

EXHIBIT A

Prepared by the
Utility Agreements and Permits Unit
(Payable)
(\$5,085,091.00)
(Actual Cost)

S.P. 6982-322 (T.H. 35)
Location: I-35, I-535 & US 53 in the City of
Duluth
Utility Owner: City of Duluth
MnDOT Agreement Number 1036438

UTILITY RELOCATION AGREEMENT **AND** **CONTRACT FOR QUITCLAIM DEED**

This Agreement Number 1036438 (Agreement) is between the State of Minnesota (State), acting through its Commissioner of Transportation, and City of Duluth, including its agents, contractors, and subcontractors (Utility Owner). This Agreement describes how the parties will mitigate the effects of a State construction project on the Utility Owner.

RECITALS

The State plans to let a contract to construct State Project Number 6982-322 (Project) on Federal Aid Interstate Highway Number 35, which is part of the National System of Interstate Highways. The Federal Highway Administration (FHWA) identifies the Project as Minnesota Project Number BLD-NHFP I350(129) in its records. The Project is located I-35, I-535 & US 53 in the City of Duluth.

Authorized FHWA officials have approved the Project.

The Utility Owner owns and operates a Sanitary Sewer Lift Station, its fixtures, and related equipment (Facilities) in part on private property where the Utility Owner has property rights and in part within the limits of the publicly owned right of way. The Facilities are within the limits of the Project.

The Utility Owner must relocate the Facilities that are within the Project limits. The Utility Owner has requested reimbursement for the cost of this relocation from the State.

The State will acquire temporary right of way within the limits of the Utility Owner's property rights to construct the Project.

Under Minnesota Statutes, section 161.20, subdivision 2, the State may acquire all properties necessary to construct, maintain, and improve the trunk highway system.

Under Minnesota Statutes, section 161.46, the State may reimburse the Utility Owner for the cost of relocating its Facilities.

Under Minnesota Statute, section 161.44, the State may convey lands owned in fee no longer needed for trunk highway purposes.

Code of Federal Regulations, title 23, part 645, subpart A, and as amended requires a written agreement that specifies the work the Utility Owner will perform for reimbursement. This Agreement is subject to all State, federal, and other applicable laws and regulations.

AGREEMENT

I. Term/Termination

- A. *Effective Date:* This Agreement is effective on the date the State obtains all signatures required by Minnesota Statutes, section 16C.05, subdivision 2.
- B. *Commencement of Work:* Upon notice of Agreement approval, the Utility Owner must commence work according to the terms of the Notice and Order and prosecute the work according to a schedule the State's Project Engineer (Project Engineer) approves.
- C. *Expiration Date:* This Agreement will expire on the date that all obligations, excluding the Utility Owner's ongoing maintenance obligation, have been satisfactorily fulfilled.
- D. *Termination by the State:* The State may terminate this Agreement at any time, with or without cause, on 30 calendar days' written notice to the Utility Owner. Upon termination, the Utility Owner will be entitled to payment, based upon actual costs incurred, for satisfactorily performed services. The termination of this Agreement does not relieve the Utility Owner of its obligations under the Notice and Order.
- E. *Survival of Terms:* The following articles survive the Agreement's expiration or termination: (III) Utility Owner's Ongoing Maintenance Requirements; (VI) Audits; (VII) Indemnification/Insurance; and (X) Governing Terms.

II. Utility Owner's Duties

- A. *Relocation:* The Utility Owner must:
 - 1. Relocate its Facilities according to:

- a. The terms of the Notice and Order that was issued on November 20, 2019, and Change of Notice and Order Completion Date issued by the construction Engineer on March 3, 2020;
 - b. All applicable codes;
 - c. The plans for the utility work, which are attached to this Agreement as Exhibit A. If any changes must be made to the plans, the Utilities Engineer must approve these changes in writing before the Utility Owner performs the work to qualify for reimbursement;
 - d. The directions of the Project Engineer and the State's Utilities Engineer (Utilities Engineer); and
 - e. MnDOT's standard construction specifications.
2. Submit one copy of the State's Application for Utility Accommodation on Trunk Highway Right of Way, Form 2525 (Permit), including two copies of "proposed" sketches, for all Facilities within the trunk highway right of way to the Utilities Engineer before beginning relocation work.
 3. Coordinate its operations with the State's contractor's (Contractor) operations and notify the Project Engineer at least two days before beginning and after completing each operational phase.
 4. Stake the location and elevation of the proposed Facilities within the trunk highway right of way. The State will stake facilities which are located within Michigan Street. The Utility Owner must not begin construction until the Project Engineer approves the location and elevation.
 5. Except in an emergency or for the minor completion of a phase of work, obtain the Utilities Engineer's approval for the overtime work to qualify for reimbursement.
 6. State and Utility Owner both acknowledge and agree that the State's work on the project by the Contractor and the Utility Owner's work to relocate Facilities by its contractor will, of necessity, be going on at the same time and that both projects will require the Contractor's and Utility Owner's contractor's work to impact one another. Both parties agree that they will require their respective contractors to cooperate with one another and to use their best efforts to eliminate or minimize to the extent possible any negative effects on the work of the other contractor. The Utility Owner must not substitute backfilling material unless specifically authorized by the Project Engineer. The Utility Owner must dispose of all unsuitable or excess soil material found within the highway right of way at an off-site disposal area as directed by the Project Engineer. The Utility Owner must

mechanically compact all material replaced in the excavation. The Utility Owner must restore all drainage and slopes to the Project Engineer's satisfaction.

7. Maintain accurate and up-to-date relocation cost records throughout the course of the Project.
8. Leave materials in place at the Project Engineer's discretion. Any materials left within the right of way after the Utility Owner completes its work will become the property of the Contractor.

B. Compliance with Safety Regulations

1. The Utility Owner must comply with the safety regulations contained in Minnesota Rules, part 8810.3400, subpart 5, during all construction and maintenance operations. The Utility Owner will furnish and require each flagger to carry a copy of the current edition of the State's *Field Manual*, which is Part IV of the *Minnesota Manual of Uniform Traffic Control Devices*. The Utility Owner must furnish each flagger with the required vest, hat, hand sign, flags, and any other necessary safety equipment.
2. The provisions of this Agreement do not relieve the Utility Owner of any legal responsibility or liability associated with the construction, operations, or maintenance of its Facilities.

C. Compliance with Pollution Control Requirements

1. The Contractor installs pollution control measures according to the National Pollution Discharge Elimination System permit (NPDES Permit). Pollution control measures include silt fences, slope stabilization measures such as seed and mulch, and any other measures the State deems necessary to comply with the NPDES Permit. If the Utility Owner's work affects such pollution control measures, the Utility Owner must restore them to their original condition and to the Project Engineer's satisfaction. If the Utility Owner is relocating Facilities before the Contractor begins construction, the Utility Owner must work with the Project Engineer to determine if pollution control measures are necessary and how to implement them if they are.
2. Pursuant to Minnesota Statutes, section 115.07, and Minnesota Rules, part 7001.1030, the Utility Owner must submit the plans and specifications for sanitary sewer construction or reconstruction to the Minnesota Pollution Control Agency (MPCA).

III. Utility Owner's Ongoing Maintenance Requirements

- A. Once construction is complete, the Utility Owner must maintain the Facilities at its own expense. The Utility Owner must follow the terms of the Permit when it performs any maintenance work.
- B. The Utility Owner may open and disturb the trunk highway right of way without a permit in the case of an emergency that is dangerous to the public and requires immediate attention. Upon learning of an emergency, the Utility Owner must immediately notify the State Patrol. The Utility Owner must take all necessary and reasonable safety measures to protect the public and must cooperate fully with the State Patrol. In this event, the Utility Owner must request a permit from the proper authority no later than the working date after it begins working in the right of way.

IV. Property Rights

- A. The Utility Owner must convey, by Quitclaim Deed, its right, title, and interest in property located in St. Louis County, Minnesota to the State. This property is legally described as:

All of Tracts A and B described below:

Tract A.

All that part of the following described tract: All that part of Lots 350 and 352, Block 14, DULUTH PROPER SECOND DIVISION, according to the plat thereof on file and of record in the office of the County Recorder in and for St. Louis County, Minnesota, which lies southwesterly of a line run parallel with and distant 25 feet southwesterly of the northeasterly line of said Lot 350 and northerly of a line run parallel with and distant 35 feet northerly of the following described line: From the point of intersection of the center line of 21st Avenue West with the center line of Michigan Street, run southeasterly along the center line of said 21st Avenue West for 276.8 feet to the point of beginning of the line to be described; thence deflect to the right at an angle of 98 degrees 03 minutes 54 seconds for 225.19 feet; thence deflect to the right on a curve having a radius of 262 feet (delta angle 81 degrees 56 minutes 02 seconds) for 374.66 feet and there terminating; the title thereto being registered as evidenced by Certificate of Title No. 200232.0;

Tract B.

Lots 350 and 352, Block 14, including the vacated portions of the East 1/2 of 22nd Avenue West adjacent and contiguous to said Lot 352, Block 14, all in DULUTH PROPER, SECOND DIVISION, according to the plat thereof on file and of record in the office of the County Recorder in and for St. Louis County, Minnesota; except that part which lies

southwesterly of a line run parallel with and distant 35 feet northeasterly of the following described line: From the point of intersection of the centerline of 21st Avenue West with the centerline of Michigan Street, run southeasterly along the centerline of said 21st Avenue West for 276.8 feet to the point of beginning of the line to be described; thence deflect to the right at an angle of 98 degrees 03 minutes 54 seconds for 225.19 feet; thence deflect to the right on a curve having a radius of 262 feet (delta angle 81 degrees 56 minutes 02 seconds) for 374.66 feet, thence on a tangent to said curve for 200 feet and there terminating; Together with all that part of Lots 350 and 352 in said Block 14 adjoining and northerly of the above-described strip, which lies southwesterly of a line run parallel with and distant 25 feet southwesterly of the northeasterly line of said Lot 350; the title thereto being registered as evidenced by Certificate of Title No. 282710.0.

together with all hereditaments and appurtenances belonging hereto.

- B. The Utility Owner grants the State the right of immediate entry upon the land described above to construct the Project, as long as the entry does not interfere with the Utility Owner's Facilities, operations, nor the construction of the replacement facilities identified in Exhibit A.
- C. Upon completion of the project, the State shall convey to the City of Duluth lands mutually determined to be necessary for the operation and maintenance of the Sanitary Sewer Lift Station facilities as shown on Exhibit A. The State will retain lands necessary for the construction and maintenance of the support of the highway.

V. Payment

A. *Payment*

- 1. Exhibit B, which is attached to this Agreement, is a detailed, itemized estimate of the cost of the Utility Owner's relocation work. Actual cost includes all expenses attributable to design engineering and construction relocation work. Reimbursement will be based on the actual costs for work that conforms to Exhibit A. Betterment, increase in value, and salvage value derived from the relocated Facilities will not be included in this reimbursement.
- 2. The State will pay the Utility Owner for the actual cost the Utility Owner incurs performing its obligations pursuant to this Agreement, in an amount not to exceed \$5,085,091.00, upon receiving:
 - a. All necessary conveyance documents executed by authorized officials of the Utility Owner;
 - b. Proof that the Facilities have been relocated to the Project Engineer's and Utilities Engineer's satisfaction; and

- c. One original, signed invoice that is supported by an itemized statement of costs. An authorized representative of the Utility Owner must sign the invoice and submit the final bill to the Utilities Engineer no later than 180 days after completing the work.
3. The State's payment constitutes payment in full for all work the Utility Owner performs and for any and all damages, claims, or causes of action of any kind accruing to the Utility Owner because of the State's order to relocate the Facilities. This payment also constitutes payment in full for the Quitclaim Deed and is mitigation for lands for which the lift station is to be constructed upon. Notwithstanding anything in this Agreement to the contrary, the Utility Owner reserves the right to pursue any lawful remedy it may have for tortious acts that may arise out of the relocation of the Facilities.
4. If acceptable to the Utilities Engineer, the State may process periodic progress billings of incurred cost without prior audit.
5. The Utility Owner will record its actual and indirect costs according to the Utility Owner's established accounting procedures that have been approved by the State and the FHWA's Division Engineer.

