



FAYETTEVILLE PUBLIC WORKS COMMISSION

PROCUREMENT DEPARTMENT

<https://www.faypwc.com/bids/>

Bid Addendum



PWC Number: PWC2324067

Bid Title : Branson Creek Water Main Replacement Along Raeford Road

Bid Opening Date and Time: Thursday, April 4, 2024 at 1:30 P.M. E.T.

Addendum Number: I

Addendum Date: March 18, 2024

Procurement Advisor: *Victoria McAllister, Procurement Manager*
procurement@faypwc.com

1. Acknowledgement of this Addendum must be done within Bid Summary section listed within the Bid Documents.

2. The solicitation is hereby modified as follows:

M1. APPENDICES, APPENDIX A, DRAWINGS

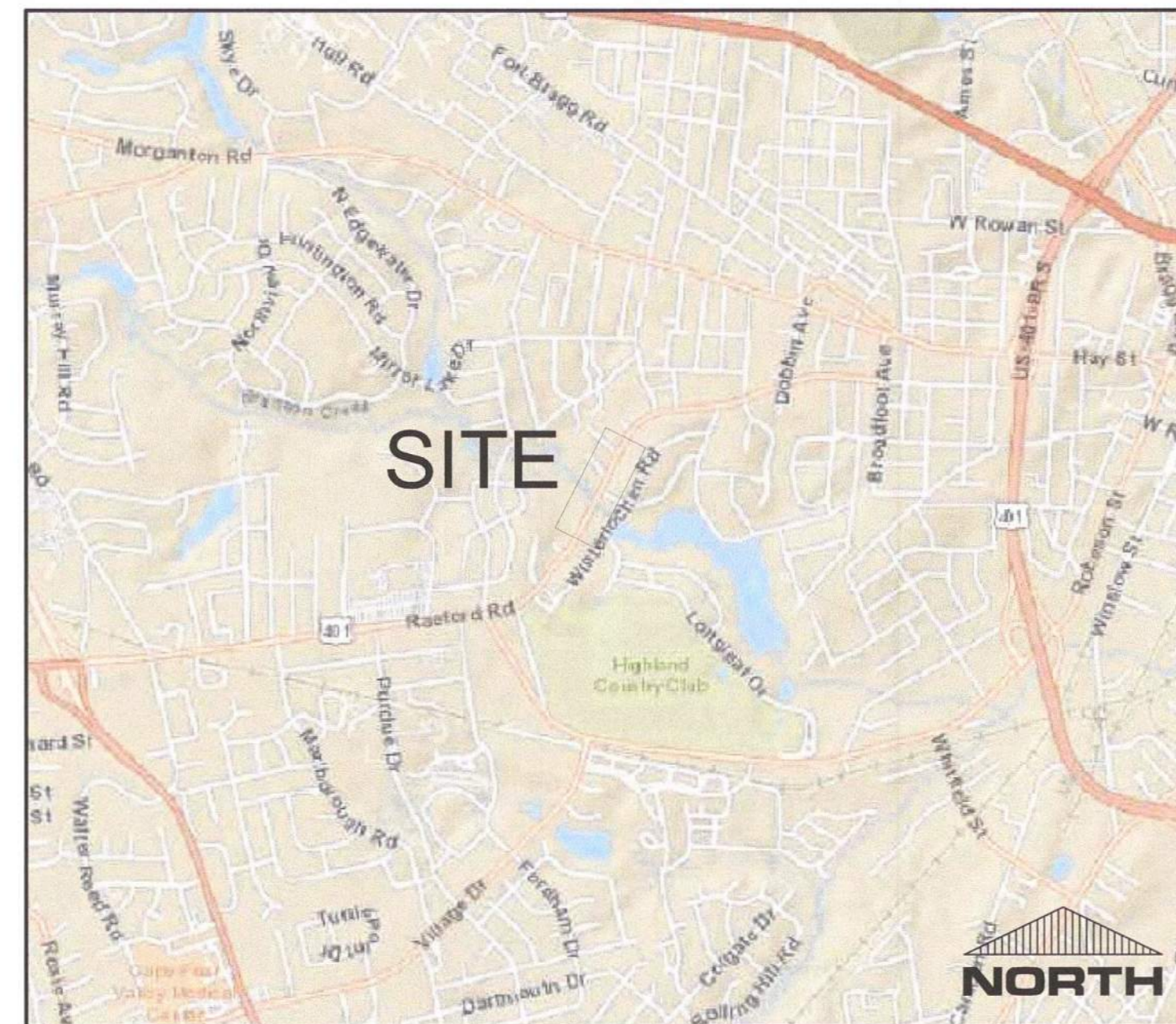
Appendix A, included within the Bid Documents is deleted in its entirety and replaced with the version attached to this Addendum.

PWC

Fayetteville's HOME TOWN UTILITY

FAYETTEVILLE, N.C.

BRANSON CREEK WATER MAIN RELOCATION ALONG RAEFORD ROAD



VICINITY MAP
N.T.S.

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EC5	EROSION AND SEDIMENT CONTROL DETAILS
EC6	EROSION AND SEDIMENT CONTROL DETAILS
DETAILS	
D1	DETAILS

**FINAL PLANS
ISSUED FOR BID**

MARCH 2024



4300 EDWARDS MILL ROAD,
SUITE 200
Raleigh, North Carolina 27612
Phone: (919) 233-8091, Fax: (919) 233-8031

NC License# F-1222
www.mckimcreed.com

M&C Project #02532-0032



1 ABBREVIATIONS
Table with 2 columns: Abbreviation and Description. Includes items like 1SFD (1 STORY FRAMED DWELLING), 1SBKBUS (1 STORY BRICK BUSINESS), AC (ASBESTOS CEMENT), AL OR ALUM (ALUMINUM), ASPH (ASPHALT), etc.

2 EXISTING SYMBOL LEGEND
Table with 3 columns: Description, Symbol, and Abbreviation. Includes items like 11.25" HORIZONTAL BEND, 22.50" HORIZONTAL BEND, 45" HORIZONTAL BEND, etc.

3 EXISTING LINE LEGEND
Table with 3 columns: Description, Linetype, and Abbreviation. Includes items like UNDERGROUND CABLE TV, UNDERGROUND PER RECORD CABLE TV, UNDERGROUND ELECTRIC, etc.

4 PROPOSED SYMBOL LEGEND
Table with 3 columns: Description, Symbol, and Abbreviation. Includes items like 11.25" HORIZONTAL BEND, 22.50" HORIZONTAL BEND, 45" HORIZONTAL BEND, etc.

5 PROPOSED LINE LEGEND
Table with 3 columns: Description, Linetype, and Abbreviation. Includes items like PERMANENT EASEMENT, TEMPORARY EASEMENT, SANITARY SEWER FORCE MAIN, etc.

6 PROFILE LINE LEGEND
Table with 3 columns: Description, Linetype, and Abbreviation. Includes items like EXISTING GRADE PAVEMENT PROFILE, EXISTING GRADE GROUND PROFILE, PROPOSED GRADE PROFILE, etc.

7 AREA LEGEND
Table with 3 columns: Description, Symbol, and Abbreviation. Includes items like WETLANDS, RIP-RAP, TEMP. SLOPE STABILIZATION, STRAW WITH NET LINER, etc.

8 GENERAL NOTES
List of 14 numbered notes regarding construction requirements, including water utility installation, testing, and coordination with other utilities.

WATER UTILITY NOTES
Table with columns: DWG. NO., W.1, DWG. BY: FAYPWC, DATE: JAN. 01, 2024, APPROVED BY: M.M.M. Includes revision history.

D. CROSSING STORM DRAINAGE LINES: A MINIMUM OF 12-INCHES OF VERTICAL CLEARANCE SHALL BE MAINTAINED BETWEEN A WATER LINE CROSSING OVER A STORM DRAINAGE LINE UNLESS DUCTILE IRON PIPE IS USED.

15. WATER OUTAGES: THE CONTRACTOR SHALL SCHEDULE A COORDINATION MEETING WITH THE PWC PROJECT COORDINATOR AND PROJECT ENGINEER A MINIMUM OF THREE (3) WORKING DAYS PRIOR TO ANY PLANNED WATER OUTAGE.

WATER UTILITY NOTES
Table with columns: DWG. NO., W.1, DWG. BY: FAYPWC, DATE: JAN. 01, 2024, APPROVED BY: M.M.M. Includes revision history.

ADDITIONAL GENERAL NOTES:
List of 17 numbered notes regarding water mains, laterals, and appurtenances, including installation, testing, and coordination requirements.

Table with columns: DATE, DATE, DATE, DATE. Includes dates like OCT 2023, MAR 2024, MAR 2024.

Table with columns: DATE, DATE, DATE, DATE. Includes dates like OCT 2023, MAR 2024, MAR 2024.



BRANSON CREEK WATER MAIN RELOCATION ALONG RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA
LEGEND AND GENERAL NOTES
FINAL DESIGN - ISSUED FOR BID

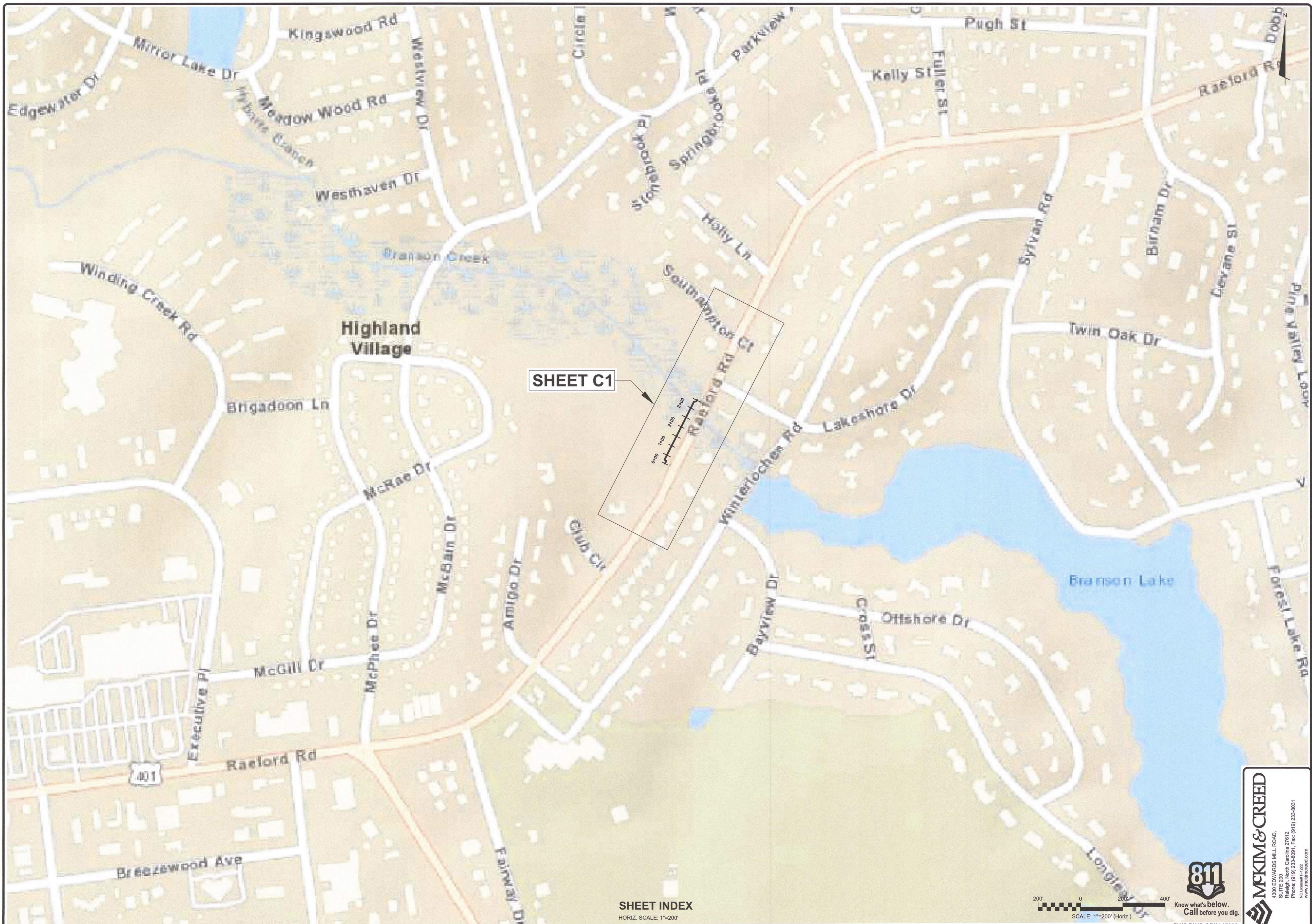
MCKIM & CREED logo and contact information: 800 EDWARDS HILL ROAD, SUITE 200, Raleigh, North Carolina 27612. Phone: (919) 233-8091, Fax: (919) 233-8031.



Know what's Below. Call before you dig.

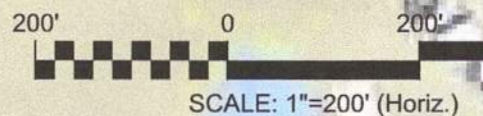
PWC DWG # DW-15820

DW-15820



SHEET C1

SHEET INDEX
HORIZ. SCALE: 1"=200'



PWC DWG # DW-15820

MCKIM & CREED
 4300 EDWARDS MILL ROAD,
 SUITE 200
 Raleigh, North Carolina 27612
 Phone: (919) 293-6091, Fax: (919) 293-6031
 www.mckimcreed.com

**BRANSON CREEK WATER MAIN
 RELOCATION ALONG RAEFORD ROAD
 FAYETTEVILLE, NORTH CAROLINA**

**FAYETTEVILLE
 PUBLIC WORKS COMMISSION**
WATER RESOURCES ENGINEERING
 P.O. Box 1088, Fayetteville, NC 28402
 955 Old Wilmington Road, Fayetteville, NC 28401
 www.fayetteville.com



G3
3 OF 12

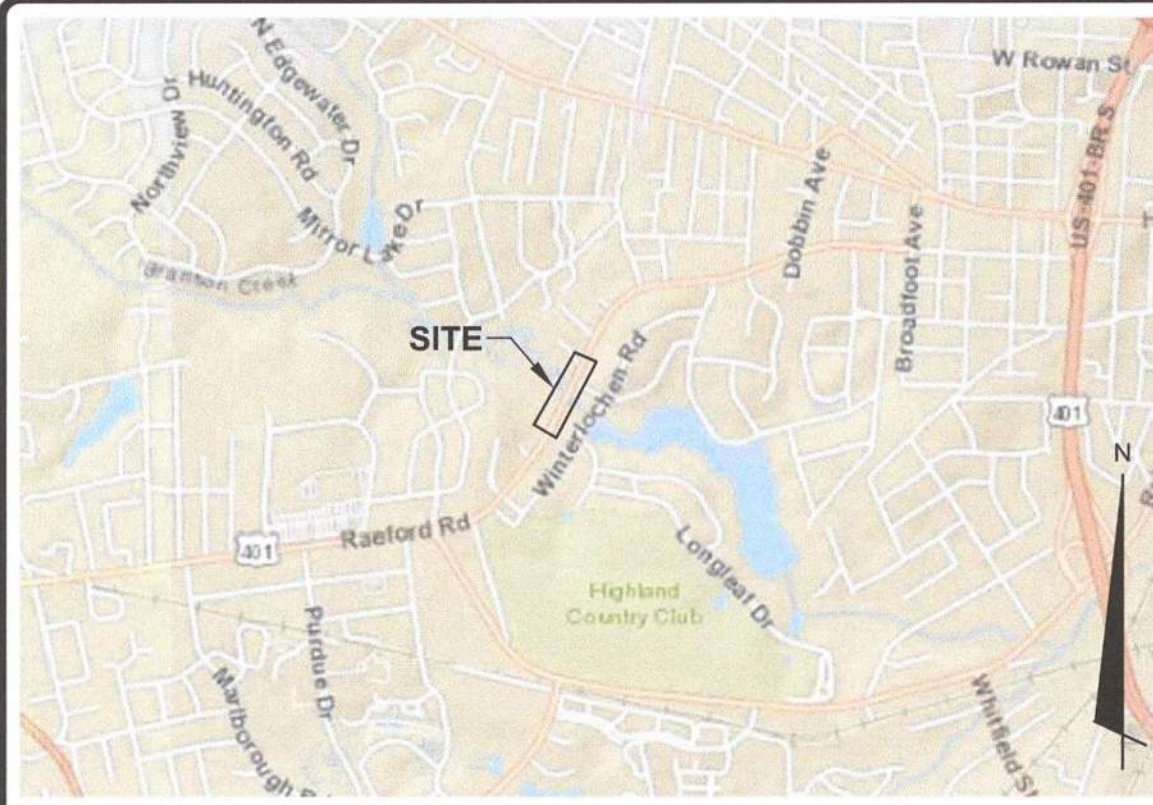
DATE: OCT 2023	SURVEYED BY: NEDOT
DESIGN BY: LMB	CHECKED BY: DLH
SCALE: 1"=200'	WORK: VERT N/A

DATE	BY
MAR 2024	DLH
MAR 2024	DLH
MAR 2024	DLH
MAR 2024	DLH

SHEET INDEX MAP
FINAL DESIGN - ISSUED FOR BID

SHEET SERIES-PINAL DESIGN - ISSUED FOR BID

I:\02532\0032\ENG\80-DRAWINGS\80-DESIGN\CIV\REF_CUI02-0250245-BRANSON_CREEK_UTILITY_PLAN.DWG 03/08/2024 12:13:35 CODE: TONDRE

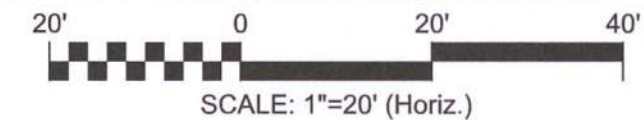


VICINITY MAP
HORIZ. SCALE: NTS



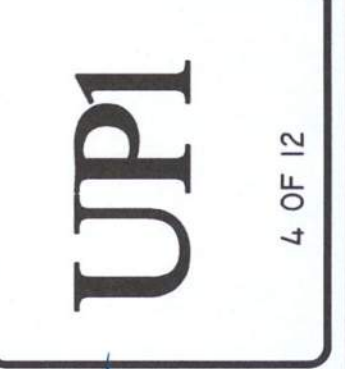
1. ALL BASEMAPPING AND SURVEY PROVIDED BY NCDOT IN NOVEMBER 2022
2. NEW 10'X10' CULVERTS, WINGWALLS, PROPOSED RIP-RAP AND DRAINAGE TO BE INSTALLED BY OTHERS FOR NCDOT BP6.R006 PROJECT - BRANSON CREEK CULVERT REPLACEMENT.

