address and Telephone Number.

      2) Site Contact.

      3) Facility Identification Number issued by Illinois, U.S. EPA, or other state licensing agencies for Special Waste Disposal facility.

      4) State and/or Local Operational Permit Number(s) for the impacted Construction and Demolition Debris Disposal sites.

6. The Contractor shall fill out the waste profile including the waste characterization laboratory results to be utilized for landfill requirements and send it to the MEC for approval. The MEC will forward the waste profile to the Board Representative designee for signature. The Contractor shall assume this signature process will take five (5) business days to accomplish.

7. Waste Stream authorization and/or permit from the Subtitle D Landfill facility where soils (including non-special waste soils and non-hazardous special waste soils), fill, general construction and demolition debris are to be deposited prior to removal from the site. The authorization must be signed by the Subtitle D landfill facility representative and state that the facility complies with all local zoning codes and all local, State, and Federal rules and regulations, that all required laboratory analyses has been received by the facility, and that the facility has agreed to accept the soils (including non-special waste soils, and non-hazardous special waste soils), fill, and general construction and demolition debris materials. The Authorization shall further state that the soils (including non-special waste soils and non-hazardous special waste soils), fill, general construction and demolition debris fill materials are being accepted for permanent placement on site, and that the material will not be removed from the site unless required by a local, state or federal Authority.

8. Analytical Testing Laboratory including the name, address, and State of Illinois Environmental Protection Agency accreditation in accordance with the Illinois Administrative Code, Title 35, Subtitle A Chapter II, Part 186, for the laboratory which will be utilized by the Contractor to perform analytical testing prior to the start of Work.

9. Ten (10) days prior to commencing Work, the contractor shall provide the MEC with a Storm Water Management Plan and MWRDGC permit schedule. This plan shall stipulate provisions for dewatering, pumping, collection, temporary storage, and discharge or disposal of storm water, perched water and other liquids, contaminated and/or uncontaminated, at the site so as to facilitate water and soil removal, as well as minimize disposal costs for contaminated fluids. The MEC and the Board must review and approve this plan.

10. Copies of Special/Hazardous Waste Hauler Licenses/Permits for each proposed transporter prior to removal of soil from the site, pursuant to 35 IAC 809. Include current copy of IEPA and/or USEPA approval letter/permit, and details of haul route(s) from site to the disposal facilities.

11. Copies of Waste Disposal Manifests and Weight Tickets to the Board Representative on a daily basis. Manifests and weight tickets must be fully executed by the generator, transporter, and designated disposal/recycling facility. These shall be presented in dated order with attached summary table. All manifests and weight tickets must be received by the Board within ten (10) working days of completion of the project.

12. Daily Reports/Logs summarizing excavation activities generating waste, locations of where the disposed materials derived, any temporary stockpile locations, transporter information, equipment, and labor. Contractor shall submit these records on monthly basis.

13. Air Sampling Data collected during the course of the Work, including OSHA compliance air monitoring, as applicable.

1.04 SUBMITTAL REVIEW

A. Review of submittals or any comments made does not relieve the Contractor from compliance with the requirements of the drawings and specifications. The purpose of this check is to review for general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor is responsible for confirming and correlating all quantities and dimensions; electing techniques of construction; coordinating the Work; and performing the Work in a safe and satisfactory manner.

B. The Contractor must not begin any Work applicable to this section until all required submittals have been reviewed and accepted by the Board Representative.

1.05 NOTIFICATIONS

A. The Contractor shall notify the Board Representative and MEC no less than forty-eight (48) business hours prior to loading and transporting any materials from the site. The MEC must be notified within the same timeframe or sooner. Materials cannot leave the site without their supervision.

1.06 RECORDKEEPING

A. The Contractor shall provide documentation of labor, equipment, materials, tickets, manifests, and disposal laboratory analysis used for soil removal, when requested by the Board Representative or MEC.

1.07 COORDINATION

A. The Contractor shall coordinate and schedule the Work to cause the least possible disruption to the daily site activities, if any.

B. The Contractor shall cooperate with and coordinate work progress with the Board Representative, the MEC and any other contractors working on site. Excavated soil shall be stockpiled near the excavation (no closer than 2 feet from the edge) or at an area deemed suitable by the Board Representative. The Contractor shall assist the Board Representative with its machinery and operator to inspect and obtain soil samples, if necessary, from the open excavation(s) at no additional cost to the project.

1.08 PROJECT CONDITIONS

A. The Contractor shall perform all Work without creating hazardous conditions anywhere on site.

B. All excavation, truck loading, grading, and backfilling operations will be conducted to ensure minimum interference with traffic. Roads, streets, walks, and other adjacent occupied and used facilities shall not be closed or obstructed without permission from the applicable governing agency and the User. Alternate routes around closed or obstructed traffic ways must be provided if required by the governing agency.

C. Any damage caused to adjacent pavement, utilities, or facilities by earth work operations will be promptly replaced or repaired at no additional cost to the Board and such work shall be performed to the satisfaction of the Board.

PART 2 - PRODUCTS

2.01 REMOVAL OF SOIL, FILL, BACKFILL, CU STRUCTURAL SOIL, AND CONSTRUCTION AND DEMOLITION DEBRIS

A. The Contractor shall furnish all necessary means, products, tools, and equipment required to remove soil (including non-special waste soils and non-hazardous special waste soils), fill, backfill, CU Structural Soil and construction and demolition debris from the site as directed by the Board Representative.

B. The Contractor shall also furnish all necessary means, products, tools, and equipment required to fulfill the scope of work described in the contract specifications and drawings. The contractor, by submitting a bid for the Work, represents itself as knowledgeable and an expert in the performance of the Work, and includes all things usually and customarily necessary to provide a complete and finished job, whether specifically mentioned or not.

C. The Contractor must have a complete plan for the entire process of soil removal and disposal in accordance with the project requirements. Contractor must provide schedule of all Work activities in accordance with the approved construction schedule.

PART 3 - EXECUTION

3.01 AUTHORIZATIONS

A. Obtain authorization from the open and active Permitted Subtitle D landfill owner where soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, CU Structural Soil and construction and demolition debris are to be deposited. The Authorization must be signed by the User and shall state that the User has received a copy of one or more laboratory analyses of representative sample(s) collected from the site by the contractor and has agreed to accept the material. The Authorization shall further state that the site owner agrees to accept the material for permanent placement on their site and that the material will not be removed from their site unless required by a local, state, or federal rules and regulations. The Authorization further shall state that the site complies with all local zoning codes, and local, state and federal laws, rules, and regulations.

B. Obtain prior authorization from Board Representative to backfill excavations and utility lines and apply topsoil. All backfill, CU Structural Soil, and topsoil shall comply with other Division 31 Sections.

C. Haulers for transportation shall hold a current, valid hauling permit for materials being transported off-site. Haulers shall hold, and present upon request, a current valid Commercial Driver’s License (CDL). Non-hazardous special wastes and hazardous wastes must be hauled by an IDOT-approved, licensed, and permitted transporter and must be valid during transportation.

D. Obtain prior authorization from Board Representative on the Waste Profile at least (5) days in advance of removing waste materials.

3.02 MATERIAL SAMPLING

A. Soil, Fill, Backfill, CU Structural Soil, Construction and Demolition debris.

1. The Contractor shall collect sufficient amount of representative sample(s) from each type of material being removed from the site for analytical testing to obtain authorization for the ultimate disposition of the materials. The Contractor is responsible to provide the proper collection, handling and transportation of the samples to the laboratory. The contractor is responsible for acquisition of any required permits and payment of all fees.

2. The Contractor shall be responsible for obtaining liquid samples as needed for characterization for liquid disposal offsite or disposition onsite as applicable. The Contractor is responsible to the acquisition of any required disposal permits and the payment of any fees associated with liquid disposal.

3. The Contractor shall submit the soil and liquid samples (as applicable) to the laboratory and pay for the cost of analyzing the constituents required for the ultimate disposition of soils and liquids.

4. The MEC may collect samples for laboratory analysis or field Photo-ionization Detector (PID) screening, or liquid samples for laboratory analysis (only if required by the Board under special circumstance.) The Contractor shall provide the necessary equipment and manpower to assist the MEC to collect materials to be sampled at no additional cost to the project.

5. The Contractor shall immediately notify the Board Representative and MEC if any materials, (solid or liquid) requiring special handling (i.e., stained soil, soil with odors, or liquids) are encountered in areas other than those identified in the contract drawings and referenced documents. No further work shall proceed in the area until approval is provided by the Board Representative.

6. All excavated soils, liquids, and other material shall be removed from the site in accordance with applicable specifications, and local, state and federal requirements and guidelines.

3.03 EXCAVATION

A. Prior to starting any excavation work at the site, the contractor shall layout an alpha-numeric grid in 25-foot intervals which designates rows and columns around the perimeter of the site. Columns shall be labeled numerically along the east fence line, beginning on the north side of the site, in 25-foot intervals, towards the south side of the site. Rows shall be labeled alphabetically along the north fence line, beginning on the east side of the site, in 25-foot intervals, towards the west side of the site. 12”x12”, waterproof placards, showing the row number or column letter shall be placed on fence posts at the 25-foot intervals around the perimeter of the site. Placards shall be secured at a height of 4 feet above the ground and shall be maintained throughout the duration of the project. The contractor shall repair or replace placards if they become damaged or illegible.

B. The Contractor shall perform excavation of soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, CU Structural Soil and construction and demolition debris to the extent shown on the contract drawings, as necessary to complete the Work and/or as directed by the Board Representative.

C. All excavation shall be performed in accordance with the design drawings and local, state and federal requirements and guidelines.

D. All excavation, truck loading, grading, and backfilling operations will be conducted to ensure minimum interference with traffic. Roads, streets, walks, and other adjacent occupied and used facilities shall not be closed or obstructed without permission from the applicable governing agency and the Board Representative. Alternate routes around closed or obstructed traffic ways must be provided if required by the governing agency.

E. Any damage caused to adjacent pavement, utilities, or facilities by earthwork operations will be promptly replaced or repaired at no additional cost to the Board and such work shall be performed to the satisfaction of the Board Representative.

F. The Contractor is responsible for keeping the soils/materials which are classified differently separated during excavation activities. If Contractor commingles soils/materials, the Contractor must properly dispose of all commingled soils/materials at their own expense.

G. If an underground storage tank (UST), drum or other unknown container is discovered during excavation activities, the Contractor must stop excavation work and immediately inform the Board Representative. The Board Representative will assess the site conditions and instruct the Contractor how to proceed with the Work. Contractor may be asked by the Board Representative to perform further limited excavation in the area to gather information on size and/or quantity of newly discovered item(s). Contractor shall perform this limited excavation work at no additional cost to the Board. All UST removals shall comply with Section 02 65 00 “Underground Storage Tank Removal” (provided upon request).

3.04 LOADING

A. The Contractor shall load soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, CU Structural Soil and construction and demolition debris materials directly from the site or from temporary stockpiles into hauling trucks for subsequent transportation and ultimate disposal.

B. Conduct all excavation, truck loading, grading, and backfilling operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities. Do not close or obstruct roads, streets or walks without permission from the applicable governing agency and the Board. Alternate routes around closed or obstructed traffic ways must be provided by Contractor if required by the governing agency.

C. The Contractor shall maintain streets clean and free of mud and dirt generated from their Work and operations.

D. The Contractor is responsible for complying with State and local road/street weight limits.

3.05 HAULING

A. The Contractor shall remove soils, dusts, rocks, etc. from the exterior of trucks, trailers, or other heavy equipment leaving the site before they leave the site.

B. The Contractor shall clean the tractor-trailers or trucks that are loaded with materials for off-site placement/salvage by removing clinging soils, or rocks from the exterior of the equipment.

C. The Contractor shall not create dust and shall maintain adequate dust suppression equipment on site if conditions warrant.

D. The Contractor shall maintain streets clean and free of mud and dirt. The Contractor shall provide a street sweeper for street maintenance, if requested by the Board, at no additional cost to the project.

E. The Contractor shall conduct soil (including non-special waste soils and non-hazardous special waste soils), fill, backfill, CU Structural Soil and construction and demolition debris removal in a manner that ensures minimum interference with roads; streets, walks and other adjacent occupied and used facilities. Do not close or obstruct streets, walks or other occupied or used facilities without permission from the applicable governing agency and Board Representative. Provide alternate routes around closed or obstructed traffic ways if required by the governing agency.

3.06 TRANSPORTATION

A. The Contractor shall remove soils, dusts, rocks, etc. from the exterior of trucks, trailers, or other heavy equipment leaving the site before they leave the site. The Contractor shall provide and complete copies of all daily reports, weight tickets and receipts (as applicable) for transportation and ultimate off-site disposal of materials removed from the property to the Board Representative, review and signature as required.

B. All soil/materials must be transported directly to the designated disposal facility from the site. Intermediate storage is not permitted.

C. The Contractor shall provide complete copies of disposal documentation for removal of all soil/materials to the Board for review and signature as required. The Contractor shall provide completed manifests and/or other waste removal documentation to the Board Representative a minimum of two (2) days prior to shipment, if signature is required.

D. The Transporter shall present evidence of special or hazardous waste hauling permits and CDL upon request by the Board, as applicable.

E. The soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, CU Structural Soil and construction and demolition debris materials shall be transported by a hauler licensed in the State of Illinois to transport applicable soils/materials.

F. The Contractor shall have properly signed manifests or disposal documentation in hand prior to leaving the site with materials to a landfill.

3.07 STOCKPILING

A. Contractor may temporarily stockpile soils (including non-special waste soils and non-hazardous special waste soils), fill, backfill, CU Structural Soil and construction and demolition debris on site for a maximum of five (5) working days, unless otherwise approved by the Board.

B. The Contractor shall be responsible for keeping such stockpiles separated. If soils/materials designated separately are commingled by Contractor, the Contractor shall dispose of such soil/material newly designated at his own expense. The Contractor will be responsible for sampling and analysis costs associated with characterization of newly designated soil/materials.

C. Acceptable locations for soil stockpiles shall be approved by the Board Representative and it shall be in accordance with the City of Chicago requirements. The maximum height of the stockpile shall not exceed 10 feet. The Contractor shall containerize or place special waste, non-hazardous waste, or hazardous waste soils on 6 mil plastic sheeting, covered with 6 mil plastic sheeting, and protect with 12-inch to 18-inch berms until subsequent loading, transportation, and disposal. Base sheeting shall overlap the dike/berm.

D. The Contractor shall not allow runoff from stockpiled soil or material to enter storm drains or leave the site.

3.08 DUST CONTROL

A. The Contractor shall control dust by all necessary means, including, but not limited to, covering trucks, stockpiles and open materials, watering haul roads, sweeping paved roads, and limiting the speed of all on-site vehicles.

B. The Contractor shall prevent vehicles from tracking soil off site by all necessary means, including, but not limited to, construction of stone truck pads at site gates, and pressure washing vehicles and tires, as necessary.

C. Contractor shall perform all necessary activities to keep roadways clean throughout each day and for the duration of the project.

3.09 LIQUID (WATER) MANAGEMENT

A. The Contractor shall subscribe to a weather notification system and manage the Work so as not to accumulate storm water on the site during excavation.

B. Prior to commencing Work, the contractor shall provide a storm water management plan. This plan shall stipulate provisions for dewatering, pumping, collection, temporary storage, and discharge or disposal of storm water, perched water, and other liquids, contaminated and/or uncontaminated, at the site so as to facilitate soil removal and minimize disposal costs for contaminated fluids.

C. The Contractor shall ensure that contamination of water, perched water and previously uncontaminated water or perched water does not occur by preventing the contact of such liquid with materials that exceed Title 35: Environmental Protection Subtitle G: Waste Disposal Chapter I: Pollution Control Board Subchapter F: Risk Based Cleanup Objectives, Part 742, Tiered Approach To Corrective Action Objectives, Appendix B, Table A values for 35 ILL. ADM. CODE 740 APPENDIX A Target Compound List (TCL) parameters. Earthen berms, plastic (polyethylene) sheeting, pumping, and other such means, as specified in the approved Storm Water Management Plan, may be used.

D. If the Contractor, through negligence, allows storm water to contact materials that exceed Title 35: Environmental Protection Subtitle G: Waste Disposal Chapter I: Pollution Control Board Subchapter F: Risk Based Cleanup Objectives, Part 742, Tiered Approach to Corrective Action Objectives, Appendix B, Table A values for 35 ILL. ADM. CODE 740 APPENDIX A Target Compound List (TCL) parameters, the water must be disposed of as water that exceeds Title 35: Environmental Protection Subtitle G: Waste Disposal Chapter I: Pollution Control Board Subchapter F: Risk Based Cleanup Objectives, Part 742, Tiered Approach to Corrective Action Objectives, Appendix B, Table A values for 35 ILL. ADM. CODE 740 APPENDIX A Target Compound List (TCL) parameters. The Contractor will be responsible for the additional costs incurred for any disposal analysis and disposal costs.

E. Storm Water Run-on /Run-off, Groundwater, and Dewatering: Contractor shall manage and remove water from site excavation in accordance with the City of Chicago and MWRDGC's requirements. The Contractor shall not discharge onsite water into the City of Chicago sewer without first obtaining all required permits in accordance with the following procedures:

1. If there is no evidence of water contamination as determined by the Board's Representative, Contractor shall obtain pumping permit from the City of Chicago Building Department.

2. If the Board's Representative determined the presence of contaminated water at the site, Contractor shall collect and analyze representative water sample in accordance with MWRDGC Environmental Remediation Wastewater (ERW) Ordinance requirements. Submit a copy of the analytical result to the Board's Representative within seven (7) working days of sample collection.

3. If the analytical result of the water sample is below the maximum concentrations acceptable for discharge of ERW into sewerage system. The Contractor shall perform the following:

    a. Secure a special discharge authorization from the MWRDGC for discharging contaminated water into the sewer system.

b. Install and operate flow meters for measuring the volume of water discharged into the sewer system at each discharging manhole. Flow meters can be either installed on the settling tank, if used, or at each discharging manhole. The flow meter must meet the MWRDGC's requirements, including a non-resettable totalizer, and must be equipped with recorder charts. Totalizers must be read a minimum of once per week and a log of such readings, with the appropriate conversion factors, and recorder charts must be provided to the Board's Representative. The flow measurement devices must be calibrated monthly and prior to its initial use. The accuracy of the device must be certified by a factory-authorized representative with documentation of this certification provided to the Board's Representative and submitted to the MWRDGC.

c. Collect and analyze representative water samples on monthly basis for the parameters required by the MWRDGC ERW special authorization. Analytical results and Sample Collection, Analysis and Report Certification shall be provided to Board's Representative within 7 working days of sample collection.

4. If the analytical results of the water exceed the MWRDGC ERW ordinance requirements, water should be either pumped into holding tank for future transportation and disposal at treatment facility or pumped directly into vacuum truck for disposal at a treatment facility as non-hazardous special waste. Prior to pumping and transporting water into the treatment facility, the Board's Representative may collect confirmation water samples to verify that the analytical results do not meet the MWRDGC's requirements. The Contractor shall provide all required equipment and access to collect such samples.

3.10 QUALITY CONTROL

A. Visual inspections and damage repairs shall be made daily by the Contractor and/or as directed by the Board Representative to assure that erosion, drainage and containment control measures are functioning properly.

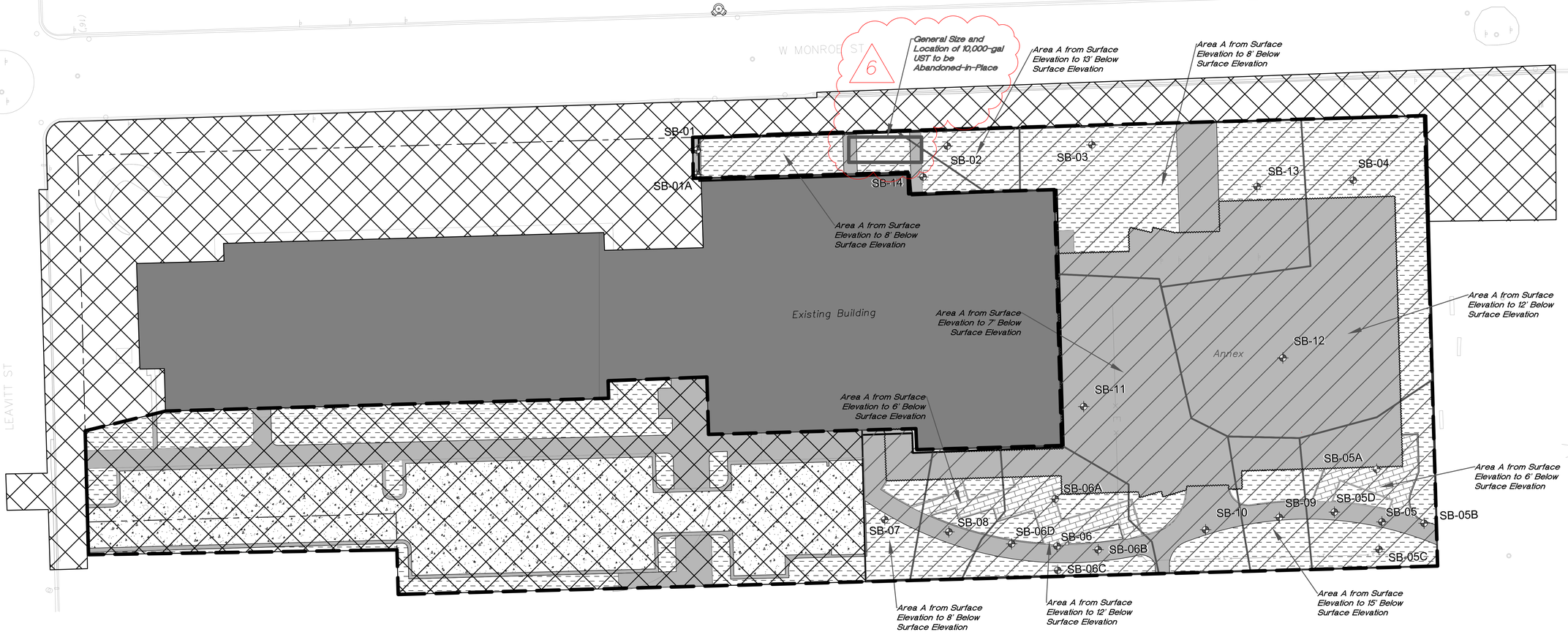
B. The Contractor shall take all necessary precautions to protect structures, equipment, pavement, walks and utilities against movement or settlement during the course of Work.

C. Damages: Promptly replace or repair any damage caused to adjacent pavement, utilities or facilities by removal operations at no additional cost. Work shall be performed to the satisfaction of the Board Representative.

D. Submittal Timeframe Compliance: The Contractor shall ensure that all required submittals are in compliance with time frames specified.

E. Utility Services: Maintain existing utilities and protect against damage during removal operations.

END OF SECTION 31 23 18.13



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Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- LIMITS OF WORK
- SAMPLING LOCATIONS

SOIL DISPOSAL CLASSIFICATION / REMEDIATION AREAS

AREA A - Subtitle D Landfill
Soils aboveTACO Tier 1 SROs (Non-Special)

AREA B - Subtitle D Landfill
Soils ASSUMED above TACO Tier 1 SROs (Non-Special)

ENGINEERED BARRIERS

CONCRETE
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

ASPHALT
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

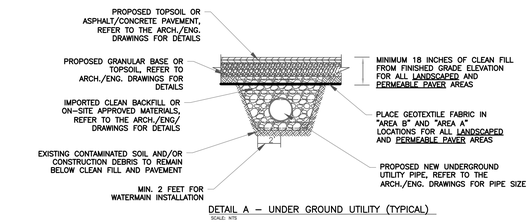
LANDSCAPING
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to finished grade. For trees, see Section 5.3 and 5.4 for details.

PERMEABLE PAVERS
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to the bottom of the pavers.

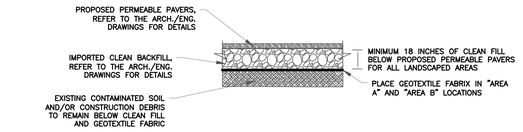
6 See Item 6 in General Notes

GENERAL NOTES

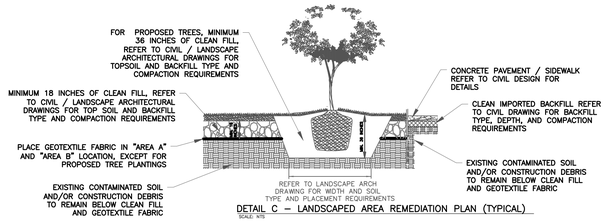
1. THIS DRAWING IS ONLY FOR ENVIRONMENTAL SITE WORK (ILLUSTRATION PURPOSES ONLY.) CONTRACTOR SHALL REFER TO ARCHITECT/ENGINEER DRAWINGS FOR CONSTRUCTION DETAILS AND DIMENSIONS. REFER TO SITE SURVEY FOR EXISTING SURFACE ELEVATIONS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND FIELD CONDITIONS. ALL DIMENSIONS AND DETAILS ARE TAKEN FROM RECORD DRAWINGS AND ARE NOT GUARANTEED TO BE ACCURATE, CONTRACTOR SHALL FIELD VERIFY ACTUAL FIELD DIMENSIONS.
3. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS. HANDLING OF EXCAVATED SOILS ON SITE SHALL REQUIRE CONSTRUCTION WORKER PRECAUTIONS DUE TO EXCEEDANCES OF THE MERCURY INHALATION EXPOSURE ROUTE AND THE LEAD INGESTION EXPOSURE ROUTE FOR CONSTRUCTION WORKERS ACCORDING TO TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE (ILAC), SECTION 742, APPENDIX B, TABLE B.
4. AT A MINIMUM, ALL EXCAVATED SOILS SHALL BE CLASSIFIED AS NON–SPECIAL NON–HAZARDOUS WASTE TO BE DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL AS LICENSED AND PERMITTED BY THE IEPA EXCEPT:
   - 4.1. EXCAVATED MATERIALS WITHIN AREA B AND BELOW REFERENCED DEPTHS IN AREA A ARE NOT SAMPLED AND ANALYZED AND ARE ASSUMED TO BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE NON–HAZARDOUS WASTE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.2. ENVIRONMENTAL SOIL/FILL CONDITIONS IN AREAS OUTSIDE THE CONSTRUCTION AREA ARE NOT KNOWN. SOIL/FILL REMOVED FROM THESE AREAS SHALL BE HANDLED PER SPECIFICATION SECTION 31 23 18.13 AS PART OF CONTRACT WORK AND ARE NOT PERMITTED FOR REUSE ON THE PROPERTY UNLESS SOIL ANALYTICAL DATA INDICATES THAT THEY ARE ACCEPTABLE FOR REUSE. ALL SOIL/FILL FROM THESE AREAS SHALL BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE AND DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.3. CONSTRUCTION DEMOLITION DEBRIS, SUCH AS BURIED CONCRETE SLABS FREE OF STAINING, WHICH MAY BE RECYCLED. ASPHALT AND CLEAN CONCRETE SHOULD BE RECYCLED AT APPROPRIATE RECYCLING FACILITIES PER SPECIFICATION SECTION 31 23 18.14. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF CCDD SHALL BE CONDUCTED IN ACCORDANCE SPECIFICATION SECTION 31 23 18.14.
5. REMEDIATION WORK SHALL INCLUDE PERFORMING EXCAVATION OF SOIL AT THE LOCATION AND ELEVATION SHOW IN THE CIVIL DRAWINGS
   - 5.1. AREA A AND AREA B SOILS IN THE PROPOSED LANDSCAPED AREAS AND PROPOSED PERMEABLE PAVER AREAS SHALL BE EXCAVATED TO A MINIMUM OF 18 INCHES. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 18 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURE FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.2. AREA A AND AREA B SOILS WHERE PROPOSED CONCRETE AND ASPHALT ARE SHALL BE EXCAVATED TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS. INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH IMPORTED CLEAN FILL TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS, THEN INSTALLING CONCRETE OR ASPHALT AS SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS.
   - 5.3. AREA A AND AREA B SOILS SHALL BE EXCAVATED TO A MINIMUM OF 36 INCHES WHERE NEW TREE PLANTINGS ARE PROPOSED. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH AT LEAST 36 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.4. AREA A AND AREA B SOILS LOCATED WITHIN THE DRIP LINES OF EXISTING TREES THAT ARE PROPOSED TO REMAIN SHALL BE EXCAVATED A MINIMUM OF 6 INCHES WHERE POSSIBLE WITHOUT DAMAGING THE ROOT BALL. THE ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 6 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
6. THE KNOWN EXISTING 10,000–GAL HEATING OIL UST SHALL BE ABANDONED–IN–PLACE BY A CONTRACTOR LICENSED FOR SUCH WORK AND IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00, 41 IAC 175 SUBPART C AND 41 IAC 175.840. CONTRACTOR SHALL NOTIFY THE EC AT LEAST 45 DAYS IN ADVANCE PRIOR TO ABANDONMENT FOR FIELD OVERSIGHT OF THE UST ABANDONMENT AND COORDINATION FOR THE UST SITE ASSESSMENT.
7. SOIL EXCAVATION SHALL BE KEPT TO THE EXTENT REQUIRED TO PERFORM THE PROPOSED CONSTRUCTION WORK AS SPECIFIED IN THE CONTRACT DOCUMENTS.
8. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF SOIL/FILL SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14. NO EXCAVATED SOIL SHALL BE REUSED ON SITE.
9. CONTRACTOR SHALL PROVIDE THE NAMES AND ADDRESSES OF ALL SELECTED WASTE/RECYCLE HAULERS, CCDD AND UNCONTAMINATED SOIL FILL OPERATIONS SITES AND/OR RECYCLING FACILITIES AND ACTIVE PERMITTED SUBTITLE D LANDFILL PER SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14 PRIOR TO THE START OF CONTRACTOR WORK.
10. ALL FIELD EQUIPMENT SHALL BE DECONTAMINATED PRIOR TO BEING TAKEN OFFSITE OR USAGE IN UNCONTAMINATED SOIL AREAS.
11. THE CONTRACTOR SHALL NOT INTERMIX ON SITE AND OFF SITE MATERIALS. OFF SITE/ROW SOILS CANNOT BE STOCKPILED ON SITE AND ON SITE MATERIALS CANNOT BE STOCKPILED OFF SITE.
12. CLEAN CONCRETE AND/OR ASPHALT REMOVED DURING EXCAVATION/DEMOLITION WORK CAN BE TRANSPORTED TO THE APPROVED RECYCLING FACILITY. CONCRETE RUBBLE COMMINGLED, MIXED OR CROSS CONTAMINATED WITH GENERAL CONSTRUCTION & DEMOLITION DEBRIS SHALL BE HANDLED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13.
13. SHOULD ANY SOILS OR FILL BE ENCOUNTERED THAT EXHIBIT UNUSUAL OR PETROLEUM/SOLVENT ODORS OR STAINING, CONTRACTOR SHALL STOP WORK IN THAT AREA AND NOTIFY THE COMMISSION REPRESENTATIVE IMMEDIATELY. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COMMISSION REPRESENTATIVE IF ANY MATERIALS (SOIL OR LIQUID) REQUIRING SPECIAL HANDLING (I.E. STAINED SOIL, SOIL WITH ODORS, OR LIQUIDS) ENCOUNTERED DURING EXCAVATION PER SPECIFICATION SECTION 31 23 18.14.
14. NO SOIL SHALL BE EXPORTED OR IMPORTED FROM THE SITE WITHOUT THE PRESENCE OF THE ENVIRONMENTAL CONSULTANT (EC). NOTIFY THE COMMISSION REPRESENTATIVE AND EC AT LEAST 48 HOURS IN ADVANCE FOR FIELD OVERSIGHT AND DOCUMENTATION OF EXPORTED SOILS TO SUBTITLE D LANDFILL AND IMPORTED SOILS PER SPECIFICATION SECTION 02 65 00 AND SPECIFICATION SECTION 31 23 18.13.
15. SHOULD AN UNDERGROUND STORAGE TANK (UST) BE ENCOUNTERED IN THE WORK AREA, CONTRACTOR SHALL STOP WORK AND NOTIFY THE COMMISSION REPRESENTATIVE AND ENVIRONMENTAL CONSULTANT IMMEDIATELY IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00.
16. ALL IMPORTED FILL MATERIALS MUST MEET THE REQUIREMENTS OF SPECIFICATION SECTION 31 23 23. ALL IMPORTED BACKFILL SHALL NOT EXCEED THE TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO) LISTED IN TITLE 35 OF ILAC, SECTION 742, APPENDIX B, TABLE A FOR THE PARAMETERS ON THE TARGET COMPOUND LIST ACCORDING TO TITLE 35 OF ILAC, SECTION 740, APPENDIX A. ALL APPROVED IMPORTED CLEAN FILL STOCKPILED ON SITE FOR FUTURE USE SHALL BE STOCKPILED OUTSIDE OF AREA A AND AREA B UNLESS STOCKPILED ON CONCRETE, ASPHALT, OR VISQUEEN/PLASTIC SHEETING.
17. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE A STORM WATER MANAGEMENT PLAN THAT SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS, AS WELL AS OTHER RELEVANT CONTRACT DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PUMPING PERMIT FROM THE CITY OF CHICAGO DEPARTMENT OF BUILDINGS AND DISCHARGE AUTHORIZATION/APPROVAL FROM METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRDGC) PRIOR TO DISCHARGE OF STORM WATER INTO CITY SEWER SYSTEM IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
18. SEE CIVIL DRAWINGS FOR UTILITY INSTALLATION AND REMOVAL DETAILS INCLUDING EXCAVATION WIDTH AND DEPTHS. IN THE PROPOSED UNDERGROUND UTILITIES AND SEWER TRENCHING AREAS, THE CONTRACTOR SHALL EXCAVATE SOIL TO A DEPTH REQUIRED BY THE NEW DEVELOPMENT. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF ALL SURROUNDING STREET, UNDERGROUND UTILITIES, BUILDINGS, AND STRUCTURES. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN A SAFE CONDITION UNTIL COMPLETION OF BACKFILLING PER SPECIFICATION SECTION 31 23 18.14.
20. CONTRACTOR SHALL NOT UTILIZE ANY SOIL AND FILL MATERIALS EXCAVATED FOR CONSTRUCTION AT ANY OTHER OFF–SITE PROPERTY.
21. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 23 18.13 (SOIL, FILL BACKFILL, AND CU STRUCTURAL SOIL, DEMOLITION DEBRIS REMOVAL), SECTION 31 23 18.14 (CCDD AND UNCONTAMINATED SOIL DISPOSAL), AND SECTION 01 56 11 (REGARDING DUST, FUME, AND ODOR CONTROL).
22. EROSION CONTROL AND APPLICABLE NPDES REQUIREMENTS ARE PROVIDED IN CONTRACT DRAWING C3–02.
23. TREE PROTECTION REQUIREMENTS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 13 00 AND ARE PROVIDED IN CONTRACT DRAWINGS L1–00 AND L2–00.



DETAIL A – UNDER GROUND UTILITY (TYPICAL)
SCALE: NTS



DETAIL B – PERMEABLE PAVER AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS



DETAIL C – LANDSCAPED AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4 th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4 th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

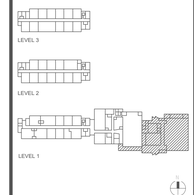
EDI

REVISIONS

NO.	DATE	DESCRIPTION
1	4/04/23	60% SD Draft
2	4/07/23	75% SD
3	4/28/23	100% CD
4	4/28/23	100% CD
5	5/04/23	IFB
6	5/19/23	IFB Addendum 1

DRAWN BY: EDI

SCALE: NTS



PBC Project Name: DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
SOIL MANAGEMENT AND REMEDIATION PLAN

Sheet NOT FOR CONSTRUCTION

SMP-01

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003	22120464-004
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50	09:00
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
pH		6.25 - 9.0		---	---	**10.6**	7.80	---	---	---	---
Acenaphthene		570		< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Acetone		25		---	---	< 0.066	< 0.073	---	---	---	---
Anthracene		12,000		< 0.038	< 0.040	0.097	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Antimony		5		---	---	< 2.4	< 2.3	---	---	---	---
Arsenic	within a MSA county	13.0		7.7	9.5	6.4	11	13	9.5	3.1	13
	within a non-MSA county	11.3		7.7	9.5	6.4	11	**13**	9.5	3.1	**13**
Barium		1,500		79	30	41	52	82	49	34	34
Benzene		0.03		< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
Benz(a)anthracene	within Chicago corporate limits	1.1		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	1.8		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzo(b)fluoranthene	within Chicago corporate limits	1.5		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	2.1		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzo(k)fluoranthene		9		0.28	< 0.040	0.33	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzoic acid		400				< 0.98	< 1.0				
Benzo(a)pyrene	within Chicago corporate limits	1.3		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	2.1		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county	0.98		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	outside populated area	0.09		**0.33**	< 0.040	**0.41**	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Beryllium		22		---	---	< 0.59	0.66	---	---	---	---
Bis(2-chloroethyl)ether		0.66		---	---	< 0.20	< 0.20	---	---	---	---
Bis(2-ethylhexyl)phthalate		46		---	---	< 0.98	< 1.0	---	---	---	---
Bromodichloromethane		0.6		---	---	< 0.0044	< 0.0049	---	---	---	---
Bromoform		0.8		---	---	< 0.0044	< 0.0049	---	---	---	---
Butyl benzyl phthalate		930		---	---	< 0.98	< 1.0	---	---	---	---
Cadmium		5.2		0.74	< 0.52	< 0.59	< 0.58	< 0.52	< 0.56	< 0.52	< 0.55
Carbazole		0.6		---	---	< 0.20	< 0.20	---	---	---	---
Carbon disulfide		9		---	---	< 0.044	< 0.049	---	---	---	---
Carbon tetrachloride		0.07		---	---	< 0.0044	< 0.0049	---	---	---	---
4-Chloroaniline		0.7		---	---	< 0.20	< 0.20	---	---	---	---
Chlorobenzene		1		---	---	< 0.0044	< 0.0049	---	---	---	---
Dibromochloromethane		0.4		---	---	< 0.0044	< 0.0049	---	---	---	---
Chloroform		0.3		---	---	< 0.0044	< 0.0049	---	---	---	---
2-Chlorophenol		1.5		---	---	< 0.20	< 0.20	---	---	---	---
Chromium		21		6.2	20	13	**23 T**	19	**22 T**	10	13
Chrysene		88		0.28	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Cobalt		20		---	---	7.4	16	---	---	---	---
Copper		2,900		---	---	21	31	---	---	---	---
Cyanide		40		---	---	< 0.60	< 0.60	---	---	---	---
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	0.42		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county	0.15		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	outside populated area	0.09		0.088	< 0.040	**0.13**	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Di-n-butyl phthalate		2,300		---	---	< 0.98	< 1.0	---	---	---	---
1,2-Dichlorobenzene		17		---	---	< 0.20	< 0.20	---	---	---	---
1,4-Dichlorobenzene		2		---	---	< 0.20	< 0.20	---	---	---	---
3,3′-Dichlorobenzidine		1.3		---	---	< 0.20	< 0.20	---	---	---	---
1,1-Dichloroethane		23		---	---	< 0.0044	< 0.0049	---	---	---	---
1,2-Dichloroethane		0.02		---	---	< 0.0044	< 0.0049	---	---	---	---
1,1-Dichloroethene		0.06		---	---	< 0.0044	< 0.0049	---	---	---	---
cis-1,2-Dichloroethene		0.4		---	---	< 0.0044	< 0.0049	---	---	---	---
trans-1,2-Dichloroethene		0.7		---	---	< 0.0044	< 0.0049	---	---	---	---
2,4-Dichlorophenol		0.48		---	---	< 0.20	< 0.20	---	---	---	---
1,2-Dichloropropane		0.03		---	---	< 0.0044	< 0.0049	---	---	---	---
cis-1,3-Dichloropropene		0.005		---	---	< 0.0018	< 0.0020	---	---	---	---
trans-1,3-Dichloropropene		0.005		---	---	< 0.0018	< 0.0020	---	---	---	---
Diethyl phthalate		470		---	---	< 0.98	< 1.0	---	---	---	---
2,4-Dimethylphenol		9		---	---	< 0.20	< 0.20	---	---	---	---
2,4-Dinitrophenol		3.3		---	---	< 0.98	< 1.0	---	---	---	---
2,4-Dinitrotoluene		0.25		---	---	< 0.039	< 0.040	---	---	---	---
2,6-Dinitrotoluene		0.26		---	---	< 0.039	< 0.040	---	---	---	---
Di-n-octyl phthalate		1,600		---	---	< 0.98	< 1.0	---	---	---	---
Ethylbenzene		13		< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
Fluoranthene		3,100		0.47	< 0.040	0.76	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Fluorene		560		< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Hexachlorobenzene		0.4		---	---	< 0.20	< 0.20	---	---	---	---
Hexachlorocyclopentadiene		1.1		---	---	< 0.20	< 0.20	---	---	---	---
Hexachloroethane		0.5		---	---	< 0.20	< 0.20	---	---	---	---
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6		0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9		0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Iron	within a MSA county	15,900		---	---	14000	**35000**	---	---	---	---
	within a non-MSA county	15,000		---	---	14000	**35000**	---	---	---	---
Isophorone		8		---	---	< 0.20	< 0.20	---	---	---	---
Lead		107		41	16	49	16	17	16	18	21
Magnesium		325,000		---	---	19000	27000	---	---	---	---
Manganese	within a MSA county	636		---	---	270	560	---	---	---	---
	within a non-MSA county	630		---	---	270	560	---	---	---	---
Mercury	elemental (analyzed as total mercury)	0.1 [E]		0.13 E	0.022	0.10	< 0.019	0.024	< 0.023	0.039	0.023
	ionic (analyzed as total mercury)	0.89		0.13	0.022	0.10	< 0.019	0.024	< 0.023	0.039	0.023

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003	22120464-004
		Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
		Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022	12/15/2022
		Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50	09:00
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
TOTALS	Bromomethane		0.2	---	---	< 0.0088	< 0.0098	---	---	---	---
	Methyl tert-butyl ether		0.32	---	---	< 0.0044	< 0.0049	---	---	---	---
	Methylene chloride		0.02	---	---	< 0.0088	< 0.0098	---	---	---	---
	2-Methylphenol		15	---	---	< 0.20	< 0.20	---	---	---	---
	Naphthalene		1.8	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	Nickel		100	---	---	18	41	---	---	---	---
	Nitrobenzene		0.26	---	---	< 0.039	< 0.040	---	---	---	---
	N-Nitrosodiphenylamine		1	---	---	< 0.20	< 0.20	---	---	---	---
	N-Nitrosodi-n-propylamine		0.0018	---	---	< 0.039	< 0.040	---	---	---	---
	Pentachlorophenol		0.02	---	---	< 0.079	< 0.081	---	---	---	---
	Phenol		100	---	---	< 0.20	< 0.20	---	---	---	---
	Pyrene		2,300	0.47	< 0.040	0.69	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	Selenium		1.3	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1
	Silver		4.4	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1
	Styrene		4	---	---	< 0.0044	< 0.0049	---	---	---	---
	Tetrachloroethene		0.06	---	---	< 0.0044	< 0.0049	---	---	---	---
	Thallium		2.6	---	---	< 1.2	< 1.2	---	---	---	---
	Toluene		12	< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
	1,2,4-Trichlorobenzene		5	---	---	< 0.20	< 0.20	---	---	---	---
	1,1,1-Trichloroethane		2	---	---	< 0.0044	< 0.0049	---	---	---	---
	1,1,2-Trichloroethane		0.02	---	---	< 0.0044	< 0.0049	---	---	---	---
	Trichloroethene		0.06	---	---	< 0.0044	< 0.0049	---	---	---	---
	2,4,5-Trichlorophenol		26	---	---	< 0.20	< 0.20	---	---	---	---
	2,4,6-Trichlorophenol		0.66	---	---	< 0.20	< 0.20	---	---	---	---
	Vanadium		550	---	---	18	25	---	---	---	---
	Vinyl chloride		0.01	---	---	< 0.0044	< 0.0049	---	---	---	---
	Xylenes, Total		5.6	< 0.015	< 0.073	< 0.013	< 0.015	< 0.077	< 0.067	< 0.015	< 0.077
	Zinc		5,100	---	---	55	67	---	---	---	---
			mg/L								
TCLP	Arsenic		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Barium		2	---	---	0.38	0.57	---	---	---	---
	Cadmium		0.005	---	---	< 0.0050	< 0.0050	---	---	---	---
	Chromium		0.1	---	---	< 0.010	< 0.010	---	---	---	---
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	---	---	0.0056	< 0.0050	---	---	---	---
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	---	---	< 0.00020	< 0.00020	---	---	---	---
	Selenium		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Silver		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011	22120464-012
		Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
		Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022	12/15/2022
		Time Collected :	08:25	08:35	10:25	10:35	16:50	17:00	10:50	11:00
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
pH		6.25 - 9.0	---	---	---	---	8.29	7.96	---	---
Acenaphthene		570	< 0.041	< 0.040	0.53	< 0.040	0.72	< 0.040	0.42	< 0.040
Acetone		25	---	---	---	---	< 0.10	< 0.075	---	---
Anthracene		12,000	0.044	< 0.040	1.0	< 0.040	3.1	< 0.040	1.7	< 0.040
Antimony		5	---	---	---	---	< 2.2	< 2.4	---	---
Arsenic	within a MSA county	13.0	10	7.2	3.3	9.7	**16**	**19**	**14**	9.1
	within a non-MSA county	11.3	10	7.2	3.3	9.7	**16**	**19**	**14**	9.1
Barium		1,500	38	40	200	38	380	39	250	61
Benzene		0.03	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
Benz(a)anthracene	within Chicago corporate limits	1.1	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
	within a populated area in MSA excluding Chicago	1.8	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
	within a populated area in non-MSA county or outside populated area	0.9	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.11	< 0.040	**2.1**	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
	within a populated area in MSA excluding Chicago	2.1	0.11	< 0.040	2.1	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
	within a populated area in non-MSA county or outside populated area	0.9	0.11	< 0.040	**2.1**	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
Benzo(k)fluoranthene		9	0.12	< 0.040	1.8	< 0.040	6.6	< 0.040	3.8	< 0.040
Benzoic acid		400					< 1.0	< 1.0		
Benzo(a)pyrene	within Chicago corporate limits	1.3	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	within a populated area in MSA excluding Chicago	2.1	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	within a populated area in non-MSA county	0.98	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	outside populated area	0.09	**0.13**	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
Beryllium		22	---	---	---	---	0.71	0.76	---	---
Bis(2-chloroethyl)ether		0.66	---	---	---	---	< 0.21	< 0.21	---	---
Bis(2-ethylhexyl)phthalate		46	---	---	---	---	< 1.0	< 1.0	---	---
Bromodichloromethane		0.6	---	---	---	---	< 0.0067	< 0.0050	---	---
Bromoform		0.8	---	---	---	---	< 0.0067	< 0.0050	---	---
Butyl benzyl phthalate		930	---	---	---	---	< 1.0	< 1.0	---	---
Cadmium		5.2	< 0.56	< 0.53	0.60	< 0.60	2.3	< 0.60	**7.4**	< 0.52
Carbazole		0.6	---	---	---	---	**0.79**	< 0.21	---	---
Carbon disulfide		9	---	---	---	---	< 0.067	< 0.050	---	---
Carbon tetrachloride		0.07	---	---	---	---	< 0.0067	< 0.0050	---	---
4-Chloroaniline		0.7	---	---	---	---	< 0.21	< 0.21	---	---
Chlorobenzene		1	---	---	---	---	< 0.0067	< 0.0050	---	---
Dibromochloromethane		0.4	---	---	---	---	< 0.0067	< 0.0050	---	---
Chloroform		0.3	---	---	---	---	< 0.0067	< 0.0050	---	---
2-Chlorophenol		1.5	---	---	---	---	< 0.21	< 0.21	---	---
Chromium		21	20	18	10	19	**27 T**	**24 T**	18	21
Chrysene		88	0.14	< 0.040	2.3	< 0.040	7.6	< 0.040	5.6	< 0.040
Cobalt		20	---	---	---	---	7.7	14	---	---
Copper		2,900	---	---	---	---	110	37	---	---
Cyanide		40	---	---	---	---	< 0.61	< 0.61	---	---
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	within a populated area in MSA excluding Chicago	0.42	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	within a populated area in non-MSA county	0.15	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	outside populated area	0.09	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
Di-n-butyl phthalate		2,300	---	---	---	---	< 1.0	< 1.0	---	---
1,2-Dichlorobenzene		17	---	---	---	---	< 0.21	< 0.21	---	---
1,4-Dichlorobenzene		2	---	---	---	---	< 0.21	< 0.21	---	---
3,3´-Dichlorobenzidine		1.3	---	---	---	---	< 0.21	< 0.21	---	---
1,1-Dichloroethane		23	---	---	---	---	< 0.0067	< 0.0050	---	---
1,2-Dichloroethane		0.02	---	---	---	---	< 0.0067	< 0.0050	---	---
1,1-Dichloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
cis-1,2-Dichloroethene		0.4	---	---	---	---	< 0.0067	< 0.0050	---	---
trans-1,2-Dichloroethene		0.7	---	---	---	---	< 0.0067	< 0.0050	---	---
2,4-Dichlorophenol		0.48	---	---	---	---	< 0.21	< 0.21	---	---
1,2-Dichloropropane		0.03	---	---	---	---	< 0.0067	< 0.0050	---	---
cis-1,3-Dichloropropene		0.005	---	---	---	---	< 0.0027	< 0.0020	---	---
trans-1,3-Dichloropropene		0.005	---	---	---	---	< 0.0027	< 0.0020	---	---
Diethyl phthalate		470	---	---	---	---	< 1.0	< 1.0	---	---
2,4-Dimethylphenol		9	---	---	---	---	< 0.21	< 0.21	---	---
2,4-Dinitrophenol		3.3	---	---	---	---	< 1.0	< 1.0	---	---
2,4-Dinitrotoluene		0.25	---	---	---	---	< 0.040	< 0.040	---	---
2,6-Dinitrotoluene		0.26	---	---	---	---	< 0.040	< 0.040	---	---
Di-n-octyl phthalate		1,600	---	---	---	---	< 1.0	< 1.0	---	---
Ethylbenzene		13	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
Fluoranthene		3,100	0.29	< 0.040	4.5	< 0.040	15	< 0.040	12	< 0.040
Fluorene		560	< 0.041	< 0.040	0.49	< 0.040	1.1	< 0.040	0.56	< 0.040
Hexachlorobenzene		0.4	---	---	---	---	< 0.21	< 0.21	---	---
Hexachlorocyclopentadiene		1.1	---	---	---	---	< 0.21	< 0.21	---	---
Hexachloroethane		0.5	---	---	---	---	< 0.21	< 0.21	---	---
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.074	< 0.040	1.4	< 0.040	**4.3**	< 0.040	**2.8**	< 0.040
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.074	< 0.040	**1.4**	< 0.040	**4.3**	< 0.040	**2.8**	< 0.040
Iron	within a MSA county	15,900	---	---	---	---	**23000 T**	**42000 T**	---	---
	within a non-MSA county	15,000	---	---	---	---	**23000 T**	**42000 T**	---	---
Isophorone		8	---	---	---	---	< 0.21	< 0.21	---	---
Lead		107	36	15	**410**	23	**840**	22	**1300**	18
Magnesium		325,000	---	---	---	---	12000	26000	---	---
Manganese	within a MSA county	636	---	---	---	---	390	410	---	---
	within a non-MSA county	630	---	---	---	---	390	410	---	---
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.060	< 0.023	0.22 E	0.028	0.56 E	0.030	0.88 E	0.026
	ionic (analyzed as total mercury)	0.89	0.060	< 0.023	0.22	0.028	0.56	0.030	0.88	0.026

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011	22120464-012
		Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
		Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022	12/15/2022
		Time Collected :	08:25	08:35	10:25	10:35	16:50	17:00	10:50	11:00
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
TOTALS	Bromomethane		0.2	---	---	---	---	< 0.013	< 0.010	---	---
	Methyl tert-butyl ether		0.32	---	---	---	---	< 0.0067	< 0.0050	---	---
	Methylene chloride		0.02	---	---	---	---	< 0.013	< 0.010	---	---
	2-Methylphenol		15	---	---	---	---	< 0.21	< 0.21	---	---
	Naphthalene		1.8	< 0.041	< 0.040	0.81	< 0.040	0.33	< 0.040	0.19	< 0.040
	Nickel		100	---	---	---	---	21	43	---	---
	Nitrobenzene		0.26	---	---	---	---	< 0.040	< 0.040	---	---
	N-Nitrosodiphenylamine		1	---	---	---	---	< 0.21	< 0.21	---	---
	N-Nitrosodi-n-propylamine		0.0018	---	---	---	---	< 0.040	< 0.040	---	---
	Pentachlorophenol		0.02	---	---	---	---	< 0.082	< 0.081	---	---
	Phenol		100	---	---	---	---	< 0.21	< 0.21	---	---
	Pyrene		2,300	0.24	< 0.040	3.7	< 0.040	15	< 0.040	11	< 0.040
	Selenium		1.3	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2	< 1.2	< 1.0
	Silver		4.4	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2	< 1.2	< 1.0
	Styrene		4	---	---	---	---	< 0.0067	< 0.0050	---	---
	Tetrachloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
	Thallium		2.6	---	---	---	---	< 1.1	< 1.2	---	---
	Toluene		12	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	1,2,4-Trichlorobenzene		5	---	---	---	---	< 0.21	< 0.21	---	---
	1,1,1-Trichloroethane		2	---	---	---	---	< 0.0067	< 0.0050	---	---
	1,1,2-Trichloroethane		0.02	---	---	---	---	< 0.0067	< 0.0050	---	---
	Trichloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
	2,4,5-Trichlorophenol		26	---	---	---	---	< 0.21	< 0.21	---	---
	2,4,6-Trichlorophenol		0.66	---	---	---	---	< 0.21	< 0.21	---	---
	Vanadium		550	---	---	---	---	27	29	---	---
	Vinyl chloride		0.01	---	---	---	---	< 0.0067	< 0.0050	---	---
	Xylenes, Total		5.6	< 0.071	< 0.070	< 0.015	< 0.018	< 0.020	< 0.015	< 0.018	< 0.015
	Zinc		5,100	---	---	---	---	550	60	---	---
			mg/L								
TCLP	Arsenic		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Barium		2	---	---	---	---	0.93	0.22	---	---
	Cadmium		0.005	---	---	---	---	0.025 T	< 0.0050	---	---
	Chromium		0.1	---	---	---	---	0.032	< 0.010	---	---
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	---	---	---	---	**0.81**	< 0.0050	---	---
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	---	---	---	---	< 0.00020	< 0.00020	---	---
	Selenium		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Silver		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	**0.21**	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005	23030736-006
		Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
		Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
		Time Collected :	18:25	18:30	19:20	19:25	19:00	19:10	17:10	17:15
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
pH		6.25 - 9.0	8.09	8.08	8.19	8.09	8.42	7.69	8.47	8.18
Acenaphthene		570	0.060	< 0.040	0.22	< 0.039	0.19	< 0.041	0.19	< 0.041
Acetone		25	< 0.072	< 0.068	< 0.077	< 0.067	0.077	< 0.066	< 0.066	< 0.072
Anthracene		12,000	0.40	< 0.040	1.1	< 0.039	0.65	< 0.041	3.5	< 0.041
Antimony		5	< 2.0	< 2.3	< 2.2	< 2.2	< 2.1	< 2.1	< 2.1	< 2.3
Arsenic	within a MSA county	13.0	7.1	13	8.6	**14**	8.5	5.4	7.8	8.1
	within a non-MSA county	11.3	7.1	**13**	8.6	**14**	8.5	5.4	7.8	8.1
Barium		1,500	21	57	220	46	140	37	38	57
Benzene		0.03	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Benz(a)anthracene	within Chicago corporate limits	1.1	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
	within a populated area in MSA excluding Chicago	1.8	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
	within a populated area in non-MSA county or outside populated area	0.9	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	**1.6**	< 0.040	**3.7**	< 0.039	**2.1**	< 0.041	**11**	< 0.041
	within a populated area in MSA excluding Chicago	2.1	1.6	< 0.040	**3.7**	< 0.039	2.1	< 0.041	**11**	< 0.041
	within a populated area in non-MSA county or outside populated area	0.9	**1.6**	< 0.040	**3.7**	< 0.039	**2.1**	< 0.041	**11**	< 0.041
Benzo(k)fluoranthene		9	1.8	< 0.040	3.4	< 0.039	1.8	< 0.041	**11**	< 0.041
Benzoic acid		400	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Benzo(a)pyrene	within Chicago corporate limits	1.3	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	within a populated area in MSA excluding Chicago	2.1	2.1	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	within a populated area in non-MSA county	0.98	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	outside populated area	0.09	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
Beryllium		22	< 0.50	0.69	< 0.55	0.62	0.57	0.67	< 0.52	0.69
Bis(2-chloroethyl)ether		0.66	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Bis(2-ethylhexyl)phthalate		46	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Bromodichloromethane		0.6	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Bromoform		0.8	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Butyl benzyl phthalate		930	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Cadmium		5.2	< 0.50	< 0.57	1.3	< 0.55	0.67	< 0.53	< 0.52	< 0.57
Carbazole		0.6	< 0.19	< 0.21	0.31	< 0.20	0.31	< 0.21	0.29	< 0.21
Carbon disulfide		9	< 0.048	< 0.045	< 0.051	< 0.045	< 0.051	< 0.044	< 0.044	< 0.048
Carbon tetrachloride		0.07	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
4-Chloroaniline		0.7	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Chlorobenzene		1	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Dibromochloromethane		0.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Chloroform		0.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
2-Chlorophenol		1.5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Chromium		21	10	**23 T**	17	21	16	**24 T**	14	**23 T**
Chrysene		88	1.9	< 0.040	4.5	< 0.039	2.4	< 0.041	13	< 0.041
Cobalt		20	6.0	15	5.9	19	7.5	10	7.7	14
Copper		2,900	9.5	31	65	28	37	29	14	29
Cyanide		40	< 0.58	< 0.61	< 0.58	< 0.60	< 0.57	< 0.62	< 0.56	< 0.62
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	within a populated area in MSA excluding Chicago	0.42	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	within a populated area in non-MSA county	0.15	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	outside populated area	0.09	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
Di-n-butyl phthalate		2,300	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
1,2-Dichlorobenzene		17	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,4-Dichlorobenzene		2	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
3,3´-Dichlorobenzidine		1.3	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,1-Dichloroethane		23	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,2-Dichloroethane		0.02	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,1-Dichloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,2-Dichloroethene		0.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
trans-1,2-Dichloroethene		0.7	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
2,4-Dichlorophenol		0.48	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,2-Dichloropropane		0.03	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,3-Dichloropropene		0.005	< 0.0019	< 0.0018	< 0.0021	< 0.0018	< 0.0020	< 0.0018	< 0.0018	< 0.0019
trans-1,3-Dichloropropene		0.005	< 0.0019	< 0.0018	< 0.0021	< 0.0018	< 0.0020	< 0.0018	< 0.0018	< 0.0019
Diethyl phthalate		470	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dimethylphenol		9	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2,4-Dinitrophenol		3.3	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dinitrotoluene		0.25	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
2,6-Dinitrotoluene		0.26	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
Di-n-octyl phthalate		1,600	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Ethylbenzene		13	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Fluoranthene		3,100	2.8	< 0.040	7.0	< 0.039	4.5	< 0.041	29	< 0.041
Fluorene		560	0.095	< 0.040	0.31	< 0.039	0.24	< 0.041	0.45	< 0.041
Hexachlorobenzene		0.4	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachlorocyclopentadiene		1.1	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachloroethane		0.5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	1.1	< 0.040	**2.0**	< 0.039	1.2	< 0.041	**7.2**	< 0.041
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	**1.1**	< 0.040	**2.0**	< 0.039	**1.2**	< 0.041	**7.2**	< 0.041
Iron	within a MSA county	15,900	13000	**35000 T**	**16000 T**	**30000 T**	**16000 T**	**22000 T**	**16000 T**	**26000 T**
	within a non-MSA county	15,000	13000	**35000 T**	**16000 T**	**30000 T**	**16000 T**	**22000 T**	**16000 T**	**26000 T**
Isophorone		8	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Lead		107	9.7	17	**880**	17	**270**	20	39	18
Magnesium		325,000	1700	30000	20000	32000	9200	18000	6800	32000
Manganese	within a MSA county	636	68	470	380	600	500	230	180	490
	within a non-MSA county	630	68	470	380	600	500	230	180	490
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.22 E	0.027	0.83 E	0.030	0.53 E	0.028	0.039	0.029
	ionic (analyzed as total mercury)	0.89	0.22	0.027	0.83	0.030	0.53	0.028	0.039	0.029

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005	23030736-006
			Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:25	18:30	19:20	19:25	19:00	19:10	17:10	17:15
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
TOTALS	Bromomethane		0.2	< 0.0095	< 0.0091	< 0.010	< 0.0089	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Methyl tert-butyl ether		0.32	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Methylene chloride		0.02	< 0.0095	< 0.0091	< 0.010	< 0.0089	< 0.010	< 0.0089	< 0.0088	< 0.0095
	2-Methylphenol		15	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Naphthalene		1.8	0.053	< 0.040	0.081	< 0.039	0.11	< 0.041	0.20	< 0.041
	Nickel		100	12	38	16	36	16	33	16	37
	Nitrobenzene		0.26	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
	N-Nitrosodiphenylamine		1	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	N-Nitrosodi-n-propylamine		0.0018	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
	Pentachlorophenol		0.02	< 0.077	< 0.081	< 0.078	< 0.079	< 0.076	< 0.083	< 0.075	< 0.084
	Phenol		100	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Pyrene		2,300	2.6	< 0.040	6.1	< 0.039	3.8	< 0.041	26	< 0.041
	Selenium		1.3	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Silver		4.4	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Styrene		4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Tetrachloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Thallium		2.6	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Toluene		12	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	0.0047	0.0060	< 0.0048
	1,2,4-Trichlorobenzene		5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	1,1,1-Trichloroethane		2	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1,2-Trichloroethane		0.02	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Trichloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	2,4,5-Trichlorophenol		26	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	2,4,6-Trichlorophenol		0.66	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Vanadium		550	20	25	24	22	23	26	21	25
	Vinyl chloride		0.01	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Xylenes, Total		5.6	< 0.014	< 0.014	< 0.015	< 0.013	< 0.015	< 0.013	< 0.013	< 0.014
	Zinc		5,100	19	49	350	52	180	90	39	53
			mg/L								
TCLP	Arsenic		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium		2	0.19	0.85	1.7	1.0	1.0	0.21	0.20	0.92
	Cadmium		0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	**0.0087**	< 0.0050	**0.14**	**0.013**	**0.10**	< 0.0050	**0.020**	< 0.0050
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
		Client Sample ID :	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
		Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
		Time Collected :	17:40	17:50	19:40	19:45	16:55	17:05	21:00	21:10
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
pH		6.25 - 9.0	7.72	7.96	8.28	7.86	**9.49**	8.18	8.17	7.86
Acenaphthene		570	< 0.039	< 0.041	0.24	< 0.040	0.67	< 0.041	< 0.041	< 0.039
Acetone		25	< 0.080	< 0.068	< 0.077	< 0.076	< 0.081	< 0.071	< 0.077	< 0.067
Anthracene		12,000	0.13	< 0.041	0.97	< 0.040	3.4	< 0.041	0.085	< 0.039
Antimony		5	< 2.2	< 2.1	< 2.2	< 2.1	< 2.2	< 2.2	< 2.3	< 2.4
Arsenic	within a MSA county	13.0	7.5	13	**15**	10	**15**	11	**25**	8.8
	within a non-MSA county	11.3	7.5	**13**	**15**	10	**15**	11	**25**	8.8
Barium		1,500	73	69	830	57	350	81	160	27
Benzene		0.03	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Benz(a)anthracene	within Chicago corporate limits	1.1	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
	within a populated area in MSA excluding Chicago	1.8	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
	within a populated area in MSA excluding Chicago	2.1	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
Benzo(k)fluoranthene		9	0.29	< 0.041	2.9	< 0.040	8.2	< 0.041	0.19	< 0.039
Benzoic acid		400	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Benzo(a)pyrene	within Chicago corporate limits	1.3	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	within a populated area in MSA excluding Chicago	2.1	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	within a populated area in non-MSA county	0.98	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	outside populated area	0.09	**0.40**	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	**0.28**	< 0.039
Beryllium		22	< 0.56	< 0.53	0.75	0.77	< 0.54	0.80	1.1	0.64
Bis(2-chloroethyl)ether		0.66	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Bis(2-ethylhexyl)phthalate		46	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Bromodichloromethane		0.6	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Bromoform		0.8	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Butyl benzyl phthalate		930	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Cadmium		5.2	< 0.56	< 0.53	2.7	< 0.52	2.9	< 0.54	0.89	< 0.59
Carbazole		0.6	< 0.20	< 0.21	0.34	< 0.21	**0.88**	< 0.21	< 0.21	< 0.20
Carbon disulfide		9	< 0.053	< 0.045	< 0.051	< 0.050	< 0.054	< 0.047	< 0.051	< 0.044
Carbon tetrachloride		0.07	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
4-Chloroaniline		0.7	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Chlorobenzene		1	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Dibromochloromethane		0.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Chloroform		0.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
2-Chlorophenol		1.5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Chromium		21	14	20	**24 T**	**26 T**	18	20	**24 T**	21
Chrysene		88	0.38	< 0.041	3.7	< 0.040	10	< 0.041	0.32	< 0.039
Cobalt		20	6.7	15	9.1	14	6.1	12	**52 T**	13
Copper		2,900	24	25	100	31	110	25	46	36
Cyanide		40	< 0.59	< 0.62	< 0.58	< 0.61	< 0.60	< 0.63	< 0.62	< 0.60
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	within a populated area in MSA excluding Chicago	0.42	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	within a populated area in non-MSA county	0.15	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	outside populated area	0.09	**0.12**	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
Di-n-butyl phthalate		2,300	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
1,2-Dichlorobenzene		17	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,4-Dichlorobenzene		2	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
3,3´-Dichlorobenzidine		1.3	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,1-Dichloroethane		23	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,2-Dichloroethane		0.02	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1-Dichloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,2-Dichloroethene		0.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
trans-1,2-Dichloroethene		0.7	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
2,4-Dichlorophenol		0.48	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,2-Dichloropropane		0.03	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,3-Dichloropropene		0.005	< 0.0021	< 0.0018	< 0.0020	< 0.0020	< 0.0022	< 0.0019	< 0.0020	< 0.0018
trans-1,3-Dichloropropene		0.005	< 0.0021	< 0.0018	< 0.0020	< 0.0020	< 0.0022	< 0.0019	< 0.0020	< 0.0018
Diethyl phthalate		470	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
2,4-Dimethylphenol		9	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
2,4-Dinitrophenol		3.3	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
2,4-Dinitrotoluene		0.25	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
2,6-Dinitrotoluene		0.26	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
Di-n-octyl phthalate		1,600	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Ethylbenzene		13	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Fluoranthene		3,100	0.67	0.067	7.3	< 0.040	19	< 0.041	0.64	< 0.039
Fluorene		560	0.051	< 0.041	0.32	< 0.040	1.1	< 0.041	< 0.041	< 0.039
Hexachlorobenzene		0.4	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Hexachlorocyclopentadiene		1.1	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Hexachloroethane		0.5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.19	< 0.041	**1.8**	< 0.040	**4.8**	< 0.041	0.15	< 0.039
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.19	< 0.041	**1.8**	< 0.040	**4.8**	< 0.041	0.15	< 0.039
Iron	within a MSA county	15,900	**16000 T**	**30000 T**	**22000 T**	**35000 T**	**19000 T**	**35000 T**	**41000 T**	**28000 T**
	within a non-MSA county	15,000	**16000 T**	**30000 T**	**22000 T**	**35000 T**	**19000 T**	**35000 T**	**41000 T**	**28000 T**
Isophorone		8	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Lead		107	100	17	**850**	18	**740**	15	44	20
Magnesium		325,000	4300	21000	16000	26000	22000	27000	19000	30000
Manganese	within a MSA county	636	150	590	330	350	280	400	**2100**	420
	within a non-MSA county	630	150	590	330	350	280	400	**2100**	420
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.57 E	0.038	0.52 E	0.031	0.38 E	< 0.021	0.059	< 0.019
	ionic (analyzed as total mercury)	0.89	0.57	0.038	0.52	0.031	0.38	< 0.021	0.059	< 0.019

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
	Laboratory ID :			23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
	Client Sample ID :			SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
	Date Collected :			03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
	Time Collected :			17:40	17:50	19:40	19:45	16:55	17:05	21:00	21:10
TOTALS	Bromomethane		0.2	< 0.011	< 0.0091	< 0.010	< 0.010	< 0.011	< 0.0094	< 0.010	< 0.0088
	Methyl tert-butyl ether		0.32	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Methylene chloride		0.02	< 0.011	< 0.0091	< 0.010	< 0.010	< 0.011	< 0.0094	< 0.010	< 0.0088
	2-Methylphenol		15	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Naphthalene		1.8	< 0.039	< 0.041	0.093	< 0.040	0.24	< 0.041	< 0.041	< 0.039
	Nickel		100	16	35	24	41	21	34	66	38
	Nitrobenzene		0.26	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	N-Nitrosodiphenylamine		1	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	N-Nitrosodi-n-propylamine		0.0018	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	Pentachlorophenol		0.02	< 0.079	< 0.083	< 0.078	< 0.081	< 0.080	< 0.084	< 0.081	< 0.079
	Phenol		100	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Pyrene		2,300	0.59	0.058	6.0	< 0.040	16	< 0.041	0.55	< 0.039
	Selenium		1.3	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Silver		4.4	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Styrene		4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Tetrachloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Thallium		2.6	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Toluene		12	< 0.0053	0.0047	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,2,4-Trichlorobenzene		5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	1,1,1-Trichloroethane		2	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,2-Trichloroethane		0.02	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Trichloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	2,4,5-Trichlorophenol		26	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4,6-Trichlorophenol		0.66	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Vanadium		550	23	21	28	28	20	23	36	24
	Vinyl chloride		0.01	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Xylenes, Total		5.6	< 0.016	< 0.014	< 0.015	< 0.015	< 0.016	< 0.014	< 0.015	< 0.013
	Zinc		5,100	81	49	880	60	420	53	160	57
			mg/L								
TCLP	Arsenic		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium		2	0.32	0.19	2.0	0.27	0.86	0.71	0.16	0.63
	Cadmium		0.005	< 0.0050	< 0.0050	0.0093 T	< 0.0050	0.0088 T	< 0.0050	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.017	0.022
	Cobalt		1	---	---	---	---	---	---	< 0.010	---
	Iron		5	---	---	---	---	---	---	< 0.25	---
	Lead		0.0075	**0.016**	< 0.0050	**0.097**	< 0.0050	**0.16**	< 0.0050	< 0.0050	< 0.0050
	Manganese		0.15	---	---	---	---	---	---	**0.65**	---
	Mercury		0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium		0.049	---	---	---	---	---	---	< 0.010	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

				Laboratory ID :	23030838-003	23030838-004
				Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
				Date Collected :	03/23/2023	03/23/2023
				Time Collected :	17:50	18:25
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	7-8' bgs
	pH		6.25 - 9.0	**9.26**	8.31
TOTALS	Acenaphthene		570	< 0.039	< 0.040
	Acetone		25	< 0.082	< 0.071
	Anthracene		12,000	0.047	< 0.040
	Antimony		5	< 2.3	< 2.3
	Arsenic	within a MSA county	13.0	9.9	6.7
		within a non-MSA county	11.3	9.9	6.7
	Barium		1,500	83	31
	Benzene		0.03	< 0.0054	< 0.0047
	Benz(a)anthracene	within Chicago corporate limits	1.1	0.14	< 0.040
		within a populated area in MSA excluding Chicago	1.8	0.14	< 0.040
		within a populated area in non-MSA county or outside populated area	0.9	0.14	< 0.040
	Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.13	< 0.040
		within a populated area in MSA excluding Chicago	2.1	0.13	< 0.040
		within a populated area in non-MSA county or outside populated area	0.9	0.13	< 0.040
	Benzo(k)fluoranthene		9	0.12	< 0.040
	Benzoic acid		400	< 0.97	< 0.99
	Benzo(a)pyrene	within Chicago corporate limits	1.3	0.14	< 0.040
		within a populated area in MSA excluding Chicago	2.1	0.14	< 0.040
		within a populated area in non-MSA county	0.98	0.14	< 0.040
		outside populated area	0.09	**0.14**	< 0.040
	Beryllium		22	0.63	0.60
	Bis(2-chloroethyl)ether		0.66	< 0.20	< 0.20
	Bis(2-ethylhexyl)phthalate		46	< 0.97	< 0.99
	Bromodichloromethane		0.6	< 0.0054	< 0.0047
	Bromoform		0.8	< 0.0054	< 0.0047
	Butyl benzyl phthalate		930	< 0.97	< 0.99
	Cadmium		5.2	< 0.58	< 0.56
	Carbazole		0.6	< 0.20	< 0.20
	Carbon disulfide		9	< 0.054	< 0.047
	Carbon tetrachloride		0.07	< 0.0054	< 0.0047
	4-Chloroaniline		0.7	< 0.20	< 0.20
	Chlorobenzene		1	< 0.0054	< 0.0047
	Dibromochloromethane		0.4	< 0.0054	< 0.0047
	Chloroform		0.3	< 0.0054	< 0.0047
	2-Chlorophenol		1.5	< 0.20	< 0.20
	Chromium		21	19	**23 T**
	Chrysene		88	0.15	< 0.040
	Cobalt		20	12	20
	Copper		2,900	33	36
	Cyanide		40	< 0.59	< 0.61
	Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	0.043	< 0.040
		within a populated area in MSA excluding Chicago	0.42	0.043	< 0.040
		within a populated area in non-MSA county	0.15	0.043	< 0.040
		outside populated area	0.09	0.043	< 0.040
	Di-n-butyl phthalate		2,300	< 0.97	< 0.99
	1,2-Dichlorobenzene		17	< 0.20	< 0.20
	1,4-Dichlorobenzene		2	< 0.20	< 0.20
	3,3′-Dichlorobenzidine		1.3	< 0.20	< 0.20
	1,1-Dichloroethane		23	< 0.0054	< 0.0047
	1,2-Dichloroethane		0.02	< 0.0054	< 0.0047
	1,1-Dichloroethene		0.06	< 0.0054	< 0.0047
	cis-1,2-Dichloroethene		0.4	< 0.0054	< 0.0047
	trans-1,2-Dichloroethene		0.7	< 0.0054	< 0.0047
	2,4-Dichlorophenol		0.48	< 0.20	< 0.20
	1,2-Dichloropropane		0.03	< 0.0054	< 0.0047
	cis-1,3-Dichloropropene		0.005	< 0.0022	< 0.0019
	trans-1,3-Dichloropropene		0.005	< 0.0022	< 0.0019
	Diethyl phthalate		470	< 0.97	< 0.99
	2,4-Dimethylphenol		9	< 0.20	< 0.20
	2,4-Dinitrophenol		3.3	< 0.97	< 0.99
	2,4-Dinitrotoluene		0.25	< 0.039	< 0.040
	2,6-Dinitrotoluene		0.26	< 0.039	< 0.040
	Di-n-octyl phthalate		1,600	< 0.97	< 0.99
	Ethylbenzene		13	< 0.0054	< 0.0047
	Fluoranthene		3,100	0.30	< 0.040
	Fluorene		560	< 0.039	< 0.040
	Hexachlorobenzene		0.4	< 0.20	< 0.20
	Hexachlorocyclopentadiene		1.1	< 0.20	< 0.20
	Hexachloroethane		0.5	< 0.20	< 0.20
	Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.077	< 0.040
		within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.077	< 0.040
	Iron	within a MSA county	15,900	**22000 T**	**22000 T**
		within a non-MSA county	15,000	**22000 T**	**22000 T**
	Isophorone		8	< 0.20	< 0.20
	Lead		107	**110**	17
	Magnesium		325,000	21000	28000
	Manganese	within a MSA county	636	380	410
		within a non-MSA county	630	380	410
	Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.28 E	< 0.022
		ionic (analyzed as total mercury)	0.89	0.28	< 0.022

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030838-003	23030838-004
		Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
		Date Collected :	03/23/2023	03/23/2023
		Time Collected :	17:50	18:25
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	7-8' bgs
TOTALS	Bromomethane		0.2	< 0.011	< 0.0094
	Methyl tert-butyl ether		0.32	< 0.0054	< 0.0047
	Methylene chloride		0.02	< 0.011	< 0.0094
	2-Methylphenol		15	< 0.20	< 0.20
	Naphthalene		1.8	< 0.039	< 0.040
	Nickel		100	31	41
	Nitrobenzene		0.26	< 0.039	< 0.040
	N-Nitrosodiphenylamine		1	< 0.20	< 0.20
	N-Nitrosodi-n-propylamine		0.0018	< 0.039	< 0.040
	Pentachlorophenol		0.02	< 0.079	< 0.080
	Phenol		100	< 0.20	< 0.20
	Pyrene		2,300	0.24	< 0.040
	Selenium		1.3	< 1.2	< 1.1
	Silver		4.4	< 1.2	< 1.1
	Styrene		4	< 0.0054	< 0.0047
	Tetrachloroethene		0.06	< 0.0054	< 0.0047
	Thallium		2.6	< 1.2	< 1.1
	Toluene		12	< 0.0054	< 0.0047
	1,2,4-Trichlorobenzene		5	< 0.20	< 0.20
	1,1,1-Trichloroethane		2	< 0.0054	< 0.0047
	1,1,2-Trichloroethane		0.02	< 0.0054	< 0.0047
	Trichloroethene		0.06	< 0.0054	< 0.0047
	2,4,5-Trichlorophenol		26	< 0.20	< 0.20
	2,4,6-Trichlorophenol		0.66	< 0.20	< 0.20
	Vanadium		550	22	25
	Vinyl chloride		0.01	< 0.0054	< 0.0047
	Xylenes, Total		5.6	< 0.016	< 0.014
	Zinc		5,100	98	55
			mg/L		
TCLP	Arsenic		0.05	< 0.010	< 0.010
	Barium		2	0.37	0.55
	Cadmium		0.005	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010
	Cobalt		1	---	---
	Iron		5	---	---
	Lead		0.0075	**0.079**	0.0064
	Manganese		0.15	---	---
	Mercury		0.002	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010
	Vanadium		0.049	---	---
			mg/kg		
SPECIA-TION	Mercury [S]		0.1	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

SECTION 31 23 18.14

CLEAN CONSTRUCTION OR DEMOLITION DEBRIS AND UNCONTAMINATED SOIL DISPOSAL

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. These environmental requirements apply to all Board projects. This section applies for all demolition, construction and renovation projects that require removal and off-site transfer of Clean Construction or Demolition Debris (CCDD) and Uncontaminated Soil as defined in this Specification.

B. Description of Work: This specification is for the excavation, loading and off-site transfer of CCDD and Uncontaminated Soil to permitted CCDD fill sites for use as fill. The locations of CCDD and Uncontaminated Soil on the project site shall be determined by the Board, in consultation with the Managing Environmental Consultant (MEC) and are initially identified in the Contract Documents.

Currently identified soils at the subject property should be eligible for disposal as CCDD as indicated on the attached figure, **Figure SMP-01,** dated May 19, 2023. Where there is a conflict between the contract documents and actual site conditions, the Contractor shall comply with any appropriate field order changes directed by the Board Representative. The Contractor shall perform the Work in accordance with all applicable local, state, and federal regulations.

The Work shall include the following:

1. CCDD Disposal:
    a. All CCDD shall be taken to a permitted CCDD fill site. Uncontaminated asphalt, clean concrete and/or brick that are free of other soil/fill or debris shall be taken to Board approved recycling facilities for recycling. The Contractor shall review Contract Documents for locations of CCDD as determined by the Board.
    b. At, or prior to, the Contractor's environmental briefing meeting with the Board Representative, the Contractor shall identify the selected CCDD fill site and/or recycling facility. Once identified in the formal submittals required in Subsection 1.5, the Contractor may not change the CCDD fill site or recycling facility without written authorization from Board Representative.
    c. At, or prior to, the Contractor's environmental briefing meeting with the Board Representative and the MEC, the Contractor shall identify the hauler or haulers to be used for the transportation of CCDD. Once identified in the formal submittals required in Subsection 1.5, the Contractor may not change the haulers without written authorization from the Board Representative.
    d. At least 48 hours prior to commencing any excavation activities, the Contractor shall contact the Board Representative and MEC for field oversight and documentation of CCDD removal and disposal.
    e. The Contractor shall excavate, load, and transport identified CCDD to the identified CCDD fill site or recycling facility.

f. The Contractor shall provide copies of CCDD fill site receipts to the Board Representative. The fill site receipts shall be per-truck and shall be legible. The receipts must include the date and time of transfer, the name of the hauler, the receiving fill site, and the volume of CCDD material transferred per truck. The Contractor shall also provide a Daily Report to the Board Representative. The Daily Report shall include, at a minimum, the name of hauler, the name of the receiving fill site, and the volume of CCDD disposed of or recycled that day. The fill site receipts shall be attached to the Daily Report.

1) Uncontaminated Soil Disposal:
   a) All soil designated as Uncontaminated Soil shall be transferred off-site to a permitted CCDD facility. The Contractor shall review Contract Documents for locations of Uncontaminated Soils, at the project site, as determined by the Board.
   b) A Source Site Certification (IEPA form LPC-662 or LPC-663) has been provided with Contract Documents. The Contractor shall select a CCDD facility that will accept the designated soils based solely upon the LPC-662 or LPC-663 and supporting information provided in the Contract Documents. No further analytical shall be conducted or provided.
   c) Contractor must obtain acceptance of Uncontaminated Soil for the project prior to submitting bid. Contractor shall provide verification of CCDD approval upon request of the Board Representative. Contractor may not change the CCDD fill site without written authorization from Board Representative.
   d) At, or prior to, the Contractor's environmental briefing meeting with the Board Representative and the MEC, the Contractor shall identify the hauler or haulers to be used for the transportation of Uncontaminated Soils to the selected fill site. Once identified in the formal submittals required in Subsection 1.5, the Contractor may not change the haulers without written authorization from Board Representative.
   e) At least 48 hours prior to commencing any excavation activities, the Contractor shall contact the Board Representative for field oversight and screening of the excavated materials. The MEC will document location and depth of excavated materials and screen Uncontaminated Soils loaded into hauling trucks prior to leaving the Board project site.
   f) The Contractor shall excavate, load and transport the identified Uncontaminated Soil to the selected CCDD fill site.
   g) The Contractor shall provide copies of CCDD fill site receipts to the Board Representative. The fill site receipts shall be per-truck and shall be legible. The receipts must include the date and time of transfer, the name of the hauler, the name of the receiving fill site, and the volume of Uncontaminated Soil transferred per truck. The Contractor shall also provide a Daily Report to the Board Representative. The Daily Report shall include, at a minimum, the name of hauler(s), the name of the receiving fill site(s), and the volume of Uncontaminated Soil transferred that day. The fill site receipts shall be attached to the Daily Report.
2) Other Materials:
   a) Material removed from the site that is not identified as CCDD or Uncontaminated Soil should be managed in accordance with Section 31 23 18.13 Soil, Fill, Backfill, CU Structural Soil & Construction & Demolition Debris Removal, and/or Section 01 52 40 Construction Waste Management and Disposal, as applicable.
3) The Contractor shall attend the environmental briefing meeting conducted by the Board Representative and MEC as scheduled.

1.02 DEFINITIONS

A. Clean Construction or Demolition Debris (CCDD): any of the following materials, alone or in combination, that (i) have been generated from construction or demolition activities and (ii) are uncontaminated:
   1. broken concrete without protruding metal bars,
   2. bricks,
   3. rock,
   4. stone,
   5. reclaimed or other asphalt pavement
   6. Uncontaminated soil which is comingled with any of the above materials is also considered CCDD.

B. Managing Environmental Consultant (MEC): the Board's consultant regarding environmental aspects of the project.

C. General Construction and Demolition (C&D) Debris: non-hazardous, uncontaminated materials resulting from construction, remodeling, repair, and demolition of utilities, structures, and roads as defined in Section 3.160 of the Environmental Protection Act, 415 Illinois Compiled Statutes (ILCS) 5/3.160 and regulated under Title 35: Environmental Protection; Subtitle G: Waste Disposal; Chapter I: Pollution Control Board; Subchapter i: Solid Waste and Special Waste Hauling. C&D debris may include soil, wall coverings, reclaimed asphalt pavement, rock, plaster, glass, non-hazardous painted wood, drywall, plastics, non-hazardous coated wood, non-asbestos insulation, bricks, wood products, roofing shingles, concrete, and general roof coverings.

D. IEPA: Illinois Environmental Protection Agency.

E. LPE: licensed professional engineer.

F. MWRDGC: Metropolitan Water Reclamation District of Greater Chicago.

G. OSHA: the federal agency with responsibility for worker safety, the Occupational Safety and Health Administration.

H. Soil: any granular or cohesive materials designated for removal as specified in the bid documents and includes soils and soil-like materials, such as clay, that are determined to be Uncontaminated Soil, Contaminated Soil, and Special and/or Hazardous Waste soil.

I. Storm water: water deposited at the site in the form of rain, snow or other natural weather event.

J. TACO: Tiered Approach to Corrective Action Objectives in accordance with 35 ILLINOIS ADMINISTRATIVE CODE (ILL. ADM. CODE) Part 742.

K. Uncontaminated Soil: soil generated during construction, remodeling, repair or demolition of utilities, structures and roads that does not contain contaminants in concentrations that pose a threat to human health and safety and the environment. [415 ILCS 5/3.160(c)] User or User Agency means the entity for which or on whose behalf the Board has undertaken to cause the Work to be performed.

L. Work: the obligations of the Contractor under the Contract Documents. Work includes, unless specifically excepted by the Contract Documents, the furnishing of all materials, labor, equipment, supplies, plant, tools, scaffolding, transportation, superintendence, permits, inspections, occupancy approvals, insurance, taxes, and all other services, facilities and expenses necessary for the full performance and completion of the requirements of the Contract Documents. Work also means that which is furnished, produced, constructed, or built pursuant to the Contract Documents.

1.03 SUBMITTALS

A. The Contractor shall ensure that submittals are provided in compliance with specified time frame(s) to avoid delays in Work.

B. The Contractor shall prepare and submit the following documents to the Board Representative for the off-site removal and transfer of CCDD:
   1. Name, address and telephone number of the CCDD fill site where CCDD is to be transported. This submittal must be made at least five days prior to removal of any materials from the site. Once this submittal is made, the Contractor cannot change the fill site without written authorization from the Board Representative. This information should include, at a minimum, the following:
      a. CCDD fill site name and address and telephone number.
      b. Site contact information, including contact person and phone number.
      c. Fill Site Identification number assigned by the IEPA.
      d. Executed CCDD Acceptance Agreement from the facility, setting forth its agreement and authorization to accept the identified material. The Contractor shall utilize the relevant Board-drafted Acceptance Agreement.
   2. Name of Haulers to be used for the transportation of CCDD and Recycled Material. This submittal must be made at least five days prior to removal of any materials from the site. This information shall include, at a minimum, the following. Once this submittal is made, the Contractor cannot change the haulers without written authorization from the Board Representative.
      a. Hauler name, address, contact information, including name and telephone number of an authorized representative.
         1) Any relevant transportation license numbers.
   3. Storm Water Management Plan (SWP) - Prior to commencing any Work, the Contractor shall provide, the Contractor shall provide a Storm Water Management Plan stipulating any required permits, such as a city storm water discharge approval, or MWRDGC discharge permit. The SWP shall contain provisions for dewatering, pumping, collection, temporary storage, and discharge or disposal of storm water, perched water and other liquids, so as to facilitate soil removal. The SWP should include provisions for preventing storm water from entering excavation areas, or from going off-site. These may include, but not be limited to, surface grading, pumping and/or combination of silt fence, sandbags, tarpaulins, plastic sheeting, and movable straw bales. This SWP shall comply with all relevant contract documents and specifications, any relevant permit conditions, and all local, state and federal laws and regulations, including those of the City of Chicago Department of Water, the MWRDGC, and the IEPA, as relevant.
   4. Copy of the Storm Water Discharge Approval from the City of Chicago Building Department and, if required, the MWRDGC Discharge Authorization, prior to pumping water into the City of Chicago sewer system.
   5. Soil Management Plan (SMP). Prior to commencing any Work, the Contractor shall provide a SMP outlining proposed excavation Work sequences and procedures to separate each type of material to be removed from the site, separating any contaminated materials from any uncontaminated materials, and shall ensure that haulers are fully informed as to the appropriate destination for the materials. The SMP shall show the locations of each type of material to be stored on site, pending reuse as specified in the Contract Documents, or off-site transfer to appropriate location.

6. Based on available analytical results from soil samples collected during the December 2022 Limited Phase II ESA and March 2023 Additional Subsurface investigation (see attached Summary Table [**Table 5**] and **Figure SMP-01**), soils from the Subject Property that may be proposed for disposal at a Clean Construction and Demolition Debris (CCDD) are:

   - Soil excavated from below the maximum depths indicated on **Figure SMP-01**.

7. Reports and Other Submissions. The Contractor shall provide the Board Representative with the following on a weekly basis:
   a. Copies of all fully executed CCDD facility receipts, which shall be legible and dated and shall contain a complete description of the material taken per truck. Board shall provide tracking receipts that shall be utilized by the Contractor for all CCDD materials transported off-site. Contractor shall verify that all fields in the Board CCDD tracking receipts are complete prior to submittal.
   b. Copies of daily reports providing information regarding hauler names and volume, or weight of material removed, and location taken, per truck.

C. Contractor shall provide and submit the following for each Recycling Facility:
   1. Name, Address, and Contact Information for each proposed Recycling Facility.
   2. Copy of document (license, permit, etc.) that indicates that the facility is authorized to operate a recycling operation for proposed material(s).
   3. Copies of recycling facility receipts for each load of material transported to the approved recycling facility.

1.04 SUBMITTAL REVIEW

A. Review of submittals or any comments made does not relieve the Contractor from compliance with the requirements of the drawings and specifications. The purpose of this check is to review for general conformance with the design concept of the project and general compliance with the information given in the contract documents. The Contractor is responsible for confirming and correlating all quantities and dimensions; electing techniques of construction; coordinating the Work; and performing the Work in a safe and satisfactory manner, in compliance with all contract documents, specifications, and applicable laws and regulations.

B. The Contractor must not begin any Work applicable to this section until all required submittals have been reviewed and accepted by the Board Representative.

C. In order to ensure appropriate oversight of removal activities, the Contractor shall provide notification to the Board Representative and MEC no less than forty-eight (48) business hours prior to excavating, loading and transporting of any materials from the site. The Board Representative shall provide a representative onsite for field verification of the CCDD and Uncontaminated Soil.

1.05 RECORD KEEPING

A. The Contractor shall maintain and provide all records provided for in this Section. The Contractor shall also provide documentation of labor, equipment, and materials used for the CCDD and Uncontaminated Soil removal as required to fulfill the scope of work described in the Contract Document or as requested by the Board Representative.

PART 2 - PRODUCTS

2.01 REMOVAL OF SOIL, FILL, BACKFILL, CU STRUCTURAL SOIL, AND CONSTRUCTION AND DEMOLITION DEBRIS

A. The Contractor shall furnish all necessary means, products, tools, and equipment required to remove and dispose CCDD and Uncontaminated Soil from the site as directed by the Board Representative.

B. The Contractor shall also furnish all necessary means, products, tools, and equipment required to fulfill the scope of work described in the contract specifications and drawings. The contractor, by submitting a bid for the Work, represents itself as knowledgeable and an expert in the performance of the Work, and includes all things usually and customarily necessary to provide a complete and finished job, whether specifically mentioned or not.

C. The Contractor must have a complete plan for the entire process of soil removal and disposal in accordance with the project requirements. Contractor must provide a schedule of all Work activities in accordance with the approved construction schedule.

PART 3 - EXECUTION

3.01 AUTHORIZATIONS

A. The Contractor shall obtain appropriate authorization from the permitted CCDD fill site or from the authorized recycling facility where the material will be taken. The Contractor shall utilize the Board form CCDD Acceptance Agreement.

3.02 MATERIAL SAMPLING

A. As directed by the Board Representative, the Contractor shall provide the necessary equipment and manpower to assist the MEC in any necessary field verifications to complete these activities at no additional cost to the project.

B. The Contractor shall not perform any field sampling or testing without a written authorization from the Board. All field sampling and testing activities shall be coordinated with the MEC for oversight and documentation.

3.03 EXCAVATION

A. The Contractor shall perform all site excavation in accordance with the Contract Documents.

B. The Contractor shall perform excavation of materials in accordance with all applicable regulations and project specifications. All excavation shall be performed in accordance with OSHA requirements and guidelines.

C. The Contractor shall immediately notify the Board Representative and MEC if any materials, (solid or liquid) requiring special handling (i.e., contaminated soil, soil with odors, or liquids) are encountered during excavation. Such materials shall be separately stockpiled and shall not be loaded into hauling trucks without a written authorization from Board Representative.

D. The Contractor shall coordinate all soil excavation and hauling from the site activities with the MEC. The Contractor must provide a written notification to the Board Representative at least 48 hours prior to starting any soil excavation and hauling from the site.

E. The Contractor shall review all of the Contract Documents to become familiar with locations of materials designated as Uncontaminated Soils, Clean Construction or Demolition Debris (CCDD), General C&D Debris, Contaminated Soils, Special Waste, or Hazardous Waste. The Contractor shall excavate each type of material separately as practical and consistent with the Contractor's SMP and shall clean excavation equipment prior to excavating CCDD and Uncontaminated Soil.

F. The Contractor shall be responsible for maintaining the structural integrity of all surrounding streets, underground utilities, buildings, and structures (walkways, sidewalks, underground tunnels, etc.).

G. The Contractor shall secure, shore, and brace where sloping is not possible either because of space restrictions or stability of material excavated. Excavations shall be braced or sloped in compliance with the latest OSHA requirements and shall comply with local codes, authorities having jurisdiction, and the City of Chicago, and maintain same. Maintain sides and slopes of excavations in a safe condition until completion of backfilling. Provide materials for shoring and bracing, such as sheet piling, uprights, stringers and cross braces, in good serviceable conditions. Maintain shoring and bracing in excavations regardless of the time period excavations will remain open. Carry down shoring and bracing as the excavation progresses.

3.04 DECONTAMINATION

A. The Contractor shall clean and/or decontaminate excavation equipment (tools, shovels, backhoes, etc.) with a jet washer or steam cleaner prior to excavating Uncontaminated Soil, other CCDD materials or materials designated for recycling. All cleaning and/or decontamination residuals must be collected and disposed of in accordance with applicable local, state and federal regulations.

B. The Contractor shall remove soils, dusts, rocks, etc. from the exterior of trucks, trailers, or other heavy equipment prior to it leaving the site.

C. The Contractor shall not allow equipment or trucks to leave the site with water leaking or mud dripping or caked to the equipment or trucks.

3.05 STOCKPILING

A. The Contractor may stockpile excavated materials on site as approved by the Board Representative and as set forth in the Contractor's approved SMP. The location of the stockpile area shall be approved by the Board Representative and it shall be in accordance with the City of Chicago requirements, including Section 13-32 & 125 of the Municipal Code. The maximum height of the stockpile is 20 feet, provided appropriate setbacks, as set forth in the Code, are met.

B. The Contractor shall be responsible for keeping CCDD and Uncontaminated Soil separated from Contaminated Soils and General Construction and Demolition (C&D) Debris, Special Waste, and Hazardous Waste. If CCDD and Uncontaminated Soil come in contact with Contaminated Soils or General C&D Debris, Special Waste or Hazardous Waste, the former CCDD and Uncontaminated Soils will now be considered contaminated materials, and the Contractor shall dispose of newly designated soils as contaminated soils at his own expense in accordance with Section 31 23 18 13 as applicable. The Contractor will be responsible for any sampling analysis costs associated with characterization of soil that has become contaminated pursuant to this Subsection.

3.06 LOADING

A. The Contractor shall notify the Board Representative 48 hours in advance of soil loading and hauling activities. No soil shall be removed from the site without the presence of the MEC.

B. Prior to loading, the Contractor shall prepare and provide hauler with appropriately marked CCDD tracking receipts for acceptance and confirmation at the receiving site.

C. The Contractor shall load excavated materials directly from the site or from temporary stockpiles into hauling trucks equipped with tarp for direct transportation to the approved CCDD fill site or recycling facility.

D. The Contractor shall conduct operations in a manner that minimizes interference with roads, streets, walks and other adjacent occupied and used facilities. The Contractor shall not close or obstruct streets, walks or other occupied or used facilities without permission from the applicable governing agency and the Board Representative. If required by the appropriate governmental entity, the Contractor shall provide alternate routes around closed or obstructed traffic ways.

E. The Contractor shall ensure compliance with all State and local road/street weight limits.

3.07 TRANSPORTATION

A. All trucks shall be properly covered prior to leaving the site as required by the City of Chicago Municipal Code.

B. All CCDD and Uncontaminated Soil shall be transported directly to the approved CCDD fill site or recycling facility on a daily basis. No off-site temporary storage is allowed. All materials not transported to the CCDD fill operation or recycling facility shall be returned to the project site for overnight storage.

C. The Contractor shall immediately notify the Board Representative and MEC if any CCDD or Uncontaminated Soil loads are rejected by the CCDD fill operation. A field order allowing for a change in transfer, to an appropriate facility, will be executed.

D. The Contractor shall provide completed and executed copies of disposal/recycling CCDD tracking receipts to the Board Representative on weekly basis.

E. Drivers shall hold, and present upon request, a current valid Commercial Driver’s License (CDL).

3.08 STORMWATER RUNOFF AND GROUNDWATER MANAGEMENT

A. The Contractor shall have access to a weather notification system and manage the Work so as not to accumulate storm water on the site during excavation.

B. The Contractor shall prevent storm water, groundwater or perched water from entering excavation areas. The Contractor shall implement the approved storm water management plan in accordance with conditions, or as directed by the Board Representative.

C. The Contractor shall manage and remove water from site excavation in accordance with the City of Chicago and MWRDGC’s requirements. The Contractor shall not discharge onsite water into the City of Chicago sewer without first obtaining all required permits from the City of Chicago Building Department and MWRDGC.

3.09 DUST CONTROL

A. The Contractor shall control dust by all necessary means, including, but not limited to covering trucks, stockpiles and open materials, watering haul roads, sweeping paved roads, and limiting the speed of all on-site vehicles. Dust control measures shall comply with the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63.

B. The Contractor shall not create dust and shall maintain adequate dust suppression equipment on site if conditions warrant.

C. The Contractor shall maintain streets clean and free of mud and dirt. Contractor shall perform all necessary activities to keep roadways clean throughout each day and for the duration of the project. The Contractor shall provide a street sweeper for street maintenance, if requested by the Board, at no additional cost to the project.

3.10 NOISE CONTROL

A. The Contractor shall not start any Work activities prior to the time specified in the City of Chicago Noise Ordinance. Section 11-4-2835 (a) of the Chicago Code forbids construction activities before 8 AM and after 8 PM.

B. The Contractor shall control the noise, in accordance with the City of Chicago Noise Ordinance, or as directed by the Board Representative where there are sensitive project-specific concerns, such as during school operating hours at school construction projects.

3.11 QUALITY CONTROL

A. Visual inspections and damage repairs shall be made daily by the Contractor and/or MEC as directed by the Board Representative to assure that erosion, drainage and containment control measures are functioning properly.

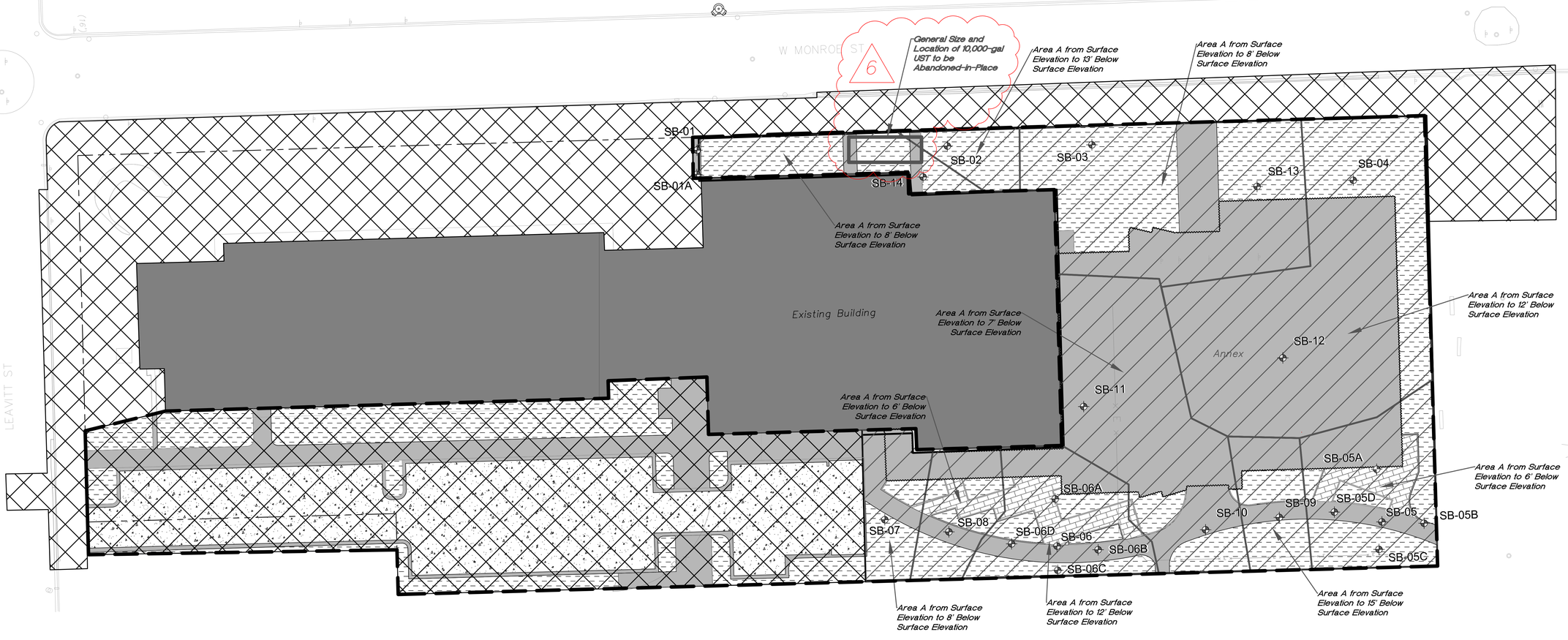
B. The Contractor shall take all necessary precautions to protect structures, equipment, pavement, walks and utilities against movement or settlement during the course of Work.

C. Damage: The Contractor shall promptly replace or repair any damage caused to adjacent pavement, utilities or facilities by removal operations at no additional cost to the Board. Work shall be performed to the satisfaction of the Board Representative.

D. Submittal Timeframe Compliance: The Contractor shall ensure that all required submittals are in compliance with time frames specified.

E. Utility Services: The Contractor shall maintain existing utilities and protect against damage during removal operations.

END OF SECTION 31 23 18.14



N

Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- LIMITS OF WORK
- SAMPLING LOCATIONS

SOIL DISPOSAL CLASSIFICATION / REMEDIATION AREAS

AREA A - Subtitle D Landfill
Soils aboveTACO Tier 1 SROs (Non-Special)

AREA B - Subtitle D Landfill
Soils ASSUMED above TACO Tier 1 SROs (Non-Special)

ENGINEERED BARRIERS

CONCRETE
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

ASPHALT
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

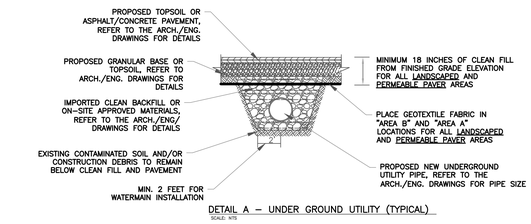
LANDSCAPING
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to finished grade. For trees, see Section 5.3 and 5.4 for details.

PERMEABLE PAVERS
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to the bottom of the pavers.

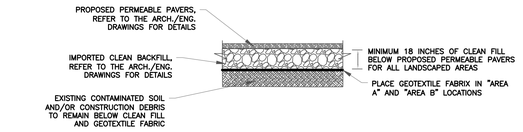
6 See Item 6 in General Notes

GENERAL NOTES

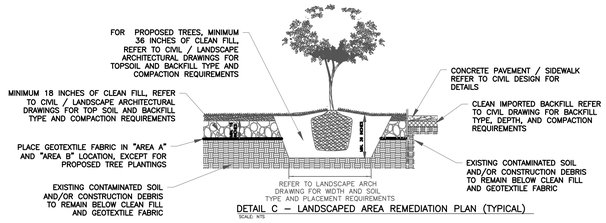
1. THIS DRAWING IS ONLY FOR ENVIRONMENTAL SITE WORK (ILLUSTRATION PURPOSES ONLY.) CONTRACTOR SHALL REFER TO ARCHITECT/ENGINEER DRAWINGS FOR CONSTRUCTION DETAILS AND DIMENSIONS. REFER TO SITE SURVEY FOR EXISTING SURFACE ELEVATIONS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND FIELD CONDITIONS. ALL DIMENSIONS AND DETAILS ARE TAKEN FROM RECORD DRAWINGS AND ARE NOT GUARANTEED TO BE ACCURATE, CONTRACTOR SHALL FIELD VERIFY ACTUAL FIELD DIMENSIONS.
3. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS. HANDLING OF EXCAVATED SOILS ON SITE SHALL REQUIRE CONSTRUCTION WORKER PRECAUTIONS DUE TO EXCEEDANCES OF THE MERCURY INHALATION EXPOSURE ROUTE AND THE LEAD INGESTION EXPOSURE ROUTE FOR CONSTRUCTION WORKERS ACCORDING TO TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE (ILAC), SECTION 742, APPENDIX B, TABLE B.
4. AT A MINIMUM, ALL EXCAVATED SOILS SHALL BE CLASSIFIED AS NON–SPECIAL NON–HAZARDOUS WASTE TO BE DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL AS LICENSED AND PERMITTED BY THE IEPA EXCEPT:
   - 4.1. EXCAVATED MATERIALS WITHIN AREA B AND BELOW REFERENCED DEPTHS IN AREA A ARE NOT SAMPLED AND ANALYZED AND ARE ASSUMED TO BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE NON–HAZARDOUS WASTE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.2. ENVIRONMENTAL SOIL/FILL CONDITIONS IN AREAS OUTSIDE THE CONSTRUCTION AREA ARE NOT KNOWN. SOIL/FILL REMOVED FROM THESE AREAS SHALL BE HANDLED PER SPECIFICATION SECTION 31 23 18.13 AS PART OF CONTRACT WORK AND ARE NOT PERMITTED FOR REUSE ON THE PROPERTY UNLESS SOIL ANALYTICAL DATA INDICATES THAT THEY ARE ACCEPTABLE FOR REUSE. ALL SOIL/FILL FROM THESE AREAS SHALL BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE AND DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.3. CONSTRUCTION DEMOLITION DEBRIS, SUCH AS BURIED CONCRETE SLABS FREE OF STAINING, WHICH MAY BE RECYCLED. ASPHALT AND CLEAN CONCRETE SHOULD BE RECYCLED AT APPROPRIATE RECYCLING FACILITIES PER SPECIFICATION SECTION 31 23 18.14. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF CCDD SHALL BE CONDUCTED IN ACCORDANCE SPECIFICATION SECTION 31 23 18.14.
5. REMEDIATION WORK SHALL INCLUDE PERFORMING EXCAVATION OF SOIL AT THE LOCATION AND ELEVATION SHOW IN THE CIVIL DRAWINGS
   - 5.1. AREA A AND AREA B SOILS IN THE PROPOSED LANDSCAPED AREAS AND PROPOSED PERMEABLE PAVER AREAS SHALL BE EXCAVATED TO A MINIMUM OF 18 INCHES. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 18 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURE FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.2. AREA A AND AREA B SOILS WHERE PROPOSED CONCRETE AND ASPHALT ARE SHALL BE EXCAVATED TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS. INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH IMPORTED CLEAN FILL TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS, THEN INSTALLING CONCRETE OR ASPHALT AS SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS.
   - 5.3. AREA A AND AREA B SOILS SHALL BE EXCAVATED TO A MINIMUM OF 36 INCHES WHERE NEW TREE PLANTINGS ARE PROPOSED. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH AT LEAST 36 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.4. AREA A AND AREA B SOILS LOCATED WITHIN THE DRIP LINES OF EXISTING TREES THAT ARE PROPOSED TO REMAIN SHALL BE EXCAVATED A MINIMUM OF 6 INCHES WHERE POSSIBLE WITHOUT DAMAGING THE ROOT BALL. THE ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 6 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
6. THE KNOWN EXISTING 10,000–GAL HEATING OIL UST SHALL BE ABANDONED–IN–PLACE BY A CONTRACTOR LICENSED FOR SUCH WORK AND IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00, 41 IAC 175 SUBPART C AND 41 IAC 175.840. CONTRACTOR SHALL NOTIFY THE EC AT LEAST 45 DAYS IN ADVANCE PRIOR TO ABANDONMENT FOR FIELD OVERSIGHT OF THE UST ABANDONMENT AND COORDINATION FOR THE UST SITE ASSESSMENT.
7. SOIL EXCAVATION SHALL BE KEPT TO THE EXTENT REQUIRED TO PERFORM THE PROPOSED CONSTRUCTION WORK AS SPECIFIED IN THE CONTRACT DOCUMENTS.
8. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF SOIL/FILL SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14. NO EXCAVATED SOIL SHALL BE REUSED ON SITE.
9. CONTRACTOR SHALL PROVIDE THE NAMES AND ADDRESSES OF ALL SELECTED WASTE/RECYCLE HAULERS, CCDD AND UNCONTAMINATED SOIL FILL OPERATIONS SITES AND/OR RECYCLING FACILITIES AND ACTIVE PERMITTED SUBTITLE D LANDFILL PER SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14 PRIOR TO THE START OF CONTRACTOR WORK.
10. ALL FIELD EQUIPMENT SHALL BE DECONTAMINATED PRIOR TO BEING TAKEN OFFSITE OR USAGE IN UNCONTAMINATED SOIL AREAS.
11. THE CONTRACTOR SHALL NOT INTERMIX ON SITE AND OFF SITE MATERIALS. OFF SITE/ROW SOILS CANNOT BE STOCKPILED ON SITE AND ON SITE MATERIALS CANNOT BE STOCKPILED OFF SITE.
12. CLEAN CONCRETE AND/OR ASPHALT REMOVED DURING EXCAVATION/DEMOLITION WORK CAN BE TRANSPORTED TO THE APPROVED RECYCLING FACILITY. CONCRETE RUBBLE COMMINGLED, MIXED OR CROSS CONTAMINATED WITH GENERAL CONSTRUCTION & DEMOLITION DEBRIS SHALL BE HANDLED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13.
13. SHOULD ANY SOILS OR FILL BE ENCOUNTERED THAT EXHIBIT UNUSUAL OR PETROLEUM/SOLVENT ODORS OR STAINING, CONTRACTOR SHALL STOP WORK IN THAT AREA AND NOTIFY THE COMMISSION REPRESENTATIVE IMMEDIATELY. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COMMISSION REPRESENTATIVE IF ANY MATERIALS (SOIL OR LIQUID) REQUIRING SPECIAL HANDLING (I.E. STAINED SOIL, SOIL WITH ODORS, OR LIQUIDS) ENCOUNTERED DURING EXCAVATION PER SPECIFICATION SECTION 31 23 18.14.
14. NO SOIL SHALL BE EXPORTED OR IMPORTED FROM THE SITE WITHOUT THE PRESENCE OF THE ENVIRONMENTAL CONSULTANT (EC). NOTIFY THE COMMISSION REPRESENTATIVE AND EC AT LEAST 48 HOURS IN ADVANCE FOR FIELD OVERSIGHT AND DOCUMENTATION OF EXPORTED SOILS TO SUBTITLE D LANDFILL AND IMPORTED SOILS PER SPECIFICATION SECTION 02 65 00 AND SPECIFICATION SECTION 31 23 18.13.
15. SHOULD AN UNDERGROUND STORAGE TANK (UST) BE ENCOUNTERED IN THE WORK AREA, CONTRACTOR SHALL STOP WORK AND NOTIFY THE COMMISSION REPRESENTATIVE AND ENVIRONMENTAL CONSULTANT IMMEDIATELY IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00.
16. ALL IMPORTED FILL MATERIALS MUST MEET THE REQUIREMENTS OF SPECIFICATION SECTION 31 23 23. ALL IMPORTED BACKFILL SHALL NOT EXCEED THE TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO) LISTED IN TITLE 35 OF ILAC, SECTION 742, APPENDIX B, TABLE A FOR THE PARAMETERS ON THE TARGET COMPOUND LIST ACCORDING TO TITLE 35 OF ILAC, SECTION 740, APPENDIX A. ALL APPROVED IMPORTED CLEAN FILL STOCKPILED ON SITE FOR FUTURE USE SHALL BE STOCKPILED OUTSIDE OF AREA A AND AREA B UNLESS STOCKPILED ON CONCRETE, ASPHALT, OR VISQUEEN/PLASTIC SHEETING.
17. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE A STORM WATER MANAGEMENT PLAN THAT SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS, AS WELL AS OTHER RELEVANT CONTRACT DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PUMPING PERMIT FROM THE CITY OF CHICAGO DEPARTMENT OF BUILDINGS AND DISCHARGE AUTHORIZATION/APPROVAL FROM METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRDGC) PRIOR TO DISCHARGE OF STORM WATER INTO CITY SEWER SYSTEM IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
18. SEE CIVIL DRAWINGS FOR UTILITY INSTALLATION AND REMOVAL DETAILS INCLUDING EXCAVATION WIDTH AND DEPTHS. IN THE PROPOSED UNDERGROUND UTILITIES AND SEWER TRENCHING AREAS, THE CONTRACTOR SHALL EXCAVATE SOIL TO A DEPTH REQUIRED BY THE NEW DEVELOPMENT. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF ALL SURROUNDING STREET, UNDERGROUND UTILITIES, BUILDINGS, AND STRUCTURES. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN A SAFE CONDITION UNTIL COMPLETION OF BACKFILLING PER SPECIFICATION SECTION 31 23 18.14.
20. CONTRACTOR SHALL NOT UTILIZE ANY SOIL AND FILL MATERIALS EXCAVATED FOR CONSTRUCTION AT ANY OTHER OFF–SITE PROPERTY.
21. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 23 18.13 (SOIL, FILL BACKFILL, AND CU STRUCTURAL SOIL, DEMOLITION DEBRIS REMOVAL), SECTION 31 23 18.14 (CCDD AND UNCONTAMINATED SOIL DISPOSAL), AND SECTION 01 56 11 (REGARDING DUST, FUME, AND ODOR CONTROL).
22. EROSION CONTROL AND APPLICABLE NPDES REQUIREMENTS ARE PROVIDED IN CONTRACT DRAWING C3–02.
23. TREE PROTECTION REQUIREMENTS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 13 00 AND ARE PROVIDED IN CONTRACT DRAWINGS L1–00 AND L2–00.



