

**PUBLIC BUILDING COMMISSION OF CHICAGO
SECOND AMENDMENT
CONTRACT NUMBER PS 1643**

THIS SECOND AMENDMENT AGREEMENT is made and entered into as of the 9th day of November, 2010, and shall be deemed and taken as forming a part of the Agreement for Architect of Record Services for Gateway Harbor & 31st Street Harbor ("Agreement") by and between the **PUBLIC BUILDING COMMISSION OF CHICAGO**, a municipal corporation of the State of Illinois ("Commission") and **AECOM TECHNICAL SERVICES, INC.** ("Consultant") dated July 14, 2009 with the like operation and effect as if the same were incorporated therein.

WITNESSETH:

WHEREAS, the Commission and Consultant have heretofore entered into an Agreement dated the 14th day of July, 2009, wherein the Consultant is to provide Architect of Record Services for the Chicago Park District; and

WHEREAS, the Commission and Consultant now desire to amend the Agreement to include Additional Services performed and associated compensation due to Consultant;

NOW THEREFORE, in consideration of the provisions and conditions set forth in the Agreement and herein, the parties hereto mutually agree to amend the Agreement as hereinafter set forth.

It is agreed by and between the parties hereto that the sole modification of, changes in, and amendments to the Agreement pursuant to this Amendment are as follows:

TERMS

1. Recitals

THE ABOVE RECITALS ARE EXPRESSLY INCORPORATED IN AND MADE A PART OF THE AMENDMENT AGREEMENT AS THOUGH FULLY SET FORTH HEREIN.

2. Schedule A - Scope of Services is amended to include the following Additional Services required for Gateway Harbor and 31st Street Harbor Program to perform Architect of Record services.

2.1. Design Change to the Gateway Harbor – Consultant will modify the design to incorporate the following:

- 2.1.1. Redesign of the floating docks, waterlines, commercial docks, rendering at Dime Pier, and bubbler system in the harbor (Coastal);
- 2.1.2. Redesign of areas with tree plantings along Dime Pier, trees and planting at service road, Utility Access Chambers to cast-in-place concrete instead of pre-cast concrete, truck access at West Navy Pier Headlands, Lay Down Yard and railing along Dime Pier (Civil/Landscape);
- 2.1.3. Perform additional geotechnical borings to clarify areas needed for ground improvement to support structures (Structural);
- 2.1.4. Remove gas service and change to electric service for the harbor services building, remove photovoltaics from the harbor services building, and provide required utilities to new garage at USACE Lay Down Yard (MEP).

The scope of the aforementioned services is detailed in Attachment A-1 to this Amendment 2.

2.2. Design Change to 31st Street Harbor – Consultant will modify the design to incorporate the following:

- 2.2.1. Design of fish habitat within the harbor (Coastal);
- 2.2.2. Engineering for three (3) additional intersections, design of pedestrian underpass, redesign of stormwater management for Fort Dearborn to eliminate permeable pavers and replace with asphalt paving and add rain gardens, design of berm at South end of project

site to retain all excavated soil on site, design of permanent bike and pedestrian pathway, redesign of the tree plan (Civil/Landscape);

- 2.2.3. Development of documents required for Plan Commission and Permit Packages covering caissons and foundations (Architectural).

The scope for the aforementioned services is detailed in Attachment A-2 to this Amendment 2.

3. Schedule D – Compensation of Architect

3.1 Section I. Architect's Fee is revised as follows:

3.1.1 The Commission shall pay the Consultant for the satisfactory performance of the Additional Services outlined in Item 2.1 above for a time card not-to-exceed amount of \$125,000.00.

3.1.2 The Commission shall pay the Consultant for the satisfactory performance of the Additional Services outlined in Item 2.2 above for a time card not-to-exceed amount of 376,422.00.

3.2 Section IV Reimbursable Expenses, Item C is modified as follows:

The maximum compensation for AOR Reimbursable Consultant Costs is increased by \$6,338.00.

Execution of this Amendment by the Consultant is duly authorized by the Consultant, and the signature(s) of each person signing on behalf of the Consultant have been made with the complete and full authority to commit the Consultant to all terms and conditions of this Amendment.

All capitalized terms not defined herein shall have the meaning ascribed to them in the agreement. Except as and to the extent that the terms of the Agreement are amended and modified herein, all terms of the Agreement shall remain in force and effect.

The terms of the Agreement remain in full force and effect except as modified in this Amendment.

(Signature Page follows)

ARCHITECT OF RECORD SERVICES
GATEWAY HARBOR AND 31ST STREET HARBOR - PS1643-A2
PROJECT NO. 11110 and 11120

IN WITNESS WHEREOF, the parties hereto have agreed and executed this Amendment No. 2.

PUBLIC BUILDING COMMISSION
OF CHICAGO

BY: Richard M. Daley
Richard M. Daley
Chairman

Date: _____

ATTEST:

BY: Edrick C. Johnson
Edrick C. Johnson
Secretary

Date: 2/25/11

ARCHITECT

AECOM TECHNICAL SERVICES, INC.

By: Meghan K. Hart
Vice President

Date: 1/31/11

AFFIX CORPORATE

SEAL, IF ANY, HERE

County of: Cook

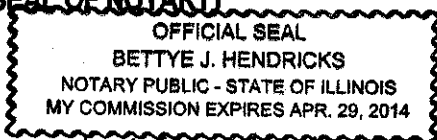
State of: Illinois

Subscribed and sworn to before me by Meghan K. Hart and _____
on behalf of Consultant this 4th day of Feb., 2011.

