

ROCKDALE WATER RESOURCES

GA. HWY. 138

8 INCH GRAVITY SEWER MAIN EXTENSION

BETWEEN HI ROC & WHITE ROAD

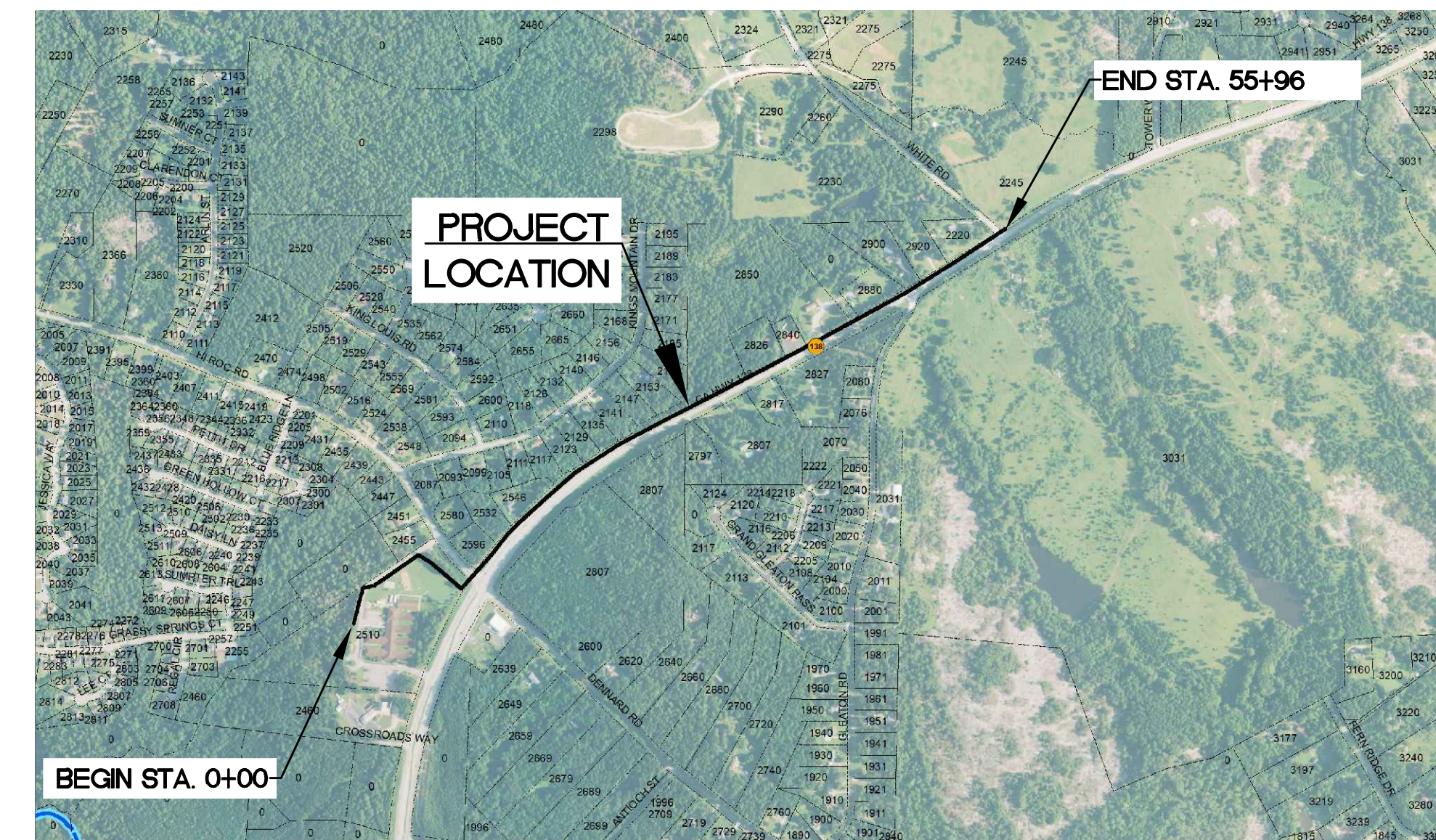


VICINITY MAP
NTS

OWNER/DEVELOPER: ROCKDALE WATER RESOURCES
958 MILSTEAD AVE. CONYERS,
GA. 30012 (770) 278-7432

DESIGN ENGINEER: ROCKDALE WATER RESOURCES
1329 PORTMAN DRIVE, STE. H
CONYERS, GA. 30012
CONTACT: DAVID CERVONE
(770) 278-7486

SITE ADDRESS: SITE: 2245 WHITE ROAD NE.
CONYERS, GA. 30012



LOCATION MAP
NTS



REVISION		DESCRIPTION	DATE	NO.
1	12/07/2022	ISSUED FOR BID	-/-/-	-

TITLE, VICINITY AND LOCATION

DESIGNED BY: DAVID CERVONE
DRAWN BY: WALT BOBO
CHECKED BY: DAVID CERVONE
DATE: 02/22/2022
FILE NAME: 2245 GA HWY 138 SEWER EXT

SHEET 1 DRAWING No. G-00

DRAWING LIST

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ABBREVIATIONS

BLDG	BUILDING
CL	CENTER LINE
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
PVC	POLYVINYL CHLORIDE
HDPE	HIGH-DENSITY POLYETHYLENE
DR	DRIVE
ELEV	ELEVATION
EX	EXISTING
E/P	EDGE OF PAVEMENT
FT	FEET
FH	FIRE HYDRANT
I.D.	INSIDE DIAMETER
IP	IRON PIN
IPF	IRON PIN FOUND
IPS	IRON PIN SET
LAT	LATITUDE
LONG	LONGITUDE
MIN	MINIMUM
MJ	MECHANICAL JOINT
NTS	NOT TO SCALE
FO	FIBER OPTIC
P/L	PROPERTY LINE
LP	LIGHT POLE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RWR	ROCKDALE WATER RESOURCES
R/W	ROAD RIGHT OF WAY
CB	CATCH BASIN
SWCB	SINGLE WING CATCH BASIN
DWCB	DOUBLE WING CATCH BASIN
JB	JUNCTION BOX
DI	DROP INLET
YI	YARD INLET
HW	HEADWALL
MH	MANHOLE
SSMH	SANITARY SEWER MANHOLE
STA	STATION
INV	INVERT
PROP	PROPOSED

ABBREVIATIONS

MB	MAIL BOX
STMH	STORM WATER MANHOLE
B/C	BACK OF CURB
FES	FLARED END SECTION
CMP	CORRUGATED METAL PIPE
UP	UTILITY/POWER POLE
TSP	TRAFFIC SIGNAL POLE

SEWER LEGEND

	S SEWER-ARV EXISTING
	S SEWER-ARV PROPOSED
	S SEWER-MANHOLE EXISTING
	S SEWER-MANHOLE PROPOSED
	S SEWER-VALVE EXISTING
	S SEWER-VALVE PROPOSED
	S SEWER-LIFT STATION EXISTING
	S SEWER-WET WELL EXISTING
	S SEWER-EXISTING MAIN, SIZE & FLOW
	S SEWER-PROPOSED MAIN

WATER LEGEND

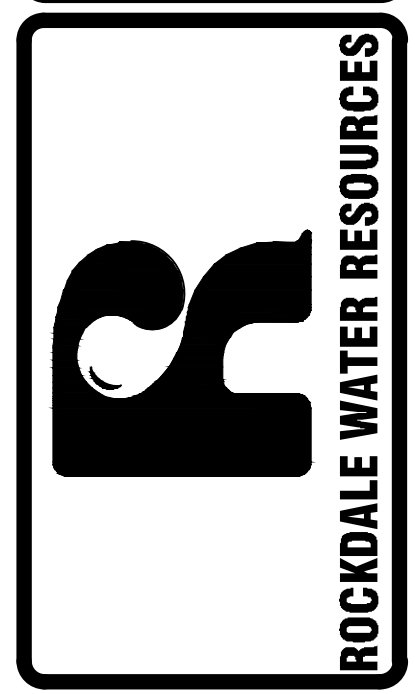
	WATER-HYDRANT EXISTING
	WATER-HYDRANT PROPOSED
	WATER-METER EXISTING
	WATER-METER PROPOSED
	WATER-VALVE EXISTING
	WATER-VALVE PROPOSED
	THRUST BLOCKING
	WATER-EXISTING MAIN & SIZE
	WATER-PROPOSED MAIN & SIZE

GENERAL LEGEND

	UTILITY POLE
	UTILITY/POWER POLE
	LIGHT POLE
	GUY WIRE
	TRAFFIC SIGNAL POLE
	STREET SIGN
	REVISION CLOUD
	SOIL BORE LOCATION
	MAIL BOX EXISTING
	CONTOURS-EXISTING
	GAS MAIN
	OVERHEAD POWER
	UNDERGROUND POWER
	UNDER GROUND TELEPHONE
	EXISTING PAVEMENT
	CONSTRUCTION LIMITS

STORM LEGEND

	STORM WATER-JUNCTION BOX EXISTING
	STORM WATER-MANHOLE EXISTING
	STORM WATER-SINGLE WING CATCH BASIN EXISTING
	STORM WATER-DOUBLE WING CATCH BASIN EXISTING
	STORM WATER-CIRCULAR WEIR INLET EXISTING
	STORM WATER-RECTANGULAR WEIR INLET EXISTING
	STORM WATER-CIRCULAR GRATED INLET EXISTING
	STORM WATER-RECTANGULAR GRATED INLET EXISTING
	STORM WATER PIPE-EXISTING MAIN



No.	DATE	DESCRIPTION	REVISION	
			No.	DATE

DRAWING LIST, SYMBOLS & ABBREVIATIONS

DESIGNED BY: DAVID CERVONE
 DRAWN BY: WALT BOBO
 CHECKED BY: DAVID CERVONE
 DATE: 04/15/2020
 FILE NAME: 2245 GA HWY 138 SEWER EXT

PIPELINE CONSTRUCTION NOTES:

1. PROVIDE TRAFFIC CONTROL IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
2. OPEN TRENCHES IN EXISTING ASPHALT SHALL BE PLATED OVERNIGHT WITH NON SKID STEEL PLATES.
3. ALL BACKFILL AND UNDISTURBED EARTH SHALL HAVE A MINIMUM DENSITY OF 90% STANDARD PROCTOR. COMPACTION UNDER ROADWAYS TO BE A MINIMUM OF 98% STANDARD PROCTOR DENSITY. TEST IN ACCORDANCE WITH ASTM D698.
4. UNLESS OTHERWISE NOTED, STATION ON PLANS REFERS TO CENTERLINE OF PIPELINE AND IS BASED ON HORIZONTAL DISTANCES.
5. VERIFY DIMENSIONS AND CONDITIONS AT THE SITE BEFORE STARTING WORK. CONFLICTS BETWEEN DETAILS OR DIMENSIONS ON THE DRAWINGS SHALL BE REPORTED PROMPTLY TO THE ENGINEER, WHO WILL DETERMINE THE INTENT OF THE DESIGN.
6. EXISTING UTILITY LOCATIONS ARE APPROXIMATE AND BASED ON RECORD DRAWINGS. POTHOLE AND SURVEY EXISTING UTILITIES THAT WILL BE AFFECTED BY TRENCHING OR EXCAVATIONS PRIOR TO ORDERING ANY MATERIALS. POTHOLES AND SURVEY DATA SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW. POTHOLE DATA SHALL INCLUDE EXISTING UTILITY HORIZONTAL LOCATION, PIPE ELEVATION, PIPE ANGULAR CONFIGURATION, AND MATERIALS OF CONSTRUCTION. IDENTIFY POTENTIAL CONFLICTS WITH THE NEW PIPE LOCATION. PIPE ALIGNMENT ADJUSTMENTS THAT DO NOT INCREASE OVERALL PIPE OR FITTING QUANTITIES SHALL BE MADE AT NO ADDITIONAL COST TO THE RWR.
7. PROTECT ALL EXISTING UTILITIES DURING CONSTRUCTION.
8. FIELD VERIFY THE HORIZONTAL AND VERTICAL LOCATION, DIAMETER, AND ORIENTATION AT ALL CONNECTION POINTS AND COORDINATE WITH RWR PRIOR TO CONSTRUCTION. PROVIDE ALL PIPE MATERIALS AND FITTINGS, AS REQUIRED TO MEET EXISTING FIELD CONDITIONS FOR A COMPLETE INSTALLATION.
9. REPAIR DAMAGE TO LANDSCAPING, PAVING, UTILITIES, CURBS, GUTTERS, IRRIGATION, STRUCTURES, ETC., CAUSED BY THE WORK.
10. PAVEMENT CUTS SHALL BE PERFORMED BY SAW CUTTING OR GRINDING. RE-CUT PAVEMENT PRIOR TO REPAVING WHERE UNDERMINING HAS OCCURRED.
11. REPLACE TRAFFIC STRIPING OR STENCILING THAT IS OBLITERATED BY CONSTRUCTION TO THE SATISFACTION OF RWR.
12. MAINTAIN 36" MINIMUM PIPELINE COVER PER RWR UNLESS OTHERWISE SHOWN ON THE PLANS OR UNLESS REDUCED DEPTH IS SPECIFICALLY APPROVED BY THE ENGINEER.
13. MAINTAIN A 10'-0" HORIZONTAL DISTANCE BETWEEN WATERLINE AND SANITARY SEWER PIPE LINES. MAINTAIN AN 18" VERTICAL SEPARATION BETWEEN WATERLINE AND SANITARY SEWER PIPE.
14. SHOULD ANY PAVEMENT BE DAMAGED AS A RESULT OF THE PROPOSED WORK, IT SHALL BE REPAIRED AND RESURFACED BY CONTRACTOR.
15. REMOVAL AND REPLACEMENT OF PAVEMENT SHALL BE IN ACCORDANCE WITH THE SPECIFICATIONS.
16. TRENCHES SHALL BE BACKFILLED IN ACCORDANCE WITH PLANS AND SPECIFICATION SECTION 02200.
17. HORIZONTAL STATIONING ALONG THE PIPELINE ALIGNMENT IS FOR LEVEL LINE MEASUREMENT AND FOR PAYMENT OF THE PIPELINES. FURNISH AND INSTALL THE ACTUAL PIPE LENGTH TO BE DETERMINED BY THE SLOPE OR CURVE ON WHICH THE PIPE IS INSTALLED.
18. ALL TRENCH EXCAVATION SHALL COMPLY WITH THE MOST CURRENT OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS.
19. DELETERIOUS MATERIALS AND EXCAVATED MATERIALS NOT USED IN BACKFILL OR GRADING SHALL BE REMOVED FROM SITE AND LEGALLY DISPOSED OF.
20. CONCRETE TRUCKS SHALL BE CLEANED IN DESIGNATED AREAS WITH WATER PROOF LINING IN COMPLIANCE WITH THE SWPPP AND OTHER PERMITS. ALL WASTE AND MATERIAL SHALL BE REMOVED FROM SITE AND LEGALLY DISPOSED OF.
21. ALL PIPES SHALL HAVE A CONSTANT SLOPE BETWEEN INVERT ELEVATIONS UNLESS A FITTING IS SHOWN.
22. ANY FENCES, MAILBOXES, OR OTHER PERMANENT STRUCTURES IN THE PATH OF THE PROPOSED SEWER LINE SHALL BE (IF NECESSARY) TEMPORARILY REMOVED PRIOR TO INSTALLATION AND REPLACED IN THE ORIGINAL LOCATION BEFORE GRASSING AND SEEDING. THESE TEMPORARILY REMOVED LINES MUST NOT REMAIN OUT OF SERVICE FOR MORE THAN 12 HOURS. MAILBOXES SHALL BE REPLACED, IF NECESSARY, AT NO ADDITIONAL COST TO THE OWNER.
23. CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL WORK, INCLUDING SPOIL PILES, BE PERFORMED WITHIN THE RIGHT-OF-WAY. IN AREAS WHERE THIS CAN NOT BE ACCOMPLISHED, OR WHERE THE SEWER LINE CROSSES PRIVATE PROPERTY, EASEMENT SHOULD BE OBTAINED.
24. SPOIL PILES ARE NOT TO BE PLACED ON THE PAVEMENT.
25. ALL DISTURBED DRAINAGE DITCHES AND SWALES SHALL BE RECONSTRUCTED TO THEIR ORIGINAL CONDITIONS TO PROVIDE POSITIVE DRAINAGE FOR UPSTREAM RUNOFF THROUGH DISTURBED AREA TO EXISTING DOWNSTREAM ELEMENTS OF THE DRAINAGE SYSTEM.
26. CONTRACTOR WILL COMPLY WITH OSHA STANDARDS.
27. ALL COSTS FOR INSTALLATION AND MAINTENANCE OF ALL SEDIMENT AND EROSION CONTROL PRACTICES ARE TO BE INCLUDED IN THE BID PACKAGE.
28. ANY ROCKDALE COUNTY INFRASTRUCTURE OR PROPERTY DAMAGED DURING, OR AS RESULT OF, CONSTRUCTION OF THIS PROJECT WILL BE REPAIRED OR REPLACED TO THE SATISFACTION OF ROCKDALE COUNTY. [THIS INCLUDES, FOR EXAMPLE (BUT NOT LIMITED TO) PAVING, CURB, CURB/GUTTER, SHOULDERS, DITCHES, STORM DRAINAGE PIPES OR STRUCTURES; SIGNS; WATER DISTRIBUTION LINES OR APPURTENANCES, WATER TREATMENT FACILITIES, FIRE HYDRANTS, VALVES, METERS; WASTEWATER (SANITARY SEWER), COLLECTION LINES OR APPURTENANCES, MANHOLES OR OTHER STRUCTURES, FORCE MAINS, PUMP STATIONS OR APPURTENANCES; LANDSCAPING OR PLANT MATERIALS, INCLUDING MULCH, GRASSING, SHRUBBERY, TREES; STRUCTURES OF ANY NATURE, INCLUDING FENCING.]
29. NO WORK WILL BE PERFORMED ON PRIVATE PROPERTY UNLESS AN APPROPRIATE EASEMENT HAS BEEN OBTAINED OR THE ROCKDALE COUNTY BOARD OF COMMISSIONERS HAVE APPROVED A WORK ON PRIVATE PROPERTY FORM.

GENERAL CONSTRUCTION NOTES:

1. WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
2. NOTIFY THE RWR REPRESENTATIVE AND ALL OTHER INTERESTED PARTIES AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO THE START OF WORK.
3. OBTAIN REQUIRED PERMITS AND NECESSARY DISTRICT BUSINESS LICENSE(S) PRIOR TO BEGINNING CONSTRUCTION.
4. TRAFFIC CONTROL COSTS SHALL BE INCLUDED IN THE BID. PROCEDURES SHALL CONFORM TO THE ROCKDALE COUNTY AND GEORGIA DEPARTMENT OF TRANSPORTATION, IF REQUIRED AND IN ACCORDANCE WITH ALL APPLICABLE PERMITS, AND WITH THE SPECIFICATIONS. A TRAFFIC CONTROL PLAN SHALL BE SUBMITTED BY CONTRACTOR FOR REVIEW.
5. CONSTRUCTION ACTIVITY SHALL BE LIMITED TO THE HOURS REFERENCED IN THE SPECIFICATIONS AND PERMITS.
6. CONTRACTOR SHALL BE RESPONSIBLE, DURING THE CONSTRUCTION PROCESS, FOR THE LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO REPAIR ANY DAMAGE CAUSED BY THE CONTRACTOR'S (OR SUBCONTRACTOR'S) EFFORTS DURING THE CONSTRUCTION OF THIS PROJECT.
7. ALL PRIVATE AND PUBLIC PROPERTY, WHICH IS OFF-SITE OR IN EASEMENTS ON-SITE, THAT IS AFFECTED BY THIS WORK, SHALL BE RESTORED BY THE CONTRACTOR TO A CONDITION EQUAL TO OR BETTER THAN EXISTED BEFORE COMMENCING CONSTRUCTION. COST TO BE INCIDENTAL TO OTHER CONSTRUCTION AND NO EXTRA COMPENSATION TO BE ALLOWED, UNLESS SPECIFICALLY EXEMPTED BY THE PLANS.
8. DURING CONSTRUCTION, INCLUDING SUSPENSION OF WORK, UNTIL FINAL ACCEPTANCE OF THE PROJECT, OBSERVE, FOLLOW AND IMPLEMENT THE REQUIREMENTS OF THE NPDES AND STORMWATER POLLUTION PREVENTION PROGRAM AND KEEP THE WORK SITE CLEAN FROM RUBBISH AND DEBRIS. ALSO ABATE DUST NUISANCE BY CLEANING, SWEEPING AND SPRINKLING WITH WATER AND USING DUST FENCES OR THEIR METHODS AS DIRECTED BY THE RWR'S REPRESENTATIVE THROUGHOUT THE CONSTRUCTION OPERATION.
9. KEEP A STRICT RECORD OF ALL CHANGES AND SUBMIT THIS RECORD TO THE RWR. ALSO COORDINATE TRANSFERRING "AS-BUILT" INFORMATION ON THE CONTRACT DRAWINGS AND DELIVER THE CERTIFIED "AS-BUILT" PLANS TO THE DISTRICT BEFORE THE RELEASE FOR FINAL ACCEPTANCE OF THE PROJECT SHALL BE FILED.
10. EXERCISE DUE CARE TO AVOID INJURY TO EXISTING IMPROVEMENTS OR FACILITIES, UTILITY FACILITIES, ADJACENT PROPERTY, AND TREES AND SHRUBBERY THAT ARE NOT TO BE REMOVED. ALL DAMAGE CAUSED TO COUNTY & CITY STREETS, INCLUDING HAUL ROUTES, SIDEWALKS, CURBS OR STREET FURNISHINGS, OR TO PRIVATE PROPERTY SHALL BE REPAIRED AT THE SOLE EXPENSE OF THE CONTRACTOR TO THE SATISFACTION OF THE RWR REPRESENTATIVE.
11. DESIGNATE AND KEEP ON THE PROJECT WHILE WORK IS BEING PERFORMED A COMPETENT SUPERINTENDENT WHO SHALL NOT BE REPLACED WITHOUT A WRITTEN NOTICE TO THE RWR'S REPRESENTATIVE. THE SUPERINTENDENT WILL BE THE CONTRACTOR'S REPRESENTATIVE AT THE SITE AND SHALL HAVE AUTHORITY TO ACT ON BEHALF OF THE CONTRACTOR. COMMUNICATIONS GIVEN TO THE SUPERINTENDENT SHALL BE AS BINDING AS IF GIVEN TO THE CONTRACTOR. DURING PERIODS WHEN THE WORK IS SUSPENDED, MAKE APPROPRIATE ARRANGEMENTS FOR EMERGENCY WORK WHICH WILL BE REQUIRED.
12. WHEN THE WORK ON ANY PORTION OF IT IS SUFFICIENTLY COMPLETE TO BE UTILIZED OR PLACED INTO SERVICE, RWR SHALL HAVE THE RIGHT UPON WRITTEN NOTIFICATION TO THE CONTRACTOR TO UTILIZE SUCH PORTIONS OF THE WORK AND TO PLACE THE OPERABLE PORTIONS INTO SERVICE AND TO OPERATE SAME. UPON SAID NOTICE AND COMMENCEMENT OF UTILIZATION OR OPERATION BY THE RWR, THE CONTRACTOR SHALL BE RELIEVED OF THE DUTY OF MAINTAINING THE PORTIONS SO UTILIZED OR PLACED INTO OPERATION; PROVIDED, HOWEVER, THAT NOTHING IN THIS NOTE SHALL BE CONSTRUED AS RELIEVING THE CONTRACTOR OF THE FULL RESPONSIBILITY FOR COMPLETING THE WORK IN ITS ENTIRETY, FOR MAKING GOOD DEFECTIVE WORK AND MATERIALS, FOR PROTECTING THE WORK FROM DAMAGE, AND FOR BEING RESPONSIBLE FOR DAMAGE.
13. IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR SHALL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK; AND FULLY COMPLY WITH STATE/FEDERAL AND OTHER LAWS, RULES, REGULATIONS, AND ORDER RELATING TO SAFETY OF WORKERS AND ALL OTHERS. THIS INCLUDES THE ISSUANCE OF PERSONAL PROTECTIVE EQUIPMENT.
14. THE WORK AT HIGHTOWER TRAIL ELEMENTARY SHALL BE PERFORMED DURING NON SCHOOL HOURS. THE CONTRACTOR SHALL COORDINATE THIS WORK WITH SCHOOL STAFF AND RWR.

