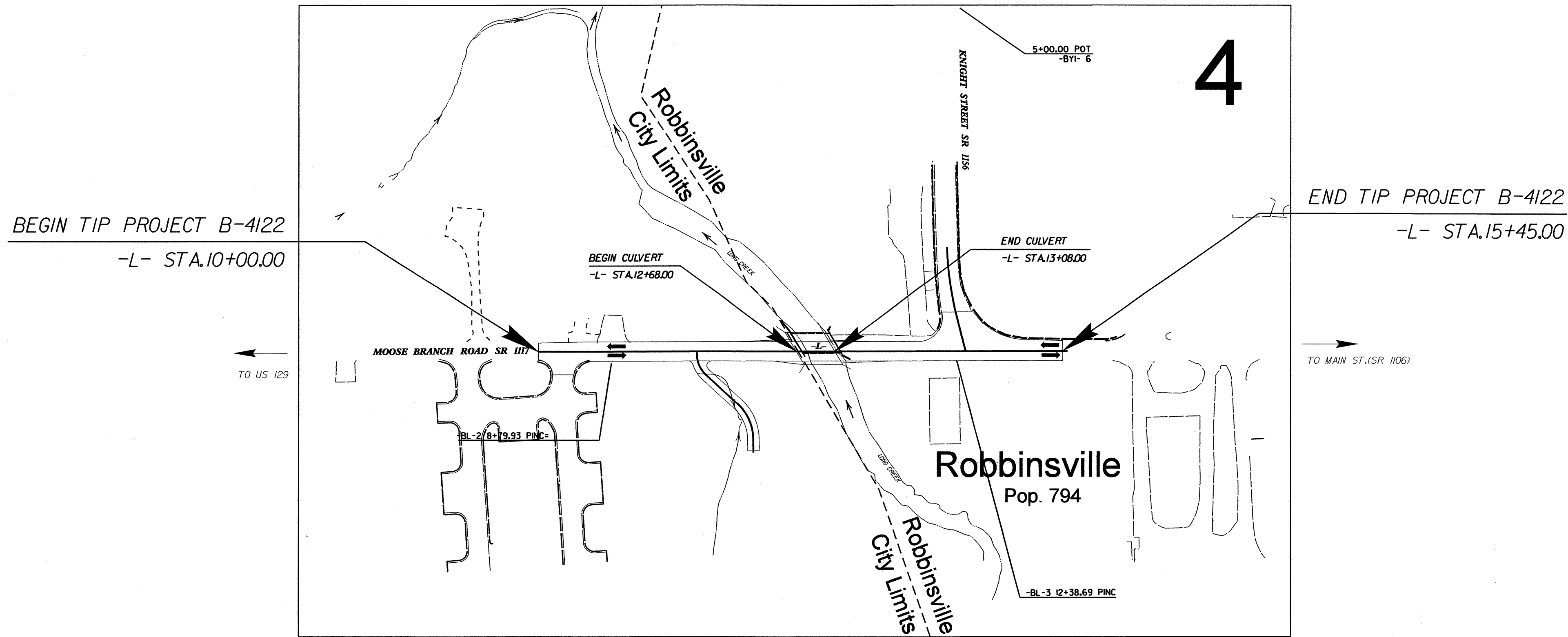


TIP PROJECT: B-4122

STATE OF NORTH CAROLINA
 DIVISION OF HIGHWAYS
 PLAN FOR PROPOSED
 HIGHWAY EROSION CONTROL
GRAHAM COUNTY

LOCATION: BRIDGE No. 81 OVER LONG CREEK ON SR 1117
TYPE OF WORK: GRADING, PAVING, DRAINAGE, GUARDRAIL, AND CULVERT



STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	B-4122	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	