B. Federal Reimbursement

1. Pursuant to Code of Federal Regulations, title 23, part 645, subpart A., and as amended, the federal government may reimburse the State for a portion of the relocation cost the State pays the Utility Owner. The amount of the federal reimbursement will be determined upon the State's audit of the cost the Utility Owner claims according to the Agreement. The amount the State pays the Utility Owner for its relocation must not exceed the amount on which the federal government bases its reimbursement.
2. If the amount the State pays the Utility Owner exceeds the amount on which the federal government bases its reimbursement, the Utility Owner, upon the State's request, must immediately pay the difference to the State.

C. Limitation on Payment

1. The total amount the State is required to pay the Utility Owner is limited to the amount shown in Article V.A.2.
2. If the Utility Owner deems it necessary to perform additional work not covered by this Agreement, or anticipates costs exceeding the amount in Article V.A.2.,

then the Utility Owner must promptly notify the Utilities Engineer, in writing, of the nature and cause of the additional work or costs prior to performing or incurring them. Notification must include the amount of additional State funds requested and reason(s) supporting the request. The Utilities Engineer may approve the request subject to the availability and encumbrance of funds. If the Utility Owner performs additional work for which the State has not previously encumbered funds, the State is not obligated to pay for that additional work.

3. If the amount the Utility Owner requests under Article V.C.2. does not exceed 10 percent of the amount in Article V.A.2., the State may authorize payment of that pre-approved additional amount without amending this Agreement. The Utility Owner must receive notification from the State that the State has approved the additional work and encumbered the additional funds before beginning the additional work, or that work will be ineligible for reimbursement.
4. If the amount the Utility Owner requests exceeds 10 percent of the amount shown in Article V.A.2., this Agreement must be amended to reflect the new cost before the State will be responsible for paying that additional cost.

VI. Audits

- A. The Utility Owner's costs to relocate its Facilities according to this Agreement and the costs for any additions or alterations to these Facilities are subject to the State and federal government's examination and audit. Pursuant to Minnesota Statutes, section 16C.05, subdivision 5, the Utility Owner's accounting books, records, documents, procedures, and practices that are relevant to this Agreement are subject to Legislative or State Audit for six years after this Agreement expires.
- B. The Utility Owner must respond to requests for audit information to support claimed costs no later than 60 days after receiving the request or the State will cite all costs in question. If the Utility Owner does not respond during this 60-day period, the State will consider the audit citations accepted and will make payment accordingly.

VII. Indemnification/Insurance

- A. The Utility Owner will defend (at its own expense and to the extent Minnesota's Attorney General allows), indemnify, save, and hold the State and all of its agents and employees harmless of and from all claims, demands, actions, or causes of action. This indemnity obligation extends to any attorney's fees the State incurs due to this Agreement and the Utility Owner's performance or nonperformance under it.
- B. The Utility Owner does not waive any defense or immunity of third parties. The Utility Owner, in defending any action on behalf of the State, will be entitled to assert every

defense or immunity that the State could assert in its own behalf.

- C. The Utility Owner certifies that its workers' compensation insurance coverage complies with Minnesota Statutes, section 176.181, subdivision 2. The Utility Owner's employees and agents are not considered State employees. The State is not responsible for any claims asserted by the Utility Owner's employees, agents, subcontractors, or any third parties under the Minnesota Workers' Compensation Act.

VIII. Nondiscrimination

- A. The Utility Owner will comply with the United States Department of Transportation's nondiscrimination regulations. These regulations are in the current version of the Code of Federal Regulations, title 49, part 21. The Utility Owner must incorporate these regulations by reference in all contracts.
- B. Minnesota Statutes, section 181.59 and any applicable local ordinances pertaining to civil rights and nondiscrimination are considered part of this Agreement.

IX. Buy America Requirements

- A. All utility work must comply with the "Buy America" provisions in 23 U.S.C. 313 and 23 CFR 635.410. If the Utility Owner uses steel or iron as part of its work, and the cost of that steel or iron is more than 0.1 percent of the total relocation cost or \$2500 (whichever is greater), it must use steel or iron melted or manufactured in the United States. Materials that have been removed from the United States for any process (e.g., change of chemical content, shape, size, or finish) are not considered domestic materials.
- B. If the Utility Owner wishes to use foreign steel or iron, and the cost of that steel or iron exceeds the limits above, it must submit the "Stipulation for Use of Foreign Steel" to the Utilities Engineer and receive approval.
- C. Upon completing its work, the Utility Owner must sign and submit the State's Certificate of Compliance, which states that all iron and steel items are domestic. If any of the iron or steel items are foreign, the certification must include the waiver it received. The State will not process any invoices that do not include the signed Certificate of Compliance.

X. Governing Terms

- A. *Data Practices:* All parties must comply with the Minnesota Government Data Practices Act (Minnesota Statutes, chapter 13) as it applies to any data that a party to this Agreement receives, collects, stores, or disseminates under it. The Act provides

civil liability for failure to comply with its requirements.

- B. *Applicable Law:* Minnesota law governs the validity, interpretation, and enforcement of this Agreement. Venue for all legal proceedings arising out of this Agreement, or its breach, must be in Ramsey County, Minnesota.
- C. *Waiver:* If the State fails to enforce any provision of this Agreement, that failure does not waive the provision or the State's right to subsequently enforce it.
- D. *Merger:* This Agreement contains all negotiations and agreements between the State and the Utility Owner. No prior understanding regarding this Agreement, whether written or oral, may be used to bind either party.
- E. *Assignment:* The Utility Owner may neither assign nor transfer any rights or obligations under this Agreement without the State's consent and a fully executed assignment agreement. To be valid, the assignment agreement must be signed and approved by the same parties who signed and approved this Agreement, or their successors in office.
- F. *Amendments:* Any amendment to this Agreement must be in writing. An amendment will not be effective until the same parties who signed and approved this Agreement, or their successors in office, sign and approve the amendment.
- G. *Incorporation of Exhibits:* All exhibits attached to this Agreement are incorporated into this Agreement.

The remainder of this page was left blank intentionally.

CITY OF DULUTH

The undersigned certify that they have lawfully executed this contract on behalf of the Governmental Unit as required by applicable charter provisions, resolutions, or ordinances.

By: _____ Mayor

Date: _____

Attested: _____ City Clerk

Date: _____

Approved as to form:

By: _____ City Attorney

Date: _____

Countersigned: _____
City Auditor

Date: _____

**STATE OF MINNESOTA
DEPARTMENT OF TRANSPORTATION**

State Encumbrance Verification

Individual certifies that funds have been encumbered as required by Minnesota Statutes §§ 16A.15 and 16C.05.

By: _____

Date: _____

Contract Number: _____

Order Number: _____

Department of Transportation

Recommended for Approval:

Approved:

By: _____
District Engineer

By: _____
Director, Office of Land Management

Date: _____

Date: _____

Office of Contract Management

Approved as to Form and Execution:

By: _____

Date: _____

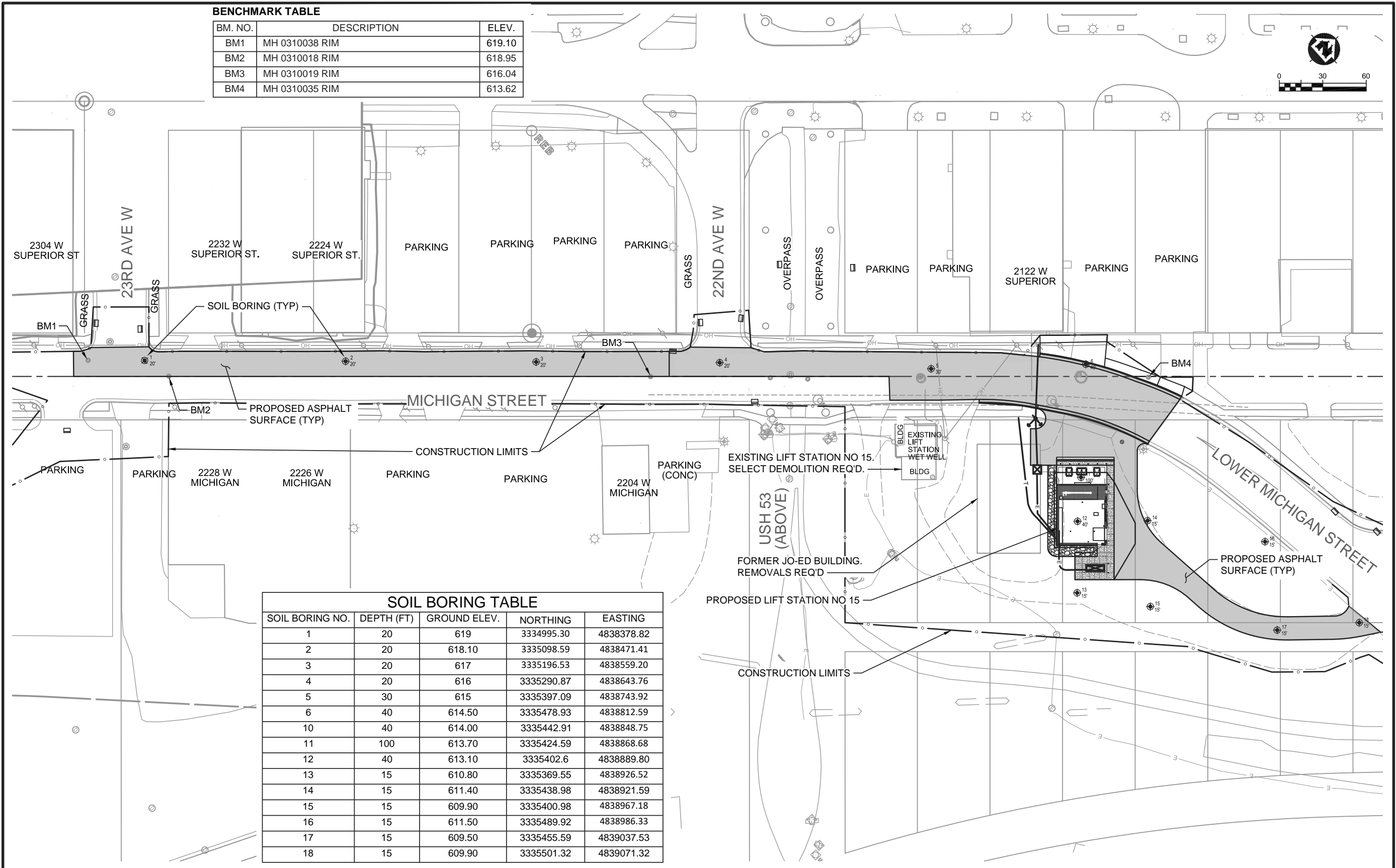
Department of Administration

By: _____

Date: _____

BENCHMARK TABLE

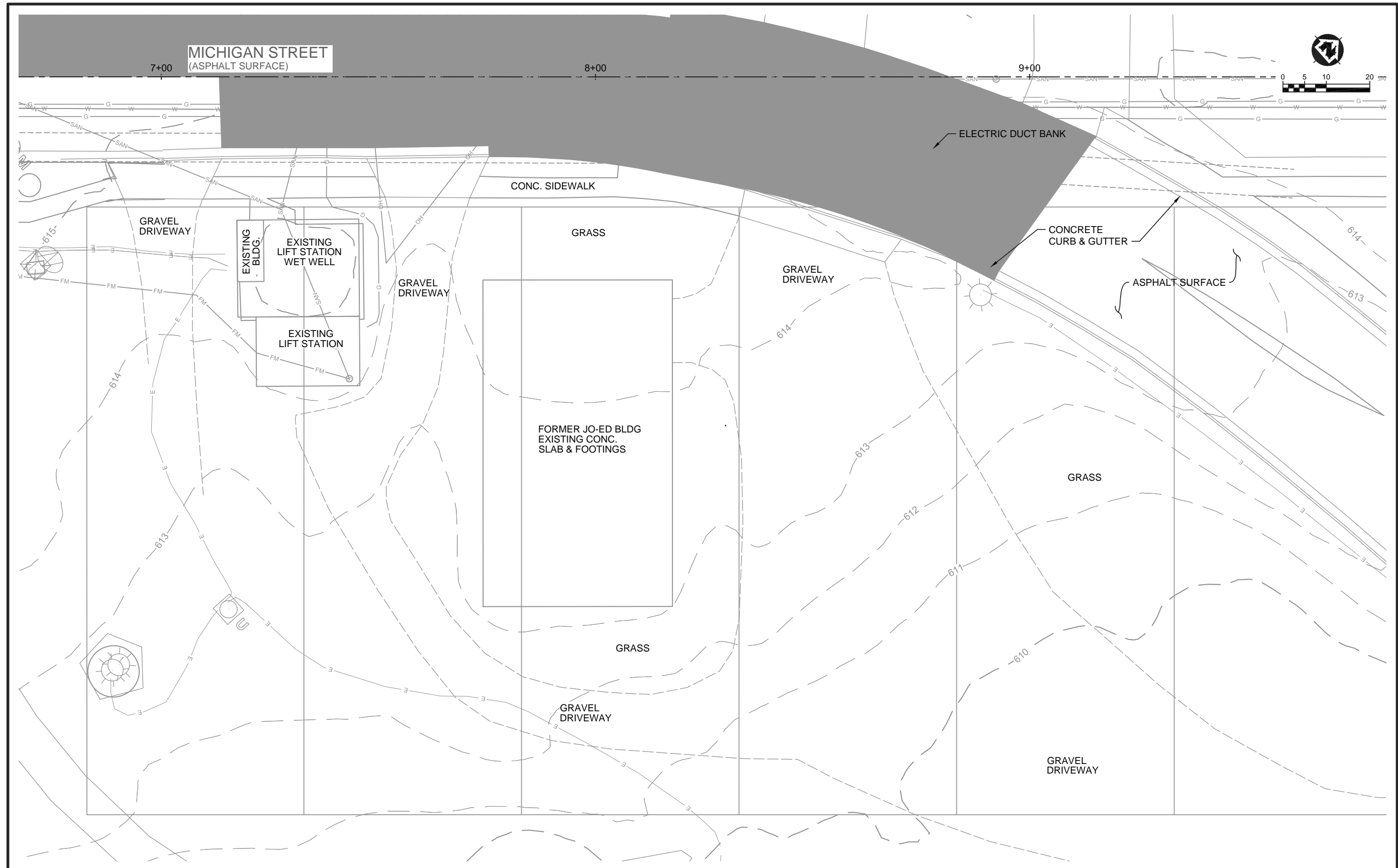
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BM2	MH 0310018 RIM	618.95
BM3	MH 0310019 RIM	616.04
BM4	MH 0310035 RIM	613.62



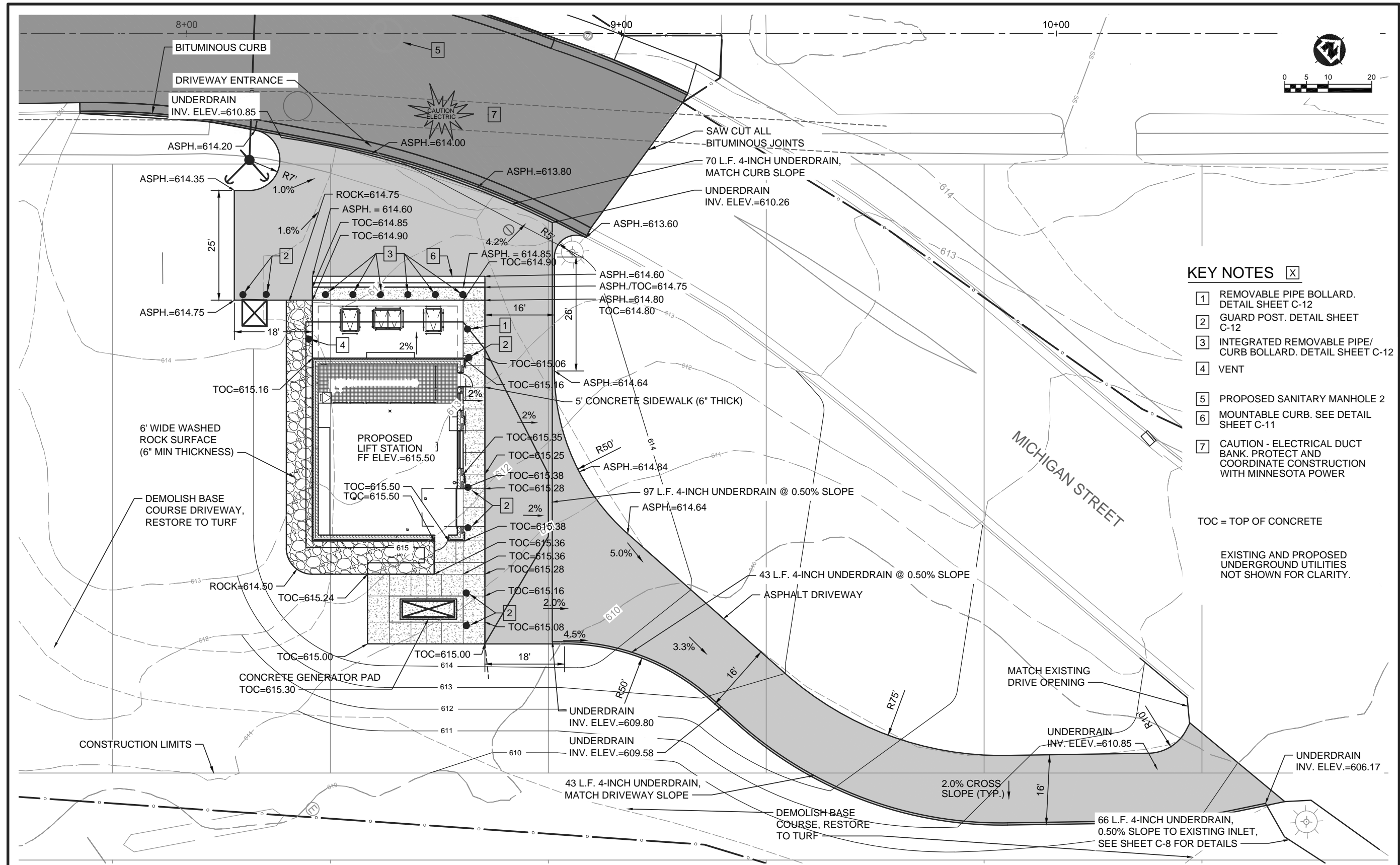
SOIL BORING TABLE

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2	20	618.10	3335098.59	4838471.41
3	20	617	3335196.53	4838559.20
4	20	616	3335290.87	4838643.76
5	30	615	3335397.09	4838743.92
6	40	614.50	3335478.93	4838812.59
10	40	614.00	3335442.91	4838848.75
11	100	613.70	3335424.59	4838868.68
12	40	613.10	3335402.6	4838889.80
13	15	610.80	3335369.55	4838926.52
14	15	611.40	3335438.98	4838921.59
15	15	609.90	3335400.98	4838967.18
16	15	611.50	3335489.92	4838986.33
17	15	609.50	3335455.59	4839037.53
18	15	609.90	3335501.32	4839071.32

PROJECT NO.: 00616135	SCALE: AS SHOWN	NO.:	DATE:	REVISION:	BY:	DATE:	LICENSE NO.:	<p>MSA ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 332 W Superior Street, Duluth MN 55802 (218) 722-3915 www.msa-ps.com <small>© MSA Professional Services, Inc.</small></p>	<p>LIFT STATION 15 RELOCATION CITY OF DULUTH, MINNESOTA 2114 W MICHIGAN STREET</p>	<p>OVERALL SITE PLAN</p>	FILE NO.: 00616135
PROJECT DATE: 1-10-2020	DRAWN BY:	CHECKED BY: SCR									SHEET: C-1
I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. SCOTT R CHILSON											



PROJECT NO.: 00616135	SCALE: AS SHOWN	NO.	DATE	REVISION	BY	DATE	LICENSE NO.	ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 332 W Superior Street, Duluth MN 55802 (218) 722-3915 www.msa-ps.com © MSA Professional Services, Inc.	LIFT STATION 15 RELOCATION CITY OF DULUTH, MINNESOTA 2114 W MICHIGAN STREET	EXISTING SITE PLAN	FILE NO.: 00616135
PROJECT DATE: 1-10-2020	DRAWN BY:				1/10/2020	44287	SCOTT R. CHILSON				
F.B.:	CHECKED BY: SCR										
I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.											
PLOT DATE: 1/14/20 P:\610e\616\00616135\CADD\Construction Drawings\2-Site Civil\00616135 Site Plan.dwg										SHEET C-2	



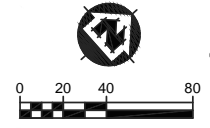
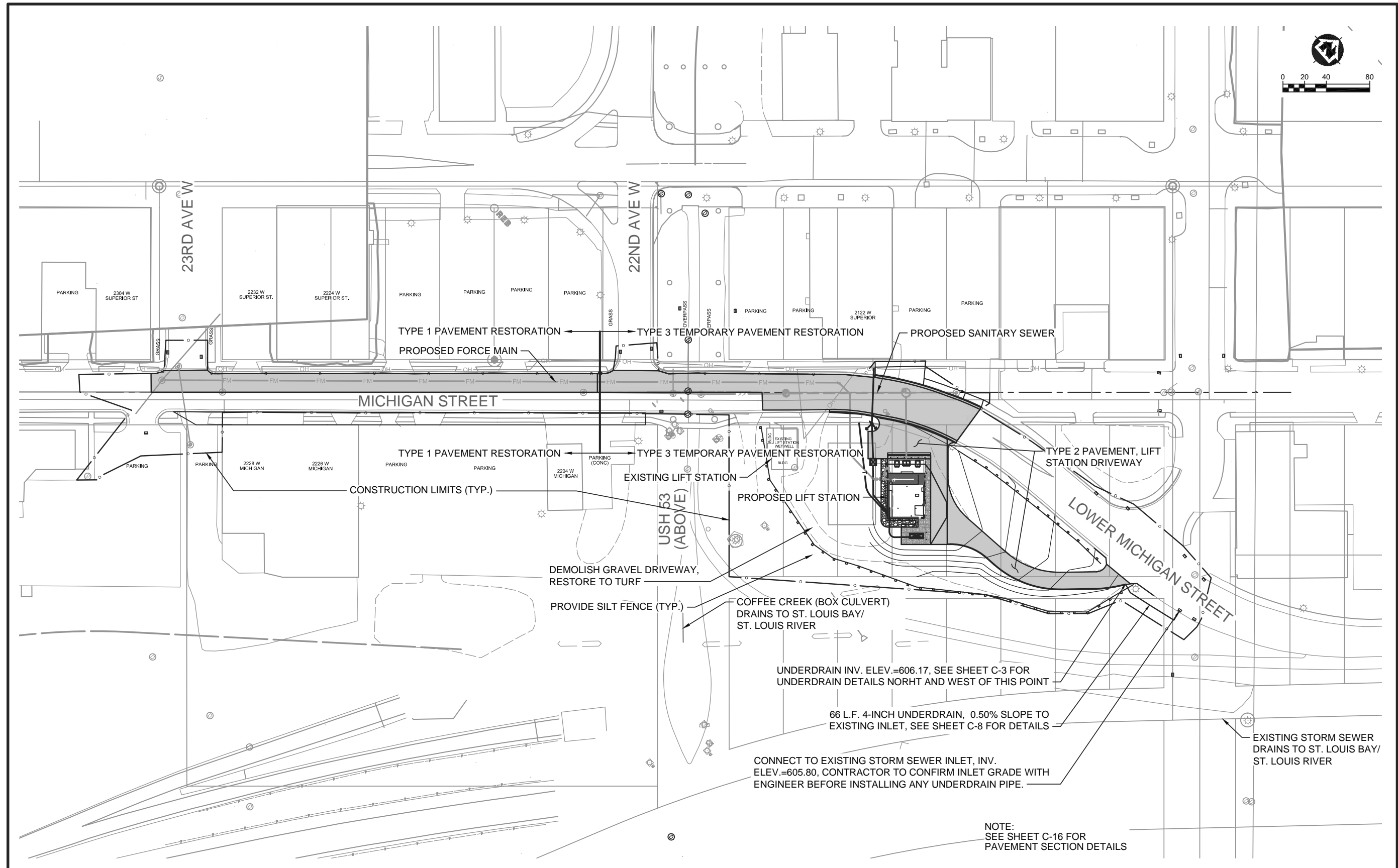
KEY NOTES [X]