15. UNDERGROUND UTILITIES OR STRUCTURES REPORTED BY RWR OR THOSE SHOWN ON RECORDS EXAMINED ARE INDICATED WITH THEIR APPROXIMATE LOCATION AND EXTENT. TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES OR STRUCTURES FOUND AT THE SITE. NOTIFY RWR OF THE UTILITIES CONCERNED BEFORE STARTING WORK.
16. TYPICAL DETAILS APPLY WHETHER OR NOT THEY ARE SPECIFICALLY REFERENCED ON INDIVIDUAL PLANS, DETAILS OR SECTIONS.
17. VERIFY DIMENSIONS AND CONDITIONS AT THE SITE BEFORE STARTING WORK. ANY CONFLICT BETWEEN DETAILS OR DIMENSIONS ON THE DRAWINGS SHALL BE REPORTED PROMPTLY TO RWR REPRESENTATIVE WHO WILL DETERMINE THE INTENT OF THE DRAWINGS.
18. SUBSURFACE UTILITY DATA ARE DEPICTED TO LEVEL D AS DEFINED IN ASCE 38-02 UNLESS OTHERWISE INDICATED.
19. NO SMOKING IS ALLOWED WITHIN THE JOBSITE OR SITE ACCESS AREAS, A FIRE SPOTTER, FIRE EXTINGUISHER, ADEQUATE WATER SUPPLY AND SHOVELS SHALL BE AVAILABLE AND WITHIN REACH AT ALL TIMES DURING ANY WELDING OR TORCH WORK. THIS JOBSITE IS IN AN EXTREMELY HAZARDOUS FIRE AREA.
20. VIDEO RECORD AND DOCUMENT THE EXISTING CONDITION OF THE PROJECT LIMITS AND SUBMIT THE RECORDING AND DOCUMENT TO THE RWR PRIOR TO THE START OF CONSTRUCTION.
21. MAKE ARRANGEMENTS FOR EQUIPMENT, MATERIAL STORAGE & YARD SECURITY.
22. EQUIPMENT AND MATERIALS SHALL BE STORED IN AREAS DESIGNATED BY THE OWNER'S REPRESENTATIVE. CONSTRUCTION AND STORAGE AREAS SHALL BE KEPT NEAT AND CLEAN AT ALL TIMES.
23. STAGING AREA SHALL BE FOR CONTRACTOR'S EMPLOYEE PARKING, CONTRACTOR'S TRAILERS AND ON-SITE STORAGE OF MATERIALS FOR THIS PROJECT ONLY.
24. PROVIDE TEMPORARY FENCING TO MAINTAIN SECURITY AT ALL TIMES.
25. CONDUCT OPERATIONS TO RESULT IN THE LEAST POSSIBLE OBSTRUCTION INCONVENIENCE TO THE PUBLIC, AND HAVE UNDER CONSTRUCTION NO GREATER LENGTH OR AMOUNT OF WORK THAT CAN BE PERFORMED PROPERLY WITH DUE REGARD TO THE RIGHTS OF THE PUBLIC OR AS STATED IN THE PERMITS. CONVENIENT ACCESS TO DRIVEWAYS, HOUSES AND BUILDINGS ALONG THE WORK SHALL BE MAINTAINED.

TOPOGRAPHIC MAPPING

THE TOPOGRAPHIC/PLANIMETRIC INFORMATION SHOWN HEREON WAS COMPILED FROM DATA COLLECTED FROM ROCKDALE WATER RESOURCES(RWR) GEOGRAPHIC INFORMATION SYSTEM MAP LAYERS, GPS SURVEY BY RWR, SURVEY BY CORPORATE ENVIRONMENTAL RISK MANAGEMENT, LLC (CERM).

GRADING NOTES:

1. ALL FILL MATERIAL SHALL BE COMPACTED IN ACCORDANCE WITH SPECIFICATIONS.
2. PROVIDE PROTECTION AGAINST EROSION AND STORM WATER POLLUTION PER EROSION CONTROL PLANS.
3. EXISTING CONTOURS ARE APPROXIMATE AND BASED ON GROUND CONDITIONS SURVEYED PRIOR TO DESIGN. IF THE GRADES AND ELEVATIONS ARE DIFFERENT THAN THE GRADES AND ELEVATIONS SHOWN IN THE PLAN, THE CONTRACTOR SHALL NOTIFY RWR.
4. THE SLOPE OF EXCAVATIONS SHALL BE SHAPED AND TRIMMED AS DIRECTED BY THE ENGINEER AND LEFT IN A NEAT AND ORDERLY CONDITION. ALL STONES, ROOTS, AND OTHER WASTE MATERIALS EXPOSED ON THE EXCAVATION OR EMBANKMENT SLOPES WHICH ARE UNABLE TO BE LOOSENESED SHALL BE REMOVED AND DISPOSED OF. THE TOE AND TOP OF ALL SLOPES SHALL BE ROUNDED TO BLEND IN WITH THE NATURAL GROUND CONTOURS.

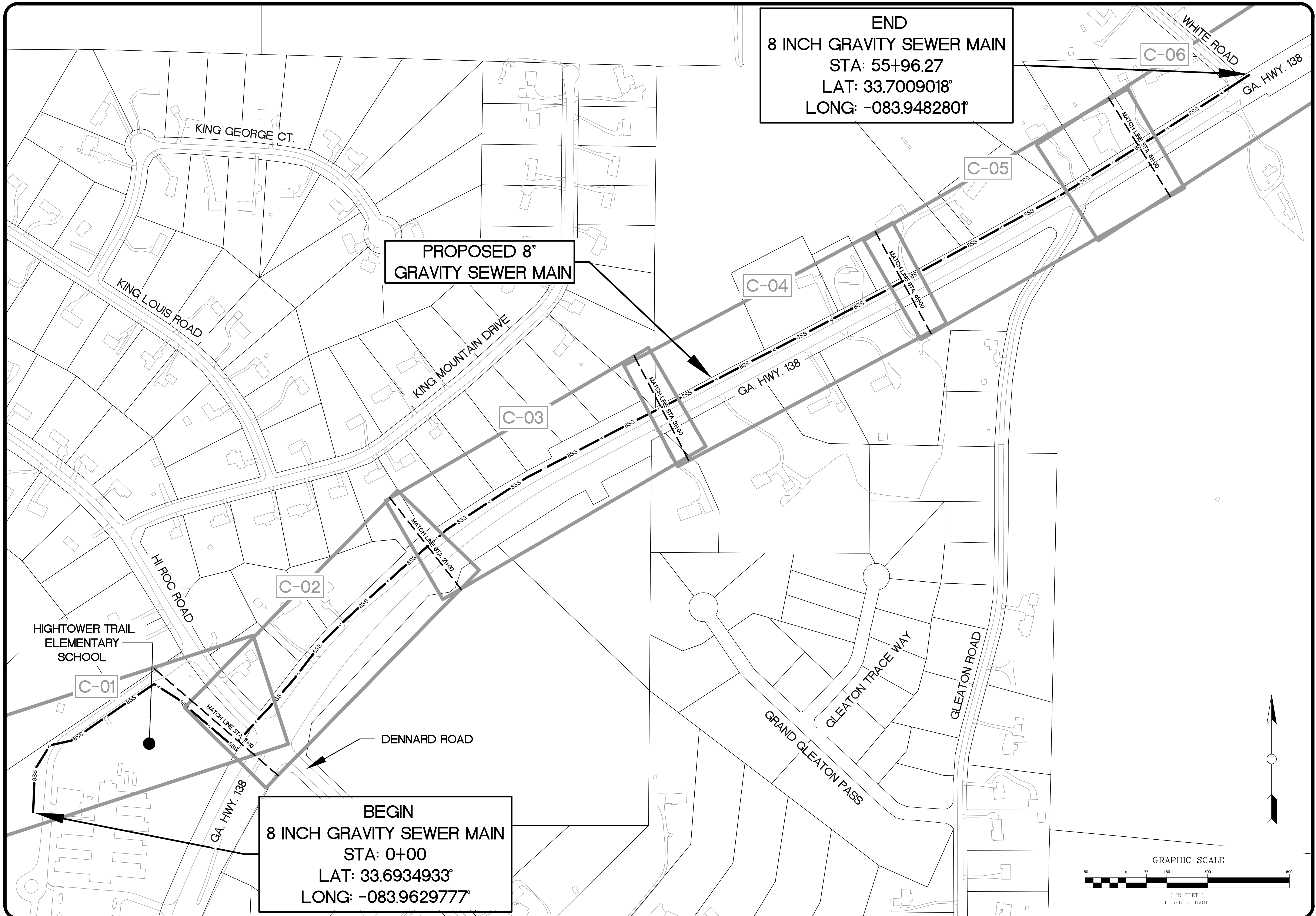


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No.	DATE		

GENERAL NOTES

DESIGNED BY: DAVID CERVONE
 DRAWN BY: WALT BOBO
 CHECKED BY: DAVID CERVONE
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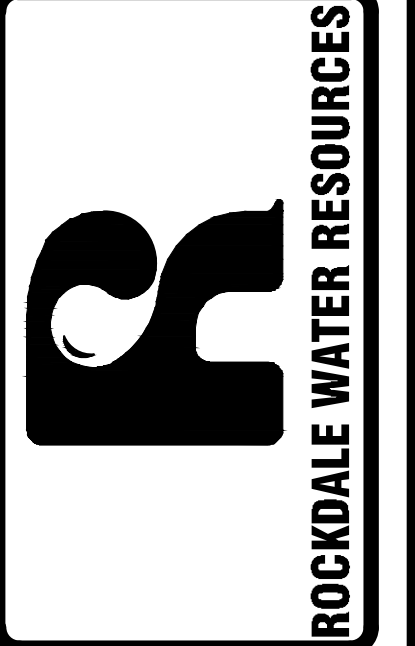
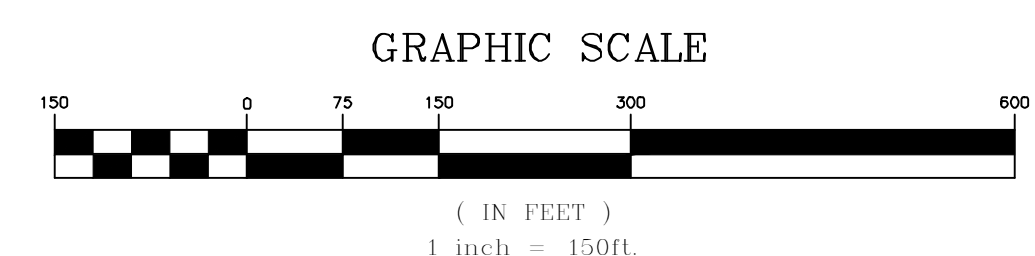
SHEET 3 DRAWING No. G-02



END
 8 INCH GRAVITY SEWER MAIN
 STA: 55+96.27
 LAT: 33.7009018°
 LONG: -083.9482801°

PROPOSED 8"
 GRAVITY SEWER MAIN

BEGIN
 8 INCH GRAVITY SEWER MAIN
 STA: 0+00
 LAT: 33.6934933°
 LONG: -083.9629777°

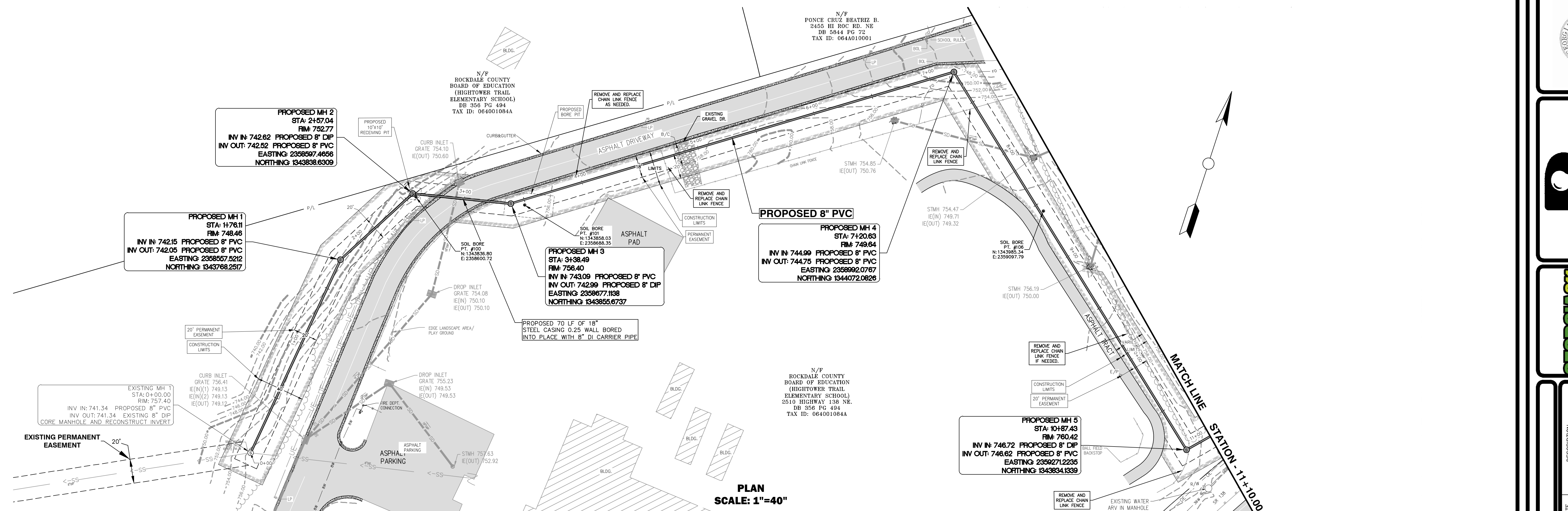


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SITE PLAN

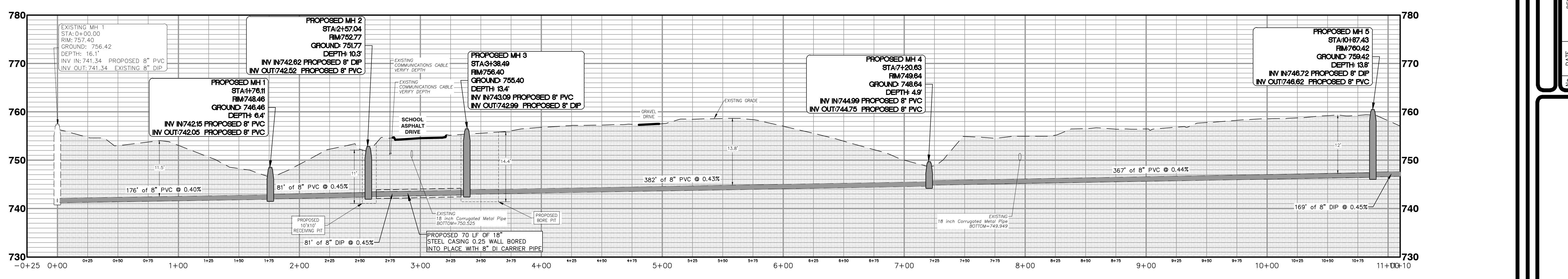
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SHEET 4 DRAWING No. G-03



PLAN
SCALE: 1"=40"

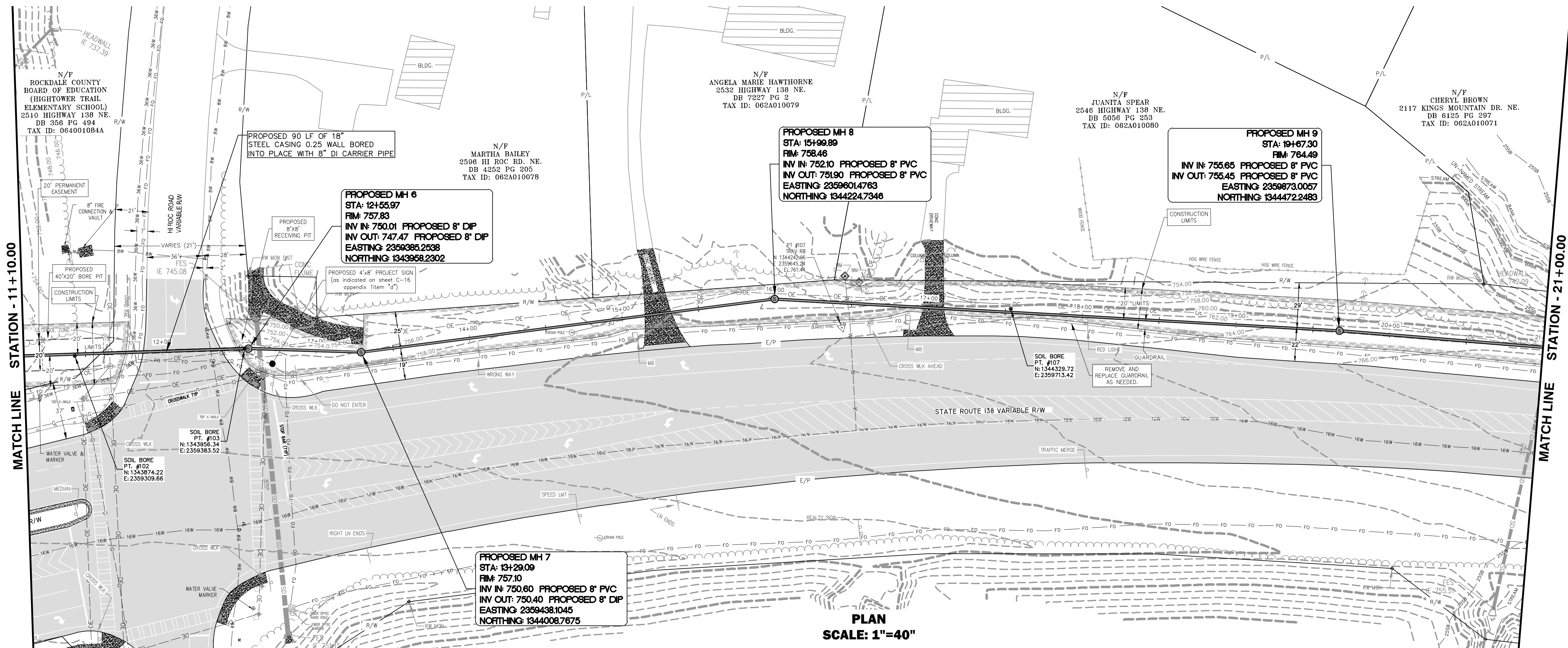
PROFILE
SCALE HORIZONTAL: 1"=40"
SCALE VERTICAL: 1"=10'



REVISION		DATE	DESCRIPTION
No.	DATE	DESCRIPTION	

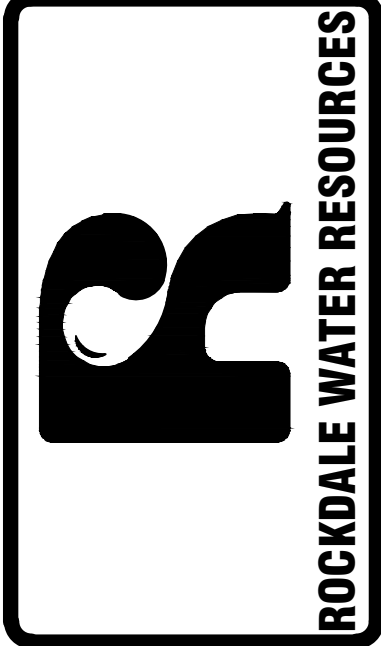
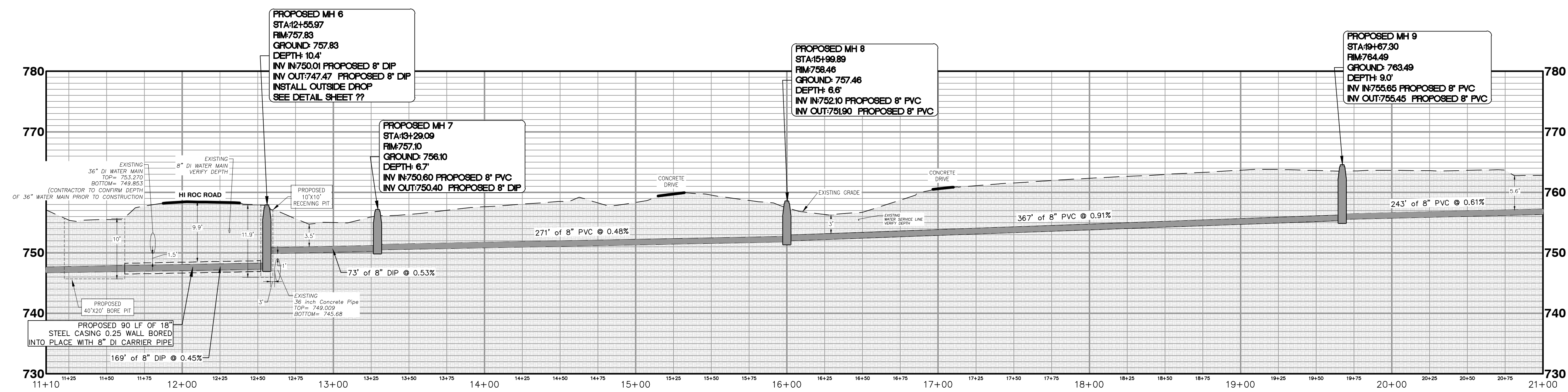
PLAN AND PROFILE

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 DATE: 02/22/2022
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PLAN
SCALE: 1"=40"

PROFILE
SCALE HORIZONTAL: 1"=40"
SCALE VERTICAL: 1"=10'

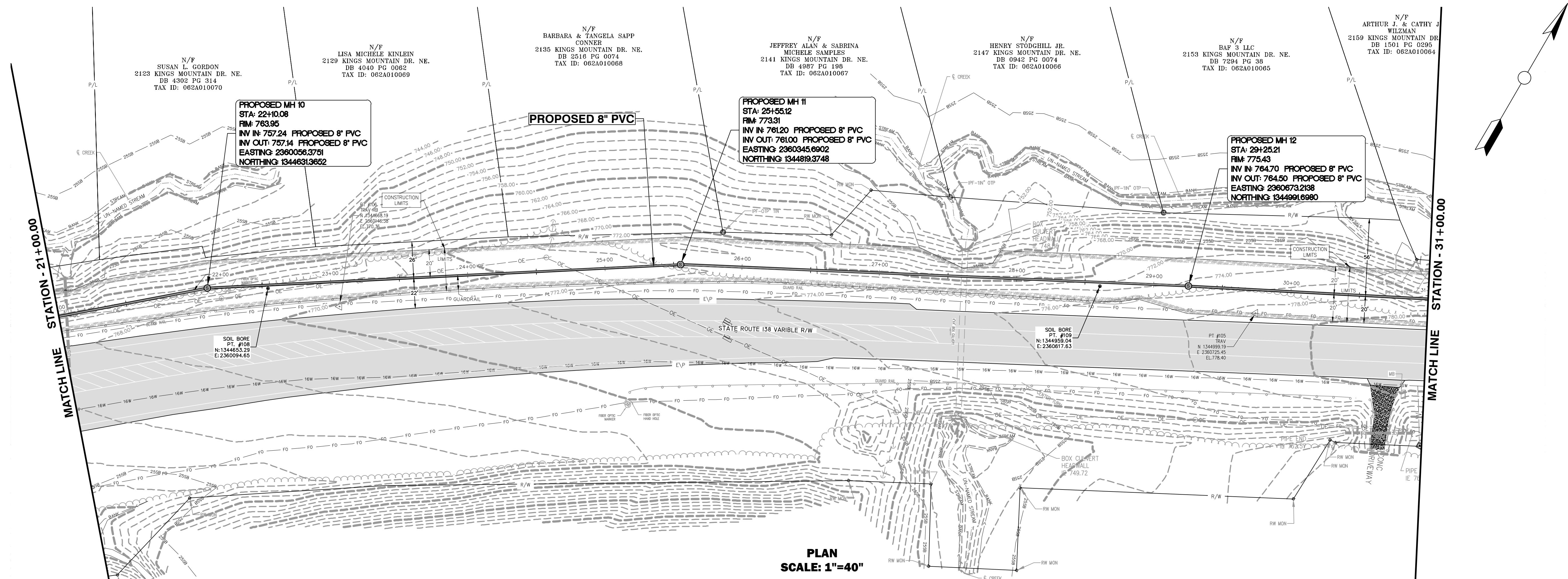


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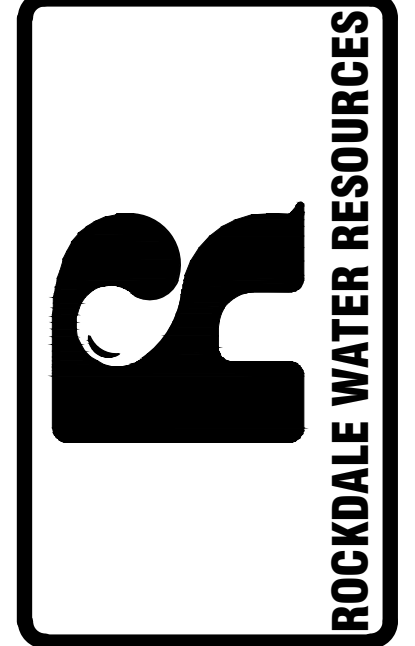
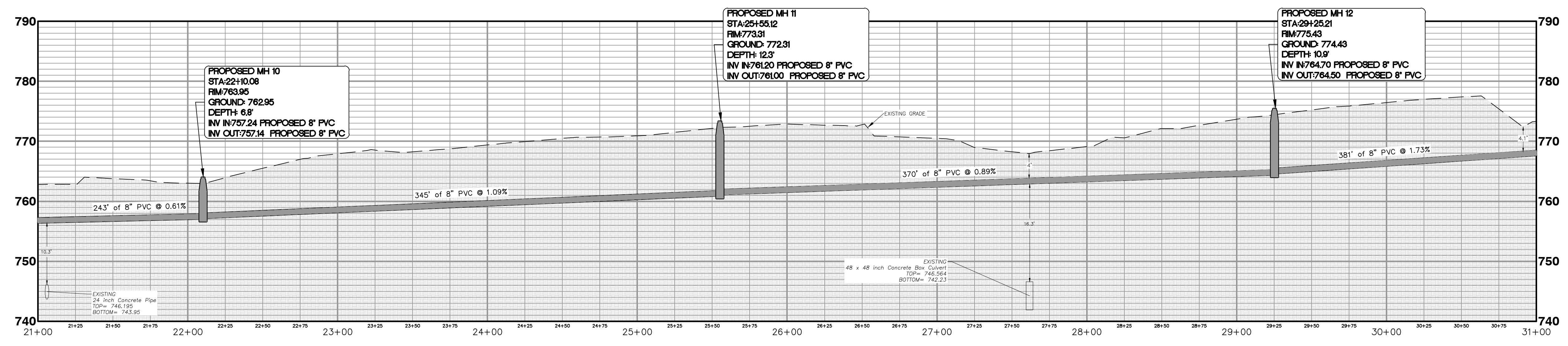
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SHEET 6 DRAWING No. C-02



