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**GRAND TOTAL:**
GENERAL NOTES

ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION" CONCURRENT WITH THE PERMIT DATE. (Available at: http://www.dot.state.mn.us/pre-lettering/spec/)

2. THE CURRENT EDITION OF THE CITY OF DULUTH PUBLIC WORKS AND UTILITIES DEPARTMENT STANDARD SPECIFICATIONS AND SUPPLEMENTS OR ADDENDA SHALL APPLY. (Available at: http://www.duluthmn.gov/engineers/standard-construction-specifications/)

3. CONTRACTOR SHALL ACQUIRE ALL NECESSARY PERMITS.

4. ANY DIFFERENCES BETWEEN PLANS AND SPECIFICATIONS AND QUESTIONS REGARDING INTERPRETATIONS OF PLANS AND SPECIFICATIONS SHALL BE RESOLVED BY THE ENGINEER OR OWNER. THE CONTRACTOR WILL NOT BE PERMITTED TO TAKE ADVANTAGE OF ANY MISSTATED CONDITIONS, ERRORS OR OMISSIONS CONCEIVED BY THE CONTRACTOR.

5. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "SOCO" AT (1-800-252-1166) TWO WORKING DAYS PRIOR TO ANY EXCAVATION OR CONSTRUCTION.

6. ALTHOUGH SUCH WORK MAY NOT BE SPECIFICALLY NOTED ON THESE PLANS, CONTRACTOR SHALL FURNISH AND INSTALL ALL SUPPLEMENTARY OR MEASURABLE FACILITIES, MASTERS NEEDED, OR DEVICES INCIDENTAL TO OR NECESSARY FOR A SOUND, SECURE AND COMPLETE INSTALLATION.

7. ALL CONCRETE STRUCTURES SHALL CONFORM TO SPEC 2461 STRUCTURAL CONCRETE OF MINNESOTA MATERIALS LAB SUPPLEMENTARY SPECIFICATIONS FOR CONSTRUCTION CURRENT EDITION Concurrent with the Permit Date. (Available at: http://www.dot.state.mn.us/pre-lettering/spec/2014-

8. ALL CONCRETE CURB SHALL CONFORM TO SPEC 2531 CONCRETE CURBING OF MINNESOTA MATERIALS LAB SUPPLEMENTAL SPECIFICATIONS FOR CONSTRUCTION CURRENT EDITION Concurrent with the Permit Date. (Available at: http://www.dot.state.mn.us/pre-lettering/spec/2014-

9. EQUIPMENT OR MATERIALS SPECIFIED IN THESE PLANS HAVE BEEN SPECIFIED BECAUSE THEY MEET THE PARAMETERS NECESSARY TO PERFORM A CERTAIN FUNCTION. THERE MAY BE OTHER EQUIPMENT OR MATERIALS THAT CAN BE USED TO MEET THE SAME OBJECTIVE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONSIDER ALL EQUIPMENT OR MATERIALS THAT CAN BE USED TO MEET THE SPECIFICATIONS, AND TO SELECT THE EQUIPMENT OR MATERIALS THAT ARE BEST SUITED TO THE SPECIFICATIONS AND THE REQUIREMENTS OF THE JOB.

10. BY SUBMISSION OF HIS BID PROPOSAL THE CONTRACTOR ACKNOWLEDGES THAT HE/SHE HAS THOROUGHLY EXAMINED THE LOCATION OF THE WORK TO BE PERFORMED, IS FAMILIAR WITH LOCAL CONDITIONS, AND HAS THE RESOURCES TO LAYOUT AND CONSTRUCT THESE PLANS.

11. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL SURVEY CONTROL STAKES SET FOR LINE,GRADE, OR CONTROL IN THEIR ORIGINAL LOCATIONS. ANY EXPENSES INCURRED IN REPLACING ANY SUCH SURVEY STAKES WHICH THE CONTRACTOR OR HIS SUBCONTRACTORS MAY HAVE FAILED TO PRESERVE SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR UNCOVERING ALL EXISTING UTILITIES LINES IDENTIFIED ON SURVEY PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE PROPERTY OWNER OF THE EXISTING UTILITIES LINES. ALL EXISTING UTILITIES LINES IDENTIFIED ON SURVEY PLANS SHALL BE THE CONTRACTOR'S RESPONSIBILITY.

