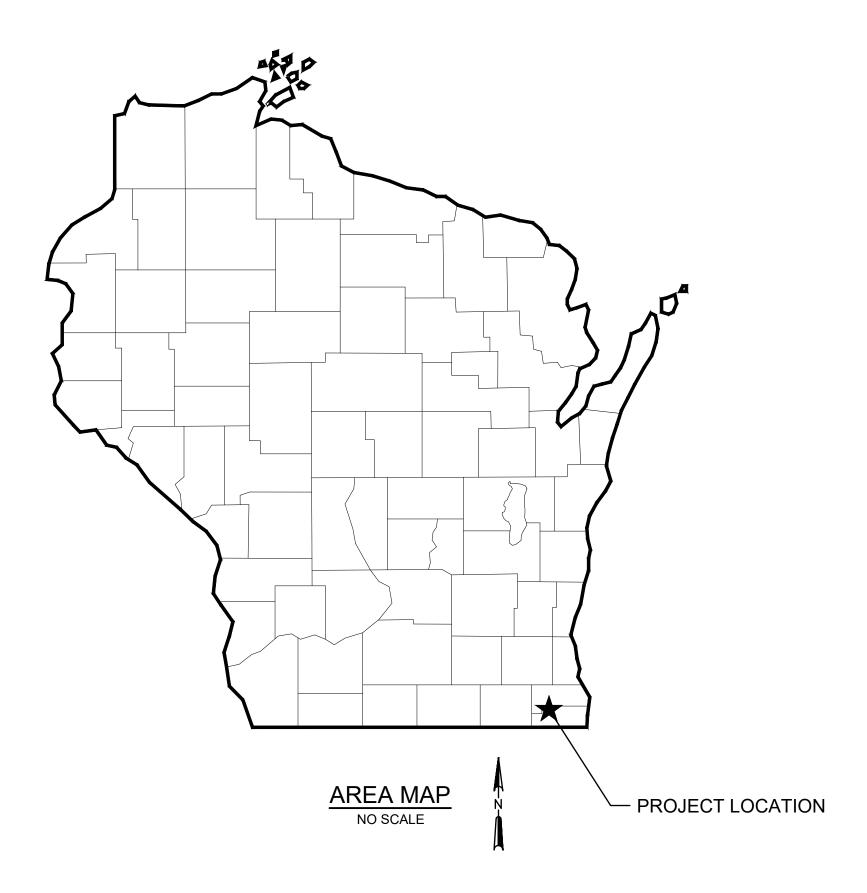
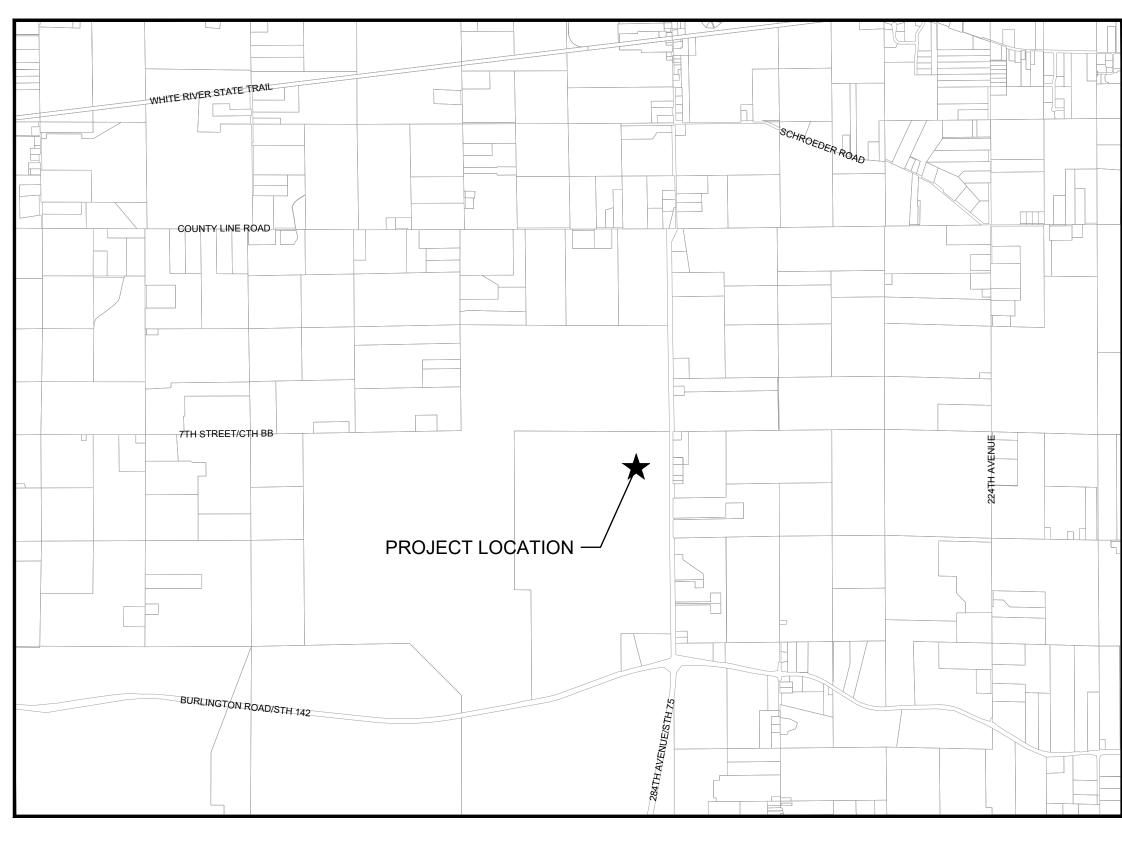
BRIGHTON DALE PARK FORCE MAIN REPLACEMENT FOR KENOSHA COUNTY, WISCONSIN