PLAN
SCALE: 1"=40"

PROFILE
SCALE HORIZONTAL: 1"=40"
SCALE VERTICAL: 1"=10"

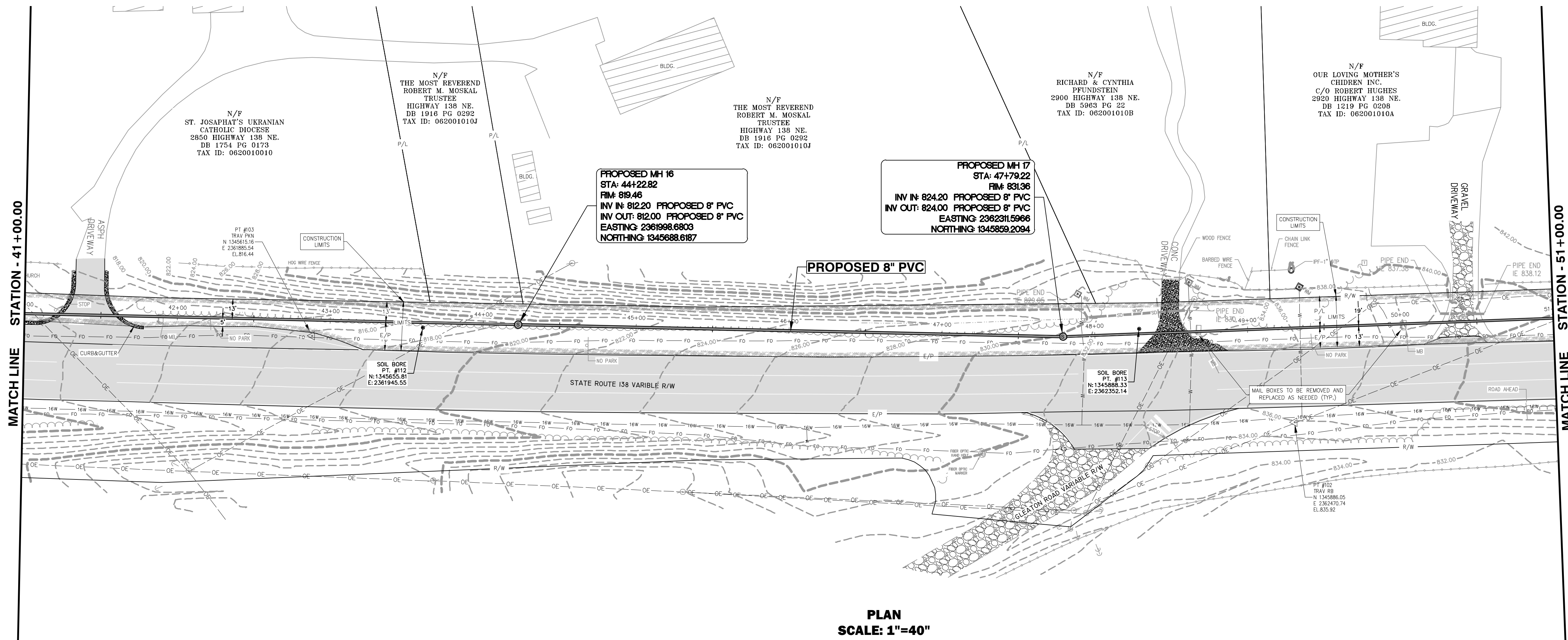


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PLAN AND PROFILE

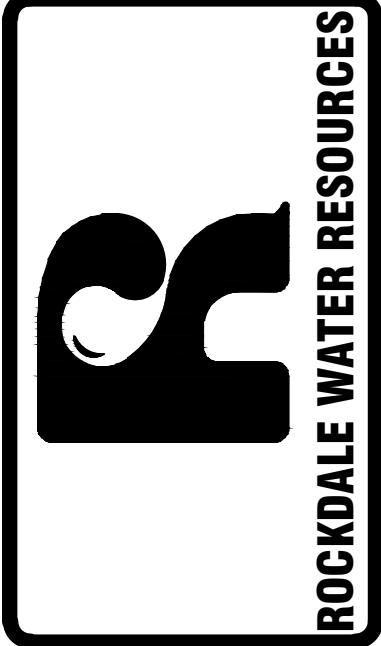
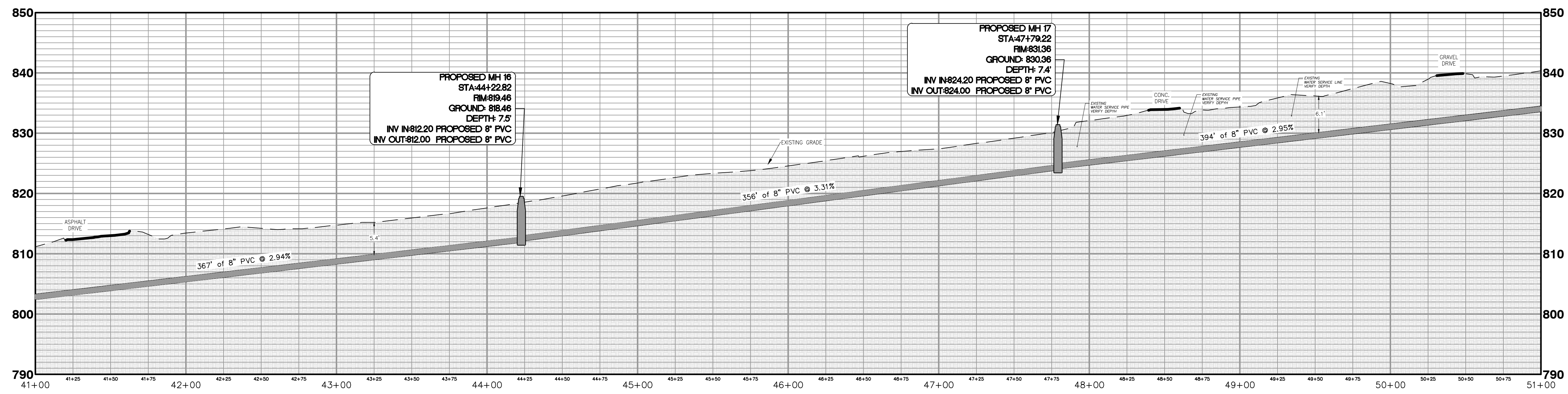
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 FILE NAME: 2245 GA HWY 138 SEWER EXT

SHEET 7 DRAWING No. C-03



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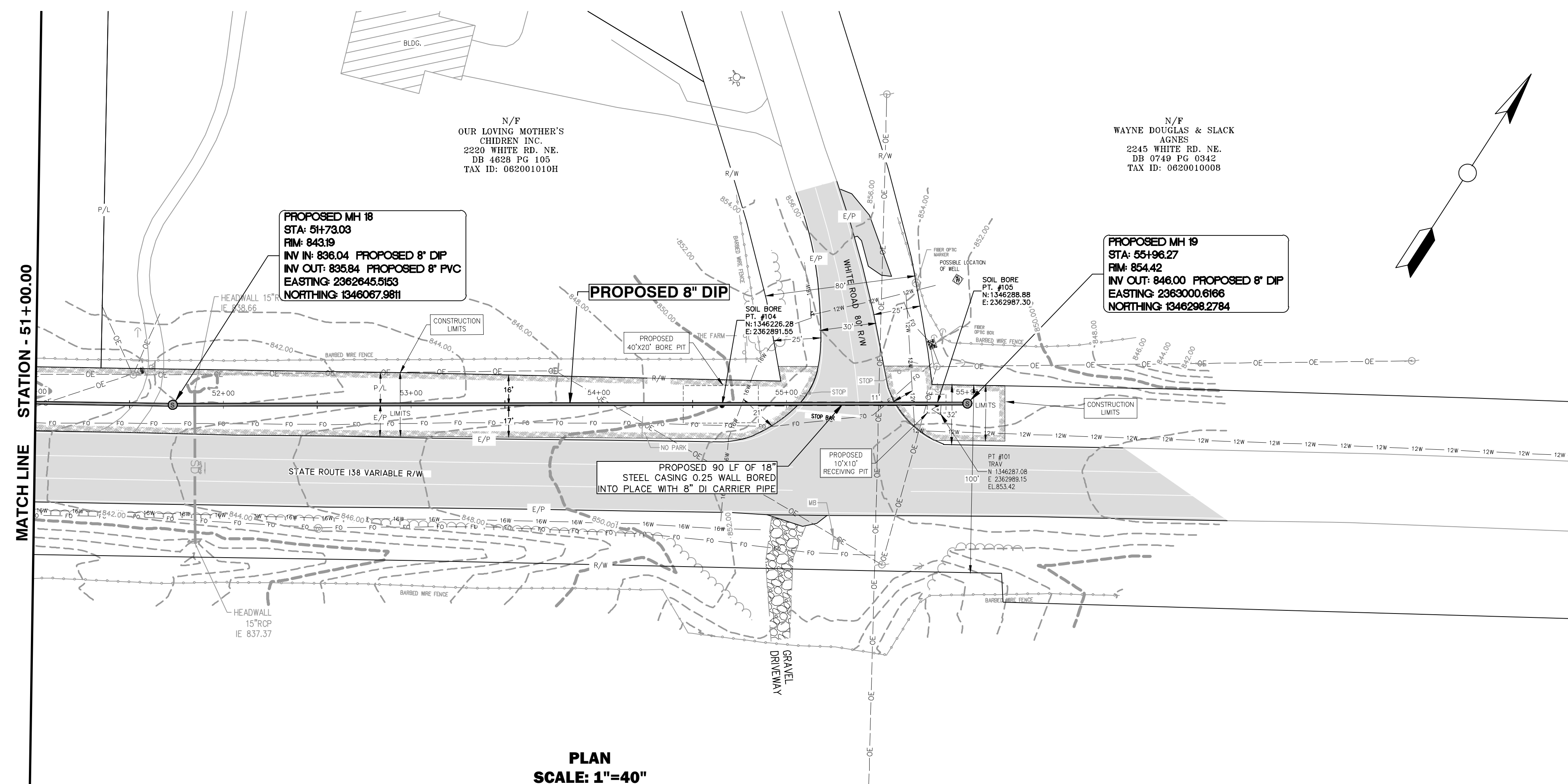


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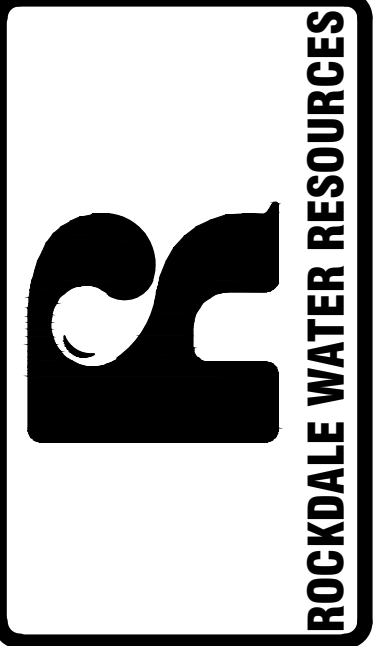
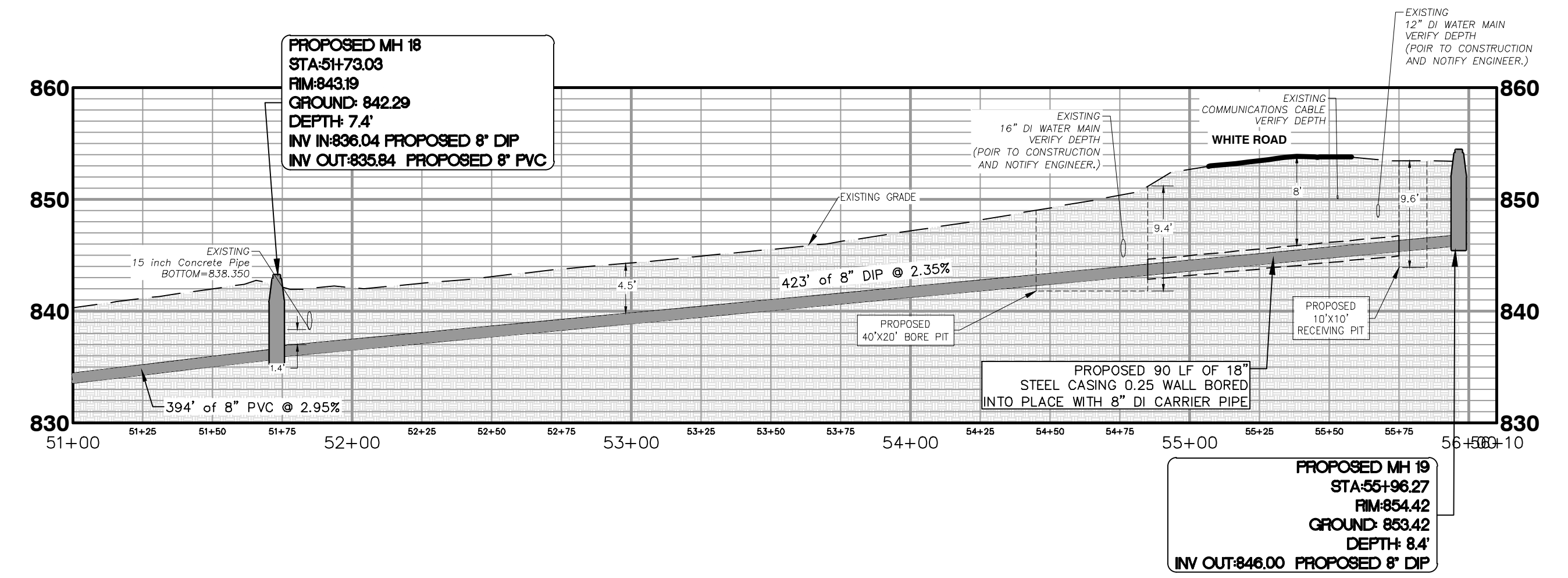
DESIGNED BY: DAVID CERVONE
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SHEET 9 DRAWING No. C-05