13. ALL WORKSHOPS AND MATERIALS THROUGHOUT THE JOB SHALL BE OF THE HIGHEST QUALITY. ALL MATERIALS SHALL BE NEW, UNLESS APPROVED BY THE ENGINEER.

14. THE CONTRACTOR SHALL AT ALL TIMES COORDINATE WORK WITH OTHER CONTRACTORS INVOLVED IN THE CONSTRUCTION WORK.

15. ALL WORK AND MATERIALS WHICH DO NOT CONFORM TO THE SPECIFICATIONS AND OR PLANS SHALL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.

16. ALL WORK IS TO BE COMPLETED IN A SAFE MANNER IN ACCORDANCE WITH THESE CONSTRUCTION SPECIFICATIONS. ANY VIOLATION THEREOF MUST BE CORRECTED AT THE COST OF THE CONTRACTOR. ALL WORK MUST CONFORM TO THE REQUIREMENTS OF ALL GOVERNMENTAL REGULATING AGENCIES AND THE COST OF CONSTRUCTION AND MATERIALS SHALL BE INCLUDED IN THE UNIT PRICE OF MATERIALS. EXAMPLES OF SUCH REGULATIONS, BUT NOT LIMITED TO, ARE:

A. SPECIAL TESTS AND PAYING FOR STREET CROSSINGS.

B. SKIDDING WHEN REQUIRED BECAUSE OF THE TRENCH DEPTH.

C. CLOSING A TRENCH IN THOSE AREAS WHERE NO OPEN TRENCH IS ALLOWED OVERNIGHT.

D. BARRIERING AND TRAFFIC CONTROL AS REQUIRED.

17. REVIEWS TO THE APPROVED CONSTRUCTION DRAWINGS AND SPECIFICATIONS MUST BE APPROVED BY THE OWNER PRIOR TO CONSTRUCTION. ANY UNAPPROVED REVIEWS ARE SUBJECT TO REMOVAL AND/OR Replacement AT THE CONTRACTOR'S EXPENSE.

18. THE QUANTITIES AND SITE CONDITIONS DESCRIBED IN THESE PLANS ARE FOR INFORMATIONAL PURPOSES ONLY AND ARE SUBJECT TO ERROR AND OMISSION. CONTRACTORS SHALL SATISFY THEMSELVES AS TO ACTUAL QUANTITIES AND SITE CONDITIONS PRIOR TO BIDDING THE WORK FOR THE CONSTRUCTION COVERED BY THESE PLANS.

19. A RESPONSIBLE EFFORT HAS BEEN MADE TO SHOW THE LOCATIONS OF EXISTING UNDERGROUND FACILITIES AND UTILITIES IN THE CONGLOM ERATE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO UTILITIES AND/OR FACILITIES CAUSED DURING THEIR CONSTRUCTION OPERATIONS. CONTRACTOR SHALL CALL "SOCO" AT (1-800-252-1166) PRIOR TO ANY EXCAVATION.

20. THE CONTRACTOR IS RESPONSIBLE FOR ALL COOPERATION OF CONSTRUCTION AFFECTING UTILITIES AND THE COORDINATION OF ANY NECESSARY UTILITY RELIEF WORK.

21. THESE PLANS ARE SUBJECT TO THE INTERPRETATION OF INTENT BY THE ENGINEER. ALL QUESTIONS CONCERNING THE INTERPRETATION OF THESE PLANS MUST BE SUBMITTED TO THE ENGINEER. ANYONE WHO TAKES UPON THEMSELVES THE INTERPRETATION OF THE DRAWINGS MAKES REVISIONS TO THEM WITHOUT CONFERING WITH THE DESIGN ENGINEER SHALL BE RESPONSIBLE FOR THE CONSEQUENCES THEREOF.

