

# Office of the City Clerk

City Hall 121 N. LaSalle St. Room 107 Chicago, IL 60602 www.chicityclerk.com

# **Legislation Text**

File #: O2013-6018, Version: 1

#### **ORDINANCE**

WHEREAS, the City of Chicago (the "City") is a home rule unit of government under Article VII, Section 6(a) of the Constitution of the State of Illinois, and as such may exercise any power and perform any function pertaining to its government and affairs; and

WHEREAS, the Metropolitan Water Reclamation District of Greater Chicago, a body corporate and politic, organized and existing under the laws of the State of Illinois (hereinafter the "District"); and

WHEREAS, on November 17, 2004, the Illinois General Assembly passed Public Act 093-1049 (the "Act"); and

WHEREAS, the Act declares that stormwater management in Cook County shall be under the general supervision of the District; and

WHEREAS, "stormwater management" as defined in the Act (and codified at 70 ILCS 2605/7h(a)) means the management of floods and floodwaters; and

WHEREAS, the Act specifically authorizes the District to plan, manage, implement, and finance activities relating to stormwater management in Cook County; and

WHEREAS, the Act provides that stormwater management in a municipality with a population over one million will be conducted by that municipality, or by the District subject to an intergovernmental agreement between the District and that municipality; and

WHEREAS, the City has a population greater than one million people; and

WHEREAS, on December 13, 2006, the City Council of the City adopted the "Chicago Stormwater Management Ordinance," codified as Chapter 11-18 of the Municipal Code of Chicago (the "City Ordinance"); and

WHEREAS, pursuant to Section 11-18-110 of the City Ordinance and other provisions of the Municipal Code of Chicago, the Commissioner of the City's Department of Water Management has issued regulations for sewer construction and stormwater management; and

WHEREAS, the Intergovernmental Cooperation Act, 5 ILCS 220/1 et seq. and Section 10 of Article VII of the Illinois Constitution allow and encourage intergovernmental corporation; and

WHEREAS, on October 6, 2009, the City and the District entered into an intergovernmental agreement ("Stormwater IGA") regarding stormwater management within the corporate limits of the City; and

WHEREAS, pursuant to the Stormwater IGA, the District and City agreed to work together on identifying and prioritizing stormwater management problems within the corporate limits of the City; and

#### S: Shared/Finance/IGA/DOT/IGAw MWRDGC /Ordinance

WHEREAS, pursuant to the Stormwater IGA, the District and the City further agreed to work together on identifying potential projects to address stormwater management problems within the corporate limits of the City and to perform feasibility studies as may be necessary for such potential projects; and

WHEREAS, the neighborhood of Albany Park is located within the corporate limits of the City; and

WHEREAS, the North Branch of the Chicago River (the "NBCR") bisects the Albany Park neighborhood on its way to flowing into the Chicago River and a low-lying area near the NBCR is prone to flooding; and

WHEREAS, during a major rainfall event on September 13 and 14, 2008 the NBCR overtopped its banks and caused significant flooding in the Albany Park neighborhood; and

WHEREAS, the City's Department of Transportation ("CDOT") responded by placing sandbags along the shore as a temporary measure against flooding, but recommends that a diversion tunnel be constructed 100 feet below grade (roughly following the right of way of Foster Avenue), to take the excess waters during a potential flood and divert them directly into the Chicago River, thereby bypassing the Albany Park neighborhood and reducing the potential for flooding; and

WHEREAS, the City previously commissioned MWH Americas, Inc. ("MWH") to perform a prefeasibility evaluation for the proposed diversion tunnel; and

WHEREAS, the City will direct MWH to continue its evaluation of the proposed diversion tunnel by performing an engineering study (the "Engineering Study") to confirm the feasibility of a diversion tunnel in the soft ground (the "Project"); and

WHEREAS, the City has received a proposal from MWH to perform the Engineering Study for an amount not to exceed Two Hundred Fifty Thousand Dollars (\$250,000); and

WHEREAS, upon the terms and conditions herein, the District will contribute up to, and no more than, One Hundred Twenty-Five Thousand Dollars (\$125,000) for the Engineering Study, as defined in the "Scope of Work", attached hereto as Exhibit 1 and made a part hereof; and

WHEREAS, the remainder of the cost of the Engineering Study will be funded by the City using certain proceeds from the issuance of its \$388,001,650 General Obligation Bonds, Project and Refunding, Series 2008C (the "Bonds") on January 28, 2009, as authorized by an ordinance by the City Council of the City (the "City Council") as adopted and published on November 5, 2008 in the Journal of the Proceedings of the City Council ("Journal of the Proceedings") at pages 42736 to 42769; and

WHEREAS, the District has full power to pass all necessary ordinances, orders, rules, resolutions and regulations for the proper management and conduct of the business of the District and for carrying into effect the object for which it was formed. It is the policy of the State that all powers granted, either expressly or by necessary

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implication by the District's enabling legislation or any other Illinois Statute, to the District may be exercised by the District under 70 ILCS 2605/4; and

WHEREAS, the City and District have agreed to enter into an agreement in substantially the form attached hereto as Exhibit A (the "Agreement") in order to memorialize their respective roles in such an effort; now, therefore,

#### BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF CHICAGO:

SECTION 1. The above recitals are expressly incorporated in and made part of this ordinance as though fully set forth herein.

