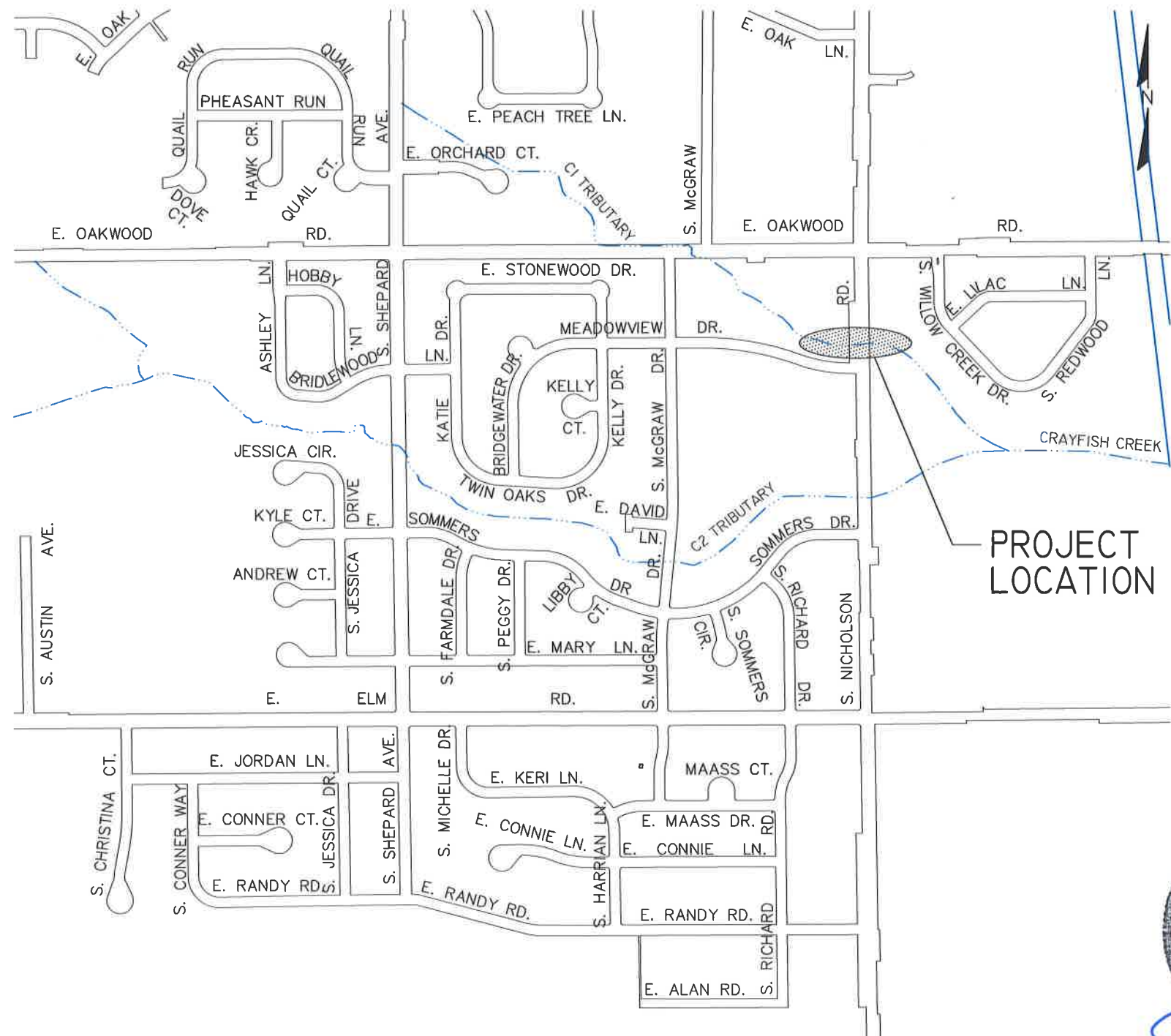


# S. NICHOLSON ROAD CULVERT REPLACEMENT IMPROVEMENTS

PROJECT NO. 14017  
CITY OF OAK CREEK



PROJECT  
LOCATION

### LIST OF DRAWINGS

| SHEET NO.     | DESCRIPTION  |
|---------------|--|
| 14017-1B-2546 | COVER SHEET  |
| 14017-2B-2547 | PROPOSED BOX CULVERT IN S. NICHOLSON ROAD<br>125' NORTH OF E. MEADOWVIEW DRIVE |
| 14017-2B-2548 | EROSION CONTROL AND TRAFFIC CONTROL  |

