# CITY OF MAPLE GROVE PLAN SYMBOLS

HENNEPIN COUNTY. MINNESOTA

PLANS FOR: RETAINING WALL REMOVAL. BITUMINOUS WALK REMOVAL. AGGREGATE BASE. BITUMINOUS SURFACE, CONCRETE WALK, PREFABRICATED MODULAR BLOCK WALLS (PMBW)

WEAVER LAKE RD RETAINING WALL RECONSTRUCTION CITY PROJECT NO. 19-09

> END C.P. 19-09 € WB WEAVER LAKE RD STA 112+57.68 17 16 RIDGE DR. 84th 11BAR 76th AVE.

INDEX MAP

PLAN REVISIONS SHEET NO. APPROVED BY



SCALE

\_\_2000′\_\_

# **GOVERNING SPECIFICATIONS**

THE 2020 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION SHALL GOVERN.

ALL TRAFFIC CONTROL DEVICES SHALL CONFORM AND BE PLACED IN ACCORDANCE TO THE 'MINNESOTA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (MN MUTCD) AND PART VI, "FIELD MANUAL FOR TEMPORARY TRAFFIC CONTROL ZONE LAYOUTS".

CITY OF MAPLE GROVE STANDARD SPECIFICATION FOR UTILITY AND STREET

# INDEX

SHEET NO.	SHEET DESCRIPTION
1	TITLE SHEET
2	STATEMENT OF ESTIMATED QUANTITIES
3	CONSTRUCTION/SOILS NOTES AND STANDARD PLATES
	EXISTING UTILITY TABULATIONS
4 5	TYPICAL SECTIONS
6 - 10	STANDARD PLAN SHEETS
11	TRAFFIC CONTROL PLANS
12	ALIGNMENT PLANS AND TABULATIONS
13	INPLACE TOPOGRAPHY, UTILITIES, RIGHT OF WAY
	AND REMOVAL PLANS
14	CONSTRUCTION AND DRAINAGE PLANS
15 - 16	STORM WATER POLLUTION PREVENTION PLAN (SWPPP)
17 - 21	RETAINING WALL PLANS
22	EROSION CONTROL AND TURF ESTABLISHMENT PLANS
23 - 32	CROSS SECTIONS

THIS PLAN CONTAINS 32 SHEETS



I HEREBY CERTIFY THAT THIS PLAN 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.

DATE <u>5/5/2022</u> LIC. NO. <u>56135</u> PRINT NAME TYLER A. SMITH

RECOMMENDED FOR APPROVAL

CITY ENGINEER, CITY OF MAPLE GROVE

20.

THIS PLAN AND/OR SPECIFICATION WAS PREPARED SPECIFICALLY FOR THIS PROJECT, AND ANY RE-USE OF DETAILS OR SPECIFICATIONS ON OTHER PROJECTS IS NOT INTENDED OR AUTHORIZED BY THE DESIGNER. LIABILITY FOR ANY RE-USE ON OTHER PROJECTS IS THE RESPONSIBILITY OF THE PERSON, AGENCY, OR CORPORATION USING

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS QUALITY LEVEL WAS DETERMINED ACCORDING TO GUIDELINES OF CI/ASCE 38-02. ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING

STATE LINE

QUARTER LINE.

SIXTEENTH LINE. RIGHT-OF-WAY LINE

TOWNSHIP OR RANGE LINE SECTION LINE.

PRESENT RIGHT-OF-WAY LINE CONTROL OF ACCESS LINE

CORPORATE OR CITY LIMITS

RAILROAD RIGHT-OF-WAY LINE

CONC. RETAINING WALL

RIVER OR CREEK .

DRY RUN. DRAINAGE DITCH

DRAIN TILE. DROP INLET.

GUARD RAIL

BARBED WIRE FENCE WOVEN WIRE FENCE

CHAIN LINK FENCE

RAILROAD SNOW FENCE

STONE WALL OR FENCE

RAIL ROAD CROSSING SIGN

RAILROAD CROSSING BELL

FLECTRIC WARNING SIGN

MEANDER CORNER

ORCHARD

NURSERY CATCH BASIN

FIRE HYDRANT CATTLE GUARD

UNDERPASS (Highway Under)

BUILDING (One Story Frame) F-FRAME

S-STONE

B-BRICK

IRON PIPE OR ROD

WOODEN HUB. SAND PIT. BORROW PIT ROCK QUARRY C-CONCRETE

T-TILE

ST-STUCCO

UTILITY SYMBOLS

TELEPHONE OR TELEGRAPH POLE LINE JOINT TELEPHONE AND POWER ON POWER POLES ON TELEPHONE POLES

PEDESTAL (TELEPHONE CABLE TERMINAL.)

TELEPHONE CABLE IN CONDUIT ELECTRIC CABLE IN CONDUIT

TELEPHONE MANHOLE

BURIED TELEPHONE CABLE

BURIED ELECTRIC CABLE

AERIAL TELEPHONE CABLE SEWER, (SANITARY)

ELECTRIC MANHOLE

SEWER MANHOLE

STEEL TOWER

STREET LIGHT

WATER MAIN

PROPERTY LINE (Except Land Line: VACATED PLATTED PROPERTY......