SECTION 2. The Commissioner of CDOT (the "Commissioner") is authorized to execute the Agreement, and such other documents as are necessary, between the City and MWRDGC, subject to the approval of the Corporation Counsel of the City as to form and legality.

# **EXHIBIT A AGREEMENT**

(See Attached)

S: Shared/Finance/IGA/DOT/IGAw MWRDGC /Ordinance

# INTERGOVERNMENTAL AGREEMENT BETWEEN THE METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO AND THE CITY OF CHICAGO, ILLINOIS, DEPARTMENT OF TRANSPORTATION

THIS INTERGOVERNMENTAL AGREEMENT (hereinafter "Agreement') is entered into this , 201\_, by and between the Metropolitan Water Reclamation District of Greater Chicago, a municipal corporation, organized and existing under the laws of the State of Illinois (hereinafter "District") and the City of Chicago, a municipal corporation and home rule unit of government under Article VII, Section 6(a) of the 1970 Constitution of the State of Illinois, (hereinafter "City"), acting through its Department of Transportation ("DOT").

WITNESSETH, THAT:

WHEREAS, on November 17, 2004, the Illinois General Assembly passed Public Act 093-1049 (the "Act"); and

WHEREAS, the Act declares that stormwater management in Cook County shall be under the general supervision of the District; and

WHEREAS, "stormwater management" as defined in the Act (and codified at 70 ILCS 2605/7h(a)) means the management of floods and floodwaters; and

WHEREAS, the Act specifically authorizes the District to plan, manage, implement, and finance activities relating to stormwater management in Cook County; and

WHEREAS, the Act provides that stormwater management in a municipality with a population over one million will be conducted by that municipality, or by the District subject to an intergovernmental agreement between the District and that municipality; and

WHEREAS, the City has a population greater than one million people; and

WHEREAS, on December 13, 2006, the City Council of the City (the "City Council") adopted the "Chicago Stormwater Management Ordinance," codified as Chapter 11-18 of the Municipal Code of Chicago (the "City Ordinance"); and

WHEREAS, pursuant to Section 11-18-110 of the City Ordinance and other provisions of the Municipal Code of Chicago, the Commissioner of the City's Department of Water Management has issued regulations for sewer construction and stormwater management; and

WHEREAS, the Illinois Intergovernmental Cooperation Act, 5 ILCS 220/1 et seq., and Section 10 of Article VII of the Illinois Constitution allow and encourage intergovernmental corporation; and

WHEREAS, on October 6, 2009, the City and the District entered into an intergovernmental agreement ("Stormwater IGA") regarding stormwater management within the corporate limits of the City; and

WHEREAS, pursuant to the Stormwater IGA, the District and City agreed to work together on identifying and prioritizing stormwater management problems within the corporate limits of the City; and

WHEREAS, pursuant to the Stormwater IGA, the District and the City further agreed to work together on identifying potential projects to address stormwater management problems within the corporate limits of the City and to perform feasibility studies as may be necessary for such potential projects; and

WHEREAS, the neighborhood of Albany Park is located within the corporate limits of the City; and

WHEREAS, the North Branch of the Chicago River (the "NBCR") bisects the Albany Park neighborhood, and a low-lying area within that neighborhood is prone to overbank flooding; and

WHEREAS, during a major rainfall event on September 13 and 14, 2008, the NBCR overtopped its banks and caused significant flooding in the Albany Park neighborhood; and

WHEREAS, DOT responded by placing sandbags along the shore as a temporary measure against flooding, but recommends that a diversion tunnel be constructed (roughly following the right-of-way of Foster Avenue), to take the excess waters during a potential flood and divert them directly into the Chicago River, thereby bypassing the Albany Park neighborhood and reducing the potential for flooding; and

WHEREAS, the City previously commissioned MWH Americas, Inc. ("MWH") to perform a prefeasibility evaluation for the proposed diversion tunnel; and

WHEREAS, the City will direct MWH to continue its evaluation of the proposed diversion tunnel by performing an engineering study (the "Engineering Study") to confirm the feasibility of a diversion tunnel in the soft ground (the "Project"); and

WHEREAS, the City has received a proposal from MWH to perform the Engineering Study for an amount not to exceed Two Hundred Fifty Thousand Dollars (\$250,000); and

WHEREAS, on December 6, 2012, the District's Board of Commissioners authorized the District to contribute up to, and no more than, One Hundred Twenty-Five Thousand Dollars (\$125,000) for the Engineering Study; and