DETAIL A – UNDER GROUND UTILITY (TYPICAL)
SCALE: NTS



DETAIL B – PERMEABLE PAVER AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS



DETAIL C – LANDSCAPED AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4 th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4 th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

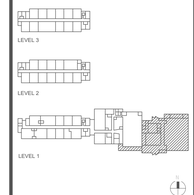
EDI

REVISIONS

NO.	DATE	DESCRIPTION
1	4/04/23	60% SD Draft
2	4/07/23	75% SD
3	4/28/23	100% CD
4	4/28/23	100% CD
5	5/04/23	IFB
6	5/19/23	IFB Addendum 1

DRAWN BY: EDI

SCALE: NTS



PBC Project Name: DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
SOIL MANAGEMENT AND REMEDIATION PLAN

Sheet NOT FOR CONSTRUCTION

SMP-01

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003	22120464-004
			Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
			Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022	12/15/2022
			Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50	09:00
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)		2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
pH		6.25 - 9.0		---	---	**10.6**	7.80	---	---	---	---
Acenaphthene		570		< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Acetone		25		---	---	< 0.066	< 0.073	---	---	---	---
Anthracene		12,000		< 0.038	< 0.040	0.097	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Antimony		5		---	---	< 2.4	< 2.3	---	---	---	---
Arsenic	within a MSA county	13.0		7.7	9.5	6.4	11	13	9.5	3.1	13
	within a non-MSA county	11.3		7.7	9.5	6.4	11	**13**	9.5	3.1	**13**
Barium		1,500		79	30	41	52	82	49	34	34
Benzene		0.03		< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
Benz(a)anthracene	within Chicago corporate limits	1.1		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	1.8		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9		0.27	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzo(b)fluoranthene	within Chicago corporate limits	1.5		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	2.1		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9		0.22	< 0.040	0.30	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzo(k)fluoranthene		9		0.28	< 0.040	0.33	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Benzoic acid		400				< 0.98	< 1.0				
Benzo(a)pyrene	within Chicago corporate limits	1.3		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	2.1		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county	0.98		0.33	< 0.040	0.41	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	outside populated area	0.09		**0.33**	< 0.040	**0.41**	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Beryllium		22		---	---	< 0.59	0.66	---	---	---	---
Bis(2-chloroethyl)ether		0.66		---	---	< 0.20	< 0.20	---	---	---	---
Bis(2-ethylhexyl)phthalate		46		---	---	< 0.98	< 1.0	---	---	---	---
Bromodichloromethane		0.6		---	---	< 0.0044	< 0.0049	---	---	---	---
Bromoform		0.8		---	---	< 0.0044	< 0.0049	---	---	---	---
Butyl benzyl phthalate		930		---	---	< 0.98	< 1.0	---	---	---	---
Cadmium		5.2		0.74	< 0.52	< 0.59	< 0.58	< 0.52	< 0.56	< 0.52	< 0.55
Carbazole		0.6		---	---	< 0.20	< 0.20	---	---	---	---
Carbon disulfide		9		---	---	< 0.044	< 0.049	---	---	---	---
Carbon tetrachloride		0.07		---	---	< 0.0044	< 0.0049	---	---	---	---
4-Chloroaniline		0.7		---	---	< 0.20	< 0.20	---	---	---	---
Chlorobenzene		1		---	---	< 0.0044	< 0.0049	---	---	---	---
Dibromochloromethane		0.4		---	---	< 0.0044	< 0.0049	---	---	---	---
Chloroform		0.3		---	---	< 0.0044	< 0.0049	---	---	---	---
2-Chlorophenol		1.5		---	---	< 0.20	< 0.20	---	---	---	---
Chromium		21		6.2	20	13	**23 T**	19	**22 T**	10	13
Chrysene		88		0.28	< 0.040	0.38	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Cobalt		20		---	---	7.4	16	---	---	---	---
Copper		2,900		---	---	21	31	---	---	---	---
Cyanide		40		---	---	< 0.60	< 0.60	---	---	---	---
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in MSA excluding Chicago	0.42		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within a populated area in non-MSA county	0.15		0.088	< 0.040	0.13	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	outside populated area	0.09		0.088	< 0.040	**0.13**	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Di-n-butyl phthalate		2,300		---	---	< 0.98	< 1.0	---	---	---	---
1,2-Dichlorobenzene		17		---	---	< 0.20	< 0.20	---	---	---	---
1,4-Dichlorobenzene		2		---	---	< 0.20	< 0.20	---	---	---	---
3,3′-Dichlorobenzidine		1.3		---	---	< 0.20	< 0.20	---	---	---	---
1,1-Dichloroethane		23		---	---	< 0.0044	< 0.0049	---	---	---	---
1,2-Dichloroethane		0.02		---	---	< 0.0044	< 0.0049	---	---	---	---
1,1-Dichloroethene		0.06		---	---	< 0.0044	< 0.0049	---	---	---	---
cis-1,2-Dichloroethene		0.4		---	---	< 0.0044	< 0.0049	---	---	---	---
trans-1,2-Dichloroethene		0.7		---	---	< 0.0044	< 0.0049	---	---	---	---
2,4-Dichlorophenol		0.48		---	---	< 0.20	< 0.20	---	---	---	---
1,2-Dichloropropane		0.03		---	---	< 0.0044	< 0.0049	---	---	---	---
cis-1,3-Dichloropropene		0.005		---	---	< 0.0018	< 0.0020	---	---	---	---
trans-1,3-Dichloropropene		0.005		---	---	< 0.0018	< 0.0020	---	---	---	---
Diethyl phthalate		470		---	---	< 0.98	< 1.0	---	---	---	---
2,4-Dimethylphenol		9		---	---	< 0.20	< 0.20	---	---	---	---
2,4-Dinitrophenol		3.3		---	---	< 0.98	< 1.0	---	---	---	---
2,4-Dinitrotoluene		0.25		---	---	< 0.039	< 0.040	---	---	---	---
2,6-Dinitrotoluene		0.26		---	---	< 0.039	< 0.040	---	---	---	---
Di-n-octyl phthalate		1,600		---	---	< 0.98	< 1.0	---	---	---	---
Ethylbenzene		13		< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
Fluoranthene		3,100		0.47	< 0.040	0.76	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Fluorene		560		< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Hexachlorobenzene		0.4		---	---	< 0.20	< 0.20	---	---	---	---
Hexachlorocyclopentadiene		1.1		---	---	< 0.20	< 0.20	---	---	---	---
Hexachloroethane		0.5		---	---	< 0.20	< 0.20	---	---	---	---
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6		0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9		0.19	< 0.040	0.21	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
Iron	within a MSA county	15,900		---	---	14000	**35000**	---	---	---	---
	within a non-MSA county	15,000		---	---	14000	**35000**	---	---	---	---
Isophorone		8		---	---	< 0.20	< 0.20	---	---	---	---
Lead		107		41	16	49	16	17	16	18	21
Magnesium		325,000		---	---	19000	27000	---	---	---	---
Manganese	within a MSA county	636		---	---	270	560	---	---	---	---
	within a non-MSA county	630		---	---	270	560	---	---	---	---
Mercury	elemental (analyzed as total mercury)	0.1 [E]		0.13 E	0.022	0.10	< 0.019	0.024	< 0.023	0.039	0.023
	ionic (analyzed as total mercury)	0.89		0.13	0.022	0.10	< 0.019	0.024	< 0.023	0.039	0.023

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-007	22120464-008	23030838-005	23030838-006	22120464-005	22120464-006	22120464-003	22120464-004
		Client Sample ID :	SB-01 (2'-3')	SB-01 (9'-10')	SB-01A (4-5)	SB-01A (7-8)	SB-02 (5'-6')	SB-02 (12'-13')	SB-03 (2'-3')	SB-03 (7'-8')
		Date Collected :	12/15/2022	12/15/2022	03/23/2023	03/23/2023	12/15/2022	12/15/2022	12/15/2022	12/15/2022
		Time Collected :	09:55	10:05	19:15	19:25	09:15	09:25	08:50	09:00
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	9-10' bgs	4-5' bgs	7-8' bgs	5-6' bgs	12-13' bgs	2-3' bgs	7-8' bgs
TOTALS	Bromomethane		0.2	---	---	< 0.0088	< 0.0098	---	---	---	---
	Methyl tert-butyl ether		0.32	---	---	< 0.0044	< 0.0049	---	---	---	---
	Methylene chloride		0.02	---	---	< 0.0088	< 0.0098	---	---	---	---
	2-Methylphenol		15	---	---	< 0.20	< 0.20	---	---	---	---
	Naphthalene		1.8	< 0.038	< 0.040	< 0.039	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	Nickel		100	---	---	18	41	---	---	---	---
	Nitrobenzene		0.26	---	---	< 0.039	< 0.040	---	---	---	---
	N-Nitrosodiphenylamine		1	---	---	< 0.20	< 0.20	---	---	---	---
	N-Nitrosodi-n-propylamine		0.0018	---	---	< 0.039	< 0.040	---	---	---	---
	Pentachlorophenol		0.02	---	---	< 0.079	< 0.081	---	---	---	---
	Phenol		100	---	---	< 0.20	< 0.20	---	---	---	---
	Pyrene		2,300	0.47	< 0.040	0.69	< 0.040	< 0.040	< 0.041	< 0.039	< 0.039
	Selenium		1.3	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1
	Silver		4.4	< 1.0	< 1.0	< 1.2	< 1.2	< 1.0	< 1.1	< 1.0	< 1.1
	Styrene		4	---	---	< 0.0044	< 0.0049	---	---	---	---
	Tetrachloroethene		0.06	---	---	< 0.0044	< 0.0049	---	---	---	---
	Thallium		2.6	---	---	< 1.2	< 1.2	---	---	---	---
	Toluene		12	< 0.0048	< 0.024	< 0.0044	< 0.0049	< 0.026	< 0.022	< 0.0050	< 0.026
	1,2,4-Trichlorobenzene		5	---	---	< 0.20	< 0.20	---	---	---	---
	1,1,1-Trichloroethane		2	---	---	< 0.0044	< 0.0049	---	---	---	---
	1,1,2-Trichloroethane		0.02	---	---	< 0.0044	< 0.0049	---	---	---	---
	Trichloroethene		0.06	---	---	< 0.0044	< 0.0049	---	---	---	---
	2,4,5-Trichlorophenol		26	---	---	< 0.20	< 0.20	---	---	---	---
	2,4,6-Trichlorophenol		0.66	---	---	< 0.20	< 0.20	---	---	---	---
	Vanadium		550	---	---	18	25	---	---	---	---
	Vinyl chloride		0.01	---	---	< 0.0044	< 0.0049	---	---	---	---
	Xylenes, Total		5.6	< 0.015	< 0.073	< 0.013	< 0.015	< 0.077	< 0.067	< 0.015	< 0.077
	Zinc		5,100	---	---	55	67	---	---	---	---
			mg/L								
TCLP	Arsenic		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Barium		2	---	---	0.38	0.57	---	---	---	---
	Cadmium		0.005	---	---	< 0.0050	< 0.0050	---	---	---	---
	Chromium		0.1	---	---	< 0.010	< 0.010	---	---	---	---
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	---	---	0.0056	< 0.0050	---	---	---	---
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	---	---	< 0.00020	< 0.00020	---	---	---	---
	Selenium		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Silver		0.05	---	---	< 0.010	< 0.010	---	---	---	---
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011	22120464-012
		Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
		Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022	12/15/2022
		Time Collected :	08:25	08:35	10:25	10:35	16:50	17:00	10:50	11:00
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
pH		6.25 - 9.0	---	---	---	---	8.29	7.96	---	---
Acenaphthene		570	< 0.041	< 0.040	0.53	< 0.040	0.72	< 0.040	0.42	< 0.040
Acetone		25	---	---	---	---	< 0.10	< 0.075	---	---
Anthracene		12,000	0.044	< 0.040	1.0	< 0.040	3.1	< 0.040	1.7	< 0.040
Antimony		5	---	---	---	---	< 2.2	< 2.4	---	---
Arsenic	within a MSA county	13.0	10	7.2	3.3	9.7	**16**	**19**	**14**	9.1
	within a non-MSA county	11.3	10	7.2	3.3	9.7	**16**	**19**	**14**	9.1
Barium		1,500	38	40	200	38	380	39	250	61
Benzene		0.03	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
Benz(a)anthracene	within Chicago corporate limits	1.1	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
	within a populated area in MSA excluding Chicago	1.8	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
	within a populated area in non-MSA county or outside populated area	0.9	0.14	< 0.040	**2.1**	< 0.040	**6.9**	< 0.040	**5.8**	< 0.040
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.11	< 0.040	**2.1**	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
	within a populated area in MSA excluding Chicago	2.1	0.11	< 0.040	2.1	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
	within a populated area in non-MSA county or outside populated area	0.9	0.11	< 0.040	**2.1**	< 0.040	**4.8**	< 0.040	**4.4**	< 0.040
Benzo(k)fluoranthene		9	0.12	< 0.040	1.8	< 0.040	6.6	< 0.040	3.8	< 0.040
Benzoic acid		400					< 1.0	< 1.0		
Benzo(a)pyrene	within Chicago corporate limits	1.3	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	within a populated area in MSA excluding Chicago	2.1	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	within a populated area in non-MSA county	0.98	0.13	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
	outside populated area	0.09	**0.13**	< 0.040	**2.3**	< 0.040	**7.0**	< 0.040	**5.8**	< 0.040
Beryllium		22	---	---	---	---	0.71	0.76	---	---
Bis(2-chloroethyl)ether		0.66	---	---	---	---	< 0.21	< 0.21	---	---
Bis(2-ethylhexyl)phthalate		46	---	---	---	---	< 1.0	< 1.0	---	---
Bromodichloromethane		0.6	---	---	---	---	< 0.0067	< 0.0050	---	---
Bromoform		0.8	---	---	---	---	< 0.0067	< 0.0050	---	---
Butyl benzyl phthalate		930	---	---	---	---	< 1.0	< 1.0	---	---
Cadmium		5.2	< 0.56	< 0.53	0.60	< 0.60	2.3	< 0.60	**7.4**	< 0.52
Carbazole		0.6	---	---	---	---	**0.79**	< 0.21	---	---
Carbon disulfide		9	---	---	---	---	< 0.067	< 0.050	---	---
Carbon tetrachloride		0.07	---	---	---	---	< 0.0067	< 0.0050	---	---
4-Chloroaniline		0.7	---	---	---	---	< 0.21	< 0.21	---	---
Chlorobenzene		1	---	---	---	---	< 0.0067	< 0.0050	---	---
Dibromochloromethane		0.4	---	---	---	---	< 0.0067	< 0.0050	---	---
Chloroform		0.3	---	---	---	---	< 0.0067	< 0.0050	---	---
2-Chlorophenol		1.5	---	---	---	---	< 0.21	< 0.21	---	---
Chromium		21	20	18	10	19	**27 T**	**24 T**	18	21
Chrysene		88	0.14	< 0.040	2.3	< 0.040	7.6	< 0.040	5.6	< 0.040
Cobalt		20	---	---	---	---	7.7	14	---	---
Copper		2,900	---	---	---	---	110	37	---	---
Cyanide		40	---	---	---	---	< 0.61	< 0.61	---	---
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	within a populated area in MSA excluding Chicago	0.42	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	within a populated area in non-MSA county	0.15	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
	outside populated area	0.09	< 0.041	< 0.040	**0.68**	< 0.040	**2.3**	< 0.040	**1.5**	< 0.040
Di-n-butyl phthalate		2,300	---	---	---	---	< 1.0	< 1.0	---	---
1,2-Dichlorobenzene		17	---	---	---	---	< 0.21	< 0.21	---	---
1,4-Dichlorobenzene		2	---	---	---	---	< 0.21	< 0.21	---	---
3,3´-Dichlorobenzidine		1.3	---	---	---	---	< 0.21	< 0.21	---	---
1,1-Dichloroethane		23	---	---	---	---	< 0.0067	< 0.0050	---	---
1,2-Dichloroethane		0.02	---	---	---	---	< 0.0067	< 0.0050	---	---
1,1-Dichloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
cis-1,2-Dichloroethene		0.4	---	---	---	---	< 0.0067	< 0.0050	---	---
trans-1,2-Dichloroethene		0.7	---	---	---	---	< 0.0067	< 0.0050	---	---
2,4-Dichlorophenol		0.48	---	---	---	---	< 0.21	< 0.21	---	---
1,2-Dichloropropane		0.03	---	---	---	---	< 0.0067	< 0.0050	---	---
cis-1,3-Dichloropropene		0.005	---	---	---	---	< 0.0027	< 0.0020	---	---
trans-1,3-Dichloropropene		0.005	---	---	---	---	< 0.0027	< 0.0020	---	---
Diethyl phthalate		470	---	---	---	---	< 1.0	< 1.0	---	---
2,4-Dimethylphenol		9	---	---	---	---	< 0.21	< 0.21	---	---
2,4-Dinitrophenol		3.3	---	---	---	---	< 1.0	< 1.0	---	---
2,4-Dinitrotoluene		0.25	---	---	---	---	< 0.040	< 0.040	---	---
2,6-Dinitrotoluene		0.26	---	---	---	---	< 0.040	< 0.040	---	---
Di-n-octyl phthalate		1,600	---	---	---	---	< 1.0	< 1.0	---	---
Ethylbenzene		13	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
Fluoranthene		3,100	0.29	< 0.040	4.5	< 0.040	15	< 0.040	12	< 0.040
Fluorene		560	< 0.041	< 0.040	0.49	< 0.040	1.1	< 0.040	0.56	< 0.040
Hexachlorobenzene		0.4	---	---	---	---	< 0.21	< 0.21	---	---
Hexachlorocyclopentadiene		1.1	---	---	---	---	< 0.21	< 0.21	---	---
Hexachloroethane		0.5	---	---	---	---	< 0.21	< 0.21	---	---
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.074	< 0.040	1.4	< 0.040	**4.3**	< 0.040	**2.8**	< 0.040
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.074	< 0.040	**1.4**	< 0.040	**4.3**	< 0.040	**2.8**	< 0.040
Iron	within a MSA county	15,900	---	---	---	---	**23000 T**	**42000 T**	---	---
	within a non-MSA county	15,000	---	---	---	---	**23000 T**	**42000 T**	---	---
Isophorone		8	---	---	---	---	< 0.21	< 0.21	---	---
Lead		107	36	15	**410**	23	**840**	22	**1300**	18
Magnesium		325,000	---	---	---	---	12000	26000	---	---
Manganese	within a MSA county	636	---	---	---	---	390	410	---	---
	within a non-MSA county	630	---	---	---	---	390	410	---	---
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.060	< 0.023	0.22 E	0.028	0.56 E	0.030	0.88 E	0.026
	ionic (analyzed as total mercury)	0.89	0.060	< 0.023	0.22	0.028	0.56	0.030	0.88	0.026

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	22120464-001	22120464-002	22120464-009	22120464-010	23030736-011	23030736-012	22120464-011	22120464-012
		Client Sample ID :	SB-04 (2'-3')	SB-04 (11'-12')	SB-05 (4'-5')	SB-05 (5'-6')	SB-05D (4-5)	SB-05D (5-6)	SB-06 (2'-3')	SB-06 (11'-12')
		Date Collected :	12/15/2022	12/15/2022	12/15/2022	12/15/2022	03/21/2023	03/21/2023	12/15/2022	12/15/2022
		Time Collected :	08:25	08:35	10:25	10:35	16:50	17:00	10:50	11:00
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	4-5' bgs	5-6' bgs	4-5' bgs	5-6' bgs	2-3' bgs	11-12' bgs
TOTALS	Bromomethane		0.2	---	---	---	---	< 0.013	< 0.010	---	---
	Methyl tert-butyl ether		0.32	---	---	---	---	< 0.0067	< 0.0050	---	---
	Methylene chloride		0.02	---	---	---	---	< 0.013	< 0.010	---	---
	2-Methylphenol		15	---	---	---	---	< 0.21	< 0.21	---	---
	Naphthalene		1.8	< 0.041	< 0.040	0.81	< 0.040	0.33	< 0.040	0.19	< 0.040
	Nickel		100	---	---	---	---	21	43	---	---
	Nitrobenzene		0.26	---	---	---	---	< 0.040	< 0.040	---	---
	N-Nitrosodiphenylamine		1	---	---	---	---	< 0.21	< 0.21	---	---
	N-Nitrosodi-n-propylamine		0.0018	---	---	---	---	< 0.040	< 0.040	---	---
	Pentachlorophenol		0.02	---	---	---	---	< 0.082	< 0.081	---	---
	Phenol		100	---	---	---	---	< 0.21	< 0.21	---	---
	Pyrene		2,300	0.24	< 0.040	3.7	< 0.040	15	< 0.040	11	< 0.040
	Selenium		1.3	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2	< 1.2	< 1.0
	Silver		4.4	< 1.1	< 1.1	< 1.0	< 1.2	< 1.1	< 1.2	< 1.2	< 1.0
	Styrene		4	---	---	---	---	< 0.0067	< 0.0050	---	---
	Tetrachloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
	Thallium		2.6	---	---	---	---	< 1.1	< 1.2	---	---
	Toluene		12	< 0.024	< 0.023	< 0.0051	< 0.0063	< 0.0067	< 0.0050	< 0.0060	< 0.0049
	1,2,4-Trichlorobenzene		5	---	---	---	---	< 0.21	< 0.21	---	---
	1,1,1-Trichloroethane		2	---	---	---	---	< 0.0067	< 0.0050	---	---
	1,1,2-Trichloroethane		0.02	---	---	---	---	< 0.0067	< 0.0050	---	---
	Trichloroethene		0.06	---	---	---	---	< 0.0067	< 0.0050	---	---
	2,4,5-Trichlorophenol		26	---	---	---	---	< 0.21	< 0.21	---	---
	2,4,6-Trichlorophenol		0.66	---	---	---	---	< 0.21	< 0.21	---	---
	Vanadium		550	---	---	---	---	27	29	---	---
	Vinyl chloride		0.01	---	---	---	---	< 0.0067	< 0.0050	---	---
	Xylenes, Total		5.6	< 0.071	< 0.070	< 0.015	< 0.018	< 0.020	< 0.015	< 0.018	< 0.015
	Zinc		5,100	---	---	---	---	550	60	---	---
			mg/L								
TCLP	Arsenic		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Barium		2	---	---	---	---	0.93	0.22	---	---
	Cadmium		0.005	---	---	---	---	0.025 T	< 0.0050	---	---
	Chromium		0.1	---	---	---	---	0.032	< 0.010	---	---
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	---	---	---	---	**0.81**	< 0.0050	---	---
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	---	---	---	---	< 0.00020	< 0.00020	---	---
	Selenium		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Silver		0.05	---	---	---	---	< 0.010	< 0.010	---	---
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	**0.21**	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005	23030736-006
		Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
		Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
		Time Collected :	18:25	18:30	19:20	19:25	19:00	19:10	17:10	17:15
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
pH		6.25 - 9.0	8.09	8.08	8.19	8.09	8.42	7.69	8.47	8.18
Acenaphthene		570	0.060	< 0.040	0.22	< 0.039	0.19	< 0.041	0.19	< 0.041
Acetone		25	< 0.072	< 0.068	< 0.077	< 0.067	0.077	< 0.066	< 0.066	< 0.072
Anthracene		12,000	0.40	< 0.040	1.1	< 0.039	0.65	< 0.041	3.5	< 0.041
Antimony		5	< 2.0	< 2.3	< 2.2	< 2.2	< 2.1	< 2.1	< 2.1	< 2.3
Arsenic	within a MSA county	13.0	7.1	13	8.6	**14**	8.5	5.4	7.8	8.1
	within a non-MSA county	11.3	7.1	**13**	8.6	**14**	8.5	5.4	7.8	8.1
Barium		1,500	21	57	220	46	140	37	38	57
Benzene		0.03	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Benz(a)anthracene	within Chicago corporate limits	1.1	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
	within a populated area in MSA excluding Chicago	1.8	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
	within a populated area in non-MSA county or outside populated area	0.9	**2.0**	< 0.040	**4.2**	< 0.039	**2.2**	< 0.041	**14**	< 0.041
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	**1.6**	< 0.040	**3.7**	< 0.039	**2.1**	< 0.041	**11**	< 0.041
	within a populated area in MSA excluding Chicago	2.1	1.6	< 0.040	**3.7**	< 0.039	2.1	< 0.041	**11**	< 0.041
	within a populated area in non-MSA county or outside populated area	0.9	**1.6**	< 0.040	**3.7**	< 0.039	**2.1**	< 0.041	**11**	< 0.041
Benzo(k)fluoranthene		9	1.8	< 0.040	3.4	< 0.039	1.8	< 0.041	**11**	< 0.041
Benzoic acid		400	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Benzo(a)pyrene	within Chicago corporate limits	1.3	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	within a populated area in MSA excluding Chicago	2.1	2.1	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	within a populated area in non-MSA county	0.98	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
	outside populated area	0.09	**2.1**	< 0.040	**4.1**	< 0.039	**2.3**	< 0.041	**14**	< 0.041
Beryllium		22	< 0.50	0.69	< 0.55	0.62	0.57	0.67	< 0.52	0.69
Bis(2-chloroethyl)ether		0.66	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Bis(2-ethylhexyl)phthalate		46	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Bromodichloromethane		0.6	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Bromoform		0.8	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Butyl benzyl phthalate		930	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Cadmium		5.2	< 0.50	< 0.57	1.3	< 0.55	0.67	< 0.53	< 0.52	< 0.57
Carbazole		0.6	< 0.19	< 0.21	0.31	< 0.20	0.31	< 0.21	0.29	< 0.21
Carbon disulfide		9	< 0.048	< 0.045	< 0.051	< 0.045	< 0.051	< 0.044	< 0.044	< 0.048
Carbon tetrachloride		0.07	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
4-Chloroaniline		0.7	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Chlorobenzene		1	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Dibromochloromethane		0.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Chloroform		0.3	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
2-Chlorophenol		1.5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Chromium		21	10	**23 T**	17	21	16	**24 T**	14	**23 T**
Chrysene		88	1.9	< 0.040	4.5	< 0.039	2.4	< 0.041	13	< 0.041
Cobalt		20	6.0	15	5.9	19	7.5	10	7.7	14
Copper		2,900	9.5	31	65	28	37	29	14	29
Cyanide		40	< 0.58	< 0.61	< 0.58	< 0.60	< 0.57	< 0.62	< 0.56	< 0.62
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	within a populated area in MSA excluding Chicago	0.42	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	within a populated area in non-MSA county	0.15	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
	outside populated area	0.09	**0.69**	< 0.040	**1.2**	< 0.039	**0.71**	< 0.041	**3.6**	< 0.041
Di-n-butyl phthalate		2,300	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
1,2-Dichlorobenzene		17	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,4-Dichlorobenzene		2	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
3,3´-Dichlorobenzidine		1.3	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,1-Dichloroethane		23	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,2-Dichloroethane		0.02	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
1,1-Dichloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,2-Dichloroethene		0.4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
trans-1,2-Dichloroethene		0.7	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
2,4-Dichlorophenol		0.48	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
1,2-Dichloropropane		0.03	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
cis-1,3-Dichloropropene		0.005	< 0.0019	< 0.0018	< 0.0021	< 0.0018	< 0.0020	< 0.0018	< 0.0018	< 0.0019
trans-1,3-Dichloropropene		0.005	< 0.0019	< 0.0018	< 0.0021	< 0.0018	< 0.0020	< 0.0018	< 0.0018	< 0.0019
Diethyl phthalate		470	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dimethylphenol		9	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
2,4-Dinitrophenol		3.3	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
2,4-Dinitrotoluene		0.25	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
2,6-Dinitrotoluene		0.26	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
Di-n-octyl phthalate		1,600	< 0.95	< 1.0	< 0.96	< 0.98	< 0.94	< 1.0	< 0.92	< 1.0
Ethylbenzene		13	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
Fluoranthene		3,100	2.8	< 0.040	7.0	< 0.039	4.5	< 0.041	29	< 0.041
Fluorene		560	0.095	< 0.040	0.31	< 0.039	0.24	< 0.041	0.45	< 0.041
Hexachlorobenzene		0.4	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachlorocyclopentadiene		1.1	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Hexachloroethane		0.5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	1.1	< 0.040	**2.0**	< 0.039	1.2	< 0.041	**7.2**	< 0.041
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	**1.1**	< 0.040	**2.0**	< 0.039	**1.2**	< 0.041	**7.2**	< 0.041
Iron	within a MSA county	15,900	13000	**35000 T**	**16000 T**	**30000 T**	**16000 T**	**22000 T**	**16000 T**	**26000 T**
	within a non-MSA county	15,000	13000	**35000 T**	**16000 T**	**30000 T**	**16000 T**	**22000 T**	**16000 T**	**26000 T**
Isophorone		8	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
Lead		107	9.7	17	**880**	17	**270**	20	39	18
Magnesium		325,000	1700	30000	20000	32000	9200	18000	6800	32000
Manganese	within a MSA county	636	68	470	380	600	500	230	180	490
	within a non-MSA county	630	68	470	380	600	500	230	180	490
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.22 E	0.027	0.83 E	0.030	0.53 E	0.028	0.039	0.029
	ionic (analyzed as total mercury)	0.89	0.22	0.027	0.83	0.030	0.53	0.028	0.039	0.029

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

			Laboratory ID :	23030736-013	23030736-014	23030736-001	23030736-002	23030736-003	23030736-004	23030736-005	23030736-006
			Client Sample ID :	SB-06A (2-3)	SB-06A (11-12)	SB-07 (2-3)	SB-07 (8-9)	SB-08 (1-2)	SB-08 (5-6)	SB-09 (2-3)	SB-09 (14-15)
			Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/21/2023
			Time Collected :	18:25	18:30	19:20	19:25	19:00	19:10	17:10	17:15
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	2-3' bgs	11-12' bgs	2-3' bgs	8-9' bgs	1-2' bgs	5-6' bgs	2-3' bgs	14-15' bgs
TOTALS	Bromomethane		0.2	< 0.0095	< 0.0091	< 0.010	< 0.0089	< 0.010	< 0.0089	< 0.0088	< 0.0095
	Methyl tert-butyl ether		0.32	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Methylene chloride		0.02	< 0.0095	< 0.0091	< 0.010	< 0.0089	< 0.010	< 0.0089	< 0.0088	< 0.0095
	2-Methylphenol		15	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Naphthalene		1.8	0.053	< 0.040	0.081	< 0.039	0.11	< 0.041	0.20	< 0.041
	Nickel		100	12	38	16	36	16	33	16	37
	Nitrobenzene		0.26	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
	N-Nitrosodiphenylamine		1	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	N-Nitrosodi-n-propylamine		0.0018	< 0.038	< 0.040	< 0.038	< 0.039	< 0.037	< 0.041	< 0.037	< 0.041
	Pentachlorophenol		0.02	< 0.077	< 0.081	< 0.078	< 0.079	< 0.076	< 0.083	< 0.075	< 0.084
	Phenol		100	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Pyrene		2,300	2.6	< 0.040	6.1	< 0.039	3.8	< 0.041	26	< 0.041
	Selenium		1.3	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Silver		4.4	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Styrene		4	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Tetrachloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Thallium		2.6	< 1.0	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.0	< 1.1
	Toluene		12	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	0.0047	0.0060	< 0.0048
	1,2,4-Trichlorobenzene		5	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	1,1,1-Trichloroethane		2	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	1,1,2-Trichloroethane		0.02	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Trichloroethene		0.06	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	2,4,5-Trichlorophenol		26	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	2,4,6-Trichlorophenol		0.66	< 0.19	< 0.21	< 0.20	< 0.20	< 0.19	< 0.21	< 0.19	< 0.21
	Vanadium		550	20	25	24	22	23	26	21	25
	Vinyl chloride		0.01	< 0.0048	< 0.0045	< 0.0051	< 0.0045	< 0.0051	< 0.0044	< 0.0044	< 0.0048
	Xylenes, Total		5.6	< 0.014	< 0.014	< 0.015	< 0.013	< 0.015	< 0.013	< 0.013	< 0.014
	Zinc		5,100	19	49	350	52	180	90	39	53
			mg/L								
TCLP	Arsenic		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium		2	0.19	0.85	1.7	1.0	1.0	0.21	0.20	0.92
	Cadmium		0.005	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Cobalt		1	---	---	---	---	---	---	---	---
	Iron		5	---	---	---	---	---	---	---	---
	Lead		0.0075	**0.0087**	< 0.0050	**0.14**	**0.013**	**0.10**	< 0.0050	**0.020**	< 0.0050
	Manganese		0.15	---	---	---	---	---	---	---	---
	Mercury		0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium		0.049	---	---	---	---	---	---	---	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
		Client Sample ID :	SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
		Date Collected :	03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
		Time Collected :	17:40	17:50	19:40	19:45	16:55	17:05	21:00	21:10
Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
pH		6.25 - 9.0	7.72	7.96	8.28	7.86	**9.49**	8.18	8.17	7.86
Acenaphthene		570	< 0.039	< 0.041	0.24	< 0.040	0.67	< 0.041	< 0.041	< 0.039
Acetone		25	< 0.080	< 0.068	< 0.077	< 0.076	< 0.081	< 0.071	< 0.077	< 0.067
Anthracene		12,000	0.13	< 0.041	0.97	< 0.040	3.4	< 0.041	0.085	< 0.039
Antimony		5	< 2.2	< 2.1	< 2.2	< 2.1	< 2.2	< 2.2	< 2.3	< 2.4
Arsenic	within a MSA county	13.0	7.5	13	**15**	10	**15**	11	**25**	8.8
	within a non-MSA county	11.3	7.5	**13**	**15**	10	**15**	11	**25**	8.8
Barium		1,500	73	69	830	57	350	81	160	27
Benzene		0.03	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Benz(a)anthracene	within Chicago corporate limits	1.1	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
	within a populated area in MSA excluding Chicago	1.8	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9	0.37	< 0.041	**3.7**	< 0.040	**9.7**	< 0.041	0.31	< 0.039
Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
	within a populated area in MSA excluding Chicago	2.1	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
	within a populated area in non-MSA county or outside populated area	0.9	0.34	< 0.041	**3.1**	< 0.040	**6.8**	< 0.041	0.29	< 0.039
Benzo(k)fluoranthene		9	0.29	< 0.041	2.9	< 0.040	8.2	< 0.041	0.19	< 0.039
Benzoic acid		400	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Benzo(a)pyrene	within Chicago corporate limits	1.3	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	within a populated area in MSA excluding Chicago	2.1	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	within a populated area in non-MSA county	0.98	0.40	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	0.28	< 0.039
	outside populated area	0.09	**0.40**	< 0.041	**3.5**	< 0.040	**9.1**	< 0.041	**0.28**	< 0.039
Beryllium		22	< 0.56	< 0.53	0.75	0.77	< 0.54	0.80	1.1	0.64
Bis(2-chloroethyl)ether		0.66	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Bis(2-ethylhexyl)phthalate		46	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Bromodichloromethane		0.6	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Bromoform		0.8	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Butyl benzyl phthalate		930	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Cadmium		5.2	< 0.56	< 0.53	2.7	< 0.52	2.9	< 0.54	0.89	< 0.59
Carbazole		0.6	< 0.20	< 0.21	0.34	< 0.21	**0.88**	< 0.21	< 0.21	< 0.20
Carbon disulfide		9	< 0.053	< 0.045	< 0.051	< 0.050	< 0.054	< 0.047	< 0.051	< 0.044
Carbon tetrachloride		0.07	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
4-Chloroaniline		0.7	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Chlorobenzene		1	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Dibromochloromethane		0.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Chloroform		0.3	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
2-Chlorophenol		1.5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Chromium		21	14	20	**24 T**	**26 T**	18	20	**24 T**	21
Chrysene		88	0.38	< 0.041	3.7	< 0.040	10	< 0.041	0.32	< 0.039
Cobalt		20	6.7	15	9.1	14	6.1	12	**52 T**	13
Copper		2,900	24	25	100	31	110	25	46	36
Cyanide		40	< 0.59	< 0.62	< 0.58	< 0.61	< 0.60	< 0.63	< 0.62	< 0.60
Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	within a populated area in MSA excluding Chicago	0.42	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	within a populated area in non-MSA county	0.15	0.12	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
	outside populated area	0.09	**0.12**	< 0.041	**1.1**	< 0.040	**2.7**	< 0.041	0.087	< 0.039
Di-n-butyl phthalate		2,300	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
1,2-Dichlorobenzene		17	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,4-Dichlorobenzene		2	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
3,3´-Dichlorobenzidine		1.3	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,1-Dichloroethane		23	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,2-Dichloroethane		0.02	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
1,1-Dichloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,2-Dichloroethene		0.4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
trans-1,2-Dichloroethene		0.7	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
2,4-Dichlorophenol		0.48	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
1,2-Dichloropropane		0.03	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
cis-1,3-Dichloropropene		0.005	< 0.0021	< 0.0018	< 0.0020	< 0.0020	< 0.0022	< 0.0019	< 0.0020	< 0.0018
trans-1,3-Dichloropropene		0.005	< 0.0021	< 0.0018	< 0.0020	< 0.0020	< 0.0022	< 0.0019	< 0.0020	< 0.0018
Diethyl phthalate		470	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
2,4-Dimethylphenol		9	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
2,4-Dinitrophenol		3.3	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
2,4-Dinitrotoluene		0.25	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
2,6-Dinitrotoluene		0.26	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
Di-n-octyl phthalate		1,600	< 0.98	< 1.0	< 0.96	< 1.0	< 0.99	< 1.0	< 1.0	< 0.98
Ethylbenzene		13	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
Fluoranthene		3,100	0.67	0.067	7.3	< 0.040	19	< 0.041	0.64	< 0.039
Fluorene		560	0.051	< 0.041	0.32	< 0.040	1.1	< 0.041	< 0.041	< 0.039
Hexachlorobenzene		0.4	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Hexachlorocyclopentadiene		1.1	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Hexachloroethane		0.5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.19	< 0.041	**1.8**	< 0.040	**4.8**	< 0.041	0.15	< 0.039
	within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.19	< 0.041	**1.8**	< 0.040	**4.8**	< 0.041	0.15	< 0.039
Iron	within a MSA county	15,900	**16000 T**	**30000 T**	**22000 T**	**35000 T**	**19000 T**	**35000 T**	**41000 T**	**28000 T**
	within a non-MSA county	15,000	**16000 T**	**30000 T**	**22000 T**	**35000 T**	**19000 T**	**35000 T**	**41000 T**	**28000 T**
Isophorone		8	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
Lead		107	100	17	**850**	18	**740**	15	44	20
Magnesium		325,000	4300	21000	16000	26000	22000	27000	19000	30000
Manganese	within a MSA county	636	150	590	330	350	280	400	**2100**	420
	within a non-MSA county	630	150	590	330	350	280	400	**2100**	420
Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.57 E	0.038	0.52 E	0.031	0.38 E	< 0.021	0.059	< 0.019
	ionic (analyzed as total mercury)	0.89	0.57	0.038	0.52	0.031	0.38	< 0.021	0.059	< 0.019

TOTALS

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	6-7' bgs	0-1' bgs	6-7' bgs	3-4' bgs	11-12' bgs	3-4' bgs	7-8' bgs
	Laboratory ID :			23030736-007	23030736-008	23030736-009	23030736-010	23030838-001	23030838-002	23030787-001	23030787-002
	Client Sample ID :			SB-10 (3-4)	SB-10 (6-7)	SB-11 (0-1)	SB-11 (6-7)	SB-12 (3-4)	SB-12 (11-12)	SB-13 (3-4)	SB-13 (7-8)
	Date Collected :			03/21/2023	03/21/2023	03/21/2023	03/21/2023	03/23/2023	03/23/2023	03/22/2023	03/22/2023
	Time Collected :			17:40	17:50	19:40	19:45	16:55	17:05	21:00	21:10
TOTALS	Bromomethane		0.2	< 0.011	< 0.0091	< 0.010	< 0.010	< 0.011	< 0.0094	< 0.010	< 0.0088
	Methyl tert-butyl ether		0.32	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Methylene chloride		0.02	< 0.011	< 0.0091	< 0.010	< 0.010	< 0.011	< 0.0094	< 0.010	< 0.0088
	2-Methylphenol		15	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Naphthalene		1.8	< 0.039	< 0.041	0.093	< 0.040	0.24	< 0.041	< 0.041	< 0.039
	Nickel		100	16	35	24	41	21	34	66	38
	Nitrobenzene		0.26	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	N-Nitrosodiphenylamine		1	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	N-Nitrosodi-n-propylamine		0.0018	< 0.039	< 0.041	< 0.038	< 0.040	< 0.039	< 0.041	< 0.041	< 0.039
	Pentachlorophenol		0.02	< 0.079	< 0.083	< 0.078	< 0.081	< 0.080	< 0.084	< 0.081	< 0.079
	Phenol		100	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Pyrene		2,300	0.59	0.058	6.0	< 0.040	16	< 0.041	0.55	< 0.039
	Selenium		1.3	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Silver		4.4	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Styrene		4	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Tetrachloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Thallium		2.6	< 1.1	< 1.1	< 1.1	< 1.0	< 1.1	< 1.1	< 1.1	< 1.2
	Toluene		12	< 0.0053	0.0047	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,2,4-Trichlorobenzene		5	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	1,1,1-Trichloroethane		2	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	1,1,2-Trichloroethane		0.02	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Trichloroethene		0.06	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	2,4,5-Trichlorophenol		26	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	2,4,6-Trichlorophenol		0.66	< 0.20	< 0.21	< 0.20	< 0.21	< 0.20	< 0.21	< 0.21	< 0.20
	Vanadium		550	23	21	28	28	20	23	36	24
	Vinyl chloride		0.01	< 0.0053	< 0.0045	< 0.0051	< 0.0050	< 0.0054	< 0.0047	< 0.0051	< 0.0044
	Xylenes, Total		5.6	< 0.016	< 0.014	< 0.015	< 0.015	< 0.016	< 0.014	< 0.015	< 0.013
	Zinc		5,100	81	49	880	60	420	53	160	57
			mg/L								
TCLP	Arsenic		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Barium		2	0.32	0.19	2.0	0.27	0.86	0.71	0.16	0.63
	Cadmium		0.005	< 0.0050	< 0.0050	0.0093 T	< 0.0050	0.0088 T	< 0.0050	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	0.017	0.022
	Cobalt		1	---	---	---	---	---	---	< 0.010	---
	Iron		5	---	---	---	---	---	---	< 0.25	---
	Lead		0.0075	**0.016**	< 0.0050	**0.097**	< 0.0050	**0.16**	< 0.0050	< 0.0050	< 0.0050
	Manganese		0.15	---	---	---	---	---	---	**0.65**	---
	Mercury		0.002	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
	Vanadium		0.049	---	---	---	---	---	---	< 0.010	---
			mg/kg								
SPECIA-TION	Mercury [S]		0.1	---	---	---	---	---	---	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

				Laboratory ID :	23030838-003	23030838-004
				Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
				Date Collected :	03/23/2023	03/23/2023
				Time Collected :	17:50	18:25
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	7-8' bgs
	pH		6.25 - 9.0	**9.26**	8.31
TOTALS	Acenaphthene		570	< 0.039	< 0.040
	Acetone		25	< 0.082	< 0.071
	Anthracene		12,000	0.047	< 0.040
	Antimony		5	< 2.3	< 2.3
	Arsenic	within a MSA county	13.0	9.9	6.7
		within a non-MSA county	11.3	9.9	6.7
	Barium		1,500	83	31
	Benzene		0.03	< 0.0054	< 0.0047
	Benz(a)anthracene	within Chicago corporate limits	1.1	0.14	< 0.040
		within a populated area in MSA excluding Chicago	1.8	0.14	< 0.040
		within a populated area in non-MSA county or outside populated area	0.9	0.14	< 0.040
	Benzo(b)fluoranthene	within Chicago corporate limits	1.5	0.13	< 0.040
		within a populated area in MSA excluding Chicago	2.1	0.13	< 0.040
		within a populated area in non-MSA county or outside populated area	0.9	0.13	< 0.040
	Benzo(k)fluoranthene		9	0.12	< 0.040
	Benzoic acid		400	< 0.97	< 0.99
	Benzo(a)pyrene	within Chicago corporate limits	1.3	0.14	< 0.040
		within a populated area in MSA excluding Chicago	2.1	0.14	< 0.040
		within a populated area in non-MSA county	0.98	0.14	< 0.040
		outside populated area	0.09	**0.14**	< 0.040
	Beryllium		22	0.63	0.60
	Bis(2-chloroethyl)ether		0.66	< 0.20	< 0.20
	Bis(2-ethylhexyl)phthalate		46	< 0.97	< 0.99
	Bromodichloromethane		0.6	< 0.0054	< 0.0047
	Bromoform		0.8	< 0.0054	< 0.0047
	Butyl benzyl phthalate		930	< 0.97	< 0.99
	Cadmium		5.2	< 0.58	< 0.56
	Carbazole		0.6	< 0.20	< 0.20
	Carbon disulfide		9	< 0.054	< 0.047
	Carbon tetrachloride		0.07	< 0.0054	< 0.0047
	4-Chloroaniline		0.7	< 0.20	< 0.20
	Chlorobenzene		1	< 0.0054	< 0.0047
	Dibromochloromethane		0.4	< 0.0054	< 0.0047
	Chloroform		0.3	< 0.0054	< 0.0047
	2-Chlorophenol		1.5	< 0.20	< 0.20
	Chromium		21	19	**23 T**
	Chrysene		88	0.15	< 0.040
	Cobalt		20	12	20
	Copper		2,900	33	36
	Cyanide		40	< 0.59	< 0.61
	Dibenz(a,h)anthracene	within Chicago corporate limits	0.20	0.043	< 0.040
		within a populated area in MSA excluding Chicago	0.42	0.043	< 0.040
		within a populated area in non-MSA county	0.15	0.043	< 0.040
		outside populated area	0.09	0.043	< 0.040
	Di-n-butyl phthalate		2,300	< 0.97	< 0.99
	1,2-Dichlorobenzene		17	< 0.20	< 0.20
	1,4-Dichlorobenzene		2	< 0.20	< 0.20
	3,3′-Dichlorobenzidine		1.3	< 0.20	< 0.20
	1,1-Dichloroethane		23	< 0.0054	< 0.0047
	1,2-Dichloroethane		0.02	< 0.0054	< 0.0047
	1,1-Dichloroethene		0.06	< 0.0054	< 0.0047
	cis-1,2-Dichloroethene		0.4	< 0.0054	< 0.0047
	trans-1,2-Dichloroethene		0.7	< 0.0054	< 0.0047
	2,4-Dichlorophenol		0.48	< 0.20	< 0.20
	1,2-Dichloropropane		0.03	< 0.0054	< 0.0047
	cis-1,3-Dichloropropene		0.005	< 0.0022	< 0.0019
	trans-1,3-Dichloropropene		0.005	< 0.0022	< 0.0019
	Diethyl phthalate		470	< 0.97	< 0.99
	2,4-Dimethylphenol		9	< 0.20	< 0.20
	2,4-Dinitrophenol		3.3	< 0.97	< 0.99
	2,4-Dinitrotoluene		0.25	< 0.039	< 0.040
	2,6-Dinitrotoluene		0.26	< 0.039	< 0.040
	Di-n-octyl phthalate		1,600	< 0.97	< 0.99
	Ethylbenzene		13	< 0.0054	< 0.0047
	Fluoranthene		3,100	0.30	< 0.040
	Fluorene		560	< 0.039	< 0.040
	Hexachlorobenzene		0.4	< 0.20	< 0.20
	Hexachlorocyclopentadiene		1.1	< 0.20	< 0.20
	Hexachloroethane		0.5	< 0.20	< 0.20
	Indeno(1,2,3-cd)pyrene	within a populated area in MSA excluding Chicago	1.6	0.077	< 0.040
		within Chicago corporate limits or a populated area in non-MSA county or outside a populated area	0.9	0.077	< 0.040
	Iron	within a MSA county	15,900	**22000 T**	**22000 T**
		within a non-MSA county	15,000	**22000 T**	**22000 T**
	Isophorone		8	< 0.20	< 0.20
	Lead		107	**110**	17
	Magnesium		325,000	21000	28000
	Manganese	within a MSA county	636	380	410
		within a non-MSA county	630	380	410
	Mercury	elemental (analyzed as total mercury)	0.1 [E]	0.28 E	< 0.022
		ionic (analyzed as total mercury)	0.89	0.28	< 0.022

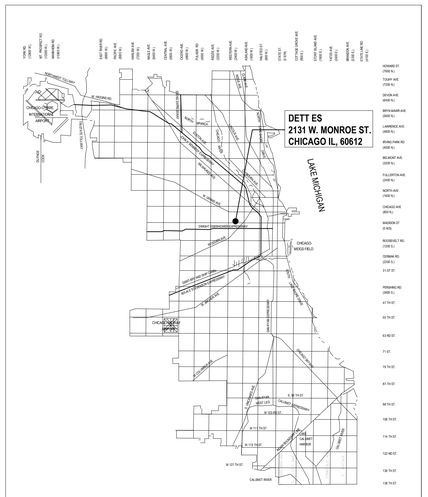
Table 5
Clean Construction or Demolition Debris (CCDD) Maximum Allowable Concentrations (MAC)
Phase II ESA - Additional Site Investigation
2131 West Monroe St
Chicago, Illinois 60612

		Laboratory ID :	23030838-003	23030838-004
		Client Sample ID :	SB-14 (3-4)	SB-14 (7-8)
		Date Collected :	03/23/2023	03/23/2023
		Time Collected :	17:50	18:25
	Analyte	Regions Limits (as applicable)	Maximum Allowable Concentration (mg/kg)	3-4' bgs	7-8' bgs
TOTALS	Bromomethane		0.2	< 0.011	< 0.0094
	Methyl tert-butyl ether		0.32	< 0.0054	< 0.0047
	Methylene chloride		0.02	< 0.011	< 0.0094
	2-Methylphenol		15	< 0.20	< 0.20
	Naphthalene		1.8	< 0.039	< 0.040
	Nickel		100	31	41
	Nitrobenzene		0.26	< 0.039	< 0.040
	N-Nitrosodiphenylamine		1	< 0.20	< 0.20
	N-Nitrosodi-n-propylamine		0.0018	< 0.039	< 0.040
	Pentachlorophenol		0.02	< 0.079	< 0.080
	Phenol		100	< 0.20	< 0.20
	Pyrene		2,300	0.24	< 0.040
	Selenium		1.3	< 1.2	< 1.1
	Silver		4.4	< 1.2	< 1.1
	Styrene		4	< 0.0054	< 0.0047
	Tetrachloroethene		0.06	< 0.0054	< 0.0047
	Thallium		2.6	< 1.2	< 1.1
	Toluene		12	< 0.0054	< 0.0047
	1,2,4-Trichlorobenzene		5	< 0.20	< 0.20
	1,1,1-Trichloroethane		2	< 0.0054	< 0.0047
	1,1,2-Trichloroethane		0.02	< 0.0054	< 0.0047
	Trichloroethene		0.06	< 0.0054	< 0.0047
	2,4,5-Trichlorophenol		26	< 0.20	< 0.20
	2,4,6-Trichlorophenol		0.66	< 0.20	< 0.20
	Vanadium		550	22	25
	Vinyl chloride		0.01	< 0.0054	< 0.0047
	Xylenes, Total		5.6	< 0.016	< 0.014
	Zinc		5,100	98	55
			mg/L		
TCLP	Arsenic		0.05	< 0.010	< 0.010
	Barium		2	0.37	0.55
	Cadmium		0.005	< 0.0050	< 0.0050
	Chromium		0.1	< 0.010	< 0.010
	Cobalt		1	---	---
	Iron		5	---	---
	Lead		0.0075	**0.079**	0.0064
	Manganese		0.15	---	---
	Mercury		0.002	< 0.00020	< 0.00020
	Selenium		0.05	< 0.010	< 0.010
	Silver		0.05	< 0.010	< 0.010
	Vanadium		0.049	---	---
			mg/kg		
SPECIA-TION	Mercury [S]		0.1	---	---

Legend:

Bold	Exceedance of CCDD MAC values based on 35 IAC Part 1100 Subpart F.
T	The appropriate totals, TCLP, or SPLP concentration were adopted as the MAC Value as listed in Summary Table (IEPA August 2012).
[E]	Results presented in the total elemental mercury line are total mercury results; however, exceedances were determined only for total mercury as ionic mercury. Mercury speciation is used to more accurately evaluate elemental mercury (footnote "n" of Summary Table (IEPA August 2012).
[S]	Results presented are based on semi-mobile mercury, a group which includes elemental mercury
---	Not analyzed

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



City of Chicago Location Map

ROBERT NATHANIEL DETT ELEMENTARY SCHOOL ANNEX AND RENOVATION

2131 W. MONROE ST.
CHICAGO IL, 60612
PBC PROJECT NUMBER 05445

ADDENDUM 01
05.19.23

PUBLIC BUILDING COMMISSION OF CHICAGO

LORI E. LIGHTFOOT, MAYOR
CARINA E. SÁNCHEZ, EXECUTIVE DIRECTOR

CHICAGO PUBLIC SCHOOLS

PEDRO MARTINEZ, CHIEF EXECUTIVE OFFICER
MIGUEL DEL VALLE, CHICAGO BOARD OF EDUCATION PRESIDENT
IVAN HANSEN, CHIEF FACILITIES OFFICER

ARCHITECT OF RECORD

KOO LLC
55 W Wacker Dr, Suite 600C
Chicago, IL 60601
312.235.0920

STRUCTURAL ENGINEER

Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604
312.987.0061

ENVIRONMENTAL

ENVIRONMENTAL ENGINEERING
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603
312-345-1400

ENVIRONMENTAL RENO/DEMO
Specialty Consulting, Inc (SPC)
2942 W Van Buren St
Chicago, IL 60612
312-319-7575

CIVIL ENGINEER

TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654
312.467.0123

MEP/FP/AV/IT ENGINEER

WSP
30 N LaSalle St, Ste 4200
Chicago, IL 60602
312.782.8150

LANDSCAPE ARCHITECT

TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654
312.467.0123

PROJECT DESCRIPTION:
THE PROJECT WILL CONSIST OF A RENOVATION OF THE EXISTING ROBERT NATHANIEL DETT ELEMENTARY SCHOOL AND CONSTRUCTION OF AN ANNEX ADDITION. THE CURRENT BUILDING'S USE IS A SCHOOL (OCCUPANCY TYPE E-1). THE PROPOSED OCCUPANCY FOR THE EXISTING BUILDING WILL REMAIN TYPE E-1. THE PROPOSED OCCUPANCY OF THE NEW ANNEX ADDITION IS ASSEMBLY (OCCUPANCY TYPE A-4).

THE PROPOSED NEW 1 STORY ANNEX ADDITION WILL BE APPROXIMATLY 17,800 SF. THE ADDITION WILL BE LINKED TO THE EXISTING SCHOOL BUILDING AND WILL INCLUDE A NEW GYMNASIUM WITH OFFICE/STORAGE, A LOBBY/PRE-FUNCTION AREA, COMMUNITY/MULTI-PURPOSE ROOM, RESTROOMS AND A NEW 40 SPACE PARKING AND TRASH ENCLOSURE AREA AT THE SOUTHWEST PORTION OF THE SITE WHICH WILL REPLACE THE EXISTING 18 SPACE LOT AT THE NORTHEAST CORNER OF THE CAMPUS. THE RENOVATION SCOPE OF WORK OF THIS PROJECT INCLUDES RE-ROOFING, REPLACEMENT OF EXTERIOR DOORS, MASONRY FACADE RESTORATION, AND RENOVATION OF THE PARKING AREAS, SIDEWALKS, AND TRASH ENCLOSURE AREA. THE INTERIOR SCOPE OF RENOVATION WORK OF THIS PROJECT INCLUDES THE ADDITION OF A NEW ELEVATOR, ALTERATION OF SELECT INTERIOR ROOM LAYOUTS, ALTERATION OF EXISTING TOILET ROOMS TO BE MADE ACCESSIBLE, AND RENOVATION OF FINISHES, CASEWORK, AND MEPFP SYSTEMS.

CERTIFICATION STATEMENT:

I hereby certify that these plans were prepared under my direct supervision and to the best of my professional knowledge they conform to the Chicago Building Code.

Signature: _____

Signed date: _____

Illinois License Number: _____

Registration Expiration date: _____

CERTIFICATION:

THIS CERTIFIED THAT THESE DRAWINGS HAVE BEEN REVIEWED TO THE BEST OF MY KNOWLEDGE AND THAT I BELIEVE THEY ARE IN ACCORDANCE WITH THE AMERICANS WITH DIABILITIES ACT (ADA), AND ALL CODES AND BUILDING ORDINANCES OF THE CITY OF CHICAGO, STATE OF ILLINOIS.

_____
LICENSED ARCHITECT / LANDSCAPE ARCHITECT / LICENSED ENGINEER

LOCATION MAP

SHEET MATRIX

C0-01	GENERAL NOTES
000 - COVER	
COVER	COVER SHEET
001 - GENERAL	
G-000	CODE MATRIX
G-001	GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS
G-002	CODE INFORMATION & EGRESS PLANS
G-004	FIXTURE COUNT ANALYSIS FLOOR 1
G-005	FIXTURE COUNT ANALYSIS FLOOR 2&3
G-007	PHASING PLAN
G-008	SITE SURVEY
G-009	SURVEY
G-010	EXISTING CONDITIONS FOR REFERENCE
002 - ENVIRONMENTAL	
SMP-1	SOIL MANAGEMENT PLAN
003 - CIVIL	
C0-01	GENERAL NOTES
C0-02	EXISTING CONDITIONS
C1-00	SITE DEMOLITION PLAN
C2-00	SITE DIMENSION PLAN
C3-00	SITE GRADING PLAN
C3-02	EROSION CONTROL PLAN
C3-04	DETAILED SITE GRADING PLAN
C4-00	SITE UTILITY PLAN
C5-00	SITE DETAILS
C5-01	SITE DETAILS
C5-02	SITE DETAILS
C5-03	UTILITY DETAILS
C5-04	UTILITY DETAILS
C5-05	UTILITY DETAILS
MOT1-00	MOT PLAN
004 - LANDSCAPE	
L0-00	TREE PRESERVATION PLAN
L1-00	LANDSCAPE PLAN
L2-00	LANDSCAPE DETAILS
L2-01	ORNAMENTAL FENCE DETAILS
L2-02	SITE DETAILS
005 - STRUCTURAL	
S-001	STRUCTURAL - GENERAL NOTES
S-002	STRUCTURAL - GENERAL NOTES AND LOADING CRITERIA
S-100	ANNEX CAISSON PLAN
S-101	ANNEX FOUNDATION AND GROUND FLOOR PLAN
S-102	ANNEX ROOF FRAMING PLAN
S-104	CLRM WING PARTIAL FOUNDATION AND FRAMING PLAN
S-200	FRAMING ELEVATIONS
S-201	FRAMING ELEVATIONS
S-300	SLAB ON GRADE SECTIONS AND DETAILS
S-301	DEEP FOUNDATION SCHEDULES, SECTIONS AND DETAILS
S-302	FOUNDATION SECTIONS AND DETAILS
S-303	GRADE BEAM SECTIONS AND DETAILS
S-401	ANNEX ENLARGED FRAMING PLAN AND DETAILS
S-402	SERVICE WING ENLARGED FRAMING PLAN AND DETAILS
S-500	BASE PLATE DETAILS

SHEET MATRIX

C0-01	GENERAL NOTES
S-501	STEEL CONNECTION DETAILS - DELEGATED DESIGN
S-502	STEEL SECTIONS AND DETAILS
S-503	STEEL BRACED FRAME DETAILS
S-504	STEEL TRUSS DETAILS
S-600	MASONRY DETAILS
S-601	MASONRY DETAILS
006 - ABATEMENT	
ASB-1	ASBESTOS ABATEMENT DESIGN PLAN
ASB-2	ASBESTOS ABATEMENT DESIGN PLAN
ASB-3	ASBESTOS ABATEMENT DESIGN PLAN
ASB-4	ASBESTOS ABATEMENT DESIGN PLAN
LBP-1	LEAD-BASED PAINT MITIGATION/ABATEMENT DESIGN PLAN
007 - ADA	
ADA.00B	MOUNTING HEIGHTS AND REACH RANGE REQUIREMENTS
ADA.01	EXTERIOR SIGN DETAILS
ADA.02	INTERIOR SIGN DETAILS
ADA.03	PERMANENT ROOM IDENTIFICATION SIGNS DETAILS
ADA.04	ACCESSIBLE PARKING DETAILS
ADA.08	DOOR AND LOCKER DETAILS
ADA.09	CASEWORK DETAILS
ADA.9.1	SCIENCE LAB CASEWORK DETAILS
ADA.10	ACCESSIBLE MOUNTING HEIGHTS AND SCHEDULE
ADA.10.1	ACCESSIBLE STALL AND URINAL LAYOUTS
ADA.11.1	ACCESSIBLE ES, HS AND ADULT TOILET ROOM PLANS AND ELEVATIONS
ADA.12	ACCESSIBLE SHOWER PLANS AND ELEVATIONS
ADA.13	ACCESSIBLE SHOWER DETAILS
ADA.15	DRINKING FOUNTAIN DETAILS
ADA.17.1	(FRONT DOOR ONLY) HYDRAULIC PASSENGER ELEVATOR DETAILS
ADA.17.9	TYPICAL ELEVATOR CONTROL DETAILS
ADA.18.2	VERTICAL PLATFORM LIFT DETAILS
008 - ARCHITECTURE	
A-010A	DEMO SITE PLAN
A-010B	SITE PLAN
A-100A	ANNEX FLOOR PLAN - LEVEL 1
A-100B	ANNEX RCP - LEVEL 1
A-101A	SERVICE WING DEMOLITION PLAN - LEVEL 1
A-101B	SERVICE WING FLOOR PLAN - LEVEL 1
A-101C	SERVICE WING DEMO RCP - LEVEL 1
A-101D	SERVICE WING RCP - LEVEL 1
A-102A	CLRM WING DEMOLITION PLAN & RCP- LEVEL 1
A-102B	CLRM WING FLOOR PLAN & RCP - LEVEL 1
A-103A	CLRM WING DEMOLITION PLAN & RCP - LEVEL 2
A-103B	CLRM WING FLOOR PLAN & RCP - LEVEL 2
A-104A	CLRM WING DEMOLITION PLAN & RCP - LEVEL 3
A-104B	CLRM WING FLOOR PLAN & RCP - LEVEL 3
A-105	ROOF PLAN ANNEX
A-106A	DEMOLITION ROOF PLAN SERVICE WING
A-106B	ROOF PLAN SERVICE WING
A-107	ROOF PLANS CLRM WING
A-200	ANNEX ENLARGED LOBBY PLAN & RCP
A-201	ANNEX ENLARGED CORRIDOR PLAN & RCP
A-202	ANNEX ENLARGED HALLWAY LINK PLAN & RCP
A-203A	ANNEX ENLARGED GYMNASIUM PLAN
A-203B	ANNEX ENLARGED GYMNASIUM RCP
A-204	ANNEX ENLARGED COMMUNITY ROOM PLAN & RCP
A-205	ANNEX ENLARGED BATHROOM PLAN AND RCP
A-206	SERVICE WING ENLARGED TOILET ROOM PLAN AND RCP
A-207	SERVICE WING ENLARGED ADMIN SUITE PLAN & RCP
A-208	CLRM WING ENLARGED TOILET ROOM PLANS
A-209	CLRM WING ENLARGED TOILET ROOM PLANS
A-210	CLRM WING ENLARGED OFFICE SUITE 103/101 PLAN & RCP
A-220	CLRM WING ENLARGED OFFICE SUITE 102/104 PLAN & RCP
A-221	CLRM WING ENLARGED MULTIPURPOSE ROOM 105 & 107 PLAN & RCP
A-222	CLRM WING ENLARGED COMPUTER ROOM 201 PLAN & RCP
A-223	CLRM WING ENLARGED MULTI-PURPOSE 202 PLAN & RCP
A-224	CLRM WING ENLARGED SENSORIAL SPACE 211 PLAN & RCP
A-225	CLRM WING ENLARGED DANCE ROOM 213 PLAN & RCP
A-226	CLRM WING ENLARGED ROOMS 302 & 304 PLAN & RCP
A-227	CLRM WING ENLARGED CLRM 306 & PULL OUT RM PLAN & RCP
A-228	CLRM WING ENLARGED SCIENCE LAB 309/STORAGE 307 PLAN & RCP
A-229	CLRM WING ENLARGED RESOURCE ROOM 310 & GAME ROOM 312 PLAN & RCP
A-230	CLRM WING ENLARGED MUSIC ROOM 311 PLAN & RCP
A-231	CLRM WING ENLARGED VISUAL ARTS ROOM 313 PLAN & RCP
A-232	CLRM WING ENLARGED TYPICAL SOUTH CLRM PLAN & RCP
A-233	CLRM WING ENLARGED STAIR PLAN & RCP
A-300	ANNEX CORRIDOR INTERIOR ELEVATIONS
A-301	ANNEX COMMUNITY ROOM AND CORRIDOR INTERIOR ELEVATIONS
A-301B	ANNEX HALLWAY LINK AND SERVICE CORRIDOR INTERIOR ELEVATIONS
A-302	ANNEX GYMNASIUM INTERIOR ELEVATIONS
A-303	ANNEX GYMNASIUM INTERIOR ELEVATIONS
A-303A	ANNEX INTERIOR BATHROOM ELEVATIONS
A-303B	ANNEX GYMNASIUM OFFICE INTERIOR ELEVATIONS
A-304	SERVICE WING INTERIOR ELEVATIONS

SHEET MATRIX

C0-01	GENERAL NOTES
A-305	SERVICE WING INTERIOR BATHROOM ELEVATIONS
A-305A	SERVICE WING INTERIOR GYM ELEVATIONS
A-306	CLRM WING INTERIOR BATHROOM ELEVATIONS
A-307	CLRM WING INTERIOR ELEVATIONS - LEVEL 1
A-307B	CLRM WING INTERIOR ELEVATIONS - LEVEL 1
A-308	CLRM WING INTERIOR ELEVATIONS - LEVEL 2
A-308B	CLRM WING INTERIOR ELEVATIONS - LEVEL 2
A-309	CLRM WING INTERIOR ELEVATIONS - LEVEL 3
A-309A	CLRM WING INTERIOR ELEVATIONS - LEVEL 3
A-309B	CLRM WING INTERIOR ELEVATIONS - LEVEL 3
A-309C	CLRM WING INTERIOR ELEVATIONS - LEVEL 3
A-400	ANNEX BUILDING ELEVATION
A-400A	ENLARGED ELEVATIONS
A-400B	ENLARGED ELEVATIONS
A-400C	ENLARGED ELEVATIONS
A-401	CLRM WING BUILDING ELEVATIONS - SOUTH
A-402	CLRM WING BUILDING ELEVATIONS - NORTH
A-403	CLRM WING BUILDING ELEVATIONS - WEST
A-404	SERVICE WING BUILDING ELEVATIONS
A-410	ANNEX BUILDING SECTIONS
A-411	ANNEX BUILDING SECTIONS
A-420	WALL SECTIONS
A-421	WALL SECTIONS
A-422	WALL SECTIONS
A-423	WALL SECTIONS
A-424	WALL SECTIONS
A-430	EXTERIOR DETAILS
A-431	EXTERIOR DETAILS
A-432	EXTERIOR DETAILS
A-433	EXTERIOR DETAILS
A-434	EXTERIOR DETAILS
A-444	RTU PLANS & ELEVATIONS
A-445	ROOF & RTU SCREENWALL DETAILS
A-446	ROOF DETAILS
A-447	EXTERIOR SITE DETAILS
A-500	WALL PARTITION
A-501A	DOOR SCHEDULE
A-501B	DOOR DETAILS
A-502	FINISH NOTES AND SCHEDULE
A-503	FINISH LEGEND, PLUMBING, SPECIALTY EQP SCHEDULE
A-504	INTERIOR SIGNAGE SCHEDULE
A-505	DRINKING FOUNTAINS
A-600	HOISTWAY PLANS & SECTIONS
A-601	HOISTWAY DETAILS
A-700	INTERIOR DETAILS
A-701	INTERIOR DETAILS
A-702	INTERIOR DETAILS
A-703	MILLWORK DETAILS
A-704	MILLWORK DETAILS
ID-010	ANNEX - FLOOR FINISH PLAN
ID-011	ANNEX - WALL FINISH PLANS
ID-012	SERVICE WING - FLOOR FINISH PLAN
ID-013	SERVICE WING - WALL FINISH PLAN
ID-014	CLRM WING - FLOOR & WALL FINISH PLANS
ID-015	CLRM WING - FLOOR & WALL FINISH PLANS
ID-016	CLRM WING - FLOOR & WALL FINISH PLANS
ID-020	FINISH AND FURNITURE PLANS
ID-021	FINISH AND FURNITURE PLANS
ID-022	FINISH AND FURNITURE PLANS
009 - MECHANICAL	
M-000	MECHANICAL LEGENDS, NOTES & ABBREVIATIONS
M-001	MECHANICAL CITY OF CHICAGO SCHEDULES
MD-201	SERVICE WING LEVEL 1 - HVAC DEMO PLAN
MD-202	CLRM WING LEVEL 1 - HVAC DEMO PLAN
MD-203	CLRM WING LEVEL 2 - HVAC DEMO PLAN
MD-204	CLRM WING LEVEL 3 - HVAC DEMO PLAN
MD-206	SERVICE WING ROOF - HVAC DEMO PLAN
MD-207	CLRM WING ROOF - HVAC DEMO PLAN
M-200	ANNEX LEVEL 1 - HVAC FLOOR PLAN
M-200A	ANNEX LEVEL 1 - HVAC RETURN AIR PLENUM FLOOR PLAN
M-201	SERVICE WING LEVEL 1 - HVAC FLOOR PLAN
M-202	CLRM WING LEVEL 1 - HVAC FLOOR PLAN
M-203	CLRM WING LEVEL 2 - HVAC FLOOR PLAN
M-204	CLRM WING LEVEL 3 - HVAC FLOOR PLAN
M-205	ANNEX - HVAC ROOF PLAN
M-206	SERVICE WING - HVAC ROOF PLAN
M-207	CLRM WING - HVAC FLOOR PLAN
M-301	ANNEX & SERVICE WING LEVEL 1 - HVAC PIPING PLAN
M-600	MECHANICAL ONE LINE DIAGRAM
M-700	MECHANICAL DETAILS
M-701	MECHANICAL DETAILS
M-800	MECHANICAL SCHEDULES
M-801	MECHANICAL SCHEDULES
M-900	BAS - GENERAL SYMBOLS & ABBREVIATIONS
M-901	BAS - GENERAL DETAILS
M-902	BAS - GENERAL RISER DIAGRAM
M-903	BAS - EXHAUST FANS, HEATERS & MISCELLANEOUS
M-904	BAS - VAV AND CAV BOXES
M-905	BAS - VRF CONTROLS
M-906	BAS - MAU S-3
M-907	BAS - RTU-4
M-908	BAS - RTU-3 & RTU-5

SHEET MATRIX

C0-01	GENERAL NOTES
010 - ELECTRICAL	
E-000	ELECTRICAL LEGENDS, NOTES & ABBREVIATIONS
E-010	ELECTRICAL SITE PLAN
ED-201	FIRST FLOOR ELECTRICAL DEMOLITION PLAN - SERVICE WING
ED-202	FIRST FLOOR ELECTRICAL DEMOLITION PLAN - CLRM WING
ED-203	SECOND FLOOR ELECTRICAL DEMOLITION PLAN - CLRM WING
ED-204	THIRD FLOOR ELECTRICAL DEMOLITION PLAN - CLRM WING
ED-205	ROOF LEVEL ELECTRICAL DEMOLITION PLAN
ED-207	ROOF LEVEL ELECTRICAL PLAN
ED-301	FIRST FLOOR LIGHTING DEMOLITION PLAN - SERVICE WING
ED-302	FIRST FLOOR LIGHTING DEMOLITION PLAN - CLRM WING
ED-303	SECOND FLOOR LIGHTING DEMOLITION PLAN - CLRM WING
ED-304	THIRD FLOOR LIGHTING DEMOLITION PLAN - CLRM WING
ED-402	FIRST FLOOR FIRE ALARM DEMOLITION PLAN - CLRM WING
ED-403	SECOND FLOOR FIRE ALARM DEMOLITION PLAN - CLRM WING
ED-404	THIRD FLOOR FIRE ALARM DEMOLITION PLAN - CLRM WING
E-201	FIRST FLOOR POWER PLAN - SERVICE WING
E-201A	FIRST FLOOR MECHANICAL POWER PLAN - SERVICE WING
E-202	FIRST FLOOR POWER PLAN - CLRM WING
E-202A	FIRST FLOOR MECHANICAL POWER PLAN - CLRM WING
E-203	SECOND FLOOR POWER PLAN - CLRM WING
E-203A	SECOND FLOOR MECHANICAL POWER PLAN - CLRM WING
E-204	THIRD FLOOR POWER PLAN - CLRM WING
E-204A	THIRD FLOOR MECHANICAL POWER PLAN - CLRM WING
E-205	ROOF LEVEL MECHANICAL POWER PLAN
E-206	ROOF LEVEL MECHANICAL POWER PLAN
E-301	FIRST FLOOR LIGHTING PLAN - SERVICE WING
E-302	FIRST FLOOR LIGHTING PLAN - CLRM WING
E-303	SECOND FLOOR LIGHTING PLAN - CLRM WING
E-304	THIRD FLOOR LIGHTING PLAN - CLRM WING
E-310	FIRST FLOOR LIGHTING PHOTOMETRICS - SERVICE WING
E-500	PARTIAL PLANS
E-600	ELECTRICAL ONE LINE DIAGRAM
E-700	ELECTRICAL DETAILS
E-701	ELECTRICAL DETAILS
E-702	ELECTRICAL DETAILS
E-703	ELECTRICAL DETAILS
E-800	ELECTRICAL SCHEDULES
E-801	ELECTRICAL SCHEDULES
011 - PV	
PV-000	PHOTOVOLTAIC COVER SHEET
PV-205	ANNEX - PV ROOF LAYOUT PLAN
PV-205.1	STRINGING AND CONDUIT PLAN
PV-500	ENLARGED ELECTRICAL PLAN
PV-600	SINGLE LINE DIAGRAM
PV-601	PV SIGNAGE
PV-700	CONSTRUCTION DETAILS
PV-701	GROUNDING DETAILS
PV-800	EQUIPMENT DATA SHEETS (1 OF 2)
PV-801	EQUIPMENT DATA SHEETS (2 OF 2)
012 - PLUMBING	
P-000	PLUMBING LEGENDS, NOTES & ABBREVIATIONS
PD-100	PLUMBING DEMOLITION PLAN - SERVICE WING
PD-201	FIRST FLOOR PLUMBING DEMOLITION PLAN - SERVICE WING
PD-202	FIRST FLOOR PLUMBING DEMOLITION PLAN - CLRM WING
PD-203	SECOND FLOOR PLUMBING DEMOLITION PLAN - CLRM WING
PD-204	THIRD FLOOR PLUMBING DEMOLITION PLAN - CLRM WING
PD-205	ROOF LEVEL PLUMBING DEMOLITION PLAN
P-100A	PLUMBING UNDERFLOOR PLAN - SERVICE WING - NEW WORK
P-100B	PLUMBING UNDERFLOOR PLAN - CLRM WING
P-201	FIRST FLOOR PLUMBING PLAN - SERVICE WING - NEW WORK
P-202	FIRST FLOOR PLUMBING PLAN - CLRM WING - NEW WORK
P-203	SECOND FLOOR PLUMBING PLAN - CLRM WING - NEW WORK
P-204	THIRD FLOOR PLUMBING PLAN - CLRM WING - NEW WORK
P-205	ROOF LEVEL PLUMBING PLAN - NEW WORK
P-300	PLUMBING 3D RISER DIAGRAM - CLRM WING
P-500	PLUMBING ENLARGED VIEWS
P-700	PLUMBING DETAILS
P-701	PLUMBING DETAILS
P-800	PLUMBING SCHEDULES
013 - FIRE PROTECTION	
FP-000	FIRE PROTECTION LEGENDS, NOTES & ABBREVIATIONS
FP-101	FIRST FLOOR FIRE PROTECTION PLAN - SERVICE WING
FP-200	FIRE PROTECTION DETAILS AND SCHEDULES
014 - MEP COORDINATION	
MEP-100	ANNEX LEVEL 1 - MEP COORDINATION
MEP-101	SERVICE WING LEVEL 1 - MEP COORDINATION
MEP-102	CLRM WING LEVEL 1 - MEP COORDINATION
MEP-103	CLRM WING LEVEL 2 - MEP COORDINATION
MEP-104	CLRM WING LEVEL 3 - MEP COORDINATION
MEP-205	ANNEX ROOF PLAN - MEP COORDINATION
MEP-206	SERVICE WING ROOF PLAN - MEP COORDINATION
MEP-207	CLRM WING ROOF PLAN - MEP COORDINATION

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

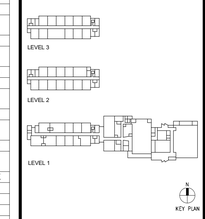
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

REVISIONS

NO.	DATE	DESCRIPTION
	12/22/22	ZONING REVIEW
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 12" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

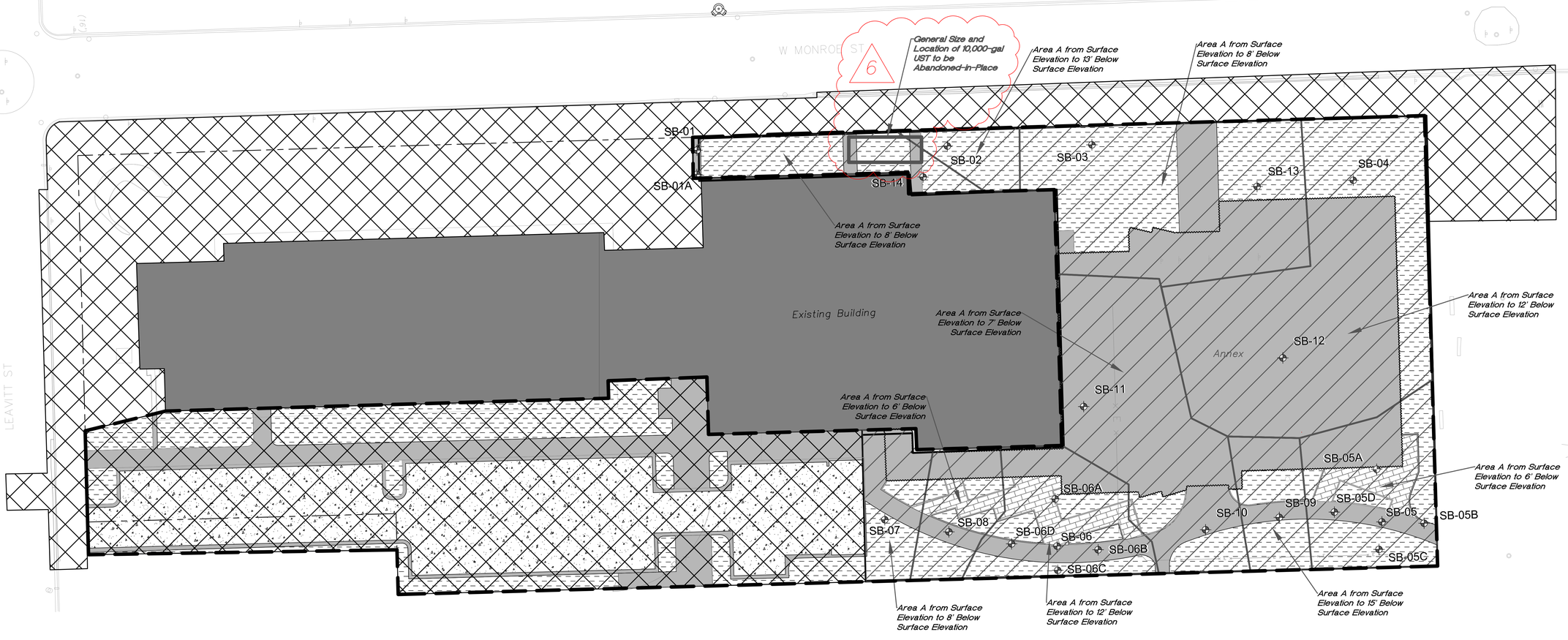
Project No: 2138

Title

COVER SHEET

Sheet NOT FOR CONSTRUCTION

COVER



N

Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- LIMITS OF WORK
- SAMPLING LOCATIONS

SOIL DISPOSAL CLASSIFICATION / REMEDIATION AREAS

AREA A - Subtitle D Landfill
Soils aboveTACO Tier 1 SROs (Non-Special)

AREA B - Subtitle D Landfill
Soils ASSUMED above TACO Tier 1 SROs (Non-Special)

ENGINEERED BARRIERS

CONCRETE
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

ASPHALT
Remove soils if required to a depth shown on Architectural/Civil drawings. Backfill with clean fill to a depth shown on Architectural/Civil drawings.

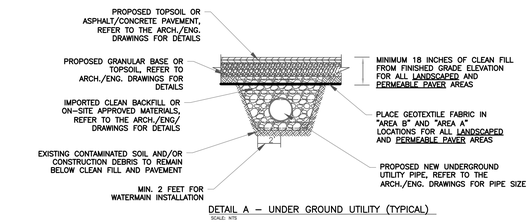
LANDSCAPING
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to finished grade. For trees, see Section 5.3 and 5.4 for details.

PERMEABLE PAVERS
Remove soils to a minimum of 18 inches below finished grade, place geotextile fabric and backfill with a minimum of 18 inches of clean fill up to the bottom of the pavers.

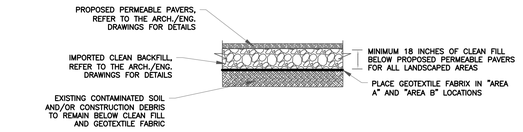
6 See Item 6 in General Notes

GENERAL NOTES

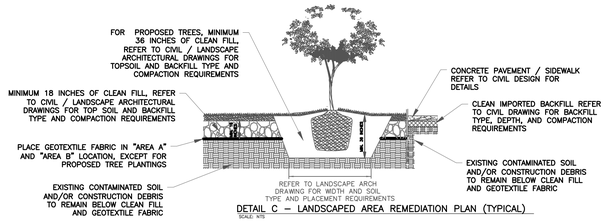
1. THIS DRAWING IS ONLY FOR ENVIRONMENTAL SITE WORK (ILLUSTRATION PURPOSES ONLY.) CONTRACTOR SHALL REFER TO ARCHITECT/ENGINEER DRAWINGS FOR CONSTRUCTION DETAILS AND DIMENSIONS. REFER TO SITE SURVEY FOR EXISTING SURFACE ELEVATIONS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND FIELD CONDITIONS. ALL DIMENSIONS AND DETAILS ARE TAKEN FROM RECORD DRAWINGS AND ARE NOT GUARANTEED TO BE ACCURATE, CONTRACTOR SHALL FIELD VERIFY ACTUAL FIELD DIMENSIONS.
3. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS. HANDLING OF EXCAVATED SOILS ON SITE SHALL REQUIRE CONSTRUCTION WORKER PRECAUTIONS DUE TO EXCEEDANCES OF THE MERCURY INHALATION EXPOSURE ROUTE AND THE LEAD INGESTION EXPOSURE ROUTE FOR CONSTRUCTION WORKERS ACCORDING TO TITLE 35 OF THE ILLINOIS ADMINISTRATIVE CODE (ILAC), SECTION 742, APPENDIX B, TABLE B.
4. AT A MINIMUM, ALL EXCAVATED SOILS SHALL BE CLASSIFIED AS NON–SPECIAL NON–HAZARDOUS WASTE TO BE DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL AS LICENSED AND PERMITTED BY THE IEPA EXCEPT:
   - 4.1. EXCAVATED MATERIALS WITHIN AREA B AND BELOW REFERENCED DEPTHS IN AREA A ARE NOT SAMPLED AND ANALYZED AND ARE ASSUMED TO BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE NON–HAZARDOUS WASTE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.2. ENVIRONMENTAL SOIL/FILL CONDITIONS IN AREAS OUTSIDE THE CONSTRUCTION AREA ARE NOT KNOWN. SOIL/FILL REMOVED FROM THESE AREAS SHALL BE HANDLED PER SPECIFICATION SECTION 31 23 18.13 AS PART OF CONTRACT WORK AND ARE NOT PERMITTED FOR REUSE ON THE PROPERTY UNLESS SOIL ANALYTICAL DATA INDICATES THAT THEY ARE ACCEPTABLE FOR REUSE. ALL SOIL/FILL FROM THESE AREAS SHALL BE CLASSIFIED AS SPECIAL WASTE OR NON–SPECIAL WASTE AND DISPOSED OF AT AN OPEN, ACTIVE, AND APPROVED SUBTITLE D LANDFILL. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING WASTE ACCEPTANCE AND PERFORM ALL REQUIRED ANALYTICAL TESTING TO SECURE ALL REQUIRED PERMITS AND WASTE STREAM AUTHORIZATION FROM SUBTITLE D LANDFILLS.
   - 4.3. CONSTRUCTION DEMOLITION DEBRIS, SUCH AS BURIED CONCRETE SLABS FREE OF STAINING, WHICH MAY BE RECYCLED. ASPHALT AND CLEAN CONCRETE SHOULD BE RECYCLED AT APPROPRIATE RECYCLING FACILITIES PER SPECIFICATION SECTION 31 23 18.14. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF CCDD SHALL BE CONDUCTED IN ACCORDANCE SPECIFICATION SECTION 31 23 18.14.
5. REMEDIATION WORK SHALL INCLUDE PERFORMING EXCAVATION OF SOIL AT THE LOCATION AND ELEVATION SHOW IN THE CIVIL DRAWINGS
   - 5.1. AREA A AND AREA B SOILS IN THE PROPOSED LANDSCAPED AREAS AND PROPOSED PERMEABLE PAVER AREAS SHALL BE EXCAVATED TO A MINIMUM OF 18 INCHES. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 18 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURE FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.2. AREA A AND AREA B SOILS WHERE PROPOSED CONCRETE AND ASPHALT ARE SHALL BE EXCAVATED TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS. INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH IMPORTED CLEAN FILL TO THE DEPTH SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS, THEN INSTALLING CONCRETE OR ASPHALT AS SHOWN ON THE ARCHITECTURAL/CIVIL DRAWINGS.
   - 5.3. AREA A AND AREA B SOILS SHALL BE EXCAVATED TO A MINIMUM OF 36 INCHES WHERE NEW TREE PLANTINGS ARE PROPOSED. THE INSTALLED ENGINEERED BARRIERS SHALL CONSIST OF BACKFILLING WITH AT LEAST 36 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
   - 5.4. AREA A AND AREA B SOILS LOCATED WITHIN THE DRIP LINES OF EXISTING TREES THAT ARE PROPOSED TO REMAIN SHALL BE EXCAVATED A MINIMUM OF 6 INCHES WHERE POSSIBLE WITHOUT DAMAGING THE ROOT BALL. THE ENGINEERED BARRIERS SHALL CONSIST OF INSTALLING GEOTEXTILE, THEN BACKFILLING WITH AT LEAST 6 INCHES OF IMPORTED CLEAN FILL WHICH SHALL BE MEASURED FROM THE BOTTOM OF THE PERMEABLE PAVERS OR FINISHED GRADE, AS APPLICABLE.
6. THE KNOWN EXISTING 10,000–GAL HEATING OIL UST SHALL BE ABANDONED–IN–PLACE BY A CONTRACTOR LICENSED FOR SUCH WORK AND IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00, 41 IAC 175 SUBPART C AND 41 IAC 175.840. CONTRACTOR SHALL NOTIFY THE EC AT LEAST 45 DAYS IN ADVANCE PRIOR TO ABANDONMENT FOR FIELD OVERSIGHT OF THE UST ABANDONMENT AND COORDINATION FOR THE UST SITE ASSESSMENT.
7. SOIL EXCAVATION SHALL BE KEPT TO THE EXTENT REQUIRED TO PERFORM THE PROPOSED CONSTRUCTION WORK AS SPECIFIED IN THE CONTRACT DOCUMENTS.
8. ALL EXCAVATION, TRANSPORTATION AND DISPOSAL OF SOIL/FILL SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14. NO EXCAVATED SOIL SHALL BE REUSED ON SITE.
9. CONTRACTOR SHALL PROVIDE THE NAMES AND ADDRESSES OF ALL SELECTED WASTE/RECYCLE HAULERS, CCDD AND UNCONTAMINATED SOIL FILL OPERATIONS SITES AND/OR RECYCLING FACILITIES AND ACTIVE PERMITTED SUBTITLE D LANDFILL PER SPECIFICATION SECTION 31 23 18.13 AND SPECIFICATION SECTION 31 23 18.14 PRIOR TO THE START OF CONTRACTOR WORK.
10. ALL FIELD EQUIPMENT SHALL BE DECONTAMINATED PRIOR TO BEING TAKEN OFFSITE OR USAGE IN UNCONTAMINATED SOIL AREAS.
11. THE CONTRACTOR SHALL NOT INTERMIX ON SITE AND OFF SITE MATERIALS. OFF SITE/ROW SOILS CANNOT BE STOCKPILED ON SITE AND ON SITE MATERIALS CANNOT BE STOCKPILED OFF SITE.
12. CLEAN CONCRETE AND/OR ASPHALT REMOVED DURING EXCAVATION/DEMOLITION WORK CAN BE TRANSPORTED TO THE APPROVED RECYCLING FACILITY. CONCRETE RUBBLE COMMINGLED, MIXED OR CROSS CONTAMINATED WITH GENERAL CONSTRUCTION & DEMOLITION DEBRIS SHALL BE HANDLED IN ACCORDANCE WITH SPECIFICATION SECTION 31 23 18.13.
13. SHOULD ANY SOILS OR FILL BE ENCOUNTERED THAT EXHIBIT UNUSUAL OR PETROLEUM/SOLVENT ODORS OR STAINING, CONTRACTOR SHALL STOP WORK IN THAT AREA AND NOTIFY THE COMMISSION REPRESENTATIVE IMMEDIATELY. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COMMISSION REPRESENTATIVE IF ANY MATERIALS (SOIL OR LIQUID) REQUIRING SPECIAL HANDLING (I.E. STAINED SOIL, SOIL WITH ODORS, OR LIQUIDS) ENCOUNTERED DURING EXCAVATION PER SPECIFICATION SECTION 31 23 18.14.
14. NO SOIL SHALL BE EXPORTED OR IMPORTED FROM THE SITE WITHOUT THE PRESENCE OF THE ENVIRONMENTAL CONSULTANT (EC). NOTIFY THE COMMISSION REPRESENTATIVE AND EC AT LEAST 48 HOURS IN ADVANCE FOR FIELD OVERSIGHT AND DOCUMENTATION OF EXPORTED SOILS TO SUBTITLE D LANDFILL AND IMPORTED SOILS PER SPECIFICATION SECTION 02 65 00 AND SPECIFICATION SECTION 31 23 18.13.
15. SHOULD AN UNDERGROUND STORAGE TANK (UST) BE ENCOUNTERED IN THE WORK AREA, CONTRACTOR SHALL STOP WORK AND NOTIFY THE COMMISSION REPRESENTATIVE AND ENVIRONMENTAL CONSULTANT IMMEDIATELY IN ACCORDANCE WITH SPECIFICATION SECTION 02 65 00.
16. ALL IMPORTED FILL MATERIALS MUST MEET THE REQUIREMENTS OF SPECIFICATION SECTION 31 23 23. ALL IMPORTED BACKFILL SHALL NOT EXCEED THE TIERED APPROACH TO CORRECTIVE ACTION OBJECTIVES (TACO) LISTED IN TITLE 35 OF ILAC, SECTION 742, APPENDIX B, TABLE A FOR THE PARAMETERS ON THE TARGET COMPOUND LIST ACCORDING TO TITLE 35 OF ILAC, SECTION 740, APPENDIX A. ALL APPROVED IMPORTED CLEAN FILL STOCKPILED ON SITE FOR FUTURE USE SHALL BE STOCKPILED OUTSIDE OF AREA A AND AREA B UNLESS STOCKPILED ON CONCRETE, ASPHALT, OR VISQUEEN/PLASTIC SHEETING.
17. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL PROVIDE A STORM WATER MANAGEMENT PLAN THAT SHALL COMPLY WITH ALL LOCAL, STATE AND FEDERAL RULES AND REGULATIONS, AS WELL AS OTHER RELEVANT CONTRACT DOCUMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING PUMPING PERMIT FROM THE CITY OF CHICAGO DEPARTMENT OF BUILDINGS AND DISCHARGE AUTHORIZATION/APPROVAL FROM METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO (MWRDGC) PRIOR TO DISCHARGE OF STORM WATER INTO CITY SEWER SYSTEM IN ACCORDANCE WITH CONTRACT SPECIFICATIONS.
18. SEE CIVIL DRAWINGS FOR UTILITY INSTALLATION AND REMOVAL DETAILS INCLUDING EXCAVATION WIDTH AND DEPTHS. IN THE PROPOSED UNDERGROUND UTILITIES AND SEWER TRENCHING AREAS, THE CONTRACTOR SHALL EXCAVATE SOIL TO A DEPTH REQUIRED BY THE NEW DEVELOPMENT. THE CONTRACTOR SHALL PREPARE A SITE SPECIFIC HEALTH AND SAFETY PLAN AND PERFORM ALL WORK IN ACCORDANCE WITH ALL APPLICABLE OSHA REGULATIONS.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURAL INTEGRITY OF ALL SURROUNDING STREET, UNDERGROUND UTILITIES, BUILDINGS, AND STRUCTURES. MAINTAIN SIDES AND SLOPES OF EXCAVATIONS IN A SAFE CONDITION UNTIL COMPLETION OF BACKFILLING PER SPECIFICATION SECTION 31 23 18.14.
20. CONTRACTOR SHALL NOT UTILIZE ANY SOIL AND FILL MATERIALS EXCAVATED FOR CONSTRUCTION AT ANY OTHER OFF–SITE PROPERTY.
21. ALL SITE WORK SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 23 18.13 (SOIL, FILL BACKFILL, AND CU STRUCTURAL SOIL, DEMOLITION DEBRIS REMOVAL), SECTION 31 23 18.14 (CCDD AND UNCONTAMINATED SOIL DISPOSAL), AND SECTION 01 56 11 (REGARDING DUST, FUME, AND ODOR CONTROL).
22. EROSION CONTROL AND APPLICABLE NPDES REQUIREMENTS ARE PROVIDED IN CONTRACT DRAWING C3–02.
23. TREE PROTECTION REQUIREMENTS SHALL BE PERFORMED IN ACCORDANCE WITH SECTION 31 13 00 AND ARE PROVIDED IN CONTRACT DRAWINGS L1–00 AND L2–00.



DETAIL A – UNDER GROUND UTILITY (TYPICAL)
SCALE: NTS



DETAIL B – PERMEABLE PAVER AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS



DETAIL C – LANDSCAPED AREA REMEDIATION PLAN (TYPICAL)
SCALE: NTS

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
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Chicago, IL 60602

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Environmental Design International
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Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

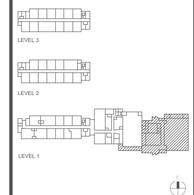
EDI

REVISIONS

NO.	DATE	DESCRIPTION
1	4/04/23	60% SD Draft
2	4/07/23	75% SD
3	4/28/23	100% CD
4	4/28/23	100% CD
5	5/04/23	IFB
6	5/19/23	IFB Addendum 1

DRAWN BY: EDI

SCALE: NTS



PBC Project Name: DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

PBC Contract No: 05445

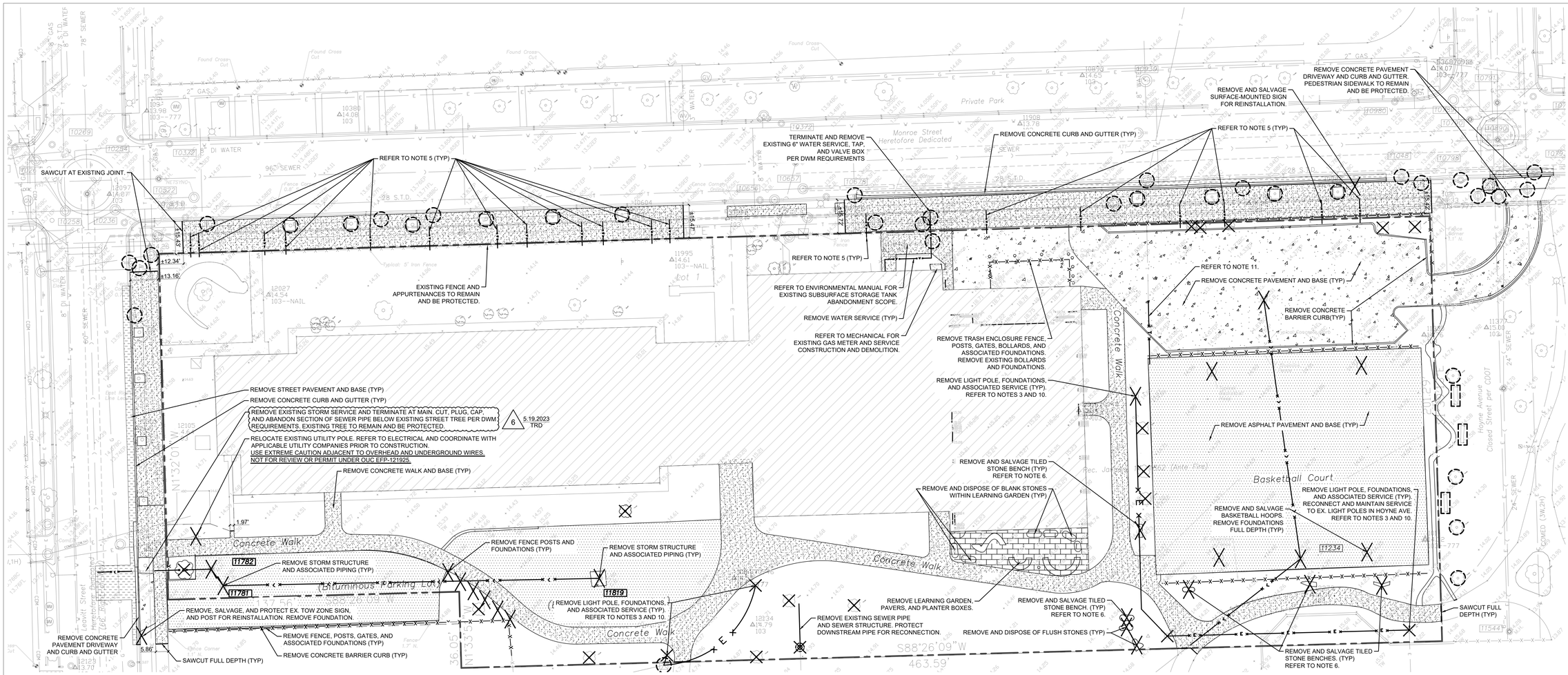
CPS Project #2021-26031-ADM

Project No: 2138

Title
SOIL MANAGEMENT AND REMEDIATION PLAN

Sheet NOT FOR CONSTRUCTION

SMP-01



N

20' 0 10' 20' 40'

Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- LIMITS OF WORK
- EXISTING BUILDING
- REMOVE CONCRETE PAVEMENT AND BASE
- REMOVE CONCRETE WALK AND BASE
- REMOVE ASPHALT PAVEMENT AND BASE
- REMOVE STREET PAVEMENT AND BASE
- REMOVE FENCE, POSTS GATES, AND FOUNDATIONS
- REMOVE CONCRETE CURB AND GUTTER
- REMOVE CONCRETE BARRIER CURB
- REMOVE WATER SERVICE
- REMOVE ELECTRIC SERVICE
- EXISTING TREE TO REMAIN
- EXISTING TREE TO BE REMOVED
- SAWCUT (FULL DEPTH)
- ITEM TO REMAIN AND BE PROTECTED
- ITEM TO BE REMOVED

SITE DEMOLITION NOTES:

1. CONTRACTOR SHALL REFER TO GEOTECHNICAL AND ENVIRONMENTAL REPORTS AND PLANS FOR ALL EXCAVATION, SOIL MANAGEMENT, AND ENVIRONMENTAL REQUIREMENTS.
2. CONTRACTOR SHALL VERIFY ALL UTILITIES AND STRUCTURES WITHIN THE PROJECT WORK LIMITS PRIOR TO CONSTRUCTION AND UTILITY LAYOUT. PROTECT ALL EXISTING UTILITIES AND STRUCTURES TO REMAIN. HAND DIG AS REQUIRED. ALERT ARCHITECT AND ENGINEER IMMEDIATELY IF EXISTING UTILITIES AND/OR STRUCTURES ARE IN CONFLICT WITH PROPOSED WORK. SUBSURFACE UTILITIES AND STRUCTURES ARE SHOWN ON PLANS SCHEMATICALLY PER RECORD DRAWINGS.
3. CONTRACTOR SHALL ENSURE SERVICES, NOTED TO REMAIN, REMAIN CONNECTED AND FUNCTIONING THROUGHOUT CONSTRUCTION. ALERT ARCHITECT AND ENGINEER IMMEDIATELY IF EXISTING UTILITIES AND/OR STRUCTURES ARE IN CONFLICT WITH PROPOSED WORK.
4. CLEAN, JET, AND TELEVISE EXISTING SEWERS NOTED TO REMAIN. PROVIDE DIAGRAMS AND VIDEOS TO ARCHITECT AND ENGINEER PRIOR TO UTILITY LAYOUT.
5. TERMINATE AND REMOVE ALL UNUSED EXISTING WATER SERVICES ALONG THE PROPERTY BOUNDARY PER DWM REQUIREMENTS. LOCATION AND SIZE SHOWN PER DWM WATER PLATS. VERIFY LOCATION AND SIZE IN FIELD.
6. ITEMS NOTED TO BE SALVAGED SHALL BE PROTECTED THROUGHOUT CONSTRUCTION. STORE MOSAIC BENCHES FOR REINSTALLATION.
7. EXISTING FIRE HYDRANTS SHALL REMAIN, BE PROTECTED, AND REMAIN ACCESSIBLE THROUGHOUT CONSTRUCTION.
8. MAXIMUM 36" TRENCH WIDTH AT WATER FACILITIES.
9. NO ELEVATION CHANGES ALLOWED AT EXISTING FIRE HYDRANTS AND WATER FACILITIES.
10. SALVAGE ALL CHICAGO PARK DISTRICT LIGHT POLES NOTED TO BE REMOVED. STORE AND PROTECT LIGHT POLES THROUGHOUT CONSTRUCTION FOR PICKUP AT A LATER DATE. COORDINATE WITH OWNER PRIOR TO CONSTRUCTION.
11. PARTIALLY REMOVE OR RELOCATE EXISTING TELEPHONE/COMMUNICATION DUCT TO ACCOMMODATE PROPOSED CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND APPLICABLE UTILITY AGENCIES PRIOR TO CONSTRUCTION FOR REMOVAL, RELOCATION, AND/OR RECONNECTION TO THE SCHOOL BUILDINGS. EXISTING TELEPHONE/COMMUNICATION DUCT SHOWN FOR REFERENCE ONLY. DUCT IS DRAWN SCHEMATICALLY AND SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.
12. IMPORTANT: THE EXCAVATING PARTY FOR TRENCHING UNDER AT&T MULTIDUCT CONDUIT MUST CONTACT THE AT&T STRUCTURE ACCESS CENTER A MINIMUM OF 10 BUSINESS DAYS PRIOR TO START OF WORK @ (262) 896-6553, AND SUBMIT THE M1 FORM TO SCHEDULE THE ON-SITE INSPECTOR. ENSURE THE REQUIRED 12" VERTICAL AND 3' HORIZONTAL CLEARANCE FROM AT&T FACILITIES IS MAINTAINED.
13. THE DEPARTMENT OF WATER MANAGEMENT WILL BE PERFORMING CORRECTIVE WORK WITHIN THE PROJECT LIMITS. PLEASE CONTACT THE TERM AGREEMENT CONSTRUCTION MANAGER (TACM@CTRWATER.NET) TO COORDINATE CONSTRUCTION. THE CONTRACTOR MUST NOT COMPLETE FINAL RESTORATION UNTIL THE CORRECTIVE WORK BY DWM HAS BEEN COMPLETED.

6 5.19.2023 TRD

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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DESIGN ISSUANCE

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1	12/01/22	100% SD
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	04/3/23	CAISSONS ONLY
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4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: TERRA, LLC

SCALE: AS NOTED

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

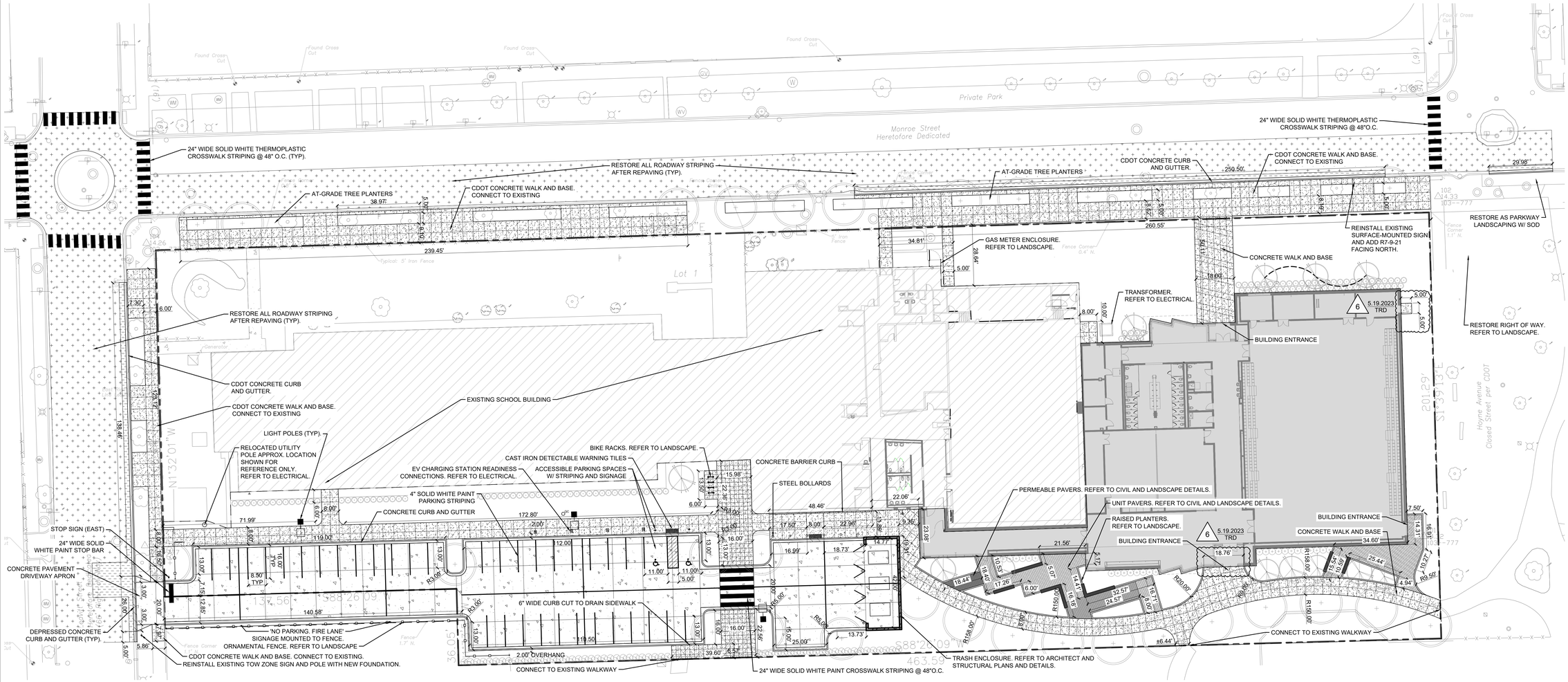
Project No: 2138

Title

SITE DEMOLITION PLAN

Sheet NOT FOR CONSTRUCTION

C1-00



N

20' 0 10' 20' 40'

Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- LIMITS OF WORK
- EXISTING BUILDING
- BUILDING
- WALL
- CONCRETE PAVEMENT AND BASE
- CONCRETE WALK AND BASE
- STREET PAVEMENT AND BASE
- MILL AND GRIND / ASPHALT SURFACE COURSE OVERLAY
- PRECAST CONCRETE PAVERS
- PERMEABLE PAVERS
- CONCRETE CURB AND GUTTER
- CONCRETE BARRIER CURB
- DEPRESSED CURB
- BIKE RACKS
- ADA TILE
- SIGN
- WHEELSTOP
- ADA MARKING
- HOSE BIB, SEE MEP
- ORNAMENTAL FENCE
- BOLLARD
- LIGHT
- EV CHARGING STATION READINESS. REFER TO ELEC.