PROJECT LOCATION MAP
NO SCALE

Strand Associates, Inc.
126 North Jefferson Street
Milwaukee, WI 53202
414-271-0771
www.strand.com

NO



DRAWING LIST

STRAND ASSOCIATES®

CONTRACT 1-2023

ISSUED FOR BID - 10/10/2023

GENERAL NOTES:

- 1. EASEMENT, EXISTING UTILITIES, PROPERTY LINES, AND R.O.W. LINES SHOWN ARE APPROXIMATE. NOT ALL UTILITY MAINS AND SERVICES ARE SHOWN ON THE DRAWINGS. CONTRACTOR SHALL CONTACT DIGGERS HOTLINE FOR UTILITY LOCATES AND SHALL BE RESPONSIBLE FOR DETERMINING THE EXACT LOCATIONS OF THE UTILITY MAINS AND SERVICES DURING CONSTRUCTION.
- 2. THE PROPOSED FORCE MAIN SHALL PASS ALL PRESSURE TESTING IN ACCORDANCE WITH THE SPECIFICATIONS PRIOR TO ABANDONING THE EXISTING FORCE MAIN AND APPURTENANCES, OR MAKING THE UNDERGROUND CONNECTIONS TO EXISTING MANHOLE 1 AND PVC FORCE MAIN.
- 3. COUNTY WILL REMOVE TREES AND SHRUBS AS SHOWN ON PLANS. IF ADDITIONAL CLEARING AND GRUBBING IS NEEDED, CONTRACTOR SHALL SUBMIT A WRITTEN REQUEST TO THE COUNTY AT MINIMUM 5 DAYS IN ADVANCE OF ANY ADDITIONAL CLEARING AND GRUBBING. PROTECT ALL TREES AND SHRUBS THAT ARE TO REMAIN.
- 4. PIPE ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED, WITH ENGINEER'S APPROVAL, TO FIT THE EXISTING FIELD CONDITIONS.
- 5. CONTRACTOR SHALL PROTECT ALL CONTROL POINTS NOT DIRECTLY LOCATED IN THE CONSTRUCTION AREA.
- 6. CONTRACTOR SHALL PROTECT ALL PROPERTY IRONS.
- 7. ALL DISTURBED AREAS SHALL BE RESTORED IN ACCORDANCE WITH THE SPECIFICATIONS.
- 8. IF NEEDED, TEMPORARY WINTER RESTORATION SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
- 9. CONTRACTOR SHALL VERIFY ALL BENCHMARKS AND CONTROL POINTS TO CONFIRM ELEVATIONS PRIOR TO CONSTRUCTION.
- 10. CONTRACTOR SHALL ESTABLISH ADDITIONAL BENCHMARKS AND CONTROL POINTS AS NECESSARY TO COMPLETE THE WORK. CONTRACTOR IS ENCOURAGED TO CHECK BENCHMARKS AND CONTROL POINTS PERIODICALLY FOR MOVEMENT.
- 11. CONTRACTOR TO RESTRAIN ALL FITTINGS IN ACCORDANCE WITH SPECIFICATIONS AND DRAWINGS. ALL PUSH ON JOINTS SHALL BE RESTRAINED ON THE PROJECT. RESTRAINED JOINTS ARE INCIDENTAL TO THE PIPE.
- 12. ALL BACKFILL WITHIN THE PAVEMENT LIMITS AND 5 FEET OUTSIDE THE PAVEMENT LIMITS SHALL BE GRANULAR BACKFILL.
- 13. CONTRACTOR SHALL CONFINE EQUIPMENT, MATERIALS, AND WORK TO THE PROJECT LIMITS.
- 14. CONTRACTOR TO PROVIDE DRILL REPORT WITH DRILL DATA POINTS. WORK SHALL BE INCIDENTAL TO THE PIPE.
- 15. EXISTING FORCE MAIN SHALL BE ABANDONED IN PLACE AND ENDS FILLED WITH GROUT AND BULKHEADED. WORK SHALL BE INCIDENTAL TO THE ABANDON FORCE MAIN BID ITEM.
- 16. CONTRACTOR SHALL CONTACT WE ENERGIES BEFORE REMOVING ANY GAS FACILITIES OR ELECTRICAL UNDERGROUND CABLES, TO VERIFY THAT THEY HAVE BEEN DISCONTINUED AND CARRY NO NATURAL GAS OR ELECTRICAL CURRENT. CONTRACTOR SHALL NOT ASSUME THAT UNMARKED FACILITIES HAVE BEEN DISCONTINUED. AT NO TIME IS IT ACCEPTABLE TO PUSH, PULL, CUT OR DRILL AN UNMARKED FACILITY WITHOUT EXPLICIT CONSENT FROM WE ENERGIES. CONTRACTOR MUST CALL THE WE ENERGIES 24 HOUR DISPATCH LINES TO ARRANGE FOR THIS VERIFICATION.
- WE ENERGIES ELECTRIC DISPATCH AT 1-800-662-4797 OR WE ENERGIES GAS DISPATCH AT 1-800-261-5325