- 1 REMOVABLE PIPE BOLLARD. DETAIL SHEET C-12
- 2 GUARD POST. DETAIL SHEET C-12
- 3 INTEGRATED REMOVABLE PIPE/ CURB BOLLARD. DETAIL SHEET C-12
- 4 VENT
- 5 PROPOSED SANITARY MANHOLE 2
- 6 MOUNTABLE CURB. SEE DETAIL SHEET C-11
- 7 CAUTION - ELECTRICAL DUCT BANK. PROTECT AND COORDINATE CONSTRUCTION WITH MINNESOTA POWER

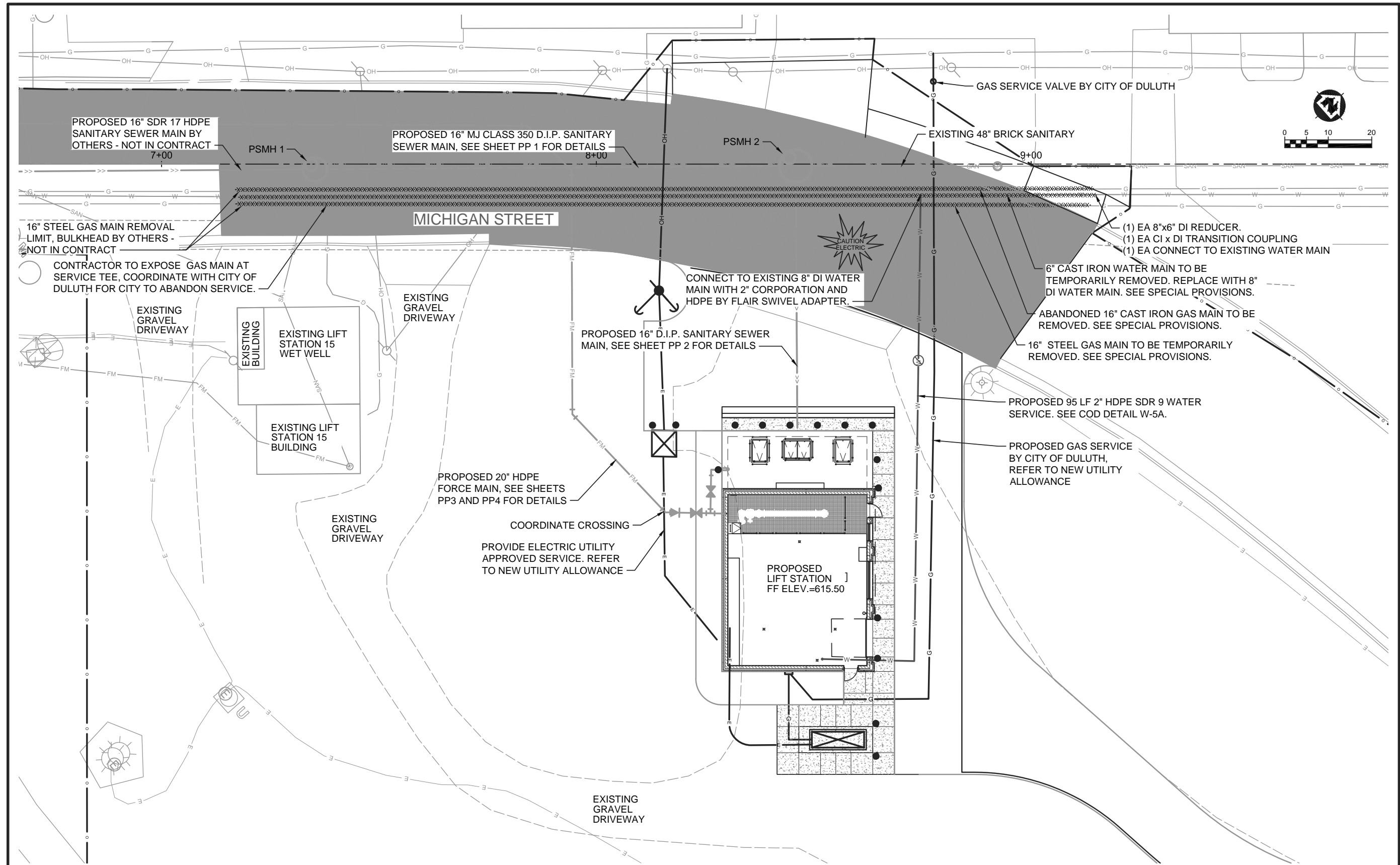
TOC = TOP OF CONCRETE

EXISTING AND PROPOSED UNDERGROUND UTILITIES NOT SHOWN FOR CLARITY.

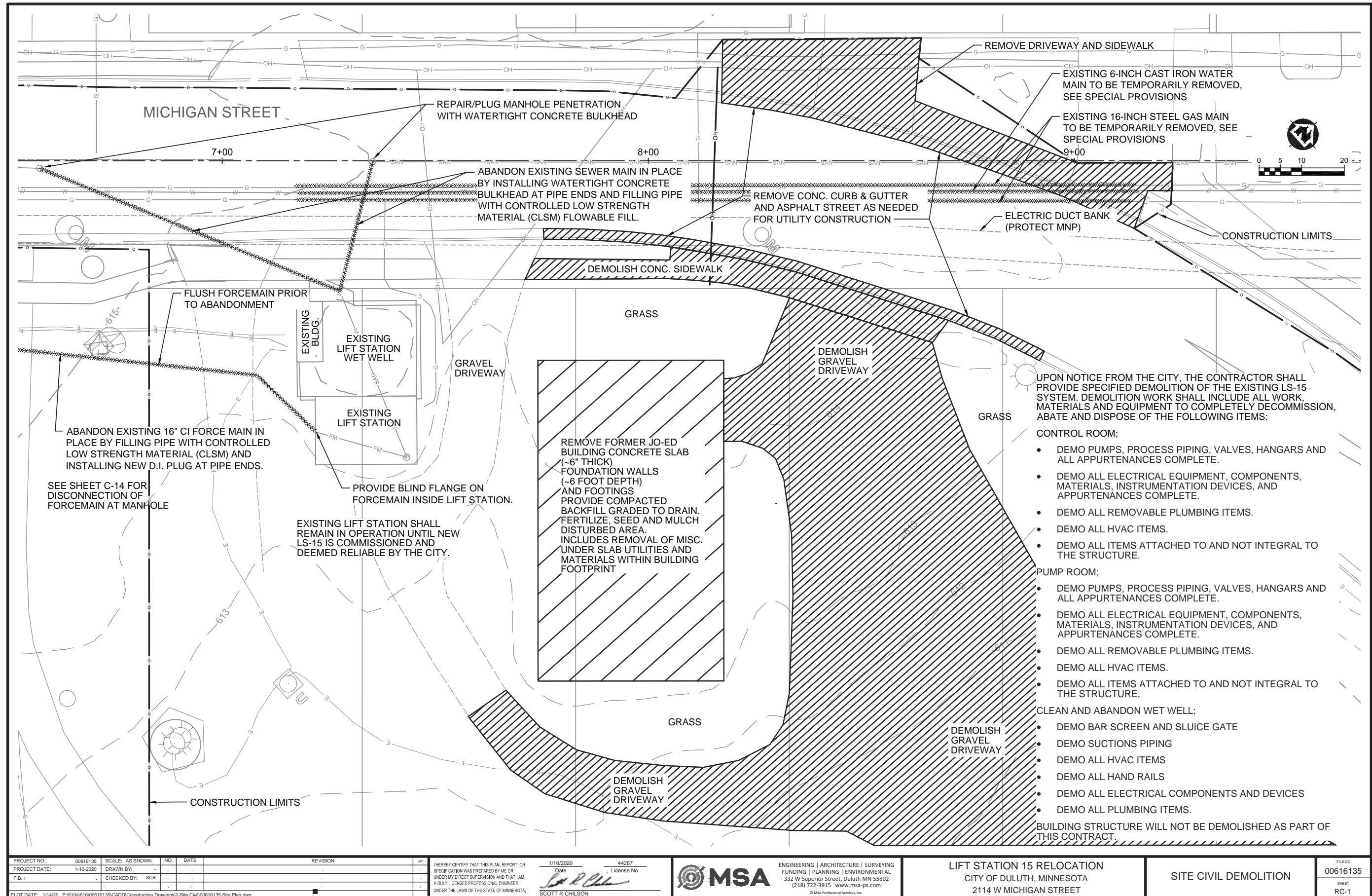
PROJECT NO.: 00616135	SCALE: AS SHOWN	NO.:	DATE:	REVISION:	BY:	1/10/2020	44287	<p>ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 332 W Superior Street, Duluth MN 55802 (218) 722-3915 www.msa-ps.com © MSA Professional Services, Inc.</p>	<p>LIFT STATION 15 RELOCATION CITY OF DULUTH, MINNESOTA 2114 W MICHIGAN STREET</p>	<p>PROPOSED SITE GRADING PLAN</p>	FILE NO.: 00616135
PROJECT DATE: 1-10-2020	DRAWN BY:				1/10/2020	License No.	<p>SCOTT R CHILSON</p>				<p>SHEET C-3</p>
F.B.:	CHECKED BY: SCR										
<p>PLOT DATE: 1/14/20 P:\610\616100616135\CADD\Construction Drawings\2-Site Civil\00616135 Site Plan.dwg</p>											



PROJECT NO.: 00616135	SCALE: AS SHOWN	NO.	DATE	REVISION	BY	1/10/2020	44287
PROJECT DATE: 1-10-2020	DRAWN BY:					Date	License No.
F.B.:	CHECKED BY: SCR					<i>Scott R. Chilson</i>	
PLOT DATE: 1/14/20 P:\610e\616\00616135\CADD\Construction Drawings\2-Site Civil\00616135 Pavement Restoration Plan.dwg						I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA. SCOTT R. CHILSON	
MSA ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 332 W Superior Street, Duluth MN 55802 (218) 722-3915 www.msa-ps.com <small>© MSA Professional Services, Inc.</small>				LIFT STATION 15 RELOCATION CITY OF DULUTH, MINNESOTA 2114 W MICHIGAN STREET		PAVEMENT RESTORATION PLAN SHEET C-8	



PROJECT NO.: 00616135	SCALE: AS SHOWN	NO.	DATE	REVISION	BY	DATE	44287	ENGINEERING ARCHITECTURE SURVEYING FUNDING PLANNING ENVIRONMENTAL 332 W Superior Street, Duluth MN 55802 (218) 722-3915 www.msa-ps.com © MSA Professional Services, Inc.	LIFT STATION 15 RELOCATION CITY OF DULUTH, MINNESOTA 2114 W MICHIGAN STREET	YARD PIPING PLAN	FILE NO. 00616135
PROJECT DATE: 1-10-2020	DRAWN BY:				1/10/2020	License No.	SHEET C-9				
F.B.:	CHECKED BY: SCR										
PLOT DATE: 1/15/20	P:\610e\616\00616135\CADD\Construction Drawings\2-Site Civil\00616135 Site Plan.dwg										



PROJECT NO.	SCALE	NO.	DATE	REVISION
00616135	AS SHOWN	-	-	-
PROJECT DATE:	DRAWN BY:	CHECKED BY:	DATE:	
1-10-2020	SCR	SCR	1/10/2020	
F.B.:				
PLOT DATE:	P:\610e\616\00616135\CADD\Construction Drawings\2-Site Civil\00616135 Site Plan.dwg			

I HEREBY CERTIFY THAT THIS PLAN, REPORT, OR SPECIFICATION WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

1/10/2020 Date
 44287 License No.
 SCOTT R CHILSON

MSA ENGINEERING | ARCHITECTURE | SURVEYING
 FUNDING | PLANNING | ENVIRONMENTAL
 332 W Superior Street, Duluth MN 55802
 (218) 722-3915 www.msa-ps.com
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LIFT STATION 15 RELOCATION
 CITY OF DULUTH, MINNESOTA
 2114 W MICHIGAN STREET


SITE CIVIL DEMOLITION

FILE NO. 00616135
 SHEET RC-1



Engineering

Room 240
411 West First Street
Duluth, Minnesota 55802

 218-730-5200

February 25, 2020

Carroll Aasen
MN/DOT Office of Land Management
395 John Ireland Blvd. – MS 678
St. Paul, MN 55155

Re: S.P. 6982-322 (T.H.35) – Twin Ports Interchange
Lift Station 15 Relocation / DOT Agreement # 1036438
Second Revised Request –Agreement to Construct

Dear Mr. Aasen:

In our ongoing coordination with the local MN/DOT (District 1) project staff, it has been determined that the City of Duluth's sanitary Lift Station (#15) located in 2114 W Michigan Street needs to be relocated to accommodate the work on I-35. The work includes the construction of a new lift station and sewage conveyance pipes.