EROSION AND SEDIMENT CONTROL MEASURES

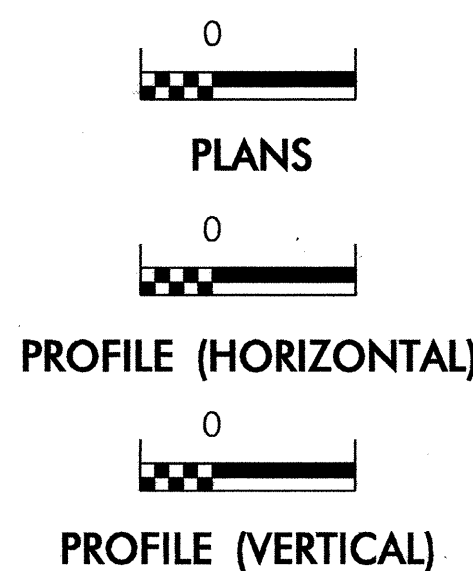
Std. #	Description	Symbol
1630.03	Temporary Silt Ditch	TD
1630.05	Temporary Diversion	TD
1605.01	Temporary Silt Fence	III
1606.01	Special Sediment Control Fence	III
1622.01	Temporary Berms and Slope Drains	TD
1630.02	Silt Basin Type B	SB
1633.01	Temporary Rock Silt Check Type-A	RS
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	RS
1633.02	Temporary Rock Silt Check Type-B	RS
	Wattle/Coir Fiber Wattle	W
	Wattle/Coir Fiber Wattle with Polyacrylamide (PAM)	W
1634.01	Temporary Rock Sediment Dam Type-A	RD
1634.02	Temporary Rock Sediment Dam Type-B	RD
1635.01	Rock Pipe Inlet Sediment Trap Type-A	RPI
1635.02	Rock Pipe Inlet Sediment Trap Type-B	RPI
1630.04	Stilling Basin	SB
1630.06	Special Stilling Basin	SB
	Rock Inlet Sediment Trap:	
1632.01	Type A	A
1632.02	Type B	B
1632.03	Type C	C
	Skimmer Basin	SK
	Tiered Skimmer Basin	SK
	Infiltration Basin	IB

THIS PROJECT CONTAINS EROSION CONTROL PLANS FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT
 Refer To E. C. Special Provisions for Special Considerations.

GRAPHIC SCALE



ROADSIDE ENVIRONMENTAL UNIT
 DIVISION OF HIGHWAYS
 STATE OF NORTH CAROLINA

THESE EROSION AND SEDIMENT CONTROL PLANS COMPLY WITH THE REGULATIONS SET FORTH BY THE NCG-010000 GENERAL CONSTRUCTION PERMIT EFFECTIVE AUGUST 3, 2011 ISSUED BY THE NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES DIVISION OF WATER QUALITY.

Prepared in the Office of:
ROADSIDE ENVIRONMENTAL UNIT
 1 South Wilmington St.
 Raleigh, NC 27611
2012 STANDARD SPECIFICATIONS

Roadway Standard Drawings

The following roadway english standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated January 2012 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1604.01 Railroad Erosion Control Detail	1632.01 Rock Inlet Sediment Trap Type A
1605.01 Temporary Silt Fence	1632.02 Rock Inlet Sediment Trap Type B
1606.01 Special Sediment Control Fence	1632.03 Rock Inlet Sediment Trap Type C
1607.01 Gravel Construction Entrance	1633.01 Temporary Rock Silt Check Type A
1622.01 Temporary Berms and Slope Drains	1633.02 Temporary Rock Silt Check Type B
1630.01 Riser Basin	1634.01 Temporary Rock Sediment Dam Type A
1630.02 Silt Basin Type B	1634.02 Temporary Rock Sediment Dam Type B
1630.03 Temporary Silt Ditch	1635.01 Rock Pipe Inlet Sediment Trap Type A
1630.04 Stilling Basin	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.05 Temporary Diversion	1640.01 Coir Fiber Baffle
1630.06 Special Stilling Basin	1645.01 Temporary Stream Crossing
1631.01 Matting Installation	

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

PROJECT REFERENCE NO. <i>B-4122</i>	SHEET NO. <i>EC-2</i>
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

SOIL STABILIZATION TIMEFRAMES

<i>SITE DESCRIPTION</i>	<i>STABILIZATION TIME</i>	<i>TIMEFRAME EXCEPTIONS</i>
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED.
SLOPES 3:1 OR FLATTER	14 DAYS	7 DAYS FOR SLOPES GREATER THAN 50' IN LENGTH.
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE, EXCEPT FOR PERIMETERS AND HQW ZONES.