PLAN VIEW
HORIZ. SCALE: 1"=20'



DATE	REVISIONS	BY
MAR 2024	FOR DESIGN	DJH
MAR 2024	NOT FOR CONSTRUCTION	DJH
MAR 2024	FINAL DESIGN SUBMITTAL	DJH
MAR 2024	ISSUED FOR BID	DJH

DATE	OCT 2023
SURVEY/EGS BY	BYNDOT
DRAWN BY	MB
CHECKED BY	DJH
SCALE	HORIZ: 1"=20' VERT: N/A



BRANSON CREEK WATER MAIN RELOCATION ALONG RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA
CIVIL UTILITY PLAN
FINAL DESIGN - ISSUED FOR BID

FAYETTEVILLE PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
P.O. Box 1085, Fayetteville, NC 28302
855 Old Wilmington Road, Fayetteville, NC 28301



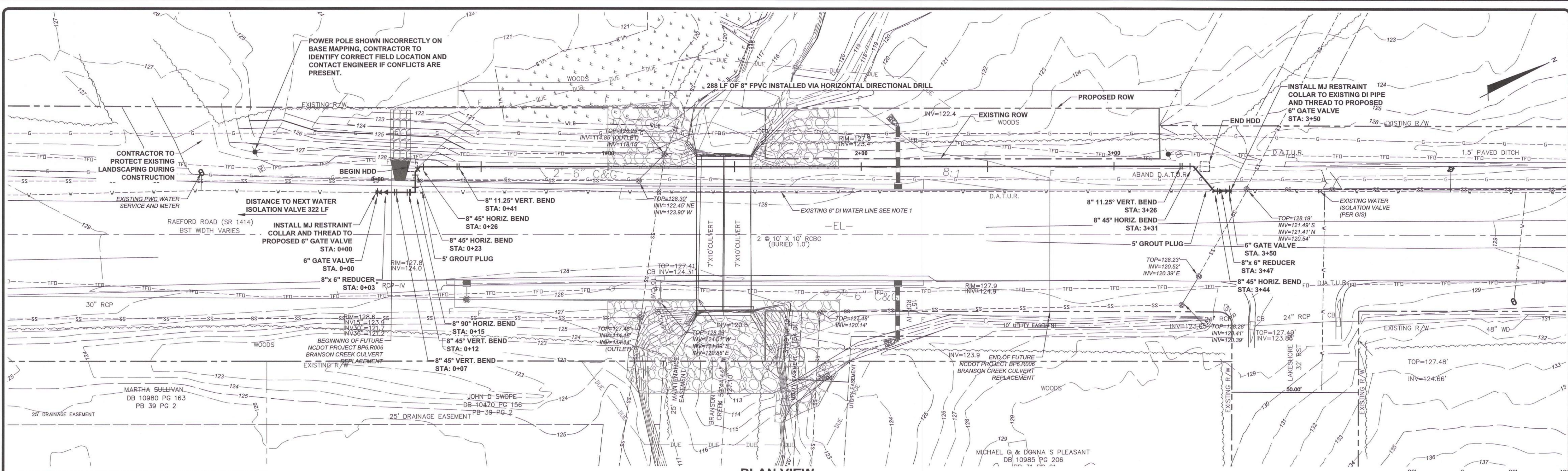
Know what's below.
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PWC DWG # DW-15820

MCKIM & CREED
6300 EDWARDS MILL ROAD,
Raleigh, North Carolina 27612
Phone: (919) 233-8091, Fax: (919) 233-8031
NC License # 1222
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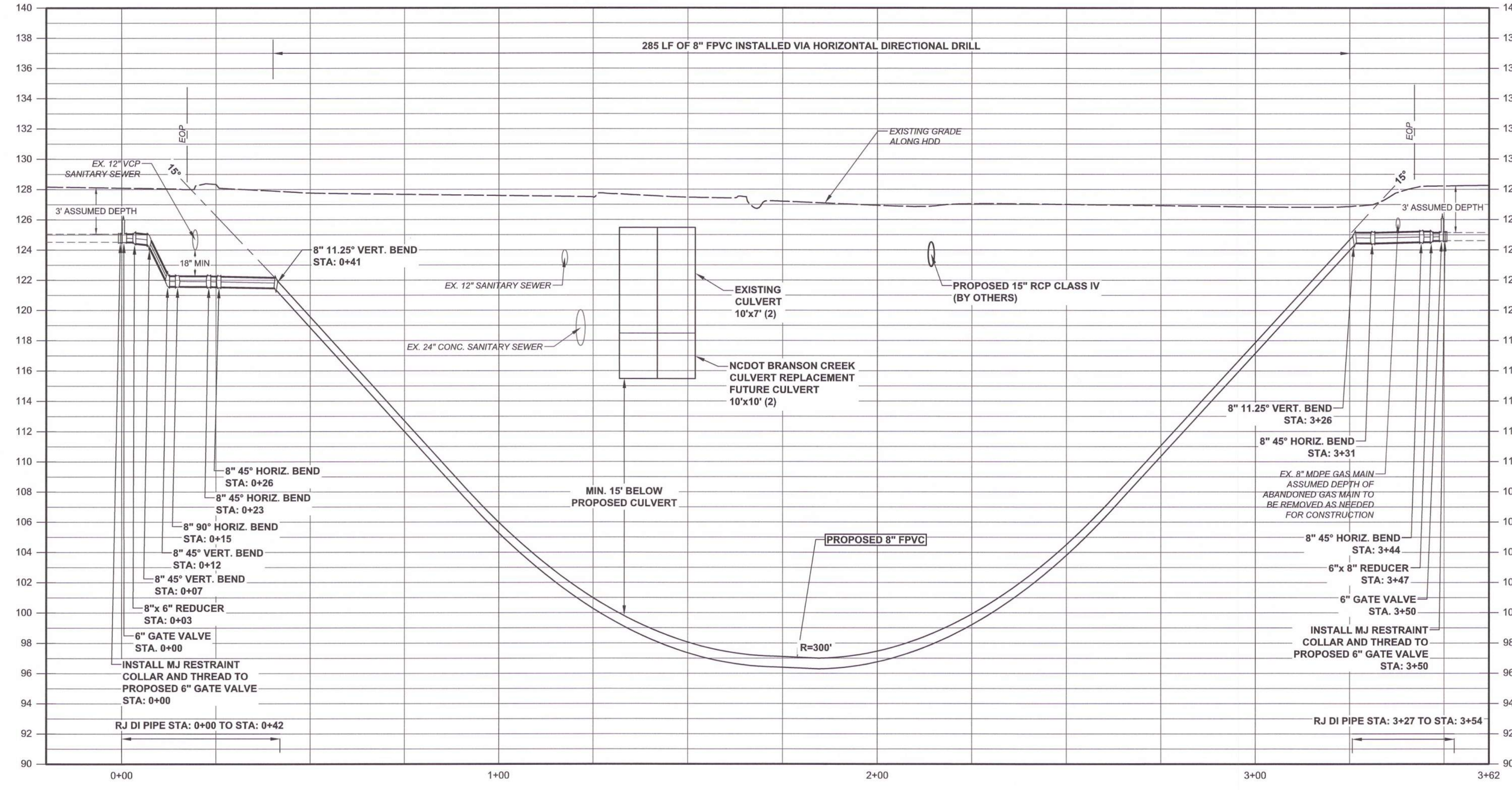
DW-15820

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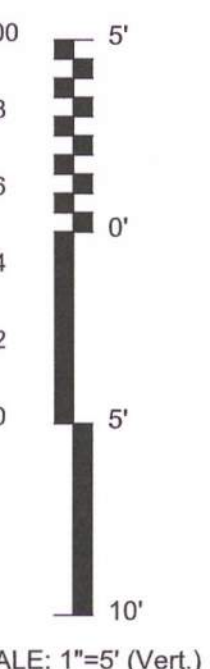
1. ALL BASEMAPING AND SURVEY PROVIDED BY NCDOT IN NOVEMBER 2022
2. NEW 10"x10" CULVERTS, WINGWALLS, PROPOSED RIP-RAP AND DRAINAGE TO BE INSTALLED BY OTHERS FOR NCDOT BP6.R006 PROJECT - BRANSON CREEK CULVERT REPLACEMENT.

PLAN VIEW
HORIZ. SCALE: 1"=20'



PROFILE VIEW
HORIZ. SCALE: 1"=20'
VERT. SCALE: 1"=5'

- NOTES:**
1. THE 6" WATER MAIN SHALL BE REMOVED AS NEEDED FOR CONSTRUCTION AND A GROUT PLUG SHALL BE PLACED ON EITHER END OF REMAINING ABANDONED 6" DI WATER MAIN. ABANDONED 6-INCH WATER MAIN WILL BE REMOVED AS NEEDED BY OTHERS DURING CONSTRUCTION OF THE NCDOT BP6.R006 BRANSON CREEK CULVERT REPLACEMENT PROJECT. CONTRACTOR SHALL VERIFY DEPTH OF EXISTING 6" WATER LINE AT CONNECTION POINTS PRIOR TO ORDERING MATERIALS.



MCKIM & CREED
4300 EDWARDS MILL ROAD,
SUITE 200
RALEIGH, NORTH CAROLINA 27612
Phone: (919) 235-8091 | Fax: (919) 235-8031
www.mckimandcreed.com

**BRANSON CREEK WATER MAIN
RELOCATION ALONG RAEFORD ROAD
FAYETTEVILLE, NORTH CAROLINA**

FWC
FAYETTEVILLE
PUBLIC WORKS COMMISSION
WATER RESOURCES ENGINEERING
P.O. Box 1088, Fayetteville, NC 28302
955 Old Wilmington Road, Fayetteville, NC 28301

DATE	REVISION
MAR 2024	BASE DESIGN SUBMITTAL
MAR 2024	NOT FOR CONSTRUCTION
MAR 2024	ISSUED FOR BID

DATE	BY
OCT 2023	DLH
	DLH
	DLH

DATE: OCT 2023
SUBMITTED BY: DLH
DRAWN BY: LMB
CHECKED BY: DLH
SCALE: 1"=20'
SCALE: 1"=5'

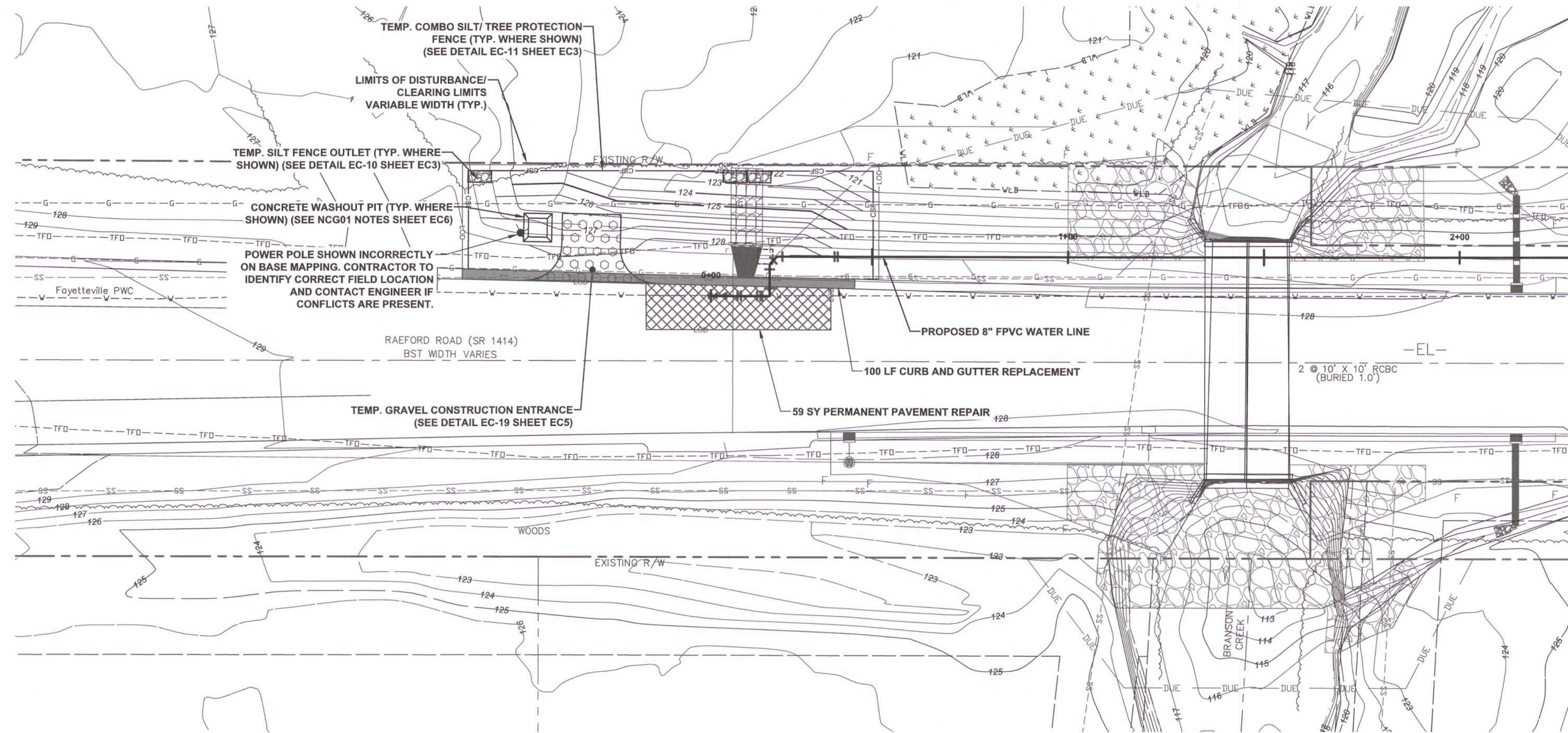


STA. 0+00 - 3+49
FINAL DESIGN - ISSUED FOR BID

5 OF 12

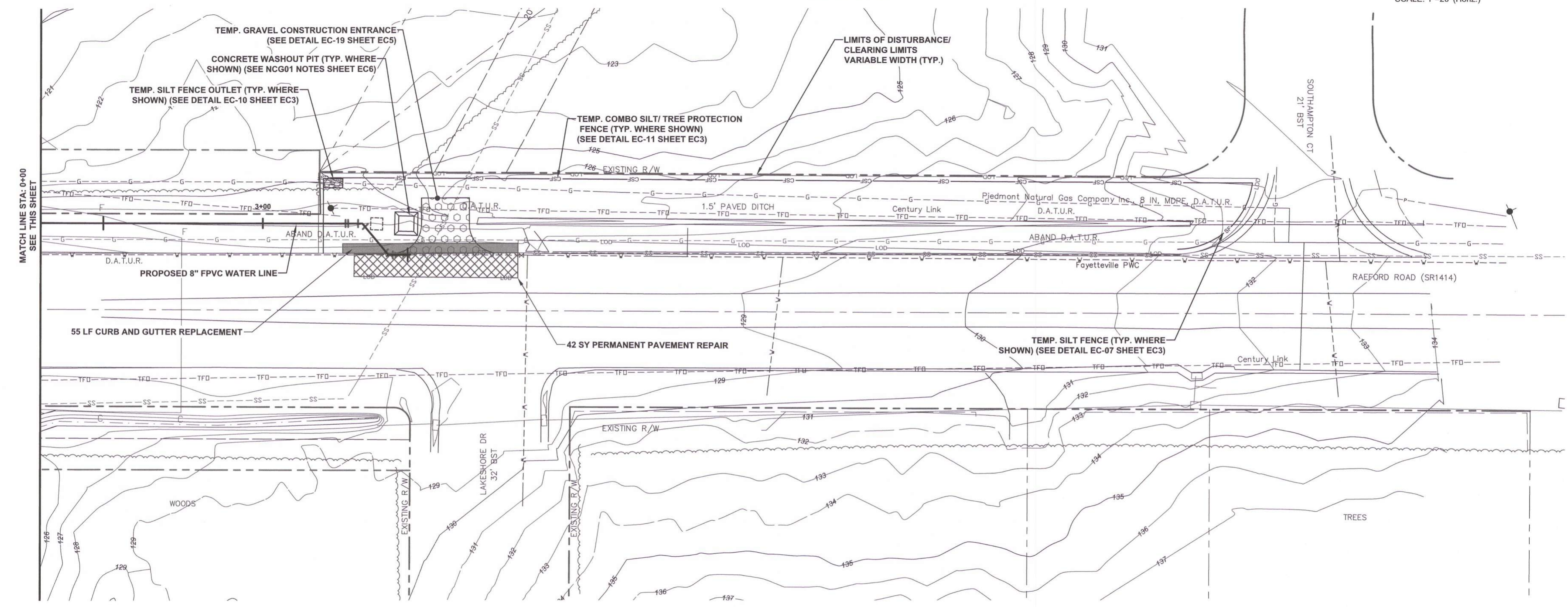
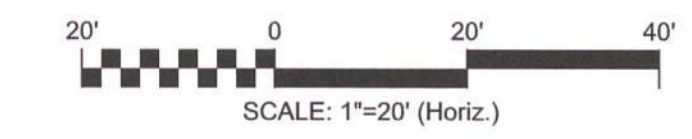
DW-15820

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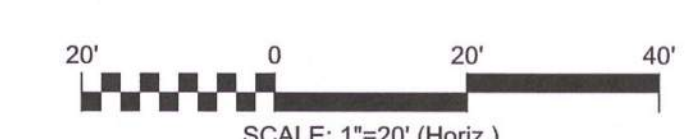
1. ALL BASEMAPPING AND SURVEY PROVIDED BY NCDOT IN NOVEMBER 2022
2. NEW 10'X10' CULVERTS, WINGWALLS, PROPOSED RIP-RAP AND DRAINAGE TO BE INSTALLED BY OTHERS FOR NCDOT BP6.R006 PROJECT - BRANSON CREEK CULVERT REPLACEMENT.

PLAN VIEW
HORIZ. SCALE: 1"=20'



1. ALL BASEMAPPING AND SURVEY PROVIDED BY NCDOT IN NOVEMBER 2022
2. NEW 10'X10' CULVERTS, WINGWALLS, PROPOSED RIP-RAP AND DRAINAGE TO BE INSTALLED BY OTHERS FOR NCDOT BP6.R006 PROJECT - BRANSON CREEK CULVERT REPLACEMENT.

PLAN VIEW
HORIZ. SCALE: 1"=20'



DATE	REVISION
MAR 2024	60% DESIGN SUBMITTAL
MAR 2024	NOT FOR CONSTRUCTION
MAR 2024	ISSUED FOR PERMIT
	BY
	DLH
	DLH
	DLH

DATE	OCT 2023
SURVEY/DESIGN BY	NCDOT
DRAWN BY	LMB
CHECKED BY	DLH
SCALE	HOR: 1" = 20'
	VERT: N/A

EC1
6 OF 12



BRANSON CREEK WATER MAIN RELOCATION ALONG RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA
EROSION AND SEDIMENT CONTROL PLAN
FINAL DESIGN - ISSUED FOR BID

FAYETTEVILLE PUBLIC WORKS COMMISSION
FWC WATER RESOURCES ENGINEERING
P.O. Box 1085, Fayetteville, NC 28302
955 Old Wilmington Road, Fayetteville, NC 28301
www.fwcnc.com

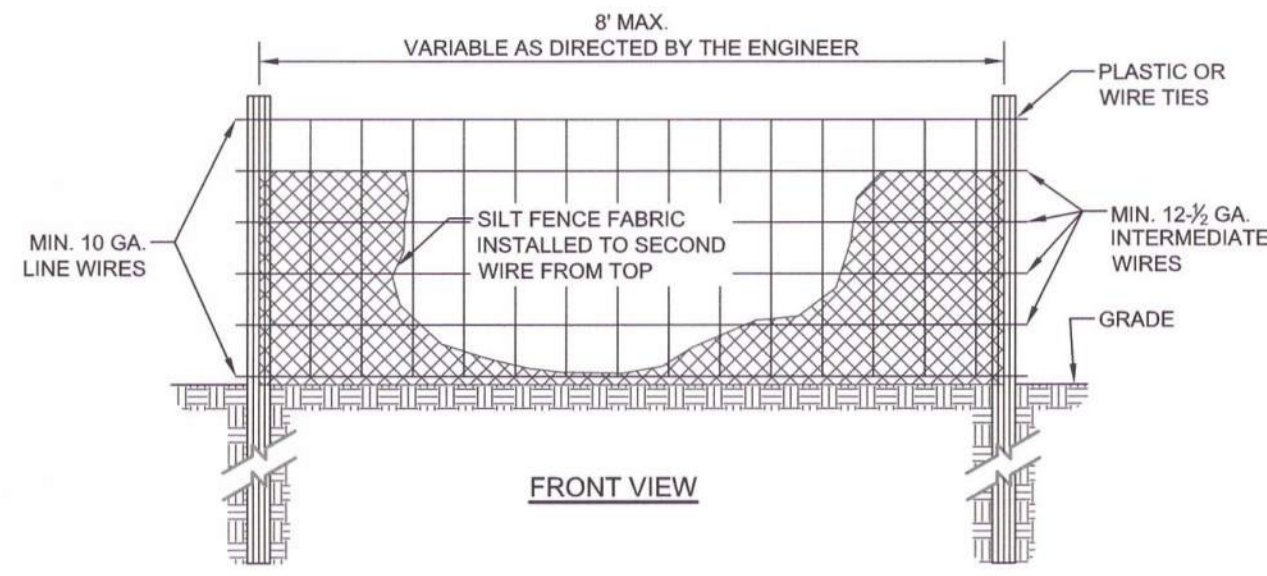
MCKIM & CREED
4300 EDWARDS MILL ROAD,
SUITE 200
Raleigh, North Carolina 27612
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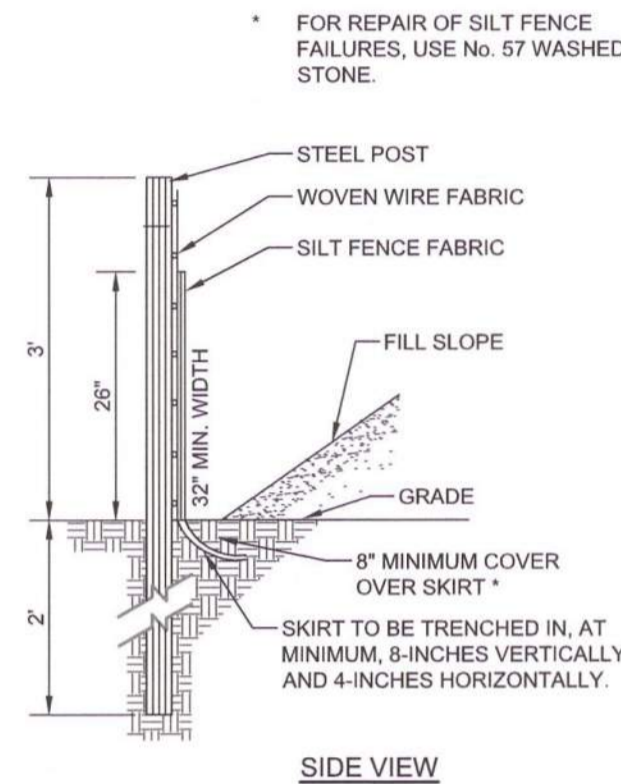
PWC DWG # DW-15820