UTILITY CONTACTS:

WE ENERGIES-GAS & ELECTRIC:

BEN KOSHAK, PROJECT MANAGER UTILITY ACCOMODATIONS WE ENERGIES 333 WEST EVERETT STREET, A299 MILWAUKEE, WI 53203 OFFICE: (414) 221-4151 BEN.KOSHAK@WECENERGYGROUP.COM

KENOSHA COUNTY:

MATT COLLINS, DIRECTOR OF PARKS KENOSHA COUNTY 19600 75TH STREET, SUITE 122-1 BRISTOL, WI 53104 OFFICE: (262) 857-1850 MATTHEW.COLLINS@KENOSHACOUNTY.ORG

MIDWEST FIBER NETWORKS:

SHEILA BONNIWELL. ENGINEER MIDWEST FIBER NETWORKS 6070 NORTH FLINT ROAD GLENDALE, WI 53209 OFFICE: (414) 672-2729 SBONNIWELL@MIDWESTFIBERNETWORKS.COM

DESIGN ENGINEER:

ISAK FRUCHTMAN STRAND ASSOCIATES, INC. 126 NORTH JEFFERSON STREET MILWAUKEE, WI 53202 OFFICE: (414) 271-0771 ISAK.FRUCHTMAN@STRAND.COM

CHARTER:

ANTHONY BIESZK. CONSTRUCTION COORDINATOR CHARTER COMMUNICATIONS 132 NORTH DRIVE MARTIN LUTHER KING DRIVE MILWAUKEE, WI 53212 OFFICE: (262) 307-7300 ANTHONY.BIESZK@CHARTER.COM

AT&T:

JEFF KNIEP AT&T 220 WISCONSIN AVENUE WAUKESHA, WI 53186 OFFICE: JK5386@ATT.COM

Z

LEGEND

EXISTING GAS LINE **CONTROL POINT** EXISTING SANITARY SEWER EXISTING SANITARY FORCE MAIN EXISTING WATER MAIN EXISTING STORM SEWER **EXISTING TELEPHONE LINE EXISTING MANHOLE** EXISTING UNDERGROUND ELECTRIC LINE EXISTING OVERHEAD ELECTRIC LINE EXISTING FIBER OPTIC LINE EXISTING FENCE **⊗** GV PROPOSED FORCE MAIN \otimes WV PROPOSED SILT FENCE (S)