| BID ITEM NO. | ESTIMATE OF QUANTITIES                                     |
|--------------|--|
| 1            | 4'x8' CONCRETE BOX CULVERT WITH END SECTIONS _____ 64 L.F. |
| 2            | EXCAVATION FOR STRUCTURES, CULVERTS _____ 1 L.S.           |
| 3            | STRUCTURAL BACKFILL _____ 200 C.Y.                         |
| 4            | REMOVE STEEL SHEET PILING DROP STRUCTURE _____ 1 L.S.      |
| 5            | REMOVE CULVERT _____ 2 EA.                                 |
| 6            | SAW CUT PAVEMENT _____ 48 L.F.                             |
| 7            | WATERMAIN OFFSET _____ 1 L.S.                              |
| 8            | RAILING _____ 52 L.F.                                      |
| 9            | CRUSHED AGGREGATE BASE COURSE _____ 40 TONS                |
| 10           | 4" ASPHALT PAVEMENT _____ 100 S.Y.                         |
| 11           | HEAVY RIPRAP WITH GEOTEXTILE FABRIC _____ 54 TONS          |
| 12           | SILT FENCE _____ 100 L.F.                                  |
| 13           | COFFERDAM WITH PUMPING _____ 2 EA.                         |
| 14           | EROSION MAT URBAN CLASS 1 TYPE A _____ 600 S.Y.            |
| 15           | TOPSOIL AND TURF SEED RESTORATION _____ 500 S.Y.           |
| 16           | TOPSOIL AND WETLAND RESTORATION _____ 100 S.Y.             |
| 17           | PAVEMENT MARKING _____ 200 L.F.                            |
| 18           | TRAFFIC CONTROL _____ 1 L.S.                               |



### GENERAL NOTES

THE LOCATION OF EXISTING UTILITIES, AS SHOWN ON THE PLANS, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH A CALL TO DIGGERS HOTLINE AND/OR A DIRECT CALL TO THE UTILITIES THAT HAVE FACILITIES IN THE AREA.

NO TREES OR SHRUBS SHALL BE DISTURBED OR REMOVED UNLESS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE EXACT LOCATION AND DIMENSIONS SHALL BE DETERMINED BY THE ENGINEER. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES IT IS NO LONGER NECESSARY.

ALL EROSION CONTROL SHALL MEET THE REQUIREMENTS SET FORTH IN THE CITY OF OAK CREEK ORDINANCES OR WISCONSIN DEPARTMENT OF NATURAL RESOURCES, WHICHEVER IS MORE STRICT.

EXISTING DRIVEWAYS SHALL BE RESTORED IN KIND AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE LIMITS OF WORK AND LOCATIONS SHALL BE IN ACCORDANCE WITH THE PLANS OR AS DIRECTED BY THE ENGINEER.

A SAWED JOINT IS REQUIRED WHERE NEW ASPHALT MEETS EXISTING ASPHALT.

THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL DRIVEWAYS SHALL BE MAINTAINED AT ALL TIMES UNTIL TIME OF RECONSTRUCTION. THE CONTRACTOR MUST GIVE LAND OWNER 48 HOURS NOTICE PRIOR TO RECONSTRUCTION.

TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE STAGED TRAFFIC CONTROL PLAN AND THE LATEST ADDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WISMUTCD) - SUPPLEMENT TO THE MUTCD.

CONTRACTOR SHALL ONLY WORK WITHIN THE RIGHT-OF-WAY OR STORM SEWER EASEMENT UNLESS SHOWN OTHERWISE ON PLANS. CONTRACTOR MUST HAVE ENGINEER WRITTEN AUTHORIZATION PRIOR TO WORKING OUTSIDE OF THE RIGHT-OF-WAY OR STORM SEWER EASEMENT. WORK THAT IS DONE OUTSIDE OF THE RIGHT-OF-WAY OR STORM SEWER EASEMENT WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER WILL NOT BE PAID FOR.

ALL DISTURBED TURF AREAS SHALL BE FINE GRADED AND RESTORED WITH 3" OF SCREENED TOPSOIL IMPORTED TO THE SITE, SEED MIX 40, FERTILIZER, EROSION MAT URBAN CLASS 1 TYPE A.