NAME -

 $\approx$ 

SIZE -->- →- → -= = = = = =

 $\bigcirc$ ======

-P--◆---P---

---xc---xc--

\_\_\_\_

BEGIN C.P. 19-09

STA. 100+42.20

€ WB WEAVER LAKE RD

39R29-69829s

· romano

~~~

Δ

\_\_\_\_\_P\_

----- T-BUR -----

—->—-->—

ДΗ

C.B. □

(TIMBER)

|       |          |                                      |      | PROJECT TOTAL         |
|-------|----------|--------------------------------------|------|-----------------------|
| NOTES | ITEM NO. | ITEM DESCRIPTION                     | UNIT | ESTIMATED<br>QUANTITY |
|       | 2021.501 | MOBILIZATION                         | LS   | 1                     |
|       | 2101.502 | CLEARING                             | EACH | 28                    |
|       | 2101.502 | GRUBBING                             | EACH | 28                    |
|       | 2104.502 | SALVAGE CONCRETE APRON               | EACH | 1                     |
|       | 2104.502 | SALVAGE SIGN PANEL TYPE C            | EACH | 6                     |
|       |          |                                      |      |                       |
|       | 2104.503 | SAWING BIT PAVEMENT (FULL DEPTH)     | L F  | 33                    |
|       | 2104.503 | REMOVE FENCE                         | L F  | 763                   |
| 2     | 2104.503 | SALVAGE FENCE                        | L F  | 183                   |
|       | 2104.504 | REMOVE BITUMINOUS PAVEMENT           | S Y  | 1231                  |
| 1     | 2104.518 | REMOVE RETAINING WALL                | S F  | 5700                  |
|       |          |                                      |      |                       |
|       | 2106.507 | EXCAVATION - COMMON                  | CY   | 1800                  |
|       | 2106.507 | COMMON EMBANKMENT (CV)               | CY   | 200                   |
| 3, 4  | 2360.509 | TYPE SP 9.5 WEARING COURSE MIX (2;B) | TON  | 193                   |
| 5     | 2411.618 | PREFABRICATED MODULAR BLOCK WALL     | S F  | 4190                  |
|       | 2501.502 | INSTALL CONCRETE APRON               | EACH | 1                     |
|       |          |                                      |      |                       |
|       | 2506.502 | ADJUST FRAME & RING CASTING          | EACH | 1                     |
|       | 2521.518 | 4" CONCRETE WALK                     | S F  | 1185                  |
|       | 2557.503 | WIRE FENCE DESIGN 48V-9322           | L F  | 878                   |
| 2     | 2557.603 | INSTALL FENCE                        | L F  | 183                   |
|       | 2563.601 | TRAFFIC CONTROL                      | LS   | 1                     |
|       |          |                                      |      |                       |
|       | 2564.502 | INSTALL SIGN PANEL TYPE C            | EACH | 6                     |
| 7     | 2571.502 |                                      | EACH | 10                    |
| 7     | 2571.502 | DECIDUOUS TREE 2.5" CAL B&B          | EACH | 18                    |
| 6     | 2572.503 | TEMPORARY FENCE                      | L F  | 851                   |
|       | 2573.502 | STORM DRAIN INLET PROTECTION         | EACH | 5                     |
|       |          |                                      |      |                       |
|       | 2573.502 | CULVERT END CONTROLS                 | EACH | 1                     |
|       | 2573.503 |                                      | L F  | 360                   |
|       | 2573.503 | SEDIMENT CONTROL LOG TYPE STRAW      | L F  | 660                   |
|       | 2574.505 | SUBSOILING                           | ACRE | 0.3                   |
|       | 2574.505 | SOIL BED PREPARATION                 | ACRE | 0.3                   |
|       |          |                                      |      |                       |
| 8     | 2574.508 |                                      | LB   | 60                    |
|       | 2575.504 | SODDING TYPE LAWN                    | S Y  | 1140                  |

- 1. ASSUMES WALL EXTENDS 2' BELOW GROUND LINE AT FRONT FACE OF WALL
- 2. ITEM INCLUDES WOOD, PVC, AND CHAINLINK FENCE
- 3. ASSUMES 113 LB/SY/IN
- 4. AGGREGATE BASE INCIDENTAL
- 5. SEE TYPICAL SECTION FOR PAYMENT HEIGHT OF WALL AND SPECIAL PROVISIONS FOR OTHER REQUIREMENTS OF THIS PAY ITEM.
- 6. COORDINATE USE WITH PROPERTY OWNER AND USE AS DIRECTED BY FIELD ENGINEER.
- 7. TREES TO BE PROVIDED BY THE CITY OF MAPLE GROVE WITH TREE TYPES TO BE DETERMINED BY PROPERTY OWNER.
- 8. ANALYSIS 22-5-10, 200 LB/ ACRE OF SOD.

| 717    |    |           |      |       |        |          |                                                                                                                                                      |
|--------|----|-----------|------|-------|--------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3      |    |           |      |       |        |          | I hereby certify that this plan, specification, or report                                                                                            |
| 12     |    |           |      |       |        |          | was prepared by me or under my direct supervision an<br>that I am a duly Licensed Professional Engineer under<br>the laws of the State of Minnesota. |
| 2      |    |           |      |       |        |          | Print Name: TYLER A. SMITH                                                                                                                           |
| a<br>C |    |           |      |       |        |          | 5 1 : A1                                                                                                                                             |
| -      | N0 | DATE      | BY   | CKD   | APPR   | REVISION | CAZUTINO                                                                                                                                             |
| :      | `  | FinaIPIan | 1245 | 7-01. | .es+01 | .dgn     | Date 5/5/2022 License # 56135                                                                                                                        |

CITY PROJECT NO.19-09

CITY PROJECT NO.19-09

S. MARTINS

DESIGNED BY
T. SMITH

CHECKED BY
S. PRUSAK



CITY OF MAPLE GROVE

STATEMENT OF ESTIMATED QUANTITIES

WEAVER LAKE RD RETAINING WALL RECONSTRUCTION

SHEET

OF

32

# CONSTRUCTION /SOILS NOTES

- 1 UNSUITABLE MATERIALS ARE TOPSOILS, OTHER ORGANIC SOILS, SILTY SOILS, AND DEBRIS.
- 2 SUITABLE MATERIALS SHALL BE ALL OTHER MINERAL SOILS ENCOUNTERED ON THE PROJECT OR FROM BORROW, NOT PREVIOUSLY DEFINED AS BEING UNSUITABLE.
- 3 SELECTED GRADING SOILS ARE DEFINED AS SUITABLE MATERIAL AVAILABLE ON THE PROJECT FROM THE ROADBED, ADJACENT CUTS OR APPROVED BORROW SOURCES.
- 4 GRANULAR MATERIAL IS DEFINED AS MATERIAL MEETING THE REQUIREMENTS OF SPEC. 3149.2A.
- 5 SELECT GRANULAR MATERIAL IS DEFINED AS MATERIAL MEETING THE REQUIREMENTS OF SPEC. 3149.2B2.
- 6 EXCESS UNSUITABLE MATERIAL SHALL BECOME THE PROPERTY OF THE DEVELOPER AND SHALL REMAIN WITHIN THE PROJECT LIMITS UNLESS OTHERWISE DIRECTED BY THE ENGINEER. COORDINATE PLACEMENT OF STOCKPILES WITH THE ENGINEER.
- 9 PROVIDE FOR THE REMOVAL AND DISPOSAL OF ANY INPLACE ABANDONED UTILITIES, OTHER STRUCTURES OR DEBRIS THAT WOULD INTERFERE WITH CONSTRUCTION. ALL SUCH MATERIALS SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL EITHER BE RECYCLED TO THE EXTENT ALLOWED OR DISPOSED OF OFF THE PROJECT LIMITS.
- 12 COMPACTION OF THE GRADING SHALL BE PER MAPLE GROVE GRADING AND LANDSCAPING SECTION 3.
- 13 DITCH BOTTOMS, TOE OF FILL, CUT RUNOUTS AND THE TOP EDGE OF THE BACKSLOPES SHALL BE ROUNDED REGARDLESS OF THE TYPICAL SECTION SHOWN.
- 14 TURF ESTABLISHMENT BY SEEDING AND MULCH SHALL BE CONSISTENT WITH ALL PROVISIONS OF TURF ESTABLISHMENT SPECIFICATIONS IN THE MAPLE GROVE STANDARD SPECIFICATIONS FOR UTILITY AND STREET CONSTRUCTION 2018.
- 15 THE CONTRACTOR IS HEREBY REMINDED OF HIS RESPONSIBILITY UNDER STATE LAW TO CONTACT ALL UTILITIES THAT MAY HAVE FACILITIES IN THE AREA. CONTACT MUST BE MADE THROUGH GOPHER STATE ONE-CALL: 1-800-252-1166
- 16 WHENEVER THE WORD "INCIDENTAL" IS USED IN THIS PLAN, IT SHALL MEAN THIS WORK WILL BE INCIDENTAL FOR WHICH NO DIRECT COMPENSATION WILL BE MADE.