EXISTING BENCHMARK

SOIL BORING

EXISTING DECIDUOUS/CONIFEROUS TREE

EXISTING TREE STUMP

EXISTING POWER POLE

EXISTING LIGHT POLE

EXISTING SIGN

EXISTING GAS VALVE

EXISTING WATER VALVE

EXISTING WATER MANHOLE

EXISTING FIRE HYDRANT

PROPOSED INLET PROTECTION

PROPOSED SANITARY SEWER MANHOLE

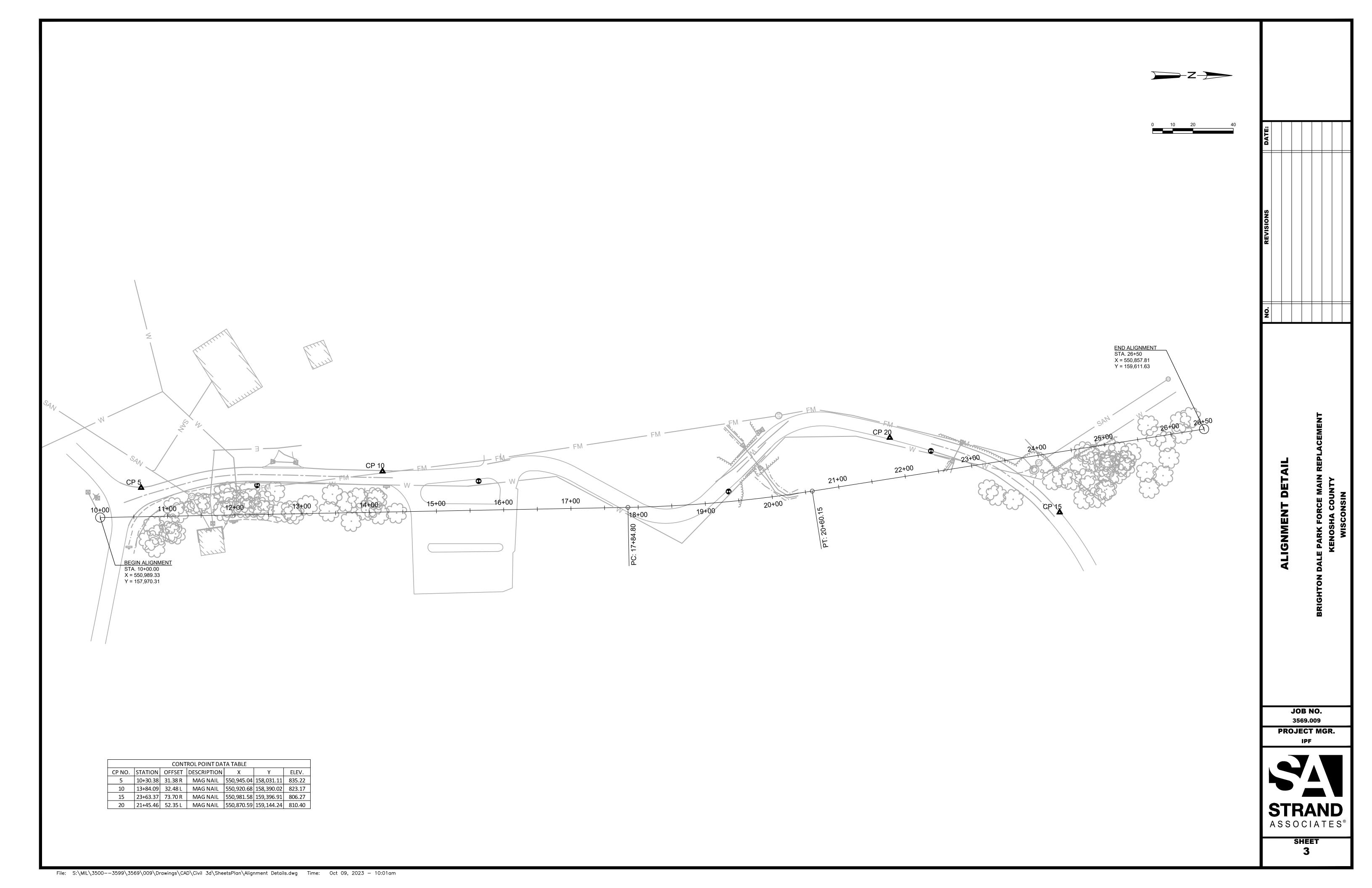
PROPOSED DITCH CHECK

ASSOCIATES[®] **SHEET**

JOB NO. 3569.009

PROJECT MGR.

File: S:\MIL\3500—3599\3569\009\Drawings\CAD\Civil 3d\SheetsPlan\Gen. Notes & Legend.dwg Time: Oct 09, 2023 — 10:28am



DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS

 VARIATIONS IN THE DIMENSIONS OR MATERIALS SHOWN HEREON SHALL BE PERMITTED IF THEY PROVIDE EQUIVALENT PROTECTION AND MATERIAL STRENGTH.

AND THE APPLICABLE SPECIAL PROVISIONS.