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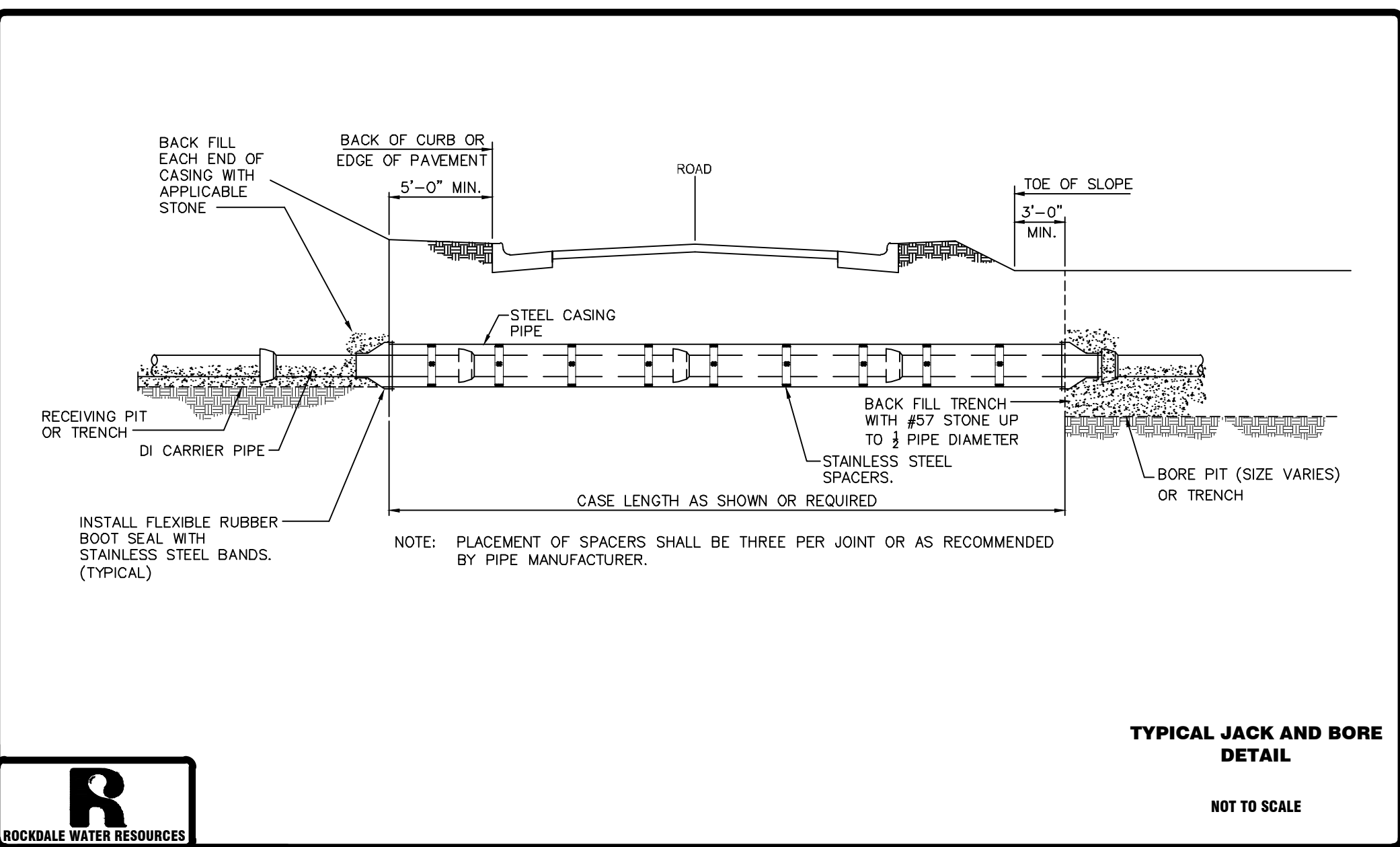
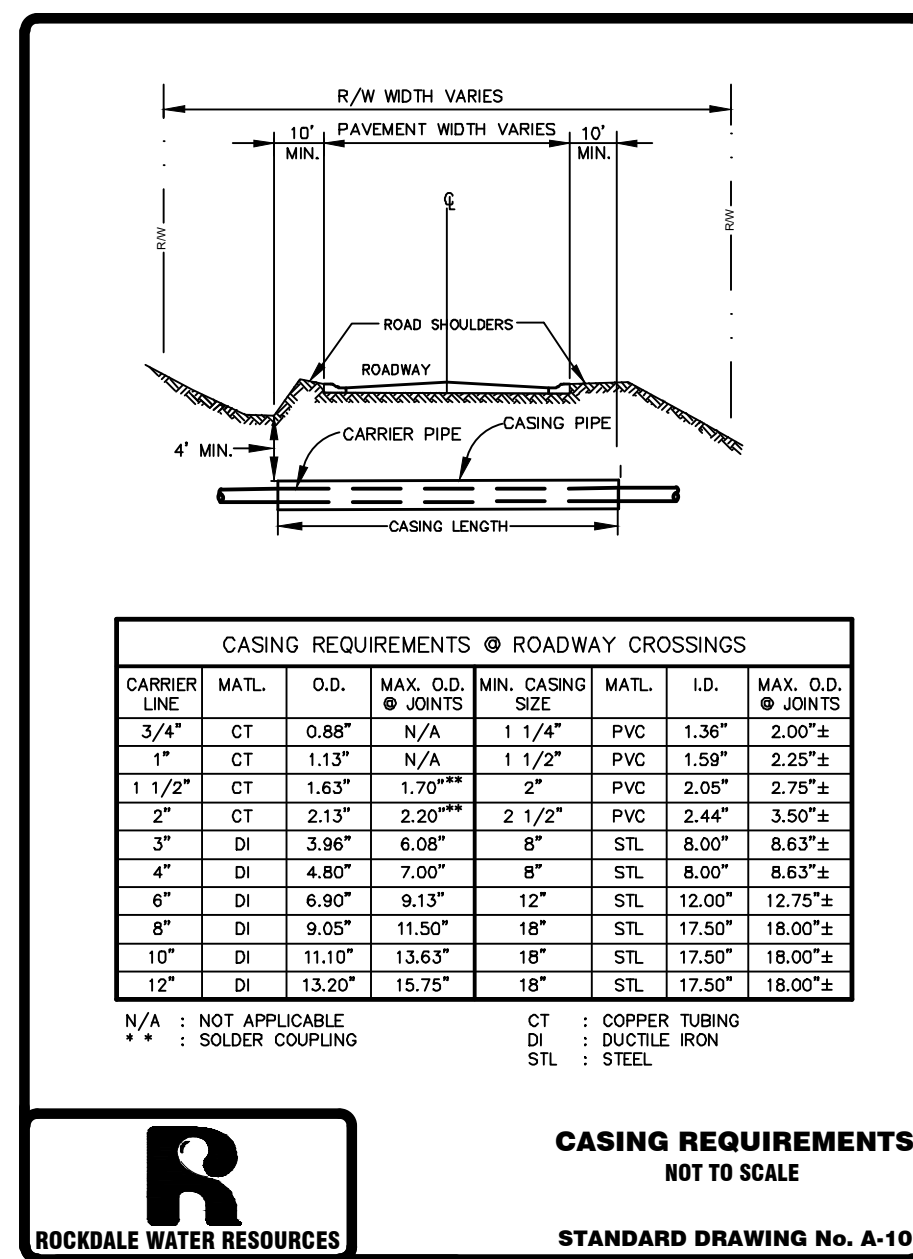
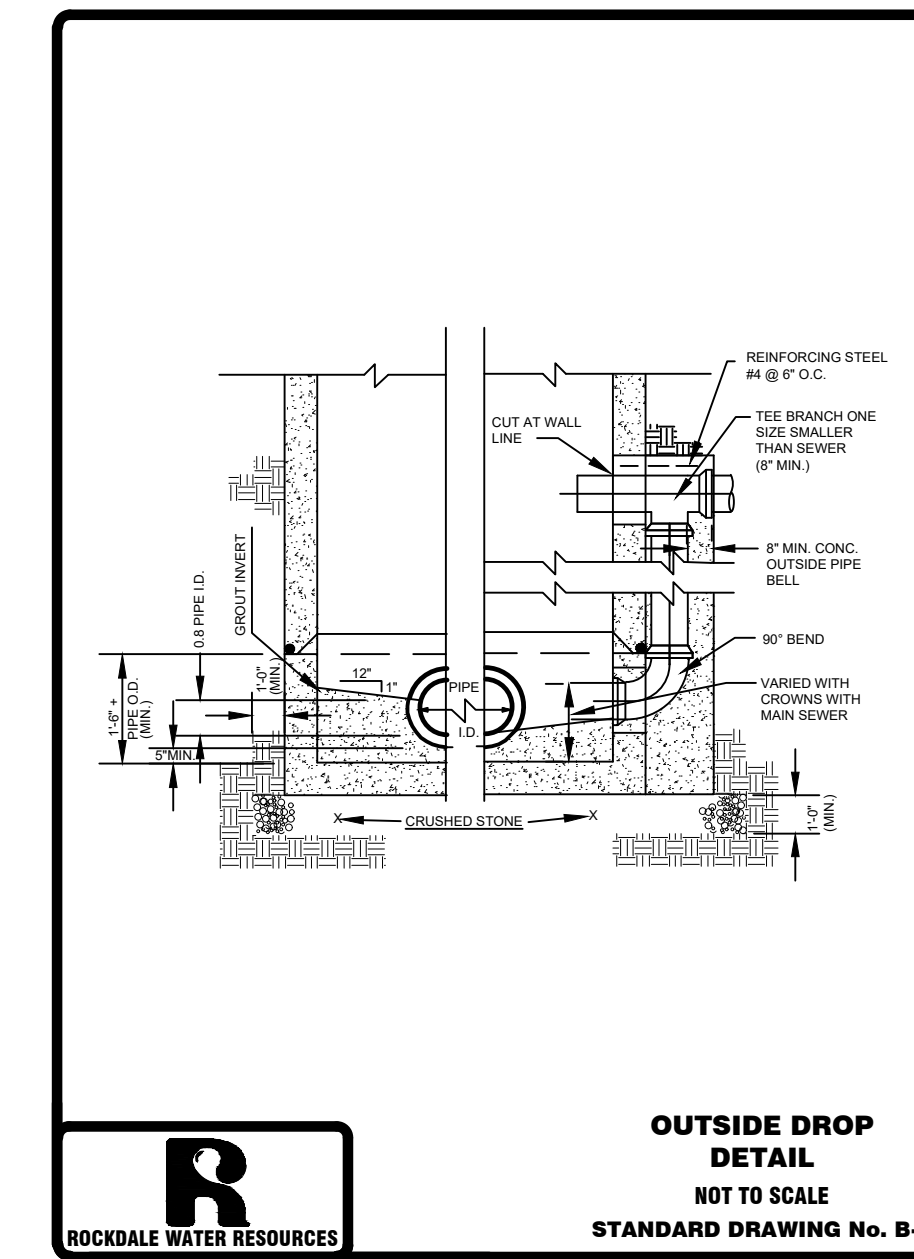
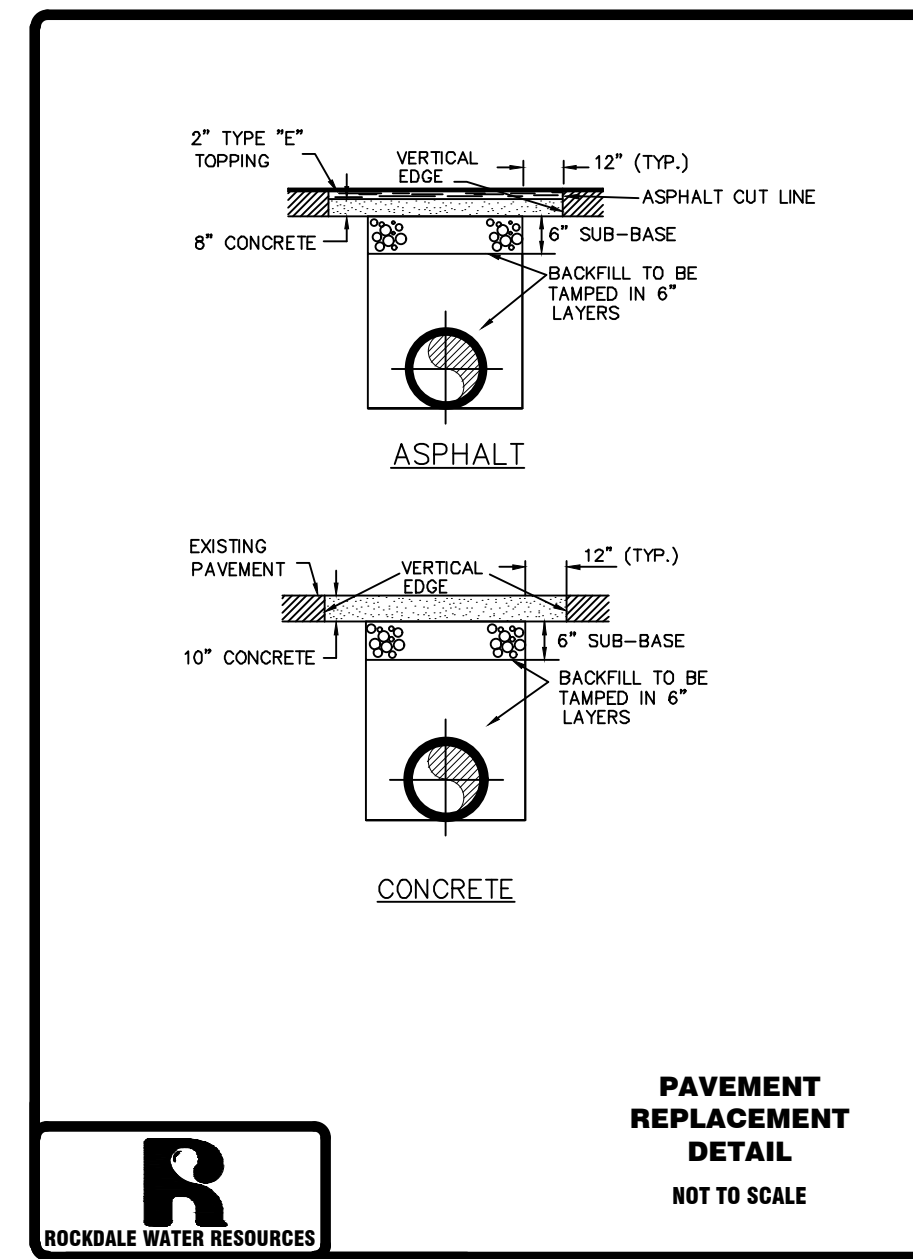
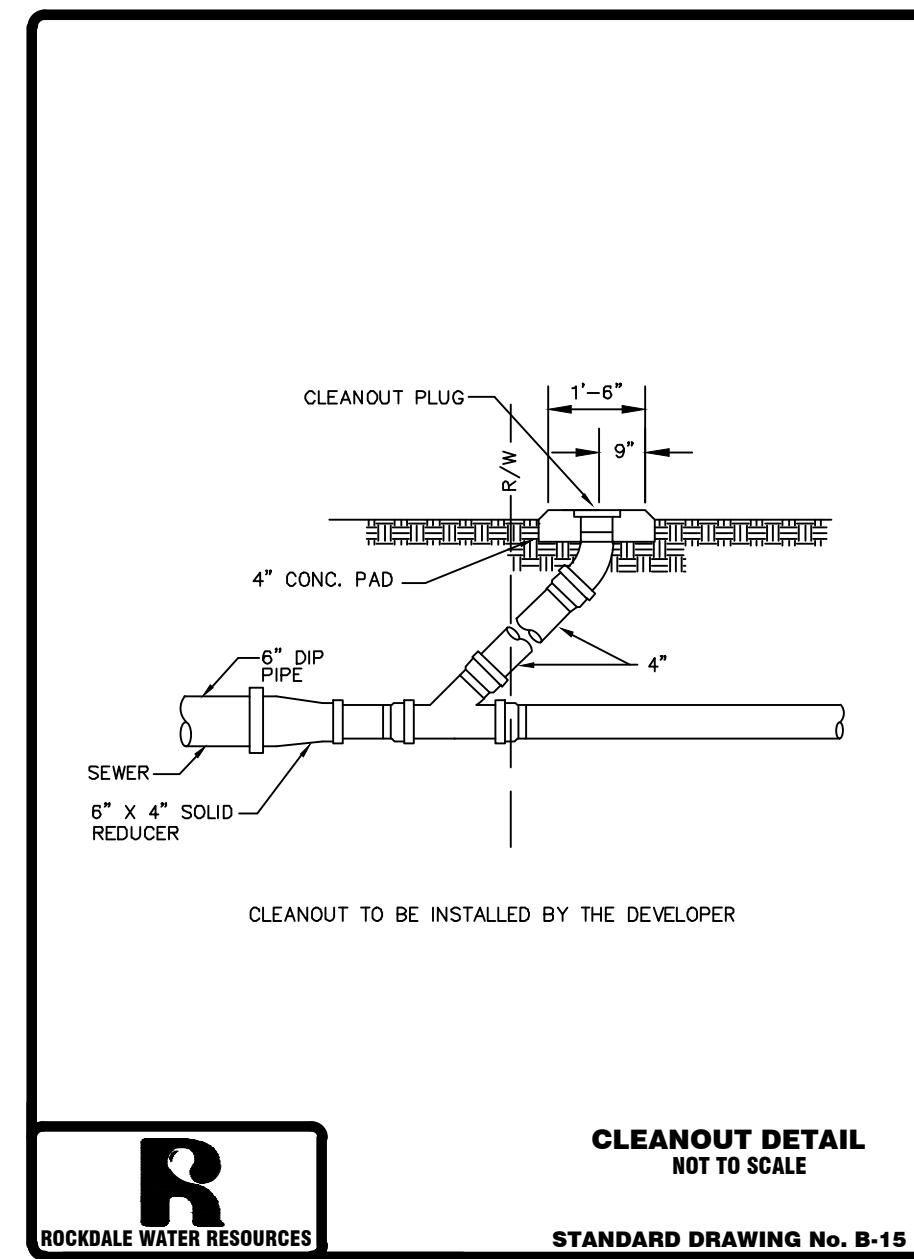
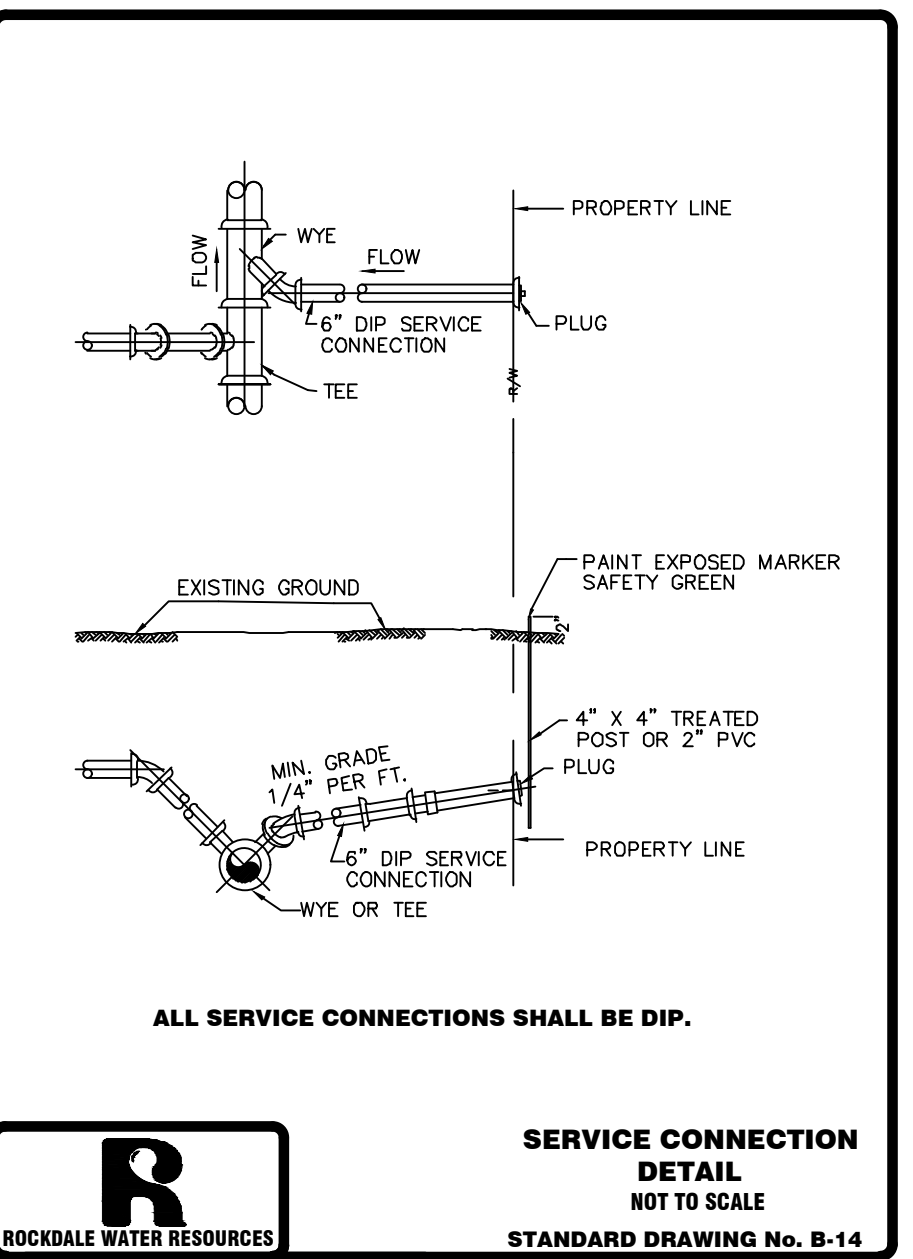
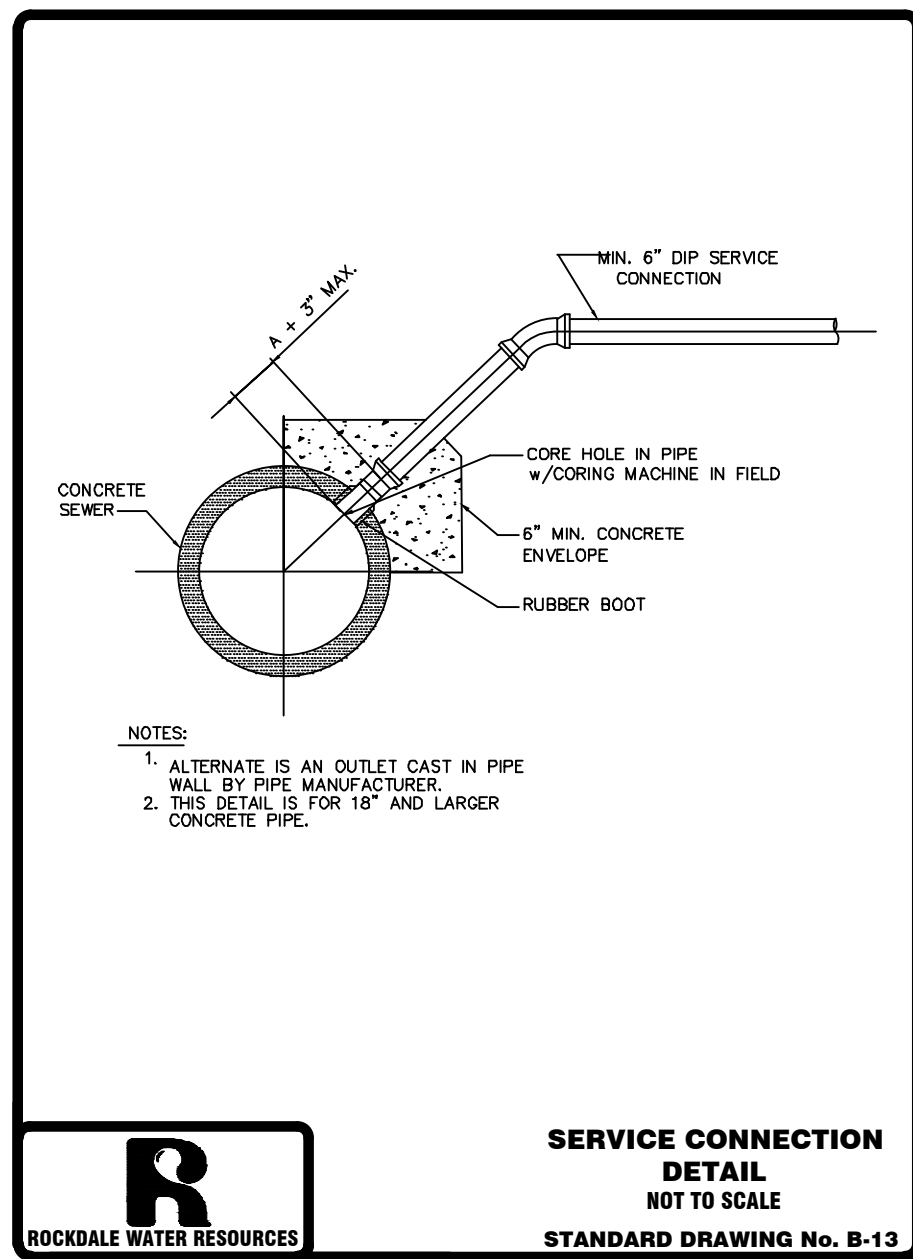
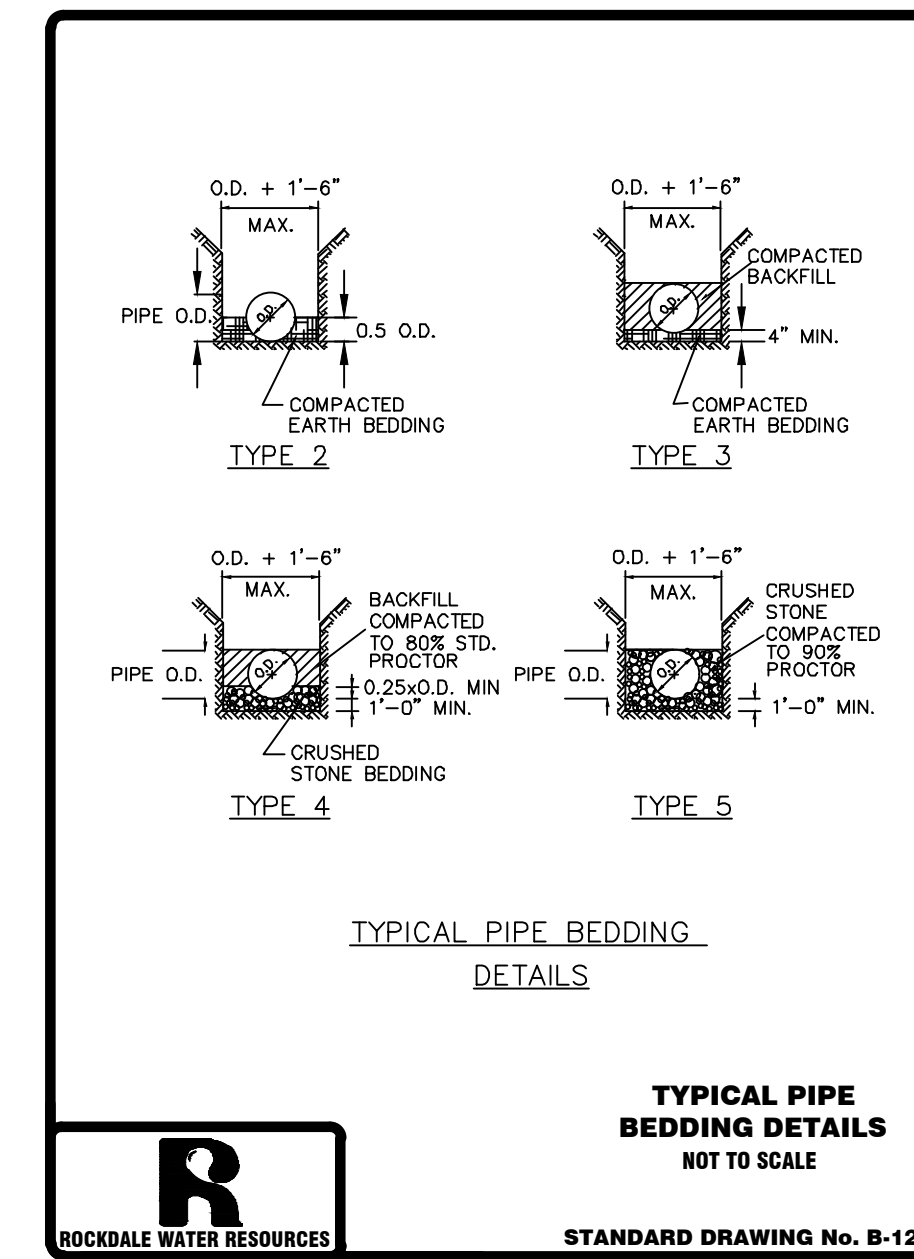
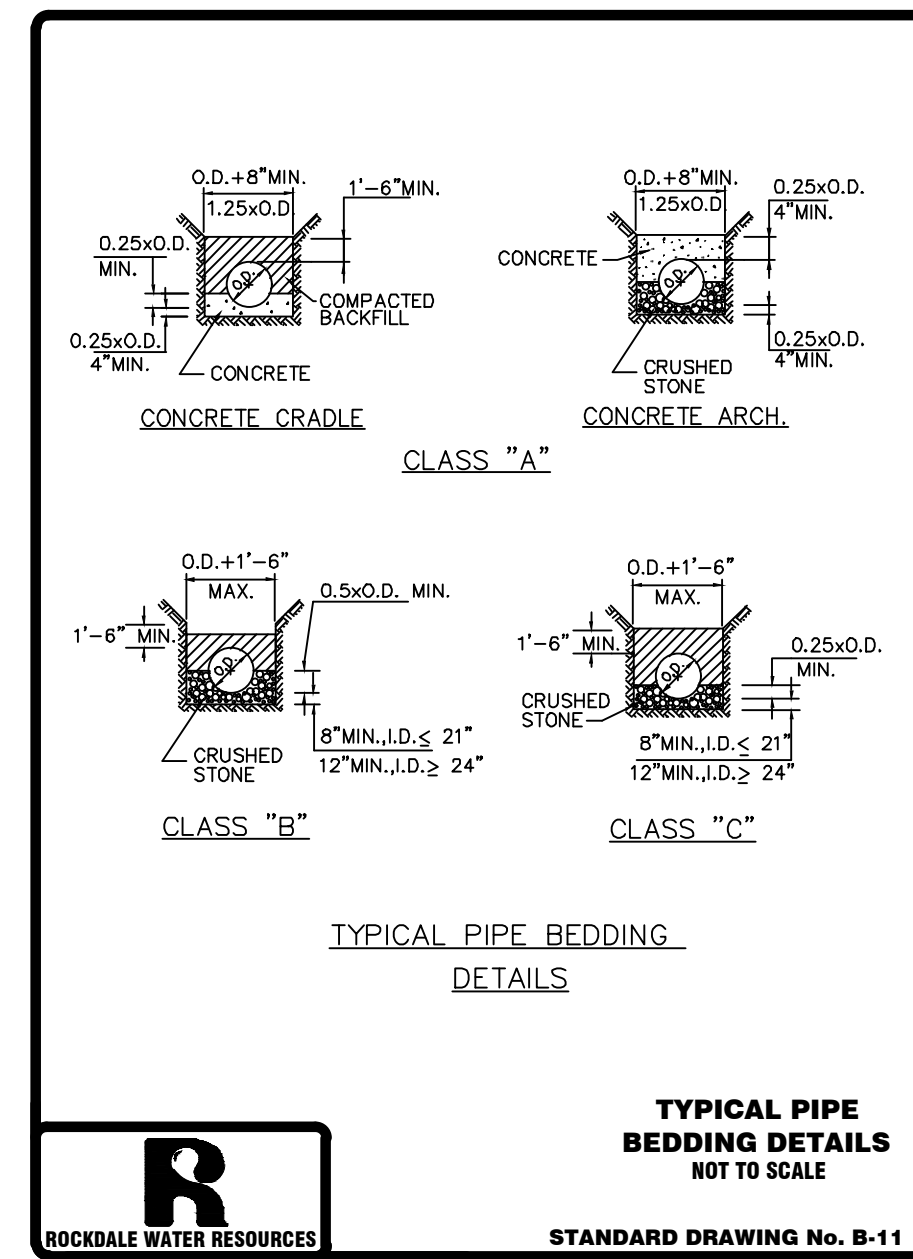
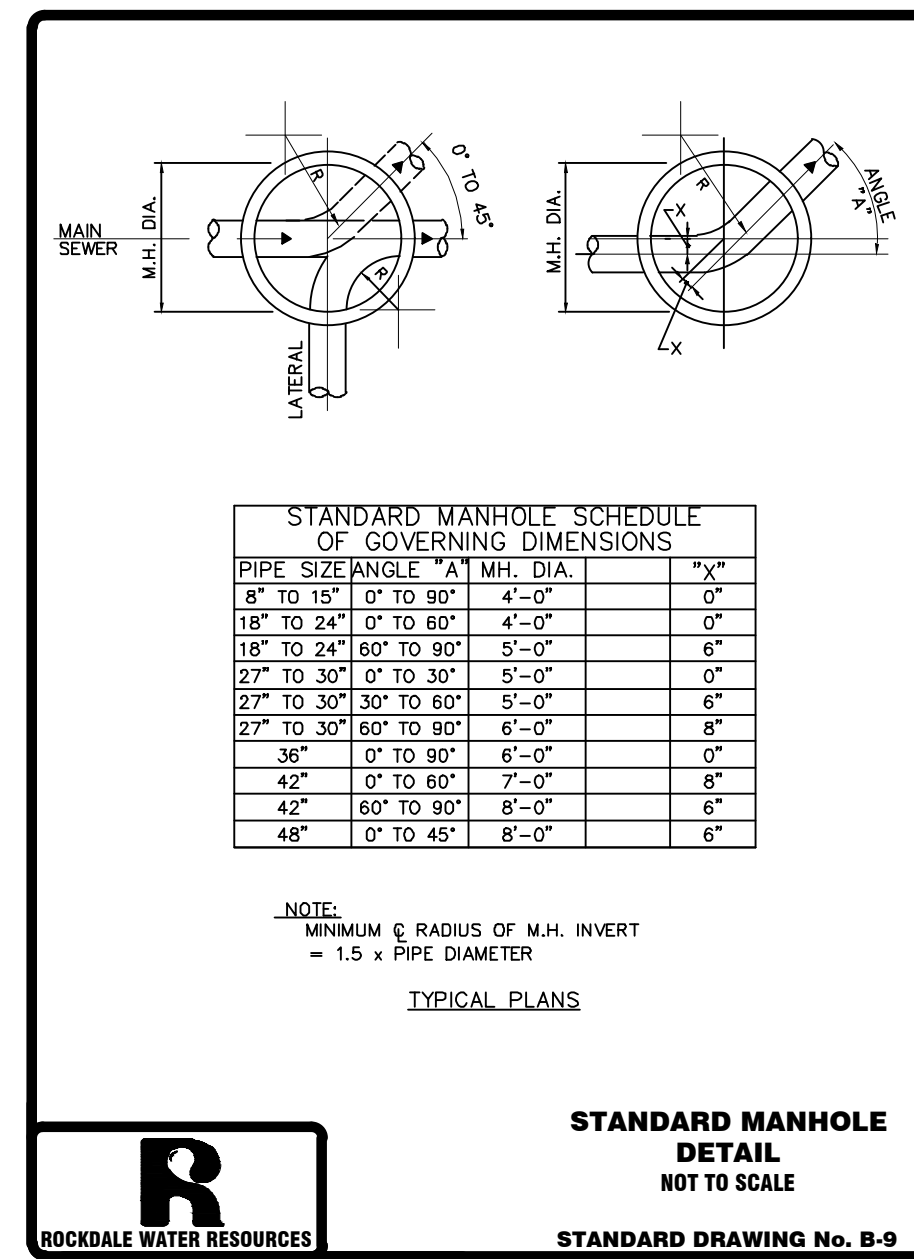
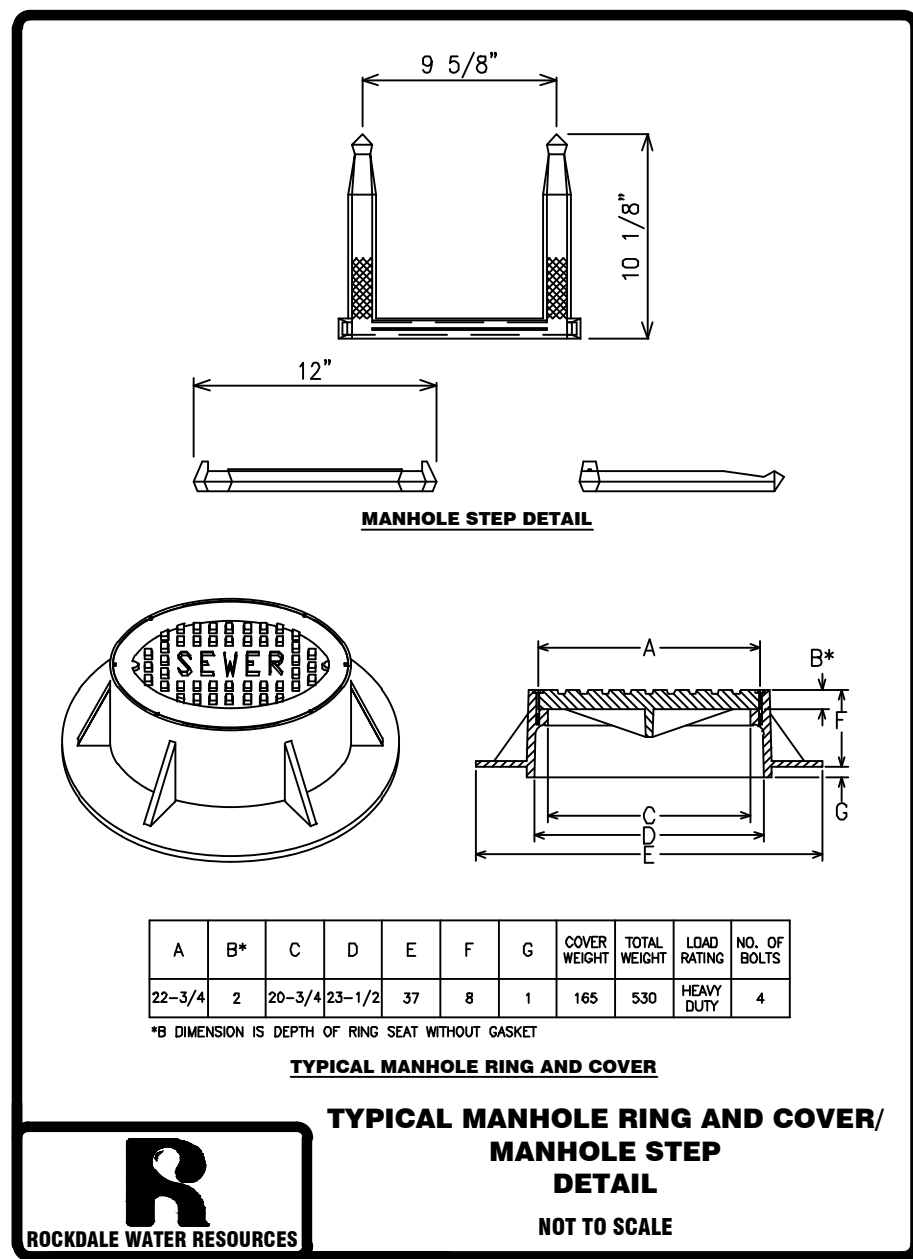
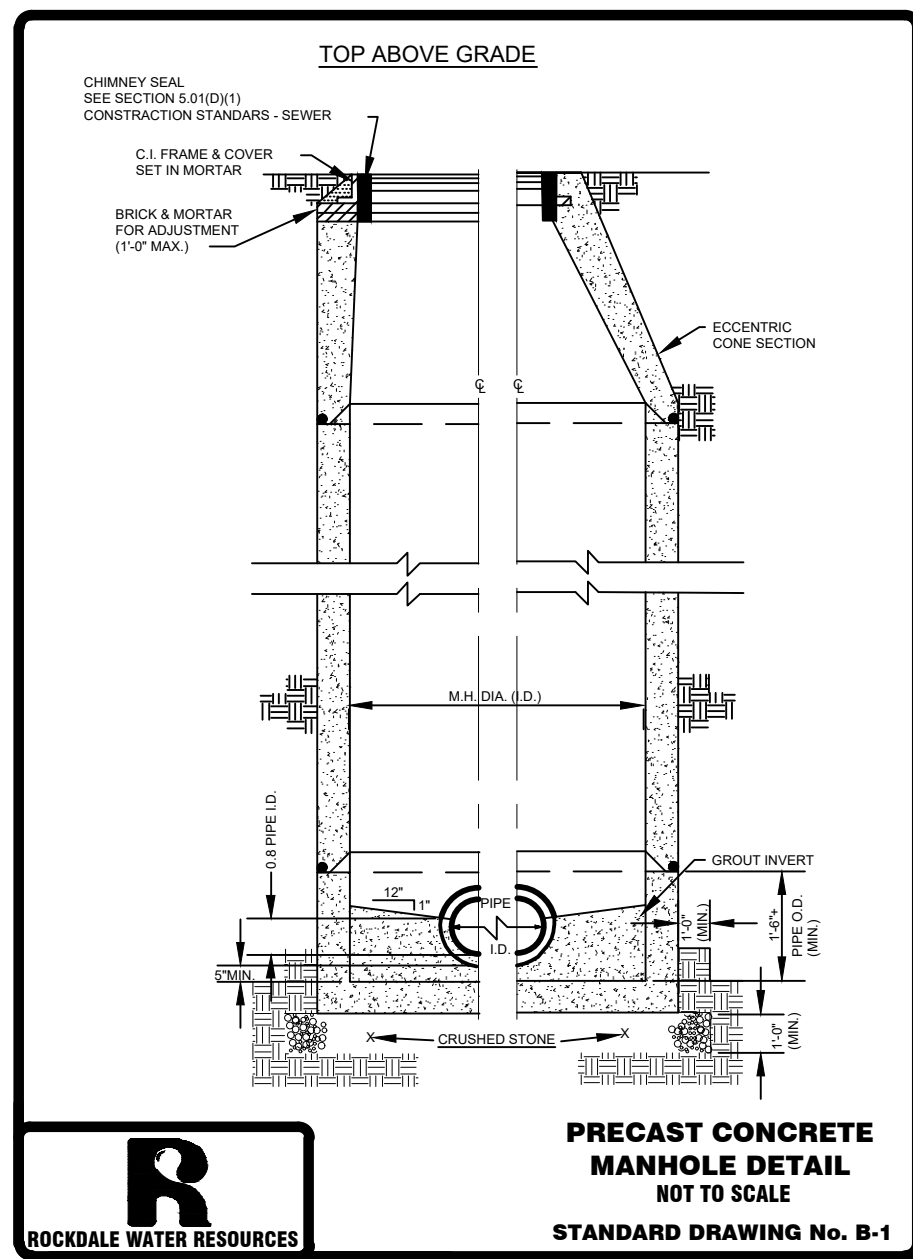