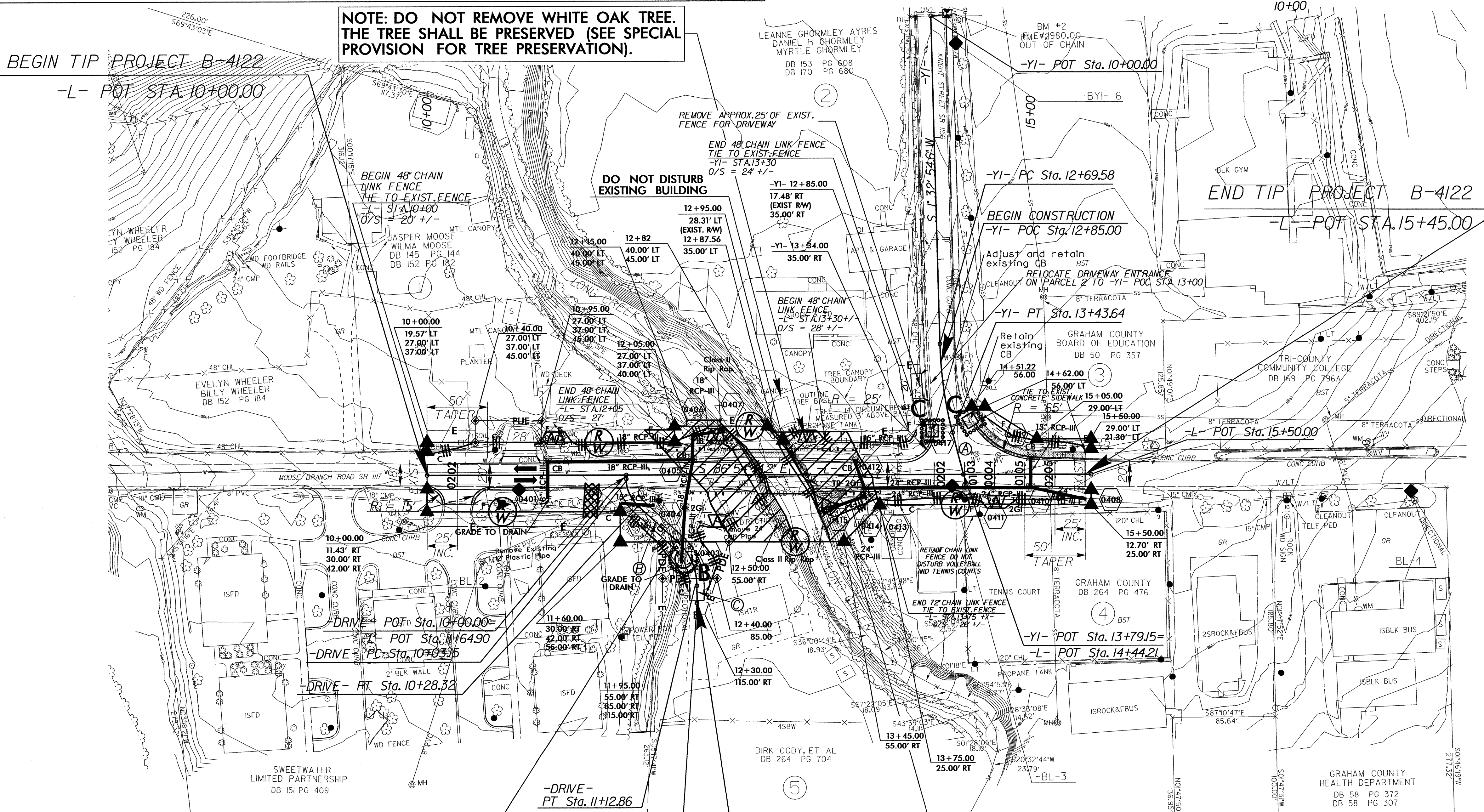
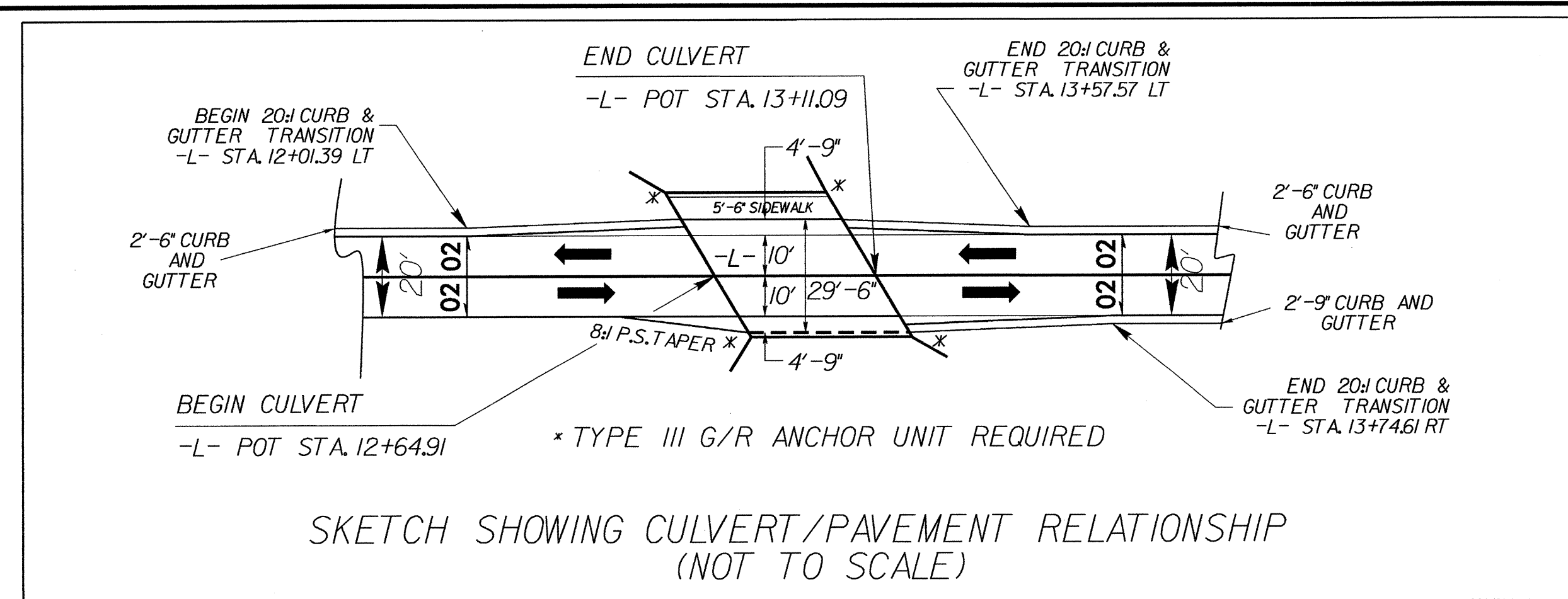
8/17/09