22. NOTHING CONTAINED IN THE CONTRACT DOCUMENTS SHALL CREATE, NOR SHALL BE CONSTRUED TO CREATE ANY CONTRACTUAL RELATIONSHIP BETWEEN THE ENGINEER AND THE CONTRACTOR OR ANY SUBCONTRACTOR.

23. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION ERRORS, METHODOLOGY OR TECHNIQUES INCORRECTLY IMPLEMENTED, CONSTRUCTION OPERATIONS OR PROCEDURES UTILIZED IN CONNECTION WITH THE WORK. THE ENGINEER WILL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.

24. PRIOR TO BEGINNING THE WORK, THE CONTRACTOR SHALL TYPICALLY SATISFY HIMSELF AS TO THE ACTUAL CONDITIONS, EARTHWORK QUANTITIES AND REQUIREMENTS OF WORK AND EXACTITY OF SPECIFICATIONS. IF ANY, ALL DATA SHALL BE MADE AGAINST THE OWNER/DEVELOPER OR ENGINEER FOR ANY EXCESS OR DEFICIENCY THEREIN, ACTUAL OR RELATIVE.

25. ALL MATERIALS ARE TO BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS, UNLESS OTHERWISE DIRECTED BY THE PROJECT SPECIFICATIONS.

26. ALL PAYING AND GRADING CONSTRUCTION WORK WITHIN THE PUBLIC RIGHT OF WAY, INCLUDING STREET ALIGNMENTS, ESTATES WAYS, EXISTING UTILITY LINES AND OTHER AREAS EVIDENCED ON THE CONTRACT DOCUMENTS SHALL CONFORM TO THE GOVERNMENTAL MINIMUM STANDARDS AND SPECIFICATIONS. MINNESOTA DEPARTMENT OF TRANSPORTATION STANDARDS AND OTHER STATE SPECIFICATIONS WILL BE CONTINUALLY UPDATED WHERE NOT AGREED TO OR INCLUDED IN THE GOVERNMENTAL SPECIFICATIONS. THE DOCUMENTS AND SPECIFICATIONS INCLUDED IN THIS PLAN ARE HEREBY MADE A PART OF THE CONTRACT DOCUMENTS AND PROJECTS MANUAL WHERE THERE IS A CONFLICT BETWEEN THESE DOCUMENTS AND THE PROJECT MANUAL. THE MORE STRINGENT OF THE REQUIREMENTS SHALL PREVAIL UNLESS PRIOR CLARIFICATION FROM THE DESIGN ENGINEER HAS BEEN OBTAINED IN WRITING TO THE CONTRACTOR.

27. CONTRACTOR TO PROVIDE ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES NECESSARY TO COMPLETE ALL PROJECT SITE WORK, SITE CLEARING, DREDGING, ROADING, EARTHWORK, ELEVATIONS, STRUCTURE, TRAFFIC/TIMBERING/BACKSETTING, ALL BORING, DRILLING, SITE CHARGING AND EARTHWORK INCLUDING ALL PAYING, PLACING, UTILITY LINE CONSTRUCTION, CURB, SIDEWALKS, SITE ELEVEN WORKSHOPS AND MATERIALS THROUGHOUT THE JOB Shall BE OF THE HIGHEST QUALITY. ALL MATERIALS SHALL BE NEW, UNLESS APPROVED BY THE ENGINEER.

28. THE ENGINEER OR OWNER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION.

29. ALL OBSTRUCTIONS IN RIGHT OF WAY SHALL BE REMOVED BEFORE ANY CONSTRUCTION IS PERMITTED.

30. ANY QUANTITIES SHOWN ON PLANS ARE NOT VERIFIED BY THE ENGINEER. QUANTITIES ARE APPROXIMATE AND ARE MEANT FOR ESTIMATING PURPOSES. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING HIS OWN QUANTITY TAKE OFFS. THE OWNER DOES NOT VERIFY ANY CUT/ADD QUANTITIES IF SHOWN ON THE PLANS.