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: TERRA, LLC

SCALE: AS NOTED

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

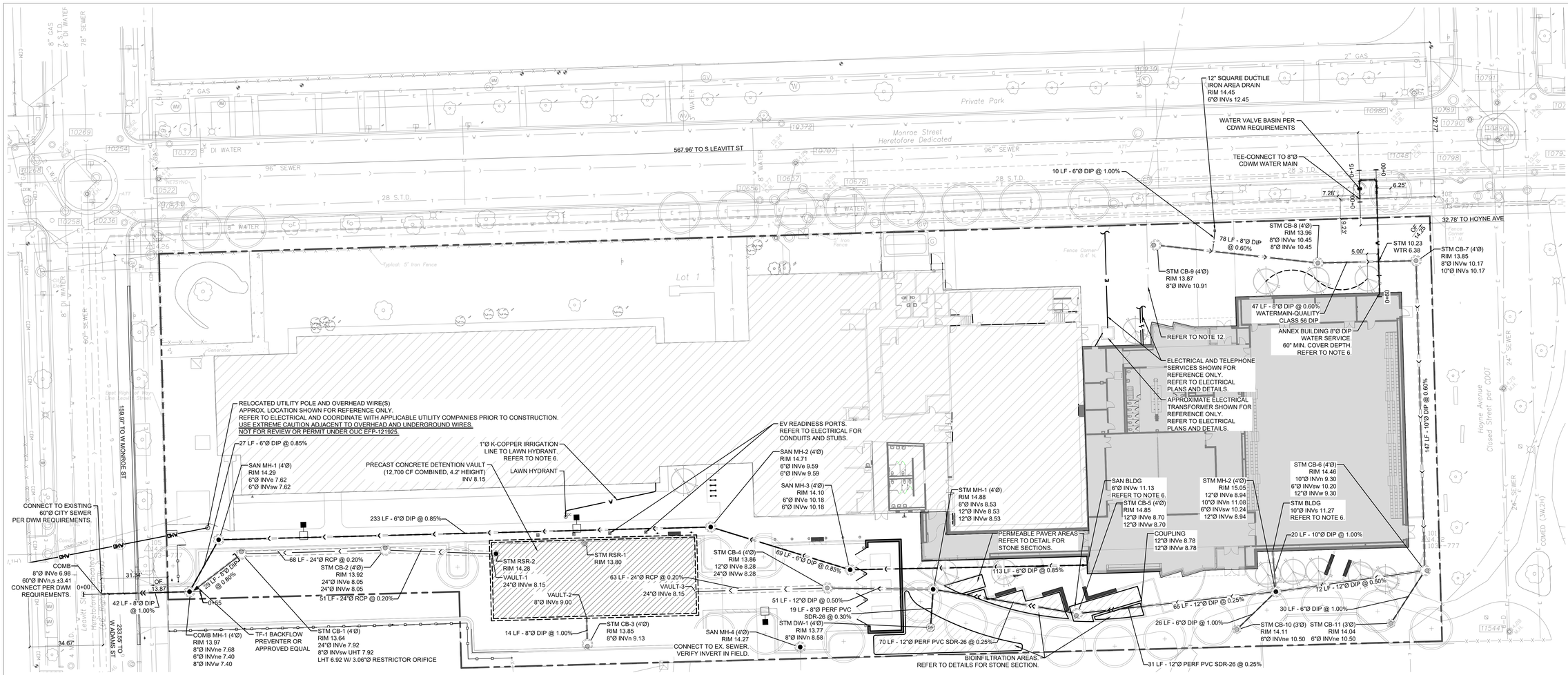
Project No: 2138

Title

SITE DIMENSION PLAN

Sheet NOT FOR CONSTRUCTION

C2-00



N

20' 0 10' 20' 40'

Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- EXISTING BUILDING
- RESTORE PER CITY REQUIREMENTS. AREA SHOWN SCHEMATIC ONLY.
- PRECAST CONCRETE DETENTION VAULT
- STORMWATER BMP
- STORM SEWER
- SANITARY SEWER
- COMBINED SEWER
- PERFORATED PIPE
- 4'Ø CATCH BASIN (CB)
- 4'Ø MANHOLE (MH)
- DRY WELL (DW)
- ACCESS RISER (RSR) OPEN GRATE
- AREA DRAIN (AD)
- CLEAN OUT (CO)
- RESTRICTOR (REST)
- UHT UPPER HALF TRAP INVERT
- LHT LOWER HALF TRAP INVERT
- WATER SERVICE
- WATER VALVE IN BASIN (WVB)
- ELECTRIC SERVICE
- TELEPHONE SERVICE

SITE UTILITY NOTES:

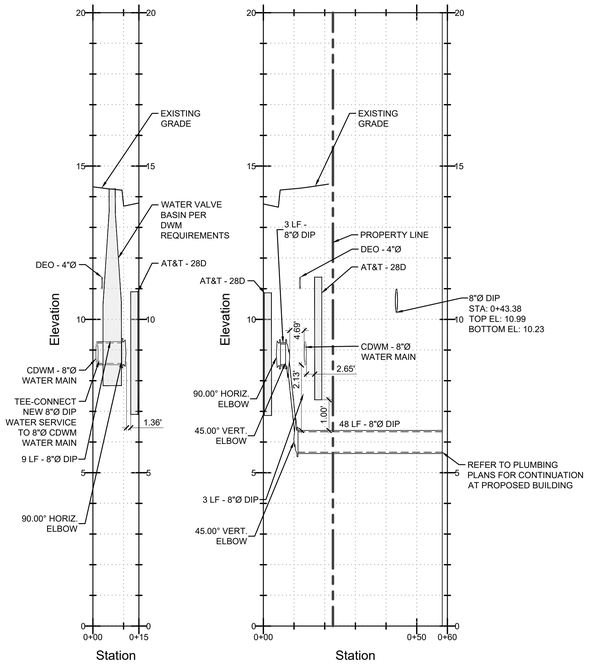
1. CONTRACTOR SHALL VERIFY ALL UTILITIES AND STRUCTURES WITHIN THE PROJECT WORK LIMITS PRIOR TO CONSTRUCTION AND UTILITY LAYOUT. PROTECT ALL EXISTING UTILITIES AND STRUCTURES TO REMAIN. HAND DIG AS REQUIRED. ALERT ARCHITECT AND ENGINEER IMMEDIATELY IF EXISTING UTILITIES AND/OR STRUCTURES ARE IN CONFLICT WITH PROPOSED WORK. SUBSURFACE UTILITIES AND STRUCTURES ARE SHOWN ON PLANS SCHEMATICALLY PER RECORD DRAWINGS.
2. CONTRACTOR SHALL ENSURE SERVICES, NOTED TO REMAIN, REMAIN CONNECTED AND FUNCTIONING THROUGHOUT CONSTRUCTION. ALERT ARCHITECT AND ENGINEER IMMEDIATELY IF EXISTING UTILITIES AND/OR STRUCTURES ARE IN CONFLICT WITH PROPOSED WORK.
3. CLEAN, JET, AND TELEVISE EXISTING SEWERS NOTED TO REMAIN. PROVIDE DIAGRAMS AND VIDEOS TO ARCHITECT AND ENGINEER PRIOR TO UTILITY LAYOUT.
4. TERMINATE AND REMOVE ALL UNUSED EXISTING WATER SERVICES ALONG THE PROPERTY BOUNDARY PER DWM REQUIREMENTS. LOCATION AND SIZE SHOWN PER DWM WATER PLATS. VERIFY LOCATION AND SIZE IN FIELD. RESTORE RIGHT OF WAY TO EXISTING CONDITIONS AT ALL TERMINATIONS.
5. FOR REUSE OF EXISTING SEWER CONNECTIONS, CONTRACTOR SHALL CLEAN, INSPECT, AND TELEVISE EXISTING CONNECTION IN THE PRESENCE OF A DWM INSPECTOR TO GARNER APPROVAL FOR REUSE. IF CONNECTION CANNOT BE REUSED, REPLACE SEWER CONNECTION PER DWM REQUIREMENTS.
6. REFER TO PLUMBING, ELECTRICAL, AND MECHANICAL PLANS AND DETAILS FOR MORE INFORMATION AND CONTINUATIONS OF BUILDING SERVICES. COORDINATE OTHER TRADES WITH PROPOSED CIVIL WORK. ALERT ARCHITECT AND ENGINEER IMMEDIATELY IF CONFLICT.
7. EXISTING FIRE HYDRANTS SHALL REMAIN, BE PROTECTED, AND REMAIN ACCESSIBLE THROUGHOUT CONSTRUCTION.
8. MAXIMUM 36" TRENCH WIDTH AT WATER FACILITIES.
9. NO ELEVATION CHANGES ALLOWED AT EXISTING FIRE HYDRANTS AND WATER FACILITIES.
10. PROPOSED 8"Ø COMBINED WATER SERVICE:
    DWM WATER REVIEW: 23-02:021
    DOMESTIC DEMAND: 180 GPM
    FIRE DEMAND: 550 GPM (W/ FIRE PUMP)
11. OWNER CONTACT:
    PUBLIC BUILDING COMMISSION OF CHICAGO
    ATTN: KERL LAJEUNE
    DEPUTY DIRECTOR OF PLANNING & DESIGN
    RICHARD J. DALEY CENTER, ROOM 200
    50 W WASHINGTON ST, CHICAGO, IL 60602
    KERL.LAJEUNE@CITYOFCHICAGO.ORG
    (T) (312) 735-0597

    FINAL OWNER CONTACT:
    CHICAGO PUBLIC SCHOOLS
    ATTN: EBEN C. SMITH
    DIRECTOR OF PLANNING & DESIGN
    42 W MADISON ST, CHICAGO, IL 60602
    ESMITH78@CPS.EDU
    (T) (773) 553-1000
12. PARTIALLY REMOVE OR RELOCATE EXISTING TELEPHONE/COMMUNICATION DUCT TO ACCOMMODATE PROPOSED CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND APPLICABLE UTILITY AGENCIES PRIOR TO CONSTRUCTION FOR REMOVAL, RELOCATION, AND/OR RECONNECTION TO THE SCHOOL BUILDINGS. EXISTING TELEPHONE/COMMUNICATION DUCT SHOWN FOR REFERENCE ONLY. DUCT IS DRAWN SCHEMATICALLY AND SHALL BE VERIFIED IN THE FIELD PRIOR TO CONSTRUCTION.

6 5.19.2023 TRD

STORMWATER SUMMARY:

PROJECT AREA	64,138SF (1.47 Ac):
RELEASE RATE:	0.38 CFS/Ac * 1.47 Ac
	0.560 CFS
RATE CONTROL:	
REQUIRED:	13,472 CF
PROVIDED:	14,494 CF
	PRECAST CONCRETE VAULT: 12,700 CF
	BIOINFILTRATION AND PERM PAVER BMP
VOLUME CONTROL:	
REQUIRED:	1,747 CF
PROVIDED:	1,794 CF
	BIOINFILTRATION AND PERM PAVER BMP
RESTRICTOR:	
FINISH FLOOR ELEVATION:	15.25 CCD
OVERFLOW ELEVATION:	13.87 CCD
100-YR HWL:	12.96 CCD
DESIGN HEAD:	5.04 FT
UPPER HALF TRAP INVERT:	7.92 CCD
RESTRICTOR SIZE:	3.06"Ø ORIFICE PLATE



Proposed Water-1
Station: (0+00 - 0+15)
H: 1" = 20' ; V: 1" = 2'

Proposed Water-2
Station: (0+00 - 0+60)
H: 1" = 20' ; V: 1" = 2'

Proposed Sewer
Station: (0+00 - 0+55)
H: 1" = 20' ; V: 1" = 2'

PUBLIC BUILDING COMMISSION

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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6	05/19/23	ADDENDUM 01

DRAWN BY: TERRA, LLC

SCALE: AS NOTED

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

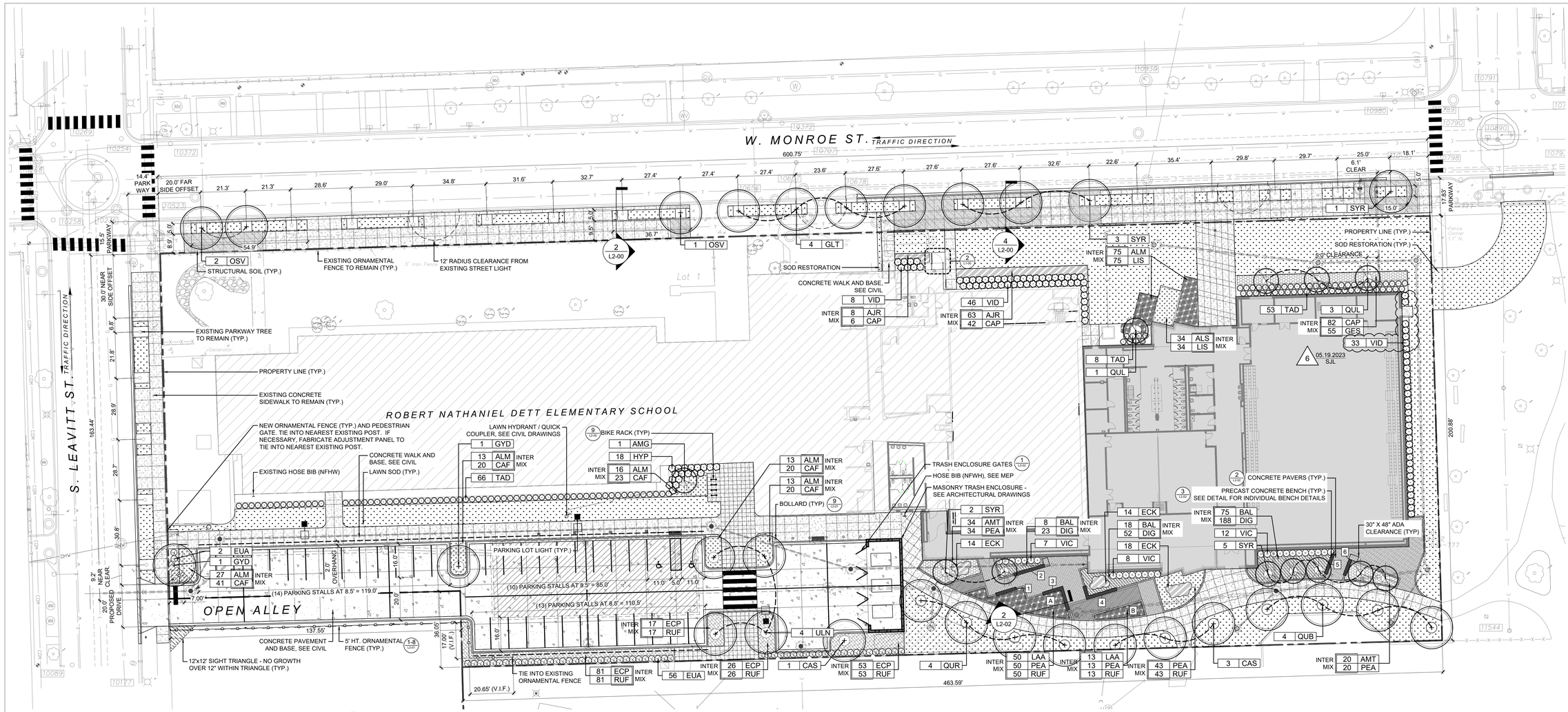
Project No: 2138

Title

SITE UTILITY PLAN

Sheet NOT FOR CONSTRUCTION

C4-00



1 LANDSCAPE PLAN

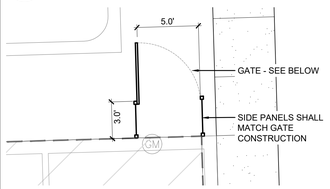
SCALE: 1" = 20'-0"

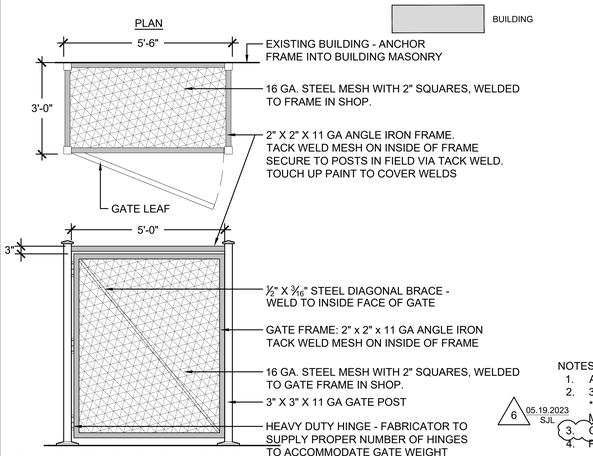
N

Scale: 1 inch = 20 feet

LEGEND:

- PROPERTY LINE
- EXISTING BUILDING
- EXISTING TREE TO REMAIN
- BUILDING
- CONCRETE PAVEMENT AND BASE
- CONCRETE WALK AND BASE
- PAVERS
- PERMEABLE PAVERS
- ORNAMENTAL FENCE
- BIKE RACKS
- HOSE BIB, SEE MEP
- SHADE TREE
- ORNAMENTAL TREE
- DECIDUOUS SHRUBS
- EVERGREEN SHRUBS
- LAWN SOD
- PERENNIAL / GROUNDCOVER AREAS
- 12' X 12' SIGHT TRIANGLE
- STRUCTURAL SOIL





2 GAS ENCLOSURE DETAIL

SCALE: NTS

6 05.19.2023 SJL

NOTES:
1. ALL MATERIALS OF FENCE SHALL HAVE SAME POWDER COAT FINISH AS ORNAMENTAL FENCE.
2. 3' WIDE PANELS IN THE N-S DIRECTION SHALL HAVE SAME COMPONENTS AS GATE:
   * 2" X 2" X 11 GA FRAME WITH 16 GAGE 2" SQUARE MESH WELDED TO INSIDE OF ANGLE
3. GATE SHALL HAVE LOCKABLE HINGE
4. PROVIDE SHOP DRAWINGS AS PART OF FENCE SUBMITTAL PACKAGE.

6 05.19.2023 SJL

Vehicular Use Area Calculation

Proposed Vehicular Use Area:	10,540	SF
Internal Landscape Required (7.5%)	791	SF required
TOTAL INTERIOR LANDSCAPE AREA PROVIDED	817	SF provided
Trees required as part of internal landscape area *(at 1 tree per 125 SF of req. internal landscape area)*	6	Trees required
Existing Internal Trees	0	
Proposed Internal Trees	6	
TOTAL INTERNAL TREES PROVIDED	6	Trees provided
	0	Trees deficient

Landscape Ordinance Analysis

Parkway Trees Required	26	Trees required
Existing Parkway Trees	15	
Proposed Parkway Trees	11	
TOTAL PARKWAY TREES PROVIDED	26	Trees provided
Note: The number of parkway trees provided is less than the number of trees required due to locations of existing trees and required tree clearances from light poles, driveways and intersections. Required parkway tree quantity only include R.O.W adjacent to project address.		
Perimeter Trees Required	1	Trees required
Existing Internal Trees	0	
Proposed Internal Trees	1	
TOTAL PERIMETER TREES REQUIRED	1	Trees provided

6 05.19.2023 SJL

Plant Schedule

CPS Robert Nathaniel Dett Elementary School

Qty.	Key	Botanical name	Common name	Size	Notes
		SHADE TREES			
4	CAS	Catalpa speciosa	Northern Catalpa	2.5" cal.	B&B
4	GLT	Gleditsia triacanthos 'Imperial'	Imperial Honeylocust	2.5" cal.	B&B
2	GYD	Gymnocladus dioicus 'Espresso'	Espresso Kentucky Coffeetree	2.5" cal.	B&B
3	OSV	Ostrya virginiana	American Hophornbeam,	2.5" cal.	B&B
4	QUB	Quercus bicolor	Swamp White Oak	2.5" cal.	B&B
4	QUR	Quercus rubra	Red Oak	2.5" cal.	B&B
4	SYR	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	2.5" cal.	B&B
4	ULN	Ulmus x 'New Horizon'	New Horizon Elm	2.5" cal.	B&B
		ORNAMENTAL TREES			
1	AMG	Amelanchier x grandiflora 'Autumn Brilliance'	Autumn Brilliance Apple Serviceberry	8' Ht	B&B
4	QUL	Quercus robur x bicolor 'Long' PP 12673	Regal Prince Columnar Oak	2.5" cal.	B&B
7	SYR	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	2.5" cal.	B&B
		EVERGREEN SHRUBS			
127	TAD	Taxus media 'Densiformis'	Dense Spreading Yew	#5 Cont.	30" Ht.
		DECIDUOUS SHRUBS			
58	EUA	Euonymus alatus 'Compactus'	Dwarf Burning Bush	#5 Cont.	30" Ht.
18	HYP	Hydrangea paniculata 'SMHPLQF'	Little Quick Fire® Hydrangea	#3 Cont.	24" Ht.
27	VIC	Viburnum carlesii 'SMVCB'	Spice Baby™ Viburnum	#5 Cont.	30" Ht.
87	VID	Viburnum dentatum 'Christom'	Blue Muffin Viburnum	#5 Cont.	36" Ht.
		PERENNIALS AND GROUNDCOVER			
71	AJR	Ajuga reptans 'Catlin's Giant'	Catlin's Giant Bugleweed	10 flat	18" o.c.
157	ALM	Allium 'MGsmmpkb 13'	Summer Peek-A-Boo Allium	#1 Cont.	18" o.c.
34	ALS	Allium schoenoprasum var. album	Cottonball Flowering Onion	#1 Cont.	18" o.c.
54	AMT	Amsonia tabernaemontana 'Blue Ice'	Blue Ice Blue Star	#1 Cont.	18" o.c.
101	BAL	Baptisia leucophaea	Cream Wild Indigo	#1 Cont.	18" o.c.
263	DIG	Dianthus gratianopolitanus 'Firewitch'	Firewitch Cheddar Pinks	#1 Cont.	12" o.c.
46	ECK	Echinacea 'Kim's Knee High'	Kim's Knee High Coneflower	#1 Cont.	18" o.c.
177	ECP	Echinacea purpurea 'Butterfly Kisses'	Butterfly Kisses Coneflower	#1 Cont.	18" o.c.
55	GES	Geranium sanguineum 'Max Frei'	Max Frei Bloody Cranesbill	#1 Cont.	18" o.c.
63	LAA	Lavandula angustifolia 'Balavurlu'	SuperBlue English Lavender	#1 Cont.	18" o.c.
109	LIS	Liriope spicata	Creeping Lilyturf	#1 Cont.	18" o.c.
283	RUF	Rudbeckia fulgida var. sullivantii 'Little Goldstar'	Little Goldstar Black-Eyed Susan	#1 Cont.	18" o.c.
		ORNAMENTAL GRASSES			
124	CAF	Carex flacca	Blue Sedge	10 flat	18" o.c.
130	CAP	Carex pensylvanica	Common Oak Sedge	10 flat	18" o.c.
160	PEA	Pennisetum alopecuroides 'Little Bunny'	Little Bunny Dwarf Fountain Grass	#1 Cont.	18" o.c.

NOTE: Plant schedule shown is for convenience only. Contractor is responsible for installing quantities shown by graphical plant blocks/hatches in drawings.

SWORN STATEMENTS:

The undersigned acknowledges the landscape planting shown on the landscape plan for the property at:

2131 W. Monroe St., Chicago, Illinois 60612

to the best of the undersigned applicant's knowledge has been designed and will be installed, maintained, and replaced, as required, by current and subsequent owners in accordance with the requirements of Chapter 32 of the Chicago Municipal Code, the landscaping standard of the Chicago Zoning Ordinance, and the "Guide to the Chicago Landscape Ordinance."

Existing parkway and on-site interior trees are to be protected while project is under construction and will be replaced by current and subsequent owner if damaged.

KERL LAJEUNE, Public Building Commission of Chicago
50 W Washington Street, Suite 200
312.735.0597
Owner's Name and Signature

The undersigned LANDSCAPE ARCHITECT, registered in the State of Illinois, acknowledges that the landscape planting plan and construction details shown on the attached landscape plans
for the property at:

2131 W. Monroe St., Chicago, Illinois 60612

has been designed in accordance with the requirements of Title 10, Chapter 32 of the Chicago Municipal Code, the landscaping standards of the Chicago Zoning Ordinance, and the Guide to the Chicago Landscape Ordinance.

#157.01738
exp. 8/31/23

Stephen J. Lekan, PLA
TERRA Engineering Ltd.
225 W. Ohio Street, Fourth Floor
Chicago, Illinois 60610
ph: 312.467.0123

*Estimated time of planting: June 15, 2024

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

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ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

LICENSED LANDSCAPE ARCHITECT
STEPHEN J. LEKAN
157.01738
State of Illinois

DESIGN ISSUANCE

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
	04/3/23	CAISSONS ONLY
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: TERRA, LLC

SCALE: AS NOTED

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

LANDSCAPE PLAN

Sheet NOT FOR CONSTRUCTION

L1-00

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

FOOTING SCHEDULE
(SEE GENERAL NOTES FOR ALLOWABLE BEARING PRESSURE)

MARK	SIZE W (ft-in)	SIZE L (ft-in)	SIZE H (ft-in)	REINFORCING EACH WAY BOTTOM, UNO	REINFORCING EACH WAY TOP, UNO	REMARKS
CF30	3' - 0"	<varies>				TRASH ENCLOSURE
E50	5' - 0"	5' - 0"	1' - 3"			EXISTING FTG (VIF)
E75	7' - 6"	7' - 6"	1' - 3"			EXISTING FTG (VIF)
E85	8' - 9"	8' - 9"	1' - 6"			EXISTING FTG (VIF)
E100	10' - 3"	10' - 3"	1' - 8"			EXISTING FTG (VIF)

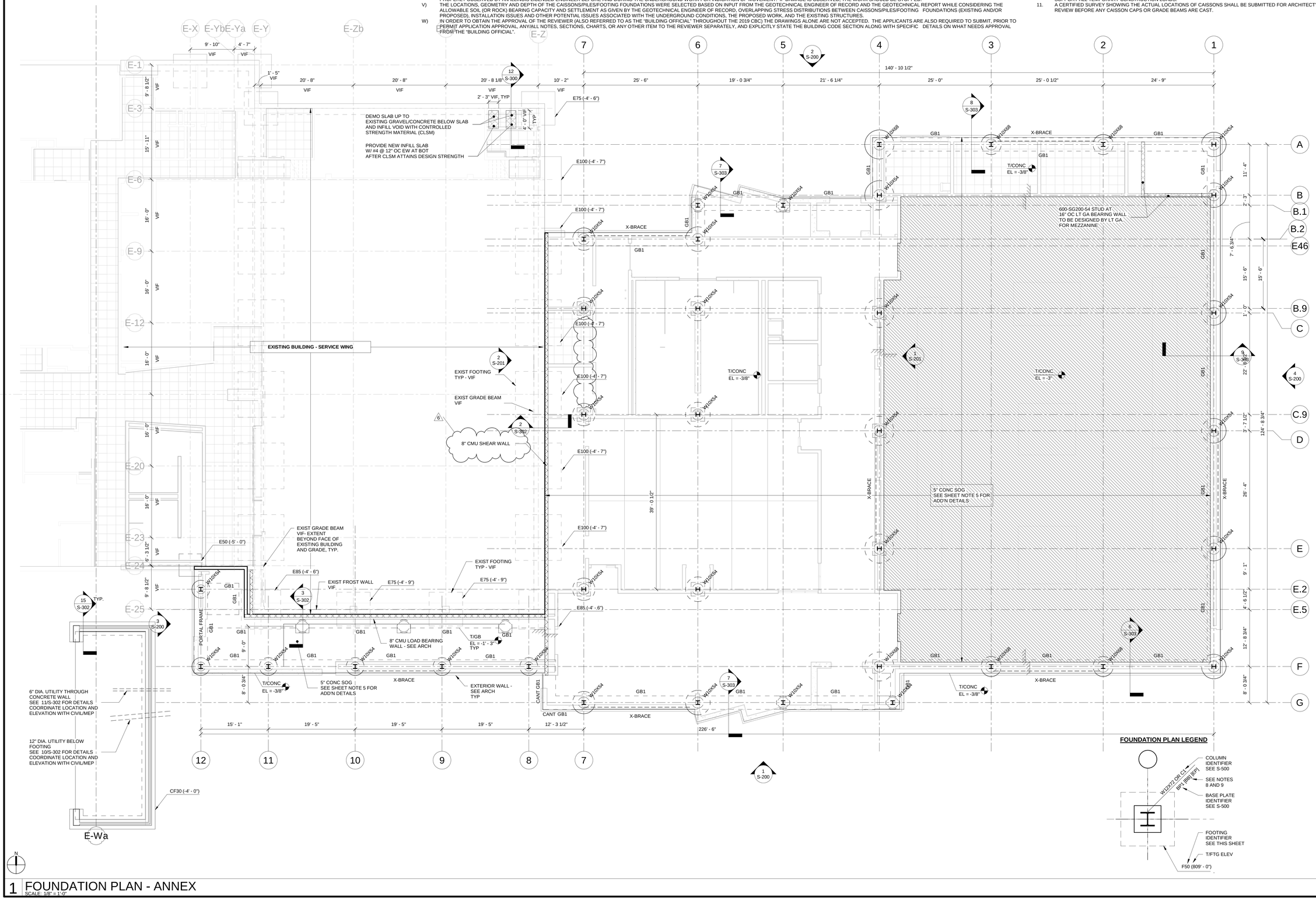
DOB GEOTECHNICAL NOTES:

DOB GEOTECHNICAL REQUIREMENTS AS NOTED HEREIN SHALL BE FOLLOWED PRIOR TO AND DURING CONSTRUCTION

M) THE SOIL ALLOWABLE BEARING CAPACITY AND THE POTENTIAL SETTLEMENT OF THE EXISTING AND PROPOSED FOUNDATIONS AS AFFECTED BY THE PROPOSED STRUCTURE WERE CONSIDERED IN THE STRUCTURAL DESIGN. AS APPLICABLE COMPACTED FILL MATERIAL AND/OR CLSM MUST FOLLOW 1803.5.8, 1804.3 AND 1803.5.9 RESPECTIVELY.
N) UNLESS BASED ON THE SITE INVESTIGATIONS AND TESTING, SPECIFIED DIFFERENTLY IN THE SOILS REPORT, THE GEOTECHNICAL ENGINEER OF RECORD SHOULD CONFIRM THAT THE PROPOSED SAFE LOADS SHOULD NOT CAUSE PRESSURE ON ANY UNDERLYING SOIL STRATUM IN EXCESS OF MAXIMUM PRESSURES ESTABLISHED IN TABLE 1806.2 (2).
O) ANY UNDERGROUND WORK OUTSIDE OF THE PROPOSED WORK SITE PROPERTY LINES WILL REQUIRE ADJACENT PROPERTY OWNER APPROVAL PRIOR TO CONSTRUCTION.
P) EXCAVATIONS MUST COMPLY WITH 14A-4-406.
Q) PRIOR TO ANY EARTHWORK A WRITTEN NOTICE MUST BE SENT TO OWNERS OF ADJACENT PROPERTIES WHERE EXCAVATION WORK WILL BE EITHER:
MORE THAN 5 FEET VERTICALLY BELOW EXISTING GRADE AND WITHIN 5 FEET OF AN EXISTING BUILDING ON A DIFFERENT LOT OR THE PUBLIC WAY.
MORE THAN 10 FEET VERTICALLY BELOW EXISTING GRADE AT ANY LOCATION ON THE PROPERTY
R) NO CONSTRUCTION OR UNDERGROUND WORK SHOULD START BEFORE FINAL RESOLUTION AND COORDINATION WITH ALL THE UTILITY MEMBERS AS PER OUC (OFFICE OF UNDERGROUND COORDINATION) EFP (EXISTING FACILITY PROTECTION) SUBMITTAL REQUIREMENTS INCLUDING BUT NOT LIMITED TO TUNNELS, SEWER, GAS AND WATER LINES, EASEMENTS, NEARBY BRIDGES AND WATERWAYS. THE EFP SHOULD BE VALID AS PER THE OUC REQUIREMENTS.
S) EFP EXPIRATION AS PER OUC, OR ANY CHANGE BEYOND WHAT WAS SUBMITTED TO THE OUC EFP FOR THE SUBJECT DOB APPLICATION, WILL REQUIRE A NEW OUC EFP SUBMITTAL AND RESOLUTION PRIOR TO CONSTRUCTION.
T) ANY PERMANENT ENCROACHMENT INTO THE PUBLIC WAY WILL REQUIRE AN APPROVED GRANT OF PRIVILEGE (AS PER 3202.1.1.1). NO CONSTRUCTION TO START BEFORE FINAL AND FULL APPROVAL.
U) STRUCTURAL/GEOTECHNICAL INTEGRITY/CAPACITY AS PER 1810.4.1 AND 1810.1.2 SHALL BE FOLLOWED. IN ADDITION ALL EXISTING ABOVE AND BELOW GROUND STRUCTURES AND UTILITIES AT THE VICINITY OF THE WORK AREA SHOULD BE PROPERLY OBSERVED BY AN ILLINOIS LICENSED ENGINEER BEFORE AND DURING THE UNDERGROUND WORK FOR INDICATION OF MOVEMENT. IF DAMAGE IS OBSERVED, THE WORK SHOULD BE STOPPED.
V) THE LOCATIONS, GEOMETRY AND DEPTH OF THE CAISSONS/PILES/FOOTING FOUNDATIONS WERE SELECTED BASED ON INPUT FROM THE GEOTECHNICAL ENGINEER OF RECORD AND THE GEOTECHNICAL REPORT WHILE CONSIDERING THE ALLOWABLE SOIL (OR ROCK) BEARING CAPACITY AND SETTLEMENT AS GIVEN BY THE GEOTECHNICAL ENGINEER OF RECORD. OVERLAPPING STRESS DISTRIBUTIONS BETWEEN CAISSONS/PILES/FOOTING FOUNDATIONS (EXISTING AND/OR PROPOSED), INSTALLATION ISSUES AND OTHER POTENTIAL ISSUES ASSOCIATED WITH THE UNDERGROUND CONDITIONS, THE PROPOSED WORK, AND THE EXISTING STRUCTURES.
W) IN ORDER TO OBTAIN THE APPROVAL OF THE REVIEWER (ALSO REFERRED TO AS THE "BUILDING OFFICIAL" THROUGHOUT THE 2019 CBC) THE DRAWINGS ALONE ARE NOT ACCEPTED. THE APPLICANTS ARE ALSO REQUIRED TO SUBMIT, PRIOR TO PERMIT APPLICATION APPROVAL, ANY/ALL NOTES, SECTIONS, CHARTS, OR ANY OTHER ITEM TO THE REVIEWER SEPARATELY, AND EXPLICITLY STATE THE BUILDING CODE SECTION ALONG WITH SPECIFIC DETAILS ON WHAT NEEDS APPROVAL FROM THE "BUILDING OFFICIAL".

SHEET NOTES:

1. SEE SHEET S-001 AND S-002 FOR GENERAL NOTES AND ABBREVIATIONS
2. SEE SHEET S-002 FOR LOADING CRITERIA.
3. SEE SHEET S-300 FOR FOUNDATION SCHEDULE
4. SEE SHEET S-301 FOR SLAB AND FOUNDATION DETAILS
5. VERIFY ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECTURAL DRAWINGS PRIOR TO CONSTRUCTION.
6. NOTATION "GBX" INDICATES GRADE BEAM.
7. TYPICAL SLAB ON GRADE CONSISTS OF 5" THICK NORMAL WEIGHT CONCRETE SLAB, REINFORCED WITH 4X4-W4XW4 WELDED WIRE FABRIC, PLACED 1" BELOW TOP OF THE SLAB ON GRADE ELEVATION. SLAB ON GRADE SHALL BEAR ON A MINIMUM OF 6" THICK LAYER OF IDOT CA-7 CRUSHED STONE. SUB STRATA SOIL SHALL BE COMPACTED PER GEOTECHNICAL REPORT.
8. PROVIDE CONTROL AND OR CONSTRUCTION JOINTS IN SLAB ON GRADE. GENERAL CONTRACTOR SHALL SUBMIT DRAWING WITH ALTERNATE LOCATION OF CONTROL AND/OR CONSTRUCTION JOINTS FOR ARCHITECT'S REVIEW.
9. CAISSON CAP IS MINIMUM OF 3" LARGER ON EACH SIDE THAN THE SIZE OF THE RESPECTIVE CAISSON DIAMETER AND 3'-0" DEEP UNLESS NOTED OR SHOWN ON THE PLAN.
10. CAISSON CAP AND GRADE BEAM CONTRACTOR SHALL USE ADEQUATE CASING WALL THICKNESS TO SAFELY SUPPORT ALL TEMPORARY CONSTRUCTION LOADS.
11. A CERTIFIED SURVEY SHOWING THE ACTUAL LOCATIONS OF CAISSONS SHALL BE SUBMITTED FOR ARCHITECT'S REVIEW BEFORE ANY CAISSON CAPS OR GRADE BEAMS ARE CAST.



FOUNDATION PLAN LEGEND

1 FOUNDATION PLAN - ANNEX
SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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Environmental Design International
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Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

REVISIONS

NO.	DATE	DESCRIPTION
2	04/07/23	75% CD
3	04/07/23	OUC SUBMITTAL
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: As indicated

LEVEL 3
LEVEL 2
LEVEL 1
KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ANNEX FOUNDATION AND GROUND FLOOR PLAN

Sheet NOT FOR CONSTRUCTION

S-101

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

SHEET NOTES:

1. SEE SHEET S-001 FOR GENERAL NOTES AND ABBREVIATIONS
2. SEE SHEET S-002 FOR LOADING CRITERIA
3. SEE SHEET S-500 FOR COLUMN SCHEDULE AND DETAILS
4. SEE SHEET S-501 TO S-507 FOR FRAMING DETAILS
5. SEE SHEET S-700 FOR TYPICAL DETAILS
6. SEE ARCH, MECH, AND ELEC SHEETS FOR MISC CONCRETE WORK INCLUDING HOUSEKEEPING PADS
7. SEE ARCH, MECH, AND ELEC SHEETS FOR LOCATIONS OF SLAB AND WALL PENETRATIONS. SEE SHEET S-507 FOR ADDITIONAL REINFORCING REQUIREMENTS
8. SEE ARCH SHEET FOR LOCATIONS OF BASKETBALL BACKSTOPS AND CORRESPONDING BEAMS

STRUCTURAL STEEL LEGEND:

- INDICATES BEAM FRAMING OVER TUBE COLUMN
- INDICATES BEAM FRAMING OVER WF COLUMN
- INDICATES BEAM FRAMING INTO SIDE OF COLUMN
- COLUMN DESIGNATION — W14 x 90 OR C1
- INDICATES FACTORED BEAM END REACTION - AXIAL — A = 20k
- INDICATES FACTORED BEAM END REACTION - SHEAR — 30k
- QUANTITY OF COMPOSITE STUDS — W21x23 (20)
- INDICATES TOP OF STEEL ELEVATION IF DIFFERENT FROM TYPICAL ELEVATION — C=1 1/4" TOS=100'-0"
- BEAM DESIGNATION
- INDICATES CAMBER
- INDICATES LOCATION OF BEAM SPLICE
- INDICATES BEAM FRAMING INTO SIDE OF BEAM
- INDICATES BEAM FRAMING OVER BEAM
- INDICATES MOMENT CONNECTION

1 ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
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REVISIONS

NO.	DATE	DESCRIPTION
2	04/07/23	75% CD
3	04/07/23	OUC SUBMITTAL
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: As indicated

LEVEL 3 | LEVEL 2 | LEVEL 1 | KEY PLAN

PBC Project Name: DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

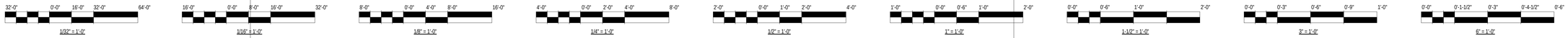
PBC Contract No: 05445

CPS Project #2021-26031-ADM

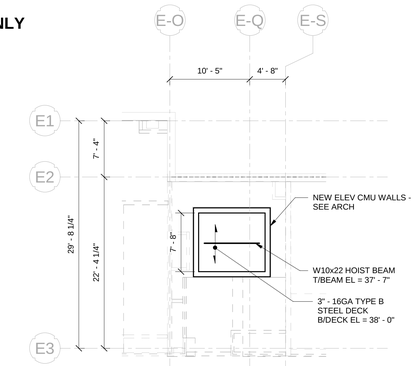
Project No: 2138

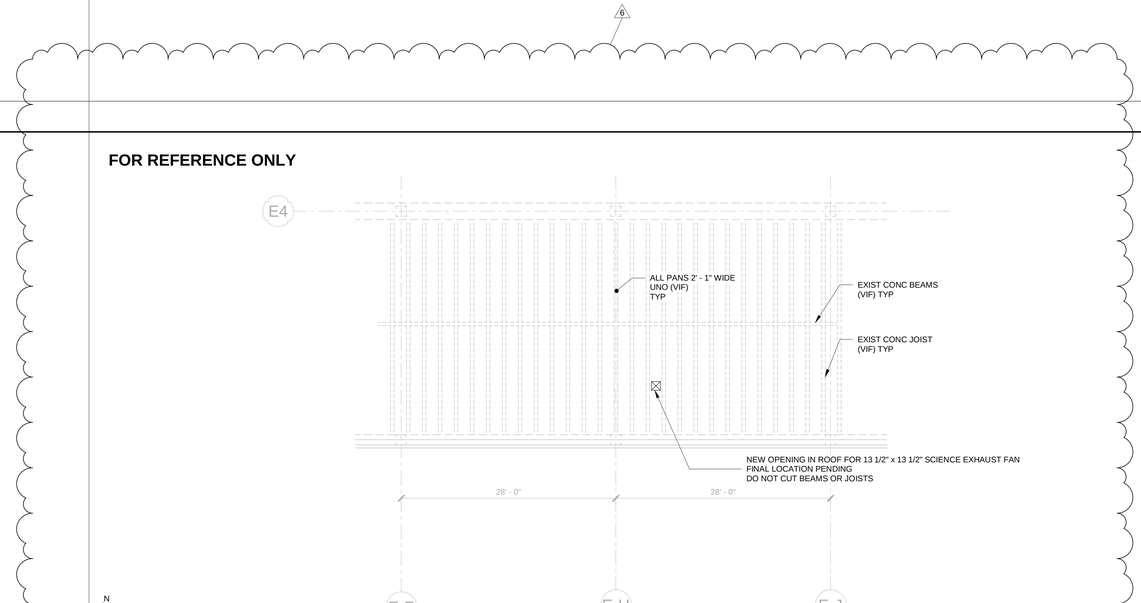
Title
ANNEX ROOF FRAMING PLAN

Sheet NOT FOR CONSTRUCTION
S-102



FOR REFERENCE ONLY



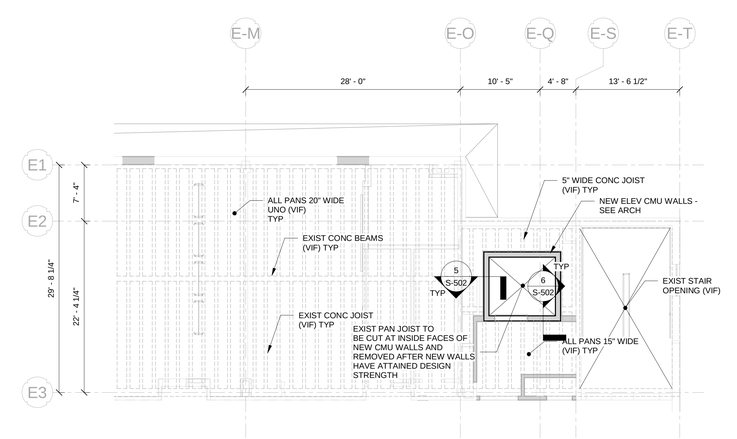


3 CLRM WING -ELEVATOR ROOF PLAN
SCALE: 1/8" = 1'-0"

FOR REFERENCE ONLY

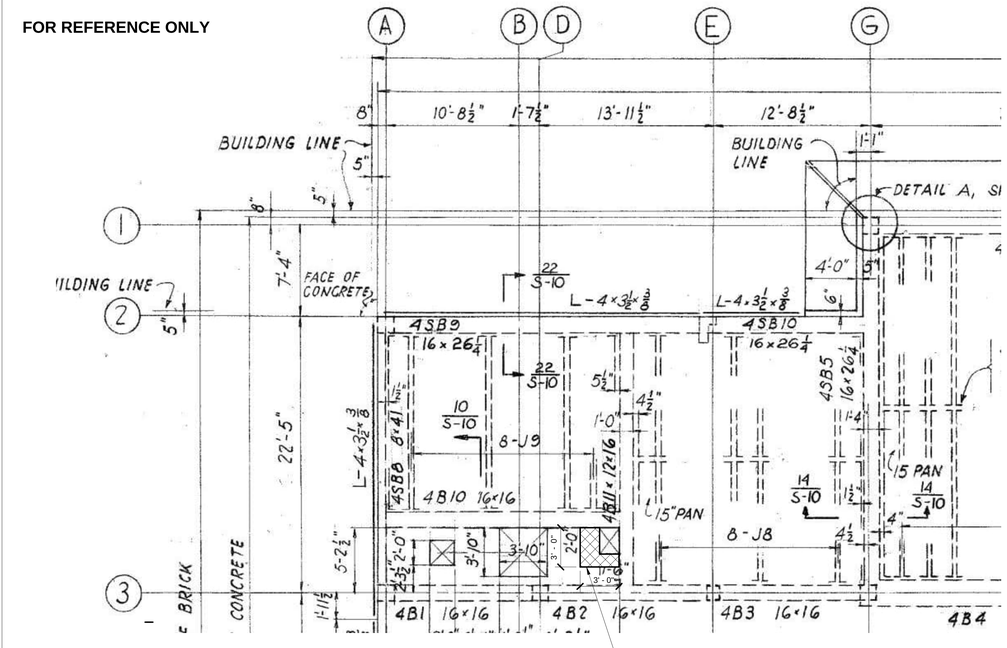
5 CLRM WING - SCIENCE EXHAUST FAN OPENING ON ROOF
SCALE: 1/8" = 1'-0"

FOR REFERENCE ONLY

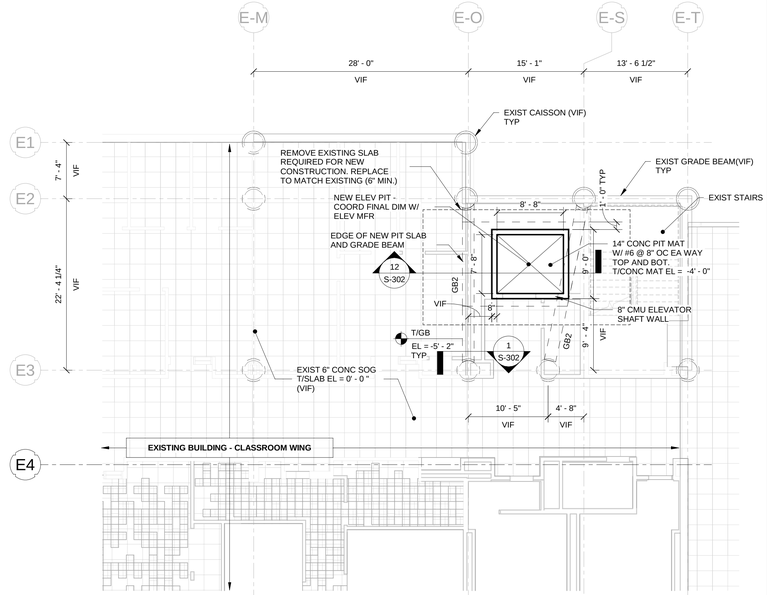


2 CLRM WING -2ND, 3RD, AND ROOF FRAMING PLAN
SCALE: 1/8" = 1'-0"

FOR REFERENCE ONLY



4 CLRM WING - ROOF CLASSROOM HATCH OPENING
SCALE: 1/8" = 1'-0"



1 CLRM WING - PARTIAL FOUNDATION PLAN
SCALE: 1/8" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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4	04/28/23	100% CD
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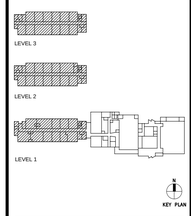
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

CLRM WING PARTIAL FOUNDATION AND FRAMING PLAN

Sheet NOT FOR CONSTRUCTION

S-104

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

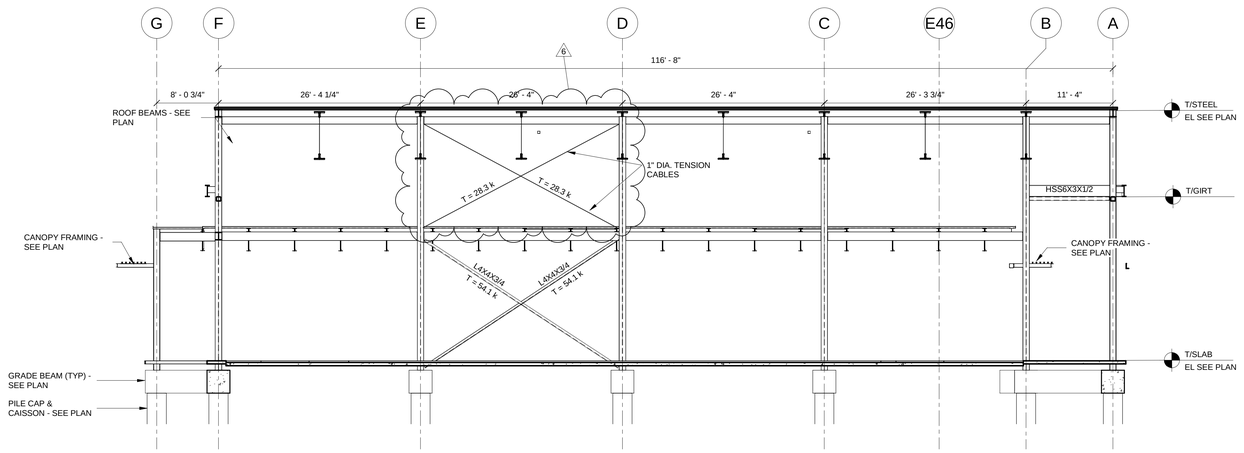
2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

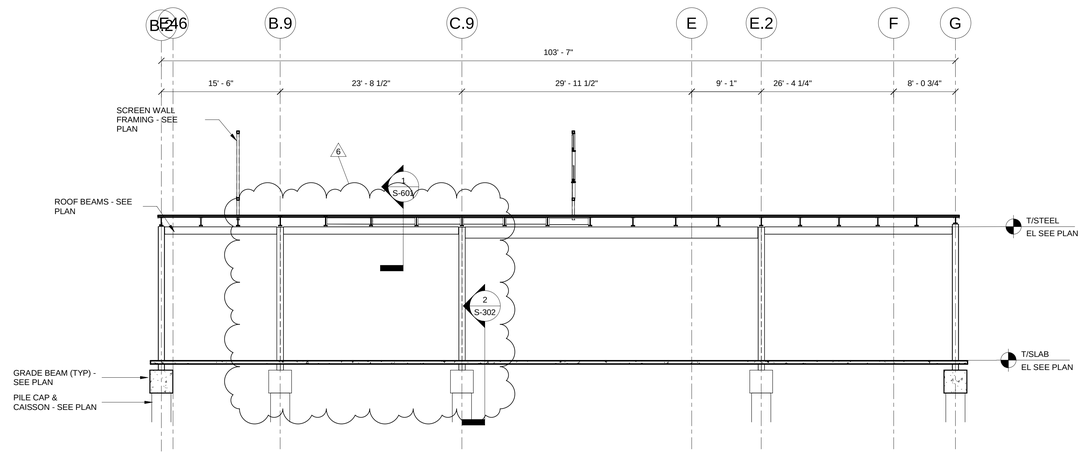
0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



1 FRAMING ELEVATION ALONG GRID 4 (FACING WEST)
SCALE: 1/8" = 1'-0"



2 FRAMING ELEVATION ALONG GRID 7 (LOOKING EAST)
SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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Chicago, IL 60654

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Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

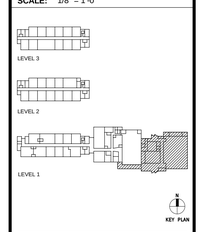
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
2	04/07/23	75% CD
3	04/07/23	OUC SUBMITTAL
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

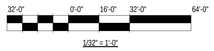
Project No: 2138

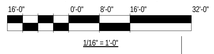
Title

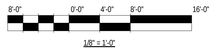
FRAMING ELEVATIONS

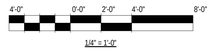
Sheet NOT FOR CONSTRUCTION

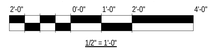
S-201

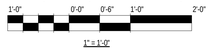


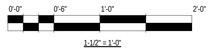


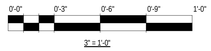


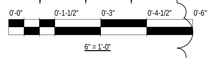


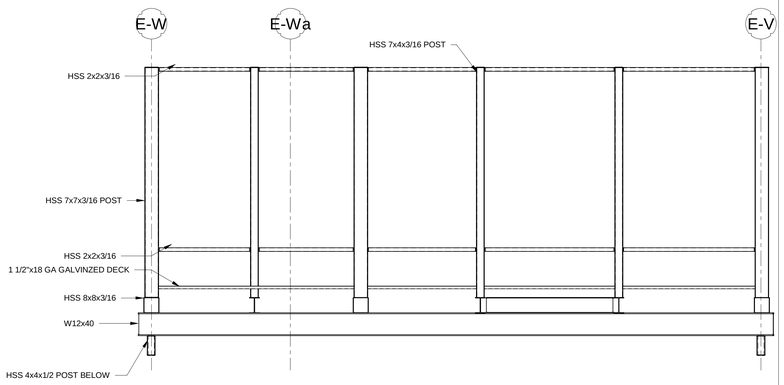




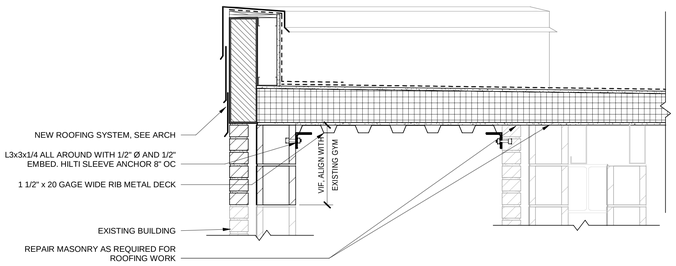




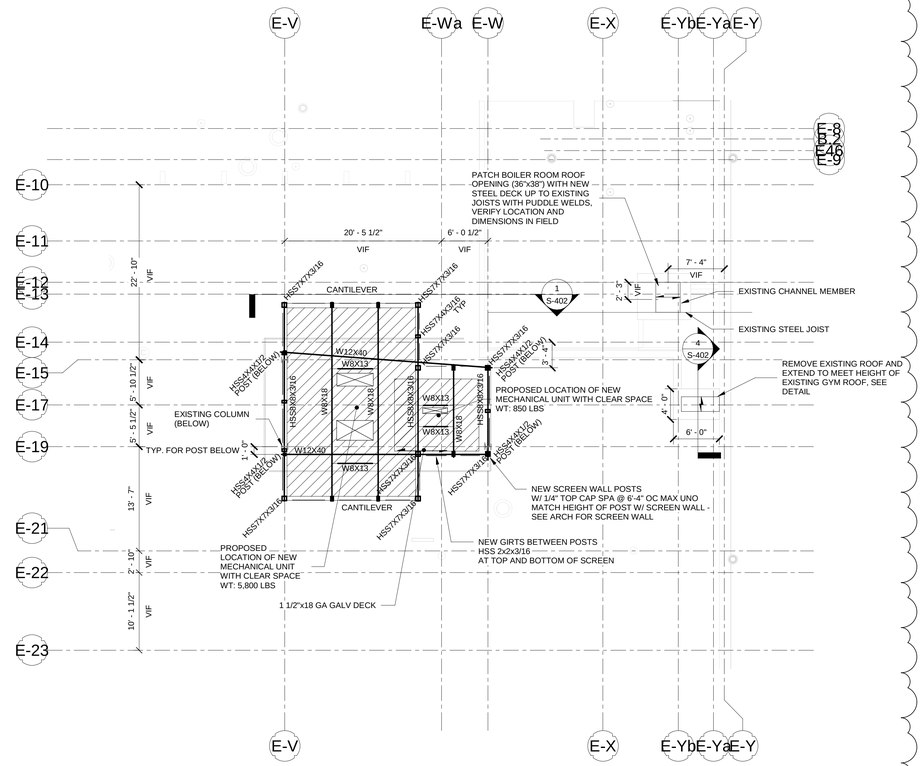




1 SERVICE WING RTU SCREEN WALL FACING SOUTH
SCALE: 3/8" = 1'-0"

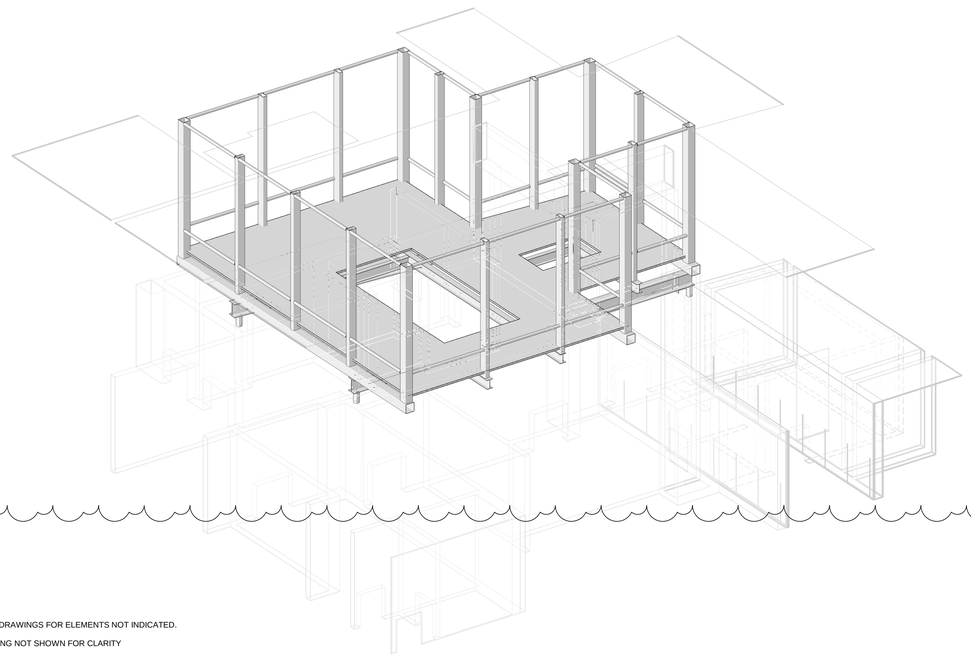


4 EXISTING GYM ROOF EXTENSION
SCALE: 1" = 1'-0"



N

2 SERVICE WING NEW RTU PLATFORM FRAMING PLAN
SCALE: 1/8" = 1'-0"



NOTE:

1. SEE ARCH/MEP DRAWINGS FOR ELEMENTS NOT INDICATED.
2. EXISTING FRAMING NOT SHOWN FOR CLARITY
2. 3D IMAGE IS PROVIDED FOR INFORMATION ONLY AND MUST NOT BE SOLELY RELIED UPON TO CONDUCT THE WORK. REFER TO THE STRUCTURAL DRAWINS FOR DETAILED DESCRIPTION OF SPECIFIC WORK TO BE PERFORMED.

3 NEW RTU PLATFORM AT EXIST SERVICE WING BLDG - 3D VIEW
SCALE:

PUBLIC BUILDING COMMISSION OF CHICAGO — Chicago Public Schools

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55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

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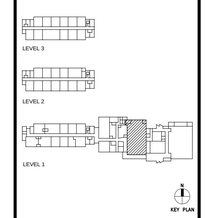
DRAWN BY:

SCALE: As indicated



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

SERVICE WING ENLARGED FRAMING PLAN AND DETAILS

Sheet NOT FOR CONSTRUCTION

S-402

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"

1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"

1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"

1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"

1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"

1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"

1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"

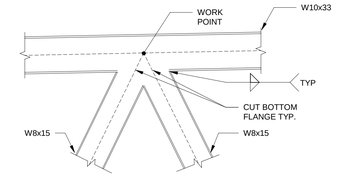
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"

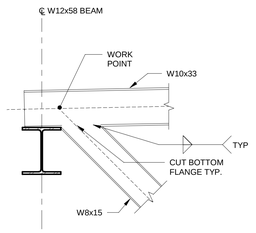
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"

6" = 1'-0"



4 TRUSS TYPICAL CONNECTION
SCALE: 3/4" = 1'-0"

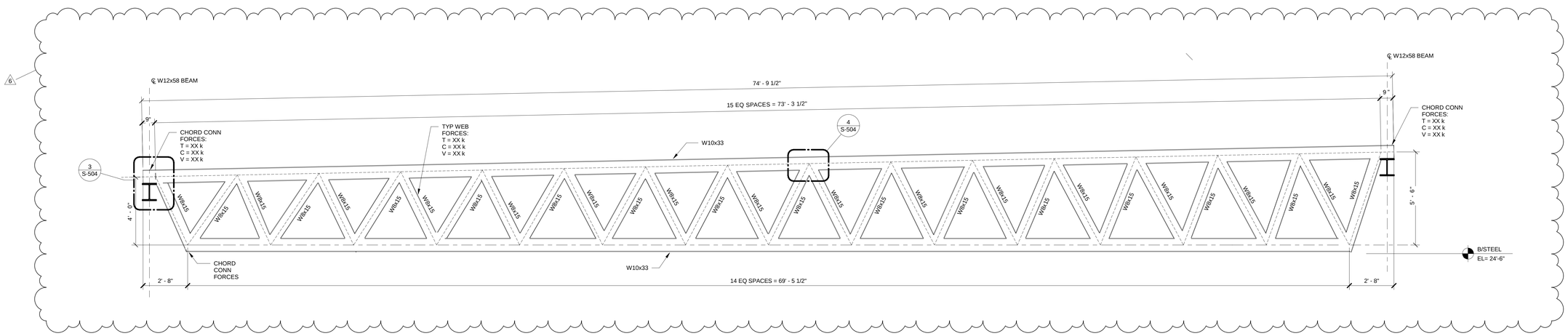


3 TRUSS END CONNECTION
SCALE: 3/4" = 1'-0"

TRUSS NOTES:

1. ALL CENTER LINES INDICATED ON TRUSS ELEVATIONS ARE MEMBER GEOMETRIC CENTER LINES, UON.
2. ...k INDICATES FACTORED TRUSS AXIAL CONNECTION FORCE IN KIPS. T = ...k INDICATES TENSION FORCE, C = ...k INDICATES COMPRESSION FORCE.
3. TRUSS PANEL POINT CONNECTION DETAILS ARE ILLUSTRATED FOR CONCEPT ONLY. CONTRACTOR SHALL PROVIDE CONNECTIONS, SHOP SPLICES, AND FIELD SPLICES AS REQUIRED TO FACILITATE FABRICATION, SHIPPING, AND ERECTION, SUBJECT TO REVIEW BY THE OWNER'S ENGINEER.
4. GROOVE WELDS MAY BE PARTIAL JOINT PENETRATION OR COMPLETE JOINT PENETRATION WELDS AS REQUIRED, UON.
5. STRUCTURAL STEEL CONNECTION SHALL BE DESIGNED TO RESOLVE ALL FORCES AT THE INDICATED WORK POINTS CONSIDERING ALL RESULTANT FORCES AND ECCENTRICITIES.
6. ALL BOLTED STEEL-TO-STEEL TRUSS CONNECTIONS SHALL UTILIZE FULLY TENSIONED BOLTS, UON.
7. FILLER PLATES AT BOLTED JOINTS SHALL BE DEVELOPED IN ACCORDANCE WITH AISC SPECIFICATION SECTION J6.
8. COMPLETE JOINT PENETRATION BUTT WELDS BETWEEN MATERIAL OF DIFFERENT THICKNESS SHALL BE PREPARED IN ACCORDANCE WITH AWS D1.1 FOR TRANSITION WELD, WITH A MAXIMUM SLOPE NOT TO EXCEED 1:2-1/2.
9. ALL WELDS USED IN MEMBERS AND CONNECTIONS IN TRUSS CONSTRUCTION SHALL BE MADE WITH A FILLER METAL THAT CAN PRODUCE WELDS THAT HAVE A MINIMUM CHARPY V-NOTCH TOUGHNESS OF 20 FT-LBS AT -20°F AS DETERMINED BY AWS CLASSIFICATION OR MANUFACTURER CERTIFICATION.
10. A RECORD SURVEY OF EACH TRUSS SHALL BE PERFORMED AT THE COMPLETION OF THE FOLLOWING STAGES:
    A. ERECTION AND PLUMBING OF TRUSSES
    B. COMPLETION OF ROOFING
    SURVEY PANEL POINTS OF TRUSS AT THE BOTTOM CHORD AND SUBMIT A WRITTEN REPORT INCLUDING ACTUAL LOCATIONS OF ALL SURVEY POINTS IN THE X, Y, AND Z DIRECTIONS AND RELATIVE DIFFERENCES TO THEIR THEORETICAL LOCATIONS.
11. CHORD AXIAL CONNECTION FORCES ARE INDICATED ON ELEVATIONS. CHORD SPLICES MUST ALSO TRANSFER SHEAR AND MOMENT. SHEAR AND MOMENT DEMAND WILL BE PROVIDED BY THE OWNER'S ENGINEER ONCE CHORD SPLICE LOCATIONS HAVE BEEN IDENTIFIED BY THE CONTRACTOR.
12. ALL MEMBER CONNECTIONS SHALL BE DESIGNED FOR THE TENSION/COMPRESSION FORCE SHOWN FOR EACH MEMBER OR A FACTORED AXIAL FORCE OF 50 KIPS, WHICHEVER IS LARGER.
13. FABRICATE AND ERECT TRUSS WITH BOTTOM CHORD LEVEL.

2 TRUSS NOTES
SCALE: 1 1/2" = 1'-0"



1 TRUSS - ELEVATION
SCALE: 3/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO — Chicago Public Schools

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2	04/07/23	75% CD
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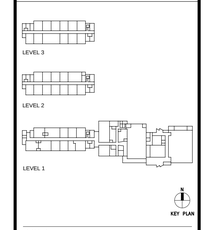
DRAWN BY:

SCALE: As indicated



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

STEEL TRUSS DETAILS

Sheet NOT FOR CONSTRUCTION

S-504

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
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4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

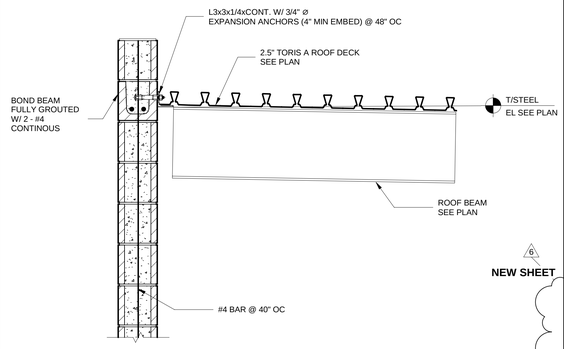
2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



6
NEW SHEET

1 LEDGER ANGLE EDGE DETAIL
SCALE: 1" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

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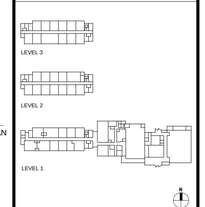
REVISIONS

NO.	DATE	DESCRIPTION
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1" = 1'-0"



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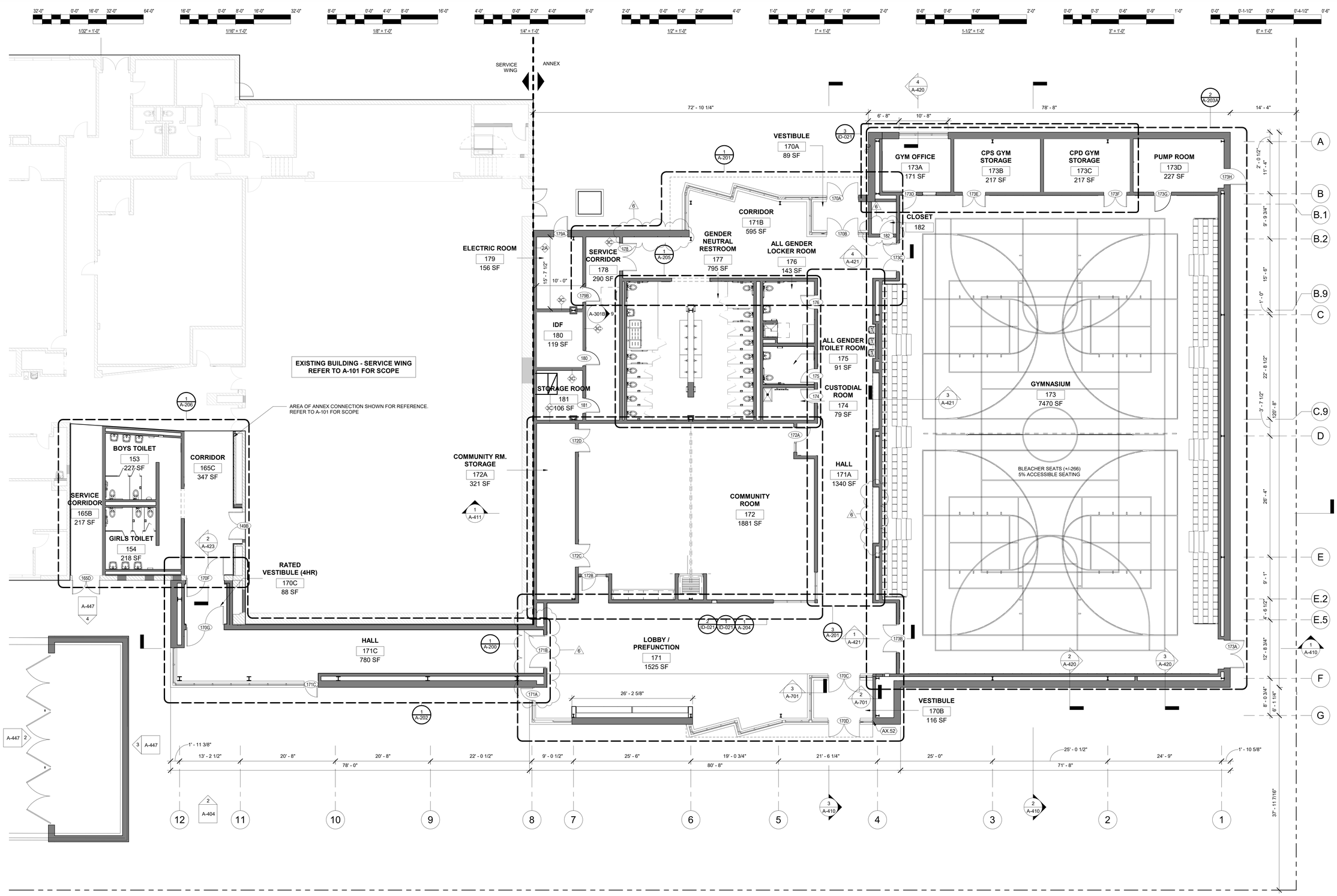
CPS Project #2021-26031-ADM

Project No: 2138

Title
MASONRY DETAILS

Sheet NOT FOR CONSTRUCTION
S-601



1 FLOOR PLAN - LEVEL 1 ANNEX

SCALE: 1/8" = 1'-0"

SUMMARY INFORMATION:

TOTAL ENCLOSED VOLUME: 361,360 CUBIC SF
TOTAL USEABLE SF: 15,900 SF

TOTAL EXTEIOR SURFACE AREA OF BLDG ENVELOPE: 14,700 SF

MASONRY WALLS: 10608 SF
ROOF SURFACE: 17014 SF
GLAZING SURFACE (EXCLUDING GYM): 2091 SF
GLAZING SURFACE (GYM): 1988 SF
RTU ROOF ENCLOSURE: 2152 SF
CONCRETE CURB: 198 SF

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	12/22/22	ZONING REVIEW
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2	02/10/23	100% DD
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4	04/28/23	100% CD
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6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

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Title
ANNEX FLOOR PLAN - LEVEL 1

Sheet NOT FOR CONSTRUCTION

A-100A

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
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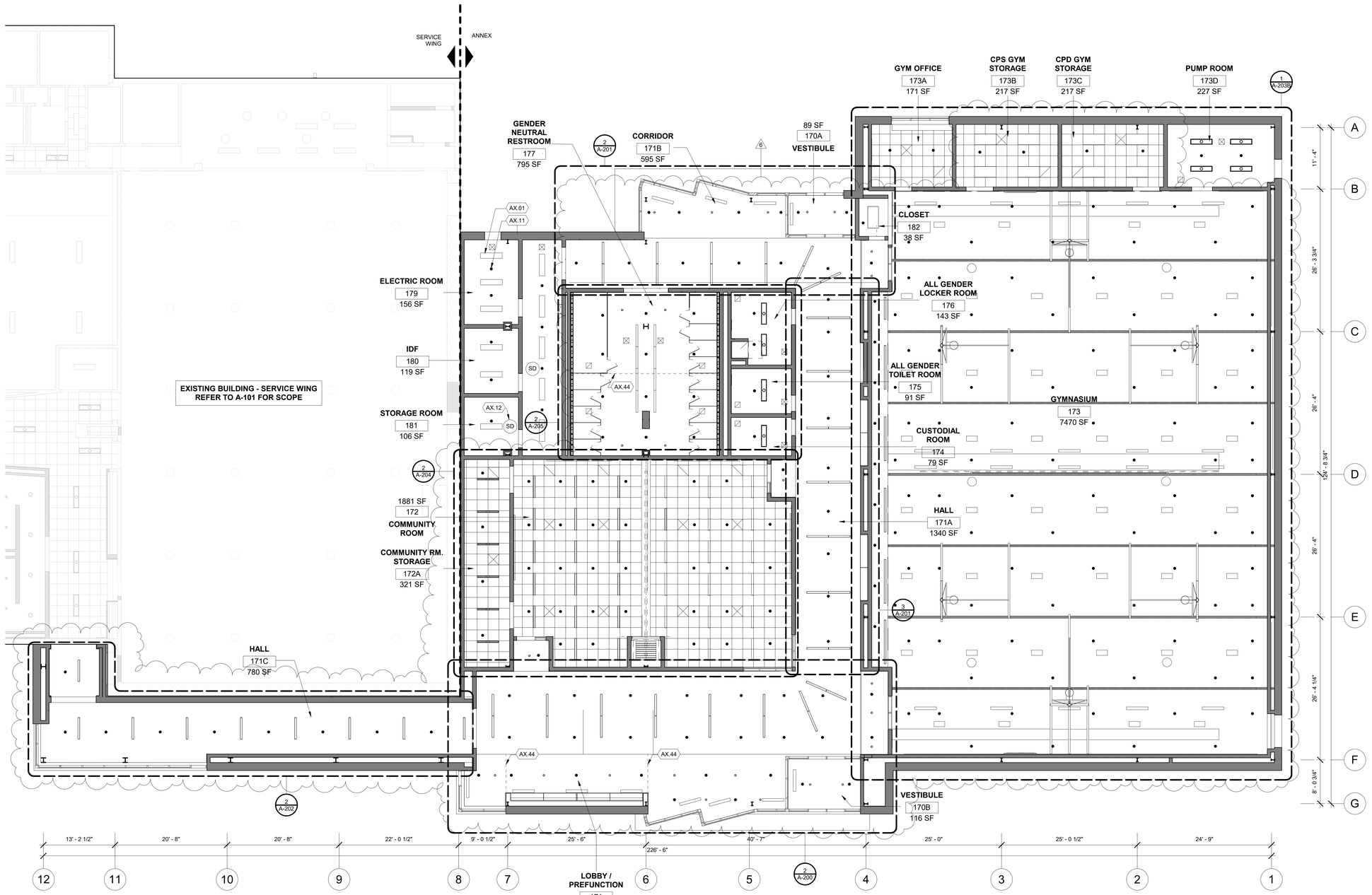
SERVICE WING
ANNEX
EXISTING BUILDING - SERVICE WING
REFER TO A-101 FOR SCOPE
GENDER NEUTRAL RESTROOM
177
795 SF
CORRIDOR
171B
595 SF
89 SF
170A
VESTIBULE
GYM OFFICE
173A
171 SF
CPS GYM STORAGE
173B
217 SF
CPD GYM STORAGE
173C
217 SF
PUMP ROOM
173D
227 SF
CLOSET
182
38 SF
ALL GENDER LOCKER ROOM
176
143 SF
ALL GENDER TOILET ROOM
175
91 SF
GYMNASIUM
173
7470 SF
CUSTODIAL ROOM
174
79 SF
HALL
171A
1340 SF
ELECTRIC ROOM
179
156 SF
IDF
180
119 SF
STORAGE ROOM
181
106 SF
1881 SF
172
COMMUNITY ROOM
COMMUNITY RM. STORAGE
172A
321 SF
HALL
171C
780 SF
VESTIBULE
170B
116 SF
LOBBY / PREFUNCTION
171
1525 SF
AX.01
AX.11
AX.12
AX.44
SD
H
13' - 2 1/2"
20' - 8"
20' - 8"
22' - 0 1/2"
9' - 0 1/2"
25' - 6"
40' - 7"
25' - 0"
25' - 0 1/2"
24' - 9"
226' - 6"
11' - 4"
26' - 3 3/4"
26' - 4"
26' - 3 3/4"
26' - 4"
26' - 4 1/4"
8' - 0 3/4"
A
B
C
D
E
F
G
12
11
10
9
8
7
6
5
4
3
2
1

1 ANNEX RCP - LEVEL1
SCALE: 1/8" = 1'-0"

LEGEND

- NEW CONSTRUCTION
- EXISTING WALL TO REMAIN
- EXISTING CURTAIN WALL SYSTEM TO REMAIN
- EXISTING WINDOW TO REMAIN
- EXISTING DOOR TO REMAIN
- NEW DOOR
- RAISED ACCESS FLOOR

KEYED NOTES - ANNEX ARCH

TAG INFO	ARCH NOTE
AX.01	PROVIDE LIGHTING FIXTURES. SEE ELECTRICAL
AX.02	PROVIDE 2X2 ACT CEILING AND GRID SYSTEM
AX.03	PROVIDE TERRAZZO FLOORING
AX.04	PROVIDE PLASTIC LAMINATE MILLWORK CABINETS WITH SOLID SURFACE TOP
AX.05	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
AX.06	PROVIDE FLOOR PENETRATION FOR MEP DEVICE. CONFIRM FINAL LOCATION WITH MEP AND FURNITURE
AX.07	PROVIDE ELECTRICAL DEVICE. SEE ELECTRICAL
AX.08	PROVIDE FIRE ALARM DEVICE
AX.09	PROVIDE WALL BASE AS SCHEDULED
AX.10	PROVIDE MOTORIZED OPERABLE PARTITION, STC-52, BOD: MODERNFOLD ACOUSTI-SEAL ENCORE AUTOMATED
AX.11	PROVIDE SPRINKLERS. SEE MECHANICAL
AX.12	PROVIDE MECHANICAL DEVICE. SEE MECHANICAL
AX.13	PROVIDE FLOORING AS SCHEDULED
AX.14	PROVIDE 1HR FIRE-RATED HOLLOW METAL WINDOW WALL
AX.15	PROVIDE HINGED INTERIOR WINDOW GUARD. ALIGN FRAMING WITH WINDOW MULLIONS
AX.16	PROVIDE AUTOMATED DUAL SHADE WINDOW TREATMENTS, WITH BLACKOUT AND 5% OPEN SHADES. ALIGN BLACKOUT CHANNELS WITH WINDOW MULLIONS. SHADE ATTACHMENT TO WINDOW WALL MUST MAINTAIN WINDOW WALL WARRANTY.
AX.17	PROVIDE CUSTOM DISPLAY CASE. SEE INTERIOR DETAILS
AX.18	PROVIDE DRINKING FOUNTAIN AND BOTTLE FILLERS
AX.20	PROVIDE HIGH IMPACT RESISTANT ACOUSTICAL PANELS, CUSTOM COLOR TO MATCH WALL FINISH
AX.21	PROVIDE GYMNASIUM FLOORING ASSEMBLY
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AX.23	PROVIDE MANUAL OPERATED TELESCOPIC BLEACHERS. SEE SPECIALTY EQUIPMENT
AX.24	PROVIDE SCORE BOARD WITH CUSTOM CPS AND CPD LOGOS AND DIGITAL DISPLAY BELOW SCOREBOARD
AX.25	PROVIDE FRONT-FOLDING BASKETBALL BACKSTOP. SEE SPECIALTY EQUIPMENT
AX.26	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
AX.27	PROVIDE HDMI FOR SHORT THROW PROJECTOR
AX.28	PROVIDE GYPSUM CEILING
AX.29	PROVIDE WELDED GRATING WALK OFF MAT ASSEMBLY
AX.30	PROVIDE LINEAR DIFFUSER. SEE MECHANICAL
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AX.32	PROVIDE COMPETITION WOOD FLOOR WITH COURT STRIPES FOR 1 MAIN BASKETBALL COURT, 2 SIDE BASKETBALL COURTS, 1 VOLLEYBALL COURT, 2 PICKLEBALL COURTS
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DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
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LANDSCAPE ARCHITECT
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ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
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Chicago, IL 60612

REVISIONS

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3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

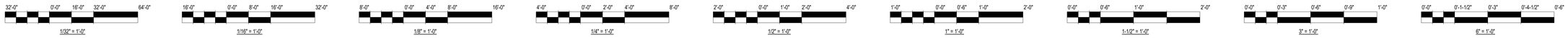
PBC Contract No: 05445

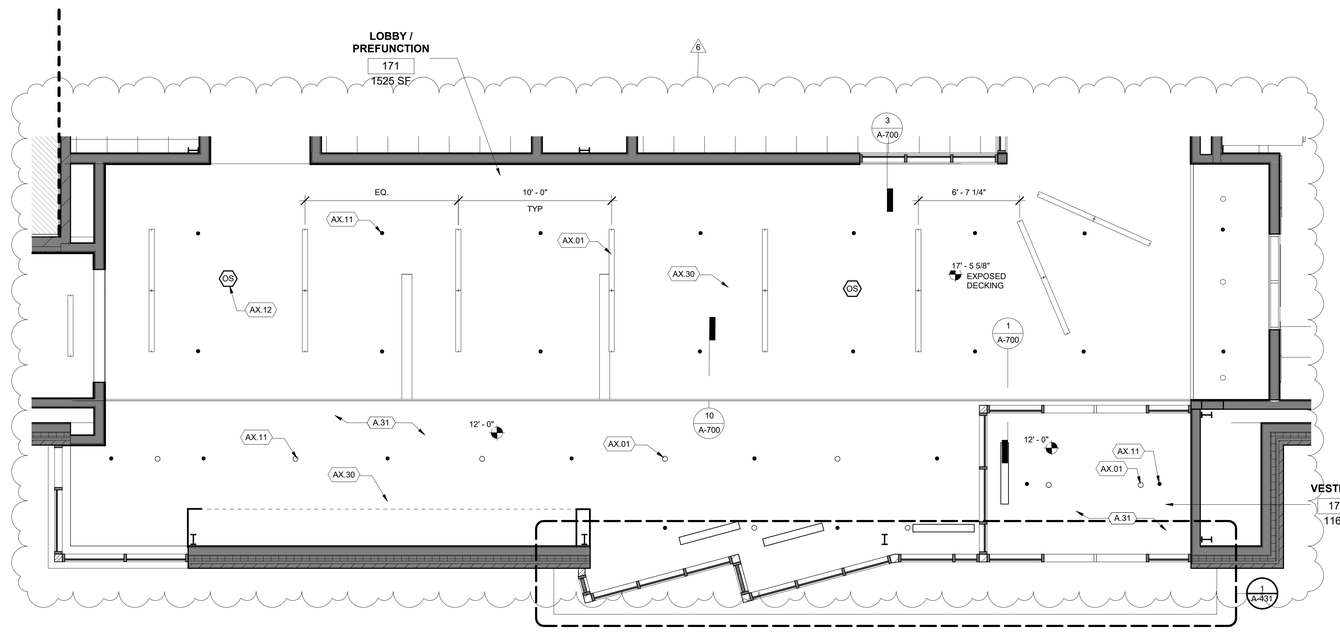
CPS Project #2021-26031-ADM

Project No: 2138

Title
ANNEX RCP - LEVEL 1

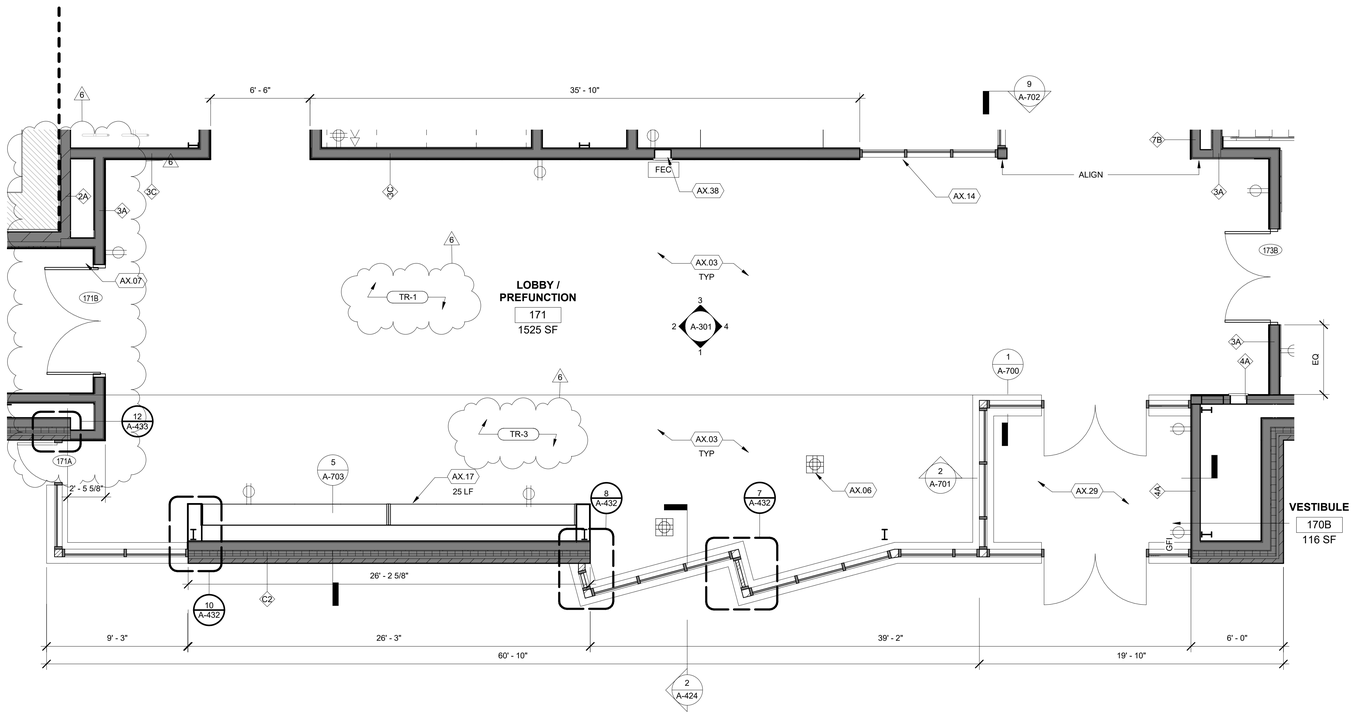
Sheet NOT FOR CONSTRUCTION
A-100B





2 LOBBY RCP - ANNEX

SCALE: 1/4" = 1'-0"



1 LOBBY PLAN - ANNEX

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PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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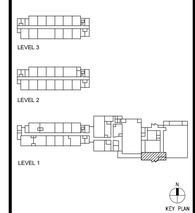
DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

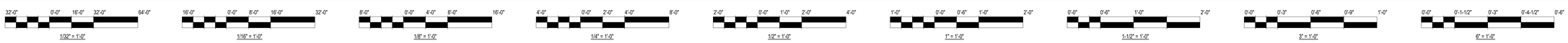
Project No: 2138

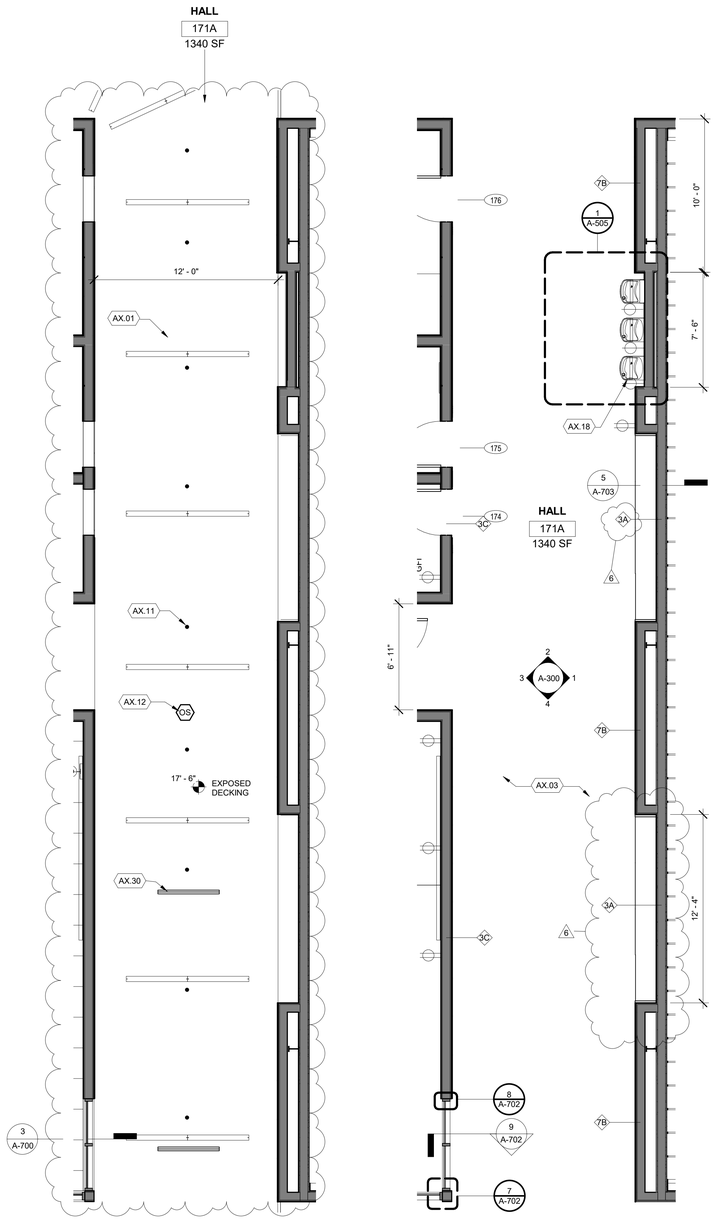
Title

ANNEX ENLARGED LOBBY PLAN & RCP

Sheet NOT FOR CONSTRUCTION

A-200



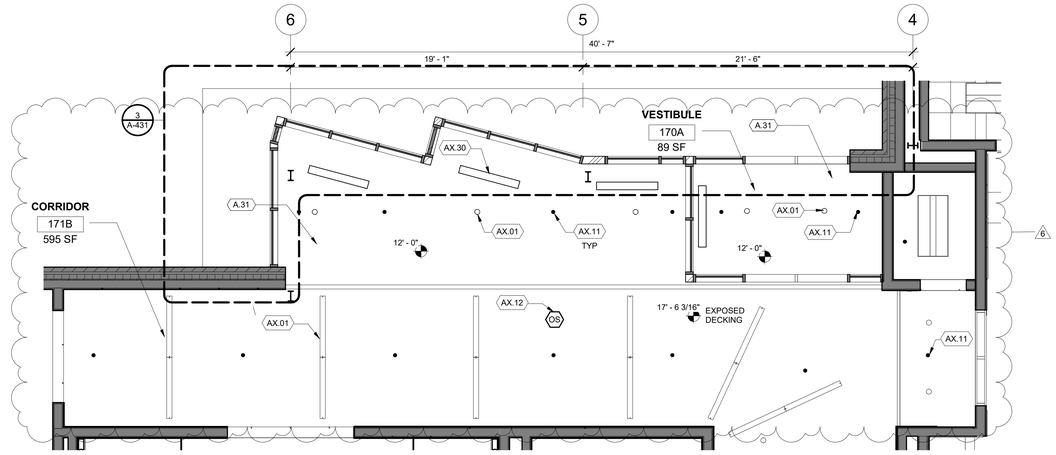


4 HALL 101A RCP

SCALE: 1/4" = 1'-0"

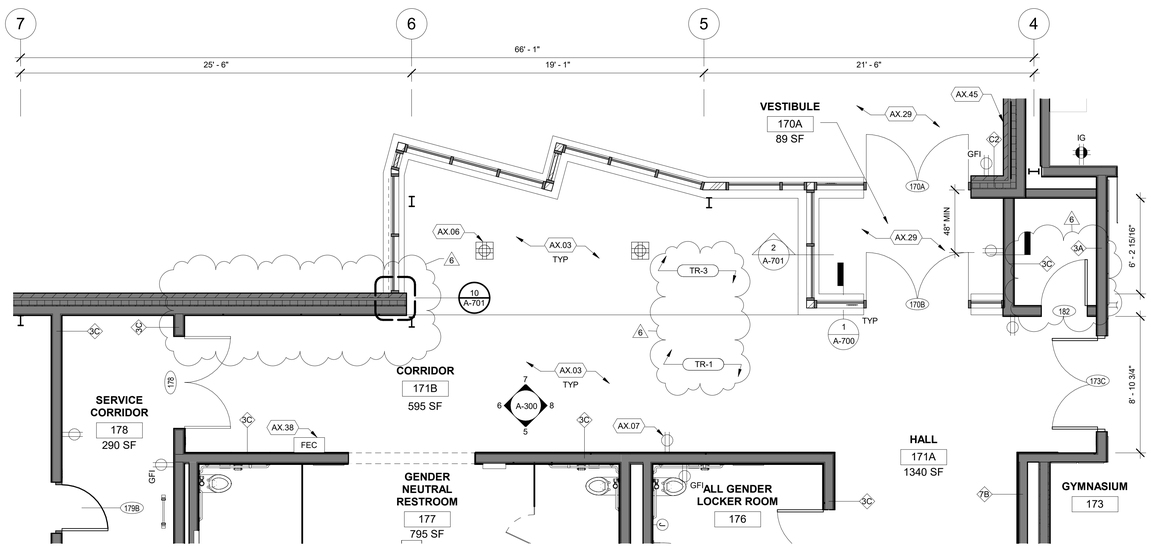
3 HALL 101A PLAN

SCALE: 1/4" = 1'-0"



2 CORRIDOR 171B RCP

SCALE: 1/4" = 1'-0"



1 CORRIDOR 171B PLAN

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DRAWN BY: KOO LLC

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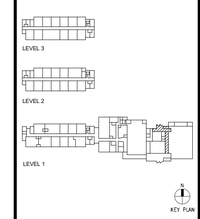

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

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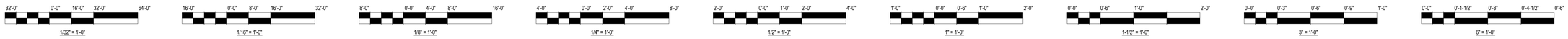
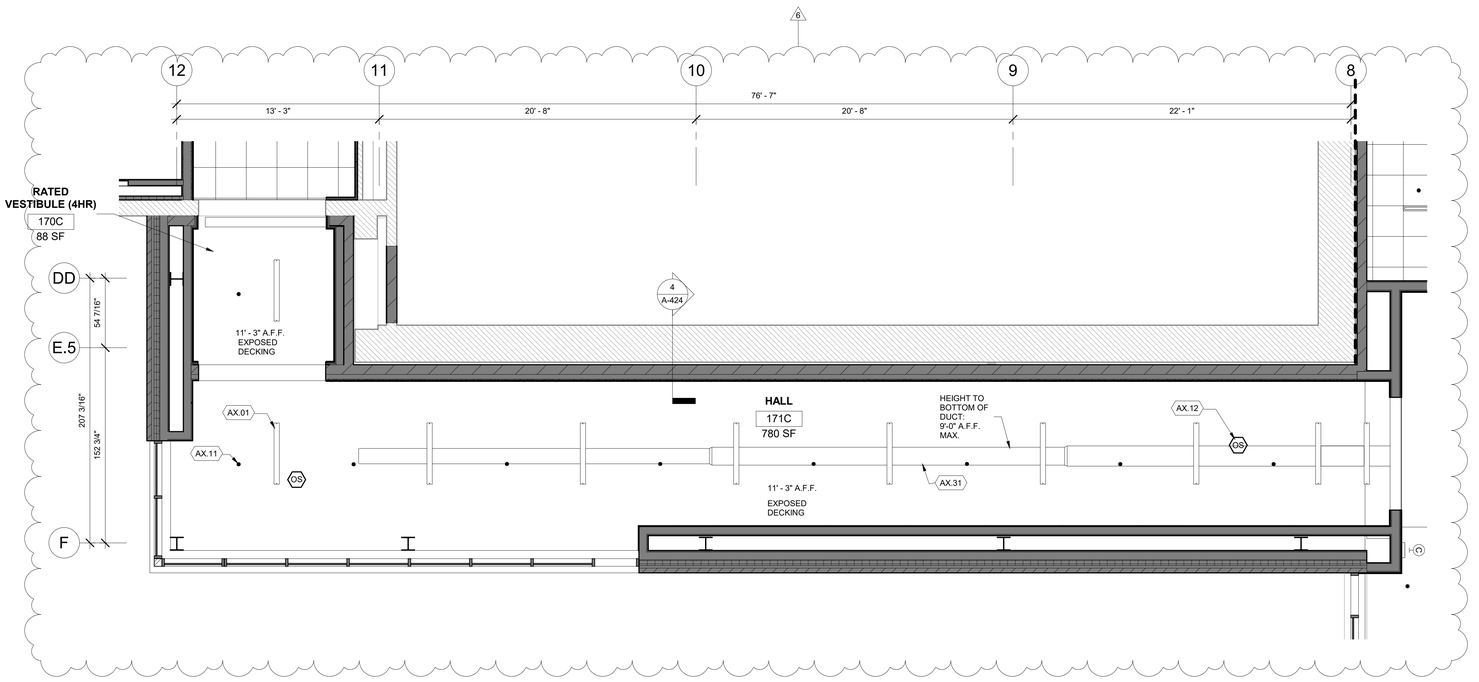
ANNEX ENLARGED CORRIDOR PLAN & RCP

Sheet NOT FOR CONSTRUCTION

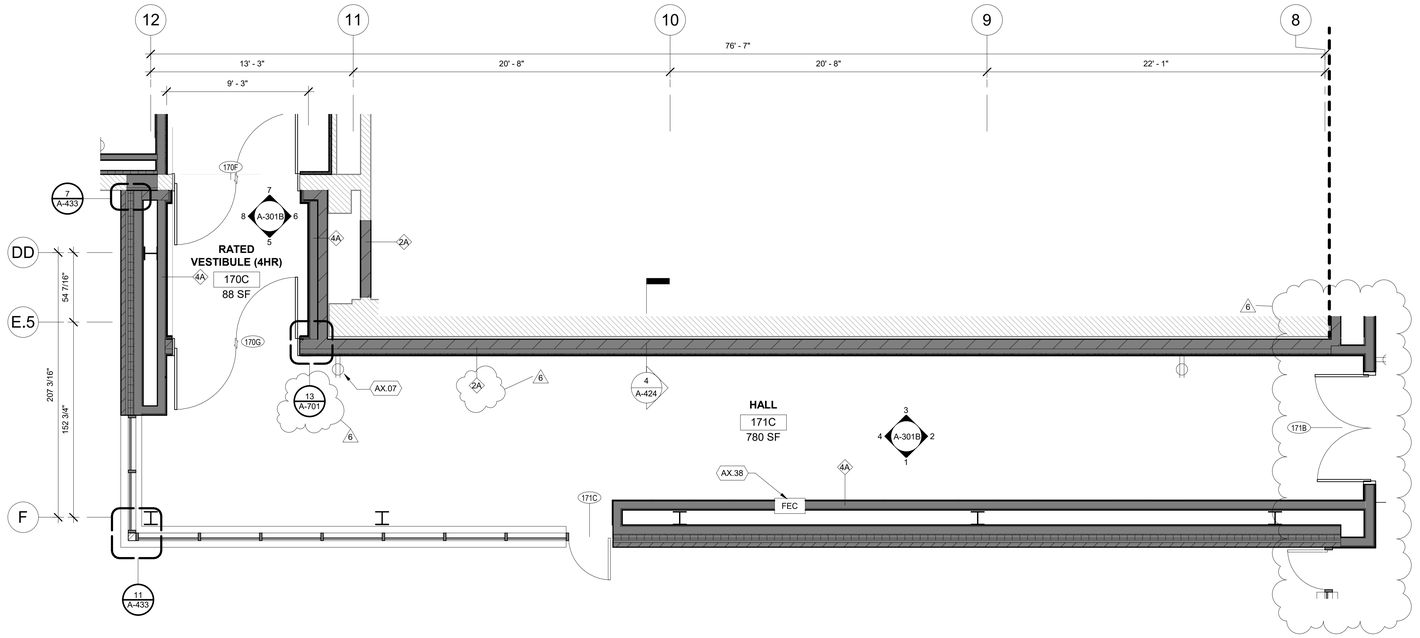
A-201





2 HALL 171C AND RATED VESTIBULE 170C RCP

SCALE: 1/4" = 1'-0"



1 HALL 171C AND RATED VESTIBULE 170C PLAN

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AX.33	PROVIDE TOP-ROLL GYMNASIUM CURTAIN DIVIDER. SEE SPECIALTY EQUIPMENT
AX.34	PROVIDE RECESSED FLOOR MOUNTED VOLLEYBALL NET AND SLEEVES. SEE SPECIALTY EQUIPMENT
AX.35	PROVIDE SPEAKER DEVICE. SEE ELECTRICAL
AX.36	PROVIDE PA SYSTEM WITH ASSISTED LISTENING DEVICES. PROVIDE 11 RECEIVERS, 3 OF WHICH ARE HEARING-AID COMPATIBLE
AX.37	PROVIDE PROJECTOR WITH TELESCOPING LIFT
AX.38	PROVIDE RECESSED FIRE EXTINGUISHER CABINET
AX.39	PROVIDE FLOOR TO CEILING CUSTOM PHENOLIC TOILET COMPARTMENT, ACCURATE PARTITIONS CORP. (ASI GROUP) COLOR-THRU PHENOLIC IN SMOKE 8450C. PROVIDE BLOCKING AS REQUIRED
AX.40	PROVIDE CANE DETECTABLE APRON MOUNTED BELOW THE EDGE OF DRINKING FOUNTAIN. COMPLY WITH REQUIRED KNEE CLEARANCE
AX.42	PROVIDE ACOUSTICALLY-SEALED FULL HEIGHT OPERABLE PARTITION CLOSURE PANEL, PER MANUFACTURER
AX.43	PROVIDE 2HR PUNCHED WINDOW OPENING WITH FIRE RESISTIVE GLAZING
AX.44	PROVIDE GYPSUM WALL BOARD EXPANSION JOINTS
AX.45	PROVIDE AI PHONE. SEE ELECTRICAL
AX.46	PROVIDE 2HR FIRE RESISTIVE TRANSOM WINDOW SYSTEM.

