

Grading , Concrete and Bituminous Surfacing, Retaining and Noise Walls, ADA Improvements, Signals, Lighting, TMS, and Bridge

<u>Category:</u>	Bridges and Culverts, Roads	<u>Project ID #:</u>	1004376327
<u>Street Address:</u>	TH 35W Minneapolis MN 55407	<u>Staff Estimate Value</u>	\$1,000,000.00
<u>County:</u>	Hennepin	<u>Stage:</u>	BIDDING - Biddate Set
<u>Bid Date:</u>	6/28/2017 , 09:30AM		
<u>Architect:</u>			
<u>Documents Available:</u>	Plans, Specs available in Insight		Plans available from Minnesota Department of Transportation (MnDOT)
<u>Last Update:</u>	5/11/2017		Project Details or Scope was Added/Updated

Additional Details

<u>Listed On:</u>	5/10/2017	<u>Floor Area:</u>	
<u>Contract Type:</u>		<u>Work Type:</u>	Alteration
<u>Stage Comments 1:</u>		<u>Floors Below Grade:</u>	
<u>Stage Comments 2:</u>		<u>Owner Type:</u>	State/Provincial
<u>Bid Date:</u>	6/28/2017	<u>Mandatory Pre Bid Conference:</u>	
<u>Invitation #:</u>	170060, 2782-327	<u>Commence Date:</u>	7/28/2017
<u>Structures:</u>	4	<u>Completion Date:</u>	
<u>Single Trade Project:</u>	Site Work	<u>Site Area:</u>	
<u>Floors:</u>		<u>LEED Certification Intent:</u>	
<u>Parent Project ID:</u>		<u>Units:</u>	
<u>Parking Spaces:</u>			

Project Participants

Company Role	Company Name	Contact Name	Address	Phone	Email	Fax
Owner	Minnesota Department of Transportation (MnDOT)	Steve Barrett	395 John Ireland Blvd., Saint Paul, MN 55155	(651) 366-5132	Seven.Barrett@state.mn.us	(651) 366-3555

Contracts

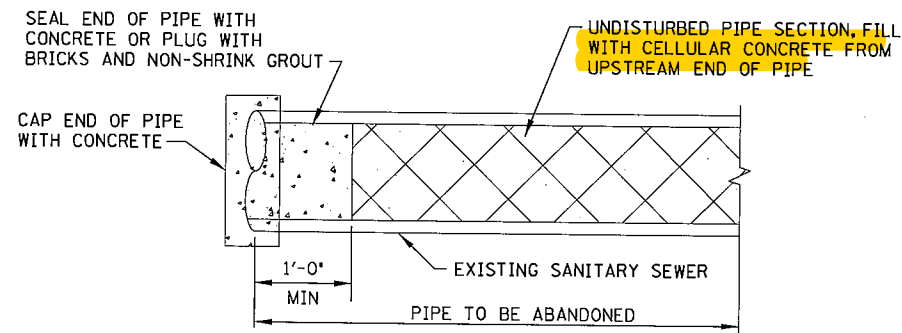
Classification	Conditions	Bonding	Bid Date	Bids To	Bid Type
General Contractor		Bid:5.00%,Perf:100.00%,Pay:100.00%	6/28/2017	Owner	Open Bidding

Personal Notes

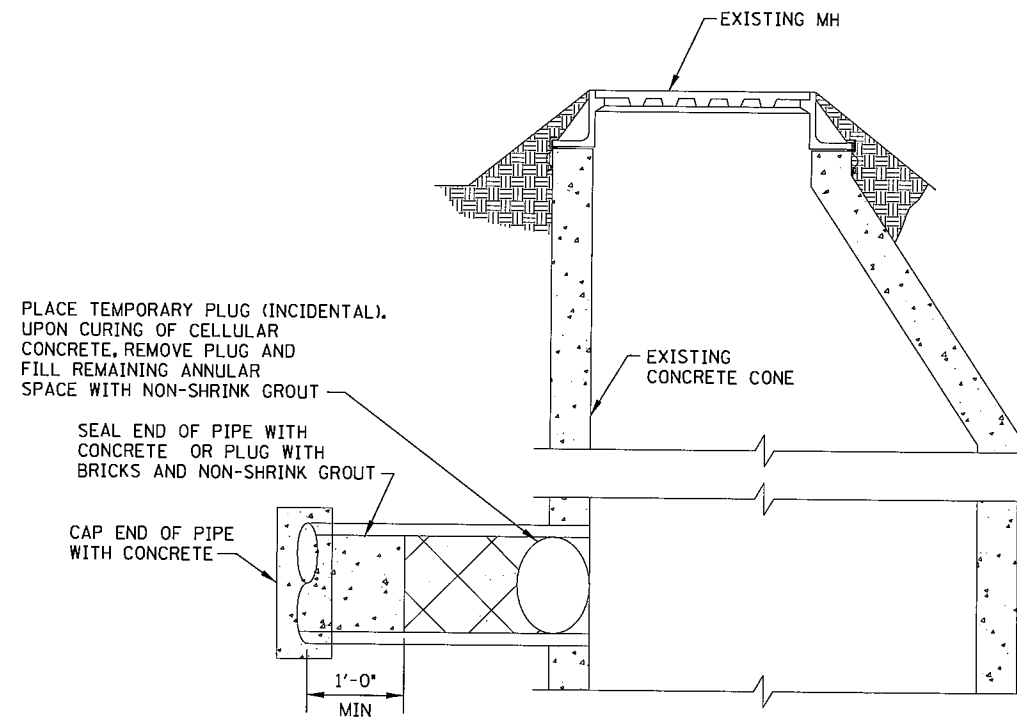
User	Note	Update Date	Private?
Drew Nielson	Assigned by: Drew Nielson on 05/11/2017 Assigned to: Jake Schumacher	5/11/2017	False

