

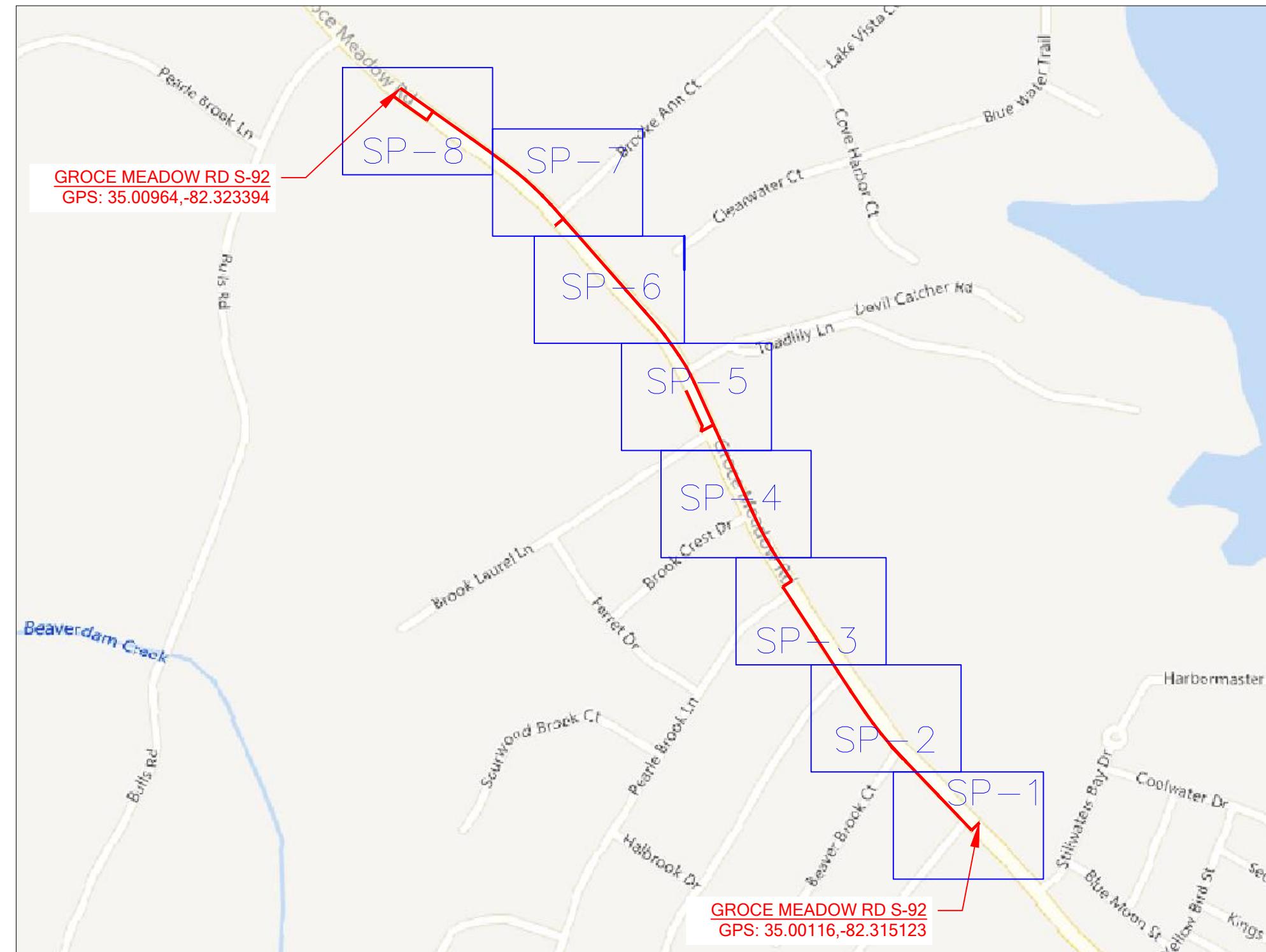
LUMOS NETWORKS
JOB NUMBER: R01963-205
ROUTE NAME: RT_29_FDH_02 (A)

INDEX TO SHEET	
SHEET	TITLE
T-1	LOCATION MAP
GN-1	LEGEND
GN-2	GENERAL NOTES AND CONSTRUCTION NOTE
TC-1 TO TC-3	TRAFFIC CONTROL PLANS
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S-REF	SCDOT ROW PLANS

LUMOS PROPOSED FIBER OPTIC NETWORK PLACEMENT

CONSTRUCTION METHOD	FOOTAGE
UNDERGROUND	4592'
AERIAL	0'

TOTAL PROPOSED FOOTAGE = 4592'



LUMOS:

NAME: RONNY POSTON
(CELL)903-948-3099
NAME: PAUL JERKINS
(CELL)803-413-8686

UTILITIES:

SC8II (I-888-72I-7877)

CENTILLION:

CRAIG BLACK - PROJECT MANAGER
(CELL)720-597-5320

PERMITS:

GREENVILLE COUNTY - PERMIT NUMBER / DATE: TBD
SCDOT - PERMIT NUMBER / DATE: TBD

LINETYPE LEGEND	
EOP	= EX. EDGE OF PAVEMENT
C/L	= EX. CENTER LINE
R/W	= EX. RIGHT OF WAY
ESMT	= EX. EASEMENT
	= EX. PROPERTY LINE
	= EX. BUILDING EDGE
OHF OHF	= EX. OVERHEAD FIBER
BFO BFO	= EX. BURIED FIBER
EX. STRAND	= EX. BURIED FIBER
-O-O-O-	= EX. FENCE
GR GR	= EX. GUARDRAIL
	= RAILROAD
	= PROPOSED OVERHEAD FIBER
144	= PROPOSED BURIED FIBER
	= PROPOSED CONDUIT
STRAND	= PROPOSED STRAND
	= PROPOSED MULTIPORT TAIL
SD	= STORM DRAINAGE
SS	= SEWER LINE
W	= WATER LINE
T	= TELCO LINE
TV	= CABLE TV LINE
E	= ELECTRIC LINE
TRAFF	= TRAFFIC LINE
G	= GAS LINE
	= ALL ROADS HATCHED ARE COUNTY ROADS AND NOT FOR SCDOT PERMIT

SYMBOL LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	PROPOSED ANCHOR & GUY		PROPOSED TERMINAL SPLICE
	FOREIGN/EXISTING ANCHOR & GUY		FIRE HYDRANT
	MGNV		WATER VALVE / METER
	JOINT USE POLE		WATER MANHOLE
	POWER POLE		SEWER MANHOLE
	COMMUNICATION POLE		STORM MANHOLE
	STEEL POLE		STORM INLET / CATCH BASIN
	CATV POLE		GAS VALVE / METER
	PROPOSED POLE		ELECTRIC MANHOLE
	RISER		ELECTRIC HANDHOLE
	PROPOSED STORAGE LOOP		STREET LIGHT
	PROPOSED AERIAL SPLICE		BURIED TRANSFORMER
	PROPOSED BURIED SPLICE		TRAFFIC HANDHOLE
	PROPOSED AERIAL FIBER DIRECTION		TRAFFIC POLE / SIGNAL
	PROPOSED BURIED FIBER DIRECTION		TELCO MANHOLE
	PROPOSED HANDHOLE		TELCO HANDHOLE
	EXISTING HANDHOLE		TELCO PEDESTAL
	PROPOSED PEDESTAL		CABLE TV HANDHOLE
	EXISTING PEDESTAL		CABLE TV PEDESTAL
	PROPOSED FLOWER POT		PROPOSED 1x8 SPLITTER
	PROPOSED LCP CABINET		PROPOSED 1x4 SPLITTER
	EXISTING LCP CABINET		SIGN
	CULVERT		FIBER MARKER



GENERAL NOTES:

1. ALL WORK WILL COMPLY WITH APPLICABLE LOCAL, STATE, AND FEDERAL REGULATORY AGENCIES, INCLUDING, BUT NOT LIMITED TO, OSHA, NESC, DOT, RPA, ETC. GENERAL NOTES WILL APPLY TO ALL DRAWINGS.
2. ALL TRAFFIC CONTROL DEVICES WILL BE IN PLACE PRIOR TO CONSTRUCTION. DEVICES NO LONGER NEEDED WILL BE REMOVED AS QUICKLY AS POSSIBLE.
3. PEDESTRIAN TRAFFIC AREAS MUST BE MAINTAINED AT ALL TIMES. PEDESTRIANS WILL NOT BE ROUTED ON TO PRIVATE PROPERTY.
4. NO MATERIALS OR EQUIPMENT WILL BE STORED OR ALLOWED TO STAND UNPROTECTED WHERE PEDESTRIAN OR VEHICULAR TRAFFIC IS PRESENT.
5. NO EQUIPMENT OR MATERIALS WILL BE STORED ON ROAD SURFACE DURING NON-WORK PERIODS.
6. NO EQUIPMENT OR MATERIALS MAY BE STORED ON THE SIDEWALK.
7. EXCAVATION MATERIAL WILL BE STORED AWAY FROM THE PAVED ROADWAY. ALL SPILLED MATERIAL WILL BE PICKED UP IMMEDIATELY.
8. MUNICIPAL ROAD SIGNS, DELINEATORS, GUARDRAILS, ETC. WILL NOT BE REMOVED WITHOUT PRIOR WRITTEN PERMISSION FROM THE APPROVING AUTHORITY.
9. ALL WORK WILL BE PERFORMED IN ACCORDANCE WITH THE CITY, COUNTY, TOWNSHIP AND STATE SPECIFICATIONS AND STANDARDS.
10. GROUND RESTORATION/RIGHT-OF-WAY SHALL BE RESTORED TO ORIGINAL OR BETTER CONDITION.
11. ANY CONDUIT/INNERDUCT RUNNING LINES SHOWN ON PRINT ARE ESTIMATES ONLY. ACTUAL RUNNING LINES TO BE DETERMINED VIA TEST HOLES BY CONTRACTOR PRIOR TO TRENCHING OPERATION. MOST UNDERGROUND UTILITIES ARE NOT SHOWN ON PRINTS. CONTACT UTILITY COMPANIES FOR EXACT LOCATION.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE TO STREETS, CURBS, ROADS, HIGHWAYS, SHOULDERS, DITCHES, EMBANKMENTS, CULVERTS, STORM DRAINS, BRIDGES OR OTHER PUBLIC OR PRIVATE PROPERTY, REGARDLESS OF LOCATION OR CHARACTER, WHICH MAY BE CAUSED BY MOVING, HAULING OR OTHERWISE TRANSPORTING EQUIPMENT MATERIALS OR MEN TO OR FROM WORK OR ANY SITE THERE-OF, WHETHER BY HIM OR HIS CONTRACTOR OR SUBCONTRACTOR.
13. EXTREME CARE SHALL BE EXERCISED TO AVOID HITTING OR CAUSING DAMAGE TO AERIAL AND SUBSURFACE OBSTRUCTIONS, OWNERS OF STRUCTURES WILL BE NOTIFIED IN ADVANCE OF EXCAVATION WORK BY THE CONTRACTOR AND A REQUEST WILL BE MADE TO LOCATE THE AFFECTED PLANT.
14. ALL MATERIAL PLACED SHALL BE APPROVED BY A PROJECT MANAGER.
15. DEVIATIONS FROM THE ENGINEERED ROUTE REQUIRES A PROJECT MANAGER AND RIGHT-OF-WAY OWNER OR CARETAKER APPROVAL PRIOR TO CONSTRUCTION.
16. CABLE SHALL BE UNREELED AND REREELED IN FIGURE 8 FASHION AT BRIDGES, RAILROAD TRACKS, ROADS, STREETS, UTILITY CROSSINGS AND OTHER LOCATIONS TO PREVENT CUTTING OF THE CABLE UNLESS NOTED IN THE DESIGN.
17. WHERE PERMITS FROM STATE, COUNTY, TOWNSHIP, CITY, RAILROAD OR GOVERNMENTAL AGENCIES ARE REQUIRED, ALL WORK PERFORMED WILL COMPLY WITH THESE AGENCIES STANDARD SPECIFICATION.
18. THE CONTRACTOR SHALL NOTIFY BUILDING MANAGEMENT WHEN WORK WILL BEGIN ON BUILDING. CONTRACTOR TO COORDINATE ROOM ACCESS AND WORK START AND STOP TIMES WITH BUILDING MANAGEMENT.

CONSTRUCTION NOTES:

19. CONTRACTOR SHALL BE LIABLE FOR ANY DAMAGE DONE TO EXISTING STRUCTURE DURING THE COURSE OF PERFORMING THE JOB INDICATED ON THE PRINTS, REPAIR AND/OR REPLACEMENT OF DAMAGE TO BUILDING SHALL BE DONE SOLELY AT THE CONTRACTORS EXPENSE.
20. THE PROJECT MANAGER WILL RESERVE THE RIGHT TO INSPECT AT ANY TIME THE WORK BEING PERFORMED BY THE CONTRACTOR. IF STC/SNC DETERMINES THAT THE WORK IS NOT BEING PERFORMED TO MINIMUM QUALITY STANDARDS, THEN THE CONTRACTOR SHALL PROVIDE REWORK AT HIS OWN COST.
21. ANY CHANGE IN PROJECT SCOPE, INCLUDING BUT NOT LIMITED TO, CONDUIT LENGTH, CONDUIT PATH, AERIAL PATH ETC., MUST BE APPROVED BY THE PROJECT MANAGER.
22. ALL CORING/CONSTRUCTION THAT WILL CAUSE NOISE AND/OR VIBRATION SHALL BE DONE OUTSIDE NORMAL BUSINESS HOURS OR TO THE DISCRETION OF THE BUILDING MANAGEMENT.
23. THE CONTRACTOR SHALL PROTECT, SHORE, BRACE AND MAINTAIN ALL UNDERGROUND PIPES, CONDUITS, DRAINS AND OTHER UNDERGROUND CONSTRUCTION UNCOVERED OR OTHERWISE Affected BY THE CONSTRUCTION WORK.
24. CERTAIN PIPE LINES, SEWERS, CULVERTS, DRAINS, CABLES AND OTHER EXISTING SUBSURFACE STRUCTURES IN THE VICINITY OF THE WORK TO BE DONE ARE INDICATED ON THE PLANS ACCORDING TO THE BEST INFORMATION AVAILABLE TO THE SURVEY CREW. DAMAGE TO SUBSURFACE STRUCTURES, OR DELAY TO THE CONTRACTOR DUE TO ENCOUNTERING STRUCTURES, CABLES OR PIPELINE NOT SHOWN OR IN LOCATIONS DIFFERENT FROM THOSE INDICATED ON THE PLANS SHALL NOT CONSTITUTE A CLAIM FOR EXTENSION OF WORK DELAYS.
25. THE REMOVAL AND STORAGE OF ALL SHRUBBERY TO BE REPLACED IS THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL LAND CONSERVATION NOTES:

1. DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY SILT TRAPS MAINTAINED AND MODIFIED AS REQUIRED DURING CONSTRUCTION PROGRESS.
2. AT THE COMPLETION OF THE CONSTRUCTION PROJECT AND PRIOR TO RELEASE OF THE BOND, ALL TEMPORARY SILTATION AND EROSION CONTROLS SHALL BE REMOVED UPON THE APPROVAL OF PROJECT MANAGER AND ALL DENUDED AREAS SHALL BE STABILIZED WITH VEGETATION.
3. EXCAVATION MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.