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PLAN AND PROFILE

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SHEET 10 DRAWING No. C-06



ROCKDALE WATER RESOURCES

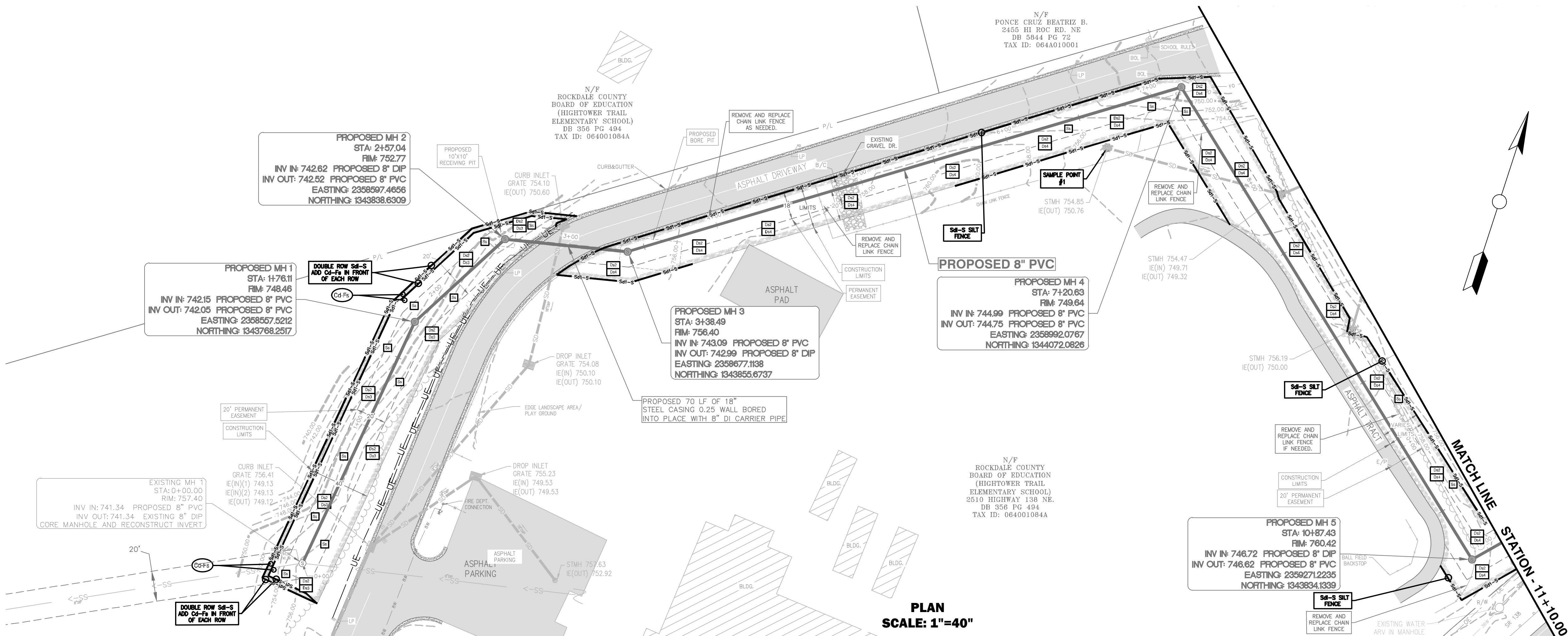
DAVID CERVONE

GEORGIA 811

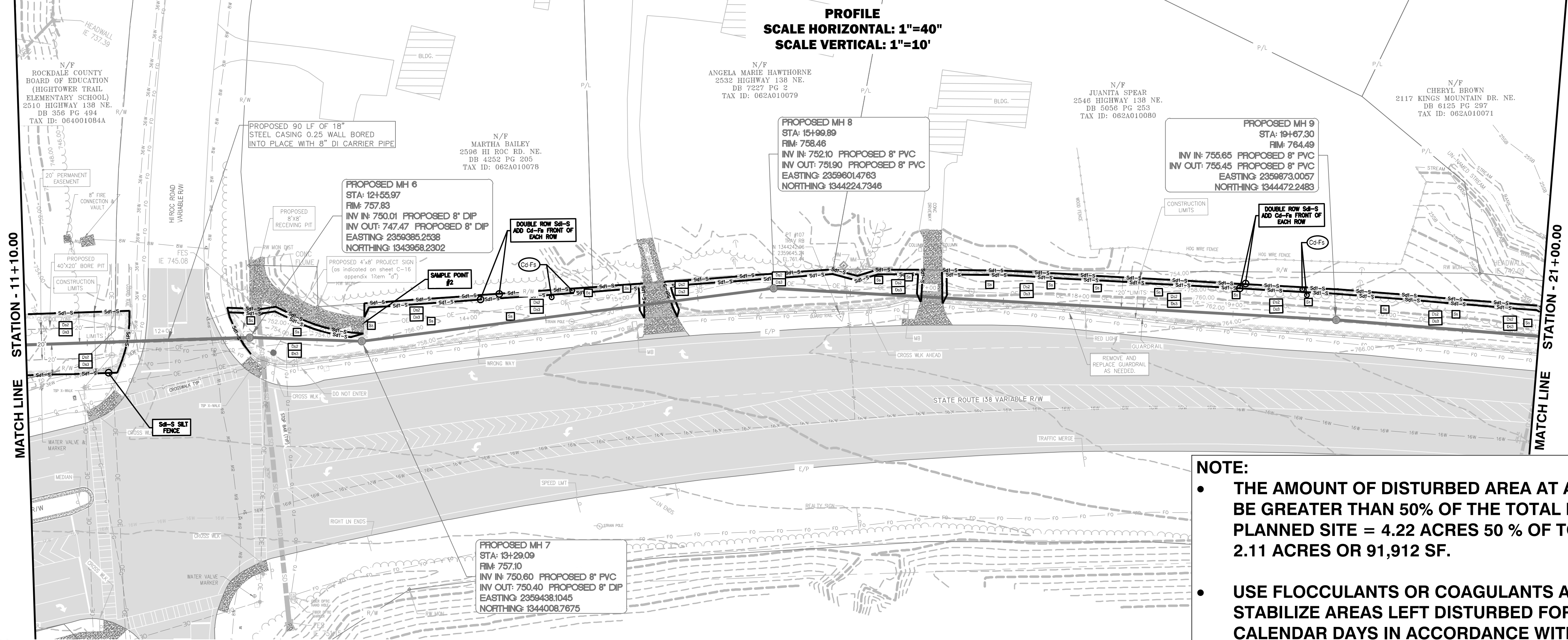
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FILE NAME: 2245 GA HWY 138 SEWER D1

SHEET 11 DRAWING No. C-07



**PLAN
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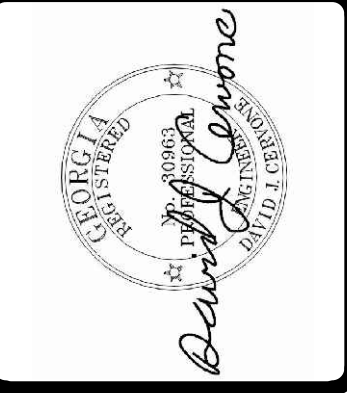


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SCALE VERTICAL: 1"=10"**

NOTE:

- THE AMOUNT OF DISTURBED AREA AT ANY ONE TIME SHALL NOT BE GREATER THAN 50% OF THE TOTAL PLANNED SITE. TOTAL PLANNED SITE = 4.22 ACRES 50 % OF TOTAL PLANNED SITE = 2.11 ACRES OR 91,912 SF.
- USE FLOCCULANTS OR COAGULANTS AN/OR MULCH TO STABILIZE AREAS LEFT DISTURBED FOR MORE THAN SEVEN(7) CALENDAR DAYS IN ACCORDANCE WITH PART III. D.1. OF THE CURRENT NPDES PERMITS.

GSWCC Georgia Soil and Water Conservation Commission
 David J Cervone
 Level II Certified Design Professional
 CERTIFICATION NUMBER: 0009074206
 ISSUED: 02/01/2022 EXPIRES: 02/01/2025

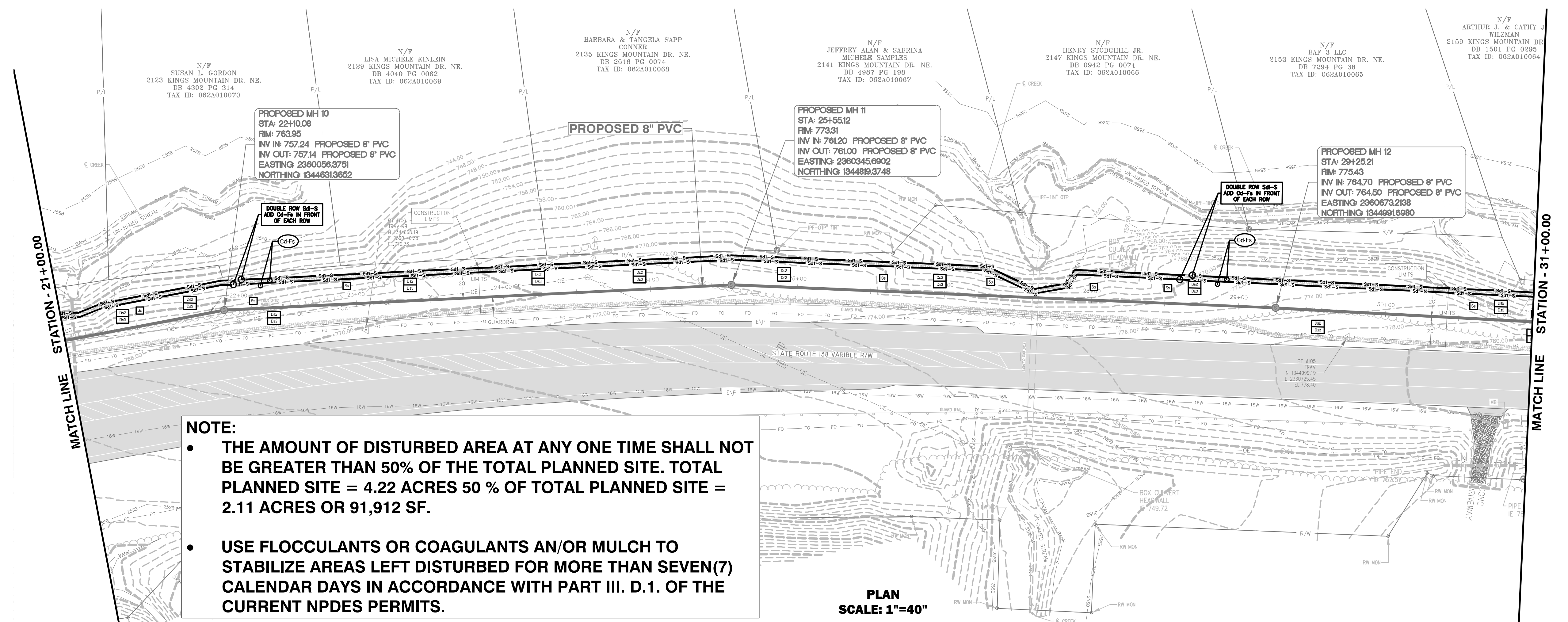


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**EROSION CONTROL PLAN
STA. 0+00 THRU 21+00**

DESIGNED BY: DAVID CERVONE
 DRAWN BY: WALT BOBO
 CHECKED BY: DAVID CERVONE
 DATE: 02/22/2022
 FILE NAME: 2245 GA HWY 138 SEWER EXT

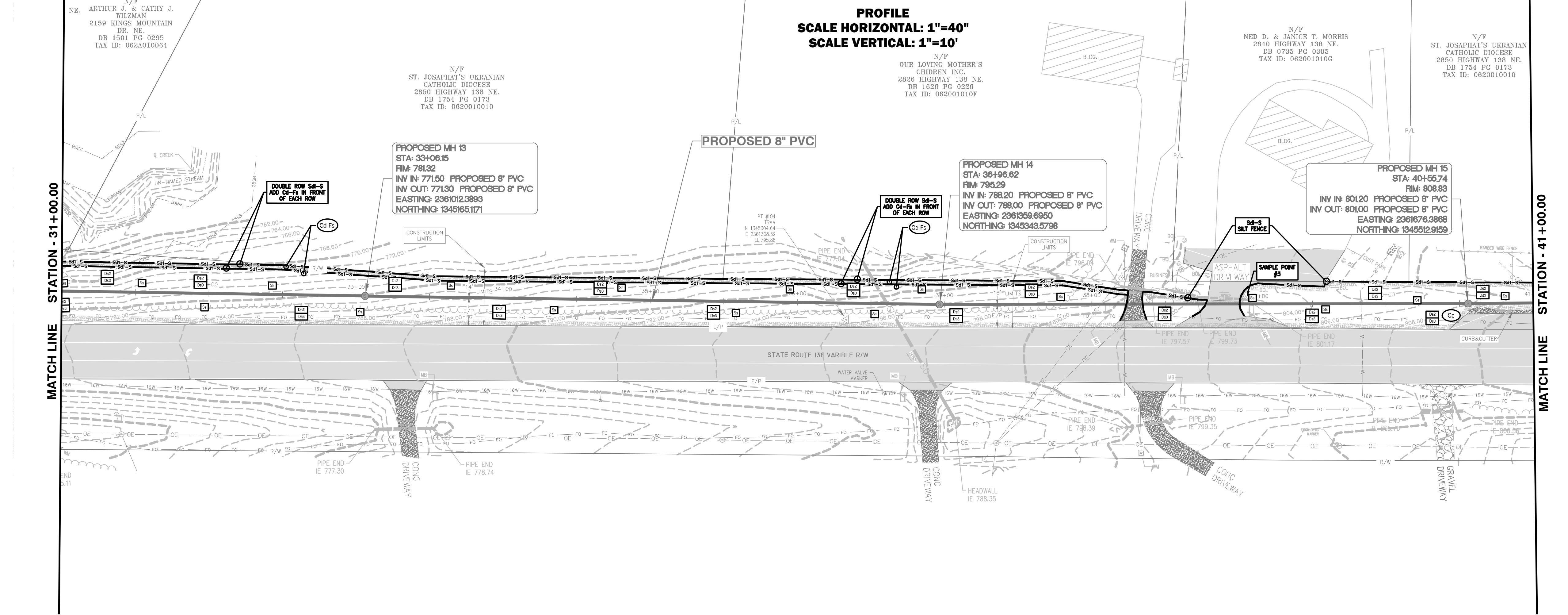
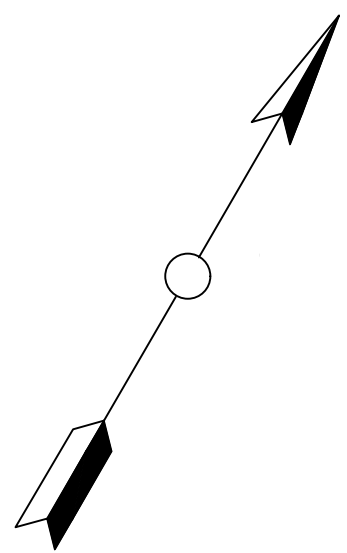
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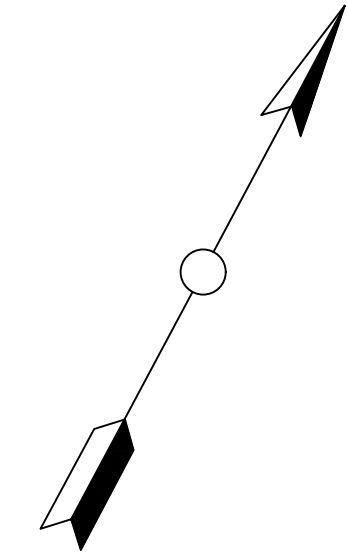
NOTE:

- THE AMOUNT OF DISTURBED AREA AT ANY ONE TIME SHALL NOT BE GREATER THAN 50% OF THE TOTAL PLANNED SITE. TOTAL PLANNED SITE = 4.22 ACRES 50% OF TOTAL PLANNED SITE = 2.11 ACRES OR 91,912 SF.
- USE FLOCCULANTS OR COAGULANTS AN/OR MULCH TO STABILIZE AREAS LEFT DISTURBED FOR MORE THAN SEVEN(7) CALENDAR DAYS IN ACCORDANCE WITH PART III. D.1. OF THE CURRENT NPDES PERMITS.