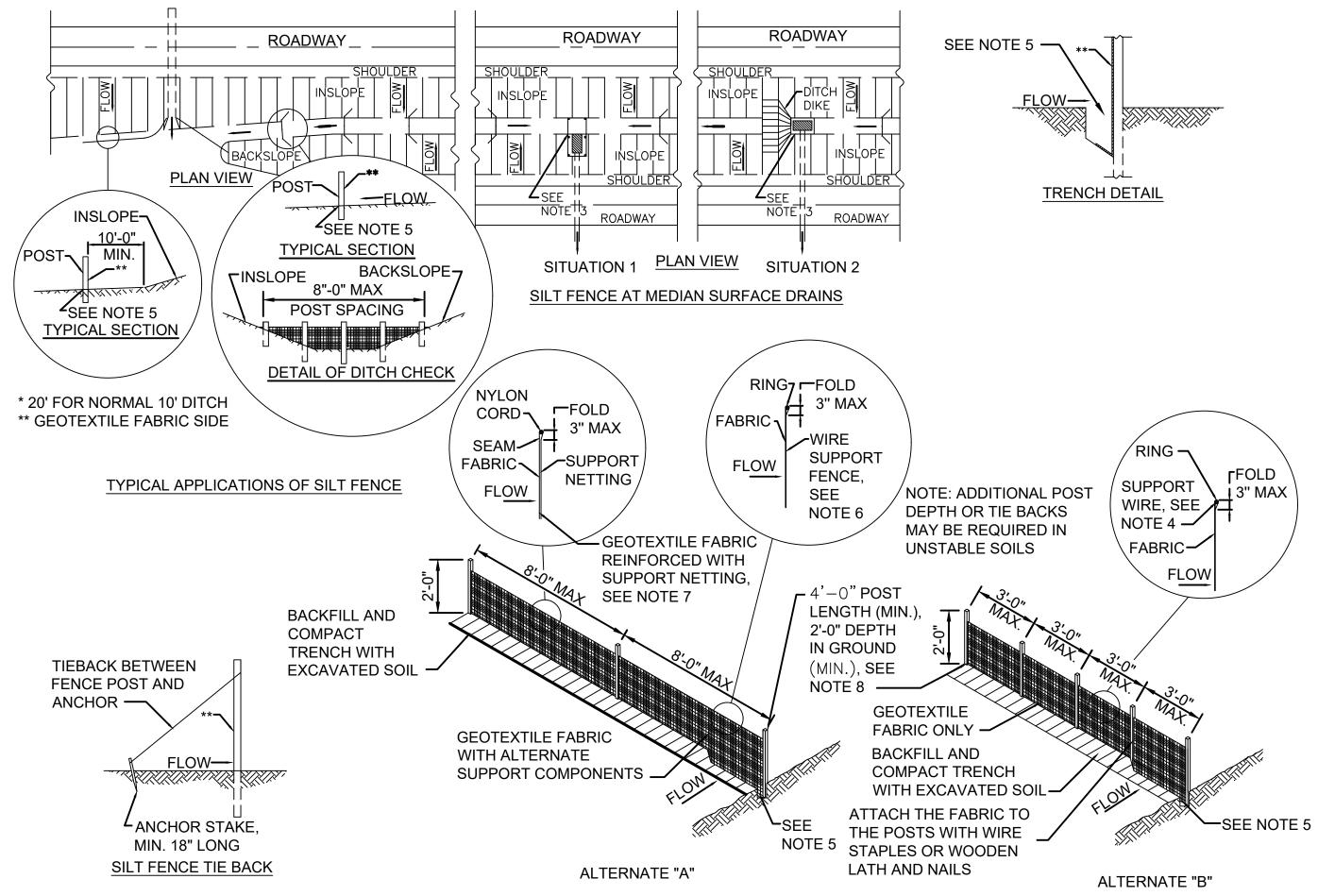
- 3. LAP JOINTS SHALL NOT BE PLACED IN THE BOTTOM OF V-SHAPED DITCHES.
- 4. JUNCTION SLOTS ON ADJACENT STRIPS OF MATTING SHALL BE STAGGERED A MINIMUM OF 4 FEET APART.
- 5. EDGES OF THE EROSION MAT SHALL BE IMPRESSED IN THE SOIL.
- 6. EROSION MAT SHALL BE MEASURED AND PAID FOR IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS.

EROSION MAT OVER SOD

- ONLY JUTE FABRIC WILL BE PERMITTED OVER SOD.
- FLOOD STAKES FOR SOD MAY BE OMITTED IF THE EXISTING SLOPE AND SOIL CONDITIONS SO PERMIT.
- THE WIDTH OF EROSION MAT SHALL ALWAYS EQUAL THE SOD WIDTH.
- SOD STRIPS MAY BE PLACED EITHER LONGITUDINALLY OR TRANSVERSELY TO THE FLOW LINE OF THE DITCH.

EROSION MAT OVER SEEDING

- JUNCTION OR ANCHOR SLOTS WILL BE AT MINIMUM INTERVALS OF 100 FEET ON GRADES UP TO AND INCLUDING 3 PERCENT, AND 50 FEET ON GRADES EXCEEDING 3 PERCENT.



SILT FENCE

NO SCALE

OTES:

1. DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

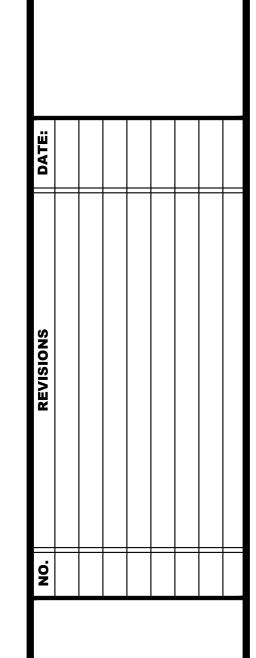
2. WHEN POSSIBLE THE SILT FENCE SHOULD BE CONSTRUCTED IN AN ARC OR HORSESHOE SHAPE, WITH THE ENDS POINTING UPSLOPE TO MAXIMIZE BOTH STRENGTH AND EFFECTIVENESS.