AERIAL CABLE PLACEMENT:

1. CONVENTIONAL AERIAL CONSTRUCTION TECHNIQUES WILL BE USED IN THE PLACEMENT OF FIBER OPTIC CABLE.
2. CABLE TENSION WILL BE MONITORED AND RECORDED AS THE CABLE IS PULLED THROUGH CABLE ROLLERS.
3. CABLE ROLLERS WILL BE SPACED AT A MAXIMUM INTERVAL OF THIRTY-FIVE FEET (35'). TYPE "B" ROLLERS WILL BE USED. CONTRACTORS ARE REQUIRED TO PROVIDE SUFFICIENT ROLLERS AND PULL-LINE TO PLACE AT LEAST FIVE KILOMETERS (5 KM) OF CABLE IN A SINGLE PULL.
4. AERIAL CABLE GUIDES WILL BE USED.
5. AERIAL STRAND WILL BE USED AND TENSIONED WITH A STRAND DYNAMOMETER.
6. STRAND WILL BE PLACED AS SPECIFIED ON ENGINEERING PLANS.
7. PRELASHING OF CABLE TO STRAND WILL NOT BE ALLOWED. CABLE WILL BE DOUBLE LASHED WITH 45 MIL STAINLESS LASHING WIRE.
8. ONLY NEW HARDWARE, i.e. LASHING WIRE, LASHING WIRE CLAMPS, ETC., WILL BE ACCEPTED.
9. LASHING WIRE CLAMPS SHALL BE PLACED 12" EACH FROM CENTER THROUGH BOLT, AND METAL STRAP WITH 1/4" SPACER SHALL BE PLACED 10" FROM CENTER THROUGH BOLT.
10. OVERLASHING OPERATIONS REQUIRE THE LOWERING OF EXISTING FIBER OPTIC CABLE SLACK COILS AND SPLICE CASES PRIOR TO OVERLASHING THE PROPOSED FIBER OPTIC CABLE (UNLESS OTHERWISE NOTED).
11. ALL UTILITY POLE HARDWARE MUST BE TIGHTENED BEFORE LASHING OPERATIONS.
12. LASHING WIRES SHALL BE TERMINATED IN A MANNER SO AS NOT TO CROSS ONE ANOTHER OR ANY OTHER SHARP OBJECTS, WHICH MIGHT CREATE FUTURE BREAKS IN THE WIRE. ENDS OF LASHING WIRE AND METAL STRAPS SHALL BE TRIMMED, TUCKED, AND KEPT NEAT.
13. FIBER OPTIC WARNING TAGS SHALL BE PLACED AT EVERY WORK POLE, MANHOLE, SLACK COIL, SPLICE CASE AND WHERE SO INDICATED BY PROJECT MANAGER.
14. COMPLY WITH NESC REGULATION PART 92 AND RUS BULLETIN 1751F-815 REQUIRING EIGHT OR MORE BONDS PER MILE.
15. ALL ANCHORS WILL BE IN PLACE PRIOR TO PLACING AND TENSIONING OF STRAND. TEMPORARY GUYING CAN BE USED IF AVAILABLE IF APPROVED BY SHENTEL PROJECT MANAGER, AND MUST BE MADE PERMANENT WITH APPROVED ANCHORS ASAP.

REFERENCES																			
WORK ZONE TRAFFIC CONTROL ENGINEER																			
 WILLIE E. McCONNELL, JR. NO. 24242																			
 SIGNATURE 8/2/11 DATE																			
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0	8-23-07 JCS DRAWING NO. UPDATE																		
#	DATE																		
CHK	DESCRIPTION																		
SCDOT SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION DESIGN STANDARDS OFFICE 955 PARK STREET ROOM 405 COLUMBIA, SC 29201																			
STANDARD DRAWING																			
RIGHT SHOULDER CLOSURE (CASE I / CASE II) PRIMARY ROUTES																			
610-205-00																			
EFFECTIVE LETTING DATE: JAN, 2013 THIS DRAWING IS NOT TO SCALE																			

GENERAL NOTES

- ALL SIGN LOCATIONS ARE TO BE MEASURED FROM THE WORK AREA. WORK LIMITS FOR THE PROJECT WILL BE DETERMINED BY THE ENGINEER AND AS INDICATED IN THE CONTRACT.
- INSTALL ADVANCE WARNING SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS NO LESS THAN 4 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH EARTH SHOULDERS AND NO LESS THAN 6 FEET FROM THE NEAR EDGE OF THE SIGN TO THE NEAR EDGE OF AN ADJACENT TRAVEL LANE ON ROADWAYS WITH PAVED SHOULDERS. WHEN CURB & GUTTER IS PRESENT, INSTALL THE SIGN NO LESS THAN 2 FEET FROM THE NEAR EDGE OF THE SIGN TO THE FACE OF THE CURB.
- SPACINGS INDICATED ARE FOR NORMAL CONDITIONS; ADJUSTMENTS MAY BE REQUIRED DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENTS OR OTHER SIGHT DISTANCE RESTRICTIONS.
- ALL SIGNS MOUNTED ON PORTABLE SIGN SUPPORTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 5 FEET FROM THE GROUND TO THE BOTTOM OF THE SIGN. ALL SIGNS MOUNTED ON GROUND MOUNTED U-CHANNEL POSTS OR SQUARE STEEL TUBE POSTS SHALL HAVE A MINIMUM MOUNTING HEIGHT OF 7 FEET FROM THE GRADE ELEVATION OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE TO THE BOTTOM OF THE SIGN UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. MOUNT ALL SIGNS STRAIGHT AND LEVEL AND WITH THE FACE OF THE SIGNS PERPENDICULAR TO THE SURFACE OF THE ROADWAY.
- REFLECTORIZE ORANGE ADVANCE WARNING SIGNS AND ANY ORANGE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A FLUORESCENT ORANGE COLORED PRISMATIC RETROREFLECTIVE SHEETING. REFLECTORIZE WHITE REGULATORY SIGNS AND ANY WHITE AREAS OF A MULTI-COLORED ADVANCE WARNING SIGN WITH A WHITE COLORED PRISMATIC RETROREFLECTIVE SHEETING.
- ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH ALL NCHRP REPORT 350 REQUIREMENTS AND SHALL REQUIRE APPROVAL BY THE DEPARTMENT. ONLY THOSE TRAFFIC CONTROL DEVICES LISTED ON THE "APPROVED PRODUCTS LIST FOR TRAFFIC CONTROL DEVICES IN WORK ZONES" ARE CONSIDERED ACCEPTABLE FOR USE. THIS LIST MAY BE ACCESSED ON THE DEPARTMENT'S WEB SITE AT: www.scdot.org
- THE CONTRACTOR SHALL PROVIDE AND UTILIZE ANY SPECIAL SIGN MOUNTING ASSEMBLIES AND HARDWARE THAT MAY BE NECESSARY FOR INSTALLING AND MOUNTING SIGNS IN AREAS OF CONCRETE MEDIAN BARRIER, BRIDGE PARAPET WALLS OR DOUBLE FACED GUARDRAIL.
- THE PRIMARY TRAFFIC CONTROL DEVICES UTILIZED FOR DAYTIME SHOULDER CLOSURES ARE 36" CONES. THE PRIMARY TRAFFIC CONTROL DEVICES UTILIZED FOR NIGHTTIME SHOULDER CLOSURES ARE PORTABLE PLASTIC DRUMS. DURING DAYTIME SHOULDER CLOSURES, 42" OVERSIZED CONES MAY BE SUBSTITUTED FOR 36" CONES. DURING NIGHTTIME SHOULDER CLOSURES, 42" OVERSIZED CONES ARE PROHIBITED FOR USE. IF THIS TRAFFIC CONTROL SETUP EXTENDS INTO THE HOURS OF DARKNESS, REPLACE ALL CONES, 36" OR 42" OVERSIZED, WITH PORTABLE PLASTIC DRUMS.
- THE 36" CONES UTILIZED DURING DAYLIGHT HOURS ARE NOT REQUIRED TO BE REFLECTORIZED. REFLECTORIZ ALL 42" OVERSIZED CONES UTILIZED DURING DAYTIME SHOULDER CLOSURES WITH TYPE III FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT. REFLECTORIZE ALL PORTABLE PLASTIC DRUMS WITH TYPE III FLEXIBLE PRISMATIC RETROREFLECTIVE SHEETING UNLESS OTHERWISE DIRECTED BY THE DEPARTMENT.
- THE DEPARTMENT PROHIBITS CONDUCTING WORK ON PRIMARY AND SECONDARY ROUTES WITHIN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE UNDER A SHOULDER CLOSURE. ALL WORK THAT MAY REQUIRE THE PRESENCE OF EQUIPMENT, PERSONNEL, MATERIALS OR WORK VEHICLES WITHIN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE SHALL BE CONDUCTED UNDER A LANE CLOSURE.

CASE I: WHENEVER ANY PORTION OF THE SHOULDER AREA WITHIN 15' BUT NOT CLOSER THAN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE MUST BE OCCUPIED BY EQUIPMENT, PERSONNEL, MATERIALS OR WORK VEHICLES TO CONDUCT THE WORK, INSTALL AND MAINTAIN THE SIGNING AND TRAFFIC CONTROL DEVICES AS ILLUSTRATED.

CASE II: WHENEVER THE WORK IS CONDUCTED BEYOND 15' BUT WITHIN 30' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE, INCLUDING THE PRESENCE OF EQUIPMENT, PERSONNEL, MATERIALS OR WORK VEHICLES, INSTALL AND MAINTAIN THE SIGNING AND TRAFFIC CONTROL AS ILLUSTRATED.

12. CONDUCT THE WORK IN SUCH A MANNER THAT WILL NOT REQUIRE ENCROACHMENT OF TRAFFIC CONTROL DEVICES, EQUIPMENT, PERSONNEL, MATERIALS OR ANY WORK RELATED VEHICLES WITHIN 1' OF THE NEAR EDGE OF THE ADJACENT TRAVEL LANE.

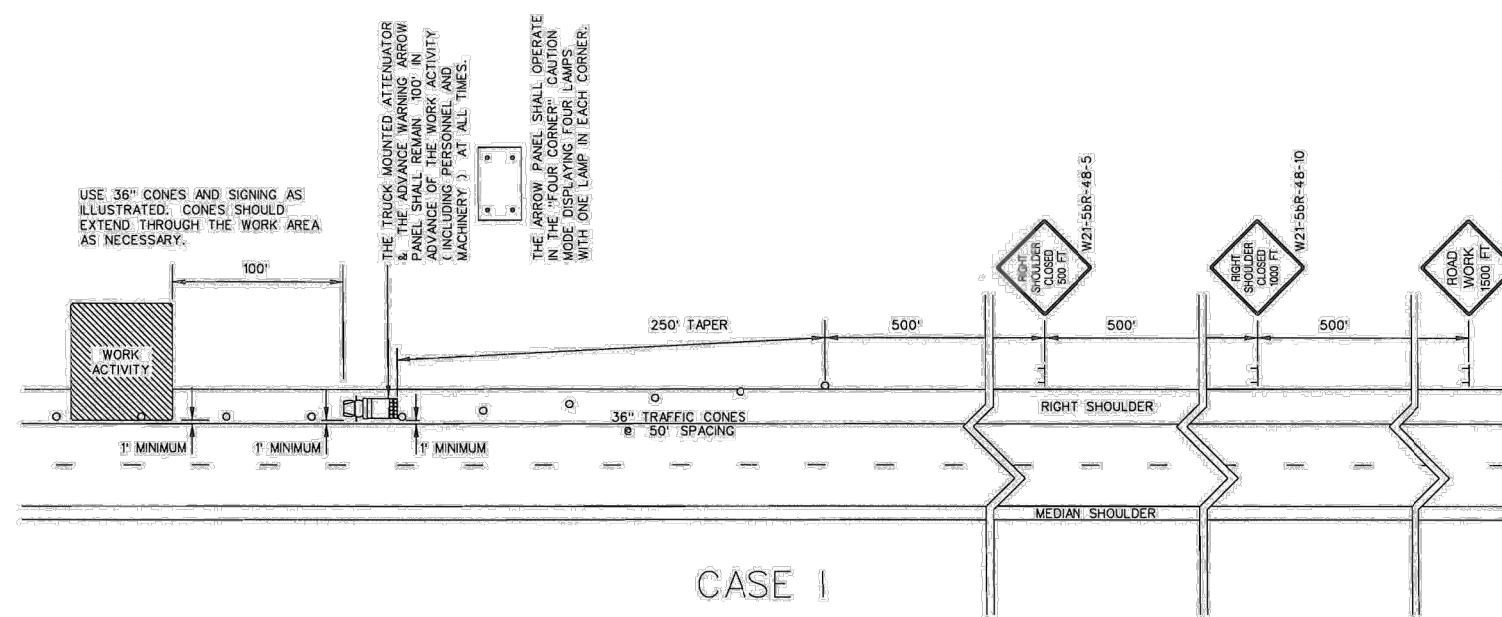
13. PLACE THE TRUCK MOUNTED ATTENUATOR AT A LOCATION 100' IN ADVANCE OF THE WORK ACTIVITY AND NO CLOSER THAN 1' FROM THE NEAR EDGE OF THE ADJACENT TRAVEL LANE.

14. FOR A CASE I SCENARIO IN THE RIGHT SHOULDER AREA, ADJUST THE TAPER AS NECESSARY TO FIT THE WIDTH OF THE SHOULDER WHILE MAINTAINING THE REQUIRED 250' TAPER LENGTH.

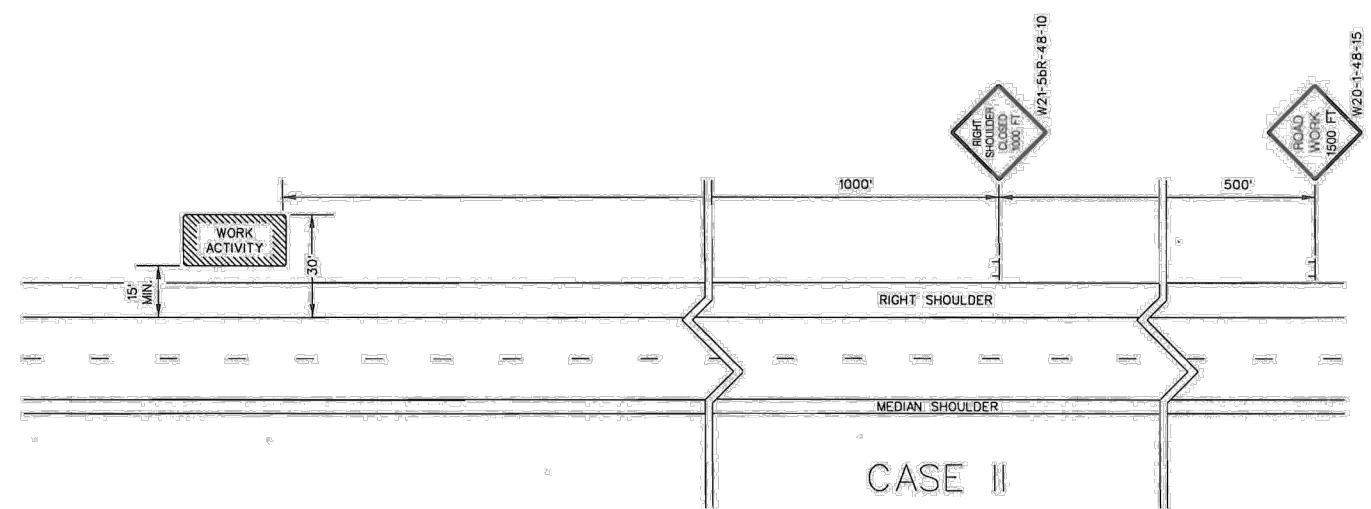
15. IF WORK IS BEING CONDUCTED SIMULTANEOUSLY AT TWO DIFFERENT LOCATIONS AT THE SAME TIME UNDER CASE I SHOULDER CLOSURES, SEPARATE THE TWO LOCATIONS BY NO LESS THAN 1 MILE FROM THE END OF THE FIRST CASE I CLOSURE THAT A MOTORIST WILL ENCOUNTER TO THE BEGINNING OF THE TAPER OF THE SECOND CASE I CLOSURE. A MINIMUM SEPARATION DISTANCE OF ONE-HALF MILE IS RECOMMENDED BETWEEN SHOULDER CLOSURES WHEN ONE OR BOTH SHOULDER CLOSURES IS A CASE I CLOSURE.

