

4100 N CALHOUN ROAD
BROOKFIELD, WI 53005
PHONE: (262) 790-1480
FAX: (262) 790-1481
EMAIL: info@trioeng.com

PROJECT:
TENNY AVENUE EXTENSION
SMART PROPERTY
CITY OF WAUKESHA, WISCONSIN
BY: SMART REALTY COMPANY
144 W BROADWAY
WAUKESHA, WI 53186

REVISION HISTORY

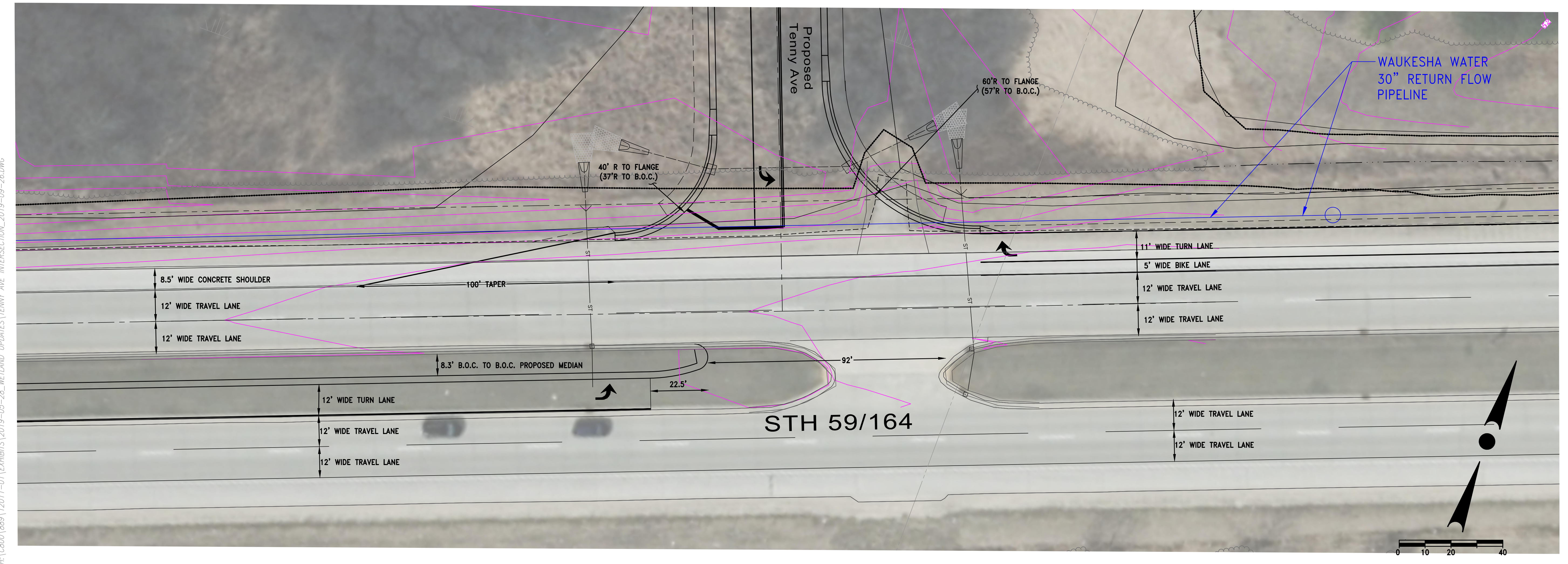
DATE	DESCRIPTION
5/21/19	Initial Submittal
7/24/19	Per WDNR Review
9/26/19	Waukesha Eng. Dept.

DATE:
SEPTEMBER 26, 2019

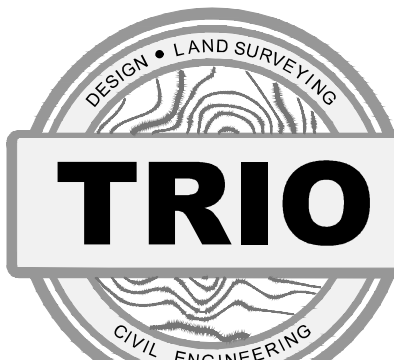
JOB NUMBER:
889-12011-01

DESCRIPTION:
INTERSECTION
PLAN

SHEET
1



H:\C800\889\12011-01\EXHIBITS\2019-05-28_METLAND_UPDATES\TENNY_AVE_INTERSECTION_2019-09-26.DWG



4100 N CALHOUN ROAD
BROOKFIELD, WI 53005
PHONE: (262) 790-1480
FAX: (262) 790-1481
EMAIL: jpuudelko@trioeng.com

PROJECT:
TENNY AVENUE EXTENSION
SMART PROPERTY
CITY OF WAUKESHA, WISCONSIN
BY: SMART REALTY COMPANY
144 N BROADWAY
WAUKESHA, WI 53186