32. THE CONTRACTOR OR SUBCONTRACTORS SHALL NOT DEPART FROM THESE PLANS OR MAKE FIELD CHANGES WITHOUT NOTIFYING IN WRITING; THE OWNER AND ENGINEER REQUESTING APPROVAL OF SUCH MODIFICATIONS. ANY CHANGES MADE WITHOUT WRITTEN APPROVAL WILL BE AT THE CONTRACTOR’S EXPENSE.

33. ALL CONSTRUCTION REMOVAL ITEMS SHALL BE DISPOSED OF AT AN APPROVED WASTE SITE.

34. CONTRACTOR IS REQUIRED TO POSSESS & FOLLOW THE GOVERNMENT SPECIFICATIONS REFERENCED IN THIS PLAN.

TRAFFIC CONTROL

1. THE WORK UNDER THIS SECTION SHALL BE IN ACCORDANCE WITH THE REFERENCED MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL BE CONSIDERED A MINIMUM STANDARD FOR THE PROTECTION OF WORKMEN AND THE TRAVELING PUBLIC.

2. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION OPERATIONS BY THE CONTRACTOR, A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE TRAFFIC CONTROL PLAN SHALL BE A MINIMUM OF 2 WEEKS PRIOR TO COMMENCEMENT OF WORK. THE PLAN SHALL INCLUDE, INSTALLING, MAINTAINING, MOVING AND REMOVING BARRIERS, WARNING SIGNS, LIGHTS, SIGNALS, CONES, AND ALL OTHER TRAFFIC CONTROL DEVICES, FLASHER DEVICES AND VARIOUS OTHER DEVICES TO ENSURE THE SAFETY OF THE TRAFFIC PASSING THROUGH AND/OR AROUND THE WORK AREA. ADDITIONALLY, THE TRAFFIC CONTROL PLAN SHALL PROVIDE FOR MOVEMENT OF DUOGRAM RIM AND VEHICULAR TRAFFIC THROUGH CONSTRUCTION ZONES AND PROTECT WORKMEN IN OR ADJACENT TO THE WORK ZONE. IT SHALL ALSO SPECIFICALLY AND GRAPHICALLY IDENTIFY A PROPOSED SEQUENCE OF OPERATIONS AND A CAMPAIGN PLAN. NO WORK OR TRAFFIC SHUTDOWNS WILL BE PERMITTED OR AUTHORIZED WITHOUT DETAILED PLAN FOR APPROVAL.

3. VEHICULAR ACCESS SHALL BE MAINTAINED TO ALL OPENWAYS AND SIDE STREETS AT ALL TIMES PERMITTED. WHEN ACCESS MUST BE RESTRICTED TO ONE LANE FOR CONSTRUCTION, THE CONTRACTOR SHALL GIVE WRITTEN NOTICE TO EACH AFFECTED RESIDENT NOT LESS THAN 24 HOURS IN ADVANCE.
VINYL COATED CHAIN LINK FENCE DETAIL

SILT FENCE, INSTALLATION

CHAIN LINK FENCE NOTES:
- STRUCTURAL STEEL PER MNDOT SPEC. 3306
- STRUCTURAL PIPE PER MNDOT SPEC. 3382
- GALVANIZE THE FENCE POST ANCHORAGE AFTER
  FABRICATION PER MNDOT SPEC. 3394. GALVANIZE
  THE FASTENERS PER MNDOT SPEC. 3392.

CHAIN LINK FENCE DETAILS:
FENCE SHALL BE PROVIDED AND INSTALLED ACCORDING TO
STANDARD PLATE 9322K WITH THE FOLLOWING EXCEPTIONS:

1. ALL END POSTS AND INTERMEDIATE LINE POSTS SHALL BE
   2" NOM. DIAMETER AS DETAILED AND NOTED ABOVE.
2. ALL FENCE COMPONENTS EXCEPT BASE PLATE AND PIPE
   SLEEVE ANCHORS SHALL BE BLACK, VINYL COATED.