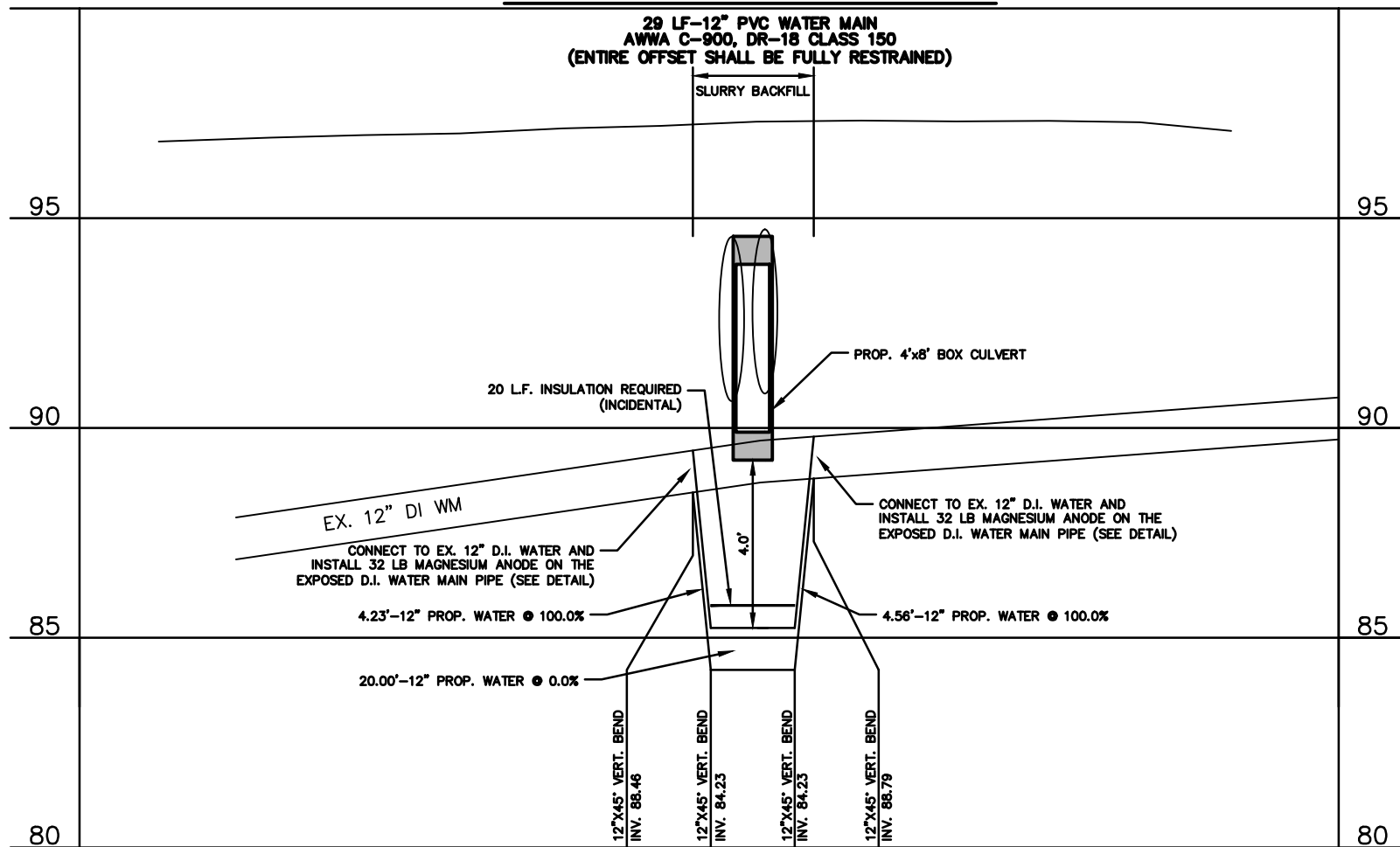
ALL DISTURBED WETLAND AREAS SHALL BE FINE GRADED AND RESTORED WITH 3" OF SCREENED TOPSOIL IMPORTED TO THE SITE, WETLAND SEED MIX, AND EROSION MAT URBAN CLASS 1 TYPE B. THE WETLAND SEED MIX WILL CONSIST OF A COVER CROP AND NATIVE SEED MIX. THE COVER CROP SHALL BE ANNUAL OATS (AVENA SATIVA) FOR SPRING PLANTINGS OR WINTER WHEAT (TRITICUM AESTIVUM) FOR DORMANT FALL PLANTINGS, AT 25 POUNDS PER ACRE. THE NATIVE SEED MIX APPLIED AT 12 POUNDS PER ACRE WILL BE COMPOSED OF A MINIMUM OF THREE SPECIES FROM THE FOLLOWING LIST, WITH NO INDIVIDUAL SPECIES COMPRISING MORE THAN 35% OF THE TOTAL GRASS SEED MIX.

| SCIENTIFIC NAME          | COMMON NAME (REQUIRED SPECIES) |
|--------------------------|--------------------------------|
| Elymus canadensis        | Canada wild rye                |
| Calamagrostis Canadensis | Canada blue joint              |
| Leersia oryzoides        | rice cut grass                 |
| Elymus virginicus        | virginia wild rye              |