DW-15820



- CONSTRUCTION SPECIFICATIONS:**
- USE SILT FENCE ONLY WHEN DRAINAGE AREA DOES NOT EXCEED 1/4 ACRE AND NEVER IN AREAS OF CONCENTRATED FLOW
 - USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B OF THE EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
 - SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F.
 - ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.25 LB/LINEAR FT MINIMUM STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
 - FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

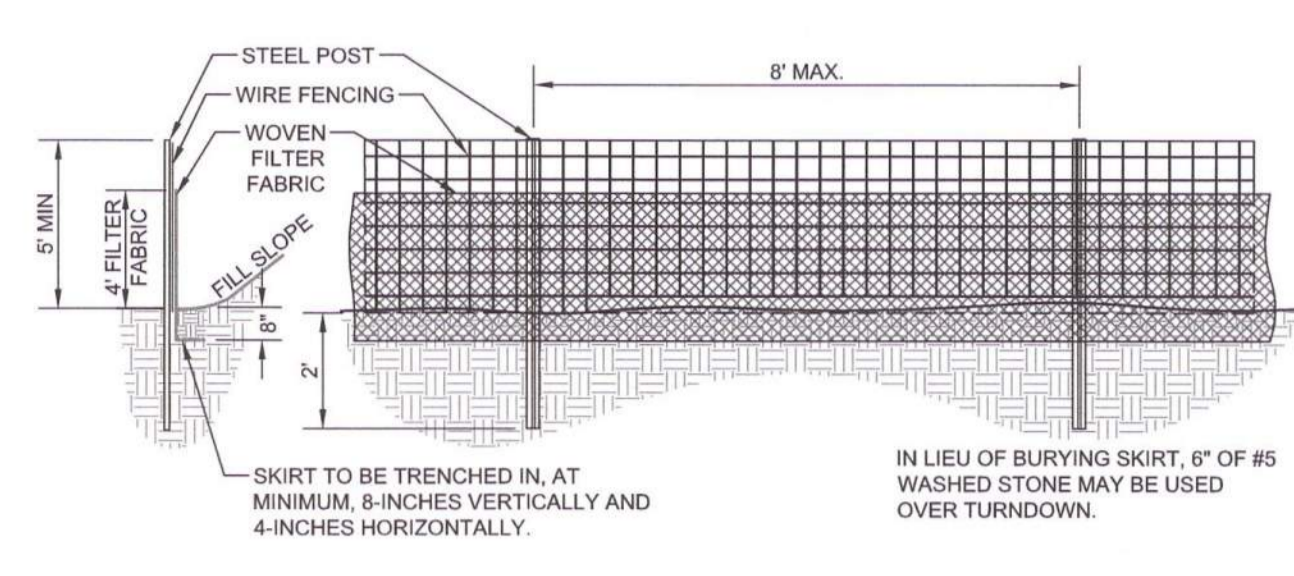
- MAINTENANCE:**
- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
 - SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
 - REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
 - REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.



SIDE VIEW

EC-07 TEMPORARY SILT FENCE

N.T.S.



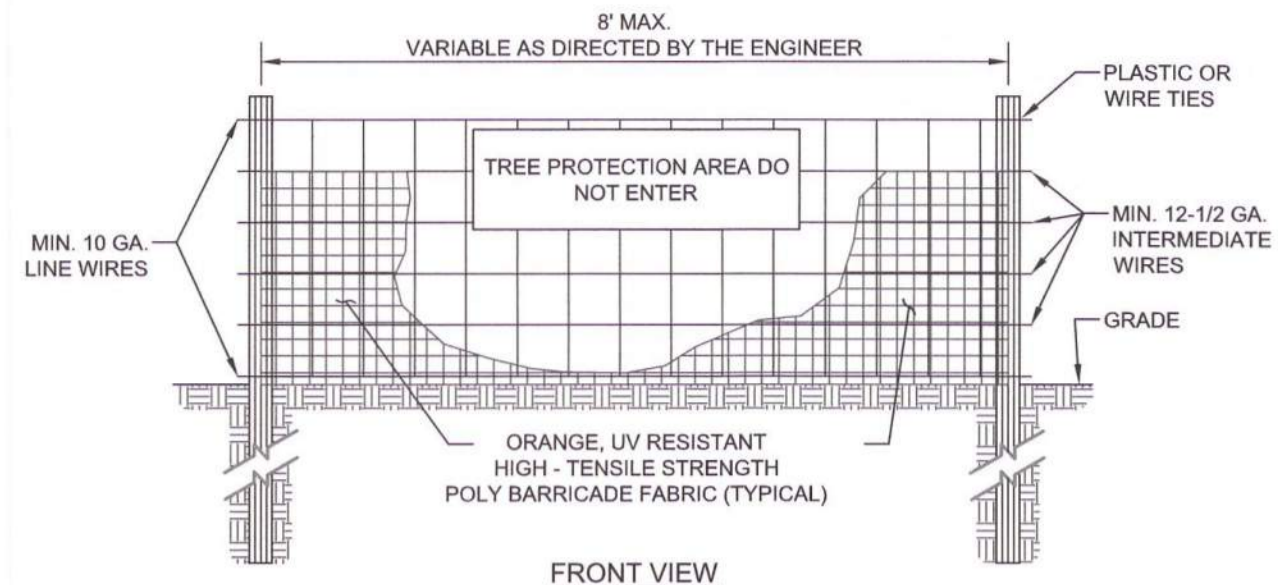
- GENERAL NOTES:**
- WIRE FENCING SHALL BE A MINIMUM OF 60" IN WIDTH AND SHALL BE STEEL CHAIN LINK FENCING, MIN #10 GAUGE
 - WOVEN FILTER FABRIC BE USED WHERE SILT FENCE IS TO REMAIN FOR A PERIOD OF MORE THAN 30 DAYS.
 - STEEL POSTS SHALL BE MIN 7' LONG. POSTS SHALL BE OF ADEQUATE SIZE AND THICKNESS TO SUPPORT SPECIFIED WIRE FENCINGS AND FILTER FABRIC.
 - TURN SILT FENCE UP SLOPE AT ENDS.
 - ORANGE SAFETY FENCE IS REQUIRED AT BACK OF SILT FENCE (WITHIN 5 FT) WHEN GRADING IS ADJACENT TO SWIM BUFFERS OR WETLANDS (REFER TO SWIM BUFFER GUIDELINES).
 - WHEN SILT FENCE IS PLACED IN DUPLICATE AT STREAM AND WETLAND CROSSINGS, THE FENCING SHALL BE SPACED A MINIMUM OF 3' APART.

- MAINTENANCE NOTES:**
- FILTER BARRIERS SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS NEEDED SHALL BE MADE IMMEDIATELY.
 - SHOULD THE FABRIC DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL IS NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY.
 - SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THE DEPOSITS REACH 1-FOOT IN HEIGHT OF THE BARRIER. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS REMOVED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEED.

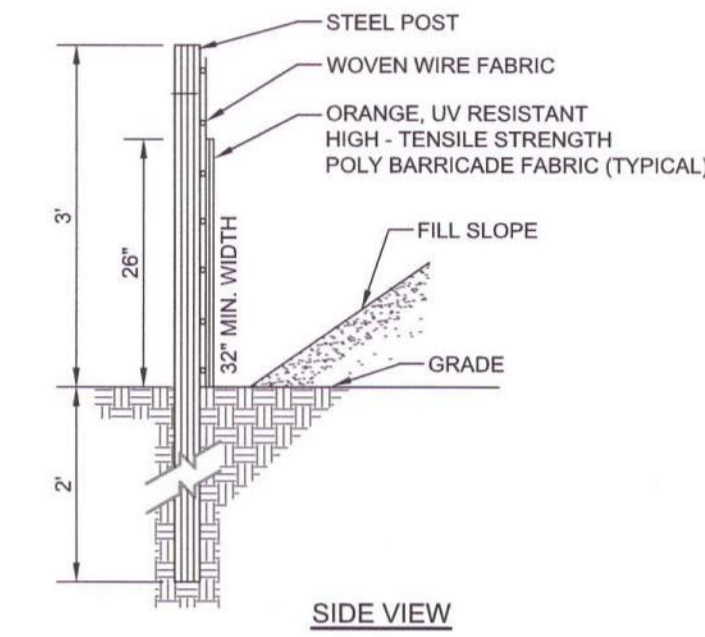
- CONSTRUCTION SPECIFICATIONS:**
- USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B OF THE EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.
- SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F.

EC-08 TEMPORARY SUPER SILT FENCE

N.T.S.



FRONT VIEW



SIDE VIEW



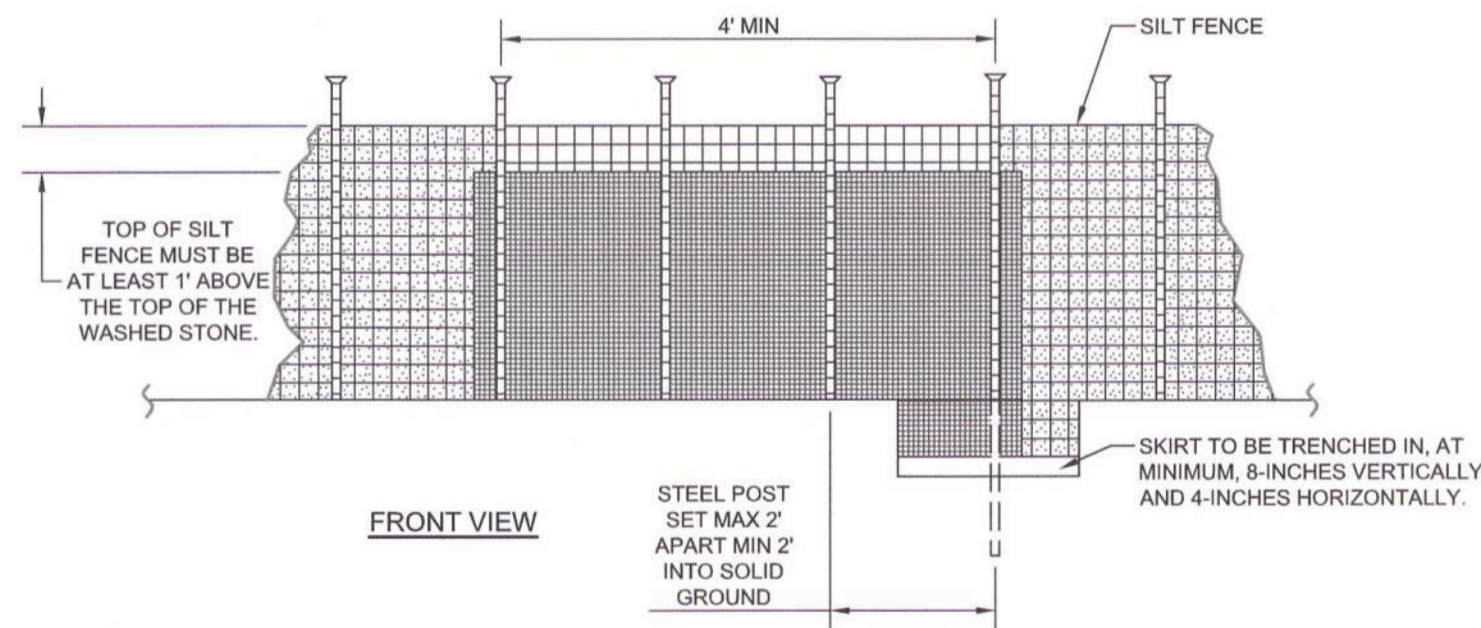
WARNING SIGN DETAIL

NOTE: FOR TREE PROTECTION ONLY

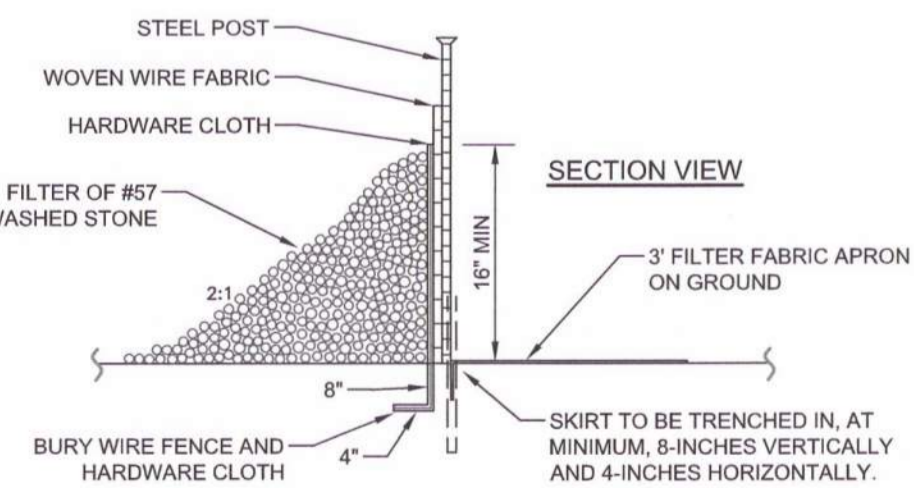
- NOTES:**
- WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL
 - LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
 - SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS.
 - PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.
 - FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
 - ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
 - MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.

EC-09 TEMPORARY TREE PROTECTION FENCE

N.T.S.



FRONT VIEW

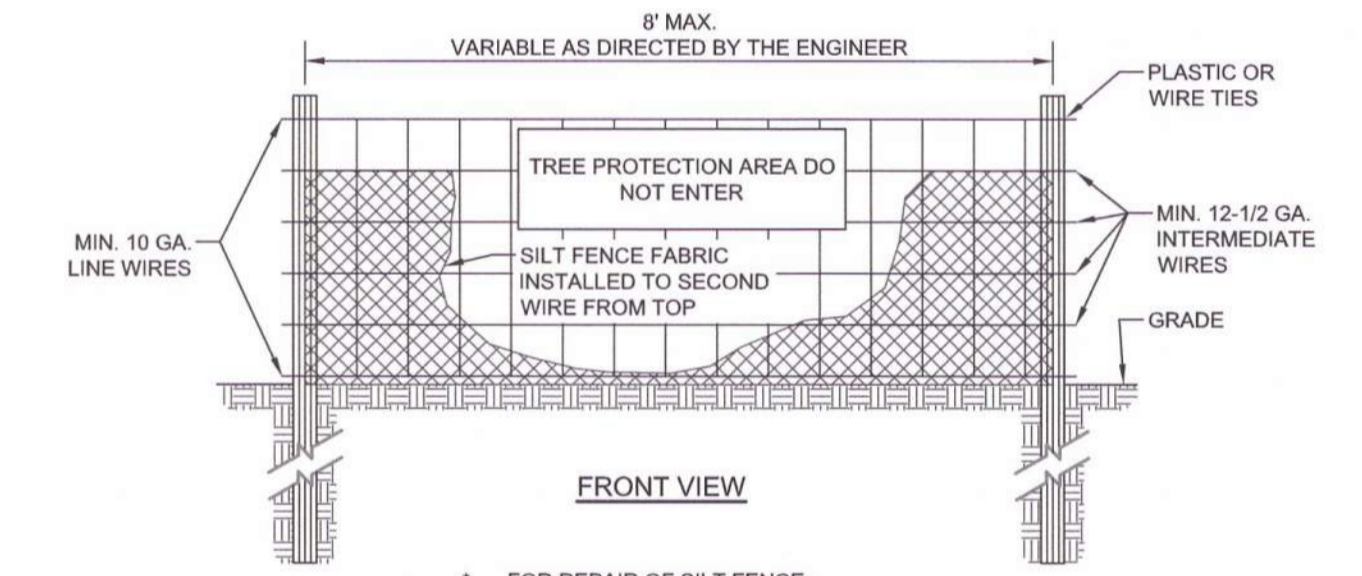


SECTION VIEW

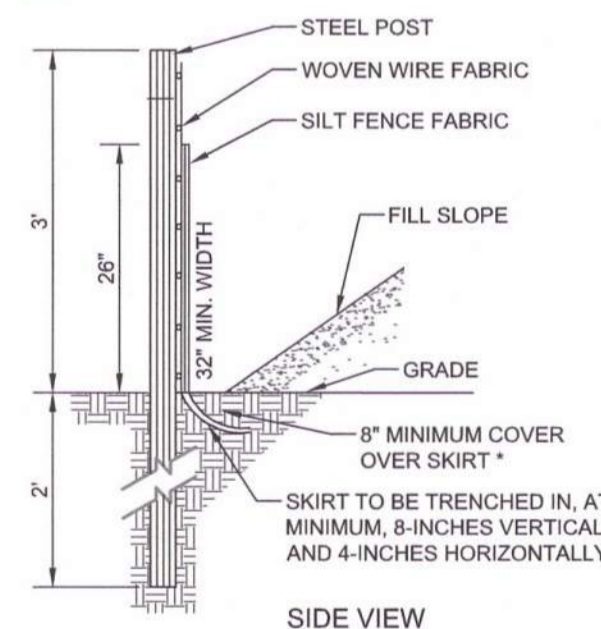
- MAINTENANCE:**
- REMOVE SEDIMENT WHEN HALF OF STONE OUTLET IS COVERED
 - REPLACE STONE AS NEEDED TO ENSURE DEWATERING.

EC-10 SILT FENCE OUTLET

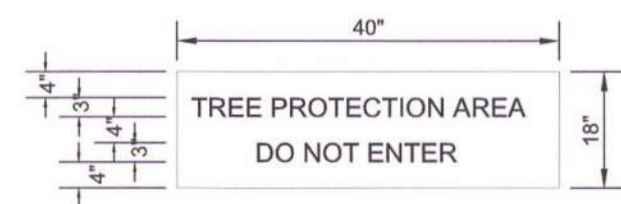
N.T.S.