REVISION HISTORY

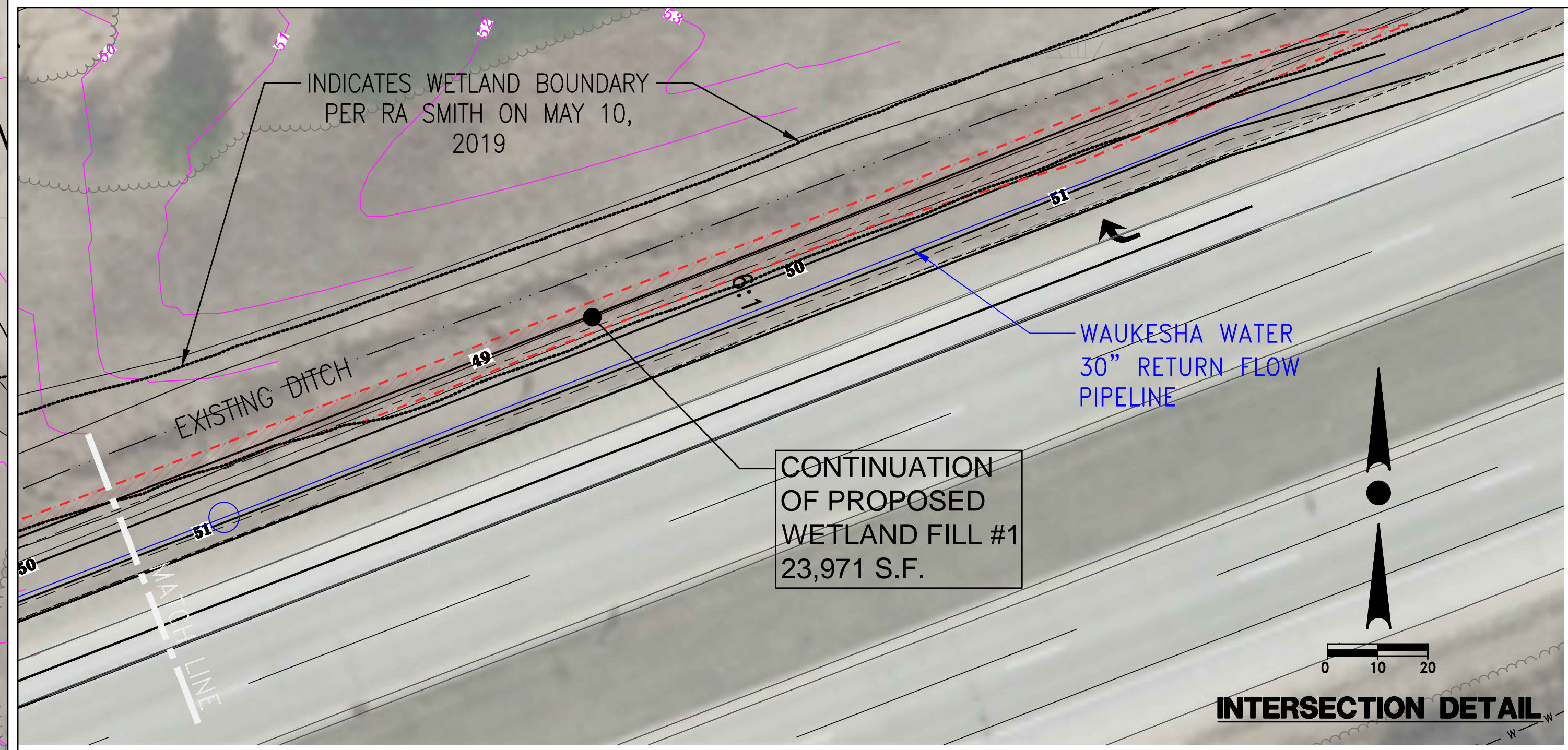
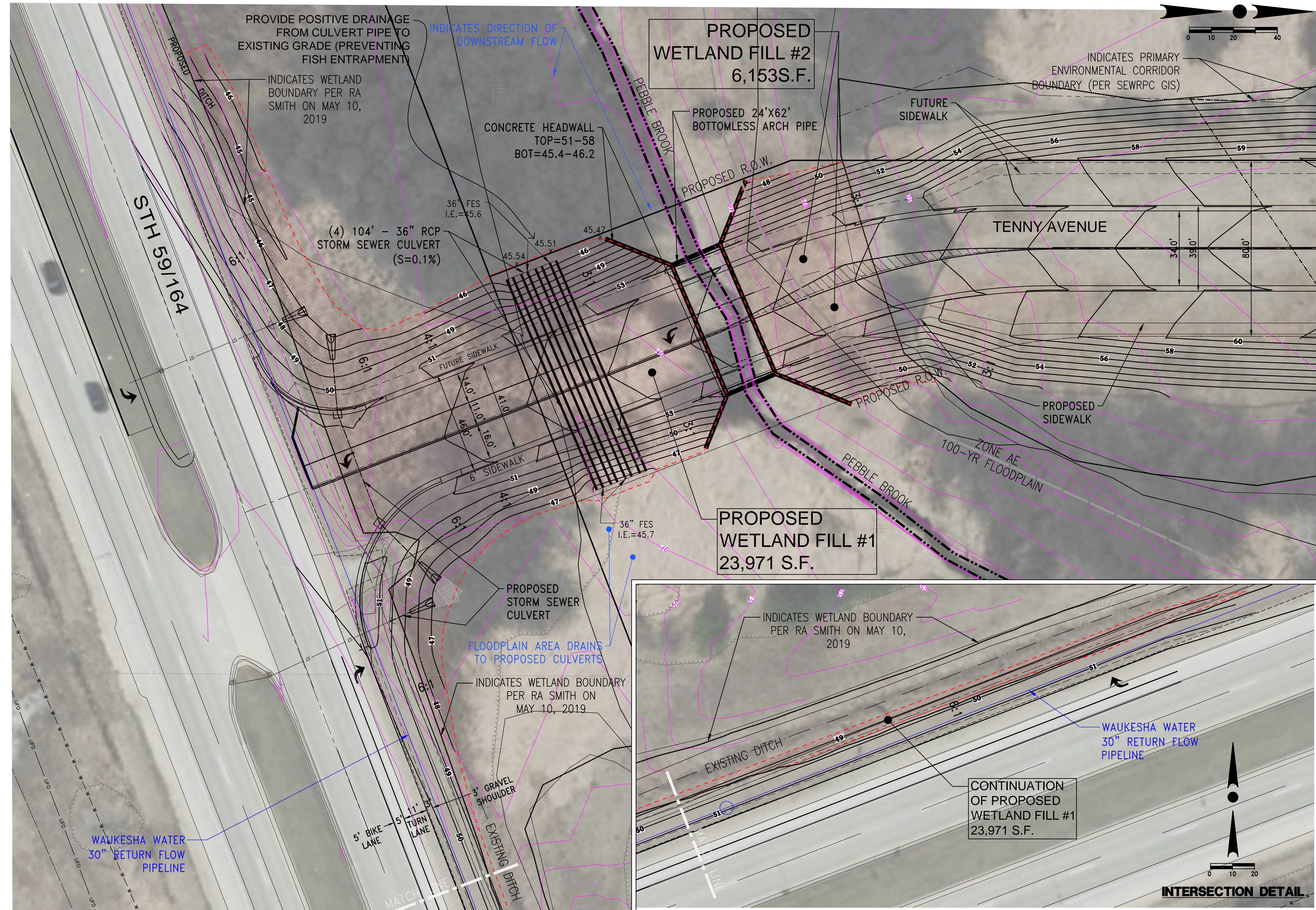
DATE	DESCRIPTION
5/21/19	Initial Submittal
7/24/19	Per WDNR Review
9/06/19	Per WDNR Review
9/26/19	Waukesha Eng. Dept.