Betty J. Hendricks
Notary Public

My Commission expires: April 29, 2014

(SEAL OF NOTARY)



Approved as to form and legality

Jacinta Epting
Neal & Leroy, LLC

Date: 2-7-11

**ATTACHMENT A-1
SCOPE OF WORK – GATEWAY HARBOR
ARCHITECT OF RECORD SERVICES
GATEWAY HARBOR and 31ST STREET HARBOR – PS1643-A2
PROJECT NO. 11110 and 11120**

(CONSULTANT'S SCOPE OF SERVICE FOLLOWS THIS PAGE)

VE Options Selected		
Item No.	Description	Responsible Designer
VE01	Pile Sleeves - The pipe piles for the floating docks have HDPE sleeves to reduce friction preventing ice damage. The specified sleeves are expensive. All less expensive HDPE coatings exist, such as HDPE tape and shrink wrap.	Edgewater
VE03	Access panels - Remove access panels for RPZ (Reduced Pressure Zone - backflow prevention devices) valves on docks. RPZs to exist below decking.	Edgewater
VE08	ADA Platforms - Prefabricate the platforms with float docks and ship to site with docks. This applies to float docks A, E and M. This reduces on-site installation expenses. See related item 65.	Edgewater/AECOM
VE10	Navigation buoys - Replace 3/4" stainless steel chain with 3/4" galvanized chain.	AECOM
VE12	Steel Grating - Replace 2-ft wide steel "wheels & heels" grating at the steel sheet pile wall at the commercial piers with a less expensive steel deck.	AECOM
VE14	Precast concrete - Replace precast concrete along Dime Pier and the arc breakwater with cast-in-place concrete. Need truck Access per VE items 55a and 55b	AECOM
VE22	Wale splice - Provide an alternate bolted wale splice. The detailed splice requires multi-pass and upward welds.	AECOM
VE29	Single loaded slips - Include double loaded slips instead of single loaded slips. To be added as Add Alternates.	Edgewater
VE37	Gas Service - Remove gas service and change to electric. Includes removal of gas main from southwest corner of Navy Pier entry to harbor services building.	Primera

VE39	Photovoltaics - Remove PV panels and system from building.	Primera
VE40	Steel Sheet Pile Plates - Remove 1/2" connection plates at outside steel pile at cap beams. Reduction from three plates to one plate.	AECOM
VE43	Fendering - Replace fendering at east side of Dime Pier with less extensive option. It is believed that the design can be simplified to save approximately 10%.	AECOM
VE46	Silva Cells - Remove Silva Cells at Plaza area and replace with CU soil.	AECOM
VE48b	UACs - Build the UACs (Utility Access Chambers) in cast-in-place concrete instead of pre-cast concrete.	AECOM/Primera
VE52	Warranty - Request 2 year warranty on specific items only, not to cover the entire project.	PBCCI/AECOM
VE53	Commercial Pier - Re-design piers to have more clearance above water to save labor costs on formwork. Also include existing below dock survey for estimating known obstructions, reduce load tests.	AECOM
VE54	Cap connections - Minimize field welding and simplify vertical pile to better pile connections.	AECOM
VE55b	Truck Access at Navy Pier - Clarify Specification to indicate truck delivery access allowed all hours of the day between October and April.	PBC/CPD
VE55b	Truck Access at Headlands - Increased staging area to allow for truck access road to Dime Pier at West Navy Pier Headlands.	PBC/CPD
VE56	Horizontal loading - Revise spec to reduce horizontal loading, shielding to typical regional conditions.	Edgewater
VE57	Dock electrical - Float dock electrical components essentially are sole source (Eaton).	Edgewater
VE59	Water lines - Reduce size of the 4" potable water lines at the floating docks.	Edgewater
VE69	Commercial Pier Shape - Reduce shape of East Commercial Pier to accommodate Mystic Boat	AECOM

VE11	USACE Fendering Wall - USACE has requested this fendering system. Hang commercial fenders instead of building fixed fendering system, or remove fendering from project.	AECOM
VE16	Railings - Simplify railing design - Replace stainless steel tension wires with galvanized pickets and replace Kobory handrail with standard galvanized section. See related item 64.	AECOM
VE17	Gate controls - Eliminate the Chamberlain gate controls, software, and all related components. This allows remote operation of gates from office.	Primera/AECOM
VED1	Trees - Simplify trees and planting at lake fill area. Primarily delete three trees adjacent to service road.	AECOM
VE44	Stone columns - Optimize stone column sizes. Perform additional exploratory borings to determine acceptable areas that require less ground improvement.	AECOM
VE49	Bubbler system - Re-design bubbler system to a less expensive system.	Edgewater
VE66	Tree grates - Provide standard steel tree grates instead of wood tree grates, quantity: (18).	AECOM
VE56	Docks - Allow chain anchoring up to 60' slip lengths. This allows chain anchoring of one main walkway (24 slips).	Edgewater

Potential Additions to Next Bid		
A01	Electrical Power to Commercial Piers Electrical upgrades to support commercial piers - new transformers, primary, etc.	Primera/AECOM
A03	Buoys - USACE requested two additional buoys for a total of five buoys separating lock area and harbor entrance.	AECOM

A04	Lay down yard - USACE requested the elevation for the new lay down yard at the south end of the island match the elevation existing USACE North Pier for ease of access.	AECOM
A05	Other - Other agreed upon infrastructure related to MPEA and USACE - TBD.	Primera/AECOM
A07	ADA platforme - During the Department of Buildings Drawing Review, Mayor's Office for People with Disabilities (MOPD) may require accessible platforme and ramps at all docks off of Dime Pier.	Edgewater/AECOM

TOTAL AMOUNT

\$125,000

**ATTACHMENT A-2
SCOPE OF WORK – 31ST STREET HARBOR
ARCHITECT OF RECORD SERVICES
GATEWAY HARBOR and 31ST STREET HARBOR – PS1643-A2
PROJECT NO. 11110 and 11120**

(CONSULTANT'S SCOPE OF SERVICE FOLLOWS THIS PAGE)



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September 21, 2010

Mike Witte
Senior Project Manager
Public Building Commission of Chicago
50 West Washington, 2nd floor
Chicago, IL 60602

RE: Additional Services for 31st Street Harbor

Dear Mr. Witte:

A number of project enhancements have been discussed in recent weeks, and this letter serves to consolidate all discussions into one proposal for AECOM to complete these services in addition to its base contract. Each new service is presented separately in the following pages to enable the Public Building Commission of Chicago (PBCC) to examine them independently. On the attached spreadsheets you will find a summary of the budget for all proposed services as well as a detailed breakdown of each specific service. Below is a brief summary of each additional service.