WHEREAS, pursuant to that authority, and upon the terms and conditions herein, the District will contribute up to, and no more than, One Hundred Twenty-Five Thousand Dollars (\$125,000) for the Engineering Study, as defined in the "Scope of Work", attached hereto as Exhibit 1 and made a part hereof; and

WHEREAS, the remainder of the cost of the Engineering Study will be funded by the City using certain proceeds from the issuance of its \$388,001,650 General Obligation Bonds, Project and Refunding, Series 2008C (the "Bonds") on January 28, 2009, as authorized by an ordinance by the City Council as adopted and published on November 5, 2008 in the Journal of

the Proceedings of the City Council ("Journal of the Proceedings") at pages 42736 to 42769; and

WHEREAS, on the City Council adopted an ordinance published in the Journal of the Proceedings for said date at pages to , which, among other things, authorizes the execution of this Agreement; and as recorded in the Regular Board Meeting Minutes of the Board of Commissioners of the District, dated September 6, 2012, the District is authorized to enter into this Agreement;

NOW THEREFORE, it is agreed, as follows:

ARTICLE ONE: INCORPORATION OF RECITALS The recitals set forth above are

incorporated herein by reference and made a part hereof.

#### ARTICLE TWO: SCOPE OF THE ENGINEERING STUDY

The scope of the Engineering Study is set forth in the "Scope of Work", attached hereto as Exhibit 1. Pursuant to that Scope of Work, MWH will perform subsurface investigations and studies that are required to determine whether a diversion tunnel in the soft ground is technically feasible. Based on its findings, MWH will prepare a Technical Memorandum (as defined in the attached Scope of Work) and an Opinion of Probable Construction Cost consistent with the Association for the Advancement of Cost Engineering's ("AACE") International Class III criteria. The City shall provide the District with copies (including interim drafts) of MWH's Technical Memorandum and its AACE Class III Opinion of Probable Construction Cost for the District's review and comment.

The sole intent and purpose of this Agreement is to provide parameters for the funding of the abovementioned Engineering Study. Nothing in this Agreement shall be construed as binding the parties to adopt any of the findings, conclusions, or recommendations of that study or any others. Additionally, nothing in this Agreement shall be construed as creating an obligation on either party to take any action related to the findings, conclusions, or recommendations of the Engineering Study or related to the proposed diversion tunnel.

#### ARTICLE THREE: TERM

The Term of the Agreement shall commence on the date that the last signature is affixed hereto and shall expire upon: (1) the written agreement of the parties hereto or (2) the District's review of, and comment on, the final version of MWH's Technical Memorandum (as defined in the attached Scope of Work) and its AACE Class III Opinion of Probable Construction Cost.

#### ARTICLE FOUR: CONSENT

Whenever the consent or approval of one or both parties to this Agreement is required hereunder, such consent or approval shall not be unreasonably withheld.

#### ARTICLE FIVE: FUNDING

Within fourteen (14) days of the execution of this Agreement, the District shall transfer to the City a lump sum in the amount of One Hundred Twenty-Five Thousand Dollars (\$125,000) to be used exclusively for the funding of the Engineering Study to be performed by MWH.

The City will require MWH to submit monthly invoices for its work on the Engineering Study. Prior to paying any invoice related to the Engineering Study, the City shall submit a copy of said invoice to the District for review. If the District disapproves of any charges on an invoice, the City shall contest those charges pursuant to the dispute resolution procedures set forth in its Professional Services Agreement with MWH.

If MWH completes the Engineering Study for an amount less than Two Hundred Fifty Thousand Dollars (\$250,000), then, within thirty (30) days following the completion of the Engineering Study, the City must refund to the District half of the difference between the proposed \$250,000 and the actual cost of the Engineering Study.

#### ARTICLE SIX: TERMINATION BY THE CITY

At any time prior to the expiration of this Agreement, the City may, upon providing notice to the District in the manner provided in Article Ten below, terminate this Agreement as it pertains to the entire Engineering Study. If the City elects to terminate this Agreement because the City and the District mutually agree that the Engineering Study is not economically or technically feasible, then, within thirty (30) days following its termination, the City shall refund to the District half of the difference between the proposed \$250,000 cost of the Engineering Study and the actual cost of the work performed on the Engineering Study up to the time of termination. If the City elects to terminate this Agreement for any reason other than economic or technical feasibility, then within thirty (30) days following its termination, the City shall refund to the District a sum of One Hundred Twenty-Five Thousand Dollars (\$125,000).

#### ARTICLE SEVEN: TERMINATION BY THE DISTRICT

In the event MWH fails to commence its performance of the Engineering Study by July 1, 2013, the District may, at its option, elect to terminate this Agreement. If the District elects to terminate this Agreement as a result of MWH's failure to commence its performance of the Engineering Study, then the City shall refund to the District a sum of One Hundred Twenty-Five Thousand Dollars (\$125,000) within thirty (30) days following receipt of the District's notice of termination.