- 17 THE GRADING GRADE IS DEFINED AS THE BOTTOM OF THE AGGREGATE BASE.
- 18 RIGHT OF ENTRY HAS BEEN GRANTED TO THE CITY OF MAPLE GROVE TO REPLANT TREES OUTSIDE OF EXISTING R/W LINE AND D/U EASEMENTS.
- 19 ALL RC PIPE SHALL BE CLASS III UNLESS OTHERWISE NOTED.

|           | CITY OF MAPLE GROVE STANDARD PLATES                                   |
|-----------|-----------------------------------------------------------------------|
| PLATE NO. | DESCRIPTION                                                           |
| EROS 1    | SILT FENCE                                                            |
| EROS 3    | SILT FENCE J-HOOK                                                     |
| EROS 7    | INLET PROTECTION ROCK FILTER FOR CATCH BASIN DURING ROAD CONSTRUCTION |
| EROS 11   | BIOLOG DITCH CHECK                                                    |
| EROS 12   | INFRASAFE - CULVERT INLET PROTECTOR                                   |
| EROS 13   | CONSTRUCTION ROCK ENTRANCE                                            |
| EROS 19   | CURB INLET PROTECTION                                                 |
| EROS 20   | INFRASAFE - SEDIMENT CONTROL BARRIER                                  |
| EROS 21   | INFRASAFE 2 X 3 DEBRIS COLLECTION DEVICE                              |
| STS 7     | FLARED END SECTION                                                    |
| STS 10    | PVC SUBDRAIN IN TO LOW POINT CATCH BASINS                             |
| STR 7     | BITUMINOUS TRAIL TYPICAL SECTION                                      |

| THE FOLLOWING STANDARD PLATES, APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION, SHALL APPLY ON THIS PROJECT. |                 |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------|-----------------|--|--|--|--|--|--|--|
|                                                                                                             | STANDARD PLATES |  |  |  |  |  |  |  |
| PLATE NO.                                                                                                   | DESCRIPTION     |  |  |  |  |  |  |  |
| 8000 J                                                                                                      | CHANNEL IZERS   |  |  |  |  |  |  |  |

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am a duly License # foresistional Engineer under the laws of the State of Minnesota.

Print Name: TYLER A. SMITH

NO DATE BY CKD APPR REVISION

Date 5/5/2022 License # 56135

CITY PROJECT NO. 19-09

CITY PROJECT NO. 19-09

DESIGNED BY
T. SMITH
CHECKED BY
S. PRUSAK



# CITY OF MAPLE GROVE CONSTRUCTION/SOILS NOTES AND STANDARD PLATES WEAVER LAKE RD RETAINING WALL RECONSTRUCTION

SHEET 3 0F 32

|                   |                  | EXISTING          | UTILITIES TA    | BULATION                    |                |        |                                                  |       |
|-------------------|------------------|-------------------|-----------------|-----------------------------|----------------|--------|--------------------------------------------------|-------|
|                   | LOCAT            | TON               | INDI ACE        | LITTLE TAY                  |                | REMARK | S                                                |       |
| ALIGNMENT         |                  |                   | INPLACE<br>ITEM | UTILITY<br>OWNER            | LEAVE<br>AS IS | ADJUST | RELOCATE                                         | NOTES |
|                   | STATION          | OFFSET            | 411.010         |                             |                |        |                                                  |       |
| WB WEAVER LAKE RD | 100+00 TO 101+17 | 8' LT TO 11' LT   | 4" GAS          | Centerpoint Energy          | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+60 TO 100+61 | 37' LT TO 12' LT  | 2" GAS          | Centerpoint Energy          |                | X      |                                                  |       |
| WB WEAVER LAKE RD | 101+16 TO 107+08 | 16' LT TO 18' LT  | 4" GAS          | Centerpoint Energy          | Х              |        |                                                  |       |
| WB WEAVER LAKE RD | 101+16 TO 101+17 | 16' LT TO 11' LT  | 4" GAS          | Centerpoint Energy          | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 107+08 TO 107+08 | 18' LT TO 16' LT  | 4" GAS          | Centerpoint Energy          | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 107+08 TO 112+61 | 16' LT            | 4" GAS          | Centerpoint Energy          | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 112+17           | 16' LT            | GAS VALVE       | Centerpoint Energy          |                | X      |                                                  |       |
| WB WEAVER LAKE RD | 112+61 TO 113+06 | 16' LT TO 13' LT  | 4" GAS          | Centerpoint Energy          | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 112+61 TO 112+61 | 16' LT TO 59' RT  | 3" GAS          | Centerpoint Energy          | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+21 TO 100+22 | 91' LT TO 36' LT  | BURIED FIBER    | Century Link Communications | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+22 TO 100+87 | 36' LT TO 17' LT  | BURIED FIBER    | Century Link Communications | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+87 TO 112+79 | 17' LT TO 21' LT  | BURIED FIBER    | Century Link Communications | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+34           | 35' LT            | HANDHOLE        | City of Maple Grove         | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+38           | 29' LT            | SIG MAST ARM    | City of Maple Grove         | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+28 TO 100+34 | 90' LT TO 87' RT  | BURIED TEL      | Comcast                     | Х              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+36 TO 112+82 | 23' LT TO 29' LT  | BURIED TEL      | Comcast                     |                | Х      |                                                  |       |
| WB WEAVER LAKE RD | 100+43 TO 101+68 | 154' LT TO 32' LT | BURIED TEL      | Comcast                     | Х              |        |                                                  |       |
| WB WEAVER LAKE RD | 101+68           | 32' LT            | TEL PED         | Comcast                     |                | Х      |                                                  |       |
| WB WEAVER LAKE RD | 101+68 TO 111+26 | 32' LT TO 29' LT  | BURIED TEL      | Comcast                     |                | Х      |                                                  |       |
| WB WEAVER LAKE RD | 104+08           | 29' LT            | TEL PED         | Comcast                     |                | Х      |                                                  |       |
| WB WEAVER LAKE RD | 106+30           | 29' LT            | TEL PED         | Comcast                     |                | Х      |                                                  |       |
| WB WEAVER LAKE RD | 108+16           | 30' LT            | TEL PED         | Comcast                     |                | Х      |                                                  |       |
| WB WEAVER LAKE RD | 111+26 TO 111+26 | 138' LT TO 33' LT | BURIED TEL      | Comcast                     | ×              |        |                                                  |       |
| WB WEAVER LAKE RD | 111+26           | 33' LT            | TEL PED         | Comcast                     | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 111+26 TO 113+06 | 29' LT TO 31' LT  | BURIED TEL      | Comcast                     | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+23 TO 100+29 | 91' LT TO 90' RT  | BURIED POWER    | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+25 TO 100+30 | 91' LT TO 61' RT  | BURIED POWER    | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+30 TO 100+41 | 61' RT            | BURIED POWER    | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 100+41 TO 100+42 | 61' RT TO 92' RT  | BURIED POWER    | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 105+48 TO 112+81 | 43' RT TO 26' LT  | BURIED POWER    | Xcel Energy                 |                | X      |                                                  |       |