1. Traffic Engineering:

Labor:	\$ 41,500
<u>Reimbursables:</u>	<u>\$ 600</u>
Total	\$ 42,100

The original scope required a study and engineering of one intersection, but the project ultimately required a very detailed study of four intersections and engineering for three. This service has been completed.

2. Pedestrian Underpass:

Labor:	\$ 11,840
<u>Reimbursables:</u>	<u>\$ 0</u>
Total	\$ 11,840

The original scope included a pedestrian underpass but it was removed after design began, then re-included further into design. This service has been completed.

3. Rain Gardens at Ft. Dearborn:

Labor:	\$ 49,344
<u>Reimbursables:</u>	<u>\$ 600</u>
Total	\$ 49,944

The original scope included a parking lot utilizing permeable pavers, but at the 90% design stage AECOM was directed to change to conventional pavement and rain gardens in order to reduce long term maintenance concerns. This service has been completed.

4. Plan Commission:

Labor:	\$ 27,096
<u>Reimbursables:</u>	<u>\$ 1,168</u>
Total	\$ 28,264



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The final design differs significantly from the design approved by the Plan Commission, and AECOM was required to provide exhibits for an additional hearing, as well as a separate set of documentation for a permit package only covering caissons and foundations. A portion of this service has been completed.

5. Tree Plan Re-design, Stage 1:

Labor:	\$ 55,896
<u>Reimbursables:</u>	<u>\$ 600</u>
Total	\$ 56,496

6. Tree Plan Re-design, Stage 2:

Labor:	\$ 117,822
<u>Reimbursables:</u>	<u>\$ 600</u>
Total	\$ 118,422

After the final design was completed and bid, AECOM was directed to revise the design in order to reduce the number of trees to be removed. Stage 1 refers to the northern area of the site around Ft. Dearborn. Stage 2 refers to the area of the site south of the building and parking garage. A portion of this service has been completed.

7. Spoils Berm:

Labor:	\$ 49,698
<u>Reimbursables:</u>	<u>\$ 600</u>
Total	\$ 50,298

The original scope called for removal of excavated soil. AECOM has been directed to design a berm at the southern edge of the site to retain all excavated soil. The task requires not only landscape design and civil engineering, but its proximity to the lake and Lake Shore Drive also require the participation of Coastal engineering. This service is proposed.

8. Fish Habitat Design:

Labor:	\$ 19,376
<u>Reimbursables:</u>	<u>\$ 2,170</u>
Total	\$ 21,546

The original scope included a design that would allow aquatic species free flow into and out of the harbor. After completion of design, the Chicago Park District expressed an interest in creating a habitat area using removed trees submerged in the lake within the harbor area. This service has been proposed.

9. Temporary to Permanent Path:

Labor:	\$ 3,850
<u>Reimbursables:</u>	<u>\$ 0</u>
Total	\$ 3,850

The Chicago Park District is interested in making permanent the bike and pedestrian pathway that will be installed on a temporary basis by the contractor. AECOM has expended effort towards initial design of the permanent path.

Total cost of all additional services: \$ 382,760



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Thank you for your consideration of this proposal. If the proposal meets with your approval, please complete the enclosed agreement and return it to AECOM. If you would like to discuss it in greater detail, please contact Michelle Inouye at (312) 373-6515 or michelle.inouye@aecom.com.

Sincerely,

Bill Vitek
Senior Vice President

cc: Tony Bouchard
Meghan Harte
Michelle Inouye



Additional Service 1: Traffic Engineering

This service has been executed and completed.

In the base scope of services under our contract, AECOM's scope for traffic engineering was limited to designing the entrance intersection on the east side of 31st Street and Lake Shore Drive. During the course of the project, including discussions with the Chicago Department of Transportation (CDOT), AECOM was required to study three additional intersections:

1. Ft. Dearborn Drive and Lake Shore Drive northbound entrance ramp
2. 31st Street and Lake Shore Drive southbound ramp
3. 31st Street and Moe Drive southbound ramp

The results of the study required a new design for items 2 and 3, though not for item 1. The changes to items 2 and 3 required a re-design of the entrance at 31st Street and Lake Shore Drive, designed under the original scope. Therefore, while the original contract required one intersection design, AECOM provided four intersection designs. Additionally, although the base scope of services included a study, the base study was only to examine the intersection in question. During the design development stage (August 2009), AECOM was informed by CDOT that all four intersections were interconnected, and this automatically triggered a significant expansion of the study's scope.

AECOM received formal direction from PBC on March 12, 2010 to complete the entire design effort including all traffic signal pole, foundations, underground conduits and wiring. The supplemental services described below were required based on the direction provided by the client.

Lastly, a question has been raised as to whether or not the West Remote Lot was properly engineered per the base scope of services. We have attached the project design kick-off meeting minutes dated 07/22/09 at which the lot in question was being debated as a possibility, but the minutes clearly indicate that the lot was not officially part of the project until after commencement.

Scope of Services

Capacity Analysis and Proposed Signal Timing - Using SYNCHRO signal timing and optimization software, AECOM developed proposed signal timing plans for the 31st Street intersection; AM peak, PM peak, and off-peak timing plans were prepared. Existing signal timings at the adjacent intersection of 31st Street with southbound Lake Shore Drive ramps were reviewed in consideration of proposed timings being developed to ensure that any signal progression that currently exists will be maintained.

The following deliverables have already been provided to PBCC:

1. Traffic Signal Timing Schedule - Upon approval of proposed signal timings by OEMC, AECOM developed the Traffic Signal Timing Schedule for the implementation of timings. The schedule includes a diagram of the intersection and signal equipment with timings for all dials and phases split out per interval-based format.
2. Traffic Signal Requirements Drawings for 31st / SB LSD Ramps - Lay out proposed traffic signal equipment, identify signal phasing, and summarize traffic data on a drawing submitted to the City of Chicago Office of Emergency Management and Communications (OEMC). Two (2) submittals of this drawing were prepared.
3. Traffic Signal Plan for 31st / NB LSD Ramps



4. Traffic Signal Plan for 31st / Moe Drive
5. Traffic Signal Plan for 31st / SB LSD Ramps - Developed plans showing the conduit and foundation, cable and signal, and removal plans for the intersection improvements. One (1) Special foundation design review is included for the NW signal pole at 31st / NB LSD Ramps intersection. Three (3) submittals of this drawing to CDOT's Division of Electrical Operations (DEO) were prepared.
6. Lighting Plans – DEO requested AECOM to include lighting plans as part of the signal traffic improvements. This task included a review of existing lighting atlas plans, a field review of existing conditions, and preparing a Street Lighting Removal Plan and Street Lighting Installation Plan for 31st / Moe and 31st /NB LSD Ramps intersections. The format and content of the plans are consistent with the samples provided by the DEO on 06/08/10. Photometric calculations were not performed in this project.