FRONT VIEW



SIDE VIEW



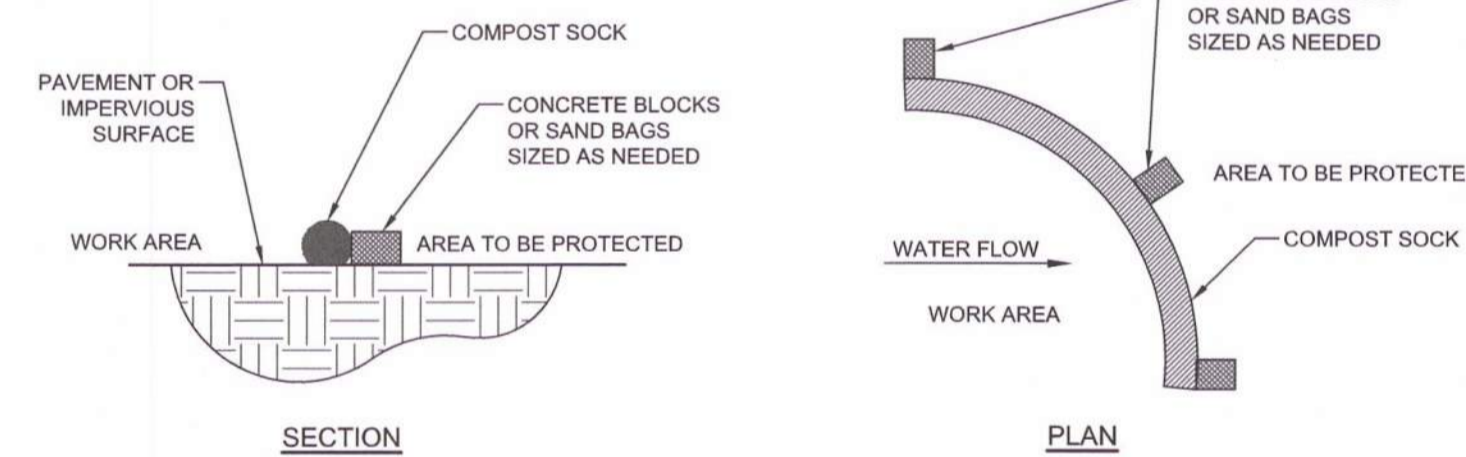
WARNING SIGN DETAIL

- NOTES:**
- WARNING SIGNS TO BE MADE OF DURABLE, WEATHERPROOF MATERIAL.
 - LETTERS TO BE 3" HIGH MINIMUM, CLEARLY LEGIBLE AND SPACED AS DETAILED.
 - SIGNS SHALL BE PLACED AT 50' MAXIMUM INTERVALS.
 - PLACE A SIGN AT EACH END OF LINEAR TREE PROTECTION AND 50' ON CENTER THEREAFTER.
 - FOR TREE PROTECTION AREAS LESS THAN 200' IN PERIMETER, PROVIDE NO LESS THAN ONE SIGN PER PROTECTION AREA.
 - ATTACH SIGNS SECURELY TO FENCE POSTS AND FABRIC.
 - MAINTAIN TREE PROTECTION FENCE THROUGHOUT DURATION OF PROJECT.
 - FOR CONDITIONS WHERE PRACTICE APPLIES, PLANNING CONSIDERATIONS (HOWEVER FLOW SHALL NOT RUN PARALLEL WITH THE FENCE) AND DESIGN CRITERIA.
 - END OF SILT FENCE NEEDS TO BE TURNED UPHILL.
 - SEE N.C. STATE DENR PRACTICE & SPECIFICATION SEDIMENTS FENCE SECTION. FOR CONDITIONS WHERE PRACTICE APPLIES, PLANNING CONSIDERATIONS.
 - SEE N.C. STATE DENR PRACTICE & SPECIFICATION SEDIMENTS FENCE SECTION. (HOWEVER FLOW SHALL NOT RUN PARALLEL WITH THE FENCE)

- MAINTENANCE:**
- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
 - SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
 - REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
 - REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

EC-11 TEMP. COMBO SILT/TREE PROTECTION FENCE

N.T.S.



SECTION

PLAN

- NOTES:**
- USE A MINIMUM 8 INCH DIAMETER COMPOST SOCK.
 - INSTALL COMPOST SOCK SO FLOW WILL NOT WASH AROUND SOCK.

- CONSTRUCTION SPECIFICATIONS:**
- MATERIALS USED IN THE COMPOST SOCK MUST MEET THE SPECIFICATIONS OUTLINED IN PRACTICE 6.18, COMPOST BLANKETS.
 - COMPOST SOCKS SHOULD BE LOCATED AS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN.
 - PRIOR TO INSTALLATION, CLEAR ALL OBSTRUCTIONS INCLUDING ROCKS, CLODS, AND OTHER DEBRIS GREATER THAN ONE INCH THAT MAY INTERFERE WITH PROPER FUNCTION OF COMPOST SOCK.
 - COMPOST SOCKS SHOULD BE INSTALLED PARALLEL TO THE TOE OF A GRADED SLOPE. A MINIMUM OF 10' BEYOND THE TOE OF THE SLOPE. SOCKS LOCATED BELOW FLAT AREAS SHOULD BE LOCATED AT THE EDGE OF THE LAND-DISTURBANCE. THE ENDS OF THE SOCKS SHOULD BE TURNED SLIGHTLY UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE END OF THE SOCKS.
 - FILL SOCK NETTING UNIFORMLY WITH COMPOST TO THE DESIRED LENGTH SUCH THAT LOGS DO NOT DEFORM.
 - OAK OR OTHER DURABLE HARDWOOD STAKES 2" X 2" IN CROSS SECTION SHOULD BE DRIVEN VERTICALLY PLUMB, THROUGH THE CENTER OF THE COMPOST SOCK. STAKES SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 4 FEET, OR A MAXIMUM INTERVAL OF 8 FEET IF THE SOCK IS PLACED IN A 4-INCH TRENCH. SEE FIGURE 6.66B. THE STAKES SHOULD BE DRIVEN TO A MINIMUM DEPTH OF 12 INCHES, WITH A MINIMUM OF 3 INCHES PROTRUDING ABOVE THE COMPOST SOCK.
 - IN THE EVENT STAKING IS NOT POSSIBLE (I.E. WHEN SOCKS ARE USED ON PAVEMENT) HEAVY CONCRETE BLOCKS SHALL BE USED BEHIND THE SOCK TO HOLD IT IN PLACE DURING RUNOFF EVENTS.
 - IF THE COMPOST SOCK IS TO BE LEFT AS PART OF THE NATURAL LANDSCAPE, IT MAY BE SEED AT TIME OF INSTALLATION FOR ESTABLISHMENT OF PERMANENT VEGETATION USING THE SEEDING SPECIFICATION IN THE EROSION AND SEDIMENTATION CONTROL PLAN.
 - COMPOST SOCKS ARE NOT TO BE USED IN PERENNIAL OR INTERMITTENT STREAMS.

- MAINTENANCE:**
- INSPECT COMPOST SOCKS WEEKLY AND AFTER EACH SIGNIFICANT RAINFALL (1/2 INCH OR GREATER) REMOVE ACCUMULATED SEDIMENT AND ANY DEBRIS.
 - THE COMPOST SOCK MUST BE REPLACED IF CLOGGED OR TORN.
 - IF PONDING BECOMES EXCESSIVE, THE SOCK MAY NEED TO BE REPLACED WITH A LARGER DIAMETER OR A DIFFERENT MEASURE.
 - THE SOCK NEED TO BE REINSTALLED IF UNDERMINED OR DISLODGED.
 - THE COMPOST SOCK SHALL BE INSPECTED UNTIL LAND DISTURBANCE IS COMPLETE AND THE AREA ABOVE THE MEASURE HAS BEEN PERMANENTLY STABILIZED.

EC-12 COMPOST SOCK

N.T.S.

BRANSON CREEK WATER MAIN
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FAYETTEVILLE, NORTH CAROLINA

EROSION AND SEDIMENT CONTROL DETAILS
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EC3

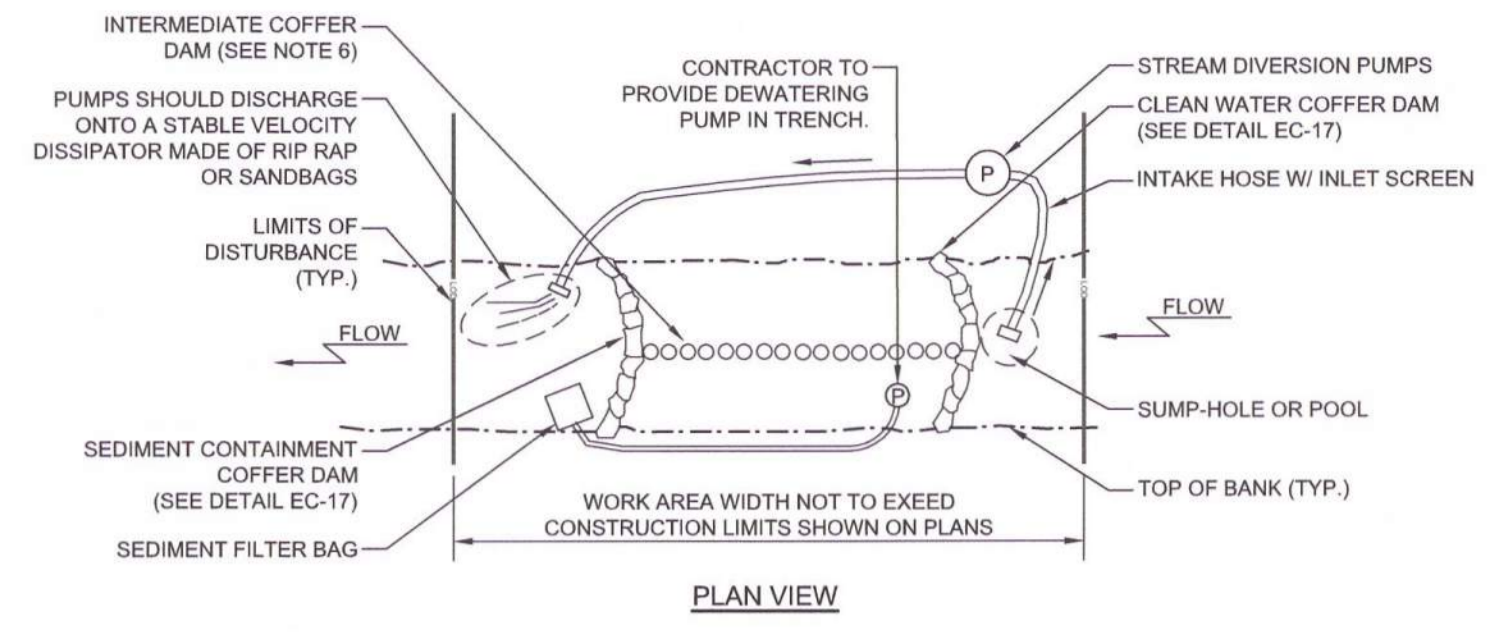
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DATE	OCT 2023
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PLAN VIEW

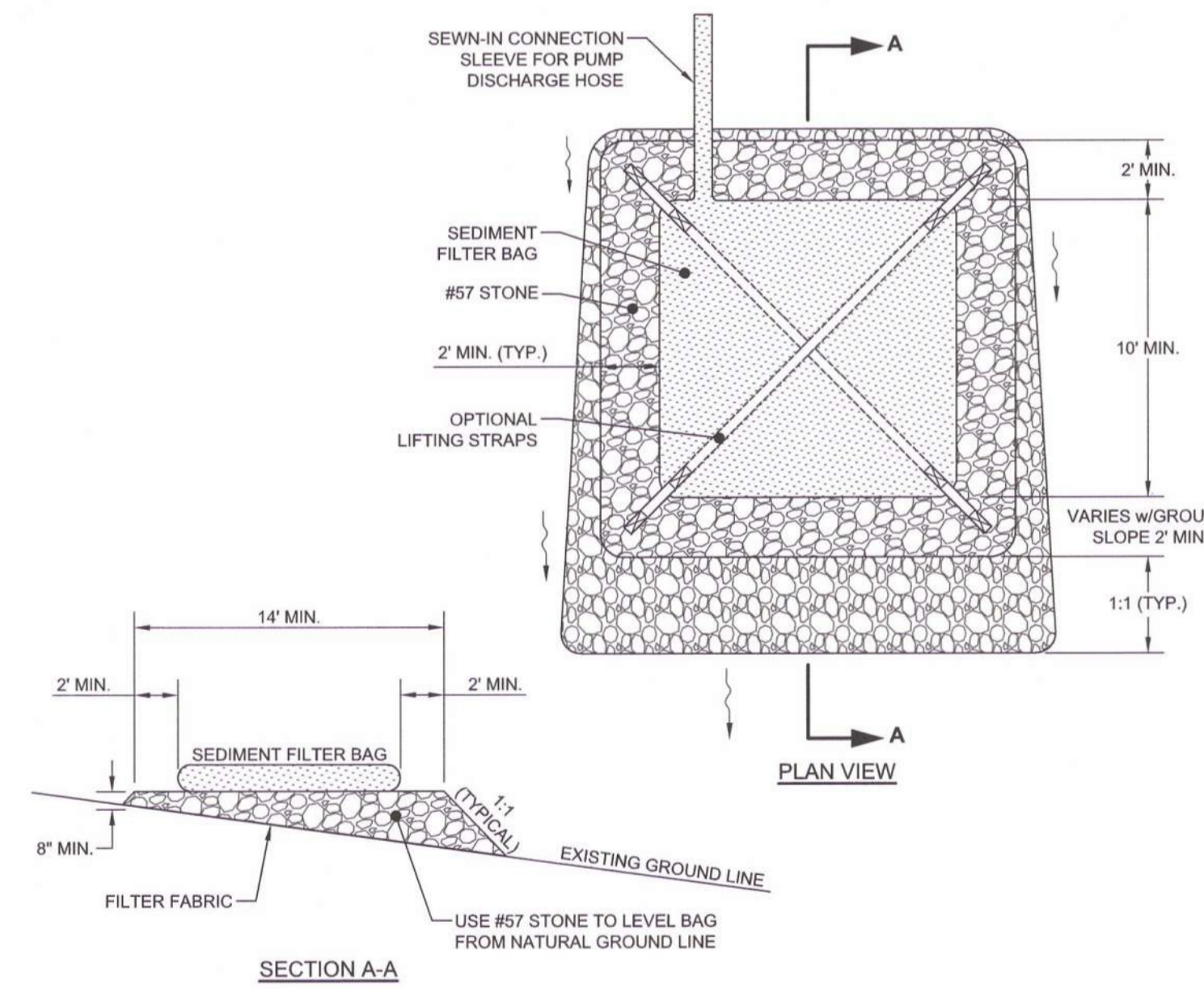
PUMP-AROUND PRACTICE:
TEMPORARY MEASURE FOR DEWATERING STREAM CROSSING SITES.

DESCRIPTION:
THE WORK SHALL CONSIST OF INSTALLING A TEMPORARY PUMP AROUND AND SUPPORTING MEASURES TO DIVERT FLOW AROUND CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR SIZING PUMPS TO ENSURE ADEQUATE CAPACITY TO KEEP FLOW FROM ENTERING WORK AREA.

IMPLEMENTATION SEQUENCE:
SEDIMENT CONTROL MEASURES, PUMP-AROUND PRACTICES, AND ASSOCIATED CONSTRUCTION SHALL BE COMPLETED IN THE FOLLOWING SEQUENCE (REFER TO DETAIL).

1. COFFER DAMS SHALL BE SITUATED AT THE ENDS OF THE WORK AREA AS SHOWN ON THE PLANS (REFER TO DETAIL EC-12), AND WATER ON THE UPSIDE OF THE DAM AREA SHALL BE PUMPED AROUND THE WORK AREA.
2. THE DIVERSION PUMPS SHALL DISCHARGE ONTO A STABLE VELOCITY DISSIPATOR MADE OF RIP-RAP OR SANDBAGS.
3. WATER FROM THE WORK AREA SHALL BE PUMPED TO A SEDIMENT FILTERING MEASURE SUCH AS A TEMPORARY WOOD CHIP DEWATERING BASIN, SILT BAG OR OTHER APPROVED SEDIMENT FILTERING MEASURE (REFER TO DETAIL EC-16).
4. AFTER THE SANITARY SEWER IS INSTALLED AND THE SLOPES HAVE BEEN STABILIZED, THE PUMP INTAKE HOSES, DISSIPATOR PADS AND FILTER MEASURES SHALL BE REMOVED AND THEN THE COFFER DAMS SHALL BE REMOVED.
5. A PUMP AROUND MUST BE INSTALLED ON ANY TRIBUTARY OR STORM DRAIN OUTFALL WHICH CONTRIBUTES BASEFLOW TO THE WORK AREA. THIS SHALL BE ACCOMPLISHED BY LOCATING A COFFER DAM AT THE DOWNSTREAM END OF THE TRIBUTARY OR STORM DRAIN OUTFALL AND PUMPING THE STREAM FLOW AROUND THE WORK AREA. THIS WATER SHALL DISCHARGE ONTO THE SAME VELOCITY DISSIPATOR USED FOR THE MAIN STREAM PUMP AROUND.
6. CONTRACTOR MAY USE INTERMEDIATE COFFER DAM ALONG STREAM ALIGNMENT TO ALLOW PHASED CROSSING VIA MAXIMUM OF 2 SEPARATE BYPASS PHASES.

EC-13 TEMPORARY PUMP AROUND N.T.S.



SEDIMENT FILTER BAG GENERAL NOTES:

1. CONTRACTOR SHALL EXERCISE CAUTION NOT TO BURST OR DAMAGE THE SEDIMENT FILTER BAG WHEN PUMPING.
2. THE LENGTH AND WIDTH OF THE TEMPORARY SEDIMENT BAG SHOWN ON THIS DRAWING MAY VARY PER VENDOR SPECIFICATIONS. THE MINIMUM "FOOTPRINT" OF THE BAG SHALL BE 10 x 15 FEET.
3. SEDIMENT FILTER BAGS SHALL BE EQUIPPED WITH A SEWN-IN SLEEVE OF SUFFICIENT SIZE TO ACCEPT A MINIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE DISCHARGE HOSE SHOULD BE EXTENDED INTO THIS SLEEVE A MINIMUM OF 6 INCHES AND BE TIGHTLY SECURED WITH A HOSE CLAMP OR OTHER SUITABLE MEANS TO PREVENT LEAKAGE. HOSE CONNECTION THROUGH A SLIT IN THE BAG WILL NOT BE ACCEPTABLE.
4. THE PUMP DISCHARGE HOSE CONNECTION SLEEVE SHALL BE SECURELY TIED OFF DURING DISPOSAL OF THE SEDIMENT FILTER BAG IN ORDER TO PREVENT LEAKAGE OF COLLECTED SEDIMENTS.
5. SEDIMENT FILTER BAG SHALL BE MAINTAINED AND REPLACED WHEN ONE HALF FULL OF SEDIMENT OR IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

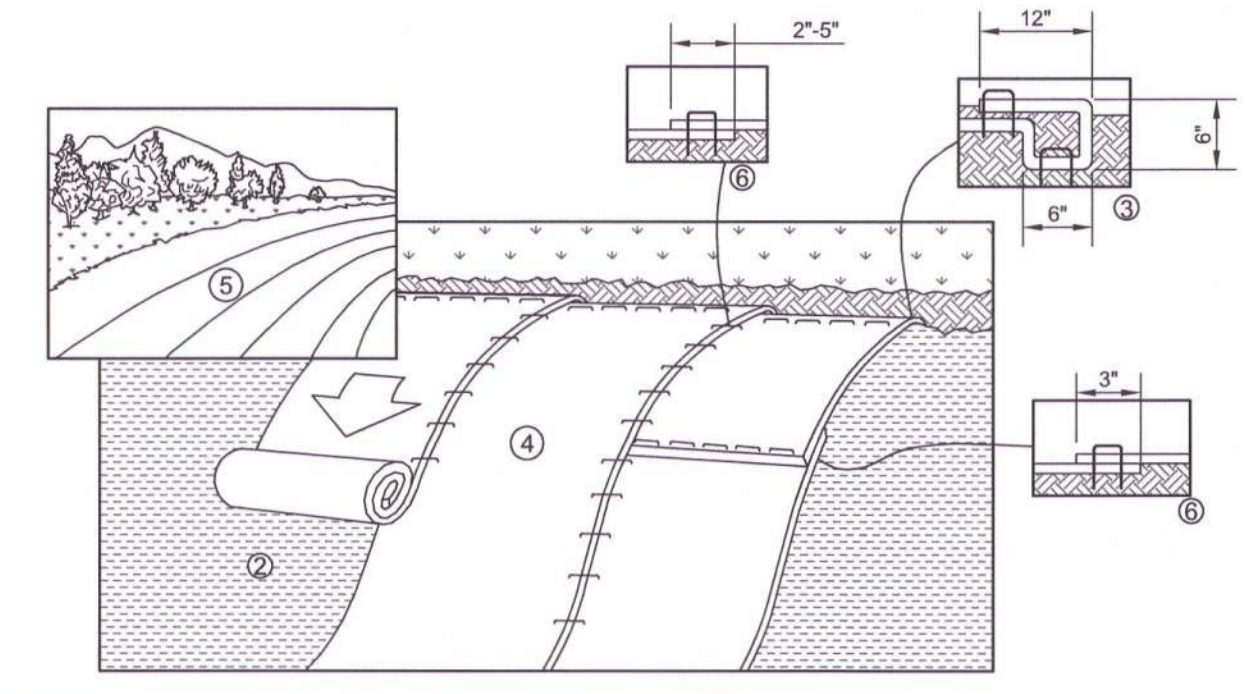
CONSTRUCTION SPECIFICATIONS:

1. FILTER BAG IS TO BE PLACED ON A LEVEL BED OF AGGREGATE.
2. INSERT THE DISCHARGE HOSE AND SECURE IT TIGHTLY PER MANUFACTURER RECOMMENDATIONS.
3. THE BAG IS TO BE MONITORED TO AVOID RUPTURE OR EXCESSIVE LEAKAGE AROUND THE DISCHARGE HOSE.
4. SEDIMENT FILTER BAG AND THE CAPTURED SEDIMENT SHOULD BE DISPOSED OF PER LOCAL REGULATIONS.