- 3. CROSS BRACE WITH 2"x4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- 4. MINIMUM 14 GAGE WIRE REQUIRED, FOLD FABRIC 3" OVER THE WIRE AND STAPLE OR PLACE WIRE RINGS ON 12" C-C.
- 5. EXCAVATE TRENCH A MINIMUM OF 4" WIDE AND 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC, FOLD MATERIAL TO FIT TRENCH AND BACKFILL AND COMPACT TRENCH WITH EXCAVATED SOIL.
- 6. WIRE SUPPORT FENCE SHALL BE 14 GAGE MINIMUM WOVEN WIRE WITH A MAXIMUM MESH SPACING OF 6". SECURE TOP OF GEOTEXTILE FABRIC TO TOP OF FENCE WITH STAPLES OR WIRE RINGS AT 12" C-C.
- 7. GEOTEXTILE FABRIC SHALL BE REINFORCED WITH AN INDUSTRIAL POLYPROPYLENE NETTING WITH A MAXIMUM MESH SPACING OF 1/4" OR EQUAL. A HEAVY DUTY NYLON TOP SUPPORT CORD OR EQUIVALENT IS REQUIRED.
- 8. STEEL POSTS SHALL BE STUDDED "TEE" OR "U" TYPE WITH A MINIMUM WEIGHT OF 1.2 LBS/LINEAR FOOT WITHOUT ANCHORS, OR ANCHORS SUFFICIENT TO RESIST POST MOVEMENT ARE REQUIRED. WOOD POSTS SHALL BE A MINIMUM SIZE OF 4" DIAMETER, OR 2 1/2" X 3 1/2", EXCEPT WOOD POSTS FOR GEOTEXTILE FABRIC REINFORCED WITH NETTING SHALL BE A MINIMUM SIZE OF 1 1/8" X 1 1/8" OAK OR HICKORY.