Additional Service 2: Pedestrian Underpass

This service has been executed and completed.

The original design included a pedestrian underpass. The design, conducted by AECOM, was started on the project based on the approved Concept Design. Work progressed to the 25% completion level based on this approved concept. The concept included a pedestrian underpass for the lakefront trail under the entrance driveway. In an effort to reduce costs, AECOM was directed to redesign the entrance and eliminate the pedestrian underpass. Eliminating the underpass required an extensive redesign of completed work for both the driveway and lakefront trail including revising the horizontal geometrics, vertical geometrics, plan and profile plans, drainage calculation, drainage plans, and contour grading plans.

The redesign of the entrance without the underpass progressed to the 30% complete level. As the design progressed, safety concerns for pedestrians on the lakefront trail became a concern. The Chicago Park District determined that even though the underpass was costly, its safety benefits far outweighed its cost. Approximately one week prior to the Design Development (DD) submittal, AECOM was directed to re-include the underpass into the project. This required re-design to re-include the underpass back into design of completed work for both the driveway and lakefront trail including revising the horizontal geometrics, vertical geometrics, plan and profile plans, drainage calculation, drainage plans, and contour grading plans in order to meet the DD submittal deadline.

The approximate timeline of events was as follows:

- Week of 8/3/09 – Review of Concept Cost was performed by AECOM D+P and Client Team. Direction provided by Greg Weykamp (verbally) that underpass and entrance realignment will not be included due to cost concerns.
- 8/27/09 – Underpass and Entrance Realignment was back on table (e-mail from Michelle). Direction provided on Friday 8/28 and Work started on 8/31.
- DD Submission made on 9/3
- Revision work continued past DD submittal (see comment below)

Taken from the DD Review Comments dated 9/22/09: (reference to Grading Plan)

5/1/09	6/4	7/1	8/1	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	1/1	1/8	1/15	1/22	1/29	2/5	2/12	2/19	2/26	3/5	3/12	3/19	3/26	4/2	4/9	4/16	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23	7/30	8/6	8/13	8/20	8/27	9/3	9/10	9/17	9/24	10/1	10/8	10/15	10/22	10/29	11/5	11/12	11/19	11/26	12/3	12/10	12/17	12/24	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design to the level of 30% complete; from that point, the rest of the design was completed as required under the base scope of services.



Additional Service 3: Change to Rain Gardens at Ft. Dearborn Parking Lot

This project has been executed and completed.

The design, conducted by AECOM Transportation Group, was started on the project based on the approved Concept Design. Work progressed to the 90% completion level based on this approved concept. The concept design for the Ft. Dearborn parking lot was based upon the use of permeable pavers as the pavement surface and means of drainage. In an effort to reduce future long term maintenance we were directed to change the permeable pavers to conventional pavement and rain gardens.

The change required a complete redesign to the site drainage plan and significant changes to the site grading. The change also required development of storm sewer profiles, revisions to the erosion control plan, revisions to the demolition, and revisions to the geometry plans for the Ft. Dearborn area. Further, significant coordination with the landscape design was necessitated in order to minimize impacts to the existing trees and proposed landscape elements.

Timeline of events is included below:

- October 26, 2009 – 60% CD Submittal included permeable pavers at Ft. Dearborn
- November 23, 2009 – Received direction from the client at a coordination meeting to continue the design utilizing permeable pavers.
- December 12, 2009 – Interim (75%) CD Submittal included permeable pavers at Ft. Dearborn
- January 11, 2010 – Client directs design team to begin redesign of Ft. Dearborn utilizing asphalt paving and rain gardens. Design of Ft. Dearborn at the time had been advanced to the 90% level in advance of the 90% CD submission.



Additional Service 4: Plan Commission

A portion of this work has been executed, though it is not yet complete.

In December 2009 CPD submitted exhibits to the Plan Commission for the full build-out, although the bid documents reflected the deletion of the second-story restaurant and reduced parking structure as base bid with the full garage build-out as an alternate. In July 2010, AECOM was directed by CPD to make exhibit changes to amend the existing Plan Development so the exhibits are accurate representations of the construction documents.

Scope of Services

To assist with this second Plan Commission review, AECOM has already created many exhibits and must provide additional support for the Plan Commission meeting held August 19, 2010. For this meeting, AECOM will need to provide updated plans and sections, presentation boards and a PowerPoint presentation, and to participate in the review session itself and/or in follow up meetings.

Task 1 – Plan Commission Re-Review

Deliverables: Exhibits, presentation boards, PowerPoint presentation, participating in Plan Commission Review meeting and/or follow up meetings

Additionally, PBC has requested that AECOM file separate permit packages for caissons and foundations to allow construction to continue, requiring additional documentation and services. Each firm's tasks are described below:

AECOM: Minor updates to IFC sheets, coordination with team

Brook Architecture: Minor updates to IFC sheets, coordination with team

Site Design Group: Minor updates to IFC sheets, coordination with team

As requested, the following is a break-out of hours by Desman staff to accommodate all required changes in the Contract Documents for the Foundation Only Permit Package and City Planning Package as requested by PBC. These packages were prepared to facilitate planning and foundation approvals by the City of Chicago in order to begin foundation construction on the site. The work required revisions to various drawings and structural calculations for stand-alone documents which incorporated caissons, grade beams, foundation walls and any columns within foundation walls for construction of these elements only. In addition, Desman's services included the preparation of the permit application and coordination with AECOM, Brook Architecture and the City of Chicago.