| WB WEAVER LAKE RD | 105+49 TO 112+79 | 43' RT TO 25' LT  | BURIED POWER    | Xcel Energy                 |                | X      |                                                  |       |
| WB WEAVER LAKE RD | 111+21 TO 111+21 | 32' LT TO 23' LT  | BURIED POWER    | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 111+21 TO 112+65 | 23' LT TO 24' LT  | BURIED POWER    | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 111+22           | 32' LT            | TRANSFORMER     | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE RD | 111+22 TO 111+22 | 32' LT TO 25' LT  | BURIED POWER    | Xcel Energy                 | X              |        |                                                  |       |
| WB WEAVER LAKE BD | 112+65 10 112+66 | 24' LI IO 50' RI  | BURIED POWER    | Xcel Energy                 | - Â            |        |                                                  |       |
| WB WEAVER LAKE RD | 100+00 TO 113+00 |                   | BURIED FIBER    | Arvig/ Osseo Area Schools   | $\sim\sim$     | $\sim$ | m                                                | (1)   |
| WB WEAVER LAKE RD | 100+00 TO 113+00 |                   | BURIED FIBER    | Zayo Bandwidth              |                |        | <del>                                     </del> | (1)   |

① UTILITY IDENTIFIED IN THE AREA, LOCATION NOT CONFIRMED. UTILITY NOT SHOWN IN PLANS OR CROSS SECTIONS.

CONTRACTOR TO CONFIRM LOACATION WITH UTILITY OWNER AND COORDINATE ANY RELOCATIONS.

| A | 6/2/2022 | TAS | SP | TAS | ADDENDUM #1 | I he was the w

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: TYLER A. SMITH

Tyler A. Smith

Jate 5/5/2022 License = 56135

CITY PROJECT NO. 19-09

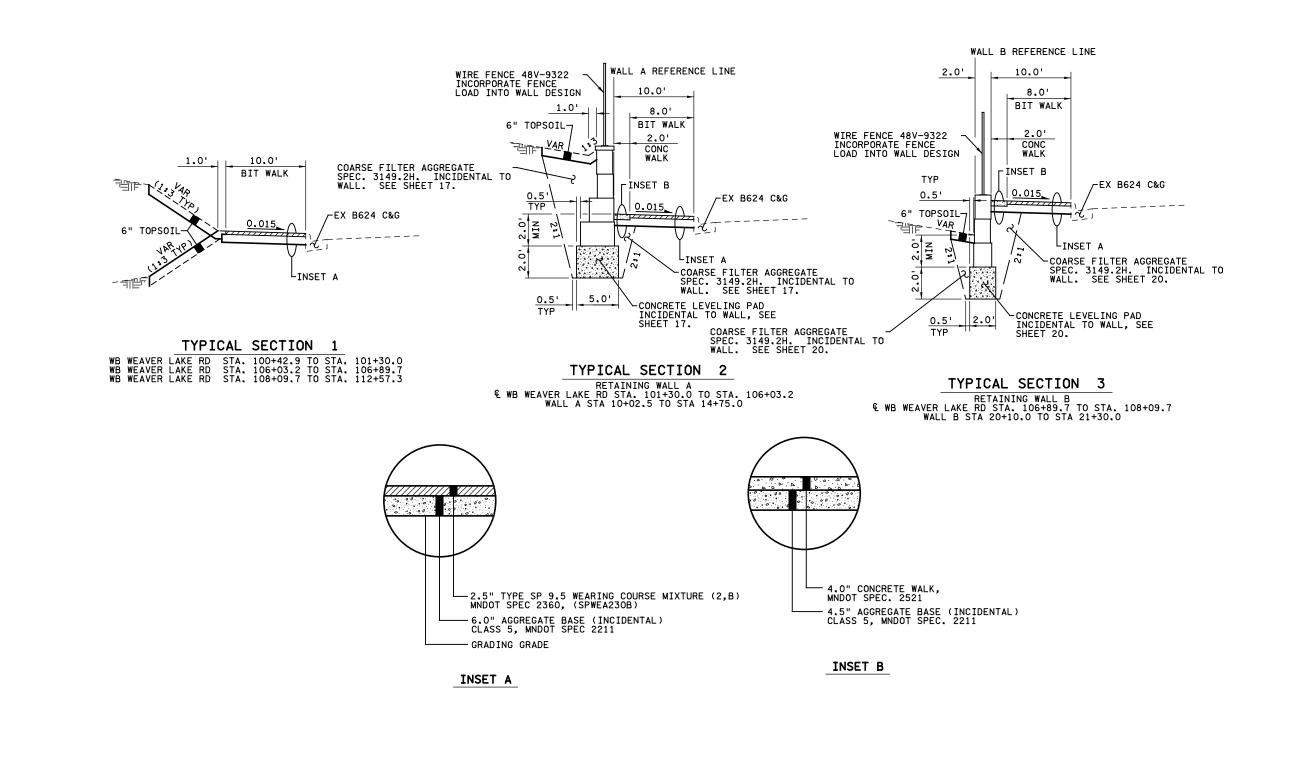
DRAWN BY
S. MARTINS
DESIGNED BY
1. SMITH
CHECKED BY
S. PRUSAK

CITY OF MAPLE GROVE

EXISTING UTILITY TABULATIONS
WEAVER LAKE RD RETAINING WALL RECONSTRUCTION

SHEET 4 0F 32

12:13:32 PM 6/2/2022 H:\Projecte\12000\12



NO DATE BY CKD APPR
...\FinalPlan\12457-01\_+s01.dgn

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. TYLER A. SMITH Tyler bit

\_License # \_\_\_\_56135\_

oate 5/5/2022

REVISION

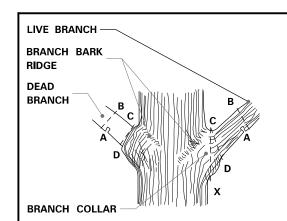
CITY PROJECT NO. 19-09

S. MARTINS DESIGNED BY T.SMITH CHECKED BY S. PRUSAK

OMM. NO. 0012457

CITY OF MAPLE GROVE TYPICAL SECTIONS WEAVER LAKE RD RETAINING WALL RECONSTRUCTION

SHEET 5 0F 32



# **BRANCHES PRUNED AT TRUNK**

TOO CORRECT TOO TOO PRUNING CLOSE LONG SLANTED CUT LIVE BUD

# BRANCHES PRUNED TO LIVE BUD

**PRUNING** 

STEPS TO PRUNING WITH PRUNING SAW:

- CUT PART WAY THROUGH THE BRANCH AT POINT A.
- 2. CUT COMPLETELY THROUGH BRANCH FROM POINT B TO A.
- 3. AT BRANCH COLLAR CUT FROM POINT C TO D.

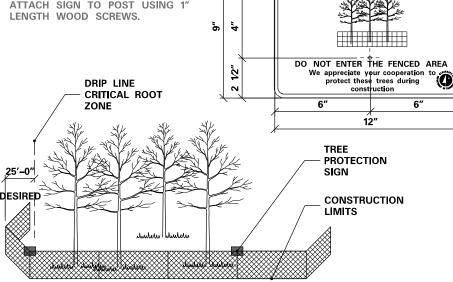
INCORRECT CUT FROM POINT C TO X (TOO CLOSE) WILL RESULT IN DISCONTINUOUS CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

CORRECT CUT FROM POINT C TO D (LEAVING BRANCH COLLAR BUT NOT THE STUB FROM POINT B TO A) WILL RESULT IN CONTINUOUS DOUGHNUT SHAPED CALLUS FORMATION AFTER ONE SEASON OF GROWTH.

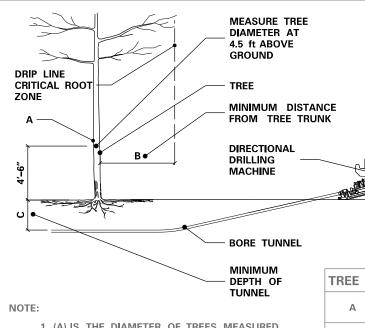
#### PRUNING NOTES:

- 1. PRUNE USING CLEAN AND SHARP SCISSOR-TYPE PRUNER OR PRUNING SAW.
- 2. THE BEST TIME TO PRUNE IS LATE DORMANT SEASON OR EARLY SPRING.
- 3. AVOID PRUNING OAKS IN APRIL, MAY, JUNE OR JULY.
- 4. IF PRUNING IS NECESSARY OR IF WOUNDS OCCUR TO OAK TREES IN APRIL, MAY, JUNE OR JULY, IMMEDIATELY PAINT CUT SURFACE OR WOUND WITH LATEX PAINT OR SHELLAC.

- 1. FABRICATE 12" X 9" X 3/8" SIGN WITH 0.75" RADIUS CORNERS. SIGN SHALL BE WHITE WITH BLACK
- ATTACH SIGN TO POST USING 1"



- 1. FURNISH AND INSTALL TEMPORARY FENCE AT THE TREE'S DRIPLINE OR CONSTRUCTION LIMITS AS SPECIFIED, PRIOR TO ANY CONSTRUCTION.
- WHEN POSSIBLE PLACE FENCE 25 FEET BEYOND THE DRIP LINE.
- 3. PLACE TREE PROTECTION SIGNS ALONG FENCE AT 50' INTERVALS.



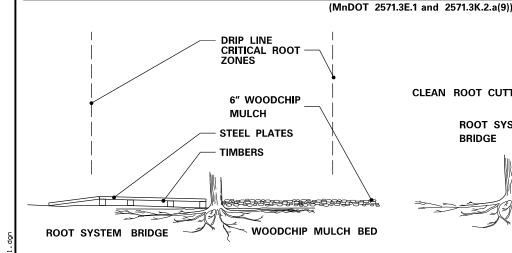
- 1. (A) IS THE DIAMETER OF TREES MEASURED 4'-6" FEET ABOVE THE GROUND AND IS TERMED THE "DIAMETER AT BREAST HEIGHT," (DBH).
- 2. USING A TREE DIAMETER TAPE, WRAP THE TAPE AROUND THE GIRTH OF THE TREE, AT THE DBH, BEING CAREFUL NOT TO TWIST THE TAPE.

**UTILITY CONSTRUCTION** 

TREE PROTECTION ZONE C <2" 2' 2' 2-4" 4' 2.5' >4-9" 2.5' > 9-14" 3' >14-19" 3.25' >19" 15' 4'

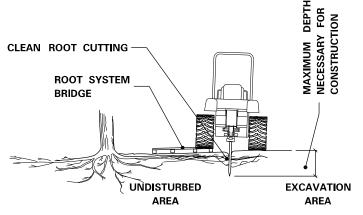
(MnDOT 2572.3A.5)

# **TEMPORARY FENCE**



IF CONSTRUCTION VEHICLES MUST PASS OVER ROOT ZONES, THE CONTRACTOR MUST EITHER:

- PLACE A 6 INCH LAYER OF WOODCHIP MULCH OVER A TYPE III GEOTEXTILE (MnDOT 3733).

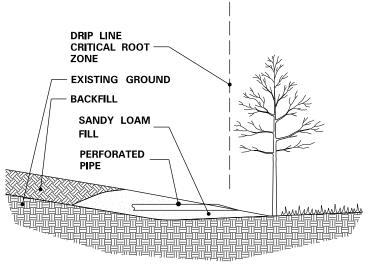


- WHEN DESIGNATED IN THE PLAN OR DIRECTED BY THE ENGINEER, PRIOR TO EXCAVATION, ALL TREE ROOTS WILL BE CLEANLY CUT BY A VIBRATORY PLOW OR OTHER APPROVED ROOT CUTTER.
- THE TREE ROOTS WILL BE CUT CLEANLY TO THE MINIMUM DEPTH NECESSARY FOR CONSTRUCTION.
- IMMEDIATELY, AND CLEANLY CUT DAMAGED AND EXPOSED ROOTS.
- ROOT ENDS EXPOSED BY EXCAVATION ACTIVITIES SHALL BE IMMEDIATELY COVERED WITH A 6" LAYER OF ADJACENT SOIL.
- EXPOSED CUT OAK ROOTS SHALL BE IMMEDIATELY (WITHIN 5 MINUTES) TREATED WITH A WOUND DRESSING MATERIAL CONSISTING OF LATEX PAINT OR



(MnDOT 2572.3A.1)

**Tree Protection Area** 



- 1. ANY FILL REQUIRED WITHIN THE DRIP LINE OF TREES, IS UNCOMPACTED ROOTING TOPSOIL
- EXCESSIVE FILL MAY REQUIRE PLACING PERFORATED PIPE WITH AT LEAST ONE DAYLIGHTED END OPENING AS AN AERATION SYSTEM.

DRIP LINE **CRITICAL ROOT** ZONE TEMPORARY FENCE REDUCED ROUNDING **NORMAL ROUNDING** 

SIGNIFICANT TREES NEAR THE PROPOSED CONSTRUCTION LIMITS WILL BE IDENTIFIED IN THE PLAN OR BY THE ENGINEER AND WILL BE PRESERVED BY THE CONTRACTOR.

PLACE THE TEMPORARY FENCE.

**SLOPE ROUNDING** 

- REDUCE SLOPE ROUNDING WHERE ROOT ZONES ARE DISTURBED BY NORMAL SLOPE ROUNDING.
- VARY BACKSLOPE STEEPNESS TO AVOID TREE LOSS OR UNNECESSARY ROOT DAMAGE.

#### OTHER VEGETATION PROTECTION MEASURES **CLEAN ROOT CUTTING**

(MnDOT 2572.3A.2)

# ROOTING TOPSOIL BORROW

(MnDOT 2572.3A.4)

STANDARD PLAN 5-297.302 1 OF 1 **APPROVED:** 12-11-2015 REVISED: DEPARTMEN

# PROTECTION AND RESTORATION OF VEGETATION

REVISION: APPROVED: DECEMBER 11, 2015 Loop. Clas

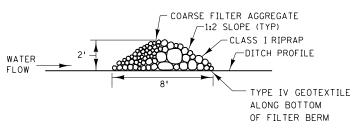
STATE PROJ. NO. OF TRANSPORTATION STATE DESIGN ENGINEER

SHEET NO. 6 OF 32 SHEETS

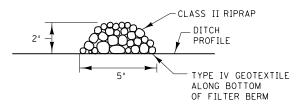
1" X 2" X 24" LONG WOODEN STAKES AS NEEDED. STAKES SHALL BE DRIVEN OVER THE SEDIMENT CONTROL LOG AT AN ANGLE OF 45 DEGREES WITH THE TOP OF THE - SEDIMENT CONTROL LOG STAKE POINTING UPSTREAM. (2) FLOW 8"-10" EMBEDMENT DEPTH-

TYPES: WOOD CHIP, COMPOST, OR ROCK

SEDIMENT CONTROL LOGS

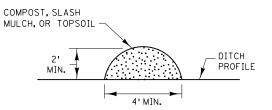


TYPE 3 (ROCK WEEPER)

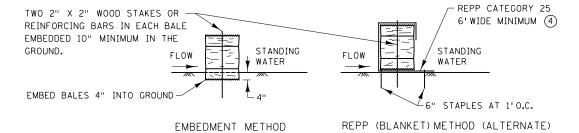


TYPE 5 (ROCK)

FILTER BERMS



TYPE 1 (COMPOST), TYPE 2 (SLASH MULCH), OR TYPE 4 (TOPSOIL)



BALE BARRIERS (3)

NOTES:

STATE PROJ. NO.

REPP = ROLLED EROSION PREVENTION PRODUCT.

SEE SPECS. 2573, 3149, 3874, 3882, 3885, 3886, AND 3897.

- (1) SPACE BETWEEN STAKES SHALL BE A MAXIMUM OF 1'FOR DITCH CHECKS OR 2'FOR OTHER
- 2) PLACE STAKES AS NEEDED TO PREVENT MOVEMENT OF SEDIMENT CONTROL LOGS PLACED ON SLOPES OR AS NEEDED DUE TO OTHER FACTORS. STAKES SHALL BE INCIDENTAL.
- (3) TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6" MAXIMUM DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROXIMATELY 14" X 18" X 36" LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.
- 4 INSTEAD OF TRENCHING, PLACE BALE ON THE REPP (BLANKET) AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.



STANDARD PLAN 5-297.405 2 OF 8 **APPROVED:** 1-8-2020 REVISED:

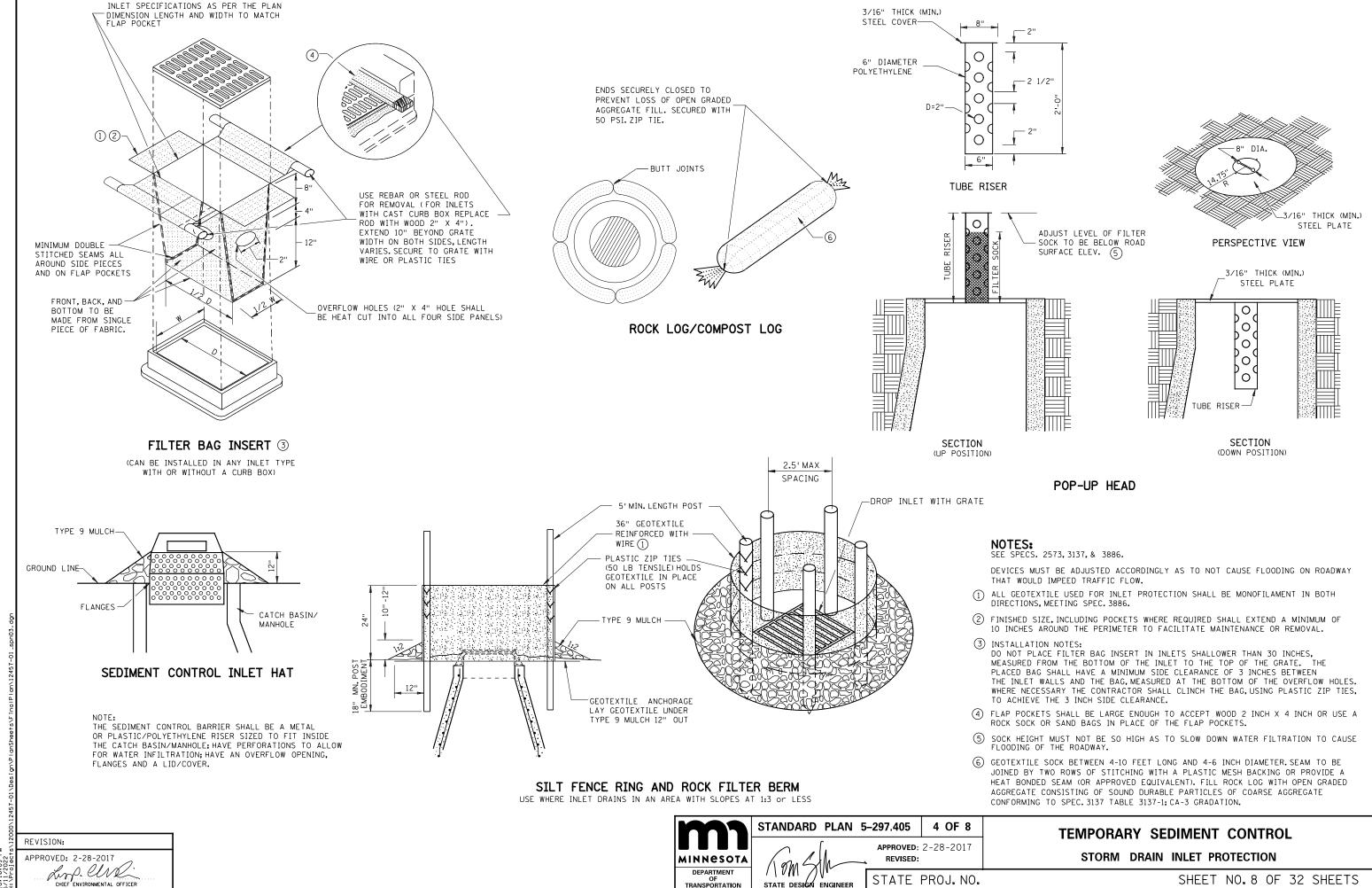
THOMAS STYRBICKI STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL FILTER BERMS, SEDIMENT CONTROL LOGS, AND BALE BARRIERS

SHEET NO. 7 OF 32 SHEETS

APPROVED: JANUARY 8, 2020 leen Kawows MARNI KARNOWSKI

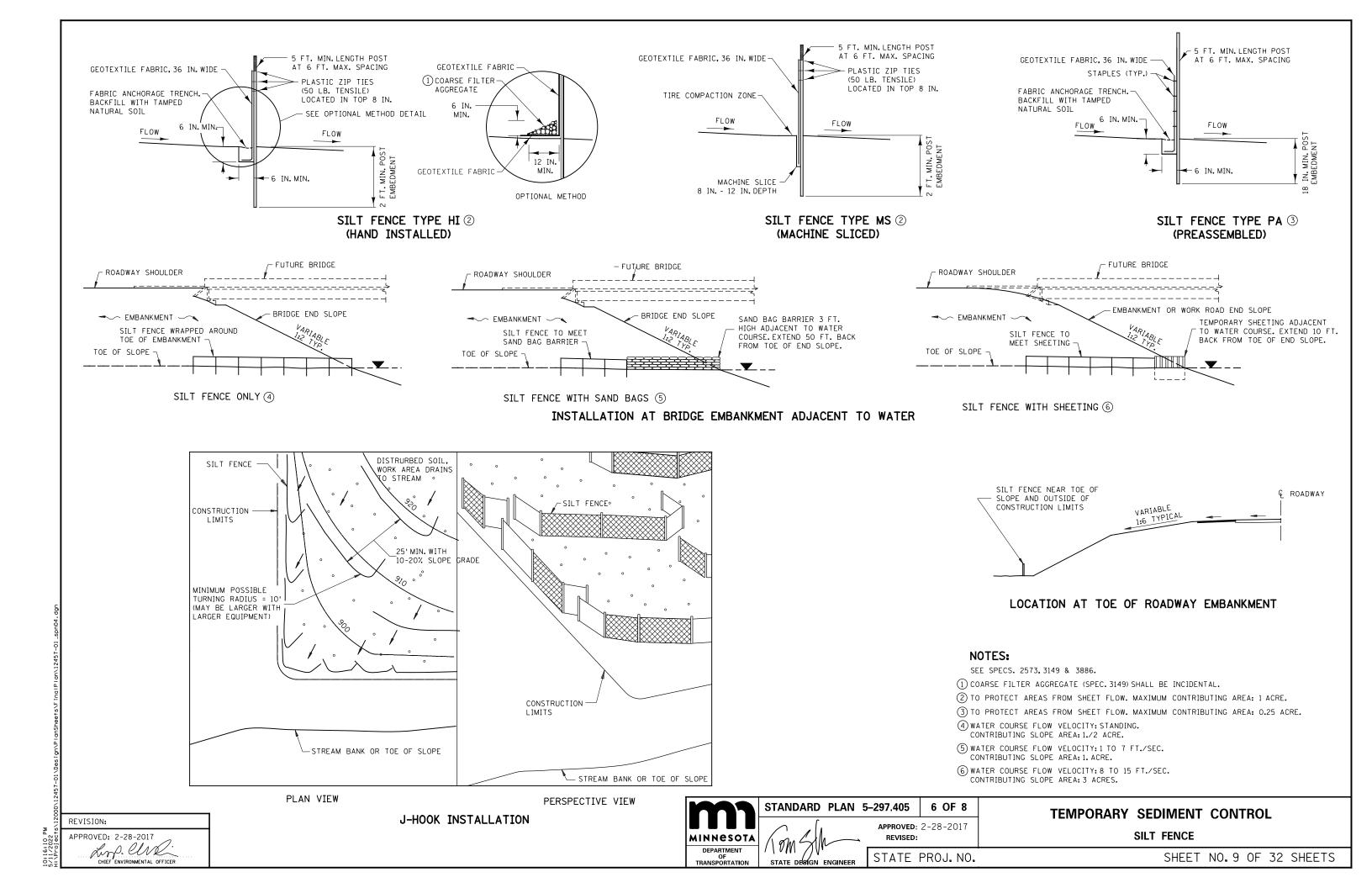
CHIEF ENVIRONMENTAL OFFICER

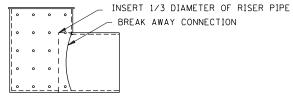


STATE DESIGN ENGINEER

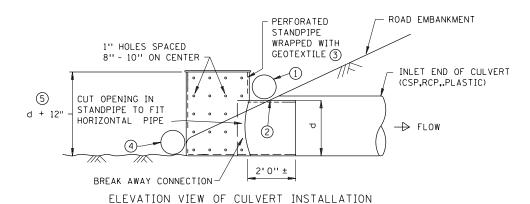
CHIEF ENVIRONMENTAL OFFICER

SHEET NO. 8 OF 32 SHEETS