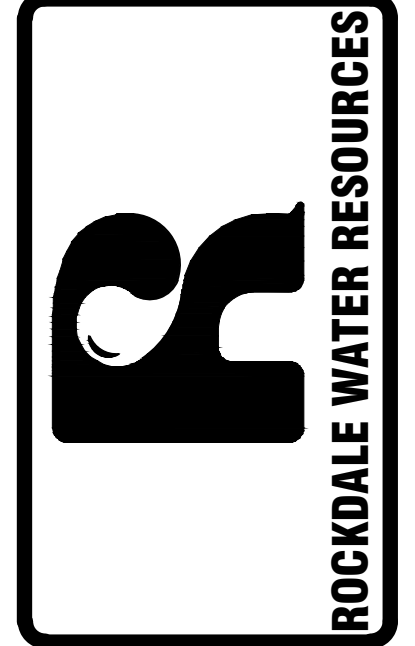
PLAN
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PROFILE
SCALE HORIZONTAL: 1"=40'
SCALE VERTICAL: 1"=10'



GSWCC Georgia Soil and Water Conservation Commission
David J Cervone
 Level II Certified Design Professional
 CERTIFICATION NUMBER: 000074206
 ISSUED: 02/01/2022 EXPIRES: 02/01/2028

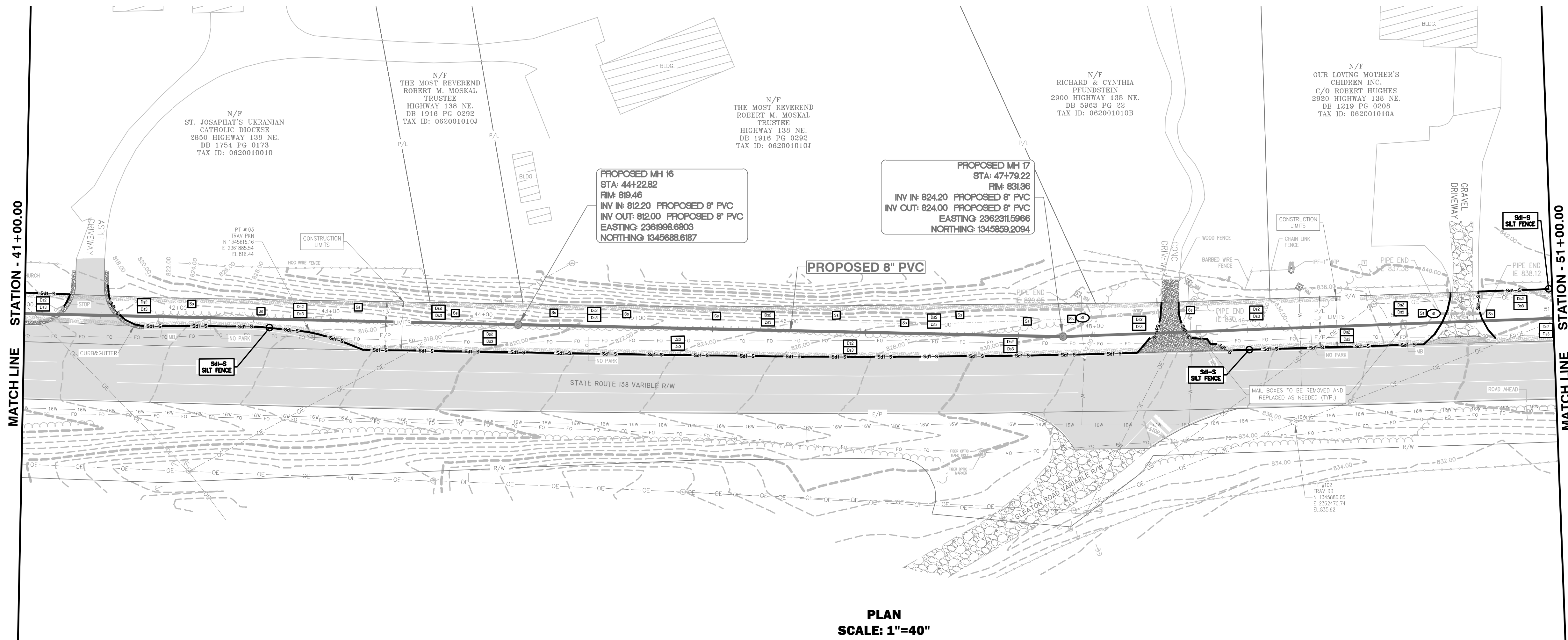


REVISION		DATE	DESCRIPTION
No.	DATE	DESCRIPTION	

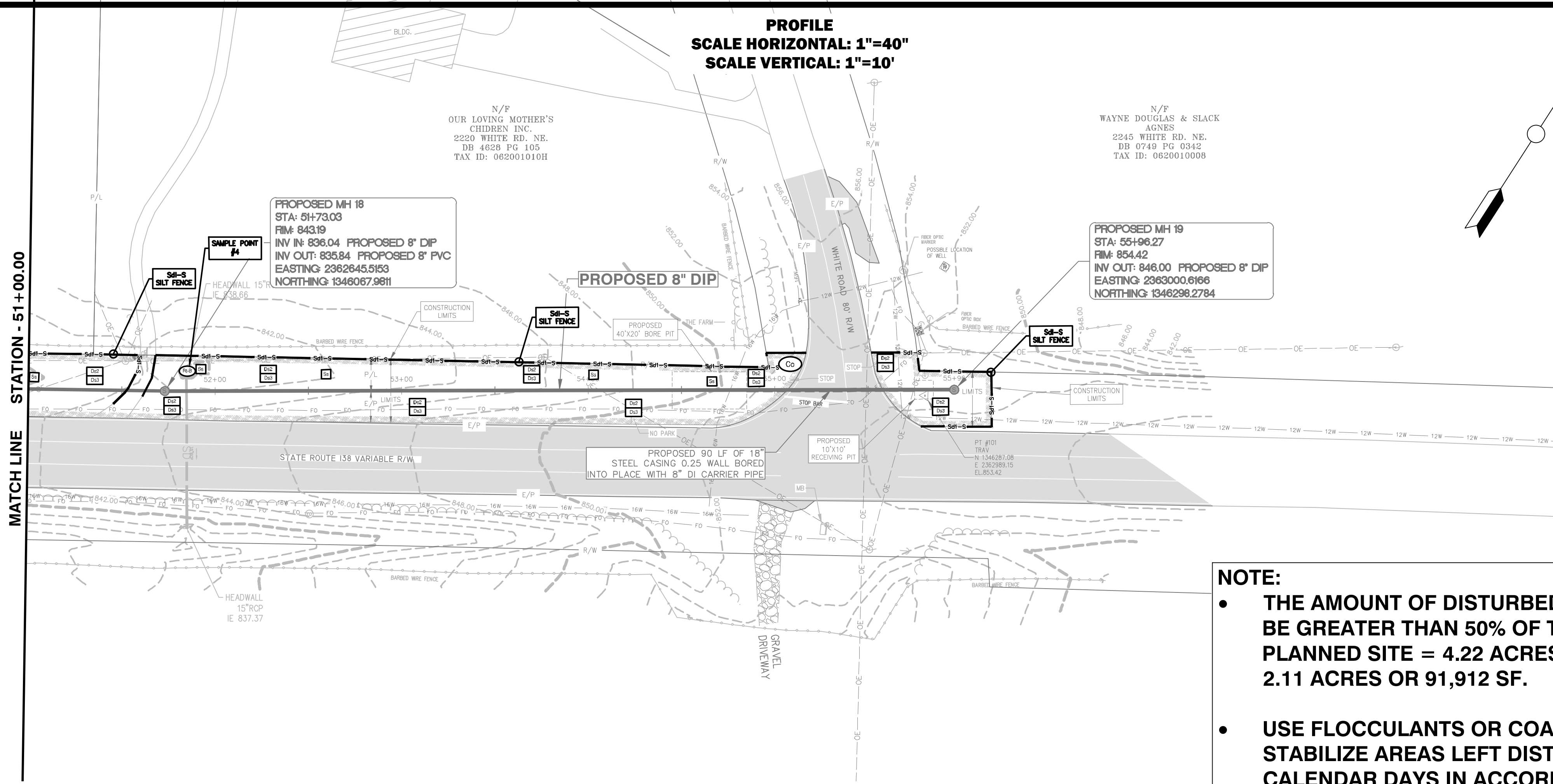
EROSION CONTROL PLAN
STA. 21+00 THRU 41+00

DESIGNED BY: DAVID CERVONE
 DRAWN BY: WALT BOBO
 CHECKED BY: DAVID CERVONE
 DATE: 02/22/2022
 FILE NAME: 2245 GA HWY 138 SEWER EXT

SHEET: **13** DRAWING NO.: **C-09**



PLAN
SCALE: 1"=40"

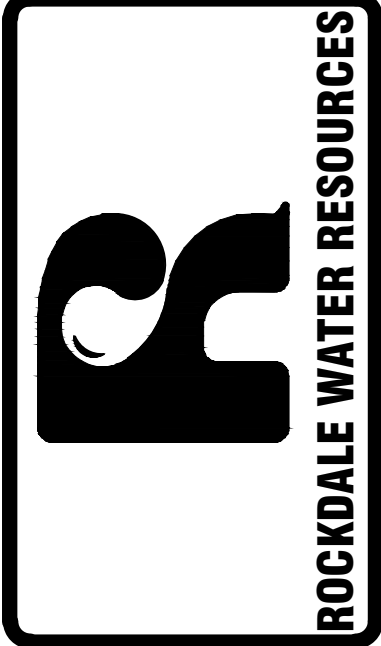


PROFILE
SCALE HORIZONTAL: 1"=40"
SCALE VERTICAL: 1"=10'

NOTE:

- THE AMOUNT OF DISTURBED AREA AT ANY ONE TIME SHALL NOT BE GREATER THAN 50% OF THE TOTAL PLANNED SITE. TOTAL PLANNED SITE = 4.22 ACRES 50 % OF TOTAL PLANNED SITE = 2.11 ACRES OR 91,912 SF.
- USE FLOCCULANTS OR COAGULANTS AN/OR MULCH TO STABILIZE AREAS LEFT DISTURBED FOR MORE THAN SEVEN(7) CALENDAR DAYS IN ACCORDANCE WITH PART III. D.1. OF THE CURRENT NPDES PERMITS.

GSWCC Georgia Soil and Water Conservation Commission
David J Cervone
 Level II Certified Design Professional
 CERTIFICATION NUMBER: 0000074205
 ISSUED: 02/01/2022 EXPIRES: 02/01/2025



REVISION		DATE	DESCRIPTION
No.	DATE	DESCRIPTION	

EROSION CONTROL PLAN
 STA. 41+00 THRU 55+81.25

DESIGNED BY: DAVID CERVONE
 DRAWN BY: WALT BOBO
 CHECKED BY: DAVID CERVONE
 DATE: 02/22/2022
 FILE NAME: 2245 GA HWY 138 SEWER EXT

SHEET: 14 DRAWING No.: C-10

DEFINITION
Applying plant residues or other suitable materials, produced on the site if possible, to the soil surface.

CONDITIONS
Mulch or temporary grassing shall be applied to all exposed areas within 14 days of disturbance. Mulch can be used as a singular erosion control device for up to six months, but it shall be applied at the appropriate depth, depending on the material used, anchored, and have a continuous 90% cover or greater of the soil surface. Maintenance shall be required to maintain appropriate depth and 90% cover. Temporary vegetation may be employed instead of mulch if the area will remain undisturbed for less than six months. If an area will remain undisturbed for greater than six months, permanent vegetative techniques shall be employed.

SPECIFICATIONS

MULCHING WITHOUT SEEDING
This standard applies to grades or cleared areas where seedlings may not have a suitable growing season to produce an erosion resistant cover, but can be stabilized with a mulch cover.

Site Preparation
1. Grade to permit the use of equipment for applying and anchoring mulch.
2. Install needed erosion control measures as required such as dikes, diversions, berms, terraces and sediment barriers.
3. Loosen compact soil to a minimum depth of 3 inches.

Mulching Materials
Select one of the following materials and apply at the depth indicated:
1. Dry straw or hay shall be applied at a depth of 2 to 4 inches providing complete soil coverage. One advantage of this material is easy application.
2. Wood waste (chips, sawdust or bark) shall be applied at a depth of 2 to 3 inches. Organic material from the clearing stage of development should remain on site, be chipped, and applied as mulch. This method of mulching can greatly reduce erosion control costs.
3. Cutback asphalt (slow curing) shall be applied at 1200 gallons per acre (or 14 gallon per sq yd).
4. Polyethylene film shall be secured over banks or stockpiled soil material for temporary protection. This material can be salvaged and reused.

Applying Mulch
When mulch is used without seeding, mulch shall be applied to provide full coverage of the exposed area.
1. Dry straw or hay mulch and wood chips shall be applied uniformly by hand or by mechanical equipment.
2. If the area will eventually be covered with perennial vegetation, 20-30 pounds of nitrogen per acre in addition to the normal amount shall be applied to offset the uptake of nitrogen caused by the decomposition of the organic mulches.
3. Cutback asphalt shall be applied uniformly. Care should be taken in areas of pedestrian traffic due to problems of tracking in or damage to shoes, clothing, etc.
4. Apply polyethylene film on exposed areas.

Anchoring Mulch
1. Straw or hay mulch can be pressed into the soil with a disk harrow with the disk set straight or with a special packer disk. Disks may be smooth or serrated and should be 20 inches or more in diameter and 8 to 12 inches apart. The edges of the disk should be dull enough not to cut the mulch but to press it into the soil leaving mulch of it in an erect position. Straw or hay mulch shall be anchored immediately after application. Straw or hay mulch spread with special blower-type equipment may be anchored with emulsified asphalt (Grade A6-5 or S5-1). The asphalt emulsion shall be sprayed onto the mulch as it is ejected from the machine. Use 100 gallons of emulsified asphalt and 100 gallons of water per ton of mulch. Tackifiers and binders can be substituted for emulsified asphalt. Please refer to specification Td.
-Tackifiers and Binders: Plastic mesh or netting with mesh no larger than one inch by one inch shall be installed according to manufacturer's specifications.
2. Netting of the appropriate size shall be used to anchor wood waste. Openings of the netting shall not be larger than the average size of the wood waste chips.
3. Polyethylene film shall be anchored at the top as well as incrementally as necessary.

Ds1 DISTURBED AREA STABILIZATION (WITH MULCHING ONLY)

DEFINITION
The establishment of temporary vegetative cover with fast growing seedlings for seasonal protection on disturbed or denuded areas.

CONDITIONS
Temporary grassing, instead of mulch, can be applied to rough graded areas that will be exposed for less than six months. Temporary vegetative measures should be coordinated with permanent measures to assure economical and effective stabilization. Most types of temporary vegetation are ideal to use as companion crops until the permanent vegetation is established.

Seeding Preparation
When a hydraulic seeder is used, seeded preparation is not required. When using conventional or handseeding, seeded preparation is not required if the soil material is loose and not sealed by rainfall.
When soil has been sealed by rainfall or consists of smooth cut slopes, the soil should be pitted, trenched or otherwise scarified to provide a place for seed to lodge and germinate.

Lime and Fertilizer
Agricultural lime is required unless soil tests indicate otherwise. Apply agricultural lime at a rate of one ton per acre. Graded areas require lime application. Soils can be tested to determine if fertilizer is needed. On reasonably fertile soils or on compacted, fertilized soil, fertilizer is not required. For soils with very low fertility, 500 to 700 pounds of 10-10-10 fertilizer or the equivalent per acre (15-15 lbs./1,000 sq. ft.) shall be applied. Fertilizer should be applied before land preparation and incorporated with a disk, ripper or chisel.

Seeding
Select a grass or grass-legume mixture suitable to the area and season of the year. Seed shall be applied uniformly by hand, cyclone seeder, drift, outdragger seeder, or hydraulic seeder (slurry including seed and fertilizer). Drift or outdragger seeders should normally place seed one-quarter to half inch deep. Appropriate depth of planting is ten times the seed diameter. Soil should be raked lightly to cover seed with soil or seed by hand.

Mulching
Temporary vegetation can, in most cases, be established without the use of mulch. Mulch without seeding should be considered for short term protection. Refer to Ds1 "Disturbed Area Stabilization (With Mulching Only)".

Irrigation
During times of drought, water shall be applied at a rate not causing runoff and erosion. The soil shall be thoroughly wetted to a depth that will insure germination of the seed. Subsequent applications should be made when needed.

Seeding Rates for Temporary Seeding

SPECIES	RATE Per 1,000 sq. ft.	RATE Per Acre *	PLANTING DATES **
Rye	3.9 pounds	3 bu.	9/1-3/1
Ryegrass	0.9 pound	40 lbs.	8/15-4/1
Annual Lespedeza	0.9 pound	40 lbs.	1/15-3/15
Weeping Lovegrass	0.1 pound	4 lbs.	2/15-6/15
Sudangrass	1.4 pounds	60 lbs.	3/1-6/1
Bromest Millet	0.9 pound	40 lbs.	4/1-7/15
Wheat	4.1 pounds	3 bu.	9/15-2/1

* Usual site conditions may require heavier seeding rates
** Seeding dates may need to be altered to fit temperature variations and conditions.

Ds2 DISTURBED AREA STABILIZATION (WITH TEMPORARY SEEDING)

DEFINITION
The planting of perennial vegetation such as trees, shrubs, vines, grasses, or legumes on exposed areas for final permanent stabilization. Permanent perennial vegetation shall be used to achieve final stabilization.

CONDITIONS
Permanent perennial vegetation is used to provide a protective cover for exposed areas including cuts, fills, ditches, and other denuded areas.

SPECIFICATIONS

Grading and Shaping
Grading and shaping may not be required where hydraulic seeding and planting equipment is to be used. Vertical banks shall be sloped to enable plant establishment.
When conventional seeding and fertilizing are to be done, grade and shape where feasible and practical, so that equipment can be used safely and efficiently during seeded preparation, seeding, mulching and maintenance of the vegetation.
concentrations of water that will cause excessive soil erosion shall be diverted to a safe outlet. Diversions and other treatment practices shall conform with the appropriate standards and specifications.

Seeded Preparation
Seeded preparation may not be required where hydraulic seeding and fertilizing equipment is to be used. When conventional seeding is to be used, seeded preparation will be done as follows:
Broadcast plantings
1. Tillage at a minimum, shall adequately loosen the soil to a depth of 4 to 6 inches, alleviate compaction, incorporate lime and fertilizer, smooth and firm the soil, allow for the proper placement of seed, sprigs, or plants, and allow for the anchoring of straw or hay mulch if a disk is to be used.
2. Tillage may be done with any suitable equipment.
3. Tillage should be done on the contour where feasible.

Ds3 DISTURBED AREA STABILIZATION (WITH PERMANENT VEGETATION)

DEFINITION
A permanent vegetation using sods on highly erodible or critically eroded lands.

CONDITIONS
This application is appropriate for areas which require immediate vegetative cover, drop inlets, grass swales, and waterways with intermittent flow.

CONSTRUCTION SPECIFICATIONS INSTALLATION

Soil Preparation
- Bring soil surface to final grade. Clear surface of trash, woody debris, stumps and clods larger than 1". Apply sod to soil surfaces only and not frozen surfaces, or gravel type soils.
- Topsoil properly applied will help guarantee stand. Don't use topsoil recently treated with herbicides or soil sterilants.
- Mix fertilizer into soil surface. Fertilize based on soil tests or Table 6-6.1. For fall planting of warm season species, half the fertilizer should be applied at planting and the other half in the spring.