MAINTENANCE:

1. INSPECT TEMPORARY STREAM CROSSINGS AFTER RUNOFF-PRODUCING RAINS TO CHECK FOR BLOCKAGE IN CHANNEL, EROSION OF ABUTMENTS, CHANNEL SCOUR, RIPRAP DISPLACEMENT, OR PIPING. MAKE ALL REPAIRS IMMEDIATELY TO PREVENT FURTHER DAMAGE TO THE INSTALLATION.

EC-16 SEDIMENT FILTER BAG WITH GRAVEL PAD N.T.S.



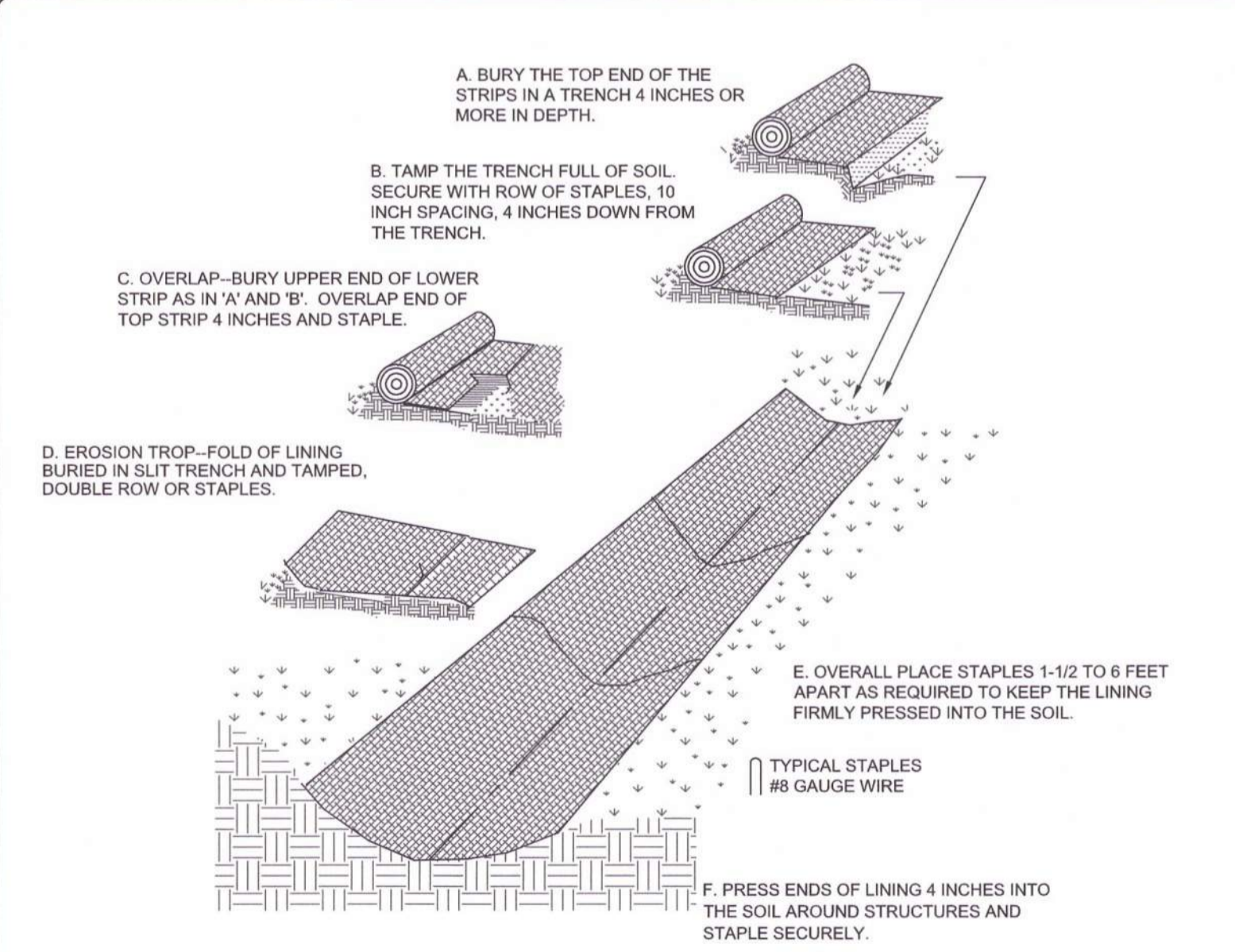
CONSTRUCTION SPECIFICATIONS:

1. EVEN IF PROPERLY DESIGNED, IF NOT PROPERLY INSTALLED, RECP'S WILL PROBABLY NOT FUNCTION AS DESIRED. PROPER INSTALLATION IS IMPERATIVE. EVEN IF PROPERLY INSTALLED, IF NOT PROPERLY TIMED AND NOURISHED, VEGETATION WILL PROBABLY NOT GROW AS DESIRED. PROPER SEED/VEGETATION SELECTION IS ALSO IMPERATIVE.
2. GRADE THE SURFACE OF INSTALLATION AREAS SO THAT THE GROUND IS SMOOTH AND LOOSE. WHEN SEEDING PRIOR TO INSTALLATION, FOLLOWING THE STEPS FOR SEED BED PREPARATION, SOIL AMENDMENTS, AND SEEDING IN SURFACE STABILIZATION. 6.1 ALL GULLIES, RILLS, AND ANY OTHER DISTURBED AREAS MUST BE FINE GRADED PRIOR TO INSTALLATION. SPREAD SEED BEFORE RECP INSTALLATION. (IMPORTANT: REMOVE ALL LARGE ROCKS, DIRT CLODS, STUMPS, ROOTS, GRASS CLUMPS, TRASH, AND OTHER OBSTRUCTIONS FROM THE SOIL SURFACE TO ALLOW FOR DIRECT CONTACT BETWEEN SOIL SURFACE AND THE RECP.)
3. TERMINAL ANCHOR TRENCHES ARE REQUIRED AT RECP ENDS AND INTERMITTENT TRENCHES MUST BE CONSTRUCTED ACROSS CHANNELS AT 25-FOOT INTERVALS. TERMINAL ANCHOR TRENCHES SHOULD BE A MINIMUM OF 12 INCHES IN DEPTH AND 6 INCHES IN WIDTH, WHILE INTERMITTENT TRENCHES NEED BE ONLY 6 INCHES DEEP AND 6 INCHES WIDE.
4. INSTALLATION FOR SLOPES - PLACE THE RECP'S 2-3 FEET OVER TOP OF THE SLOPE AND INTO AN EXCAVATED END TRENCH MEASURING APPROXIMATELY 12 INCHES DEEP BY 6 INCHES WIDE. PIN THE RECP AT 1 FOOT INTERVALS ALONG THE BOTTOM OF THE TRENCH, BACKFILL, AND COMPACT. UNROLL THE RECP DOWN OR ALONG THE SLOPE MAINTAINING DIRECT CONTACT BETWEEN THE SOIL AND RECP. OVERLAP ADJACENT ROLLS A MINIMUM OF 3 INCHES. PIN THE RECP TO THE GROUND USING STAPLES OR PINS IN A 3 FOOT CENTER-TO-CENTER PATTERN. LESS FREQUENT STAPLING/PINNING IS ACCEPTABLE ON MODERATE SLOPES.
5. INSTALLATION IN CHANNELS - EXCAVATE TERMINAL TRENCHES (12 INCHES DEEP AND 6 INCHES WIDE) ACROSS THE CHANNEL AT THE UPPER AND LOWER END OF THE LINED CHANNEL SECTIONS. AT 25-FOOT INTERVALS ALONG THE CHANNEL, ANCHOR THE RECP ACROSS THE CHANNEL EITHER IN 6 INCH BY 6 INCH TRENCHES OR BY INSTALLING TWO CLOSELY SPACED ROWS OF ANCHORS. EXCAVATE LONGITUDINAL TRENCHES 6 INCHES DEEP AND WIDE ALONG CHANNEL EDGES (ABOVE WATER LINE) IN WHICH TO BURY THE OUTSIDE RECP EDGES. PLACE THE FIRST RECP IN THE TERMINAL TRENCH AND PIN IT AT 1 FOOT INTERVALS ALONG THE BOTTOM OF THE TRENCH.
NOTE: THE RECP SHOULD BE PLACED UPSIDE DOWN IN THE TRENCH WITH THE ROLL ON THE DOWNSTREAM SIDE OF THE BENCH. ONCE PINNED AND BACKFILLED, THE RECP IS DEPLOYED BY WRAPPING OVER THE TOP OF THE TRENCH AND UNROLLING UPSTREAM. IF THE CHANNEL IS WIDER THAN THE PROVIDED ROLLS, PLACE ENDS OF ADJACENT ROLLS IN THE TERMINAL TRENCH, OVERLAPPING THE ADJACENT ROLLS A MINIMUM OF 3 INCHES. PIN AT 1 FOOT INTERVALS, BACKFILL, AND COMPACT. UNROLL THE RECP IN THE UPSTREAM DIRECTION UNTIL REACHING THE FIRST INTERMITTENT TRENCH. FOLD THE RECP BACK OVER ITSELF, POSITIONING THE ROLL ON THE DOWNSTREAM SIDE OF THE TRENCH, AND ALLOWING THE MAT TO CONFORM TO THE TRENCH.
THEN PIN THE RECP (TWO LAYERS) TO THE BOTTOM OF THE TRENCH, BACKFILL, AND COMPACT. CONTINUE UP THE CHANNEL (WRAPPING OVER THE TOP OF THE INTERMITTENT TRENCH) REPEATING THIS STEP AT OTHER INTERMITTENT TRENCHES, UNTIL REACHING THE UPPER TERMINAL TRENCH.
6. AT THE UPPER TERMINAL TRENCH, ALLOW THE RECP TO CONFORM TO THE TRENCH. SECURE WITH PINNED OR STAPLES, BACKFILL, COMPACT AND THEN BRING THE MAT BACK OVER THE TOP OF THE TRENCH AND ONTO THE EXISTING MAT (2 TO 3 FEET OVERLAP IN THE DOWNSTREAM DIRECTION), AND PIN AT 1 FOOT INTERVALS ACROSS THE RECP. WHEN STARTING INSTALLATION OF A NEW ROLL, BEGIN IN A TRENCH OR SHINGLE-LAP ENDS OF ROLLS A MINIMUM OF 1 FOOT WITH UPSTREAM RECP ON TOP TO PREVENT UPLIFTING. PLACE THE OUTSIDE EDGES OF THE RECP(S) IN LONGITUDINAL TRENCHES, PIN, BACKFILL, AND COMPACT.
7. ANCHORING DEVICES - 11 GAUGE, AT LEAST 6 INCHES LENGTH BY 1 INCH WIDTH STAPLES OR 12 INCH MINIMUM LENGTH WOODEN STAKES ARE RECOMMENDED FOR ANCHORING THE RECP TO THE GROUND. IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE/STAKE LENGTHS GREATER THAN 8 1/2" MAY BE NECESSARY TO PROPERLY SECURE THE RECP. WHEN USING THE DOT SYSTEM™, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
8. DRIVE STAPLES OR PINS SO THAT THE TOP OF THE STAPLE OR PIN IS FLUSH WITH THE GROUND SURFACE. ANCHOR EACH RECP EVERY 3 FEET ALONG ITS CENTER. LONGITUDINAL OVERLAPS MUST BE SUFFICIENT TO ACCOMMODATE A ROW OF ANCHORS AND UNIFORM ALONG THE ENTIRE LENGTH OF OVERLAP AND ANCHORED EVERY 3 FEET ALONG THE OVERLAP LENGTH. ROLL ENDS MAY BE SPLICED BY OVERLAPPING 1 FOOT (IN THE DIRECTION OF WATER FLOW), WITH THE UPSTREAM UPSLOPE MAT PLACED ON TOP OF THE DOWNSTREAM DOWNSLOP RECP. THIS OVERLAP SHOULD BE ANCHORED AT 1 FOOT SPACING ACROSS THE RECP. WHEN INSTALLING MULTIPLE WIDTH MATS HEAT SEALED IN THE FACTORY, ALL FACTORY SEAMS AND FIELD OVERLAPS SHOULD BE SIMILARLY ANCHORED.

MAINTENANCE:

1. INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAIN FALL. EVENT REPAIR IMMEDIATELY.
2. GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH THE RECP.
3. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.
4. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND THE ERODED AREA PROTECTED.
5. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED.
6. STABILIZATION NOTE: STABILIZED GROUND COVER MUST BE ESTABLISHED WITHIN 7 DAYS IN AREAS WHERE SLOPES ARE STEEPER THAN 3:1 (SEE NPDES STABILIZATION TIMEFRAME SHEET EC8)

EC-14 TEMPORARY SLOPE STABILIZATION N.T.S.



EC-17 TEMPORARY STRAW WITH NET LINER N.T.S.



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EROSION AND SEDIMENT CONTROL DETAILS
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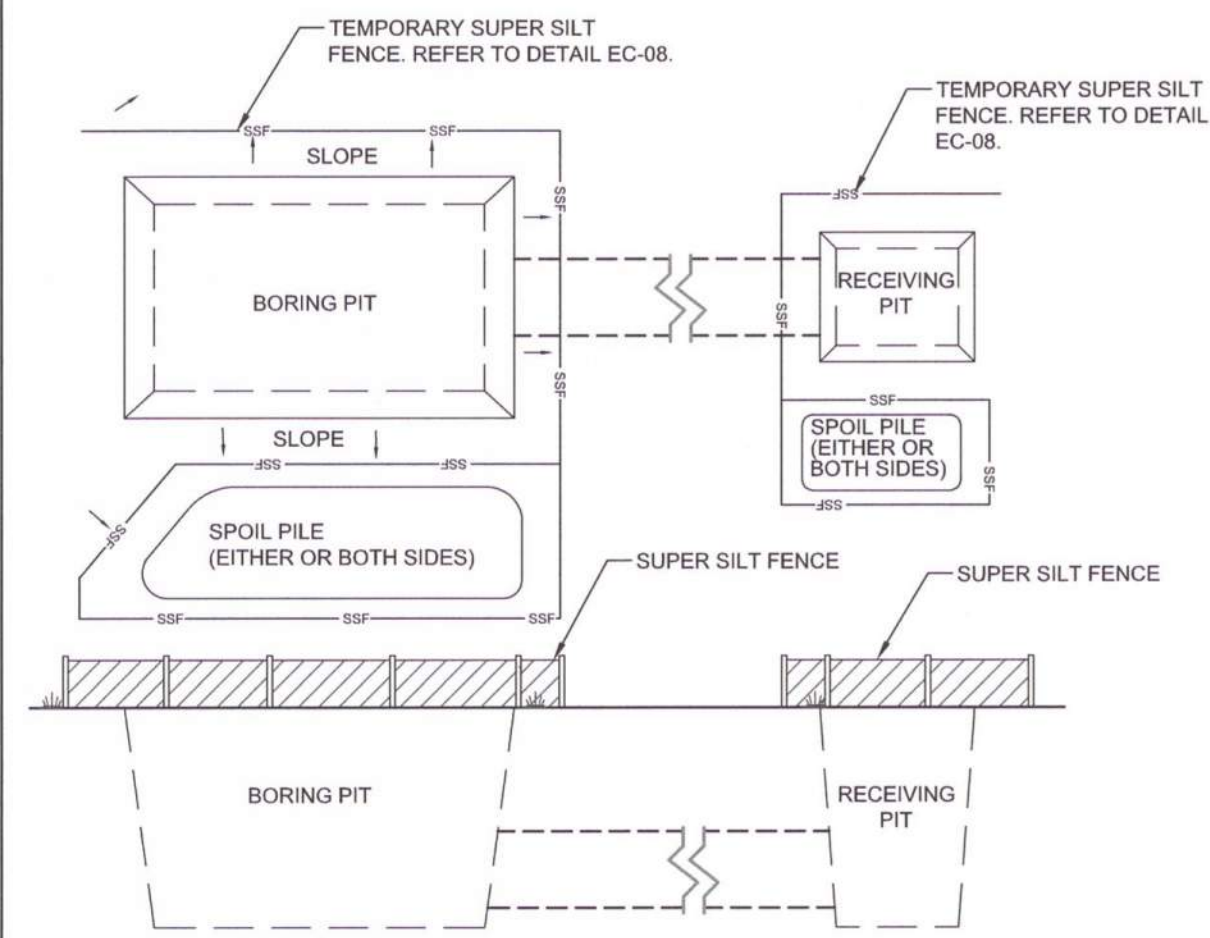


EC4
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BY: DLH
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REVISION: NOT FOR CONSTRUCTION
DATE: MAY 2024
REVISION: REVISION FOR BID

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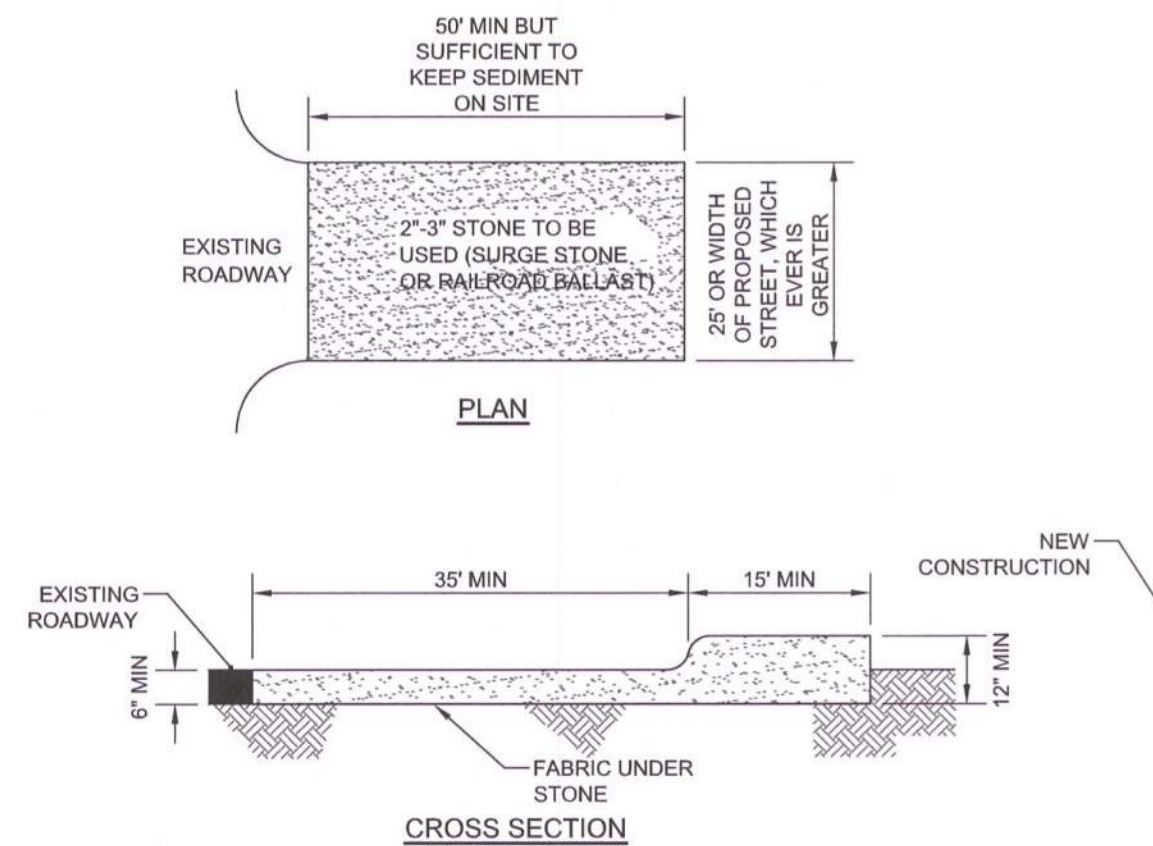
- NOTE:**
- CONTRACTOR TO PROVIDE SEDIMENT PITS AS NECESSARY. ALL PITS SHALL BE PROTECTED AS WELL AGAINST SEDIMENTATION RUNOFF.
 - ALL SPOIL PILES TO BE PLACED WITHIN SILT FENCE AREA.
 - CHECK DAMS REQUIRED IN DOWNSTREAM DITCHES AT ALL CONSTRUCTION ENTRANCES.
 - 16-INCH COMPOST SOCK (SEE DETAIL EC-12) MAY BE USED IN LIEU OF SUPER SILT FENCE IN PAVED AREAS.