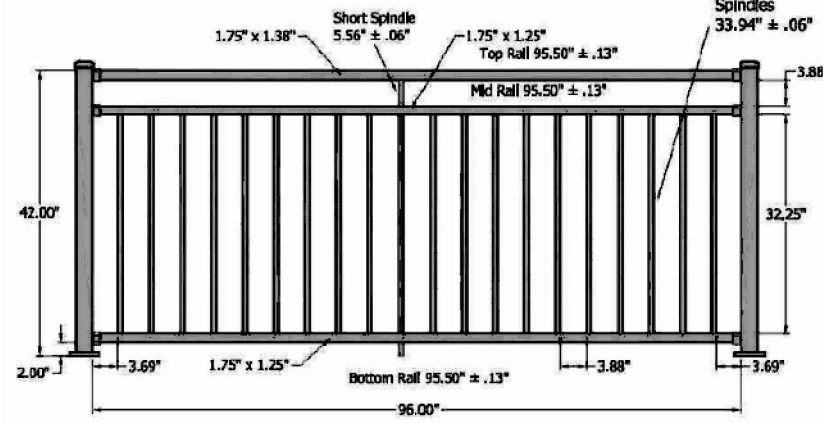
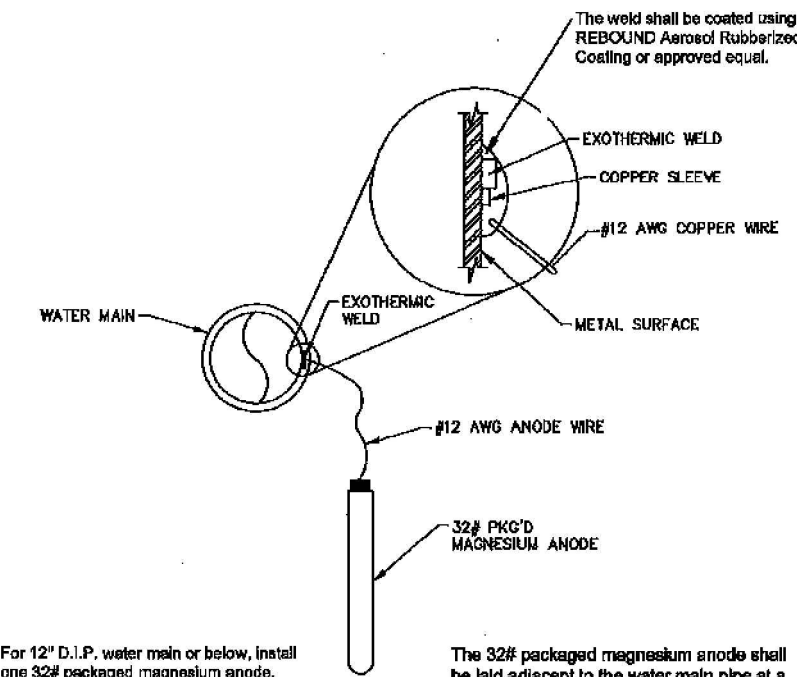
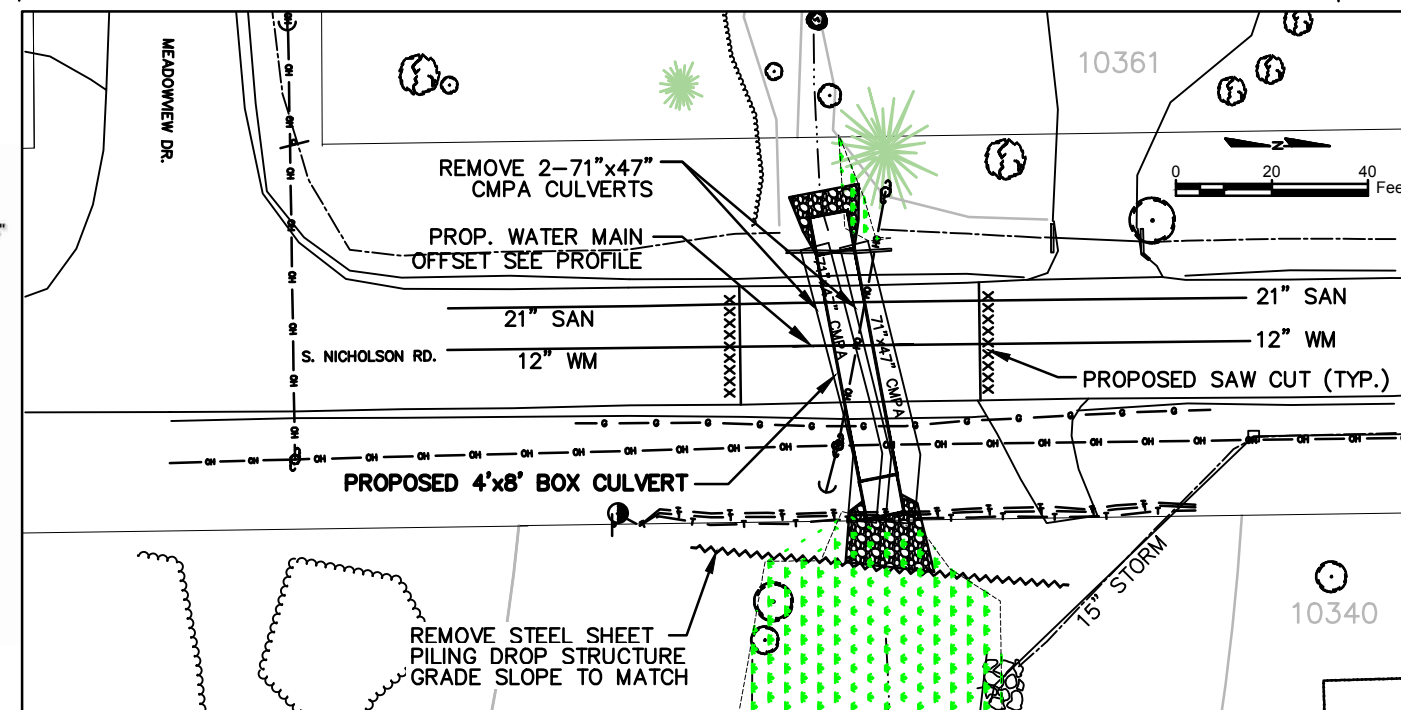
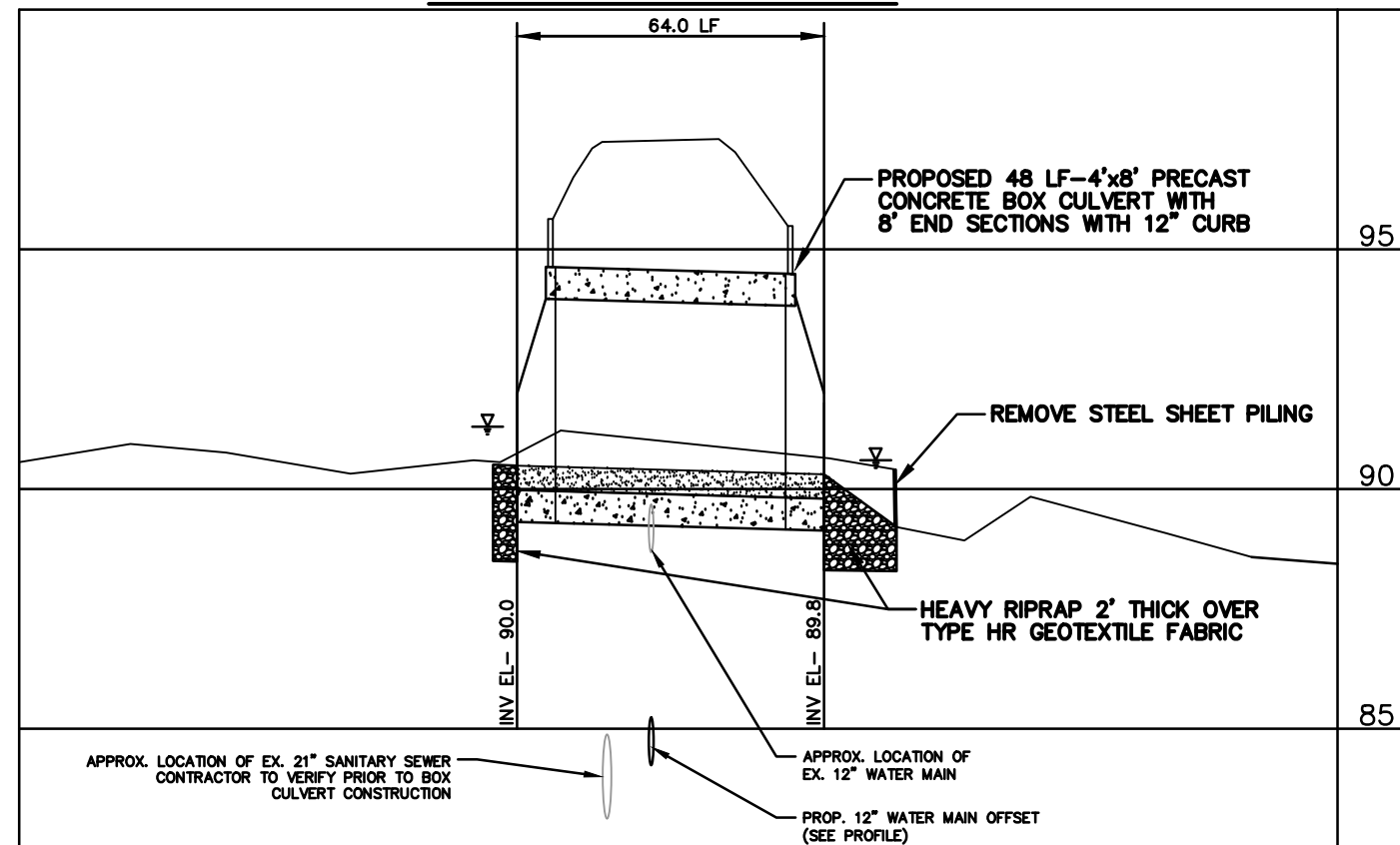
CONTRACTOR SHALL PROTECT ALL TREES AND SHRUBS FROM ALL EQUIPMENT EXHAUST.