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
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Environmental Design International
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ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
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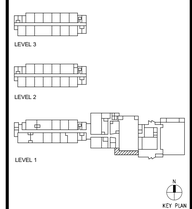
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

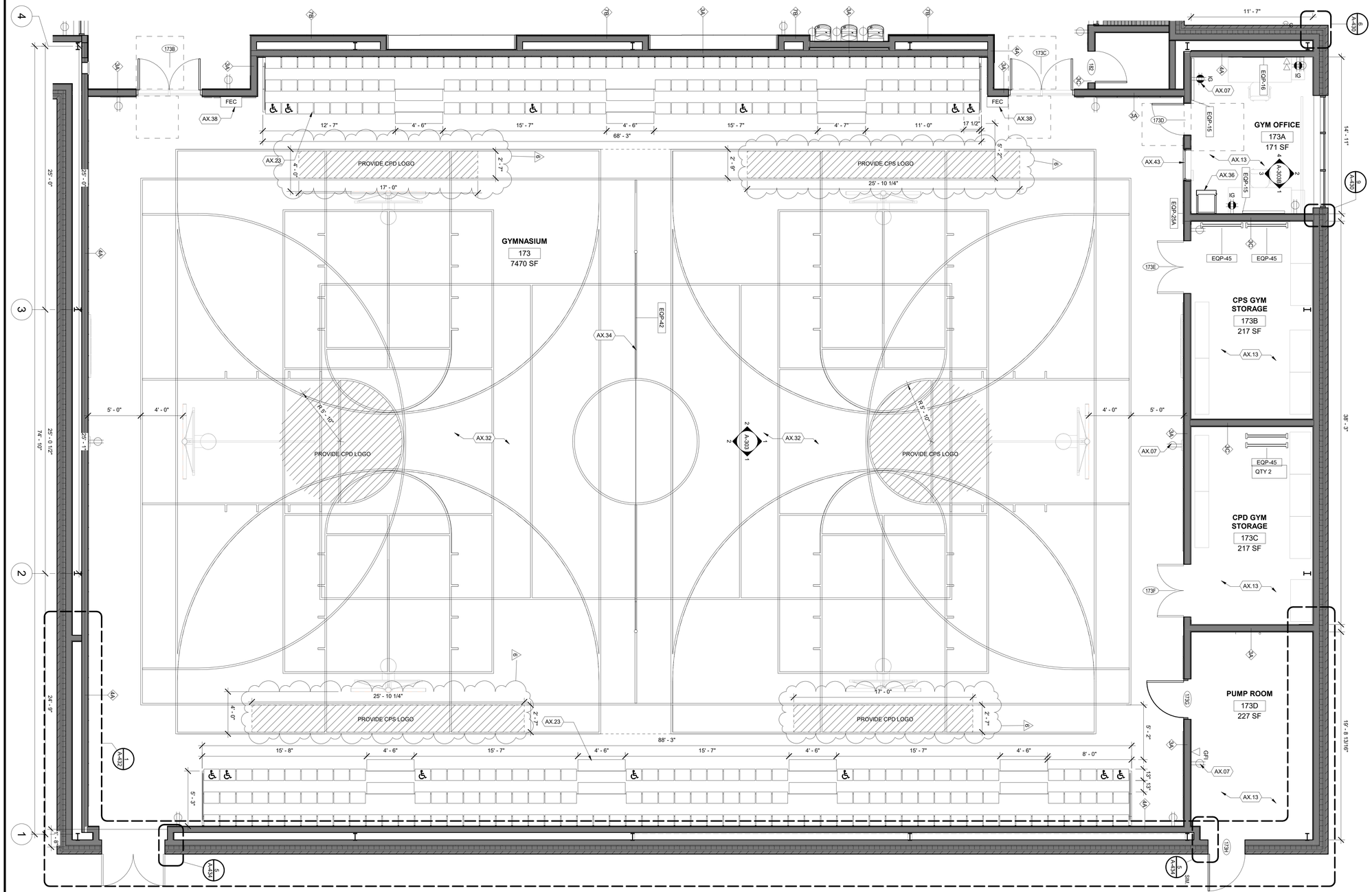
Project No: 2138

Title

ANNEX ENLARGED HALLWAY LINK PLAN & RCP

Sheet NOT FOR CONSTRUCTION

A-202



1 GYMNASIUM PLAN - ANNEX

SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH	
TAG INFO	ARCH NOTE
AX.01	PROVIDE LIGHTING FIXTURES. SEE ELECTRICAL
AX.02	PROVIDE 2X2 ACT CEILING AND GRID SYSTEM
AX.03	PROVIDE TERRAZZO FLOORING
AX.04	PROVIDE PLASTIC LAMINATE MILLWORK CABINETS WITH SOLID SURFACE TOP
AX.05	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
AX.06	PROVIDE FLOOR PENETRATION FOR MEP DEVICE. CONFIRM FINAL LOCATION WITH MEP AND FURNITURE
AX.07	PROVIDE ELECTRICAL DEVICE. SEE ELECTRICAL
AX.08	PROVIDE FIRE ALARM DEVICE
AX.09	PROVIDE WALL BASE AS SCHEDULED
AX.10	PROVIDE MOTORIZED OPERABLE PARTITION, STC-62, BOD: MODERNFOLD ACOUSTI-SEAL ENCORE AUTOMATED
AX.11	PROVIDE SPRINKLERS. SEE MECHANICAL
AX.12	PROVIDE MECHANICAL DEVICE. SEE MECHANICAL
AX.13	PROVIDE FLOORING AS SCHEDULED
AX.14	PROVIDE 1HR FIRE-RATED HOLLOW METAL WINDOW WALL
AX.15	PROVIDE HINGED INTERIOR WINDOW GUARD. ALIGN FRAMING WITH WINDOW MULLIONS
AX.16	PROVIDE AUTOMATED DUAL SHADE WINDOW TREATMENTS, WITH BLACKOUT AND 5% OPEN SHADES. ALIGN BLACKOUT CHANNELS WITH WINDOW MULLIONS. SHADE ATTACHMENT TO WINDOW WALL MUST MAINTAIN WINDOW WALL WARRANTY.
AX.17	PROVIDE CUSTOM DISPLAY CASE. SEE INTERIOR DETAILS
AX.18	PROVIDE DRINKING FOUNTAIN AND BOTTLE FILLERS
AX.20	PROVIDE HIGH IMPACT RESISTANT ACOUSTICAL PANELS, CUSTOM COLOR TO MATCH WALL FINISH
AX.21	PROVIDE GYMNASIUM FLOORING ASSEMBLY
AX.22	PROVIDE GYMNASIUM WALL PADDING MATCHING WALL PAINT. NOTCH WALL PADS AROUND ROOM SIGNS AND WALL DEVICES.
AX.23	PROVIDE MANUAL OPERATED TELESCOPIC BLEACHERS. SEE SPECIALTY EQUIPMENT
AX.24	PROVIDE EC CORE BOARD WITH CUSTOM CPS AND CPD LOGOS AND DIGITAL DISPLAY BELOW SCOREBOARD
AX.25	PROVIDE FRONT-FOLDING BASKETBALL BACKSTOP. SEE SPECIALTY EQUIPMENT
AX.26	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
AX.27	PROVIDE HDMI FOR SHORT THROW PROJECTOR
AX.28	PROVIDE GYPSUM CEILING
AX.29	PROVIDE WELDED GRATING WALK OFF MAT ASSEMBLY
AX.30	PROVIDE LINEAR DIFFUSER. SEE MECHANICAL
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DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

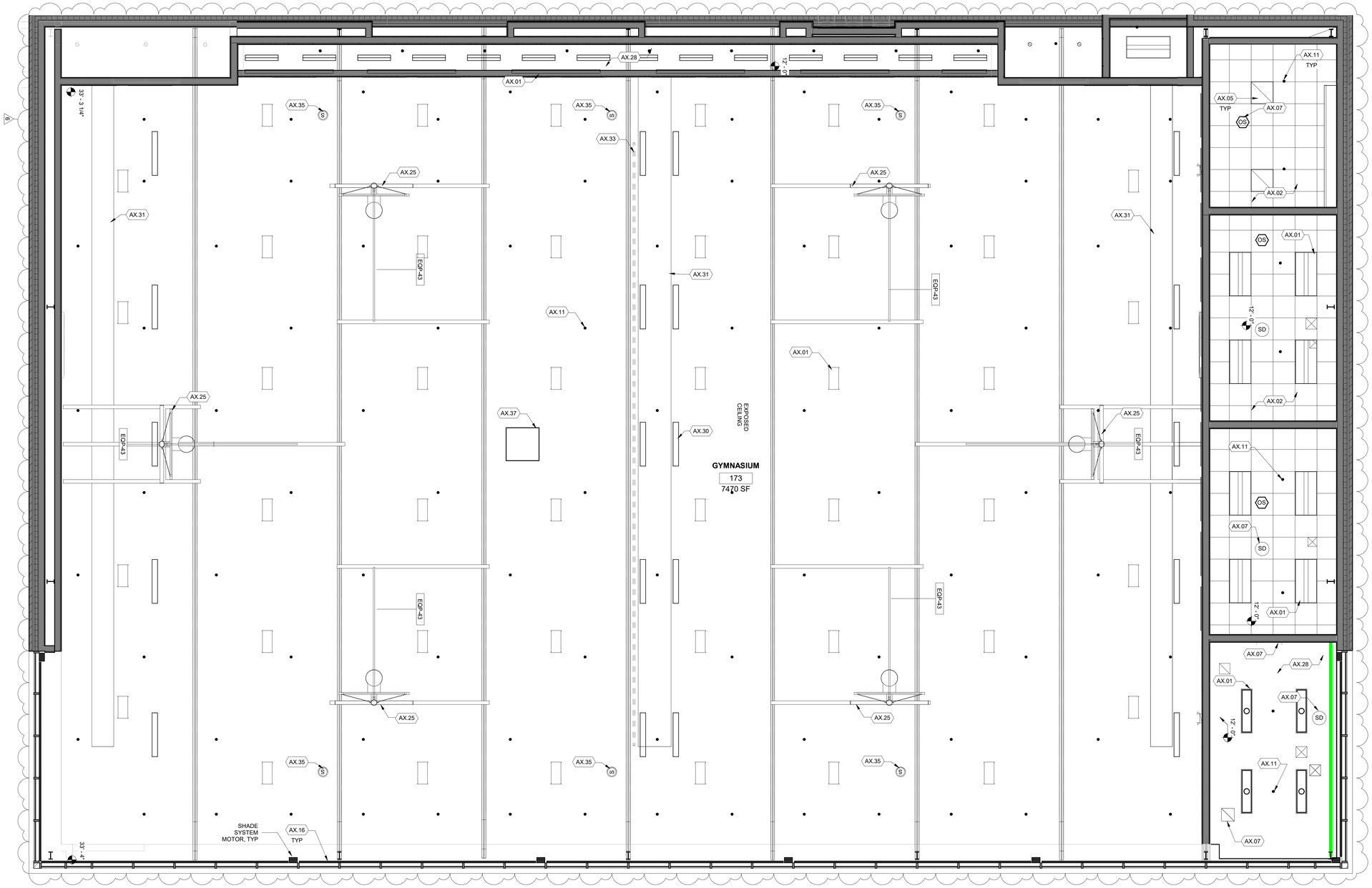
Project No: 2138

Title

ANNEX ENLARGED GYMNASIUM PLAN

Sheet NOT FOR CONSTRUCTION

A-203A



3 GYMNASIUM RCP - ANNEX

SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH	
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AX.08	PROVIDE FIRE ALARM DEVICE
AX.09	PROVIDE WALL BASE AS SCHEDULED
AX.10	PROVIDE MOTORIZED OPERABLE PARTITION, STC-52, BOD: MODERNFOLD ACOUSTI-SEAL ENCORE AUTOMATED
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PUBLIC BUILDING COMMISSION OF CHICAGO

Chicago Public Schools

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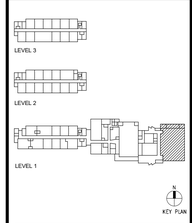
DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ANNEX ENLARGED GYMNASIUM RCP

Sheet NOT FOR CONSTRUCTION

A-203B

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

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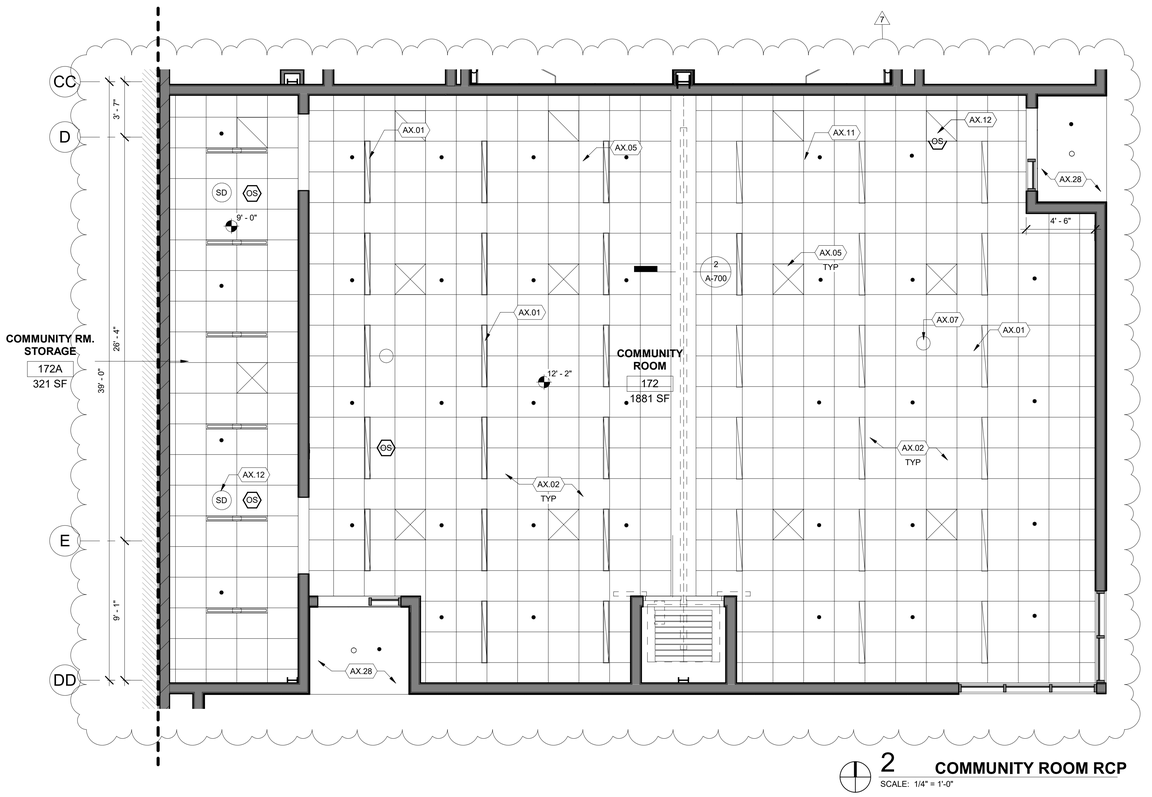
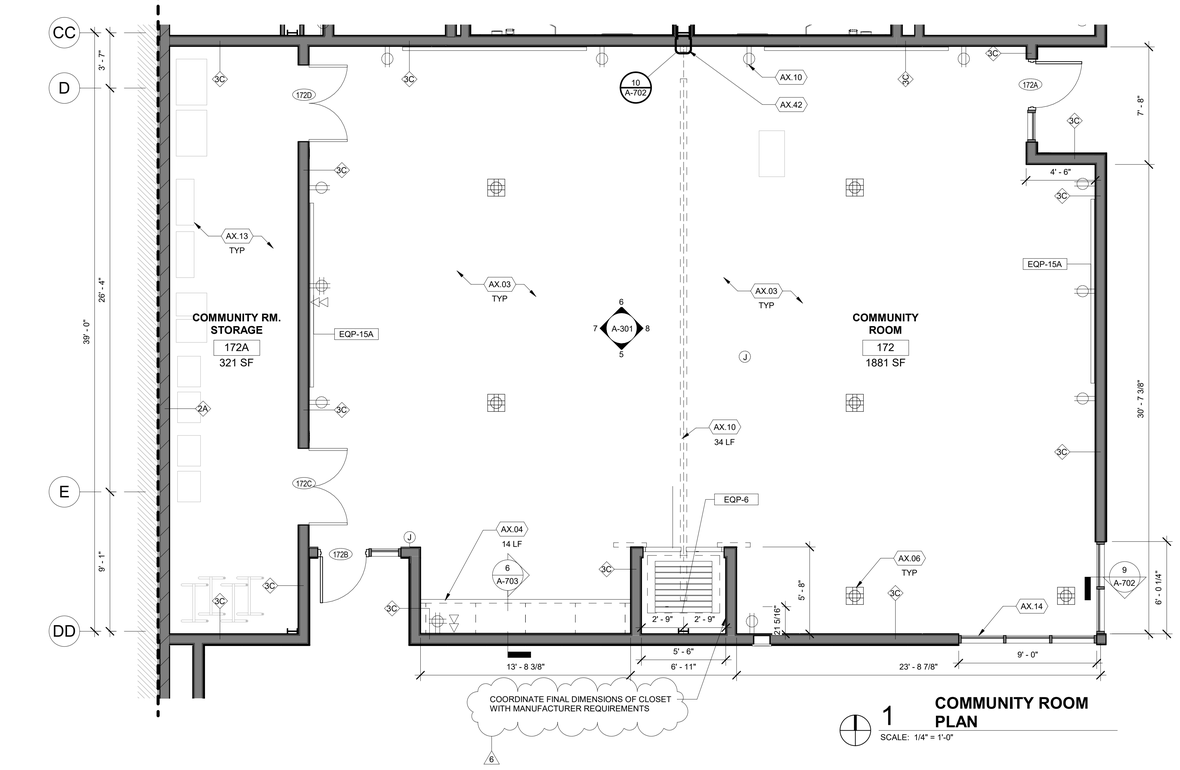


2 **COMMUNITY ROOM RCP**
SCALE: 1/4" = 1'-0"



1 **COMMUNITY ROOM PLAN**
SCALE: 1/4" = 1'-0"

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7	Date 9	ADDENDUM 02

DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

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ANNEX ENLARGED COMMUNITY ROOM PLAN & RCP

Sheet NOT FOR CONSTRUCTION

A-204

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

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1/16" = 1'-0"

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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

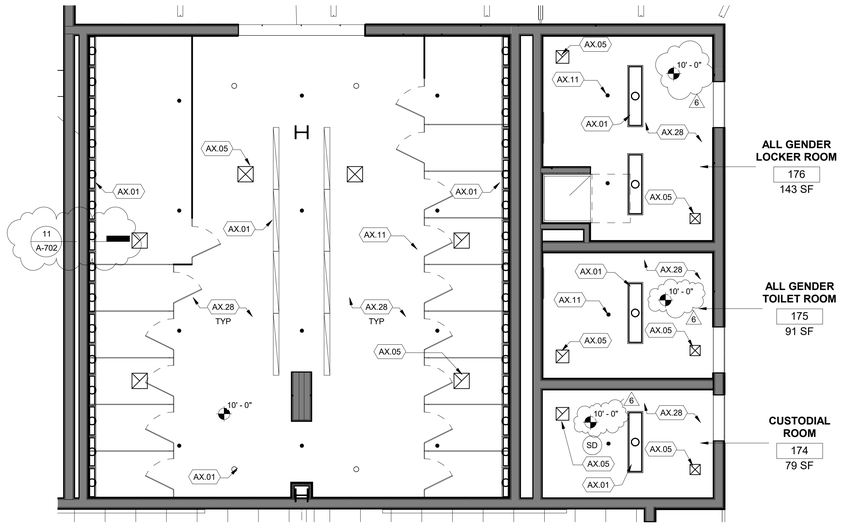
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

PLUMBING FIXTURE SCHEDULE

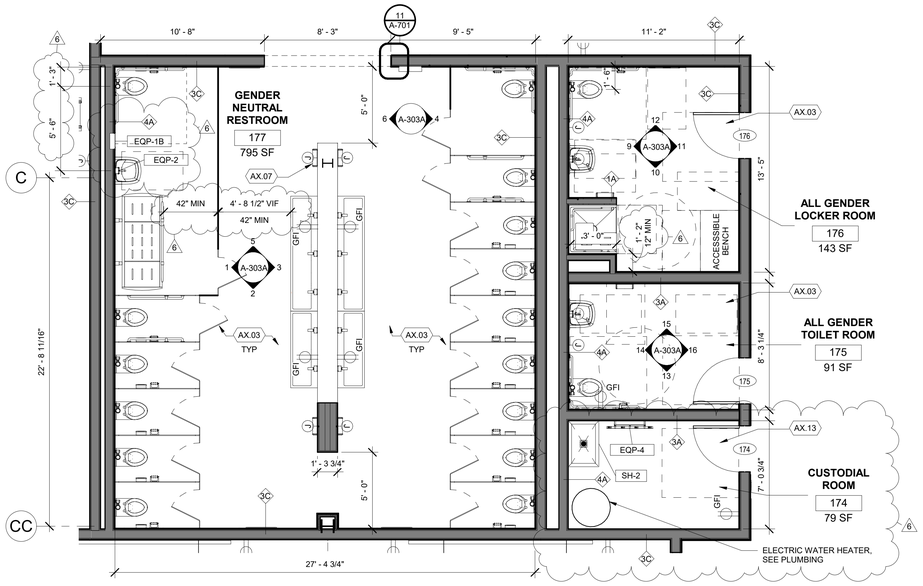
Type Mark	Description
	<varies>
DF-1	DRINKING FOUNTAIN WITH BOTTLE FILLER, ADULT ADA
DF-2	DRINKING FOUNTAIN, NO BOTTLE CHILLER,ADULT HEIGHT
DF-3	DRINKING FOUNTAIN
DF-4	DRINKING FOUNTAIN, NO BOTTLE CHILLER,CHILD HEIGHT
LAV-1	LAVATORY, WALL MOUNTED
LAV-1A	LAVATORY, WALL MOUNTED, ADA ACCESSIBLE, CHILD
LAV-1B	LAVATORY, WALL MOUNTED, ADA ACCESSIBLE, ADULT
LAV-2	ADULT HEIGHT DROP SINK WITH GOOSENECK FAUCET
LAV-3	CHILD HEIGHT DROP SINK WITH GOOSENECK FAUCET
LAV-4	UTILITY SINK WITH SOLIDS INTERCEPTOR
LAV-5	BARRIER FREE WALL MOUNTED EMERGENCY EYE WASH STATION
LAV-6	ADULT HEIGHT KITCHEN SINK
SH-2	MOP SINK
SHW-1	ADA AND ANSI COMPLIANT TRANSFER SHOWER WITH WHITE PHENOLIC SEAT, GRAB BARS, BOTTOM PLATE, AND ANTI-SLIP FLOOR. 1.375" STANDARD THRESHOLD
UR-1	STANDARD HEIGHT URINAL
WC-1	CPS STANDARD ADULT TOILET
WC-2	CPS STANDARD ADA ACCESSIBLE TOILET

SPECIALTY EQUIPMENT SCHEDULE

TYPE MARK	DESCRIPTION
	<varies>
EL-01	ELEVATOR HOISTWAY
EQP-1A	HAND TOWEL DISPENSER
EQP-1B	RECESSED PAPER TOWEL DISPENSER WITH FIXED WASTE BASKET
EQP-1C	WALL MOUNTED SANITARY NAPKIN DISPOSAL
EQP-1E	SANITARY NAPKIN DISPENSER, WALL MOUNTED
EQP-2	SOAP DISPENSER
EQP-3	WALL MOUNTED CLOCK - SEE ELECTRICAL
EQP-4	UTILITY SHELF W/ APRON HOOKS, WALL MOUNTED
EQP-4B	NOT USED
EQP-4C	EMERGENCY CENTER
EQP-4D	PEGBOARD DRYING RACK, 2' X 2'4"
EQP-4E	SAFETY GOGGLE CONTROL CENTER, WALL-MOUNTED LOCKABLE STEEL STORAGE CABINET. DESIGNED TO HOLD A MINIMUM OF 30 PAIRS OF CHEMICAL SPLASH GOGGLES
EQP-4F	APRON RAIL WITH HOOKS, TO ACCOMODATE 32 APRONS
EQP-5A	TEACHING WALL. (2) 4'x4' TACKBOARDS , (1) 12' MARKERBOARD
EQP-5C	TEACHING WALL. (1) 3'x4' TACKBOARDS , (1) 6'X4' MARKERBOARD
EQP-5D	TEACHING WALL. 4'x1' TACKBOARD, 6' MARKERBOARD
EQP-5E	TACK STRIP 5'X2'
EQP-6	MODERNFOLD OPERABLE PARTITION
EQP-7	WALL MOUNTED FULL HEIGHT MIRROR
EQP-7A	WALL MOUNTED MIRROR ABOVE SINK
EQP-7C	3X5 WALL MOUNTED MIRROR
EQP-8	VERTICAL GRAB BAR, CHILD ADA
EQP-8A	REAR WALL GRAB BAR
EQP-8B	SIDE WALL GRAB BAR, ELEMENTARY ADA
EQP-8C	VERTICAL GRAB BAR, ELEMENTARY ADA
EQP-8D	SIDE WALL GRAB BAR, ELEMENTARY ADA
EQP-8E	VERTICAL GRAB BAR, ADULT ADA
EQP-9	TOILET PAPER DISPENSER,SINGLE ROLL
EQP-10	WALL MOUNTED HAND DRYER, ADA ACCESSIBLE
EQP-11	MOTORIZED ADULT CHANGING TABLE. OWNER PROVIDED
EQP-12	URINAL SCREEN
EQP-15	MARKERBOARD 4'
EQP-15A	MARKERBOARD 12'
EQP-15B	MARKERBOARD 10' X 4'
EQP-16	TACKBOARD 4'
EQP-16A	TACKBOARD 4' 8
EQP-16B	TACKBOARD 10' X 3' 6"
EQP-18	METAL STUDENT LOCKERS WITH SLANTED TOP
EQP-19	PARTIAL HEIGHT DANCE MIRRORS CONTINUOUS
EQP-19A	FULL HEIGHT DANCE MIRRORS CONTINUOUS
EQP-19B	6X6 WALL MOUNTED MIRROR
EQP-20	CPS STANDARD MULTIHEIGHT DANCE BARRES, PERMANENLTY FLOOR MOUNTED
EQP-21	MUSICAL INSTRUMENT CART
EQP-22	SALVAGED TELEVISION
EQP-23	TOILET STALL - LIGHT BLUE PARTITION
EQP-25A	GYM WALL PADDING
EQP-25B	GYM WALL PADDING
EQP-25C	GYM WALL PADDING
EQP-25D	GYM WALL PADDING
EQP-25E	GYM WALL PADDING
EQP-25F	GYM WALL PADDING
EQP-25G	GYM WALL PADDING
EQP-26	ACOUSTICAL WALL PADDING
EQP-27	AUTOMATED TELESCOPIC BLEACHERS. BOD: IRWIN INFINITY SEAT MODULE
EQP-28	SCOREBOARD
EQP-30	FIXED LADDER WITH CAGE, PLATFORM, ROOFSIDE RETURN
EQP-32	ACCESS LADDER
EQP-37	CVTR ROOF VENT
EQP-38	SAFETY RAIL FOR NURSING BENCH
EQP-40	WALL MOUNTED SPEAKER - SEE ELECTRICAL
EQP-41	TOP ROLL GYMNASIUM CURTAIN DIVIDER. BOD: PSS PERFORMANCE 4040XL
EQP-42	FLOOR MOUNTED VOLLEYBALL SYSTEM. BOD: DRAPER INC EVS TWO COURT SYSTEM 500042
EQP-43	FRONT-FOLDING BASKETBALL BACKSTOP. BOD: DRAPER INC TF-20
EQP-44	SIGNAGE
EQP-45	4'X5' MOBILE MARKERBOARD



2 **BATHROOMS & BOH RCPS - ANNEX**
SCALE: 1/4" = 1'-0"



1 **BATHROOMS & BOH PLANS - ANNEX**
SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH

TAG INFO	ARCH NOTE
AX.01	PROVIDE LIGHTING FIXTURES. SEE ELECTRICAL
AX.02	PROVIDE 2X2 ACT CEILING AND GRID SYSTEM
AX.03	PROVIDE TERRAZZO FLOORING
AX.04	PROVIDE PLASTIC LAMINATE MILLWORK CABINETS WITH SOLID SURFACE TOP
AX.05	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
AX.06	PROVIDE FLOOR PENETRATION FOR MEP DEVICE. CONFIRM FINAL LOCATION WITH MEP AND FURNITURE
AX.07	PROVIDE ELECTRICAL DEVICE. SEE ELECTRICAL
AX.08	PROVIDE FIRE ALARM DEVICE
AX.09	PROVIDE WALL BASE AS SCHEDULED
AX.10	PROVIDE MOTORIZED OPERABLE PARTITION, STC-52, BOD: MODERNFOLD ACOUSTI-SEAL ENCORE AUTOMATED
AX.11	PROVIDE SPRINKLERS. SEE MECHANICAL
AX.12	PROVIDE MECHANICAL DEVICE. SEE MECHANICAL
AX.13	PROVIDE FLOORING AS SCHEDULED
AX.14	PROVIDE 1HR FIRE-RATED HOLLOW METAL WINDOW WALL
AX.15	PROVIDE HINGED INTERIOR WINDOW GUARD. ALIGN FRAMING WITH WINDOW MULLIONS
AX.16	PROVIDE AUTOMATED DUAL SHADE WINDOW TREATMENTS, WITH BLACKOUT AND 5% OPEN SHADES. ALIGN BLACKOUT CHANNELS WITH WINDOW MULLIONS. SHADE ATTACHMENT TO WINDOW WALL MUST MAINTAIN WINDOW WALL WARRANTY.
AX.17	PROVIDE CUSTOM DISPLAY CASE. SEE INTERIOR DETAILS
AX.18	PROVIDE DRINKING FOUNTAIN AND BOTTLE FILLERS
AX.20	PROVIDE HIGH IMPACT RESISTANT ACOUSTICAL PANELS, CUSTOM COLOR TO MATCH WALL FINISH
AX.21	PROVIDE GYMNASIUM FLOORING ASSEMBLY
AX.22	PROVIDE GYMNASIUM WALL PADDING MATCHING WALL PAINT. NOTCH WALL PADS AROUND ROOM SIGNS AND WALL DEVICES.
AX.23	PROVIDE MANUAL OPERATED TELESCOPIC BLEACHERS. SEE SPECIALTY EQUIPMENT
AX.24	PROVIDE SCORE BOARD WITH CUSTOM CPS AND CPD LOGOS AND DIGITAL DISPLAY BELOW SCOREBOARD
AX.25	PROVIDE FRONT-FOLDING BASKETBALL BACKSTOP. SEE SPECIALTY EQUIPMENT
AX.26	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
AX.27	PROVIDE HDMI FOR SHORT THROW PROJECTOR
AX.28	PROVIDE GYPSUM CEILING
AX.29	PROVIDE WELDED GRATING WALK OFF MAT ASSEMBLY
AX.30	PROVIDE LINEAR DIFFUSER. SEE MECHANICAL
AX.31	EXPOSED HVAC DUCT. SEE MECHANICAL
AX.32	PROVIDE COMPETITION WOOD FLOOR WITH COURT STRIPES FOR 1 MAIN BASKETBALL COURT, 2 SIDE BASKETBALL COURTS, 1 VOLLEYBALL COURT, 2 PICKLEBALL COURTS
AX.33	PROVIDE TOP-ROLL GYMNASIUM CURTAIN DIVIDER. SEE SPECIALTY EQUIPMENT
AX.34	PROVIDE RECESSED FLOOR MOUNTED VOLLEYBALL NET AND SLEEVES. SEE SPECIALTY EQUIPMENT
AX.35	PROVIDE SPEAKER DEVICE. SEE ELECTRICAL
AX.36	PROVIDE PA SYSTEM WITH ASSISTED LISTENING DEVICES. PROVIDE 11 RECEIVERS, 3 OF WHICH ARE HEARING-AID COMPATIBLE
AX.37	PROVIDE PROJECTOR WITH TELESCOPING LIFT
AX.38	PROVIDE RECESSED FIRE EXTINGUISHER CABINET
AX.39	PROVIDE FLOOR TO CEILING CUSTOM PHENOLIC TOILET COMPARTMENT, ACCURATE PARTITIONS CORP. (ASI GROUP) COLOR-THRU PHENOLIC IN SMOKE 8450C. PROVIDE BLOCKING AS REQUIRED
AX.40	PROVIDE CANE DETECTABLE APRON MOUNTED BELOW THE EDGE OF DRINKING FOUNTAIN. COMPLY WITH REQUIRED KNEE CLEARANCE
AX.42	PROVIDE ACOUSTICALLY-SEALED FULL HEIGHT OPERABLE PARTITION CLOSURE PANEL, PER MANUFACTURER
AX.43	PROVIDE 2HR PUNCHED WINDOW OPENING WITH FIRE RESISTIVE GLAZING
AX.44	PROVIDE GYPSUM WALL BOARD EXPANSION JOINTS
AX.45	PROVIDE AI PHONE. SEE ELECTRICAL
AX.46	PROVIDE 2HR FIRE RESISTIVE TRANSOM WINDOW SYSTEM.

TOILET RM GENERAL NOTES:

1. DISCOLORED GROUT TO BE STEAM CLEANED AND DAMAGED TILE TO BE REPLACED.
2. ASSUME 100 SF OF PATCH AND REPAIR AT AREAS ADJACENT TO DEMOLITION, INCLUDING FLOORING, WALL TILE, AND CEILINGS.
3. AT NEW BATHROOMS, PROVIDE ALL CPS STANDARD EQUIPMENT INCLUDING SHARPS DISPOSAL, SANITARY NAPKIN DISPOSAL, HAND DRYER, SOAP DISPENSER, MIRROR AND THE LIKE

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

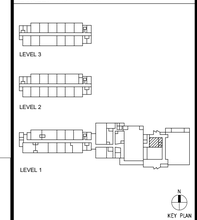
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: As indicated



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ANNEX ENLARGED BATHROOM PLAN AND RCP

Sheet NOT FOR CONSTRUCTION

A-205

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

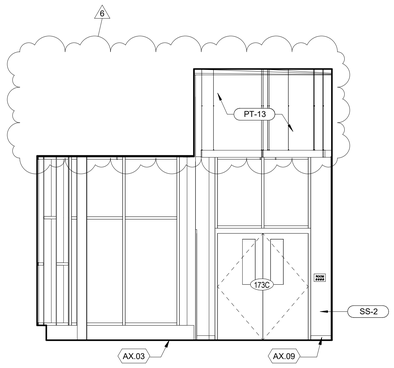
2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

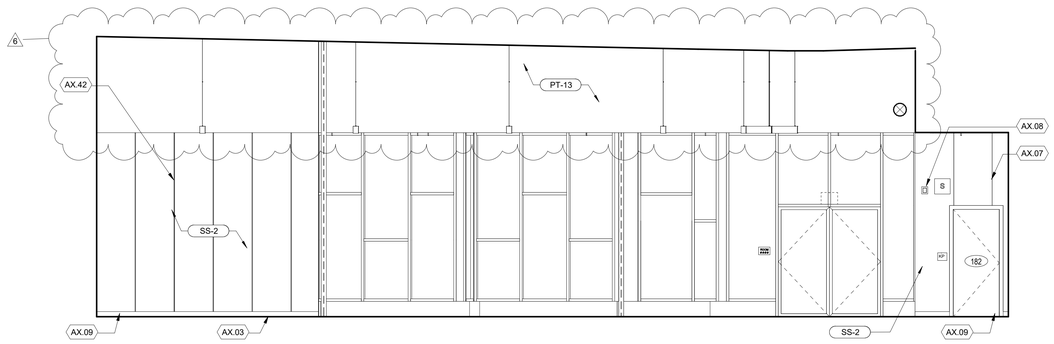
0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

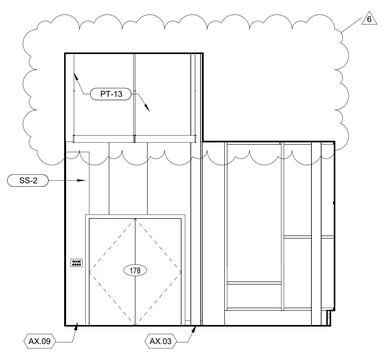
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



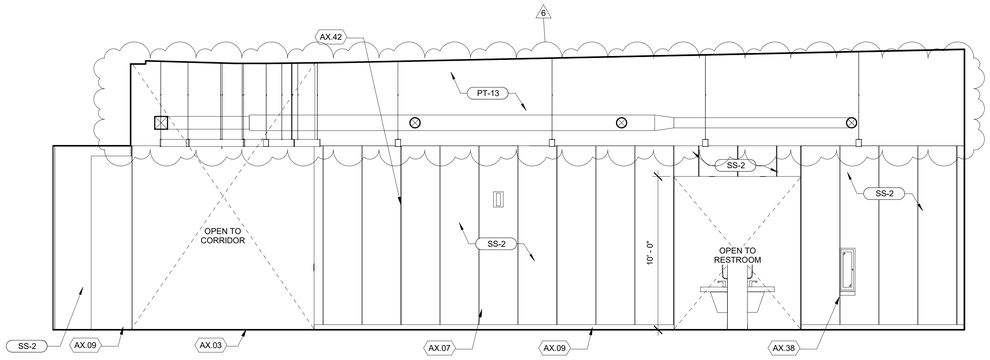
8 CORRIDOR 171B - EAST
SCALE: 1/4" = 1'-0"



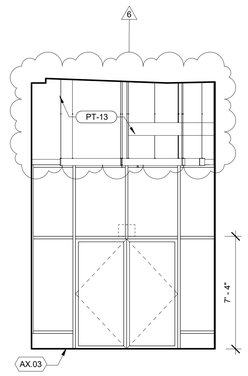
7 CORRIDOR 171B - NORTH
SCALE: 1/4" = 1'-0"



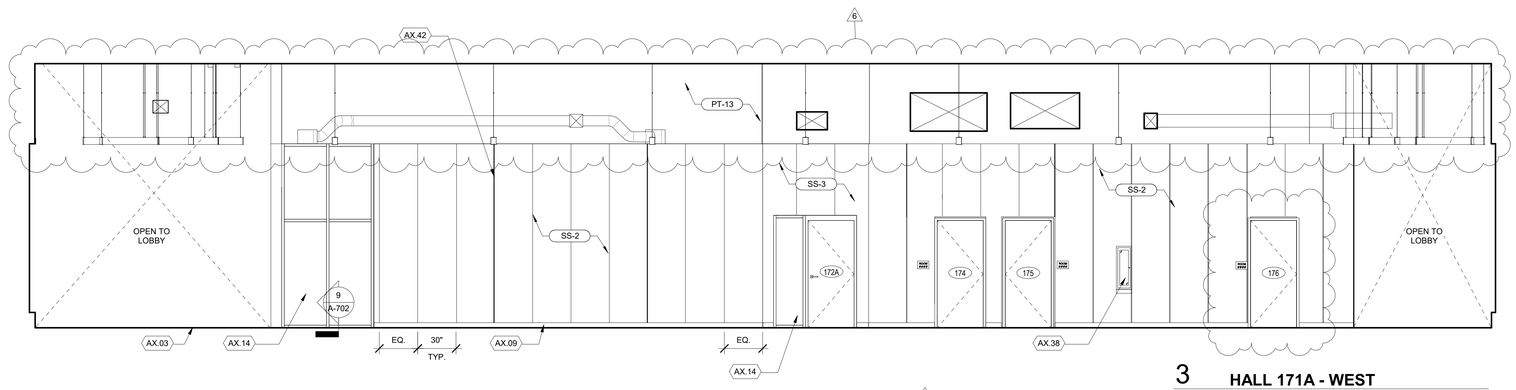
6 CORRIDOR 171B - WEST
SCALE: 1/4" = 1'-0"



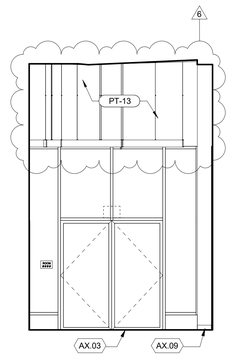
5 CORRIDOR 171B - SOUTH
SCALE: 1/4" = 1'-0"



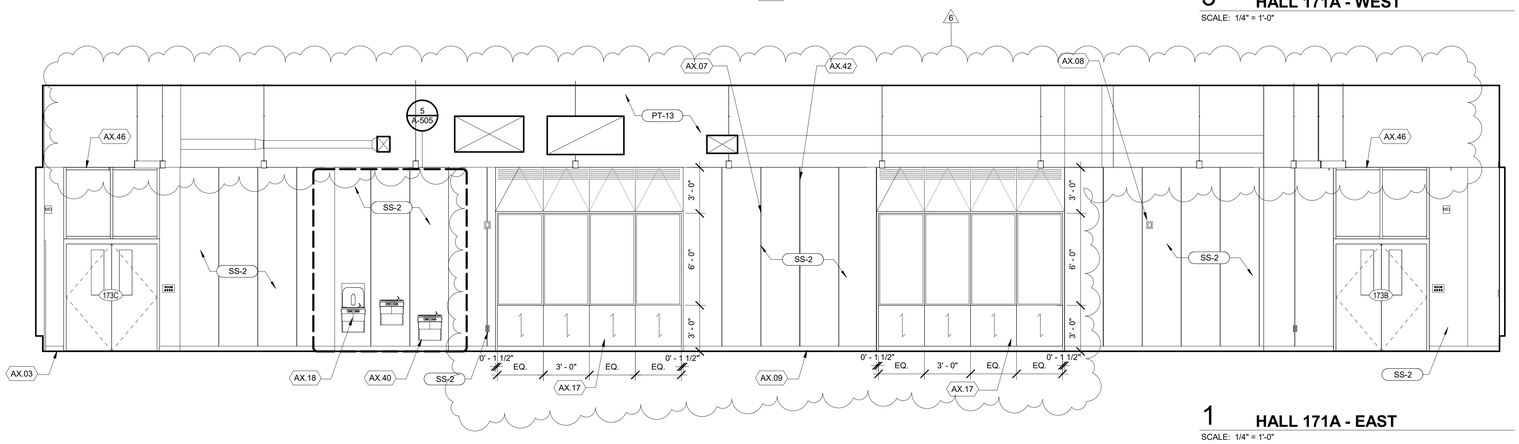
4 HALL 171A - SOUTH
SCALE: 1/4" = 1'-0"



3 HALL 171A - WEST
SCALE: 1/4" = 1'-0"



2 HALL 171A - NORTH
SCALE: 1/4" = 1'-0"



1 HALL 171A - EAST
SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH	
TAG INFO	ARCH NOTE
AX.01	PROVIDE LIGHTING FIXTURES. SEE ELECTRICAL
AX.02	PROVIDE 2X2 ACT CEILING AND GRID SYSTEM
AX.03	PROVIDE TERRAZZO FLOORING
AX.04	PROVIDE PLASTIC LAMINATE MILLWORK CABINETS WITH SOLID SURFACE TOP
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AX.28	PROVIDE GYPSUM CEILING
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PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

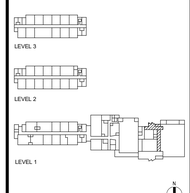
ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC
SCALE: 1/4" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
ANNEX CORRIDOR INTERIOR ELEVATIONS

Sheet NOT FOR CONSTRUCTION
A-300

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

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2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
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1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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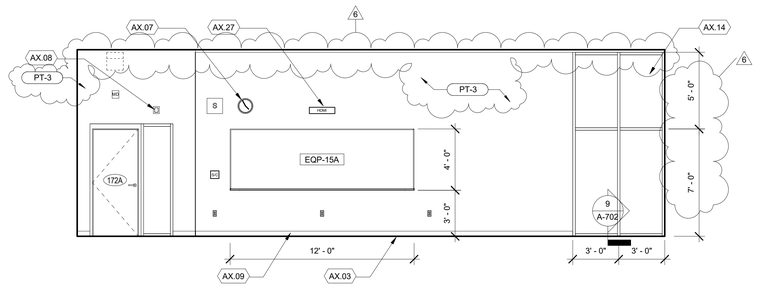
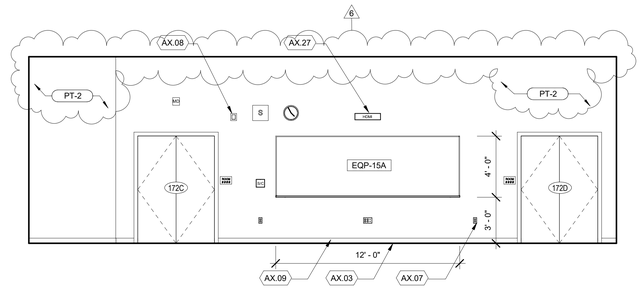


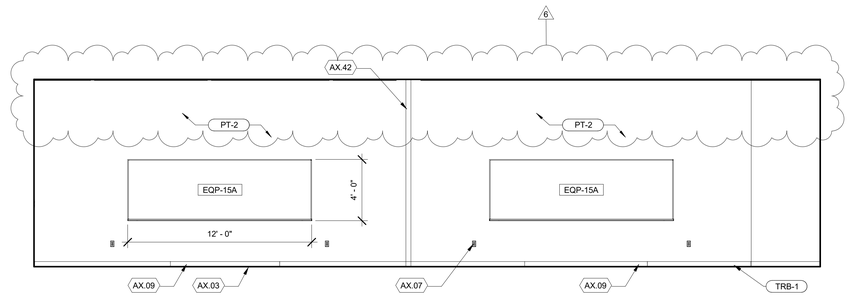
8 COMMUNITY ROOM - EAST - ANNEX

SCALE: 1/4" = 1'-0"



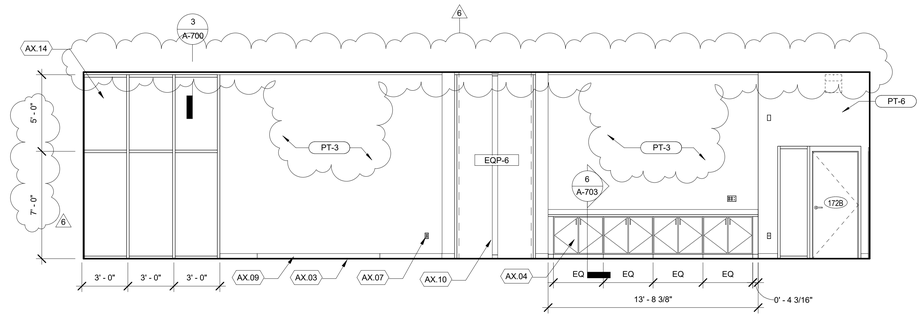
7 COMMUNITY ROOM - WEST - ANNEX

SCALE: 1/4" = 1'-0"



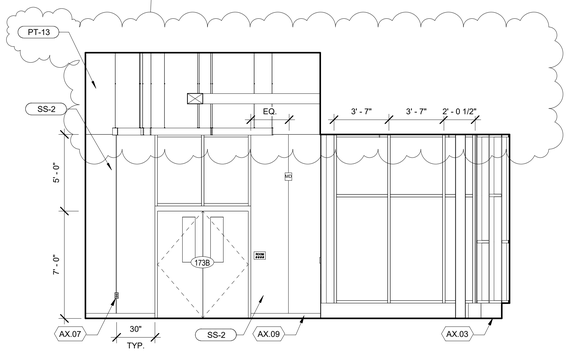
6 COMMUNITY ROOM - NORTH - ANNEX

SCALE: 1/4" = 1'-0"



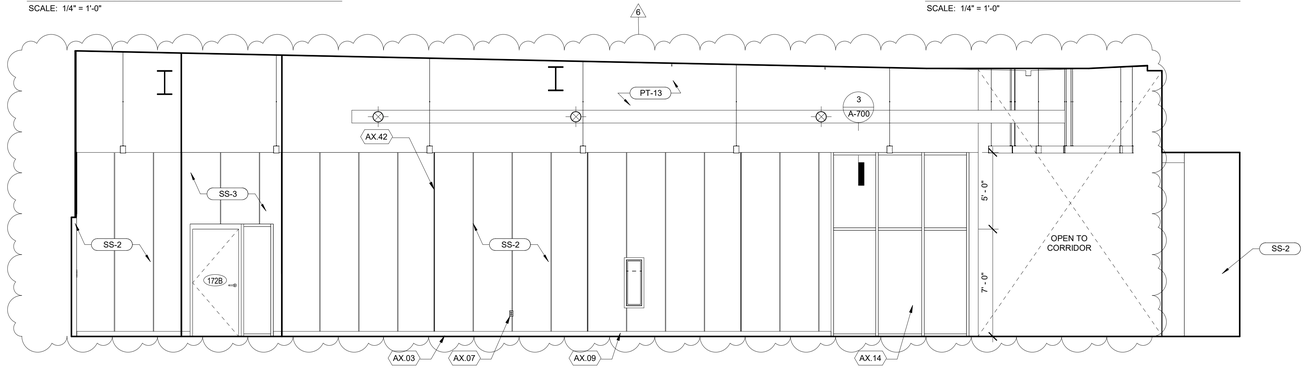
5 COMMUNITY ROOM - SOUTH - ANNEX

SCALE: 1/4" = 1'-0"



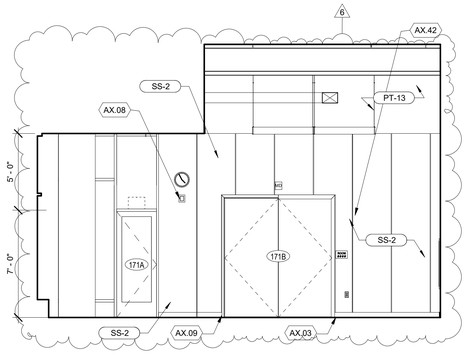
4 LOBBY/PREFUNCTION SPACE - EAST - ANNEX

SCALE: 1/4" = 1'-0"



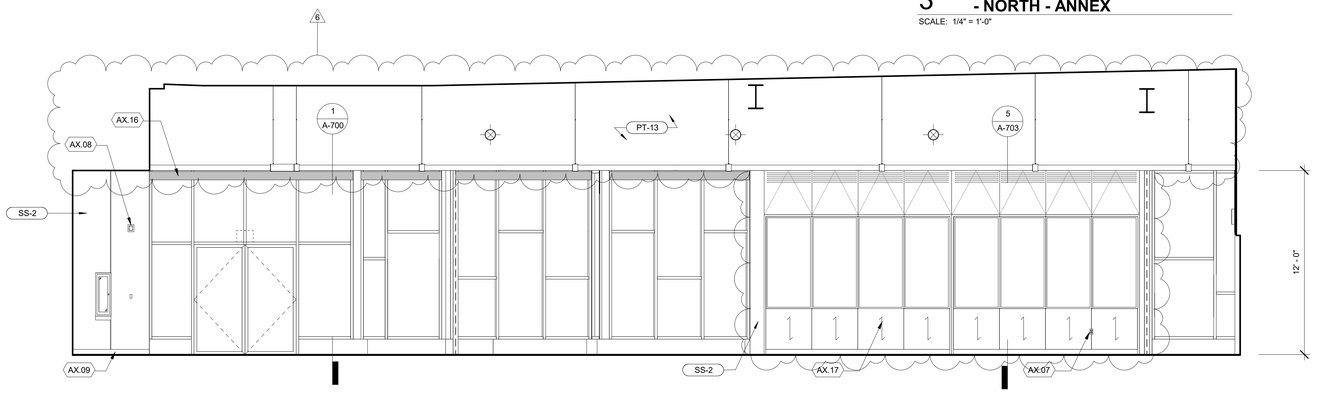
3 LOBBY/PREFUNCTION SPACE - NORTH - ANNEX

SCALE: 1/4" = 1'-0"



2 LOBBY/PREFUNTION SPACE - WEST - ANNEX

SCALE: 1/4" = 1'-0"



1 LOBBY/PREFUNCTION - SOUTH - ANNEX

SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH	
TAG INFO	ARCH NOTE
AX.01	PROVIDE LIGHTING FIXTURES. SEE ELECTRICAL
AX.02	PROVIDE 2X2 ACT CEILING AND GRID SYSTEM
AX.03	PROVIDE TERRAZZO FLOORING
AX.04	PROVIDE PLASTIC LAMINATE MILLWORK CABINETS WITH SOLID SURFACE TOP
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AX.08	PROVIDE FIRE ALARM DEVICE
AX.09	PROVIDE WALL BASE AS SCHEDULED
AX.10	PROVIDE MOTORIZED OPERABLE PARTITION, STC-52, BOD: MODERNFOLD ACOUSTI-SEAL ENCORE AUTOMATED
AX.11	PROVIDE SPRINKLERS. SEE MECHANICAL
AX.12	PROVIDE MECHANICAL DEVICE. SEE MECHANICAL
AX.13	PROVIDE FLOORING AS SCHEDULED
AX.14	PROVIDE 1HR FIRE-RATED HOLLOW METAL WINDOW WALL
AX.15	PROVIDE HINGED INTERIOR WINDOW GUARD. ALIGN FRAMING WITH WINDOW MULLIONS
AX.16	PROVIDE AUTOMATED DUAL SHADE WINDOW TREATMENTS, WITH BLACKOUT AND 5% OPEN SHADES. ALIGN BLACKOUT CHANNELS WITH WINDOW MULLIONS. SHADE ATTACHMENT TO WINDOW WALL MUST MAINTAIN WINDOW WALL WARRANTY.
AX.17	PROVIDE CUSTOM DISPLAY CASE. SEE INTERIOR DETAILS
AX.18	PROVIDE DRINKING FOUNTAIN AND BOTTLE FILLERS
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AX.22	PROVIDE GYMNASIUM WALL PADDING MATCHING WALL PAINT. NOTCH WALL PADS AROUND ROOM SIGNS AND WALL DEVICES.
AX.23	PROVIDE MANUAL OPERATED TELESCOPIC BLEACHERS. SEE SPECIALTY EQUIPMENT
AX.24	PROVIDE SCORE BOARD WITH CUSTOM CPS AND CPD LOGOS AND DIGITAL DISPLAY BELOW SCOREBOARD
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AX.26	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
AX.27	PROVIDE HDMI FOR SHORT THROW PROJECTOR
AX.28	PROVIDE GYPSUM CEILING
AX.29	PROVIDE WELDED GRATING WALK OFF MAT ASSEMBLY
AX.30	PROVIDE LINEAR DIFFUSER. SEE MECHANICAL
AX.31	EXPOSED HVAC DUCT. SEE MECHANICAL
AX.32	PROVIDE COMPETITION WOOD FLOOR WITH COURT STRIPES FOR 1 MAIN BASKETBALL COURT, 2 SIDE BASKETBALL COURTS, 1 VOLLEYBALL COURT, 2 PICKLEBALL COURTS
AX.33	PROVIDE TOP-ROLL GYMNASIUM CURTAIN DIVIDER. SEE SPECIALTY EQUIPMENT
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AX.45	PROVIDE AI PHONE. SEE ELECTRICAL
AX.46	PROVIDE 2HR FIRE RESISTIVE TRANSOM WINDOW SYSTEM.

PUBLIC BUILDING COMMISSION

Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

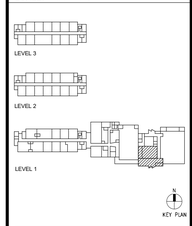
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

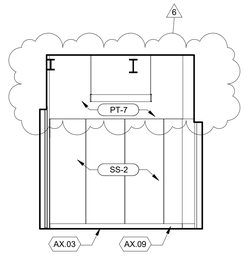
Title

ANNEX COMMUNITY ROOM AND CORRIDOR INTERIOR ELEVATIONS

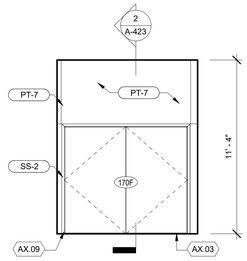
Sheet NOT FOR CONSTRUCTION

A-301

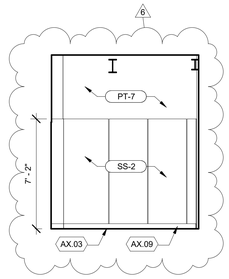
1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



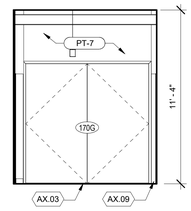
8 RATED VESTIBULE 170C - WEST
SCALE: 1/4" = 1'-0"



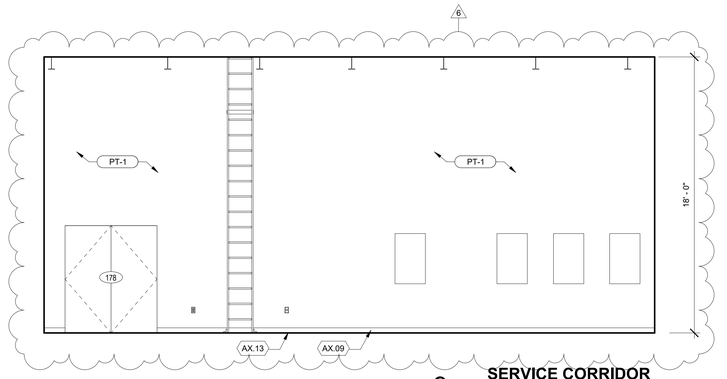
7 RATED VESTIBULE 170C - NORTH
SCALE: 1/4" = 1'-0"



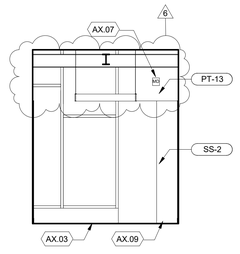
6 RATED VESTIBULE 170C - EAST
SCALE: 1/4" = 1'-0"



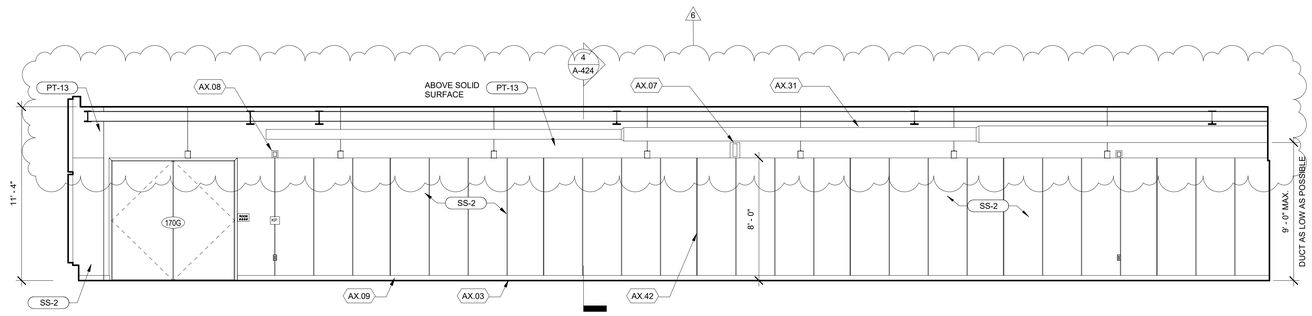
5 RATED VESTIBULE 170C - SOUTH
SCALE: 1/4" = 1'-0"



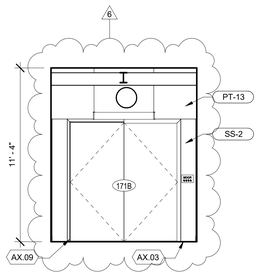
9 SERVICE CORRIDOR 178 - EAST
SCALE: 1/4" = 1'-0"



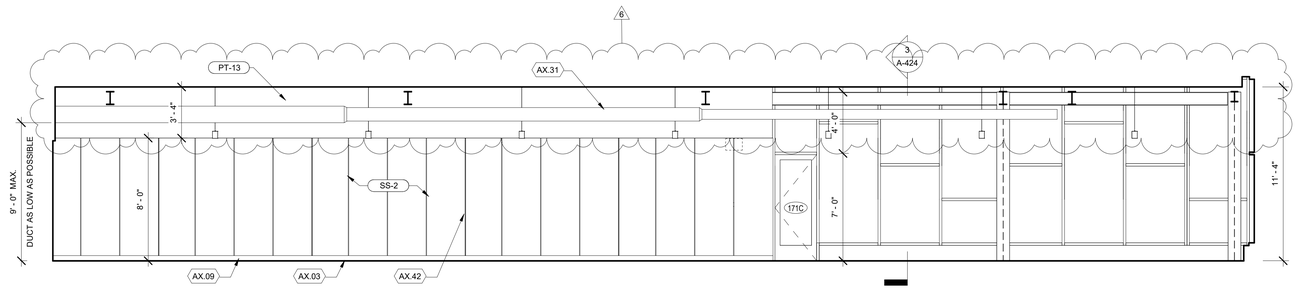
4 HALL 171C - WEST
SCALE: 1/4" = 1'-0"



3 HALL 171C - NORTH
SCALE: 1/4" = 1'-0"



2 HALL 171C - EAST
SCALE: 1/4" = 1'-0"



1 HALL 171C - SOUTH
SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH

TAG INFO	ARCH NOTE
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AX.02	PROVIDE 2X2 ACT CEILING AND GRID SYSTEM
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PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

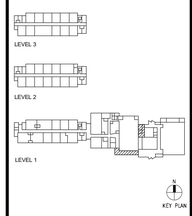
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

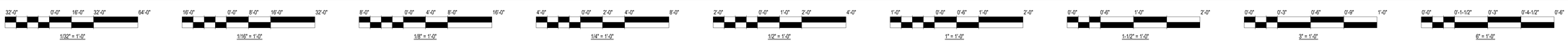
Project No: 2138

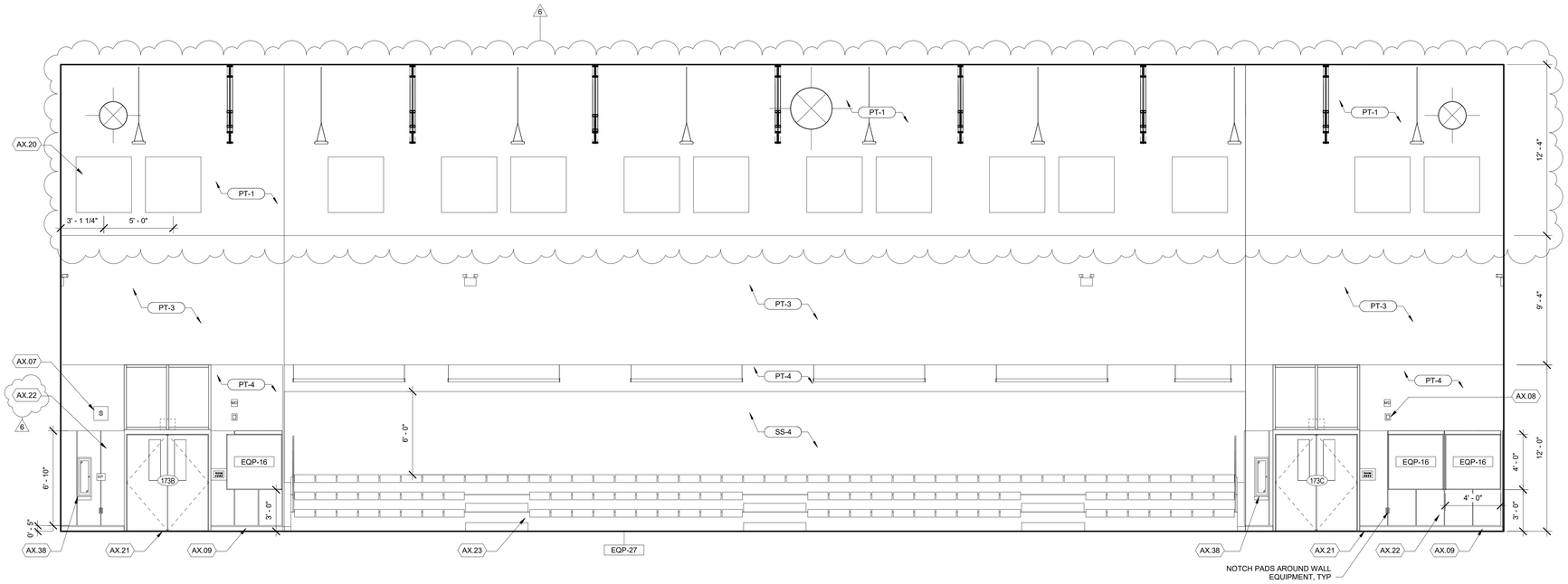
Title

ANNEX HALLWAY LINK AND SERVICE CORRIDOR INTERIOR ELEVATIONS

Sheet NOT FOR CONSTRUCTION

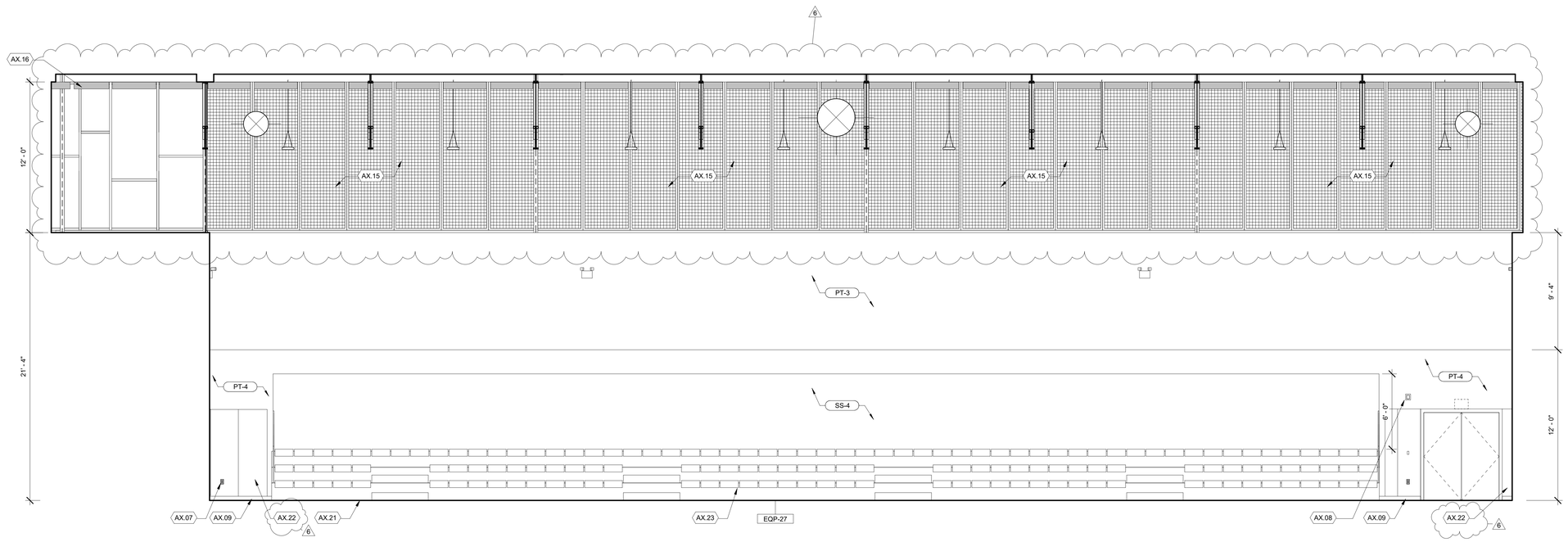
A-301B





2 GYMNASIUM WEST - ANNEX

SCALE: 1/4" = 1'-0"



1 GYMNASIUM EAST - ANNEX

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KEYED NOTES - ANNEX ARCH

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AX.44	PROVIDE GYPSUM WALL BOARD EXPANSION JOINTS
AX.45	PROVIDE AI PHONE. SEE ELECTRICAL
AX.46	PROVIDE 2HR FIRE RESISTIVE TRANSOM WINDOW SYSTEM.

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
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225 W Ohio St, 4th Floor
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Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
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2942 W Van Buren St
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REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
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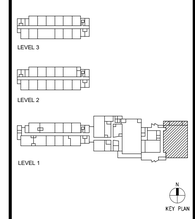
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 1/4" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ANNEX GYMNASIUM INTERIOR ELEVATIONS

Sheet NOT FOR CONSTRUCTION

A-302

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
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4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
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2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
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1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
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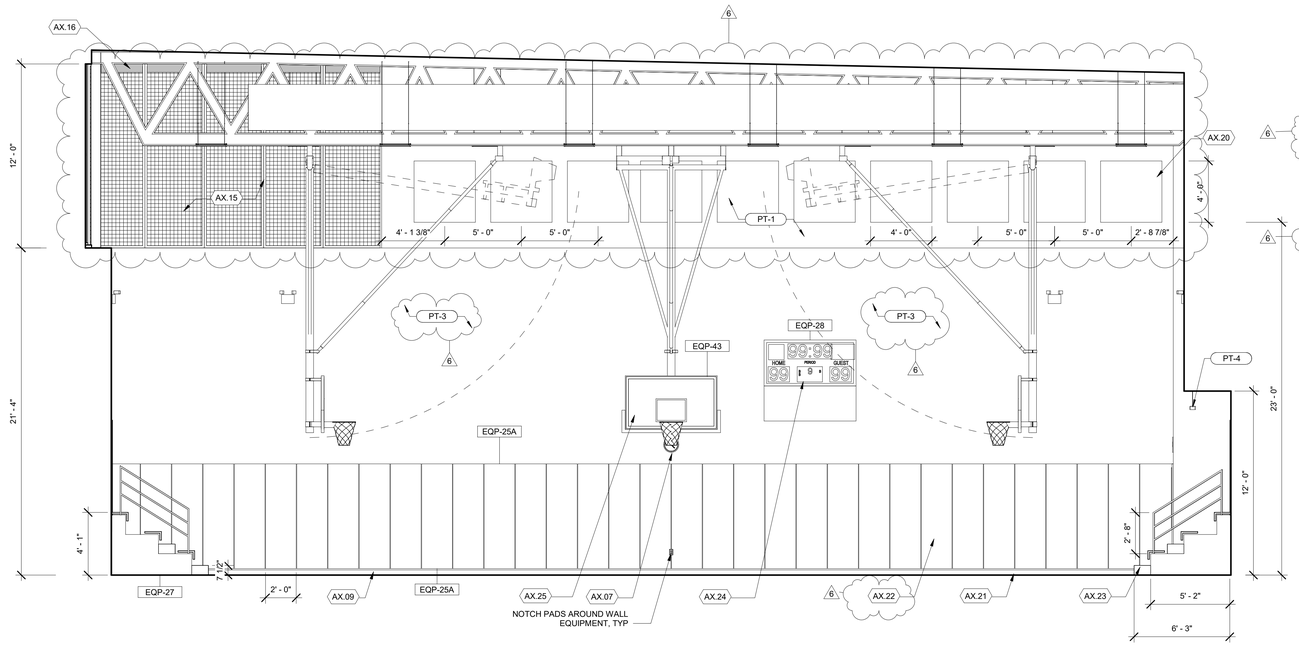
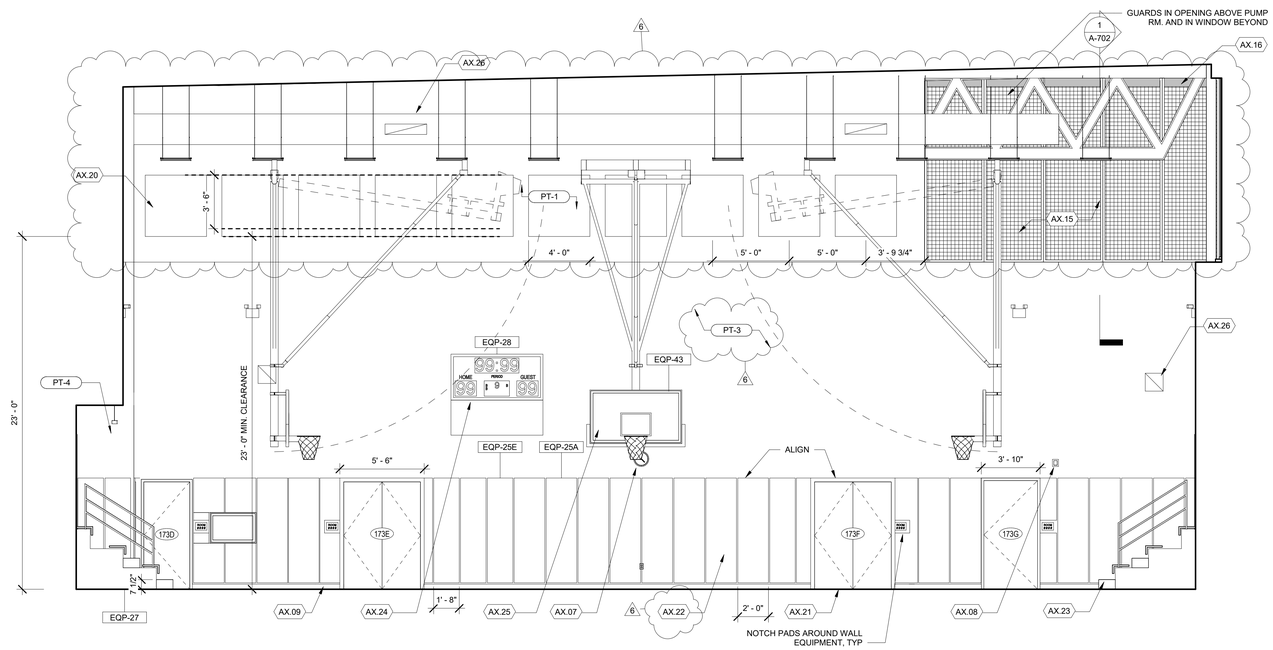


2 GYMNASIUM SOUTH - ANNEX

SCALE: 1/4" = 1'-0"



1 GYMNASIUM NORTH - ANNEX

SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH

TAG INFO	ARCH NOTE
AX.01	PROVIDE LIGHTING FIXTURES. SEE ELECTRICAL
AX.02	PROVIDE 2X2 ACT CEILING AND GRID SYSTEM
AX.03	PROVIDE TERRAZZO FLOORING
AX.04	PROVIDE PLASTIC LAMINATE MILLWORK CABINETS WITH SOLID SURFACE TOP
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AX.06	PROVIDE FLOOR PENETRATION FOR MEP DEVICE. CONFIRM FINAL LOCATION WITH MEP AND FURNITURE
AX.07	PROVIDE ELECTRICAL DEVICE. SEE ELECTRICAL
AX.08	PROVIDE FIRE ALARM DEVICE
AX.09	PROVIDE WALL BASE AS SCHEDULED
AX.10	PROVIDE MOTORIZED OPERABLE PARTITION, STC-52, BOD: MODERNFOLD ACOUSTI-SEAL ENCORE AUTOMATED
AX.11	PROVIDE SPRINKLERS. SEE MECHANICAL
AX.12	PROVIDE MECHANICAL DEVICE. SEE MECHANICAL
AX.13	PROVIDE FLOORING AS SCHEDULED
AX.14	PROVIDE 1HR FIRE-RATED HOLLOW METAL WINDOW WALL
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AX.16	PROVIDE AUTOMATED DUAL SHADE WINDOW TREATMENTS, WITH BLACKOUT AND 5% OPEN SHADES. ALIGN BLACKOUT CHANNELS WITH WINDOW MULLIONS. SHADE ATTACHMENT TO WINDOW WALL MUST MAINTAIN WINDOW WALL WARRANTY.
AX.17	PROVIDE CUSTOM DISPLAY CASE. SEE INTERIOR DETAILS
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AX.26	PROVIDE MECHANICAL GRILLE. SEE MECHANICAL
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DRAWN BY: KOO LLC

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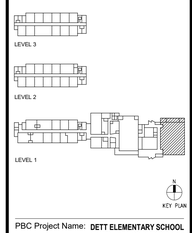

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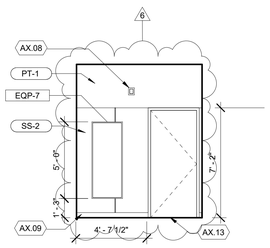
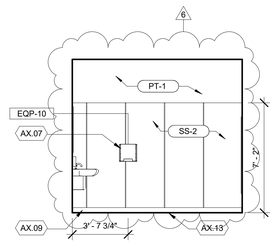
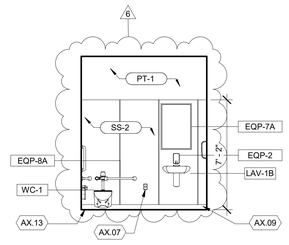


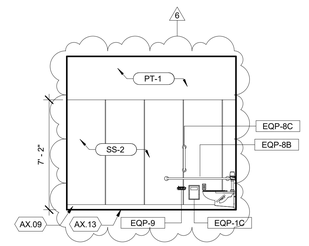
16 **ALL GENDER TOILET ROOM 175 EAST**
SCALE: 1/4" = 1'-0"



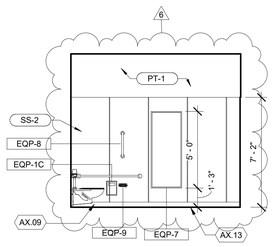
15 **ALL GENDER TOILET ROOM 175 NORTH**
SCALE: 1/4" = 1'-0"



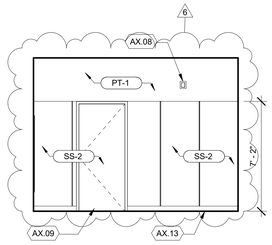
14 **ALL GENDER TOILET ROOM 175 WEST**
SCALE: 1/4" = 1'-0"



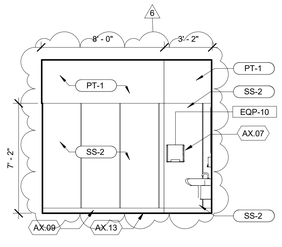
13 **ALL GENDER TOILET ROOM 175 SOUTH**
SCALE: 1/4" = 1'-0"



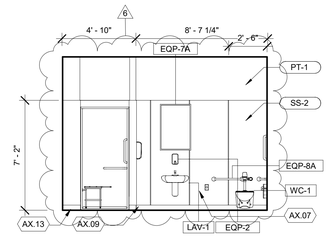
12 **ALL GENDER LOCKER ROOM 107 NORTH**
SCALE: 1/4" = 1'-0"



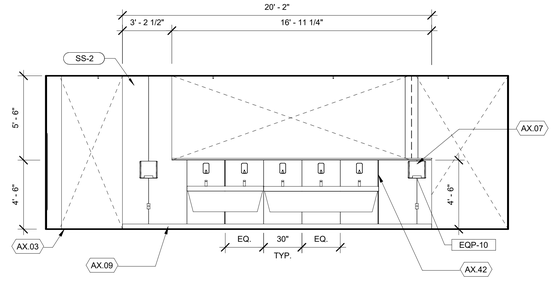
11 **ALL GENDER LOCKER ROOM 176 - EAST**
SCALE: 1/4" = 1'-0"



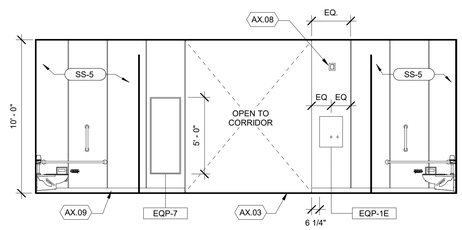
10 **ALL GENDER LOCKER ROOM 176 - SOUTH**
SCALE: 1/4" = 1'-0"



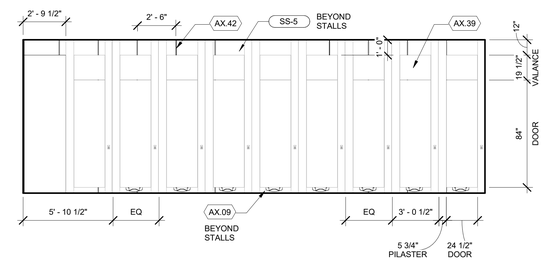
9 **ALL GENDER LOCKER ROOM 176 - WEST**
SCALE: 1/4" = 1'-0"



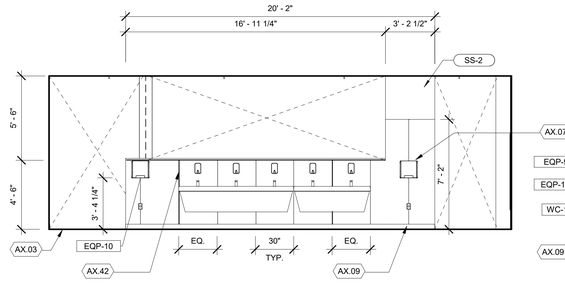
6 **GENDER NEUTRAL RESTROOM 177 - EAST-FACING LAVATORY**
SCALE: 1/4" = 1'-0"



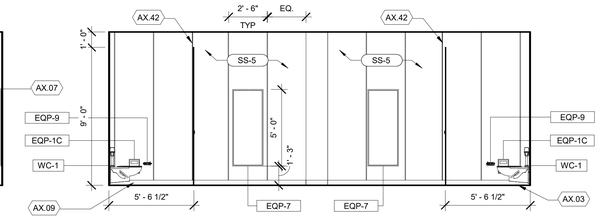
5 **GENDER NEUTRAL RESTROOM 177 - NORTH**
SCALE: 1/4" = 1'-0"



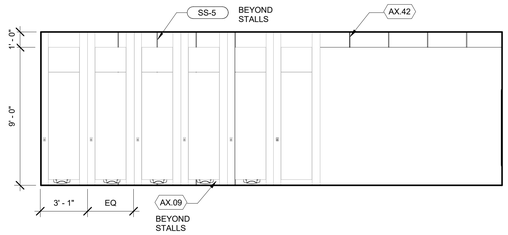
4 **GENDER NEUTRAL RESTROOM 177 - EAST**
SCALE: 1/4" = 1'-0"



3 **GENDER NEUTRAL RESTROOM 177 - WEST-FACING LAVATORY**
SCALE: 1/4" = 1'-0"



2 **GENDER NEUTRAL RESTROOM 177 - SOUTH**
SCALE: 1/4" = 1'-0"



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SCALE: 1/4" = 1'-0"

KEYED NOTES - ANNEX ARCH	
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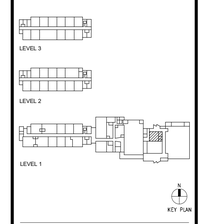

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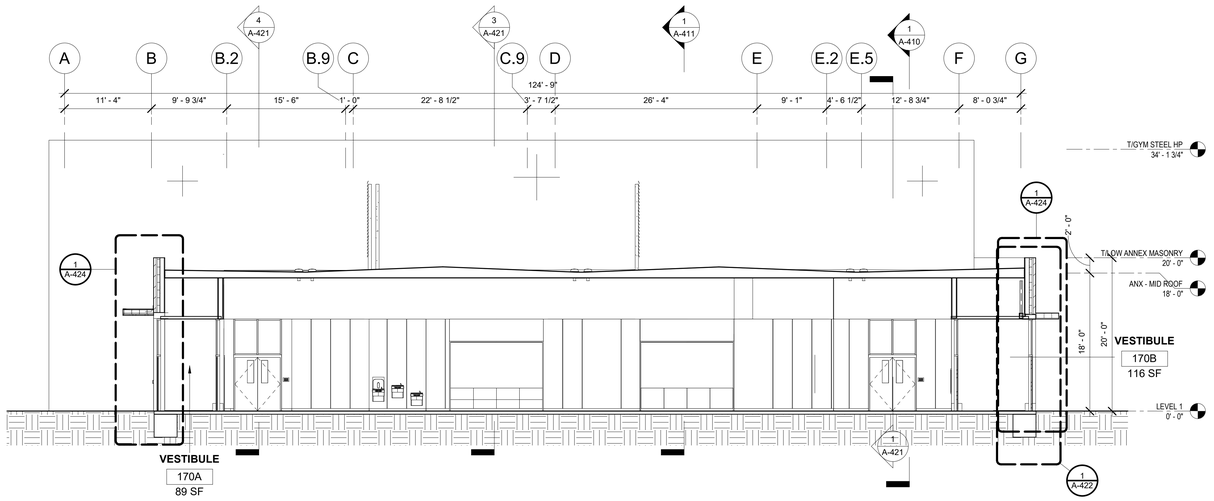
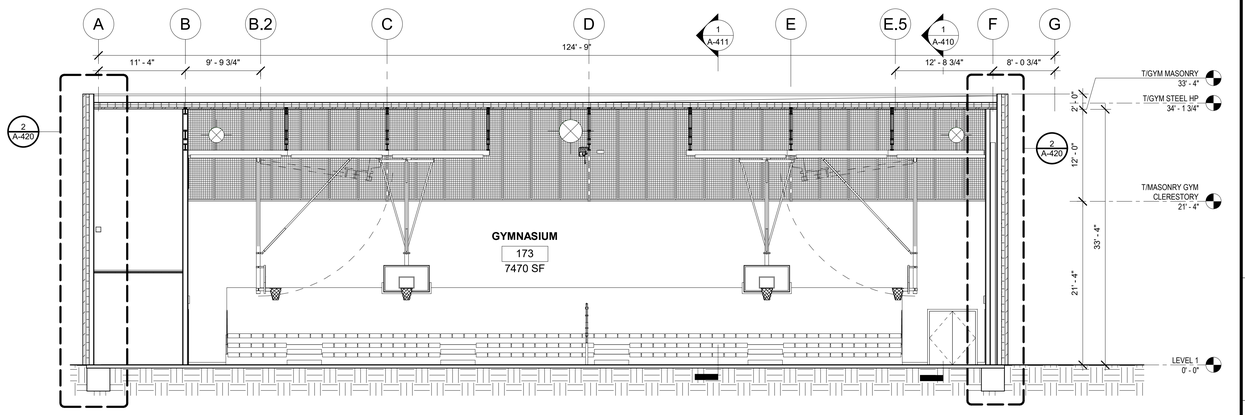
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



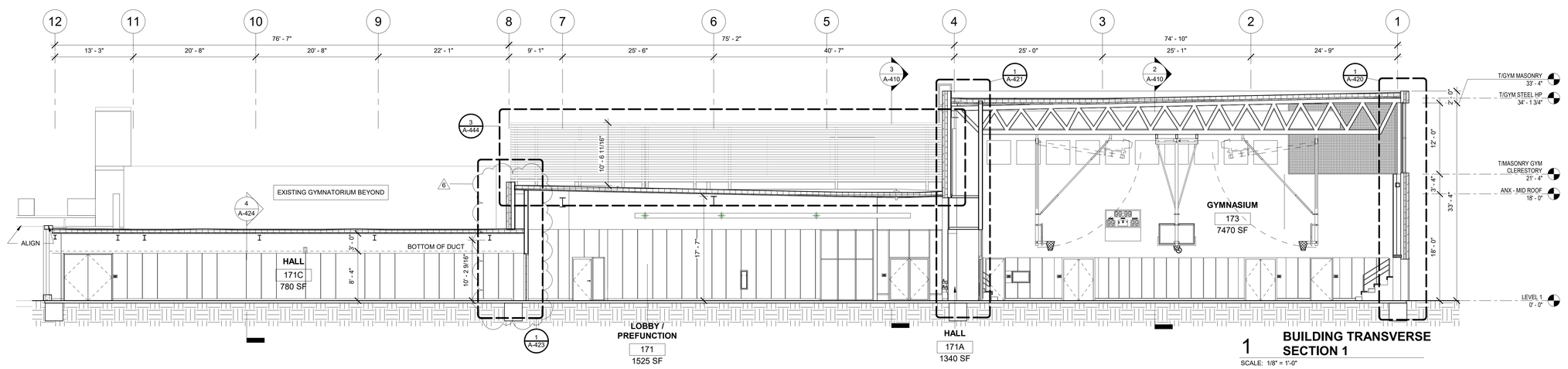
3 **BUILDING CROSS SECTION 1**

SCALE: 1/8" = 1'-0"



2 **BUILDING CROSS SECTION 2**

SCALE: 1/8" = 1'-0"



1 **BUILDING TRANSVERSE SECTION 1**

SCALE: 1/8" = 1'-0"

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DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

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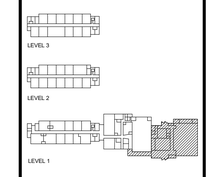
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ANNEX BUILDING SECTIONS

Sheet NOT FOR CONSTRUCTION

A-410

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

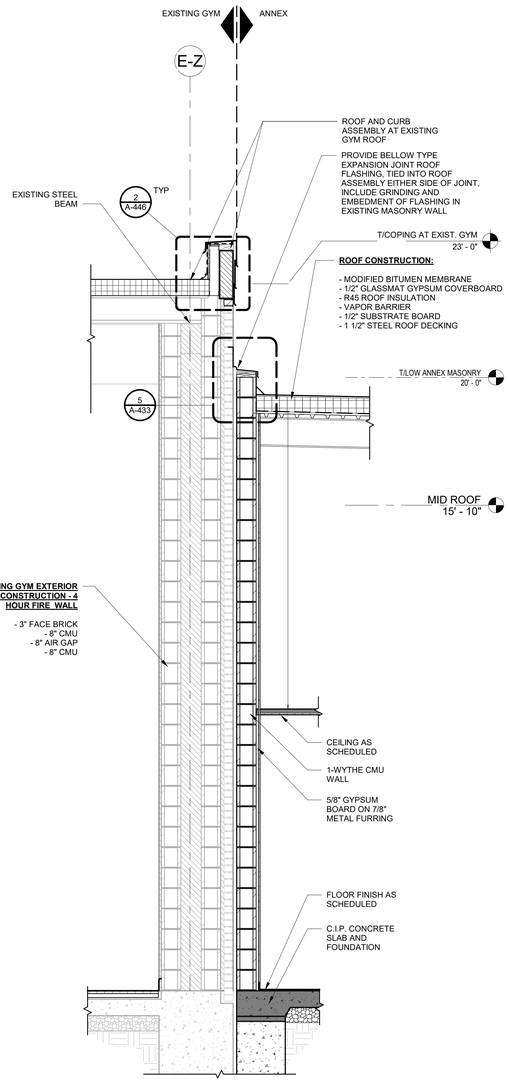
0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

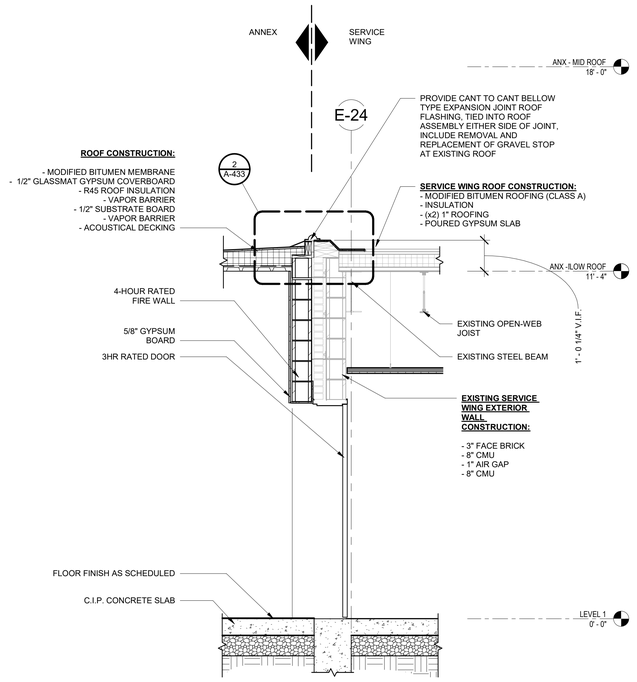
WALL SECTION AND DETAIL GENERAL NOTES:

1. ALUMINUM WINDOW WALL SYSTEM LEED PERFORMANCE CRITERIA
   A. ASSEMBLY U-VALUE .35
   B. COG U-VALUE: .30
   C. SHGC (ASSEMBLY) 0.38 FOR FIXED, 0.33 FOR OPERABLE
2. ROOF INSULATION TO BE 6 3/4" THICK, POLYISO INSULATION WITH GLASS FIBER MAT FACERS, 6.7 MIN. R-VALUE PER INCH, TYPICAL
3. EXTERIOR WALL CONTINUOUS CAVITY INSULATION TO BE POLYISO RIGID INSULATION WITH FOIL FACERS, 6.7 MIN. R-VALUE PER INCH, TYPICAL
4. WINDOW WALL HEAD RECEPTORS TO HAVE SILICONE SHEET AND ACCOMMODATE 3/4" DEFLECTION
5. ALL COPINGS AND ROOF EDGE FLASHING SYSTEMS TO BE PRE-ENGINEERED, FACTORY FABRICATED, PRE-FINISHED ALUMINUM COPINGS AND ROOF EDGE FLASHING SYSTEMS TESTED AND CERTIFIED TO ME ANSISPRUFM-1 WIND DESIGN STANDARDS FOR EDGE SYSTEMS
6. METAL COPINGS, PANELS AND TRIMS TO BE ONE CUSTOM COLOR AND FINISH
7. WHERE FASTENERS ARE SHOWN THEY ARE FOR REFERENCE ONLY AND TO PROVIDE INFORMATION REGARDING DESIGN INTENT, GC TO COORDINATE AND PROVIDE ALL REQUIRED FASTENERS AS INDICATED IN THE SPECIFICATIONS.



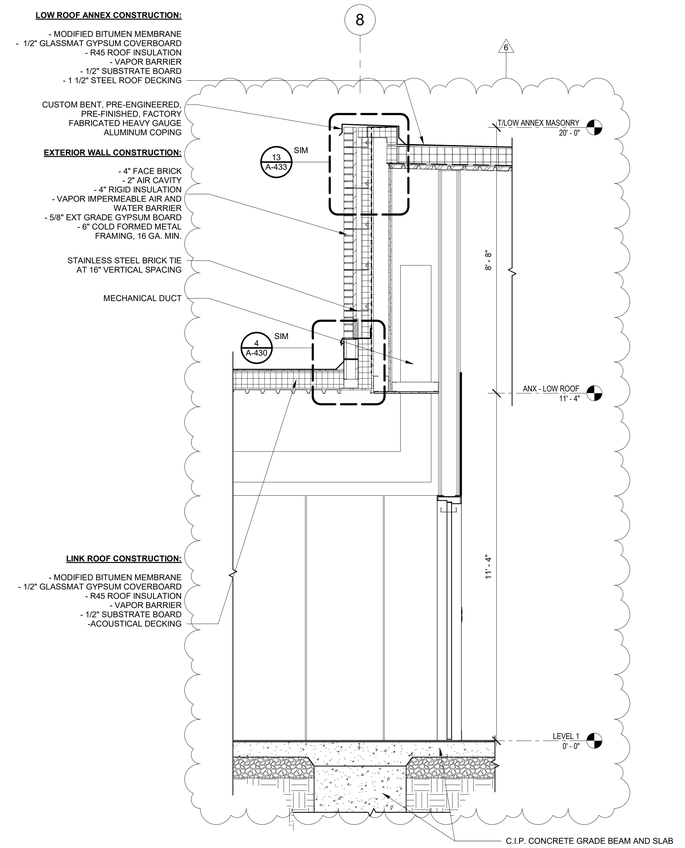
3 WALL SECTION AT EXISTING GYMNASIUM

SCALE: 1/2" = 1'-0"



2 ANNEX LINK AT EXISTING SCHOOL WALL SECTION

SCALE: 1/2" = 1'-0"



1 ANNEX LINK WALL SECTION

SCALE: 1/2" = 1'-0"

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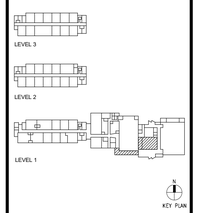
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: As indicated



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

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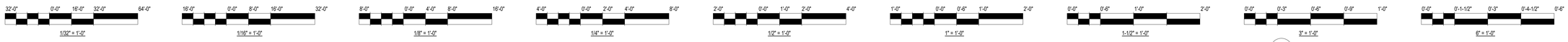
Project No: 2138

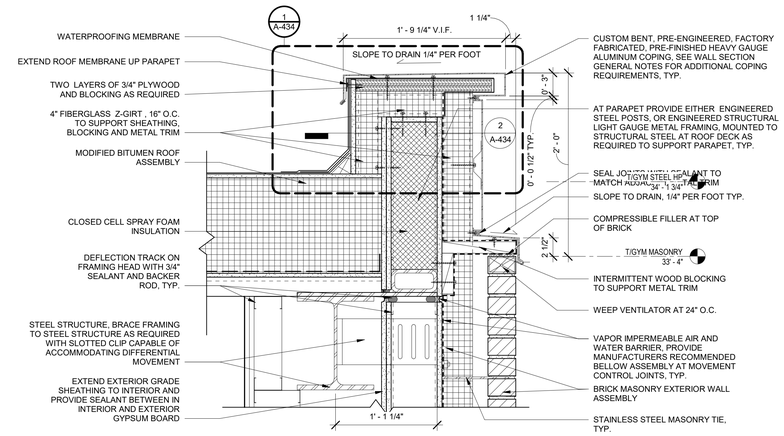
Title

WALL SECTIONS

Sheet NOT FOR CONSTRUCTION

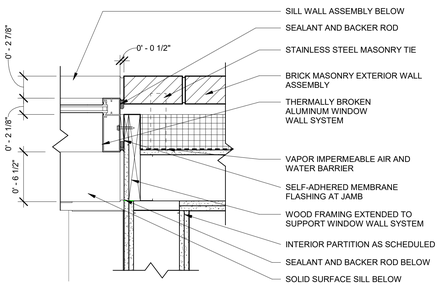
A-423





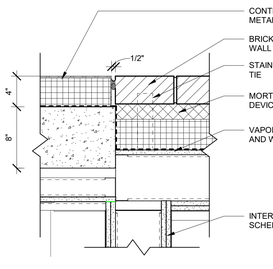
10 TYPICAL GYM. PARAPET DETAIL

SCALE: 1 1/2" = 1'-0"



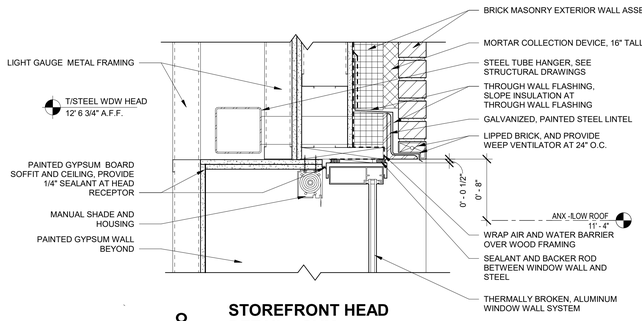
9 MASONRY JAMB - PLAN DETAIL

SCALE: 1 1/2" = 1'-0"



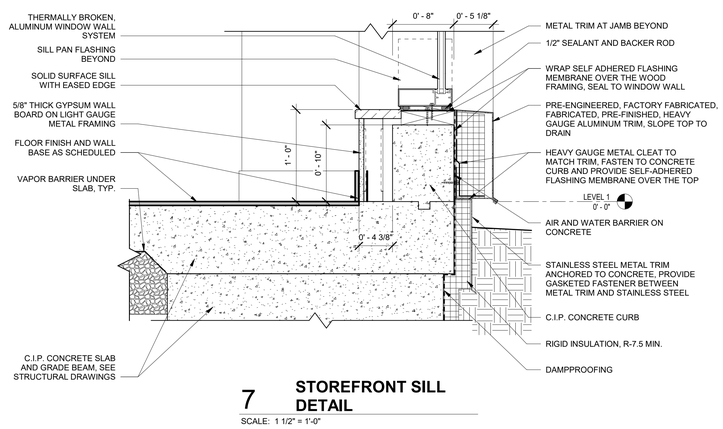
9A MASONRY TO CONCRETE JAMB - PLAN DETAIL

SCALE: 1 1/2" = 1'-0"



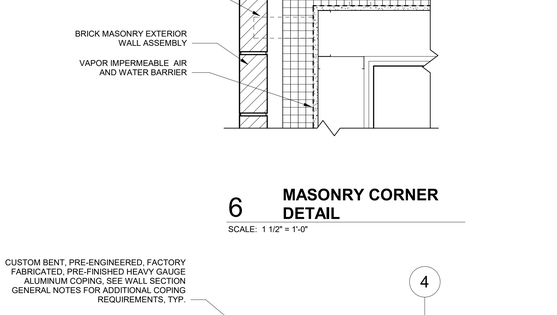
8 STOREFRONT HEAD DETAIL - GYM

SCALE: 1 1/2" = 1'-0"



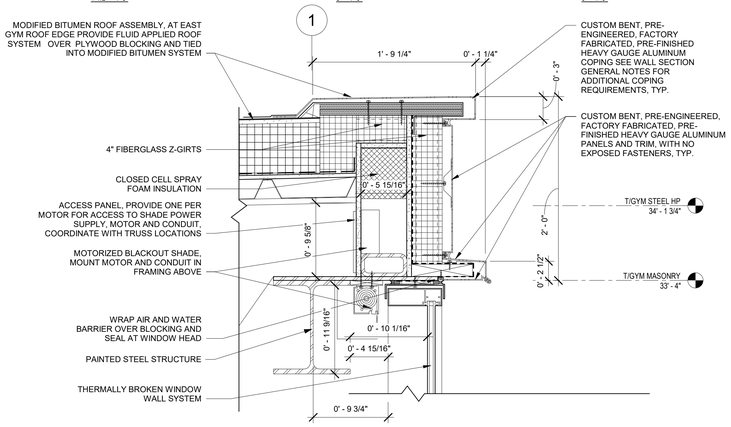
7 STOREFRONT SILL DETAIL

SCALE: 1 1/2" = 1'-0"



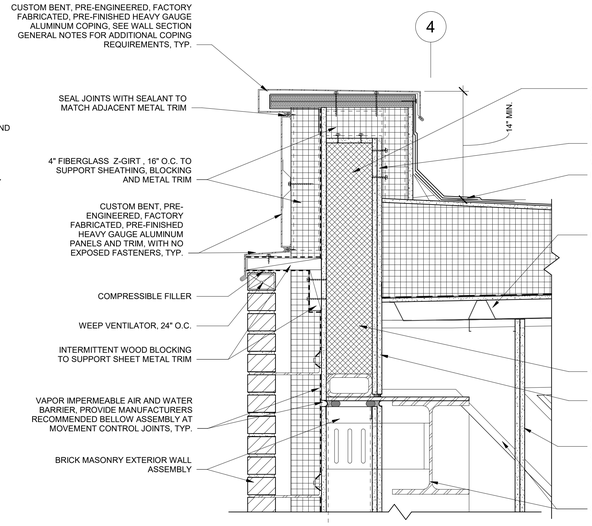
6 MASONRY CORNER DETAIL

SCALE: 1 1/2" = 1'-0"



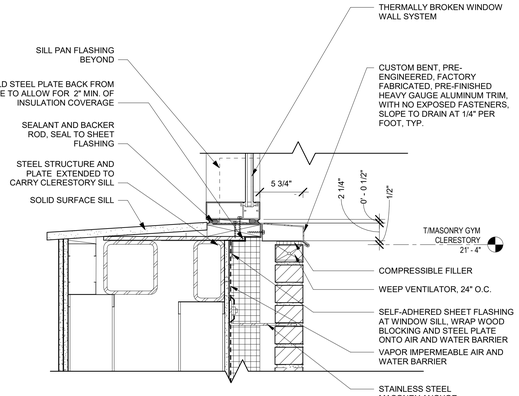
3 GYM CLERESTORY HEAD DETAIL

SCALE: 1 1/2" = 1'-0"



5 GYM PARAPET DETAIL_WEST

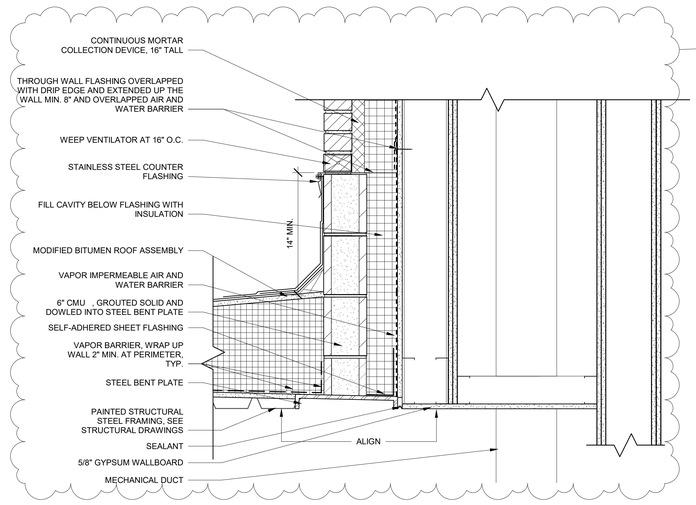
SCALE: 1 1/2" = 1'-0"



NOTES:
1. WINDOW GUARD AND AIRCRAFT CABLE BRACING NOT SHOWN FOR CLARITY

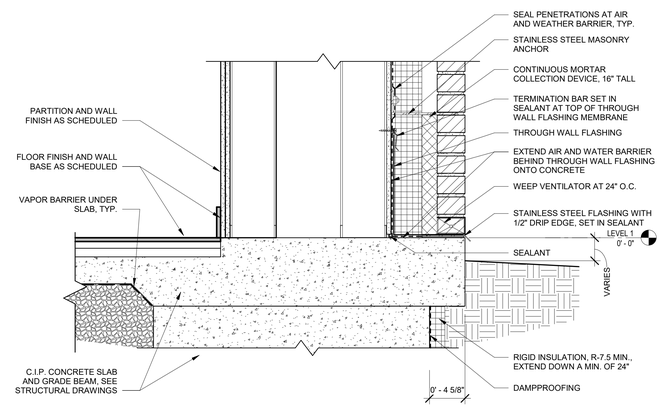
2 GYM CLERESTORY SILL DETAIL

SCALE: 1 1/2" = 1'-0"



4 GYMNASIUM WEST WALL SECTION AT LOW ANNEX ROOF

SCALE: 1 1/2" = 1'-0"



1 MASONRY SILL DETAIL

SCALE: 1 1/2" = 1'-0"

PUBLIC BUILDING COMMISSION

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312-235-0920 PH

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3	04/07/23	75% CD
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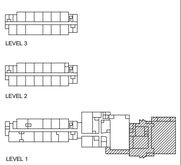
SCALE: 1 1/2" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

EXTERIOR DETAILS

Sheet NOT FOR CONSTRUCTION

A-430

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
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4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
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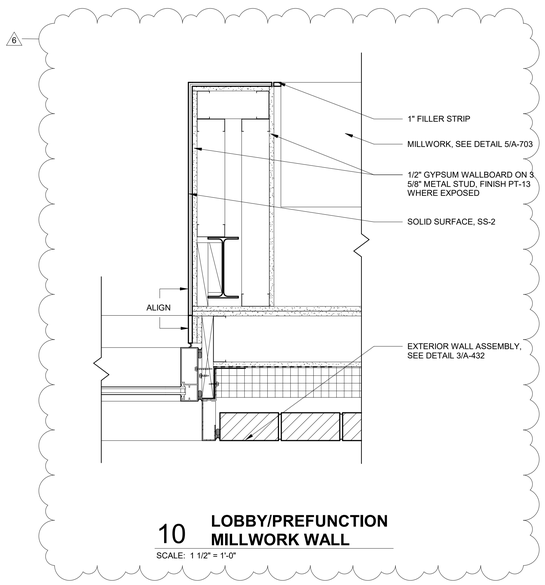
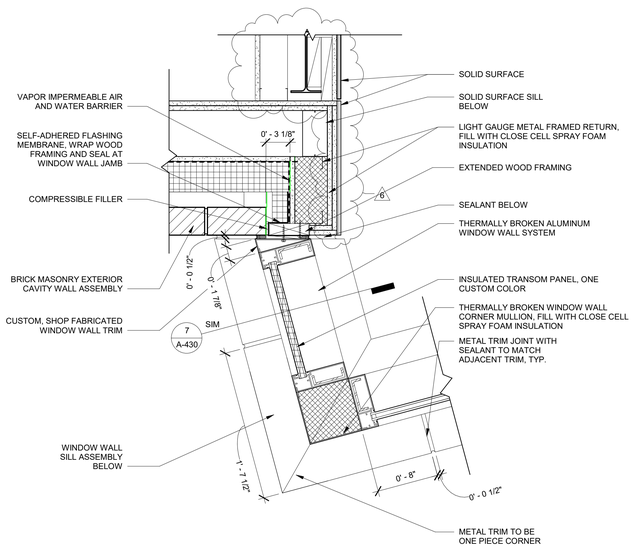
0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



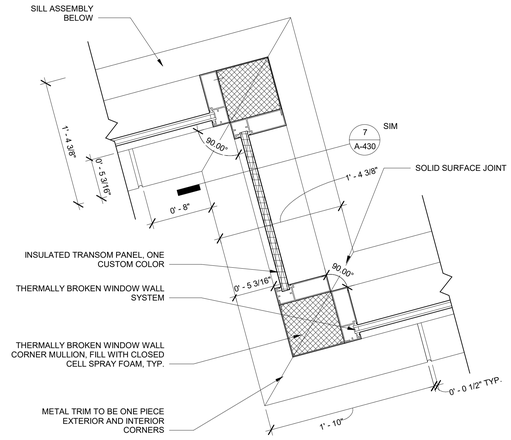
10 LOBBY/PREFUNCTION MILLWORK WALL

SCALE: 1 1/2" = 1'-0"



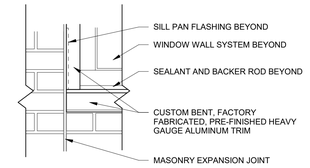
8 SOUTH VESTIBULE STOREFRONT RETURN

SCALE: 1 1/2" = 1'-0"



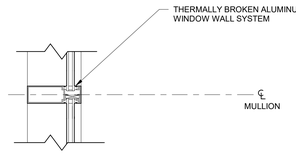
7 SOUTH VESTIBULE STOREFRONT TRANSITION

SCALE: 1 1/2" = 1'-0"



9 CLERESTORY EDGE SILL TERMINATION

SCALE: 1 1/2" = 1'-0"



6 STOREFRONT HORIZONTAL MULLION

SCALE: 1 1/2" = 1'-0"

5 STOREFRONT HORIZONTAL EXPANSION JOINT

SCALE: 1 1/2" = 1'-0"

4 GYM CLERESTORY MULLION AT COLUMN

SCALE: 1 1/2" = 1'-0"

3 GYM CLERESTORY JAMB DETAIL

SCALE: 1 1/2" = 1'-0"

2 GYM CLERESTORY CORNER DETAIL

SCALE: 1 1/2" = 1'-0"

SCALE: 1/4" = 1'-0"

1 GYMNASIUM PLAN - ANNEX - CLERESTORY

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SCALE: As indicated

LEVEL 3
LEVEL 2
LEVEL 1
KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

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EXTERIOR DETAILS

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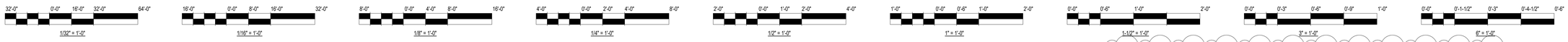
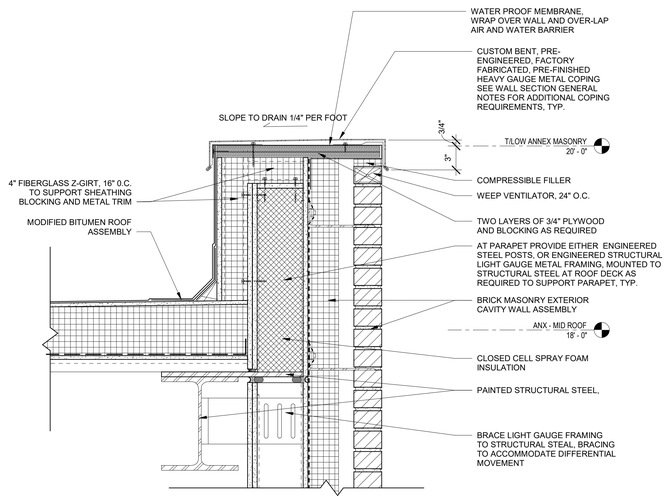
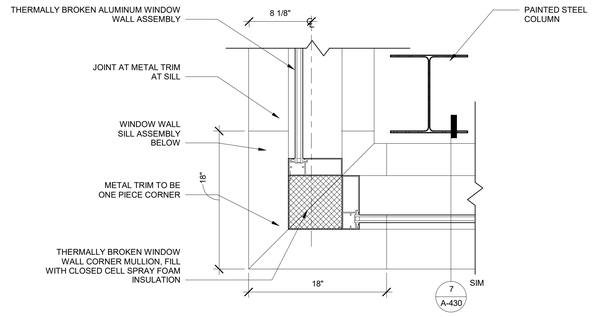
A-432





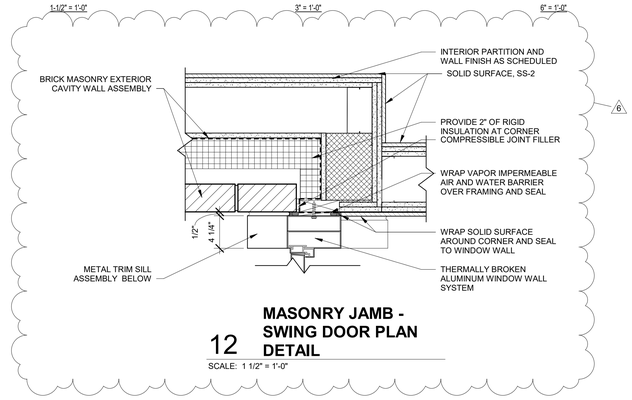
13 VESTIBULE COPING DETAIL

SCALE: 1 1/2" = 1'-0"



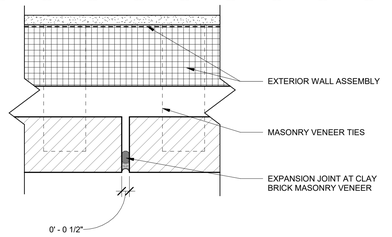
11 ANNEX LINK CORNER MULLION

SCALE: 1 1/2" = 1'-0"



12 MASONRY JAMB - SWING DOOR PLAN DETAIL

SCALE: 1 1/2" = 1'-0"



10 MASONRY BRICK EXPANSION JOINT

SCALE: 3" = 1'-0"

9 COPING - LINK WALL SECTION

SCALE: 1 1/2" = 1'-0"

7 MASONRY CORNER JOINT - EXPANSION

SCALE: 1 1/2" = 1'-0"

5 FIRE WALL ROOF FLASHING DETAIL AT GYM

SCALE: 1 1/2" = 1'-0"

2 ROOF EXPANSION JOINT ANNEX LINK

SCALE: 1 1/2" = 1'-0"

8 MASONRY INFILL DETAIL

SCALE: 1 1/2" = 1'-0"

REMOVE EXISTING MASONRY, OUTER WYTHE ONLY. REMOVE BROKEN UNITS ON INNER WYTHES TO SOUND SUBSTRATE. PROVIDE NEW MASONRY TO MATCH EXISTING, TOOTH IN AND LAY FLUSH. MATCH EXISTING COURSING AND PATTERN. PROVIDE STAINLESS STEEL PINTLE STYLE ANCHORS AND ATTACH TO EXISTING SUBSTRATE.

6 MASONRY REPLACEMENT DETAIL

SCALE: 1 1/2" = 1'-0"

4 MASONRY TUCKPOINT DETAIL

SCALE: 6" = 1'-0"

1 ENLARGED MASONRY ELEVATION

SCALE: 1 1/2" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS
2131 W MONROE ST, CHICAGO, IL 60612
CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR, STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

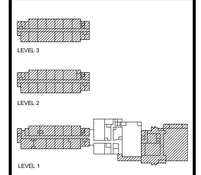
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

REVISIONS

NO.	DATE	DESCRIPTION
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01
7	Date 9	ADDENDUM 02

DRAWN BY: KOO LLC

SCALE: As indicated



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

EXTERIOR DETAILS

Sheet NOT FOR CONSTRUCTION

A-433

1/32" = 1'-0"   1/16" = 1'-0"   1/8" = 1'-0"   1/4" = 1'-0"   1/2" = 1'-0"   1" = 1'-0"   1-1/2" = 1'-0"   3" = 1'-0"   6" = 1'-0"

DOOR SCHEDULE REMARKS:

a. CLEAN EXTERIOR FRP DOOR, ANNODIZED ALUMINUM DOOR FRAME. REPLACE DOOR THRESHOLD, DOOR CLOSER, PANIC HARDWARE, KICKPLATE, AND 100% OF RUSTED FASTENERS, TO MATCH CPS STANDARDS, PATCH HOLES LEFT BY PREVIOUS DOOR HARDWARE IN FRAME, FLOOR SLAB & MASONRY WALLS
b. SCRAPE PRIME AND PAINT EXISTING DOOR AND DOOR FRAME
c. NEW DOOR TO BE LOCATED IN EXISTING WALL OPENING. VERIFY ROUGH OPENING SIZE IN FIELD
d. CLEAN, SAND, AND RESTAIN WOOD DOORS AND FRAMES AT OFFICE/ADMIN AREAS
e. **AT EXISTING CLASSROOM DOORS TO REMAIN**: SCRAPE PRIME AND PAINT EXISTING METAL DOORS AND DOOR/SIDELITE FRAMES. REPAIR ALL DAMAGE THAT MEASURES GREATER THAN 1/4" IN ANY DIRECTION. ASSUME 10 TOTAL DOORS, FRAMES, AND SIDELITE TO BE REPLACED IN KIND, SEE DOOR TYPE G. ASSUME 20 SF OF PATCH AND REPAIR AT WALLS, FLOORING, AND CEILING PER DOOR TO BE REPLACED. SEE NOTE (f) FOR HARDWARE REPLACEMENT.
f. **AT EXISTING DOORS TO REMAIN:** REMOVE AND REPLACE DOOR HARDWARE THROUGHOUT (DOOR LEVER/LOCKSETS INCLUDING FACE/STRIKE PLATES). DOOR HINGES ARE TO REMAIN U.N.O. REPLACE DAMAGED DOOR CLOSERS (ASSUME 10 TOTAL) AND PROVIDE MISSING DOOR CLOSERS (ASSUME 20 TOTAL). ALL DOORS TO BE REKEYED, ASSUME CPS STANDARD HARDWARE SETS. REMOVE UNUSED LOCK HOOKS AT CLASSROOM DOORS THROUGHOUT (ASSUME 10 TOTAL). INFILL HOLES SGT AT AREA OF REMOVAL.
g. PROVIDE ELECTROMAGNETIC HOLD OPENS.