16. THE DEPARTMENT RESERVES THE RIGHT TO RESTRICT WORK OPERATIONS AND/OR WITHHOLD THE MONTHLY ESTIMATE IF THE TRAFFIC CONTROL IS NOT PROPERLY INSTALLED AND MAINTAINED AS DIRECTED BY THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, THE STANDARD DRAWINGS, THE PLANS AND/OR THE ENGINEER.

17. THIS TYPICAL TRAFFIC CONTROL SETUP APPLIES TO THE INSTALLATION OF SHOULDER CLOSURES IN THE RIGHT SHOULDER AREAS OF PRIMARY AND SECONDARY ROADWAYS.



CASE I



CASE II

PORTABLE TRUCK MOUNTED ATTENUATOR

- UTILIZE A TRUCK MOUNTED ATTENUATOR ATTACHED TO THE REAR OF A TRUCK WITH A MINIMUM GROSS VEHICLE WEIGHT (GVW) OF 15,000 POUNDS (ACTUAL WEIGHT). IF THE ADDITION OF SUPPLEMENTAL WEIGHT TO THE VEHICLE AS BALLAST IS NECESSARY, CONTAIN THE MATERIAL WITHIN A STRUCTURE CONSTRUCTED OF STEEL. CONSTRUCT THIS STEEL STRUCTURE TO HAVE A MINIMUM OF FOUR SIDES AND A BOTTOM. A TOP IS OPTIONAL. BOLT THIS STRUCTURE TO THE FRAME OF THE TRUCK. UTILIZE A SUFFICIENT NUMBER OF FASTENERS FOR ATTACHMENT OF THE STEEL STRUCTURE TO THE FRAME OF THE TRUCK. ENSURE THE STRUCTURE WILL NOT SEPARATE FROM THE FRAME OF THE TRUCK DURING AN IMPACT UPON THE ATTACHED TRUCK MOUNTED ATTENUATOR. UTILIZE EITHER DRY LOOSE SAND OR STEEL REINFORCED CONCRETE FOR BALLAST MATERIAL WITHIN THE STEEL STRUCTURE TO ACHIEVE THE NECESSARY WEIGHT. THE BALLAST MATERIAL SHALL REMAIN CONTAINED WITHIN THE CONFINES OF THE STEEL STRUCTURE AND SHALL NOT PROTRUDE FROM THE STEEL STRUCTURE IN ANY MANNER.
- LOCATE THE TRUCK MOUNTED ATTENUATOR 100 FEET IN ADVANCE OF THE WORK AREA UNLESS OTHERWISE SPECIFIED.
- PROVIDE, INSTALL AND MAINTAIN THE TRUCK MOUNTED ATTENUATOR AS SPECIFIED BY THE STANDARD SPECIFICATIONS AND AS DIRECTED BY THE ENGINEER.

ADVANCE WARNING ARROW PANEL

ALL ADVANCE WARNING ARROW PANELS SHALL BE 48" x 96" WITH A MINIMUM LEGIBILITY DISTANCE OF 1 MILE. PLACEMENT OF AN ADVANCE WARNING ARROW PANEL MAY REQUIRE ADJUSTMENTS DUE TO HORIZONTAL AND/OR VERTICAL ALIGNMENT OR OTHER SIGHT DISTANCE RESTRICTIONS. THE PANEL FACE SHALL BE NONREFLECTIVE BLACK. ALL ADVANCE WARNING ARROW PANELS SHALL COMPLY WITH THE STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, LATEST EDITION.

WHEN AN ADVANCE WARNING ARROW PANEL IS REQUIRED TO OPERATE IN THE CAUTION MODE, THE ADVANCE WARNING ARROW PANEL SHALL DISPLAY THE "FOUR CORNERS" CAUTION MODE, WITH ONE LAMP IN EACH CORNER, DISPLAY OF ANY OTHER TYPE OF CAUTION MODE OTHER THAN THE "FOUR CORNERS" CAUTION MODE SUCH AS THE "FLASHING BAR" OR THE "ALTERNATING DIAMOND" CAUTION MODES ARE UNACCEPTABLE AND PROHIBITED.

LEGEND

36" TRAFFIC CONES

SUBMITTAL INFORMATION				HOURS OF OPERATION:	
SITE NAME:	REV	DATE	DESCRIPTION	INIT	WORKING HOURS MON-FRI: 9AM-4PM
SITE ADDRESS:	0	06/28/2024	PERMIT DRAWING	CENT	
COUNTY:					
APPROVER:					



SHEET TITLE

TRAFFIC CONTROL PLAN

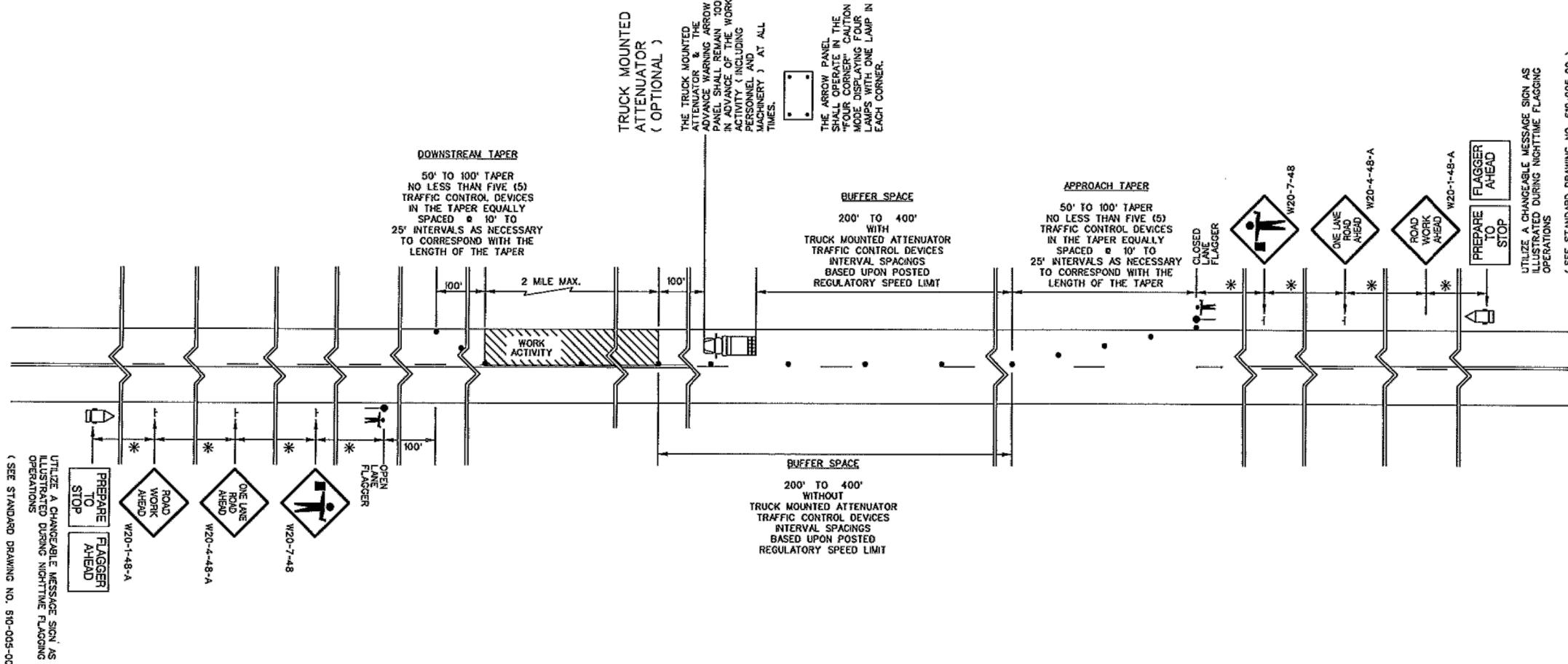
SHEET NUMBER

TC-1

DRAWING SHEET

DRAWING 610-005-10 NOTES

1. SEE STANDARD DRAWING NO. 610-005-00 FOR ALL GENERAL NOTES AND REQUIREMENTS.



TABLE

SIGN PLACEMENT INTERVALS	
SPEED LIMIT	*
# 35 MPH LOW SPEED	200
# 40 - 50 MPH INTERMEDIATE SPEED	350
# 55 MPH HIGH SPEED	500

TABLE B

TRAFFIC CONTROL DEVICE SPACING INTERVALS WORK ACTIVITY / BUFFER SPACE AREAS	
SPEED LIMIT	SPACING INTERVALS
≤ 35 MPH	25 FEET
40 - 55 MPH	50 FEET

HIS DRAWING IS NOT TO SCALE

REFERENCES



STICKER
1/27/15
DATE

6			
5			
4			
3			
2			
1			
0	1-15-15	JCS	NEW DRAWING
#	DATE	CHK.	DESCRIPTION



SOUTH CAROLINA DEPARTMENT OF TRANSPORTATION
DESIGN STANDARDS OFFICE
955 PARK STREET
ROOM 405
COLUMBIA, SC 29201

STANDARD DRAWING

**FLAGGING
OPERATIONS
TWO-LANE TWO-WAY
ROADWAYS
WITHOUT
INTERSECTIONS**

610-005-10

EFFECTIVE LETTING DATE JAN 2016



SHEET TITLE

TRAFFIC CONTROL PLAN

SHEET NUMBER

DRAWING SHEET



PREPARED BY: 110 SAMARITAN DR, SUITE 21
CUMMING, GA 30041. USA



PROJECT INFORMATION

PROJECT INFORMATION	
SITE NAME:	RT_29_FDH_02
SITE ADDRESS:	1 OTTER LN
COUNTY:	GREENVILLE
APPROVER:	

SUBMITTAL INFORMATION

SUBMITTAL INFORMATION		
REV	DATE	DESCRIPTION
0	06/28/2024	PERMIT DRAWING

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM



SHEET TITL

TRAFFIC CONTROL PLAN

DRAWING SHEET

6 OF 29

AppendixB: Pipelines

Figure6-Longitudinal Installation of UtilitiesinRoadway Shoulders

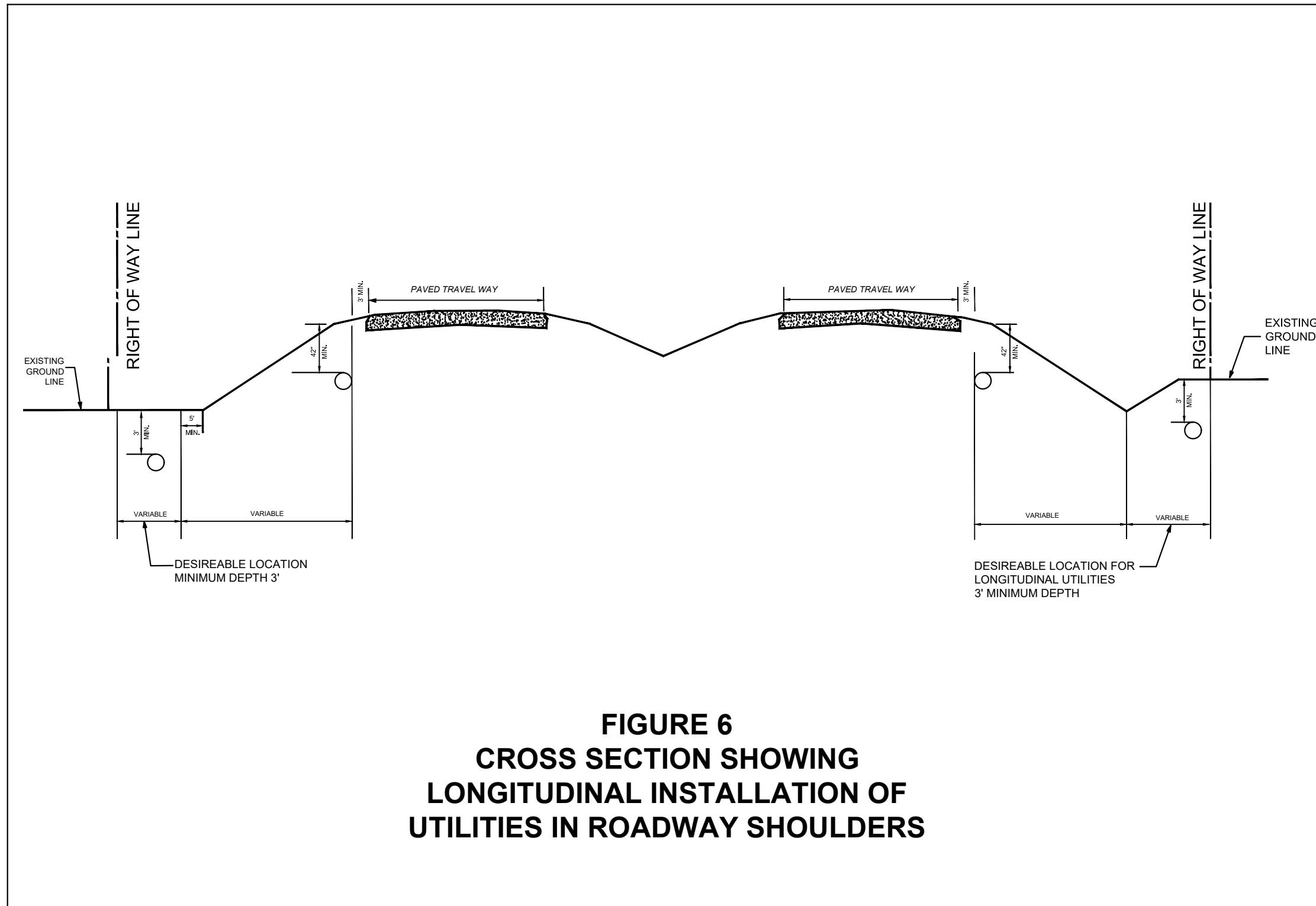
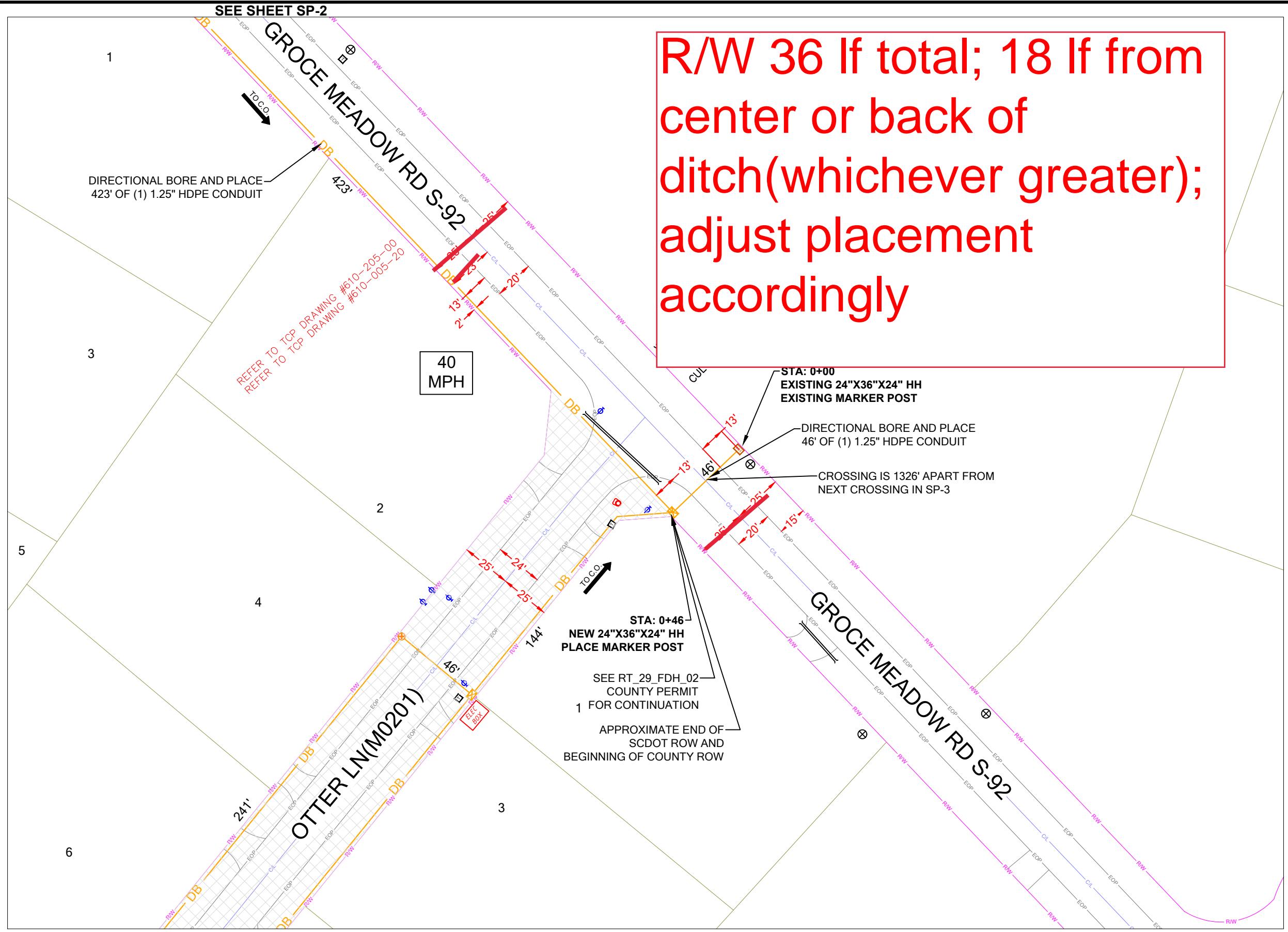