| CITY OF OAK CREEK - ENGINEERING DEPARTMENT  |      |                                    |      |                  |                       |
|---|------|------------------------------------|------|------------------|-----------------------|
| DESIGNED BY   | DATE | DRAWN BY                           | DATE | CHECKED BY       | DATE                  |
| PJB   | 1/16 | PJB                                | 1/16 | MCS              | 1/16                  |
|   |      |                                    |      | APPROVED BY      |                       |
|   |      |                                    |      | Michael C. Simon | 5/6/19                |
|   |      |                                    |      | CITY ENGINEER    | DATE                  |
|   |      |                                    |      | SCALE            | SHEET                 |
| <b>COVER SHEET</b>  |      |                                    |      |                  |                       |
| <b>CULVERT REPLACEMENT IN S. NICHOLSON ROAD<br/>125 FEET NORTH OF E. MEADOWVIEW DRIVE</b> |      |                                    |      |                  |                       |
| PLAN HOR.   | N/A  |                                    |      |                  | 1                     |
| PROFILE HOR.  | N/A  |                                    |      |                  | OF                    |
| VER.  | N/A  |                                    |      |                  | 3                     |
| REVISION BY   | DATE | APPROVED BY COUNCIL RESOLUTION NO. |      |                  | FILE NO: 14017-B-2546 |