We request a formal agreement for reimbursement of not only the construction costs, but also reimbursement of the costs of inspection and construction contract administration.

In summary, the anticipated costs are as follows:

- 1) Construct New Lift Station 15. This work includes the construction of the new lift station structure and equipment, influent gravity pipes, and effluent force main pipe. The City intends to enter into a contract with Rice Lake Construction Group who was selected by qualified low bid process to perform this work. The estimated construction cost of the Lift Station 15 replacement is \$4,618,600.00 based on "low bids" received February 12, 2020.
- 2) Construction Inspection and Administration. The City intends to hire MSA engineering consultants to provide construction inspection and administration services. The estimated cost of engineering services for construction inspection and administration is \$404,185.00. (MSA revised cost proposal dated 02/25/2020).



Engineering

218-730-5200

Room 240
411 West First Street
Duluth, Minnesota 55802

- 3) Construction Administration Quality Assurance. The City intends to provide consultant management and construction quality assurance services with "in-house" staff. The estimated cost of City staff time is \$62,306.00.

The total value of this proposed utility construction agreement is \$5,085,091.00.

Please contact me at 218-730-5104 or by email at tpfeffer@duluthmn.gov to answer your questions.

Sincerely,

A handwritten signature in black ink that reads "Thomas M. Pfeffer".

Tom Pfeffer
Senior Engineer
MN licensed PE

Cc: Eric Shaffer, Chief Engineer of Utilities
Aaron Soderlund, Project Engineer
City Project No. 1803 File

**COST ESTIMATE
 PROFESSIONAL ENGINEERING SERVICES**

CITY OF DULUTH - LIFT STATION 15
MnDOT Agreement No. xxxxxxxxx
 Twin Ports Interchange Project in Duluth, MN (S.P. 6982-322)

January 27, 2020

BILLING RATE	143	130	117	104	78	73	60	130	HRS
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CONSTRUCTION SERVICES

LABOR COSTS - CONSTRUCTION SERVICES

JOB TITLE	MGR1 /								TOTAL HRS	TOTAL COST
	MGR2	ENG3	ENG2	ENG1	TECH	CAD TECH	CLR	SURV		
Construction of Lift Station 15										
PreConstruction Coordination			20				2		22	\$ 2,460
Consultant Contract Admin (16 mths)			32						32	\$ 3,744
Weekly Construction QA (52 weeks)			416					26	442	\$ 50,227
Final Contract Closeout			40				20		60	\$ 5,876
									0	\$ -
									0	\$ -
									0	\$ -
									0	\$ -
									0	\$ -
									0	\$ -
									0	\$ -
									0	\$ -
									0	\$ -
TOTAL	0	0	508	0	0	0	48	0	556	\$ 62,306

DIRECT COSTS - CONSTRUCTION SERVICES

	RATE	UNIT	# UNITS	TOTAL
Mileage	\$0.575	per mile	0	\$ -
Lodging	\$0	per day	0	\$ -
Meals	\$0	per day	0	\$ -
Computer Time	\$0	per hour	0	\$ -
CAD Computer	\$0	per hour	0	\$ -
Printing	\$0.00	per print	0	\$ -
Postage/fax	\$0	per project	0	\$ -
Staking Direct Costs	\$0	per day	0	\$ -
Other Direct Costs	\$0	per project	0	\$ -
				\$ -
TOTAL CONSTRUCTION DIRECT COSTS				\$ -

CONSTRUCTION SUMMARY		
LABOR	\$	62,306
DIRECT	\$	-
TOTAL	\$	62,306

EXHIBIT TOTAL
\$ 62,306



February 25, 2020

Mr. Aaron Soderlund, P.E.
City of Duluth
411 West First Street, RM 211
Duluth, MN 55802

Re: Proposal for Construction related Engineering Services for
Construction of Lift Station No. 15 Relocation -MNDOT Agreement No. 1036438

Dear Mr. Soderlund:

MSA Professional Services, Inc. (MSA) is pleased to submit this proposal for construction related services for the proposed relocation of Lift Station 15. The MSA team will provide services limited to technical support during the construction phase.

SCOPED A/E SERVICES TO BE PROVIDED BY MSA:

- Attend a pre-construction meeting;
- Review Shop Drawings: A single review of each submitted shop drawing is included within this scope of services;
- Review Operation and Maintenance Submittals;
- Coordinate/respond to contractor questions;
- Provide up to 40 hours of assistance for the contractor with construction staking and layout in 2020. Provide 32 hours of as-built surveying in 2021. Staking will be placed once as requested by contractor;
- Provide up to 996 hours of resident project representative services in 2020. Provide up to 384 hours of resident project representative services in 2021. RPR service are further described in the attached;
- Provide review of up to eight (8) contractor pay applications in 2020, and up to four (4) in 2021;
- Respond to up to twelve (12) RFI/CB in 2020, and up to two (2) in 2021;
- Prepare and implement up to four (4) Change Orders in 2020, and up to one (1) in 2021;
- Attend up to Twelve (12) progress meetings in 2020, and up to two (2) in 2021;
- Provide up to One Hundred and Sixty (160) hours of soil removal oversight in 2020;
- Provide up to sixty-four (64) hours to develop Environmental Reports and up to four (4) hours coordinating with MPCA;
- Witness and document equipment start up and performance tests required to demonstrate compliance with contract documents;

1230 South Boulevard
Baraboo, WI 53913

P (608) 356-2771
TF (800) 362-4505
F (608) 356-2770

www.msa-ps.com

Page 2

Proposal for CRS for Lift Station No.15 Relocation

Mr. Aaron Soderlund, P.E.

February 25, 2020

- Provide coordination of geotechnical sub-consultant;
 - Provide up to \$2,500 of quality assurance geotechnical testing and review of construction progress;
 - Provide up to \$2,320 of geotechnical professional services associated with the completion of the project;
- Conduct final walk-through and develop a punch list;
- Conduct site visit to confirm completion of the punch list;
- Complete an 11th month warranty review. To be scheduled approximately 11 months after the substantial completion of the project;
- Provide up to 24 hours of operator training and assistance;
- Develop as-built drawings from contractor record drawings depicting the nature of the construction modifications;
- Develop O&M per city standards;
- Provide overall project management

A/E DELIVERABLES:

- Punch list;
- Email confirmation that punch list is complete;
- Record drawings conforming to Duluth standards;
- O&M conforming to Duluth standards

Attached is a schedule of estimated time and expenses for the proposed services described above assumed to be provided in 2020 and 2021. The total estimated fee is \$404,185 time and materials (T&M) for the construction services. Our proposal to proceed is based on time and material during the construction phase of the project.

We look forward to working with you to construct the relocation of Lift Station No.15. If you have any questions about our proposal, please call me at (608) 355-8868 or my cell phone at (608) 963-6527.

Sincerely,
MSA Professional Services, Inc.



Scott R. Chilson, P.E.
Senior Project Engineer

SRC:mk

Lift Station No. 15 Relocation 2020-2021 Construction Services - City Project 1803 (RFP Number: 18-19AA)										
Phase		2020 TOTAL HOURS	2021 TOTAL HOURS	2020 LABOR COST	2021 LABOR COST	2020 DIRECT EXPENSE	2021 DIRECT EXPENSE	SUB-CONSULTANTS	Notes	TOTAL COST
100	Construction Administration	767	141	\$ 102,107	\$ 24,560	\$ 1,053	\$ 2,219	\$ -		\$ 129,939
	Preconstruction Conference Meeting	10	0	\$ 1,670	\$ -	\$ 10	\$ -			\$ 1,680
	Project Administration	72	24	\$ 12,640	\$ 4,800	\$ 8	\$ 2			\$ 17,450
	Correspondence	50	24	\$ 8,540	\$ 4,800	\$ 8	\$ 2			\$ 13,350
	Shop Drawing and Submittal Review	304	0	\$ 37,004	\$ -	\$ 1,000	\$ -			\$ 38,004
	O&M Submittal Review	132	0	\$ 15,922	\$ -	\$ 5	\$ 6			\$ 15,933
	Pay Requests	50	20	\$ 6,370	\$ 2,816	\$ 6	\$ 4			\$ 9,196
	RFI's	84	8	\$ 11,164	\$ 1,184	\$ 8	\$ 2			\$ 12,358
	Change Orders	65	7	\$ 8,797	\$ 1,104	\$ 8	\$ 2			\$ 9,911
	Project Closeouts	0	58	\$ -	\$ 9,856	\$ -	\$ 2,200			\$ 12,056
200	Construction Inspection	1240	488	\$ 144,868	\$ 58,240	\$ 11,385	\$ 5,000	\$ -		\$ 219,493
	Staking	80	64	\$ 8,800	\$ 7,584	\$ 4,052	\$ 4,153			\$ 24,589
	Inspection	996	384	\$ 107,204	\$ 43,008	\$ 1,936	\$ 843			\$ 152,991
	Progress Meetings	98	20	\$ 17,004	\$ 3,648	\$ 25	\$ 4			\$ 20,680
	Startup Services	50	20	\$ 9,500	\$ 4,000	\$ 553	\$ -			\$ 14,053
	Coordination of Geotect Sub	16	0	\$ 2,360	\$ -	\$ 4,820	\$ -		*	\$ 7,180
300	Operational Phase	0	188	\$ -	\$ 25,272	\$ 13	\$ 374	\$ -		\$ 25,659
	Operator Training	0	24	\$ -	\$ 3,392	\$ 8	\$ 31			\$ 3,431
	Operation and Maintenance Manual	0	32	\$ -	\$ 4,992	\$ 5	\$ 17			\$ 5,014
	Record Drawings	0	116	\$ -	\$ 14,392	\$ -	\$ 316			\$ 14,708
	11 Month Warranty Review	0	16	\$ -	\$ 2,496	\$ -	\$ 11			\$ 2,507
	Expenses and Consultants	0	0	\$ -	\$ -	\$ -	\$ -			\$ -
400	Envornmenal Services Phase	160	68	\$ 18,000	\$ 8,200	\$ 55	\$ 2,840	\$ -		\$ 29,094
	Soil Removal Oversight	160	0	\$ 18,000	\$ -	\$ 55	\$ -			\$ 18,055
	Reporting	0	64	\$ -	\$ 7,560	\$ -	\$ 265			\$ 7,825
	MPCA Fee	0	4	\$ -	\$ 640	\$ -	\$ 2,575			\$ 3,215
900	Additional Services	0	0	\$ -	\$ -	\$ -	\$ -	\$ -		\$ -
	TBD	0	0	\$ -	\$ -	\$ -	\$ -			\$ -
	GRAND TOTAL	2167	885	\$ 264,975	\$ 116,272	\$ 12,505	\$ 10,432	\$ -		\$ 404,185