The following is a list of affected drawings, structural calculations and various tasks, along with staff that worked on them and hours worked:

A. Structural Drawings S0.02, S0.03, S0.04, S1.01 thru S1.01D, S1.02 thru S1.02D, S2.01, S2.01A, S3.01, S3.02, S3.04:

- Yury Swetin, 5.5 hours: QAQC, Review, Stamp & Sign Permit and Planning Documents
- Indusekar, 13.0 hours: Review and Mark-ups for Permit and Planning Documents
- Chit Manas, 14.5 hours: Revisions to Permit and Planning Documents



B. Architectural Drawings G1.01, A1.01, A1.02, A3.01, A3.02, S2.01, A3.03, A3.04, A4.01, A4.02, S4.01:

- Pier Panicali, 5.5 hours: QAQC, Review, Stamp & Sign Permit and Planning Documents
- Chit Manas, 14.5 hours: Revisions to Permit and Planning Documents

C. Structural Calculations:

- Yury Swetin, 1.5 hours: Review of Calculations to be submitted for Foundation Only
- Indusekar, 3.0 hours: Copy and Repackage Structural Calculations

D. Permit Application:

- Chuck Kramer, 3.0 hours: Review of Overall Documents and Preparation of Application
- Chit Manas, 1.5 hours: Assistance in Preparation of Permit Application

E. Coordination with AECOM:

- Pier Panicali, 4.0 hours: Coordination including Misc. Meetings, Email and Conference Calls
- Chuck Kramer, 3.0 hours: Coordination including Misc. Meetings, Email and Conference Calls
- Chit Manas, 5.5 hours: Coordination including Misc. Meetings, Email and Conference Calls

F. Coordination with Brook Architecture:

- Pier Panicali, 1.5 hours: Coordination including Misc. Meetings, Email and Conference Calls
- Chit Manas, 4.0 hours: Coordination including Misc. Meetings, Email and Conference Calls

G. Coordination with City of Chicago:

- Chuck Kramer, 4.0 hours: Coordination including Misc. Meetings with City Personnel

Task 2 – Caissons/Foundation Permit

Deliverables: Repackaged Bid/Permit documents and other support required for permit issuance



Additional Service 5: Tree Plan Redesign – Stage 1

A portion of this work has been executed, though it is not yet complete.

In order to reduce the number of existing trees that require removal, the Chicago Park District (CPD) and Public Building Commission (PBC) has requested AECOM's 31st Street Harbor design team to redesign a majority of the site plan which has already been approved by the Plan Commission. In Stage 1 of this project, AECOM will redesign the Fort Dearborn Parking Lot and the West Remote Parking Lot.

These lots are to be built as part of Construction Phase I. The desired changes are based on site visits with the CPD Department of Natural Resources held in April 2010. However, the proposed revisions that will be implemented have been changed since the issuance of this memo based on field review and further discussions between CPD and AECOM's civil engineer and landscape architect.

Scope of Services

The AECOM design team, specifically the Civil engineers and landscape designers, attended a follow-up walk-through on August 18, 2010, with PBCC and CPD staff to review the redesign objectives for the parking lot areas at Ft. Dearborn and West Remote. The landscape designers will attend a follow-up meeting with PBCC and CPD to review the final design, and the Civil engineers will attend one plan review meeting with the Chicago Department of Buildings to advance approval of the final documents. The electrical engineers will revise their drawings after the site plan has been modified by civil and landscape.

Task 1: Redesign Ft. Dearborn Parking Lot

Scope of Services: AECOM

1. Project management and coordination, including client/design team meetings
2. Preparation of bulletin packages

Scope of Services: AECOM

1. Confirm design impacts related to tree changes:
 - a. Attend one (1) site visit with the Client Team
2. Revise hardscape elements and rain garden configuration:
 - a. Revise the geometry plan
 - b. Revise the grading plan
 - c. Revise the drainage plan
 - d. Update the drainage schedules
 - e. Update the drainage calculations
 - f. Revise the proposed drainage profiles
 - g. Update the O&M plan
 - h. Revise the erosion control plan
 - i. Revise the site paving plan
3. DOB Permit Revisions:
 - a. Submit revised plans and calculations to the DOB for review and approval.
 - b. Attend one (1) open plan review meeting with the DOB.
 - c. Address comments and provide responses.
4. Administration:
 - a. AECOM will provide project oversight and coordination for the redesign elements
 - b. Coordinate with other disciplines (Landscape, Site Electrical) to confirm design changes and impacts. AECOM will attend two (2) internal coordination meetings and one (1) client meeting.
 - c. A total of one (1) internal QA review will be performed and the comments incorporated into the plan set.



Scope of Services: Site Design Group

1. Confirm tree relocation / demolition / salvage / save-in-place criteria and selection
 - a. Two site visits with Client Team
 - b. Coordinate trees relocation strategy with Care of Tree recommendations
 - c. Update Tree Survey, Demolition/Relocation Plan and Tree Counts
 - d. Prepare consensus plan with CPD, DNR, and Care of Trees
2. Revise Tree Layout, Hardscape, and Rain Garden Configuration
 - a. Removal of 8' wide walk adjacent to parking lot, reconfigure pedestrian paths
 - b. Relocate parking pay stations
 - c. Add/modify bump outs, relocate HC stalls
 - d. Adjust landscape design:
 - i. Adjacent to reconfigured rain gardens
 - ii. To reflect new sidewalk strategy
 - iii. To accommodate relocated trees within the construction boundary where feasible
 - iv. To accommodate existing trees to remain in place

Scope of Services: Primera

Revise electrical duct bank along the pathway, curblin and parking area, including:

- Relocating two transformers, the medium voltage ductbank, and the 240 volt feeder ductbank from the east side of the parking lot to the west side of the parking lot
- Relocating parking lot lighting poles to accommodate the tree revisions
- Relocating pay stations to accommodate the tree revisions
- Revising the branch circuiting notes to accommodate the removal of the sidewalk and protection of additional trees
- Updating the backgrounds with revised civil and landscape drawings several times over the past month
- Attending coordination meetings to prepare the bulletins

Deliverables

Revised 100% construction documents and related permit documentation impacting civil, landscape and electrical

Task 2: Redesign West Remote Parking Lot

The original direction from CPD included tree relocation issues in the area of the West Remote lot, however, this parcel has been removed from the project scope. During the period when the West Remote Lot was still in design, the AECOM design team began work on this task; Site Design Group completed 25% of its task and AECOM completed 20% of its task. The cost below reflects the work completed to date.