CULVERT STANDPIPE

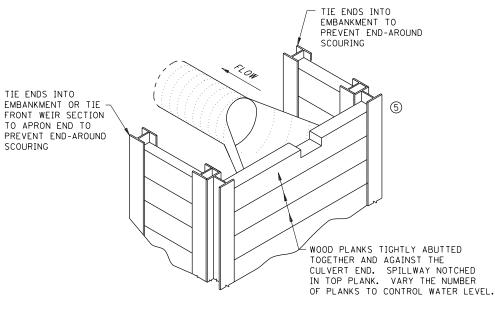


CULVERT STANDPIPE INSERT (D-RISER)

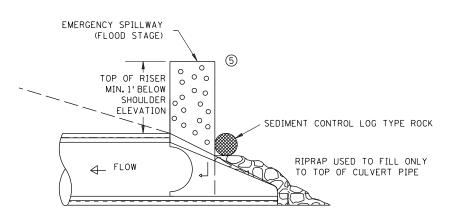
d= CULVERT SIZE: 12" - 36"



2d

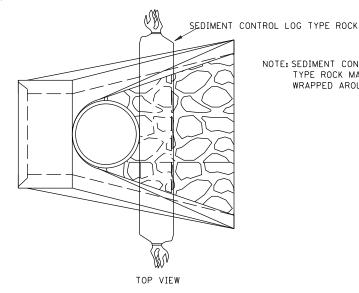


WOOD PLANK WEIR



END VIEW

LONGITUDINAL SECTION



NOTE: SEDIMENT CONTROL LOG TYPE ROCK MAY BE WRAPPED AROUND RISER

CULVERT STANDPIPE INSERT (D-RISER)

# NOTES:

SEE SPECS. 2573, 3891 & 3893.

FOR USE WHEN TEMPORARY PONDING IS NEEDED IN DITCH SECTIONS FOR SEDIMENT CONTROL.

MANUFACTURED ALTERNATIVES LISTED ON MODOT'S APPROVED PRODUCTS LIST MAY BE SUBSTITUTED AT NO ADDITIONAL COST.

- 1) ROCK LOG OR SANDBAG TO HOLD STANDPIPE AND ACT AS A SEAL BETWEEN RISER PIPE AND CULVERT.
- 2 PLACE CULVERT APRON AND SLIDE TEMPORARY STANDPIPE INTO CSP OR RCP CULVERT.
- 3 ALL GEOTEXTILE USED FOR CULVERT PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING SPEC. 3886 FOR MACHINE SLICED.
- 4 ROCK LOG OR RIP RAP TO HOLD STANDPIPE AND ACT AS A FILTER BETWEEN RISER PIPE AND CULVERT.
- (5) HEIGHT OVERFLOW NOT TO CAUSE FLOODING OF ROAD OR ADJACENT PROPERTIES.



STANDARD PLAN 5-297.405 8 OF 8 **APPROVED:** 2-28-2017 REVISED: STATE PROJ. NO. STATE DESIGN ENGINEER

TEMPORARY SEDIMENT CONTROL **CULVERT END CONTROLS** 

SHEET NO.10 OF 32 SHEETS

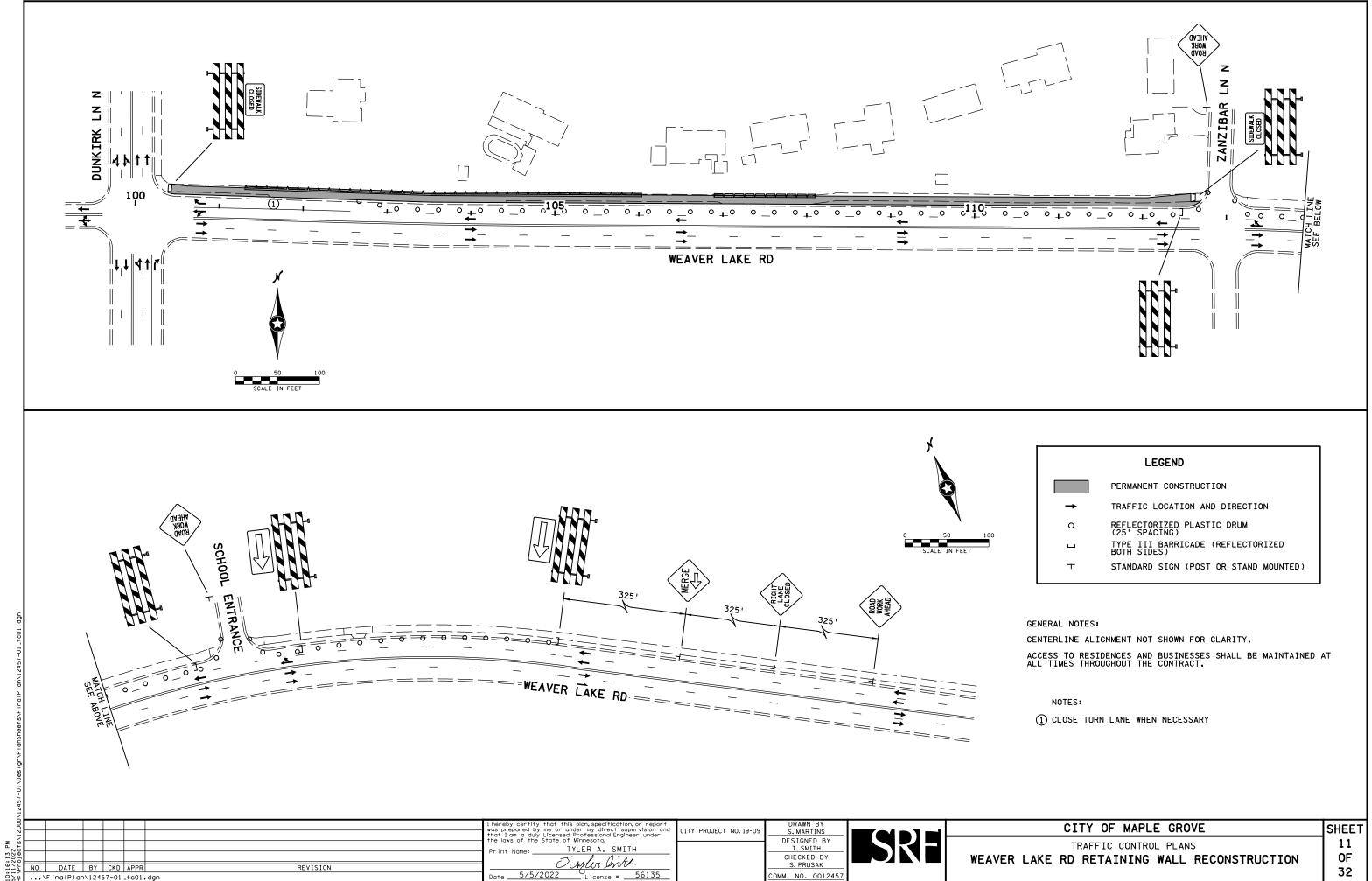
REVISION:

APPROVED: 2-28-2017 Log. Clas CHIEF ENVIRONMENTAL OFFICER

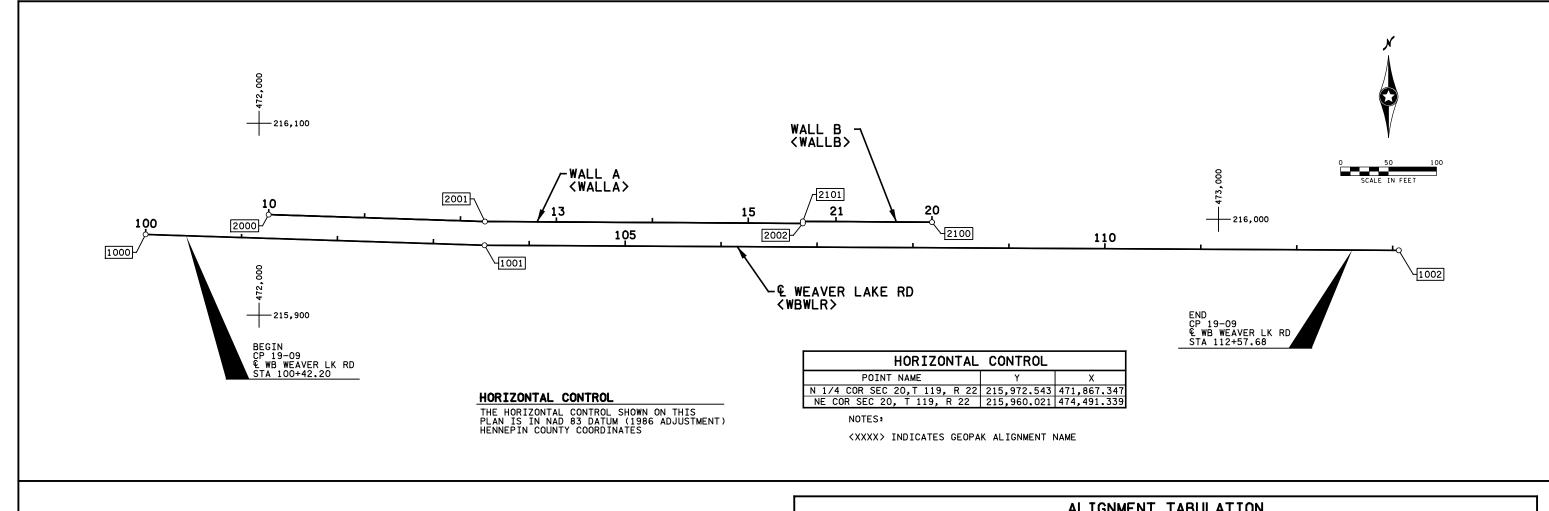
SEDIMENT CONTROL LOG WEIR

(COMPOST, WOOD CHIP, OR ROCK)

d = CULVERT SIZE: 12"-36"



ote 5/5/2022



|        |       |                                | ALI                      | GNMENT '          | TABULA    | TION    |        |              |              |                 |  |
|--------|-------|--------------------------------|--------------------------|-------------------|-----------|---------|--------|--------------|--------------|-----------------|--|
|        |       |                                |                          | CIRCULAR C        | URVE DATA | ١       |        | COODD        | INATES       |                 |  |
| POINT  | POINT | STATION                        | DELTA                    | DEGREE            | RADIUS    | TANGENT | LENGTH | COURD.       | INATES       | A 7 TM   IT   I |  |
| NUMBER | LOTAL | STATION                        |                          | SPIRAL CURVE DATA |           |         |        |              | Y            | AZIMUTH         |  |
|        |       |                                | ANGLE ( <del>0</del> s ) | DEGREE            | ST        | LT      | LS     | ×            | I            |                 |  |
| ı      | € W   | B WEAVER LAKE RD               | <wbwlr></wbwlr>          |                   |           |         |        |              |              |                 |  |
| 1000   | P0T   | & WB WEAVER LAKE RD 100+00.000 |                          |                   |           |         |        | 471,881.7583 | 215,984.1909 | 91° 50' 00.56"  |  |
| 1001   | POT   | 103+53.387                     |                          |                   |           |         |        | 472,234.9647 | 215,972.8843 | 90° 19' 01.58"  |  |
| 1002   | POT   | € WB WEAVER LAKE RD 113+06.396 |                          |                   |           |         |        | 473,187.9590 | 215,967.6099 |                 |  |
| ,      | WAL   | L A <walla></walla>            |                          |                   |           |         |        |              |              |                 |  |
| 2000   | POT   | € WALL A 10+00.000             |                          |                   |           |         |        | 472,010.0317 | 216,004.7673 | 91° 50' 00.56"  |  |
| 2001   | POT   | 12+25.511                      |                          |                   |           |         |        | 472,235.4277 | 215,997.5521 | 90° 19' 01.58"  |  |
| 2002   | POT   | € WALL A 15+56.875             |                          |                   |           |         |        | 472,566.7866 | 215,995.7182 |                 |  |
| ,      | WAL   | L B <wallb></wallb>            |                          |                   |           |         |        |              |              |                 |  |
| 2100   | POT   | € WALL B 20+00.000             |                          |                   |           |         |        | 472,701.3891 | 215,996.9732 | 270° 19' 01.58' |  |
| 2101   | POT   | € WALL B 21+34.593             |                          |                   |           |         |        | 472,566.7977 | 215,997.7181 |                 |  |

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. TYLER A. SMITH

Tyler but

License # 56135 NO DATE BY CKD APPR
...\FinalPlan\12457-01\_al01.dgn REVISION oate 5/5/2022

CITY PROJECT NO. 19-09

DRAWN BY S. MARTINS DESIGNED BY T. SMITH

CHECKED BY S. PRUSAK

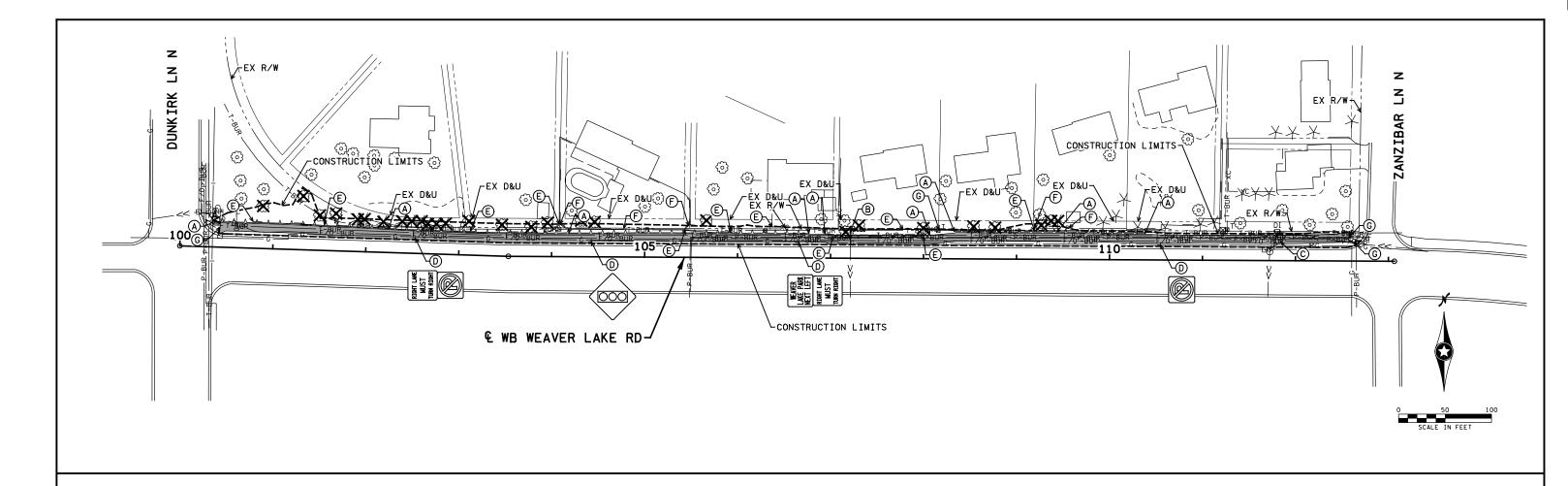
OMM. NO. 0012457

CITY OF MAPLE GROVE ALIGNMENT PLANS AND TABULATIONS

WEAVER LAKE RD RETAINING WALL RECONSTRUCTION

12 OF 32

SHEET



## GENERAL NOTES:

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA".

SOME UTILITIES MAY BE RELOCATED PRIOR TO CONSTRUCTION.

THE RIGHT-OF-WAY SHOWN IN THIS PLAN GIVES A GRAPHICAL LOCATION WITH RESPECT TO THE GEOMETRIC DESIGN AND MAP DATA. THE EXACT RIGHT OF WAY AND BOUNDARY CORNERS ARE LOCATED BY REFERENCE TO THE RIGHT OF WAY PLATS AND ARE IDENTIFIED ON THE RIGHT OF

ALL TREES TO BE CLEARED AND GRUBBED WILL BE MARKED BY THE FIELD ENGINEER.

PROTECT ALL TREES THAT ARE NOT MARKED FOR REMOVAL (INCIDENTAL). SEE SHEET 6 FOR MORE INFORMATION.

SHRUB REMOVAL SHALL BE INCIDENTAL.

SEE UTILITY TABULATIONS FOR PRIVATE UTILITY ITEMS.

IT IS THE CONTRACTORS RESPONSIBILITY TO IDENTIFY AND PROTECT EXISTING IRRIGATION SYSTEMS. ANY DISRUPTION OR MODIFICATION TO THESE SYSTEMS IS CONSIDERED INCIDENTAL. THE CONTRACTOR IS RESPONSIBLE FOR RESTORING IRRIGATION SYSTEMS TO WORKING CONDITION DEEMED ACCEPTABLE TO THE ENGINEER AND PROPERTY OWNER.

#### **LEGEND** TELEPHONE PEDESTAL CLEARING AND GRUBBING CATCH BASIN REMOVE BITUMINOUS PAVEMENT DROP INLET BURIED TELECOMMUNICATIONS **APRON** BURIED FIBER OPTIC ----F/0 -BUR----UTILITY VALVE BURIED ELECTRIC **HYDRANT** GAS 0 MANHOLE WATER MAIN SIGNAL POLE WITH MAST ARM ----> STORM SEWER - SIG-BUR - BURIED SIGNAL HANDHOLE GAS VALVE

#### NOTES:

- A REMOVE RETAINING WALL
- B SALVAGE CONCRETE APRON
- © ADJUST FRAME & RING CASTING
- (D) SALVAGE SIGN PANEL TYPE C
- REMOVE FENCE. TEMPORARY FENCE TO BE COORDINATED WITH PROPERTY OWNER.
- (F) SALVAGE FENCE (PRIVACY FENCES) TEMPORARY FENCE TO BE COORDINATED WITH PROPERTY OWNER.
- (G) SAWING BITUMINOUS PAVEMENT (FULL DEPTH)

| 3             |    |           |      |        |        |          |                                                                                                                                                       |
|---------------|----|-----------|------|--------|--------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| ĕ             |    |           |      |        |        |          | I hereby certify that this plan, specification, or report                                                                                             |
| $\frac{2}{3}$ |    |           |      |        |        |          | was prepared by me or under my direct supervision and<br>that I am a duly Licensed Professional Engineer under<br>the laws of the State of Minnesota. |
| c†s           |    |           |      |        |        |          | Print Name: TYLER A. SMITH                                                                                                                            |
| oj e          |    |           |      |        |        |          | July Dicht                                                                                                                                            |
| ڄ             | N0 | DATE      | BY   | CKD    | APPR   | REVISION |                                                                                                                                                       |