6

GENERAL NOTES:

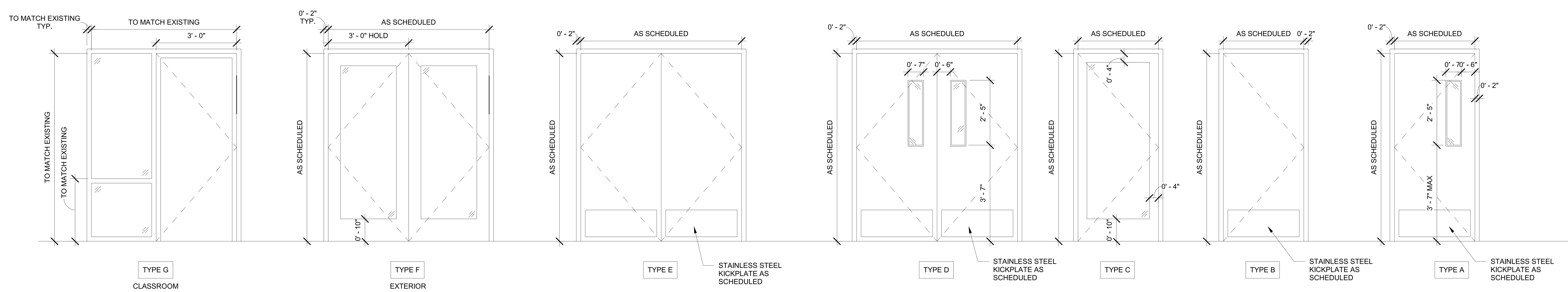
1. AT NEW DOOR OPENINGS THROUGH EXISTING MASONRY WALLS, ASSUME TOPPING MIXTURE WILL BE REQUIRED TO BRIDGE BETWEEN CONCRETE FLOOR SLABS AT DOOR SILL.
2. AT HOLLOW METAL DOORS, PROVIDE LOW PROFILE NEOPRENE BUBBLE SEALS AROUND HEAD AND JAMB, AND A 1/2" SILL WITH BULB NEOPRENE GASKET PER CPS STANDARDS.
3. ALL INTERIOR DOORS REQUIRE A 5 LB MAXIMUM OPERATING FORCE.

DOOR SCHEDULE

DOOR NO	ROOM NAME	ROOM NO	DOOR: DOOR SIZE: WIDTH	HEIGHT	THICKNESS	DOOR: TYPE	DOOR: MAT	DOOR: FINISH	FRAME: DETAILS (A-501B U.N.O.): HEAD	JAMB	FRAME: TYPE	FRAME: MAT	FRAME: FINISH	HDWR SET	FIRE RATING LABEL	REMARKS
LEVEL 1																
100A	ENTRY	100A	2' - 11"	6' - 4 1/2"	0' - 1 3/4"	EXIST.	--	--	EXIST.	EXIST.	EXIST.	--	--	126	--	a
100B	ENTRY	100A	2' - 11"	6' - 4 1/2"	0' - 1 3/4"	EXIST.	--	--	EXIST.	EXIST.	EXIST.	--	--	126	--	a
100C	ENTRY	100A	2' - 11"	6' - 4 1/2"	0' - 1 3/4"	EXIST.	--	--	EXIST.	EXIST.	EXIST.	--	--	126	--	a
100D	BOOK ST.	100B	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
100E	ALCOVE	100D	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	e
100F	ALCOVE	100D	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
100G	ELECTRIC ROOM	100E	5' - 0"	7' - 0"	0' - 1 3/4"	E	FRP	--	1	2		STEEL	PREFIN	132	C	
100H	JANITOR'S CLOSET	100C	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
100I	STORAGE	100F	3' - 0"	7' - 0"	0' - 1 3/4"	B	HM	PT-11	11	11		HM	PT-11	102	B	
101	HALLWAY	101	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
101A	COUNSELOR	101A	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	11	11		HM	PT-12	107	C	
101B	SOCIAL WORKER	101B	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	11	11		HM	PT-12	107	C	
101C	OCCUPATIONAL THERAPIST + SPEECH PATHOLOGIST	101C	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	11	11		HM	PT-12	107	C	
101D	COUNSELOR	101D	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	11	11		HM	PT-12	107	C	
101E	CARE ROOM	101E	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	11	11		HM	PT-12	107	C	
102	ALCOVE	102	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
102A	WORK ROOM	102A	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
102B	OFFICE	102B	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
102C	OFFICE	102C	3' - 0"	7' - 0"	0' - 1 3/4"	B	WD	WD-1	11	11		HM	PT-12	107	C	d
102D	ALCOVE	102	3' - 0"	7' - 0"	0' - 1 3/4"	B	WD	WD-1	11	11		HM	PT-12	102	C	d
103	CORRIDOR	100	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
103A	TEACHER'S LOUNGE	103	5' - 8"	7' - 0"	0' - 1 3/4"	E	WD	WD-1	11	11		HM	PT-12	111	B	
103B	TEACHER'S LOUNGE	103	5' - 8"	7' - 0"	0' - 1 3/4"	E	WD	WD-1	11	11		HM	PT-12	111	B	
104	ALCOVE	104	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
104A	CONF.	104A	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
104B	OFFICE	104B	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
104C	OFFICE	104C	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
104D	OFFICE	104D	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
104E	OFFICE	104E	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
105	MULTIPURPOSE ROOM	105	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
106	CLSRM	106	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
107	CLSRM	107	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
108	KINDERGARTEN	108	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
108A	STORAGE	108A	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	104	--	
108B	TOILET RM	108B	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	110	C	
108C	KINDERGARTEN	108	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
108F	OFFICE	102C	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	ST-1	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	d
109	KINDERGARTEN	109	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
109A	TOILET RM	109A	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	110	--	
109B	VESTIBULE	109B	2' - 6"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
109C	VESTIBULE	109B	3' - 0"	7' - 0"	0' - 1 3/4"	B	FRP	--	1	2		STEEL	PREFIN	126	C	c
110	KINDERGARTEN	110	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
110B	TOILET RM	110B	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	110	C	
111	KINDERGARTEN	111	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
111A	TOILET RM	111A	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	110	--	
111B	VESTIBULE	109B	2' - 6"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
113	GIRLS TOILET	113	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
115	BOYS TOILET	115	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
116	ACCESSIBLE ALL GENDER	116	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	106	C	e
117	STAIR #2	117	5' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
118	STAIR #1	118	5' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
127	LUNCHROOM	127	5' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
127A	LUNCHROOM	127	5' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
128	KITCHEN	128	2' - 10"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	124	--	
128B	KITCHEN	128	2' - 10"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	124	--	
131	STORAGE	131	2' - 10"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	116	--	
133	STORAGE	133	2' - 8"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
135	STORAGE	135	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
136	CORRIDOR	136	5' - 8"	7' - 0"	0' - 1 3/4"	E	FRP	--	1	2		STEEL	PREFIN	101	C	c
137	STORAGE	137	2' - 8"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
138	STORAGE	138	3' - 0"	7' - 0"	0' - 1 3/4"	B	FRP	--	1	2		STEEL	PREFIN	126	C	c
138A	STORAGE	138	2' - 8"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
139	STAGE	147	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	105	--	
140	STAFF TOILET	140	2' - 4"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	103	--	
141	OFFICE	141	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
142	STORAGE	142	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
143	STAFF TOILET	143	2' - 4"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	103	--	
144	GYM STORAGE	144	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	104	--	
145	BOILER RM	145	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
145A	BOILER RM	145	2' - 10"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
146	GYM OFFICE	146	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
148	GYM STORAGE	148	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	11	11		HM	PT-11	102	C	
149	EXISTING GYM	149	3' - 0"	7' - 0"	0' - 1 3/4"	A	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
149A	EXISTING GYM	149	6' - 0"	7' - 0"	0' - 1 3/4"	E	FRP	--	20	-		STEEL	PREFIN	131	C	
149B	EXISTING GYM	149	6' - 0"	7' - 0"	0' - 1 3/4"	E	HM	PT-11	10	9		HM	PT-11	105	C	
149C	EXISTING GYM	149	5' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	105	--	
149D	EXISTING GYM	149	5' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	105	--	
157	HEALTH ROOM	157	2' - 8"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
158	ADJUSTMENTS	158	2' - 8"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
158A	MDF	158A	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-12	EXIST.	EXIST.	EXIST.	--	PT-12	102	--	
159	OFFICE	159	2' - 10"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-12	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	
159A	OFFICE	159	2' - 0"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-12	EXIST.	EXIST.	EXIST.	--	PT-12	102	--	
160	TOILET RM	160	2' - 0"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	103	--	
161	STORAGE	161	2' - 10"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
161A	STORAGE	161	2' - 0"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-12	EXIST.	EXIST.	EXIST.	--	PT-12	102	--	
163	RECEPTION	163	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
164	STORAGE	161	2' - 10"	6' - 8"	0' - 1 3/4"	EXIST.	--	PT-12	EXIST.	EXIST.	EXIST.	--	PT-12	107	--	
165	CORRIDOR	165	5' - 8"	6' - 10"		EXIST.	--	--	EXIST.	EXIST.	EXIST.	--	--	134	--	a
165A	CORRIDOR	165	5' - 8"	6' - 10"		EXIST.	--	--	EXIST.	EXIST.	EXIST.	--	--	134	--	a
165B	CORRIDOR	165	5' - 8"	6' - 10"		EXIST.	--	--	EXIST.	EXIST.	EXIST.	--	--	134	--	a
165C	CORRIDOR	165	5' - 8"	6' - 10"		EXIST.	--	--	EXIST.	EXIST.	EXIST.	--	--	134	--	a

DOOR SCHEDULE

DOOR NO	ROOM NAME	ROOM NO	DOOR: DOOR SIZE: WIDTH	HEIGHT	THICKNESS	DOOR: TYPE	DOOR: MAT	DOOR: FINISH	FRAME: DETAILS (A-501B U.N.O.): HEAD	JAMB	FRAME: TYPE	FRAME: MAT	FRAME: FINISH	HDWR SET	FIRE RATING LABEL	REMARKS
165D	SERVICE CORRIDOR	165B	6' - 0"	7' - 0"	0' - 1 3/4"	E	FRP	--	1	2		STEEL	PREFIN	131	C	REMOVABLE MULLION
170A	VESTIBULE	170A	6' - 8"	7' - 2"		F	ALUM	CLEAR ANOD	-	7		ALUM	CLEAR ANOD	133	C	REMOVABLE MULLION
170B	VESTIBULE	170A	6' - 8"	7' - 2"		F	ALUM	CLEAR ANOD	-	7		ALUM	CLEAR ANOD	137	C	REMOVABLE MULLION
170C	HALL	171A	6' - 8"	7' - 2"		F	ALUM	CLEAR ANOD	-	7		ALUM	CLEAR ANOD	137	C	REMOVABLE MULLION
170D	VESTIBULE	170B	6' - 8"	7' - 2"		F	ALUM	CLEAR ANOD	-	7		ALUM	CLEAR ANOD	133	C	REMOVABLE MULLION
170F	RATED VESTIBULE (4HR)	170C	8' - 0 3/8"	7' - 0"	0' - 1 3/4"	E	HM	PT-11	2/A-423	-		HM	PT-12	115	180	g
170G	RATED VESTIBULE (4HR)	170C	8' - 0 3/8"	7' - 10"	0' - 1 3/4"	E	HM	PT-11	4	4		HM	PT-12	115	180	g
171A	LOBBY / PREFUNCTION	171	2' - 7 1/8"	6' - 11"	0' - 1 3/4"	C	ALUM	CLEAR ANOD	-	7		ALUM	CLEAR ANOD	136	C	
171B	LOBBY / PREFUNCTION	171	7' - 0"	7' - 9 3/8"	0' - 1 3/4"	73	WD	WD-1	19	19		HM	PT-12	115	C	g
171C	HALL	171C	2' - 8 11/16"	6' - 11"	0' - 1 3/4"	C	ALUM	CLEAR ANOD	-	7		ALUM	CLEAR ANOD	136	C	
172A	COMMUNITY ROOM	172	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	12	12		HM	PT-12	101	C	
172B	COMMUNITY ROOM	172	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	12	12		HM	PT-12	101	C	
172C	COMMUNITY RM. STORAGE	172A	5' - 0"	7' - 0"	0' - 1 3/4"	E	WD	WD-1	11	11		HM	PT-12	111	B	
172D	COMMUNITY RM. STORAGE	172A	5' - 0"	7' - 0"	0' - 1 3/4"	E	WD	WD-1	11	11		HM	PT-12	111	B	
173A	GYMNASIUM	173	6' - 0"	7' - 0"	0' - 1 3/4"	E	FRP	--	21	-		HM	PT	131	C	REMOVABLE MULLION
173B	GYMNASIUM	173	5' - 11"	7' - 0"	0' - 1 3/4"	D	WD	WD-1	12	12		HM	PT-12	105	C	
173C	GYMNASIUM	173	5' - 11"	7' - 0"	0' - 1 3/4"	D	WD	WD-1	12	12		HM	PT-12	105	C	
173D	GYM OFFICE	173A	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	11	11		HM	PT-12	101	C	
173E	CPS GYM STORAGE	173B	5' - 0"	7' - 0"	0' - 1 3/4"	E	WD	WD-1	11	11		HM	PT-12	111	C	
173F	CPD GYM STORAGE	173C	5' - 0"	7' - 0"	0' - 1 3/4"	E	WD	WD-1	11	11		HM	PT-12	111	C	
173G	PUMP ROOM	173D	3' - 6"	7' - 1"	0' - 1 3/4"	B	WD	WD-1	11	11		HM	PT-12	102	C	
173H	PUMP ROOM	173D	3' - 6"	7' - 0"	0' - 1 3/4"	72	FRP	--	21	-		STEEL	PREFIN	126		
174	CUSTODIAL ROOM	174	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	12	12		HM	PT-12	102	C	
175	ALL GENDER TOILET ROOM	175	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	12	12		HM	PT-12	106	C	
176	ALL GENDER LOCKER ROOM	176	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	12	12		HM	PT-12	106	C	
178	SERVICE CORRIDOR	178	6' - 0"	7' - 0"	0' - 1 3/4"	E	WD	WD-1	12	12		HM	PT-12	105	C	
179A	ELECTRIC ROOM	179	3' - 0"	7' - 0"	0' - 1 3/4"	B	FRP	--	1	2		STEEL	PREFIN	126	C	
179B	ELECTRIC ROOM	179	3' - 0"	7' - 0"	0' - 1 3/4"	B	HM	PT-12	11	11		HM	PT-12	102	C	
180	IDF	180	3' - 0"	7' - 0"	0' - 1 3/4"	B	HM	PT-12	11	11		HM	PT-12	102	C	
181	STORAGE ROOM	181	3' - 0"	7' - 0"	0' - 1 3/4"	B	HM	PT-12	11	11		HM	PT-12	102	C	
182	CLOSET	182	3' - 0"	7' - 0"	0' - 1 3/4"	B	HM	PT-12	12	12		HM	PT-12	111	C	
CLSRM - LEVEL 2																
200B	ELEVATOR MACHINE RM	202B	3' - 0"	7' - 0"	0' - 1 3/4"	B	HM	PT-11	12	12		HM	PT-11	102	C	
200C	STORAGE	202A	5' - 8"	7' - 0"	0' - 1 3/4"	E	HM	PT-11	12	12		HM	PT-11	111	C	
200D	STORAGE	202A	5' - 8"	7' - 0"	0' - 1 3/4"	E	HM	PT-11	12	12		HM	PT-11	111	C	
201	COMPUTER ROOM	201	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
202	MULTI-PURPOSE	202	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	117	--	
202A	MULTI-PURPOSE	202	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	12	12		HM	PT-11	117	C	
203	CLSRM	203	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
204	CLSRM	204	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
205	CLSRM	205	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
206	CLSRM	206	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
207	CLSRM	207	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
208	CLSRM	208	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
209	CLSRM	209	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
210	CLSRM	210	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
211	SENSORIAL RM	211	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
213	CORRIDOR	200	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
213A	STORAGE	213A	2' - 10"	7' - 0"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
214	BOY'S TOILET	214	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
215	JANITOR CLOSET	215	2' - 10"	7' - 0"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
216	GIRL'S TOILET	216	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
217	STAIR #2	217	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
217A	STAIR #2	217	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
218	STAIR #1	218	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
218A	STAIR #1	218	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
219	BOYS TOILET	219	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
220	GIRLS TOILET	220	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
221	ACCESSIBLE ALL GENDER	221	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
222	STORAGE	222	3' - 0"	7' - 0"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	102	C	e
223	VESTIBULE	223	5' - 0"	7' - 0"	0' - 1 3/4"	E	HM	PT-11	24	22		HM	PT-11	115	C	
CLSRM - LEVEL 3																
301	CLSRM	301	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
302	INCENTIVE ROOM	302	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
302A	INCENTIVE ROOM	302	2' - 8"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
303	CLSRM	303	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
304	COMPUTER ROOM	304	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
305	CLSRM	305	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
306	CLSRM	306	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
308	PULL-OUT ROOM	308	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
309	SCIENCE LAB	309	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
309A	SCIENCE LAB STORAGE	309A	3' - 0"	7' - 0"	0' - 1 3/4"	A	WD	WD-1	11	11		HM	PT-12	106	B	e
309B	SCIENCE LAB	309	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
310	RESOURCE ROOM	310	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
311	MUSIC ROOM	311	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
312	GAME ROOM	312	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
313	VISUAL ART RM	313	3' - 0"	7' - 0"	0' - 1 3/4"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	101	--	
313A	STORAGE	313A	2' - 10"	7' - 0"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
314	BOY'S TOILET	314	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	
315	GIRL'S TOILET	315	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	
316	JANITOR'S CLOSET	316	2' - 10"	7' - 0"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	102	--	
317	STAIR #2	317	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
317A	STAIR #2	317	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
318	STAIR #1	318	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
318A	STAIR #1	318	3' - 4"	6' - 8"	0' - 2"	EXIST.	--	PT-11	EXIST.	EXIST.	EXIST.	--	PT-11	119	--	
319	BOY'S TOILET	319	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
320	GIRL'S TOILET	320	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
321	ACCESSIBLE ALL GENDER	321	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	11	11		HM	PT	106	C	e
321	ACCESSIBLE ALL GENDER	321	3' - 0"	6' - 8"	0' - 1 3/4"	B	HM	PT-11	24	22		HM	PT-11	103	C	e
322	STORAGE	322	3' - 0"	7' - 0"	0' - 1 3/4"	A	HM	PT-11	24	22		HM	PT-11	102	C	
323	VESTIBULE	323	5' - 0"	7' - 0"	0' - 1 3/4"	E	HM	PT-11	24	22		HM	PT-11	115	C	



GENERAL NOTE: PROVIDE SMOOTH SURFACE WITHIN 10" OF FINISHED FLOOR, THE FULL WIDTH OF DOOR

1 **DOOR TYPES**
SCALE: 1/2" = 1'-0"

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST, CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC
SCALE: As indicated

LEVEL 3
LEVEL 2
LEVEL 1
KEY PLAN

PBC Project Name: DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS
PBC Contract No: 05445
CPS Project #2021-26031-ADM
Project No: 2138

Title
DOOR SCHEDULE

Sheet NOT FOR CONSTRUCTION
A-501A

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

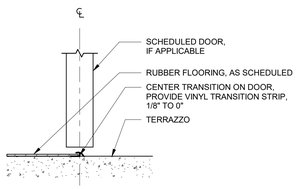
2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

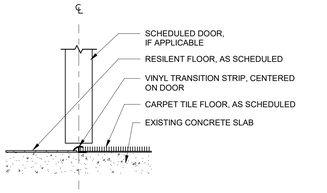
0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

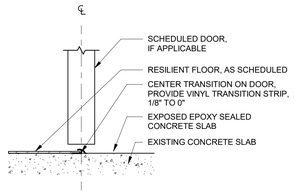
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



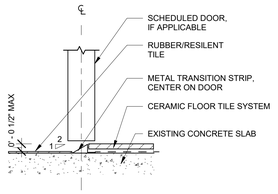
18 FLOOR TRANSITION - RESILIENT TO TERRAZZO
SCALE: 3" = 1'-0"



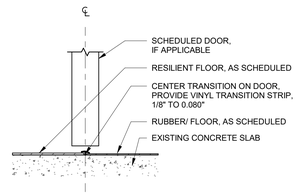
17 FLOOR TRANSITION - RESILIENT TO CARPET
SCALE: 3" = 1'-0"



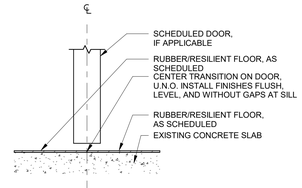
16 FLOOR TRANSITION - RESILIENT TO EXPOSED CONCRETE
SCALE: 3" = 1'-0"



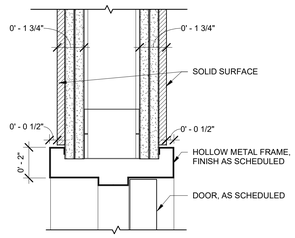
15 FLOOR TRANSITION - RESILIENT TO TILE
SCALE: 3" = 1'-0"



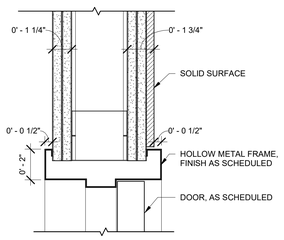
14 FLOOR TRANSITION - RESILIENT TO RUBBER
SCALE: 3" = 1'-0"



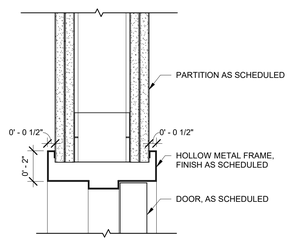
13 FLOOR TRANSITION - RESILIENT TO RESILIENT
SCALE: 3" = 1'-0"



19 HEAD/JAMB AT SOLID SURFACE WALL
SCALE: 3" = 1'-0"



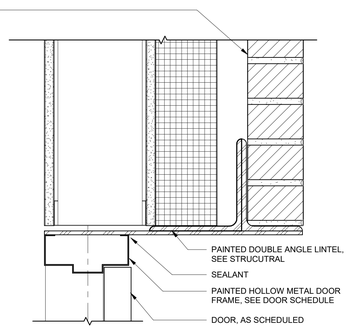
12 HEAD/JAMB AT SOLID SURFACE AND METAL STUD WALL
SCALE: 3" = 1'-0"



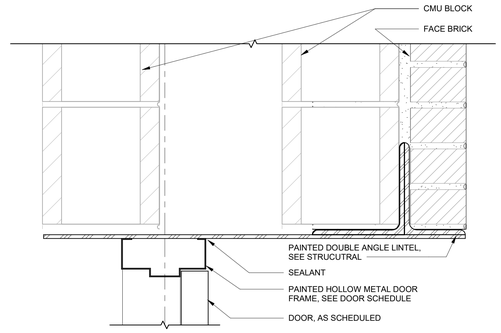
11 HEAD/JAMB AT METAL STUD WALL
SCALE: 3" = 1'-0"

EXTERIOR WALL CONSTRUCTION:

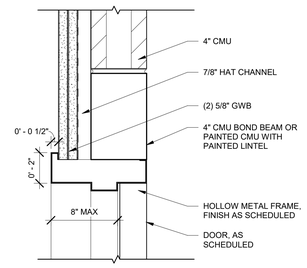
- FACE BRICK
- 2" AIR CAVITY
- 4" RIGID INSULATION
- VAPOR IMPERMEABLE AIR AND WATER BARRIER
- 5/8" EXT GRADE GYPSUM BOARD
- 6" COLD FORMED METAL FRAMING, 16 GA. MIN.



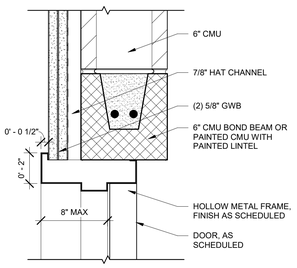
21 DOOR HEAD @ EXTERIOR GYM
SCALE: 3" = 1'-0"



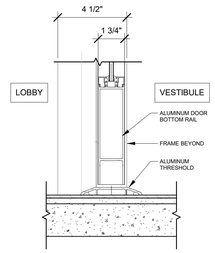
20 DOOR HEAD @ EXTERIOR EXTG GYM
SCALE: 3" = 1'-0"



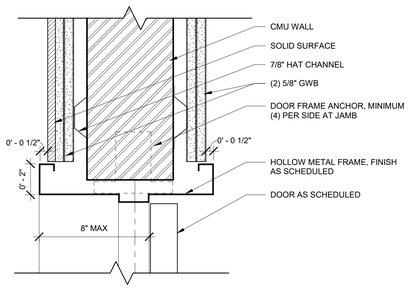
24 DOOR HEAD AT CMU WALL
SCALE: 3" = 1'-0"



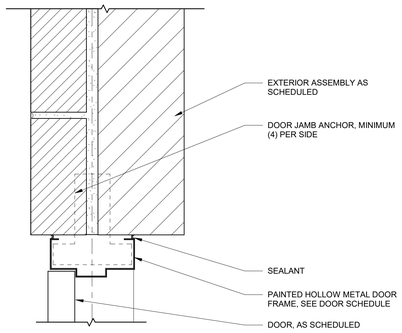
10 DOOR HEAD AT CMU & GWB WALL
SCALE: 3" = 1'-0"



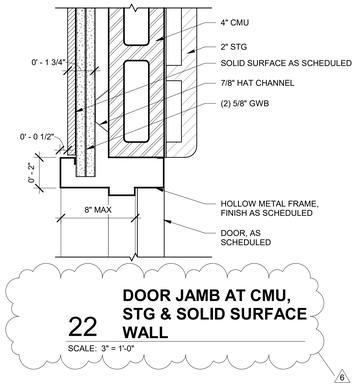
8 DOOR SILL AT ALUM WINDOWALL
SCALE: 3" = 1'-0"



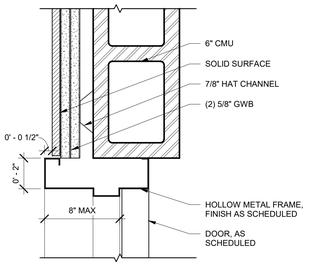
4 DOOR JAMB AT CMU, GWB & SOLID SURFACE WALL
SCALE: 3" = 1'-0"



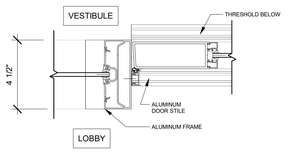
2 DOOR JAMB @ EXTERIOR MASONRY WALL
SCALE: 3" = 1'-0"



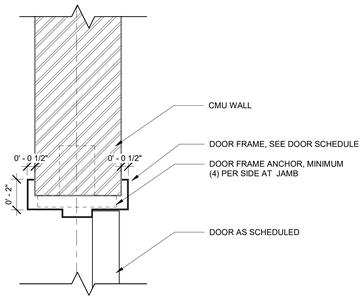
22 DOOR JAMB AT CMU, STG & SOLID SURFACE WALL
SCALE: 3" = 1'-0"



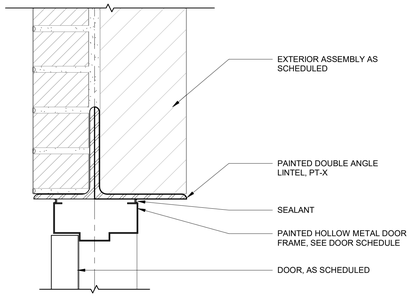
9 DOOR JAMB AT CMU, GWB, & SOLID SURFACE WALL
SCALE: 3" = 1'-0"



7 DOOR JAMB AT ALUM STOREFRONT
SCALE: 3" = 1'-0"



3 DOOR HEAD/JAMB AT CMU WALL
SCALE: 3" = 1'-0"



1 DOOR HEAD AT EXTERIOR MASONRY WALL
SCALE: 3" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE: 3" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

DOOR DETAILS

Sheet NOT FOR CONSTRUCTION

A-501B

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

FINISH SCHEDULE

	Number	Floor Finish	Wall Base	North Wall	South Wall	East Wall	West Wall	Ceiling Finish	Area
BUILDING ENGINEER PARKING SPACE									127 SF
PRINCIPAL PARKING SPACE									113 SF
CORRIDOR	100	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	2520 SF
ENTRY	100A	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	223 SF
BOOK ST.	100B	VCT-1	-	PT-1	PT-1	PT-1	PT-1	PT-9	194 SF
JANITOR'S CLOSET	100C	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	25 SF
ALCOVE	100D	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	95 SF
ELECTRIC ROOM	100E	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	187 SF
STORAGE	100F	RT-11	-	PT-1	PT-1	PT-1	PT-1	GYP-1	45 SF
HALLWAY	101	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	206 SF
COUNSELOR	101A	CP-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	110 SF
SOCIAL WORKER	101B	CP-1	-	PT-1	PT-1, WT-1	PT-1	PT-1	APC-2	147 SF
OCCUPATIONAL THERAPIST + SPEECH PATHOLOGIST	101C	CP-1	-	PT-1	PT-1, WT-1	PT-1	PT-1	APC-2	177 SF
COUNSELOR	101D	CP-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	139 SF
CARE ROOM	101E	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	117 SF
ALCOVE	102	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	231 SF
WORK ROOM	102A	VCT-1	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	323 SF
OFFICE	102B	VCT-1	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	105 SF
OFFICE	102C	VCT-1	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	123 SF
TEACHER'S LOUNGE	103	VCT-1	-	PT-1	PT-1, WT-1	PT-1	PT-1	APC-2	607 SF
STORAGE	103B	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	50 SF
ALCOVE	104	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	262 SF
CONF	104A	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	175 SF
OFFICE	104B	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	52 SF
OFFICE	104C	VCT-1	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	125 SF
OFFICE	104D	VCT-1	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	85 SF
OFFICE	104E	VCT-1	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	85 SF
MULTIPURPOSE ROOM	105	VCT-2	-	PT-1	PT-1, WT-1	PT-1	PT-1	APC-2	816 SF
CORRIDOR	105F	VCT-2	-	PT-1	PT-1	PT-1	PT-1	APC-2	115 SF
CLSRM	106	-	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	818 SF
CLSRM	107	VCT-2	-	WT-1	PT-1, WT-1	PT-1	PT-1	APC-2	816 SF
KINDERGARTEN	108	-	RB-1	PT-1	PT-1	PT-8	PT-1	-	1246 SF
STORAGE	108A	-	-	PT-1	PT-1	PT-1	PT-1	-	64 SF
TOILET RM	108B	-	-	PT-1	PT-1	PT-1	PT-1	-	61 SF
KINDERGARTEN	109	-	RB-1	PT-1	PT-1	PT-8	PT-1	-	1166 SF
TOILET RM	109A	-	-	PT-1	PT-1	PT-1	PT-1	-	38 SF
VESTIBULE	109B	-	-	PT-1	PT-1	PT-1	PT-1	-	37 SF
KINDERGARTEN	110	-	RB-1	PT-1	PT-1	PT-1	PT-8	-	939 SF
STORAGE	110A	-	-	PT-1	PT-1	PT-1	PT-1	-	48 SF
TOILET RM	110B	-	-	PT-1	PT-1	PT-1	PT-1	-	58 SF
KINDERGARTEN	111	-	RB-1	PT-1	PT-1	PT-1	PT-8	-	1181 SF
TOILET RM	111A	-	-	PT-1	PT-1	PT-1	PT-1	-	38 SF
GIRLS TOILET	113	TR-1	-	SS-5	SS-5	SS-2	SS-5	GYP-2	224 SF
BOYS TOILET	115	TR-1	-	SS-5	SS-5	SS-5	SS-2	GYP-2	210 SF
ACCESSIBLE ALL GENDER	116	TR-1	-	SS-5	SS-2	SS-5	SS-5	PT	57 SF
STAIR #2	117	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	250 SF
STAIR #1	118	-	--	PT-1	PT-1	PT-1	PT-1	PT-9	237 SF
LUNCHROOM	127	VCT-2	-	PT-1	PT-1	PT-1	PT-1	APC-2	2288 SF
KITCHEN	128	-	-	PT-1	PT-1	PT-1	PT-1	-	700 SF
JANITOR	130	-	-	PT-1	PT-1	PT-1	PT-1	-	40 SF
STORAGE	131	-	-	PT-1	PT-1	PT-1	PT-1	-	44 SF
CORRIDOR	132	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	323 SF
STORAGE	133	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	87 SF
OFFICE	134			PT-1	PT-1	PT-1	PT-1	AB-1	60 SF
STORAGE	135			PT-1, WT-1	PT-1	PT-1	PT-1	-	440 SF
CORRIDOR	136	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	158 SF
STORAGE	137			PT-1	PT-1	PT-1	PT-1	-	88 SF
STORAGE	138			PT-1	PT-1	PT-1	PT-1	-	126 SF
CORRIDOR	139	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	108 SF
STAFF TOILET	140	TR-1	-	SS-5	SS-5	SS-5	SS-2	-	61 SF
OFFICE	141			PT-1	PT-1	PT-1	PT-1	-	51 SF
STORAGE	142			PT-1	PT-1	PT-1	PT-1		63 SF
STAFF TOILET	143	TR-1	-	SS-5	SS-5	SS-5	SS-2	-	69 SF
GYM STORAGE	144	VCT-1	-	PT-1	PT-1	PT-1	PT-1	GYP-1	113 SF
BOILER RM	145	-	-	PT-1	PT-1	PT-1	PT-1	-	1110 SF
GYM OFFICE	146	VCT-1	-	PT-1	PT-1	PT-1	PT-1	-	83 SF
STAGE	147	-	-	PT-1	PT-1	PT-1	PT-1	-	709 SF
GYM STORAGE	148	VCT-1	-	PT-1	PT-1	PT-1	PT-1	GYP-1	49 SF
EXISTING GYM	149	-	-	PT-1	PT-1	PT-1	PT-1	-	5681 SF
BOYS TOILET	153	TR-1	-	SS-5	SS-2	SS-5	SS-5	GYP-2	227 SF
GIRLS TOILET	154	TR-1	-	SS-2	SS-5	SS-5	SS-5	GYP-2	218 SF
HEALTH ROOM	157	-	-	PT-1	PT-1	PT-1	PT-1	-	142 SF
ADJUSTMENTS	158	-	-	PT-1	PT-1	PT-1	PT-1	-	378 SF
MDF	158A	-	-	PT-1	PT-1	PT-1	PT-1	-	66 SF
OFFICE	159	-	-	PT-1	PT-1	PT-1	PT-1	-	223 SF
TOILET RM	160	-	-	PT-1	PT-1	PT-1	PT-1	-	24 SF
STORAGE	161	-	-	PT-1	PT-1	PT-1	PT-1	-	189 SF
VAULT	162	-	-	PT-1	PT-1	PT-1	PT-1	-	136 SF
RECEPTION	163	-	-	PT-1	PT-1	PT-1	PT-1	-	151 SF

FINISH SCHEDULE

	Number	Floor Finish	Wall Base	North Wall	South Wall	East Wall	West Wall	Ceiling Finish	Area
CLERICAL	164	-	-	PT-1	PT-1	PT-1	PT-1	-	338 SF
CORRIDOR	165	VCT-1	-	PT-1	PT-1	PT-1	PT-1	-	825 SF
CORRIDOR	165A	VCT-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	1069 SF
SERVICE CORRIDOR	165B	VCT-1	-	PT-1	PT-1 6	PT-1	PT-1	APC-2	217 SF
CORRIDOR	165C	VCT-1	-	PT-1	PT-1	PT-1, SS-2	PT-1, SS-2	APC-2	347 SF
VESTIBULE	170A	TR-1	TRB-1	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	GYP-3	89 SF
VESTIBULE	170B	TR-1	TRB-1	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	GYP-3	116 SF
RATED VESTIBULE (4HR)	170C	TR-1	TRB-1	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	GYP-1	88 SF
LOBBY / PREFUNCTION	171	TR-1, TR-3	TRB-1, RB-2	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	AB-1, GYP-3	1525 SF
HALL	171A	TR-1	CB-1, RB-2	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	AB-1	1340 SF
CORRIDOR	171B	TR-1, TR-3	CB-1	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	AB-1, GYP-3	595 SF
HALL	171C	TR-1	CB-1	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	SS-2, PT-13	GYP-1	780 SF
COMMUNITY ROOM	172	TR-1, TR-2	TRB-1	PT-2	PT-3	PT-3	PT-2	APC-1	1881 SF
COMMUNITY RM. STORAGE	172A	EXP-1	RB-1	PT-1	PT-1	PT-1	PT-1	APC-2	321 SF
GYMNASIUM	173	WD-1	WB-1 6	PT-1, PT-4, PT-3	PT-1, PT-4, PT-3	PT-3, PT-4 ,PT-1, SS-4	PT-1, PT-3, PT-4, SS-4	-	7470 SF
GYM OFFICE	173A	RT-1	RB-1	PT-1	PT-1	PT-1	PT-1	APC-2	171 SF
CPS GYM STORAGE	173B	RT-1	RB-1	PT-1	PT-1	PT-1	PT-1	GYP-1	217 SF
CPD GYM STORAGE	173C	RT-1	RB-1	PT-1	PT-1	PT-1	PT-1	GYP-1	217 SF
PUMP ROOM	173D	RS-1	RB-1 6	PT-1	PT-1	PT-1	PT-1	GYP-1	227 SF
CUSTODIAL ROOM	174	RS-1	RB-1	PT-1	PT-1	PT-1	PT-1	GYP-2	79 SF
ALL GENDER TOILET ROOM	175	TR-1	TRB-1	SS-5	SS-5	SS-5	SS-2	GYP-2	91 SF
ALL GENDER LOCKER ROOM	176	TR-1	TRB-1	SS-5	SS-5	SS-5	SS-2	GYP-2	143 SF
GENDER NEUTRAL RESTROOM	177	TR-1	TRB-1	SS-5	SS-5	SS-5, SS-2	SS-5, SS-2	GYP-2	795 SF
SERVICE CORRIDOR	178	RS-1	RB-1	PT-1	PT-1	PT-1	PT-1	-	200 SF
ELECTRIC ROOM	179	RS-1	RB-1	PT-1	PT-1	PT-1	PT-1	GYP-1	156 SF
IDF	180	RT-11	RB-1	PT-1	PT-1	PT-1	PT-1	PT-9	119 SF
STORAGE ROOM	181	RS-1	RB-1	PT-1	PT-1	PT-1	PT-1	GYP-2	106 SF
CLOSET	182	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	38 SF
CORRIDOR	200	VCT-2	-	PT-1	PT-1	PT-1	PT-1	APC-2	2627 SF
COMPUTER ROOM	201	VCT-2	-	PT-1	PT-1, WT-1	PT-1	PT-1	APC-2	787 SF
MULTI-PURPOSE	202	CP-1	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-2	1285 SF
STORAGE	202A	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	112 SF
ELEVATOR MACHINE RM	202B	RS-1	-	PT-1	PT-1	PT-1	PT-1	APC-2	116 SF
CLSRM	203	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	815 SF
CLSRM	204	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	818 SF
CLSRM	205	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	815 SF
CLSRM	206	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	817 SF
CLSRM	207	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	814 SF
CLSRM	208	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	816 SF
CLSRM	209	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	816 SF
CLSRM	210	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	826 SF
SENSORIAL RM	211	VCT-2	-	PT-1	PT-1, WT-2	PT-1	PT-1	APC-1	797 SF
DANCE ROOM	213	RT-4	-	PT-1	PT-1, WT-2	PT-1	PT-1	APC-1	812 SF
STORAGE	213A	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	117 SF
BOY'S TOILET	214	TR-1	-	SS-5	SS-5	SS-5	SS-2	GYP-2	203 SF
JANITOR CLOSET	215	RS-1	-	PT-1	PT-1	PT-1	PT-1	PT-1	37 SF
GIRL'S TOILET	216	TR-1	-	SS-5	SS-5	SS-2	SS-5	GYP-2	202 SF
STAIR #2	217	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	259 SF
STAIR #1	218	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	251 SF
BOYS TOILET	219	TR-1	-	SS-5	SS-5	SS-5	SS-2	GYP-2	212 SF
GIRLS TOILET	220	TR-1	-	SS-5	SS-5	SS-5	SS-2	GYP-2	226 SF
ACCESSIBLE ALL GENDER	221	TR-1	-	SS-5	SS-5	SS-5	SS-2	GYP-2	57 SF
STORAGE	222	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	15 SF
VESTIBULE	223	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	106 SF
CORRIDOR	300	VCT-2	-	PT-1	PT-1	PT-1	PT-1	APC-2	2645 SF
CLSRM	301	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	787 SF
INCENTIVE ROOM	302	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	797 SF
CLSRM	303	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	815 SF
COMPUTER ROOM	304	VCT-2	-	PT-1, WT-2	PT-1	PT-1	PT-8	APC-2	818 SF
CLSRM	305	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	815 SF
CLSRM	306	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	817 SF
PULL-OUT ROOM	308	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	816 SF
SCIENCE LAB	309	VCT-2	-	PT-1	PT-1, WT-1	PT-10, PT-1	PT-8	APC-2	1460 SF
SCIENCE LAB STORAGE	309A	VCT-2	-	PT-1	PT-1	PT-1	PT-1	APC-2	165 SF
RESOURCE ROOM	310	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-8	APC-2	814 SF
MUSIC ROOM	311	VCT-2	-	PT-1, WT-1	PT-1	PT-1	PT-1	APC-1	813 SF
GAME ROOM	312	VCT-2	-	PT-1, WT-2	PT-1	PT-1	PT-8	APC-1	828 SF
VISUAL ART RM	313	VCT-2	-	PT-1	PT-1, WT-1	PT-8	PT-1	APC-2	814 SF
STORAGE	313A	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	117 SF
BOY'S TOILET	314	TR-1	-	SS-5	SS-5	SS-5	SS-2	GYP-2	199 SF
GIRL'S TOILET	315	TR-1	-	SS-5	SS-5	SS-2	SS-5	GYP-2	202 SF
JANITOR'S CLOSET	316	RS-1	-	PT-1	PT-1	PT-1	PT-1	GYP-2	37 SF
STAIR #2	317	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	259 SF
STAIR #1	318	-	-	PT-1	PT-1	PT-1	PT-1	PT-9	254 SF
BOY'S TOILET	319	TR-1	-	SS-5	SS-5	SS-5	SS-2	GYP-2	213 SF
GIRL'S TOILET	320	TR-1	-	SS-5	SS-5	SS-2	SS-5	GYP-2	228 SF
ACCESSIBLE ALL GENDER	321	TR-1	-	SS-5	SS-2	SS-5	SS-5	GYP-2	57 SF
STORAGE	322	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	15 SF
VESTIBULE	323	VCT-2	-	PT-1	PT-1	PT-1	PT-1	GYP-1	106 SF

NOTE THAT NO SCOPE IS PROPOSED WHERE COLUMN IS LEFT BLANK.

EXISTING BUILDING PAINT SCOPE:

1. PAINT AS SCHEDULED IN ROOM SCHEDULE
2. PRIME AND PAINT ALL ROOMS AND SPACES WITHIN THE EXISTING SCHOOL
3. DO NOT PAINT ANY EXISTING GLAZED TILE OR GLAZED MASONRY. LOCATION OF GLAZED TILE OR GLAZED MASONRY WAINSCOT INCLUDES BUT IS NOT LIMITED TO, CORRIDORS, GYMNASIUM, LUNCHROOM, KITCHEN. VERIFY CONSTRUCTION IN FIELD

GENERAL PAINT NOTES:

1. REVIEW QUALITY ASSURANCE REQUIREMENTS IN SPECIFICATIONS, GC TO SCHEDULE A PRE-APPLICATION CONFERENCE PRIOR TO PAINTING. SEE RENOVATION PAINTING SPECIFICATION FOR ADDITIONAL INFORMATION.
2. IN ALL ROOMS SCHEDULE TO BE PAINTED, PAINT ALL MISCELLANEOUS METAL INCLUDING AIR GRILLES, PIPES, LOUVERS, RACEWAY, ETC. SCUFF SAND AND CLEAN METAL SURFACES TO REMOVE CONTAMINANTS.
3. REMOVE ALL LOOSE, CRACKED, AND PEELING PAINT, WHERE NOT AT CMU WALLS, SKIM COAT SURFACE IN ORDER TO ACHIEVE A UNIFORM FINISH.
4. PATCH HOLES IN WALLS AND CEILINGS GREATER THAN 1/4" IN ANY DIRECTION. SKIM COAT WALL IN AREA OF REMOVED TRIM. PREP AND PRIME WITH FLAT, WHITE LATEX PRIMER PRIOR TO PAINTING.
5. PAINT ALL EXPOSED DUCTWORK, PIPING, CONDUIT, JUNCTION BOXES, AND SIMILAR ITEMS THAT ARE EXISTING TO REMAIN, PAINT COLOR TO MATCH ADJACENT WALL OR CEILING SURFACE.
6. SCUFF SAND ALL BRICK, BLOCK, AND TILE. CLEAN SURFACE TO REMOVE ANY SURFACE CONTAMINANTS PRIOR TO PAINTING.
7. WHERE EXISTING FIRE ALARM/ELECTRICAL DEVICES, OR SIGNAGE ARE REMOVED, PATCH AND PAINT SURFACES TO MATCH ADJOINING SURFACES.
8. AT EXISTING CONCRETE CEILINGS AND STRUCTURE TO RECEIVE PAINT, ASSUME CEMENTITIOUS SURFACE PATCHING FOR 30% OF AREA.

PUBLIC BUILDING COMMISSION OF CHICAGO

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

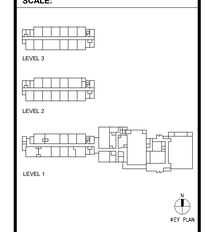
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

REVISIONS

NO.	DATE	DESCRIPTION
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE:



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FINISH NOTES AND SCHEDULE

Sheet NOT FOR CONSTRUCTION

A-502

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

SPECIALTY EQUIPMENT SCHEDULE

TYPE MARK	DESCRIPTION
	<varies>
EL-01	ELEVATOR HOISTWAY
EQP-1A	HAND TOWEL DISPENSER
EQP-1B	RECESSED PAPER TOWEL DISPENSER WITH FIXED WASTE BASKET
EQP-1C	WALL MOUNTED SANITARY NAPKIN DISPOSAL
EQP-1E	SANITARY NAPKIN DISPENSER, WALL MOUNTED
EQP-2	SOAP DISPENSER
EQP-3	WALL MOUNTED CLOCK - SEE ELECTRICAL
EQP-4	UTILITY SHELF W/ APRON HOOKS, WALL MOUNTED
EQP-4B	NOT USED
EQP-4C	EMERGENCY CENTER
EQP-4D	PEGBOARD DRYING RACK, 2' X 2'4"
EQP-4E	SAFETY GOGGLE CONTROL CENTER, WALL-MOUNTED LOCKABLE STEEL STORAGE CABINET. DESIGNED TO HOLD A MINIMUM OF 30 PAIRS OF CHEMICAL SPLASH GOGGLES
EQP-4F	APRON RAIL WITH HOOKS, TO ACCOMODATE 32 APRONS
EQP-5A	TEACHING WALL. (2) 4'x4' TACKBOARDS , (1) 12' MARKERBOARD
EQP-5C	TEACHING WALL. (1) 3'x4' TACKBOARDS , (1) 6'X4' MARKERBOARD
EQP-5D	TEACHING WALL. 4'x1' TACKBOARD, 6' MARKERBOARD
EQP-5E	TACK STRIP 5'X2'
EQP-6	MODERNFOLD OPERABLE PARTITION
EQP-7	WALL MOUNTED FULL HEIGHT MIRROR
EQP-7A	WALL MOUNTED MIRROR ABOVE SINK
EQP-7C	3X5 WALL MOUNTED MIRROR
EQP-8	VERTICAL GRAB BAR, CHILD ADA
EQP-8A	REAR WALL GRAB BAR
EQP-8B	SIDE WALL GRAB BAR, ELEMENTARY ADA
EQP-8C	VERTICAL GRAB BAR, ELEMENTARY ADA
EQP-8D	SIDE WALL GRAB BAR, ELEMENTARY ADA
EQP-8E	VERTICAL GRAB BAR, ADULT ADA
EQP-9	TOILET PAPER DISPENSER,SINGLE ROLL
EQP-10	WALL MOUNTED HAND DRYER, ADA ACCESSIBLE
EQP-11	MOTORIZED ADULT CHANGING TABLE. OWNER PROVIDED
EQP-12	URINAL SCREEN
EQP-15	MARKERBOARD 4'
EQP-15A	MARKERBOARD 12'
EQP-15B	MARKERBOARD 10' X 4'
EQP-16	TACKBOARD 4'
EQP-16A	TACKBOARD 4' 8
EQP-16B	TACKBOARD 10' X 3' 6"
EQP-18	METAL STUDENT LOCKERS WITH SLANTED TOP
EQP-19	PARTIAL HEIGHT DANCE MIRRORS CONTINUOUS
EQP-19A	FULL HEIGHT DANCE MIRRORS CONTINUOUS
EQP-19B	6X6 WALL MOUNTED MIRROR
EQP-20	CPS STANDARD MULTIHEIGHT DANCE BARRES, PERMANENLTY FLOOR MOUNTED
EQP-21	MUSICAL INSTRUMENT CART
EQP-22	SALVAGED TELEVISION
EQP-23	TOILET STALL - LIGHT BLUE PARTITION
EQP-25A	GYM WALL PADDING
EQP-25B	GYM WALL PADDING
EQP-25C	GYM WALL PADDING
EQP-25D	GYM WALL PADDING
EQP-25E	GYM WALL PADDING
EQP-25F	GYM WALL PADDING
EQP-25G	GYM WALL PADDING
EQP-26	ACOUSTICAL WALL PADDING
EQP-27	AUTOMATED TELESCOPIC BLEACHERS. BOD: IRWIN INFINITY SEAT MODULE
EQP-28	SCOREBOARD
EQP-30	FIXED LADDER WITH CAGE, PLATFORM, ROOFSIDE RETURN
EQP-32	ACCESS LADDER
EQP-37	CVTR ROOF VENT
EQP-38	SAFETY RAIL FOR NURSING BENCH
EQP-40	WALL MOUNTED SPEAKER - SEE ELECTRICAL
EQP-41	TOP ROLL GYMNASIUM CURTAIN DIVIDER. BOD: PSS PERFORMANCE 4040XL
EQP-42	FLOOR MOUNTED VOLLEYBALL SYSTEM. BOD: DRAPER INC EVS TWO COURT SYSTEM 500042
EQP-43	FRONT-FOLDING BASKETBALL BACKSTOP. BOD: DRAPER INC TF-20
EQP-44	SIGNAGE
EQP-45	4'X5' MOBILE MARKERBOARD

PLUMBING FIXTURE SCHEDULE

Type Mark	Description
	<varies>
DF-1	DRINKING FOUNTAIN WITH BOTTLE FILLER, ADULT ADA
DF-2	DRINKING FOUNTAIN, NO BOTTLE CHILLER,ADULT HEIGHT
DF-3	DRINKING FOUNTAIN
DF-4	DRINKING FOUNTAIN, NO BOTTLE CHILLER,CHILD HEIGHT
LAV-1	LAVATORY, WALL MOUNTED
LAV-1A	LAVATORY, WALL MOUNTED, ADA ACCESSIBLE, CHILD
LAV-1B	LAVATORY, WALL MOUNTED, ADA ACCESSIBLE, ADULT
LAV-2	ADULT HEIGHT DROP SINK WITH GOOSENECK FAUCET
LAV-3	CHILD HEIGHT DROP SINK WITH GOOSENECK FAUCET
LAV-4	UTILITY SINK WITH SOLIDS INTERCEPTOR
LAV-5	BARRIER FREE WALL MOUNTED EMERGENCY EYE WASH STATION
LAV-6	ADULT HEIGHT KITCHEN SINK
SH-2	MOP SINK
SHW-1	ADA AND ANSI COMPLIANT TRANSFER SHOWER WITH WHITE PHENOLIC SEAT, GRAB BARS, BOTTOM PLATE, AND ANTI-SLIP FLOOR. 1.375" STANDARD THRESHOLD
UR-1	STANDARD HEIGHT URINAL
WC-1	CPS STANDARD ADULT TOILET
WC-2	CPS STANDARD ADA ACCESSIBLE TOILET

FINISH LEGEND1

ITEM NO.	ITEM DESCRIPTION	MFR	PRODUCT	SIZE/PILE HT.
AB-1	ACOUSTIC BAFFLES	ARMSTRONG	SOUNDSCAPES PECAN (PC)	5" x 94"
APC-1	ACOUSTIC PANEL CEILING	ARMSTRONG (OR SIMILAR CPS APPROVED MANUFACTURER)	ULTIMA HIGH NRC	24" x 24" x 3/4"
APC-2	ACOUSTIC PANEL CEILING	USG CORPORATION (OR SIMLIAR CPS APPROVED MANUFACTURER)	SHEETROCK CLIMAPLUS	24" x 24" x 1/2"
CB-1	RESILIENT COVE BASE	TBD	TBD	
CMU-1	EXISTING CMU WALL TO REMAIN	EXISTING	PROVIDE PAINTED FINISH	2" x 2"
CP-1	CARPET TILE, LIBRARY	SHAW CONTRACT	TBD	18" X 36"
EXP-1	EXPOSED CONCRETE FLOOR	TBD	TBD	
FRP-1	FIBER REINFORCED PANEL	TBD	TBD	
GT-1	GROUT	MAPEI (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	
GYP-1	PAINTED GYPSUM BOARD CEILING	SEE SPECIFICATIONS	TBD	
GYP-2	PAINTED WATER RESISTANT GYPSUM BOARD CEILING	SEE SPECIFICATIONS	TBD	
GYP-3	PAINTED GYPSUM BOARD CEILING - ANNEX LOBBY ACCENT	TBD. SEE SPECIFICATIONS	TBD	
PL-1	PLASTIC LAMINATE	FORMICA (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	
PT-1	WALL PAINT - FIELD	BENJMAIN MOORE	DISTANT GRAY	
PT-2	WALL PAINT - BLUE ACCENT	BENJMAIN MOORE	CHICAGO BLUES	
PT-3	WALL PAINT - ANNEX GYMNASIUM, LIGHT ACCENT	BENJMAIN MOORE	TIMBER WOLF	
PT-4	WALL PAINT - ANNEX GYMNASIUM, DARK ACCENT	BENJMAIN MOORE	CHAMPION COBALT	
PT-5	WALL PAINT - COMMUNITY ROOM CEILING PLENUM	BENJMAIN MOORE	TBD	
PT-6	WALL PAINT - COMMUNITY ROOM	TBD	TBD	
PT-7	WALL PAINT - CEILING PLENUM	TBD	TBD	
PT-8	WALL PAINT - ACCENT	BENJMAIN MOORE	BLUE BAYOU	
PT-9	CEILING PAINT	BENJMAIN MOORE	SEMI-GLOSS FINISH	
PT-10	WALL PAINT - SCIENCE ROOM ACCENT	BENJAMIN MOORE	BROADWAY LIGHTS	
PT-11	CUSTOM COLOR LOCKER FINISH	BENJAMIN MOORE	CUSTOM COLOR	
PT-12	DOOR/FRAME PAINT	BENJAMIN MOORE	CHAMPION COBALT	
PT-13	BLACK PAINT	BENJAMIN MOORE	BLACK TAR	
QT-1	QUARRY TILE	DALTILE (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	6" x 6" x 1/2"
RB-1	RUBBER BASE	TARKETT (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	4"
RB-2	RUBBER BASE - COMMUNITY ROOM ACCENT	TARKETT (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	4"
RB-3	RUBBER BASE - COMMUNITY ROOM	TARKETT (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	4"
RS-1	RESINUOUS FLOORING	TBD	TBD	
RT-4	SPRUNG DANCE FLOOR	TBD	TBD	
RT-11	STATIC DISSIPATIVE RESILIENT TILE	ARMSTRONG (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	12" x 12" x 1/8"
SGT-1	EXISTING SGT TO REMAIN	EXISTING	EXISTING TO REMAIN. PATCH AND REPAIR AS NOTED.	2" x 2"
SS-1	SOLID SURFACE COUNTERTOP	FORMICA (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	
SS-2	SOLID SURFACE WAINSCOT	HIMACS (OR SIMILAR CPS APPROVED MANUFACTURER)	CREAM OAK Z102	30 x 144" x 1/4"
SS-3	SOLID SURFACE WAINSCOT - ANNEX LOBBY ACCENT	AVONITE (OR SIMILAR CPS APPROVED MANUFACTURER)	ANTIQUE BLUE 8258 SATIN	30" x 144" x 1/4"
SS-4	SOLID SURFACE WAINSCOT - ANNEX GYMNASIUM	CORIAN (OR SIMILAR CPS APPROVED MANUFACTURER)	LAGUNA	
SS-5	SOLID SURFACE WAINSCOT - ANNEX BATHROOM ACCENT	HIMACS (OR SIMILAR CPS APPROVED MANUFACTURER)	BLACK PEARL G010	30" x 144" x 1/4"
ST-1	WOOD DOOR STAIN	TBD	TBD	
TB-1	QUARRY TILE BASE	DALTILE (OR SIMILAR CPS APPROVED MANUFACTURER)	TBD	
TR-1	CAST IN PLACE TERRAZZO FLOORING - LIGHT	NSTONE (OR SIMILAR CPS APPROVED MANUFACTURER)	ASSUME CUSTOM MIX, PROVIDE PRE-CAST 4" TERRAZZO BASE IN MATCHING COLOR	
TR-2	CAST IN-PLACE TERRAZZO FLOORING - DARK	NSTONE (OR SIMILAR CPS APPROVED MANUFACTURER)	ASSUME CUSTOM MIX, PROVIDE PRE-CAST 4" TERRAZZO BASE IN MATCHING COLOR	
TR-3	CAST IN-PLACE TERRAZZO FLOORING - ANNEX LOBBY ACCENT	NSTONE (OR SIMILAR CPS APPROVED MANUFACTURER)	ASSUME CUSTOM MIX, PROVIDE PRE-CAST 4" TERRAZZO BASE IN MATCHING COLOR	
TRB-1	TERRAZZO MATCHING BASE	NSTONE (OR SIMILAR CPS APPROVED MANUFACTURER)	ASSUME CUSTOM MIX, PROVIDE PRE-CAST 4" TERRAZZO BASE IN MATCHING COLOR	
VCT-1	VINYL COMPOSITION TILE, CPS STANDARD 3 COLOR RANDOMIZED PATTERN	TARKETT	20% COPPER, 30% BUTTERMILK, 50% WINTERSORM	
VCT-2	VINYL COMPOSITION TILE, CPS STANDARD 3 COLOR RANDOMIZED PATTERN	TARKETT	20% DEEP WATER, 30% BUTTERMILK, 50% WINTER STORM	
WB-1	PAINTED METAL ANGLE	TBD	TBD	
WD-1	COMPETITION WOOD FLOOR WITH STRIPING	TBD	TBD	
WD-1	MAPLE VENEER	TBD	TBD	
WT-1	WINDOW TREATMENT - SHEER ROLLER SHADES	DRAPER, INC. (OR SIMILAR CPS APPROVED MANUFACTURER)	SINGLE ROLLER WITH WHITE CLUTCH AND BRACKETS, STAINLESS STEEL BEAD CHAIN, HARDWARE FINISH: ANODIZED ALUMNINUM, FABRIC: 9803 3% WHITELLINEN	
WT-2	WINDOW TREATMENT - BLACKOUT ROLLER SHADES - MOTORIZED	DRAPER, INC. (OR SIMILAR CPS APPROVED MANUFACTURER)	SINGLE ROLLER WITH WHITE CLUTCH AND BRACKETS, STAINLESS STEEL BEAD CHAIN, HARDWARE FINISH: ANODIZED ALUMNINU	
WT-3	WINDOW TREATMENT - BLACKOUT ROLLER SHADES - MANUAL	DRAPER, INC. (OR SIMILAR CPS APPROVED MANUFACTURER)	SINGLE ROLLER WITH WHITE CLUTCH AND BRACKETS, STAINLESS STEEL BEAD CHAIN, HARDWARE FINISH: ANODIZED ALUMNINU	

PUBLIC BUILDING COMMISSION OF CHICAGO

Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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REVISIONS

NO.	DATE	DESCRIPTION
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY: KOO LLC

SCALE:

LEVEL 3

LEVEL 2

LEVEL 1

N
KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FINISH LEGEND, PLUMBING, SPECIALTY EQP SCHEDULE

Sheet NOT FOR CONSTRUCTION

A-503

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
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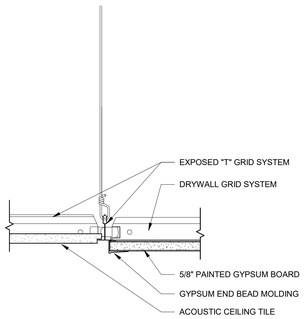
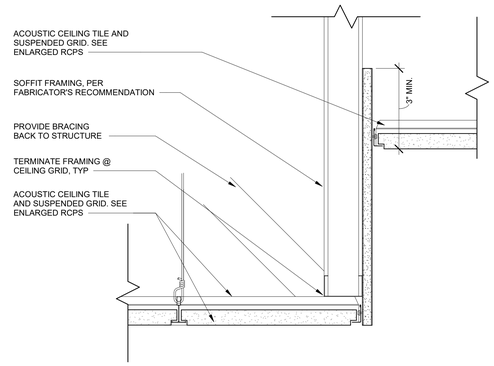
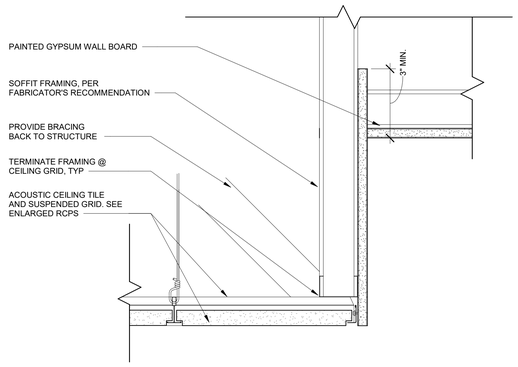
6" = 1'-0"



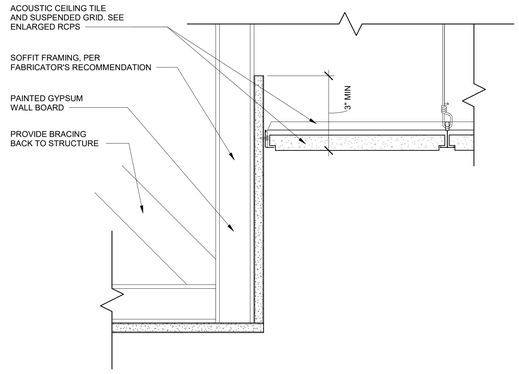
9 IDTL - GYP TO ACT CEILING TRANSITION
SCALE: 3" = 1'-0"



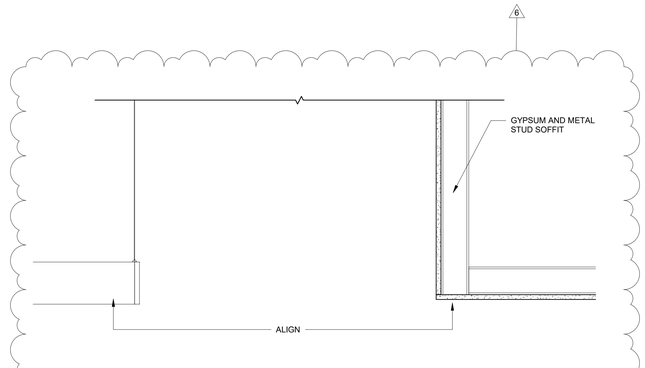
8 IDTL - ACT TO ACT CEILING TRANSITION
SCALE: 3" = 1'-0"



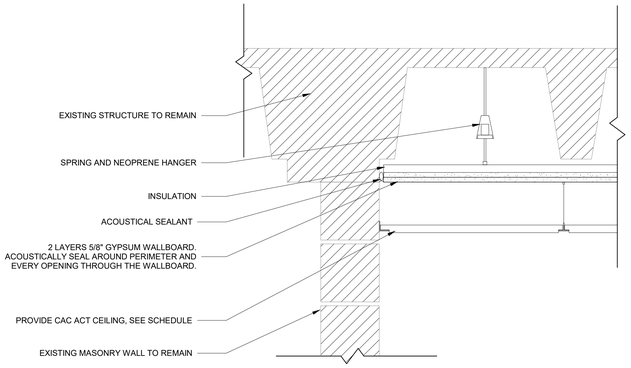
7 IDTL - ACT TO GYP CEILING TRANSITION
SCALE: 3" = 1'-0"



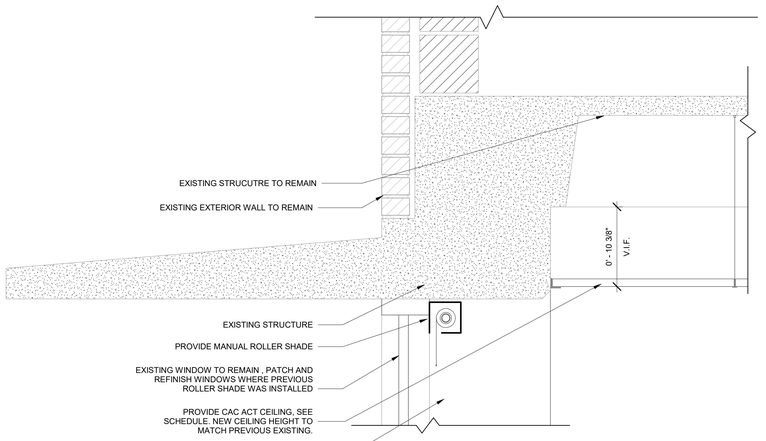
6 IDTL - GYP BD SOFFIT TO ACT
SCALE: 3" = 1'-0"



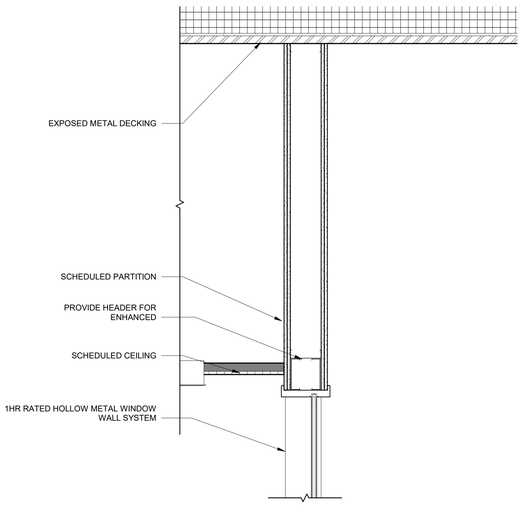
SOFFIT DETAIL
10 SOFFIT DETAIL SECTION - ANNEX LOBBY
SCALE: 1 1/2" = 1'-0"



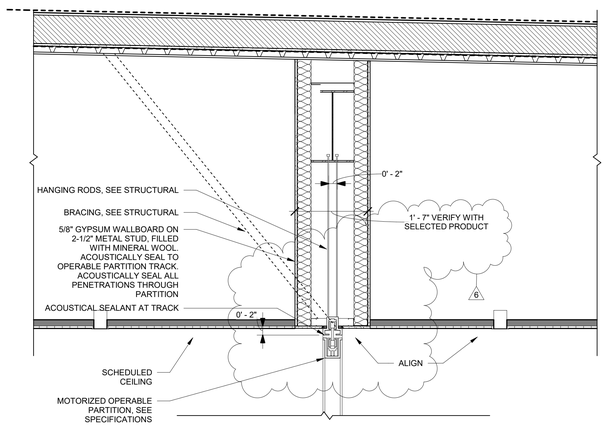
5 IDTL - ACOUSTICAL FLOOR SLAB DETAIL
SCALE: 1 1/2" = 1'-0"



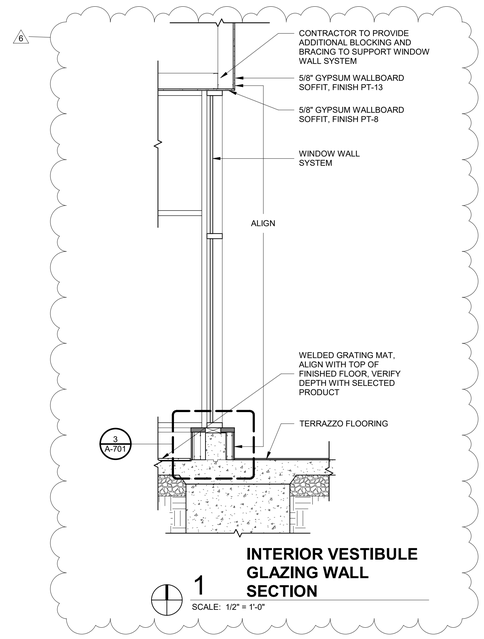
4 SOFFIT DETAIL AT CLASSROOM WINDOW
SCALE: 1 1/2" = 1'-0"



3 COMMUNITY ROOM - STOREFRONT DETAIL SECTION
SCALE: 1" = 1'-0"



2 COMMUNITY ROOM - PARTITION DETAIL SECTION
SCALE: 3/4" = 1'-0"



1 INTERIOR VESTIBULE GLAZING WALL SECTION
SCALE: 1/2" = 1'-0"

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CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
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REVISIONS

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4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

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SCALE: As indicated

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
INTERIOR DETAILS

Sheet NOT FOR CONSTRUCTION
A-700

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

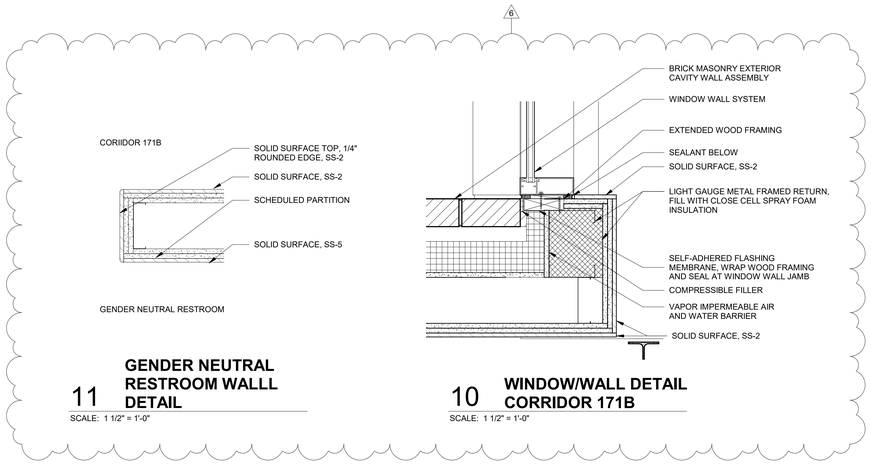
2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

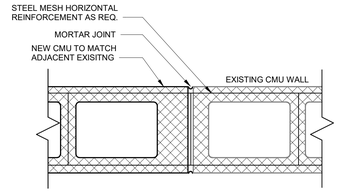
0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

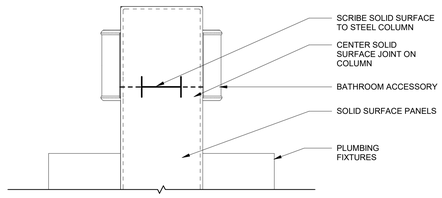


11 **GENDER NEUTRAL RESTROOM WALLL DETAIL**
SCALE: 1 1/2" = 1'-0"

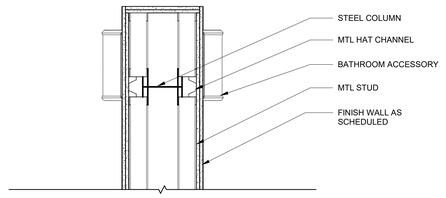
10 **WINDOW/WALL DETAIL CORRIDOR 171B**
SCALE: 1 1/2" = 1'-0"



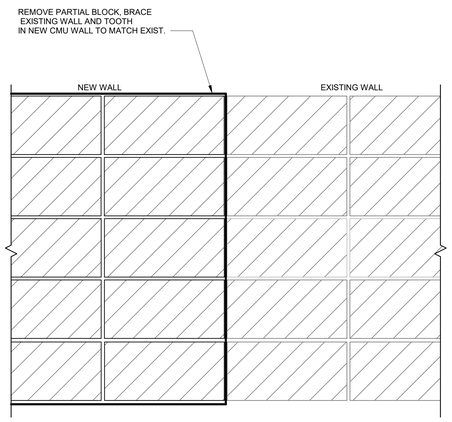
9 **INFILL @ CMU WALL DETAIL**
SCALE: 3" = 1'-0"



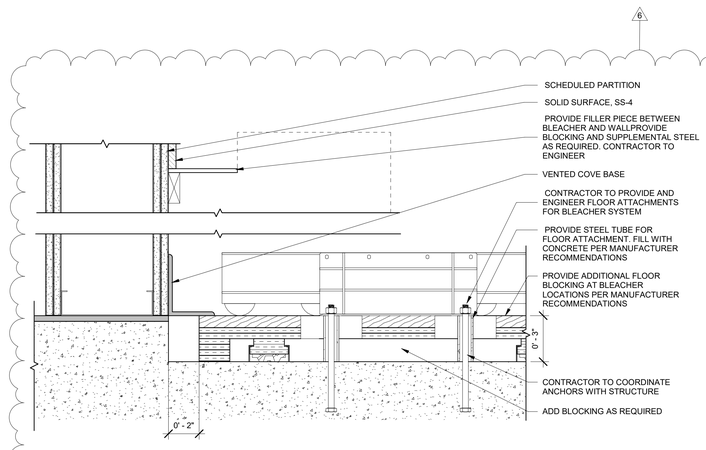
8 **BATHROOM LAVATORY KNEE WALL TOP DETAIL - ANNEX BATHROOM**
SCALE: 1" = 1'-0"



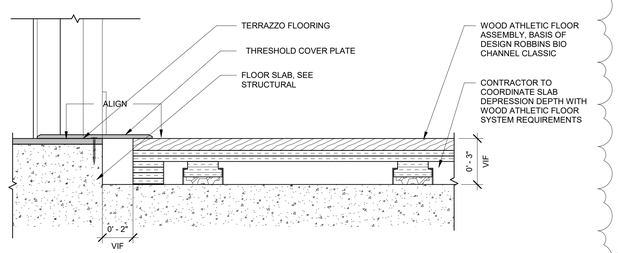
7 **BATHROOM LAVATORY COLUMN DETAIL PLAN - ANNEX BATHROOM**
SCALE: 1" = 1'-0"



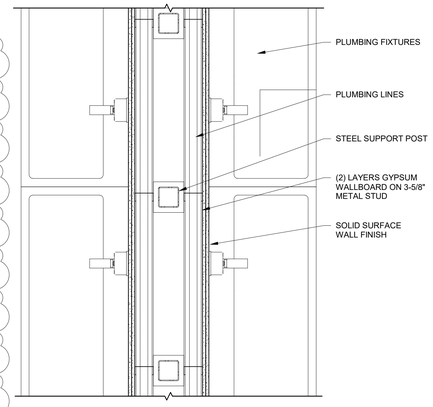
6 **INFILL @ EXPOSED MASONRY WALL ELEVATION**
SCALE: 1 1/2" = 1'-0"



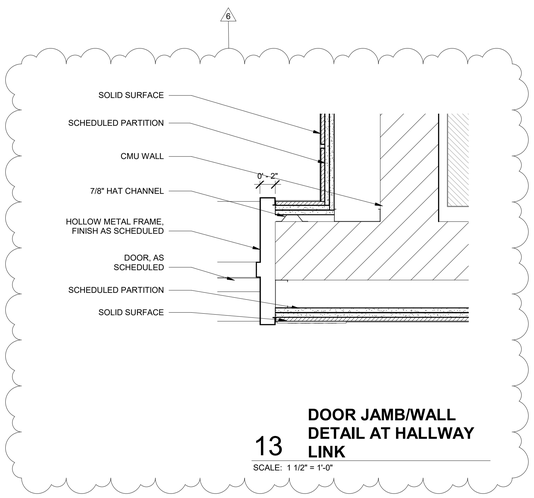
12 **GYM BLEACHERS FLOOR ANCHOR DETAIL**
SCALE: 3" = 1'-0"



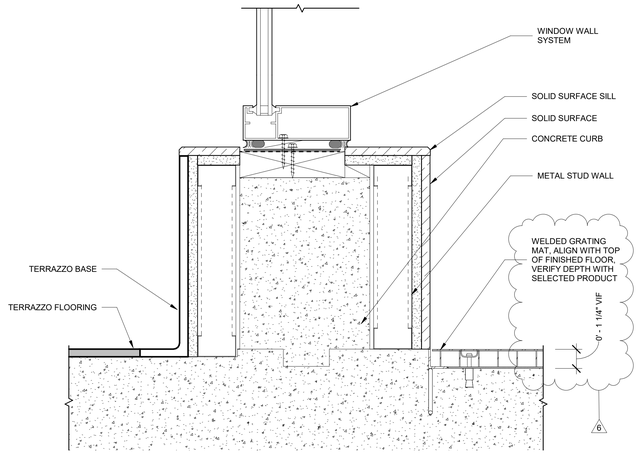
5 **FLOOR TRANSITION - TERRAZZO TO GYMNASIUM FLOORING**
SCALE: 3" = 1'-0"



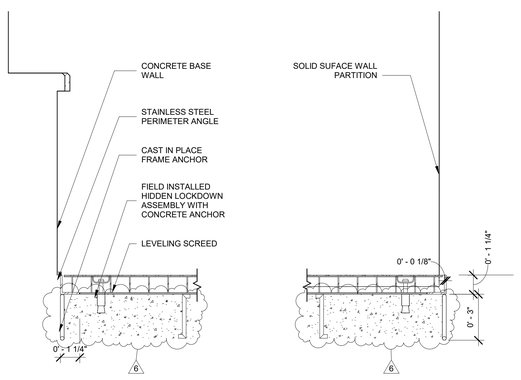
4 **BATHROOM LAVATORY DETAIL PLAN - ANNEX BATHROOM**
SCALE: 1" = 1'-0"



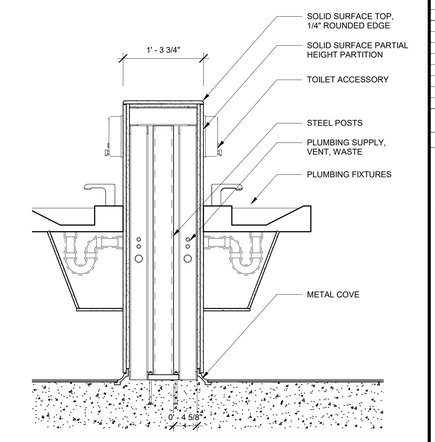
13 **DOOR JAMB/WALL DETAIL AT HALLWAY LINK**
SCALE: 1 1/2" = 1'-0"



3 **CONCRETE BASE DETAIL SECTION - ANNEX VESTIBULE**
SCALE: 3" = 1'-0"



2 **WELDED GRATING MAT DETAIL SECTION - ANNEX VESTIBULE**
SCALE: 3" = 1'-0"



1 **BATHROOM LAVATORY DETAIL SECTION - ANNEX BATHROOM**
SCALE: 1" = 1'-0"

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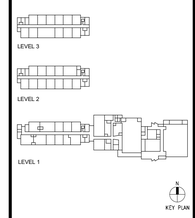

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CPS Project #2021-26031-ADM

Project No: 2138

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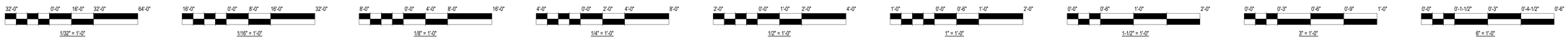
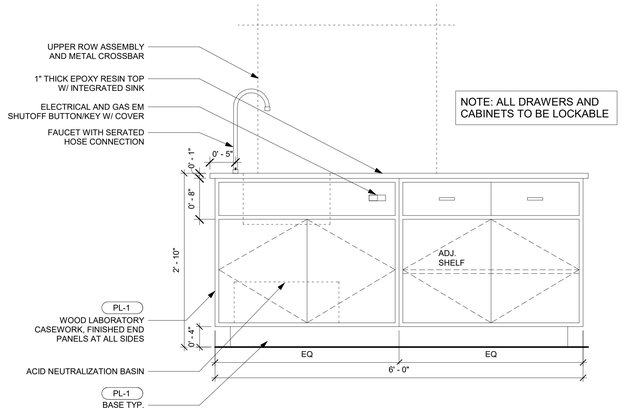
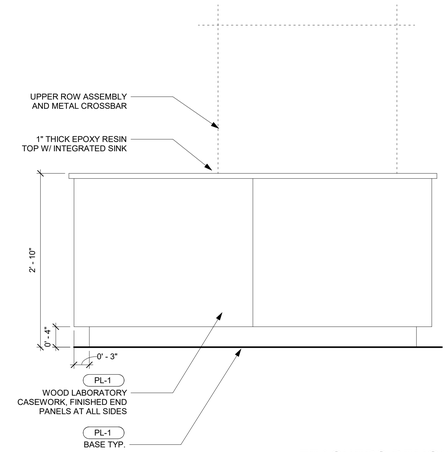
A-701





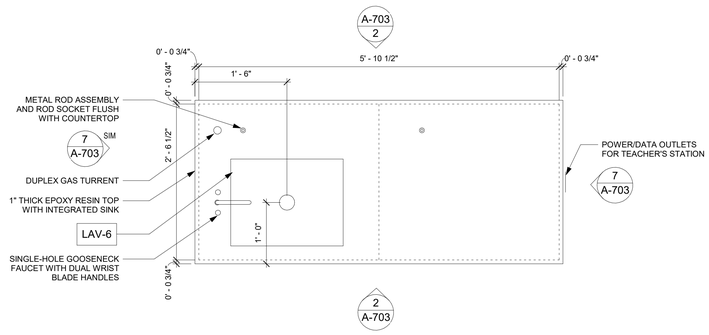
10 TEACHERS DEMONSTRATION STATION FRONT ELEVATION

SCALE: 1" = 1'-0"



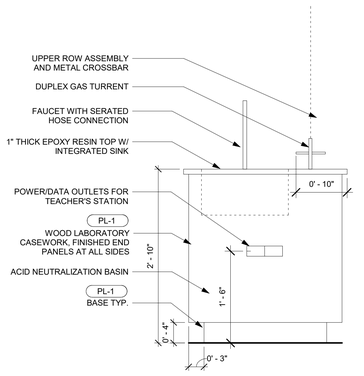
9 TEACHERS DEMONSTRATION STATION BACK ELEVATION

SCALE: 1" = 1'-0"



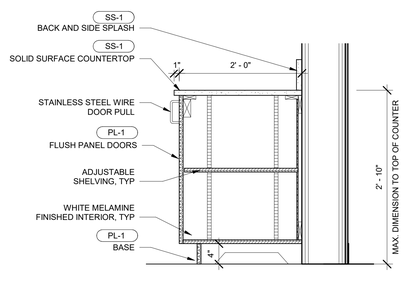
8 TEACHERS DEMONSTRATION STATION PLAN

SCALE: 1" = 1'-0"



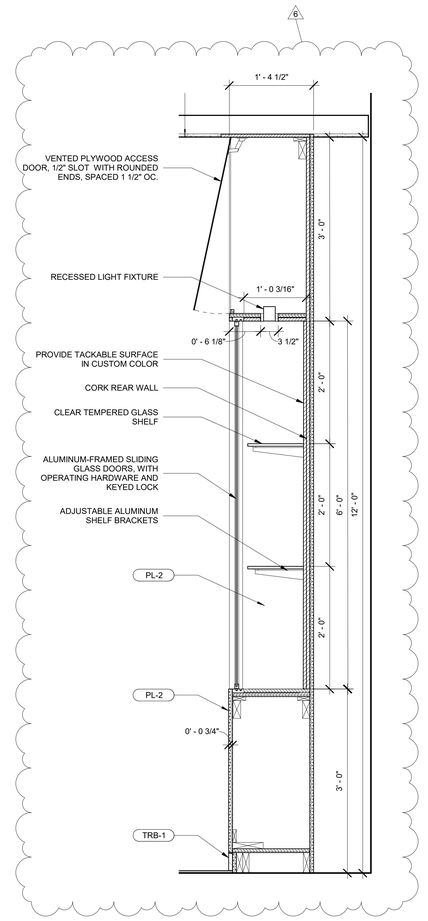
7 TEACHERS DEMONSTRATION STATION SECTION

SCALE: 1" = 1'-0"



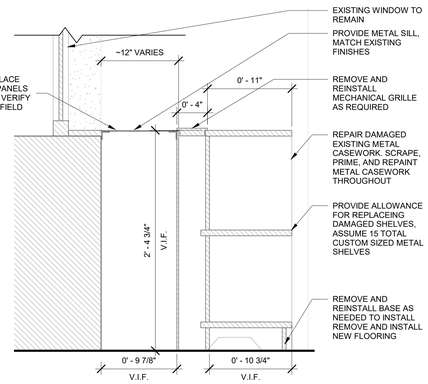
6 COMMUNITY RM MILLWORK SECTION

SCALE: 1" = 1'-0"



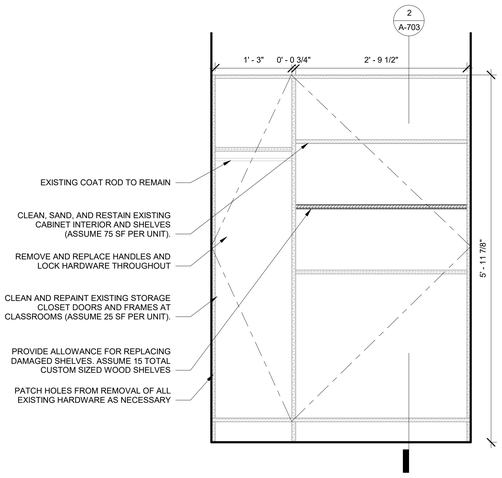
5 DISPLAY CASE SECTION - ANNEX S LOBBY AND N/S HALL

SCALE: 1" = 1'-0"



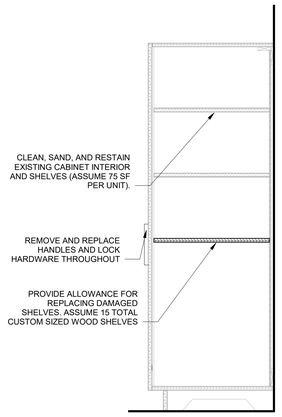
4 METAL SILL REPAIR SECTION DETAIL

SCALE: 1 1/2" = 1'-0"



3 CLRM MILLWORK - TYPE 1

SCALE: 1" = 1'-0"



2 CLRM MILLWORK SECTION - TYPE 1

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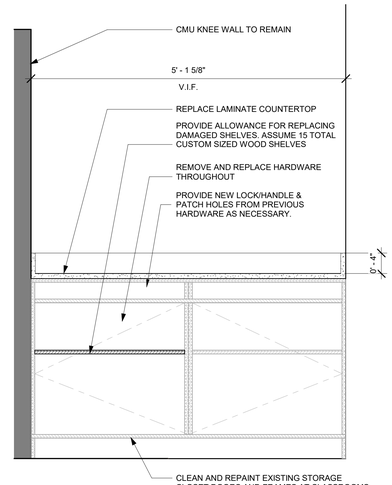

1 CLRM MILLWORK TYPE 2 DETAIL

SCALE: 1" = 1'-0"

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DRAWN BY: KOO LLC

SCALE: As indicated

LEVEL 3
LEVEL 2
LEVEL 1
KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
MILLWORK DETAILS

Sheet NOT FOR CONSTRUCTION
A-703

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

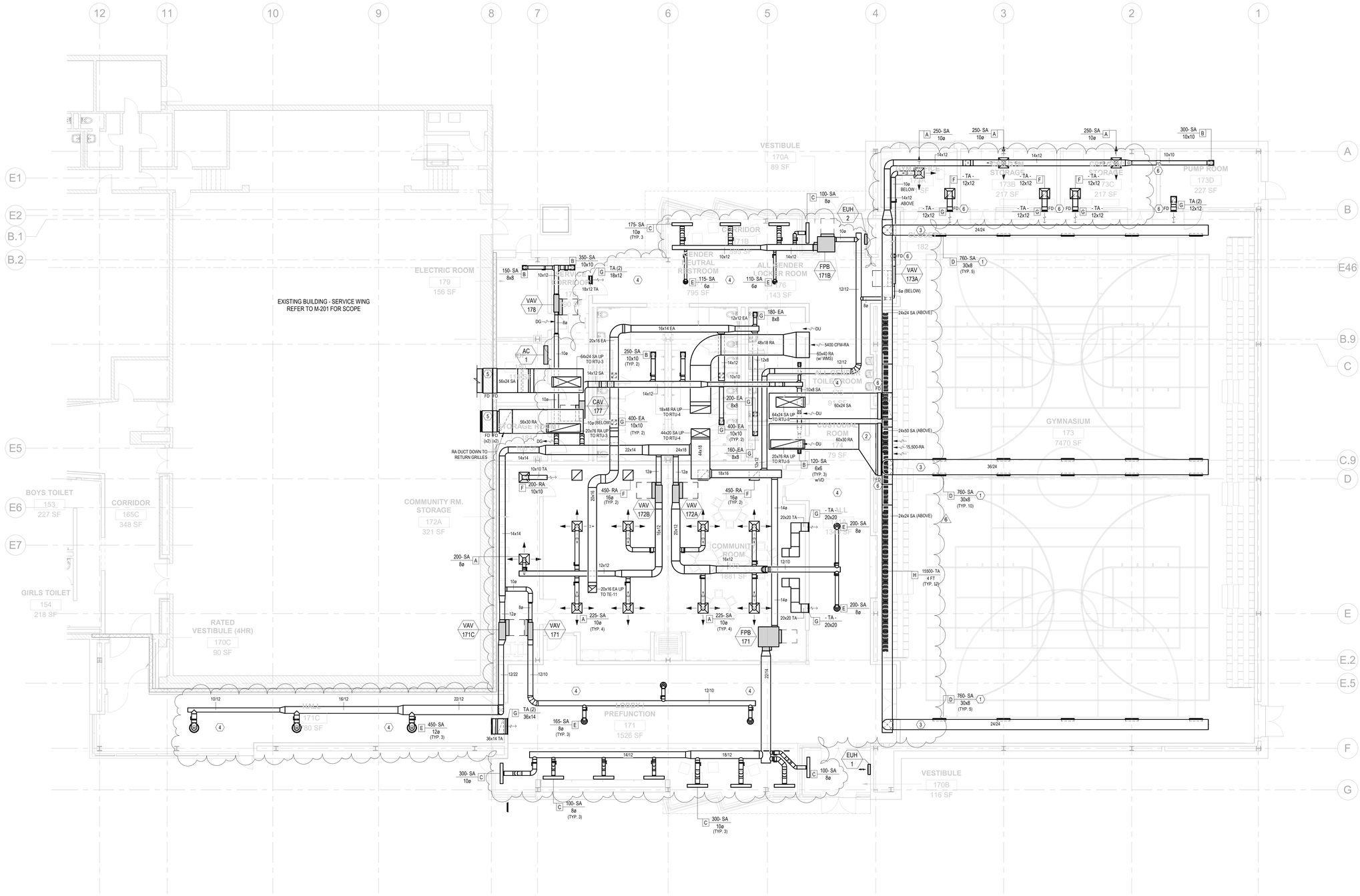
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

KEYED NOTES:

1. INSTALL DIFFUSERS AT 45 DEGREE ANGLED DOWN FROM DUCTWORK. PROVIDE VOLUME DAMPER WITHIN TAKE-OFF. ADJUST BLADES TO PROVIDE PROPER AIRFLOW ACROSS GYMNASIUM. COORDINATE WITH HANGING LIGHT FIXTURES AND SUPPORTS.
2. TRANSITION TO 10Hx30 FITTING AND EXTEND RETURN AIR DUCT TO JUST WITHIN THE SOFFIT. TERMINATE WITH WIRE MESH SCREEN. COORDINATE INSTALLATION WITH STRUCTURAL TRUSSES.
3. COORDINATE DUCT ELEVATION WITH HANGING LIGHT FIXTURES AND SPRINKLERS SUCH THAT THE BOTTOM OF DUCT STAYS ABOVE THE BOTTOM CHORD OF THE STRUCTURAL TRUSSES.
4. ALL EXPOSED MECHANICAL EQUIPMENT, DUCTWORK AND DEVICES TO BE PAINTED/FINISHED BLACK AND INSTALLED ABOVE 12'-0" AFF. COORDINATE WITH ARCHITECT.
5. PROVIDE TWO BACK-TO-BACK 3-HR FIRE DAMPERS THROUGH THE 4-HR RATED GYM WALL. SEAL ALL DUCTWORK PENETRATIONS WITH FIRE SEALANT.
6. PROVIDE A 1.5-HR FIRE DAMPER AS INDICATED. SEAL ALL DUCTWORK PENETRATIONS WITH FIRE SEALANT AND PROVIDE ACCESS DOORS IN THE ADJACENT CEILING.

SHEET NOTES:

1. MECHANICAL CONTRACTOR AND CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO COORDINATE WITH THE BUILDING ENGINEERING STAFF/OWNER TO ENSURE THAT ALL EXISTING AIR HANDLING UNITS REMAIN OPERATIONAL DURING THE CONSTRUCTION RENOVATION.
2. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING POWER, WIRING, AND FINAL CONNECTION TO ALL CONTROL DEVICES.
3. MECHANICAL CONTRACTOR SHALL PROVIDE A TESTING AND BALANCING REPORT OF THE EXISTING MECHANICAL SYSTEMS FOR THE ENGINEER OF RECORD TO REVIEW PRIOR TO THE START OF CONSTRUCTION.
4. MECHANICAL CONTRACTOR SHALL PROVIDE A TESTING AND BALANCING REPORT AFTER ALL ALTERATIONS AND NEW CONSTRUCTION WORK HAS BEEN COMPLETED.
5. MECHANICAL CONTRACTOR TO FIELD VERIFY ALL DUCTWORK ELEVATIONS CURRENTLY INSTALLED PRIOR TO PROCURING SHOP DRAWINGS.
6. ALL EXISTING DUCTWORK THAT IS TO REMAIN IS TO BE EXAMINED FOR RUPTURES AND MECHANICAL CONTRACTOR IS TO INFORM THE ENGINEER OF RECORD WITH A LIST OF DEFICIENCY FINDS IN THE FIELD PRIOR TO COMMENCING ANY DEMOLISHING OF THE EXISTING MECHANICAL SYSTEM AND INSTALLATION OF NEW DUCTWORK.
7. MECHANICAL CONTRACTOR IS TO INSPECT AND CLEAN ALL RELOCATED EQUIPMENT BEFORE AND AFTER INSTALLATION.
8. MECHANICAL CONTRACTOR IS TO COMPLETE A FULL DUCT CLEANING OF ALL EXISTING DUCTWORK PRIOR TO MAKING NEW CONNECTIONS TO THE MAINS. THE MECHANICAL CONTRACTOR IS TO PROVIDE SCOPE DOCUMENTATION DESCRIBING THE EXTENT OF THE DUCT CLEANING AND CLEANING PROCEDURES.
9. THE EXISTING CABLE TRAY IS TO REMAIN. MECHANICAL CONTRACTOR IS TO PROVIDE ALL THE NECESSARY OFFSETS TO AVOID CONFLICT WITH THE EXISTING CABLE TRAY.
10. AT NO POINT SHALL NEW DUCTWORK BE INSTALLED BELOW 8'-0" OR BELOW EXISTING DUCTWORK ELEVATIONS.
11. ALL NEW EXPOSED FLAT OVAL / ROUND DUCTWORK IS TO BE SPIRAL DOUBLE- WALLED DUCT.
12. PROVIDE HIGH-EFFICIENCY TAKEOFFS FOR ALL APPLICATIONS.
13. ALL TAKEOFFS FROM MAINS TO DIFFUSERS ARE TO BE PROVIDED WITH BALANCING DAMPERS.
14. WHERE INDICATED, 18x12 DOOR GRILLES ARE TO BE PROVIDED WITH THE DOOR BY THE DOOR MANUFACTURER; REFER TO ARCHITECTURAL PLANS FOR DOOR TYPE COORDINATION.
15. VAV BOXES ARE TO BE CONTROLLED BY THE SPACE THERMOSTAT. THERMOSTAT LOCATIONS ARE INDICATED ON HVAC PIPING DRAWINGS. FINAL LOCATION AND MOUNTING HEIGHTS ARE TO BE COORDINATED BETWEEN THE CONTROLS CONTRACTOR, OWNERSHIP, AND THE ARCHITECT.
16. TEST AND EXERCISE ALL EXISTING CONTROLS INSTRUMENTS AND DEVICES TO VERIFY OPERATION. ALL INSTRUMENTS AND DEVICES SHALL BE TESTED AND CALIBRATED TO GUARANTEE ACCURATE MEASUREMENT. THIS INCLUDES BUT IS NOT LIMITED TO THERMOSTATS, CONTROL VALVES, CONTROL DAMPERS, AIRFLOW MEASURING STATIONS, TEMPERATURE SENSORS, STATIC PRESSURE SENSORS, SWITCHES, DUCT SMOKE DETECTORS, ETC. PROVIDE REPORT SUMMARIZING THE STATUS OF EACH DEVICE AND ANY DEFICIENCIES.
17. ALL EXISTING CONTROLS DEVICES SHALL BE PROTECTED OR RELOCATED AS REQUIRED FOR THIS PROJECT. CONTRACTOR SHALL IDENTIFY ALL DEVICES AND COORDINATE THESE WITH THE CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO IDENTIFY WHERE THE WORK OF ANOTHER TRADE WILL REQUIRE THIS.
18. MECHANICAL CONTRACTOR IS TO LOCATE INSPECT, AND TEST THE EXISTING AHU DUCT STATIC PRESSURE SENSOR. PROVIDE A NEW AHU DUCT STATIC PRESSURE SENSOR IF THE EXISTING AHU DUCT STATIC PRESSURE SENSOR IS DEEMED NOT SALVAGEABLE.
19. MECHANICAL CONTRACT SHALL INSPECT ALL DUCTWORK RUNS PRIOR TO INSTALLATION AND NOTIFY THE EOR OF ANY POSSIBLE ACCESS ISSUES TO ANY OVERHEAD EQUIPMENT, DEVICES, CONTROL VALES, ISOLATION VALVES, FIRE DAMPERS, SERVICE PANELS , INSPECTION DOORS, FILTER DOORS OR ANY OTHER ITEM WHICH MAY BE INACCESSIBLE FOR O&M STAFF ONCE DUCTWORK IS INSTALLED.



1 **ANNEX LEVEL 1 - HVAC FLOOR PLAN**
SCALE: 1/8" = 1'-0"

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2942 W Van Buren St
Chicago, IL 60612

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ANNEX LEVEL 1 - HVAC FLOOR PLAN

Sheet NOT FOR CONSTRUCTION

M-200

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-6" 1'-0" 2'-0"
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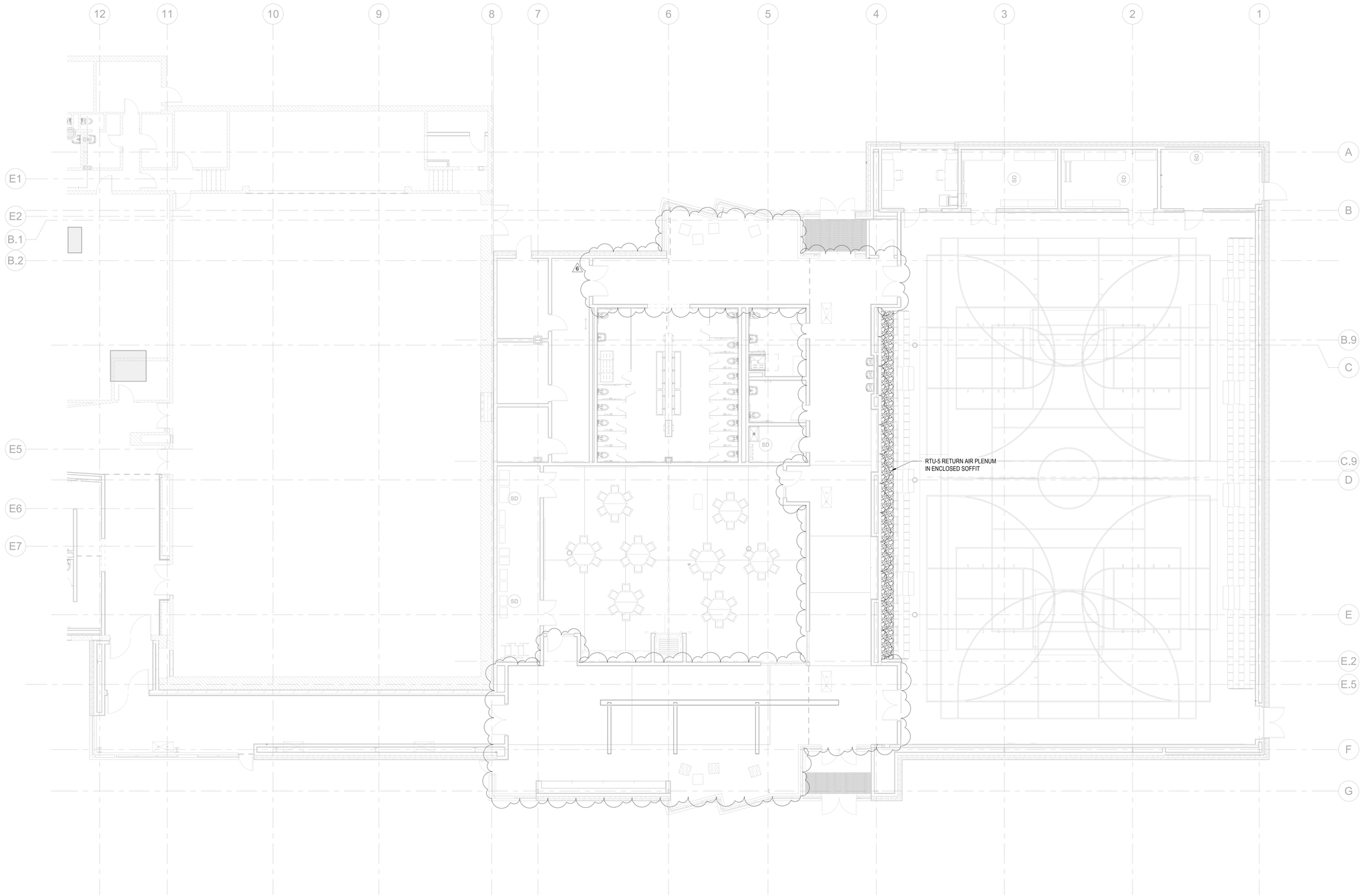
0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

DRAWING LEGEND

RTU-5 RETURN AIR PLENUM

6



1 ANNEX LEVEL 1 - HVAC RETURN AIR PLENUM PLAN
1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

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CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:

KOO LLC
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STE 600C
CHICAGO, IL 60601
312-235-0920 PH

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Chicago, IL 60602

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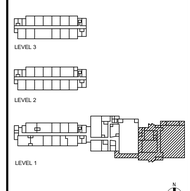
DRAWN BY:

SCALE: As indicated



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CPS Project #2021-26031-ADM

Project No: 2138

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ANNEX LEVEL 1 - HVAC RETURN AIR PLENUM FLOOR PLAN

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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

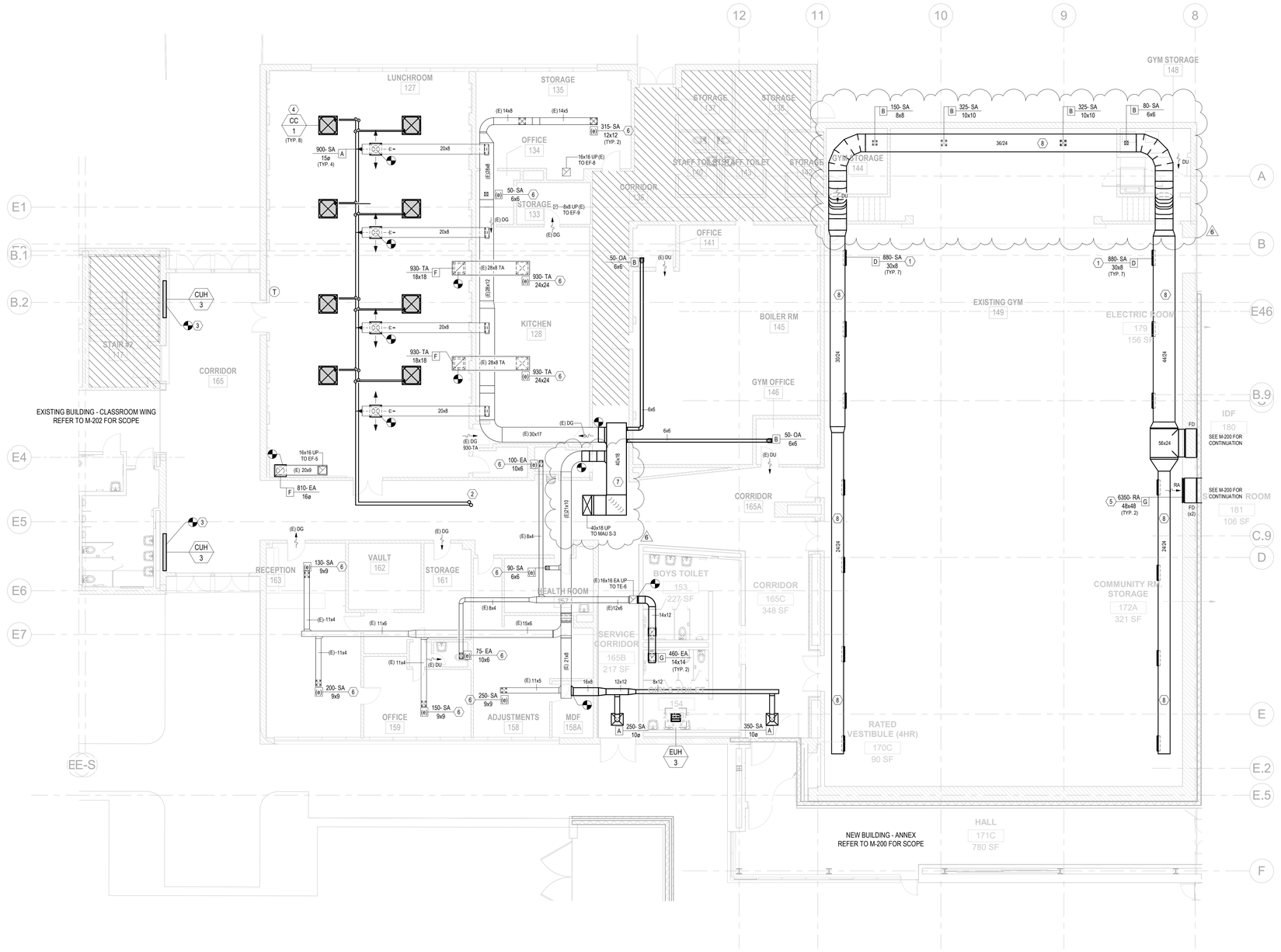
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

KEYED NOTES:

1. INSTALL DIFFUSERS AT 45 DEGREE ANGLED DOWN FROM DUCTWORK. PROVIDE VOLUME DAMPER WITHIN TAKE-OFF. ADJUST BLADES TO PROVIDE PROPER AIRFLOW ACROSS GYMNASIUM. COORDINATE WITH HANGING LIGHT FIXTURE AND SUPPORTS.
2. ROUTE REFRIGERANT PIPING UP TO CONNECTED OUTDOOR UNIT. COORDINATE FINAL REFRIGERANT PIPE SIZE AND ROUTING WITH REQUIREMENTS PROVIDED BY MANUFACTURER AND LOCATION OF CONDENSING UNIT ON ROOF.
3. INSTALL NEW CABINET UNIT HEATERS IN EXISTING WALL CAVITY. CONNECT TO EXISTING HW/S/R PIPING CONNECTIONS. COORDINATE WITH ARCHITECTURE FOR ANY WALL MODIFICATION FOR NEW UNIT PLATE TO COVER EXISTING OPENING.
4. ROUTE 1" CD DRAIN TO NEAREST FLOOR DRAIN OR OPEN HUB DRAIN. COORDINATE WITH PLUMBING DRAWINGS.
5. INSTALL TWO (2) STACKED RETURN AIR GRILLES AT 24" AFF AND 84" AFF RESPECTIVELY. FOR EACH GRILLE, EXTEND A 48x48 DUCT WITH TWO BACK-TO-BACK 3-HR FIRE DAMPERS THROUGH THE EXISTING GYM WALL TO CONNECT TO THE RETURN AIR DUCT IN THE ADJACENT STORAGE ROOM.
6. AFTER CONSTRUCTION IS COMPLETE, REBALANCE EXISTING INLETS AND OUTLETS TO AIRFLOW VALUES RECORDED DURING PRE-TEST. REFER TO SPECIFICATION SECTION 230593 FOR ADDITIONAL INFORMATION.
7. COORDINATE NEW DUCT RUN WITH EXISTING CEILING COMPONENTS AS NEEDED. PROVIDE FINAL SHOP DRAWINGS TO ENGINEER OF RECORD FOR REVIEW PRIOR TO CONSTRUCTION.
8. INSTALL NEW DUCTWORK TO RUN AS TIGHT AS POSSIBLE BENEATH EXISTING STRUCTURAL BEAMS. COORDINATE WITH LIGHTING AND OTHER EXISTING CONDITIONS. DUCTWORK ABOVE STAGE AREA SHOULD BE INSTALLED ABOVE THE STAGE CEILING.