FIGURE 6
CROSS SECTION SHOWING
LONGITUDINAL INSTALLATION OF
UTILITIES IN ROADWAY SHOULDERS

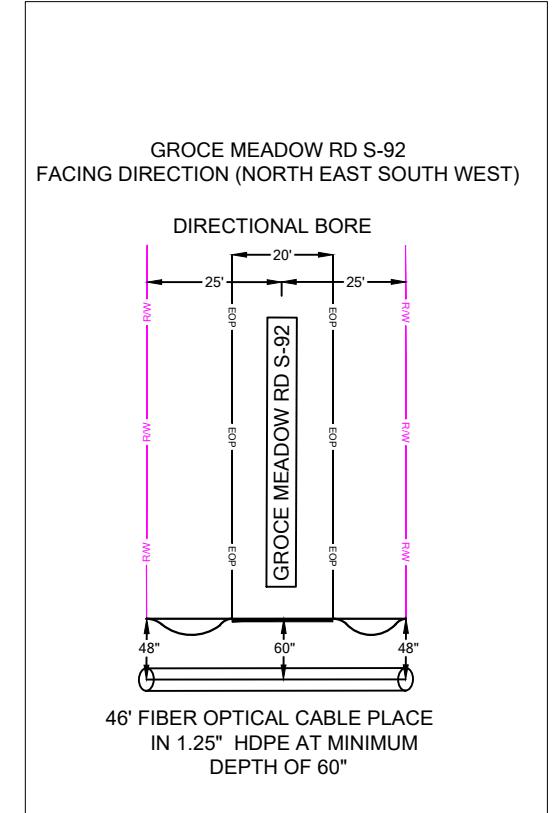




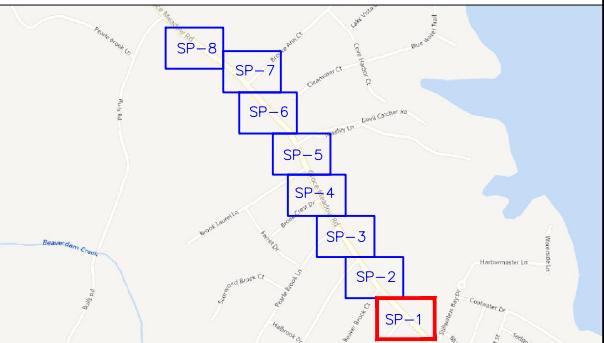
CONSTRUCTION NOTES



SCDOT ROW FILE: NOT FOUND
SHEET #



SHEET LAYOUT



South Carolina 811
Call 811 Before you Dig

PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02	REV	DATE	DESCRIPTION	INIT
SITE ADDRESS:	1 OTTER LN	0	06/28/2024	PERMIT DRAWING	CENT
COUNTY:	GREENVILLE				
APPROVER:					
	0' 25' 50'				
	SCALE: 1"=50'				

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM

SHEET TITLE

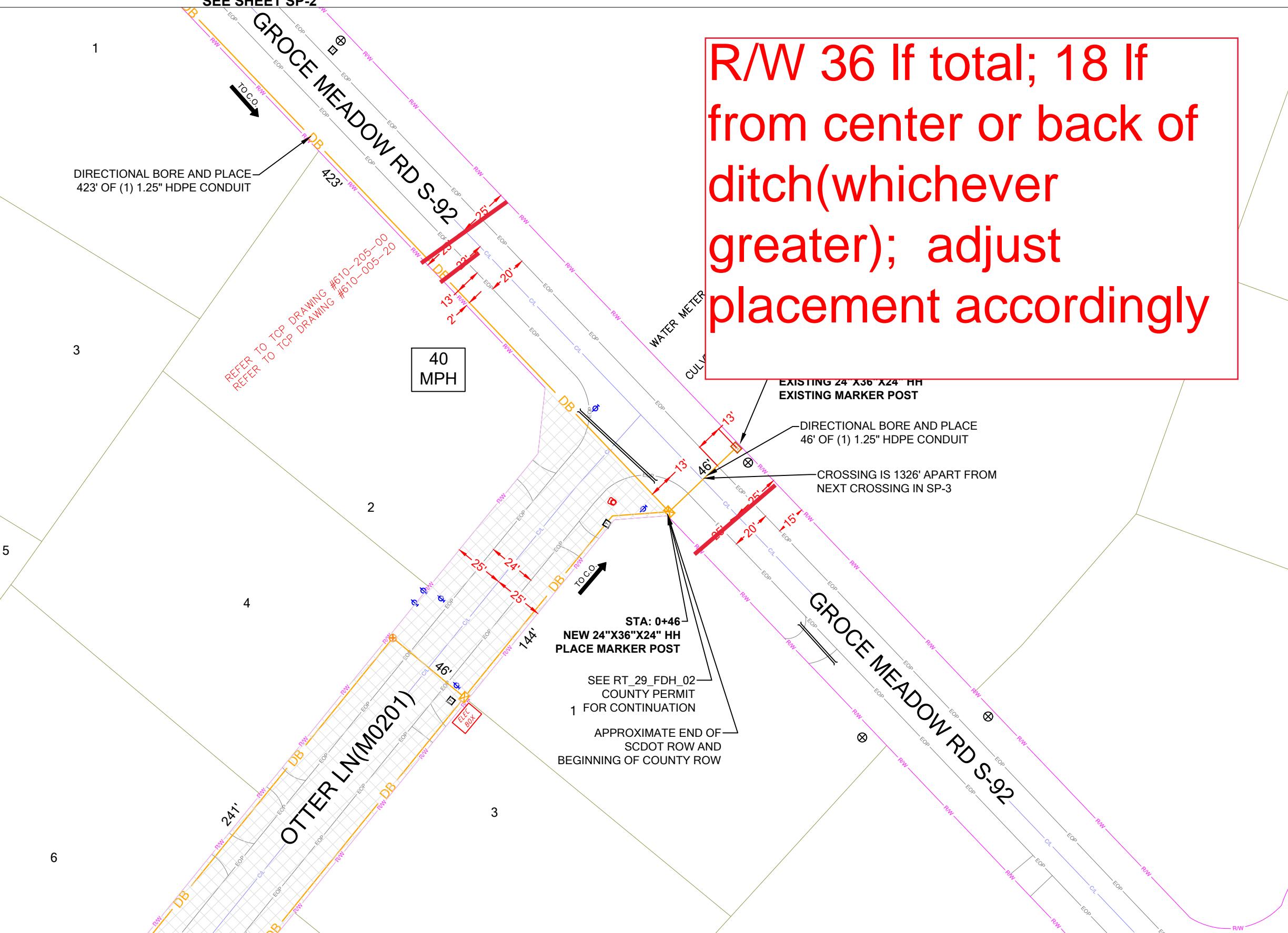
PERMIT DRAWING

SHEET NUMBER	DRAWING SHEET
SP-1	8 OF 29

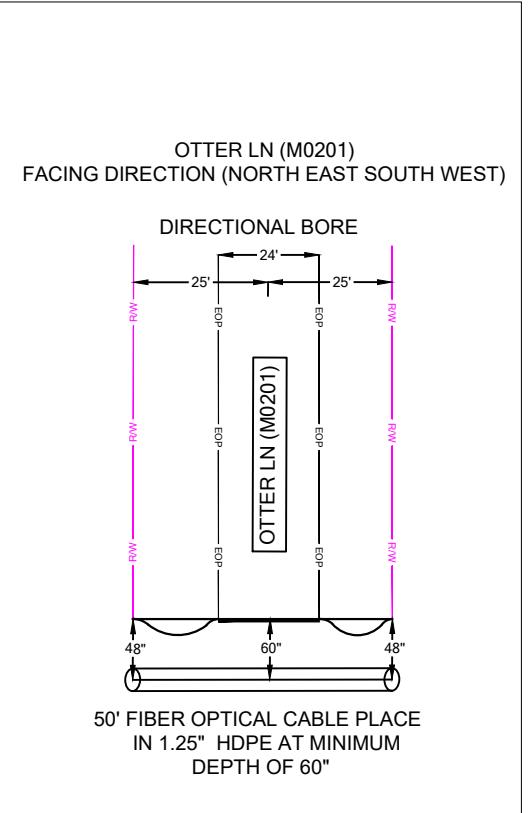
CONSTRUCTION NOTES



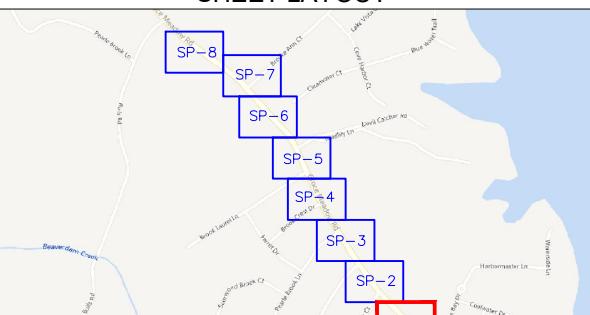
R/W 36 If total; 18 If from center or back of ditch (whichever greater); adjust placement accordingly



**SCDOT ROW FILE: NOT FOUND
SHEET #**



SHEET LAYOUT



NOTE: LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.

TE: ALL EXISTING UTILITIES
PLACED ON PRINTS FOR
REFERENCE ONLY.
(NOT TO SCALE)



lumos

PREPARED BY: 110 SAMARITAN DR, SUITE 21
CUMMING, GA 30041. USA

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PROJECT INFORMATION

SUBMITTAL INFORMATION

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM

SHEET TITLE

PERMIT DRAWING

DRAWING SHEET

SP-1A

9 OF 29

R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02
SITE ADDRESS:	1 OTTER LN
COUNTY:	GREENVILLE
APPROVER:	