In the event MWH fails to complete its performance of the Engineering Study by December 31, 2015, the District may, at its option, elect to terminate this Agreement. If the District elects to terminate this Agreement as a result of MWH's failure to complete its performance of the Engineering Study, then, within thirty (30) days following receipt of the District's notice of termination, the City shall refund to the District half of the difference between the proposed Two Hundred Fifty Thousand Dollar (\$250,000) cost of the Engineering Study and the actual cost of the work performed on the Engineering Study up to the time of termination.

#### ARTICLE EIGHT: PERMITS AND EASEMENTS

Nothing in this Agreement shall be construed to require or oblige the District to procure or provide funding for any of the federal, state, or local permits or easements that may be necessary for, or in any way related to, the Engineering Study.

#### ARTICLE NINE: INDEMNITY

- (a) The City must defend, indemnify, keep and hold harmless the District, its officers, representatives, elected and appointed officials, agents and employees from and against any and all Losses, including those related to:
  - (i) injury, death or damage of or to any person or property;

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ii) any infringement or violation of any property right (including any patent, trademark, or copyright);

- iii) MWH's failure to perform its contractual obligations with respect to the Engineering Study, including MWH's failure to perform its obligations to any subcontractor;
- iv) injuries or death of any employee of MWH or any subcontractor under any workers compensation statute.
- b) "Losses" means, individually and collectively, liabilities of every kind, including losses, damages and reasonable costs, payments and expenses (such as, but not limited to, court costs and reasonable attorneys' fees and disbursements), claims, demands, actions, suits, proceedings, judgments or settlements, any or all of which in any way arise out of or relate to MWH's breach of any contract related to the Engineering Study or MWH's negligent or otherwise wrongful acts or omissions or those of its officers, agents, employees, consultants, subcontractors or licensees arising out of or as a consequence of the performance of the Engineering Study.
- c) At the District General Counsel's option, the City must defend all suits brought upon all such Losses and must pay all costs and expenses incidental to them, but the District has the right, at its option, to participate, at its own cost, in the defense of any suit, without relieving the City of any of its obligations under this Agreement. Any settlement must be made only with the prior written consent of the District's General Counsel, if the settlement requires any action on the part of the District.
- d) To the extent permissible by law, the City waives any limits to the amount of its obligations to indemnify, defend or contribute to any sums due under any Losses, including any claim by any employee of MWH that may be subject to the Workers Compensation Act, 820 ILCS 305/1 et seq., or any other related law or judicial decision (such as, Kotecki v. Cyclops Welding Corp., 146 III. 2d 155 (1991)). The District, however, does not waive any limitations it may have on its liability under the Illinois Workers Compensation Act or any other statute or judicial decision.
- e) The indemnities in this section survive the expiration or termination of this Agreement.

ARTICLE TEN: NOTICE Notice to District shall

be addressed to:

Director of Engineering Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street Chicago, Illinois 60611 FAX: (312) 751.7905

and

General Counsel Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street

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Chicago, Illinois 60611 Phone: (312) 751.6565

Notice to the City shall be addressed to:

Commissioner City of Chicago, Department of Transportation 30 North LaSalle Street, suite 1100 Chicago, Illinois 60602

And

Corporation Counsel City of Chicago, Department of Law 121 North LaSalle Street, Room 600 Chicago, Illinois 60602 Attention: Finance and Economic Development Division Phone:(312) 744.0200

Unless otherwise specified, any notice, demand or request required hereunder shall be given in writing at the addresses set forth above, by any of the following means: (a) personal service; (b) electronic communications, whether by telex, telegram, telecopy or facsimile (FAX) machine; (c) overnight courier; or (d) registered or certified mail, return receipt requested.

Such addresses may be changed when notice is given to the other party in the same manner as provided above. Any notice, demand or request sent pursuant to either clause (a) or (b) hereof shall be deemed received upon such personal service or upon dispatch by electronic means. Any notice, demand or request sent pursuant to clause (c) shall be deemed received on the day immediately following deposit with the overnight courier and, if sent pursuant to subsection (d) shall be deemed received two (2) days following deposit in the mail.

#### ARTICLE ELEVEN: ASSIGNMENT; BINDING EFFECT

This Agreement, or any portion thereof, shall not be assigned by either party without the prior written consent of the other.

This Agreement shall inure to the benefit of and shall be binding upon the City, the District and their respective successors and permitted assigns. This Agreement is intended to be and is for the sole and exclusive benefit of the parties hereto and such successors and permitted assigns.

#### ARTICLE TWELVE: MODIFICATION

This Agreement may not be altered, modified or amended except by written instrument signed by all of the parties hereto.

#### ARTICLE THIRTEEN: COMPLIANCE WITH LAWS

The parties hereto shall comply with all federal, state and municipal laws, ordinances, rules and regulations relating to this Agreement.