SHEET NOTES:

1. MECHANICAL CONTRACTOR AND CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO COORDINATE WITH THE BUILDING ENGINEERING STAFF/OWNER TO ENSURE THAT ALL EXISTING AIR HANDLING UNITS REMAIN OPERATIONAL DURING THE CONSTRUCTION RENOVATION.
2. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING POWER, WIRING, AND FINAL CONNECTION TO ALL CONTROL DEVICES.
3. MECHANICAL CONTRACTOR SHALL PROVIDE A TESTING AND BALANCING REPORT OF THE EXISTING MECHANICAL SYSTEMS FOR THE ENGINEER OF RECORD TO REVIEW PRIOR TO THE START OF CONSTRUCTION.
4. MECHANICAL CONTRACTOR SHALL PROVIDE A TESTING AND BALANCING REPORT AFTER ALL ALTERATIONS AND NEW CONSTRUCTION WORK HAS BEEN COMPLETED.
5. MECHANICAL CONTRACTOR TO FIELD VERIFY ALL DUCTWORK ELEVATIONS CURRENTLY INSTALLED PRIOR TO PROCURING SHOP DRAWINGS.
6. ALL EXISTING DUCTWORK THAT IS TO REMAIN IS TO BE EXAMINED FOR RUPTURES AND MECHANICAL CONTRACTOR IS TO INFORM THE ENGINEER OF RECORD WITH A LIST OF DEFICIENCY FINDS IN THE FIELD PRIOR TO COMMENCING ANY DEMOLISHING OF THE EXISTING MECHANICAL SYSTEM AND INSTALLATION OF NEW DUCTWORK.
7. MECHANICAL CONTRACTOR IS TO INSPECT AND CLEAN ALL RELOCATED EQUIPMENT BEFORE AND AFTER INSTALLATION.
8. MECHANICAL CONTRACTOR IS TO COMPLETE A FULL DUCT CLEANING OF ALL EXISTING DUCTWORK PRIOR TO MAKING NEW CONNECTIONS TO THE MAINS. THE MECHANICAL CONTRACTOR IS TO PROVIDE SCOPE DOCUMENTATION DESCRIBING THE EXTENT OF THE DUCT CLEANING AND CLEANING PROCEDURES.
9. THE EXISTING CABLE TRAY IS TO REMAIN. MECHANICAL CONTRACTOR IS TO PROVIDE ALL THE NECESSARY OFFSETS TO AVOID CONFLICT WITH THE EXISTING CABLE TRAY.
10. AT NO POINT SHALL NEW DUCTWORK BE INSTALLED BELOW 8'-0" OR BELOW EXISTING DUCTWORK ELEVATIONS.
11. ALL NEW EXPOSED FLAT OVAL / ROUND DUCTWORK IS TO BE SPIRAL DOUBLE- WALLED DUCT.
12. PROVIDE HIGH-EFFICIENCY TAKEOFFS FOR ALL APPLICATIONS.
13. ALL TAKEOFFS FROM MAINS TO DIFFUSERS ARE TO BE PROVIDED WITH BALANCING DAMPERS.
14. WHERE INDICATED, 18x12 DOOR GRILLES ARE TO BE PROVIDED WITH THE DOOR BY THE DOOR MANUFACTURER; REFER TO ARCHITECTURAL PLANS FOR DOOR TYPE COORDINATION.
15. VAV BOXES ARE TO BE CONTROLLED BY THE SPACE THERMOSTAT. THERMOSTAT LOCATIONS ARE INDICATED ON HVAC PIPING DRAWINGS. FINAL LOCATION AND MOUNTING HEIGHTS ARE TO BE COORDINATED BETWEEN THE CONTROLS CONTRACTOR, OWNERSHIP, AND THE ARCHITECT.
16. TEST AND EXERCISE ALL EXISTING CONTROLS INSTRUMENTS AND DEVICES TO VERIFY OPERATION. ALL INSTRUMENTS AND DEVICES SHALL BE TESTED AND CALIBRATED TO GUARANTEE ACCURATE MEASUREMENT. THIS INCLUDES BUT IS NOT LIMITED TO THERMOSTATS, CONTROL VALVES, CONTROL DAMPERS, AIRFLOW MEASURING STATIONS, TEMPERATURE SENSORS, STATIC PRESSURE SENSORS, SWITCHES, DUCT SMOKE DETECTORS, ETC. PROVIDE REPORT SUMMARIZING THE STATUS OF EACH DEVICE AND ANY DEFICIENCIES.
17. ALL EXISTING CONTROLS DEVICES SHALL BE PROTECTED OR RELOCATED AS REQUIRED FOR THIS PROJECT. CONTRACTOR SHALL IDENTIFY ALL DEVICES AND COORDINATE THESE WITH THE CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO IDENTIFY WHERE THE WORK OF ANOTHER TRADE WILL REQUIRE THIS.
18. MECHANICAL CONTRACTOR IS TO LOCATE INSPECT, AND TEST THE EXISTING AHU DUCT STATIC PRESSURE SENSOR. PROVIDE A NEW AHU DUCT STATIC PRESSURE SENSOR IF THE EXISTING AHU DUCT STATIC PRESSURE SENSOR IS DEEMED NOT SALVAGEABLE.
19. MECHANICAL CONTRACT SHALL INSPECT ALL DUCTWORK RUNS PRIOR TO INSTALLATION AND NOTIFY THE EOR OF ANY POSSIBLE ACCESS ISSUES TO ANY OVERHEAD EQUIPMENT, DEVICES, CONTROL VALES, ISOLATION VALVES, FIRE DAMPERS, SERVICE PANELS , INSPECTION DOORS, FILTER DOORS OR ANY OTHER ITEM WHICH MAY BE INACCESSIBLE FOR O&M STAFF ONCE DUCTWORK IS INSTALLED.



1 **SERVICE WING LEVEL 1 - HVAC FLOOR PLAN**
SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

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Architect of Record:
KOO LLC
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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3
LEVEL 2
LEVEL 1
KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
SERVICE WING LEVEL 1 - HVAC FLOOR PLAN

Sheet NOT FOR CONSTRUCTION
M-201

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KEYED NOTES:

1. INSTALL NEW CABINET UNIT HEATERS IN EXISTING WALL CAVITY. CONNECT TO EXISTING HW/S/R PIPING CONNECTIONS. COORDINATE WITH ARCHITECT FOR ANY WALL MODIFICATION FOR NEW UNIT PLATE TO COVER EXISTING OPENING.
2. EXISTING FIN TUBE RADIATORS TO BE RELOCATED TO ACCOMMODATE WALL FURRING. COORDINATE NEW LOCATION WITH ARCHITECT AND COORDINATE RECONNECTION OF PIPING AND CONTROLS. CLEAN FIN TUBE COILS AND COMPONENTS. CLEAN AND REPAINT COVERS. COORDINATE WITH ARCHITECT FOR COLOR AND FINISH. INSPECT ALL EXISTING COMPONENTS AND CERTIFY THEY ARE OPERATIONAL. PROVIDE REPORT TO EOR FOR ANY FAILING COMPONENTS.
3. EXISTING CLASSROOM UNIT VENTILATORS (CUV) TO REMAIN. CLEAN COILS AND COMPONENTS. CLEAN AND REPAINT COVERS, COORDINATE WITH ARCHITECT FOR COLOR AND FINISH. INSPECT ALL EXISTING COMPONENTS AND CERTIFY THEY ARE OPERATIONAL. PROVIDE REPORT TO EOR FOR ANY FAILING COMPONENTS.
4. RELOCATE EXISTING UNIT THERMOSTATS TO MATCH NEW FLOOR PLAN. EXTEND CONTROL WIRING AND CONDUITS AS REQUIRED.
5. REBALANCE EXISTING OUTLET TO THE AIRFLOW SHOWN.
6. NOT USED.
7. AFTER CONSTRUCTION IS COMPLETE, REBALANCE EXISTING INLETS AND OUTLETS WITHIN THIS AREA TO AIRFLOW VALUES RECORDED DURING PRE-TEST. REFER TO SPECIFICATION SECTION 230593 FOR ADDITIONAL INFORMATION.

SHEET NOTES:

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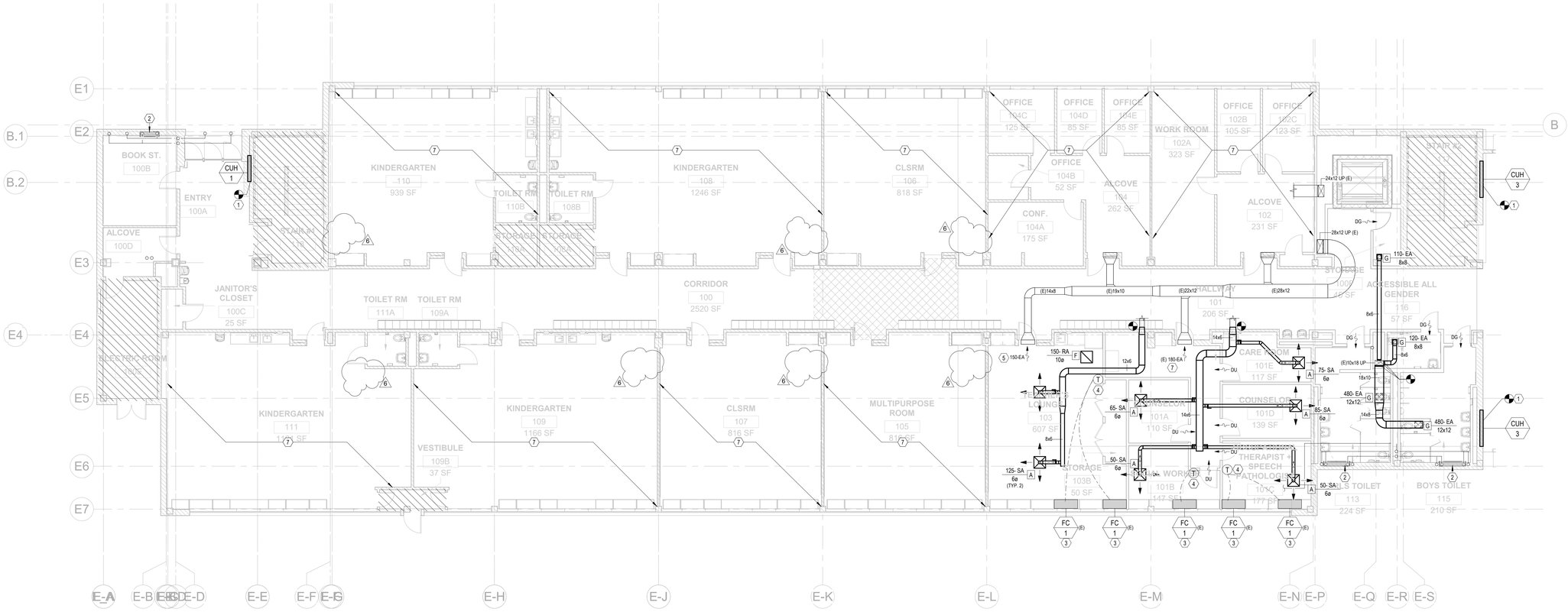

1 CLRM WING LEVEL 1 - HVAC FLOOR PLAN

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DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

CLRM WING LEVEL 1 - HVAC FLOOR PLAN

Sheet NOT FOR CONSTRUCTION

M-202

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

KEYED NOTES:

1. INSTALL NEW CABINET UNIT HEATERS CENTERED ON WALL. RECONNECT TO EXISTING PIPING CONNECTION. COORDINATE INSTALLATION OF DUMMY SIDE CABINETS SIZE, FINISH AND SUPPORT WITH MANUFACTURER AND ARCHITECT. VERIFY IN FIELD DIMENSIONS PRIOR TO INSTALLATION.
2. EXISTING FIN TUBE RADIATORS TO BE RELOCATED TO ACCOMMODATE WALL FURRING. COORDINATE NEW LOCATION WITH ARCHITECT AND COORDINATE RECONNECTION OF PIPING AND CONTROLS. CLEAN FIN TUBE COILS AND COMPONENTS. CLEAN AND REPAINT COVERS, COORDINATE WITH ARCHITECT FOR COLOUR AND FINISH. INSPECT ALL EXISTING COMPONENTS AND CERTIFY THEY ARE OPERATIONAL. PROVIDE REPORT TO EOR FOR ANY FAILING COMPONENTS.
3. EXISTING CLASSROOM UNIT VENTILATORS (CUV) TO REMAIN. CLEAN COILS AND COMPONENTS. CLEAN AND REPAINT COVERS, COORDINATE WITH ARCHITECT FOR COLOUR AND FINISH. INSPECT ALL EXISTING COMPONENTS AND CERTIFY THEY ARE OPERATIONAL. PROVIDE REPORT TO EOR FOR ANY FAILING COMPONENTS.
4. RELOCATE EXISTING UNIT THERMOSTATS TO MATCH NEW FLOOR PLAN. EXTEND CONTROL WIRING AND CONDUITS AS REQUIRED..
5. ROUTE 1" CD DRAIN TO NEAREST FLOOR DRAIN OR OPEN HUB DRAIN. COORDINATE WITH PLUMBING DRAWINGS.
6. ROUTE REFRIGERANT PIPING UP TO ROOF THROUGH PIPE PORTAL. COORDINATE FINAL REFRIGERANT PIPE SIZE AND ROUTING WITH REQUIREMENTS PROVIDED BY MANUFACTURER AND LOCATION OF CONDENSING UNIT ON ROOF.
7. NOT USED.
8. AFTER CONSTRUCTION IS COMPLETE, REBALANCE EXISTING INLETS AND OUTLETS WITHIN THIS AREA TO AIRFLOW VALUES RECORDED DURING PRE-TEST. REFER TO SPECIFICATION SECTION 230593 FOR ADDITIONAL INFORMATION.
9. INSTALL DUCTWORK AS INDICATED TO AVOID OVERLAP. COORDINATE WITH ARCHITECT FOR PATCHING OF OLD CEILING OPENINGS.
10. RELOCATE EXISTING UNIT VENTILATOR TO LOCATION SHOWN. COORDINATE NEW LOCATION WITH ARCHITECT AND COORDINATE RECONNECTION OF PIPING AND CONTROLS.

SHEET NOTES:

1. MECHANICAL CONTRACTOR AND CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO COORDINATE WITH THE BUILDING ENGINEERING STAFF/OWNER TO ENSURE THAT ALL EXISTING AIR HANDLING UNITS REMAIN OPERATIONAL DURING THE CONSTRUCTION RENOVATION.
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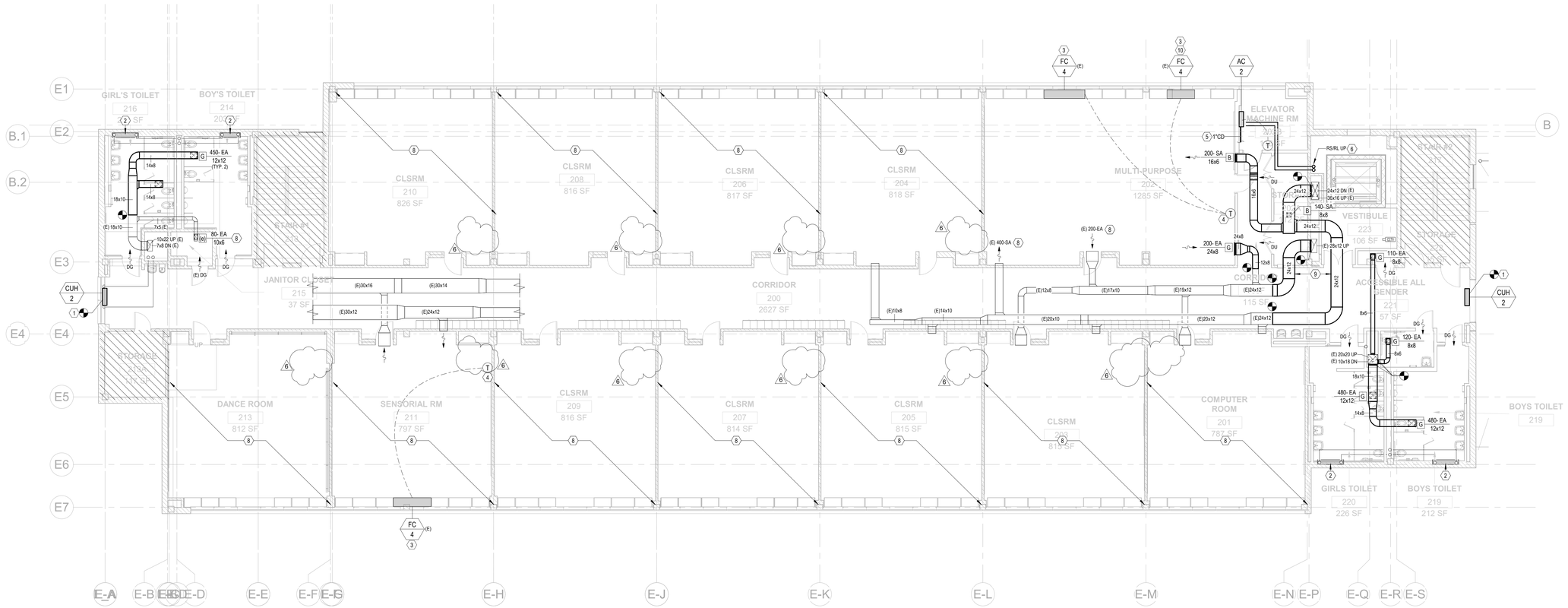
13. ALL TAKEOFFS FROM MAINS TO DIFFUSERS ARE TO BE PROVIDED WITH BALANCING DAMPERS.
14. WHERE INDICATED, 18x12 DOOR GRILLES ARE TO BE PROVIDED WITH THE DOOR BY THE DOOR MANUFACTURER; REFER TO ARCHITECTURAL PLANS FOR DOOR TYPE COORDINATION.
15. VAV BOXES ARE TO BE CONTROLLED BY THE SPACE THERMOSTAT. THERMOSTAT LOCATIONS ARE INDICATED ON HVAC PIPING DRAWINGS. FINAL LOCATION AND MOUNTING HEIGHTS ARE TO BE COORDINATED BETWEEN THE CONTROLS CONTRACTOR, OWNERSHIP, AND THE ARCHITECT.
16. TEST AND EXERCISE ALL EXISTING CONTROLS INSTRUMENTS AND DEVICES TO VERIFY OPERATION. ALL INSTRUMENTS AND DEVICES SHALL BE TESTED AND CALIBRATED TO GUARANTEE ACCURATE MEASUREMENT. THIS INCLUDES BUT IS NOT LIMITED TO THERMOSTATS, CONTROL VALVES, CONTROL DAMPERS, AIRFLOW MEASURING STATIONS, TEMPERATURE SENSORS, STATIC PRESSURE SENSORS, SWITCHES, DUCT SMOKE DETECTORS, ETC. PROVIDE REPORT SUMMARIZING THE STATUS OF EACH DEVICE AND ANY DEFICIENCIES.
17. ALL EXISTING CONTROLS DEVICES SHALL BE PROTECTED OR RELOCATED AS REQUIRED FOR THIS PROJECT. CONTRACTOR SHALL IDENTIFY ALL DEVICES AND COORDINATE THESE WITH THE CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO IDENTIFY WHERE THE WORK OF ANOTHER TRADE WILL REQUIRE THIS.
18. MECHANICAL CONTRACTOR IS TO LOCATE INSPECT, AND TEST THE EXISTING AHU DUCT STATIC PRESSURE SENSOR. PROVIDE A NEW AHU DUCT STATIC PRESSURE SENSOR IF THE EXISTING AHU DUCT STATIC PRESSURE SENSOR IS DEEMED NOT SALVAGEABLE.
19. MECHANICAL CONTRACT SHALL INSPECT ALL DUCTWORK RUNS PRIOR TO INSTALLATION AND NOTIFY THE EOR OF ANY POSSIBLE ACCESS ISSUES TO ANY OVERHEAD EQUIPMENT, DEVICES, CONTROL VALES, ISOLATION VALVES, FIRE DAMPERS, SERVICE PANELS , INSPECTION DOORS, FILTER DOORS OR ANY OTHER ITEM WHICH MAY BE INACCESSIBLE FOR OAM STAFF ONCE DUCTWORK IS INSTALLED.



1 CLRM WING LEVEL 2 - HVAC FLOOR PLAN

SCALE: 1/8" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
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Environmental Design International
33 W Monroe ST #1825
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ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
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REVISIONS

NO.	DATE	DESCRIPTION
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2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
CLRM WING LEVEL 2 - HVAC FLOOR PLAN

Sheet NOT FOR CONSTRUCTION

M-203

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KEYED NOTES:

1. INSTALL NEW CABINET UNIT HEATERS CENTERED ON WALL. RECONNECT TO EXISTING PIPING CONNECTION. COORDINATE INSTALLATION OF DUMMY SIDE CBAINETS SIZE, FINISH AND SUPPORT WITH MANUFACTURER AND ARCHITECT. VERIFY IN FIELD DIMENSIONS PRIOR TO INSTALLATION.
2. EXISTING FIN TUBE RADIATORS TO BE RELOCATED TO ACCOMMODATE WALL FURRING. COORDINATE NEW LOCATION WITH ARCHITECT AND COORDINATE RECONNECTION OF PIPING AND CONTROLS. CLEAN FIN TUBE COILS AND COMPONENTS. CLEAN AND REPAINT COVERS, COORDINATE WITH ARCHITECT FOR COLOR AND FINISH. INSPECT ALL EXISTING COMPONENTS AND CERTIFY THEY ARE OPERATIONAL. PROVIDE REPORT TO EOR FOR ANY FAILING COMPONENTS.
3. REBALANCE EXISTING OUTLETS TO THE AIRFLOW SHOWN.
4. EXISTING CLASSROOM UNIT VENTILATORS (CUV) TO REMAIN. CLEAN COILS AND COMPONENTS. CLEAN AND REPAINT COVERS, COORDINATE WITH ARCHITECT FOR COLOR AND FINISH. INSPECT ALL EXISTING COMPONENTS AND CERTIFY THEY ARE OPERATIONAL. PROVIDE REPORT TO EOR FOR ANY FAILING COMPONENTS.
5. NOT USED.
6. AFTER CONSTRUCTION IS COMPLETE, REBALANCE EXISTING INLETS AND OUTLETS WITHIN THIS AREA TO AIRFLOW VALUES RECORDED DURING PRE-TEST. REFER TO SPECIFICATION SECTION 230593 FOR ADDITIONAL INFORMATION.

SHEET NOTES:

1. MECHANICAL CONTRACTOR AND CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO COORDINATE WITH THE BUILDING ENGINEERING STAFF/OWNER TO ENSURE THAT ALL EXISTING AIR HANDLING UNITS REMAIN OPERATIONAL DURING THE CONSTRUCTION RENOVATION.
2. MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING POWER, WIRING, AND FINAL CONNECTION TO ALL CONTROL DEVICES.
3. MECHANICAL CONTRACTOR SHALL PROVIDE A TESTING AND BALANCING REPORT OF THE EXISTING MECHANICAL SYSTEMS FOR THE ENGINEER OF RECORD TO REVIEW PRIOR TO THE START OF CONSTRUCTION.
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6. ALL EXISTING DUCTWORK THAT IS TO REMAIN IS TO BE EXAMINED FOR RUPTURES AND MECHANICAL CONTRACTOR IS TO INFORM THE ENGINEER OF RECORD WITH A LIST OF DEFICIENCY FINDS IN THE FIELD PRIOR TO COMMENCING ANY DEMOLISHING OF THE EXISTING MECHANICAL SYSTEM AND INSTALLATION OF NEW DUCTWORK.
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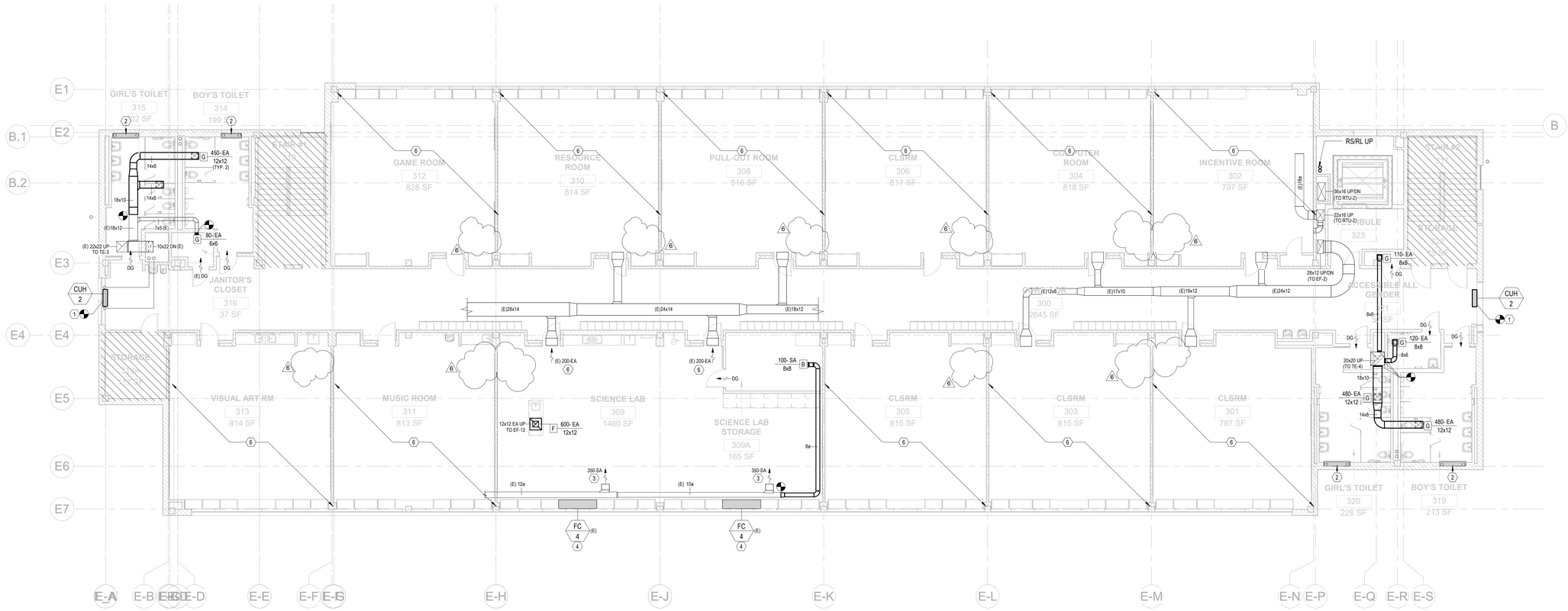

1 CLRM WING LEVEL 3 - HVAC FLOOR PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
CLRM WING LEVEL 3 - HVAC FLOOR PLAN

Sheet NOT FOR CONSTRUCTION
M-204

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KEYED NOTES:

1. REBALANCE EXISTING EXHAUST FAN, REFER TO SCHEDULES FOR INFORMATION.
2. ALL EXHAUST VENTS INCLUDING PLUMBING VENTS THROUGH ROOF SHALL BE AT LEAST 15'-0" FROM MECHANICAL OUTDOOR AIR INTAKES REPRESENTED BY THE DASHED OUTLINES.

SHEET NOTES:

1. MECHANICAL CONTACTOR AND CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO COORDINATE WITH THE BUILDING ENGINEERING STAFF/OWNER TO ENSURE THAT ALL EXISTING AIR HANDLING UNITS REMAIN OPERATIONAL DURING THE CONSTRUCTION RENOVATION.
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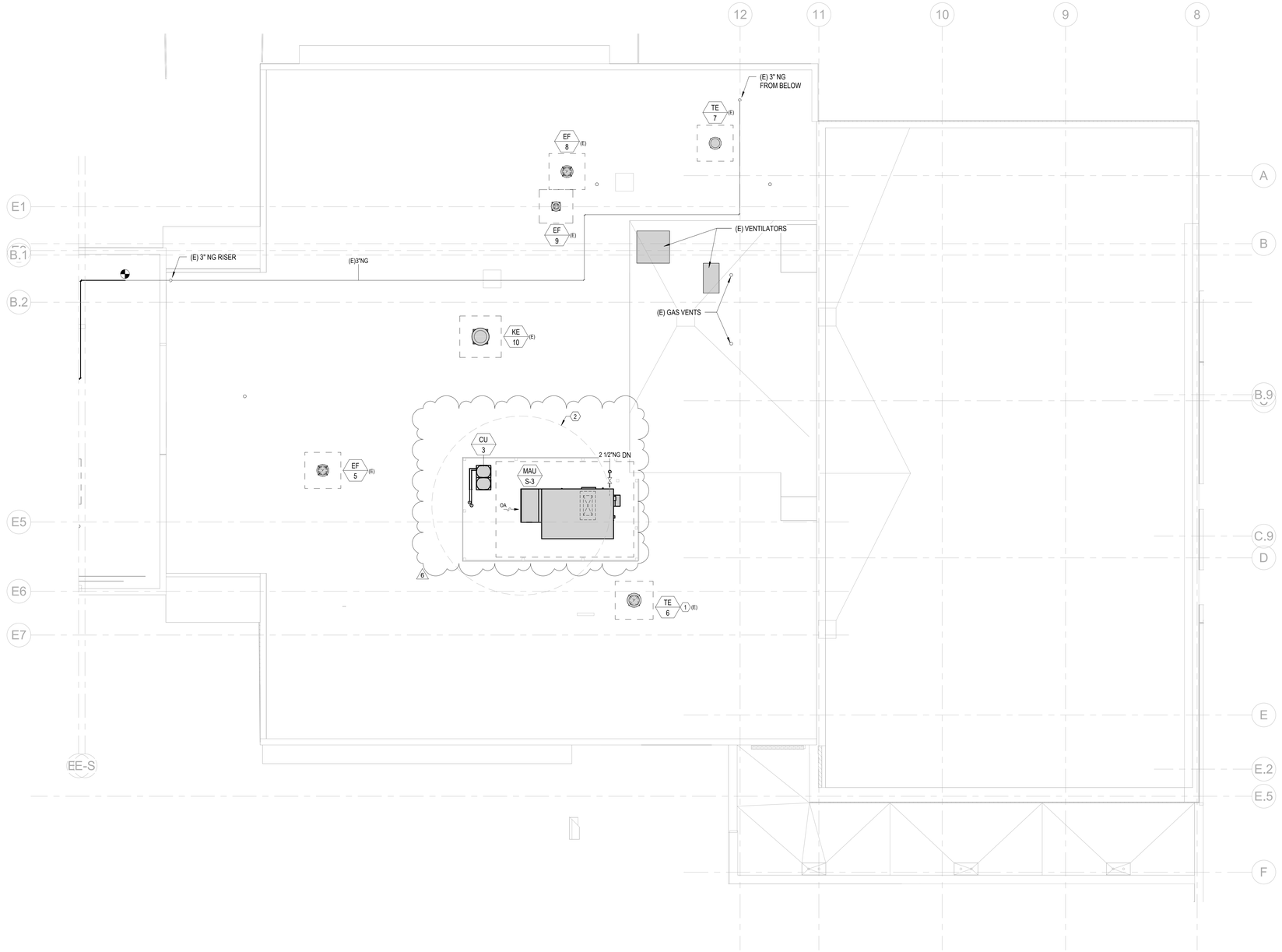

1 SERVICE WING - HVAC ROOF PLAN
SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

SERVICE WING - HVAC ROOF PLAN

Sheet NOT FOR CONSTRUCTION

M-206

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KEYED NOTES:

1. PROVIDE TAMPER PROOF, IMPACT PROOF, LOCKABLE PROTECTIVE COVER FOR GYMNASIUM THERMOSTAT, HUMIDISTAT AND CO_2 SENSOR.
2. ROUTE CD FROM AC-SPLIT DOWN TO FLOOR DRAIN LOCATED IN MECH ROOM. COORDINATE PIPING ROUTING TO AVOID OTHER DISCIPLINES AND TRIP HAZARD.
3. ROUTE REFRIGERANT PIPING UP THRU ROOF THRU PIPE PORTAL. COORDINATE FINAL REFRIGERANT PIPE SIZE AND ROUTING WITH REQUIREMENTS PROVIDED BY MANUFACTURER AND LOCATION OF CONDENSING UNIT ON ROOF.
4. CONNECT NEW 4" GAS SERVING ANNEX EQUIPMENT TO (E) 6"G HEADER. COORDINATE FINAL CONNECTION POINT IN FIELD WITH EXISTING CONDITIONS. COORDINATE DOWNTOWN OF SYSTEM FOR NEW CONNECTION. REFER TO DETAIL 12/M-701 FOR FURTHER DETAIL.
5. COORDINATE ROUTING OF NEW GAS PIPING TIGHT TO NEW EXISTING STRUCTURE. COORDINATE WITH EXISTING UTILITIES AND CONDITIONS. MINIMIZE OFFSETS AND ADDITIONAL FITTINGS WHEN POSSIBLE.
6. INSTALL NEW PEOPLE'S ENERGY APPROVED TWO-PULSE TYPE GAS METER AND ASSOCIATED GAS PIPING. COORDINATE WITH NATURAL GAS UTILITY.

SHEET NOTES:

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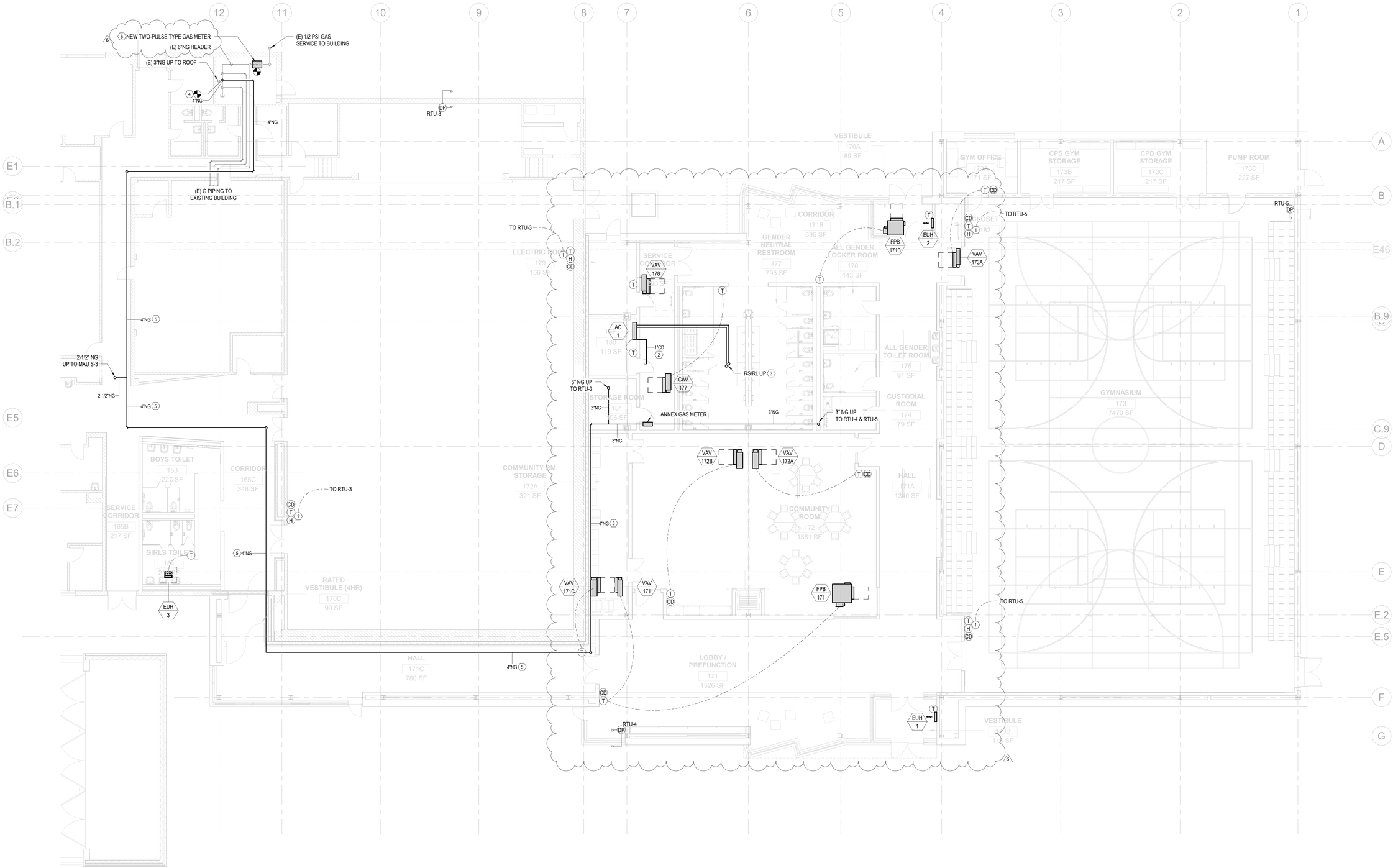

1 ANNEX & SERVICE WING LEVEL 1 - HVAC PIPING PLAN
SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ANNEX & SERVICE WING LEVEL 1 - HVAC PIPING PLAN

Sheet NOT FOR CONSTRUCTION

M-301

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

ROOFTOP UNIT SCHEDULE

TAG	SERVICE	LOCATION	AIRFLOW (CFM)				SUPPLY FAN							POWERED EXHAUST FAN									DX-COOLING COIL						GAS HEATING					
			SA	MIN OA (Normal)	MIN OA (DCV)	SPACE RA	ESP (IN. W.C.)	TSP (IN. W.C.)	DRIVE TYPE	# OF FANS	TOTAL HP	TOTAL BHP	VFD (Y/N)	# OF VFDs	MIN CFM	MAX CFM	ESP (IN. W.C.)	TSP (IN. W.C.)	DRIVE TYPE	# OF FANS	TOTAL HP	TOTAL BHP	VFD (Y/N)	NOMINAL TONS	CAPACITY (MBH)		COIL EAT (DB/WB)(degF)	COIL LAT (DB/WB)(degF)	HGRH LAT (DB/WB)(degF)	EER	HEATING CFM	INPUT (MBH)	OUTPUT (MBH)	EAT (degF)	LAT (degF)	TURNDOWN
																									TOTAL	SENSIBLE									
MAU S-3	SERVICE WING	SERVICE WING ROOF	5,800	5,800	-	-	1.50	2.34	DIRECT	1	5	3.25	Y	1	-	-	-	-	-	-	-	-	-	40	462.1	243.4	95 / 78	56 / 55	84 / 65	12.3	5,800	675	547	-10	77	16:1
RTU-3	EXISTING GYM	ANNEX LOW ROOF	13,200	6,200	1,320	12,700	2.00	5.07	DIRECT	2	20	17.36	Y	2	5,700	12,700	1.00	2.02	DIRECT	1	5	4.3	Y	40	455.4	312.8	78 / 66	54 / 54	-	12.9	9,000	1000	810	15	98	20:1
RTU-4	ANNEX	ANNEX LOW ROOF	7,700	2,300	2,150	5,400	1.75	4.60	DIRECT	1	10	8.29	Y	1	0	7,500	1.00	-	DIRECT	1	3	1.65	Y	22	273.6	195.5	80 / 67	55 / 55	-	10.0	4,400	200	160	27	61	10:1
RTU-5	NEW GYM	ANNEX LOW ROOF	16,000	7,500	2,000	15,500	2.00	5.71	DIRECT	2	30	24.26	Y	2	7,000	15,500	1.00	2.07	DIRECT	1	5	4.39	Y	45	501.9	355.4	78 / 66	54 / 54	-	12.8	10,000	1200	972	10	100	20:1

ROOFTOP UNIT SCHEDULE (cont'd)

TAG	MANUFACTURER AND TYPE	MODEL	ENERGY RECOVERY WHEEL															ELECTRICAL					CONFIGURATION	PRE-FILTER	FINAL FILTER	REFRIGERANT CHARGE (LBS)		MAX SOUND PRESSURE (dBA)	OPERATING WEIGHT (LBS)	DIMENSIONS (IN)			REMARKS
			OA (CFM)	EA (CFM)	SUMMER CONDITIONS							WINTER CONDITIONS							MODEL	MCA	MOCP	VOLTS	PHASE	FREQ.				CIRCUIT 1	CIRCUIT 2			L	W	H	
					OA EAT	SA LAT	RA EAT	EA LAT	CAPACITY (MBH)	SENSIBLE EFF.	LATENT EFF.	OA EAT	SA LAT	RA EAT	EA LAT	CAPACITY (MBH)	SENSIBLE EFF.	LATENT EFF.																
MAU S-3	TRANE HORIZON	OAND480E3-D1C400JN	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	188	225	208	3	60	VERTICAL DISCHARGE	MERV-8	MERV-13	75.7	35.8	93.0	5,300	197	101	93	1-10
RTU-3	TRANE HORIZON	OANG040C1-DAB10BT00	6,200	5,700	95 / 78	82 / 69	75 / 63	88 / 73	209.9	0.67	0.63	35 / 30	56 / 48	70 / 58	46 / 41	236.2	0.67	0.63	ERC-5262C	208	225	208	3	60	VERTICAL DISCHARGE	MERV-8	MERV-13	56.5	45.4	85.7	10,500	336	98	108	1-9,11
RTU-4	TRANE HORIZON	OAKD264A3-D0B404JT	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	125	150	208	3	60	VERTICAL DISCHARGE	MERV-8	MERV-13	30.2	29.7	92.2	4,000	147	95	81	1-9
RTU-5	TRANE HORIZON	OANG045C1-DAB10BV00	7,500	7,000	95 / 78	80 / 68	75 / 63	91 / 75	297.8	0.77	0.73	35 / 30	60 / 51	70 / 58	42 / 38	335.5	0.78	0.73	ERC-6876C	257	300	208	3	60	VERTICAL DISCHARGE	MERV-8	MERV-13	54.8	43.7	85.7	10,800	336	98	108	1-9,11

REMARKS:

1 PREMIUM EFFICIECNCY MOTORS WITH MANUFACTURER SUPPLIED AND INSTALLED VFD.

2 ECONOMIZER MODE WITH 100% MODULATING POWER EXHAUST.

3 GAS FIRED HEATING WITH STAINLESS STEEL HEAT EXCHANGER AND MODULATING HEATING CONTROL.

4 PROVIDE WITH CONDENSATE OVERFLOW SWITCH, STAINLESS STEEL DRAIN PAN, AND EXTEND DRAIN LINES TO NEAREST ROOF DRAIN.

5 FACTORY INSTALLED PACKAGED DDC CONTROLS WITH BACNET/IP INTERFACE.

6 MOTOR DAMPERS TO BE PROVIDED BY MANUFACTURER.

7 PROVIDE WITH 30" INSULATED ROOF CURB W/ INTEGRAL SPINGS SIZED FOR MINIMUM 1" DEFLECTION.

8 PROVIDE WITH SINGLE POINT POWER CONNECTION, CONVENIENCE OUTLET AND NEMA 3R DISCONNECT.

9 AFMS TO BE PROVIDED BY THE MANUFACTURER. SEE CONTROL DRAWINGS FOR AFMS LOCATIONS.

10 PROVIDE HOT GAS REHEAT COIL FOR REHEAT AFTER SUBCOOLING AND DEHUMIDIFICATION.

11 PROVIDE ENERGY RECOVERY WHEEL WITH MODULATING WHEEL BYPASS DAMPERS AND FROST CONTROL.

FAN SCHEDULE

TAG	LOCATION	SERVICE	CFM	ESP ("W.C.)	FAN DATA			MOTOR				APPROX. WEIGHT w/ ACCESSORIES (LBS)	MAX SOUND PRESSURE (dBA)	MANUFACTURER	MODEL	REMARKS
					TYPE	RPM	DRIVE	BHP	HP	RPM	VOLTS/PH/HZ					
(E) EF-2	CLASSROOM WING ROOF	EAST CLASSROOMS	2,100	-	-	-	-	-	-	-	-	-	-	-	-	9
(E) TE-3	CLASSROOM WING ROOF	WEST TOILETS	2,190	-	-	-	-	-	-	-	-	-	-	-	-	9
(E) TE-4	CLASSROOM WING ROOF	EAST TOILETS	3,570	-	-	-	-	-	-	-	-	-	-	-	-	9
(E) EF-5	SERVICE WING ROOF	LUNCHROOM 127	810	-	-	-	-	-	-	-	-	-	-	-	-	9
(E) TE-6	SERVICE WING ROOF	SERVICE WING TOILETS	1,100	-	-	-	-	-	-	-	-	-	-	-	-	9
TE-11	ANNEX LOWER ROOF	ANNEX TOILETS	2,140	0.75	DOWNBLAST	1696	DIRECT	0.62	1	1725	120/1/60	120	65	GREENHECK	G-140-VG	1-6
EF-12	CLASSROOM WING ROOF	SCIENCE LAB EXHAUST	600	0.50	DOWNBLAST	1550	DIRECT	0.12	1/8	1550	120/1/60	60	57	GREENHECK	G-095-D	1-5,7,8

REMARKS:

1 REFER TO SEQUENCE OF OPERATION SPECIFICATION FOR COMPLETE OPERATION STRATEGY.

2 PROVIDE DISCONNECT SWITCH. DISCONNECT SWITCH TO BE RATED FOR THE ENNVIRONMENT THE FAN IS INSTALLED IN. PROVIDE AUX CONTACTS FOR DISCONNECT SWITCHES LOCATED REMOTELY FROM ASSOCIATED VFD.

3 PROVIDE LOW LEAK MOTORIZED BACKDRAFT DAMPER. POWERED FROM DDC SYSTEM.

4 THE FAN MOTOR SHALL BE HIGH EFFICIENCY DESIGN (AS SPECIFIED) AND FURNISHED AS PART OF THE FAN. DIVISION 26 CONTRACTOR SHALL PROVIDE THE NECESSARY WIRING AND CONDUIT TO MOTOR.

5 THE LISTED STATIC PRESURE FOR THESE FANS DOES NOT INCLUDE VELOCITY PRESSURE LOSSES OR GAINS. THE MANUFACTURER WILL DETERMINE VELOCITY PRESSURE LOSSES OR GAINS TO OBTAIN TOTAL STATIC PRESSURE FOR THE FAN SELECTION.

6 PROVIDE 30" INSULATED ROOF CURB.

7 PROVIDE 18" INSULATED ROOF CURB.

8 PROVIDE MANUAL ON/OFF SWITCH AND AUTOMATIC TIMER OFF FOR EXHAUST FAN. SWITCH AND TIMER TO BE PROVIDED BY TC CONTRACTOR.

9 EXISTING FAN TO REMAIN. REBALANCE FAN TO PERFORMANCE DATA INDICATED IN SCHEDULE PER SPECIFICATIONS.

FAN POWERED TERMINAL UNIT SCHEDULE W/ ELECTRIC REHEAT SCHEDULE

TAG	SERVICE	AIRFLOW (CFM)			UNIT SIZE	INLET (IN)	MAX AIR P.D. INCH W.C.	MAX NC		REHEAT COIL (ELECTRIC)						UNIT ELECTRICAL DATA				MANUFACTURER AND MODEL	REMARKS
		MAX	NORMAL OPERATION MIN	DCV OPERATION MIN				RAD.	DISCH.	EAT (degF)	LAT (degF)	CAPACITY (MBH)	CAPACITY (KW)	STAGES	V/P/HZ	FAN HP	V/P/HZ	MCA	MOP		
FPB-171	LOBBY/PREFUNCTION 171	1600	480	200	06	14	0.25	36	29	66	86	35.8	10.5	SCR	208/3/60	1.0	208/1/60	49.6	50	TITUS DTQS	ALL
FPB-171B	CORRIDOR 171B	850	260	-	04	10	0.25	32	28	65	88	20.5	6.0	SCR	208/3/60	0.5	208/1/60	27.1	30	TITUS DTQS	ALL

REMARKS:

1 CONTROLLER, REHEAT CONTROLLER AND SPACE TEMPERATURE SENSOR FURNISHED BY TCC.

2 FACTORY INSTALLATION OF CONTROLLER AND CONTROL DEVICES FURNISHED BY TCC.

3 REFER TO PLANS FOR ACTUAL CFM REQUIREMENTS.

4 PROVIDE DUCT DISCHARGE TRANSITION AS REQUIRED TO MATCH DUCT SIZE AS INDICATED ON PLANS.

5 PROVIDE ELECTRIC HEATING COIL WITH MODULATING SCR CONTROL.

6 PROVIDE UNIT WITH MERV-8 FILTER AT THE RETURN AIR OPENING.

VARIABLE & CONSTANT AIR VOLUME TERMINAL UNIT W/ ELECTRIC REHEAT SCHEDULE

TAG	SERVICE	AIRFLOW (CFM)			INLET (IN)	MAX AIR P.D. INCH W.C.	MAX NC		REHEAT COIL (ELECTRIC)									MANUFACTURER AND MODEL	REMARKS
		COOLING MAX	NORMAL OPERATION MIN	DCV OPERATION MIN			RAD.	DISCH.	HEATING CFM	EAT (degF)	LAT (degF)	CAPACITY (MBH)	CAPACITY (KW)	STAGES	V/P/HZ	MCA	MOP		
VAV-171	LOBBY/PREFUNCTION 171	500	150	100	8	0.25	20	27	250	55	87	8.5	2.5	SCR	208/3/60	8.7	15	TITUS DESV	ALL
VAV-171C	HALL 171C	1350	400	-	12	0.25	24	25	675	55	85	22.2	6.5	SCR	208/3/60	22.6	25	TITUS DESV	ALL
VAV-172A	COMMUNITY ROOM 172	1300	400	200	12	0.25	24	24	500	55	87	17.1	5.0	SCR	208/3/60	17.3	20	TITUS DESV	ALL
VAV-172B	COMMUNITY ROOM 172	1100	400	200	12	0.25	22	24	400	55	87	13.7	4.0	SCR	208/3/60	13.9	15	TITUS DESV	ALL
VAV-173A	GYM OFFICE 173A	250	100	50	6	0.25	17	23	150	55	87	5.1	1.5	SCR	208/3/60	5.2	15	TITUS DESV	ALL
VAV-178	SERVICE CORRIDOR 178	500	150	-	8	0.25	20	27	250	55	87	8.5	2.5	SCR	208/3/60	8.7	15	TITUS DESV	ALL
CAV-177	RESTROOMS	860	860	-	10	0.25	23	25	860	55	86	29.0	8.5	SCR	208/3/60	29.5	30	TITUS DESV	ALL

REMARKS:

1 CONTROLLER, REHEAT CONTROLLER AND SPACE TEMPERATURE SENSOR FURNISHED BY TCC.

2 FACTORY INSTALLATION OF CONTROLLER AND CONTROL DEVICES FURNISHED BY TCC.

3 REFER TO PLANS FOR ACTUAL CFM REQUIREMENTS.

4 PROVIDE VAV BOX WITH ELECTRIC HEATING COIL, NEMA 1 CONTROL PANEL ENCLOSURE, AND DISCONNETION SWITCH.

5 PROVIDE DUCT DISCHARGE TRANSITION AS REQUIRED TO MATCH DUCT SIZE AS INDICATED ON PLANS.

6 PROVIDE ELECTRIC HEATING COIL WITH MODULATING SCR CONTROL

PUBLIC BUILDING COMMISSION OF CHICAGO — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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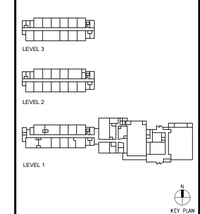
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE:



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

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Title

MECHANICAL SCHEDULES

Sheet NOT FOR CONSTRUCTION

M-800

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
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8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
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1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

SPLIT SYSTEM SCHEDULE

TAG	SERVICE	SUPPLY FAN CFM	COOLING DATA						HEATING CAPACITY (MBH)	REFRIGERANT		EFFICIENCY			ELECTRICAL DATA					UNIT DIMENSIONS W x D x H	MAX SOUND PRESSURE dB(A)	OPERATING WEIGHT (LB)	BASIS OF DESIGN		REMARKS
			NOMINAL CAPACITY (TONS)	TOTAL COOLING (MBH)	EAT (DB/WB)	LAT (DB/WB)	AMBIENT TEMP (F)	# OF CIRCUITS		TYPE	CHARGE (LBS)	SEER	EER	COP	VOLTS	PH	HERTZ	MCA	MOCP				MANUFACTURER	MODEL	
AC-1	ANNEX IDF ROOM	388-544-738	2	22,400	80 / 67	55 / 55	-	-	-	R-410A	4.3	-	-	-	208	1	60	1	15	43 x 9 x 13	53	50	TRANE	NTYWST24A112A	1,2,6,7,8,9
CU-1		1769			-	-	95	1				20.5	12.5	-	208	1	60	17	20	33 x 13 x 35	55	150	TRANE	NTYSST24A112A	3,4,5,8,10
AC-2	ELEVATOR MACHINE RM	145-237-400	1	12,000	80 / 67	55 / 55	-	-	14,400	R-410A	2.9	-	-	-	208	1	60	1	15	32 x 9 x 12	45	50	TRANE	NTXWST12A112A	1,2,6,7,8,9
CU-2		1229			-	-	95	1				23.1	13	3.84	208	1	60	9	15	32 x 11 x 22	51	100	TRANE	NTXSST12A112A	3,4,5,8,10

REMARKS:

1 PROVIDE WITH LOCAL DISCONNECT AND MOTOR STARTER.
2 PROVIDE WITH FIXED REMOTE THERMOSTAT AND INTERFACE UNIT OPERATION WITH BAS.
3 PROVIDE UNIT WITH NEMA 3R DISCONNECT SWITCH.
4 INTERFACE CONDENSING UNIT WITH BAS. BAS SHALL RECEIVE ALL UNITS ALARMS, UNIT OPERATING STATUS , AND SPACE TEMPERATURE.
5 PROVIDE CONDENSING UNIT WITH LOW ABIENT CONTROLS.
6 HIGH WALL CONFIGURATION.
7 PROVIDE WITH INTEGRAL CONDENSATE LIFT MECHANISM.
8 PROVIDE UNIT WITH ALL MANUFACTURER RECOMMENDED TRIM, VALVES AND PIPING EQUIPMENT.
9 PROVIDE DRIP PAN WITH LEAK SENSOR
10 PROVIDE OUTDOOR STAND FOR CONDENSING UNIT. COORDINATE WITH ARCHITECTURE.

CEILING CASSETTES (VRF)

TAG	SERVING	BASIS OF DESIGN (TRANE MITSUBISHI)	TYPE	QTY	FEEDER CONDENSING UNIT	MAX SOUND PRESSURE (dBA)	NOMINAL TONNAGE	SUPPLY FAN MAX FLOW (CFM)	NOMINAL CAPACITIES		CORRECTED COOLING CAPACITY		CORRECTED HEATING CAPACITY	ELECTRICAL DATA				UNIT WEIGHT (LBS)	REMARKS
									COOLING (BTU/HR)	HEATING (BTU/HR)	TOTAL (BTU/HR)	SENSIBLE (BTU/HR)	TOTAL (BTU/HR)	VOLTS	PHASE	MCA	MOCP		
CC-1	LUNCHROOM 127	TPLFYP015EM140B	FOUR-WAY CEILING CASSETTE	8	CU-3	28-31	1.25	600	15,000	17,000	14,611	11,204	16,661	208	1	0.4	15	50	ALL

REMARKS:

1 PROVIDE INTEGRAL DISCONNECT STARTER.
2 PROVIDE UNIT WITH BUILT-IN CONDENSATE LIFT MECHANISM, AND EXTEND CONDENSATE DRAIN PIPING TO NEAREST FLOOR DRAIN.
3 CONNECT ALL UNITS TO ONE PROGRAMMABLE WIRED THERMOSTAT WITH 7-DAY SCHEDULING AND CONNECTION TO CENTRAL CONDENSING UNIT. PROVIDE VANDAL PROOF COVER FOR THERMOSTAT.
4 PROVIDE GRILLE AND CONFIRM COLOUR WITH ARCHITECT.

HEAT PUMP CONDENSING UNIT SCHEDULE (VRF)

TAG	BASIS OF DESIGN (TRANE MITSUBISHI)	COOLING CAPACITY			HEATING CAPACITY		EFFICIENCY RATINGS			MODULES	COMPRESSOR			REFRIGERANT			ELECTRICAL DATA							MAX SOUND PRESSURE (dBA)	NOMINAL OPERATING WEIGHT (LBS)	REMARKS
		NOMINAL (BTU/HR)	CORRECTED (BTU/HR)	TONS	NOMINAL (BTU/HR)	CORRECTED (BTU/HR)	EER	IEER	HEATING COP @ 47 degF		QTY	STYLE	TYPE	BASE CHARGE (LBS)	EXTRA CHARGE (LBS)	VOLTS	PH	HERTZ	RFS	MCA	MOCP				
CU-3	TUHYH1203AN40AN	120,000	116,887	10	135,000	133,286	13.30	22.10	4.01	P120	1	INV-SCROLL	R-410A	23.8	10.2	208	3	60	70	47	70			61.5	700	ALL

REMARKS:

1 PROVIDE MANUFACTURER RECOMMENDED UNIT STAND.
2 PROVIDE WITH UNIT MOUNTED DISCONNECT. COORDINATE WITH DIV 26.
3 PROVIDE WITH ALL LINESET CONNECTIONS AND TRIM NECESSARY FOR A COMPLETE INSTALLATION.
4 PROVIDE LOW-AMBIENT KIT FOR VRF SYSTEM CAPABLE OF PROVIDING HEAT DOWN TO -25F.
5 PROVIDE INDEPENDENT INDOOR UNIT OPERATION SO THE SYSTEM WILL CONTINUE TO RUN IF ANY INDIVIDUAL UNIT IS POWERED DOWN.
6 PROVIDE EVAPORATION TEMPERATURE CONTROL TO OPTIMISE COVERAGE OF LATENT AND SENSIBLE HEAT.
7 PROVIDE AUTO-RESTART SO IN THE CASE OF POWER FAILURE TO BUILDING, EQUIPMENT WILL AUTO-RESTART.
8 PROVIDE CONDENSER UNIT WITH BUILT-IN REFRIGERANT FILTER.

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

TAG	SERVICE	TYPE	INLET SIZE (IN.)	FACE SIZE (IN.)	INSULATED PLENUM BOOT	NO. OF SLOTS	SLOT WIDTH (IN.)	DAMPER	MATERIAL	MANUFACTURER	MODEL	REMARKS
A	SUPPLY	SQUARE PLAQUE DIFFUSER	REFER TO PLANS	24x24	-	-	-	OBD	STEEL	TITUS	OMNI	1,2,5,6
B	SUPPLY	FIXED 35° DOUBLE DEFLECTION GRILLE	REFER TO PLANS	INLET SIZE + 2	-	-	-	OBD	ALUMINUM	TITUS	300FL	1,2,3,5,6
C	SUPPLY	LINEAR SLOT DIFFUSER	REFER TO PLANS	-	YES	3	1"	OBD	ALUMINUM	TITUS	ML-39	1,2,4,5,6,7
D	SUPPLY	DRUM LOUVER	REFER TO PLANS	INLET SIZE + 3	-	-	-	ASD	ALUMINUM	TITUS	DL	1,2,5
E	SUPPLY	ADJUSTABLE ROUND CEILING DIFFUSER	REFER TO PLANS	-	-	-	-	OBD	STEEL	TITUS	TMRA	1,2,5,6
F	EXHAUST / TRANSFER / RETURN	STEEL PERFORATED RETURN DIFFUSER	REFER TO PLANS	24x24	-	-	-	OBD	STEEL	TITUS	PAR	1,2,5,6
G	EXHAUST / TRANSFER / RETURN	FIXED 35° DEFLECTION GRILLE	REFER TO PLANS	INLET SIZE + 2	-	-	-	OBD	ALUMINUM	TITUS	350FL	1,2,5,6
H	TRANSFER / RETURN	RETURN LINEAR SLOT DIFFUSER	-	-	-	6	1"	-	ALUMINUM	TITUS	MLR-39	1,2,4,5

REMARKS:

1 COORDINATE ALL FINISHES WITH ARCHITECT.
2 PROVIDE APPROPRIATE BORDER AND ACCESSORIES FOR CEILING/WALL TYPE.
3 WHERE INSTALLED ON A SIDEWALL, LOUVERS ARE TO BE ANGLED SO THE AIR IS DIRECTED DOWNWARD AT A 45 DEGREE ANGLE.
4 PROVIDE BLANK-OFFS FOR UNUSED SECTIONS.
5 THE MAX NC LEVEL FOR GRILLES, REGISTERS AND DIFFUSERS IS NC 30
6 ALL RUN OUT DUCTWORK TO DIFFUSERS OR GRILLES SHALL BE NECK SIZE UNLESS NOTED OTHERWISE.
7 DIFFUSERS WITH MULTIPLE SLOTS SHALL HAVE THE INNER MOST SLOT DIRECTED TOWARDS THE INTERIOR OF THE BUILDING. THE REMAINING SHALL BE DIRECTED TOWARDS THE EXTERIOR UNLESS NOTED OTHERWISE.

ELECTRIC UNIT HEATER SCHEDULE (EUH)

TAG	LOCATION	TYPE	FAN CFM	UNIT DIMENSIONS (IN.)			ELECTRIC HEATING COIL			MANUFACTURER	MODEL	REMARKS
				H	W	D	KW	AMPS	VOLTS/PH/HZ			
EUH-1	SEE PLANS	WALL MOUNT	200	22	31	4	6	28.8	208/1/60	QMARK	EFQ6008	1-5
EUH-2	SEE PLANS	WALL MOUNT	200	22	31	4	6	28.8	208/1/60	QMARK	EFQ6008	1-5
EUH-3	SEE PLANS	CEILING MOUNT	150	18	16	4	3	14.5	208/1/60	QMARK	EFF4004	1-5

REMARKS:

1 COORDINATE FINISH WITH ARCHITECT.
2 PROVIDE DISCONNECT SWITCH.
3 PROVIDE MANUAL THERMAL RESET SAFETY CUTOUT.
4 PROVIDE WITH MOUTING BRACKET/SUPPORTS AND TRIM KIT.
5 PROVIDE REMOTE-MOUNTED 7-DAY PROGRAMMABLE THERMOSTAT WITH VANDAL PROOF COVER.

CABINET UNIT HEATER SCHEDULE (HYDRONIC)

TAG	QTY	LOCATION	CABINET MOUNTING	SIZE	HEATING COIL DATA									FAN/ MOTOR DATA						MANUFACTURER AND MODEL	REMARKS
					FLUID TYPE	ROWS	MBH	GPM	WPD	EAT	LAT	EWT	LWT	CFM	QTY	HP EACH	VOLT	PH	HZ		
CUH-1	1	SEE PLANS	WALL RECCESSED	06	WATER	1	41.1	4.11	1.32	60	120	180	160	630	2	1/10	120	1	60	VULCAN RW-1120	1-5
CUH-2	4	SEE PLANS	SLOPE TOP FLOOR MOUNTED	02	WATER	2	22.1	2.21	0.45	60	120	180	160	230	1	1/15	120	1	60	VULCAN FS-1005	1-4,6
CUH-3	2	SEE PLANS	WALL RECCESSED	08	WATER	2	75.1	7.5	5.7	60	120	180	160	860	3	1/10	120	1	60	VULCAN RW-1120	1-5

REMARKS:

1 PROVIDE UNIT WITH STAND-ALONE CONTROLS WITH 7-DAY REMOTE PROGRAMMABLE THERMOSTAT AND VANDAL PROOF COVER.
2 PROVIDE UNIT WITH DISCONNECT SWITCH AND STARTER.
3 COORDINATE FINISH WITH ARCHITECT. FINISH TO BE FACTORY APPLIED POWDER COATED BAKED ENAMEL, COLOR SELECTED BY ARCHITECT FROM MANUFACTURER'S STANDARD COLORS.
4 PROVIDE UNIT WITH EQUIPMENT SUPPORT KIT.
5 COORDINATE UNIT ENCLOSURE TO CONCEAL EXISTING WALL CAVITY BEHIND UNIT FACE PLATE. COORDINATE WITH ARCHITECT FOR ANY REQUIRED WALL CAVITY MODIFICATION.
6 PROVIDE WITH DUMMY SIDE CABINETS TO EXTEND ENTIRE SPAN OF WINDOW. VERIFY IN FIELD DIMENSIONS AND SIZE. COORDINATE SIZE AND FINISH WITH ARCHITECT.

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CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
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ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

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6	05/19/23	ADDENDUM 01

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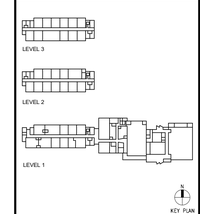

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

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CPS Project #2021-26031-ADM

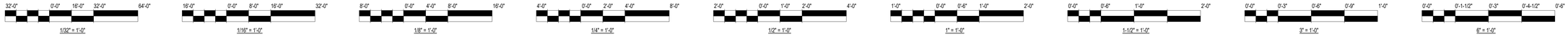
Project No: 2138

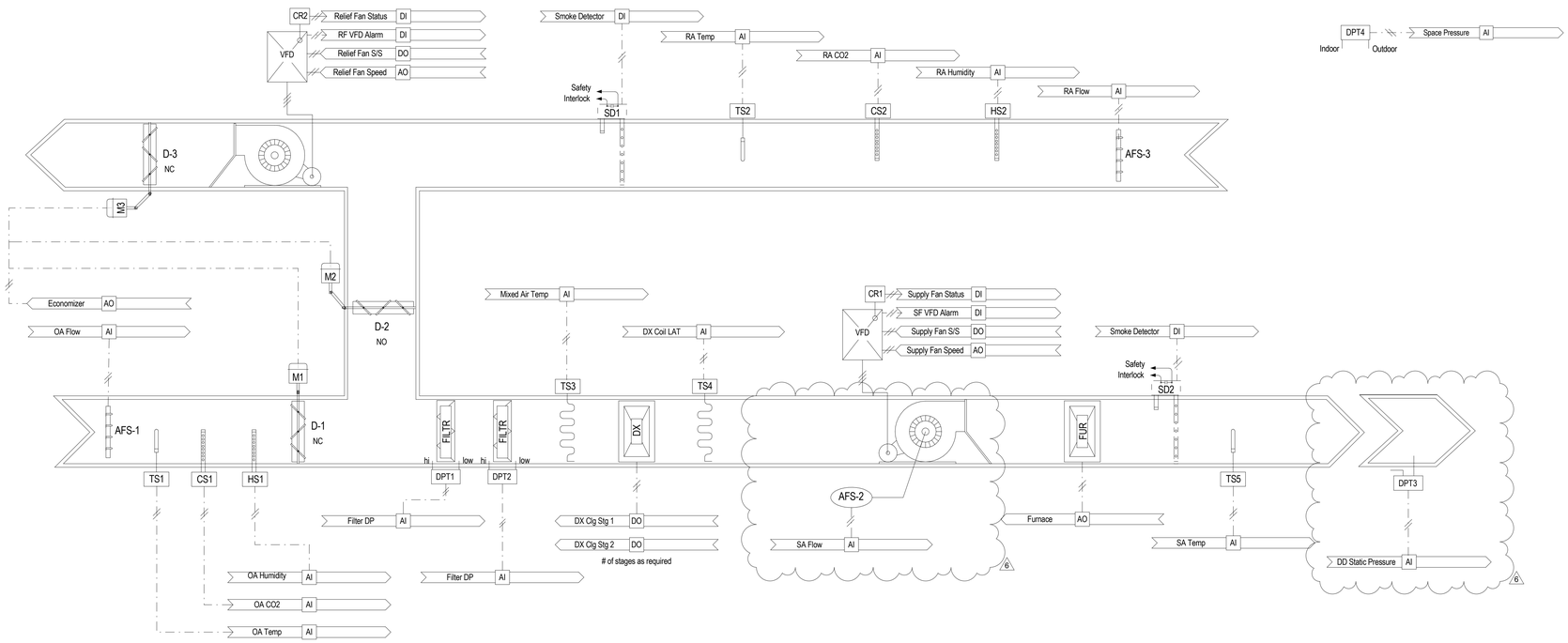
Title

MECHANICAL SCHEDULES

Sheet NOT FOR CONSTRUCTION

M-801





VAV RTU - GAS HEAT AND DX COOLING (RTU-4)

POINTS LIST

ADDRESS	POINT DESCRIPTOR	POINT TYPE DI	AI	DO	AO	VP	GRAPHICS	TREND	ALARM	REMARKS
	Supply Fan S/S			●			●	●	●	
	Supply Fan Status	●					●	●	●	
	SF VFD Alarm	●					●	●	●	
	Supply Fan Speed				●		●	●	●	
	Relief Fan S/S			●			●	●	●	
	Relief Fan Status	●					●	●	●	
	RF VFD Alarm	●					●	●	●	
	Relief Fan Speed				●		●	●	●	
	Smoke Detector	●					●	●	●	
	OA Temp		●				●	●	●	
	Mixed Air Temp		●				●	●	●	
	DX Coil LAT		●				●	●	●	
	RA Temp		●				●	●	●	
	SA Temp		●				●	●	●	
	Filter DP		●				●	●	●	
	DX Clg Stg 1			●			●	●	●	# stages as required
	Furnace				●		●	●	●	
	Economizer				●		●	●	●	
	OA Humidity		●				●	●	●	
	RA Humidity		●				●	●	●	
	OA Flow		●				●	●	●	
	SA Flow		●				●	●	●	
	RA Flow		●				●	●	●	
	Space Pressure		●				●	●	●	
	OA CO2		●				●	●	●	
	RA CO2		●				●	●	●	
	DD Static Pressure		●				●	●	●	

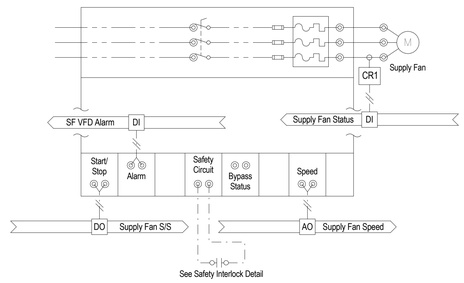
BILL OF MATERIAL

DESIG	QTY	MODEL NO.	DESCRIPTION	MFG / REMARKS
TS1,2,5,6			Duct Temperature Sensor	
TS3,4			Averaging Duct Temperature Sensor	
DPT1-4			Differential Pressure Transmitter	
SD1-2			Smoke Detector	
D1-4			Control Dampers	
M1-4			Damper Actuators	
TS7			Zone Temperature Sensor	
CR1-2			Current Switch (VFD Type)	
HS1-2			Duct Humidity Sensor	
AFS1-3			Air Flow Monitoring Station	
CS1-2			Duct CO2 Sensor	
CS3			Zone CO2 Sensor	

DRAWING NOTES:

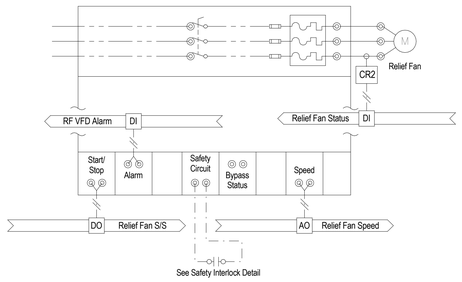
1. Locate each Zone Damper DAT sensor a sufficient distance downstream of the zone dampers to ensure adequate mixing of the airstreams.

ELECTRIC LADDER DIAGRAMS



SUPPLY FAN VFD

ELECTRIC LADDER DIAGRAMS



RELIEF FAN VFD

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STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
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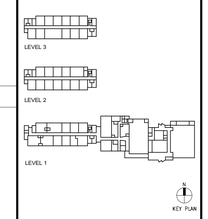

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

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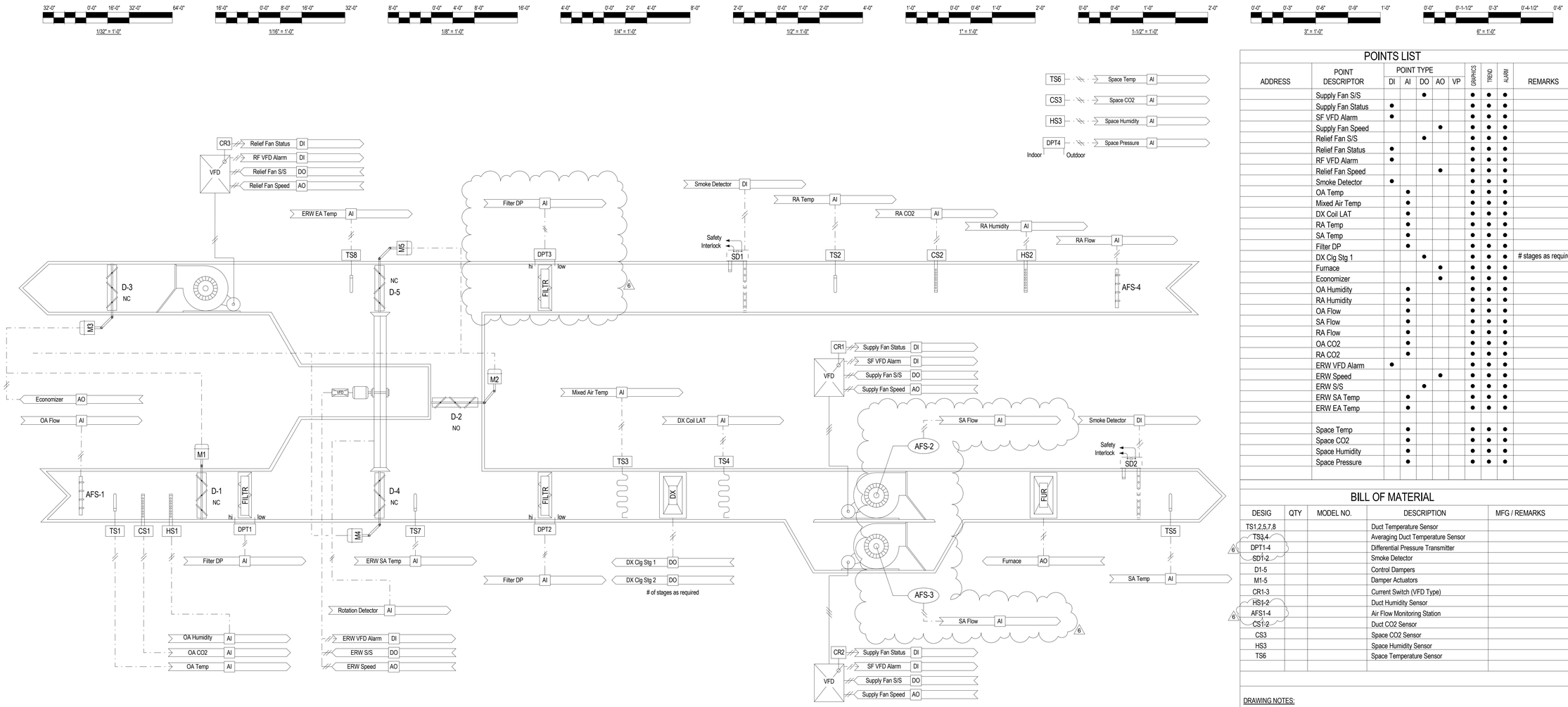
BAS - RTU-4

Sheet NOT FOR CONSTRUCTION

M-907



SINGLE ZONE RTU - ENERGY RECOVERY, GAS HEAT AND DX COOLING (RTU-3 & RTU-5)

POINTS LIST

ADDRESS	POINT DESCRIPTOR	POINT TYPE DI	AI	DO	AO	VP	GRAPHICS	TREND	ALARM	REMARKS
	Supply Fan S/S			●			●	●	●	
	Supply Fan Status	●					●	●	●	
	SF VFD Alarm	●					●	●	●	
	Supply Fan Speed				●		●	●	●	
	Relief Fan S/S			●			●	●	●	
	Relief Fan Status	●					●	●	●	
	RF VFD Alarm	●					●	●	●	
	Relief Fan Speed				●		●	●	●	
	Smoke Detector	●					●	●	●	
	OA Temp		●				●	●	●	
	Mixed Air Temp		●				●	●	●	
	DX Coil LAT		●				●	●	●	
	RA Temp		●				●	●	●	
	SA Temp		●				●	●	●	
	Filter DP		●				●	●	●	
	DX Clg Stg 1			●			●	●	●	# stages as required
	Furnace				●		●	●	●	
	Economizer				●		●	●	●	
	OA Humidity		●				●	●	●	
	RA Humidity		●				●	●	●	
	OA Flow		●				●	●	●	
	SA Flow		●				●	●	●	
	RA Flow		●				●	●	●	
	OA CO2		●				●	●	●	
	RA CO2		●				●	●	●	
	ERW VFD Alarm	●					●	●	●	
	ERW Speed				●		●	●	●	
	ERW S/S			●			●	●	●	
	ERW SA Temp		●				●	●	●	
	ERW EA Temp		●				●	●	●	
	Space Temp		●				●	●	●	
	Space CO2		●				●	●	●	
	Space Humidity		●				●	●	●	
	Space Pressure		●				●	●	●	

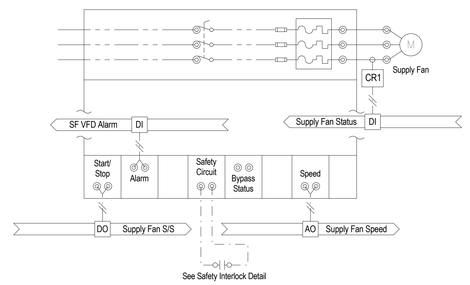
BILL OF MATERIAL

DESIG	QTY	MODEL NO.	DESCRIPTION	MFG / REMARKS
TS1,2,5,7,8			Duct Temperature Sensor	
TS3,4			Averaging Duct Temperature Sensor	
DPT1-4			Differential Pressure Transmitter	
SD1-2			Smoke Detector	
D1-5			Control Dampers	
M1-5			Damper Actuators	
CR1-3			Current Switch (VFD Type)	
HS1-2			Duct Humidity Sensor	
AFS1-4			Air Flow Monitoring Station	
CS1-2			Duct CO2 Sensor	
CS3			Space CO2 Sensor	
HS3			Space Humidity Sensor	
TS6			Space Temperature Sensor	

DRAWING NOTES:

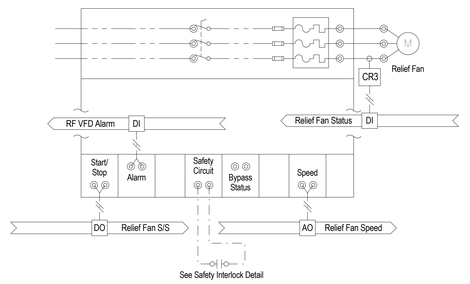
1. -

ELECTRIC LADDER DIAGRAMS



SUPPLY FAN VFD

ELECTRIC LADDER DIAGRAMS



RELIEF FAN VFD

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Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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CHICAGO, IL 60612

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CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
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55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60604

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333 South Wabash Avenue
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Chicago, IL 60654

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ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

BAS - RTU-3 & RTU-5

Sheet

NOT FOR CONSTRUCTION

M-908

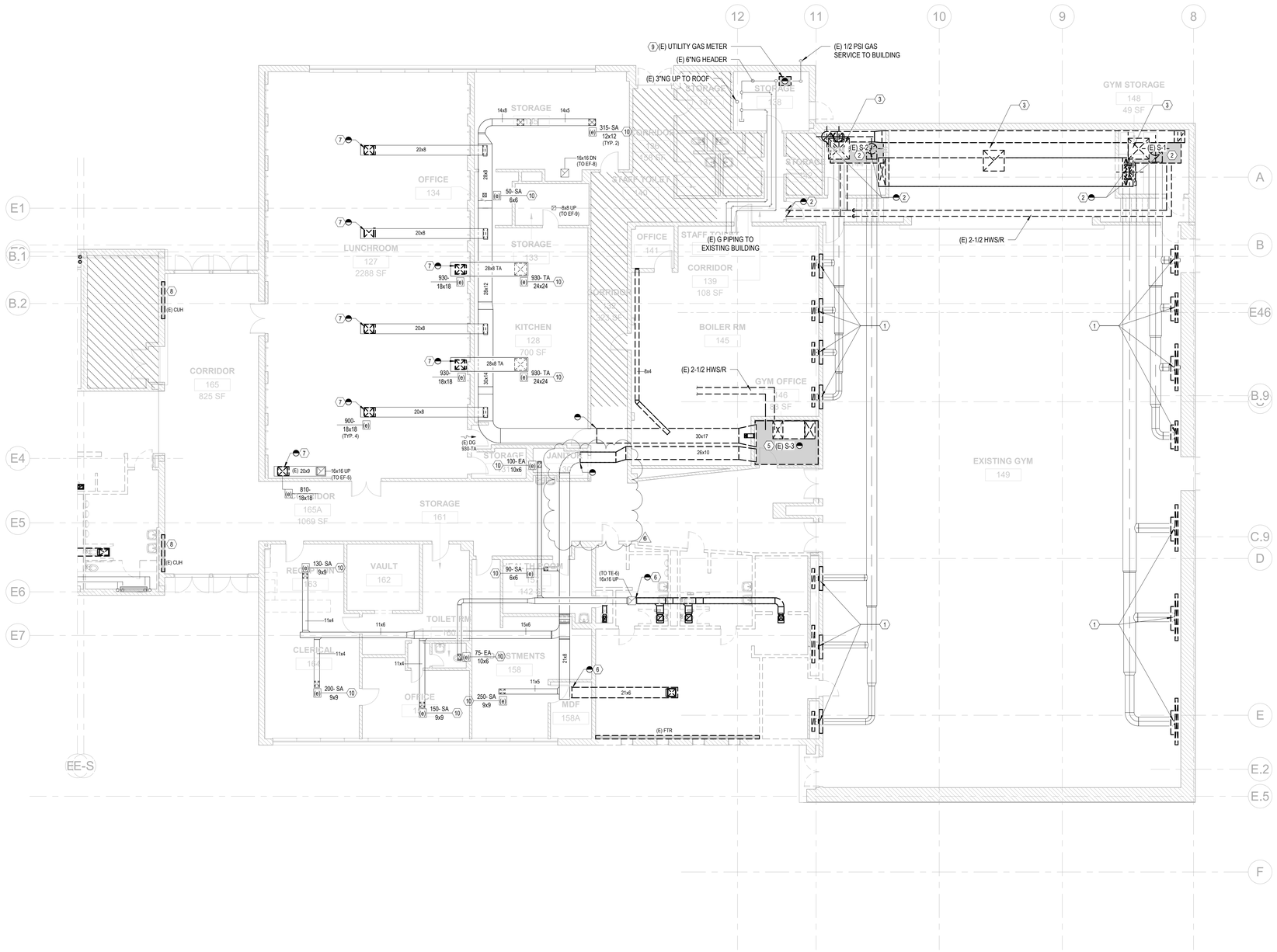
1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

DEMO KEYED NOTES:

1. DEMOLISH EXISTING SIDEWALL GRILLES ASSOCIATED WITH EXISTING GYMNASIUM SUPPLY/RETURN SYSTEM. PROVIDE INSULATED CAP TO ISOLATE FROM UNDERGROUND DUCTWORK SYSTEM. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR WALL FINISH. UNDERGROUND DUCTWORK SYSTEM SHALL BE ABANDONED IN PLACE.
2. EXISTING S-1 AND S-2 AIR HANDLING UNITS SHALL DEMOLISHED IN THEIR ENTIRETY. REMOVE ALL ASSOCIATED PIPING, PUMPS, DUCTWORK, CONTROLS, SUPPORTS, POWER CONNECTIONS AND ASSOCIATED ACCESSORIES. CAP AND SEAL PIPING AT MAIN. DEMOLISH DUCTWORK RISERS DN TO FLOOR PENETRATION. COORDINATE WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR CAP AT FLOOR. EXISTING UNDERGROUND DUCTWORK TO BE ABANDONED IN PLACE.
3. DEMOLISH EXISTING ROOF VENTILATOR AND ASSOCIATED DUCTWORK. REFER TO MD-206 FOR CONTINUATION. COORDINATE WITH ARCHITECTURAL FOR PATCHING OF ROOF FROM DEMOLISHED VENTILATOR.
4. DEMOLISH EXISTING HWS/R PIPING BACK TO MAIN OUTSIDE OF EXISTING GYMNASIUM REMOVE ALL ASSOCIATED SUPPORTS. CAP AND SEAL MAIN.
5. DEMOLISH EXISTING S-3 LOCATED ABOVE BOILER ROOM OFFICE. DEMOLISH PIPING AND ASSOCIATED DUCTWORK AS SHOWN. DEMOLISH EXISTING OA DUCTWORK BACK TO ROOF AND REMOVE ASSOCIATED SUPPORTS, CONTROLS, DAMPERS, POWER CONNECTIONS AND ACCESSORIES FROM EXISTING UNIT.
6. DEMOLISH DUCTWORK BACK TO MAIN. PREPARE FOR NEW CONNECTION, REFER TO NEW FLOOR PLAN FOR CONNECTION.
7. DEMOLISH EXISTING DIFFUSER, REGISTER OR GRILLE AND PREPARE FOR NEW CONNECTION.
8. DEMOLISH EXISTING CABINET UNIT HEATER AND REPLACE WITH NEW. PROVIDE ASSOCIATED SUPPORTS, VALVES, CONTROLS AND ACCESSORIES. PIPING CONNECTION TO REMAIN AND BE REUSED TO CONNECT WITH NEW UNIT. COORDINATE WITH ARCHITECTURAL FOR ANY REQUIRED WALL MODIFICATIONS TO INSTALL NEW UNIT.
9. CONTRACTOR TO VERIFY GAS METER PRIOR TO START OF WORK. DEMOLISH EXISTING GAS METER AND PREPARE GAS PIPING FOR INSTALLATION OF NEW PEOPLE'S ENERGY APPROVED TWO-PULSE UTILITY METER. COORDINATE WITH GAS UTILITY.
10. BEFORE DEMOLITION BEGINS, PERFORM PRE-TEST ON EXISTING INLETS AND OUTLETS. RECORD AIRFLOW AND SUBMIT REPORT TO ARCHITECT/ENGINEER. REFER TO SPECIFICATION SECTION 230593 FOR ADDITIONAL INFORMATION.

DEMO SHEET NOTES:

1. MECHANICAL CONTRACTOR AND THE CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO COORDINATE WITH THE BUILDING ENGINEERING STAFF TO ENSURE THAT ALL AIR HANDLING UNITS ARE MAINTAINED AND OPERATIONAL DURING THE CONSTRUCTION RENOVATION.
2. ALL DUCTWORK TO BE DEMOLISHED SHALL BE CUT, CAPPED, AND REMOVED BACK TO MAIN.
3. MECHANICAL CONTRACTOR IS TO COMPLETE A TESTING AND BALANCING REPORT OF THE EXISTING MECHANICAL SYSTEMS FOR THE ENGINEER OF RECORD TO REVIEW PRIOR TO THE START OF WORK.
4. MECHANICAL CONTRACTOR IS TO COMPLETE A TESTING AND BALANCING REPORT AFTER ALL ALTERATIONS AND NEW CONSTRUCTION WORK HAS BEEN COMPLETED.
5. REMOVE EXISTING DUCTWORK, GRILLES, INCLUDING EXHAUST FAN AND CONTROLS. KEEP THE EXHAUST FAN AND CONTROLS IF IT IS SERVING OTHER AREAS, VERIFY PRIOR TO REMOVAL. BALANCE FOR NEW AIRFLOW. REMOVE EXISTING SUPPLY DUCT AND ANY HEATING EQUIPMENT AND DEVICES AND CAP PIPING BACK TO MAINS, MAINTAINING CONTINUITY.
6. MECHANICAL CONTRACTOR TO FIELD VERIFY ALL DUCTWORK ELEVATIONS CURRENTLY INSTALLED PRIOR TO PROCURING SHOP DRAWINGS.
7. ALL EXISTING DUCTWORK THAT IS TO REMAIN IS TO BE EXAMINED FOR RUPTURES AND MECHANICAL CONTRACTOR IS TO INFORM THE ENGINEER OF RECORD WITH A LIST OF DEFICIENCY FINDS IN THE FIELD PRIOR TO COMMENCING ANY DEMOLISHING OF THE EXISTING MECHANICAL SYSTEM AND INSTALLATION OF NEW DUCTWORK.
8. MECHANICAL CONTRACTOR IS TO INSPECT AND CLEAN ALL RELOCATED EQUIPMENT BEFORE AND AFTER INSTALLATION.
9. MECHANICAL CONTRACTOR IS TO COMPLETE A FULL DUCT CLEANING OF ALL EXISTING DUCTWORK PRIOR TO MAKING NEW CONNECTIONS TO THE MAINS. THE MECHANICAL CONTRACTOR IS TO PROVIDE SCOPE DOCUMENTATION DESCRIBING THE EXTENT OF THE DUCT CLEANING AND CLEANING PROCEDURES.
10. REMOVE EXISTING WALL THERMOSTATS AND WIRING COMPLETE AS REQUIRED.
11. PRIOR TO ANY DEMO WORK CAN START, GENERAL CONTRACTOR SHALL HAVE THE CONTROL CONTRACTOR VISIT THE SITE AND DOCUMENT THE CONTROL DEVICES THAT ARE TO REMAIN AND MARK THOSE LOCATIONS. IT IS UP TO THE CONTROL CONTRACTOR TO EITHER REMOVE THOSE DEVICES OR LEAVE THEM FOR EQUIPMENT OPERATION OR PROVIDE TEMPORARY DEVICES AS NECESSARY.
12. TEST AND EXERCISE ALL CONTROLS INSTRUMENTS AND DEVICES TO VERIFY OPERATION. ALL INSTRUMENTS AND DEVICES SHALL BE TESTED AND CALIBRATED TO GUARANTEE ACCURATE MEASUREMENT. THIS INCLUDES BUT IS NOT LIMITED TO THERMOSTATS, CONTROL VALVES, CONTROL DAMPERS, AIRFLOW MEASURING STATIONS, TEMPERATURE SENSORS, STATIC PRESSURE SENSORS, SWITCHES, DUCT SMOKE DETECTORS, ETC. PROVIDE REPORT SUMMARIZING THE STATUS OF EACH DEVICE AND ANY DEFICIENCIES.
13. ALL EXISTING CONTROLS DEVICES SHALL BE PROTECTED OR RELOCATED AS REQUIRED FOR THIS PROJECT. CONTRACTOR SHALL IDENTIFY ALL DEVICES AND COORDINATE THESE WITH THE CONSTRUCTION MANAGER / GENERAL CONTRACTOR TO IDENTIFY WHERE THE WORK OF ANOTHER TRADE WILL REQUIRE THIS.
14. MECHANICAL CONTRACTOR IS TO LOCATE INSPECT, AND TEST THE EXISTING AHU DUCT STATIC PRESSURE SENSOR. PROVIDE A NEW AHU DUCT STATIC PRESSURE SENSOR IF THE EXISTING AHU DUCT STATIC PRESSURE SENSOR IS DEEMED NOT SALVAGEABLE.



1 SERVICE WING LEVEL 1 - HVAC DEMO PLAN
SCALE: 1/8" = 1'-0"

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1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3 | LEVEL 2 | LEVEL 1 | KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
SERVICE WING LEVEL 1 - HVAC DEMO PLAN

Sheet NOT FOR CONSTRUCTION
MD-201

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
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2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
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1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

KEYED NOTES:

1. REMOVE ALL ELECTRICAL INFRASTRUCTURE IN THIS AREA INCLUDING LIGHTING, RECEPTACLES, FIRE ALARM, AND INTERCOM SYSTEMS. TAG ASSOCIATED CIRCUITS IN SOURCE PANELS AS "SPARE".
2. REPLACE EXISTING SECURITY/INTRUSION DETECTION PANEL LOCATED IN BOILER ROOM.
3. REMOVE ALL EXTERIOR LIGHTING, CAMERAS, AND ASSOCIATED INFRASTRUCTURE ON EAST SIDE OF EXISTING GYMNASIUM.

1 **LEVEL 1 SERVICE WING - POWER DEMO PLAN**
SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

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ENVIRONMENTAL ENGINEER
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33 W Monroe ST #1825
Chicago, IL 60603

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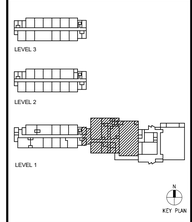
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

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CPS Project #2021-26031-ADM

Project No: 2138

Title
FIRST FLOOR ELECTRICAL DEMOLITION PLAN - SERVICE WING

Sheet
ED-201

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

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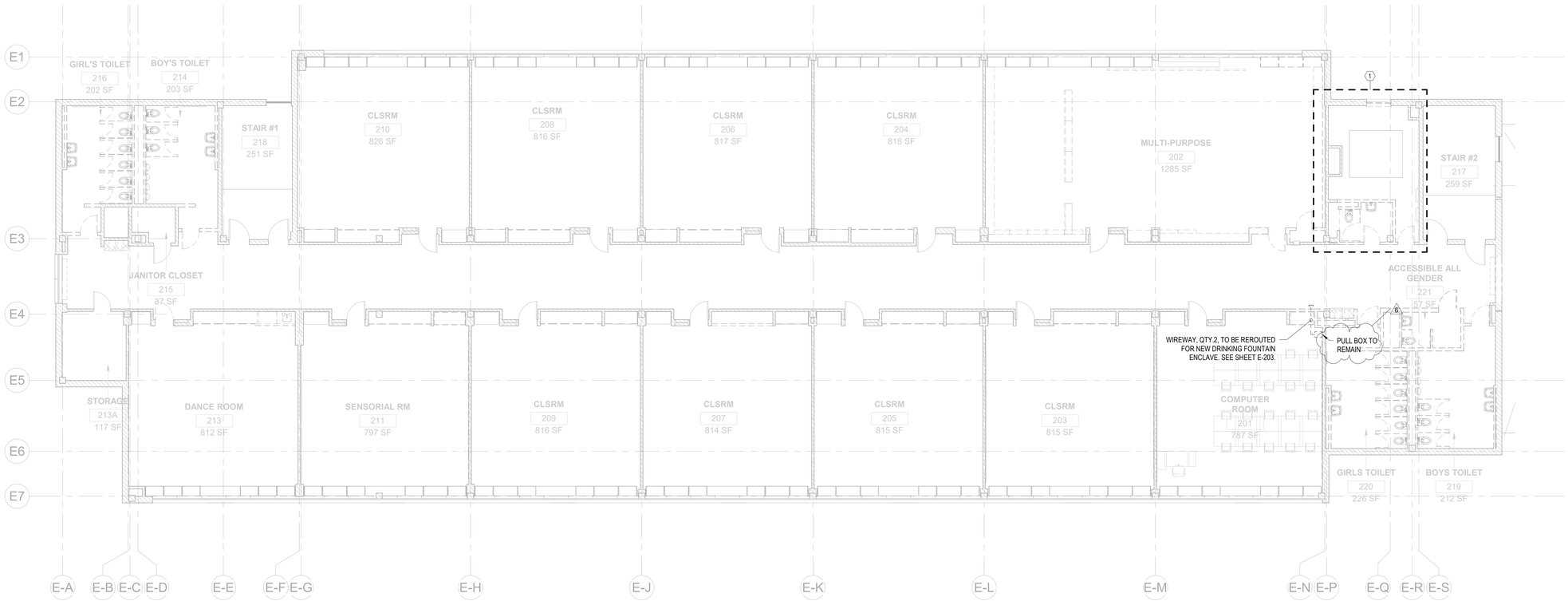
0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

KEYED NOTES:

1. REMOVE WALL DEVICES ON WALLS MARKED FOR DEMOLITION. REMOVE ABANDONED WIRING. PROVIDE BYPASS MEANS FOR ANY HOMERUNS SERVING SCOPE OUT OF AREA OF WORK INTERRUPTED BY THE REMOVAL OF WALL AND ASSOCIATED DEVICES.



1 LEVEL 2 CLRM WING - POWER DEMO PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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CHICAGO, IL 60612

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Architect of Record:

KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

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Chicago, IL 60654

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Environmental Design International
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ENVIRONMENTAL RENO/DEMO
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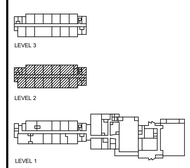
DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

SECOND FLOOR ELECTRICAL DEMOLITION PLAN - NO CLRM WING ON

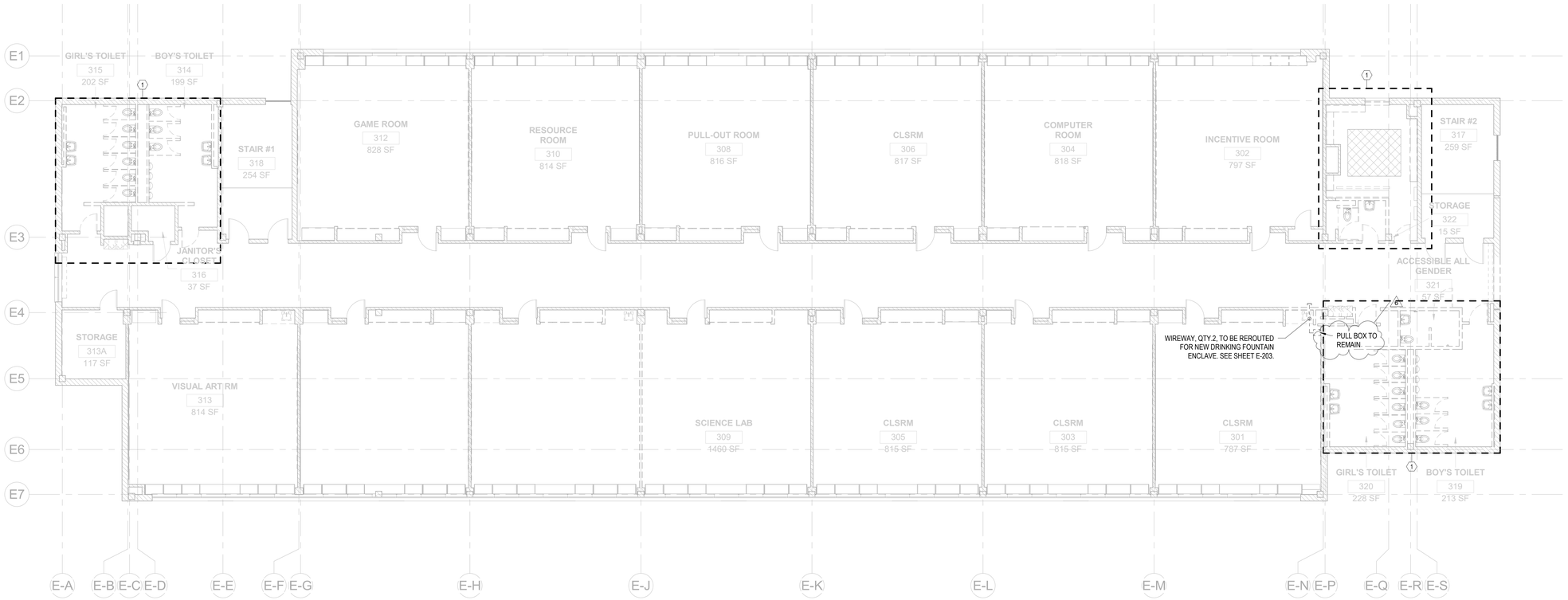
Sheet

ED-203

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

KEYED NOTES:

1. REMOVE WALL DEVICES MARKED FOR DEMOLITION AND ABANDONED WIRING. PROVIDE BYPASS MEANS FOR ANY HOMERUNS SERVING AREAS OUT OF SCOPE OF WORK INTERRUPTED BY THE REMOVAL OF WALL AND ASSOCIATED DEVICES.



1 LEVEL 3 CLRM WING - POWER DEMO PLAN

SCALE: 1/8" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:

KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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333 South Wabash Avenue
Chicago, IL 60604

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Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

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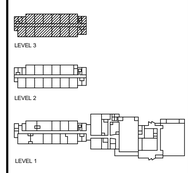
DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

THIRD FLOOR ELECTRICAL DEMOLITION PLAN - NO CLRM WING ON

Sheet

ED-204

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

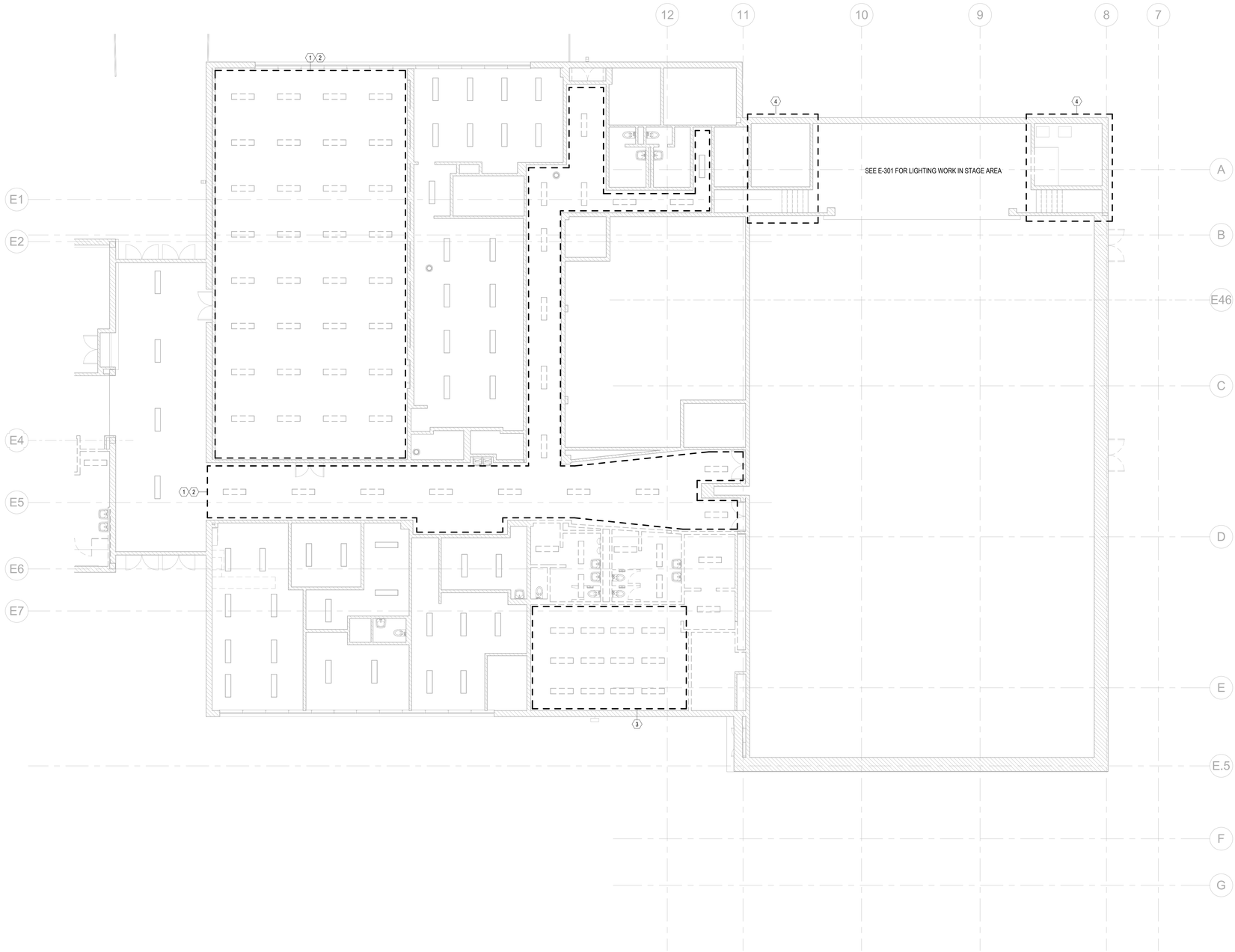
KEYED NOTES:

6 1. REMOVE EXISTING LIGHT FIXTURES WITHIN THIS AREA. RETAIN LIGHTING HOMERUN FOR EXTENSION TO NEW FIXTURES.

2. REMOVE CEILING MOUNTED DEVICES SUCH AS SMOKE DETECTORS AND AUTOMATIC LIGHTING CONTROL DEVICES.

6 3. REMOVE ALL ELECTRICAL INFRASTRUCTURE IN THIS AREA INCLUDING LIGHTING, RECEPTACLES, FIRE ALARM, AND INTERCOM SYSTEMS. TAG CIRCUITS IN SOURCE PANELS AS "SPARE"

4. LIGHTING IN AREAS SHOWN TO REMOVED. SEE SHEET E-301 FOR NEW LIGHTING TYPE AND LOCATIONS.



1 **LEVEL 1 SERVICE WING - LIGHTING DEMO PLAN**
SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
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ENVIRONMENTAL ENGINEER
Environmental Design International
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ENVIRONMENTAL RENO/DEMO
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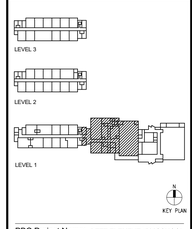
DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
FIRST FLOOR LIGHTING DEMOLITION PLAN - SERVICE WING

Sheet NOT FOR CONSTRUCTION

ED-301

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

KEYED NOTES:

A. RELOCATE POWER POLE APPROX. 5-FEET IN DIRECTION AS SHOWN. VERIFY EXACT LOCATION WITH CIVIL UTILITY DRAWINGS. REROUTE EXISTING UNDERGROUND AND OVERHEAD SERVICE AND DATA FEEDS AS REQUIRED FOR NEW LOCATION.

B. SEE SHEET E-702, DETAIL 1, FOR AREA LIGHT POLE BASE CONSTRUCTION.

C. PROVIDE 2 #10, 1 #10 GRND, 3/4"C. FOR ALL LIGHT POLE CONDUIT RUNS.

D. ELECTRICAL CONTRACTOR (EC) TO ROUTE TWO (2) 4"C. WITH PULL WIRES FOR TELEPHONE SERVICE TO IDF ROOM. COORDINATE FINAL STUB-UP LOCATIONS WITH TELEPHONE PROVIDER PRIOR TO INSTALLATION. ESTIMATED DISTANCE TO HUB 150'.

E. PRIMARY CONDUIT UP TO MANHOLE BY EC. CONDUIT TERMINATION AT MANHOLE BY UTILITY.

F. PROVIDE MINIMUM 2-INCH CONDUIT FROM EXISTING MDF ROOM TO NEW IDF ROOM. SEE SHEET E-700, DETAILS 1 AND 4.

G. NEW PARKING LOT LIGHTING CIRCUIT TO BE INTERCEPTED BY EXISTING SPARE TIMECLOCK CONTACTOR SERVING EXTERIOR LIGHTING.

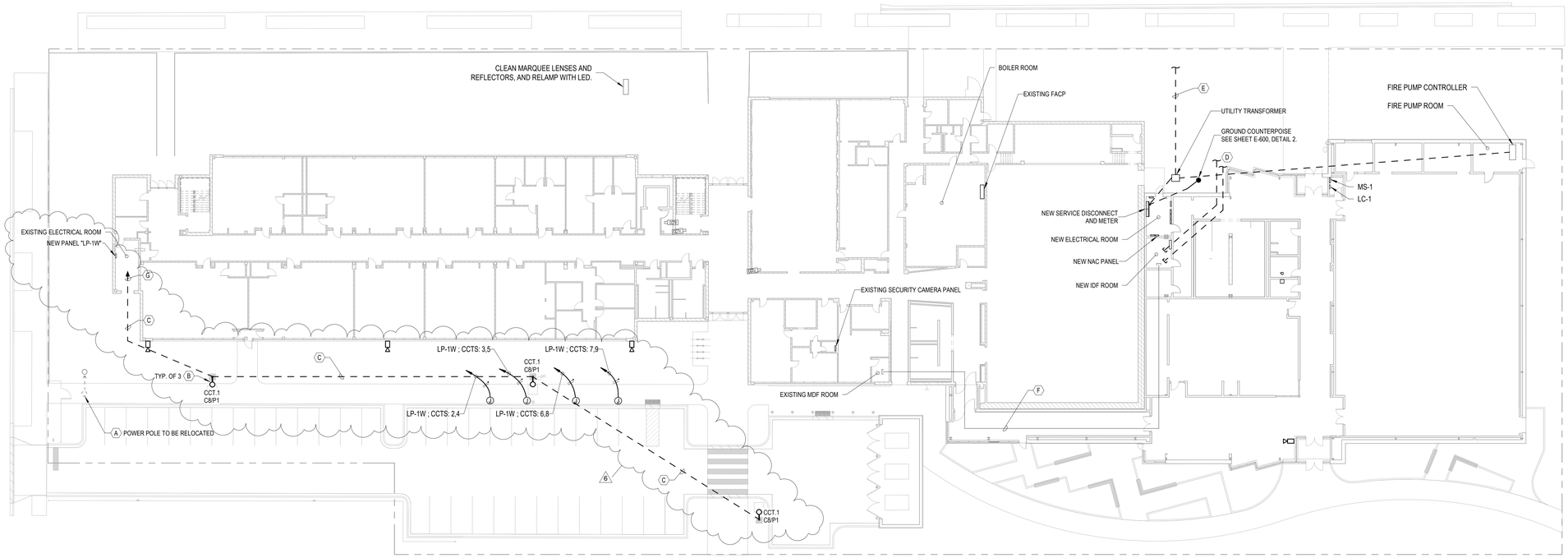
SHEET NOTES:

1. SEE SHEET E-000 FOR SYMBOL LIST AND GENERAL NOTES, AND SHEET E-801 FOR FIXTURE SCHEDULE.
2. NEW PARKING LOT LIGHTING FIXTURES SHALL BE CONTROLLED BY NEW COMBINATION PHOTOCELL/TIME CLOCK ASSEMBLY PER CPS STANDARDS.
3. CHARGING STATIONS: PROVIDE 2 #8 GRND, 1"C. TO 40A-2P CB, PANEL "MECH-2". CIRCUITING AS SHOWN. JUNCTION BOXES FOR EACH CHARGING STATION TO BE LOCATED UNDER EACH UNIT. COORDINATE LOCATIONS WITH CIVIL DRAWINGS.
4. SEE SHEET E-600 FOR COORDIANATION OF ELECTRICAL DISTRIBUTION AND ASSOCIATED EQUPMENT.
5. SEE SHEET E-201 FOR ADDITIONAL IN-FLOOR RECEPTACLE LOCATIONS.

LEGEND:

NEW BELOW-GRADE POWER CONDUIT - - - - - - - - -

NEW ABOVE-GRADE POWER CONDUIT ———————



1 ELECTRICAL SITE PLAN

SCALE: 1" = 20'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:

KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
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Chicago, IL 60602

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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1" = 20'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ELECTRICAL SITE PLAN

Sheet NOT FOR CONSTRUCTION

E-010

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
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3" = 1'-0"

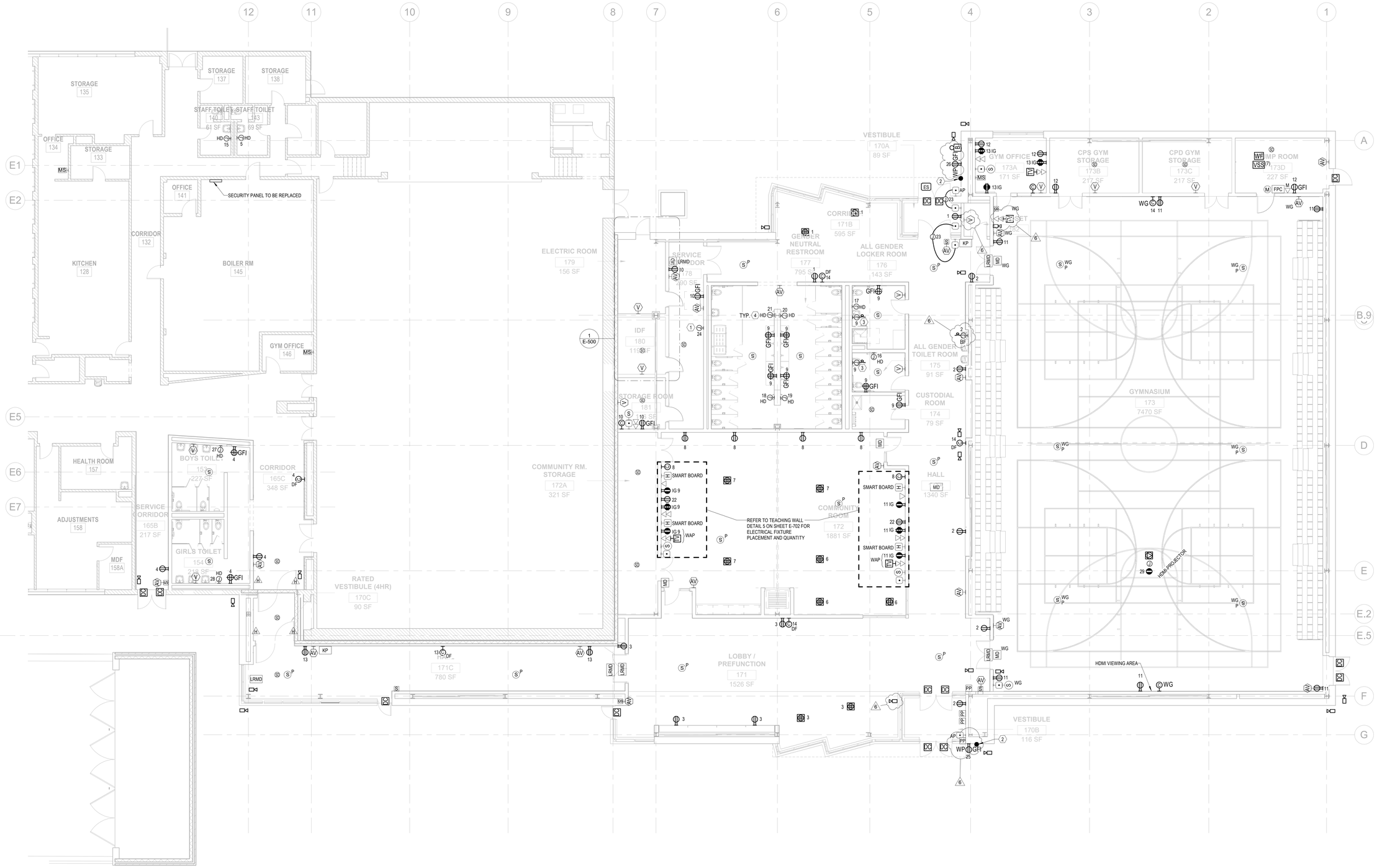
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

SHEET NOTES:

1. ALL RECEPTALCES SHALL BE FED FROM PANEL RP-1 , UNLESS NOTED OTHERWISE.

KEYED NOTES:

1. PROVIDE DEDICATED 120V CONNECTION TO BAS SYSTEM CONTROL PANEL. COORDINATE LOCATION IN FIELD WITH TEMPERATURE CONTROLS CONTRACTOR.
2. NEW AIPHONE MODEL IX IN AREAS SHOWN.
3. PROVIDE HARD-WIRED CONNECTIONS FOR AUTOMATIC VALVES AND POWER FROM LAVATORY CIRCUIT. VERIFY LOCATIONS WITH PLUMBING DRAWINGS.
4. PROVIDE JUNCTION BOX FOR HAND DRYER.