Lift Station No. 15 Relocation 2020 Construction Services - City Project 1803 (RFP Number: 18-19AA)																					
Phase		Project Manager / Engineer Chilson	Senior Technician Lockett	Survey Charlie	Lead Enviro. Engineer Anderson	Lead Enviro. Scientist II Davidson	Enviro. Scientist I Kingsfus	Program Manager Miller	Lead Structural Engineer Schinkoeth	Lead Arch. Szymanski	Arch. Project Engineer Vega Phippe	Plumbing and HVAC Engineer Wastlund	Electrical Project Engineer Lutz	Process Mech./Elect. Designer/ Technician Goetz	Admin. Seczko	TOTAL HOURS	LABOR COST	DIRECT EXPENSE	SUB-CONSULTANTS	Notes	TOTAL COST
Phase No.	Task / Deliverable	2020 Hourly Rates	\$190.00	\$105.00	\$115.00	\$150.00	\$125.00	\$100.00	\$228.00	\$121.00	\$170.00	\$110.00	\$140.00	\$100.00	\$95.00	\$75.00					
Task No.	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours					
100	Construction Administration		220	86	0	22	16	32	4	40	40	62	40	54	54	97	767	\$ 102,107	\$ 1,053	\$ -	\$ 103,160
	Preconstruction Conference Meeting		8													2	10	\$ 1,670	\$ 10		\$ 1,680
	Project Administration		40			12			4	8	8						72	\$ 12,640	\$ 8		\$ 12,648
	Correspondence		40								2					8	50	\$ 8,540	\$ 8		\$ 8,548
	Shop Drawing and Submittal Review		48	32		4	4	8		24	16	40	24	32		40	304	\$ 37,004	\$ 1,000		\$ 38,004
	O&M Submittal Review		24	16						2	8	16	10	16		24	132	\$ 15,922	\$ 5		\$ 15,927
	Pay Requests		16	16			2	8								8	50	\$ 6,370	\$ 6		\$ 6,376
	RFI's		24	12		4	2	8		4	4	4	4	4		10	84	\$ 11,164	\$ 8		\$ 11,172
	Change Orders		20	10		2	8	8		2	2	2	2	2		5	65	\$ 8,797	\$ 8		\$ 8,805
	Project Closeouts																0	\$ -	\$ -		\$ -
200	Construction Inspection		154	1020	40	6	0	0	0	8	12	0	0	0	0	0	1240	\$ 144,868	\$ 11,385	\$ -	\$ 156,253
	Staking			40	40												80	\$ 8,800	\$ 4,052		\$ 12,852
	Inspection		24	960						4	8						996	\$ 107,204	\$ 1,936		\$ 109,140
	Progress Meetings		72	12		6				4	4						98	\$ 17,004	\$ 25		\$ 17,029
	Startup Services		50														50	\$ 9,500	\$ 553		\$ 10,053
	Coordination of Geotect Sub		8	8													16	\$ 2,360	\$ 4,820	*	\$ 7,180
300	Operational Phase		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$ 13	\$ -	\$ 13
	Operator Training																0	\$ -	\$ 8		\$ 8
	Operation and Maintenance Manual																0	\$ -	\$ 5		\$ 5
	Record Drawings																0	\$ -	\$ -		\$ -
	11 Month Warranty Review																0	\$ -	\$ -		\$ -
	Expenses and Consultants																0	\$ -	\$ -		\$ -
400	Environmental Services Phase		0	0	0	0	80	80	0	0	0	0	0	0	0	0	160	\$ 18,000	\$ 55	\$ -	\$ 18,055
	Soil Removal Oversight						80	80									160	\$ 18,000	\$ 55		\$ 18,055
	Reporting																0	\$ -	\$ -		\$ -
	MPCA Fee																0	\$ -	\$ -		\$ -
900	Additional Services		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -
	TBD																0	\$ -	\$ -		\$ -
	GRAND TOTAL		374	1106	40	28	96	112	4	48	52	62	40	54	54	97	2167	\$ 264,975	\$ 12,505	\$ -	\$ 277,480

Lift Station No. 15 Relocation 2020 Construction Services - City Project 1803 (RFP Number: 18-19AA)																
Phase		Project Manager / Engineer Chilson	Senior Technician Lockett	Survey Charlie	Lead Enviro. Engineer Anderson	Lead Enviro. Scientist II Davidson	Enviro. Scientist I Kingsfus	Program Manager Miller	Lead Structural Engineer Schinkoeth	Lead Arch. Szymanski	Arch. Project Engineer Vega Phippe	Plumbing and HVAC Engineer Wastlund	Electrical Project Engineer Lutz	Process Mech./Elect. Designer/ Technician Goetz	Admin. Seczko	
2020 Hourly Rates		\$190.00	\$105.00	\$115.00	\$150.00	\$125.00	\$100.00	\$228.00	\$121.00	\$170.00	\$110.00	\$140.00	\$100.00	\$95.00	\$75.00	
Phase No.	Task / Deliverable	Task No.	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours
100	Construction Administration		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Preconstruction Conference Meeting		8 hours													2 hours
	Project Administration		Average of 1 hour per week			1 hour per week during 3 months when mitigation work is active			4 hours	8 hours	8 hours					
	Correspondence		Average of 1 hour per week													
	Shop Drawing and Submittal Review		Average of 6 hours per week during 2 months of SDR's	32 hours		4 hours	4 hours	8 hours		24 hours	16 hours	40 hours	24 hours	32 hours	32 hours	40 hours
	O&M Submittal Reviews		Average of 3 hours per week during 2 months of SDR's	16 hours						2 hours	8 hours	16 hours	10 hours	8 hours	16 hours	24 hours
	Pay Requests		2 hours for 8 PR's	2 hours for 8 PR's			2 hours	8 hours								1 hour for 8 PR's
	RFI's		2 hours for 12 RFI's	1 hours for 12 RFI's		2 hours for 2 RFI's	2 hours	8 hours		2 hours for 2 RFI's	2 hours for 2 RFI's	2 hours for 2 RFI's	4 hours	2 hours for 2 RFI's	2 hours for 2 RFI's	1 hour for 10 RFI's
	Change Orders		4 hours for 5 CO's	2 hours for 5 CO's		2 hours for 1 CO's	8 hours	8 hours		2 hours for 1 CO's	2 hours for 1 CO's	2 hours for 1 CO's	2 hours	2 hours for 1 CO's	2 hours for 1 CO's	1 hour for 5 CO's
	Project Closeouts															
200	Construction Inspection		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Staking			(5) 8 hour days for Rod Man	(5) 8 hour days for Lic. Surveyor											
	Inspection		24 hours	Average of 24 hours per week for 40 weeks					4 hours	8 hours						
	Progress Meetings		12 meeting	12 meeting Included under Observation		1 meeting			1 meeting	1 meeting						
	Startup Services		5 day													
	Coordination of Geotect Sub		8 hours	8 hours												
300	Operational Phase		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Operator Training															
	Operation and Maintenance Manual															
	Record Drawings															
	11 Month Warrenty Review															
	Expenses and Consultants															
400	Envornmenal Services Phase		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Soil Removal Oversite					8 hours	80 hours	80 hours								
	Reporting															
	MPCA Fee															
900	Additional Services		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TBD															
	GRAND TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0	0

Lift Station No. 15 Relocation 2021 Construction Services - City Project 1803 (RFP Number: 18-19AA)																							
Phase		Project Manager / Engineer Chilson	Senior Technician Lockett	Survey Charlie	Lead Enviro. Engineer Anderson	Lead Enviro. Scientist II Davidson	Enviro. Scientist I Kingsfus	Program Manager Miller	Lead Structural Engineer Schinkoeth	Lead Arch. Szymanski	Arch. Project Engineer Vega Phippe	Plumbing and HVAC Engineer Wastlund	Electrical Project Engineer Lutz	Process Mech./Elect. Designer/ Technician Goetz	Admin. Seczko	TOTAL HOURS	LABOR COST	DIRECT EXPENSE	SUB-CONSULTANTS	Notes	TOTAL COST		
Phase No.	Task / Deliverable	Task No.	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours							
			2021 Hourly Rates	\$200.00	\$112.00	\$125.00	\$160.00	\$130.00	\$105.00	\$240.00	\$130.00	\$180.00	\$115.00	\$140.00	\$105.00	\$100.00	\$80.00						
100	Construction Administration		104	20	0	2	0	0	0	0	0	0	0	0	0	0	15	141	\$ 24,560	\$ 2,219	\$ -	\$ 26,779	
	Preconstruction Conference Meeting																	0	\$ -	\$ -		\$ -	
	Project Administration		24															24	\$ 4,800	\$ 2.20		\$ 4,802	
	Correspondence		24															24	\$ 4,800	\$ 2.20		\$ 4,802	
	Shop Drawing and Submittal Review																	0	\$ -	\$ -		\$ -	
	O&M Submittal Review																	0	\$ -	\$ 5.50		\$ 6	
	Pay Requests		8	8													4	20	\$ 2,816	\$ 4.40		\$ 2,820	
	RFI's		4	2														2	\$ 8	\$ 2.20		\$ 1,186	
	Change Orders		4	2														1	\$ 7	\$ 2.20		\$ 1,106	
	Project Closeouts		40	8		2												8	\$ 58	\$ 9,856	\$ 2,200.00		\$ 12,056
200	Construction Inspection		36	420	32	0	0	0	0	0	0	0	0	0	0	0	0	488	\$ 58,240	\$ 5,000	\$ -	\$ 63,240	
	Staking			32	32													64	\$ 7,584	\$ 4,153		\$ 11,737	
	Inspection			384														384	\$ 43,008	\$ 843		\$ 43,851	
	Progress Meetings		16	4														20	\$ 3,648	\$ 3.61		\$ 3,652	
	Startup Services		20															20	\$ 4,000	\$ -		\$ 4,000	
	Coordination of Geotect Sub																	0	\$ -	\$ -		\$ -	
300	Operational Phase		40	56	0	0	0	0	0	20	4	16	16	16	16	4	188	\$ 25,272	\$ 374	\$ -	\$ 25,646		
	Operator Training		8	16														24	\$ 3,392	\$ 31		\$ 3,423	
	Operation and Maintenance Manual		16	16														32	\$ 4,992	\$ 17		\$ 5,009	
	Record Drawings		8	16						20	4	16	16	16	16	4	116	\$ 14,392	\$ 316		\$ 14,708		
	11 Month Warranty Review		8	8														16	\$ 2,496	\$ 11		\$ 2,507	
	Expenses and Consultants																	0	\$ -	\$ -		\$ -	
400	Envornmenal Services Phase		0	0	0	12	16	40	0	0	0	0	0	0	0	0	0	68	\$ 8,200	\$ 2,840	\$ -	\$ 11,040	
	Soil Removal Oversight																		0	\$ -	\$ -		\$ -
	Reporting					8	16	40										64	\$ 7,560	\$ 265		\$ 7,825	
	MPCA Fee					4												4	\$ 640	\$ 2,575		\$ 3,215	
900	Additional Services		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$ -	\$ -	\$ -	\$ -	
	TBD																	0	\$ -	\$ -		\$ -	
	GRAND TOTAL		180	496	32	14	16	40	0	20	4	16	16	16	16	19	885	\$ 116,272	\$ 10,432	\$ -	\$ 126,704		

Lift Station No. 15 Relocation 2021 Construction Services - City Project 1803 (RFP Number: 18-19AA)																
Phase		Project Manager / Engineer Chilson	Senior Technician Lockett	Survey Charlie	Lead Enviro. Engineer Anderson	Lead Enviro. Scientist II Davidson	Enviro. Scientist I Kingsfus	Program Manager Miller	Lead Structural Engineer Schinkoeth	Lead Arch. Szymanski	Arch. Project Engineer Vega Phippe	Plumbing and HVAC Engineer Wastlund	Electrical Project Engineer Lutz	Process Mech./Elect. Designer/ Technician Goetz	Admin. Seczko	
2020 Hourly Rates		\$200.00	\$112.00	\$120.00	\$160.00	\$130.00	\$105.00	\$240.00	\$130.00	\$180.00	\$115.00	\$140.00	\$105.00	\$100.00	\$80.00	
Phase No.	Task / Deliverable	Task No.	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours	Estimated Hours
100	Construction Administration		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Preconstruction Conference Meeting															
	Project Administration		Average of 1 hour per week													
	Correspondence		Average of 1 hour per week													
	Shop Drawing and Submittal Review															
	O&M Submittal Reviews															
	Pay Requests		2 hours for 4 PR's	2 hours for 4 PR's												1 hour for 4 PR's
	RFI's		2 hours for 2 RFI's	1 hours for 2 RFI's												1 hour for 2 RFI's
	Change Orders		4 hours for 1 CO's	2 hours for 1 CO's												1 hour for 1 CO's
	Project Closeouts		40 hours	8 hours		2 hours										8 hours
200	Construction Inspection		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Staking (Record Drawing)			(4) 8 hour days for Rod Man	(4) 8 hour days for Lic. Surveyor											
	Inspection			Average of 16 hours per week for 24 weeks					4 hours	4 hours						
	Progress Meetings		2 meetings	2 meetings												
	Startup Services		2 days	Included under Observation												
	Coordination of Geotect Sub															
300	Operational Phase		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Operator Training		8 hours	16 hours												
	Operation and Maintenance Manual		16 hours	16 hours												40 hours
	Record Drawings		8 hours	16 hours					16 hours	4 hours	16 hours	16 hours	16 hours	16 hours	16 hours	4 hours
	11 Month Warrenty Review		1 Meeting	8 hours												
	Expenses and Consultants															
400	Envornmenal Services Phase		0	0	0	0	0	0	0	0	0	0	0	0	0	2
	Soil Removal Oversight															
	Reporting					8 hours	16 hours	40 hours								2
	MPCA Fee					4 hours										0
900	Additional Services		0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TBD															
	GRAND TOTAL		0	0	0	0	0	0	0	0	0	0	0	0	0	2