#### ARTICLE FOURTEEN: GOVERNING LAW AND SEVERABILITY

This Agreement shall be governed by the laws of the State of Illinois. If any provision of this Agreement shall be held or deemed to be or shall in fact be inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions or in all cases because it conflicts with any other provision or provisions hereof or any constitution, statute, ordinance,

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rule of law or public policy, or for any reason, such circumstance shall not have the effect of rendering any other provision or provisions contained herein invalid, inoperative or unenforceable to any extent whatsoever. The invalidity of any one or more phrases, sentences, clauses, or sections contained in this Agreement shall not affect the remaining portions of this Agreement or any part hereof.

#### ARTICLE FIFTEEN: SHAKMAN PROVISIONS

Shakman Provisions (a) The City is subject to the May 31, 2007 Order entitled "Agreed Settlement Order and Accord" (the "Shakman Accord") and the June 24, 2011 "City of Chicago Hiring Plan" (the "City Hiring Plan") entered in Shakman v. Democratic Organization of Cook County, Case No 69 C 2145 (United States District Court for the Northern District of Illinois). Among other things, the Shakman Accord and the City

Hiring Plan prohibit the City from hiring persons as governmental employees in non-exempt positions on the basis of political reasons or factors.

- (b) You are aware that City policy prohibits City employees from directing any individual to apply for a position with You, either as an employee or as a subcontractor, and from directing You to hire an individual as an employee or as a subcontractor. Accordingly, You must follow your own hiring and contracting procedures, without being influenced by City employees. Any and all personnel provided by You under this Agreement are employees or subcontractors of You, not employees of the City of Chicago. This Agreement is not intended to and does not constitute, create, give rise to, or otherwise recognize an employer-employee relationship of any kind between the City and any personnel provided by You.
- (c) You will not condition, base, or knowingly prejudice or affect any term or aspect of the employment of any personnel provided under this Agreement, or offer employment to any individual to provide services under this Agreement, based upon or because of any political reason or factor, including, without limitation, any individual's political affiliation, membership in a political organization or party, political support or activity, political financial contributions, promises of such political support, activity or financial contributions, or such individual's political sponsorship or recommendation. For purposes of this Agreement, a political organization or party is an identifiable group or entity that has as its primary purpose the support of or opposition to candidates for elected public office. Individual political activities are the activities of individual persons in support of or in opposition to political organizations or parties or candidates for elected public office.
- (d) In the event of any communication to You by a City employee or City official in violation of paragraph (b) above, or advocating a violation of paragraph (c) above, You will, as soon as is reasonably practicable, report such communication to the Hiring Oversight Section of the City's Office of the Inspector General ("IGO Hiring Oversight"), and also to the head of the Department. You will also cooperate with any inquiries by IGO Hiring Oversight or the Shakman Monitor's Office related to this Agreement.

#### ARTICLE SIXTEEN: COUNTERPARTS

This Agreement may be executed in counterparts, each of which shall be deemed an original.

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#### ARTICLE SEVENTEEN: ENTIRE AGREEMENT

This Agreement constitutes the entire agreement between the parties.

#### ARTICLE EIGHTEEN: AUTHORITY

Execution of this Agreement by the City is authorized by an ordinance adopted by the City Council on , 20 . Execution of this Agreement by the District is authorized by , 20 . The parties represent and warrant to each other that they have the authority to enter into this Agreement and perform their obligations hereunder.

#### ARTICLE NINETEEN: HEADINGS

The headings and titles of this Agreement are for convenience only and shall not influence the construction or interpretation of this Agreement.

#### ARTICLE TWENTY: DISCLAIMER OF RELATIONSHIP

Nothing contained in this Agreement, nor any act of the City or the District shall be deemed or construed by any of the parties hereto or by third persons, to create any relationship of third party beneficiary, principal, agent, limited or general partnership, joint venture, or any association or relationship involving the City and the District.

#### ARTICLE TWENTY-ONE: CONSTRUCTION OF WORDS

The use of the singular form of any word herein shall also include the plural, and vice versa. The use of the neuter form of any word herein shall also include the masculine and feminine forms, the masculine form shall include feminine and neuter, and the feminine form shall include masculine and neuter.

#### ARTICLE TWENTY-TWO: NO PERSONAL LIABILITY

No officer, member, official, employee or agent of the City or the District shall be individually or personally liable in connection with this Agreement.

#### ARTICLE TWENTY-THREE: NON-WAIVER

Either party's failure to require strict performance by the other party of any provision of this Agreement will not waive a party's right to demand strict compliance with any other provision of this Agreement or such provision at any other time. Any waiver of any terms of this Agreement must be in writing and shall not diminish the future enforceability of this Agreement.