Table 6-6.1. Fertilizer Requirements for Soil Surface Application

Fertilizer Type (lbs./acre)	Fertilizer Rate (lbs./acre)	Fertilizer Rate	Season
10-10-10	1000	.025	Fall

Table 6-6.2. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.3. Fertilizer Requirements for Sod

Types of Species Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
Cool Season Grasses	First Second Maintenance	6-12-12 10-10-10 1000 400	50-100 30
Warm Season Grasses	First Second Maintenance	6-12-12 10-10-10 1000 400	50-100 30

Table 6-6.4. Fertilizer Requirements for Sod

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.5. Fertilizer Requirements for Sod

Types of Species Planting Year	Fertilizer (N-P-K)	Rate (lbs./acre)	Nitrogen Top Dressing Rate (lbs./acre)
Cool Season Grasses	First Second Maintenance	6-12-12 10-10-10 1000 400	50-100 30
Warm Season Grasses	First Second Maintenance	6-12-12 10-10-10 1000 400	50-100 30

Table 6-6.6. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.7. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.8. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.9. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.10. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.11. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.12. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.13. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.14. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.15. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.16. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.17. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.18. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.19. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.20. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.21. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.22. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.23. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.24. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.25. Sod Planting Requirements

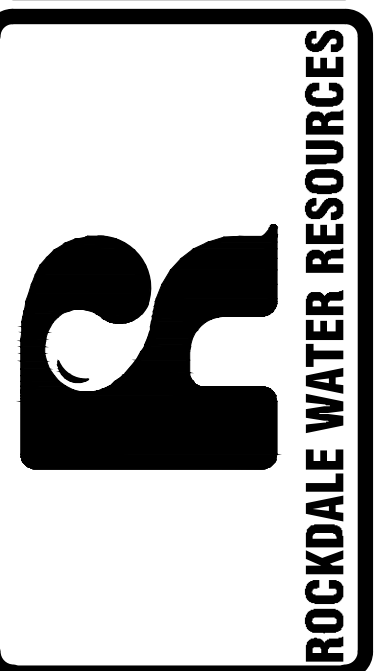
Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.26. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede	-	P, C	Warm Weather
St. Augustine	Common Bitterblue Raleigh	P, C	Warm Weather
Zoysia	Emerald Myer	P, C	Warm Weather
Tall Fescue	Kentucky	M, L, P	Cool Weather

Table 6-6.27. Sod Planting Requirements

Grass	Varieties	Resource Area	Growing Season
Bermudagrass	Common Tifway Tifgreen Tifdwarf	M, L, P P, C P, C P, C	Warm Weather
Bahiagrass	Pennsacola	P, C	Warm Weather
Centipede			

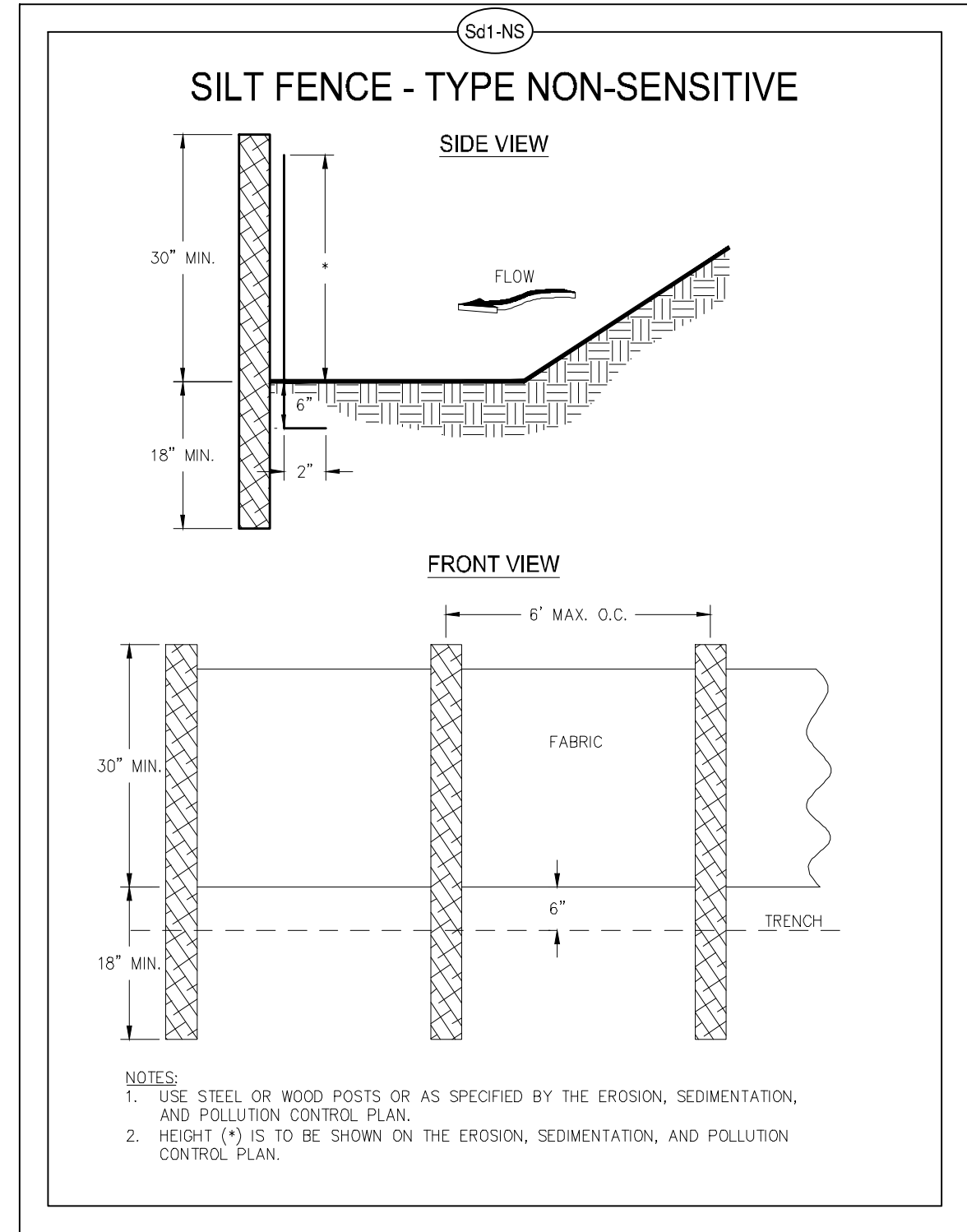
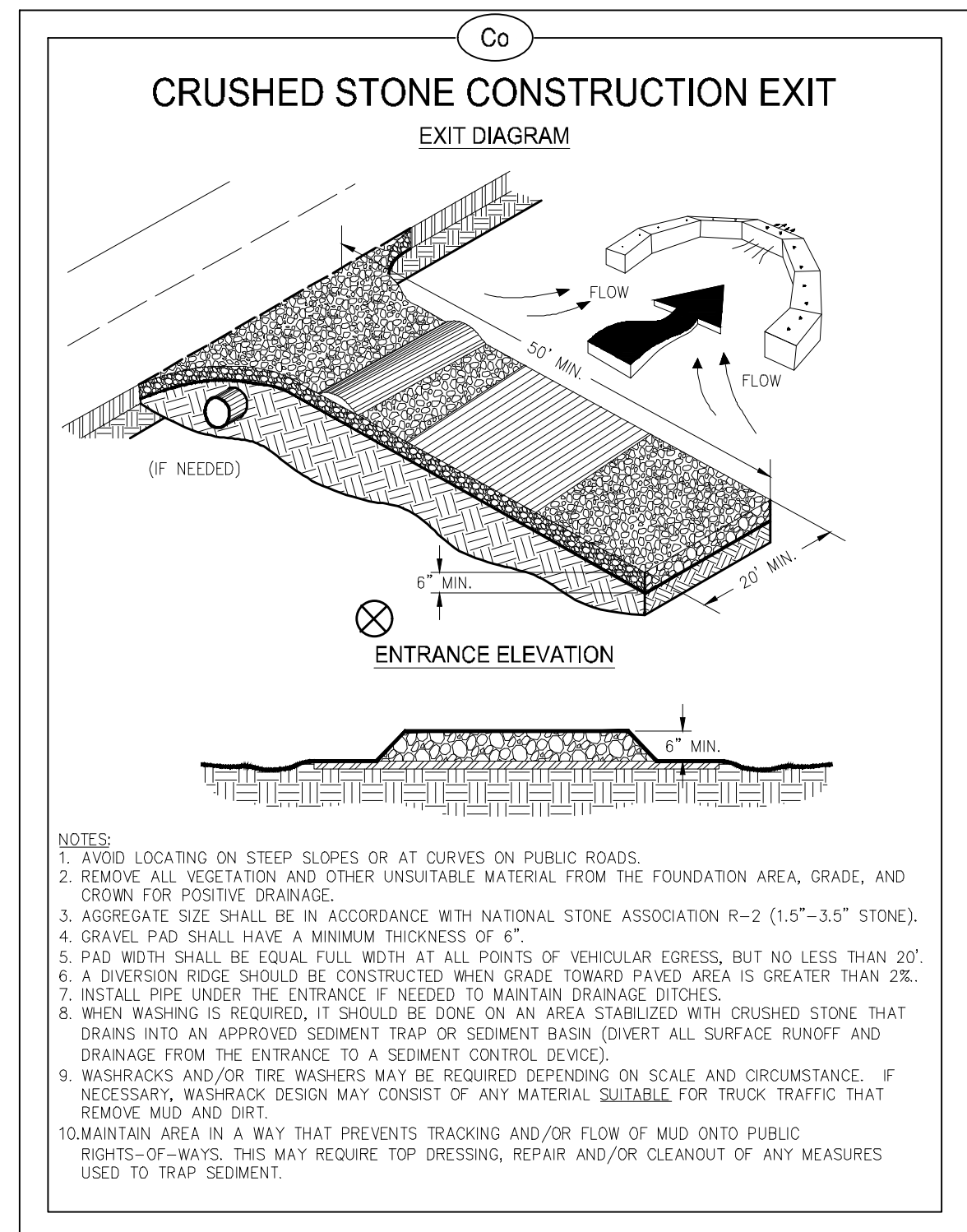
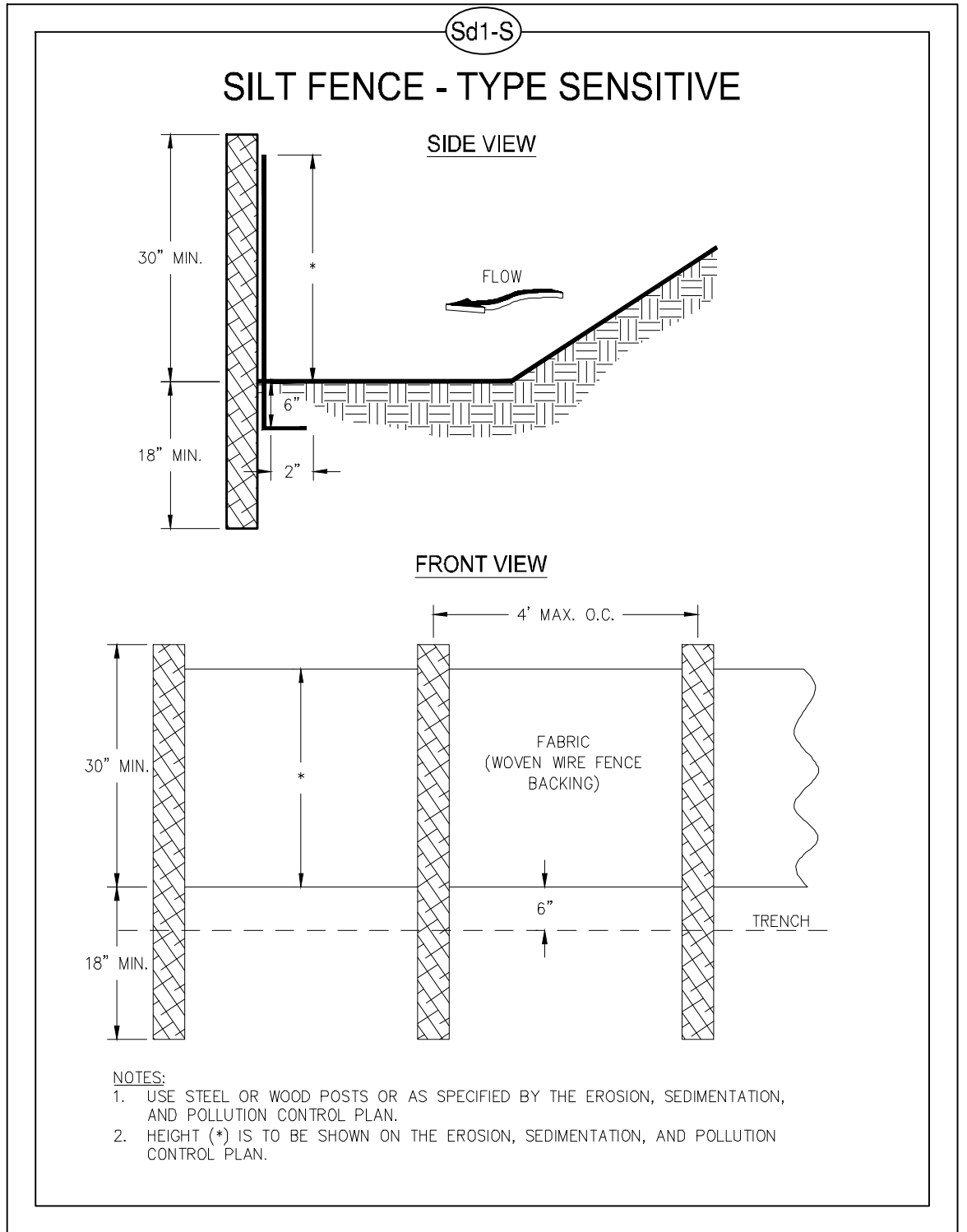
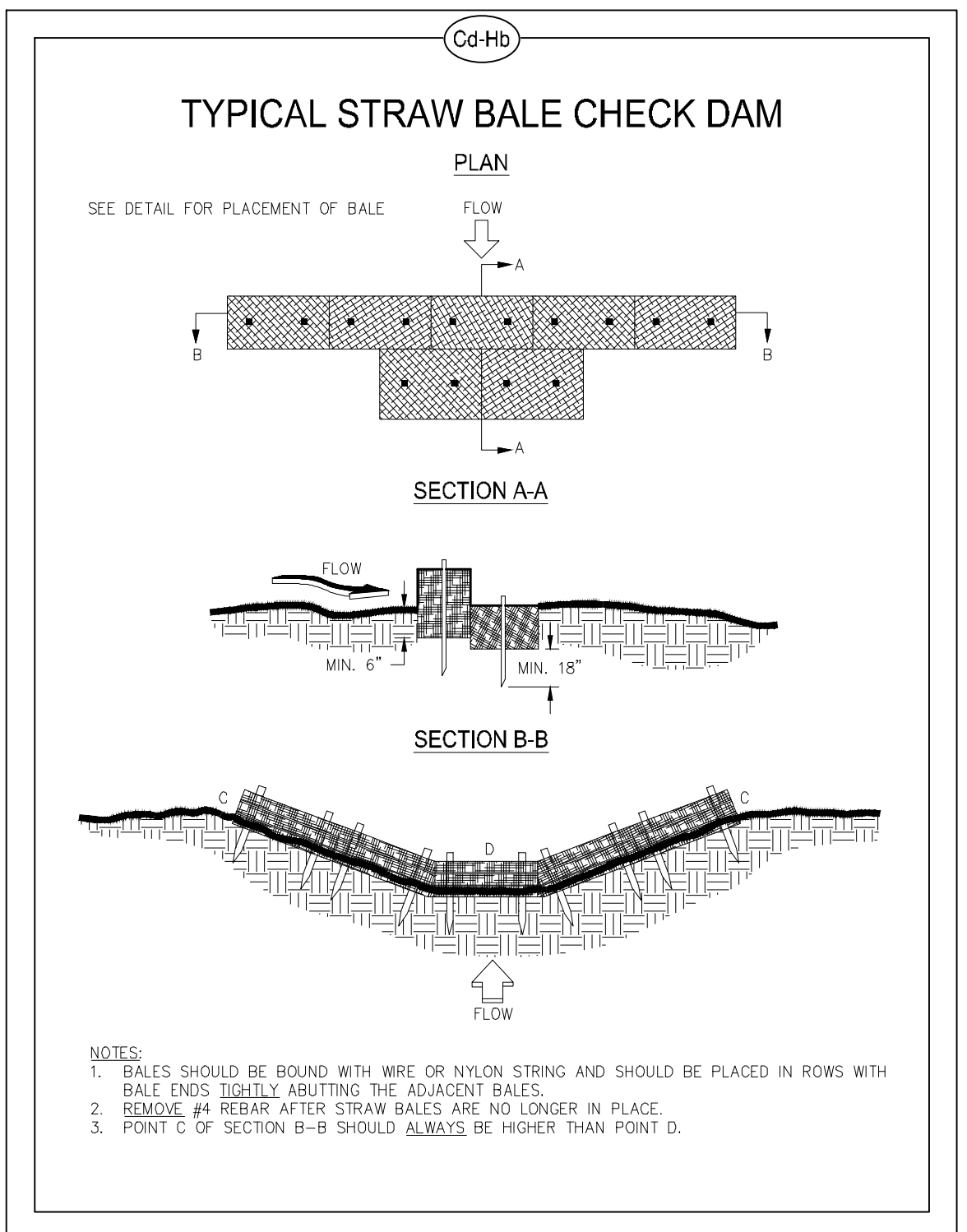
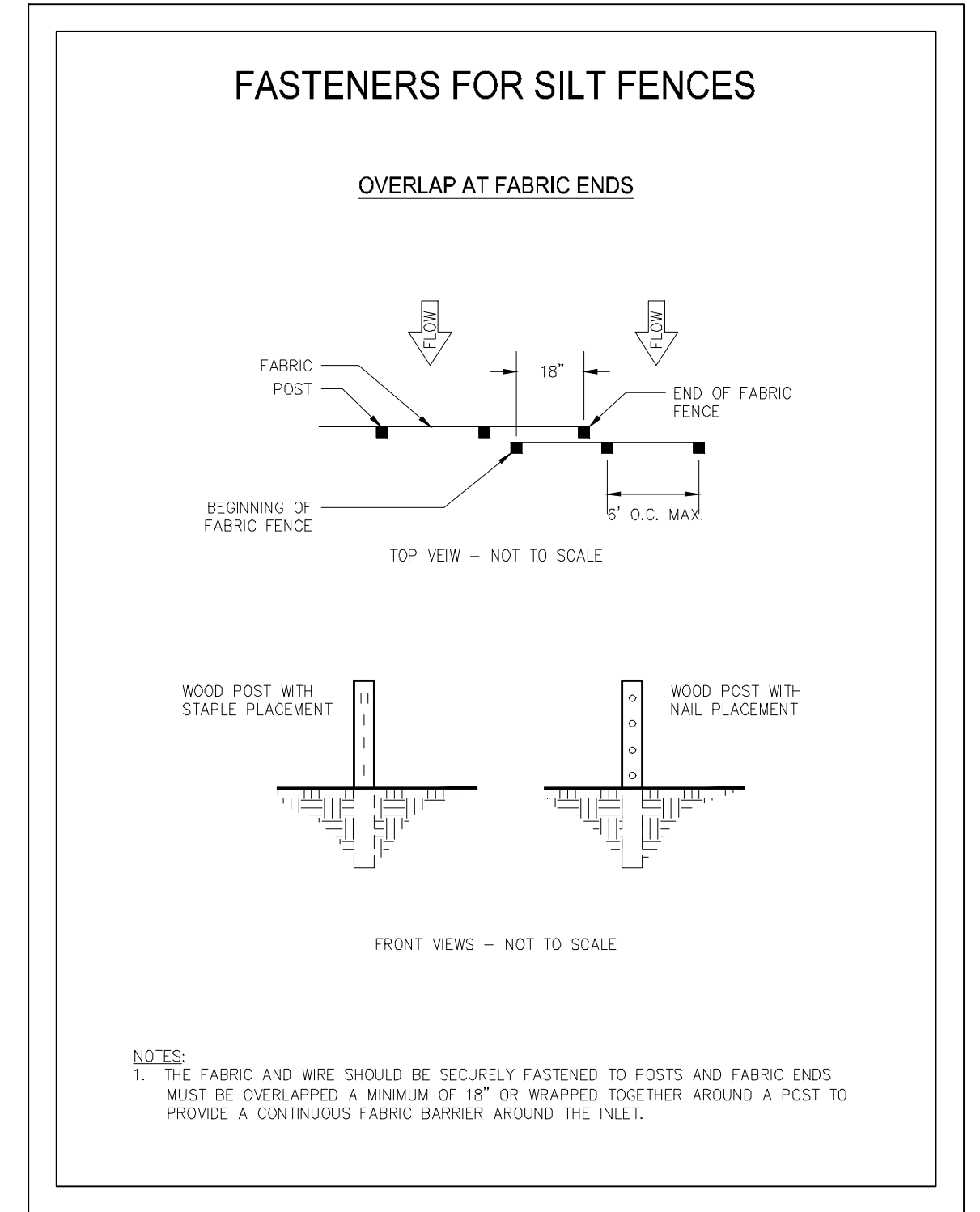
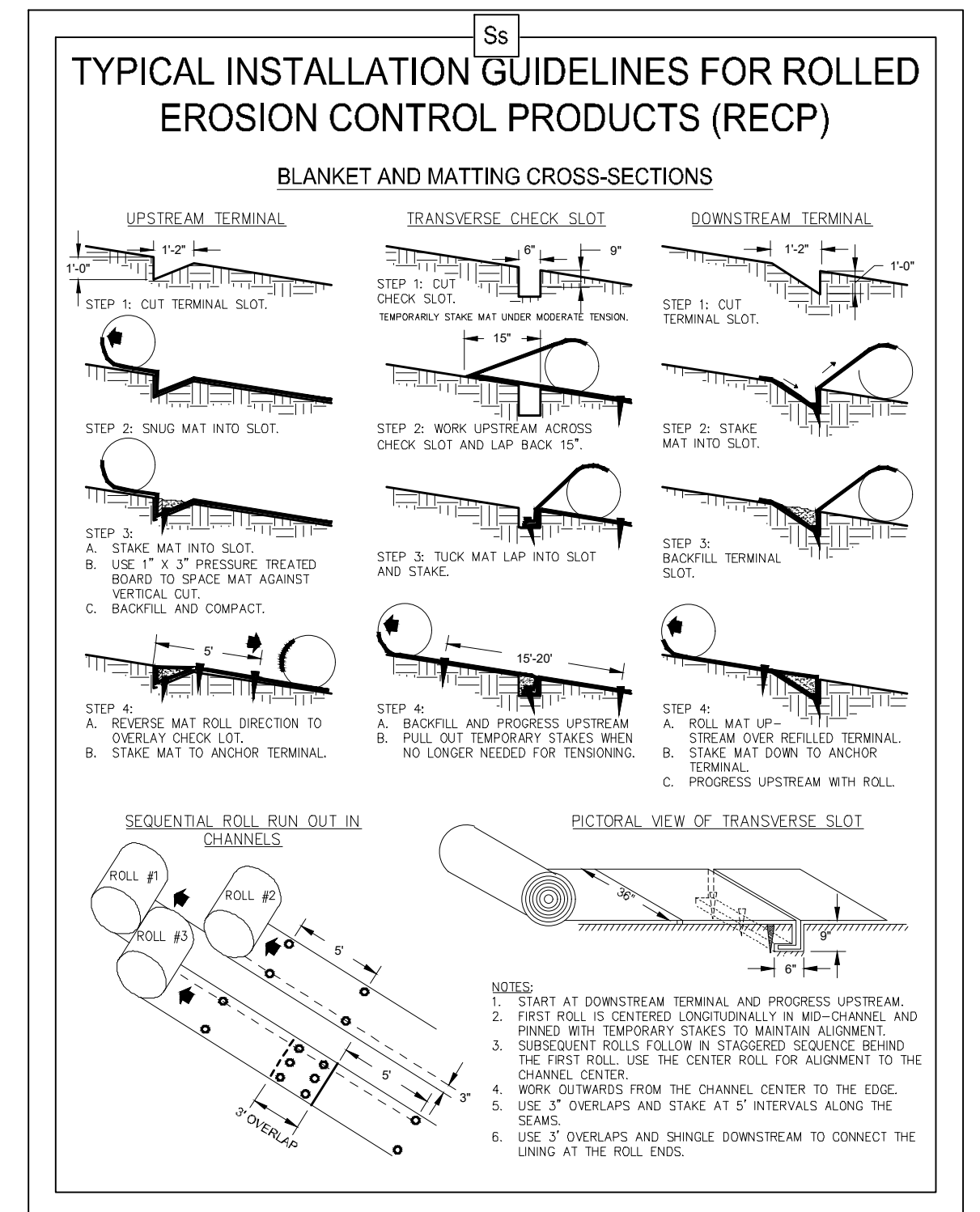
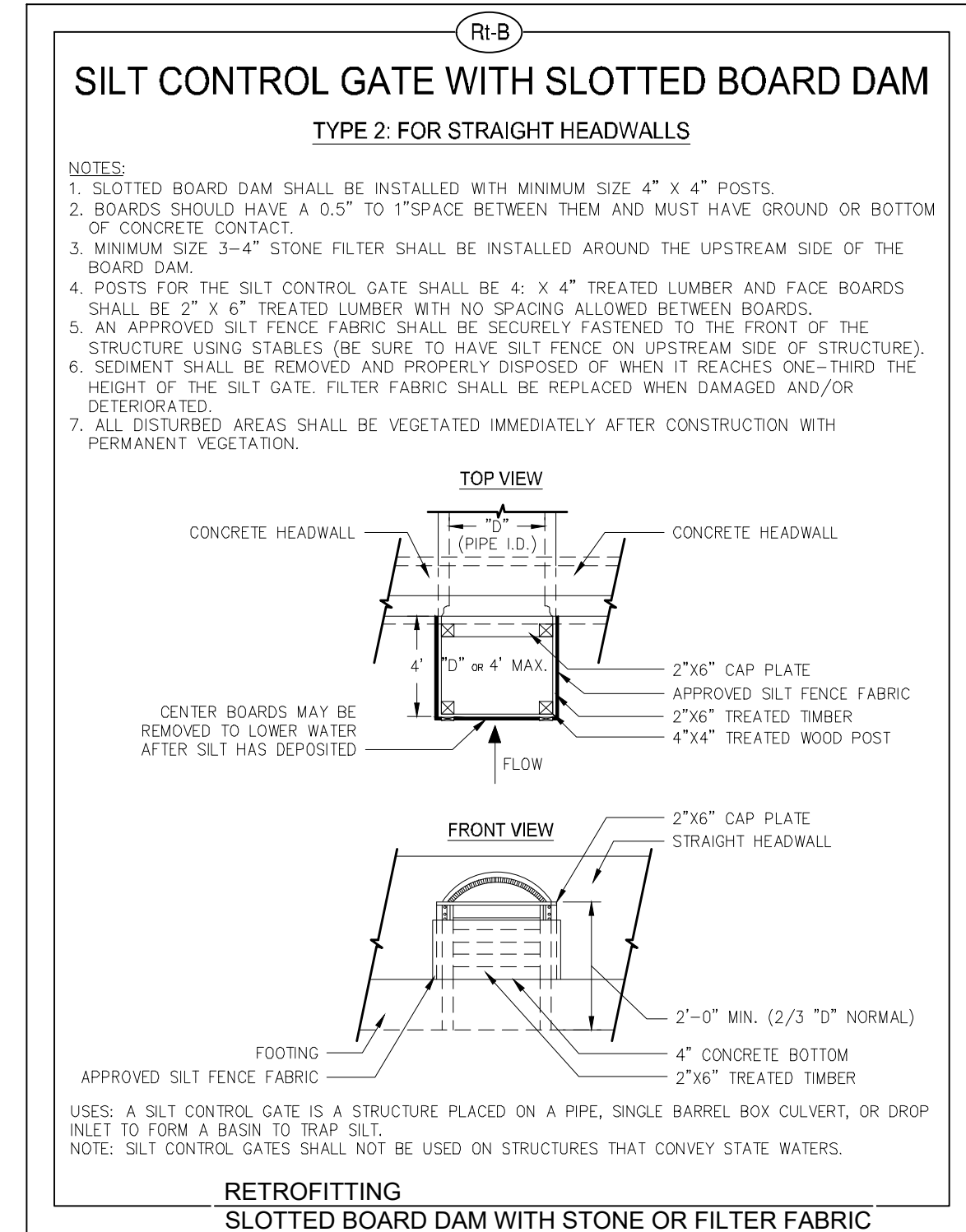
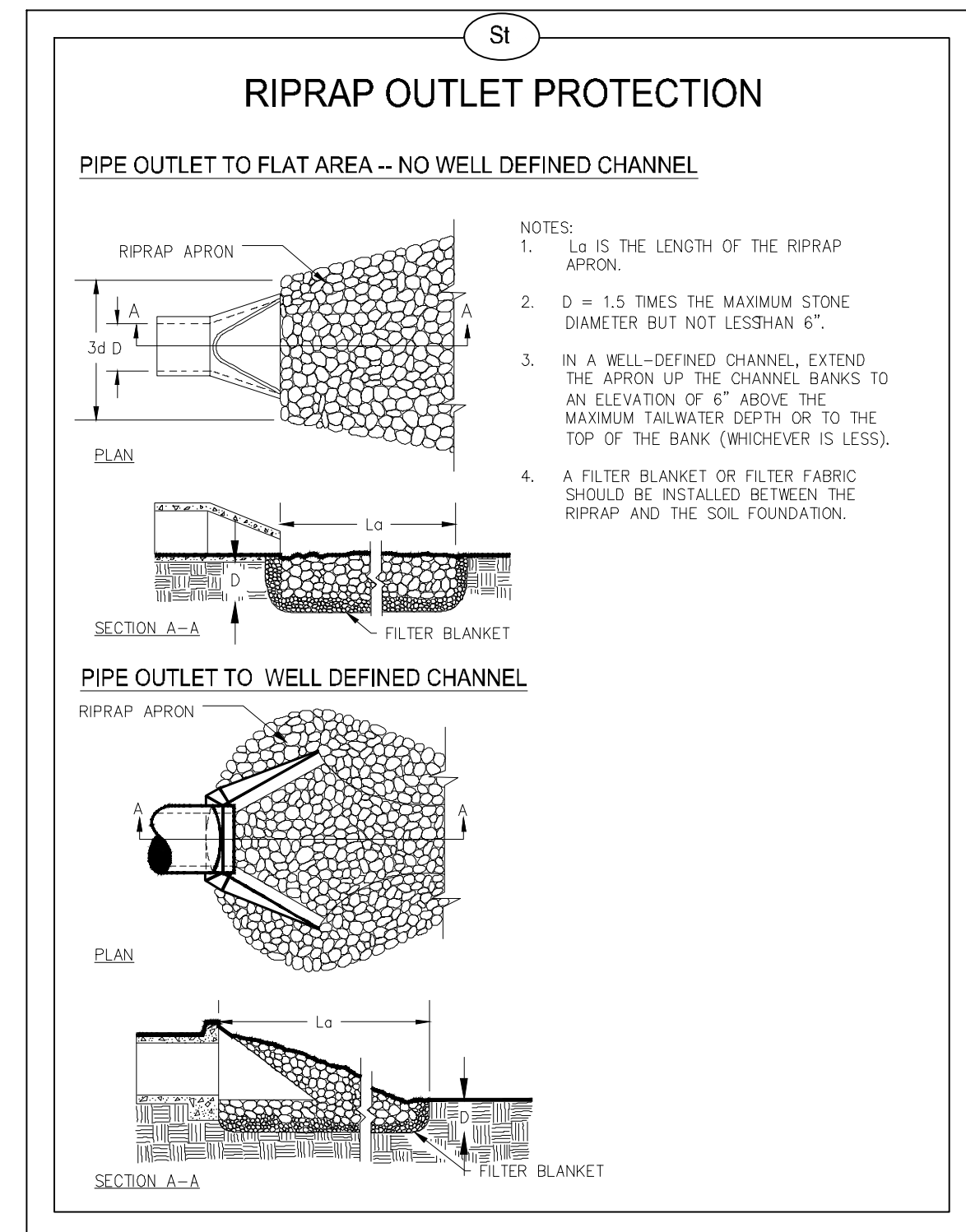
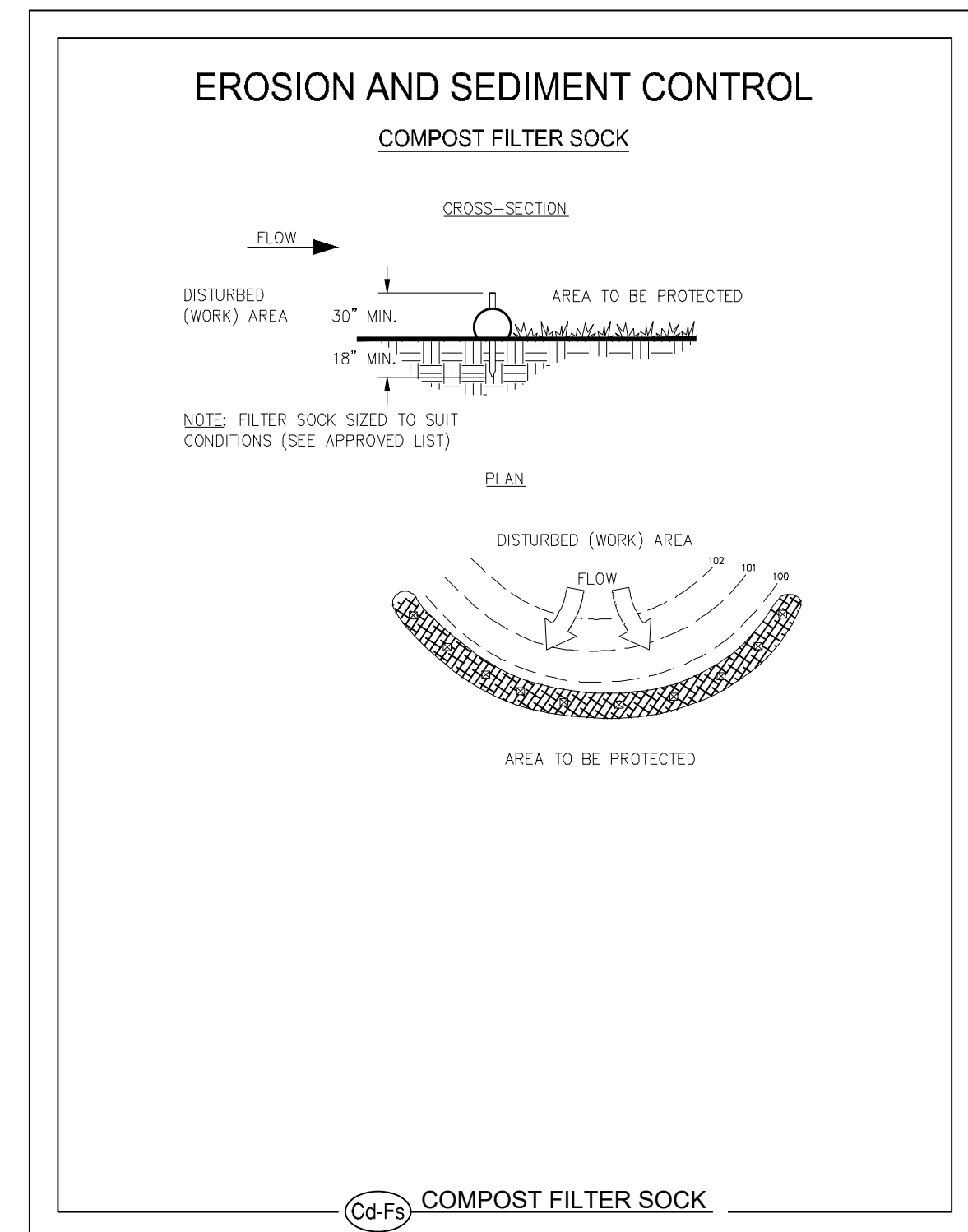