Exclusions

The following items are not included with the cost provided in this scope description:

1. Any additional redesign effort needed to save any trees not identified as part of the original client sign-off and selection confirmation.
2. Any fees related to the DOB permit review process.
3. Revisions to the specifications.
4. Geotechnical or hydraulic investigations or review.
5. Any client directed redesign of the initial design proposal.
6. Documentation or coordination of demolished trees to be salvaged for reuse on or off site.

7. Additional drawing issues required for permit and or zoning approval beyond the issuance of the Bulletin.
8. "Interim" landscape drawings showing where relocated trees are to be installed within the Stage 1 construction boundary not within the context of full landscape plans.
9. Drawings showing the location of where relocated trees are to be installed outside the Stage One construction boundary.



Additional Service 6: Tree Plan Redesign – Stage 2

As with the project described in Additional Service 4, Stage 2 of the Tree Plan Redesign is required due to a post-design request by CPD's Department of Natural Resources to reduce the number of trees being removed in the site plan of the revitalized park. The re-design removes fewer trees and provides for more trees to be relocated on site.

Task 1 – Stage 2 Area Redesign

The AECOM design team, specifically the Civil engineers and landscape designers, attended a follow-up walk-through with PBCC and CPD staff to review the redesign objectives. The landscape designers will attend a follow-up meeting with PBCC and CPD to review the final design, and the Civil engineers will attend one plan review meeting with the Chicago Department of Buildings to advance approval of the final documents.

Scope of Services: AECOM

1. Adjust landscape design
 - a. Modify grading to maintain elevations of existing tree to remain
 - b. Civil coordination with potential modifications
 - c. Introduce additional new trees
2. Project management and coordination, including client/design team meetings
3. Preparation of bulletin packages

Deliverables: Revised construction documents (Bulletin) and related permit documentation

Scope of Services: AECOM

1. Confirm design impacts related to tree changes:
 - a. Attend two (2) site visits with the Client Team
2. Revise grading, drainage, and hardscape elements to save trees:
 - a. Revise the demolition plan.
 - b. Revise the geometry plan. A total of two (2) revisions will be performed based on client feedback after the initial submittal for review. Autotum will be utilized to redesign the boat trailer parking and boat ramp operations. The Lakefront trail will be designed to AASHTO and CPD Standards.
 - c. Revise the grading plan.
 - d. Revise the drainage plan.
 - e. Update the drainage schedules.
 - f. Update the drainage calculations.
 - g. Update the O&M plan.
 - h. Revise the erosion control plan.
 - i. Revise the site paving plan.
 - j. Revise the fueling station location plan.
3. DOB Permit Revisions:
 - a. Submit revised plans and calculations to the DOB for review and approval.
 - b. Attend one (1) open plan review meeting with the DOB.
 - c. Address comments and provide responses.
4. Administration:
 - a. AECOM will provide project oversight and coordination for the redesign.

Deliverables: Revised construction documents (Bulletin) and related permit documentation



Scope of Services: Site Design Group

1. Adjust landscape design
 - a. Introduce additional new trees
 - b. Civil coordination with potential modifications

Deliverables: Revised construction documents (Bulletin) and related permit documentation

Scope of Services: Primera

Modify electrical and water utility construction documents to conform with the new tree plan.

Deliverables: Revised construction documents (Bulletin) and related permit documentation

Exclusions

The following items are not included with the cost provided in this scope description:

1. Any additional redesign effort needed to save any trees not identified as part of the original client sign-off and selection confirmation.
2. Any fees related to the DOB permit review process.
3. Revisions to the specifications.
4. Geotechnical or hydraulic investigations or review.
5. Any client directed redesign of the initial design proposal.
6. Documentation or coordination of demolished trees to be salvaged for reuse on or off site.
7. Additional drawing issues required for permit and or zoning approval beyond the issuance of the Bulletin.
8. "Interim" landscape drawings showing where relocated trees are to be installed within the Stage 2 construction boundary not within the context of full landscape plans.
9. Drawings showing the location of where relocated trees are to be installed outside the Stage 2 construction boundary.



Additional Service 7: Spoils Berm Design

The April 2010 tree walk-through highlighted substantial reduction of berm formations along the west side of the garage structure. During this walk-through the area south of the fuel station at the south end of the project boundary was identified as a potential "spoils berm." The current design calls for approximately 9,000 cubic feet of excavated soil to be removed from the site and this area may be able to accommodate excess spoils. The drainage and revetment overtopping would need to be reviewed with any berm development along this edge and an overall review of the site spoils volume coordinating recent changes will be re-evaluated.

Scope of Services

AECOM's civil and landscape representatives attended a site visit with PBC and CPD staff to confirm design objectives, and will be available for one plan review as needed. There is no electrical redesign associated with this portion of the project. Although the project appears to be simple – mound the excavated soil – the site is unique and specific engineering is required. Below is a thorough explanation of the coastal and geotechnical engineering required for the task.

Coastal and Geotechnical Engineering

The proposed land grading area sits within an overtopping flow and conveyance zone. The original design of the shoreline revetment completed in 2002 included management of wave attack on the stepped concrete revetment. Any change to the land surface that has an impact on the function of the revetment needs to follow Army Corps of Engineers standards. The original funding of the shoreline revetment was approved under the theory that the design was required to manage wave attack and associated overtopping flows without causing flooding to Lake Shore Drive – a federal highway.

The revetment is designed to allow as much as 1 to 2 cubic feet per second of overtopping discharge generated by waves during a 100 – year event. Therefore, if 300 to 400 feet of upland area adjacent to the seawall is modified, we need to make sure that the 400 to 800 cfs of overtopping flows are managed without damaging the wall or adjacent land that is part of the fabric of the wall. Furthermore, we need to make sure that the overtopping flows are safely returned to Lake Michigan without flooding Lake Shore Drive. The current design includes overland flow pathways that were sized to manage the designated design flow rates. We will need to make sure that the partial blockage of the flow pathway that currently conveys overtopping flows to the south drainage gap does not cause flooding problems.