2020 Direct Cost Details										
		Prints / Copies	Mileage	Plots	Postage	Survey GPS	Survey Truck	Misc (Postage, survey supplies)	TOTAL EXPENSE	
Phase	Unit Cost	\$0.10	\$0.545	\$10.00	\$1.00	\$40.00	\$0.70	\$1.00		
Phase No.	Task / Deliverable	Unit Task	Each	Miles	Each	Dollars	Hours	Miles	Dollars	
100	Construction Administration		10,530	0	0	0	0	0	\$ -	\$ 1,053
	Preconstruction Conference Meeting		100							\$ 10.00
	Project Administration		80							\$ 8.00
	Correspondence		80							\$ 8.00
	Shop Drawing and Submittal Review		10,000							\$ 1,000.00
	O&M Submittal Review		50							\$ 5.00
	Pay Requests		60							\$ 6.00
	RFI's		80							\$ 8.00
	Change Orders		80							\$ 8.00
	Project Closeouts		-							\$ -
200	Construction Inspection		70	4,500	6	0	100	65	\$ -	\$ 11,385
	Staking		40		2		100	40		\$ 4,052.00
	Inspection		10	3,500	2			10		\$ 1,935.50
	Progress Meetings		10		2			5		\$ 24.50
	Startup Services		10	1,000				10		\$ 553.00
	Geotechnical Sub-Firm (AET) Testing Allowance									\$ 2,500.00
	Geotechnical Sub-Firm (AET) Profesional Services Allowance									\$ 2,320.00
300	Operational Phase		75	10	0	0	0	0	\$ -	\$ 13
	Operator Training		25	10						\$ 7.95
	Operation and Maintenance Manual		50							\$ 5.00
	Record Drawings									\$ -
	11 Month Warrenty Review									\$ -
	Expenses and Consultants									\$ -
400	Envornmenal Services Phase		-	100	0	0	0	0	\$ -	\$ 55
	Soil Removal Oversite			100						\$ 54.50
	Reporting									\$ -
	MPCA Fee									\$ -
900	Additional Services		0	0	0	0	0	0	\$ -	\$ -
	TBD									\$ -
GRAND TOTAL			10,675	4,610	6	-	100	65	\$ -	\$ 12,505

2021 Direct Cost Details										
		Prints / Copies	Mileage	Plots	Postage	Survey GPS	Survey Truck	Misc (Postage, survey supplies)	TOTAL EXPENSE	
Phase	Unit Cost	\$0.11	\$0.562	\$10.30	\$1.03	\$41.20	\$0.72	\$1.03		
Phase No.	Task / Deliverable	Unit Task	Each	Miles	Each	Dollars	Hours	Miles	Dollars	
<i>Subtasks/Task notes & details</i>										
100	Construction Administration		20,170	0	0	0	0	0	\$ -	\$ 2,219
	Preconstruction Conference Meeting									\$ -
	Project Administration		20							\$ 2.20
	Correspondence		20							\$ 2.20
	Shop Drawing and Submittal Review									\$ -
	O&M Submittal Review		50							\$ 5.50
	Pay Requests		40							\$ 4.40
	RFI's		20							\$ 2.20
	Change Orders		20							\$ 2.20
	Project Closeouts		20,000							\$ 2,200.00
200	Construction Inspection		40	1,500	0	0	100	45	\$ -	\$ 5,000
	Staking		40				100	40		\$ 4,153.24
	Inspection			1500						\$ 843.00
	Progress Meetings							5		\$ 3.61
	Startup Services									\$ -
	Geotechnical Sub-Firm (AET) Testing Allowance									\$ -
	Geotechnical Sub-Firm (AET) Profesional Services Allowance									\$ -
300	Operational Phase		1,275	50	20	0	0	0	\$ -	\$ 374
	Operator Training		75	40						\$ 30.73
	Operation and Maintenance Manual		150							\$ 16.50
	Record Drawings		1,000		20					\$ 316.00
	11 Month Warranty Review		50	10						\$ 11.12
	Expenses and Consultants									\$ -
400	Envornmenal Services Phase		1,000	0	10	50	0	0	\$ 2,500.00	\$ 2,840
	Soil Removal Oversight									\$ -
	Reporting		1,000		10	50				\$ 264.50
	MPCA Fee								2,500	\$ 2,575.00
900	Additional Services		0	0	0	0	0	0	\$ -	\$ -
	TBD									\$ -
GRAND TOTAL			22,485	1,550	30	50	100	45	\$ 2,500.00	\$ 10,432



CONSULTANTS
· ENVIRONMENTAL
· GEOTECHNICAL
· MATERIALS
· FORENSICS

February 17, 2020

Mr. Scott Chilson, PE
MSA Professional Services, Inc.
332 West Superior Street
Duluth, MN 55802
schilson@msa-ps.com

Acknowledgment and Agreement of Services
AET Job #07-20517

In response to your request for proposal on February 12, 2020 for the referenced project, American Engineering Testing, Inc., (AET) is proposing project unit rates for Construction Materials Testing and Professional Engineer support/consultation time.

Understood information from requesting party includes the following:

Project Name: Lift Station 15 Relocation
Project Address: 2114 West Michigan Street, Duluth, MN 55806

Service Extent/Communication: AET's services will be provided on a will-call basis when requested by Client or authorized representative. To ensure a technician is available for your project we kindly request at least 24 hours' notice for scheduling work. This provides us with the opportunity to meet your needs as requested.

Understood Scope of Services (Actual services to be determined by requirements of construction documents or at direction of Client or authorized representative) may include the following:

- Perform Construction Materials Testing as required by specifications and as requested by client.
- Provide a Staff Engineer II (Professional Engineer) to support shop drawing review.
- Provide Staff Engineer II (Professional Engineer) for consultation
- Other services as requested by the client for this project.

Fees: Our services will be provided on a unit cost basis according to the unit rates provided in the attached Fee Schedule tabulation and the 2020 Unit Rate Sheet.

Terms and Conditions: All AET Services are provided subject to the Terms and Conditions set forth in the enclosed Service Agreement-Terms and Conditions, which, upon acceptance of this proposal, are binding upon you as the Client requesting Services, and your successors, assignees, joint venturers and third-party beneficiaries. Please be advised that additional insured status is granted upon acceptance of the proposal.

Acceptance: AET requests written acceptance of this proposal in the Proposal Acceptance box below, but the following actions shall constitute your acceptance of this proposal together with the Terms and Conditions and Amendments: 1) issuing an authorizing purchase order for any of the Services described above, 2) authorizing AET's presence on site or 3) written or electronic notification for AET to proceed with any of the Services described in this proposal. Please indicate your acceptance of this proposal by signing below and returning a copy to us. When you accept this proposal, you represent that you are authorized to accept on behalf of the Client.

MSA
Lift Station 15 Relocation
AET Proposal No. 07-20517
February 17, 2020
Page 2 of 2

Sincerely,
American Engineering Testing, Inc.



Tom Woerdeman
Senior Engineering Technician
218-628-1518
TWoerdeman@amengtest.com



Benjamin Mattson, PE
Senior Geotechnical Engineer
715-359-3534
bmattson@amengtest.com

Enclosures:
Estimated Fee Tabulation
AET Terms and Conditions

AET PROPOSAL No. 07-20517	ACCEPTANCE AND AUTHORIZATION
Signature: _____	Date: _____
Typed/Printed Name: _____	
Title: _____	
Representing: _____	

FEE SCHEDULE TABULATION
 PROJECT TESTING SERVICES
 LIFT STATION 15 RELOCATION
 2114 WEST MICHIGAN STREET
 DULUTH, MN 55806
 AET PROPOSAL No. 07-20517



SERVICE DESCRIPTION	PROJECT BUDGET		
	ESTIMATED UNITS	UNIT RATE	BUDGET AMOUNT
<i>Project Management & Coordination</i>			
1. Staff Engineer II (Professional Engineer) to support Shop Drawing Review.	8 hours	\$145.00	\$1,160.00
2. Staff Engineer II (Professional Engineer) for consultation.	8 hours	\$145.00	\$1,160.00
ESTIMATED BUDGET			\$2,320.00



2020 MATERIALS FEE SCHEDULE

I. Engineering/Technical Personnel Rates

A.	Administrative Assistant	65.00/hr
B.	Engineering Technician	70.00/hr
C.	Engineering Technician II	85.00/hr
D.	NDT Technician	98.00/hr
E.	ICC/CWI Tech/Engr Tech III	98.00/hr
F.	Engineering Assistant	115.00/hr
G.	Engineer I	125.00/hr
H.	Engineer II	145.00/hr
I.	Senior Engineer/Specialist	155.00/hr
J.	Principal Engineer	175.00/hr

II. Vehicle Mileage

A.	Vehicle Mileage	.75/mile
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III. Soils/Earthwork

A.	Excavation Observations	See I & II
B.	Nuclear Density Tests	16.00/test
C.	Nuclear gauge use fee during full time observation	65.00/day
D.	CP/DCP Non-MnDOT	25.00/test
E.	MnDOT DCP	60.00/test
F.	Proctor	150.00/test
G.	Wet preparation for Proctor	75.00/sample
H.	Sieve Analysis	100.00/test
I.	635 Wash thru .02mm	35.00/test
J.	Atterberg Limits	115.00/test
K.	Hydrometer	210.00/test
L.	Specific Gravity	140.00/test
M.	Topsoil analysis	
	1. Method A	295.00/test
	2. Method B (nutrient content)	330.00/test
N.	Organic Content	70.00/test
O.	CBR (excludes proctor)	
	1. Granular Soil	675.00/test
	2. Cohesive Soil	750.00/test
P.	Permeability Tests	
	1. Rigid Wall	275.00/test
	2. Flexible Wall	395.00/test

IV. Plastic/Hardened Concrete

A.	Cylinder Compressions	27.00/test
B.	WisDOT Cylinder Break Reporting	25.00/cyl
C.	Curing/Handling Spares	27.00/test
D.	Cylinder Molds	3.00/mold
E.	Saw Trimming Ends	10.00/end
F.	Beam Flexure	60.00/test
G.	Beam Mold Prep	50.00/mold
H.	Equipment Rental (beyond personnel)	
	1. Schmidt Hammer	65.00/day
	2. Rebar Locator	125.00/day
	3. Generator	50.00/day
I.	Coring	
	1. Coring Crew	146.00/hr
	2. Bit Wear	7.00/inch
	3. Patch	10.00/core
J.	Density & Compressions of Cores	
	1. Density & Absorption	60.00/test
	2. Compression	70.00/test
	3. Saw Trimming Ends	16.00/core

K. Shotcrete

1.	Panel Coring (6 cores)	245.00/panel
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2.	Compression Test	60.00/test
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L. Floor Flatness (ASTM:E1155)

1.	Profilograph Rental	165.00/day
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M. Air Content ASTM:C457

		525.00/test
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N. Petrographic ASTM:C856

		1750.00/test
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V. Masonry

A.	Sampling/ICC Inspection	See I & II
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B. Compression Mortar/Grout

1.	Cylinders or Cubes	72.00/set
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2.	C1019 Grout Box Prism	60.00/test
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3.	C1314 Masonry Prism	240.00/set of 3
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4. Molds

1.	Cylinders & Cubes	3.00/mold
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2.	Grout Sample Box® (GSB)	5.00/mold
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VI. Bituminous

A.	Field Sampling	See I & II
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B. Laboratory Tests

1.	Marshall Air Voids	210.00/test
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2.	Superpave Gyrotory Air Voids	210.00/test
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3.	Stability & Flow	57.00/test
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4.	Density & Thickness	45.00/core
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5.	Chemical Extraction	220.00/test
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6.	Extraction & Gradation	100.00/test
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7. Fabricate TSR Specimen

1.	Marshall	75.00/test
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2.	Gyrotory	85.00/test
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8.	TSR Test	35.00/test
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9.	Saw Trimming Lifts	20.00/core
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10.	Gyrotory Mix Properties	550.00/test
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11.	Marshall Mix Properties	550.00/test
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12.	CAA	125.00/test
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13.	FAA	120.00/test
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VII. Equipment

A.	Seismograph	75.00/day
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1.	Engineering Services	See I & II
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B.	Ground Penetrating Radar (GPR)	450.00/day
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1.	Engineering Services	See I & II
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VIII. Expenses

A.	Direct Project Expenses: includes out-of-town per diem; special materials & supplies; subcontracted services, and miscellaneous costs	Cost + 15%
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The rates presented are portal-to-portal with vehicle mileage, expenses and equipment rentals being additional.