SUBMITTAL INFORMATION

REV	DATE	DESCRIPTION	INIT
0	06/28/2024	PERMIT DRAWING	CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM



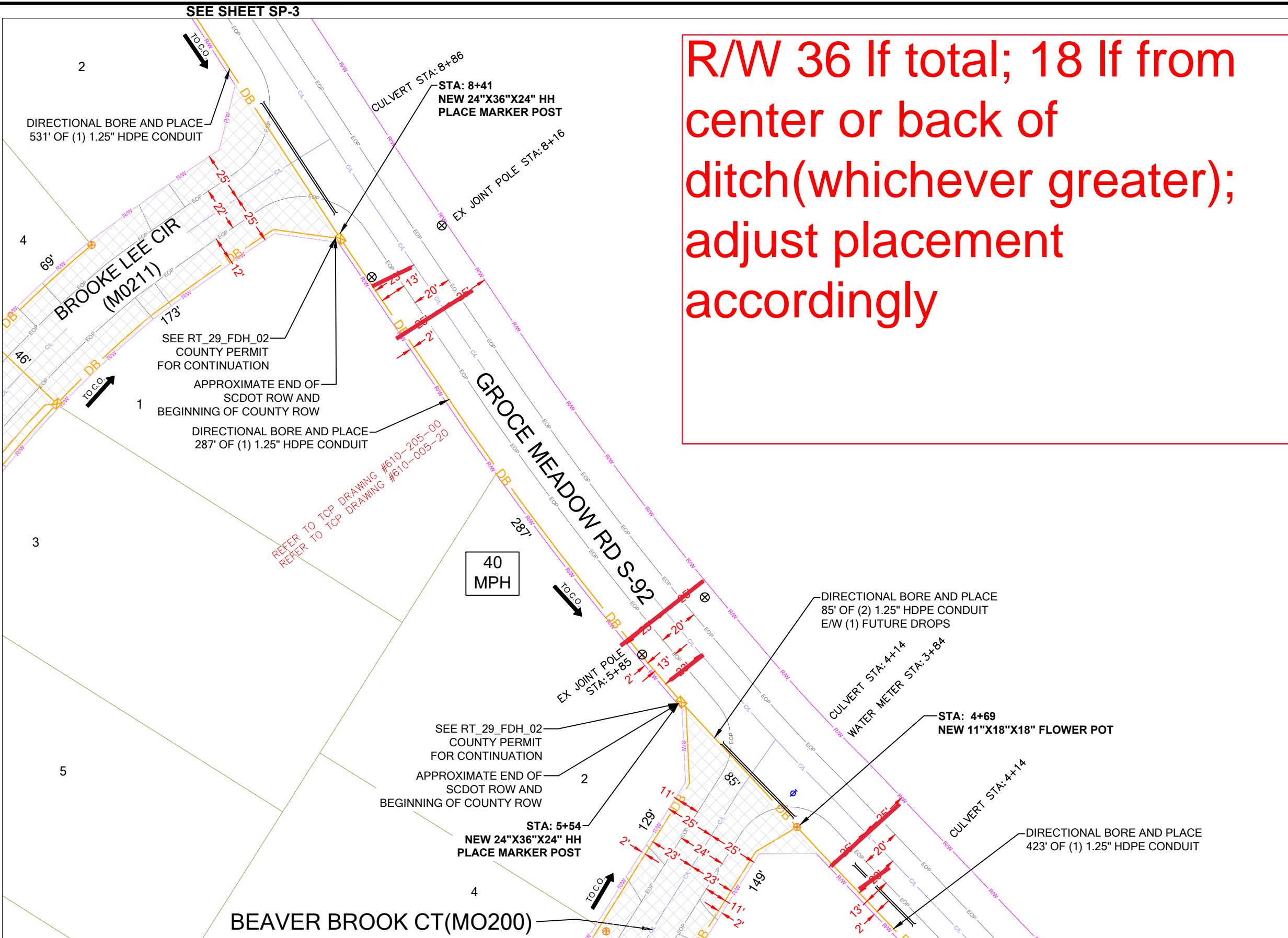
SHEET TITLE
DETAILED VIEW

SHEET NUMBER	DRAWING SHEET
SP-1B	10 OF 29

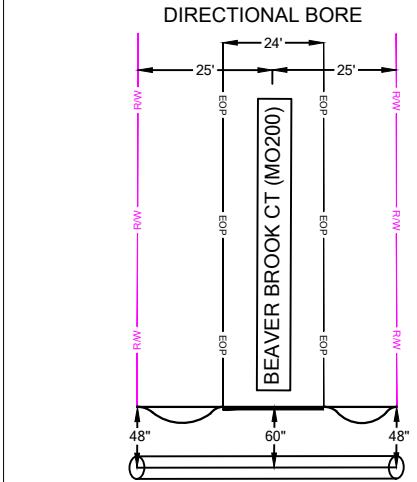
CONSTRUCTION NOTES



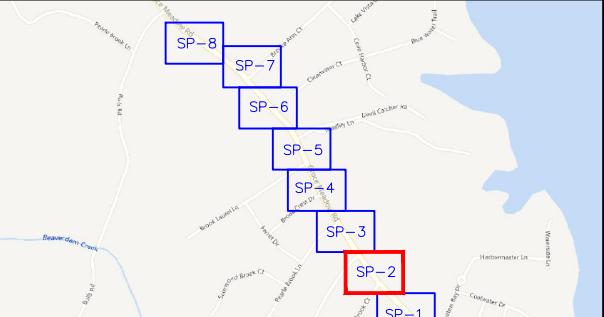
SCDOT ROW FILE: NOT FOUND
SHEET #



BEAVER BROOK CT (MO200)
FACING DIRECTION (NORTH EAST SOUTH WEST)



SHEET LAYOUT



PROJECT INFORMATION

SITE NAME: RT_29_FDH_02

SITE ADDRESS: 1 OTTER LN

COUNTY: GREENVILLE

APPROVER:

SUBMITTAL INFORMATION

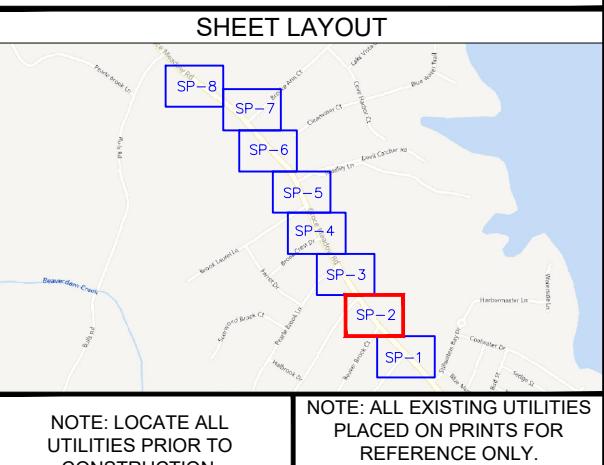
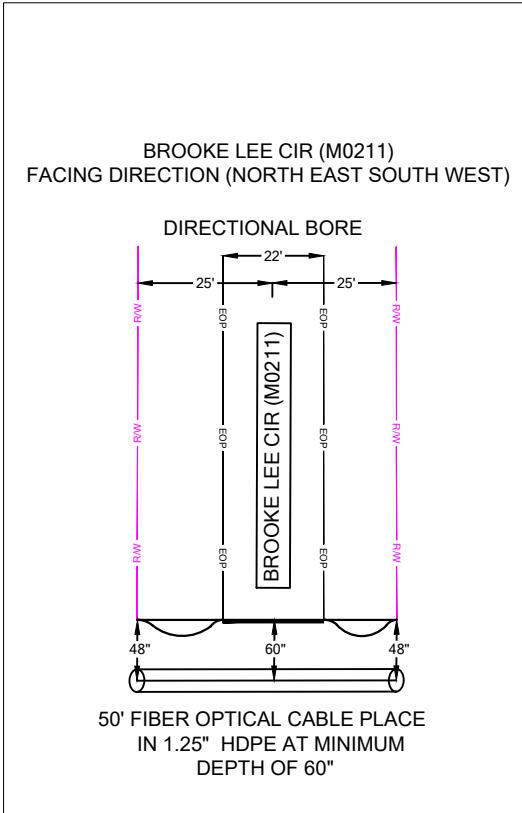
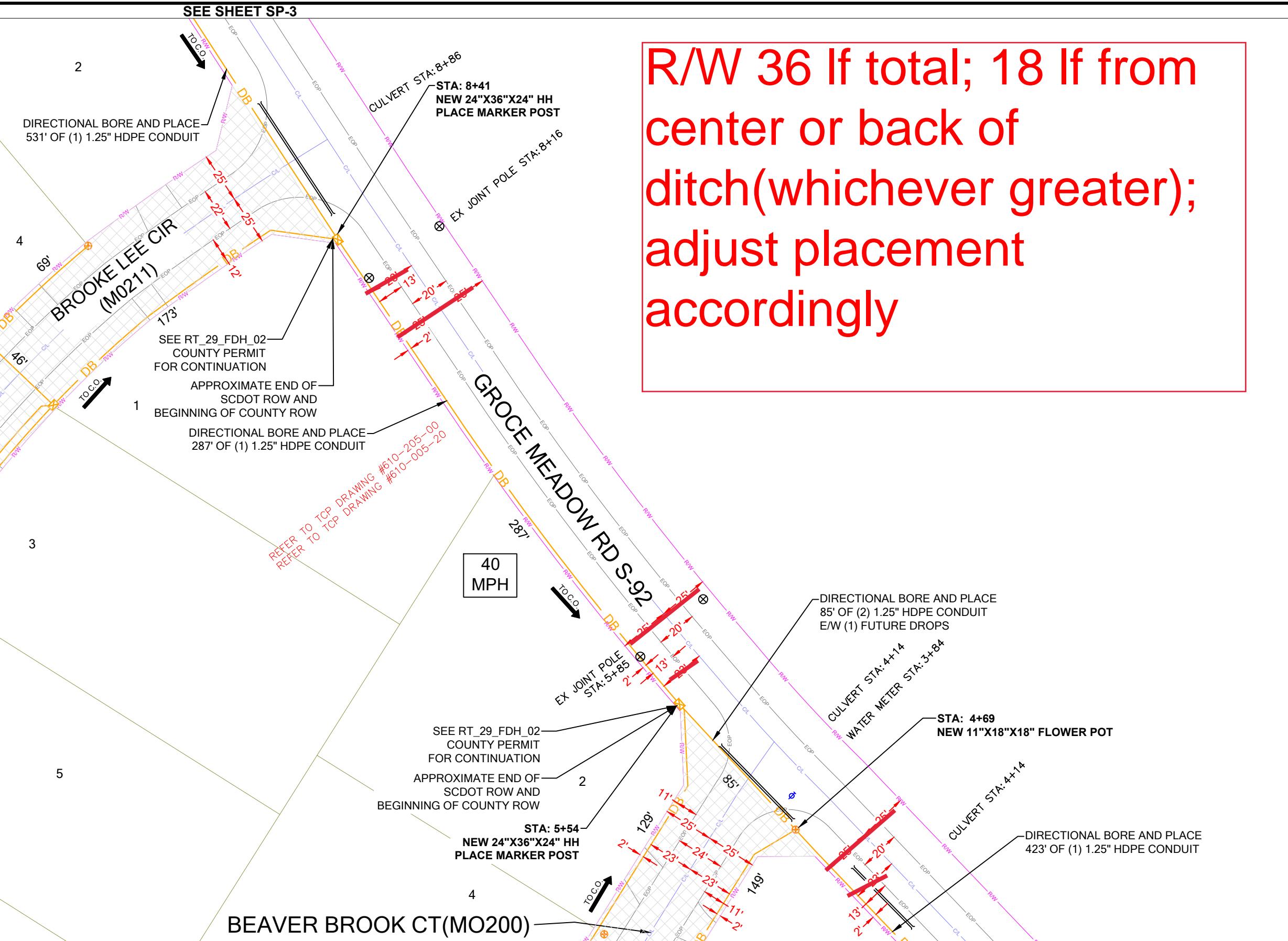
REV DATE DESCRIPTION INIT

0 06/28/2024 PERMIT DRAWING CENT

CONSTRUCTION NOTES



SCDOT ROW FILE: NOT FOUND
SHEET #



PROJECT INFORMATION			SUBMITTAL INFORMATION				HOURS OF OPERATION:	
SITE NAME:	RT_29_FDH_02		REV	DATE	DESCRIPTION	INIT	WORKING HOURS MON-FRI: 9AM-4PM	
SITE ADDRESS:	1 OTTER LN		0	06/28/2024	PERMIT DRAWING	CENT		
COUNTY:	GREENVILLE							
APPROVER:								
			0'	25'	50'			

R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02
SITE ADDRESS:	1 OTTER LN
COUNTY:	GREENVILLE
APPROVER:	

SUBMITTAL INFORMATION

REV	DATE	DESCRIPTION	INIT
0	06/28/2024	PERMIT DRAWING	CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM

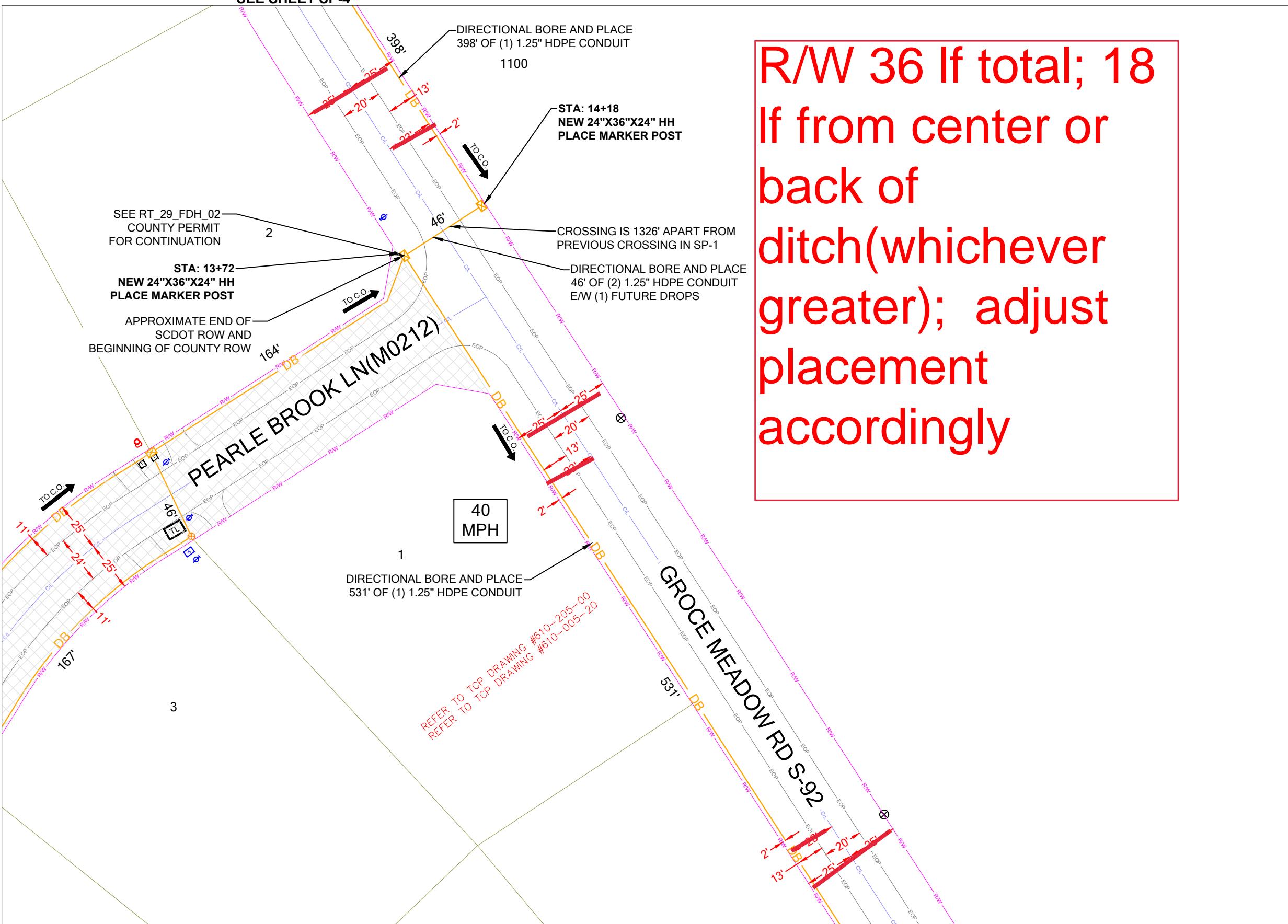


SHEET TITLE

DETAILED VIEW

SHEET NUMBER	DRAWING SHEET
SP-2B	13 OF 29

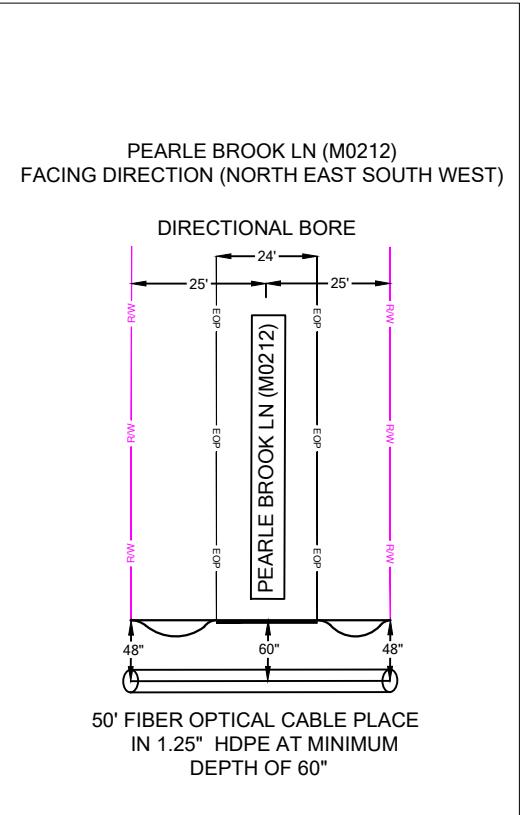
SEE SHEET SP-4



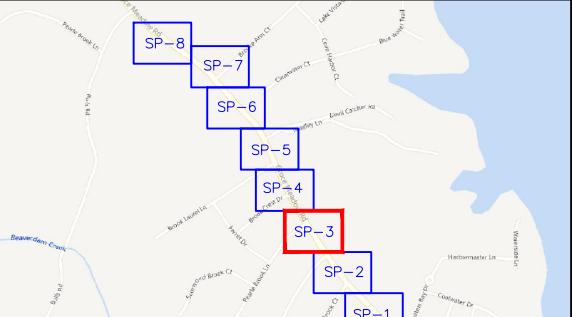
CONSTRUCTION NOTES



SCDOT ROW FILE: NOT FOUND
SHEET #



SHEET LAYOUT



NOTE: LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.