| ΞĮ            | \  | FinaIPIan | N124 | 57-01. | .rem01 | .dgn     | Date 5/5/2022 License # 56135                                                                                                                         |

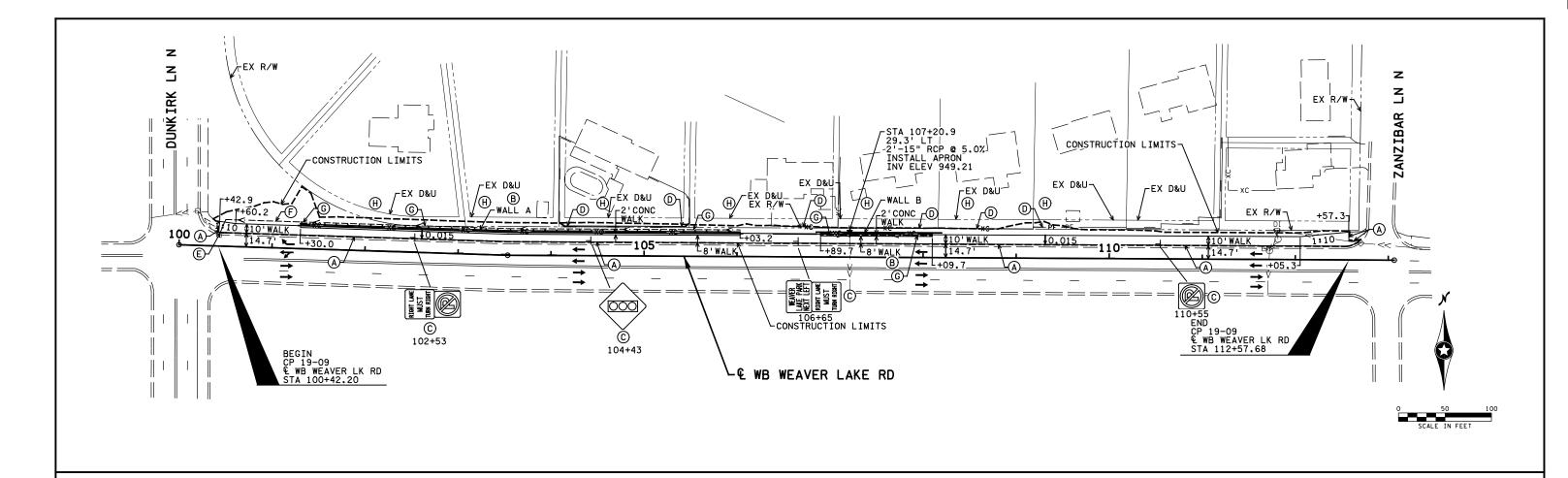
| CITY DDO IECT NO. 10. 00 | DRAWN BY          |
|--------------------------|-------------------|
| CITY PROJECT NO. 19-09   | S. MARTINS        |
|                          | DESIGNED BY       |
|                          |                   |
|                          | T. SMITH          |
|                          | CHECKED BY        |
|                          | S. PRUSAK         |
|                          | COMM. NO. 0012457 |



| CITY OF MAPLE GR | ROVE |  |
|------------------|------|--|
|------------------|------|--|

INPLACE TOPOGRAPHY, UTILITIES, RIGHT OF WAY AND REMOVAL PLAN WEAVER LAKE RD RETAINING WALL RECONSTRUCTION

SHEE1 13 0F 32



- (A) MATCH EXISTING
- B SEE RETAINING WALL PLANS
- INSTALL SIGN PANEL TYPE C. SLEEVES FOR SIGN BASES TO BE PROVIDED BY THE CITY
- (INCLUDES ALL FENCE TYPES)
- CONNECT 6" TP PIPE DRAIN TO EXISTING DRAINAGE STRUCTURE (INCIDENTAL)
- F) 6" TP PIPE (INCIDENTAL)
- **©** 6" TP PERFORATED PIPE (INCIDENTAL)
- REPLACEMENT TREES AND SHRUBS TO BE PROVIDED BY THE CITY OF MAPLE GROVE. LOCATION OF REPLACEMENT TREES AND SHRUBS TO BE COORDINATED WITH PROPERTY OWNER AND APPROVED BY FIELD ENGINEER.

GENERAL NOTES:.

THE RIGHT-OF-WAY SHOWN IN THIS PLAN GIVES A GRAPHICAL LOCATION WITH RESPECT TO THE GEOMETRIC DESIGN AND MAP DATA. THE EXACT RIGHT OF WAY AND BOUNDARY CORNERS ARE LOCATED BY REFERENCE TO THE RIGHT OF WAY PLATS AND ARE IDENTIFIED ON THE RIGHT OF WAY MAP.

ALL DIMENSIONS ARE IN FEET UNLESS OTHERWISE NOTED.

SEE RETAINING WALL PLANS AND PROFILES FOR RETAINING WALL INFORMATION.

|          | LEGEND                  |
|----------|-------------------------|
|          | INPLACE PAVEMENT        |
|          | PROPOSED CONSTRUCTION   |
|          | PROPOSED RETAINING WALL |
| <b>→</b> | DIRECTION OF TRAFFIC    |
| ≪        | 6" TP PIPE DRAIN        |
| xc       | CHAIN LINK FENCE        |
|          | WOOD FENCE              |
| —— PF —— | PVC FENCE               |
|          |                         |

hereby certify that this plan, specification, or report as prepared by me or under my direct supervision on hot I am a duly Licensed Professional Engineer under he laws of the State of Minnesota. TYLER A. SMITH Juster Inth NO DATE BY CKD APPR
...\FinalPlan\12457-01\_cp01.dgn REVISION License # 56135 ate \_\_\_\_5/5/2022

CITY PROJECT NO. 19-09

S. MARTINS DESIGNED BY T.SMITH

CHECKED BY

S. PRUSAK

OMM. NO. 0012457

CITY OF MAPLE GROVE

CONSTRUCTION AND DRAINAGE PLANS WEAVER LAKE RD RETAINING WALL RECONSTRUCTION SHEE1 14 0F 32

# STORM WATER POLLUTION PREVENTION NARRATIVE (SHEET 1 OF 2)

#### PROJECT CONTACTS

THE OWNER AND CONTRACTOR ARE RESPONSIBLE FOR THE IMPLEMENTATION OF THE SWPPP AND INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER CONSTRUCTION.

| ORGANIZATION         | CONTACT NAME   | PHONE        |
|----------------------|----------------|--------------|
| CITY OF MAPLE GROVE  | JUPE HALE      | 763-494-6350 |
| SRF CONSULTING GROUP | JEREMY NIELSEN | 763-475-0010 |

MPCA DUTY OFFICER 24 HOUR EMERGENCY NOTIFICATION:

651-649-5451 800-422-0798

### GENERAL NOTES FOR CONSTRUCTION ACTIVITY

1.THE CONTRACTOR SHALL PREPARE A WRITTEN, NOT ORAL, WEEKLY SCHEDULE OF PROPOSED EROSION CONTROL ACTIVITIES FOR THE PROJECT ENGINEER'S APPROVAL AS PER MNDOT SPEC. 1717.2.

BURNING OF ANY MATERIAL IS NOT ALLOWED WITHIN PROJECT BOUNDARY.

THE CONTRACTOR SHALL PLACE STABILIZED CONSTRUCTION EXITS, AS NECESSARY, TO PREVENT TRACKING OF SEDIMENT ONTO PAVED SURFACES. STABILIZED CONSTRUCTION EXITS SHALL BE SUFFICIENTLY SIZED AND MAINTAINED TO PREVENT TRACK OUT. STABILIZED CONSTRUCTION EXITS SHALL BE INCIDENTAL.

ALL TOPSOIL IN DISTURBED AREAS SHALL BE REMOVED AND STOCKPILED FOR LATER PLACEMENT. AVOID COMPACTION AS MUCH AS IS FEASIBLE IN ALL AREAS WHERE COMPACTION IS NOT REQUIRED FOR CONSTRUCTION.

DO NOT DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS. DELINEATE AREAS NOT TO BE DISTURBED PRIOR TO STARTING GROUND DISTURBING ACTIVITIES. IF IT BECOMES NECESSARY TO DISTURB AREAS OUTSIDE OF THE CONSTRUCTION LIMITS OBTAIN WRITTEN PERMISSION PRIOR TO PROCEEDING. PRESERVE ALL BUFFERS (IF ANY) SHOWN ON THE PLANS.

DIRECT DISCHARGES FROM BMPS TO VEGETATED AREAS AND ROUTE STORMWATER AROUND UNSTABILIZED AREAS OF THE SITE WHENEVER POSSIBLE. PROVIDE EROSION CONTROL AND VELOCITY DISSIPATION DEVICES AS NEEDED TO PREVENT EROSION AND NUISANCE

PROVIDE STABILIZATION IN ANY TRENCHES CUT FOR DEWATERING OR SITE DRAINING PURPOSES.

BASIN DRAINING ACTIVITIES OF TURBID OR SEDIMENT LADEN WATER SHALL BE DISCHARGED TO TEMPORARY SEDIMENT BASINS WHENEVER POSSIBLE. IN THE EVENT THAT IT IS NOT POSSIBLE TO DISCHARGE THE SEDIMENT LADEN WATER TO A TEMPORARY SEDIMENT BASIN THE WATER SHALL BE TREATED SO THAT IT DOES NOT CAUSE A NUISANCE CONDITION IN THE RECEIVING WATERS OR TO DOWNSTREAM

IT IS NOT ANTICIPATED THAT POLYMERS, FLOCCULANTS OR OTHER SEDIMENTATION TREATMENT CHEMICALS SHALL BE USED. HOWEVER, IF THE USE OF SUCH CHEMICALS BECOMES NECESSARY TO COMPLY WITH PERMIT REQUIREMENTS, IT SHALL BE IN ACCORDANCE WITH ALL REQUIREMENTS OF THE NPDES PERMIT.

#### POLLUTION PREVENTION NOTES

- 1.THE CONTRACTOR SHALL COMPLY WITH THE REQUIREMENTS REGARDING POLLUTION PREVENTION MANAGEMENT DURING CONSTRUCTION, WHICH SHALL INCLUDE, BUT NOT BE LIMITED TO, PROVIDING THE FOLLOWING (ITEMS LISTED ARE INCIDENTAL):
- A. WASHOUT AREAS FOR CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS AND OTHER CONSTRUCTION MATERIALS
  FOR USE BY ALL SUBCONTRACTORS AND MATERIAL TESTING PERSONNEL. LOCATION OF WASHOUT AREAS SHALL BE IDENTIFIED BY
  SIGNAGE AND SHALL BE AT LEAST 200 FT FROM SITE MANAGEMENT PLAN REQUIREMENT AREAS (IF APPLICABLE) OR
  ENVIRONMENTALLY SENSITIVE AREAS, AND UTILIZE A LEAK-PROOF CONTAINMENT FACILITY OR IMPERMEABLE LINER THAT PREVENTS RUNOFF ONTO ADJACENT SOILS. AN ENGINEERED COLLECTION SYSTEM CAN ALSO BE USED IF IT IS APPROVED BY THE PROJECT ENGINEER.
- B. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE PROJECT ENGINEER FOR A CHEMICAL STORAGE AREA AND SHALL DESIGNATE AN AREA FOR FUELING AND MINOR MAINTENANCE OF CONSTRUCTION VEHICLES (INCLUDING WASHING) WITH MEANS TO CAPTURE ANY FUEL SPILLS. RUNOFF SHALL BE CONTAINED IN A TEMPORARY SEDIMENT BASIN OR OTHER EFFECTIVE CONTROL AND ALL WASTE GENERATED SHALL BE PROPERLY DISPOSED OF. NO ENGINE DEGREASING IS ALLOWED ON SITE.
- C. SOLID WASTE COLLECTION AND REMOVAL
- D. SECONDARY CONTAINMENT FOR STORAGE OF HAZARDOUS MATERIALS
- E. SECURED HAZARDOUS WASTE STORAGE CONTAINERS
- F. CHEMICAL SPILL KITS (SHALL BE PROVIDED AT EACH LOCATION WHERE CHEMICALS ARE USED OR STORED AND ANY LOCATION WHERE VEHICLES ARE FUELED OR MAINTAINED).
- G. PORTABLE RESTROOM FACILITIES THAT ARE ANCHORED TO PREVENT TIPPING

- 2. CHEMICALS SHALL BE KEPT IN A SECURE STORAGE AREA WITH RESTRICTED ACCESS IN SEALED CONTAINERS WHEN NOT IN USE. RETURN ALL CHEMICALS TO THE DESIGNATED STORAGE AREA BY THE END OF THE DAY UNLESS INFEASIBLE. CHEMICAL STORAGE CONTAINERS SHALL HAVE SECONDARY CONTAINMENT WHEN BEING USED OR STORED ON THE PROJECT SITE, AND PRODUCTS OR CHEMICALS THAT MAY LEACH POLLUTANTS SHALL BE UNDER COVER (PLASTIC SHEETING OR TEMPORARY ROOF). CHEMICAL SPILLS OF ANY KIND (OIL, FUEL, FERTILIZER, ETC.) SHALL BE CLEANED UP AND REMOVED FROM THE SITE IMMEDIATELY. THE CONTRACTOR SHALL HAVE A SPILL KIT ON SITE AT ALL TIMES.
- 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CREATING AND FOLLOWING A WRITTEN DISPOSAL PLAN FOR ALL HAZARDOUS WASTE MATERIALS. THE PLAN SHALL INCLUDE HOW THE MATERIAL SHALL BE DISPOSED OF AND THE LOCATION OF THE DISPOSAL SITE AND SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO WORK ON SITE, LEAKS, SPILLS, OR OTHER RELEASES SHALL BE RESPONDED TO IN ACCORDANCE WITH MPCA SPILL CONTAINMENT AND REMEDIAL ACTION PROCEDURES.
- 4. THE CONTRACTOR SHALL USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT DISCHARGE OR PLACEMENT OF BITUMINOUS GRINDINGS, CUTTINGS, MILLINGS, AND OTHER BITUMINOUS WASTES FROM AREAS OF EXISTING OR FUTURE VEGETATED SOILS, AND ALL WATER CONVEYANCE SYSTEMS, INCLUDING INLETS, DITCHES AND CURB FLOW LINES.