- CONSTRUCTION SPECIFICATIONS:**
- USE A SYNTHETIC FILTER FABRIC OF AT LEAST 95% BY WEIGHT OF POLYOLEFINS OR POLYESTER, WHICH IS CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS IN ASTM D 6461, WHICH IS SHOWN IN PART IN TABLE 6.62B OF THE EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL. SYNTHETIC FILTER FABRIC SHOULD CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF 6 MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 TO 120° F.
 - ENSURE THAT POSTS FOR SEDIMENT FENCES ARE 1.25 LB/LINEAR FT MINIMUM STEEL WITH A MINIMUM LENGTH OF 5 FEET. MAKE SURE THAT STEEL POSTS HAVE PROJECTIONS TO FACILITATE FASTENING THE FABRIC.
 - FOR REINFORCEMENT OF STANDARD STRENGTH FILTER FABRIC, USE WIRE FENCE WITH A MINIMUM 14 GAUGE AND A MAXIMUM MESH SPACING OF 6 INCHES.

- MAINTENANCE:**
- INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY.
 - SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY.
 - REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEANOUT.
 - REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

EC-18 SILT FENCE LAYOUT AT PIT LOCATIONS

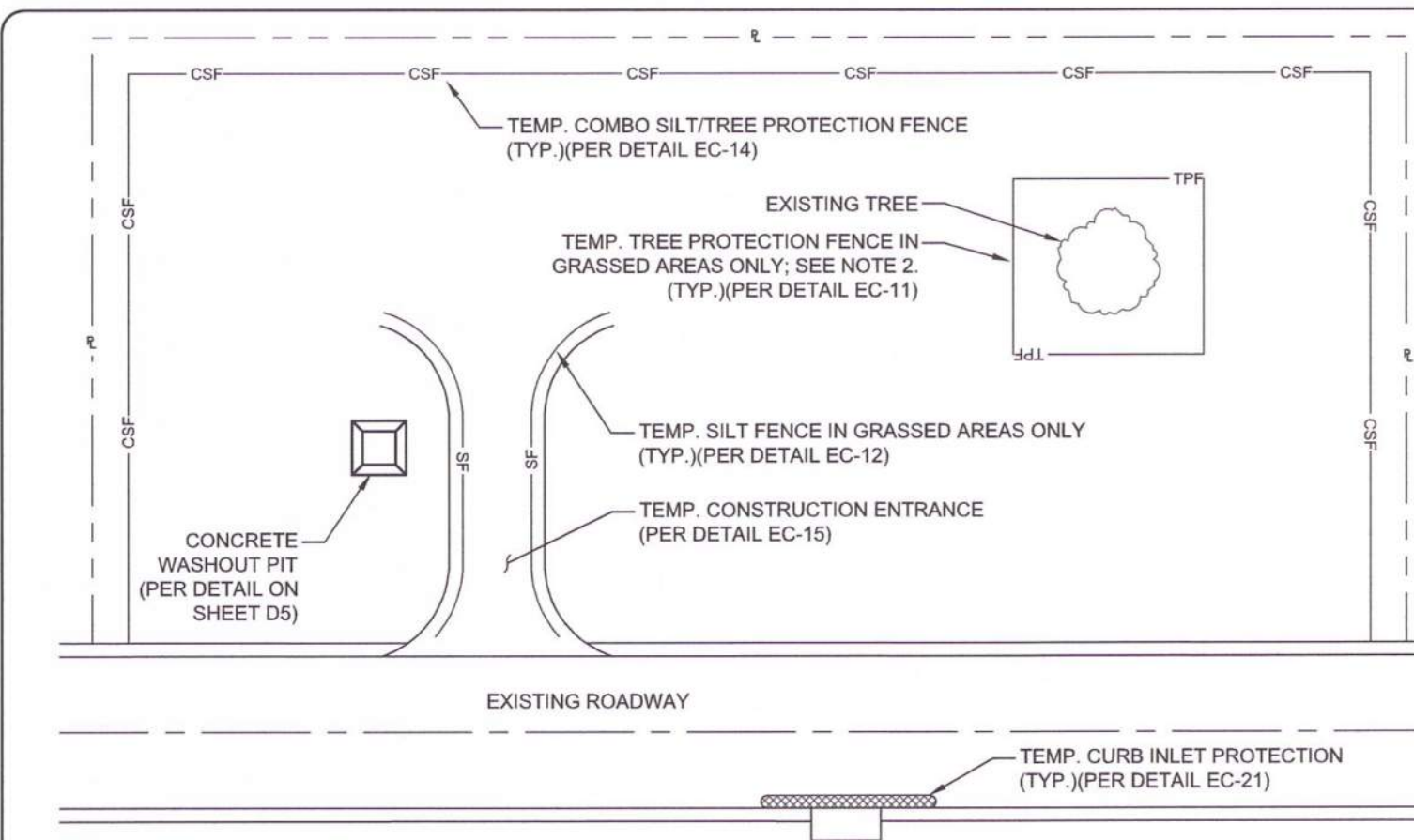
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- NOTES:**
- PUT SILT FENCE OR TREE PROTECTION FENCE UP TO ENSURE CONSTRUCTION ENTRANCE IS USED.
 - IF CONSTRUCTION ON THE SITES ARE SUCH THAT THE MUD IS NOT REMOVED BY THE VEHICLE TRAVELING OVER THE STONE, THEN THE TIRES OF THE VEHICLES MUST BE WASHED BEFORE ENTERING THE PUBLIC ROAD.
 - IF A PROJECT CONTINUES TO PULL MUD AND DEBRIS ON TO THE PUBLIC ROAD, THE GOVERNING AUTHORITY WILL CLEAN THE AREA AND INVOICE THE FINANCIALLY RESPONSIBLE PERSON AS INDICATED ON THE FINANCIAL RESPONSIBILITY FORM.

EC-19 TEMPORARY CONSTRUCTION ENTRANCE

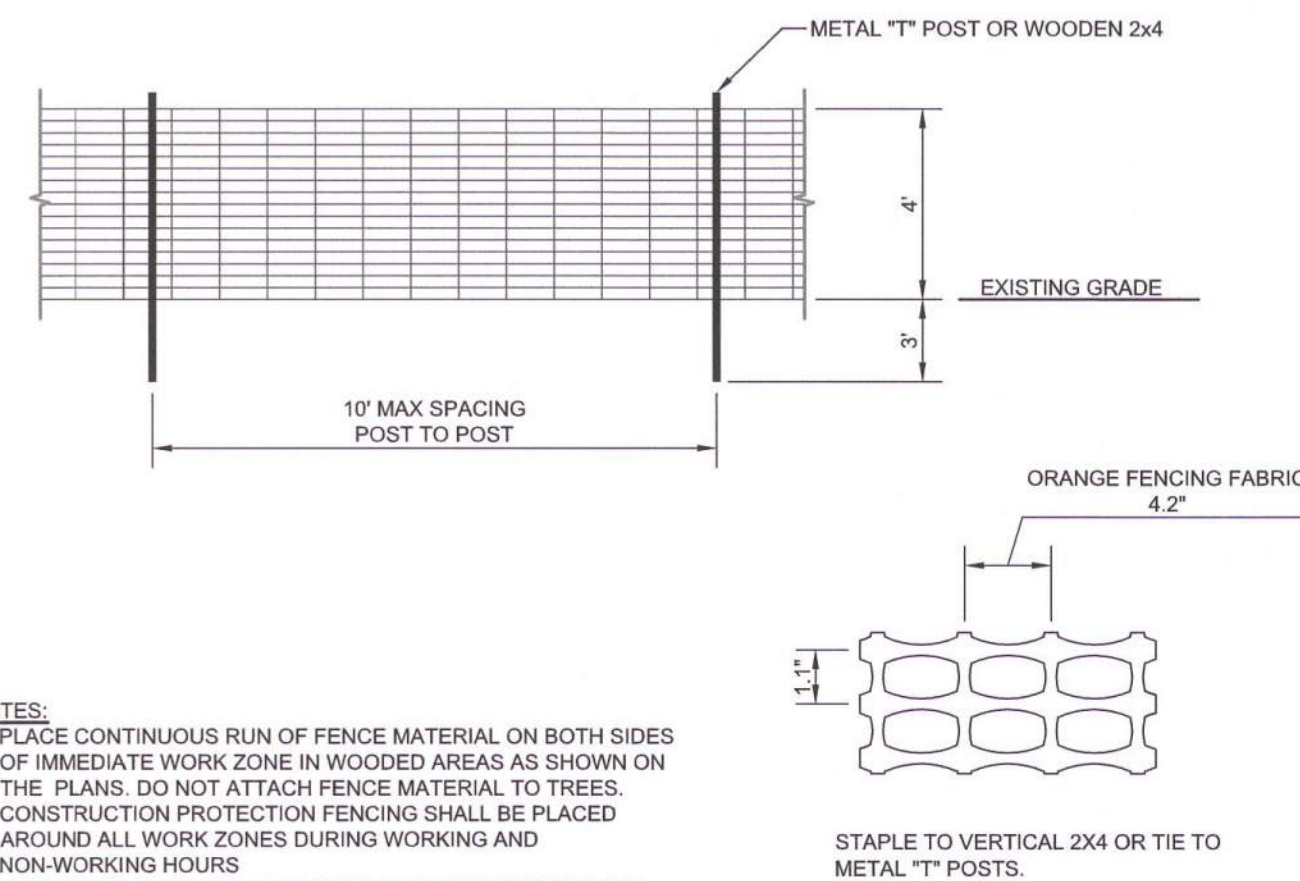
N.T.S.



- NOTES:**
- FOR A STORAGE YARD LOCATED IN A HARDSCAPE/PAVED AREA, TEMPORARY CONSTRUCTION PROTECTION FENCING (PER DETAIL EC-28) SHALL BE INSTALLED AROUND THE PERIMETER OF THE STORAGE YARD AND AROUND TREES IN LIEU OF COMBINATION SILT/TREE PROTECTION FENCE.
 - CONTRACTOR SHALL NOTIFY PWC OF PROPOSED LOCATION OF STORAGE YARD AND SECURE STORAGE YARD LOCATION FROM PROPERTY OWNER PRIOR TO MOBILIZATION. STORAGE YARD SHALL NOT BE OCCUPIED UNTIL PROPER EROSION AND SEDIMENTATION CONTROL DEVICES ARE INSTALLED AND ACCEPTED BY THE ENGINEER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE PROPER LIGHTING, SECURITY AND OTHER TEMPORARY PROTECTION MEASURES AT THE STORAGE YARD AT NO ADDITIONAL EXPENSE TO PWC.
 - PRIOR TO MOBILIZATION AND START OF CONSTRUCTION, CONTRACTOR TO PROVIDE TO THE ENGINEER A SKETCH OF THE SECURED LAYDOWN YARD INCLUDING THE PROPOSED EROSION AND SEDIMENTATION CONTROL DEVICES, IN ACCORDANCE WITH THE SUBMITTAL PROVISIONS CONTAINED IN THE CONTRACT DOCUMENTS.
 - AS PART OF THE DEMOBILIZATION AND FINAL COMPLETION CERTIFICATION, CONTRACTOR TO PROVIDE GENERAL CLEANUP, REPAIR OF ALL HARDSCAPE TO LIKE OR BETTER CONDITIONS, REGRADING AND SEEDING, AND REMOVAL OF ALL EROSION AND SEDIMENTATION CONTROL DEVICES, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
 - IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND SECURE A STORAGE YARD(S) PRIOR TO MOBILIZATION. CONTRACTOR SHALL OBTAIN A SEPARATE EROSION AND SEDIMENTATION CONTROL PERMIT FROM NCDEQ SHOULD TWO OR MORE STORAGE YARDS BE REQUIRED FOR THE PROJECT.
 - LIMITS OF STORAGE YARD(S) SHALL BE LOCATED A MINIMUM OF 50 FEET AWAY FROM STORM DRAIN INLETS, TEMPORARY DIVERSIONS, CHANNELS, AND SURFACE WATER BODIES.
 - THE PERMITS/RECORD BOX AND RAIN GAUGE SHALL BE KEPT AT THE ENTRANCE TO THE CONTRACTOR'S STORAGE YARD.

EC-20 CONTRACTOR STORAGE YARD DETAIL

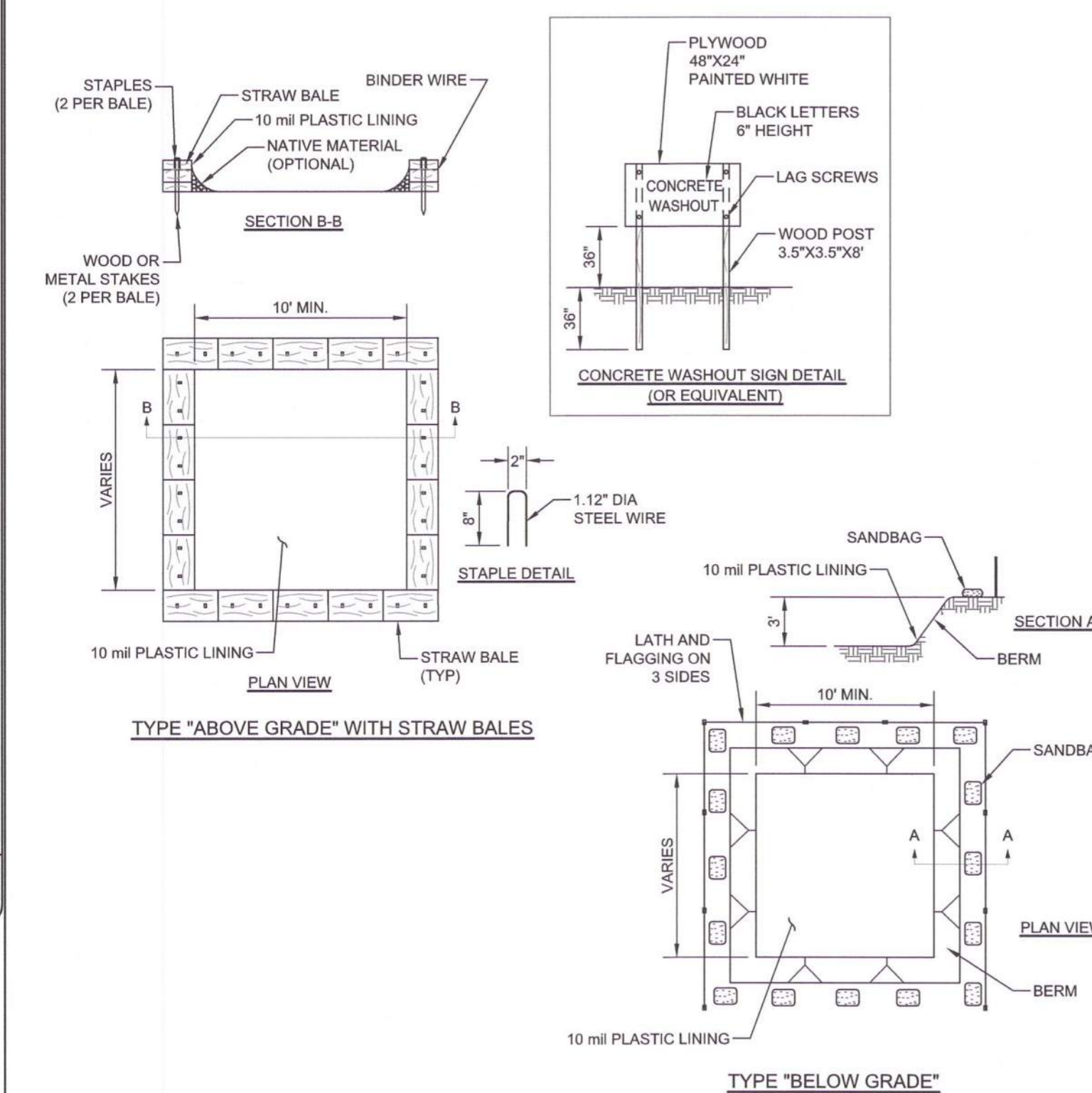
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- NOTES:**
- PLACE CONTINUOUS RUN OF FENCE MATERIAL ON BOTH SIDES OF IMMEDIATE WORK ZONE IN WOODED AREAS AS SHOWN ON THE PLANS. DO NOT ATTACH FENCE MATERIAL TO TREES.
 - CONSTRUCTION PROTECTION FENCING SHALL BE PLACED AROUND ALL WORK ZONES DURING WORKING AND NON-WORKING HOURS.
 - ONE SIGN PER 50' OF CONSTRUCTION PROTECTION FENCING SHALL READ: "DANGER CONSTRUCTION AREA KEEP OUT"

EC-21 TEMP. CONSTRUCTION PROTECTION FENCE

N.T.S.



- NOTES:**
- ACTUAL LAYOUT TO BE DETERMINED IN THE FIELD.
 - A CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
 - MATERIALS USED TO CONSTRUCT TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE REMOVED FROM THE SITE OF THE WORK AND DISPOSED OF OR RECYCLED.
 - HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.

- MAINTENANCE NOTES:**
- THE CONCRETE WASHOUT AREA SHALL BE REPAIRED AND ENLARGED OR CLEANED OUT AS NECESSARY TO MAINTAIN CAPACITY FOR WASTED CONCRETE.
 - AT THE END OF CONSTRUCTION, ALL CONCRETE SHALL BE REMOVED AND DISPOSED OF AT APPROVED WASTE SITE.
 - AFTER REMOVAL OF CONCRETE WASHOUT AREA, SEED DISTURBED AREA.
 - INSPECT WEEKLY, DURING AND AFTER ANY STORM EVENT.

EC-22 CONCRETE WASHOUT PIT

N.T.S.

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GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Table with 3 columns: Site Area Description, Stabilization Method, and Timeframe variations. Includes rows for perimeter dikes, high quality water, slopes, and areas with slopes.

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity.

Table with 2 columns: Temporary Stabilization and Permanent Stabilization. Lists various methods like grass seed, hydroseeding, and mulch.

- POLYACRYLAMIDES (PAMS) AND FLOCCULANTS
1. Select flocculants that are appropriate for the soils being exposed during construction...

- CONCRETE WASHOUTS
1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue...