NOTE: ALL EXISTING UTILITIES PLACED ON PRINTS FOR REFERENCE ONLY. (NOT TO SCALE)



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02	REV	DATE	DESCRIPTION	INIT
SITE ADDRESS:	1 OTTER LN	0	06/28/2024	PERMIT DRAWING	CENT
COUNTY:	GREENVILLE				
APPROVER:					
	0' 25' 50'				
	SCALE: 1"=50'				

SUBMITTAL INFORMATION

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM

SHEET TITLE

PERMIT DRAWING

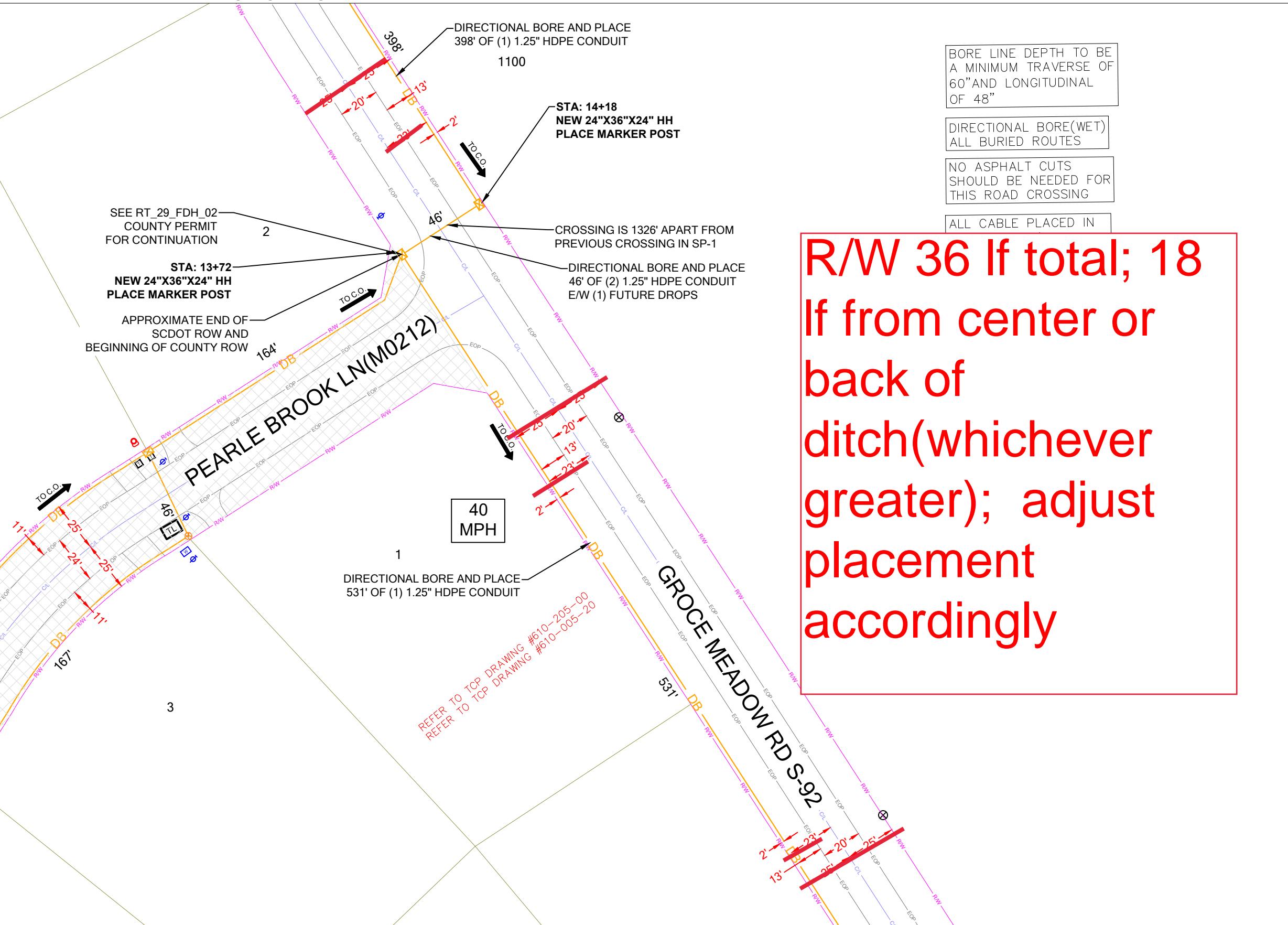
SHEET NUMBER

DRAWING SHEET

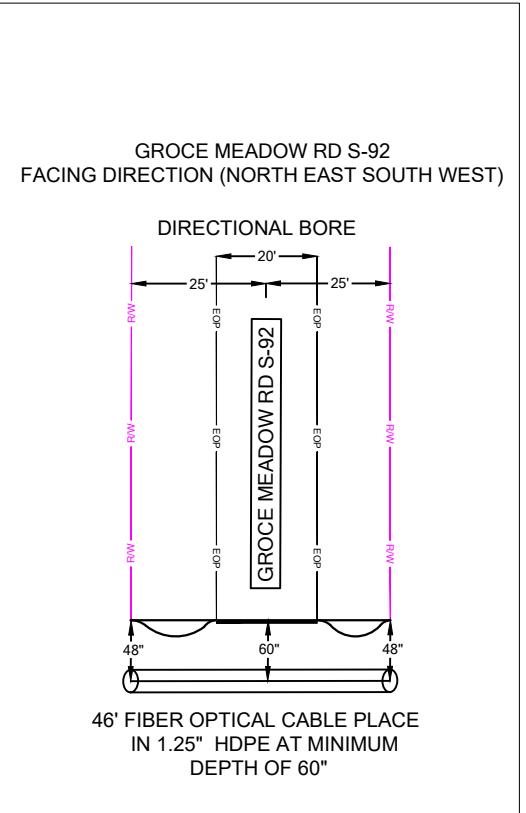
SP-3

14 OF 29

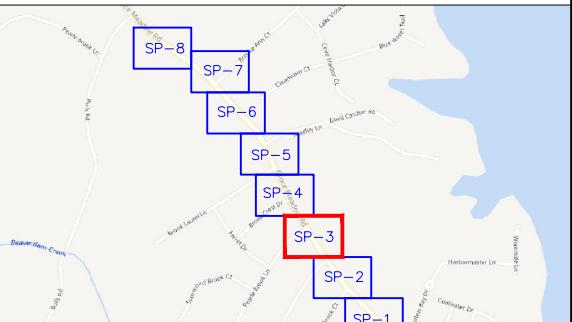
SEE SHEET SP-4



CONSTRUCTION NOTES

SCDOT ROW FILE: NOT FOUND
SHEET #

SHEET LAYOUT



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02	REV	DATE	DESCRIPTION	INIT
SITE ADDRESS:	1 OTTER LN	0	06/28/2024	PERMIT DRAWING	CENT
COUNTY:	GREENVILLE				
APPROVER:					
	0' 25' 50'				
	SCALE: 1"=50'				

SEE SHEET SP-2

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM

SHEET TITLE

PERMIT DRAWING

SHEET NUMBER	DRAWING SHEET
SP-3A	15 OF 29

R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02
SITE ADDRESS:	1 OTTER LN
COUNTY:	GREENVILLE
APPROVER:	

SUBMITTAL INFORMATION

REV	DATE	DESCRIPTION	INIT
0	06/28/2024	PERMIT DRAWING	CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM



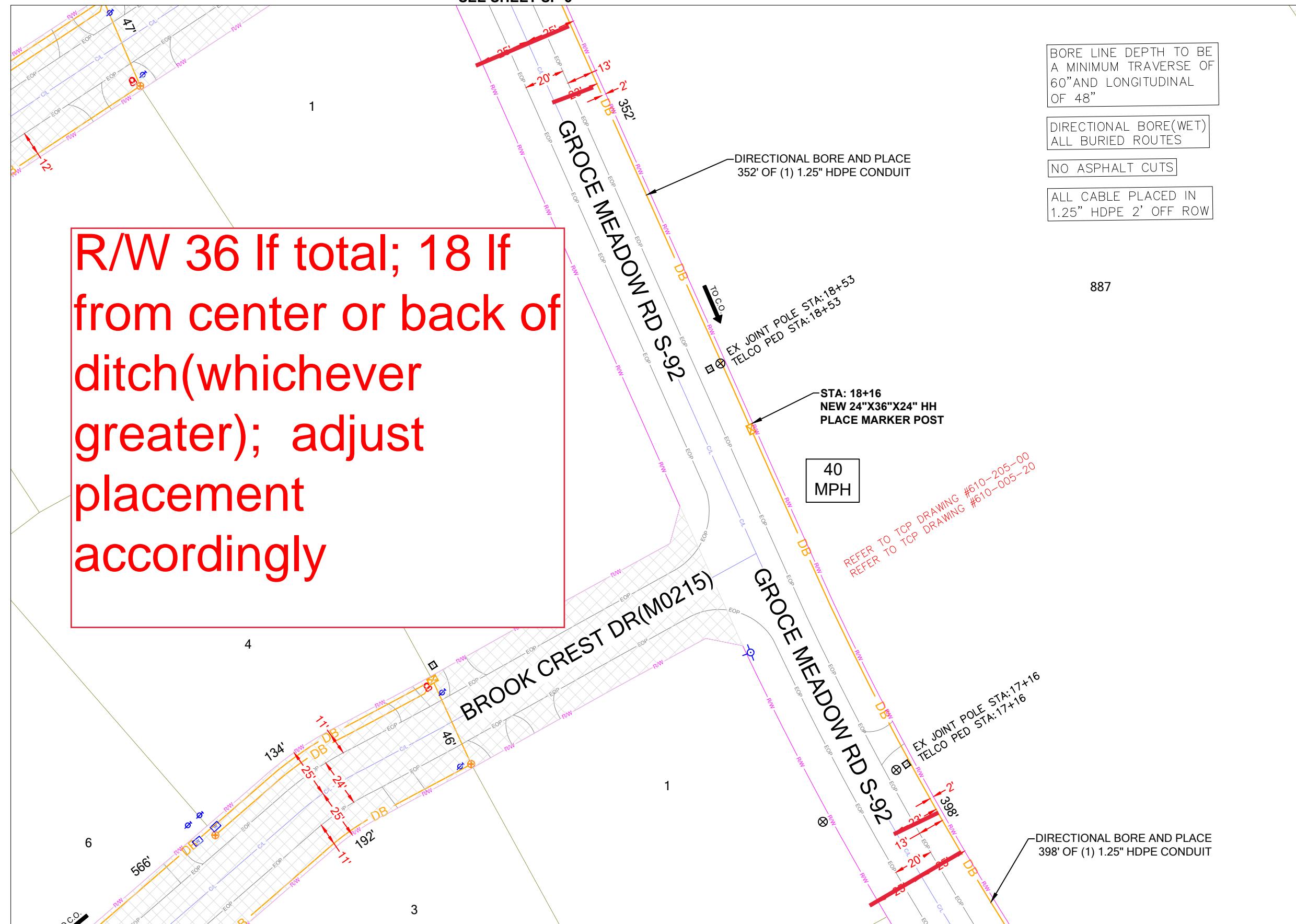
SHEET TITLE

DETAILED VIEW

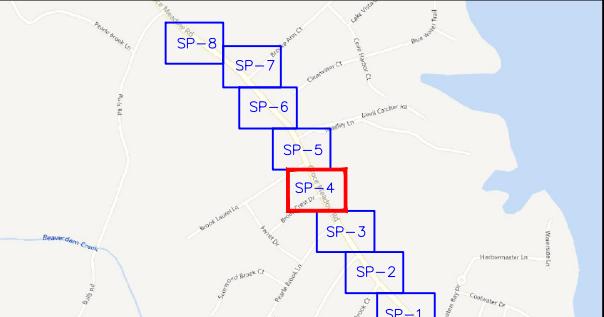
SHEET NUMBER
SP-3B

DRAWING SHEET
16 OF 29

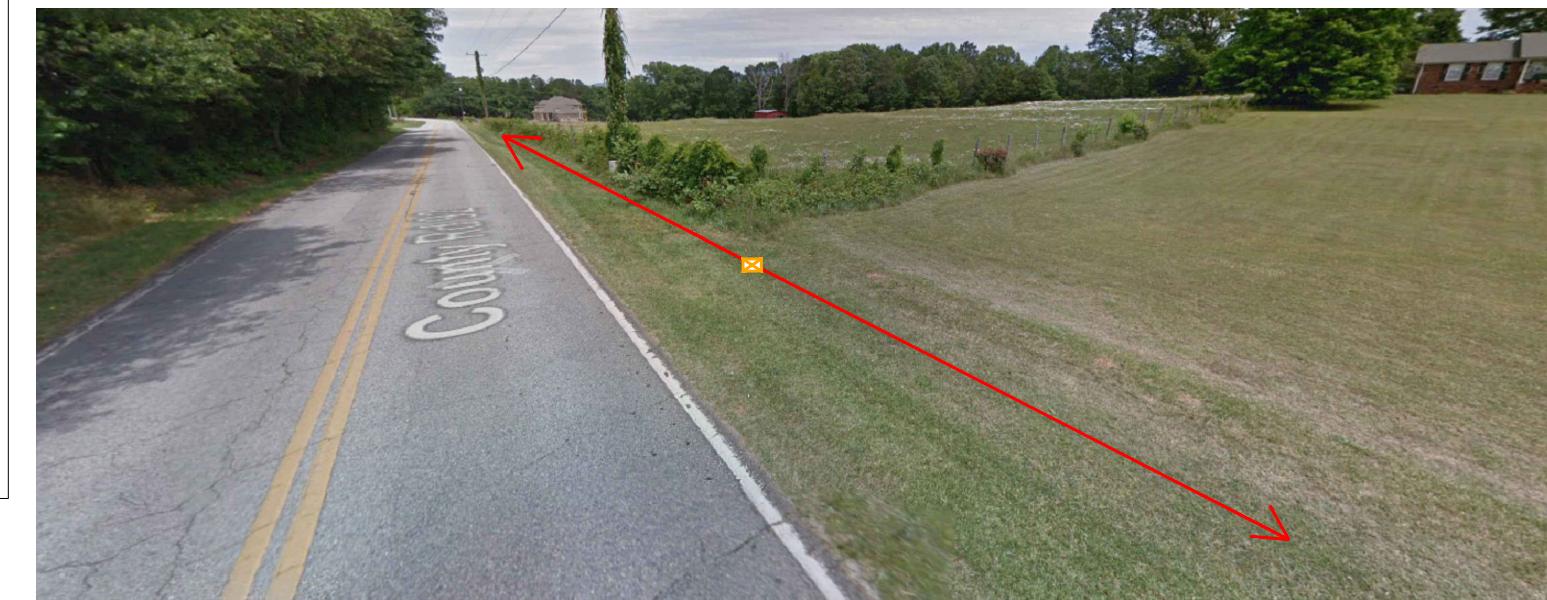
SEE SHEET SP-5



CONSTRUCTION NOTES

SCDOT ROW FILE: NOT FOUND
SHEET #**SHEET LAYOUT**

R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02
SITE ADDRESS:	1 OTTER LN
COUNTY:	GREENVILLE
APPROVER:	