The current seawall design acts as a fabric comprised the following components: a) a steel sheet pile wall at the lake edge, b) battered "H" piles that are connected to the back side of the ssp wall and angle back towards land underground to resist both wave crest pressure attack that pushes towards land, and wave trough pressure that pulls the wall back toward the water when the low part of the wave occurs at the wall, c) engineered fill behind the wall, d) a massive reinforced concrete promenade and steps that are structurally connected to the steel wall, and e) a shear key wall on the land side of the concrete steps that provides resistance to the wall sliding toward the lake during trough loads. The original design of this structure was vetted by the Corps and we will need to demonstrate that the fill near the back side of this wall doesn't create a problem. We have influenced the fill design concept with our architects such that we believe that this fill will not likely cause structural stability or settlement problems that were not anticipated in the original design. We will need to reopen the numerical settlement and stability models originally developed for the Corps of Engineers to make this proof and obtain their approval for the design change.

The proposed case is now different than the original analysis in that a portion of the proposed fill area will now be partially protected by the new harbor stub groin. The south portions of the fill area will not be protected. Therefore, we will need to quantify the changed overtopping flow conditions and flow rates. We will then confirm how the overtopping flows will be managed between the lake and the fill without causing an increase in flooding risk in comparison to the original design basis for the revetment. We will need to establish an appropriate setback between the concrete steps and the fill to protect the area from erosion that could affect the seawall system, and also make sure that the overtopping flows are conveyed safely back into the lake. We have discussed these issues with our architectural team and believe that it should not be a problem creating a design that satisfies the project goals while also meeting the requirements of the regulatory agencies that have jurisdiction.

Coastal Engineering

The coastal engineering work will be completed by an assistant project coastal engineer under the direction of our Senior Principal Coastal Engineer (Bill Weaver). Mr. Weaver was the engineer of record for the coastal engineering design of the original seawall revetment. Following is a summary of the engineering tasks that we will complete for this project:

- Obtain and review the design basis documents and numerical models developed for the seawall revetment project during 2000 to 2002.
- Compare the current wave climate at the fill area with the original wave climate immediately north and south of the harbor stub groin. Quantify the overtopping flow changes associated with the new harbor design and document for the agency review.
- Revise the upland flow conveyance model developed as part of the original revetment design. This model takes the overtopping flows and performs a backwater analysis to convey this water back to the lake without causing flooding. We will modify the model to reflect the geometry of the new fill as it affects the lateral flow conveyance in the park towards the south drainage gap. We plan to simplify the model approach and account for partial return of these flows over the top of the revetment wall. We will need to document that the flows are appropriately returned to the lake without damaging the revetment or causing upland flooding.
- Prepare the coastal engineering aspects of a technical memorandum for the Corps of Engineers and CDOT to illustrate that the fill will not have adverse impacts on the existing shoreline revetment.
- Meet with the architect and civil engineer to develop the grading plan concept in a way that will satisfy the above requirements.
- Provide input with respect to turf reinforcement in the wave overtopping attack zone. If necessary, prepare recommendations for turf reinforcement for portions of the fill slope that may be subject to wave overtopping damage.
- Prepare a submittal for the corps of engineers and CDOT, and meet with the Corps of Engineers if necessary.

Geotechnical Engineering

The geotechnical engineering work will be completed by an assistant project geotechnical engineer under the direction of our Principal Geotechnical Engineer (Ted Bushell). Mr. Bushell was the engineer of record for the geotechnical engineering design of the original seawall revetment. Following is a summary of the engineering tasks that we will complete for this project:

AECOM

- Obtain and review the original geotechnical and structural design basis documents for the seawall revetment.
- Evaluate the effects of the proposed additional fill on the global stability and settlement of the existing shoreline revetment. Input to the setback needs for this fill as necessary to maintain the stability and settlement characteristics of the revetment within the required regulatory and Corps of Engineers standards.
- Prepare the geotechnical engineering aspects of a technical memorandum for the Corps of Engineers and CDOT to illustrate that the fill will not have adverse impacts on the existing shoreline revetment.
- Meet with the architect and civil engineer to develop the grading plan concept in a way that will satisfy the above requirements.
- Input to the submittal to the Corps of Engineers and CDOT.

Scope of Services: AECOM D+P (project management and landscape design)

1. Adjust landscape and grading design
 - a. Civil coordination with potential modifications
 - b. Existing landscape / proposed prairie coordination
 - c. Introduce additional new trees
2. Project management and coordination, including client/design team meetings
3. Preparation of bulletin packages

Deliverables: Revised construction documents (Bulletin) and related permit documentation.

Scope of Services: AECOM ATG (Civil Engineering)

1. Confirm design impacts and intent:
 - a. Attend one (1) site visit with the Client Team
2. Revise design drawings:
 - a. Revise the grading plan to show proposed contours for the spoils berm.
 - b. Review the drainage plan.
 - c. Update the drainage calculations.
 - d. Update the O&M plan.
 - e. Revise the erosion control plan.
3. Permit Revisions:
 - a. Any work related to permit applications or revisions is not included.
4. Administration:
 - a. AECOM will provide project oversight and coordination for the redesign elements included above.
 - b. Coordinate with other disciplines (Landscape) to confirm design changes and impacts.
 - c. A total of one (1) internal QA review will be performed and the comments incorporated into the plan set.

Deliverables: Revised construction documents (Bulletin) and related permit documentation.

Scope of Services: Site Design Group

1. Adjust landscape design:
 - a. Modify landscape in area around fueling station

Deliverables: Revised Construction Drawings (Bulletin) and related permit documentation.



Additional Service 8: Research and Design Submerged Fish Habitat

The design of new fish habitat was not included in the scope of the original contract. While the Chicago Park District may have indicated an interest in some type of fish habitat, no clear direction was given to AECOM on what design a fish habitat would take. Additionally, AECOM did include some elements in the design that would allow fish to enter the marina area and that design was reviewed and approved by the Park District as part of the overall design reviews at each stage of the project. Subsequently, the Chicago Park District has expressed great interest in salvaging some of the trees slated for removal in the base project for use as a submerged fish habitat within the new marina. At a design charrette on May 14, 2010, this interest was discussed in finer detail. The tasks described below are required to make this enhancement possible.