9. ALTERNATES A AND B ARE EQUAL AND EITHER MAY BE USED.

EROSION CONTROL NOTES

- 1. ALL PERMIT CONDITIONS SHALL BE MET DURING CONSTRUCTION OF THE PROJECT
- 2. CONSTRUCTION SITE EROSION CONTROL AND SEDIMENTATION CONTROL SHALL COMPLY WITH THE REQUIREMENTS OF KENOSHA COUNTY, AND SHALL MEET OR EXCEED EROSION CONTROL METHODS AS SHOWN AND SPECIFIED IN THE WISCONSIN DEPARTMENT OF NATURAL RESOURCES (WDNR) "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS".
- CONTRACTOR SHALL OBTAIN ALL NECESSARY EROSION CONTROL PERMITS PRIOR TO ANY LAND DISTURBING ACTIVITY.
 CONTRACTOR SHALL PROVIDE EROSION CONTROL PLAN AS PERMIT REQUIRES.
- 4. ALL EROSION CONTROL MEASURES SHALL BE ADJUSTED TO MEET FIELD CONDITIONS AT THE TIME OF CONSTRUCTION AND SHALL BE INSTALLED PRIOR TO ANY GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL ON THE SITE.
- 5. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION AFTER A RAINFALL OF 0.5 INCHES OR MORE, BUT NO LESS THAN ONCE EVERY WEEK. MAINTENANCE OF ALL EROSION CONTROL STRUCTURES SHALL BE PROVIDED TO INSURE INTENDED PURPOSE IS ACCOMPLISHED. REPAIRS AND MAINTENANCE SHALL BE COMPLETED WITHIN 24 HOURS OF INSPECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANUP AND REMOVAL OF ALL SEDIMENT WHEN LEAVING PROPERTY. EROSION CONTROL MEASURES MUST BE IN WORKING CONDITION AT END OF EACH WORK DAY.
- 6. EROSION CONTROL MEASURES SHALL BE MAINTAINED ON A CONTINUING BASIS UNTIL SITE IS FULLY STABILIZED.
- 7. FILTER FABRIC SHALL BE INSTALLED BENEATH INLET COVERS TO TRAP SEDIMENT AS PER INLET PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE CONSTRUCTION PLANS PRIOR TO ANY LAND DISTURBING ACTIVITY.
- 8. PERIODIC STREET SWEEPING SHALL BE COMPLETED TO MAINTAIN THE PUBLIC STREET FREE OF DUST AND DIRT.
- 9. SILT FENCE SHALL BE INSTALLED IN HORSESHOE FASHION AROUND ALL TOPSOIL AND FILL STOCKPILES. NOTIFY KENOSHA COUNTY OF ANY NEW STOCKPILE LOCATIONS.
- 10. WASTE AND MATERIAL DISPOSAL. ALL WASTE AND UNUSED BUILDING MATERIALS (INCLUDING GARBAGE, DEBRIS, CLEANING WASTES, WASTEWATER, TOXIC MATERIALS, OR HAZARDOUS MATERIALS) SHALL BE PROPERLY DISPOSED AND NOT ALLOWED TO BE CARRIED OFF-SITE BY RUNOFF OR WIND.
- 11. ANY SOIL DISTURBANCE AND/OR SOIL OR DIRT STORAGE PILES SHALL BE LOCATED A MINIMUM OF TWENTY-FIVE FEET FROM ANY DOWNSLOPE ROAD, LAKE, STREAM, WETLAND, OR DRAINAGE CHANNEL. STRAW BALE OR FILTER FABRIC FENCES SHALL BE PLACED ON THE DOWN SLOPE SIDE OF THE PILE, IF REMAINING FOR MORE THAN THIRTY DAYS. PILES SHALL BE STABILIZED BY MULCHING, VEGETATIVE COVER, TARPS, OR OTHER MEANS.
- 12. ALL DISTURBED GROUND LEFT INACTIVE FOR SEVEN OR MORE DAYS SHALL BE STABILIZED BY TEMPORARY OR PERMANENT SEEDING, AND MULCHING SODDING, COVERING WITH TARPS, OR EQUIVALENT BEST MANAGEMENT PRACTICES. IF TEMPORARY SEEDING IS USED, A PERMANENT COVER SHALL ALSO BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION. SEEDING OR SODDING SHALL BE REQUIRED AS PART OF THE FINAL SITE STABILIZATION.
- 13. EACH SITE SHALL HAVE GRAVELED ROADS, ACCESS DRIVES AND PARKING AREAS OF SUFFICIENT WIDTH AND LENGTH TO PREVENT SEDIMENT FROM BEING TRACKED ONTO PUBLIC OR PRIVATE ROADWAYS. ANY SEDIMENT REACHING A PUBLIC OR PRIVATE ROAD SHALL BE REMOVED BY STREET CLEANING, TO THE SATISFACTION OF THE COUNTY, BEFORE THE END OF EACH WORKDAY. FLUSHING MAY NOT BE USED UNLESS SEDIMENT WILL BE CONTROLLED BY A SEDIMENT BASIN OR OTHER APPROPRIATE BEST MANAGEMENT PRACTICE SPECIFIED IN THE WDNR "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS". NOTIFY KENOSHA COUNTY FOR CHANGES IN STABILIZED CONSTRUCTION ENTRANCE LOCATION.
- 14. SEDIMENT CLEANUP. ALL OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF A STORM EVENT SHALL BE CLEANED UP BY THE END OF THE NEXT WORK DAY. ALL OTHER OFF-SITE SEDIMENT DEPOSITS OCCURRING AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE CLEANED UP BY THE END OF THE WORK DAY.
- 15. NOTIFY THE COUNTY WITHIN TWO WORKING DAYS OF COMMENCING ANY LAND DEVELOPMENT OR LAND DISTURBING ACTIVITY.
- 16. NOTIFY THE COUNTY OF COMPLETION OF ANY BEST MANAGEMENT PRACTICES WITHIN THE NEXT WORKING DAY AFTER THEIR INSTALLATION.
- 17. OBTAIN PERMISSION IN WRITING FROM THE COUNTY PRIOR TO MODIFYING THE EROSION CONTROL PLAN. NOTIFY WDNR AT LEAST FIVE WORKING DAYS PRIOR TO IMPLEMENTING CHANGES TO THE EROSION CONTROL PLAN.
- 18. REPAIR ANY SILTATION OR EROSION DAMAGE TO ADJOINING SURFACES AND DRAINAGE WAYS RESULTING FROM LAND DEVELOPMENT OR LAND DISTURBING ACTIVITIES.
- 19. KEEP A COPY OF THE EROSION CONTROL PLAN ON SITE.
- 20. WHENEVER SOIL EXHIBITING OBVIOUS SIGNS OF CONTAMINATION IS ENCOUNTERED DURING EXCAVATION OR INSTALLATION, TAKE APPROPRIATE IMMEDIATE PRECAUTIONS TO ENSURE WORKER HEALTH AND SAFETY, AND CONTACT OPERATIONS SUPERVISOR OR INSPECTOR.
- 21. WATER PUMPED FROM THE SITE, INCLUDING BUT NOT LIMITED TO, PITS OR TRENCHES SHALL BE TREATED BY SEDIMENT BASINS, AN APPROVED SEDIMENT BAG, A STRAW BALE DEWATER BASIN, A COMBINATION OF BOTH, OR OTHER APPROPRIATE BEST MANAGEMENT PRACTICES SPECIFIED IN THE WDNR "CONSTRUCTION SITE EROSION AND SEDIMENT CONTROL TECHNICAL STANDARDS". WATER SHALL NOT BE DISCHARGED IN A MANNER THAT CAUSES EROSION OF THE SITE, ADJACENT SITES, OR RECEIVING CHANNELS.
- 22. NO WORK SHALL BE PERFORMED WITHIN THE BANKS OR BELOW THE ORDINARY HIGH WATERMARK OF ANY NAVIGABLE WATERWAY OR STREAM AND NO CROSSING OF NAVIGABLE WATERWAYS WITH EQUIPMENT CAN OCCUR.
- 23. ANY SOIL BEING DISTURBED WITHIN 75 FEET OF AN ORDINARY HIGHWATER MARK OF ANY NAVIGABLE WATERWAY OR STREAM SHALL BE STABILIZED WITHIN 24 HOURS OF CONSTRUCTION COMPLETION.
- 24. STONE TRACKING PADS SHALL BE INSTALLED AT ALL CONSTRUCTION SITE ENTRANCES.
- 25. SALVAGE AND REPLACE WETLAND SOILS. OVERSEED WITH WISDOT NO. 60 SEED MIX.
- 26. CLEAN EQUIPMENT TO AVOID INTRODUCTION OF INVASIVE OR NOXIOUS WEEDS FOR AREAS OF WETLAND DISTURBANCE.
- 27. REMOVE ALL EROSION CONTROL PRACTICES ONCE SITE HAS BEEN STABILIZED.