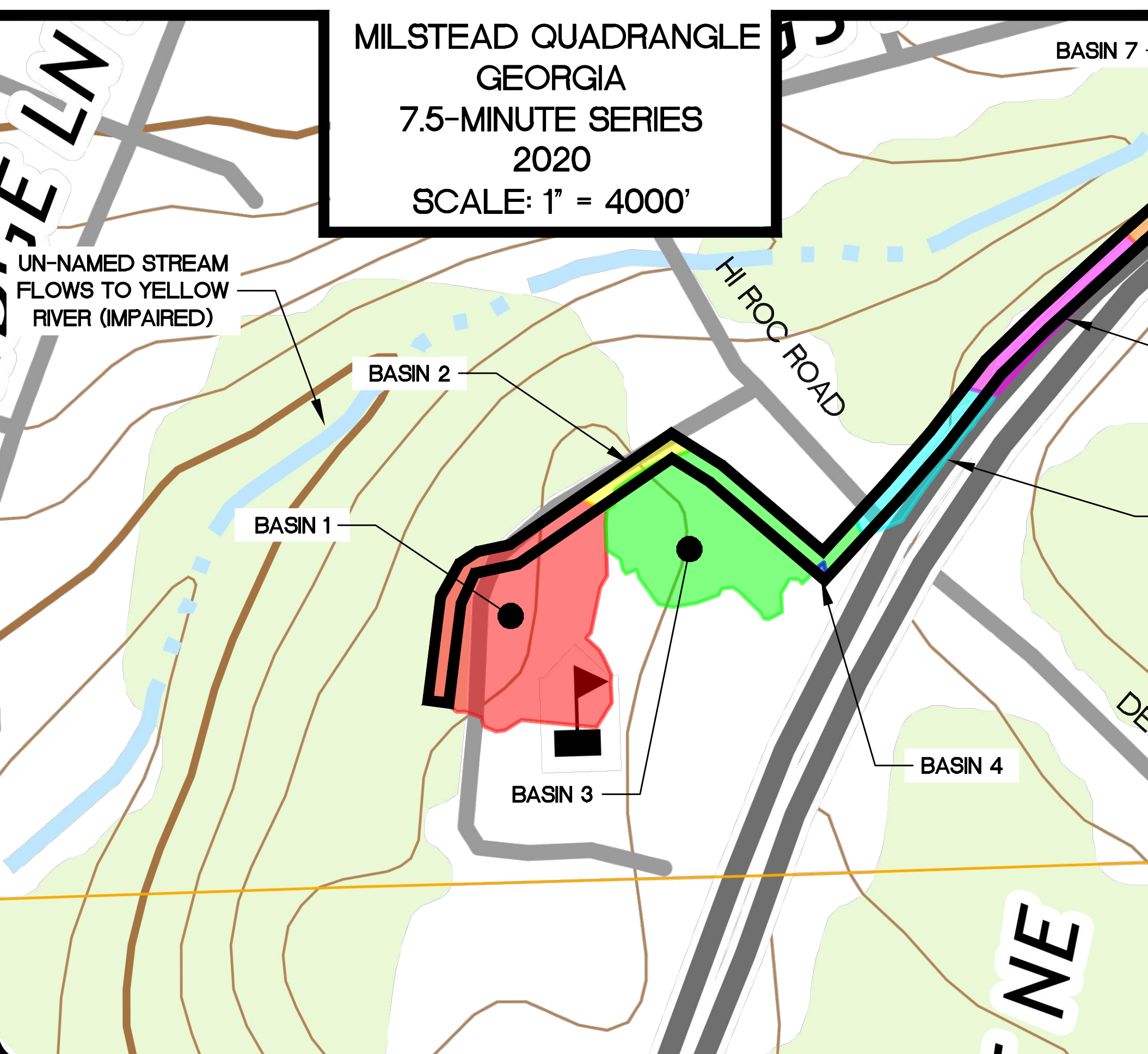
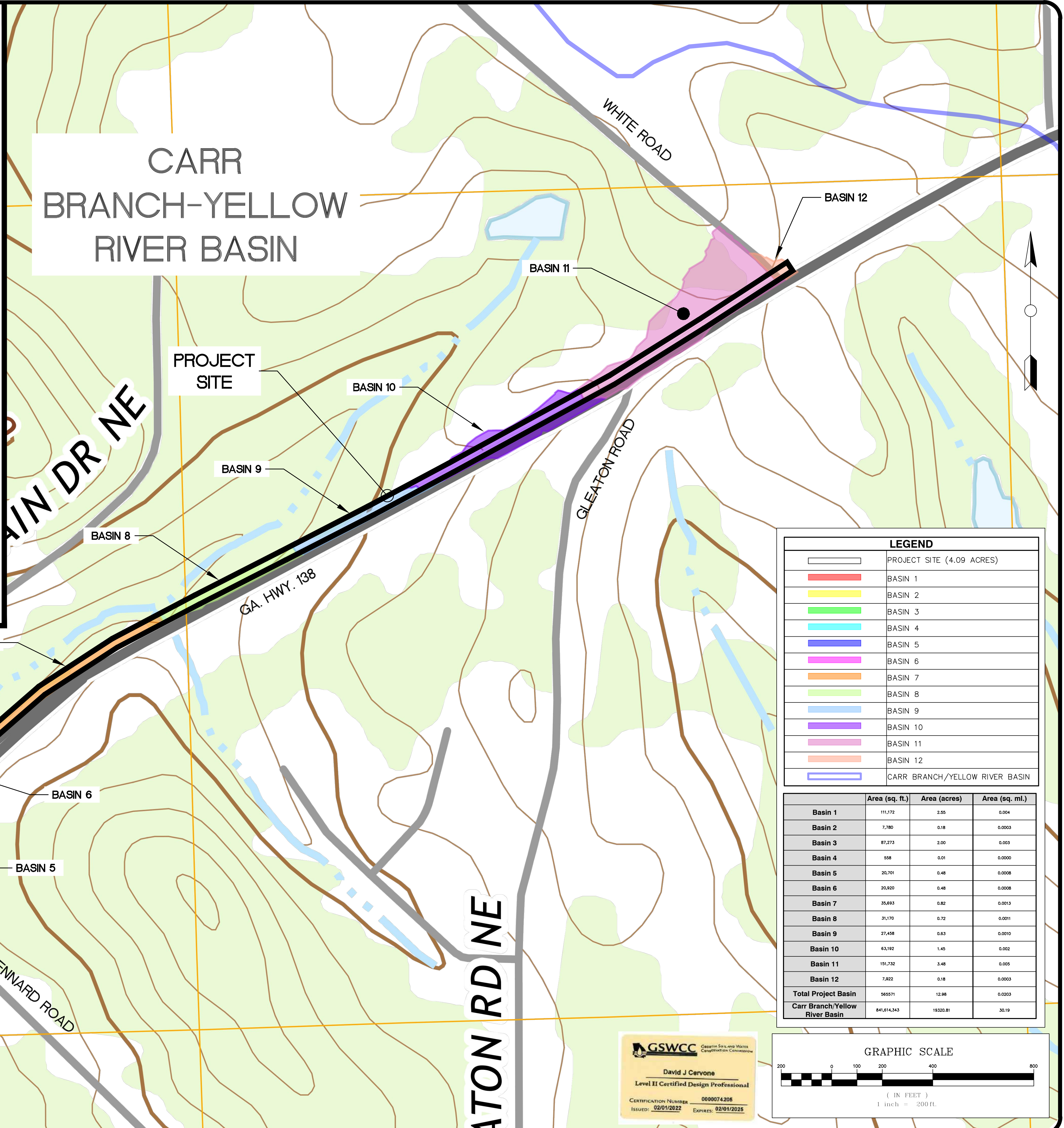
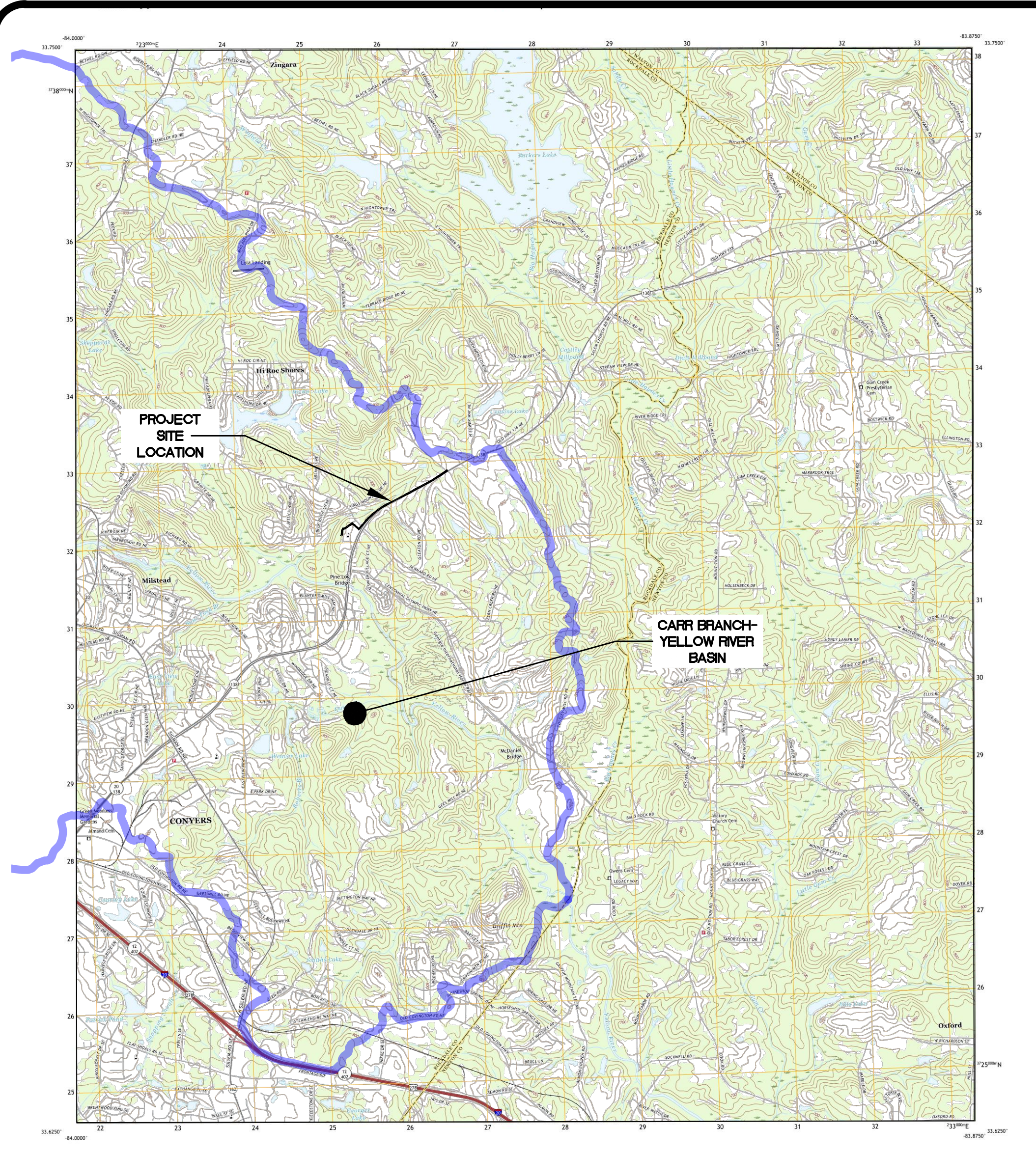
REVISION		DESCRIPTION	DATE
No.	DATE		

EROSION CONTROL DETAILS

DESIGNED BY: DAVID CERVONE
 DRAWN BY: WALT BOBO
 CHECKED BY: DAVID CERVONE
 DATE: 02/22/2022
 FILE NAME: 2245 GA HWY 138 SEWER DT

SHEET: 18
 DRAWING No.: C-14



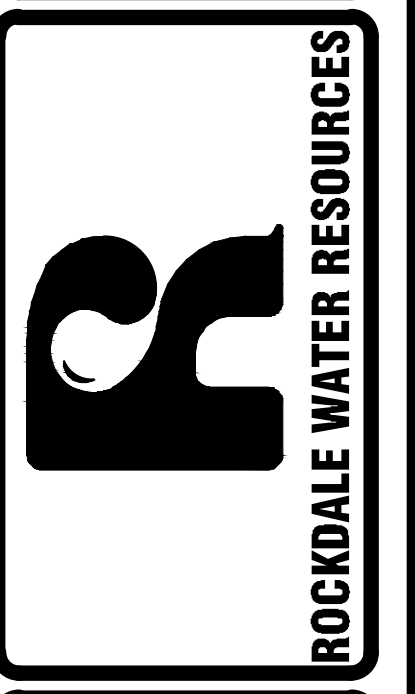
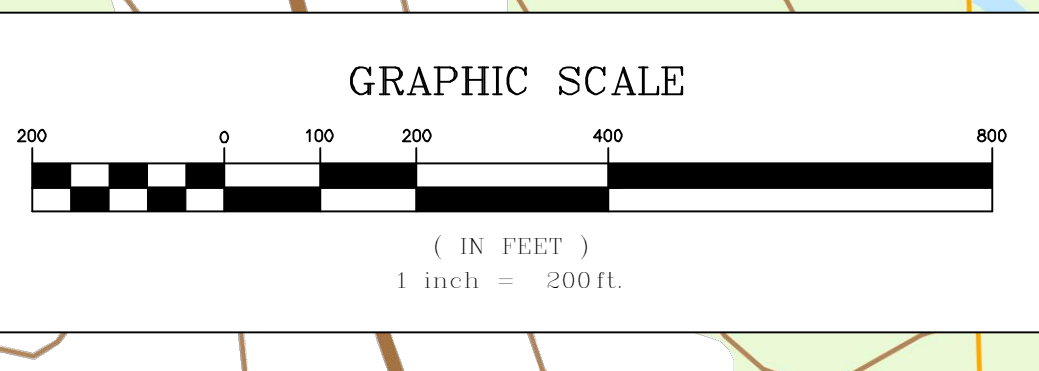


LEGEND

	PROJECT SITE (4.09 ACRES)
	BASIN 1
	BASIN 2
	BASIN 3
	BASIN 4
	BASIN 5
	BASIN 6
	BASIN 7
	BASIN 8
	BASIN 9
	BASIN 10
	BASIN 11
	BASIN 12
	CARR BRANCH/YELLOW RIVER BASIN

	Area (sq. ft.)	Area (acres)	Area (sq. mi.)
Basin 1	111,172	2.05	0.004
Basin 2	7,780	0.18	0.0003
Basin 3	87,273	2.00	0.003
Basin 4	558	0.01	0.0000
Basin 5	20,701	0.48	0.0008
Basin 6	20,920	0.48	0.0008
Basin 7	35,693	0.82	0.0013
Basin 8	31,170	0.72	0.0011
Basin 9	27,458	0.63	0.0010
Basin 10	63,192	1.45	0.002
Basin 11	151,732	3.48	0.005
Basin 12	7,922	0.18	0.0003
Total Project Basin	565,571	12.98	0.0203
Carr Branch/Yellow River Basin	841,614,343	19,320.81	30.19

GSWCC Georgia Soil and Water Conservation Commission
 David J Cervone
 Level II Certified Design Professional
 CERTIFICATION NUMBER: 0000074205
 ISSUED: 02/01/2022 Expires: 02/01/2025



REVISION

NO.	DATE	DESCRIPTION

EROSION CONTROL USGS MAP

DESIGNED BY: DAVID CERVONE
 DRAWN BY: WALT BOBO
 CHECKED BY: DAVID CERVONE
 DATE: 02/22/2022
 FILE NAME: 2245 GA HWY 138 SEWER EXT

SHEET: **19** DRAWING No.: **C-15**