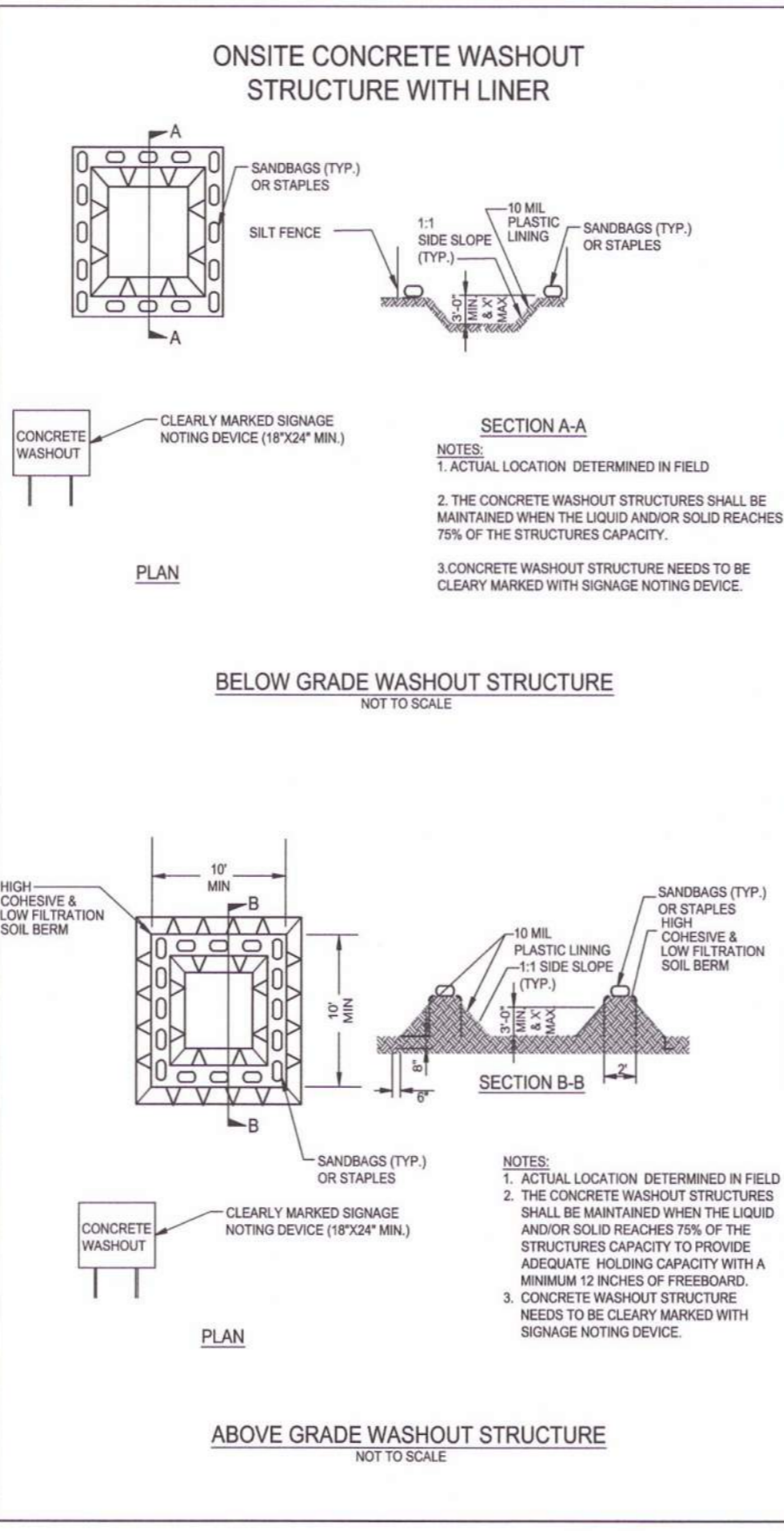
- EQUIPMENT AND VEHICLE MAINTENANCE
1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.

- LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE
1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers...

- PAINT AND OTHER LIQUID WASTE
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets...

- PORTABLE TOILETS
1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available...

- EARTHEN STOCKPILE MANAGEMENT
1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls...



- HERBICIDES, PESTICIDES AND RODENTICIDES
1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers...

- HAZARDOUS AND TOXIC WASTE
1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.

Table for Part III Self-Inspection, Recordkeeping and Reporting. Section A: Self-Inspection. Includes inspection frequency and required documentation for rain gauges, E&S measures, stormwater, and perimeter.

Part II, Section G, Item (4) Draw Down of Sediment Basins for Maintenance or Close Out. Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface...

Table for Part III Self-Inspection, Recordkeeping and Reporting. Section B: Recordkeeping. Includes documentation requirements for E&S plan, grading, ground cover, maintenance, and corrective actions.

Table for Part III Self-Inspection, Recordkeeping and Reporting. Section C: Reporting. Includes occurrence reporting, reporting timeframes, and reporting requirements for various events like sediment deposition and oil spills.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19

BRANSON CREEK WATER MAIN RELOCATION ALONG RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA

FAYETTEVILLE PUBLIC WORKS COMMISSION WATER RESOURCES ENGINEERING P.O. Box 1088, Fayetteville, NC 28302

MCKIM & CREED logo and contact information: 4300 EDWARDS MILL ROAD, SUITE 200, RALEIGH, NORTH CAROLINA 27612



Revision table with columns: DATE, REVISION, BY, DLH. Shows revisions for PERMITS FOR CONSTRUCTION and FINAL DESIGN SUBMITTAL.