1 LEVEL 1 SERVICE WING - POWER PLAN

SCALE: 1/8" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR POWER PLAN - SERVICE WING

Sheet NOT FOR CONSTRUCTION

E-201

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

GENERAL NOTES

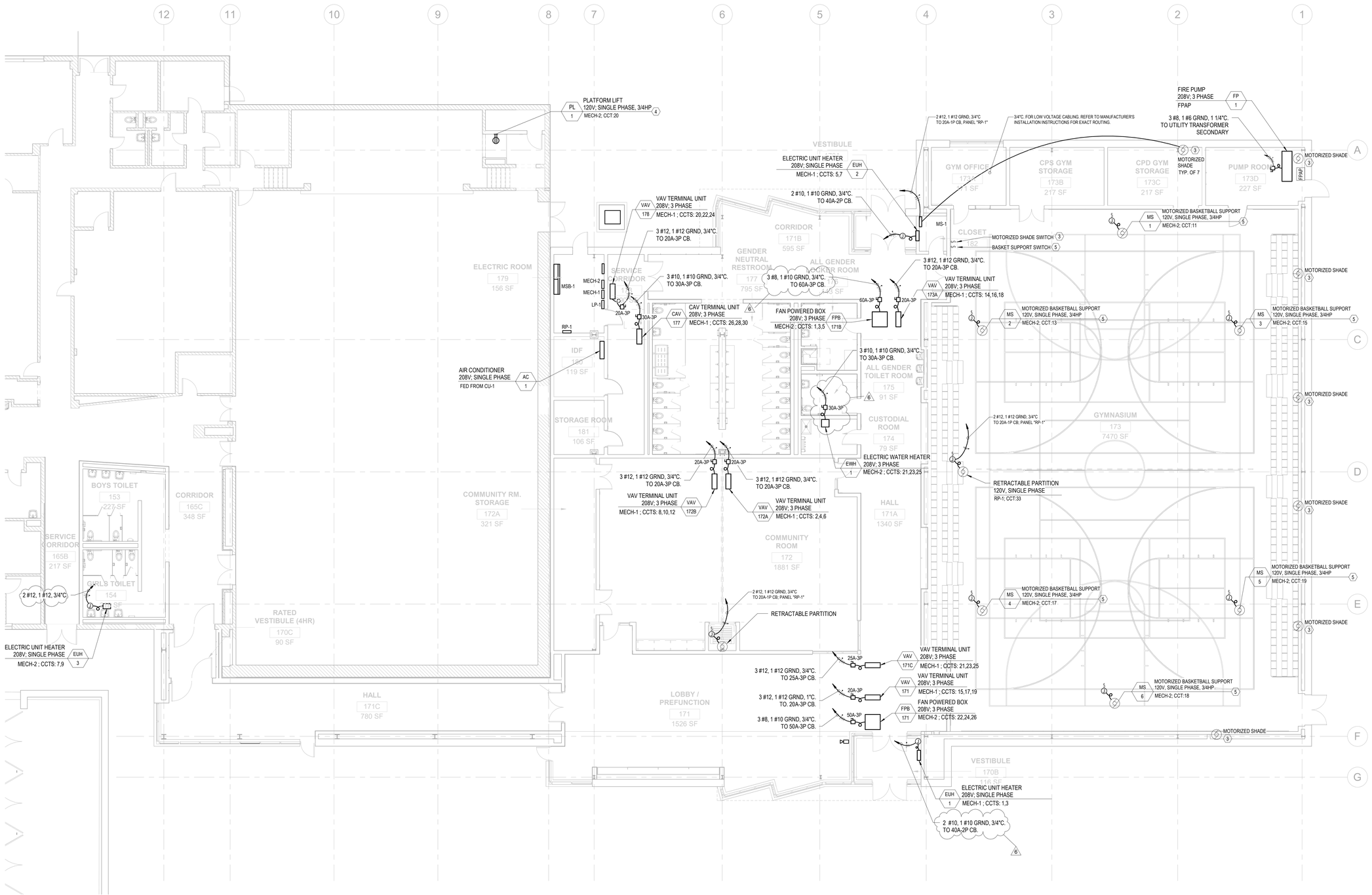
A. SEE SHEET E-000 FOR SYMBOL LIST AND GENERAL NOTES

B. CIRCUITS ARE FED FROM PANEL DESIGNATIONS, AS SHOWN.

C. CIRCUIT NUMBERS ARE SHOWN FOR DESIGN INTENT ONLY.

KEYED NOTES

1. ELECTRIC WATER HEATER (EWH-1) : COORDINATE ROUGH-IN LOCATION WITH PLUMBING DRAWINGS.
2. SEE MECHANICAL DRAWINGS FOR LOCATIONS OF EQUIPMENT. MECHANICAL CONTRACTOR TO PROVIDE EQUIPMENT CONTROLS.
3. MOTORIZED SHADES : ALL SHADES ALONG CLEARSTORY TO OPERATE IN UNISON WITH SINGLE-SWITCH OPERATION. SEE SHEET E-701, DETAIL 2 FOR GENERAL MANUFACTURER'S WIRING DIAGRAM.
4. MOTORIZED PLATFORM LIFT : EC TO VERIFY RECEPTACLE TYPE FOR LIFT POWER CORD PRIOR TO INSTALLATION.
5. MOTORIZED BASKETBALL SUPPORTS : VERIFY WITH MANUFACTURER TYPE AND QUANTITY OF BACKBOXES FOR 'LIFT-STOP-LOWER' MOTOR OPERATION.



1 LEVEL 1 SERVICE WING - MECHANICAL POWER PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION

Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
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Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
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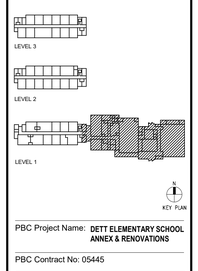
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR MECHANICAL POWER PLAN - SERVICE WING

Sheet NOT FOR CONSTRUCTION

E-201A

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

GENERAL NOTES

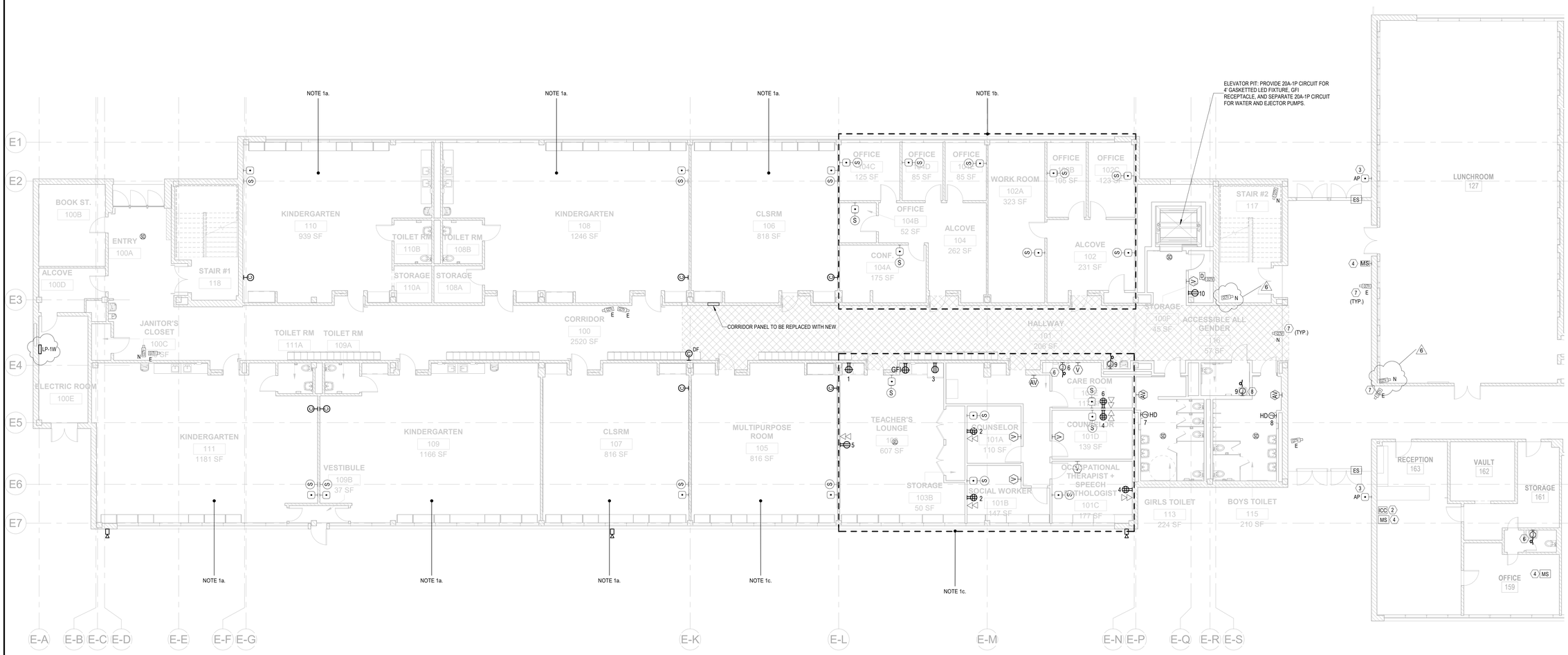
A. SEE DRAWING E-000 FOR SYMBOL LIST AND ADDITIONAL NOTES.

B. ALL POWER CIRCUITS TO BE FED FROM ELECTRICAL PANEL SERVING AREA OF WORK. CIRCUIT NUMBERS ARE SHOWN AS NEW CIRCUITS FOR DESIGN INTENT ONLY. ELECTRICAL CONTRACTOR (EC) SHALL MAKE ALL RECESSARY MODIFICATIONS AS REQUIRED SO AS NOT TO EXCEED CODE REQUIREMENTS FOR THE LOADING OF BRANCH CIRCUITS.

C. EXISTING WIRING TO BE REUSED FOR NEW OR RELOCATED EXIT SIGNS.

KEYED NOTES

1. EXISTING INTERCOM AND SPEAKERS TO BE REPLACED WITH THE REUSE OF BACKBOXES AND WIRING AT THE FOLLOWING ROOM LOCATIONS AS NOTED:
   a. CLASSROOMS: SPEAKERS AND CALL BUTTONS TO BE LOCATED AT TEACHING STATIONS. CLOCKS TO BE LOCATED AT ROOM ENTRANCE. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL.
   b. OFFICES, ALCOVES AND WORK ROOMS: REFER TO ARCHITECTURAL FOR EXACT SPEAKER, CALL BUTTON, AND CLOCK RECEPTACLE LOCATION AND MOUNTING HEIGHT.
   c. MULTIPURPOSE ROOM AND TEACHERS LOUNGE: LOCATE DEVICES WHERE SHOWN.
2. INTERCOM HEAD-END DEVICE: REPLACE EXISTING EQUIPMENT WITH NEW IN SAME LOCATION. CONTRACTOR TO VERIFY CONDITION OF EXISTING CABLING FOR REUSE.
3. AIPHONE: REPLACE EXISTING AIPHONE WITH NEW IX MODEL. REUSE EXISTING INFRASTRUCTURE AND WIRING. PROVIDE NEW WIRING WHERE REQUIRED.
4. AIPHONE MASTER STATIONS: PROVIDE NEW AIPHONE MASTER LOCATIONS IN MAIN OFFICE, PRINCIPAL'S OFFICE, KITCHEN MANAGE OFFICE, AND SECURITY DESK(S).
5. NEW FIRE ALARM DEVICES AND SMOKE DETECTORS, WHERE SHOWN, TO BE TIED INTO EXISTING FIRE ALARM SYSTEM.
6. PROVIDE HARD-WIRED CONNECTIONS FOR AUTOMATIC VALVES AND POWER FROM LAVATORY CIRCUIT. VERIFY LOCATIONS WITH PLUMBING DOCUMENTS.
7. SECURITY CAMERAS: PROVIDE NEW ("N") CAMERAS IN AREA AS SHOWN. ("E") DENOTES EXISTING LOCATIONS.
8. ITEMS WITH THIS NOTE TO BE FED FROM SAME CIRCUIT OF ROOM OR AREA.



1 LEVEL 1 CLRM WING - POWER PLAN

SCALE: 1/8" = 1'-0"

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5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

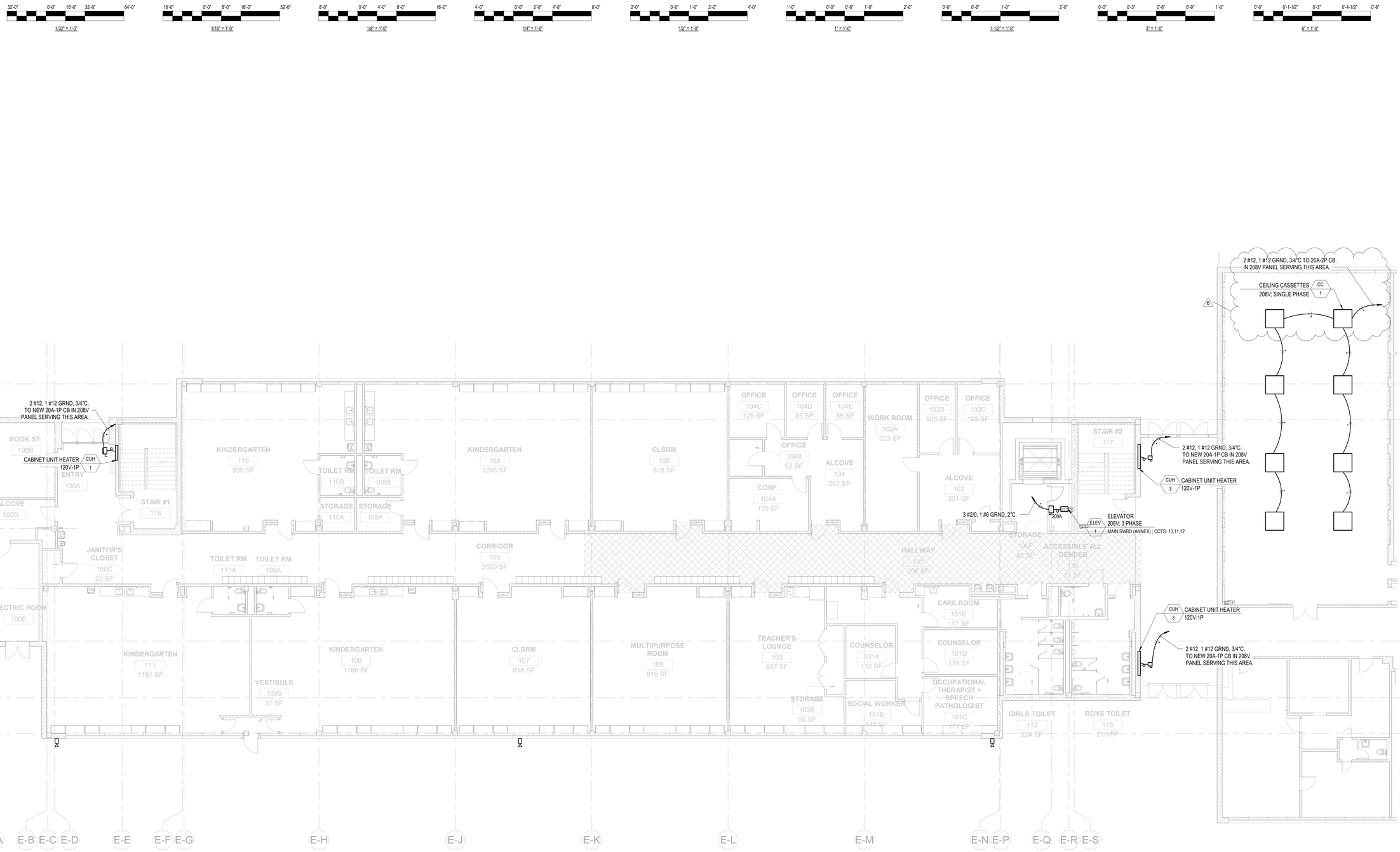
Project No: 2138

Title

FIRST FLOOR POWER PLAN - CLRM WING

Sheet NOT FOR CONSTRUCTION

E-202



1 LEVEL 1 CLRM WING - MECHANICAL POWER PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION

Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR MECHANICAL POWER PLAN - CLRM WING

Sheet NOT FOR CONSTRUCTION

E-202A

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
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3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

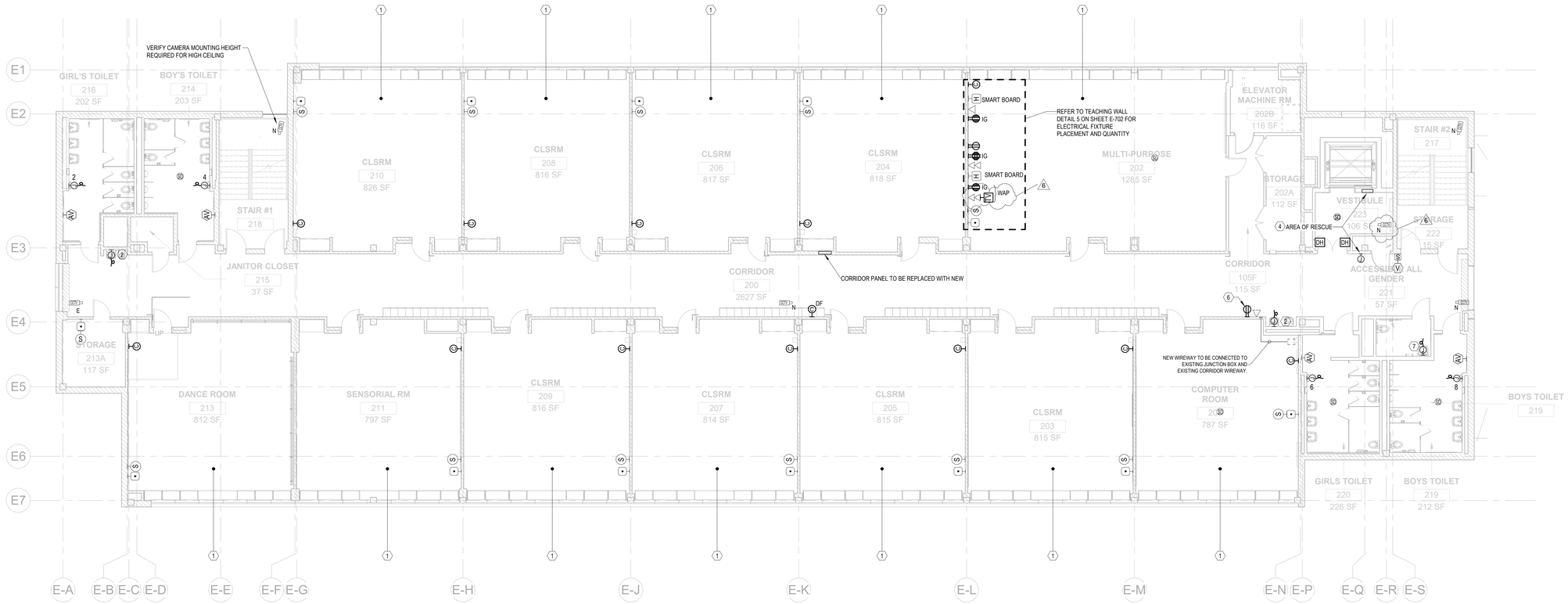
GENERAL NOTES

A. SEE DRAWING E-000 FOR SYMBOL LIST AND ADDITIONAL NOTES.

B. ALL POWER CIRCUITS TO BE FED FROM ELECTRICAL PANEL SERVING AREA OF WORK. CIRCUIT NUMBERS ARE SHOWN AS NEW CIRCUITS FOR DESIGN INTENT ONLY. ELECTRICAL CONTRACTOR (EC) SHALL MAKE ALL RECESSARY MODIFICATIONS AS REQUIRED SO AS NOT TO EXCEED CODE REQUIREMENTS FOR THE LOADING OF BRANCH CIRCUITS.

KEYED NOTES

1. SPEAKERS AND CALL BUTTONS TO BE REPLACED WITH THE REUSE OF BACKBOXES AND WIRING LOCATED AT TEACHING STATIONS. NEW CLOCKS TO BE LOCATED AT ROOM ENTRANCE. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT WITH ARCHITECTURAL.
2. PROVIDE HARD-WIRED CONNECTIONS FOR AUTOMATIC VALVES AND POWER FOR HALLWAY DRINKING FOUNTAINS FROM LAVATORY CIRCUIT. VERIFY LOCATIONS WITH PLUMBING CIRCUITS.
3. SECURITY CAMERAS : PROVIDE NEW ("N") CAMERAS IN AREA AS SHOWN. "E" DENOTES EXISTING LOCATIONS.
4. AREA-OF-RESCUE : PROVIDE TWO-WAY COMMUNICATION WHERE SHOWN. MOUNT "AREA-OF-RESCUE" SIGN IN AREA FACING CORRIDOR. COORDINATE ELEVATION WITH ARCHITECTURAL.
5. NEW SMOKE DETECTORS AND A/V APPLIANCES TO BE TIED IN TO EXISTING FIRE ALARM SYSTEM.
6. POWER AND DATA FOR HALLWAY MONITOR IN CORRIDOR AT ROOM 220 TO BE RELOCATED. SEE ARCHITECTURAL FOR ELEVATION. REUSE EXISTING CIRCUIT.
7. ITEMS WITH THIS NOTE TO BE FED FROM SAME CIRCUIT OF ROOM OR AREA.



1 LEVEL 2 CLRM WING - POWER PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO — Chicago Public Schools

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CHICAGO, IL 60612

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Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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333 South Wabash Avenue
Chicago, IL 60604

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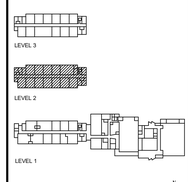
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

SECOND FLOOR POWER PLAN - CLRM WING

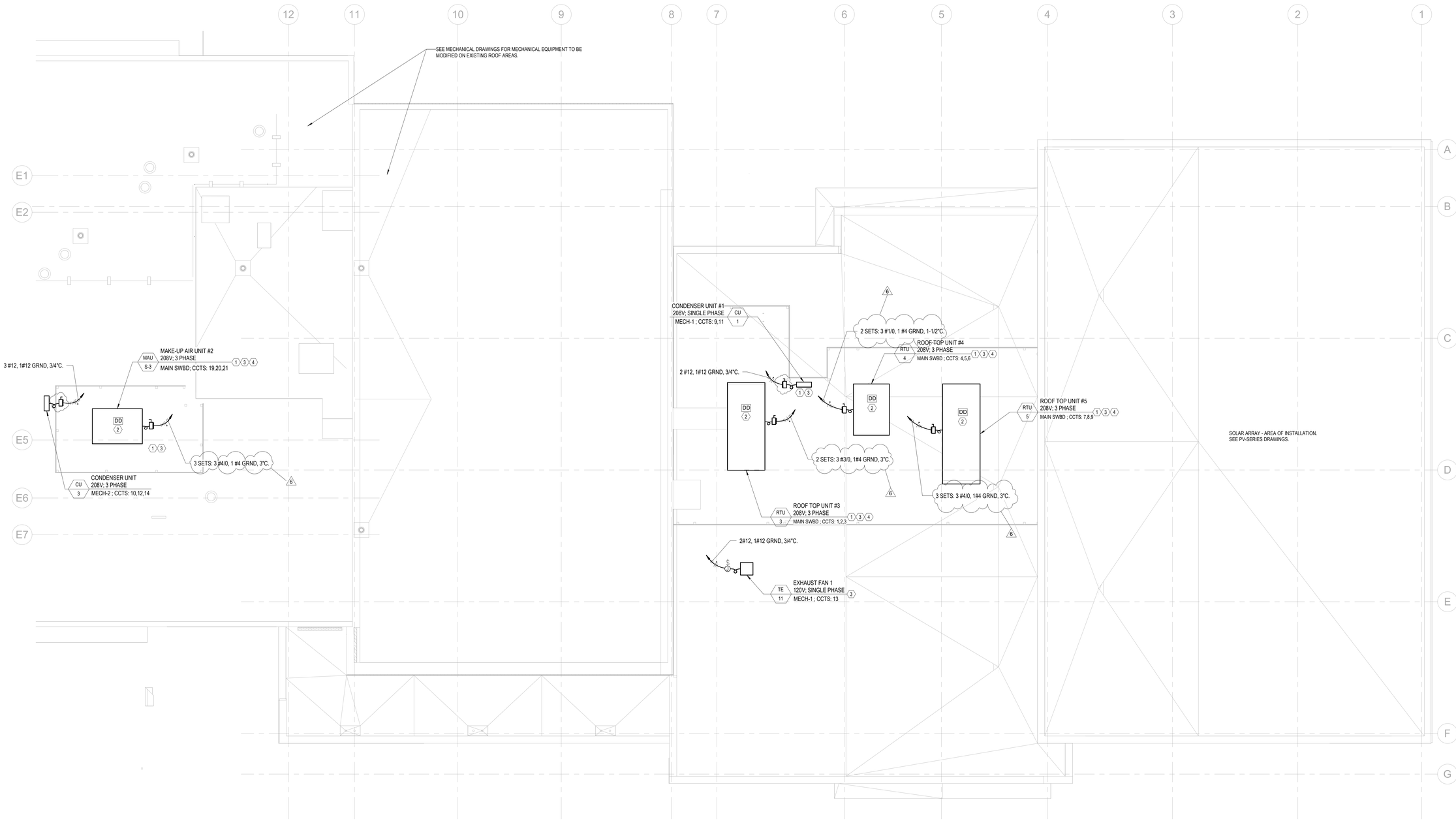
Sheet NOT FOR CONSTRUCTION

E-203

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

KEYED NOTES:

1. PROVIDE 120V CONNECTION TO IN-UNIT LIGHTS AND/OR UNIT MOUNTED RECEPTACLE.
2. COORDINATE PLACEMENT OF DUCT DETECTORS WITH HVAC DUCTWORK CONFIGURATION. LOCATE PER NFPA 72 REQUIREMENTS.
3. PROVIDE REQUIRED CONDUIT FOR CONTROL WIRING TO BAS, PER MANUFACTURER.
4. ROOFTOP UNITS ARE EQUIPPED WITH 120V, 15A, 2-PLUG CONVENIENCE RECEPTACLES INTERNAL TO THE UNIT, POWERED TO THE LINE-SIDE OF THE RTU SERVICE DISCONNECT.



1 ANNEX ROOF - MECHANICAL POWER PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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CHICAGO, IL 60612

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CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
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Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
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4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3 | LEVEL 2 | LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ROOF LEVEL MECHANICAL POWER PLAN

Sheet NOT FOR CONSTRUCTION

E-205

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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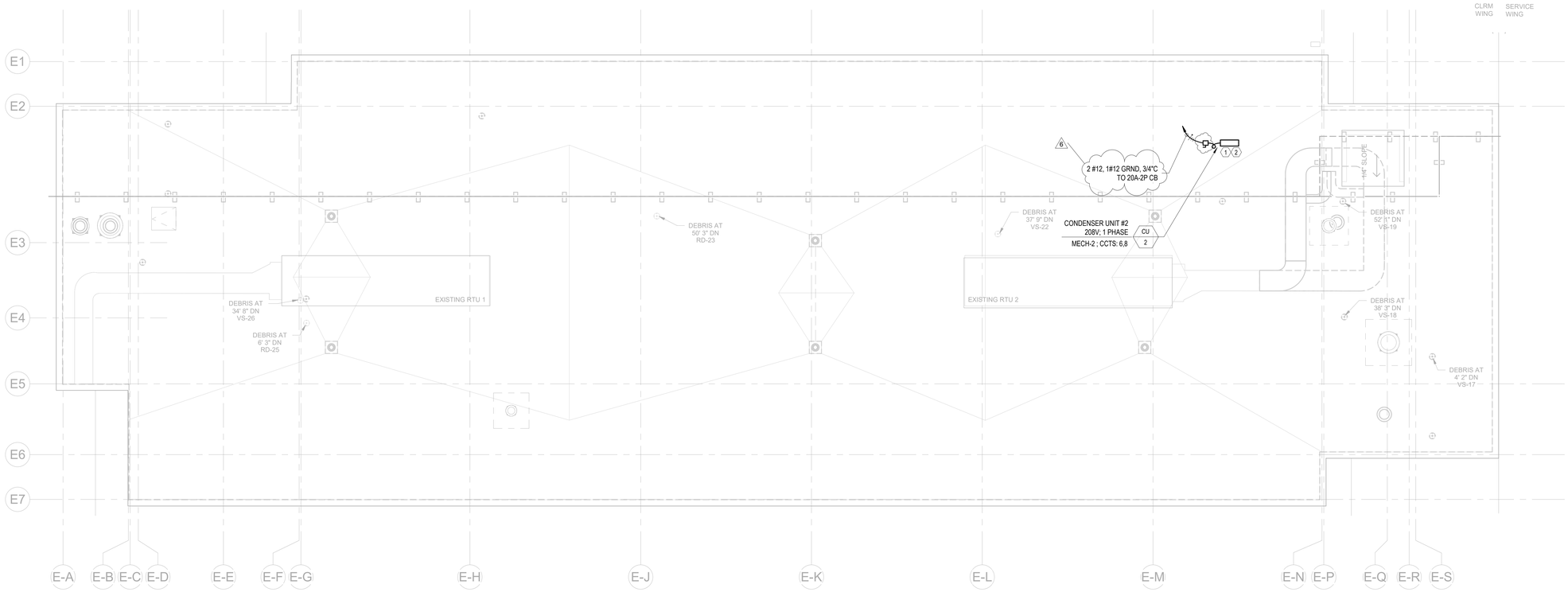
0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

KEYED NOTES:

1. PROVIDE 120V CONNECTION TO IN-UNIT LIGHTS AND/OR UNIT MOUNTED RECEPTACLE. COORDINATE WITH FINAL EQUIPMENT SELECTION SUBMITTED IN CA PHASE FOR 120V CONNECTION LOCATIONS AND QUANTITY.
2. PROVIDE REQUIRED CONDUIT FOR CONTROL WIRING, PER MANUFACTURER



1 CLSRM - ROOF

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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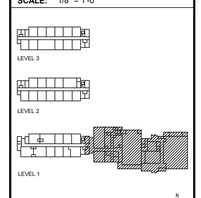
DRAWN BY:

SCALE: 1/8" = 1'-0"



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PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ROOF LEVEL MECHANICAL POWER PLAN

Sheet NOT FOR CONSTRUCTION

E-206

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
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1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

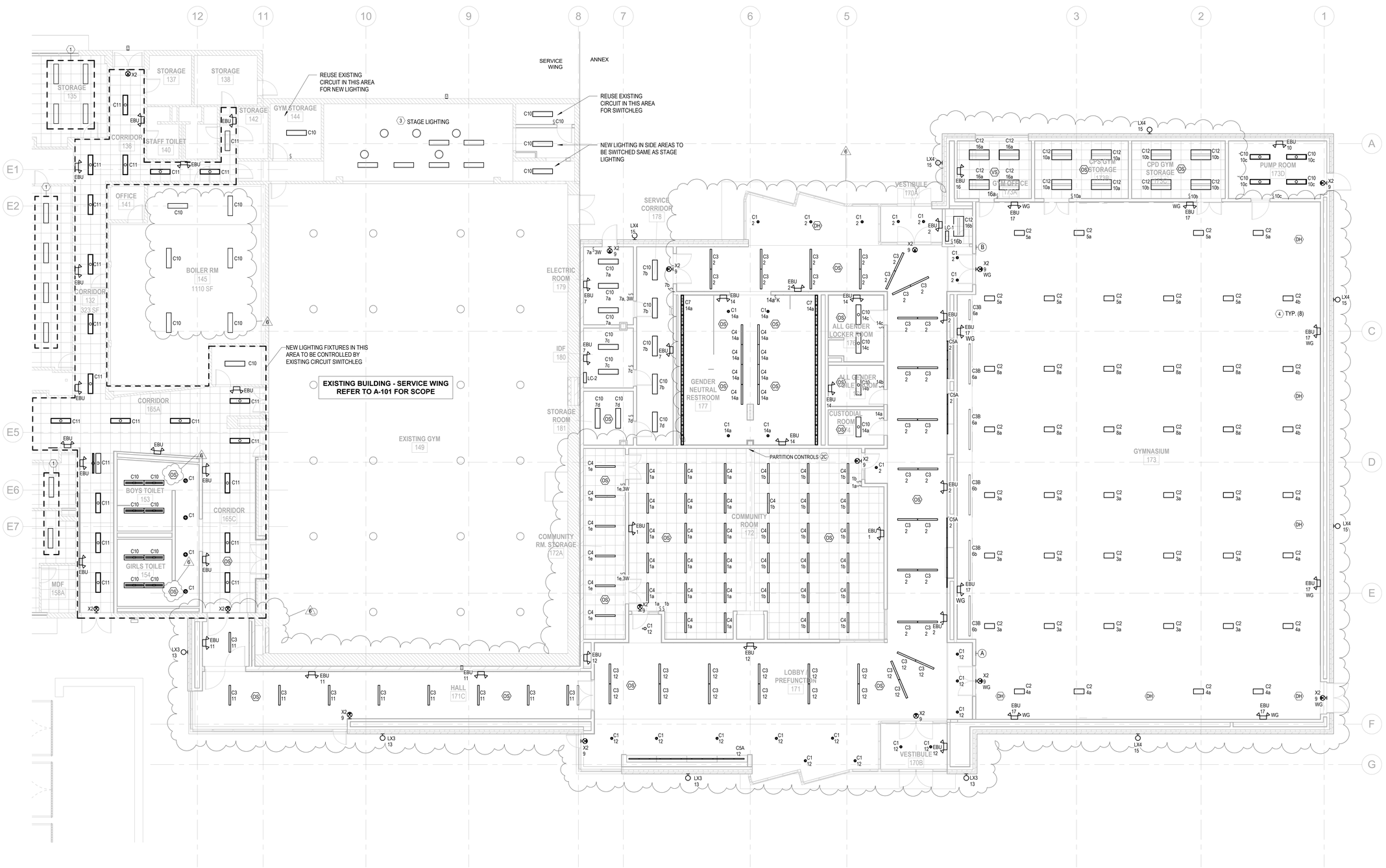
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

GENERAL NOTES:

1. SEE SHEET E-000 FOR SYMBOLS AND GENERAL NOTES.
2. FIXTURES SHOWN ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
3. PROVIDE LIGHTING CONTROL DEVICES IN COMPLIANCE WITH ENERGY CODE FOR RENOVATED SPACES. DEVICES SHOWN ARE DIAGRAMMATIC TO ILLUSTRATE PREFERRED COMPLIANCE APPLICATION. CONTRACTOR SHALL MODIFY DEVICE QUANTITY AND PLACEMENT BASED ON PROCURED MANUFACTURER PRODUCT CAPABILITIES, LIMITATIONS, AND RECOMMENDATION FOR FULL COVERAGE AND ENERGY CODE COMPLIANCE. THE ADDITION OF DEVICES SHALL INCUR NO ADDITIONAL COST TO THE OWNER.

KEYED NOTES:

1. LIGHT FIXTURES WITH THIS NOTE TO BE RELAMPED WITH LED. CLEAN FIXTURE LENSES AND REFLECTORS. SEE FIXTURE SCHEDULE FOR LED LAMP TO BE USED FOR LENGTH OF FIXTURE(S) SHOWN.
2. LIGHTING CONTROL : PROVIDE A PROGRAMMABLE, LOW-VOLTAGE LIGHTING CONTROL SYSTEM FOR THE FOLLOWING AREAS :
   - 2A. GYMNASIUM LIGHTING - CONTROL PANEL "LC-1" ; CONTROL STATIONS TO BE LOCATED AT GYM ENTRYWAYS, WHERE SHOWN, FOR RAISE/LOWER OF LIGHTING ZONES.
   - 2B. CORRIDOR LIGHTING TO BE CONTROLLED BY CONTROL PANEL "LC-2".
   - 2C. CONFERENCE AREA CONTROLLED BY CONTROL PANEL "LC-2", AS CIRCUITTED. CONFERENCE AREA PARTITION, WHEN CLOSED, WILL ALLOW INDEPENDENT FUNCTION FOR EACH PARTITIONED SPACE, 3-WAY SWITCHING TO ACT AS SINGLE-POLE TOGGLE SWITCHES, OCCUPANCY SENSORS, AND MECHANICAL UNIT SUPPLY AND RETURN AIR.
3. EXISTING LIGHT FIXTURES ABOVE STAGE TO BE SALVAGED AND REINSTALLED AS REQUIRED FOR WORK ABOVE CEILING. FIXTURE LENSES AND REFLECTORS TO BE CLEANED AND RELAMPED FOR LED. SEE FIXTURE SCHEDULE FOR LAMP TYPE USED FOR FIXTURE LENGTH.
4. GYM SWITCHLEG 4a AND 4b AS SHOWN TO BE CONTROLLED BY DAY LIGHT HARVESTING.



1 LEVEL 1 SERVICE WING - LIGHTING RCP

SCALE: 1/8" = 1'-0"

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55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

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TERRA Engineering, LTD.
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Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

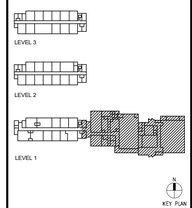
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR LIGHTING PLAN - SERVICE WING

Sheet NOT FOR CONSTRUCTION

E-301

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

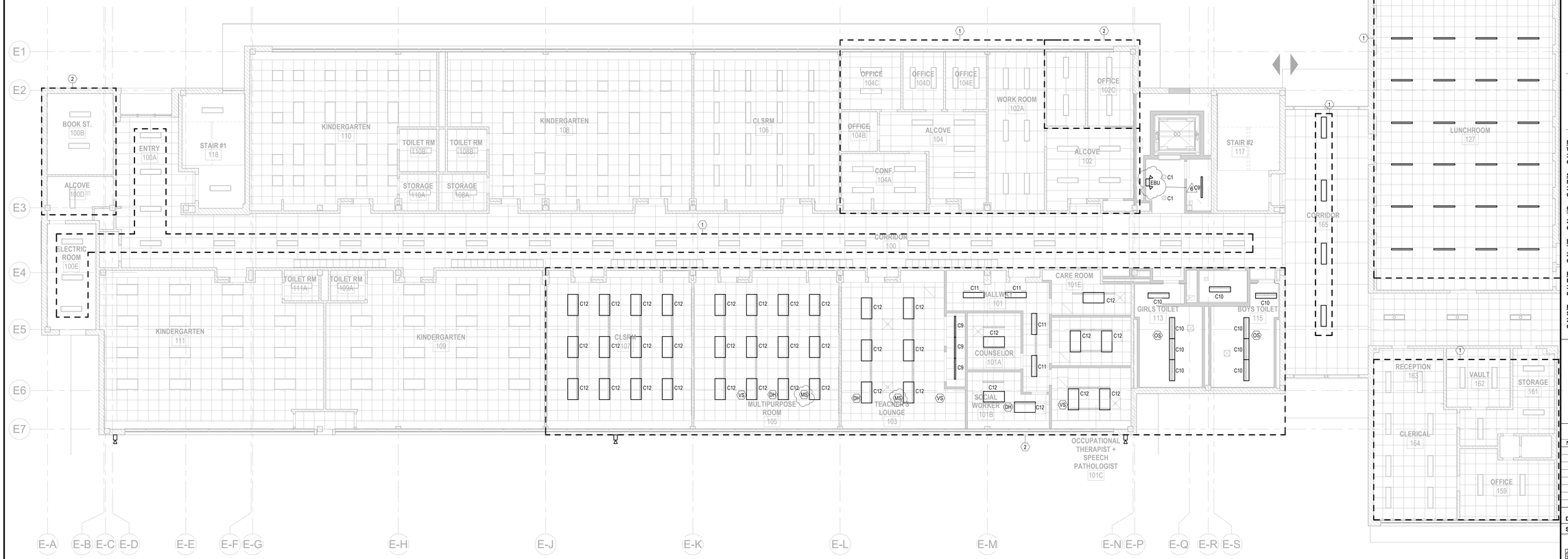
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

SHEET NOTES:

1. FIXTURES SHOWN ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
2. PROVIDE LIGHTING CONTROL DEVICES IN COMPLIANCE WITH ENERGY CODE FOR RENOVATED SPACES. DEVICES SHOWN ARE DIAGRAMMATIC TO ILLUSTRATE PREFERRED COMPLIANCE APPLICATION. CONTRACTOR SHALL MODIFY DEVICES QUANTITY AND PLACEMENT BASED ON PROCURED MANUFACTURER PRODUCT CAPABILITIES,LIMITATION, AND RECOMMENDATION FOR FULL COVERAGE AND ENERGY CODE COMPLIANCE. THE ADDITION OF DEVICES SHALL INCUR NO ADDITIONAL COST TO THE OWNER.

KEYED NOTES:

1. LUMINAIRES IN AREAS SHOWN TO BE RELAMPED.
2. PROVIDE NEW LIGHTS IN THIS AREA. CONNECT TO EXISTING HOMERUNS LEFT FROM FIXTURES REMOVED IN DEMOLITION.



1 LEVEL 1 - CLRM WING LIGHTING RCP

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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Chicago, IL 60604

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Chicago, IL 60654

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ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

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1	12/01/22	100% SD
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3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR LIGHTING PLAN - CLRM WING

Sheet NOT FOR CONSTRUCTION

E-302

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

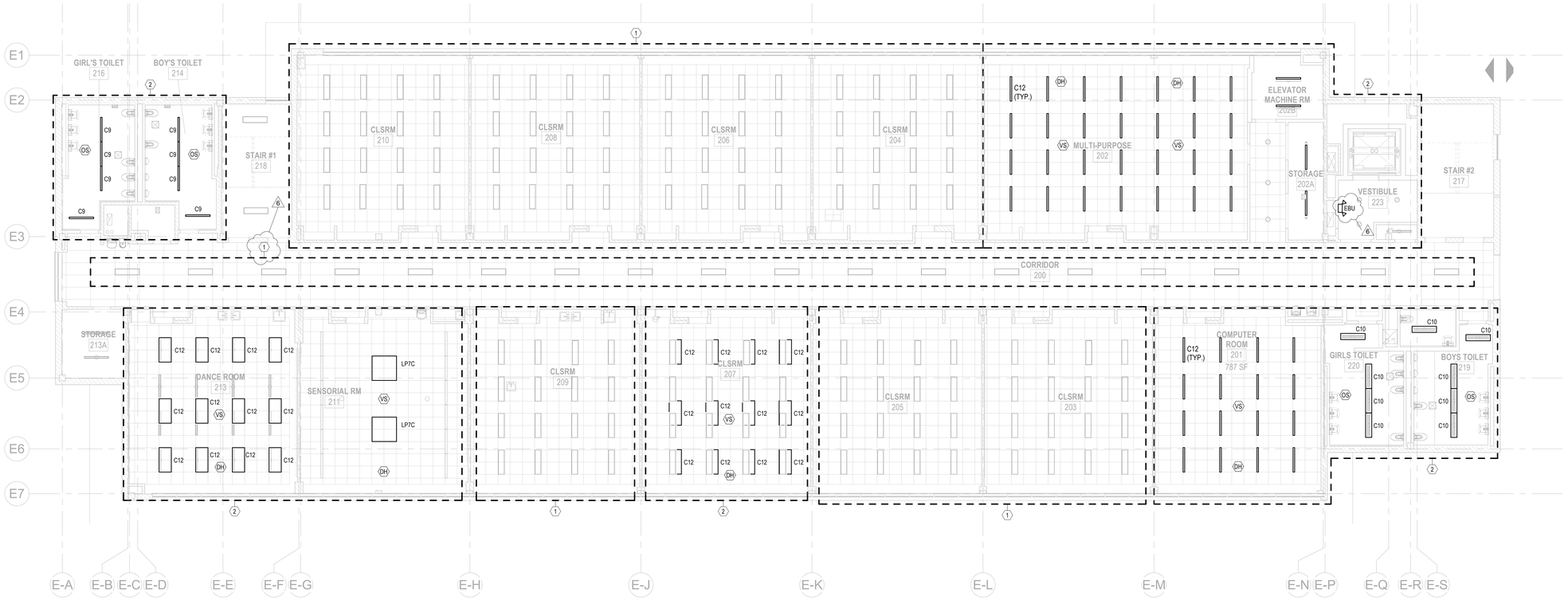
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

SHEET NOTES:

1. FIXTURES SHOWN ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
2. PROVIDE LIGHTING CONTROL DEVICES IN COMPLIANCE WITH ENERGY CODE FOR RENOVATED SPACES. DEVICES SHOWN ARE DIAGRAMMATIC TO ILLUSTRATE PREFERRED COMPLIANCE APPLICATION. CONTRACTOR SHALL MODIFY DEVICES QUANTITY AND PLACEMENT BASED ON PROCURED MANUFACTURER PRODUCT CAPABILITIES,LIMITATION, AND RECOMMENDATION FOR FULL COVERAGE AND ENERGY CODE COMPLIANCE. THE ADDITION OF DEVICES SHALL INCUR NO ADDITIONAL COST TO THE OWNER.

KEYED NOTES: ⬡

1. LUMINAIRES IN AREAS SHOWN TO BE RELAMPED.
2. PROVIDE NEW LIGHTS IN THIS AREA. CONNECT TO EXISTING HOMERUNS LEFT FROM FIXTURES REMOVED IN DEMOLITION.



1 LEVEL 2 - CLRM WING LIGHTING RCP

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

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TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
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225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
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5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

SECOND FLOOR LIGHTING PLAN - CLRM WING

Sheet NOT FOR CONSTRUCTION

E-303

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

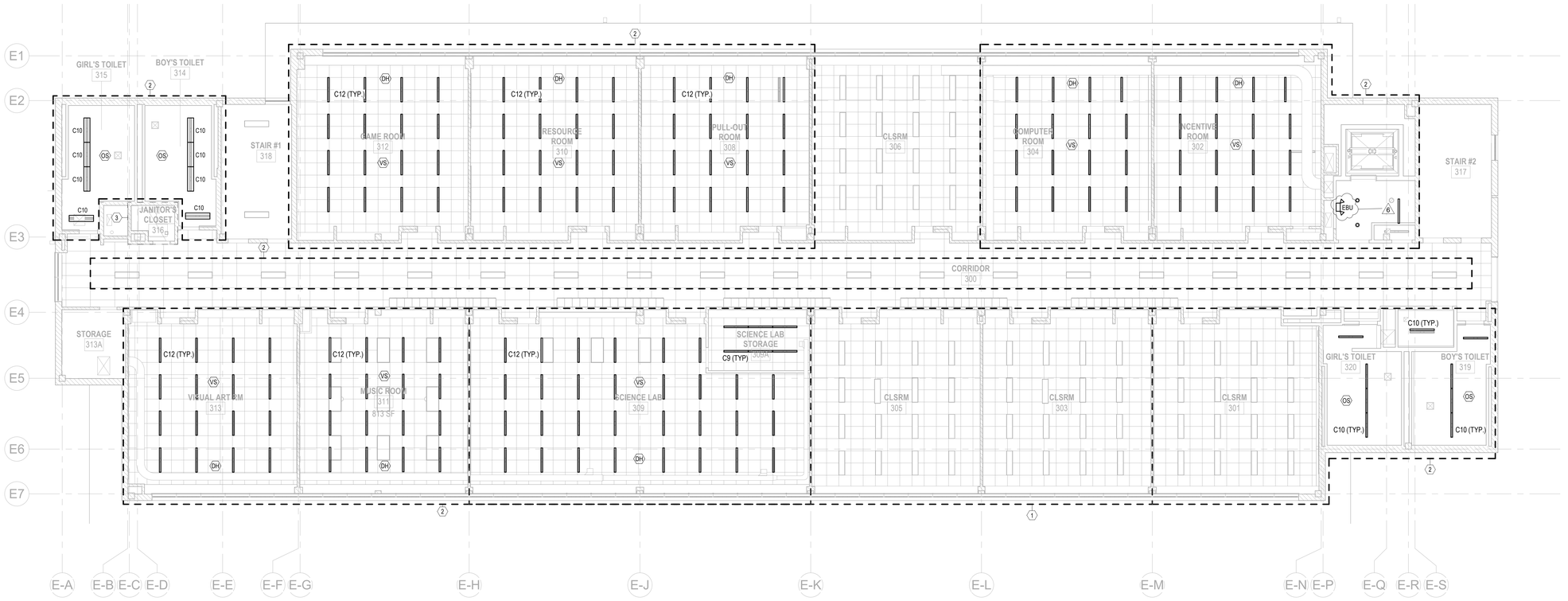
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

SHEET NOTES:

1. FIXTURES SHOWN ARE EXISTING TO REMAIN UNLESS NOTED OTHERWISE.
2. PROVIDE LIGHTING CONTROL DEVICES IN COMPLIANCE WITH ENERGY CODE FOR RENOVATED SPACES. DEVICES SHOWN ARE DIAGRAMMATIC TO ILLUSTRATE PREFERRED COMPLIANCE APPLICATION. CONTRACTOR SHALL MODIFY DEVICES QUANTITY AND PLACEMENT BASED ON PROCURED MANUFACTURER PRODUCT CAPABILITIES,LIMITATION, AND RECOMMENDATION FOR FULL COVERAGE AND ENERGY CODE COMPLIANCE. THE ADDITION OF DEVICES SHALL INCUR NO ADDITIONAL COST TO THE OWNER.

KEYED NOTES: ⬡

1. PROVIDE NEW LIGHTS IN THIS AREA. CONNECT TO EXISTING HOMERUNS LEFT FROM FIXTURES REMOVED IN DEMOLITION. PROVIDE NEW ENERGY CODE COMPLIANT LIGHTING CONTROL SYSTEM INCLUDING AUTOMATIC DAYLIGHT HARVESTING PHOTOCELL, VACANCY SENSOR, AND LOCAL MULTI-LEVEL LIGHTING MANUAL SWITCH.
2. PROVIDE NEW LIGHTS IN THIS AREA. CONNECT TO EXISTING HOMERUNS LEFT FROM FIXTURES REMOVED IN DEMOLITION. PROVIDE NEW ENERGY CODE COMPLIANT LIGHTING CONTROL SYSTEM INCLUDING OCCUPANCY SENSORS AND LOCAL KEYED MANUAL SWITCH.
3. EXISTING LIGHT FIXTURES, LIFE SAFETY DEVICES, AND CONDUIT TO BE RELOCATED / REWORKED TO ACCOMMODATE ROOF ACCESS DOOR MODIFICATIONS. SEE ARCHITECTURAL DRAWINGS.



1 LEVEL 3 - CLRM WING LIGHTING RCP

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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333 South Wabash Avenue
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ENVIRONMENTAL RENO/DEMO
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Chicago, IL 66012

REVISIONS

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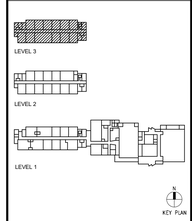
DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

THIRD FLOOR LIGHTING PLAN - CLRM WING

Sheet NOT FOR CONSTRUCTION

E-304

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
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0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
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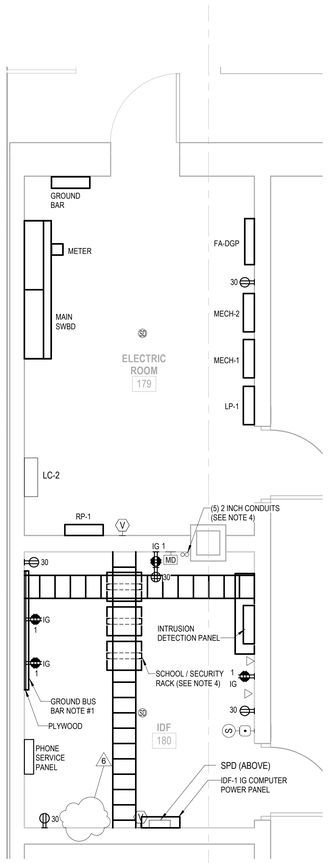
0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



NOTES:
1. THE FINISHED FLOOR IN THE IDF SHALL BE STATIC DISSIPATIVE. FLOOR STATIC STRIP SHALL BE PROVIDED AT SURFACE DIRECTLY BELOW GROUND BUS BAR.
2. FOR SCHOOL ADDITIONS, PROVIDE (2) 25-PAIR CAT 5E CABLES TO EXISTING MDF.
3. VERIFY EXACT IDF LAYOUT WITH CPS ITS SR. INFRASTRUCTURE MANAGER (773-553-6030).
4. PROVIDE (5) 2 INCH CONDUITS.
   a. (1)-2 INCH FOR (4) 25-PAIR CAT 5E FROM MDF.
   b. (1)-2 INCH FOR FIBER FROM MDF.
      i. (1)-6 STRAND FOR SECURITY
      ii. (2)-6 STRAND FOR DATA
   c. (1)-2 INCH FOR COAX - RG-59 FROM MDF.
   d. (1)-2 INCH SPARE FROM MDF.
   e. (1)-2 INCH FOR INTERCOM CONNECTIVITY FROM EXISTING HEADEND. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM EXACT CONDUIT SIZE WITH INTERCOM SYSTEM MANUFACTURER.
5. ALL REGULAR RECEPTACLES SHALL BE FED FROM PANEL "RP-1". ALL IG RECEPTACLES SHALL BE FED FROM PANEL IDF-1.

1 PARTIAL PLAN - ANNEX ELECTRICAL AND IDF ROOM
SCALE: 3/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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55 WACKER DR,
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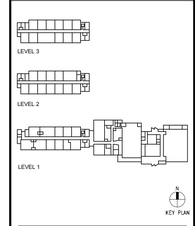
DRAWN BY:

SCALE: 3/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

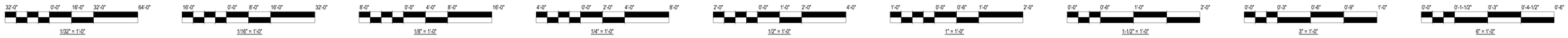
PBC Contract No: 05445

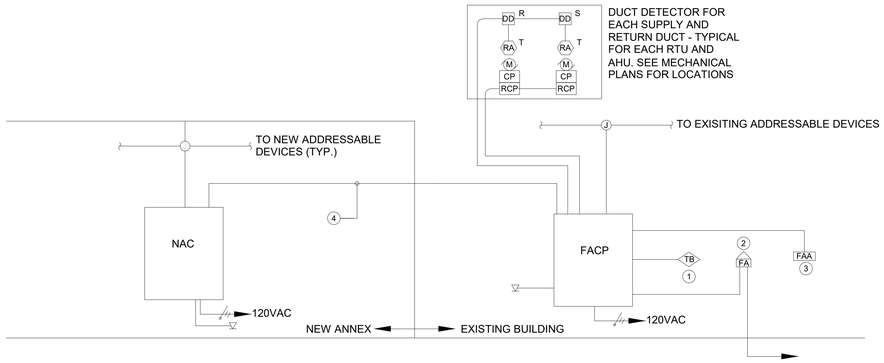
CPS Project #2021-26031-ADM

Project No: 2138

Title
PARTIAL PLANS

Sheet NOT FOR CONSTRUCTION
E-500





NOTES:

1. RISER DIAGRAM ABOVE IS DIAGRAMMATIC AND IS SHOWN TO PROVIDE A GENERAL OVERVIEW OF MAJOR SYSTEM COMPONENTS AND THEIR INTERCONNECTIONS. THIS DIAGRAM IS NOT TO BE USED FOR FIELD INSTALLATION PURPOSES.

2. SEE PLANS FOR DEVICE LOCATIONS AND QUANTITIES.

3. PROVIDE ALL ANCILLARY COMPONENTS, HARDWARE, POWER CONNECTIONS AND WIRING AS REQUIRED FOR A COMPLETE AND OPERATING FIRE ALARM SYSTEM.

KEYED NOTES:

1. REFER TO FLOOR PLANS FOR ALL TROUBLE BELL LOCATIONS.

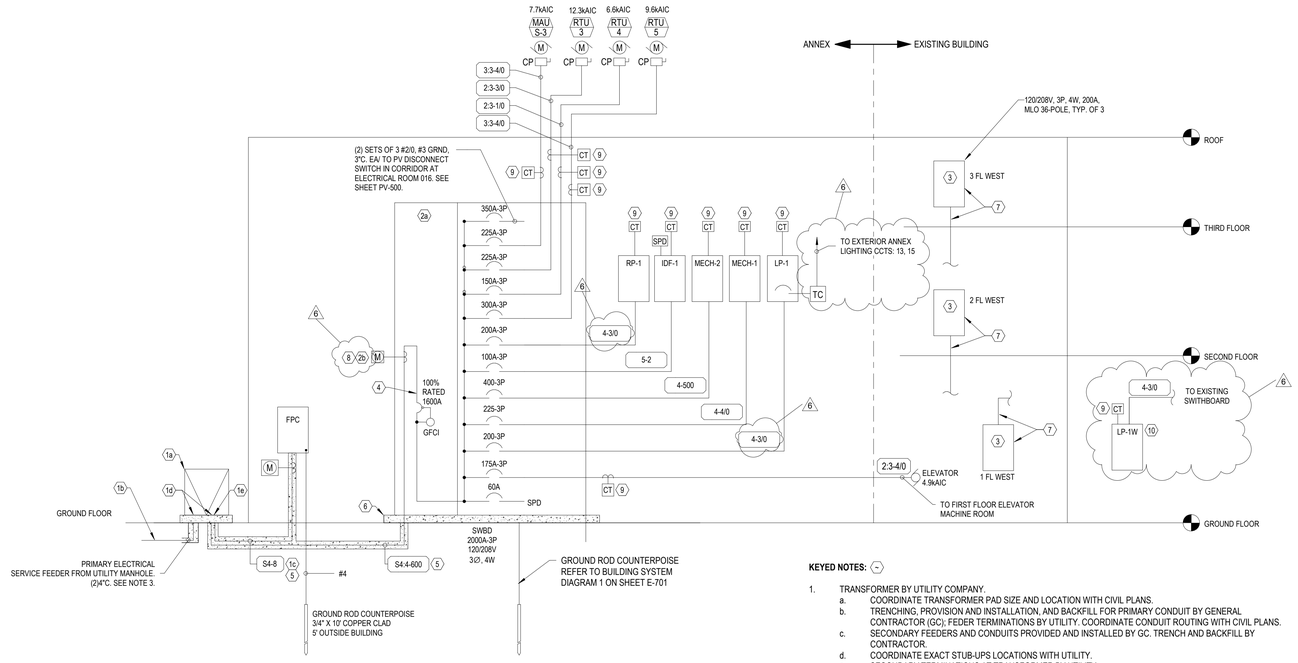
2. REUSE EXISTING CITY TIE FOUND IN NORTH MAIN ELECTRICAL ROOM.

3. REPLACE EXISTING ANNUNCIATOR PANEL WITH NEW TO REFLECT ADDED ZONES AND AREA. REUSE EXISTING BACK BOX ENCLOSURE.

4. PROVIDE CONNECTION BETWEEN EXISTING FACP AND NEW NOTIFICATION APPLIANCE CIRCUIT (NAC). SIZE PER MANUFACTURER RECOMMENDATION AND ROUTE ABOVE CEILING.

1 FIRE ALARM RISER DIAGRAM

SCALE: NTS

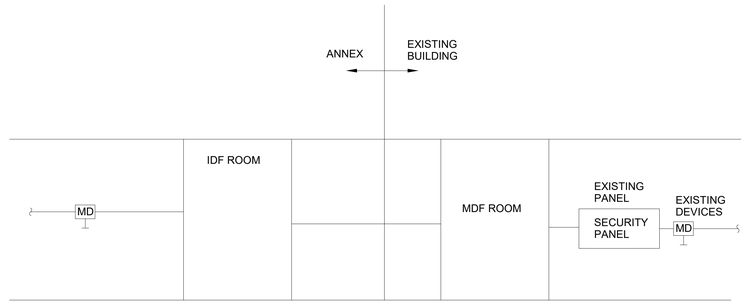


KEYED NOTES:

1. TRANSFORMER BY UTILITY COMPANY.
   a. COORDINATE TRANSFORMER PAD SIZE AND LOCATION WITH CIVIL PLANS.
   b. TRENCHING, PROVISION AND INSTALLATION, AND BACKFILL FOR PRIMARY CONDUIT BY GENERAL CONTRACTOR (GC); FEDER TERMINATIONS BY UTILITY. COORDINATE CONDUIT ROUTING WITH CIVIL PLANS.
   c. SECONDARY FEEDERS AND CONDUITS PROVIDED AND INSTALLED BY GC. TRENCH AND BACKFILL BY CONTRACTOR.
   d. COORDINATE EXACT STUB-UPS LOCATIONS WITH UTILITY.
   e. SECONDARY TERMINATIONS AT TRANSFORMER BY UTILITY.
2. INLINE METER SOCKET AND C/T CABINET, 2000A, 120/208V, 3-PHASE, 4-WIRE.
   a. CURRENT TRANSFORMER (CT) CABINET FURNISHED AND INSTALLED BY GC. CT'S FURNISHED AND INSTALLED BY UTILITY.
   b. METERING IS HOT-SEQUENCING AND ON LINE-SIDE OF METER.
3. VERIFY AVAILABLE SHORT CIRCUIT FAULT CURRENT WITH UTILITY PRIOR TO ORDERING ELECTRIC PANELS. INCREASE SHORT CIRCUIT RATING OF PANELS AS REQUIRED.
4. SECONDARY TERMINATIONS AT MAIN OVER-CURRENT PROTECTION DEVICE BY GC.
5. COORDINATE DUCTBANK ROUTING UNDER GRADE BEAM. SEE CIVIL DRAWINGS FOR BEAM LOCATION.
6. ALL WORK RELATED TO COMED PAD-MOUNTED TRANSFORMER SHALL BE COORDINATED WITH COMED PROJECT ENGINEERING DESIGN TECH.
7. CORRIDOR LIGHTING PANELS TO BE REPLACED WITH SAME RATING AS NOTED. EXISTING MAIN FEEDERS TO BE REUSED.
8. METER AT SERVICE ENTRANCE TO BE RATED FOR NET METERING.
9. APPLY LOAD METERING FOR LEED. REFER TO DETAIL 4/E-702
10. NEW 24-POLE, MLO, 120/208V, 3-PHASE, 4-WIRE PANEL "LP-1W" TO BE FED FROM EXISTING 200A-3P CIRCUIT BREAKER IN EXISTING MAIN SWITCHBOARD. SEE SHEET E-500 FOR LOCATION.

2 ELECTRICAL RISER DIAGRAM

SCALE: N.T.S.



NOTES:

1. HOME RUN NEW SECURITY DEVICES IN ANNEX TO IDF ROOM.

2. REUSE EXISTING SECURITY PANEL AND DEVICES FOUND IN EXISTING BUILDING.

3. PROVIDE CABLE CONNECTOR BETWEEN IDF-MDF AND MDF-SECURITY PANEL.

4. EXISTING VISTA 50P SECURITY PANEL TO BE REPLACED WITH HONEYWELL 128BPT. CONTRACTOR TO VERIFY CONDITION OF EXISTING WIRING FOR REUSE.

3 SECURITY SYSTEM RISER DIAGRAM

SCALE: NTS

FEEDER SCHEDULE

TAG	CONDUCTORS	NEUTRAL	GROUND	CONDUIT	NOTES
3-1/0	3#1/0	--	6	1-1/2"	
3-2/0	3#2/0	--	6	2"	
3-4	3#4	--	8	1-1/4"	
4-500	3#500	1#500	3	3-1/2"	
4-6	3#6	1#6	10	1-1/4"	
4-4	3#4	1#4	8	1-1/4"	
4-8	3#8	1#8	10	1"	
5-2	3#2	2#2	8	1-1/2"	200% NEUTRAL
4-1/0	3#1/0	1#1/0	6	2"	
4-2/0	3#2/0	1#2/0	6	2"	
4-3/0	3#3/0	1#3/0	6	2-1/2"	
4-4/0	3#4/0	1#4/0	6	2-1/2"	
4-250	3#250	1#250	4	3"	
2:3-250	(2) SETS: 3#250	--	(2) SETS: 2	2-1/2" EA	
2:4-250	(2) SETS: 3#250	(2) SETS: 1#250	(2) SETS: 2	3" EA	
2:4-500	(2) SETS: 3#500	(2) SETS: 1#500	(2) SETS: 1/0	3-1/2" EA	
5-1/0	3#1/0	2#1/0	6GRD, 6IG	2"	
3-3/0	3#3/0	--	6	2"	
2:5-250	(2) SETS: 3#250	(2) SETS: 2#250	(2) SETS: 3GRD, 3IG	3" EA	
S4-8	3#8	1#8	8	1-1/4"	CONCRETE ENCASE
S4:4-600	(4) SETS: 3#600	(4) SETS: 1#600	(4) SETS: 4/0	4" EA	CONCRETE ENCASE
2:3-3/0	(2) SETS: 3#3/0	--	4	2"	
2:3-1/0	(2) SETS: 3#1/0	--	4	2"	
3:3-4/0	(3) SETS: 3#4/0	--	4	2"	
2:3-4/0	(2) SETS: 3#4/0	--	6	2"	

PUBLIC BUILDING COMMISSION OF CHICAGO

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

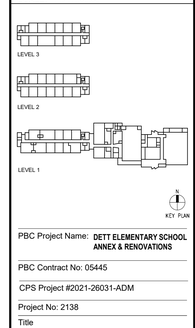
ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: As indicated



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

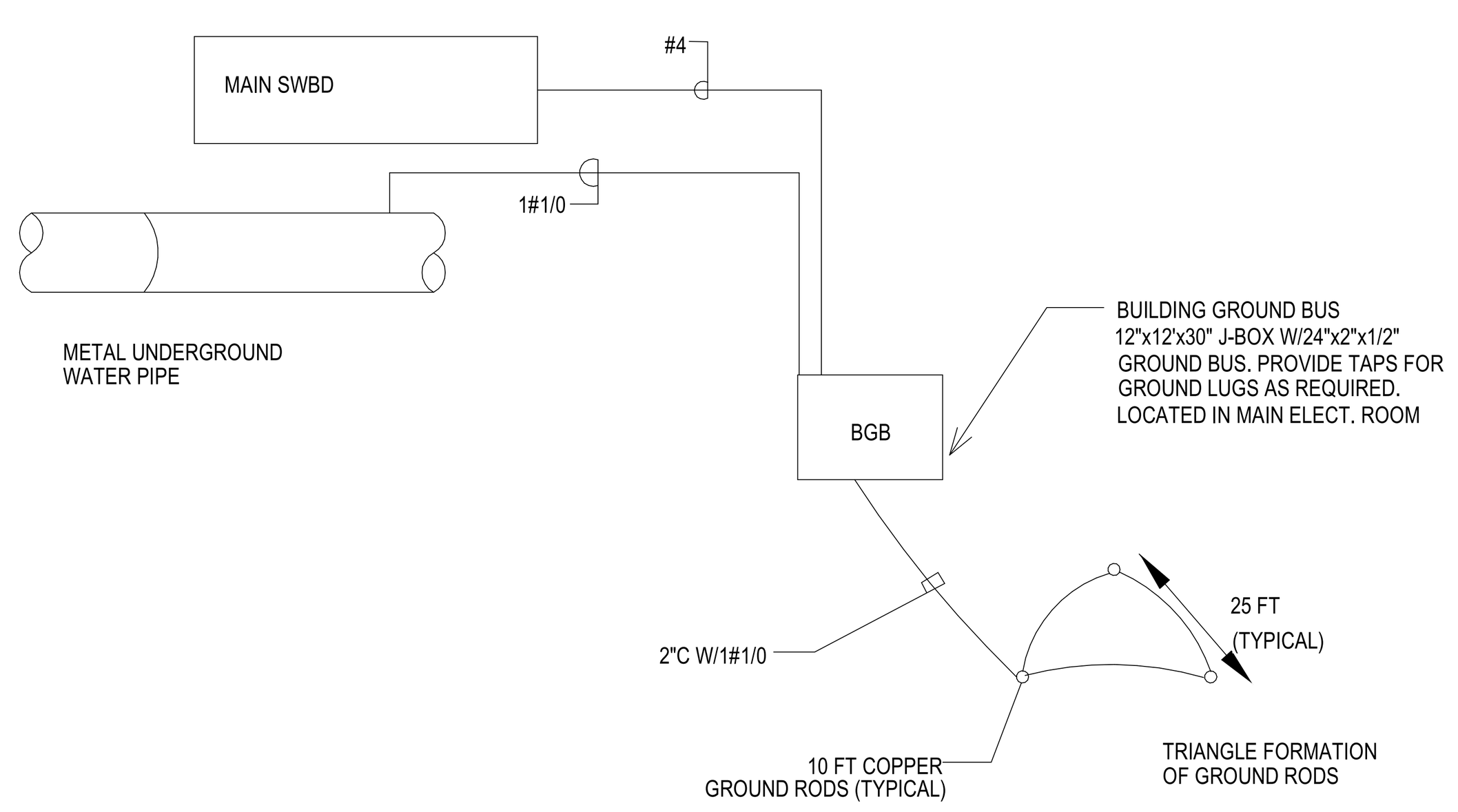
Title

ELECTRICAL ONE LINE DIAGRAM

Sheet NOT FOR CONSTRUCTION

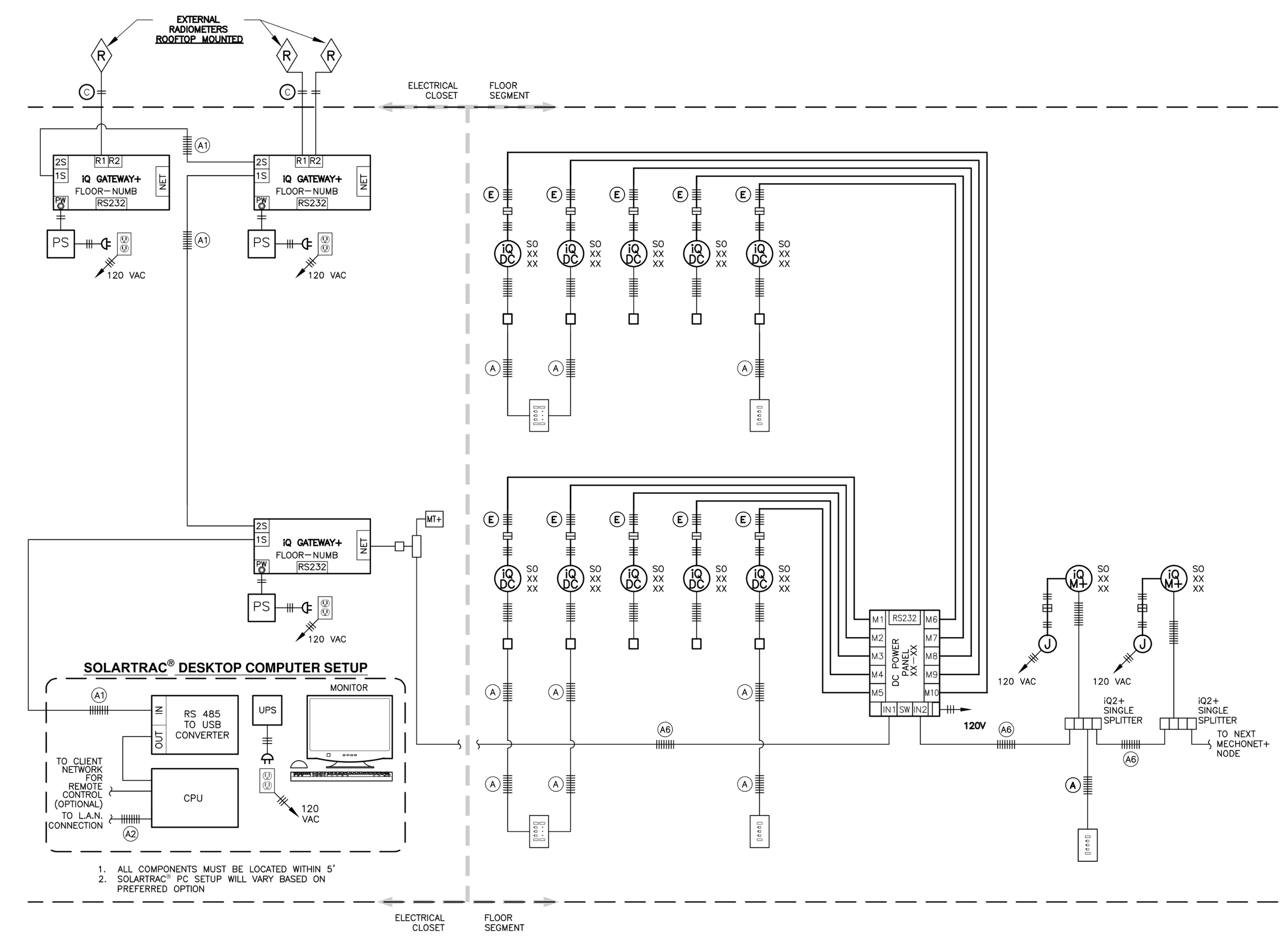
E-600

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"



1 BUILDING SYSTEM GROUNDING DIAGRAM

SCALE: N.T.S.

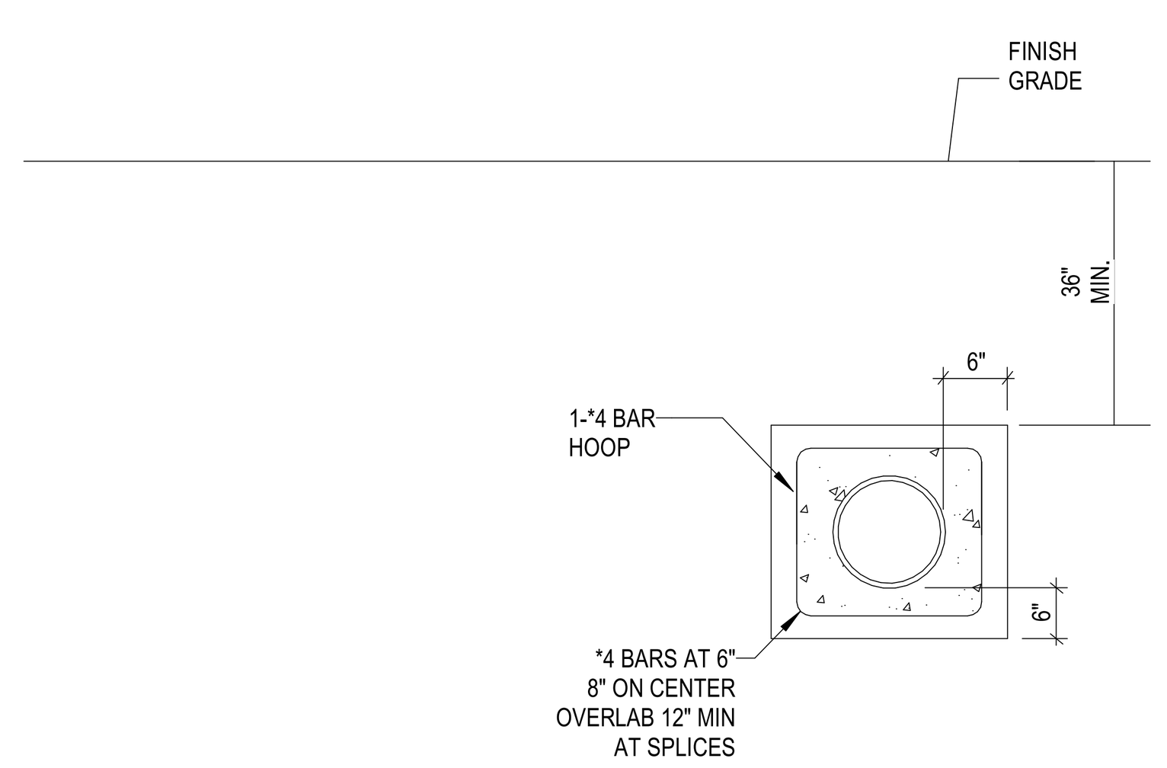


LOW VOLTAGE CABLE LEGEND - EIA568B

A	**CAT5E/6 – CABLE FOR LOW VOLTAGE DRY CONTACT WIRING CONNECTIONS:** 24AWG 4UTP (8–CONDUCTOR STRANDED UNSHIELDED TWISTED PAIR) TERMINATION: RJ–45 MODULAR PLUG CRIMPED (EIA568B) ON BOTH ENDS Recommended OLYMPIC WIRE AND CABLE (www.olympicwire.com 1–800–526–2269) PART No. **3078M5F–8** (NON–PLENUM) or compatible cable. —OR— 24AWG 4UTP (8–CONDUCTOR SOLID UNSHIELDED TWISTED PAIR) TERMINATION: RJ–45 MODULAR PLUG CRIMPED (EIA568B) ON BOTH ENDS Recommended OLYMPIC WIRE AND CABLE (www.olympicwire.com 1–800–526–2269) PART No. **3604M5UC–9** (PLENUM) or compatible cable. **DISTANCE LIMITATION: 400' CUMULATIVE** (FURNISHED & INSTALLED BY OTHERS) SEE **CABLE "A" REFERENCE DRAWING** FOR DETAILED SPECIFICATION.	A6	**CAT5E/6 – CABLE FOR MECHONET+ NETWORK WIRING CONNECTIONS:** 24AWG 4UTP (8–CONDUCTOR STRANDED UNSHIELDED TWISTED PAIR) TERMINATION: RJ–45 MODULAR PLUG CRIMPED (EIA568B) ON BOTH ENDS Recommended OLYMPIC WIRE AND CABLE (www.olympicwire.com 1–800–526–2269) PART No. **3078M5F–8** (NON–PLENUM) or compatible cable. —OR— 24AWG 4UTP (8–CONDUCTOR SOLID UNSHIELDED TWISTED PAIR) TERMINATION: RJ–45 MODULAR PLUG CRIMPED (EIA568B) ON BOTH ENDS Recommended OLYMPIC WIRE AND CABLE (www.olympicwire.com 1–800–526–2269) PART No. **3604M5UC–9** (PLENUM) or compatible cable. **DISTANCE LIMITATION: 4000' CUMULATIVE. MAX. NODES: 250.** (FURNISHED & INSTALLED BY OTHERS) SEE **CABLE "A" REFERENCE DRAWING** FOR DETAILED SPECIFICATION.
A1	**CAT5E/6 – CABLE FOR SDNET WIRING CONNECTIONS:** 24AWG 4UTP (8–CONDUCTOR STRANDED UNSHIELDED TWISTED PAIR) TERMINATION: RJ–45 MODULAR PLUG CRIMPED (EIA568B) ON BOTH ENDS Recommended OLYMPIC WIRE AND CABLE (www.olympicwire.com 1–800–526–2269) PART No. **3078M5F–8** (NON–PLENUM) or compatible cable. —OR— 24AWG 4UTP (8–CONDUCTOR SOLID UNSHIELDED TWISTED PAIR) TERMINATION: RJ–45 MODULAR PLUG CRIMPED (EIA568B) ON BOTH ENDS Recommended OLYMPIC WIRE AND CABLE (www.olympicwire.com 1–800–526–2269) PART No. **3604M5UC–9** (PLENUM) or compatible cable. **DISTANCE LIMITATION: 4000' CUMULATIVE. MAX. NETWORK NODES: 16.** (FURNISHED & INSTALLED BY OTHERS) SEE **CABLE "A" REFERENCE DRAWING** FOR DETAILED SPECIFICATION.	C	**ELECTRONIC CABLE FOR LOW VOLTAGE PC INTERFACE/ANALOG I/O TO SENSOR WIRING CONNECTION:** 18AWG 1STP (2–CONDUCTOR SHIELDED TWISTED PAIR) TERMINATION: 2–PIN PHOENIX TYPE CONNECTOR/CONNECTION "+" = RED | "–" = BLACK | '+' = BLUE/RED | '–' = GRAY/BLACK Recommended BELDEN (www.BELDEN.com 1–800–BELDEN–1) PART No.**82760** (PLENUM) **DISTANCE LIMITATION: 500' CUMULATIVE** (FURNISHED & INSTALLED BY OTHERS)
		E	**COMPOSITE CONTROL CABLE FOR DC MOTOR POWER AND DATA.** 5–CONDUCTOR, (2 X 14AWG UNSHIELDED POWER PAIR and 3 X 22AWG STRANDED, and SHIELDED DATA TRIAD) Recommended LIBERTY CABLE (www.LibertyCable.com 1–800–530–8998) PART No. 9020126 (NON–PLENUM) & No. 9020127 (PLENUM) or compatible cable, SEE "CABLE E REFERENCE DRAWING" FOR DETAILED SPECIFICATION. **DISTANCE LIMITATION: SEE "CABLE E REFERENCE DRAWING".** (FURNISHED & INSTALLED BY OTHERS)

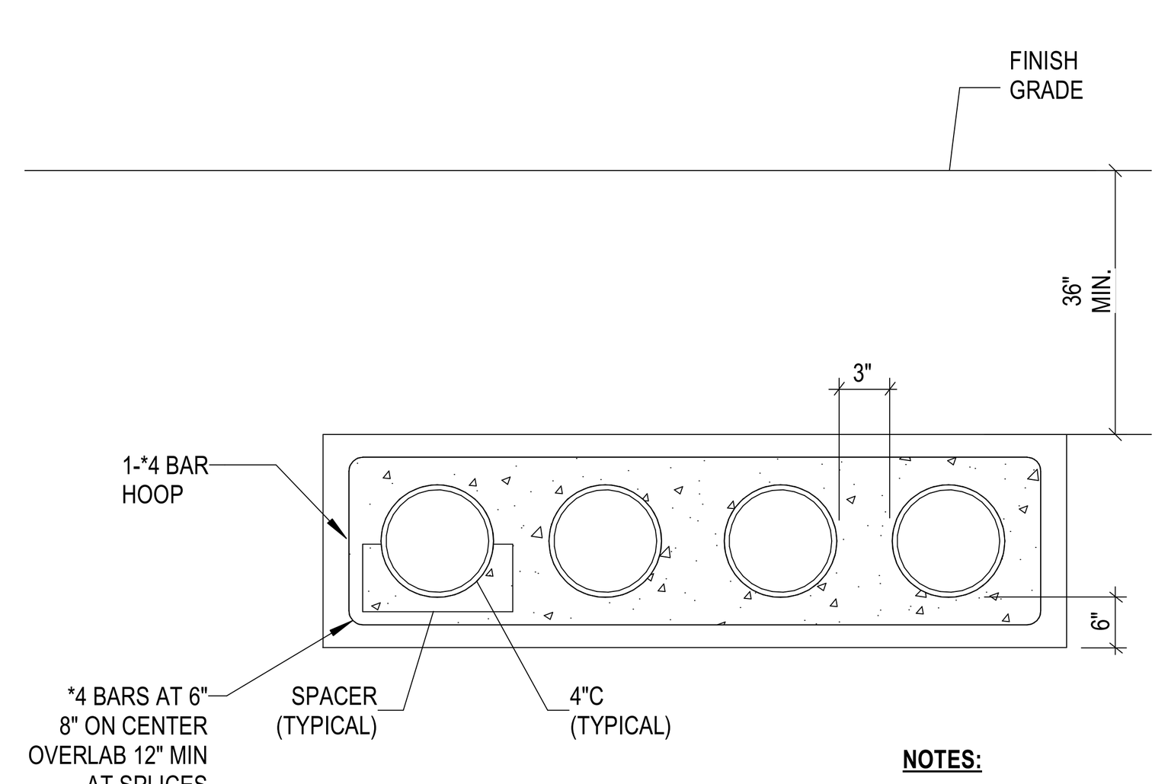
2 DIAGRAM - MOTORIZED SHADES

SCALE: N.T.S.



3B DETAIL - FIRE PUMP ELECTRICAL SERVICE

SCALE: NTS



3A DETAIL - MAIN INCOMING ELECTRICAL SERVICE

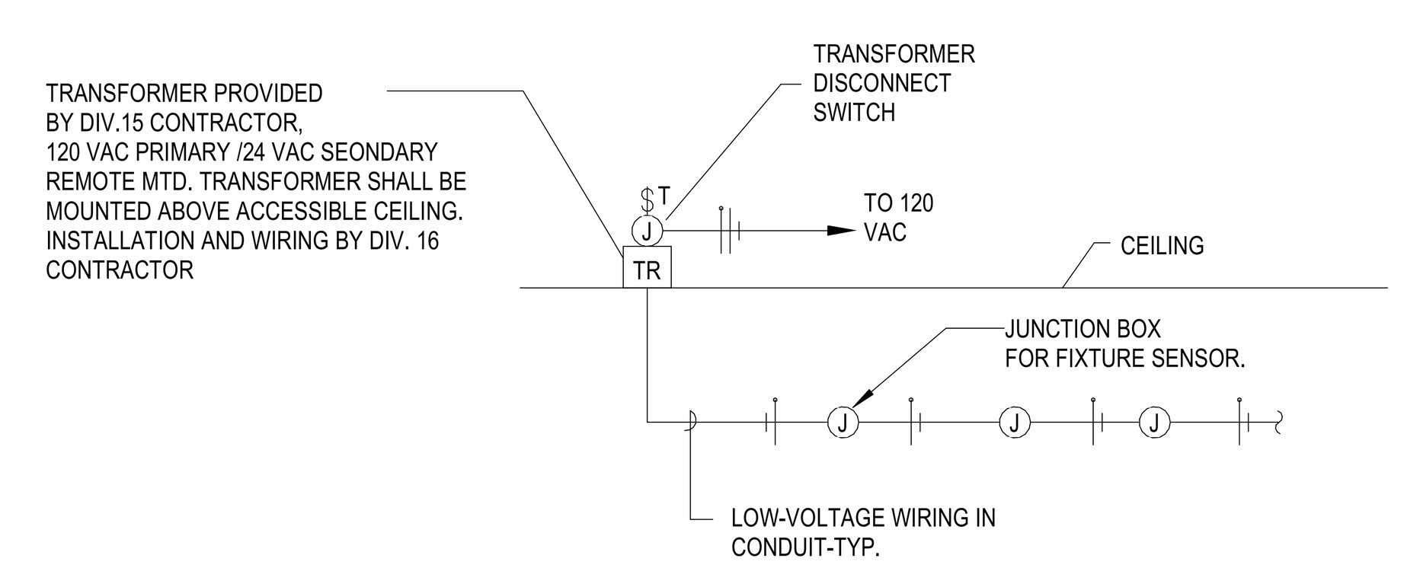
SCALE: NTS

NOTES:

1. ALL DUCT BANK CONDUITS SHALL BE GALVANIZED RIGID STEEL CONDUIT U.N.O.
2. SEE CIVIL PLANS FOR GRADE BEAM / DUCT BANK COORDINATION.

3 DETAIL - ELECTRICAL DUCT BANK

SCALE: NTS

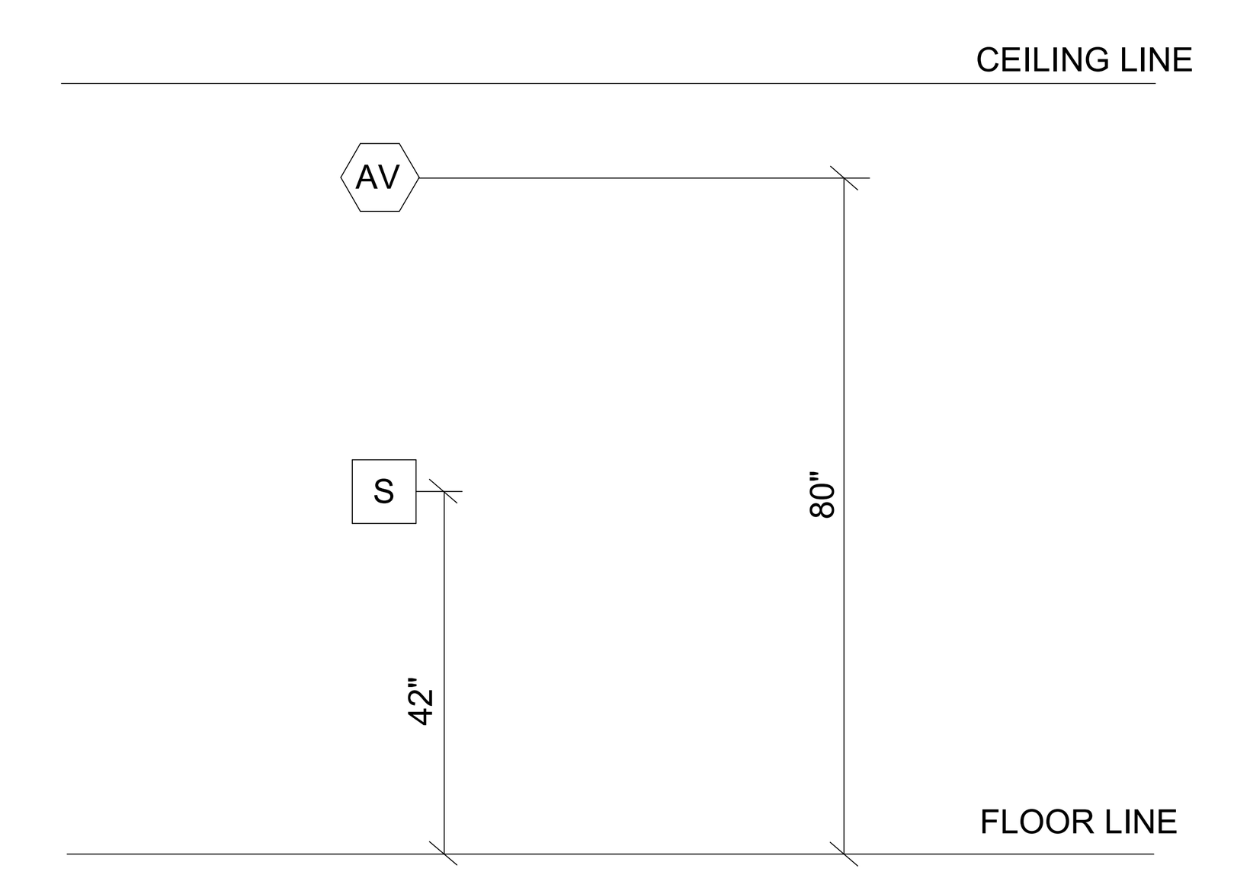


NOTES:

1. PLUMBING FIXTURE SENSOR SCHEMATIC WIRING DIAGRAM IS DIAGRAMMATIC ONLY.
2. ABOVE DIAGRAM APPLIED TO ALL VALVE SENSORS INCLUDING BUT NOT LIMITED TO, TOILET FLUSH VALVES AND SINK VALVES. SEE DWGS. FOR LOCATIONS.
3. PROVIDE ALL HARDWARE, WIRING AND FINAL CONNECTIONS AS REQUIRED FOR A COMPLETE AND OPERATING SYSTEM.
4. VERIFY EXACT REQUIRE,EMTS IN THE FIELD WITH THE PLUMBING CONTRACTOR.
5. ALL TRANSFORMERS SHALL BE ACCESSIBLE COORDINATE ACCESS PANELS, IF REQUIRED WITH THE GENERAL CONTRACTOR,

4 PLUMBING FIXTURE SENSOR WIRING DIAGRAM

SCALE: NTS



5 FIRE ALARM DEVICE MOUNTING HEIGHT DIAGRAM

SCALE: NTS

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: As indicated

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
ELECTRICAL DETAILS

Sheet
NOT FOR CONSTRUCTION
E-701

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
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0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
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0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
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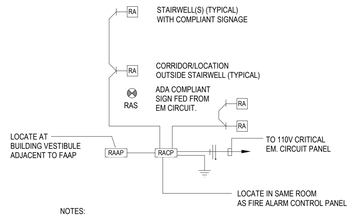
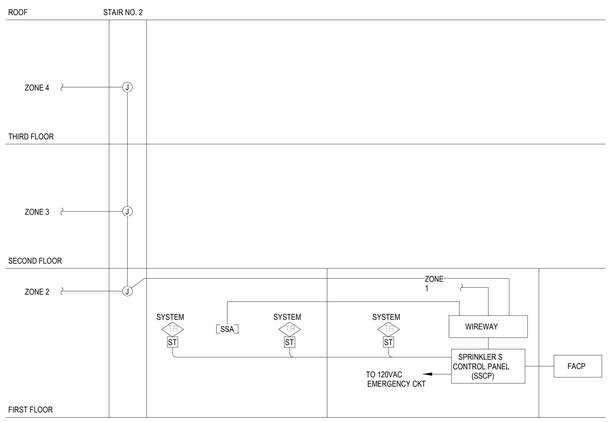


NOTES:

1. PROVIDE FOUR (4) 18 GAUGE (MINIMUM) CONDUCTORS BETWEEN EACH RESCUE ASSISTANCE COMMUNICATION STATION (RA) AND THE RESCUE ASSISTANCE ANNUNCIATOR PANEL.
2. PROVIDE TWO (2) 18 GAUGE (MINIMUM) CONDUCTORS BETWEEN POWER SUPPLY AND ANNUNCIATOR PANEL.
3. PROVIDE A ZONE CONTROL AND ANNUNCIATOR PANEL AND BATTERY BACK-UP SIZED FOR NUMBER OF AREAS SPECIFIED.
4. DETAIL IS A DIAGRAMMATIC SCHEMATIC TO GENERALLY INDICATE SYSTEM COMPONENTS AND SYSTEM DISTRIBUTION. REFER TO DRAWING PLANS FOR LOCATION AND QUANTITIES.
5. MOUNT RESCUE ASSISTANCE ILLUMINATION DOUBLE FACE OR SINGLE FACE SIGNAGE FROM CEILING WHERE APPLICABLE OR WALL MOUNTED 80" AFF. PROVIDE POWER FOR SIGNAGE FROM LIFE SAFETY EMERGENCY POWER.

1 RESCUE ASSISTANCE SYSTEMS

SCALE: NTS



NOTES:

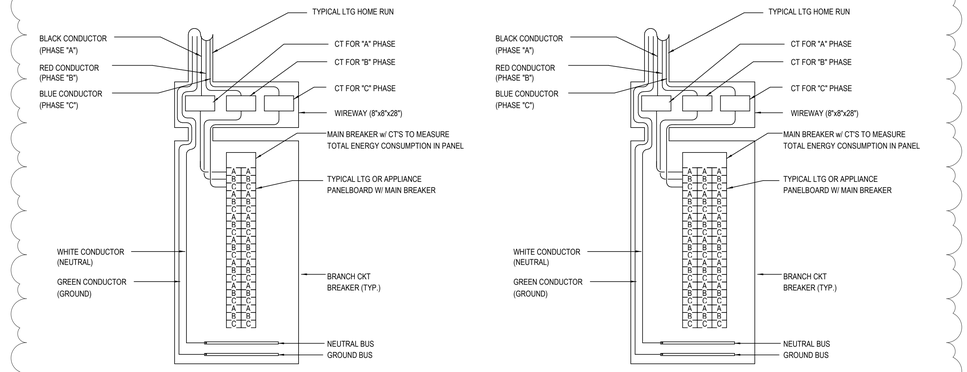
1. RISER DIAGRAM ABOVE IS DIAGRAMMATIC AND IS SHOWN TO PROVIDE A GENERAL OVERVIEW OF MAJOR SYSTEM COMPONENTS AND THEIR INTERCONNECTION. THIS DIAGRAM IS NOT TO BE USED FOR FIELD INSTALLATION PURPOSES.
2. ALL WIRING SHALL BE IN CONDUIT, 3/4" MINIMUM. ALL WIRING SHALL BE PROVIDED PER MANUFACTURER'S RECOMMENDATIONS.
3. SEE PLANS FOR DEVICE LOCATIONS AND QUANTITIES.
4. PROVIDE ALL ANCILLARY COMPONENTS, HARDWARE, POWER CONNECTIONS AND WIRING AS REQUIRED FOR A COMPLETE AND OPERATING VALVE SUPERVISORY (TAMPER) SYSTEM.

EOR NOTES

1. ELECTRICAL CONTRACTOR SHALL REVISE AND COORDINATE WITH SCHOOL DESIGN.
2. ALL SYSTEM COMPONENTS INCLUDING PANELS, TROUBLE BELLS, ANUNCIATORS, CITY TIE, ETC, SHALL BE SHOWN. RISER DIAGRAM SHALL IDENTIFY LOCATION AND WIRING FOR THE SYSTEM COMPONENTS.
3. ALL DEVICES INCLUDING MANUAL PULL STATIONS, AUTOMATIC DETECTION AND NOTIFICATION DEVICES SHALL BE INDICATED IN EACH FLOOR.

2 SPRINKLER SUPERVISORY RISER DIAGRAM

SCALE: NTS

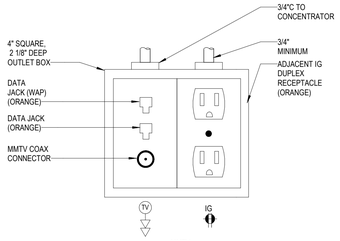


NOTE:
1. ALL WIRING WITHIN WIREWAY AND PANEL INCLUDING THE PULSE OUTPUT SHALL BE 600V RATED.
2. PROVIDE 3 PHASE CIRCUIT BREAKER OR VOLTAGE TAPS FOR EACH PHASE FOR KWH CT'S

PROVIDE INDIVIDUAL METERING FOR THE FOLLOWING LOADS PER LEED		
PANEL	LOAD	CATEGORY
SWBD	ENTIRE SERVICE	UTILITY
SWBD	MAU-S-3	HVAC
SWBD	RTU-3	HVAC
SWBD	RTU-4	HVAC
SWBD	RTU-5	HVAC
RP-1	ENTIRE PANEL	RECEPTACLE
IDF-1	ENTIRE PANEL	EQUIPMENT
MECH-1	ENTIRE PANEL	HVAC
MECH-2	ENTIRE PANEL	HVAC
LP-1	ENTIRE PANEL	LIGHTING
SWBD	ELEVATOR	EQUIPMENT
UTILITY	FPC	EQUIPMENT

3 METERING DETAIL FOR LEED

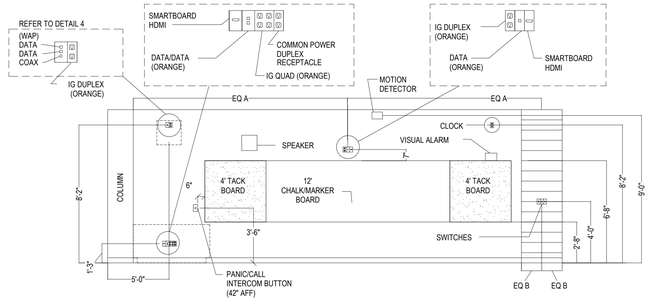
SCALE: NTS



NOTES:
1. TYPICAL MOUNTING HEIGHT 8'-2" AFF IN ALL CLASSROOMS, AND OFFICE AREAS.

4 TELEVISION MMTV OUTLET DETAIL

SCALE: NTS



NOTE
1. FOR ALL WORKSTATION LOCATIONS SHOWN WITH A RECEPTACLE AND AN ASSOCIATED TELE/DATA DEVICE OR HDMI CONNECTION, PROVIDE A COMBINATION BACKBOX WITH A COMMON COVER. WALL BOX SHALL BE A TWO, THREE, OR FOUR GANG BACKBOX WITH A DIVIDER, IN ORDER TO ACCOMMODATE THE POWER AND DATA. BACKBOX SHALL BE THE WALLSOURCE BACKBOX AS MANUFACTURED BY WIREMOLD OR EQUIVALENT. PROVIDE ALL NECESSARY ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.
2. BACKBOXES SHALL BE OFFSET AND NOT MOUNTED BACK TO BACK.