**PROPOSED WATER MAIN OFFSET PROFILE**



**PROPOSED BOX CULVERT PROFILE**



**NOTES:**  
 RAILINGS ON BOX CULVERT END SECTIONS SHALL BE WESTBURY RIVIERA SERIES STYLE C30 ALUMINUM RAILING (AS SHOWN), BLACK COLOR, MANUFACTURED BY DIGGER SPECIALTIES, INC. OR EQUAL  
 SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL BEFORE RAILINGS ARE FABRICATED  
 RAILINGS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS



Constructed By: \_\_\_\_\_  
 Completion Date: \_\_\_\_\_  
 Inspected By: \_\_\_\_\_  
 As-Built By: \_\_\_\_\_  
 Redlines to Mylar: \_\_\_\_\_  
 Type of Pipe: \_\_\_\_\_

| CITY OF OAK CREEK - ENGINEERING DEPARTMENT   |       |                                    |      |            |      |   |        |    |  |  |
|--|-------|------------------------------------|------|------------|------|---|--------|----|--|--|
| DESIGNED BY  | DATE  | DRAWN BY                           | DATE | CHECKED BY | DATE | APPROVED BY   |        |    |  |  |
| PJB  | 1/16  | PJB                                | 1/16 |            |      | <br>MICHAEL C. SWANN<br>CITY ENGINEER<br>DATE: 5/6/19 |        |    |  |  |
| <b>PROPOSED BOX CULVERT IMPROVEMENTS</b><br>IN: S. NICHOLSON ROAD<br>125' NORTH OF E. MEADOWVIEW DRIVE |       |                                    |      |            |      | SCALE   | SHEET  |    |  |  |
|  |       |                                    |      |            |      | PLAN  | 1"=40' | 2  |  |  |
|  |       |                                    |      |            |      | PROFILE   |        | OF |  |  |
|  |       |                                    |      |            |      | HOR.  | 1"=40' |    |  |  |
| VER.   | 1"=4' | 3                                  |      |            |      |   |        |    |  |  |
| REVISION BY  | DATE  | APPROVED BY COUNCIL RESOLUTION NO. |      |            |      | FILE NO: 14017-B-2547                                 |        |    |  |  |

For 12" D.I.P. water main or below, install one 32# packaged magnesium anode.  
 For 16" D.I.P. water main or above, install two 32# packaged magnesium anodes.

The 32# packaged magnesium anode shall be laid adjacent to the water main pipe at a point that allows for the greatest separation between anode and water main.

# EROSION CONTROL PLAN

## EROSION CONTROL MAINTENANCE PLAN

ALL MAINTENANCE SHALL BE IN ACCORDANCE WITH APPLICABLE WDNR TECHNICAL STANDARDS

ALL EROSION CONTROL PRACTICES SHALL BE, AT A MINIMUM, INSPECTED WEEKLY AND WITHIN 24 HOURS AFTER EVERY PRECIPITATION EVENT THAT PRODUCES 0.5" OF RAIN OR MORE DURING A 24-HOUR PERIOD. REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN ALL PRACTICES AS DESIGNED.

ALL SEEDED AREAS SHALL BE FERTILIZED, RESEED AS NECESSARY, AND MULCHED (OR MATTED) ACCORDING TO PROJECT SPECIFICATIONS TO ESTABLISH AND MAINTAIN A DENSE VEGETATIVE COVER.