DATE:
SEPTEMBER 26, 2019

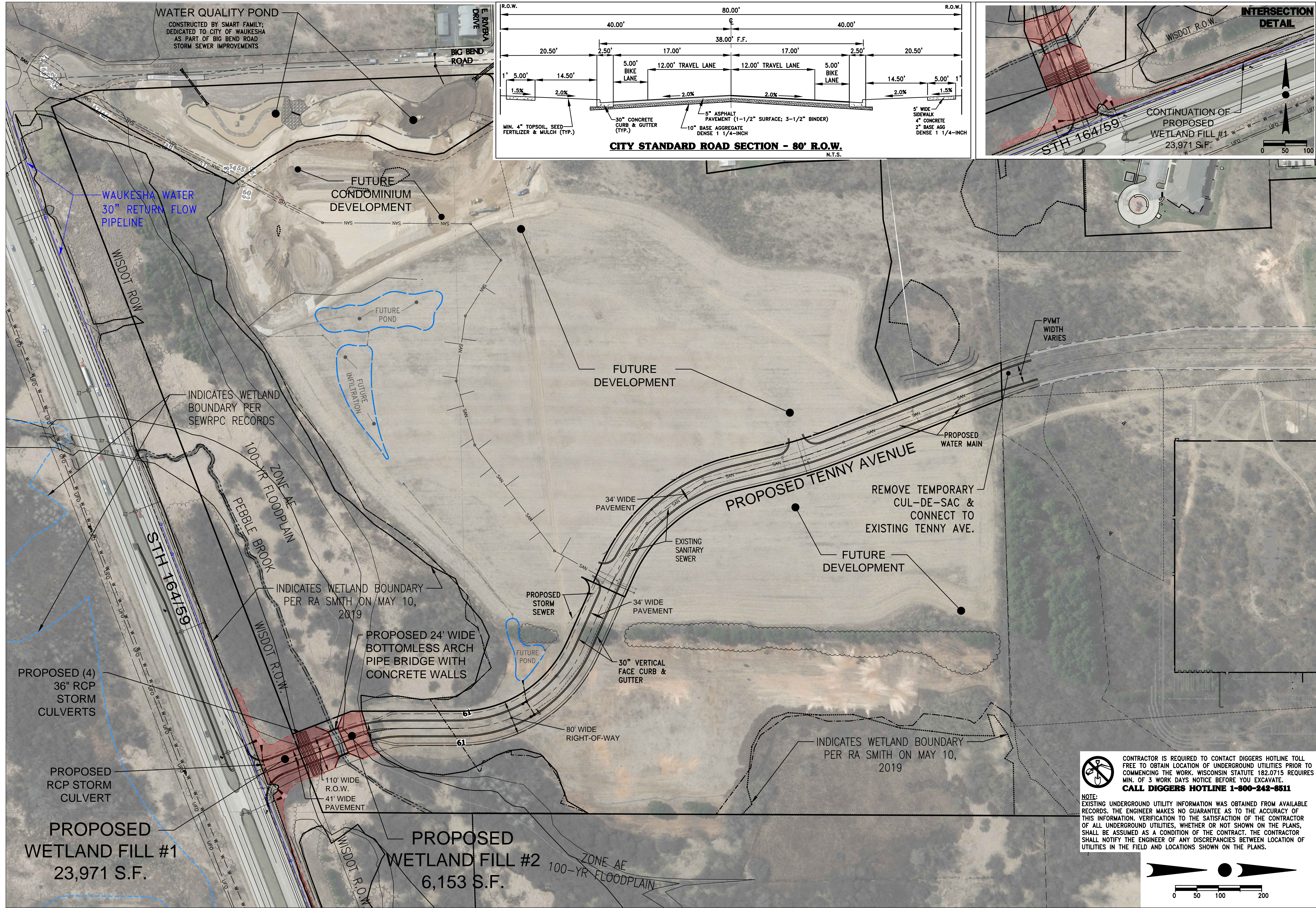
JOB NUMBER:
889-12011-01

DESCRIPTION:
INTERSECTION
DETAIL
EXHIBIT

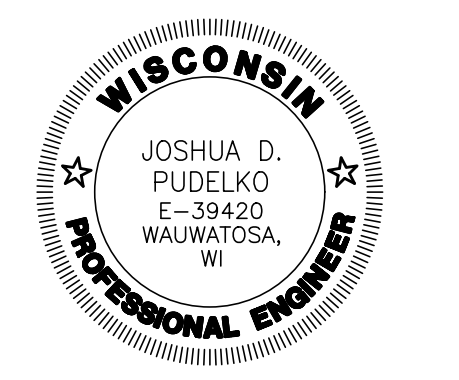
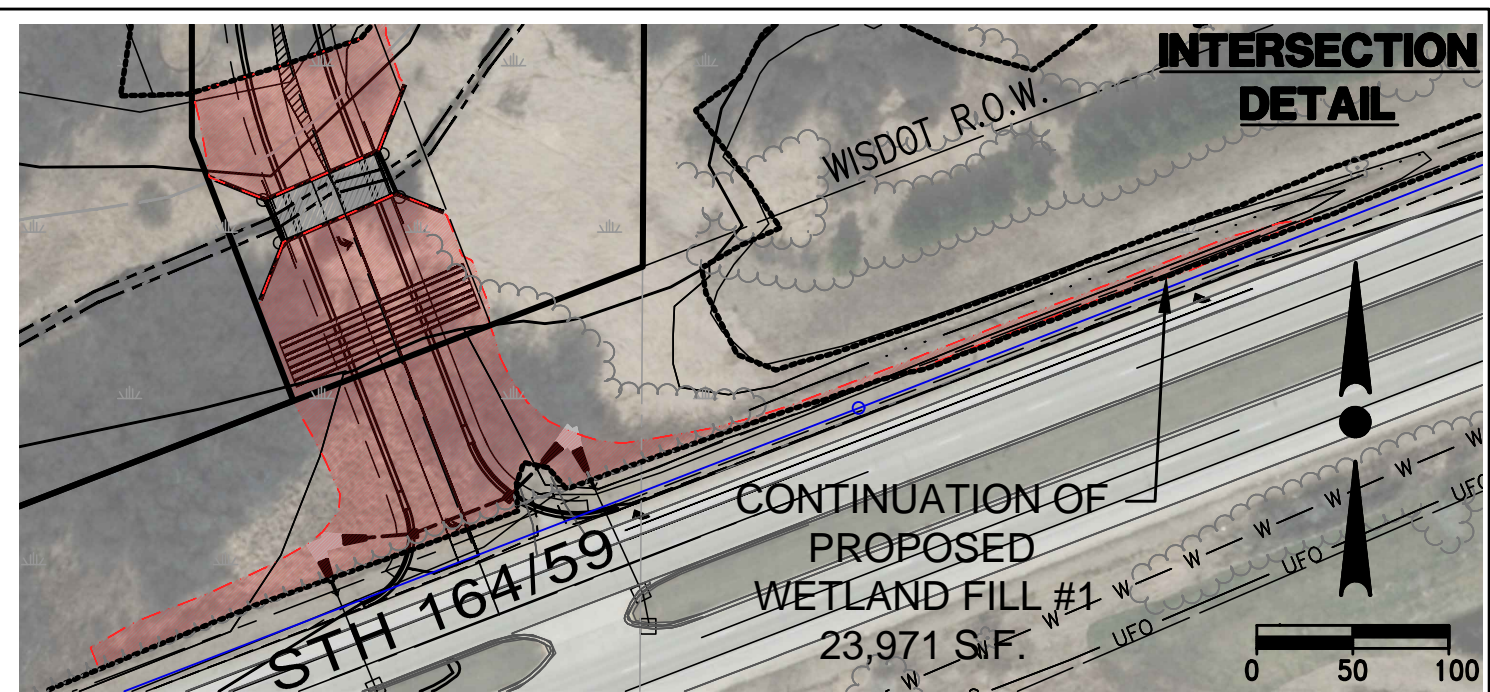
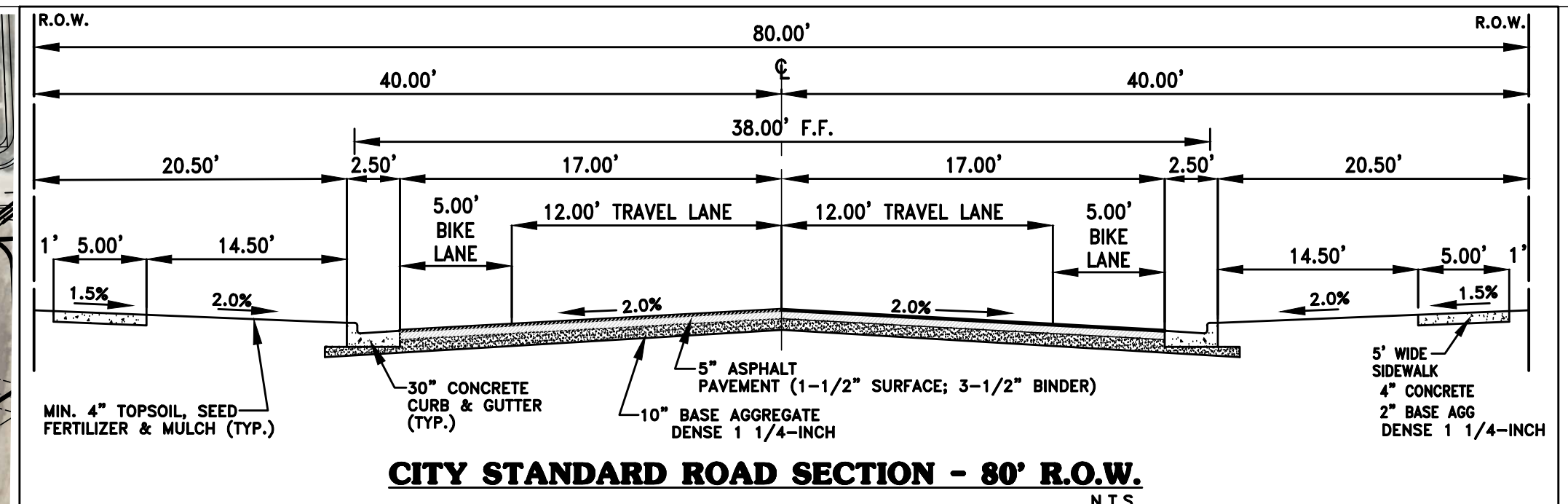
SHEET
02