Overtime for personnel charged at above cost plus 25% for over 8 hours per day or Saturday; and at above cost plus 50% for Sundays or Holidays. Hazardous work charged at an additional 25%. Night time shift work will include a premium charge of \$25.00 per person per shift.

A minimum charge of \$100.00 per job may be assessed to cover administrative costs.

BIDS RECEIVED - February 12, 2020
 Lift Station 15 Relocation (for Twin Ports Interchange project)

MnDOT Agreement No. 1036438
 City Project No. 1803

Vendor			Rice Lake Construction Grp		Lakehead Constructors		Veit & Company		George Bougalis & Sons		
Exhibit											
Spec. No.	Description	Est. Quantity	Units	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension	Unit Price	Extension
2021.501	MOBILIZATION	1	LS	\$225,000.00	\$225,000.00	\$322,500.00	\$322,500.00	\$466,999.90	\$466,999.90	\$268,000.00	\$268,000.00
2104.502	REMOVE SANITARY MANHOLE	1	EA	\$12,600.00	\$12,600.00	\$1,190.00	\$1,190.00	\$4,900.00	\$4,900.00	\$5,500.00	\$5,500.00
2104.503	REMOVE CURB AND GUTTER	290	LF	\$13.00	\$3,770.00	\$3.30	\$957.00	\$4.40	\$1,276.00	\$6.00	\$1,740.00
2104.503	REMOVE SEWER PIPE	120	LF	\$184.00	\$22,080.00	\$100.00	\$12,000.00	\$74.90	\$8,988.00	\$60.00	\$7,200.00
2104.504	REMOVE ASPHALT PAVEMENT	1,825	SY	\$9.00	\$16,425.00	\$5.50	\$10,037.50	\$4.20	\$7,665.00	\$6.95	\$12,683.75
2104.601	REMOVE ABANDONED 16" CI GAS MAIN	1	LS	\$15,220.00	\$15,220.00	\$34,000.00	\$34,000.00	\$12,000.00	\$12,000.00	\$40,800.00	\$40,800.00
2104.603	REMOVE 6" CI WATER MAIN	210	LF	\$31.00	\$6,510.00	\$112.00	\$23,520.00	\$29.90	\$6,279.00	\$36.00	\$7,560.00
2105.507	SELECT GRANULAR BORROW, (CV) MOD 7%; 12" UNDER ALL NEW PAVEMENT	880	CY	\$20.00	\$17,600.00	\$35.50	\$31,240.00	\$26.50	\$23,320.00	\$36.00	\$31,680.00
2105.609	CONTAMINATED SOIL ABATEMENT (EXCAVATION, TRUCKING, DISPOSAL)	6,300	TON	\$75.00	\$472,500.00	\$38.00	\$239,400.00	\$40.00	\$252,000.00	\$58.00	\$365,400.00
2106.604	CONTAMINATED SOIL CAP	4,000	SY	\$18.00	\$72,000.00	\$16.15	\$64,600.00	\$12.25	\$49,000.00	\$22.00	\$88,000.00
2211.507	AGGREGATE BASE (CV) CLASS V; 8" UNDER ALL NEW PAVEMENT	676	CY	\$25.00	\$16,900.00	\$48.85	\$33,022.60	\$46.90	\$31,704.40	\$46.00	\$31,096.00
2357.506	BITUMINOUS TACK COAT	180	GAL	\$10.00	\$1,800.00	\$4.00	\$720.00	\$4.45	\$801.00	\$14.00	\$2,520.00
2360.509	TYPE SP 12.5 WEARING COURSE (4, F)	360	TON	\$153.00	\$55,080.00	\$123.00	\$44,280.00	\$136.60	\$49,176.00	\$120.00	\$43,200.00
2360.509	TYPE SP 12.5 NON WEARING COURSE (4, B)	300	TON	\$142.00	\$42,600.00	\$123.00	\$36,900.00	\$136.60	\$40,980.00	\$110.00	\$33,000.00
2502.503	SUBSURFACE DRAIN	200	LF	\$18.00	\$3,600.00	\$18.00	\$3,600.00	\$13.45	\$2,690.00	\$16.00	\$3,200.00
2503.502	CONNECT TO EXISTING SEWERS	1	EA	\$7,500.00	\$7,500.00	\$21,500.00	\$21,500.00	\$3,220.00	\$3,220.00	\$10,000.00	\$10,000.00
2503.503	20" HDPE FORCEMAIN - SDR 17	840	LF	\$250.00	\$210,000.00	\$358.00	\$300,720.00	\$225.00	\$189,000.00	\$180.00	\$151,200.00
2503.601	LIFT STATION NO. 15 CONSTRUCTION	1	LS	\$2,302,595.00	\$2,302,595.00	\$2,956,719.56	\$2,956,719.56	\$3,145,055.00	\$3,145,055.00	\$3,282,456.00	\$3,282,456.00
2503.601	DEMINIMIS MATERIALS (PER DEMINIMIS ALLOWANCE SCHEDULE)	1	LS	\$20,000.00	\$20,000.00	\$40.00	\$40.00	\$1,000.00	\$1,000.00	\$60,000.00	\$60,000.00
2503.601	EXISTING LIFT STATION NO. 15 DEMOLITION	1	LS	\$25,000.00	\$25,000.00	\$14,000.00	\$14,000.00	\$30,000.00	\$30,000.00	\$19,500.00	\$19,500.00
2503.601	EXISTING JO-ED BUILDING SLAB, FOUNDATIONS, AND BURIED UTILITY DEMOLITION	1	LS	\$8,000.00	\$8,000.00	\$9,800.00	\$9,800.00	\$25,000.00	\$25,000.00	\$5,500.00	\$5,500.00
2503.601	UTILITY PROVIDER ALLOWANCE	1	LS	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00	\$35,000.00
2503.601	SCADA CONTRACTOR ALLOWANCE	1	LS	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00	\$50,000.00
2503.601	CONNECT NEW FORCEMAIN TO EXISTING DRAINAGE STRUCTURE	1	LS	\$4,500.00	\$4,500.00	\$13,600.00	\$13,600.00	\$28,000.00	\$28,000.00	\$15,000.00	\$15,000.00
2503.601	ABANDON EXISTING FORCEMAIN AND CONNECTION TO MANHOLE STRUCTURE	1	LS	\$35,620.00	\$35,620.00	\$10,100.00	\$10,100.00	\$26,100.00	\$26,100.00	\$216,653.00	\$216,653.00
2503.601	ABANDON 30" GRAVITY SEWER	1	LS	\$22,800.00	\$22,800.00	\$6,250.00	\$6,250.00	\$7,500.00	\$7,500.00	\$18,840.00	\$18,840.00
2503.601	ABANDON 48" GRAVITY SEWER	1	LS	\$15,600.00	\$15,600.00	\$10,650.00	\$10,650.00	\$12,000.00	\$12,000.00	\$16,000.00	\$16,000.00
2503.602	FACE BRICK	1,000	BRICK	\$12.00	\$12,000.00	\$9.20	\$9,200.00	\$11.60	\$11,600.00	\$14.00	\$14,000.00
2503.602	PIPE CAP AND PILES	9	EA	\$37,500.00	\$337,500.00	\$7,889.00	\$71,001.00	\$31,800.00	\$286,200.00	\$9,500.00	\$85,500.00
2503.603	16" DI PIPE SEWER - GRAVITY (PRESSURE CLASS 350)	111	LF	\$950.00	\$105,450.00	\$742.00	\$82,362.00	\$2,767.20	\$307,159.20	\$317.00	\$35,187.00
2503.603	30" DI PIPE SEWER - GRAVITY (PRESSURE CLASS 350)	60	LF	\$3,750.00	\$225,000.00	\$1,900.00	\$114,000.00	\$1,074.00	\$64,440.00	\$415.00	\$24,900.00
2504.503	WATER SERVICE 2" TYPE PE PIPE	95	LF	\$55.00	\$5,225.00	\$183.00	\$17,385.00	\$79.00	\$7,505.00	\$85.00	\$8,075.00
2504.603	8" WATER MAIN DUCTILE IRON (CLASS 52)	210	LF	\$75.00	\$15,750.00	\$223.00	\$46,830.00	\$138.00	\$28,980.00	\$114.00	\$23,940.00
2505.603	16" STEEL HP GAS TRENCH EXCAVATION	210	LF	\$42.00	\$8,820.00	\$122.00	\$25,620.00	\$112.00	\$23,520.00	\$168.00	\$35,280.00
2506.502	SANITARY SEWER MANHOLE, CONST DRAINAGE STRUCTURE 60-4020 (PSMH-1)	1	LS	\$9,680.00	\$9,680.00	\$17,000.00	\$17,000.00	\$10,000.00	\$10,000.00	\$17,300.00	\$17,300.00
2506.602	SANITARY SEWER MANHOLE, 84" (PSMH-2)	1	LS	\$125,000.00	\$125,000.00	\$25,500.00	\$25,500.00	\$42,500.00	\$42,500.00	\$32,308.00	\$32,308.00
2521.518	6" SIDEWALK CONCRETE (3F52)	585	SF	\$8.00	\$4,680.00	\$6.00	\$3,510.00	\$8.90	\$5,206.50	\$9.00	\$5,265.00
2531.504	7" CONCRETE DRIVEWAY PAVEMENT (3F52)	65	SY	\$75.00	\$4,875.00	\$100.00	\$6,500.00	\$90.50	\$5,882.50	\$89.00	\$5,785.00
2535.503	BITUMINOUS CURB	290	LF	\$10.00	\$2,900.00	\$12.00	\$3,480.00	\$13.40	\$3,886.00	\$60.00	\$17,400.00
2563.501	TEMPORARY TRAFFIC MANAGEMENT	1	LS	\$3,650.00	\$3,650.00	\$20,000.00	\$20,000.00	\$8,250.00	\$8,250.00	\$36,000.00	\$36,000.00
2573.501	STABILIZED CONSTRUCTION EXIT	2	EA	\$5,000.00	\$10,000.00	\$1,550.00	\$3,100.00	\$2,000.00	\$4,000.00	\$4,200.00	\$8,400.00
2573.502	INLET PROTECTION	13	EA	\$450.00	\$5,850.00	\$230.00	\$2,990.00	\$175.00	\$2,275.00	\$600.00	\$7,800.00
2573.503	SILT FENCE, TYPE HI	570	LF	\$6.00	\$3,420.00	\$5.00	\$2,850.00	\$5.15	\$2,935.50	\$5.50	\$3,135.00
2575.601	TURF ESTABLISHMENT; PERVIOUS AREAS. INCLUDES 4" TOPSOIL, SEED, FERTILIZER, HYDRAULIC MATRIX	1	LS	\$18,500.00	\$18,500.00	\$10,500.00	\$10,500.00	\$10,000.00	\$10,000.00	\$20,900.00	\$20,900.00
				Total:	\$4,618,600.00	Total:	\$4,748,174.66	Total:	\$5,333,994.00	Total:	\$5,202,903.75

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