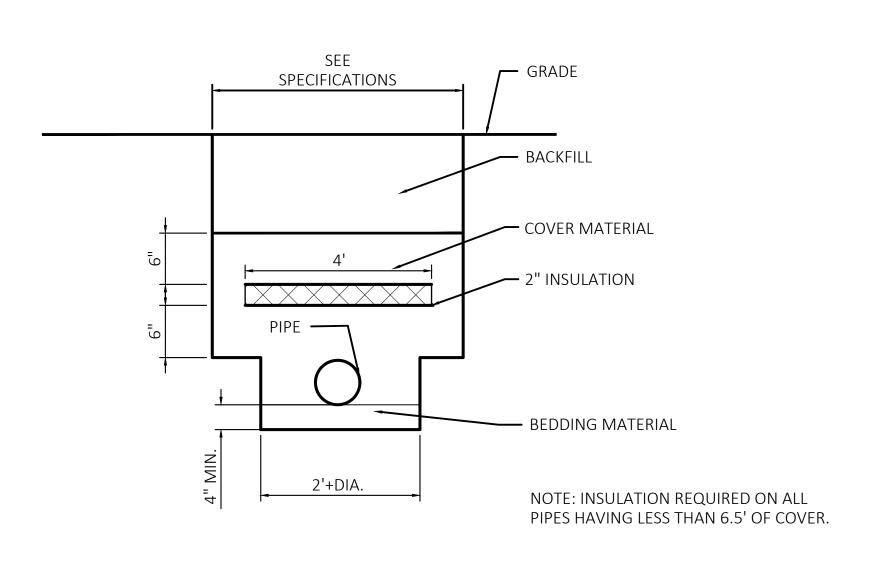


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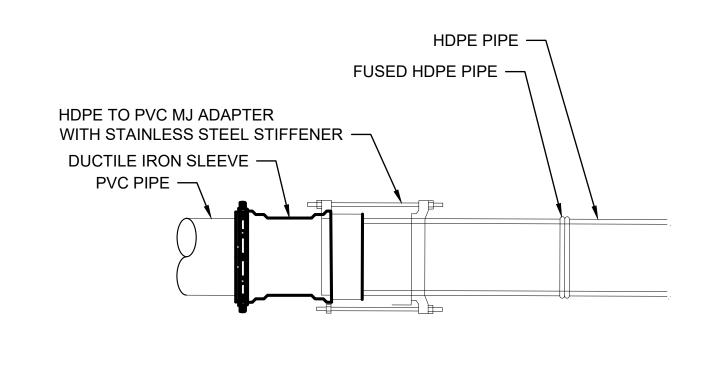


SHEET 4



UNDERGROUND PIPE INSULATION
5 NO SCALE

WOOD STAKES SPACED 3'-4' O.C.



NO SCALE

→ PVC TO HDPE CONNECTION

NOMINAL 2"X2"X30" MIN.
LENGTH OR EQUIVALENT.

EMBED LOGS
3"-5"

DETAIL OF COIR LOG INSTALLATION

DIRECTION
OF FLOW

STAKES DRIVEN FLUSH WHEN
SOIL CONDITIONS PERMIT

IF REQUIRED TWO ROWS MAY BE
USED WITH STAGGERED JOINTS

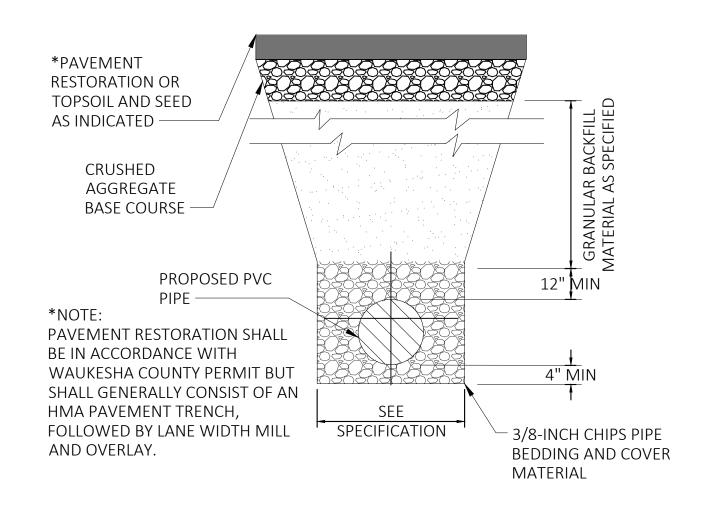
SLOPE VARIES

FRONT ELEVATION

12" COIR FIBER LOGS ACROSS DITCH BOTTOM

C STRAW WATTLE

5 NO SCALE



D TYPICAL TRENCH DETAIL
5 NO SCALE

DETAILS

AAIN REPLACEMENT

BRIGHTON DALE PARK FORCE MAIN REP

CONSTRU

JOB NO. 3569.009

PROJECT MGR.

STRAND ASSOCIATES®

SHEET 5