- 5. THE CONTRACTOR SHALL USE METHODS AND OPERATIONAL PROCEDURES THAT PREVENT CONCRETE DUST, PARTICLES, SAW CUT SLURRY, PLANING WASTE AND OTHER CONCRETE WASTES FROM LEAVING PUBLIC RIGHT OF WAY, DEPOSITING IN EXISTING OR FUTURE VEGETATED AREAS OR ENTERING STORMWATER CONVEYANCE SYSTEM INCLUDING INLETS AND CURB FLOW LINES. ONSITE RELEASE OF CONCRETE SLURRY IS PERMISSIBLE IF MINNESOTA POLLUTION CONTROL GUIDANCE FOR ROAD CONSTRUCTION CONCRETE SLURRY AND THE REQUIREMENTS OF THE SPECIAL PROVISIONS ARE FOLLOWED.

#### EROSION CONTROL SUPERVISOR, INSPECTIONS AND MAINTENANCE NOTES

- 1. THE EROSION CONTROL SUPERVISOR SHALL WORK WITH THE PROJECT ENGINEER TO OVERSEE THE IMPLEMENTATION OF THE SWPPP AND THE INSTALLATION, INSPECTION, AND MAINTENANCE OF THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS BEFORE, DURING AND AFTER
- 2. INSPECTIONS OF THE ENTIRE CONSTRUCTION SITE SHALL OCCUR A MINIMUM OF ONCE EVERY SEVEN DAYS DURING ACTIVE CONSTRUCTION AND WITHIN 24 HOURS AFTER A RAINFALL EVENT GREATER THAN 0.5 INCHES IN 24 HOURS (IN NO CASE SHALL THE TIME BETWEEN INSPECTIONS EXCEED 7 DAYS. RAINFALL AMOUNTS SHALL BE OBTAINED USING A PROPERLY MAINTAINED RAIN GAUGE ONSITE OR BY A WEATHER STATION THAT IS WITHIN ONE MILE. THE EROSION CONTROL SUPERVISOR SHALL THOROUGHLY INSPECT ALL EROSION PREVENTION AND SEDIMENT CONTROL BMPS TO ENSURE INTEGRITY AND EFFECTIVENESS OF EACH BMP.
- 3. ALL INSPECTIONS AND MAINTENANCE CONDUCTED DURING CONSTRUCTION SHALL BE RECORDED IN WRITING WITHIN 24 HOURS AND THESE RECORDS SHALL BE RETAINED WITH THE SWPPP. INSPECTION REPORTS SHALL BE SUBMITTED TO THE PROJECT ENGINEER AND SWPPP DESIGNER IN A FORMAT APPROVED BY THE ENGINEER. INSPECTION RECORDS SHALL INCLUDE:
  - A. DATE AND TIME OF INSPECTIONS;
  - B. NAME OF PERSONS CONDUCTING INSPECTIONS;
  - C. FINDINGS OF INSPECTIONS, INCLUDING RECOMMENDATIONS FOR CORRECTIVE ACTIONS;
  - D. CORRECTIVE ACTIONS TAKEN INCLUDING DATES, TIMES, AND THE PARTY COMPLETING MAINTENANCE ACTIVITIES;
  - E. DATE AND AMOUNT OF ALL RAINFALL EVENTS GREATER THAN 0.5 INCH IN 24 HOURS;
  - F. LOCATION, DESCRIPTION AND PHOTO OF ANY DISCHARGES OFF THE PROJECT SITE.
  - G. DOCUMENTS AND CHANGES MADE TO THE SWPPP.
- 4. THE CONTRACTOR SHALL COMPLY WITH THE FOLLOWING INSPECTION AND MAINTENANCE REQUIREMENTS (INSPECTIONS MAY BE REDUCED UNDER CERTAIN CONDITIONS AS COVER IS ESTABLISHED AND CONDITIONS CHANGE):
  - A. SILT FENCE SHALL BE REPAIRED, REPLACED OR SUPPLEMENTED WHEN IT BECOMES NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT OF THE SILT FENCE.
  - B. INLET PROTECTION DEVICES SHOULD BE REPAIRED WHEN THEY BECOME NONFUNCTIONAL OR SEDIMENT REACHES 1/2 THE HEIGHT AND/OR DEPTH OF THE DEVICE.
  - C. TEMPORARY SEDIMENT BASINS, IF REQUIRED, SHALL HAVE THE SEDIMENT REMOVED ONCE THE SEDIMENT HAS REACHED 1/2 THE STORAGE VOLUME.
  - D. REMOVE ANY SEDIMENT DEPOSITED IN SURFACE WATERS. SEDIMENT SHALL BE REMOVED AND ANY AREA DISTURBED BY THE REMOVAL RESTABILIZED WITHIN 7 DAYS OF DISCOVERY. A SITE MANAGEMENT PLAN IS REQUIRED FOR WORK IN ANY SURFACE WATER AND APPROPRIATE AUTHORITIES SHALL BE CONTACTED PRIOR TO COMMENCING WORK.
  - E. TRACKED SEDIMENT SHALL BE REMOVED WITHIN 24 HOURS OF DISCOVERY OF TRACKING ONTO PAVED SURFACES.
  - F. ALL NONFUNCTIONAL BMPS SHALL BE REPAIRED, REPLACED, OR SUPPLEMENTED BY THE END OF THE NEXT BUSINESS DAY AFTER DISCOVERY (UNLESS NOTED OTHERWISE ABOVE).
  - G. REINSTALL AS QUICKLY AS POSSIBLE ANY BMP REMOVED TO ACCOMMODATE SHORT TERM ACTIVITIES.
  - H. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL BMPS UNTIL WORK HAS BEEN COMPLETED, AND SITE HAS GONE UNDER FINAL STABILIZATION. SEDIMENT REMOVAL AND MAINTENANCE OF BMPS IS INCIDENTAL.
- 5. CLEAN OUT ALL PERMANENT STORMWATER BASINS REGARDLESS OF WHETHER USED AS A TEMPORARY SEDIMENT BASIN OR SEDIMENT TRAP TO THE DESIGN CAPACITY AFTER ALL UPGRADIENT LAND DISTURBING ACTIVITY IS COMPLETED.

| 2            |    |           |        |       |       |          |
|--------------|----|-----------|--------|-------|-------|----------|
| 000          |    |           |        |       |       |          |
| /12          |    |           |        |       |       |          |
|              |    |           |        |       |       |          |
| 2022<br>ojec |    |           |        |       |       |          |
| 하는           | ИО | DATE      | BY     | CKD   | APPR  | REVISION |
| 574          | \  | FinalPlan | 1\1249 | 57-01 | swn01 | dan      |

hereby certify that this plan, specification, or report as prepared by me or under my direct supervision an nat I am a duly Licensed Professional Engineer under ne laws of the State of Minnesota. TYLER A. SMITH

5/5/2022

Jugler Grith

\_License # \_\_\_56135

CITY PROJECT NO. 19-09

S. MARTINS DESIGNED BY T. SMITH CHECKED BY J. NIELSEN

OMM. NO. 0012457



# CITY OF MAPLE GROVE

# STORM WATER POLLUTION PREVENTION NARRATIVE (SHEET 2 OF 2)

#### STABILIZATION AND SEDIMENT CONTROL NOTES

- 1. THE EROSION PREVENTION AND SEDIMENT CONTROL BMPS SHALL BE PLACED AS NECESSARY TO MINIMIZE EROSION FROM DISTURBED SURFACES AND CAPTURE SEDIMENT ONSITE. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY REMOVAL WORK AND/OR GROUND DISTURBING ACTIVITIES AND SHALL BE MAINTAINED UNTIL THE POTENTIAL FOR EROSION HAS BEEN ELIMINATED. IF SEDIMENT CONTROLS ARE OVERLOADED (BASED ON FREQUENT FAILURE OR EXCESSIVE MAINTENANCE), ADDITIONAL UPGRADIENT OR REDUNDANT BMPS SHALL BE PLACED.
- 2. SEDIMENT CONTROL DEVICES SHALL BE ESTABLISHED ON ALL DOWN GRADIENT PERIMETERS BEFORE ANY UP GRADIENT LAND DISTURBING ACTIVITIES BEGIN. SEDIMENT CONTROL DEVICES INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:
  - A. PERIMETER CONTROL SHALL BE LOCATED ON THE CONTOUR TO CAPTURE OVERLAND, LOW-VELOCITY SHEET FLOWS DOWN GRADIENT OF ALL EXPOSED SOILS AND PRIOR TO DISCHARGING TO SURFACE WATERS. THE BMP SHALL BE J-HOOKED AT A MAXIMUM OF 100 FOOT INTERVALS AND EACH SECTION SHALL CONTAIN NO MORE THAN 1/4 ACRE OF DRAINAGE AREA.
  - B. SEDIMENT DAMAGE FROM STOCKPILES SHALL BE MINIMIZED BY PLACING A ROW OF SUPER DUTY SILT FENCE A MINIMUM 5 FEET FROM THE TOE. IF THERE IS NOT ADEQUATE PROJECT AREA TO PLACE THE SILT FENCE MORE THAN 5 FEET FROM THE TOE OF THE SLOPE, THE CONTRACTOR MAY SUBMIT AN ALTERNATIVE TO THE PROJECT ENGINEER FOR APPROVAL.
  - C. DITCH CHECKS (IF REQUIRED) SHALL BE PLACED AS INDICATED ON THE PLANS DURING ALL PHASES OF CONSTRUCTION.
    - 1. TEMPORARY DITCH CHECKS (IF REQUIRED) SHALL CONSIST OF USING ROCK DITCH CHECKS, SEDIMENT CONTROL LOGS AND ROCK WEEPERS IN FRONT OF CULVERT INLETS. IN LIEU OF REMOVING TEMPORARY DITCH CHECKS, THE ROCK MAY BE PUSHED INTO THE GROUND.
    - 2. FILTER LOGS (IF REQUIRED) SHALL BE PLACED DURING PERMANENT TURF ESTABLISHMENT AT THE INTERVALS IDENTIFIED IN THE PLAN.
- 3. STORM SEWER INLETS SHALL BE PROTECTED AT ALL TIMES WITH THE APPROPRIATE INLET PROTECTION FOR EACH SPECIFIC PHASE OF CONSTRUCTION. PROVIDE INLET PROTECTION DEVICES WITH EMERGENCY OVERFLOW CAPABILITIES. SILT FENCE PLACED IN THE INLET GRATE IS NOT AN ACCEPTABLE INLET PROTECTION BMP FOR GRADING OPERATIONS (THIS BMP SHALL BE ACCEPTED ONLY FOR SHORT INTERVALS DURING MILLING OR PAVING OPERATIONS). INLET PROTECTION DEVICES MAY NEED TO BE PLACED MULTIPLE TIMES IN THE SAME LOCATION OVER THE LIFE OF THE CONTRACT. INLET PROTECTION DEVICES SHALL BE PAID FOR ONCE PER INLET REGARDLESS OF THE NUMBER OF TIMES THE BMP IS PLACED. ALL STORM SEWER INLET PROTECTION DEVICES SHALL BE KEPT IN GOOD FUNCTIONAL CONDITION AT ALL TIMES. IF THE PROJECT ENGINEER DEEMS AN INLET PROTECTION DEVICE TO BE NONFUNCTIONAL, IN POOR CONDITION, INEFFECTIVE OR NOT APPROPRIATE FOR THE CURRENT CONSTRUCTION ACTIVITIES IT SHALL BE REPLACED WITH A SUITABLE ALTERNATIVE AT NO COST TO THE OWNER.
- 4. PAVEMENT SURFACES SHALL BE SWEPT WITHIN 24 HOURS OF DISCOVERY OF SEDIMENT OR TRACKING ONTO PAVEMENT THAT DRAINS TO CURB, INLETS, DITCHES OR PONDS. PAVEMENT SHALL BE LIGHTLY WETTED PRIOR TO SWEEPING. THIS WORK IS INCIDENTAL.
- 5. OUTLETS INTO SURFACE WATERS SHALL BE STABILIZED WITH ENERGY DISSIPATION WITHIN 24 HOURS OF BEING CONSTRUCTED.
- 6. DITCHES AND EXPOSED SOILS SHALL BE KEPT IN AN EVEN ROUGH GRADED CONDITION IN ORDER TO BE ABLE TO APPLY EROSION CONTROL MULCHES AND BLANKETS.
