**ADDENDUM #1**

ANDERSON ROAD (M.S.A.S. 198) – HAINES ROAD TO CHAMBERSBURG AVENUE  
S.A.P. 118-198-003  
CITY OF DULUTH  
PROJECT No. 0357TR  
BID No. 12-02DS  
Bid Opening: February 16, 2012

**NOTICE**

This Addendum (10 pages with attachment) is issued to modify, explain or correct the original drawings, specifications and/or previous addenda and is hereby made a part of the Contract Documents. Please attach this Addendum to the specification and note receipt of this Addendum on the Request for Bid.

**DRAWINGS**

1. **Sheet 2** – Statement of Estimated Quantities – Revise the following:
   
a) Line 38, bid item 2411.501 Structural Concrete (3Y43), the quantity in the Total Project column is revised to 36 cubic yards, and the quantity in the Participating Quantity column is revised to 36 cubic yards.

2. **Sheet 20** – Tabulations – Revise the following:
   
a) The quantity for Structural Concrete (3Y43) (2411) for the retaining wall located at Sta. 35+03 to Sta. 35+88 is revised to 36 cubic yards.

3. **Sheet 27** - Typical Section – Concrete for sidewalks and driveways shall be Mn/DOT (2461) Mix Designation No. 3A32.

4. **Sheet 55** – Retaining Wall Details – Revise the following:
   
a) On the Retaining Wall Profile, the leader note that indicates “bottom of footing” is revised to read “Top of Footing”. The bottom of footing is not shown on the profile.

   b) On the Retaining Wall Section (RT-1), the leader note identifying footing reinforcement is revised to read “#4 Rebar 12” O.C., Each Way, Top & Bottom”. The footing depth dimension is revised to be 1’-6” to bottom of concrete. The depth of footing dimension is revised to be 4’-0” from finished ground to bottom of concrete.

5. **Sheets 61 and 62** – Existing Conditions and Removals – The existing underground telephone (UT) line located from Station 25+85 (19’ RT) to Station 41+27 (19’ RT) will be abandoned prior to construction.

6. **Sheet 98** – Plan and Profile – The label for the retaining wall located at Sta. 35+03 to Sta. 35+88 (Left) should be revised to read: “See Retaining Wall Details on Sheet 55.”

7. **ADD** detail drawing W-18 Anode Connection (attached) to project.
8. **Section S-7 Operator Qualifications for Gas Work of the City of Duluth Standards** is replaced with the following:

   a) This contract may require contractor personnel to perform covered tasks on the City of Duluth's natural gas system. To work on the natural gas system, the contractor's personnel must be qualified to perform any of the covered tasks identified in the City of Duluth Operator Qualification Plan. Prior to the issuance of the Notice to Proceed, contractors, sub-contractors or vendors performing any of these covered tasks shall submit their Operator Qualification Plan and a list of employees' names, job titles and covered tasks to be performed under this contract to the Engineer for approval. The Operator Qualification Plan must be approved by the City before a Notice to Proceed will be issued.

9. **Paragraph B of section S-11** Governing Specifications of the City of Duluth Standards is replaced with the following:

   B. December 2011 Minnesota MUTCD, including the field manual dated February, 2011.

10. **Section 1404 Maintenance of Traffic and 2563 Traffic** is supplemented with the following:

    The February 2011 version of the Field Manual for Temporary Traffic Control Zone Layouts is incorporated in the project.

11. **Section 1803 Prosecution of Work** is supplemented with the following:

    No work shall be performed except between the hours of 7:00 am and 9:00 pm Central Standard Time unless specified or authorized by the Engineer.

12. **Section 1903 Increased or Decreased Quantities** (SP-7) on page S-8 of the Special Provisions is supplemented with the following:

    The provisions of Mn/DOT 1903 regarding overruns and underruns shall not apply to the following items of work under this contract:

    - 2505.602 Building Inspection for Sewer Lateral Each
    - 2505.602 Televising Sanitary or Storm Sewer Lateral Each
    - 2505.602 Location of Sanitary or Storm Sewer Lateral by Sonde Method Each
    - 2505.602 Exc. for Potholing Sanitary or Storm Sewer Lateral 0’ to 7’ Deep Each
    - 2505.602 Exc. for Potholing Sanitary or Storm Sewer Lateral 7’ to 10’ Deep Each

13. **Section 2105 Excavation, Backfill and Compaction for Utilities** of the City Duluth Standard is supplemented with the following:

    a) The City of Duluth gas utility must be notified 2 working days prior to any excavation or directional drilling within 6 feet of a 6 inch or larger natural gas main. Department personnel will be on site to monitor excavation and inspect any exposed steel main 6 inches or larger. Notify the Engineering Division at 730-5200 to coordinate this
inspection.