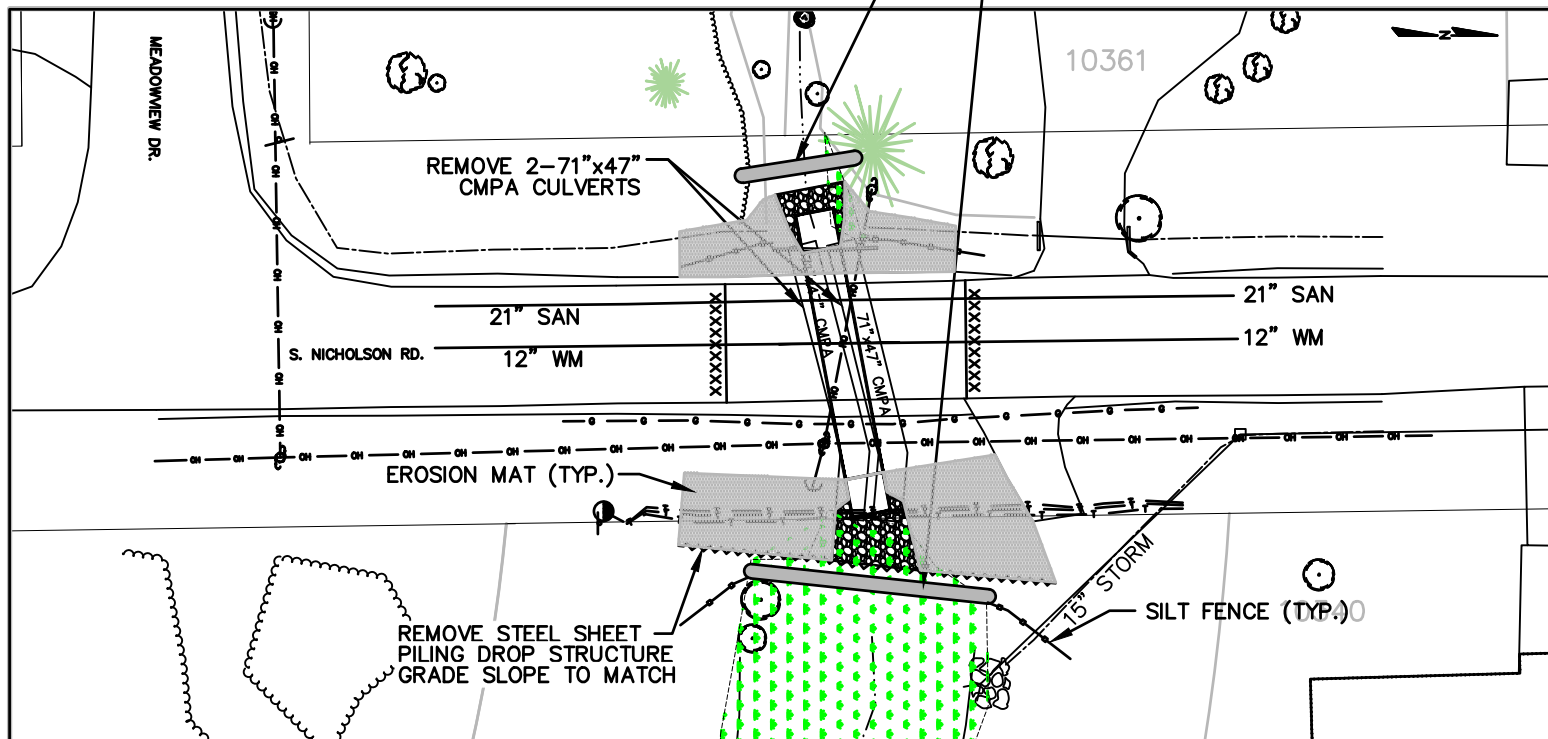
ANY SEDIMENT TRACKED ONTO A PUBLIC ROAD SHALL BE REMOVED BY STREET CLEANING (NOT FLUSHED) BEFORE THE END OF EACH WORKING DAY.