H:\C800\889\12011-01\EXHIBITS\2019-05-28_WETLAND_UPDATES\TENNY_AVE_INTERSECTION_2019-09-26.DWG



WATER QUALITY POND
 CONSTRUCTED BY SMART FAMILY;
 DEDICATED TO CITY OF WAUKESHA
 AS PART OF BIG BEND ROAD
 STORM SEWER IMPROVEMENTS



4100 N CALHOUN ROAD
 BROOKFIELD, WI 53005
 PHONE: (262) 790-1480
 FAX: (262) 790-1481
 EMAIL: info@trioeng.com

PROJECT:
TENNY AVENUE EXTENSION
 SMART PROPERTY
 CITY OF WAUKESHA, WISCONSIN
BY: SMART REALTY COMPANY
 144 W BROADWAY
 WAUKESHA, WI 53186

REVISION HISTORY

DATE	DESCRIPTION
5/21/19	Initial Submittal
7/24/19	Per WDNR Review
9/26/19	Waukesha Eng. Dept.

DATE:
 SEPTEMBER 26, 2019

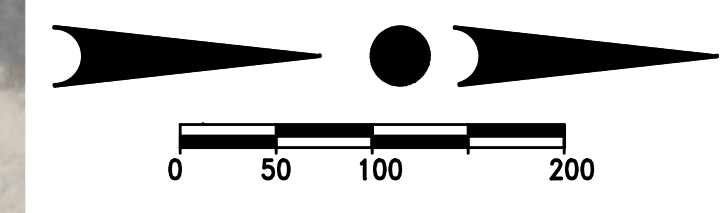
JOB NUMBER:
 889-12011-01

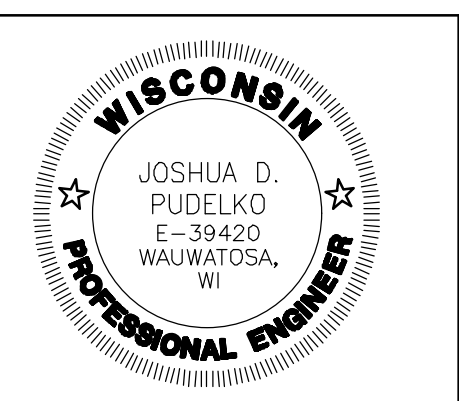
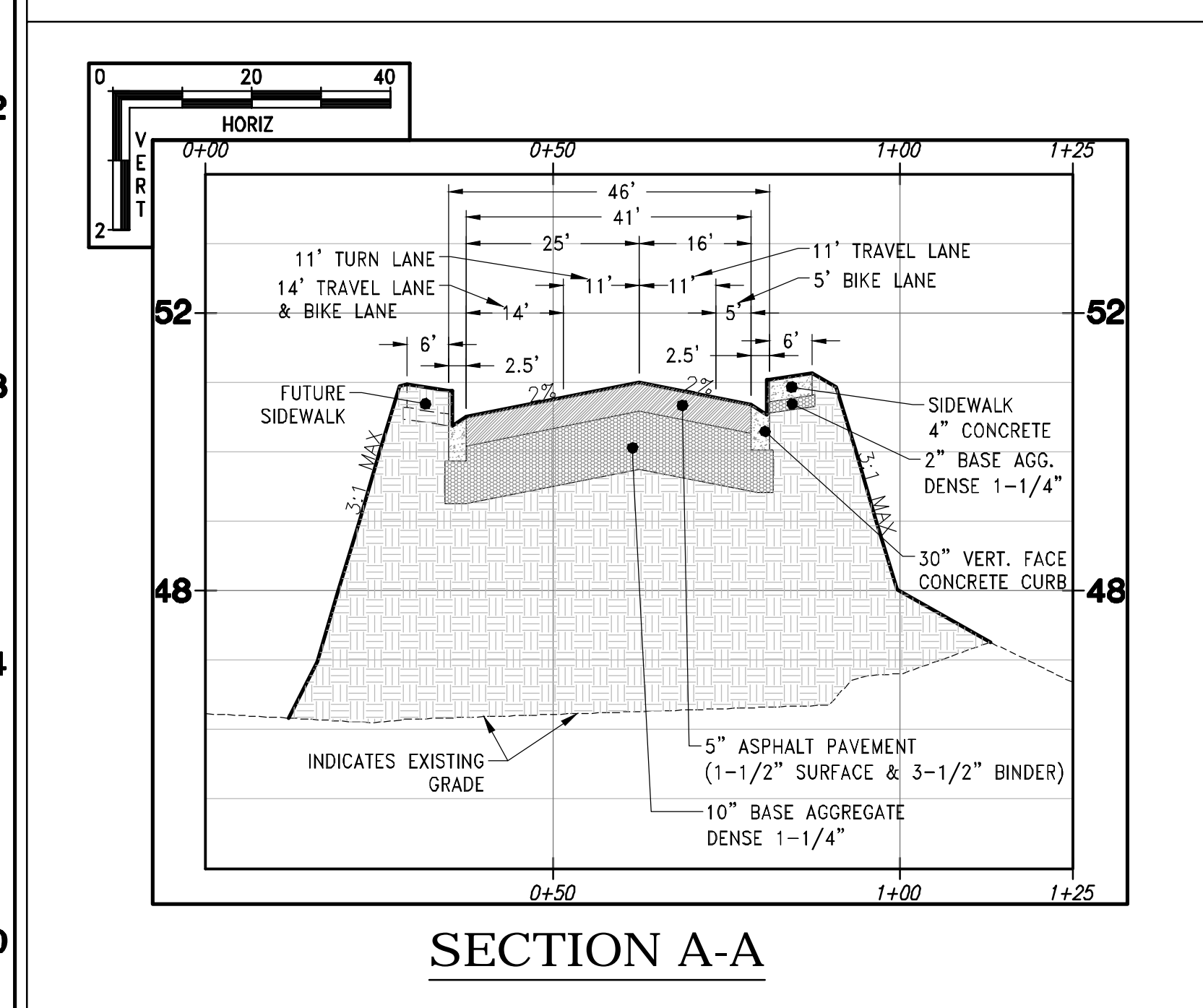
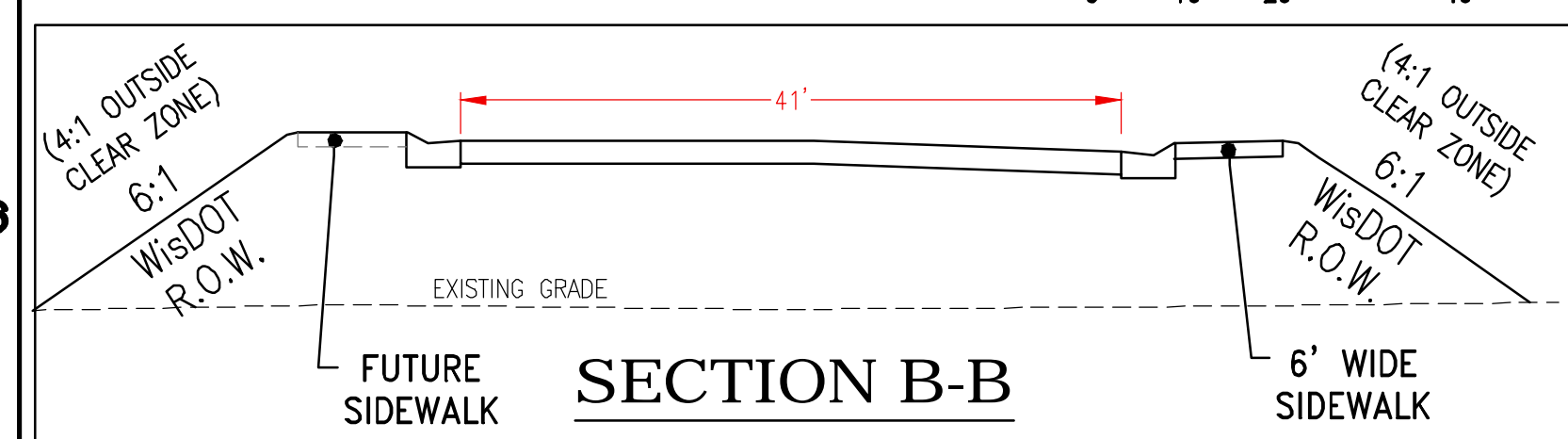
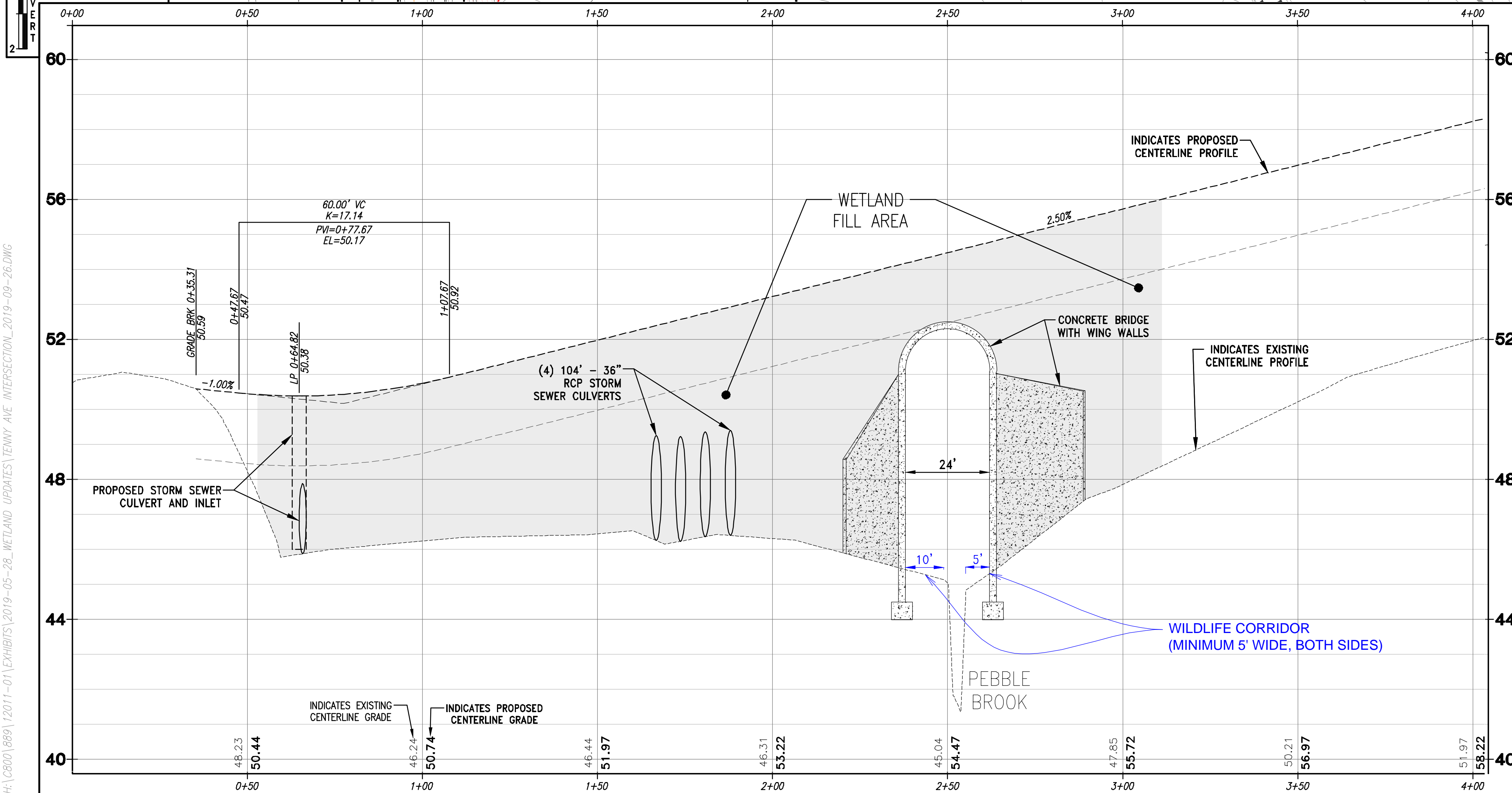
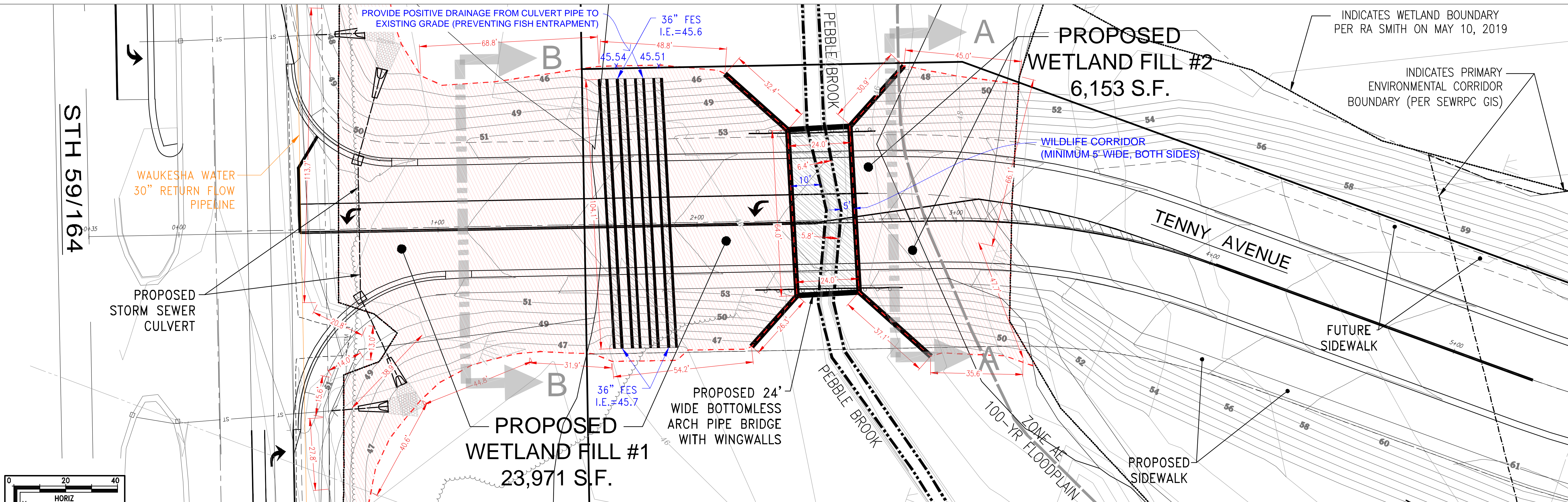
DESCRIPTION:
 OVERALL
 SITE PLAN