Any time a steel natural gas main smaller than 6 inches is exposed within an excavation, the Engineering Division shall be notified at 730-5200 to coordinate an inspection of the exposed gas main.

b) **Dewatering.** All excavation for utility pipe or structures shall be dry and free from water as necessary to provide a stable foundation. The Contractor shall provide all necessary dewatering equipment and all necessary equipment or materials for water quality treatment when necessary. Discharge from dewatering operations shall meet all federal, state and city standards prior to entering any water course or storm sewer.

c) Replace paragraph H.1 of the City of Duluth Standards with the following:
All costs of excavating to foundation grade, preparing the foundation and bedding, dewatering, placing encasement materials, placing and compacting suitable on site backfill materials and other work necessary for prosecution and completion of the work as specified, shall be included for payment as part of the specified utility and utility appurtenance items without any direct compensation being made therefore.

14. **Section 2301 Concrete Pavement** is supplemented with the following:

a) **Protection Against Cold Weather.** If the national weather service forecast for the construction area predicts air temperatures of 34 °F [1 °C] or less within the next 24 hours and the Contractor wishes to place concrete, submit a cold weather protection plan. Protect the concrete from damage including freezing due to cold weather. Should any damage result, the Engineer will suspend operations until corrective action is taken and may subject the damaged concrete to 1503 and 1512.

b) **Cold Weather Protection Plan.** Submit proposed time schedule and plans for cold weather protection of concrete in writing to the Engineer for acceptance that provides provisions for adequately protecting the concrete during placement and curing. Do not place concrete until the Engineer accepts the cold weather protection plans.

15. **Section 2357 Bituminous Tack Coat** is supplemented with the following:

a) This work shall consist of treating a new or existing bituminous or concrete surface and the surface of each lift or course constructed except the final lift or course in accordance with the provisions of MN/DOT 2357, except as modified below: The bituminous material used for tack coat shall be placed in accordance with MN/DOT 2360 and shall be incidental to work associated with MN/DOT 2360 for which no direct compensation will be paid.

16. **Section 2503 Pipe Sewers – Gravity** of the City of Duluth Standard is supplemented with the following:

a) **Flexible Couplings.** Flexible couplings and adapters shall be made from elastomeric polyvinyl chloride. Couplings shall be resistant to chemicals, ultraviolet rays, fungus growth, normal sewer gases and unaffected by soil conditions. Couplings shall be water tight. Couplings shall be attached to pipe utilizing stainless steel bands.
b) Replace paragraph B.10 with the following: Flexible couplings and adapters shall be used to connect new pipe to existing PVC or clay pipes.

17. **Section 2504 Water Main and Water Service Installation** of the City of Duluth Standard is supplemented with the following:

a) Replace paragraph A.3.a with the following: Buried fittings shall be mechanical joint with rubber gaskets.

b) Replace paragraph A.11.n with the following: All hydrant bolts and nuts below grade shall be stainless steel. Mechanical joint bolts shall be as specified elsewhere in this specification.

c) Delete the second sentence of paragraph A.13.f.

d) Replace paragraph A.13.g with the following: All exposed bolts on the valve, including the stuff box and bonnet bolts, shall be stainless steel.

e) Replace paragraph A.14 with the following:

**Butterfly Valves (12" and larger sizes only)**

Butterfly valves shall conform to the requirements of AWWA C504, Class 150B and all butterfly valves must meet such supplementary requirements as may be stipulated in the Contract Drawings or Special Provisions and the provisions hereof.