#### ARTICLE TWENTY-FOUR: REPRESENTATIVES

Immediately upon execution of this Agreement, the following individuals will represent the parties as a primary contact

For the District: Director of Engineering

Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street Chicago, Illinois 60611 Phone: (312) 751-3169 FAX: (312)751.7905

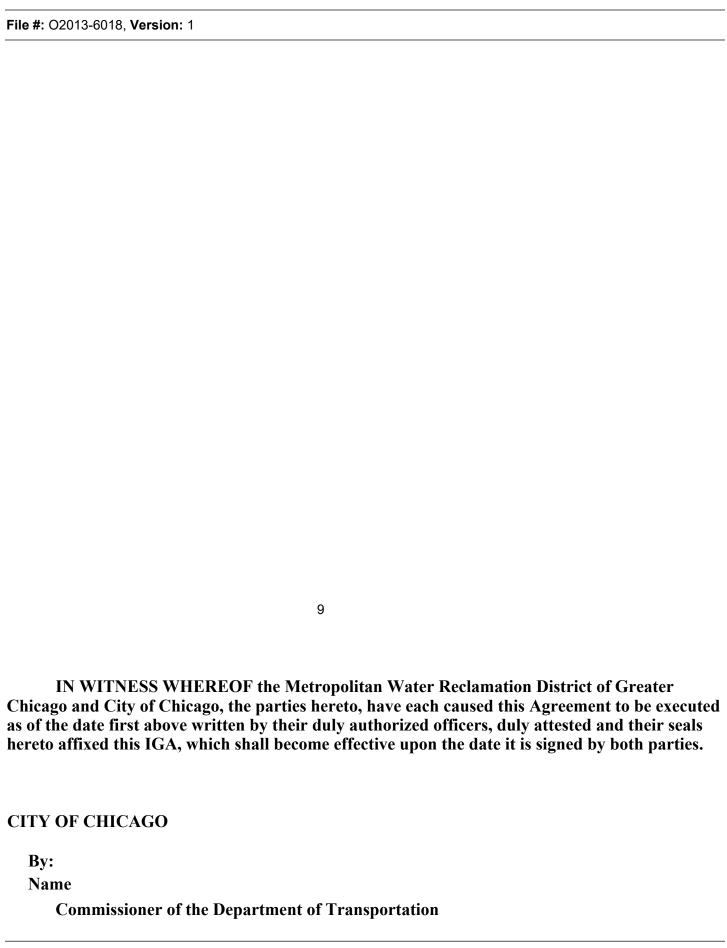
For the City: Commissioner

City of Chicago, Department of Transportation 8

30 North LaSalle Street Chicago, Illinois 60602 Phone: (312) FAX: (312)

Each party agrees to promptly notify the other party of any change in its designated representative, which notice shall include the name, address, telephone number and fax number of the representative for such party for the purpose hereof.

[Signature Page Follows]



File #: O2013-6018, Version: 1
ATTEST:
By:
Name:
Clerk
METROPOLITAN WATER RECLAMATION DISTRICT OF GREATER CHICAGO
By:. Name:
Chairman of the Committee on Finance
Chairman of the Committee on Finance
Ву:
Name:
Executive Director
ATTEST:
By:
Clerk
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APPROVED AS TO ENGINEERING:
AFFILOVED AS TO ENGINEERING.
Name:
Assistant Director of Engineering
Name:

Director of Engineering

File #: O2013-6018, Version: 1								
APPROVED	AS	TO	FORM	AND	LEGALITY			
Name:								
Head Assistan	t Atto	rney						
Name:								
General Couns	sel							
			Exhi	hit 1 Sc	one of the Engineering Study (See Attached)			



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#### Scope of Work and Schedule

# Albany Park Stormwater Diversion Tunnel - Geotechnical Investigation Chicago Department of Transportation

#### **Background**

MWH previously developed a conceptual level design of an 18-foot-diameter tunnel for the Albany Park Stormwater Diversion Tunnel Project. The design included two potential tunnel profile alternatives: one in the unconsolidated overburden material and one in the underlying rock formation. The conceptual design was based on both available subsurface information and record drawings from the TARP-North Branch of Chicago River and MWRD interceptor projects. MWH examined the feasibility of constructing the 18-foot diameter tunnel in both overburden material and rock formations. A review of available geotechnical records indicated that such a tunnel in overburden material would be significantly more expensive than a comparable tunnel in rock, and would result in undesirable clearances with respect to the existing infrastructures. As a result, the overburden tunnel was not considered a viable alternative, and no Opinion of Probable Construction Cost (OPCC) for this alternative was developed. However, based on the available geotechnical and utility information, it was concluded that the rock tunnel alternative would be a viable option, and an OPCC was prepared accordingly based on the Association for the Advancement of Cost Engineering (AACE) Industry Standards for a Class 4 estimate (ANSI Standard Reference Z94.2-1989 Budget Estimate).