SHEET
 3

NOTE:
 CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE.
CALL DIGGERS HOTLINE 1-800-242-8511

NOTE:
 EXISTING UNDERGROUND UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS. THE ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN LOCATION OF UTILITIES IN THE FIELD AND LOCATIONS SHOWN ON THE PLANS.





PROJECT:
TENNY AVENUE EXTENSION
SMART PROPERTY
CITY OF WUKESHA, WISCONSIN
BY: SMART REALTY COMPANY
144 W BROADWAY
WUKESHA, WI 53186

REVISION HISTORY

DATE	DESCRIPTION
6/21/19	Initial Submittal
7/24/19	Per WDR Review
9/26/19	Waukesha Eng. Dept.

DATE:
SEPTEMBER 26, 2019

JOB NUMBER:
889-12011-01

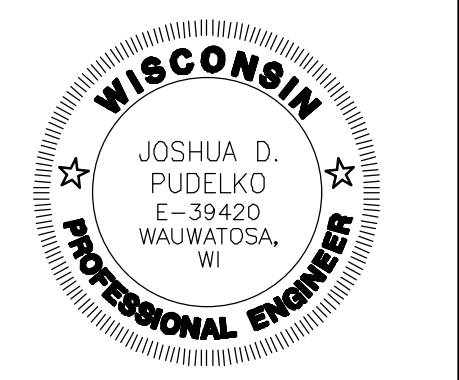
DESCRIPTION:
INTERSECTION
WETLAND CROSSING
PROFILES

SHEET
4

H:\C800\889\2019-05-28_WETLAND_UPDATES\TENNY_AVE_INTERSECTION_2019-09-26.DWG

- EROSION CONTROL NOTES:**
1. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO MINIMIZE EROSION, WATER POLLUTION AND SILTATION CAUSED BY CONSTRUCTION OF THIS PROJECT. EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH WISCONSIN DEPARTMENT OF NATURAL RESOURCES TECHNICAL STANDARDS.
 2. EROSION CONTROL PLAN: PRIOR TO BEGINNING WORK, THE CONTRACTOR MAY BE REQUIRED TO SUBMIT AN EROSION AND SEDIMENT CONTROL PLAN, DETAILING SPECIFIC MEASURES THAT WILL BE USED IN THE VARIOUS STAGES OF CONSTRUCTION FOR APPROVAL BY THE ENGINEER.
 3. IMPLEMENTATION: THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL AFTER INITIAL EROSION AND SEDIMENT CONTROL DEVICES ARE IN PLACE AND APPROVED BY THE ENGINEER.
 4. EROSION CONTROL MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
 - A. DIVERT UPSTREAM RUNOFF FROM FLOWING THROUGH THE CONSTRUCTION SITE.
 - B. PROTECT DOWNSTREAM OR ADJACENT WATERWAYS AND WETLANDS WITH SILT FENCE.
 - C. DELAY STRIPPING TOPSOIL UNTIL REQUIRED FOR CONSTRUCTION.
 - D. PLACE SILT FENCE OR EROSION CONTROL BALES IN DITCHES AND OTHER DRAINAGE WAYS TO COLLECT SEDIMENT AND TO SLOW THE VELOCITY OF RUNOFF.
 - E. PROTECT STORM SEWER INLETS AND THE UPSTREAM END OF CULVERTS WITH SILT FENCE OR EROSION CONTROL BALES.
 - F. PROMPT REMOVAL OF EXCAVATED MATERIAL.
 - G. PROPER STORAGE OF BACKFILL AND BEDDING MATERIALS INCLUDING PLACING SILT FENCE OR EROSION CONTROL BALES ON THE DOWNSLOPE SIDES OF SPOIL PILES.
 - H. CONSTRUCTION OF TRACKING PAD TO CONSTRUCTION SITE TO PREVENT SEDIMENT FROM BEING TRACKED ONTO ROADWAYS.
 - I. PROMPT (SAME DAY) CLEANUP OF MATERIAL TRACKED ONTO ADJACENT STREETS.
 - J. TIMELY RESTORATION OF DAMAGE SURFACE AREAS.
 - K. ALL AREAS THAT WILL REMAIN DISTURBED AFTER OCTOBER 15, MUST BE TEMPORARILY SEED AS OF THAT DATE.