History

User	Viewed	First Viewed Date	Currently Tracked?	Date Tracked
Jake Schumacher	False		True	5/11/2017
Drew Nielson	True	5/11/2017	True	5/11/2017



4 PLUG FILL AND ABANDON PIPE SEWER
C53 NO SCALE



5 PLUG FILL AND ABANDON PIPE SEWER WITH TEMPORARY PLUG
C53 NO SCALE

1:49:32 PM 3/13/2017 F:\MDD01\135# San Sewer Relocation Project\Project Design\Plan\Sanitary Sewer Set\DD05.dgn

NO	DATE	BY	CKD	APPR	REVISION

I hereby certify that this plan, specification, or report 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.

Print Name: **WILLIAM F. LUECK**

William F. Lueck

Date: **02-29-2016** License #: **40785**

STATE AID PROJECT NO.

STATE PROJECT NO.

COUNTY PROJECT NO.

CITY PROJECT NO.

DRAWN BY
D. FRISHMAN

DESIGNED BY
G. SANDERS

CHECKED BY
W. LUECK

COMM. NO.



CITY OF MINNEAPOLIS

SANITARY DETAILS

SANITARY SEWER RELOCATION

STATE PROJ. NO. 2782-327 (T.H. 35W)

SHEET
SN57
OF
SN57

SECTION SM-03301

CONTROLLED LOW STRENGTH MATERIAL (CLSM)

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Furnishing and placing normal weight CLSM and light weight CLSM (i.e., cellular concrete grout).

1.2 REFERENCES

- A. American Concrete Institute (ACI):
 - 1. 211.1 Standard Practice for Selecting Proportions for Normal, Heavyweight and Mass Concrete.
 - 2. 229R Controlled Low-Strength Materials (CLSM).
 - 3. 301 Specifications for Structural Concrete.
- B. American Society for Testing and Materials (ASTM):
 - 1. C31 Standard Practice for Making and Curing Concrete Test Specimens in the Field.
 - 2. C33 Standard Specification for Concrete Aggregates.
 - 3. C94 Standard Specification for Ready-Mixed Concrete.
 - 4. C150 Standard Specification for Portland Cement.
 - 5. C172 Standard Practice for Sampling Freshly Mixed Concrete.
 - 6. C232 Standard Test Methods for Bleeding of Concrete.
 - 7. C403 Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance.
 - 8. C494 Standard Specification for Chemical Admixtures for Concrete.
 - 9. C495 Standard Test Method for Compressive Strength of Lightweight Insulating concrete.
 - 10. D4832 Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders.
 - 11. D6103 Standard Test Method for Flow Consistency of Controlled Low Strength Material (CLSM).

1.4 SUBMITTALS

Provide following submittals consistent with the provisions of Section SM-01300.

- A. Shop Drawings:
 - 1. CLSM design mix, giving dry weights of cement, saturated surface-dry weights of aggregate, types, names and percent of admixtures, air content, and water used per cubic yard.
 - 2. Flowable fill design mix shall have no fly ash for placement in contact with earth. Flowable fill for use entirely within structures may contain fly ash.
 - 3. Initial and final set times of design mix as determined by ASTM C403.