5 TYPICAL CLASSROOM TEACHING WALL

SCALE: NTS

PUBLIC BUILDING COMMISSION OF CHICAGO
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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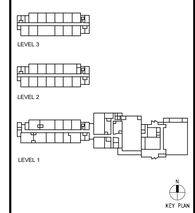
DRAWN BY:

SCALE: NTS



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ELECTRICAL DETAILS

Sheet NOT FOR CONSTRUCTION

E-702

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

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0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

Branch Panel: LP-1

Location: ELECTRIC ROOM 179
Supply From: MAIN SWBD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22kAIC
Mains Type: MLO
Mains Rating: 200 A
MCB Rating: 200 A

6

Notes:

Load Class.	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	Load Class.
L	1	LIGHTING	20 A	1	1157 VA			1112 VA			1	20 A	LIGHTING	2	L
L	3	LIGHTING	20 A	1		1408 VA			880 VA		1	20 A	LIGHTING GYM 173	4	L
L	5	LIGHTING	20 A	1			792 VA			264 VA	1	20 A	LIGHTING GYM 173	6	L
L	7	LIGHTING	20 A	1	1177 VA			880 VA			1	20 A	LIGHTING GYM 173	8	L
L	9	EXIT SIGNS...	20 A	1		1152 VA			568 VA		1	20 A	LIGHTING	10	L
L	11	LIGHTING	20 A	1			241 VA			727 VA	1	20 A	LIGHTING	12	L
L	13	LIGHTING EXTERIOR	20 A	1	200 VA			1334 VA			1	20 A	LIGHTING	14	L
L	15	LIGHTING EXTERIOR	20 A	1		612 VA			74 VA		1	20 A	LIGHTING	16	L
L	17	EBU GYM LIGHTS	20 A	1			67 VA							18	
--	19	Spare	20 A	1	0 VA									20	
--	21	Spare	20 A	1		0 VA			0 VA		1	20 A	Spare	22	--
--	23	Spare	20 A	1			0 VA			--	1	--	Space	24	--
--	25	Space	--	1	--			--			1	--	Space	26	--
--	27	Space	--	1		--			--		1	--	Space	28	--
--	29	Space	--	1			--			--	1	--	Space	30	--
--	31	Space	--	1	--			--			1	--	Space	32	--
--	33	Space	--	1		--			--		1	--	Space	34	--
--	35	Space	--	1			--			--	1	--	Space	36	--
--	37	Space	--	1	--			--			1	--	Space	38	--
--	39	Space	--	1		--			--		1	--	Space	40	--
--	41	Space	--	1			--			--	1	--	Space	42	--
				Total Load:	5860 VA		4695 VA		2092 VA						
				Total Amps:	52 A		42 A		17 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Other	0 VA	0.00%	0 VA		
LTS	12646 VA	125.00%	15808 VA	**Total Conn. Load:**	12646 VA
				Total Est. Demand:	15808 VA
				Total Conn. Current:	35 A
				Total Est. Demand Current:	44 A

Notes:

Switchboard: MAIN SWBD

Location: ELECTRIC ROOM 179
Supply From:
Mounting: FLOOR
Enclosure: NEMA-1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 42kAIC
Mains Type: MCB
Mains Rating: 2000 A
MCB Rating: 1600 A

6

Notes:
100% RATED MCB

CKT	Circuit Description	# of Poles	Frame Size	Trip Rating	Load	Remarks
1,2,3	RTU-3	3	400 A	225 A	73560 VA	
4,5,6	RTU-4	3	200 A	150 A	44200 VA	
7,8,9	RTU-5	3	400 A	300 A	90875 VA	
10,11,12	ELEVATOR	3	200 A	175 A	41600 VA	
13,14,15	MECH-1	3	400 A	225 A	53717 VA	
16,17,18	RP-1	3	200 A	200 A	31660 VA	
19,20,21	MAU S-3	3	400 A	225 A	63360 VA	
22,23,24	IDF-1 IG	3	100 A	100 A	12240 VA	
25,26,27	LP-1	3	200 A	200 A	12646 VA	
28,29,30	MECH-2	3	400 A	400 A	67672 VA	
31,32,33	SOLAR PV	3	400 A	350 A	0 VA	
				Total Conn. Load:	491530 VA	
				Total Amps:	1364 A	

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	228069 VA	106.95%	243909 VA		
Other	0 VA	0.00%	0 VA	**Total Conn. Load:**	491530 VA
Power	17160 VA	100.00%	17160 VA	**Total Est. Demand:**	561930 VA
Receptacle	16020 VA	81.21%	13010 VA	**Total Conn. Current:**	1364 A
MISC	0 VA	0.00%	0 VA	**Total Est. Demand Current:**	1560 A
LTS	12646 VA	125.00%	15808 VA		
Continuous	217635 VA	125.00%	272044 VA		

Notes:

Branch Panel: IDF-1 IG

Location: STORAGE ROOM 181
Supply From: MAIN SWBD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22kAIC
Mains Type: MCB
Mains Rating: 100 A
MCB Rating: 100 A

6

Notes:

Load Class.	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	Load Class.
R	1	RECEPTACLE	20 A	1	720 VA			1000 VA			3	20 A	IT RACK	2	C
C	3	IT RACK	20 A	3		1000 VA			1000 VA		--	--	--	4	--
--	5	--	--	--			1000 VA			1000 VA	--	--	--	6	--
--	7	--	--	--	1000 VA			1000 VA			3	20 A	IT RACK	8	C
P; R	9	IG REC; RM 172	20 A	1		720 VA			1000 VA		--	--	--	10	--
P; R	11	IG REC; RM 172	20 A	1			720 VA			1000 VA	--	--	--	12	--
R	13	IG REC; RM 173A	20 A	1	1080 VA			0 VA			1	20 A	Spare	14	--
--	15	SPD	20 A	3		0 VA			0 VA		1	20 A	Spare	16	--
--	17	--	--	--			0 VA			0 VA	1	20 A	Spare	18	--
--	19	--	--	--	0 VA			0 VA			1	20 A	Spare	20	--
--	21	Spare	20 A	1		0 VA			--		1	--	Space	22	--
--	23	Spare	20 A	1			0 VA			--	1	--	Space	24	--
--	25	Spare	20 A	1	0 VA			--			1	--	Space	26	--
--	27	Spare	20 A	1		0 VA			--		1	--	Space	28	--
--	29	Space	--	1			--			--	1	--	Space	30	--
--	31	Space	--	1	--			--			1	--	Space	32	--
--	33	Space	--	1		--			--		1	--	Space	34	--
--	35	Space	--	1			--			--	1	--	Space	36	--
--	37	Space	--	1	--			--			1	--	Space	38	--
--	39	Space	--	1		--			--		1	--	Space	40	--
--	41	Space	--	1			--			--	1	--	Space	42	--
				Total Load:	4800 VA		3720 VA		3720 VA						
				Total Amps:	40 A		31 A		31 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Power	720 VA	100.00%	720 VA		
Receptacle	2520 VA	100.00%	2520 VA	**Total Conn. Load:**	12240 VA
Continuous	9000 VA	125.00%	11250 VA	**Total Est. Demand:**	14490 VA
				Total Conn. Current:	34 A
				Total Est. Demand Current:	40 A

Notes:
200% NEUTRAL

Branch Panel: RP-1

Location: ELECTRIC ROOM 179
Supply From: MAIN SWBD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 22kAIC
Mains Type: MLO
Mains Rating: 200 A
MCB Rating: 200 A

6

Notes:

Load Class.	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	Load Class.
R	1	REC - COORIDOR 171	20 A	1	1080 VA			900 VA			1	20 A	REC - CORRIDOR A.101A	2	R;
R	3	REC - COORIDOR 171	20 A	1		1440 VA			900 VA		1	20 A	REC - ROOM 153,154	4	R
P	5	HAND DRYER - ROOM 143	20 A	1			1500 VA			1080 VA	1	20 A	REC - ROOM 172	6	R
R	7	REC - ROOM 172	20 A	1	1080 VA			1080 VA			1	20 A	REC - ROOM 172	8	R
R	9	REC- ROOM 174, 175, 176, 177	20 A	1		1260 VA			720 VA		1	20 A	REC - ROOM 178,181	10	R
R	11	REC - ROOM 173	20 A	1			1080 VA			720 VA	1	20 A	REC - ROOM 173A, 173B, 173C,...	12	R
R	13	REC - COORIDOR 171C	20 A	1	540 VA			1080 VA			1	20 A	CLOCK RECPTACLE	14	P
P	15	HAND DRYER - ROOM 140	20 A	1		1500 VA			1500 VA		1	20 A	HAND DRYER - 175	16	P
P	17	HAND DRYER - ROOM 176	20 A	1			1500 VA			1500 VA	1	20 A	HAND DRYER - ROOM 177	18	P
P	19	HAND DRYER - ROOM 177	20 A	1	1500 VA			1500 VA			1	20 A	HAND DRYER - ROOM 177	20	P
P	21	HAND DRYER - ROOM 177	20 A	1		1500 VA			360 VA		1	20 A	REC - ROOM 172	22	P
M;	23	AUTOMATIC DOOR - VESTIBULE...	20 A	1			0 VA			0 VA	1	20 A	BAS PANEL	24	P
R	25	GFI WP REC	20 A	1	180 VA			180 VA			1	20 A	GFI WP REC	26	R
P	27	HAND DRYER - ROOM 153	20 A	1		1500 VA			1500 VA		1	20 A	HAND DRYER - ROOM 154	28	P
R	29	HDMI PROJECTOR	20 A	1			180 VA			1080 VA	1	20 A	REC - ROOM A.111A, A.111B	30	R
M	31	MS-1	20 A	1	600 VA			560 VA			1	20 A	RETRACTABLE PARTITION	32	M;
M;	33	RETRACTABLE PARTITION	20 A	1		560 VA			--		1	--	Space	34	--
--	35	Spare	20 A	1			0 VA			0 VA	1	20 A	Spare	36	--
--	37	Spare	20 A	1	0 VA			0 VA			1	20 A	Spare	38	--
--	39	Spare	20 A	1		0 VA			0 VA		1	20 A	Spare	40	--
--	41	Spare	20 A	1			0 VA			--	1	--	Space	42	--
				Total Load:	10280 VA		12740 VA		8640 VA						
				Total Amps:	88 A		108 A		72 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	1720 VA	108.72%	1870 VA		
Power	16440 VA	100.00%	16440 VA	**Total Conn. Load:**	31660 VA
Receptacle	13500 VA	87.04%	11750 VA	**Total Est. Demand:**	30060 VA
MISC	0 VA	0.00%	0 VA	**Total Conn. Current:**	88 A
				Total Est. Demand Current:	83 A

Notes:

PUBLIC BUILDING COMMISSION OF CHICAGO
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE:

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

ELECTRICAL SCHEDULES

Sheet NOT FOR CONSTRUCTION

E-800

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

Branch Panel: MECH-1

Location: ELECTRIC ROOM 179
Supply From: MAIN SWBD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 42kAIC
Mains Type: MLO
Mains Rating: 225 A
MCB Rating: 225 A

Notes:

Load Class.	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	Load Class.
M;	1	EUH-1	40 A	2	2995 VA			2039 VA			3	20 A	VAV 172A	2	M;
--	3	--	--	--		2995 VA			2039 VA		--	--	--	4	--
M;	5	EUH-2	40 A	2			2995 VA			2039 VA	--	--	--	6	--
--	7	--	--	--	2995 VA			1638 VA			3	20 A	VAV 172B	8	M;
M;	9	CU-1	20 A	2		1768 VA			1638 VA		--	--	--	10	--
--	11	--	--	--			1768 VA			1638 VA	--	--	--	12	--
M;	13	EF1	20 A	1	746 VA			613 VA			3	20 A	VAV 173A	14	M;
M;	15	VAV 171	20 A	3		1027 VA			613 VA		--	--	--	16	--
--	17	--	--	--			1027 VA			613 VA	--	--	--	18	--
--	19	--	--	--	1027 VA			1026 VA			3	20 A	VAV-178	20	M;
M;	21	VAV 171C	30 A	3		2664 VA			1026 VA		--	--	--	22	--
--	23	--	--	--			2664 VA			1026 VA	--	--	--	24	--
--	25	--	--	--	2664 VA			3477 VA			3	30 A	CAV-177	26	M;
--	27	Spare	20 A	1		0 VA			3477 VA		--	--	--	28	--
--	29	Spare	20 A	1			0 VA			3477 VA	--	--	--	30	--
--	31	Spare	20 A	1	0 VA			0 VA			1	20 A	Spare	32	--
--	33	Spare	20 A	1		0 VA			0 VA		1	20 A	Spare	34	--
--	35	Space	--	1			--			0 VA	1	20 A	Spare	36	--
--	37	Space	--	1	--			0 VA			1	20 A	Spare	38	--
--	39	Space	--	1		--			--		1	--	Space	40	--
--	41	Space	--	1			--			--	1	--	Space	42	--
			Total Load:		19221 VA		17248 VA		17248 VA						
			Total Amps:		160 A		144 A		144 A						

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	53717 VA	104.86%	56325 VA		
MISC	0 VA	0.00%	0 VA	**Total Conn. Load:**	53717 VA
				Total Est. Demand:	56325 VA
				Total Conn. Current:	149 A
				Total Est. Demand Current:	156 A

Notes:

Branch Panel: MECH-2

Location: ELECTRIC ROOM 179
Supply From: MAIN SWBD
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: 42kAIC
Mains Type: MLO
Mains Rating: 400 A
MCB Rating: 400 A

Notes:

Load Class.	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	Load Class.
M;	1	FPB-171B	60 A	3	5847 VA				332 VA		2	20 A	CC-1	2	M
--	3	--	--	--		5847 VA				332 VA	--	--	--	4	--
--	5	--	--	--			5847 VA			936 VA	2	20 A	CU-2	6	M;
M;	7	EUH-3	20 A	2	1508 VA			936 VA			--	--	--	8	--
--	9	--	--	--		1508 VA			5540 VA		3	20 A	CU-3	10	M;
M	11	MS-1	20 A	1			560 VA			5540 VA	--	--	--	12	--
M	13	MS-2	20 A	1	560 VA			5540 VA			--	--	--	14	--
M	15	MS-3	20 A	1		560 VA								16	
M	17	MS-4	20 A	1			560 VA			560 VA	1	20 A	MS-6	18	M
M	19	MS-5	20 A	1	560 VA			560 VA			1	20 A	PL-1	20	M
M;	21	EWH-1	30 A	3		2167 VA			5847 VA		3	50 A	FPB-171	22	M;
--	23	--	--	--			2167 VA			5847 VA	--	--	--	24	--
--	25	--	--	--	2167 VA			5847 VA			--	--	--	26	--
--	27	Spare	20 A	1		0 VA			0 VA		1	20 A	Spare	28	--
--	29	Spare	--	1	--		--			0 VA	1	20 A	Spare	30	--
--	31	Space	--	1	--			0 VA			1	20 A	Spare	32	--
--	33	Space	--	1		--			0 VA		1	20 A	Spare	34	--
--	35	Space	--	1			--			--	1	--	Space	36	--
--	37	Space	--	1	--			--			1	--	Space	38	--
--	39	Space	--	1		--			--		1	--	Space	40	--
--	41	Space	--	1			--			--	1	--	Space	42	--
			Total Load:		23856 VA			21800 VA		22016 VA					
			Total Amps:		199 A			182 A		184 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
Motor	67672 VA	106.48%	72057 VA		
MISC	0 VA	0.00%	0 VA	**Total Conn. Load:**	67672 VA
				Total Est. Demand:	72057 VA
				Total Conn. Current:	188 A
				Total Est. Demand Current:	200 A

Notes:

Branch Panel: LP-1W

Location:
Supply From:
Mounting: Surface
Enclosure: Type 1

Volts: 120/208 Wye
Phases: 3
Wires: 4

A.I.C. Rating: A
Mains Type: MLO
Mains Rating: 200 A
MCB Rating: 200 A

Notes:

Load Class.	CKT	Circuit Description	Trip	Poles	A	B	C	A	B	C	Poles	Trip	Circuit Description	CKT	Load Class.
L	1	LIGHTING PARKING LOT	20 A	1	1200 VA			3328 VA			2	40 A	EV CHARGING STATIONS-CLAS...	2	C
C	3	EV CHARGING STATIONS	40 A	2		3328 VA			3328 VA		--	--	--	4	--
--	5	--	--	--			3328 VA			3328 VA	2	40 A	EV CHARGING STATIONS-CLAS...	6	C
C	7	EV CHARGING STATIONS	40 A	2	3328 VA			3328 VA			--	--	--	8	--
--	9	--	--	--		3328 VA								10	
	11													12	
	13													14	
	15													16	
	17													18	
	19													20	
	21													22	
	23													24	
	25													26	
	27													28	
	29													30	
	31													32	
	33													34	
	35													36	
	37													38	
	39													40	
	41													42	
			Total Load:		11130 VA			9984 VA		6656 VA					
			Total Amps:		97 A			87 A		55 A					

Legend:

Load Classification	Connected Load	Demand Factor	Estimated Demand	Panel Totals	
LTS	1200 VA	125.00%	1500 VA		
Continuous	26624 VA	125.00%	33280 VA	**Total Conn. Load:**	27767 VA
				Total Est. Demand:	34708 VA
				Total Conn. Current:	77 A
				Total Est. Demand Current:	96 A

Notes:

LIGHTING FIXTURE SCHEDULE

TAGS	DESCRIPTION	MANUFACTURER/CATALOG NO.	TYPE	DRIVER	CRI / LUMENS	TEMP	W	V	MOUNTING	NOTES
C1	RECESSED ROUND LED DOWNLIGHT WITH NOMINAL 4 IN. APERTURE, MEDUIM WIDE DISTRIBUTION AND CLEAR DIFFUSE TRIM FINISH.	LIGHTOLIER 4R-N-XX-LC / C4L-15-9-35-M-Z10-XX-U / C4-R-DL-CC-P LITHONIA EVO 4 PORTFOLIO LD4B	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 1500 LM	3500K	16	120	RECESSED CEILING	
C1A	RECESSED ROUND LED DOWNLIGHT WITH NOMINAL 4 IN. APERTURE, WALL WASH DISTRIBUTION AND DIFFUSING LENS.	LIGHTOLIER 4R-N-EM6-LC / C4L-15-9-35-M-Z10-XX-U / C4-R-DL-CC-P LITHONIA EVO 4 PORTFOLIO LD4B	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 1500 LM	3500K	16	120	RECESSED CEILING	
C1B	RECESSED ROUND LED LENSED WALLWASH DOWNLIGHT WITH NOMINAL 4 IN. APERTURE, WALL WASH DISTRIBUTION AND CLEAR DIFFUSE TRIM FINISH.	LIGHTOLIER 4-R-N-XX-LC / C4L-15-9-35-M-Z10-U/C4-R-LW-CC-P LITHONIA EVO 4 PORTFOLIO LD4B	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 1500 LM	3500K	16	120	RECESSED CEILING	
C2	SUSPENDED INDUSTRIAL RECTANGULAR 1X2, CONDUIT MOUNTING. FROSTED ACRYLIC LENS BOTTOM FIXTURE FLUSH WITH BOTTOM OF CEILING TRUSS.	DAYBRITE FBY-12L-835-UNV-XX-XX-LFA LITHONIA IBG METALUX OHB	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 12000 LM	3500K	88	120	SUSPENDED	
C3	SUSPENDED LED LINEAR PENDANT FIXTURE WITH NOMINAL 4 IN. APERTURE, FLUSH LENS, DIRECT DISTRIBUTION, COORDINATE TO FIT BETWEEN BAFFLE SYSTEM. COLOR TBD	FOCAL POINT FSM4LS-FL-625LF-935K-1C-UNV-L11-XX-XX LEDALITE TRUGROOVE AXIS BEAM 4	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 625 LMS/FT	3500K	6W/FT	120	SUSPENDED	
C3A	SUSPENDED LED LINEAR PENDANT FIXTURE WITH NOMINAL 4 IN. APERTURE, FLUSH LENS, DIRECT LABERTIAN DISTRIBUTION, COORDINATE TO FIT BETWEEN BAFFLE SYSTEM. COLOR TBD. INTEGRAL BATTERY	FOCAL POINT FSM4LS-FL-625LF-935K-1C-UNV-L11-XX-1EM LEDALITE TRUGROOVE AXIS BEAM 4	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 625 LMS/FT	3500K	6W/FT	120	SUSPENDED	
C3B	SUSPENDED LED LINEAR SLOT FIXTURE WITH NOMINAL 4 IN. APERTURE, FLUSH LENS AND ASYMETRIC DISTRIBUTION	FOCAL POINT FSM4AL-FL-625LF-935K-1C-UNV-L11-XX-XX LEDALITE TRUGROOVE AXIS BEAM 4	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 625 LMS/FT	3500K	6W/FT	120	SUSPENDED	
C4	RECESSED LED LINEAR SLOT FIXTURE WITH NOMINAL 4 IN. APERTURE, FLUSH LENS AND LAMBERTIAN DISTRIBUTION. TRIM FINISH TBD	FOCAL POINT FSM4L-FL-625LF-935K-1C-UNV-L11-TF-CP LEDALITE TRUGROOVE AXIS BEAM 4	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 625 LMS/FT	3500K	6W/FT	120	RECESSED	
C4A	RECESSED LED LINEAR SLOT FIXTURE WITH NOMINAL 4 IN. APERTURE, FLUSH LENS AND DIRECT DISTRIBUTION, TUNEABLE WHITE, MOUNTED IN GRID CEILING	FINELITE HP4-R-D-LENGTH PER PLAN-S-8TW-F-96LG-XXX-SC-DRIVER-C**-CP	LED	INTEGRAL 0-10V DIMMABLE TO 1% AND TUNEABLE WHITE	80+CRI 381 LMS/FT	2700-6500K	10W/FT	120	RECESSED	
C5	RECESSED LED LINEAR NOMINAL 2 IN. APERTURE, FLUSH FROSTED LENS AND SYMMETRIC DISTRIBUTION. MUD IN FLANGLESS TRIM.	FOCAL POINT FSM2L-FFL-375LF-935K-1C-UNV-LD1-TF-CP LEDALITE TRUGROOVE AXIS BEAM 2	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 375 LMS/FT	3500K	5W/FT	120	RECESSED	
C5A	RECESSED LED LINEAR SLOT FIXTURE WITH NOMINAL 2 IN. APERTURE, FLUSH FROSTED LENS AND ASYMMETRIC DISTRIBUTION, WITHIN CUSTOM DISPLAY CASE. TRIM FINISH TBD	FOCAL POINT FSM2AL-FFL-375LF-935K-1C-UNV-LD1-TF-CP LEDALITE TRUGROOVE AXIS BEAM 2	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 375 LMS/FT	3500K	5W/FT	120	RECESSED	
C6	RECESSED 4FT X 4FT LED LENSED SQUARE LUMINAIRE WITH DEEP REGRESS. TUNEABLE WHITE.	FINELITE HPT-RSE-4X4-S-8TW-96-XXX-SC/10V-TW-DTO/C*/96 LG-CP	LED	INTEGRAL 0-10V DIMMABLE TO 1% AND TUNEABLE WHITE	80+CRI 8300 LM	2700-6500K	62	120	RECESSED	
C7	RECESSED LED LINEAR PERIMETER FIXTURE. NOMINAL 6" WIDTH WITH FLUSH SATIN ACRYLIC LENS. WALL TO WALL LENGTH, HARD CEILING.	PRUDENTIAL P83-FLSH-LED35-HO-Length Per Plan-XX-SAL-WTW-SC-UNV-X3B-DM01-XX FOCAL POINT SEEM 4	LED	INTEGRAL 0-10V DIMMABLE TO 1%	90+CRI 600 LMS/FT	3500K	11W/FT	120	RECESSED	
C8	SITE LUMINAIRE WITH INTEGRAL PHOTOCELL AND MOTION SENSOR FOR DIMMING OPERATION. SEE POLE FOR MOUNTING INFORMATION.	GLEON-SA2C-740-U-T4FT-QM-BK-BPC-MS/DIM-L40W-FSIR-100	LED	INTEGRAL 0-10V DIMMING			40W	120	POLE	
C9	4' LED ENCLOSED & GASKETED INDUSTRIAL STRIP	Metalux - VT LED Series Columbia - LXEM Series Lithonia - FEM Series DayBrite – V2LED Series	LED	Integral LED driver	6000 LMS	3500K	37.8W	120	SURFACE OR PENDANT	
C10	1'X4' LED AMBIENT LENSED TROFFER REGRESSED ALUMINUM DOOR	LITHONIA – GTL LED Series METALUX - GR LED Series DAY-BRITE - TGRID Series COLUMBIA – LLT14 Series	LED	Integral LED driver	4000 LMS	3500K	31W	120	RECESSED	
C11	1'X4' LED LENSED TROFFER, SURFACE MOUNT	FAILSAFE- GRV LED LITHONIA – VRTL HEW – V50	LED	Integral LED driver	4300 LMS	3500K	44W	120	RECESSED	
C12	2'X4' LED INDIRECT TROFFER WITH ACRYLIC BASKET	FINELITE - HPR-24 DCO-LED (basis of design product) MARK LIGHTING - WHSPR	LED	Integral LED driver	4600 LMS	3500K	40.5W	120	RECESSED	
EBU	LED BATTERY PACK UNIT WITH ATTACHED HEADS, NICKEL CADMIUM BATTERY	CHLORIDE – TMF Series/DUAL-LITES – CCU2 Series/SURE-LITES – XR6-C Series	LED	Integral LED driver	670 LMS	N/A	8.4W	120	SURFACE	
X2	CHICAGO APPROVED EDGE-LIT LED SPECIFICATION-GRADE EXIT SIGN WITH INTEGRAL 90MIN BATTERY	CHLORIDE – CEE and CERE Series SURE-LITES – ECHX-7 Series LITHONIA – EDGC-EL Series	LED	Integral LED driver	N/A	N/A	5W	120	Recessed/ Surface/ Ceiling/ or Wall-mounted	Mounting as necessary for application. Chicago Approved
X1	CHICAGO APPROVED LED SPECIFICATION-GRADE STEEL EXIT SIGN WITH INTEGRAL 90MIN BATTERY	CHLORIDE – CESE Series SURE-LITES – CHXC-7 Series LITHONIA – LXC-EL Series	LED	Integral LED driver	N/A	N/A	5W	120	Recessed/ Surface/ Ceiling/ or Wall-mounted	Mounting as necessary for application. Chicago Approved.
P1	STRAIGHT ROUND ALUMINUM POLE CONSISTS OF SINGLE-PIECE EXTRUDED ALUMINUM.	Gardco Pole SRA-CA-4-125-20-D1-xxx-DG-xxx	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
LX3	LED EXTERIOR WALL-PACK TRAPEZOID FULL CUT OFF ACRYLIC LENS, STANDARD FINISH AS SELECTED BY ARCHITECT, FORWARD THROW DISTRIBUTION OR SELECTED BY ENGINEER AS REQUIRED	Lithonia - WDGE2 McGraw-Edison – IST Philips Gardco – 101 LED HUBBELL – TRP2	LED	Integral LED driver Add Cold weather battery backup	6000 LM S	3000K	50W	120	WALL	Exterior UL Wet Location
LX4	LED EXTERIOR WALL MOUNT AT THE MOUNTING HEIGHT >15FT-20FT, FULL CUT OFF ACRYLIC LENS, STANDARD FINISH AS SELECTED BY ARCHITECT, DISTRIBUTION AS SELECTED BY ENGINEER AS REQUIRED PER APPLICATION	McGraw-Edison – GWC Lithonia – DSXW2 Philips Gardco – ECF -S Hubbell – AIRO	LED	Integral LED driver	20000 LMS	3000K	102W	120	WALL	Exterior UL Wet Location

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2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

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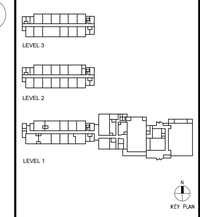
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 12" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

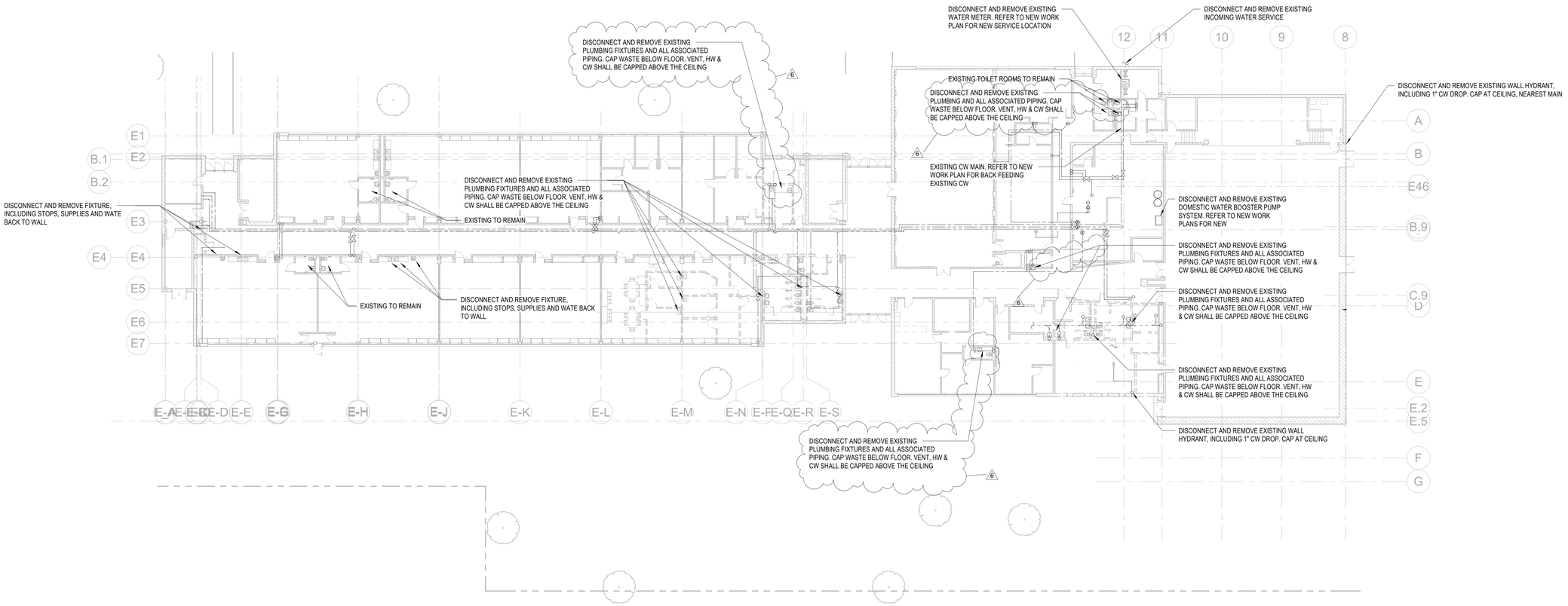
ELECTRICAL SCHEDULES

Sheet NOT FOR CONSTRUCTION

E-801

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

DEMO NOTE:
DISCONNECT AND REPLACE ROOF DRAIN, REFER TO PLUMBING DRAIN SCHEDULE FOR TYPE.



1 LEVEL 1 SERVICE WING - PLUMBING PLAN DEMO

SCALE: 1/16" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/16" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

PLUMBING DEMOLITION PLAN - SERVICE WING

Sheet NOT FOR CONSTRUCTION

PD-100

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-4"

DEMO NOTE:
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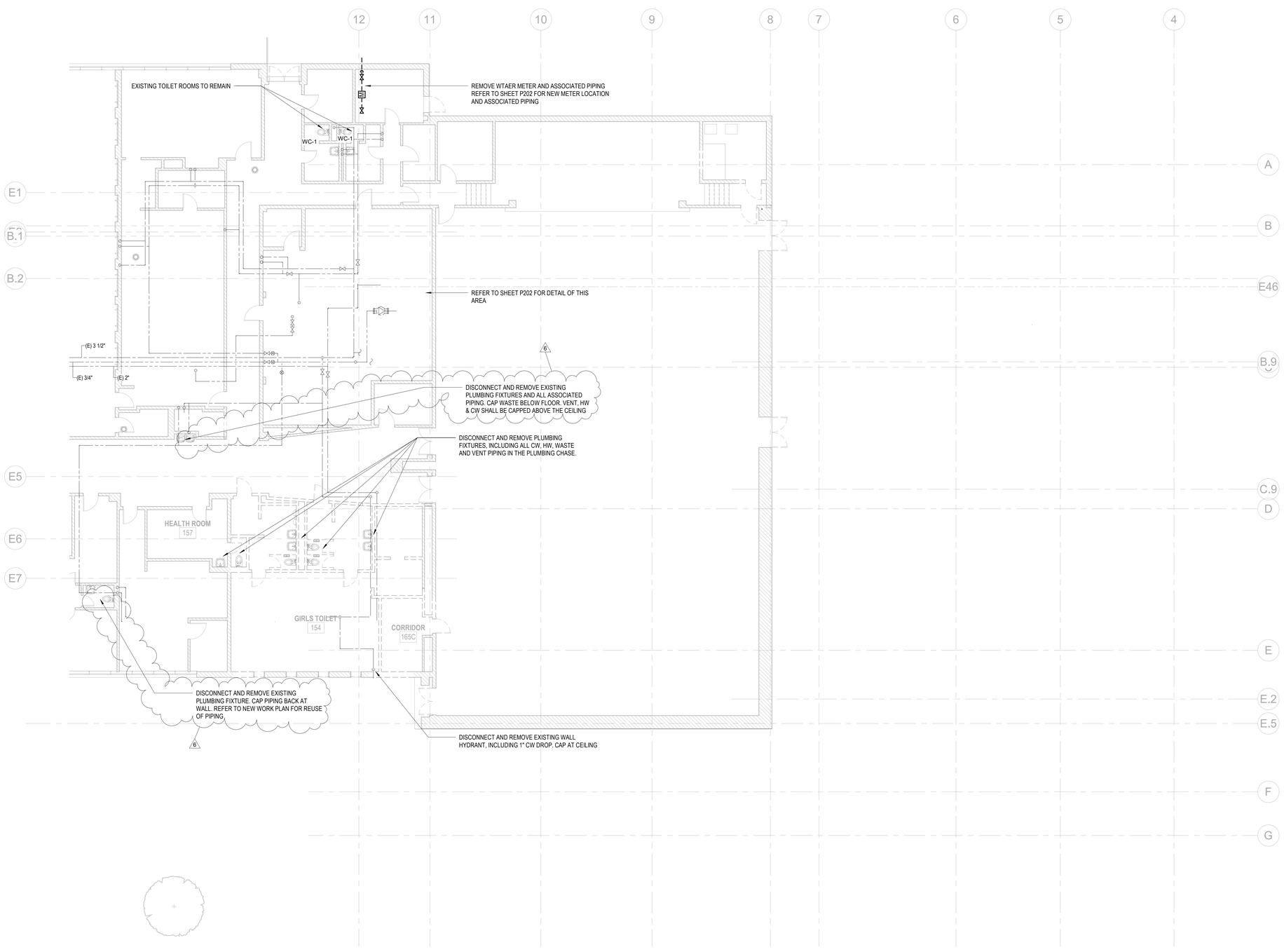

1 LEVEL 1 SERVICE WING - PLUMBING DEMO PLAN
SCALE: 1/8" = 1'-0"

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CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

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KOO LLC
55 WACKER DR,
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CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

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Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

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TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

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TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
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ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

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2942 W Van Buren St
Chicago, IL 66012

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DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR PLUMBING DEMOLITION PLAN - SERVICE WING

Sheet NOT FOR CONSTRUCTION

PD-201

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

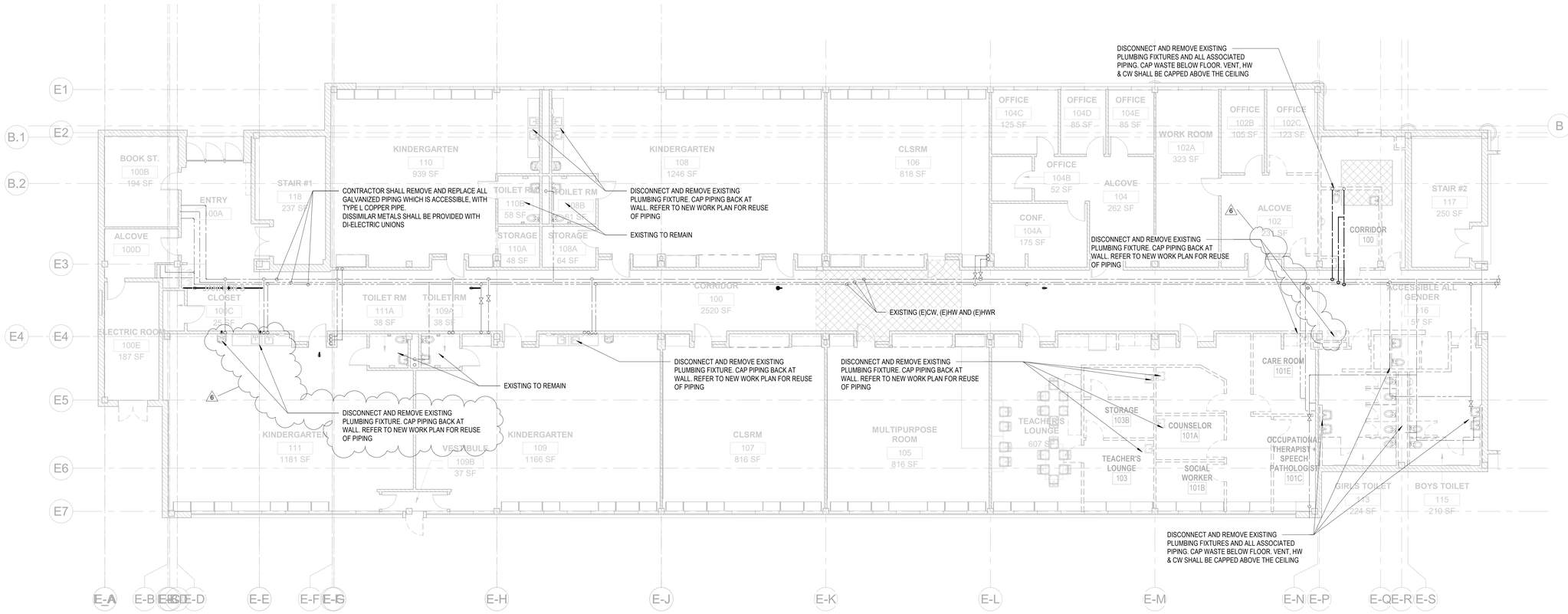
1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

DEMO NOTE:
DISCONNECT AND REPLACE ROOF DRAIN, REFER TO PLUMBING DRAIN SCHEDULE FOR TYPE.



1 LEVEL 1 CLRM WING - PLUMBING DEMO PLAN

SCALE: 1/8" = 1'-0"

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2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

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Specialty Consulting Inc.
2942 W Van Buren St
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DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR PLUMBING DEMOLITION PLAN - CLRM WING

Sheet NOT FOR CONSTRUCTION

PD-202

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

DEMO NOTE:
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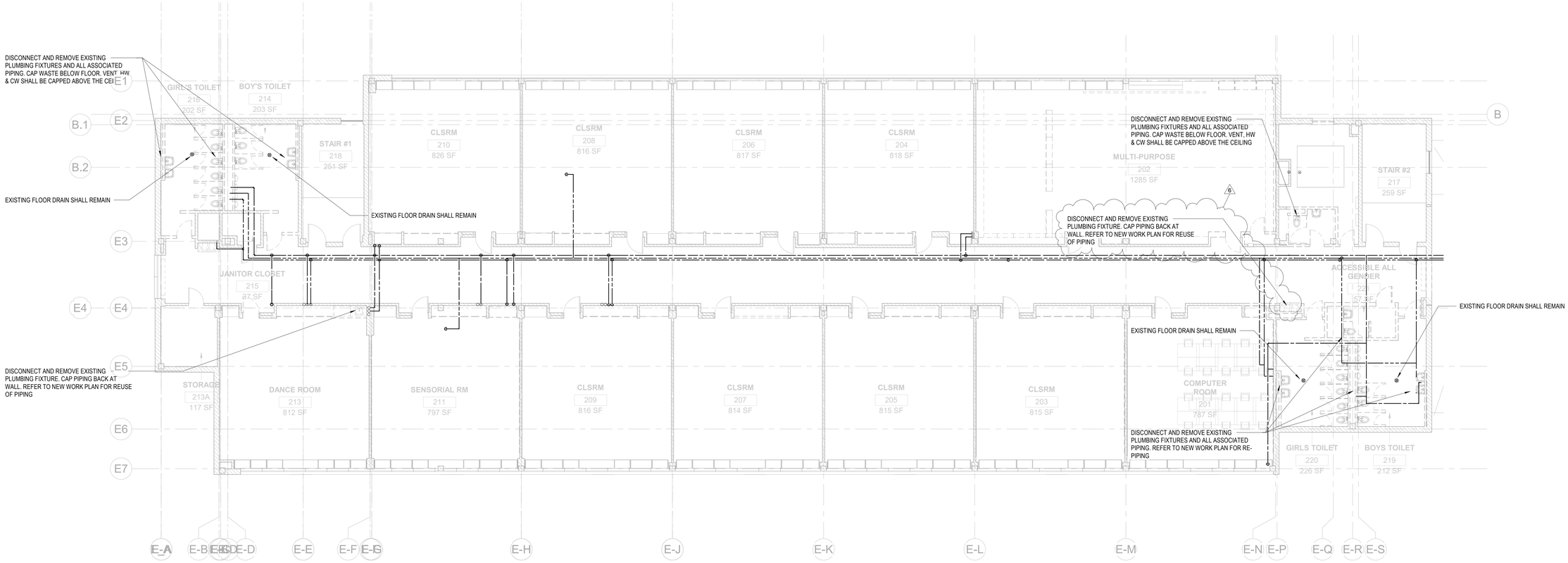

1 LEVEL 2 CLRM WING - PLUMBING DEMO PLAN

SCALE: 1/8" = 1'-0"

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2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
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2942 W Van Buren St
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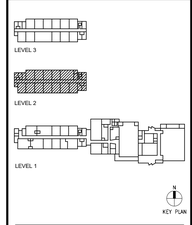
DRAWN BY:

SCALE: 1/8" = 1'-0"



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
SECOND FLOOR PLUMBING DEMOLITION PLAN - CLRM WING

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PD-203

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

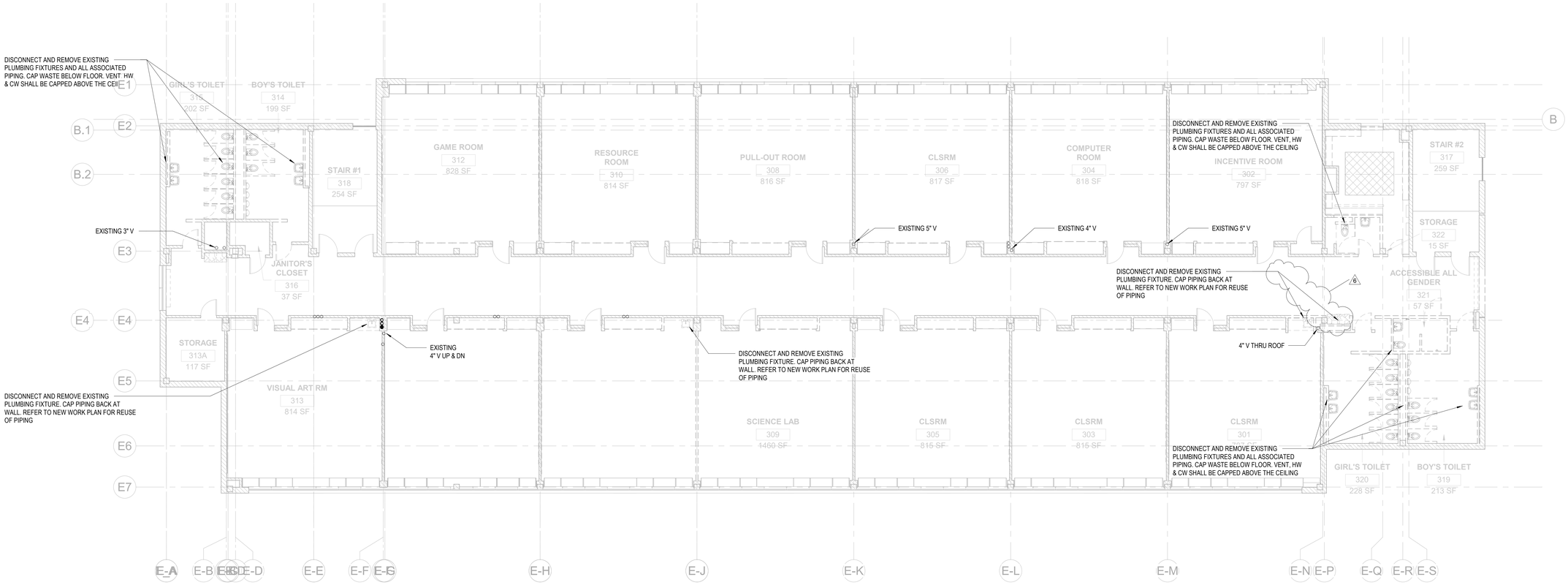
1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

DEMO NOTE:
DISCONNECT AND REPLACE ROOF DRAIN, REFER TO PLUMBING DRAIN SCHEDULE FOR TYPE.



1 LEVEL 3 CLRM WING - PLUMBING DEMO PLAN

SCALE: 1/8" = 1'-0"

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CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

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DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

THIRD FLOOR PLUMBING DEMOLITION PLAN - CLRM WING

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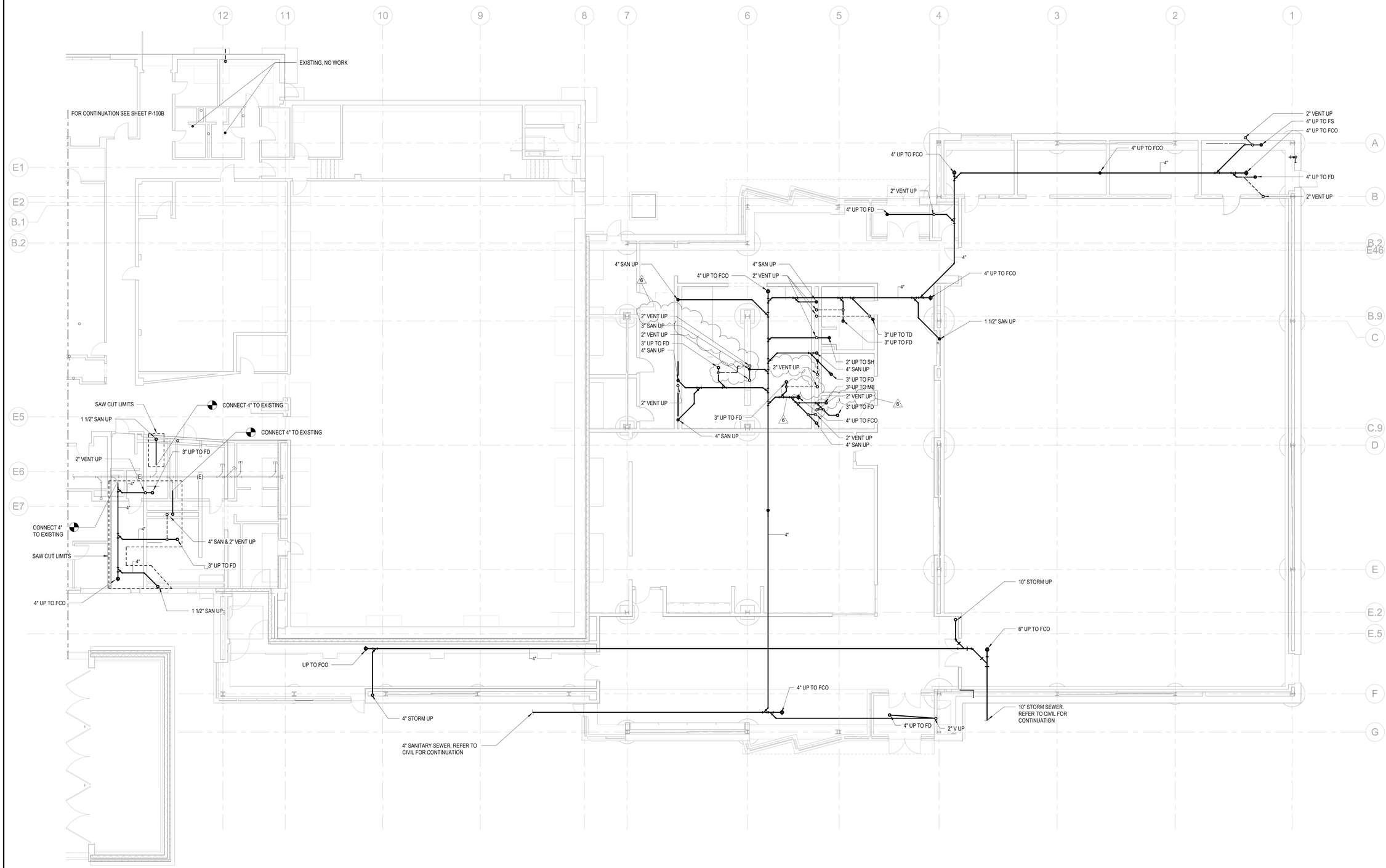
PD-204

1/32" = 1'-0" | 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 1" = 1'-0" | 1-1/2" = 1'-0" | 3" = 1'-0" | 6" = 1'-0"

NOTES:
1. EXISTING PIPING SHOWN IS BASED ON 1959 AS BUILT DOCUMENTS.



1 LEVEL 1 SERVICE WING - UNDERFLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

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CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

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TERRA Engineering, LTD.
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ENVIRONMENTAL ENGINEER
Environmental Design International
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Chicago, IL 60603

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Specialty Consulting Inc.
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4	04/28/23	100% CD
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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

PLUMBING UNDERFLOOR PLAN - SERVICE WING - NEW

Sheet NOT FOR CONSTRUCTION

P-100A

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

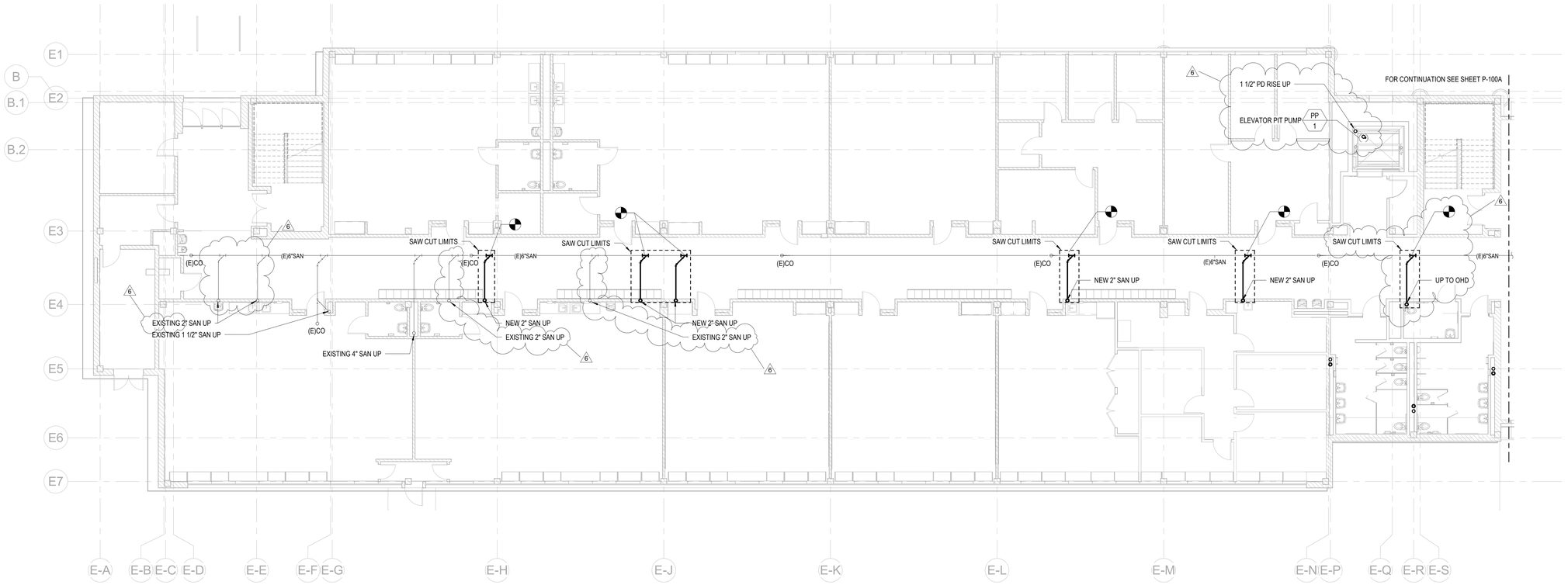
2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"



1 LEVEL 1 CLRM WING - UNDERFLOOR PLUMBING PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

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CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS

CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:

KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
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TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

N
KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

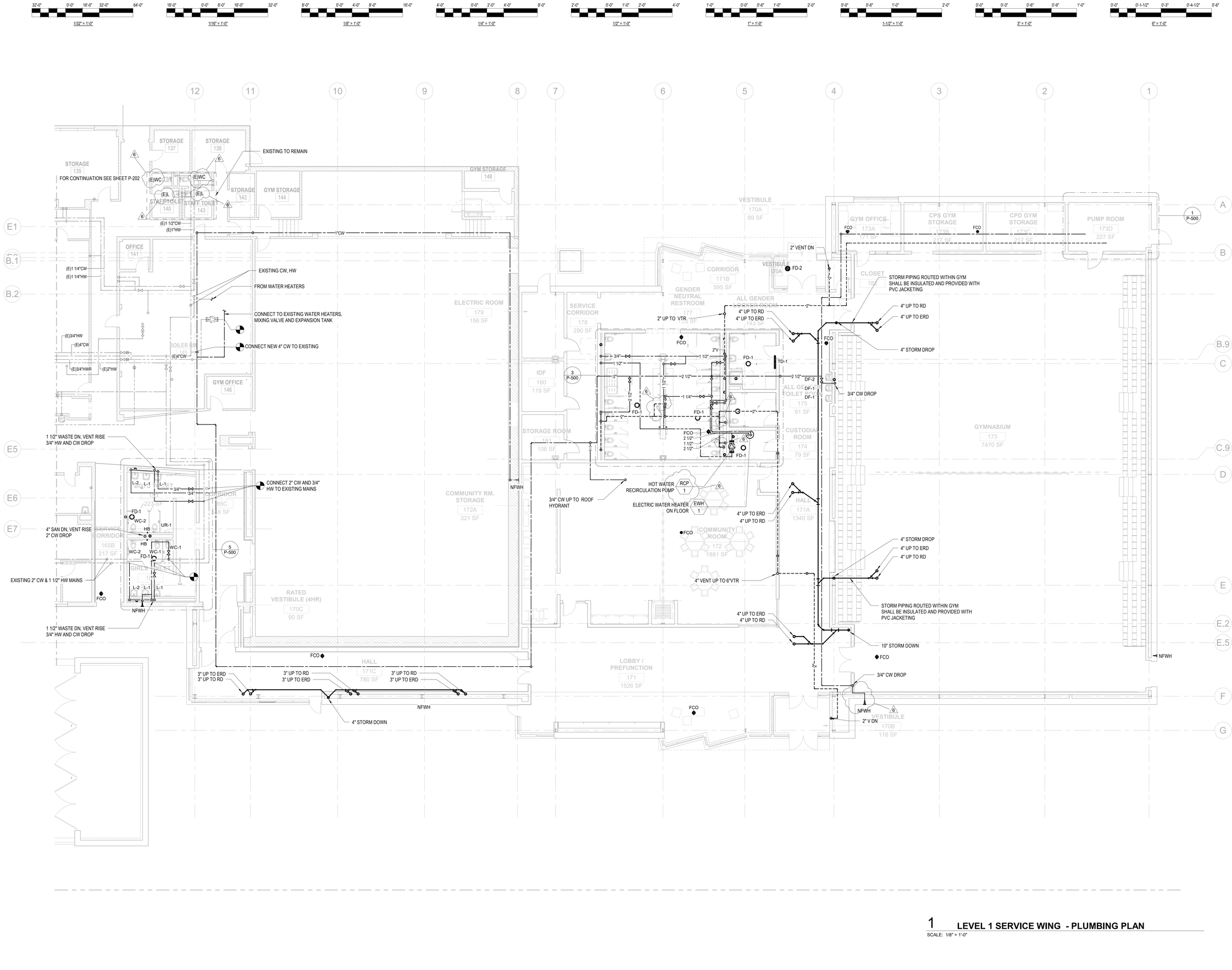
Project No: 2138

Title

PLUMBING UNDERFLOOR PLAN - CLRM WING

Sheet NOT FOR CONSTRUCTION

P-100B



1 LEVEL 1 SERVICE WING - PLUMBING PLAN

SCALE: 1/8" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:

KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

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5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

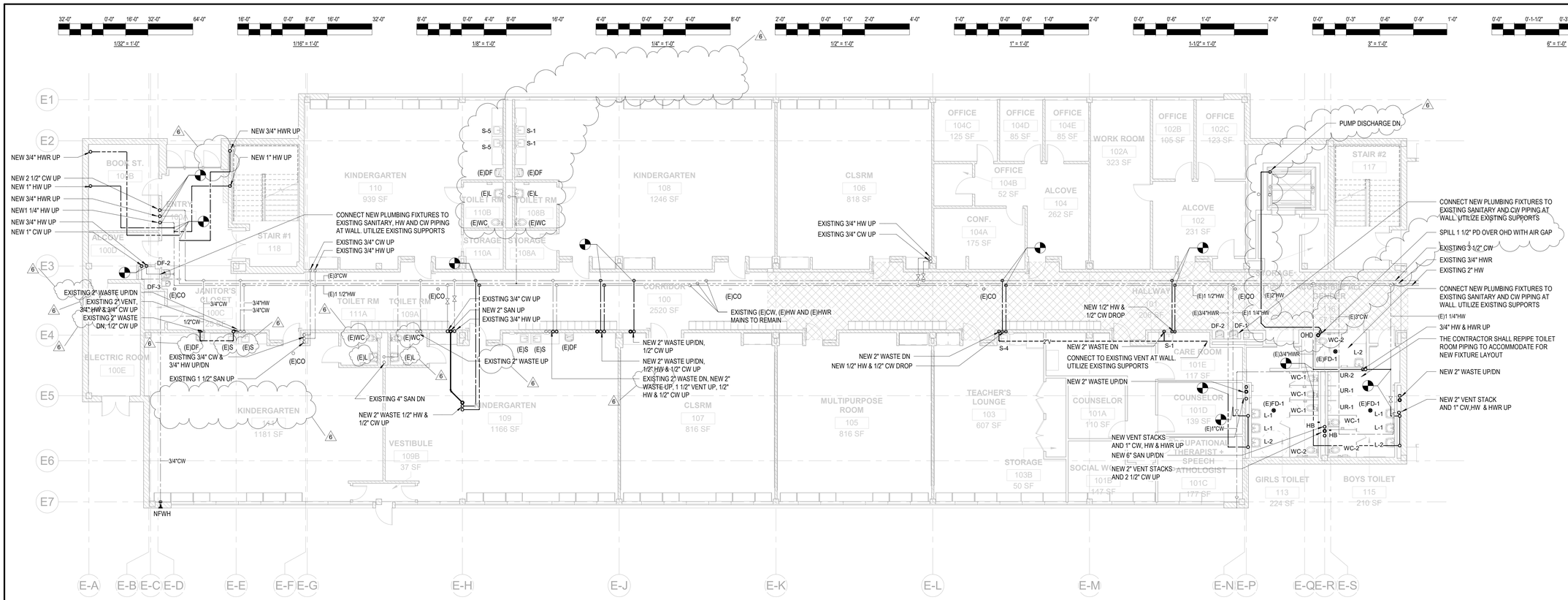
Project No: 2138

Title

FIRST FLOOR PLUMBING PLAN - SERVICE WING - NEW WORK

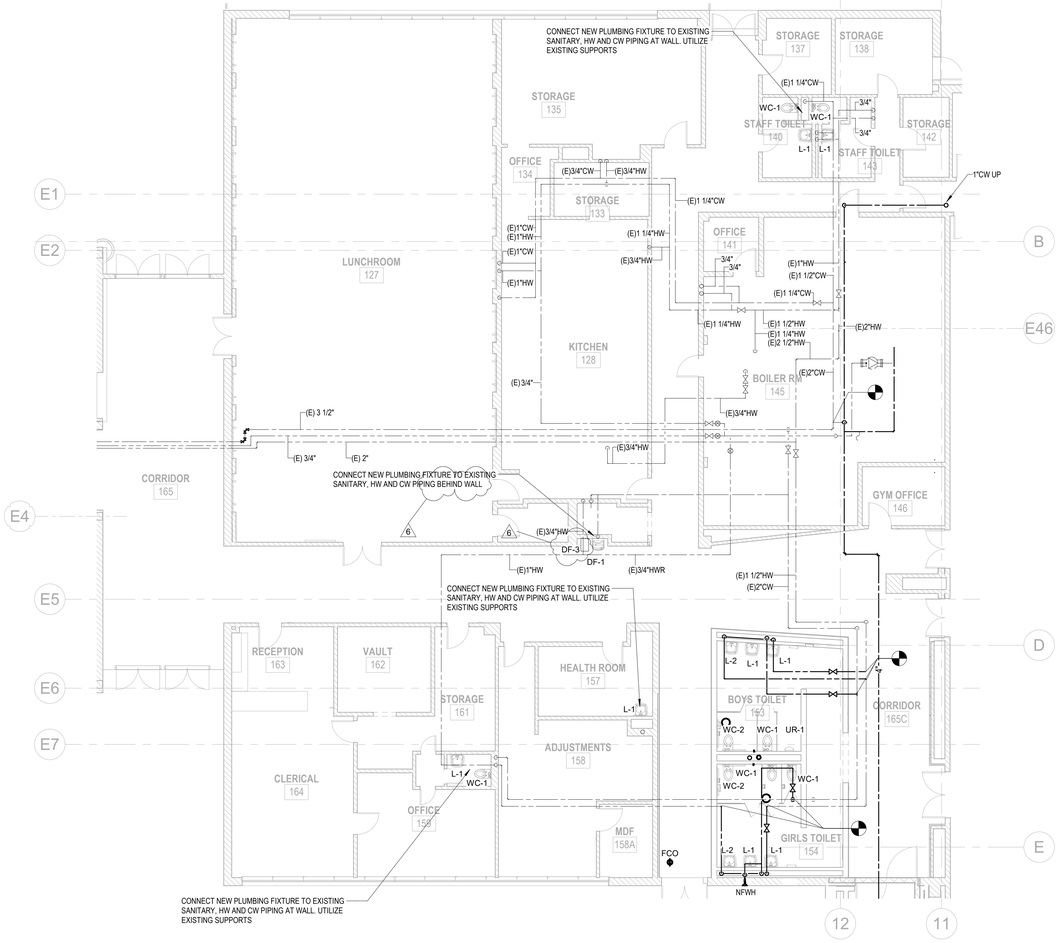
Sheet NOT FOR CONSTRUCTION

P-201



1 LEVEL 1 CLRM WING - PLUMBING PLAN_A

SCALE: 1/8" = 1'-0"



2 LEVEL 1 CLRM WING - PLUMBING PLAN_B

SCALE: 1/8" = 1'-0"

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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Architect of Record:
KOO LLC
55 WACKER DR, STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
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CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

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TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

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3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

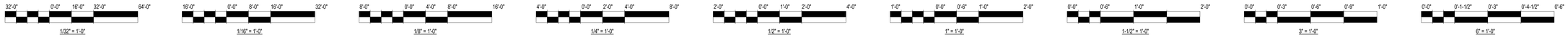
Project No: 2138

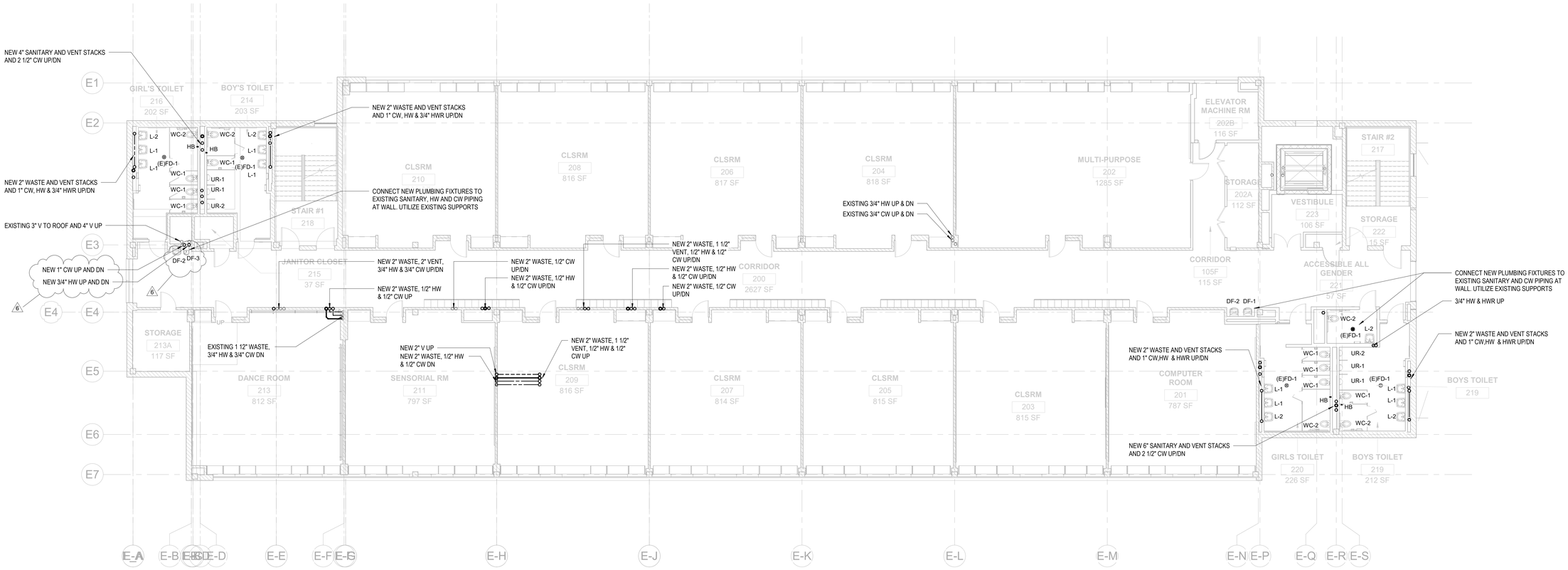
Title

FIRST FLOOR PLUMBING PLAN - CLRM WING - NEW WORK

Sheet NOT FOR CONSTRUCTION

P-202





1 LEVEL 2 CLRM WING - PLUMBING PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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CHICAGO, IL 60612

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Architect of Record:
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55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

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Milhouse Engineering & Construction
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ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
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4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

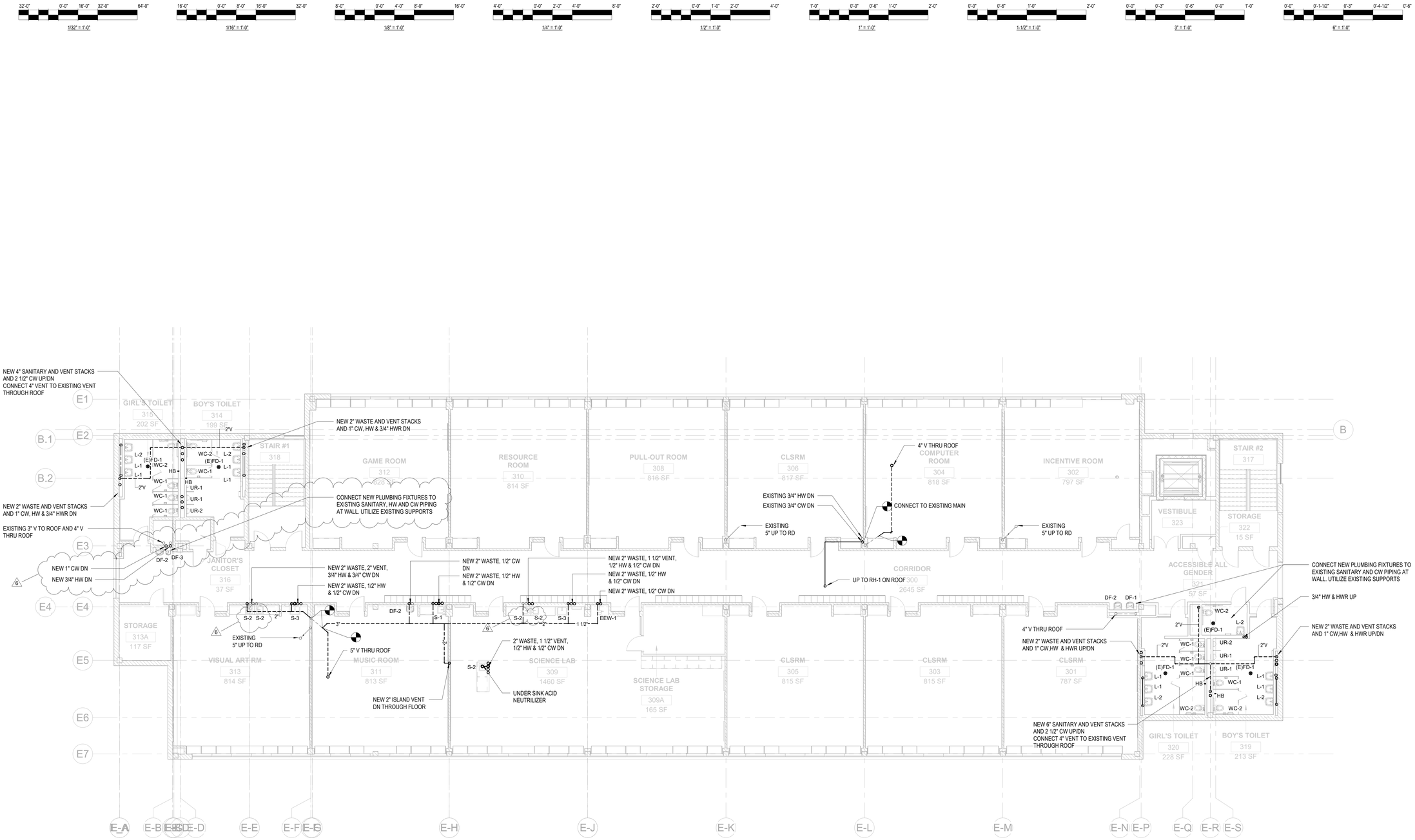
Project No: 2138

Title

SECOND FLOOR PLUMBING PLAN - CLRM WING - NEW WORK

Sheet NOT FOR CONSTRUCTION

P-203



1 LEVEL 3 CLRM WING - PLUMBING PLAN

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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Environmental Design International
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6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

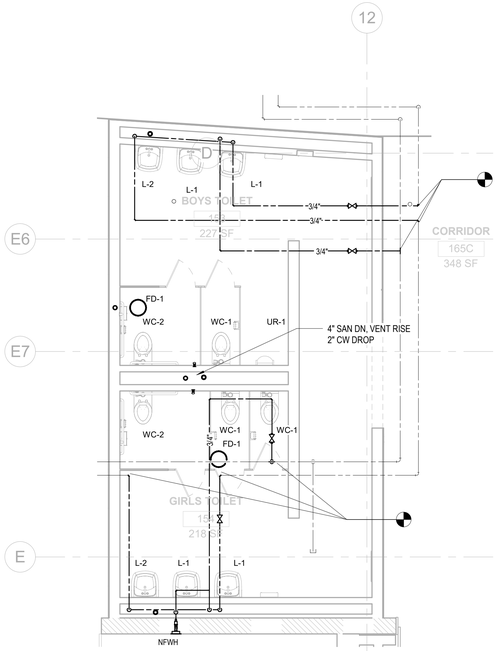
Project No: 2138

Title

THIRD FLOOR PLUMBING PLAN - CLRM WING - NEW WORK

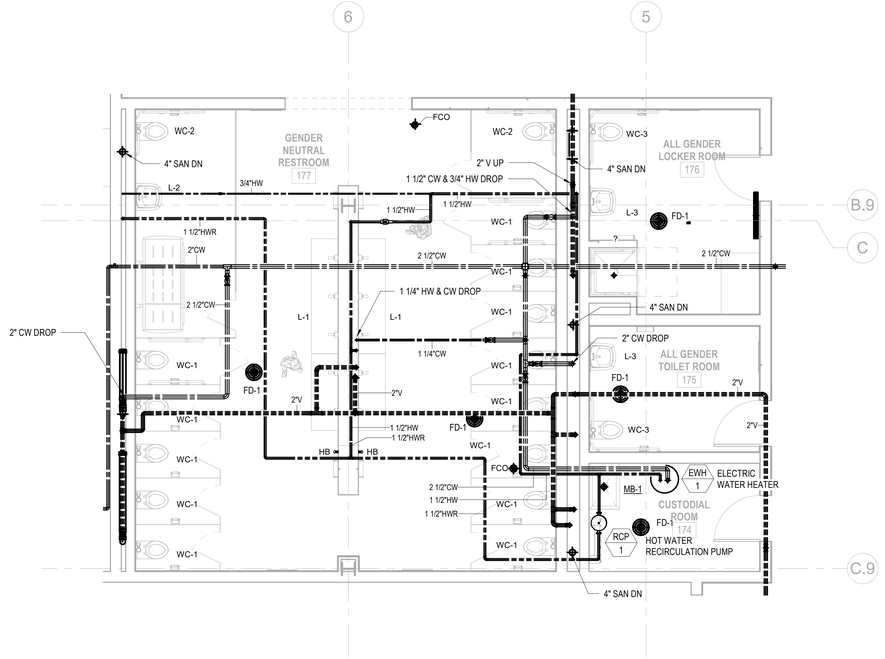
Sheet NOT FOR CONSTRUCTION

P-204



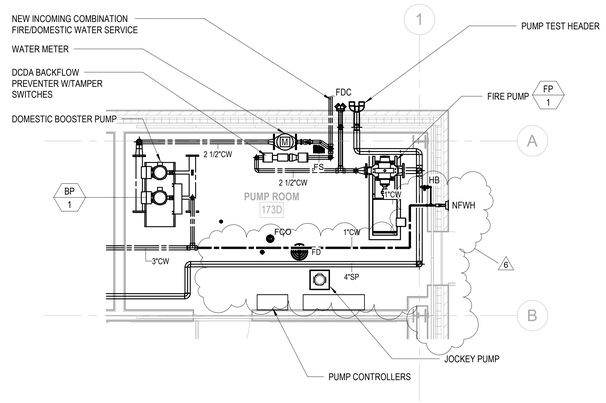
5 **LEVEL 1 SERVICE WING - ENLARGED GIRLS & BOYS RR PLUMBING PLAN**

SCALE: 1/4" = 1'-0"



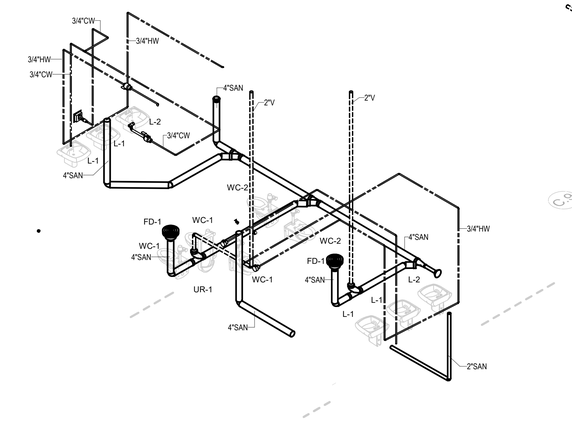
3 **LEVEL 1 SERVICE WING - ENLARGED RESTROOMS PLUMBING PLAN**

SCALE: 1/4" = 1'-0"



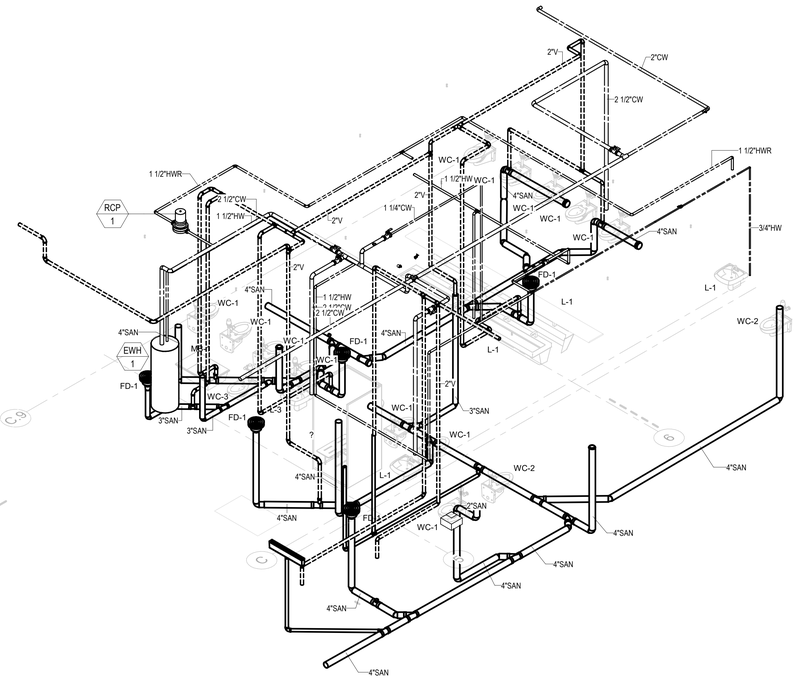
1 **LEVEL 1 SERVICE WING PUMP ROOM - ENLARGED PLUMBING PLAN**

SCALE: 1/4" = 1'-0"



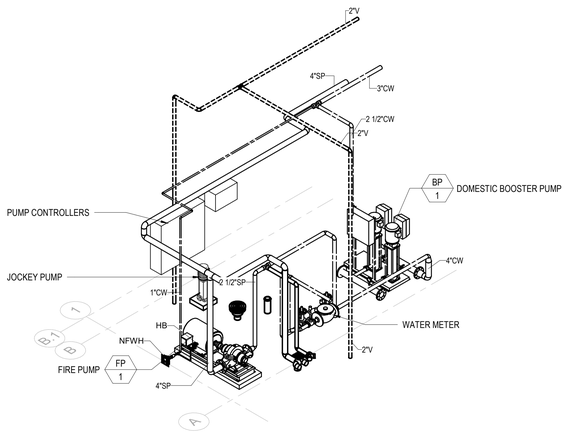
6 **PLUMBING GIRLS & BOYS RESTROOMS PLAN**

SCALE:



4 **PLUMBING RESTROOMS PLAN**

SCALE:



2 **PLUMBING PUMP ROOM**

SCALE:

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

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5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/4" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
PLUMBING ENLARGED VIEWS

Sheet NOT FOR CONSTRUCTION
P-500

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

PLUMBING FIXTURE SCHEDULE

PLAN DESIGNATION	TYPE	CONNECTION SIZES				DESCRIPTION
		WASTE	VENT	CW	HW	
WC-1	WATER CLOSET, FLUSH VALVE, WALL HUNG	4"	1 1/2"	1"	--	WATER CLOSET: AMERICAN STANDARD "AFWALL" #2257101.020, VITREOUS XHINA, WALL HUNG, STANDARD MOUNT HEIGHT
						FLUSH VALVE: AMERICAN STANARD #6047.161.002, MANUAL OPERATION. 1.1 GPF
						SEAT: AMERICAN STANDARD #5905.100, EXTRA HEAVY DUTY, OPEN FRONT, LESS COVER
WC-2	WATER CLOSET FLUSH VALVE WALL-HUNG ADA-COMPLIANT	4"	1 1/2"	1"	--	WATER CLOSET: AMERICAN STANDARD "AFWALL" #2257101.020, VITREOUS XHINA, WALL HUNG, ADA MOUNT HEIGHT
						FLUSH VALVE: AMERICAN STANARD #6047.161.002, MANUAL OPERATION. 1.1 GPF
						SEAT: AMERICAN STANDARD #5905.100, EXTRA HEAVY DUTY, OPEN FRONT, LESS COVER
WC-3	WATER CLOSET, FLUSH VALVE, WALL HUNG	4"	1 1/2"	1"	--	WATER CLOSET: AMERICAN STANDARD "AFWALL" #2257101.020, VITREOUS CHINA, WALL HUNG, ADA MOUNT HEIGHT
						FLUSH VALVE: WATER CLOSET MODEL IS A COMBINATION FIXTURE FLUSH VALVE. 1.28 GPF, ELECTRONIC
						SEAT: AMERICAN STANDARD #5905.100, EXTRA HEAVY DUTY, OPEN FRONT, LESS COVER
L-1	LAVATORY WALL MOUNTED	1 1/2"	1 1/2"	1/2"	1/2"	LAVATORY: BRADLEY "VERGE" #LVAD3 AND #LVAD2, THREE STATION AND TWO STATION LAVATORY
						FAUCET: SYMMONS #SLS-6710-0.5-DP4, SINGLE LEVER HANDLE, .5 GPM (10 REQUIRED FOR TROUGH FIXTURES)
						STOP & SUPPLY: MCGUIRE
L-2	LAVATORY WALL MOUNTED, ADA COMPLIANT	1 1/2"	1 1/2"	1/2"	1/2"	LAVATORY: AMERICAN STANDARD "COMRADE" #0124024.020 VITEOUS CHINA, WALL HUNG
						FAUCET: SYMMONS #SLS-6710-0.5-DP4, SINGLE LEVER HANDLE, .5 GPM. 10 FAUCETS REQUIRED FOR TOUGH FIXTURES
						STOP & SUPPLY: MCGUIRE
						PIPE WRAP: TRUBRO
L-3	LAVATORY WALL MOUNTED, ADA COMPLIANT	1 1/2"	1 1/2"	1/2"	1/2"	LAVATORY: AMERICAN STANDARD "COMRADE" #0124024.020 VITEOUS CHINA, WALL HUNG
						FAUCET: SYMMONS #S696OE-STS-035-SF278, ELECTRONIC HARD WIRED, .35 GPM, TOUCHLESS
						STOP & SUPPLY: MCGUIRE
						PIPE WRAP: TRUBRO
S-1	HAND SINK COUNTER-MOUNTED	1 1/2"	1 1/2"	1/2"	1/2"	ELKAY #BCRA150C, 15X15X6, 304 STAINLESS STEEL, 20 GAUGE
						FAUCET: ZURN #Z871C1-XL-7F, 8" GOOSENECK, 1.0GPM
						STRAINER: BACKET
						STOP & SUPPLY: MCGUIRE
S-2	LAB ROOM SINK COUNTER-MOUNTED ADA COMPLIANT	1 1/2"	1 1/2"	1/2"	1/2"	SINK: ELKAY #BCRA150C, 15X15X6, 304 STAINLESS STEEL, 20 GAUGE WITH ACID NEUTRALIZATION BASIN, WATTS #T10
						FAUCET: ZURN #Z871C1-XL-7F, 8" GOOSENECK, 1.0GPM
						STRAINER: BACKET
						STOP & SUPPLY: MCGUIRE
S-3	SINK WITH SOLIDS INTERCEPTOR	1 1/2"	1 1/2"	1/2"	1/2"	SINK: ZURN #MS2620-F-DF1, POLYPROPYLENE COMPOSITE SINK WITH DUAL HANDLE FAUCET. PROVIDE WITH VACUUM BREAKER WITH SOLID INTERCEPTOR,STRIEM "SIDEKICK"
						FAUCET: ZURN #Z871C1-XL-7F, 8" GOOSENECK, 1.0GPM
						STRAINER: BACKET
						STOP & SUPPLY: MCGUIRE
S-4	SINK WITH GREASE INTERCEPTOR	1 1/2"	1 1/2"	1/2"	1/2"	SINK: ELKAY #LRAD-191865, 18 GAUGE STAINLESS STEEL, DROP IN, 6.5" DEEP, WITH GREASE INTERCEPTOR, ROCKFORD #G-1412
						FAUCET: ZURN #Z871C1-XL-7F, 8" GOOSENECK, 1.0GPM
						STRAINER: BACKET
						STOP & SUPPLY: MCGUIRE
S-5	HAND SINK COUNTER MOUNTED ADA COMPLIANT	1 1/2"	1 1/2"	1/2"	1/2"	SINK: ELKAY BCRA150C, 15X15X6, STAINLESS STEEL 20 GAUGE WITH SOLIDS INTERCEPTOR,STRIEM "SIDEKICK"
						FAUCET: ZURN #Z812K3-XL-7F, DOUBLE JOINTED SPOUT, 1.0 GPM
						STRAINER: BACKET
						-
						ENCLOSURE: REFERENCE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS.
SHW-1	SHOWER	2"	1 1/2"	1/2"	1/2"	BASIN: AKER AKKE MODEL SPL-3950 51"x39" SHOWER PAN.
						FAUCET ASSEMBLY: MOEN MODEL T247EPBL SHOWER FAUCET WITH SINGLE-LEVER HANDLE.
						STRAINER:
DF-1	WATER COOLER	1 1/2"	1 1/2"	1/2"	--	DRINKING FOUNTAIN: ELKAY # EZS8L, WATER COOLER
						STOP & SUPPLY: MCGUIRE MODEL LF2165CCLK LEAD-FREE BRASS LOOSE-KEY COMPRESSION ANGLE STOP VALVE WITH RISER AND ESCUTCHEON.
						-
DF-2	WATER COOLER	1 1/2"	1 1/2"	1/2"	--	DRINKING FOUNTAIN: ELKAY # LZS8WSLK, WATER COOLER WITH BOTTLE FILL STATION
						STOP & SUPPLY: MCGUIRE MODEL LF2165CCLK LEAD-FREE BRASS LOOSE-KEY COMPRESSION ANGLE STOP VALVE WITH RISER AND ESCUTCHEON.
						-
DF-3	WATER COOLER	1 1/2"	1 1/2"	1/2"	--	DRINKING FOUNTAIN: #EDFP 214FPK
						STOP & SUPPLY: MCGUIRE MODEL LF2165CCLK LEAD-FREE BRASS LOOSE-KEY COMPRESSION ANGLE STOP VALVE WITH RISER AND ESCUTCHEON.
						-
MB-1	MOP SINK	3"	1 1/2"	3/4"	3/4"	BASIN: STERN WILLIAMS MODEL SBC-1700-BP-2 24" x 24" x17" CORNER TERRAZZO MOP SINK WITH STAINLESS STEEL STRAINER, CAP AND BACK PANELS.
						FAUCET: FIAT MODEL 830-AA CHROME-PLATED SERVICE FAUCET WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE, PAIL HOOK AND 3/4" HOSE THREAD ON SPOUD. BODY INLETS 8" CENTER-TO-CENTER, FOUR ARM HANDLES. VALVES EQUIPPED WITH RENEWABLE HUB, RENEWABLE SEATS, SWIVEL DISCS, ENCASED WASHERS, AND BRASS WASHER SCREWS.
NFWH	WALL HYDRANT FREEZELESS	--	--	3/4"	--	HYDRANT: WOODFORD MODEL B65 BOX-TYPE NON-FREEZE RECESSED WALL HYDRANT WITH HOSE CONNECTION VACUUM BREAKER AND TAMPER-RESISTANT BRASS BOX.
TD-1	TRENCH DRAIN	3"	1 1/2"	--	--	ZURN #Z899-THK-2, 4" WIDE, STAINLESS STEEL GRATE
HB	HOSE BIB	--	--	3/4"	--	WATT #LFSC-5
EEW-1	EYE WASH	--	--	3/4"	3/4"	MODEL, HAWS #7260BT-7270BT, WALL MOUNTED EMERGENCY EYE WASH, PROVIDE WITH LEONARD #170A-LF-STSTL-REC MIXING VALVE IN RECESSED LOCKABLE CABINET.

REMARKS:
A. ALL PLUMBING FIXTURES AND TRIM SHALL BE LEAD-FREE WHERE REQUIRED BY LOCAL CODES.
B. ALL PLUMBING FIXTURES SHALL COMPLY WITH ICC/ANSI A117.1 (AMERICANS WITH DISABILITIES ACT) FOR ACCESSIBILITY WHERE REQUIRED.
C. COORDINATE ALL MOUNTING HEIGHTS WITH ARCHITECTURAL DRAWINGS.
D. ALL P-TRAPS SHALL HAVE INTEGRAL CLEANOUT PLUGS.
E. ALL EXPOSED PIPING SHALL BE CHROME-PLATED.
F. ADA-ACCESSIBLE SINKS AND LAVATORIES SHALL BE PROVIDED WITH INSULATION KITS (TRU-BRO LAV GUARD OR EQUAL) TO PAD EXPOSED PLUMBING WHEN APPLICABLE.
G. ENSURE ALL TRAPS ARE PRIMED PRIOR TO BUILDING TURNOVER.
H. PROVIDE ASSE 1010-LISTED WATER HAMMER ARRESTORS (ZURN 1260XL OR EQUAL) FOR EACH FIXTURE OR GROUP OF FIXTURES AS RECOMMENDED BY THE PLUMBING AND DRAINAGE INSTITUTE (PDI) STANDARD PDI-WH 201.

WATER HAMMER ARRESTOR SCHEDULE

MARK	AA	A	B	C	D	E	F
MAXIMUM FIXTURE UNITS	3	11	32	60	113	154	330
MAXIMUM PRESSURE RATING	350 PSIG						
MANUFACTURER	SIOUX CHIEF						
MODEL NUMBER	660 SERIES	650 SERIES					

NOTES:
1. WATER HAMMER ARRESTOR SPECIFIED COMES WITH UNCONDITIONAL LIFETIME OF THE SYSTEM WARRANTY. ANY SUBSTITUTION SHALL BE SUBMITTED TO A/E FOR REVIEW AND SHALL INCLUDE SUCH WARRANTY.
2. ALL WATER HAMMER ARRESTORS SHALL MEET ASSE 1010-2004 STANDARDS
3. WATER HAMMER ARRESTORS ARE NOTED ON THE PLANS AND RISERS WITH THE ABBREVIATION 'WHA-X'.

BACKFLOW PREVENTION DEVICE SCHEDULE

FIXTURE/ EQUIPMENT TYPE	ROOM NAME	HOSE-CONNECTION VACUUM BREAKER (ASSE 1052)	REDUCED PRESSURE PRINCIPAL BACKFLOW PREVENTER ASSEMBLY (ASSE 1013)	DOUBLE CHECK BACKFLOW PREVENTER ASSEMBLY (ASSE 1015)	DUAL CHECK VALVE WITH INTERMEDIATE ATMOSPHERIC VENT & DRAIN (ASSE 1012)	DUAL CHECK VALVE WITH INTERMEDIATE ATMOSPHERIC VENT (ASSE 1012)	CORROSION RESISTANT DUAL CHECK VALVE BACKFLOW PREVENTER (ASSE 1022)	HOSE-CONNECTION VACUUM BREAKER (ASSE 1001)	REDUCED PRESSURE PRINCIPAL BACKFLOW PREVENTER ASSEMBLY (ASSE 1047)	REMARKS
MOP SINK	ROOM #510A, #456, #356, #256, #156							○		INSTALL 7'-6" A.F.F.
INCOMING FIRE	ROOM #B123A								○	
HOSE BIB		○								

- ALL BACKFLOW PREVENTION DEVICES SHALL CONFORM TO STANDARD LISTINGS AS DICTATED BY THE LOCAL CODES.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL BACKFLOW PREVENTION DEVICES IN ACCORDANCE WITH THE LOCAL CODE REQUIREMENTS.
- ACCEPTABLE MANUFACTURER'S INCLUDE FEBCO, WATTS, OR ZURN.

PLUMBING NOTES:

1. ALL PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL, STATE AND ALL AUTHORITIES HAVING JURISDICTION.
2. ALL DRAIN PIPING FROM KITCHEN EQUIPMENT SHALL BE COPPER AND DISCHARGE TO SPILL OVER ABOVE FLOOR SINK / FLOOR DRAIN
3. ALL SANITARY PIPING 2 1/2" & LARGER SHALL HAVE A MINIMUM OF 1/8" SLOPE PER FOOT. ALL SANITARY PIPING 2" & SMALLER SHALL HAVE A MINIMUM OF 1/4" SLOPE PER FOOT
4. ALL ABOVE GROUND DOMESTIC WATER PIPING SHALL BE COPPER TYPE "L"
5. BACKFLOW PREVENTERS SHALL BE CERTIFIED AND CERTIFICATION SHALL BE SENT TO AUTHORITIES.
6. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TEES AND PLUGS FOR TESTING OF SYSTEMS. PLUMBING INSPECTOR SHALL BE PRESENT AT ALL TEST.
7. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING FIELD CONDITIONS WHICH MAY EFFECT HIS WORK.
8. CONTRACTOR SHALL COORDINATE WITH MECHANICAL, ELECTRICAL AND ALL OTHER TRADES INVOLVED. ALSO, COORDINATE WITH ARCHITECTS, STRUCTURAL, MECHANICAL AND ELECTRICAL WORK.

DRAIN SCHEDULE

UNIT NO.	MANUFACTURER & MODEL NO.	DESCRIPTION	BODY MATERIAL	GRATE				OUTLET LOCATION	ACCESSORIES	REMARKS
				SIZE	OPEN FREE AREA	MATERIAL	SHAPE			
FD-1	ZURN ZN-415B	GENERAL DRAIN	DURA COATED	6" DIA.	9"	-	ROUND	BOTTOM	NICKEL BRONZE GRATE	1, 2, 3
FD-2	ZURN Z520-Y	MECHANICAL ROOMS	DURA COATED	9" DIA.	18"	-	ROUND	BOTTOM	SEDIMENT BUCKET	1, 2, 3
RD-1	ZURN ZA-121-DP	PRIMARY ROOF DRAIN	DURA COATED	12"ϕ	78"	-	ROUND	BOTTOM	DECK PLATE & ADJUSTABLE EXTENSION	1, 2
ERD-1	ZURN ZA-121-DP-EA-W2	SECONDARY ROOF DRAIN	DURA COATED	12"ϕ	78"	-	ROUND	BOTTOM	DECK PLATE, ADJUSTABLE EXTENSION, & 2" INTERNAL DAM	1, 2

NOTES:
1. BEFORE SETTING DRAINS, OBTAIN EXACT INFORMATION RELATIVE TO FINISH FLOOR LEVEL AT TOP OF DRAINS AND TYPE OF ROOF CONSTRUCTION FOR ROOF DRAIN INSTALLATION.
2. DRAIN OUTLET SIZES ARE INDICATED ON THE DRAWINGS.
3. ALL FLOOR SINKS AND FLOOR DRAINS SHALL HAVE A SURE SEAL TRAP GUARD DEVICE INSTALLED IN THE OUTLET.
4. THIS DRAIN IS SPECIFIED AND FURNISHED BY THE KITCHEN EQUIPMENT VENDOR. THE PLUMBING CONTRACTOR SHALL INSTALL AND PLUMB THE DRAIN.
5. SET DRAIN SO THAT THE TOP OF THE STRAINER IS FLUSH WITH THE FLOOR CREATING A RECESSED STRAINER.
6. PROVIDE A COMPLETE TRENCH DRAIN SYSTEM PER THE LENGTH DIMENSIONS ON THE DRAWINGS.

DOMESTIC WATER PRESSURE BOOSTER SYSTEM

EQUIP. NO.	SERVICE LOCATION	NO. OF PUMPS	GPM/EA PUMP	SYSTEM PRESSURE VALUES				MOTOR DATA AND VALUES			CONTROL PANEL				REMARKS	MANUFACTURER
				TDH [Feet]	SUCTION [PSI]	BOOST [PSI]	SET [PSI]	RPM	HP	kWh PER YR.	VOLTAGE	PHASE	FULL LOAD	MAX. SCCR		
BP-1	BOILER ROOM	2	84	109.08	17	47.22	59.22	3,450	5	11137.51	208	Three Phase	14.6	100KAIC	1, 2, 3, 4, 5, 6, 7, 8, 9, 10,11	GRUNDFOS

1. NET BOOST PRESSURE IS CALCULATED BY SYSTEM SET PRESSURE MINUS SUCTION PRESSURE LESS SYSTEM LOSSES OF 5 PSI
2. SYSTEM SUBMITTALS SHALL INCLUDE CERTIFICATE NUMBER FOR NSF61 CERTIFICATION, UL508A AND QCZJ 3RD PARTY COMPLIANCE.
3. SYSTEM CONTROLS MUST COMPLY WITH AND PROVIDE FOR EITHER CONTROL LOGIC OR REMOTE SENSOR IN ACCORDANCE WITH ANSI/ASHRAE/IES STANDARD 90.1 ENERGY STANDARD
4. PROVIDE 5-YEAR WARRANTY ON COMPLETE SYSTEM AND INCLUDE WARRANTY CERTIFICATE WITH DETAILS IN SUBMITTALS
5. SYSTEM SHALL BE PRE-SET TO SYSTEM SITE CONDITIONS BY SIMULATING SUCTION PRESSURE. HYDROSTATIC-ONLY TESTING IS NOT ACCEPTABLE.
6. THE INDUSTRIAL CONTROLLER SHALL BE IN COMPLIANCE WITH CURRENT NEC, SECTION 409.110 HAVING A MAXIMUM 100K AVAILABLE FAULT CURRENT.
7. SCCR RATINGS MUST BE INCLUSIVE OF ALL COMPONENTS WITHIN THE ENCLOSURE WITHOUT THE NEED TO PROVIDE ADDITIONAL UPSTREAM PROTECTION.
8. EQUAL SYSTEMS MUST SHOW MATHEMATICAL ANALYSIS PROVING THAT THE ALTERNATE SUPPLIER MEETS OR EXCEEDS THE KW CAPACITY LISTED.
9. PROVIDE THE FOLLOWING OPTIONS: NONE REQUIRED

PLUMBING FIXTURE ROUGH-IN SCHEDULE

FIXTURE TYPE	TRAP	WASTE	VENT	AIR CHAMBER		INLET TO STOP		REMARKS
				CW	HW	CW	HW	
WC (F.V.)	-	4"	2"	1 1/4"	-	1"	-	
WC (F.T.)	-	4"	2"	3/4"	-	1/2"	-	
UR	-	2"	1 1/2"	1"	-	3/4"	-	
L	1 1/4"	1 1/2"	1 1/2"	1/2"	1/2"	1/2"	1/2"	
SK	1 1/2"	2"	1 1/2"	3/4"	3/4"	1/2"	1/2"	
SH	1 1/2"	2"	1 1/2"	3/4"	3/4"	1/2"	1/2"	
BT	1 1/2"	2"	1 1/2"	3/4"	3/4"	1/2"	1/2"	
DW	1 1/2"	1 1/2"	1 1/2"	-	3/4"	-	1/2"	
ACW	1 1/2"	1 1/2"	1 1/2"	3/4"	3/4"	1/2"	1/2"	
DF	1 1/4"	1 1/2"	1 1/2"	1/2"	-	1/2"	-	

ELECTRIC STORAGE WATER HEATER SCHEDULE

TAG	DESCRIPTION	MANUFACTURER	MODEL NO.	TANK SIZE (GALLONS)	RECOVERY (GPH)	TEMP IN (F)	TEMP OUT (F)	ELECTRICAL DATA				OPERATING WEIGHT (LBS)	EMERGENCY POWER	COMMENTS
								KW	V	PH	HZ			
EWH-1	ELECTRIC WATER HEATER	LOCHINVAR	LDT-120-XR-6100	120	49	50 F	140 F	6.5	208	3	60	-	NO	

PUMP SCHEDULE

MARK	LOCATION	DESCRIPTION	GPM	TDH	VOLTAGE/PHASE	HP	MANUFACTURER AND MODEL
PP-1	ELEVATOR PIT	ELEVATOR PIT PUMP	50	15	120/1/60	1/2	ZOELLER #153 WITH OIL GUARD SYSTEM
RCP-1	MECHANICAL RM	RECIRC	10	5	115/1	1/12	BELL & GOSSETT SERIES 100

PUBLIC BUILDING COMMISSION OF CHICAGO
Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 60612

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

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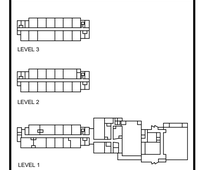
SCALE: As indicated



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title
PLUMBING SCHEDULES

Sheet NOT FOR CONSTRUCTION
P-800

32'-0" 0'-0" 16'-0" 32'-0" 64'-0"
1/32" = 1'-0"

16'-0" 0'-0" 8'-0" 16'-0" 32'-0"
1/16" = 1'-0"

8'-0" 0'-0" 4'-0" 8'-0" 16'-0"
1/8" = 1'-0"

4'-0" 0'-0" 2'-0" 4'-0" 8'-0"
1/4" = 1'-0"

2'-0" 0'-0" 1'-0" 2'-0" 4'-0"
1/2" = 1'-0"

1'-0" 0'-0" 0'-6" 1'-0" 2'-0"
1" = 1'-0"

0'-0" 0'-6" 1'-0" 2'-0"
1-1/2" = 1'-0"

0'-0" 0'-3" 0'-6" 0'-9" 1'-0"
3" = 1'-0"

0'-0" 0'-1-1/2" 0'-3" 0'-4-1/2" 0'-6"
6" = 1'-0"

ABBREVIATIONS LIST

ABBREVIATION	DESCRIPTION
AC	AIR COMPRESSOR
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHJ	AUTHORITY HAVING JURISDICTION
AP	ACCESS PANEL
ARCH	ARCHITECTURE, ARCHITECTURAL
ASSY	ASSEMBLY
ATM	ATMOSPHERE
AUX	AUXILIARY
B/W	BETWEEN
BOB	BOTTOM OF BEAM
BOP	BOTTOM OF PIPE
BV	BUTTERFLY VALVE W/TAMPER SWITCH
CA	COMPRESSED AIR (INDUSTRIAL)
CALC	CALCULATIONS
CAP.	CAPACITY
CC	CEILING COLUMN
CCD	CHICAGO CITY DATUM
CM	CENTIMETER
CO2	CARBON DIOXIDE
CLG	CEILING
COL	COLUMN
COMP	COMPRESSOR
CONC	CONCRETE
CONN.	CONNECTION
CONT	CONTINUATION
CSP	COMBINED STANPIPE/SPRINKLER SYSTEM
CV	CHECK VALVE
CW	COLD WATER
DCV	DOUBLE CHECK VALVE
DDC	DOUBLE DETECTOR CHECK VALVE
DI	DUCTILE IRON
DIA	DIAMETER
DIM	DIMENSION
DN	DOWN
DR	DRAIN
DPV	DRY PIPE VALVE
DV	DRAIN VALVE
DWG	DRAWING
EA	EACH
EC	ELECTRICAL CONTRACTOR
EL	ELEVATION
ELEC	ELECTRICAL
EQUIP	EQUIPMENT
EOBL	END OF BRANCH LINE
EXIST OR (E)	EXISTING
EXP	EXPANSION
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FBO	FURNISHED BY OTHERS
FD	FLOOR DRAIN
FDC	FIRE DEPARTMENT CONNECTION
FDHV	FIRE DEPARTMENT HOSE VALVE
FDHVC	FIRE DEPARTMENT HOSE VALVE CABINET
FDV	FIRE DEPARTMENT VALVE
FDVC	FIRE DEPARTMENT VALVE CABINET
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FIN.	FINISHED
FFE	FINISHED FLOOR ELEVATION
FH	FIRE HOUSE
FHC	FIRE HOSE CABINET
FHR	FIRE HOSE RACK
FP	FIRE PROTECTION
FPC	FIRE PUMP CONTROLLER
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FS	FLOW SWITCH
FT	FEET
GC	GENERAL CONTRACTOR
ITC	INSPECTOR TEST CONNECTION
MD	MAIN DRAIN
N&C	NIPPLE AND CAP
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NS	NOT SPRINKLERED
NTS	NOT TO SCALE
OS&Y	OUTSIDE SCREW & YOKE VALVE W/TAMPER SWITCH
PC	PLUMBING CONTRACTOR
PG	PRESSURE GAUGE
PIV	POST INDICATOR VALVE
PKG	PACKAGE
PLBG	PLUMBING
POC	POINT OF CONNECTION
PRESS	PRESSURE
PRV	PRESSURE REDUCING VALVE
PSI	POUNDS PER SQUARE INCH
PSIG	POUNDS PER SQUARE INCH GAUGE
QTY	QUANTITY
RPZ	REDUCED PRESSURE ZONE VALVE
RPM	REVOLUTIONS PER MINUTE
SCV	SECTIONAL CONTROL VALVE W/TAMPER SWITCH
SP	STANDPIPE
SPKLR	SPRINKLER
SUB	SUBCONTRACTOR
SYS	SYSTEM
TB	THRUST BLOCK
TD	TRENCH DRAIN
TEMP	TEMPERATURE
THERM OR T	THERMOMETER
TS	TAMPER SWITCH
TYP	TYPICAL
UG	UNDERGROUND
UNO	UNLESS NOTED OTHERWISE
VIF	VERIFY IN FIELD
VEL	VELOCITY
VERT	VERTICAL
W	WASTE
W/	WITH
WIP	WALL INDICATOR POST
WF	WATER FILTER
WFS	WATER FLOW SWITCH
WH	WALL HYDRANT

FIRE PROTECTION SYMBOL LIST

SYMBOL	DESCRIPTION
	NEW PIPING
	EXISTING PIPING
	EXISTING PIPING TO BE REMOVED
UG	UNDERGROUND PIPING
F	FIRE/BULK MAIN
F(HZ)	HIGHZONE FIRE MAIN
F(LZ)	LOWZONE FIRE MAIN
(DRY)	DRY SYSTEM PIPING
S	SPRINKLER PIPING
MD	MAIN DRAIN PIPING
T.S.	CONTROL VALVE W/TAMPER SWITCH
	CHECK VALVE W/BALL DRIP
	CHECK VALVE
	BACKFLOW PREVENTER
FDV	DRAIN VALVE
	POST INDICATOR VALVE
	WALL POST INDICATOR VALVE
	UNDERGROUND GATE VALVE IN BUFFALO BOX
	SPRINKLER RISER
	OS&Y CONTROL VALVE
	PUMP (SCHEMATIC)
FE-1	FIRE EXTINGUISHER
FEC-1	FIRE EXTINGUISHER CABINET
	FIRE HOSE CABINET
	FIRE DEPARTMENT HOSE VALVE CABINET
	FIRE HOSE
	FIRE DEPARTMENT HOSE VALVE
FDC-1	FLUSH FIRE DEPARTMENT CONNECTION
FDC-1	EXPOSED FIRE DEPARTMENT CONNECTION
FDC-1	FREE-STANDING FIRE DEPARTMENT CONNECTION
FH-1	FIRE HYDRANT
FPT-1	FLUSH FIRE PUMP TEST HEADER
FPT-1	FLUSH FIRE PUMP TEST HEADER
FPT-1	FREE-STANDING FIRE PUMP TEST HEADER
FPT-1	FIRE PUMP TEST HEADER
ALARM BELL	ALARM BELL
	ALARM STROBE
F.S.	WATER FLOW SWITCH
	PRESSURE GAUGE
	THRUST BLOCK
	SLEEVE THROUGH WALL
	PIPE THROUGH WALL
	PIPE DOWN
	PIPE UP OR UP/DN
	INSPECTOR'S TEST CONNECTION
	CAP
	CAP
T.S. T.S.	DOUBLE CHECK VALVE
T.S. T.S.	DOUBLE DETECTOR CHECK VALVE
T.S. T.S.	REDUCER PRESSURE ZONE VALVE
	DRY PIPE VALVE
SP	STANDPIPE
CSP	COMBINED STANDPIPE
DSP	DRY STANDPIPE
EQM / NO	EQUIPMENT DESIGNATION A - TYPE OF EQUIPMENT B - TAG NUMBER
1 / FP1.1	DETAIL NUMBER DRAWING NUMBER
	POINT OF NEW CONNECTION
NS	NON-SPRINKLERED AREA

FIRE PROTECTION GENERAL NOTES

1. SCOPE: PROVIDE AND INSTALL ALL FIRE PROTECTION WORK AS INDICATED FOR A COMPLETE WORKING SYSTEM.
2. INFORMATION ON THE PLANS IS DIAGRAMMATIC. CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINAL PIPE ROUTING, PIPE SIZING, AND SPRINKLER LOCATIONS.
3. PERMITS, LICENSES AND FEES: THIS CONTRACTOR SHALL PAY ALL REQUIRED FEES AND SHALL OBTAIN ALL NECESSARY PERMITS AND LICENSES FOR INSTALLATION OF THE WORK TO COMPLETION.
4. APPLICABLE CODES AND REGULATIONS: ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING CODES AND REGULATIONS:
   - 4.1 CURRENT CHICAGO BUILDING CODE
   - 4.2 NFPA 1, 10, 13, 20 AND ANY NFPA GUIDELINES NOT LISTED
   - 4.3 CHICAGO FIRE PREVENTION BUREAU
5. COORDINATE WORK WITH ALL TRADES. PROVIDE A COMPLETE HYDRAULICALLY CALCULATED WET PIPE AUTOMATIC SYSTEM, WHICH SHALL BE FULLY SPRINKLERED. ALL PIPING AND EQUIPMENT SHALL BE ADEQUATELY SIZED BASED ON HYDRAULIC CALCULATIONS.
6. GENERAL NOTES, DRAWINGS AND SPECIFICATIONS BY THE ARCHITECT SHALL APPLY TO SPRINKLER SCOPE.
7. ALL MATERIAL NOT TO BE USED AND ALL DEBRIS SHALL BE REMOVED FROM SITE AND THE AREA OF WORK SHALL BE LEFT IN CLEAN CONDITION.
8. INSTALLATION OF ALL PIPING, INSULATION, SPRINKLER HEADS AND EQUIPMENT SHALL BE PERFORMED IN A NEAT AND ORKMANLIKE MANNER, SHALL CONFORM TO THE LATEST TRADE PRACTICES AND SHALL BE FULLY COORDINATED WITH THE WORK OF ALL OTHER TRADES.
9. ALL PIPING SHALL BE INSTALLED AS HIGH AS POSSIBLE UNLESS OTHERWISE NOTED WHILE MAINTAINING PROPER SLOPES AND ALLOWING FOR DUCTWORK, LIGHTING, STRUCTURAL BEAMS, ETC.
10. FLEXIBLE CONNECTIONS SHALL BE PROVIDED FOR PIPING CROSSING EXPANSION JOINTS WHERE INSUFFICIENT FLEXIBILITY EXISTS.
11. PIPE SLEEVES: PIPE SLEEVES AND PIPING INSTALLED IN FIRE SEPARATIONS SHALL BE SEALED WITH DCRA FIRE PROTECTION DIVISION APPROVED FIRE STOPPING METHODS AND MATERIALS.
12. ALL FIRE PROTECTION PIPING INSTALLED SHALL BE TESTED AS REQUIRED BY ALL THE AUTHORITIES HAVING JURISDICTION AND TO THE SATISFACTION OF THE OWNER.
13. ALL FIRE PROTECTION WORK SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE OF THE FINAL INSTALLATION BY OWNER.
14. THE ANNEX PORTION OF THE BUILDING SHALL BE FULLY SPRINKLERED IN ACCORDANCE WITH THE REGULATIONS OF ALL AUTHORITIES HAVING JURISDICTION. THE SPRINKLER SYSTEMS SHALL BE HYDRAULICALLY CALCULATED. THE SPRINKLER CONTRACTOR SHALL VERIFY THE ACTUAL WATER SUPPLY AND PRESSURE AVAILABLE FROM THE WATER SUPPLY SYSTEM BEFORE DESIGN. THE ACTUAL WATER SUPPLY AND PRESSURE SHALL BE VERIFIED BY A FLOW TEST, AS REQUIRED BY DCRA FIRE PROTECTION DIVISION.
15. FIRE SPRINKLER SHALL BE AS INDICATED ON DRAWINGS AND BE FULLY COORDINATED AS NECESSARY WITH FIRE ALARM CONTRACTOR,
16. SUBMIT SHOP DRAWINGS TO ARCHITECT/ENGINEER AND DCRA FIRE PROTECTION DIVISION FOR REVIEW AND APPROVAL PRIOR TO STARTING WORK. ALL FIRE PROTECTION SHOP DRAWING AND CALCULATIONS SHALL BE STAMPED AND SIGNED BY A REGISTERED PROFESSIONAL ENGINEER.
17. INSTALL SPRINKLERS IN THE CENTER OF CEILING TILE UNLESS NOTED OTHERWISE.
18. ALL FIRE PROTECTION WORK SHALL BE BY AN ACCREDITED FIRE PROTECTION CONTRACTOR REGULARLY ENGAGED IN THE BUSINESS FOR AT LEAST FIVE YEARS AND FAMILIAR WITH THIS WORK AND THE REQUIREMENT OF THE APPROVING JURISDICTION.
19. SPRINKLER SHOP DRAWING SHALL INDICATE PROXIMATE AND SPATIAL RELATIONSHIPS WITH ALL BUILDING CHARACTERISTICS AND COMPONENTS AS REQUIRED TO PRODUCE FULLY COORDINATED DRAWINGS. THE SPRINKLER CONTRACTOR SHALL ALSO REVIEW ARCHITECTURAL REFLECTED CEILING PLANS AS NECESSARY TO COORDINATE WITH SPECIAL ARCHITECTURAL FEATURES AND/OR LIGHTING LAYOUTS IN VARIOUS AREAS. PROVIDE WITH CAGE FOR SPRINKLERS.
20. EXTEND SPRINKLER PROTECTION BELOW OPEN STAIRS. HEAD LOCATIONS SHALL BE COORDINATED WITH SLOPED CEILING AND LEVEL CONDITIONS UNDER LANDING IN ACCORDANCE WITH NFPA 13. PROVIDE WITH CAGE FOR SPRINKLERS.
21. PROVIDE SPRINKLERS AT TOP OF STAIRWELLS AND UNDER FIRST ACCESSIBLE STAIR LANDING IN ACCORDANCE WITH NFPA 13. PROVIDE WITH CAGE FOR SPRINKLERS.

NOTE: 1. THIS IS A GENERAL SYMBOL LIST THEREFORE SOME ITEMS MAY NOT DIRECTLY APPLY TO THIS PROJECT AND DRAWINGS.
2. EXISTING PIPING SHOWN WITH THIN LINE WEIGHT. NEW PIPING SHOWN WITH THICK LINE WEIGHT.
3. DISREGARD SYMBOLS AND ABBREVIATIONS WHICH DO NOT APPLY TO THIS PROJECT.
4. THIS IS A GENERAL ABBREVIATION LIST THEREFORE SOME ITEMS MAY NOT DIRECTLY APPLY TO THIS PROJECT AND RELATED DRAWINGS.

FIRE PROTECTION_DRAWING LIST

SHEET NUMBER	SHEET NAME
FP-000	FIRE PROTECTION LEGENDS, NOTES & ABBREVIATOINS
FP-101	FIRST FLOOR FIRE PROTECTION PLAN - SERVICE WING
FP-200	FIRE PROTECTION DETAILS AND SCHEDULES

PUBLIC BUILDING COMMISSION — Chicago Public Schools

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS
2131 W MONROE ST,
CHICAGO, IL 60612
CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

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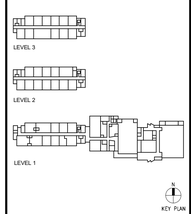
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: NTS



PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

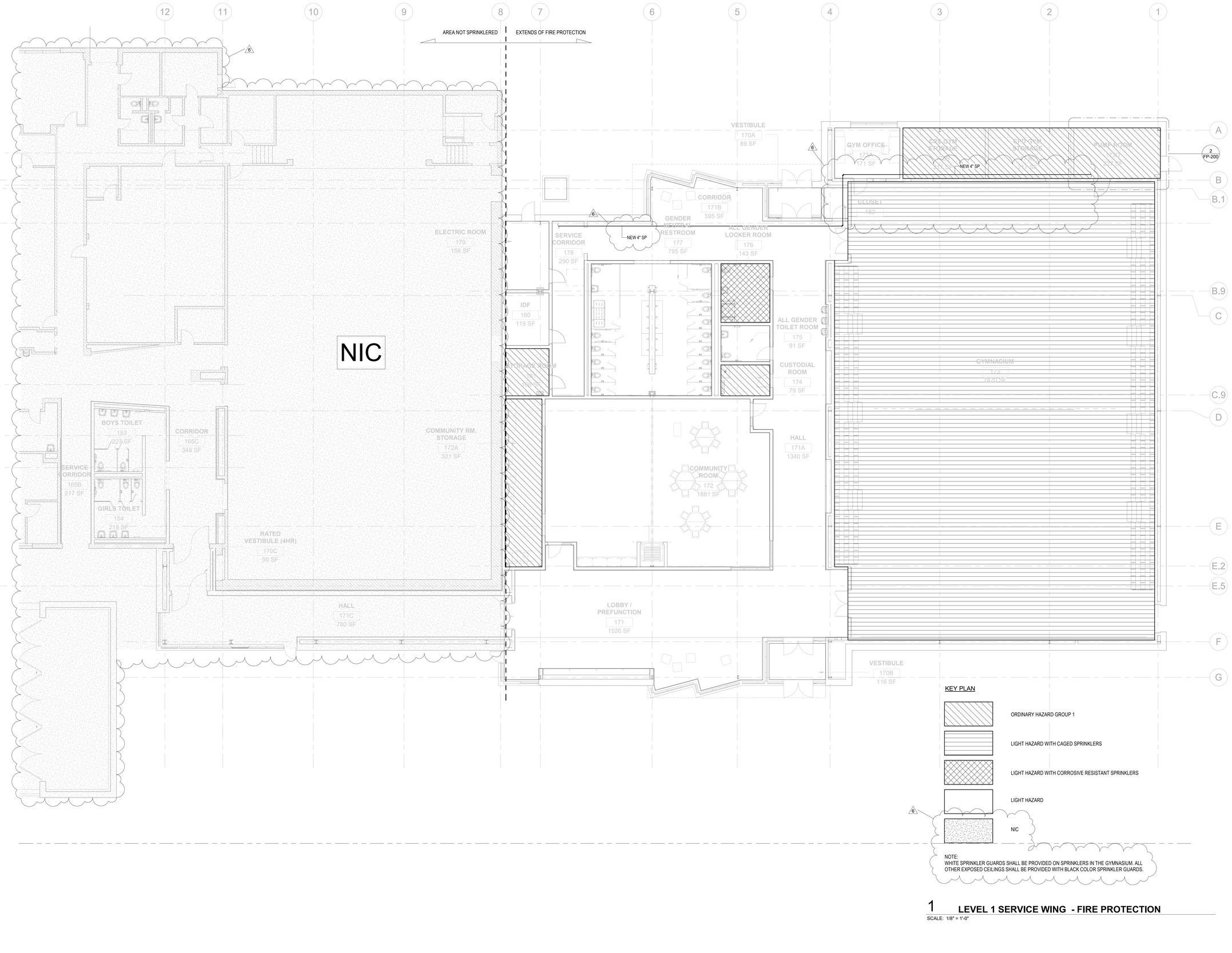
Project No: 2138

Title

FIRE PROTECTION LEGENDS, NOTES & ABBREVIATOINS

Sheet NOT FOR CONSTRUCTION

FP-000



KEY PLAN

- ORDINARY HAZARD GROUP 1
- LIGHT HAZARD WITH CAGED SPRINKLERS
- LIGHT HAZARD WITH CORROSIVE RESISTANT SPRINKLERS
- LIGHT HAZARD
- NIC

NOTE:
WHITE SPRINKLER GUARDS SHALL BE PROVIDED ON SPRINKLERS IN THE GYMNASIUM. ALL OTHER EXPOSED CEILINGS SHALL BE PROVIDED WITH BLACK COLOR SPRINKLER GUARDS.

1 LEVEL 1 SERVICE WING - FIRE PROTECTION

SCALE: 1/8" = 1'-0"

PUBLIC BUILDING COMMISSION OF CHICAGO

DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS

2131 W MONROE ST,
CHICAGO, IL 60612

CHICAGO PUBLIC SCHOOLS
CITY OF CHICAGO, MAYOR LORI LIGHTFOOT

Architect of Record:
KOO LLC
55 WACKER DR,
STE 600C
CHICAGO, IL 60601
312-235-0920 PH

MEPFP ENGINEER
WSP
30 N LaSalle Street Suite 4200
Chicago, IL 60602

STRUCTURAL ENGINEER
Milhouse Engineering & Construction
333 South Wabash Avenue
Chicago, IL 60604

CIVIL ENGINEER
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

LANDSCAPE ARCHITECT
TERRA Engineering, LTD.
225 W Ohio St, 4th Floor
Chicago, IL 60654

ENVIRONMENTAL ENGINEER
Environmental Design International
33 W Monroe ST #1825
Chicago, IL 60603

ENVIRONMENTAL RENO/DEMO
Specialty Consulting Inc.
2942 W Van Buren St
Chicago, IL 66012

REVISIONS

NO.	DATE	DESCRIPTION
1	12/01/22	100% SD
2	02/10/23	100% DD
3	04/07/23	75% CD
4	04/28/23	100% CD
5	05/04/23	IFB
6	05/19/23	ADDENDUM 01

DRAWN BY:

SCALE: 1/8" = 1'-0"

LEVEL 3

LEVEL 2

LEVEL 1

KEY PLAN

PBC Project Name: **DETT ELEMENTARY SCHOOL ANNEX & RENOVATIONS**

PBC Contract No: 05445

CPS Project #2021-26031-ADM

Project No: 2138

Title

FIRST FLOOR FIRE PROTECTION PLAN - SERVICE WING

Sheet NOT FOR CONSTRUCTION

FP-101