- 7. INITIATE STABILIZATION OF ALL EXPOSED SOIL AND STOCKPILE AREAS IMMEDIATELY AFTER CONSTRUCTION ACTIVITY ON THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY OR PERMANENT STABILIZATION SHALL BE COMPLETED WITHIN NO MORE THAN 14 DAYS.
- 8. ALL EXPOSED SOIL AREAS SHALL BE STABILIZED PRIOR TO THE ONSET OF WINTER. ANY WORK STILL BEING PERFORMED SHALL BE SNOW MULCHED, SEEDED, OR BLANKETED.
- 9. ALL TOPSOIL BERMS SHALL BE STABILIZED AS FOLLOWS:
  - A. BETWEEN APRIL 1 AUGUST 31, SEED WITH SEED MIXTURE 21-111
  - B. BETWEEN SEPTEMBER 1 AND MARCH 31, SEED WITH SEED MIXTURE 21-112 AND TOP WITH RAPID STABILIZATION 2.
- 10. TILLING FOR BEDS OR TREE HOLES SHALL BE PLANTED AND MULCHED WITH WOODCHIP WITHIN 7 DAYS OR STRAW MULCHED UNTIL PLANTING OPERATIONS CAN BE COMPLETED. FILTER LOGS SHALL BE PLACED, AS NEEDED, TO TRAP SEDIMENT ON THE LOWER EDGE OF BEDS OR TREE HOLES. FILTER LOGS SHALL BE LEFT TO PHOTO DEGRADE.

| Ζ   |    |            |        |       |        |          |                |                                                                                                                |               |
|-----|----|------------|--------|-------|--------|----------|----------------|----------------------------------------------------------------------------------------------------------------|---------------|
| 8   |    |            |        |       |        |          | I hereby certi | fy that this plan, specification, or report                                                                    | 01711 000 150 |
| 112 |    |            |        |       |        |          | that I am a di | by me or under my direct supervision and<br>uly Licensed Professional Engineer under<br>he State of Minnesota. | CITY PROJEC   |
| :ts |    |            |        |       |        |          |                | TYLER A. SMITH                                                                                                 |               |
| je  |    |            |        |       |        |          | Print Name:    | <u> </u>                                                                                                       | l             |
| Pro | NO | DATE       | BY     | CKD   | APPR   | REVISION |                | Orghir Inth                                                                                                    | l             |
| =   |    | \Fina P an | 1\1245 | 57-01 | _swp02 | .dgn     | Date5/5        | 5/2022 License #56135                                                                                          | l             |

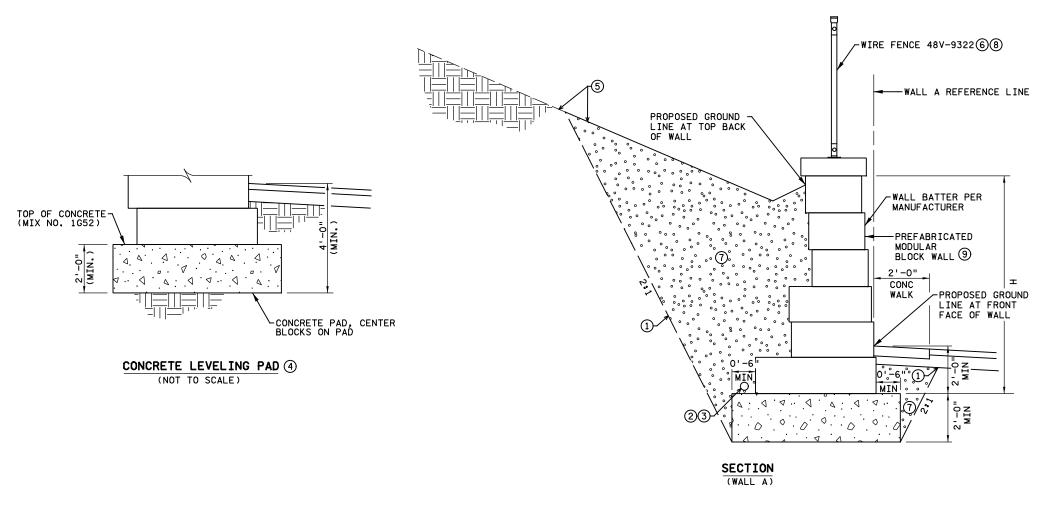
PROJECT NO. 19-09

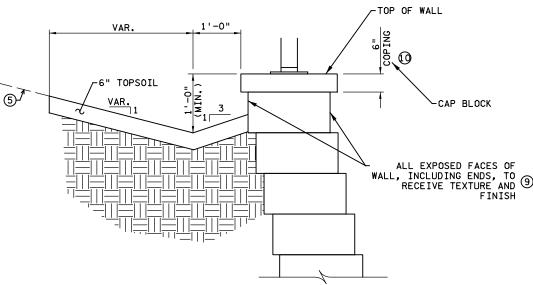
DRAWN BY
S. MARTINS
DESIGNED BY
T. SMITH
CHECKED BY
J. NIELSEN

OMM. NO. 0012457



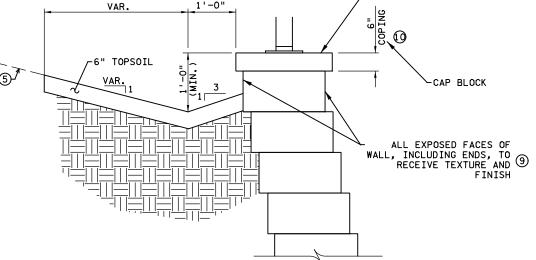
STORM WATER POLLUTION PREVENTION PLAN (SWPPP)
WEAVER LAKE RD RETAINING WALL RECONSTRUCTION





TOP OF WALL DETAIL

- (1) SEE CROSS SECTIONS FOR EXCAVATION FOR MODULAR BLOCK RETAINING WALLS. ACTUAL SLOPE IS DETERMINED BY OSHA REGULATIONS AND IN-SITU SOILS; EXCAVATION BEYOND THESE LIMITS IS AT CONTRACTORS EXPENSE.
- 2 DO NOT DAYLIGHT DRAIN PIPE THROUGH WALL.
- 3 6" THERMOPLASTIC PERFORATED PIPE, SPEC. 3245. WRAP WITH TYPE 1 GEOTEXTILE, SPEC. 3733. INSTALLATION AS PER SPEC. 2502. PIPE SHALL RUN THE LENGTH OF THE WALL. CONNECT TO STORM SEWER AT DUNKIRK LN N. INCIDENTAL.
- (4) CONCRETE PAD (MIX NO. 1G52) INCIDENTAL.
- $\ensuremath{\mathfrak{S}}$  SEE CROSS SECTIONS FOR EXISTING AND PROPOSED SLOPE.
- (6) WIRE FENCE TO BE CONTINUOUS ENTIRE LENGTH OF WALL. INSTALLATION PER MNDOT STANDARD PLATE 9322 AND SPEC. 2557.
- (7) COARSE FILTER AGGREGATE SPEC. 3149.2H. TO BE INCLUDED IN PAY ITEM FOR MODULAR BLOCK RETAINING WALL.
- (8) PAYMENT INCLUDES ALL COSTS FOR FURNISHING WIRE FENCE AND ALL COMPONENTS SPECIFIED AND SHOWN ON THESE PLANS.
- PAYMENT INCLUDES ALL COSTS FOR DESIGN, FURNISHING, AND CONSTRUCTING PMBW INCLUDING ALL EXCAVATION AND BACKFILL, CONCRETE LEVELING PAD, DRAINAGE SYSTEM, AND OTHER SERVICES NECESSARY FOR CONSTRÚCTION OF THE WALL.
- $\bigodot$  PERMANENTLY SECURE CAP TO TOP BLOCK WITH APPROVED CONSTRUCTION ADHESIVE.



|    |               |       |      |        |                            | I hereby certify that this plan, specification, or report                                                                                            |  |
|----|---------------|-------|------|--------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--|
|    |               |       |      |        |                            | was prepared by me or under my direct supervision and<br>that I am a duly Licensed Professional Engineer under<br>the laws of the State of Minnesota |  |
|    |               |       |      |        |                            | TVI ED A CHITH                                                                                                                                       |  |
|    |               |       |      |        |                            | Print Name:                                                                                                                                          |  |
| N0 | DATE          | BY    | CKD  | APPR   | REVISION                   | Crysis int                                                                                                                                           |  |
| \  | F ina IP I ar | N1245 | 7-01 | _wrd01 | Date5/5/2022License #56135 |                                                                                                                                                      |  |

CITY PROJECT NO. 19-09

S MARTINS DESIGNED BY J THIESSE CHECKED BY S. PRUSAK OMM. NO. 0012457

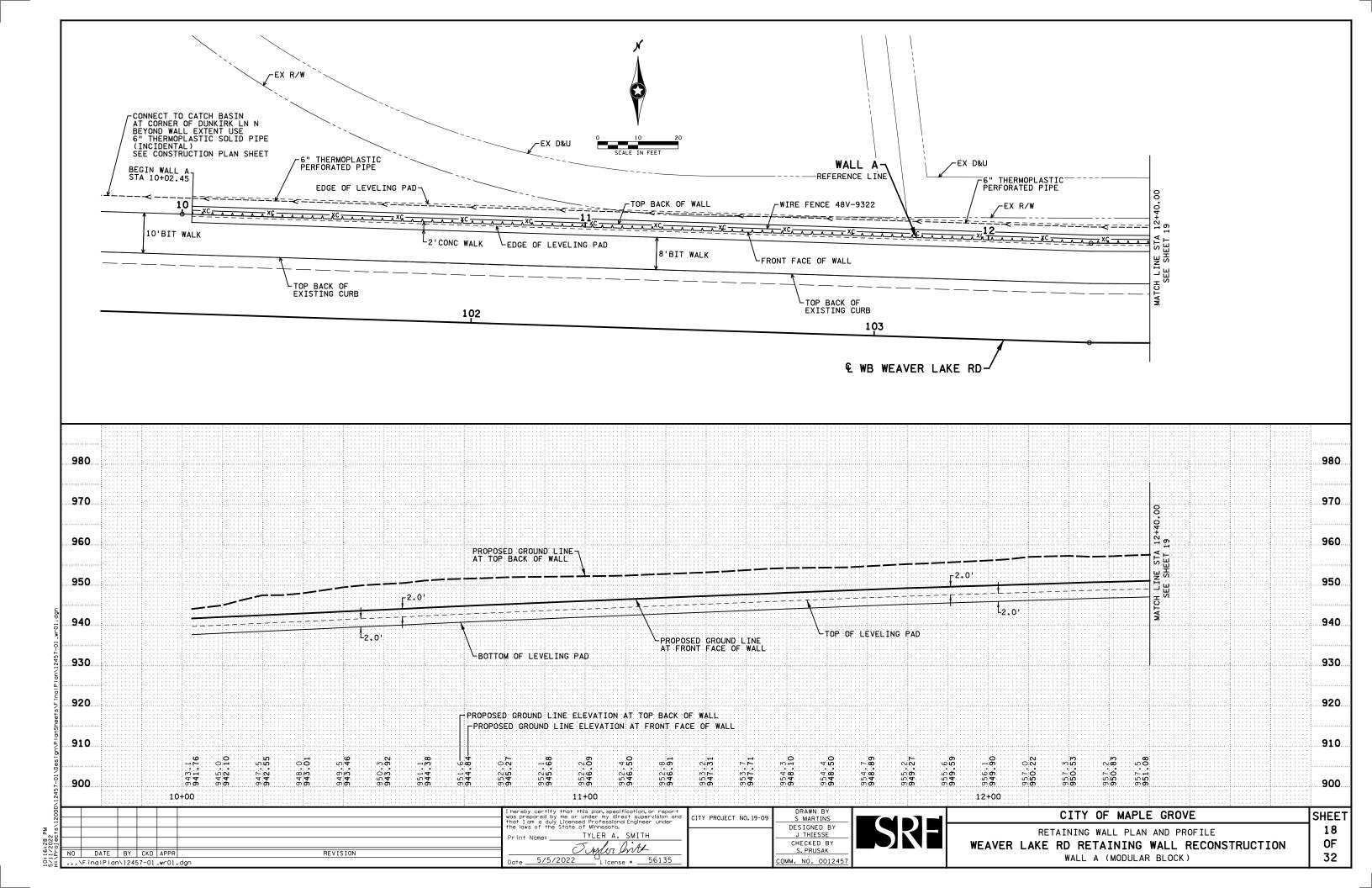


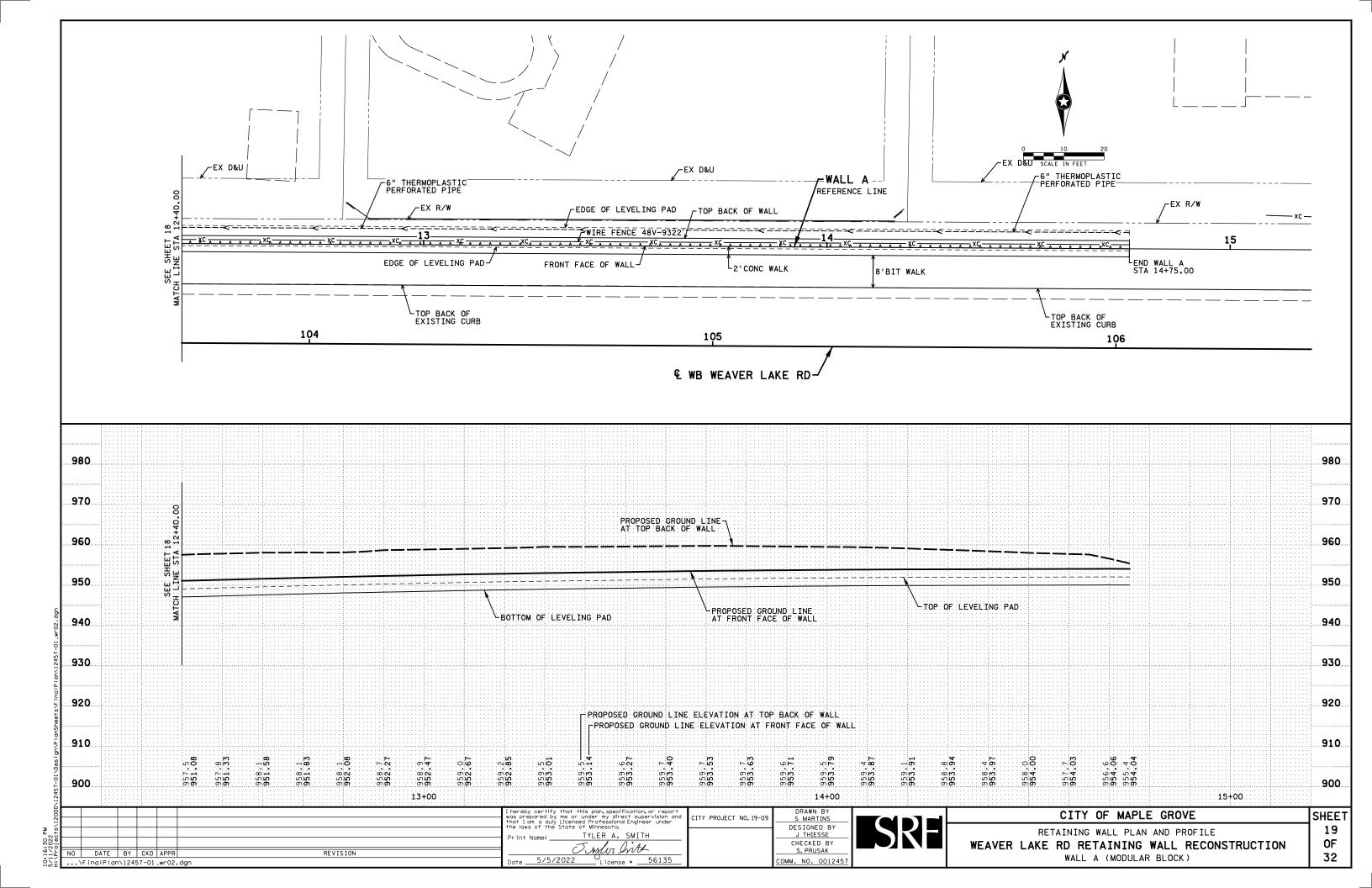
CITY OF MAPLE GROVE

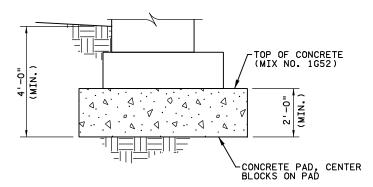
SHEE1 17 0F

32

RETAINING WALL (MOD BLOCK) MISCELLANEOUS DETAILS WEAVER LAKE RD RETAINING WALL RECONSTRUCTION WALL A

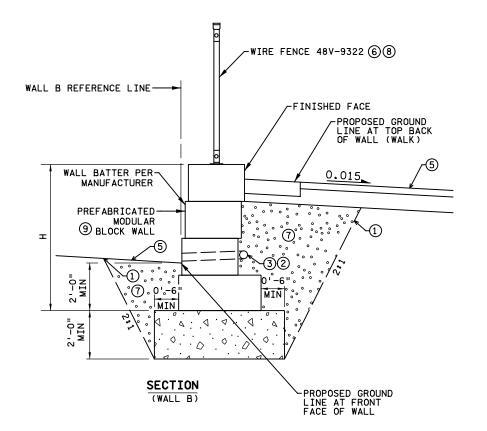


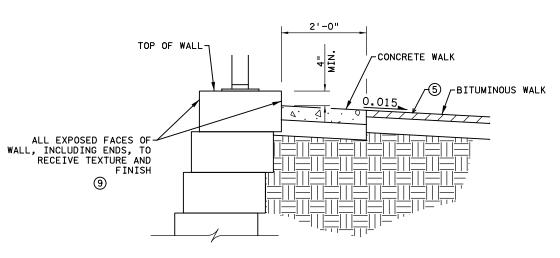




CONCRETE LEVELING PAD (4)

(NOT TO SCALE)





TOP OF WALL DETAIL

- (1) SEE CROSS SECTIONS FOR EXCAVATION FOR MODULAR BLOCK RETAINING WALLS. ACTUAL SLOPE IS DETERMINED BY OSHA REGULATIONS AND IN-SITU SOILS; EXCAVATION BEYOND THESE LIMITS IS AT CONTRACTORS EXPENSE.
- ② DAYLIGHT DRAIN PIPE THROUGH WALL WITH CONCRETE SPLASH BLOCK AND RODENT SCREEN. INCIDENTAL.
- (3) 6" THERMOPLASTIC PERFORATED PIPE, SPEC. 3245. WRAP WITH TYPE 1 GEOTEXTILE, SPEC. 3733. INSTALLATION AS PER SPEC. 2502. PIPE SHALL RUN THE LENGTH OF THE WALL. INCIDENTAL.
- (4) CONCRETE PAD (MIX NO. 1G52) INCIDENTAL.
- $\ensuremath{\mathfrak{S}}$  SEE CROSS SECTIONS FOR EXISTING AND PROPOSED SLOPE.
- (6) WIRE FENCE TO BE CONTINUOUS ENTIRE LENGTH OF WALL. INSTALLATION PER MNDOT STANDARD PLATE 9322 AND SPEC. 2557.
- (7) COARSE FILTER AGGREGATE SPEC. 3149.2H. TO BE INCLUDED IN PAY ITEM FOR MODULAR BLOCK RETAINING WALL.
- (8) PAYMENT INCLUDES ALL COSTS FOR FURNISHING WIRE FENCE AND ALL COMPONENTS SPECIFIED AND SHOWN ON THESE PLANS.
- PAYMENT INCLUDES ALL COSTS FOR DESIGN, FURNISHING, AND CONSTRUCTING PMBW INCLUDING ALL EXCAVATION AND BACKFILL, CONCRETE LEVELING PAD, DRAINAGE SYSTEM, AND OTHER SERVICES NECESSARY FOR CONSTRUCTION OF THE WALL.

I hereby certify that this plan, specification, or report was prepared by me or under my direct supervision and that I am duly Licensed Professional Engineer under the laws of the State of Minnesota.

Print Name: TYLER A. SMITH

o<sub>ate</sub> 5/5/2022

Tyler bith

License # 56135

CITY PROJECT NO. 19-09

SRE

S MARTINS
DESIGNED BY

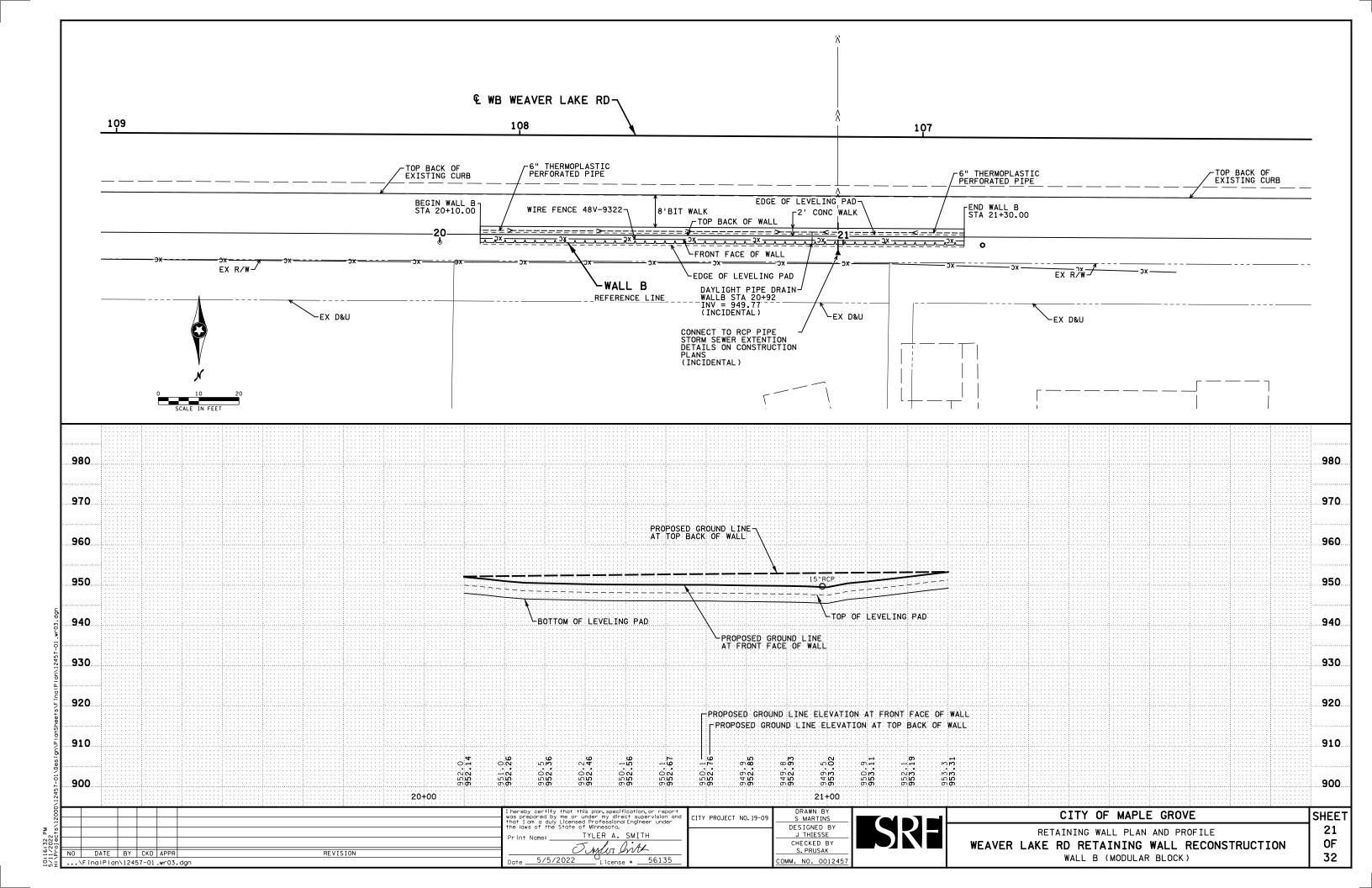
J THIESSE

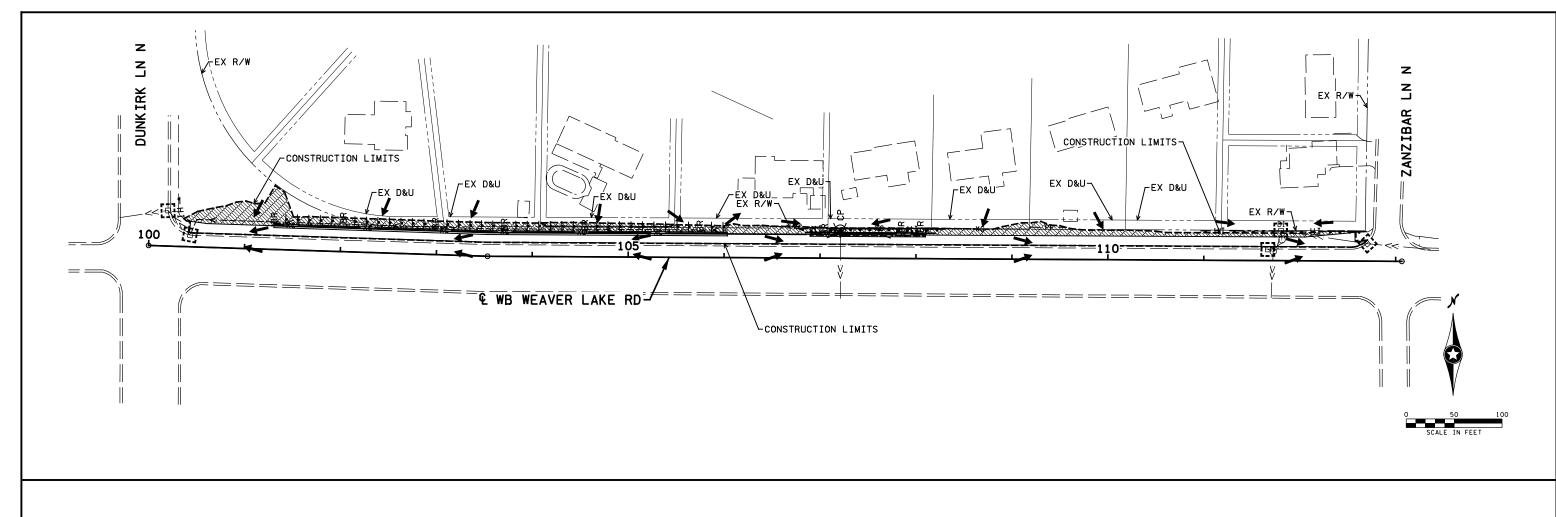
CHECKED BY

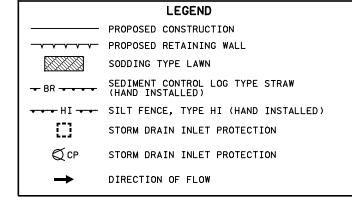
S. PRUSAK

OMM. NO. 0012457

CITY OF MAPLE GROVE







TYLER A. SMITH Tyler bith NO DATE BY CKD APPR
...\FinalPlan\12457-01\_ec01.dgn REVISION \_\_License # \_\_\_\_56135 oate 5/5/2022

CITY PROJECT NO. 19-09

OMM. NO. 0012457

DRAWN BY S. MARTINS DESIGNED BY T. SMITH

CHECKED BY S. PRUSAK

CITY OF MAPLE GROVE EROSION CONTROL AND TURF ESTABLISHMENT PLANS WEAVER LAKE RD RETAINING WALL RECONSTRUCTION SHEET 22 OF 32