Unless otherwise specified, valves furnished shall comply with the following supplementary requirements.

a. Manual actuator equipped with standard 2-inch square operating nut, split V type or O-ring stem seal and enclosed in a lubricating gear box. For buried installations, valves shall be equipped with a side-mounted actuator designed to accept a valve box.

b. Valve disc shall be cast iron conforming to ASTM 126, Class B or ASTM A48, Class 40, alloy cast iron conforming to ASTM A436 or A439, or ductile iron conforming to ASTM A536.

c. Valves shall open counter-clockwise.

d. The exterior of the valve shall be supplied with an epoxy coating.

e. Valves shall be furnished with mechanical joint ends.

f. All exposed bolts, screws, washers or nuts on the valve shall be stainless steel.

f) **Mechanical Joint Bolts.** All mechanical joint bolts used on all buried fittings, valves and hydrants shall be Cor-Ten or similar low corrosion bolts and nuts and have 6 ounce zinc anode caps conforming to ASTM B-418.

g) **Magnesium Anode.** All hydrants and valves shall have a 3 pound magnesium anode attached to one of the mechanical joint bolts. Refer to standard detail W-18.
h) Replace the last sentence of the second paragraph under B.2 with the following:
Any HDPE pipe with scratches, cuts or scrapes deeper than 10% of the wall thickness, shall not be used unless the damaged section is cut out and replaced.

18. **Section 2503/2504/2505 Horizontal Directional Drilling** of the City of Duluth Standard is supplemented with the following:

   a) **Monitoring Gas Main or Service During Drilling Operations.**

   The City of Duluth gas utility must be notified 2 working days prior to any excavation or directional drilling within 6 feet of a 6 inch or larger natural gas main. Department personnel will be on site to monitor excavation and inspect any exposed steel main 6 inches or larger. Notify the Engineering Division at 730-5200 to coordinate this inspection.

   Any time a steel natural gas main smaller than 6 inches is exposed within an excavation, the Engineering Division shall be notified at 730-5200 to coordinate an inspection of the exposed main.

   Prior to the start of any directional drilling, the Contractor shall pothole all proposed gas line crossing locations to confirm the depth of the main. The Contractor shall maintain the excavation or reopen the excavation to verify drilling operations did not interfere with any gas main or gas service.

19. **Section 2505 Gas Main** is supplemented with the following:

   High pressure PE Gas Main or Gas Service pipe may be installed by open-trench, horizontal directional drilling, or methods approved by the Engineer.

20. **Section 2506 Manholes and Catch Basins** is supplemented with the following:

   No steps will be allowed in manholes.

21. **Sections 2521 Walks / 2531 Concrete Curbing** are supplemented with the following:

   a) The Protection against Cold Weather and the Cold Weather Protection Plan requirements of Section 2301 of this addendum shall apply to section 2521 Walks and section 2531 Concrete Curbing.

22. **Section 2521/2531 Access Ramp Layout** (SP-22) of the Special Provisions is supplemented with the following:

   **SPECIAL PROJECT ADA REQUIREMENTS.**

   All pedestrian facilities and shared trails on this Project must be constructed according to Public Rights-of-Way Accessibility Guidelines (PROWAG) which can be found at: [http://www.access-board.gov/prowac/draft.htm](http://www.access-board.gov/prowac/draft.htm).

   A. The Contractor must designate a responsible person familiar with PROWAG to assess proposed sidewalk layouts at each site before work begins. Any time work the Contractor is performing concerns pedestrian facilities, the Contractor’s representative shall be on site.
B. Pedestrian facilities must be constructed to meet the following criteria:

1. Pedestrian Access Routes (PAR) must be constructed to meet the following:
   - Minimum 4 feet width.
   - A maximum cross slope of 2.0%.
   - Vertical discontinuities must be less than 0.25 inches.
   - Must provide positive drainage without allowing any ponding.

2. Landings are part of the PAR and must be constructed to meet the following:
   - 4 feet by 4 feet minimum width.
   - Maximum slope of 2.0% in all directions.
   - Required at all locations where the PAR changes directions.
   - Must be connected to the PAR.

3. Ramps are part of the PAR and must be constructed to meet either of the following criteria:
   - Longitudinal slopes less than 5% in the direction of travel requires no landing at the top of the ramp (unless the PAR changes direction).
   - Longitudinal slopes between 5 - 8.3% in the direction of travel require a landing at the top of the ramp.

C. If the Contractor constructs any pedestrian or shared-use trail facilities that are not per Plan, do not meet the above requirements, or do not follow the agreed upon resolution, the Contractor shall be responsible for correcting the deficient facilities with no compensation paid for the corrective work. To ensure that the pedestrian facilities are constructed in compliance with PROWAG, the Contractor shall follow the following three steps:

1. The Contractor shall use the appropriate ramp details in the Plan and identify the removal limits for the sidewalk and curb and gutter. If Contractor determines the removal limits are not adequate to meet PROWAG, the Contractor shall stop work immediately and consult the Engineer to determine the best solution. Once the Engineer and the Contractor reach agreement on how to proceed, the Contractor may finish the removals.