Scope of Services

Task 1: Research

There are two subjects which need to be explored in great detail before a design can be created: (1) materials to be used in constructing the habitat structure, i.e., which types of trees, their size, best configurations, etc., and (2) the impact of the habitat structure on the function of the marina, i.e., its resilience to wave force, mounting/anchoring strategies, modifications to current hardscape designs, etc. Specific tasks will include:

1. Evaluation of existing harbor lake bottom submerged plant communities, wave climate.
2. Evaluate lake level and wave climate for the submerged vegetation plant shelf zone.
3. Collaborate with ecological scientist to set design criteria from plant perspective
4. Review design options with PBC/CPD

Deliverable: Report containing recommended materials and design options

Task 2: Design

Upon reviewing the findings of the Task 1 report, should PBCC choose to continue with the project, AECOM would produce the required documentation for design of the habitat, construction and permitting. Additionally, AECOM will investigate the potential cost of the construction phase change order that would be submitted by the contractor to install the fish habitat. AECOM cannot estimate the cost of this change order at this time, but it could be significant. For the PBCC to make an informed decision prior to executing the plan, AECOM believes it is prudent to examine the installation costs of the project.

Specific tasks will include:

1. Develop submerged vegetation plant shelf construction concept. Set location and assess wave climate nuances. Assess wave interaction with shelf and rooting media. Develop stone layering and filtering strategy to retain rooting media on elevated stone shelf. Assess wave overtopping of shelf perimeter and impacts on rooting media if the shelf is set up high in water column. Prepare schematic plan and detail sketches.
2. Review material quantities and likely costs of change order.
3. Discuss with CPD location/limits/costs and technical issues of concepts.
4. Manage permit issues and application.
5. Prepare plans and specifications for selected option.
6. QA/QC

Deliverable: 100% construction design documents and related permit documentation.

Staff

AECOM

In addition to AECOM staff already working on the project, specifically project managers and Coastal designers, AECOM proposes to add the services of an Ecological Scientist. **Whitney Stambuagh** has six years experience in fisheries studies; aquatic ecology, both freshwater and saltwater; limnology; fishery habitat assessments; threatened and endangered species assessments; aerial field surveys; zooplankton studies; and wetland surveys. She will work closely with the Coastal team to design the submerged habitat. Her complete resume is attached.



Additional Service 9: Temporary to Permanent Path

The construction staging plan called for the creation of a temporary path for pedestrians and cyclists. The Chicago Park District has requested that AECOM consider incorporating the temporary path as a permanent path in the site design to separate pedestrians and cyclists from the primary lakefront trail.

AECOM was asked to provide a scope of services for two options: (1) a full design and (2) a review only if the project is conducted as design/build by the contractor.

Whether or not AECOM is selected to design the path, it should be noted that the path does require a fair level of professional engineering. The permanent path installation should be designed to both AASHTO standards for multi-use paths and the CPD Lakefront Trail standard. In addition, the path must be designed to be ADA compliant. This will insure both the safe and functional usage by bicyclists, maintenance vehicles, pedestrians, and other users. Providing sufficient sight distance, clear zones, and grades are essential for safe and proper usage.

The path should be designed to provide sufficient drainage and erosion control measures. Signage and markings must be properly designed to alert bicyclists and other users to potential conflicts and to convey regulatory messages.

Scope of Services – Review Only

As an alternative to the full design of a permanent path in lieu of a temporary path, AECOM will review and comment on a design to be prepared by others:

- Review the geometry for the permanent path installation.
- Review the grading, drainage and erosion control design.
- A total of two (2) reviews are included.

The tasks will include:

1. Confirm design intent and desired layout of the new permanent path:
 - a. Attend one (1) site visit with the Client Team
2. Review grading, drainage, and hardscape elements to save trees:
 - a. Review the pre-final design plans for the permanent path. The Lakefront path will be reviewed based upon AASHTO and CPD Standards.
 - b. Review the final design plans.
3. DOB Permit Revisions:
 - a. This work is not included. The designer will be responsible for any permit revisions.
4. Administration:
 - a. AECOM will provide project oversight and coordination for the review.
 - b. Coordinate with other disciplines (Landscape, Site Utilities, Architectural) to confirm comments. AECOM will attend one (1) internal coordination meetings and one (1) client meeting.

Budget for Review Only = \$7,767

Scope of Services – Full Design

Scope of Services: AECOM Design + Planning

1. Project management and coordination, including client/design team meetings
2. Preparation of bulletin packages



Deliverables: Revised construction documents (Bulletin) and related permit documentation.

Scope of Services: AECOM Transportation Group

1. Confirm design impacts and intent:
 - a. Attend one (1) site visit with the Client Team
2. Revise hardscape elements and rain garden configuration:
 - a. Revise the grading plan
 - b. Review the drainage plan.
 - c. Revise the erosion control plan.
3. Administration:
 - a. AECOM will provide project oversight and coordination for the redesign elements included above.
 - b. Coordinate with other disciplines (Landscape) to confirm design changes and impacts.
 - c. A total of one (1) internal QA review will be performed and the comments incorporated into the plan set.

Deliverables: Revised construction documents (Bulletin) and related permit documentation.

Scope of Services: Site Design Group

1. Confirm tree relocation / demolition / salvage / save-in-place criteria and selection
 - a. Up to two site visits with Client Team
 - b. Coordinate trees relocation strategy with Care of Tree recommendations
 - c. Update Tree Survey, Demolition/Relocation Plan and Tree Counts
 - d. Prepare consensus demolition plan with CPD, DNR, Care of Trees and AECOM Design + Planning
2. Adjust landscape design
 - a. Accommodate relocated trees within the construction boundary where feasible
 - b. Accommodate existing trees to remain in place
 - c. Modify proposed tree layout

Deliverables: Revised construction documents (Bulletin) and related permit documentation.

Budget to Design Permanent Path = \$31,454