Due to the limited subsurface information, potential construction risks, and lack of information regarding utilities along the tunnel alignment, CDOT has requested that MWH define and conduct a site-specific subsurface geotechnical and environmental investigation program to reexamine the overburden tunnel option and its associated construction costs. The Scope of Work presented below describes the elements proposed for a site-specific subsurface geotechnical/environmental .investigation based on general practice in the tunneling industry for the design of an overburden tunnel and preparation of an associated OPCC. In addition, the investigation scope is prepared to will allow for refining the rock tunnel alternative option and its cost, if eventually deemed necessary. It will be significantly less costly to extend the boreholes in the rock as part of this effort as opposed to remobilizing and drilling for additional boreholes to design the rock tunnel if the soft ground tunnel is found to be less viable and/or cost prohibitive.

#### Scope of Work

MWH will perform the tasks described below as the basis for completion of subsurface investigations and studies required to more accurately identify the subsurface conditions and associated construction risks, with the overall aim of producing an updated AACE Class 3 overburden tunnel construction cost estimate:

Task 1 - Kick-off Meeting. Two technical members of the MWH project team will meet with the Chicago Department of

Transportation (CDOT) to discuss the project, the proposed schedule for the field investigations, required coordination activities, and procedures for communication, data exchange, and invoicing.

Task 2 - Review of Available Subsurface and Utility Data. MWH will review subsurface data and record drawings provided by the City of Chicago and the Metropolitan Water Reclamation District of Greater

Chicago (MWRD) as the basis for determining the location and requirements for new subsurface borings along the anticipated stormwater tunnel alignment. Data expected to be available for review includes record drawings and previous subsurface boring data from the North Branch Leg of TARP, the MWRD Mainstream TARP Tunnel near Foster Avenue, the MWRD North Side No. 4 and No. 5 Interceptor Sewers located along the North Branch of the Chicago River. It is assumed that CDOT will coordinate with the Chicago Department of Water Management to provide MWH with available data pertaining to City of Chicago water and sewer infrastructure along the alignment of the proposed tunnel.

Task 3 - Preparation of the Investigation Program. MWH will draw upon prior analyses and information reviewed under Task 2 to prepare a detailed subsurface geotechnical and environmental investigation program for drilling and testing to characterize subsurface conditions along the route of the proposed Albany Park Stormwater Tunnel. Conditions to be characterized include thickness and consistency of the overburden soil layers, soil and rock properties, aquifers and groundwater condition, groundwater fluctuations and yields, potential ground and groundwater contamination, potential presence of cobbles and boulders, presence of water bearing zones. It is expected that the program will include the following overall activities:

- 1 Locate the boreholes and secure permits from the City and other agencies for borehole drilling.
- 2 Drill a total of up to 5 boreholes through the overburden and into the rock to a depth of approximately 150 feet below ground surface (bgs) along the 5,700-foot tunnel alignment. It is assumed that one hole will be at location of each of the proposed shafts (starting shaft, ending shaft, intermediate shaft) and one will be adjacent to the MWRD interceptor to investigate conditions near this critical crossing.
- 3 Drilling includes up to 500 feet in overburden sampling at 5' intervals and coring 250 feet in rock taking H-size coring.
- 4 Perform a series of geotechnical field testing including standard penetration testing on soil at 5-ft intervals (ASTM D1586 & 1587), permeability testing on pervious soils, rock coring with Rock Quality Designation (RQD) and water pressure testing.
- 5 Perform environmental and gas screening of the holes for volatiles, semivolatiles and gases.
- 6 Collect soil and groundwater samples and test for disposal characteristics parameters to landfills.
- 7 Collect soil and water samples to perform chlorides, sulphates, pH, total dissolved solid in water only.
- 8 Collect and perform geotechnical soil and samples for laboratory testing including moisture content (ASM D-2216), gradation(ASTM D-422), Atterberg Limits (ASTM D-4318), unconfined compressive strength on soil samples (ASTM D-2116) and unconfined strength on rock (ASTM D 2938), Splitting Tensile Strength of Rock (ASTM D-3697), and point load test on rock samples (ASTM D5731).
- 9 Convert holes to standpipe piezometer in overburden material or open hole piezometer in rock and perform mini pump tests in the holes for yield.
- 3.10- Provide Geotechnical Data Report (GDR) including borehole logs, results of field and laboratory testing, survey location of boreholes, and analytical test results.

MWH will document the proposed program in a technical memorandum for review by CDOT. No external approvals are anticipated to be required for the performance of the proposed program. Should MWH determine that any type of external permit or authorization is required, MWH will notify CDOT so that provisions for securing the required approval can be developed and appropriate budget allocated for any additional effort.

Task 4 - Solicit Proposals for Geotechnical Investigation Program. MWH will prepare a request for proposal document as the basis for soliciting proposals for the program defined under Task 3. Effort will be made to solicit proposals from qualified MBE or WBE firms so as to comply with goals established for MWH's contract. MWH will invite and obtain up to three bids for the proposed program from drilling firms, analyze the bids, and secure a sub-contract with the firm judged to be qualified, responsive and most cost-effective. Should MWH determine that no qualified MBE or WBE firms are available to perform the required investigations, it will notify CDOT and obtain direction before proceeding with selection of a subcontractor.