## EROSION CONTROL NOTES

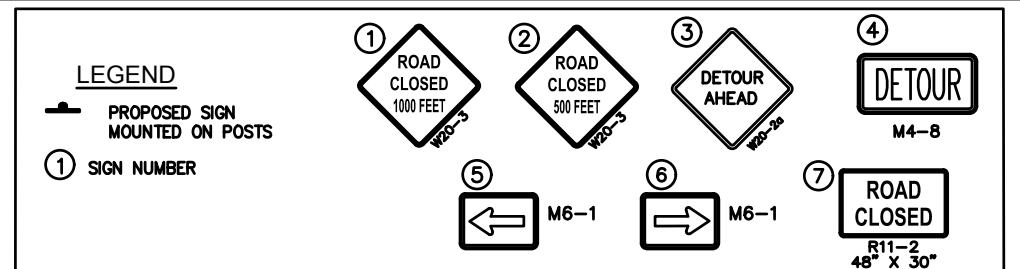
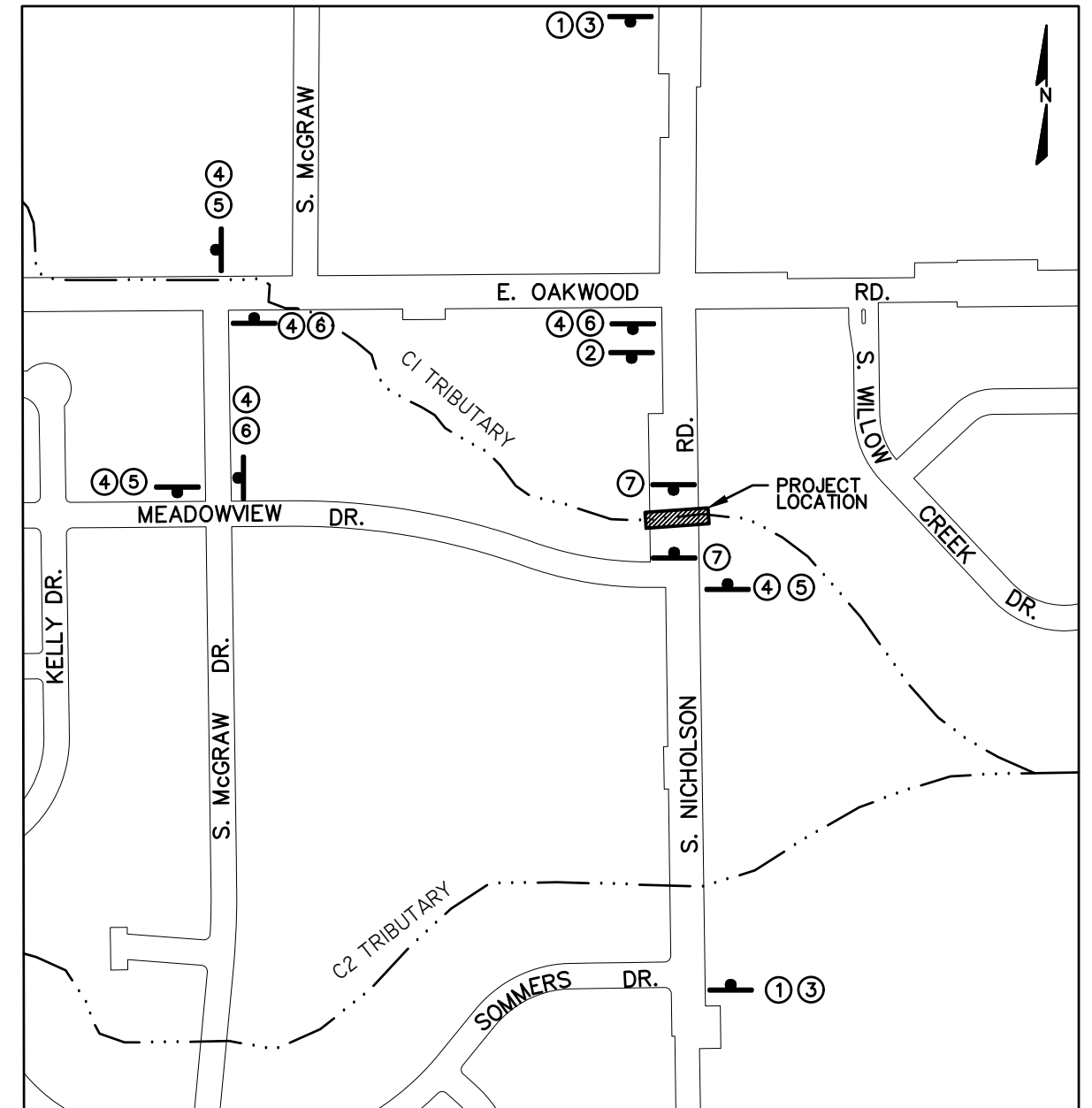
1. ALL WORK TO REMOVE AND INSTALL CULVERTS AND GRADE STREAM BANKS SHALL BE DONE OUTSIDE OF ACTIVE STREAM FLOW
2. ANY DEWATERING SHALL BE DONE IN ACCORDANCE WITH WDNR CONSERVATION PRACTICE STANDARD 1061
3. EXCAVATION AND GRADING ACTIVITIES SHALL BE SEQUENCED TO MINIMIZE EXPOSURE FOR EROSION
4. USE OF COFFERDAMS AND STREAM FLOW PUMPING SHALL BE LIMITED TO 60 CONSECUTIVE HOURS.

## CULVERT REMOVAL/INSTALLATION SEQUENCE

1. INSTALL COFFERDAMS TO ISOLATE WORK AREA AND PUMP STREAM FLOW AROUND
2. REMOVE CULVERTS, CONSTRUCT WATERMAIN OFFSET, INSTALL AND BACKFILL BOX CULVERT.
3. REMOVE SHEET PILING, PLACE RIPRAP, GRADE STREAM BANKS AND RESTORE WITH TOPSOIL, SEED AND EROSION MAT
4. REMOVE COFFERDAMS



# TRAFFIC CONTROL DETOUR PLAN



Constructed By: \_\_\_\_\_  
 Completion Date: \_\_\_\_\_  
 Inspected By: \_\_\_\_\_  
 As-Built By: \_\_\_\_\_  
 Redlines to Mylar: \_\_\_\_\_  
 Type of Pipe: \_\_\_\_\_

| SA. SA.          |  |      |  | CITY OF OAK CREEK - ENGINEERING DEPARTMENT |  |      |  |
|------------------|--|------|--|--|--|------|--|
| DESIGNED BY      |  | DATE |  | DRAWN BY                                   |  | DATE |  |
| PJB              |  | 1/16 |  | PJB  |  | 1/16 |  |
| APPROVED BY      |  |      |  | APPROVED BY                                |  |      |  |
| Michael E. Simon |  |      |  | 5/6/19                                     |  |      |  |
| CITY ENGINEER    |  |      |  | DATE                                       |  |      |  |
| SCALE            |  |      |  | SHEET                                      |  |      |  |
| PLAN             |  |      |  | 3  |  |      |  |
| HOR. SCALE       |  |      |  | OF   |  |      |  |
| PROFILE          |  |      |  | 3  |  |      |  |
| HOR. PROFILE     |  |      |  | VER. PROFILE                               |  |      |  |
| VER. PROFILE     |  |      |  | 3  |  |      |  |
| GER              |  | 5/19 |  | APPROVED BY COUNCIL RESOLUTION NO.         |  |      |  |
| REVISION BY      |  | DATE |  | FILE NO: 14017-B-2548                      |  |      |  |