2. Prior to pouring each curb and gutter segment, the Contractor must verify the zero height curb and curb transitions will be located as shown in the Plans and will provide an adequate detectable edge as described in MN/DOT 2531 (CONCRETE CURBING). The Contractor shall also verify the proposed curb flow lines will provide positive drainage as well as maintain existing gutter inflows/outflows. The curb and gutter shall be constructed as detailed in the Plan with a defined flowline and no vertical discontinuities. The Contractor shall consult with the Engineer to determine a resolution if any of these conditions cannot be met. Once the Engineer and the Contractor reach agreement on how to proceed, the Contractor may proceed with pouring the curb and gutter.

3. After the curb has been correctly poured, the Contractor has set the sidewalk forms, and prior to placing the concrete curb ramps/sidewalks, the Contractor shall verify the ADA requirements above will be achieved. If any of these requirements cannot be met the Contractor shall meet with the Engineer to determine the best solution. Once the Engineer and the Contractor reach
agreement on how to proceed, the Contractor may proceed with the curb ramp/sidewalk pour.

D. It shall be the responsibility of the Contractor, or Contractor’s Surveyor if applicable, to layout all proposed work at each intersection in accordance with the Plan and requirements listed in this Special Provision. The Contractor may confer with the Engineer for guidance in laying out the proposed work, but it will be the Contractor’s responsibility to ensure the proposed work meets all the requirements of this Special Provision. This layout includes, but is not limited to placement of grade breaks, curb transitions, gutter flow lines, truncated dome placement, crosswalk marking placement, flares, landing limits, and ramp limits. It is important that the Contractor layout this work properly to achieve the construction of a compliant pedestrian facility. This layout work shall be incidental with no extra compensation paid.

E. The Contractor shall utilize measures and methods when working near existing buildings that will avoid damaging the building’s face or structure. The contractor will be responsible for any damage to the building’s face or structure, both below and above ground. Any damage resulting from Contractor operations will be repaired at the Contractor’s expense to the satisfaction of the Engineer.

F. The Contractor shall round all joints and edges of the walk with a ¼ inch radius edging tool, contraction joints shall extend to at least 30 percent of walk thickness and shall be approximately 1/8 inch wide as per MnDOT 2521. The Contractor shall also have the option of providing saw cuts to construct the sidewalk joints. This work shall be considered incidental and no extra compensation paid.

G. If pedestrian signal system work is included in the project, all pedestrian signal systems should be installed as shown in the Plan and must be constructed to meet the following criteria. The Contractor shall verify that the proposed push button locations will meet all of the following criteria before proceeding with the installation of the pedestrian push button system:

- Pedestrian push buttons shall be oriented with the button facing towards the intersection and the button face placed parallel to the outside edge of the crosswalk.
- Pedestrian push buttons shall be a minimum of 4 feet and a maximum of 10 feet from the back of curb/edge of roadway, but may be placed 1.5 feet to 4 feet from the back of curb/edge of roadway if mounted on a signal pole as indicated in the Plan or as approved by the Engineer.
- Pedestrian push buttons shall be located at the outside crosswalk edge and shall be no more than 5 feet offset from the projected outside edge of the crosswalk/outside edge of detectable warnings.
- Pedestrian push buttons shall be a minimum of 10 feet apart, except in islands and medians, where the minimum separation is 5 feet.
- Each pedestrian push button shall have a landing immediately adjacent to the push button face with minimum dimensions of 4 feet by 4 feet and a maximum slope of 2.0% in all directions. Center the push button on the landing if possible to do so without violating any of the requirements listed
in this Special Provision. The landing must be connected to the Pedestrian Access Route.

- A 6-foot wide clear distance between obstructions shall be maintained wherever it is possible to do so for snow removal purposes.
- The push buttons shall be mounted at a height of 42 inches as indicated in the Plan.
- If it is possible to mount a push button on a signal pole and meet all the criteria listed in this Special Provision, then the push button shall be mounted on signal pole and the unused push button station components shall be considered surplus materials and delivered to the City of Duluth Traffic Operations Office at 1532 N Michigan Street.
- Crosswalks shall be striped in a straight alignment between the outside edges of the detectable warnings with no kinks unless the crosswalks are shown as kinked in the Plan.
- The Contractor shall maintain all working points marked by the surveyor and use the working points to layout push button locations in accordance with the Plans and Special Provisions. The Engineer will verify the proposed push button locations are acceptable prior to construction.