Task 5 - Conduct Field Investigations. MWH will coordinate and monitor the activities of the drilling contractor selected to complete the borings. MWH staff will establish the approximate location for the 5 boreholes, confirm that the drilling subcontractor has requested and obtained utility locates in the vicinity of the borings, observe and monitor the drilling program and field testing and sampling, and prepare list of samples for laboratory testing. All drilling and testing will be performed by a subcontractor to MWH. The subcontractor will be responsible for documenting conditions in the vicinity of the borings prior to the start of drilling, and for restoring the area back to the pre-investigation conditions following completion of the field activities.

Task 6 - Investigation of Potential Subsurface Conflicts. MWH will investigate potential utility conflicts, and/or conflicts with foundations of major structures and bridges along the proposed tunnel alignment using the information obtained under Task 2. MWH will also investigate the depth of water in the NBCR and the thickness of soft sediments below the river bed based on a hand drilled boring along the edge of the NBCR.

Task 7 - Technical Memorandum. MWH will prepare a draft Technical Memorandum that includes results of subsurface geotechnical and environmental investigations, data analysis, subsurface geotechnical profile along with tunnel profiles and available utilities, tunnel induced settlement analysis, groundwater inflow to shaft and tunnel analysis, and comments regarding the proposed design/construction philosophy and approach. Three (3) copies of the draft memorandum will be submitted to CDOT for review. It is assumed that CDOT will complete its review of the draft technical memorandum within two weeks. Following receipt of CDOT's comments, MWH will work to complete and submit five (5) copies of the final technical memorandum.

Task 8 - Updated Opinion of Probable Construction Cost. MWH will prepare a draft AACE Class 3 opinion of probable construction cost (OPCC) for the overburden tunnel option and refine the previously developed AACE Class 3 OPCC for the rock tunnel option. Results will be presented as an addendum to the Technical Memorandum described in Task 7.

#### **Estimated Schedule of Work**

The following Table 1 includes the estimated schedule to complete the proposed subsurface investigations program. The total duration to complete the proposed scope of work is estimated to be 8 months.

Table 1 - Schedule of Subsurface Investigation and Reports

Milestone	Time to Complete after NTP	Estimated Completion Date
Notice-to-Proceed (NTP)	0 weeks	January 14, 2013
Task 1 - Kick Off Meeting	1 weeks	January 21, 2013
Task 2- Compile and Review Available Subsurface Data	3 weeks	Februarys 2013
Task 3 - Prepare a Detailed Subsurface Investigation and Testing Plan	6 weeks	February 25, 2013
Task 4 - Prepare RFP and Secure Firm for Drilling and Testing	9 weeks	March 18, 2013

#### File #: O2013-6018, Version: 1 Task 5A - Locate Holes, Coordinate Permitting, and Observe Drilling and 16 weeks May 13, 2013 Testina<sup>(1)</sup> Task 5B - Mobilization, Drilling and Testing for Task 3 Scope 16 weeks May 13, 2013 Task 6 - Investigate Surface and Subsurface Utility/Structure Conflicts 18 weeks May 20, 2013 Task 7 - Prepare a Design Technical Memorandum (Draft and Final) 26 weeks July 15, 2013 Task 8 - Prepare OPCC for Overburden Tunnel and Refined OPCC for the 32 weeks August 22, 2013 Rock Tunnel

#### Notes:

(1) A 2-week duration is assumed for borehole clearance and permitting.

Chicago Department of Transportation

CITY OF CHICAGO

July 24. 2013

TO THE HONORABLE, THE CHAIRMAN AND MEMBERS OF THE CITY COUNCIL COMMITTEE ON COMMITTEES, RULES AND ETHICS

#### Ladies and Gentlemen:

I transmit herewith an ordinance authorizing the execution of an intergovernmental agreement with the Metropolitan Water Reclamation District regarding a stormwater tunnel study.

Your favorable consideration of this ordinance will be appreciated.

Gabe Klein, Commissioner

30 NORTH LASALLE STREET, SUITE 1100, CHICAGO, ILLINOIS 60602

Chicago, July 24, 2013

## To the President and Members of the City Council:

Your Committee on Committees, Rules and Ethics, having under consideration an Ordinance introduced by Alderman Laurino entering into

An Intergovernmental agreement with the Water Reclamation Board to undergo a geotechnical feasibility study regarding flood prevention.

begs leave to recommend that Your Honorable Body pass the Ordinance which is transmitted herewith.

This recommendation was concurred in by a viva voce vote of the members of the committee on July 24, 2013.

Alderman Edward M. Bruke Vice - Chairman, Committee on Committees, Rules and Ethics