5. TEMPORARY EROSION CONTROL MEASURES.
 - A. THE CONTRACTOR SHALL CONSTRUCT TEMPORARY EROSION CONTROL MEASURES, WHERE EROSION IS LIKELY TO BE A PROBLEM, PRIOR TO BEGINNING WORK ON THOSE SECTION(S) OF THE PROJECT. TEMPORARY EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL AFTER PERMANENT EROSION CONTROL, SUCH AS SEEDING OR SODDING, HAS BEEN ESTABLISHED.
 - B. IN THE EVENT THE PERMANENT EROSION CONTROL MEASURES ARE NOT FULLY IMPLEMENTED IN CURRENT CONSTRUCTION SEASON, THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL NECESSARY TEMPORARY EROSION CONTROL MEASURES UNTIL AFTER PERMANENT MEASURES HAVE BEEN COMPLETED IN THE FOLLOWING YEAR.
6. ALL DISTURBANCE AREAS THAT REMAIN INACTIVE FOR SEVEN DAYS OR LONGER SHALL RECEIVE TEMPORARY SEEDING.
7. TRENCH DEWATERING SHALL BE IN ACCORDANCE WITH WDNR TECHNICAL STANDARDS.
8. INSTALL SILT FENCE IN ACCORDANCE WITH WDNR TECHNICAL STANDARD DETAILS.
9. ALL RIP RAP AT PIPE OUTLETS SHALL BE 3"x5" MEDIUM RIP RAP OVER TYPE R FABRIC PER WDOT SPECIFICATIONS UNLESS OTHERWISE DESIGNATED.
10. EROSION CONTROL INSPECTION AND MAINTENANCE
 - A. INSPECT EROSION CONTROL MEASURES WEEKLY AND AFTER SITE RECEIVES 0.5" OF RAIN IN A 24-HOUR PERIOD DURING CONSTRUCTION.
 - B. REPAIR OR REPLACE EROSION CONTROLS THAT ARE DAMAGED OR FAILING.
11. ALL AREAS TO BE SEED AND MULCHED SHALL USE WDOT SEED MIXTURE NO. 20. MULCH SHALL APPLIED PER WDOT SPECIFICATIONS USING METHOD B FOR PLACEMENT.



12660 W. NORTH AVENUE
BROOKFIELD, WI 53005
PHONE: (262) 790-1480
FAX: (262) 790-1481
EMAIL: jpudelko@trioeng.com

PROJECT:
TENNY AVENUE EXTENSION
SMART PROPERTY
CITY OF WAUKESHA, WISCONSIN
BY: SMART REALTY COMPANY
137 WISCONSIN AVENUE
WAUKESHA, WI 53186

REVISION HISTORY

DATE	DESCRIPTION
6/21/19	Initial Submittal
7/24/19	Per WDNR Review
9/26/19	Waukesha Eng. Dept.

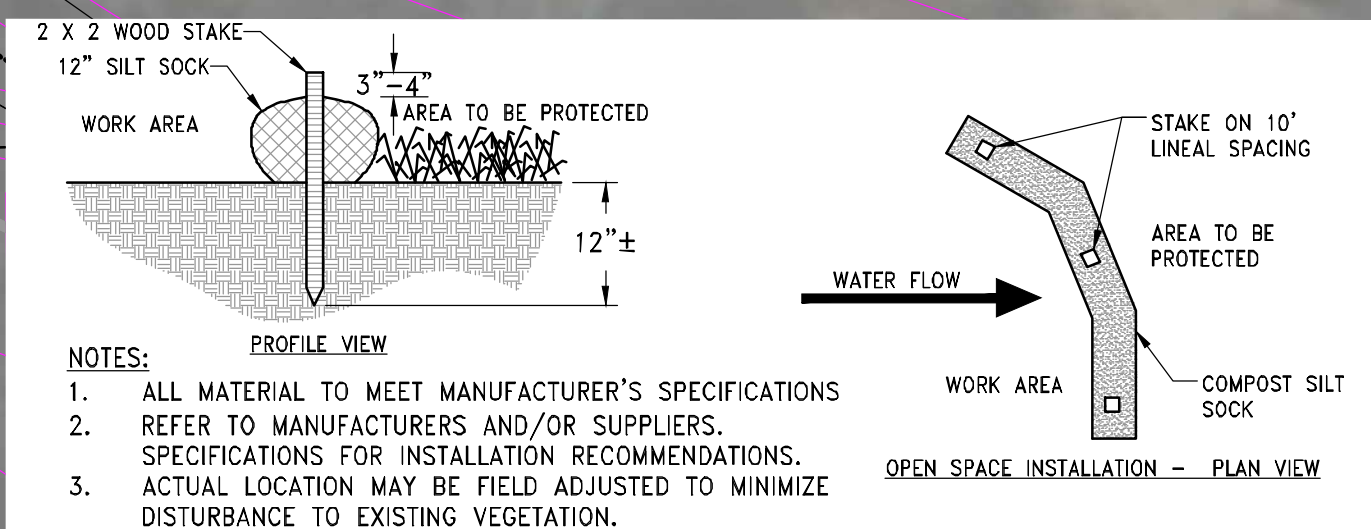
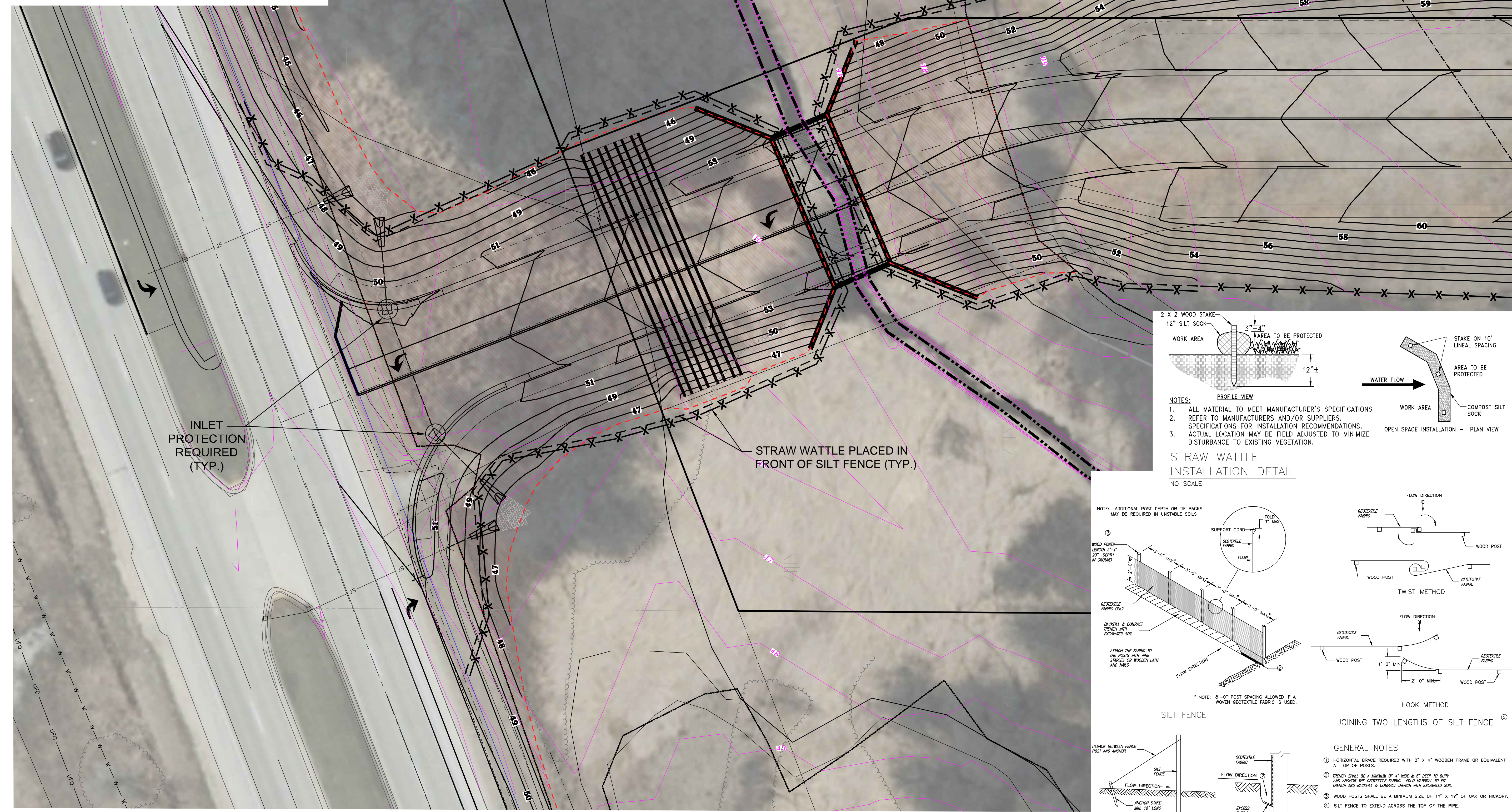
DATE:
SEPTEMBER 26, 2019