- C. Set time - the mix will be so proportioned that it will have a minimum of 500 psi penetration resistance in four hours as measured by ASTM C403. This is known as the ACI modified flow procedure conducted by filling an open ended 3x6-inch cylinder mold with flowable fill mixture, lifting and measuring the lateral spread across a flat surface.
- D. Normal Weight CLSM:
1. Excavatable by machine.
 2. 28-day compressive strength: 500 psi +/- 50 psi.
 3. Minimum compressive strength at 3 days: 20 psi.
 4. Density: 110 pcf +/- 5 pcf.
- Preparation and testing of cylinders shall be in accordance with ASTM.
- E. Light Weight CLSM:
1. Excavatable by machine.
 2. Low density, non-bleeding cellular concrete.
 3. Portland cement and water slurry blended with a high stability pre-generated foaming agent.
 4. Fluid (10-inch slump), pumpable.
 5. Wet Density: greater than 30 pounds per cubic foot.
 6. 28-day Compressive Strength: 100 psi minimum.
 7. If water is present in the structure being abandoned, the CLSM shall have a minimum density of 70 pcf.

2.3 MIXING

- A. Light weight CLSM shall be provided by ready mix industry and shall comply with ASTM C94.
- B. Sufficient mixing capacity shall be provided to permit the CLSM to be placed without interruption. The mixer drum shall be completely emptied prior to the initial batch of CLSM to ensure that no additional cement fines are incorporated into the mix.

PART 3 EXECUTION

3.1 USES

- A. Normal weight CLSM shall be used where shown on the Drawings, or for the following at the CONTRACTOR's discretion:
1. Structural fill.
 2. Bedding and backfill for piping.
 3. Trench stabilization.
- B. Light weight CLSM shall be used to fill structures shown to be abandoned in place on the Drawings.

3.2 CLSM PLACEMENT PROCEDURES

- A. Deposit CLSM by ready mix truck, pump, or other approved method by continuous discharging material in the space to be filled.

2000 psi concrete or brick and mortar end caps.

All watermain, hydrants, manholes and associated items abandoned or removed shall be in accordance with the applicable Standard Supplemental Specifications for Construction of Public Infrastructure and requirements by the City of Minneapolis-Division WM-Watermain. Existing water main contains lead joints, and some existing lead services may be encountered during project construction. If encountered, the lead service shall be removed entirely from the corporation stop to the meter, including corporation stop, service, and curb box. All lead must be disposed of properly by the Contractor. Existing water manholes have fiberglass inserts that the City would like salvaged from manholes that are removed or adjusted (incidental).

Measurement and Payment

1. Payment for abandoning manholes will be made under Item 2104.525 Abandon Catch Basin or Manhole by Each and will include all necessary labor, equipment, and materials to properly abandon the manhole, including all required excavation, casting and manhole removal, grout, and backfill, per the specifications and details.
2. Remove Manhole or Catch Basin shall be paid for under Item 2104.509 Remove Manhole or Catch Basin by Each and will include all materials, equipment, and labor associated with manhole and casting removal per the specifications and details.
3. Plug, Fill & Abandon Pipe Sewer shall be paid for under Item 2503.603 Plug Fill & Abandon Pipe Sewer by Linear Foot and will include all materials, equipment, and labor associated with plugging, filling with grout, and abandonment of pipe sewer per the specifications and details, independent of sewer size.
4. Remove Sewer Pipe (Sanitary) shall be paid for under Item 2104.501 Remove Sewer Pipe (Sanitary) by Linear Foot and will include all materials, equipment, and labor associated with pipe removal per the specifications and details, independent of sewer size.
5. Remove Sanitary Service Pipe shall be paid for under Item 2104.501 Remove Sanitary Service Pipe by Linear Foot and will include all materials, equipment, and labor associated with pipe removal per the specifications and details, regardless of service type, size, connection construction requirements or material of construction.
6. Removal of Water Main shall be paid for under Item 2104.501 Remove Water Main, by Linear Foot and will include all materials, equipment, and labor associated with removal of the watermain, including any concrete encasement, thrust block, gate valves, and independent of water main size, per the specifications and details.
7. Abandon Water Main abandonment shall be paid for under Item 2104.603 Abandon Water Main, by Linear Foot and will include all materials, equipment, and labor associated with abandonment of the watermain, including cellular concrete, independent of size, per the specifications and details.
8. Removal of Water Service Pipe shall be paid for under Item 2105.501 Remove Water Service Pipe by Linear Foot and will include all materials, equipment, and labor associated with removal of the service pipe, including any concrete encasement, per the specifications and details, independent of service type, size or material of construction. Lead services to be properly disposed of.
9. Removal of Hydrants shall be paid for under Item 2104.509 Remove Hydrant by Each and will include all materials, equipment, and labor associated with removal of the hydrant, gate valve, tee, lead and manhole per the specifications and details.