SUBMITTAL INFORMATION

REV	DATE	DESCRIPTION	INIT
0	06/28/2024	PERMIT DRAWING	CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM

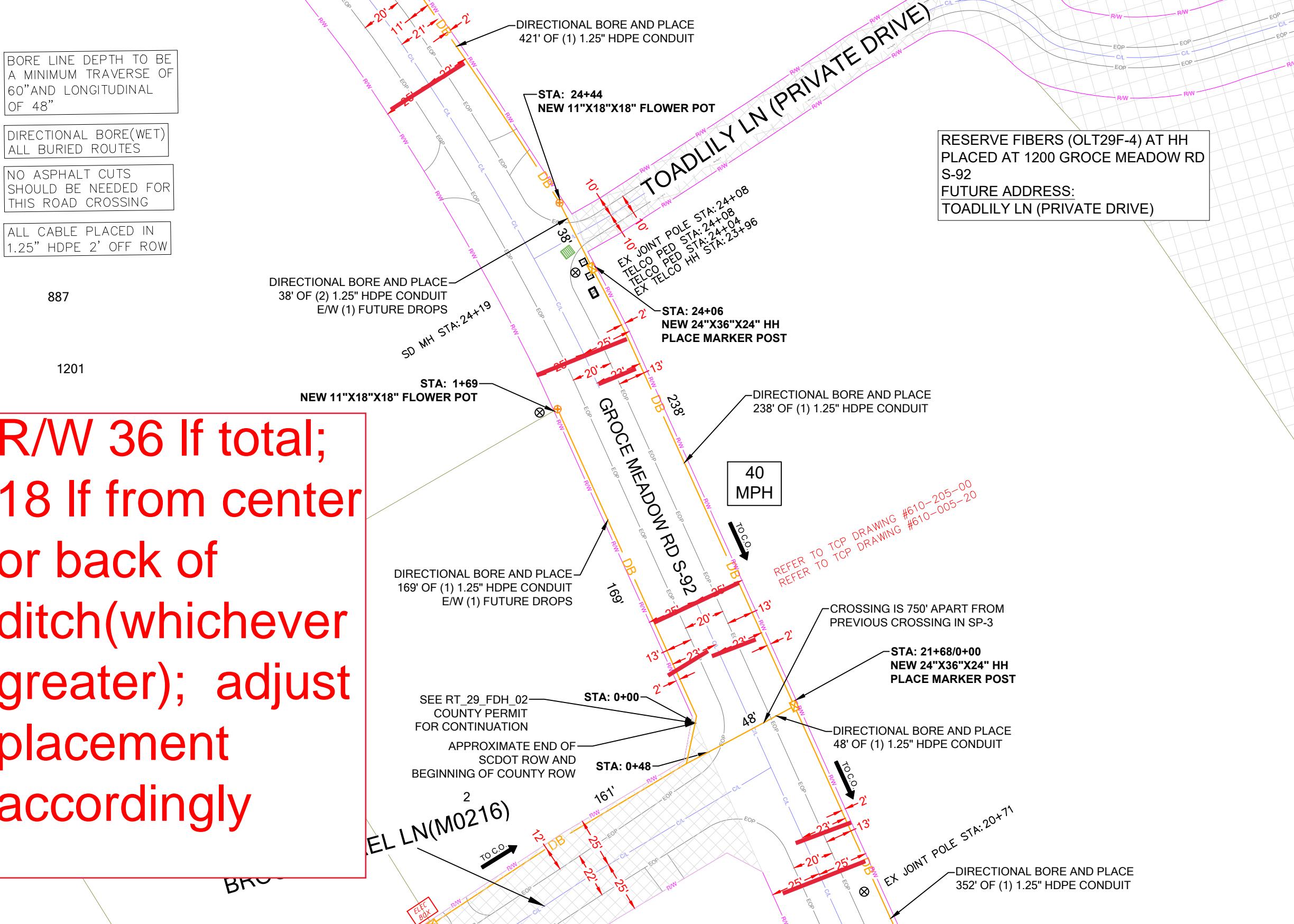


SHEET TITLE

DETAILED VIEW

SHEET NUMBER	DRAWING SHEET
SP-4A	18 OF 29

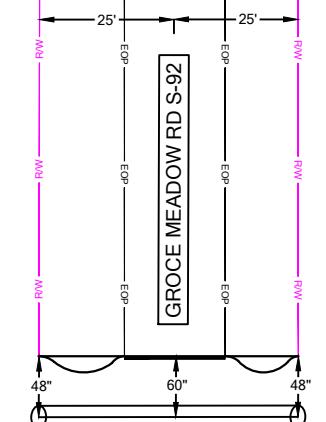
SEE SHEET SP-6



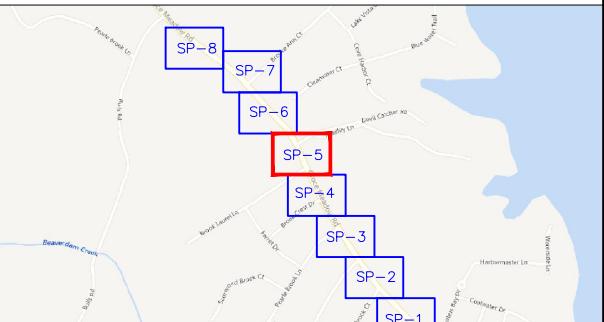
CONSTRUCTION NOTES

SCDOT ROW FILE: NOT FOUND
SHEET #GROCE MEADOW RD S-92
FACING DIRECTION (NORTH EAST SOUTH WEST)

DIRECTIONAL BORE

48" FIBER OPTICAL CABLE PLACE
IN 1.25" HDPE AT MINIMUM
DEPTH OF 60"

SHEET LAYOUT

NOTE: LOCATE ALL
UTILITIES PRIOR TO
CONSTRUCTION.NOTE: ALL EXISTING UTILITIES
PLACED ON PRINTS FOR
REFERENCE ONLY.
(NOT TO SCALE)

PROJECT INFORMATION

SITE NAME: RT_29_FDH_02

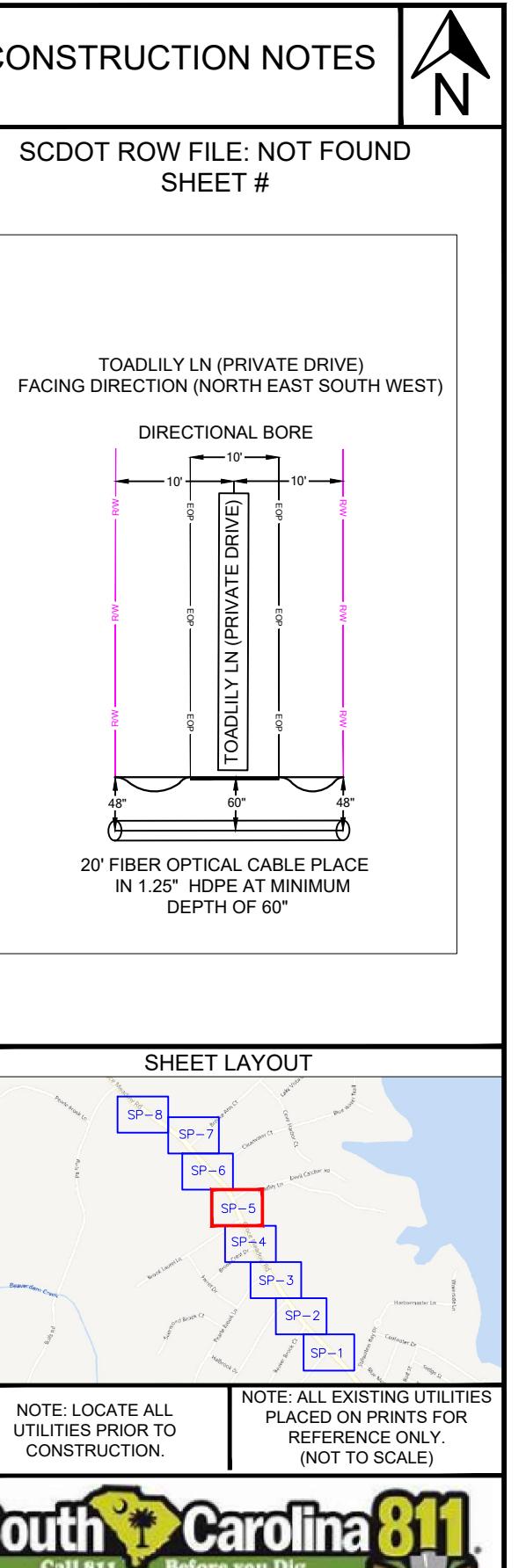
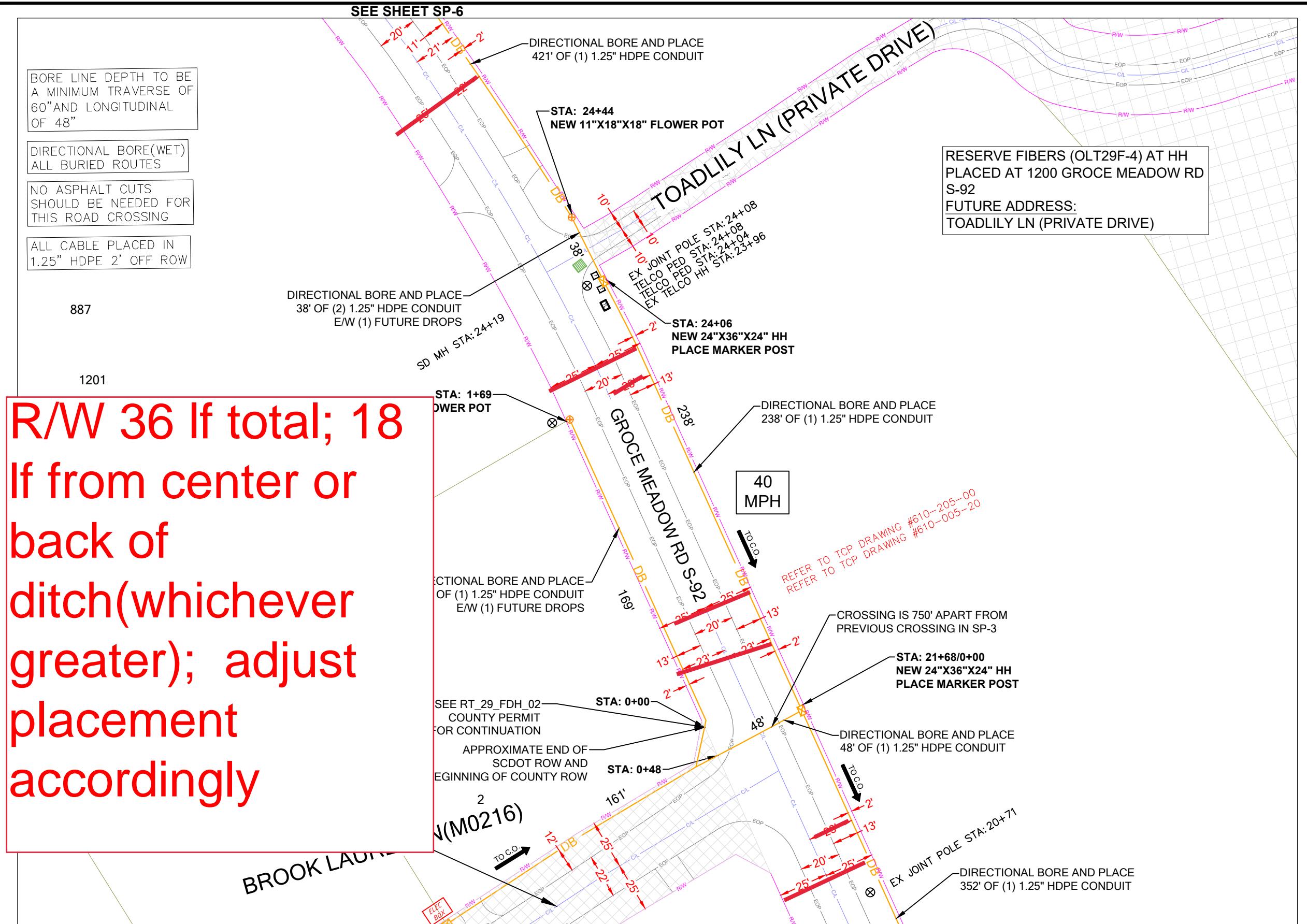
SITE ADDRESS: 1 OTTER LN

COUNTY: GREENVILLE

APPROVER:

SUBMITTAL INFORMATION

REV: 0 DATE: 06/28/2024 DESCRIPTION: PERMIT DRAWING INIT: CENT



R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02
SITE ADDRESS:	1 OTTER LN
COUNTY:	GREENVILLE
APPROVER:	

SUBMITTAL INFORMATION

REV	DATE	DESCRIPTION	INIT
0	06/28/2024	PERMIT DRAWING	CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM



SHEET TITLE

DETAILED VIEW

SHEET NUMBER	DRAWING SHEET
SP-5B	21 OF 29

SEE SHEET SP-7

BORE LINE DEPTH TO BE
A MINIMUM TRAVERSE OF
60" AND LONGITUDINAL
OF 48"

DIRECTIONAL BORE(WET)
ALL BURIED ROUTES

NO ASPHALT CUTS
SHOULD BE NEEDED FOR
THIS ROAD CROSSING

ALL CABLE PLACED IN
1.25" HDPE 2' OFF ROW

887

**R/W 36 If total; 18 If
from center or back of
ditch(whichever
greater); adjust
placement accordingly**

PREPARED BY: 110 SAMARITAN DR, SUITE 212
CUMMING, GA 30041. USA

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PROJECT INFORMATION

SITE NAME: RT_29_FDH_02

SITE ADDRESS: 1 OTTER LN

COUNTY: GREENVILLE

APPROVER:

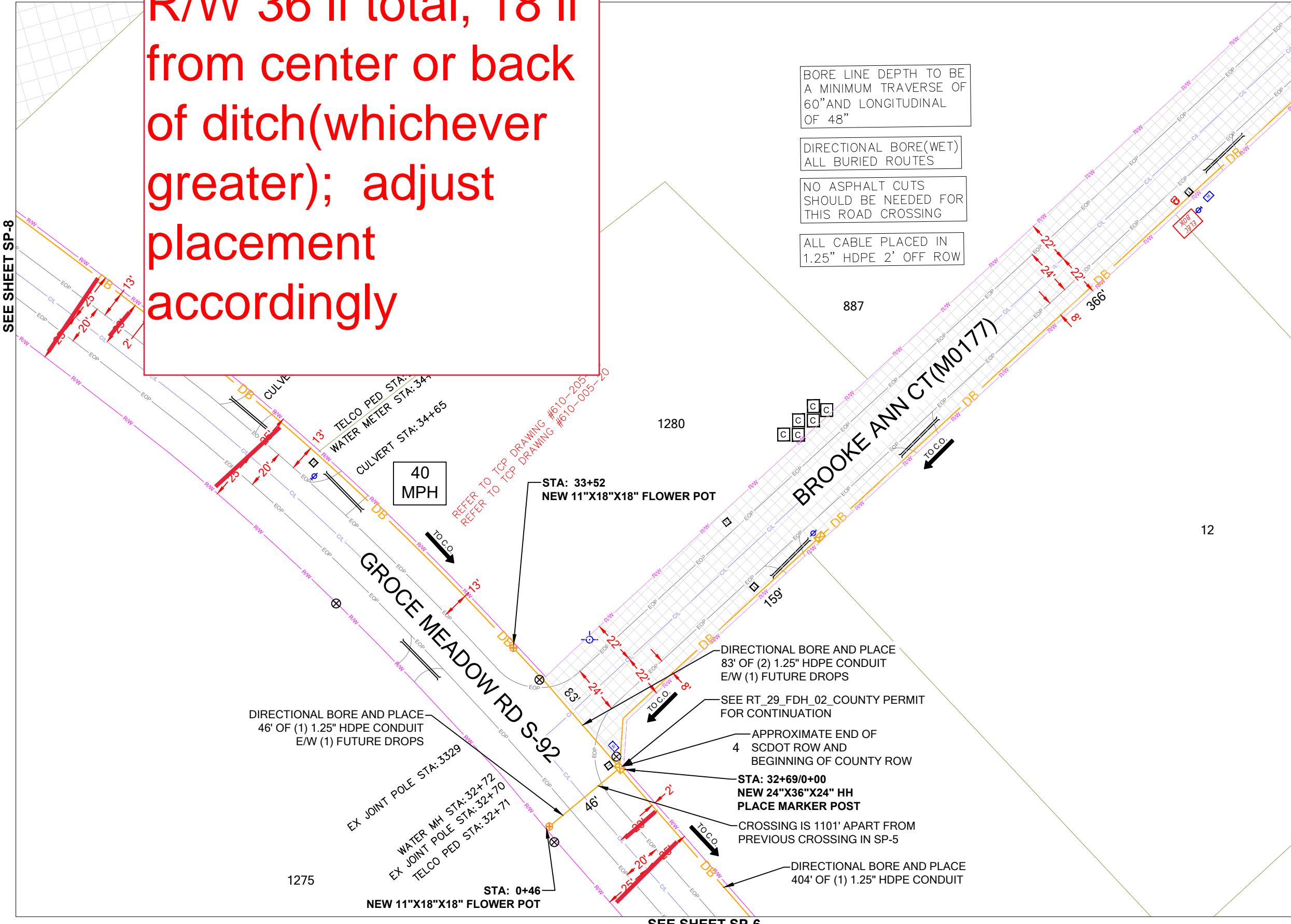
SUBMITTAL INFORMATION

REV: 0 DATE: 06/28/2024 DESCRIPTION: PERMIT DRAWING INIT: CENT

R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



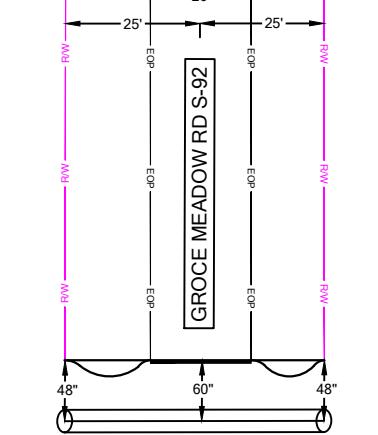
CONSTRUCTION NOTES



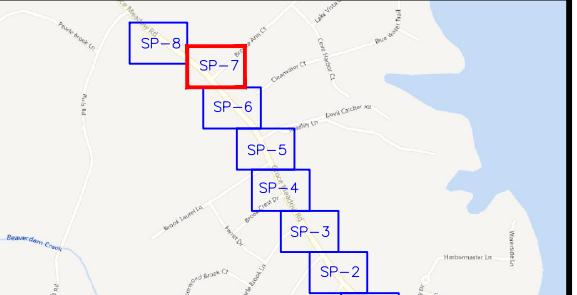
SCDOT ROW FILE: NOT FOUND
SHEET #

GROCE MEADOW RD S-92
FACING DIRECTION (NORTH EAST SOUTH WEST)

DIRECTIONAL BORE

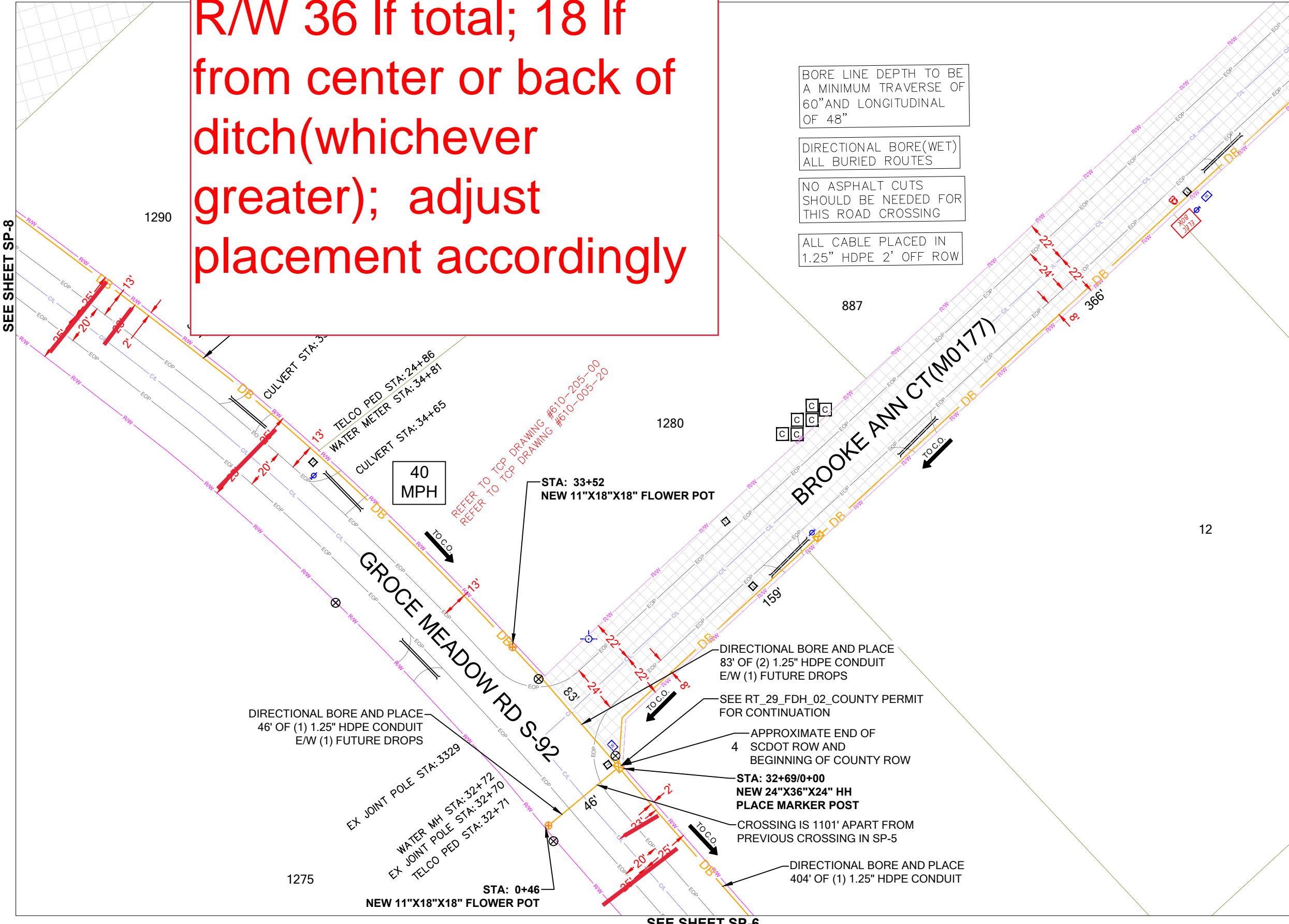


SHEET LAYOUT



SITE NAME:	RT_29_FDH_02	REV	DATE	DESCRIPTION	INIT
SITE ADDRESS:	1 OTTER LN	0	06/28/2024	PERMIT DRAWING	CENT
COUNTY:	GREENVILLE				
APPROVER:					
	0' 25' 50'				
	SCALE: 1"=50'				

R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



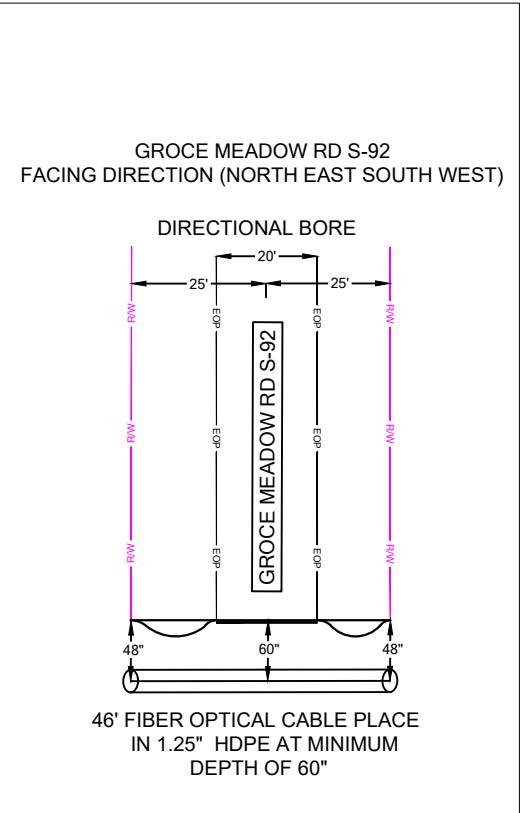
R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



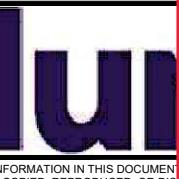


CONSTRUCTION NOTES

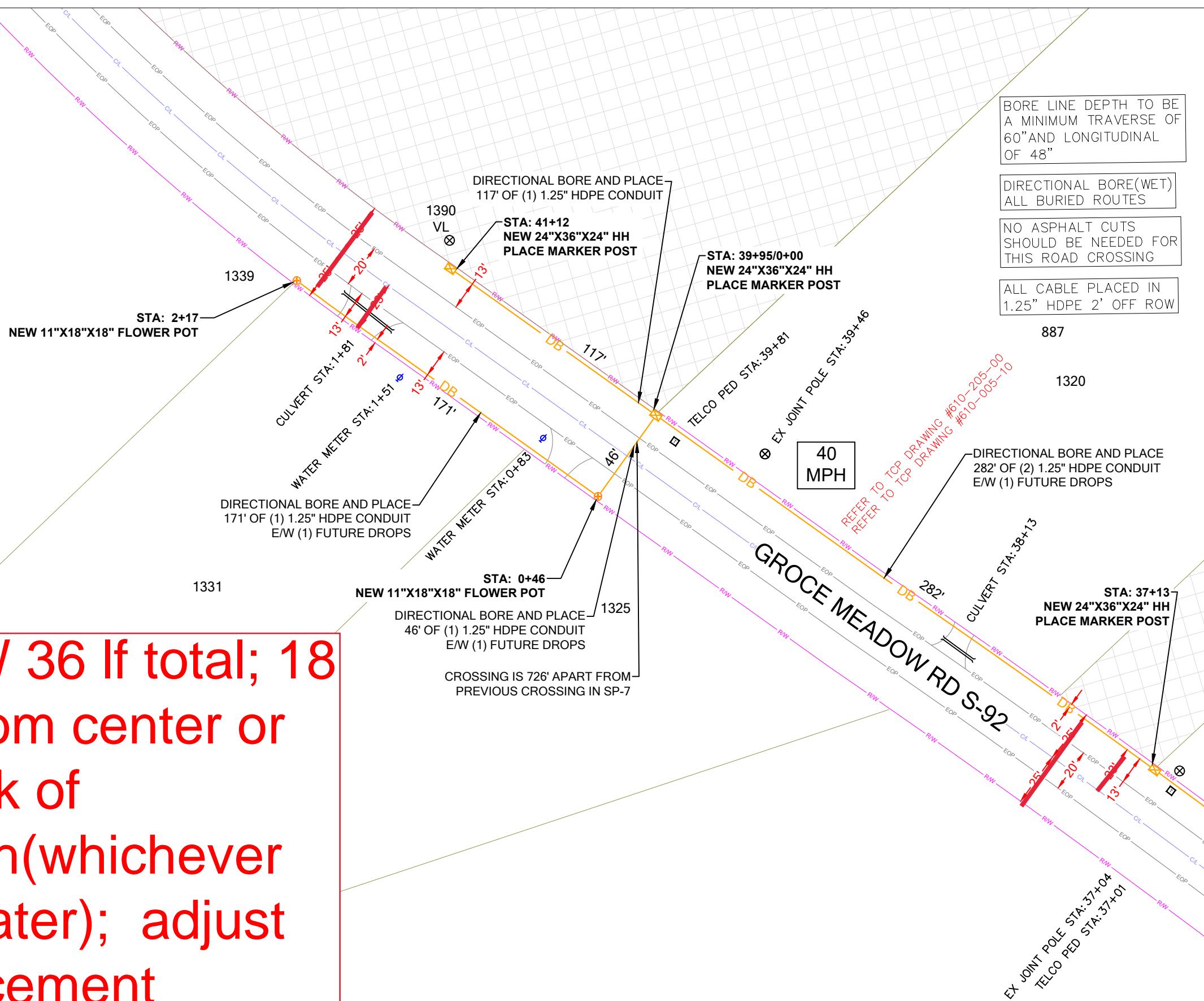
SCDOT ROW FILE: NOT FOUND
SHEET #



R/W 36 If total; 18
If from center or
back of
ditch(whichever
greater); adjust
placement
accordingly



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PROJECT INFORMATION

FILE NAME:	RT_29_FDH_02
ADDRESS:	1 OTTER LN
UNITY:	GREENVILLE
PROVER:	
	0' 25' 50'
	SCALE: 1"=50'

SUBMITTAL INFORMATION

REV	DATE	DESCRIPTION	INIT
0	06/28/2024	PERMIT DRAWING	CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM

SHEET TITLE
PERMIT DRAWING

SHEET NUMBER
SP-8

DRAWING SHEET
27 OF 29

NOTE: LOCATE ALL UTILITIES PRIOR TO CONSTRUCTION.
NOTE: ALL EXISTING UTILITIES PLACED ON PRINTS FOR REFERENCE ONLY. (NOT TO SCALE)



R/W 36 If total; 18 If from center or back of ditch(whichever greater); adjust placement accordingly



PROJECT INFORMATION

SITE NAME:	RT_29_FDH_02
SITE ADDRESS:	1 OTTER LN
COUNTY:	GREENVILLE
APPROVER:	

SUBMITTAL INFORMATION

REV	DATE	DESCRIPTION	INIT
0	06/28/2024	PERMIT DRAWING	CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM



SHEET TITLE

DETAILED VIEW

SHEET NUMBER
SP-8A

DRAWING SHEET
28 OF 29

STATE REFERENCE

GROCE MADOW RD S-92 - DOCKET NUMBER: NA - PAGE NUMBER: NA

PROJECT INFORMATION

SITE NAME: RT_29_FDH_02

SITE ADDRESS: 1 OTTER LN

COUNTY: GREENVILLE

APPROVER:

SUBMITTAL INFORMATION

REV: 0

DATE: 06/28/2024

DESCRIPTION: PERMIT DRAWING

INIT: CENT

HOURS OF OPERATION:

WORKING HOURS
MON-FRI: 9AM-4PM



SHEET TITLE:
SCDOT ROW PLANS

SHEET NUMBER:
S-REF

DRAWING SHEET:
29 OF 29