JOB NUMBER:
889-12011-01

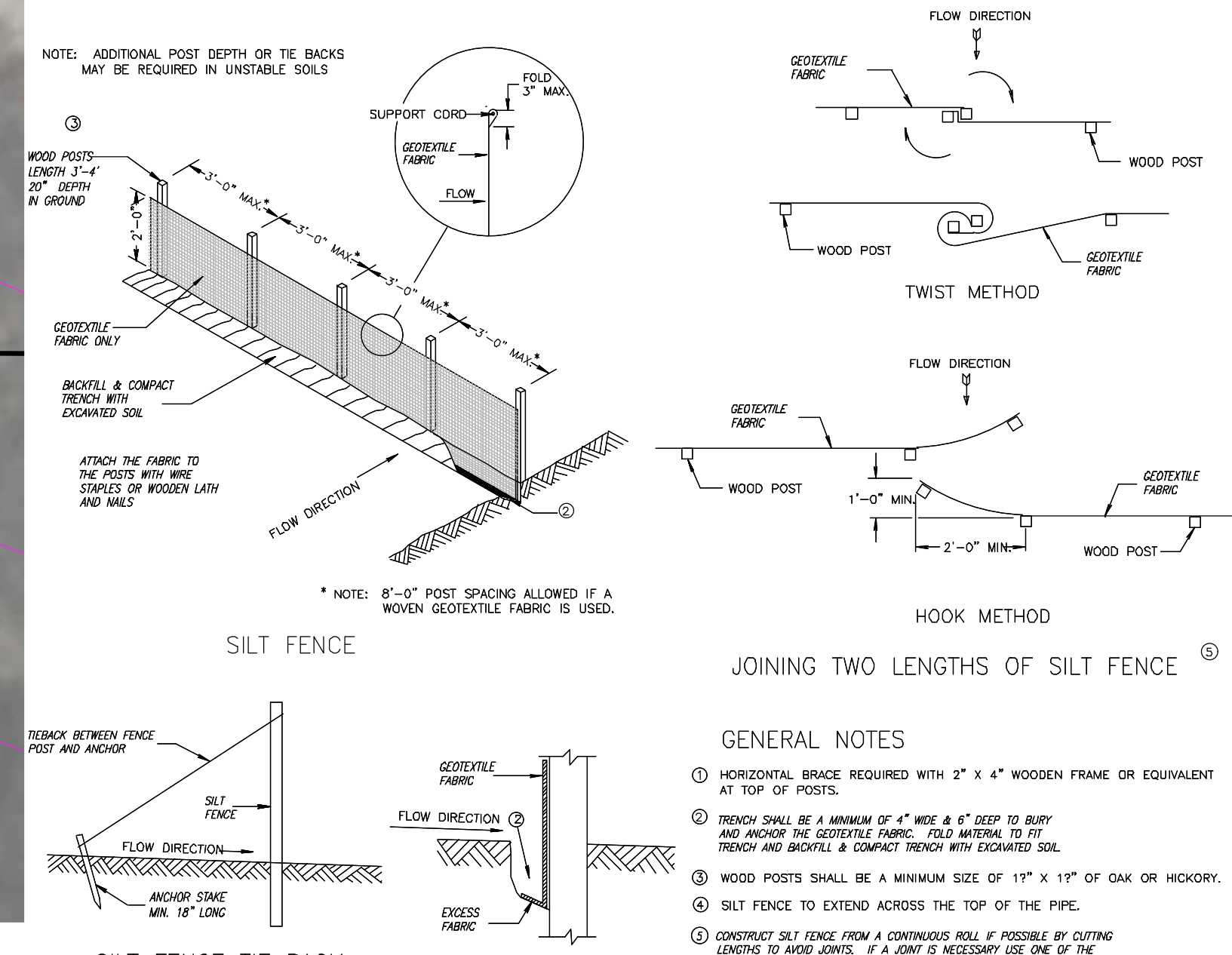
DESCRIPTION:
WETLAND
DISTURBANCE
EROSION CONTROL

SHEET

H:\C8001\889\12011-01\EXHIBITS\2019-05-28_WETLAND_UPDATES\TENNY_AVE_INTERSECTION_2019-09-26.DWG



- NOTES:**
1. ALL MATERIAL TO MEET MANUFACTURER'S SPECIFICATIONS REFER TO MANUFACTURERS AND/OR SUPPLIERS. SPECIFICATIONS FOR INSTALLATION RECOMMENDATIONS.
 2. ACTUAL LOCATION MAY BE FIELD ADJUSTED TO MINIMIZE DISTURBANCE TO EXISTING VEGETATION.



- GENERAL NOTES**
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
 2. TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO SURF AND ANCHOR THE GEOTEXTILE FABRIC. FOLD FABRIC TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
 3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1 1/2" X 1 1/2" OF OAK OR HICKORY.
 4. SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
 5. CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS: (A) OVERLAP THE END POSTS AND TWIST OR ROTATE, AT LEAST 180 DEGREES; (B) HOOK THE END OF EACH SILT FENCE LENGTH.

SILT FENCE INSTALLATION DETAIL
NO SCALE

NOTE:
EXISTING UNDERGROUND UTILITY INFORMATION WAS OBTAINED FROM AVAILABLE RECORDS. THE ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION. VERIFICATION TO THE SATISFACTION OF THE CONTRACTOR OF ALL UNDERGROUND UTILITIES, WHETHER OR NOT SHOWN ON THE PLANS, SHALL BE ASSUMED AS A CONDITION OF THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN LOCATION OF UTILITIES IN THE FIELD AND LOCATIONS SHOWN ON THE PLANS.

CONTRACTOR IS REQUIRED TO CONTACT DIGGERS HOTLINE TOLL FREE TO OBTAIN LOCATION OF UNDERGROUND UTILITIES PRIOR TO COMMENCING THE WORK. WISCONSIN STATUTE 182.0715 REQUIRES MIN. OF 3 WORK DAYS NOTICE BEFORE YOU EXCAVATE. CALL DIGGERS HOTLINE 1-800-242-8511