PAYMENT FOR FURNISHING AND INSTALLING FENCES AS
DETAILED AND NOTED ABOVE SHALL BE INCLUDED IN PRICE
BID FOR ITEM "WIRE FENCE DESIGN 4BV-9322".

SILT FENCE, PREASSEMBLED
DESIGN GUIDELINES:
TO PROTECT AREAS FROM SHEET
FLOW, MAXIMUM CONTRIBUTING AREA:
1 ACRE.

STREAM BANK OR
TOE OF SLOPE

PLAN VIEW
SIDE VIEW
DISTURBED SOIL, WORK AREA DRAINS TO STREAM

MINIMUM POSSIBLE
TURNING RADIUS = 10'
(MAY BE LARGER
WITH LARGER
EQUIPMENT)

CONSTRUCTION
LIMITS

SLT FENCE
25' MIN. WITH
10-20% SLOPE
GRADE

GEOTEXTILE FABRIC, 30" WIDE
5 FT. MIN. LENGTH POST
AT 6 FT. MAX. SPACING

STAPLES
FABRIC ANCHORAGE TRENCH,
BACKFILL W/TAMPED NATURAL SOIL

FLOW
FLOW

1200 NEW STREET
RETAINING WALL

1720 NEW STREET, DULUTH, MN
EXISTING CONDITIONS & REMOVALS PLAN NOTES

1. **REMOVE RETAINING WALL.**

2. **CLEAR AND GRUB TREE.**

3. **RECEIVER. SALVAGE AND RE-INSTALL GUARDRAIL.**

4. **REMOVE ALL DEBRIS FROM RETAINING WALL FAILURE.**

**Diagram Notes:**
- **BEGIN GUARDRAIL SALVAGE AND REINSTALL**
- **REMOVE END OF RETAINING WALL AS NECESSARY TO ACCOMMODATE NEW WALL.**
- **EX WOOD STAR TO REMAIN.**
- **EX RETAINING WALL TO REMAIN.**
- **END GUARDRAIL SALVAGE AND REINSTALL.**
SITE & GRADING PLAN NOTES

1. CONSTRUCT NON-REINFORCED GRAVITY RETAINING WALL WITH VINYL COATED CHAIN LINK FENCE. SEE SECTION A-A ON SHEET C9.0.

2. REINSTALL SALVAGED GUARD RAIL.

3. INSTALL SILT FENCE PER DETAIL ON SHEET C9.0.

4. PLACE 4" TOPSOIL AND SOD ALL DISTURBED AREAS.
4" TOPSOIL AND SOD. GRADE BETWEEN BACK OF CURB AND WALL VARIES.

EXISTING CONCRETE CURB TO REMAIN.

EXISTING BITUMINOUS TO REMAIN.

EXISTING GRADE ALONG SLOPE AT 2V:1H INCIDENTAL TO PREFABRICATED BLOCK WALL.

BACKFILL INCIDENTAL TO PREFABRICATED BLOCK WALL TO BE SELECT GRANULAR BURROW MOD. 7% (CV) MnDOT 2211.503

3/4" DIA. CRUSHED AGGREGATE DIRECTLY BEHIND WALL INCIDENTAL TO ITEM 2411.618 PREFABRICATED MODULAR BLOCK WALL.

FABRIC WRAPPED PERFORATED DRAIN TILE INCIDENTAL TO PREFABRICATED BLOCK WALL. DAYLIGHT DRAIN TILE THROUGH FACE OF WALL AND DISCHARGE AT 722.00'.

12'-0" TALL VINYL-COATED CHAIN LINK FENCE. SEE DETAIL ON SHEET C5.0.

TOP OF WALL ELEV. VARIES 778.00'-780.00'

EXISTING GRADE AT BOTTOM OF WALL

PROPOSED NON-REINFORCED GRAVITY WALL SYSTEM CONSTRUCTED AT TOE OF SLOPE.

BOTTOM OF WALL ELEV. ±772.50

3/4" DIA. CRUSHED AGGREGATE LEVELING PAD INCIDENTAL TO ITEM 2411.618 PREFABRICATED MODULAR BLOCK WALL.

SECTION A-A