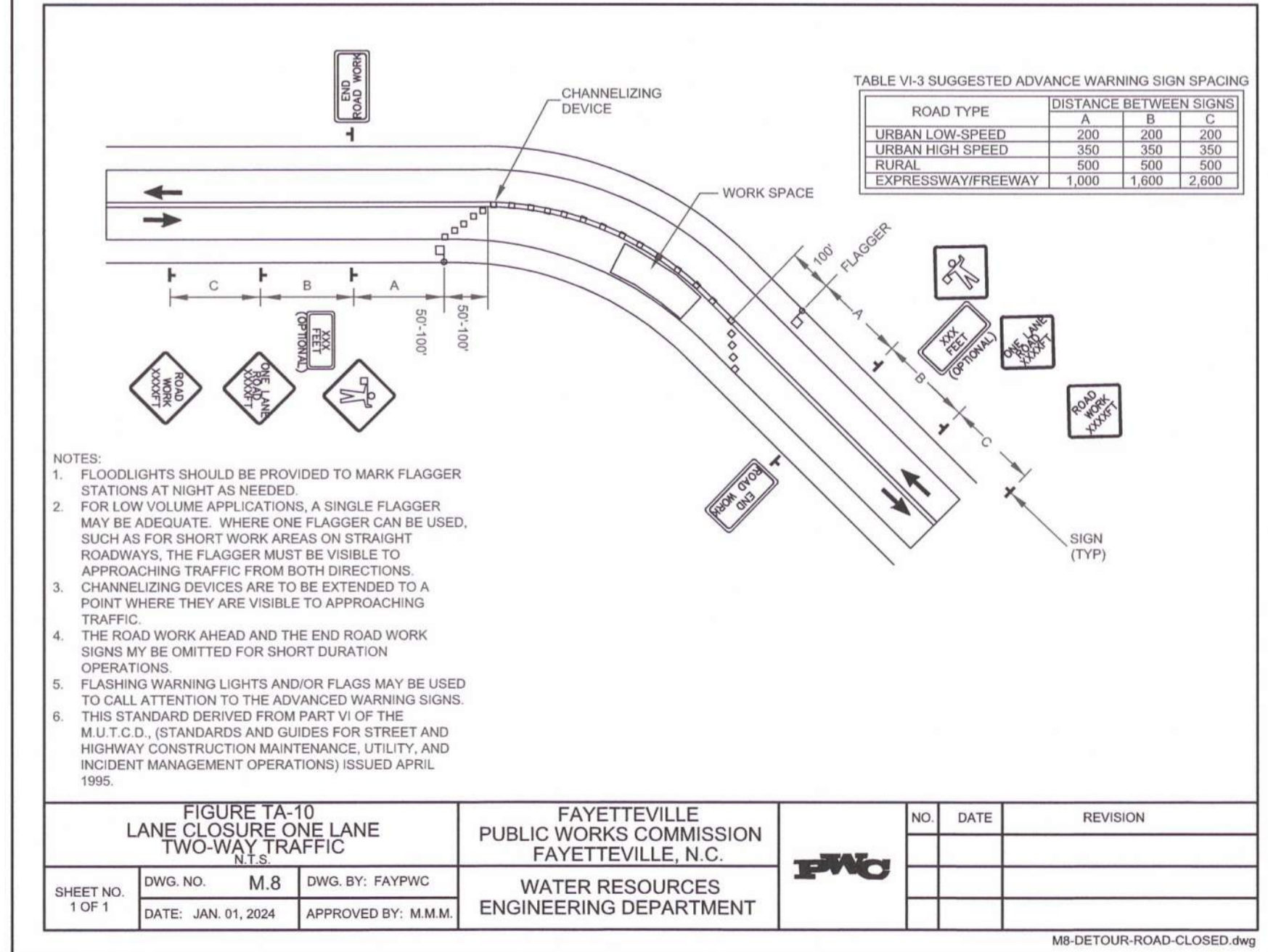
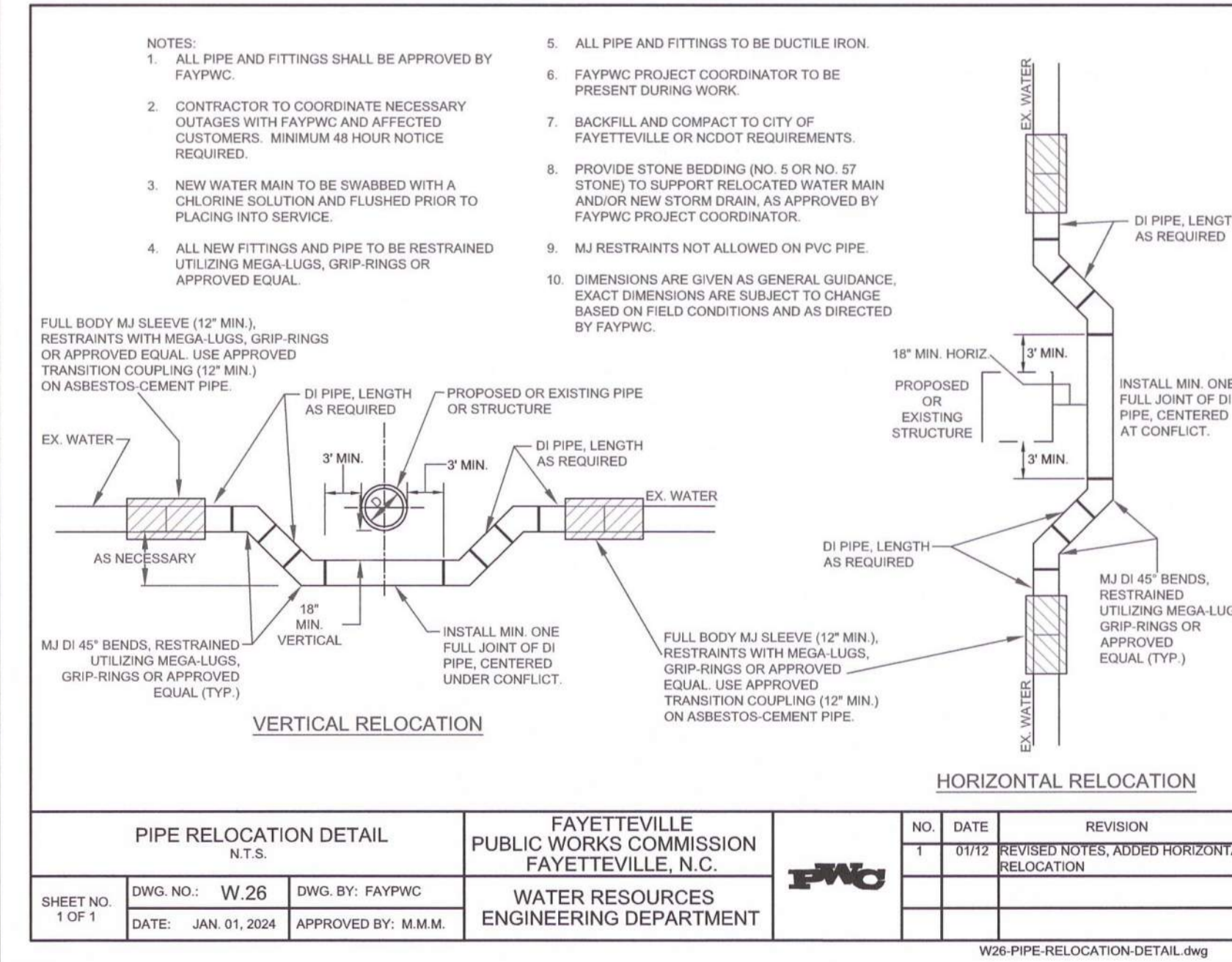
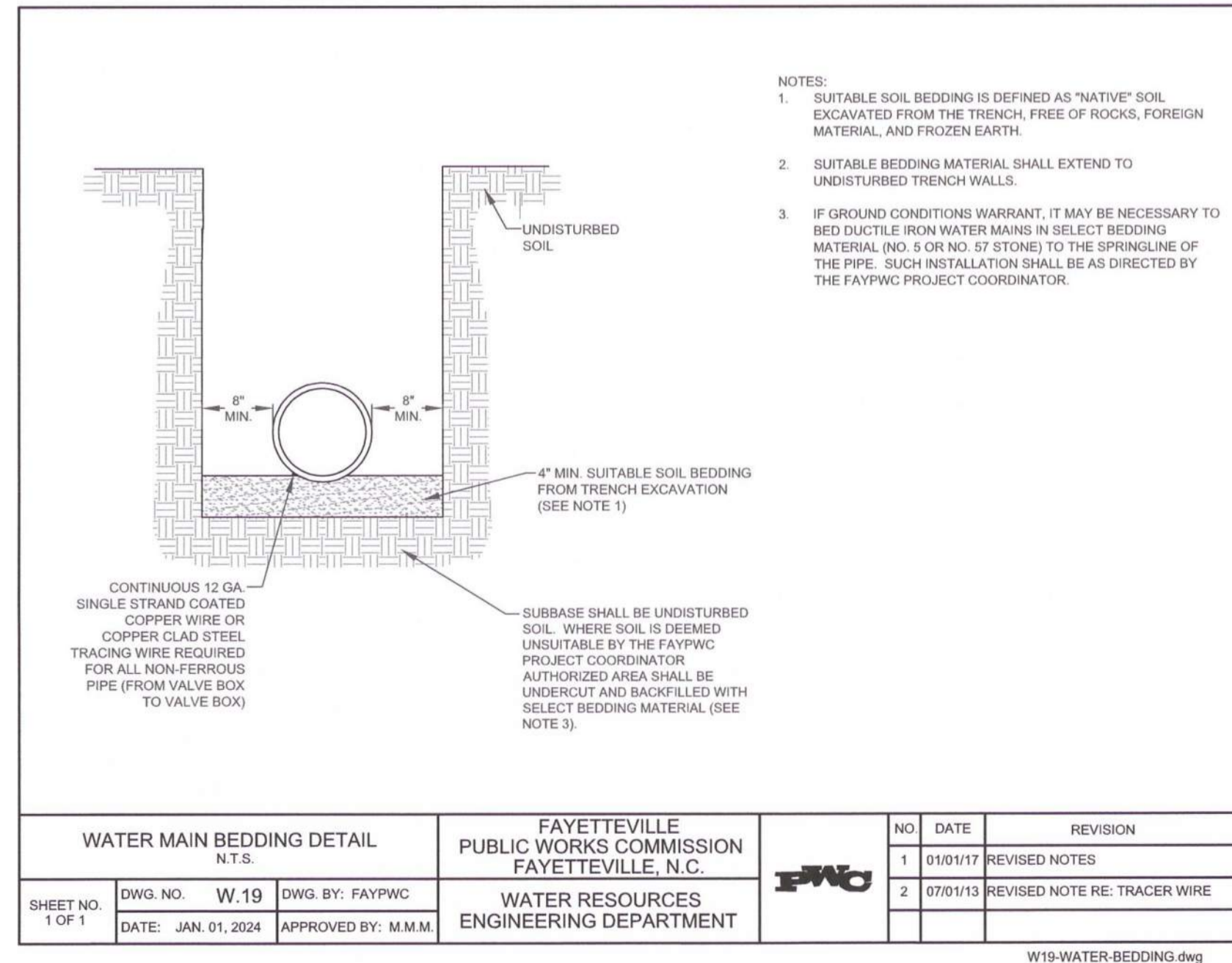
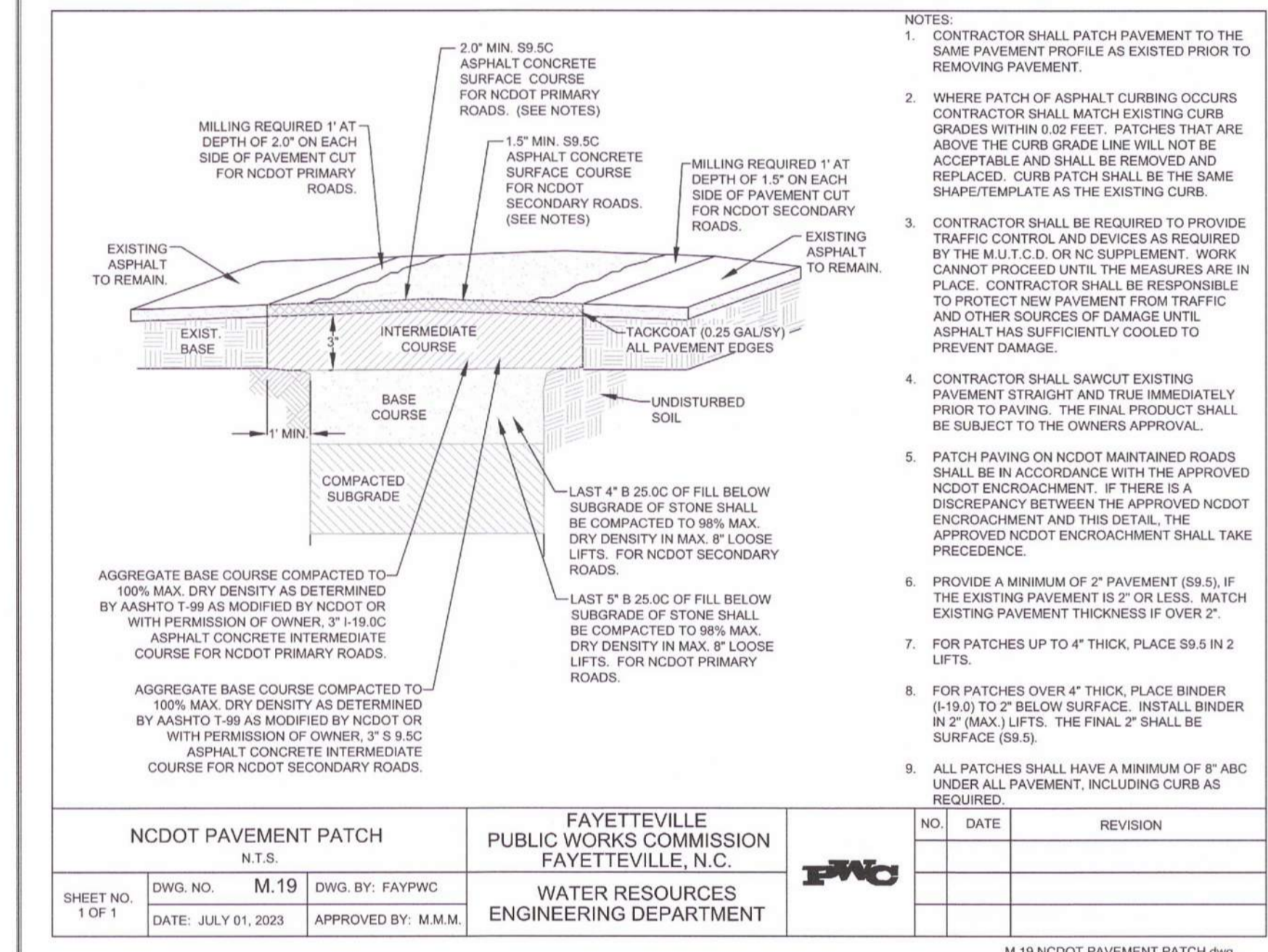
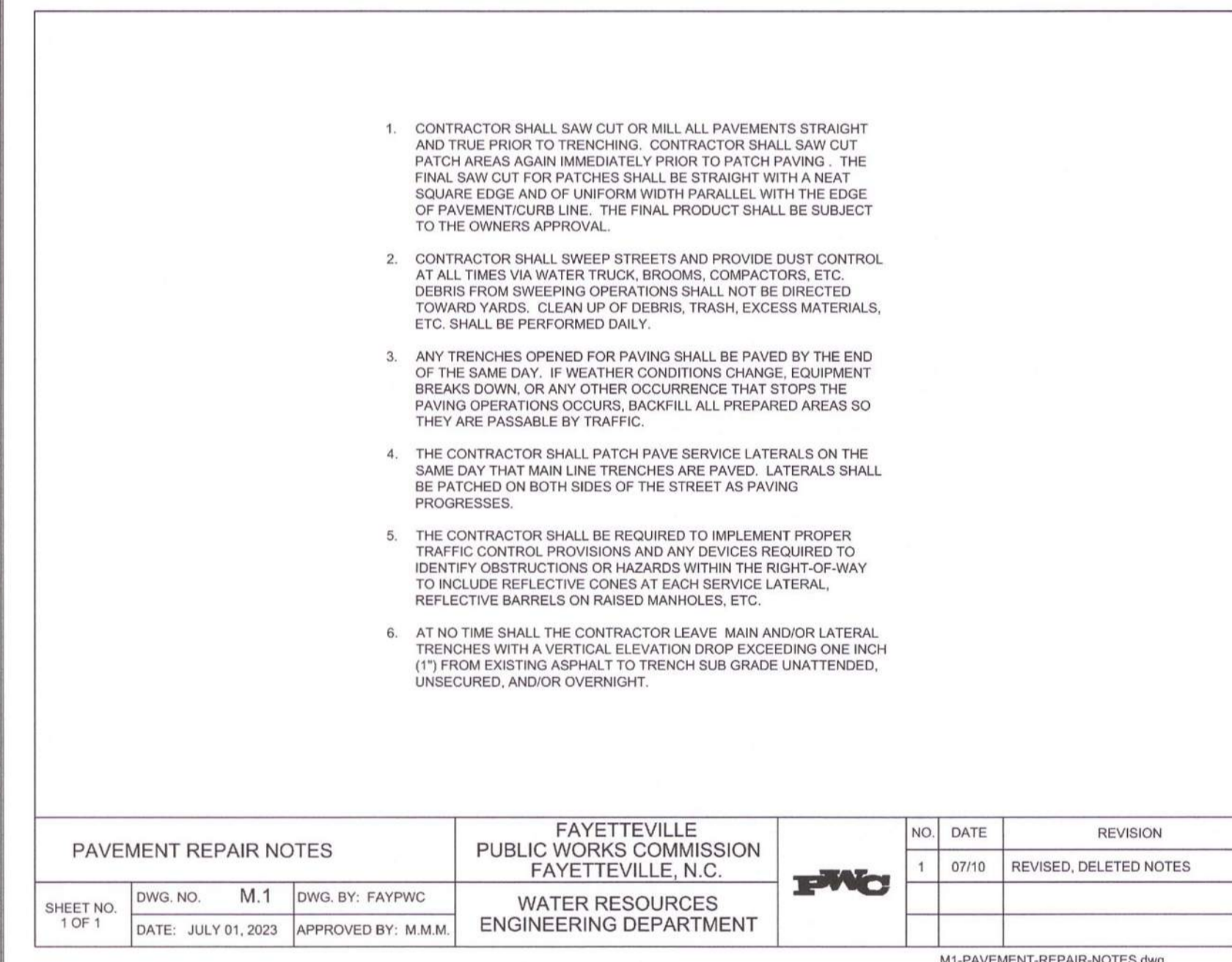
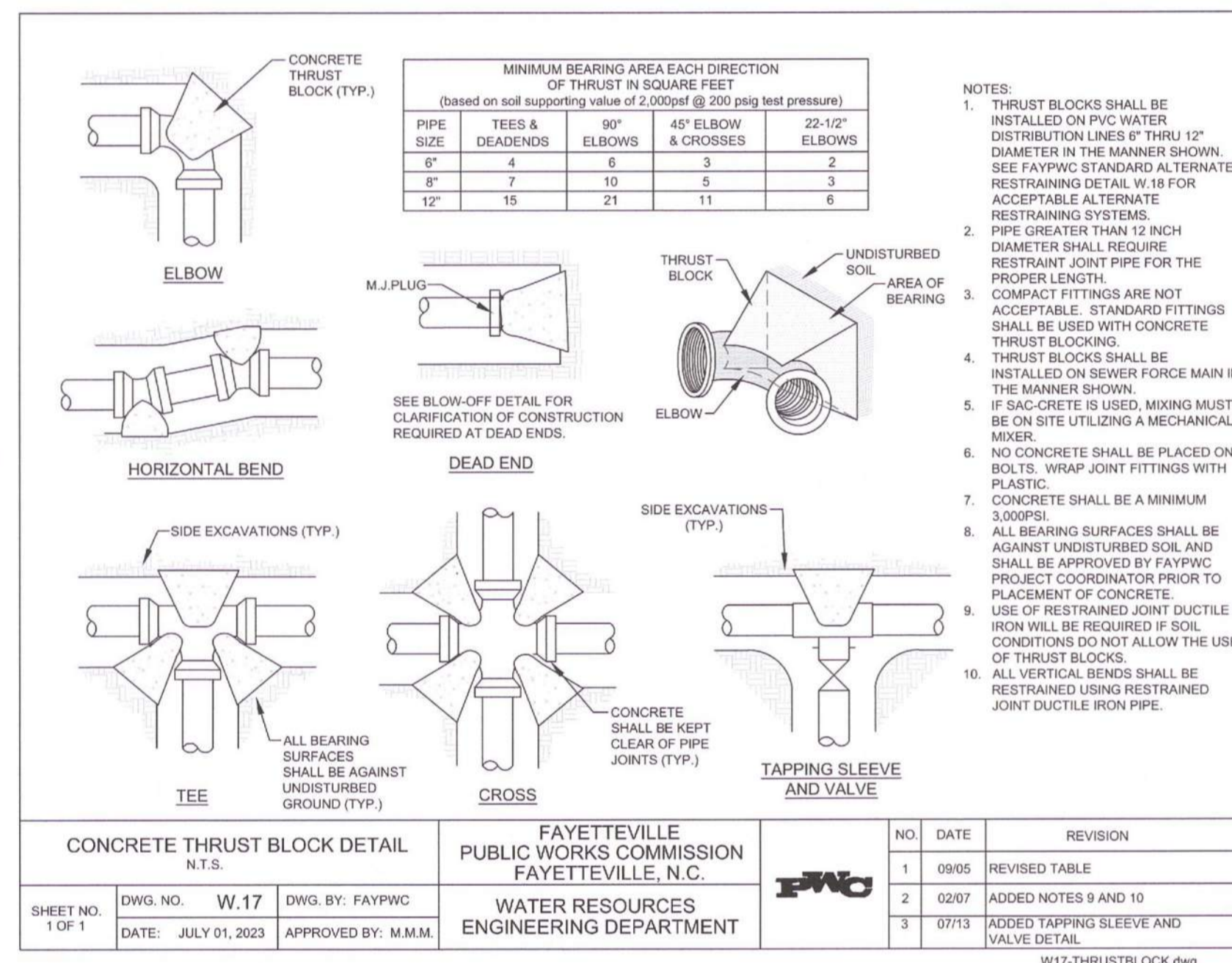
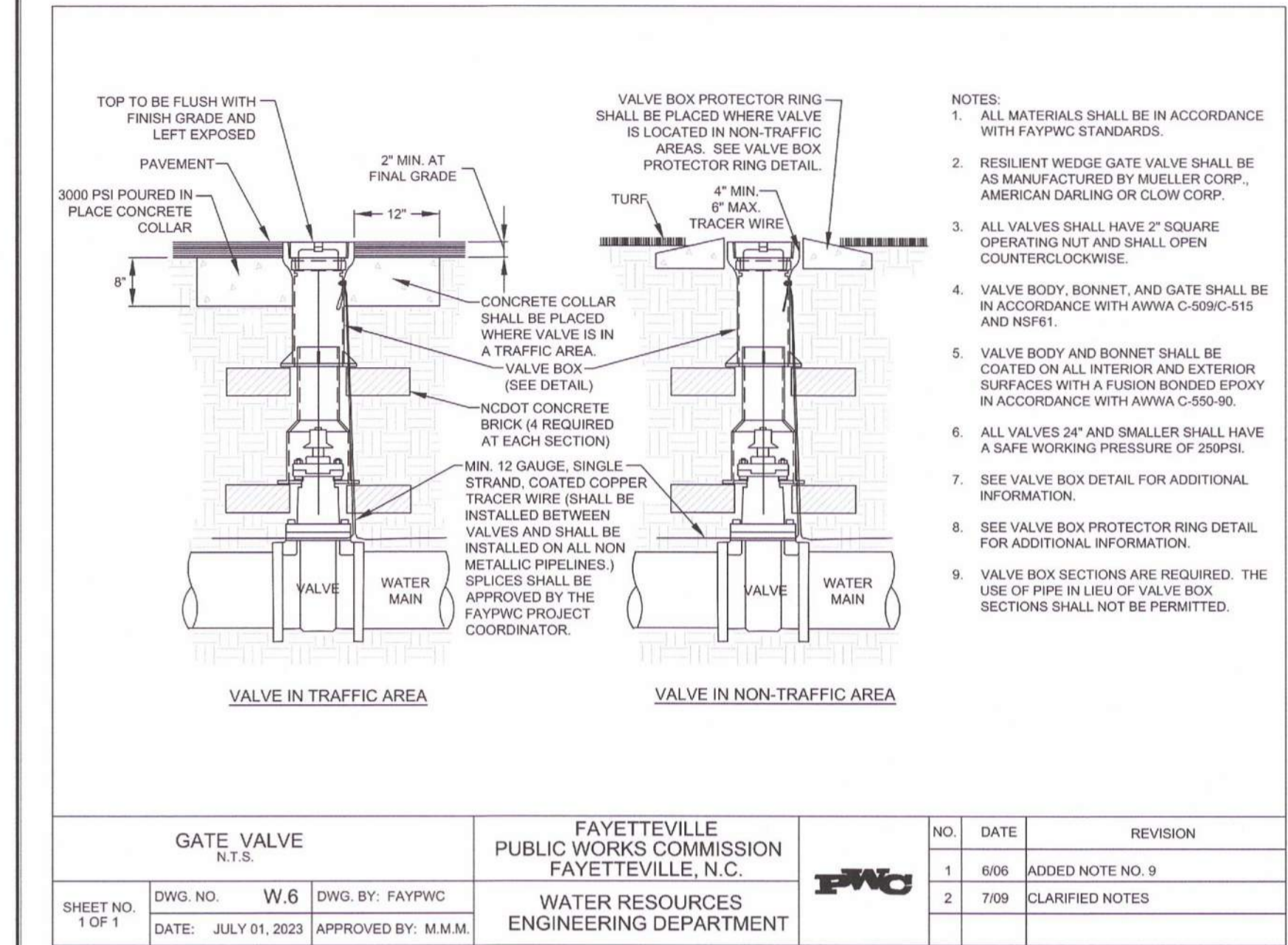
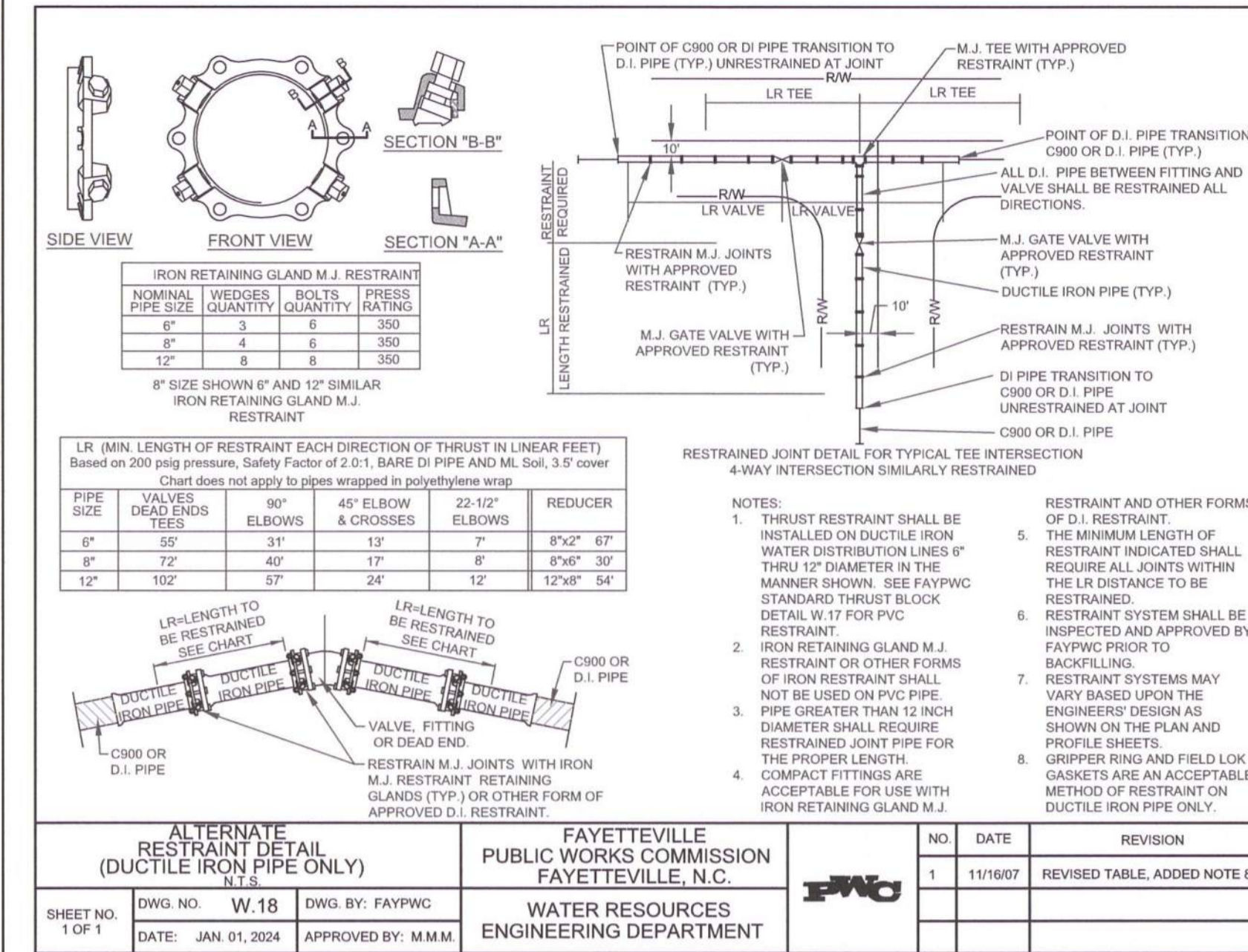
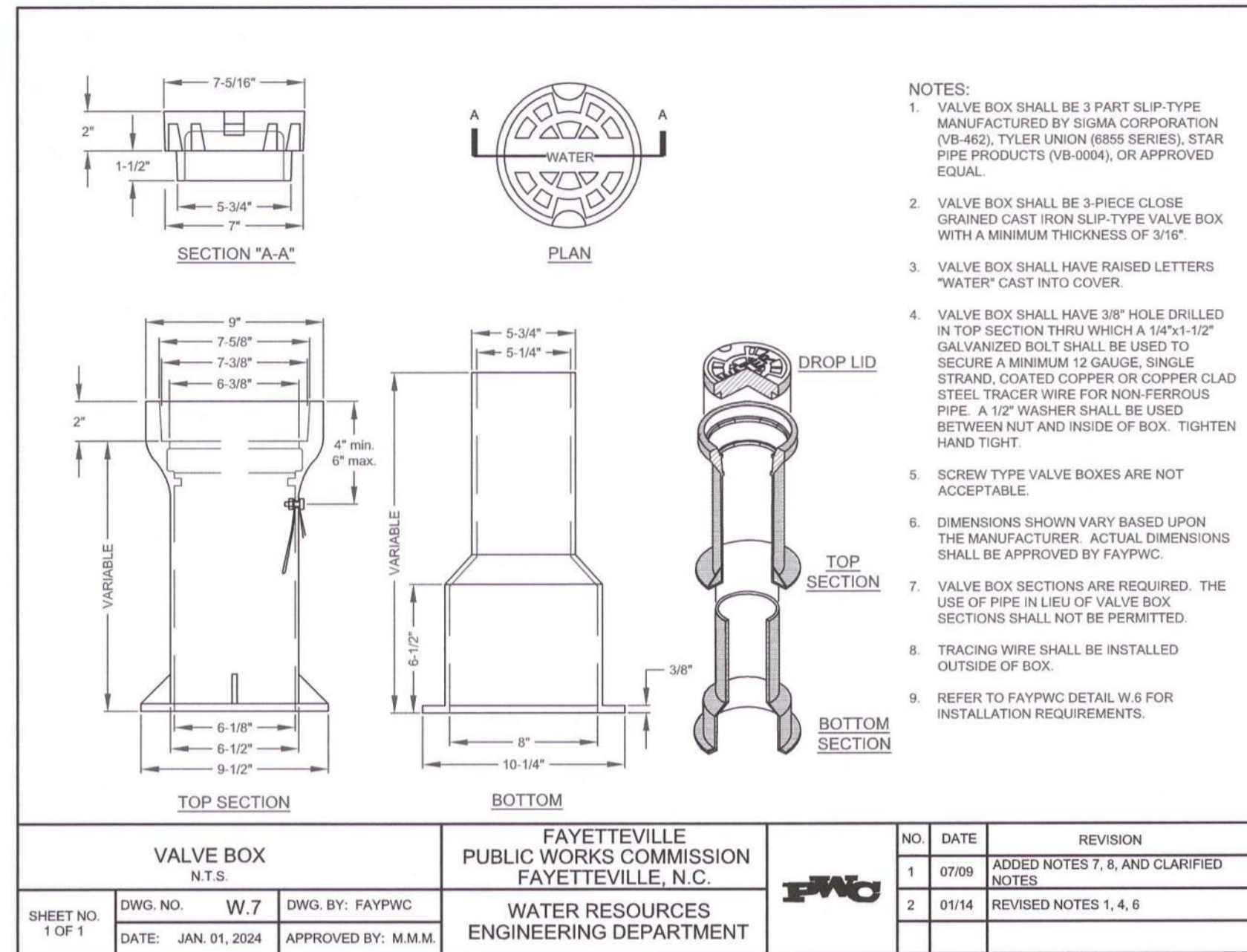
Table with columns: DATE, SURVEY/DESIGN BY, DRAWN BY, CHECKED BY, SCALE. Shows project details for OCT 2023.



EROSION AND SEDIMENT CONTROL DETAILS FINAL DESIGN - ISSUED FOR BID

FWC logo and contact information: P.O. Box 1088, Fayetteville, NC 28302, 985 Old Wilmington Road, Fayetteville, NC 28401

PWC DWG # DW-15820



BY	DATE	DESCRIPTION
DLH	11/15/2023	DESIGN
DLH	01/01/2024	REVISION

DATE	OCT 2023	REVISION
1	606	ADDED NOTE NO. 9
2	709	CLARIFIED NOTES

DATE	OCT 2023	REVISION
1	606	ADDED NOTE NO. 9
2	709	CLARIFIED NOTES

DATE: OCT 2023

SURVEY/GPS BY: NCDOT

DESIGN BY: LMB

CHECKED BY: DLH

SCALE: HOR: N/A

VERT: N/A

BRANSON CREEK WATER MAIN RELOCATION ALONG RAEFORD ROAD FAYETTEVILLE, NORTH CAROLINA

DETAILS - DESIGN - ISSUED FOR BID

6 OF 6

FAYETTEVILLE PUBLIC WORKS COMMISSION WATER RESOURCES ENGINEERING

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910-233-5891

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