If any of these conditions cannot be met, the Contractor shall consult with the Engineer to determine a resolution. Once the Engineer and the Contractor reach an agreement on how to proceed, the Contractor may proceed. If the Contractor constructs any pedestrian push button systems or pedestrian facilities which do not meet the criteria or the agreed upon resolution, the Contractor will be responsible for correcting the deficiencies with no compensation paid for the corrective work.

To help ensure signal systems are properly constructed the Contractor must adhere to the following practices:

- All push button station bases shall be poured either concurrently with or after the adjacent sidewalk pour.
- Signal pole foundations which are being constructed in or adjacent to sidewalk shall be constructed in accordance with the applicable MnDOT Standard Plate 8120 or 8126. If a push button is proposed to be mounted on a signal pole, the Contractor shall determine the finished grade of the top of proposed sidewalk prior to pouring the signal pole foundation. The signal pole foundation shall not be more than 8 inches above the finish grade of the sidewalk and must still meet the vertical clearance requirements of the applicable MnDOT Standard Plates 8120 or 8126. If this is not possible, the Contractor shall consult with the Engineer to determine the appropriate solution.

23. **Section 2571 Plant Installation** is supplemented with the following:

Plant installation shall be performed in accordance with the provisions of Mn/DOT 2571, except as modified below:

a) Section 2571.2 Materials, subsections C4 through C8 are deleted.

b) Section 2571.3 Construction Requirements, A General, Paragraph 1 is changed to read: At least one owner or the Operations Manager of the general contracting firm
and the subcontracting firm shall hold a valid Mn/DOT Landscape Specialist
certification. The Contractor shall provide experienced crews working under the
direct supervision of the Certified Specialist.

c) Section 2571.3 Construction Requirements, A1a Preparatory Work, paragraph 2) a.
is deleted.

d) Section 2571.3 Construction Requirements, A1b Preparation of Planting Holes and Beds, paragraphs 2) and 4) are deleted.

e) Section 2571.3 Construction Requirements, A1c Initial Planting Operations, paragraph 6) is deleted.

f) Section 2571.3 Construction Requirements, A1e Plant Establishment Period, paragraph is hereby changed to read: The plant establishment period is on calendar year from the date all of the initial planting operations on the Project are completed, unless specified otherwise.

g) Section 2571.3 Construction Requirements, A2 Plant Layout, paragraph b. is deleted.

h) Section 2571.3 Construction Requirements, A7 Equipment Required, the entire subsection is deleted.

i) Section 2571.3 Construction Requirements, subsections B1, B2, and B3 are deleted.

j) Section 2571.3 Construction Requirements, F Installation of Plants, F1 General, paragraph (a) is deleted.

k) Section 2571.3 Construction Requirements, J Protection of Plants, subsections J1(a), J2, J3 are deleted.

l) Section 2571.3 Construction Requirements, M Plant Establishment Period, subsection M3 Replacement Requirements, (c) Paragraph 3 is hereby changed to read: At the end of the one year plant establishment period, the Contractor is responsible for determining which plants need to be replaced.

m) Section 2571.5 Basis of Payment, subsections A, B, C, and D are deleted and hereby changed to read: Upon completion of planting and prior to final inspection, the Contractor shall be paid 90% of the contract unit price. The City will hold 10% of the unit price until after the final walk-thru inspection by the Engineer. The final walk-thru will be scheduled during the first week in July of the year following the completion of planting.

BID PACKET

24. Exhibit A – Change to the estimated quantity on line 38, bid item 2411.501, Structural Concrete (3Y43) of the Exhibit A proposal form to 36 cubic yards.

END OF ADDENDUM
ANODE CONNECTION

MJ RETAINER GLAND

VALVE OR HYDRANT

6 OUNCE ZINC ANODE CAP

COR-TEN MJ BOLT WITH EXTRA LENGTH AS NECESSARY TO HOLD SECOND NUT AND ANODE CAP

WRAP ANODE WIRE AROUND MJ BOLT AND SECURE WITH SECOND NUT. COAT BOTH NUTS WITH BITUMASTIC

3# MAGNESIUM ANODE