PROJECT REFERENCE NO.	SHEET NO.
B-4122	EC-3/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

NOTE: PLACE TEMPORARY ROCK SEDIMENT DAMS TYPE - B AND TEMPORARY ROCK SILT CHECKS TYPE - A AT DRAINAGE OUTLETS.

NAD 83/95

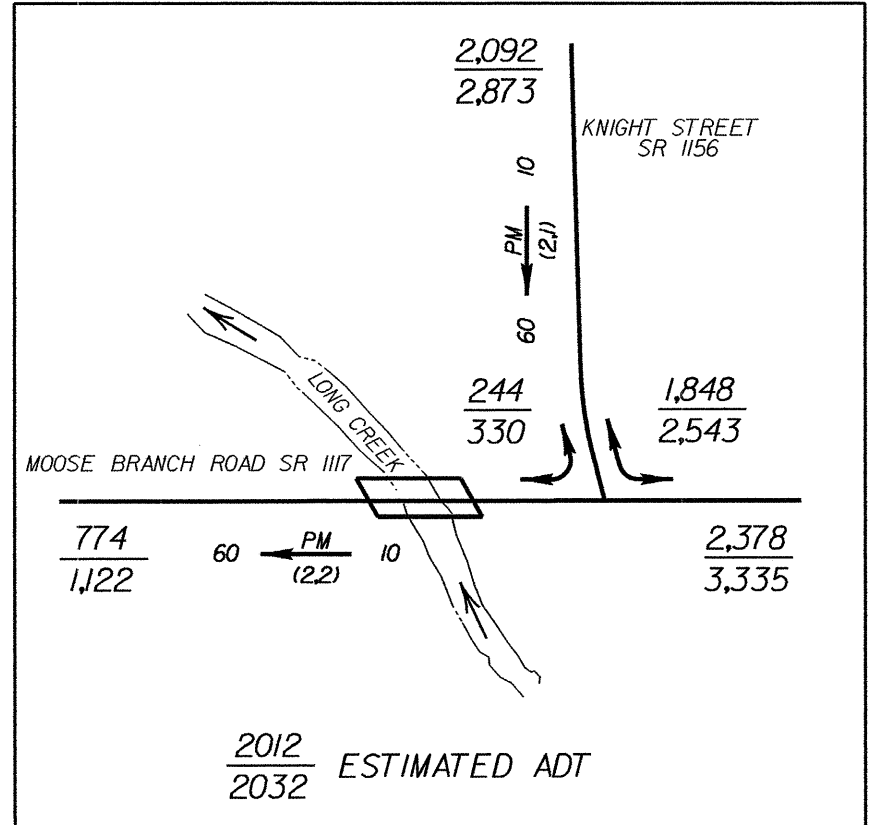
CLEARING AND GRUBBING EROSION CONTROL FOR CONSTRUCTION SHEET 4



RIP-RAP AND GEOTEXTILE QUANTITIES

STRUCTURE 0407 OUTLET PIPE RIP RAP QUANTITIES	2 TONS CL B RIP RAP & 7 SY GEOTEXTILE
STRUCTURE 0415 OUTLET PIPE RIP RAP QUANTITIES	3 TONS CL B RIP RAP & 11 SY GEOTEXTILE

NOTE: CLASS II RIP RAP IS A STRUCTURE PAY ITEM



-DRIVE-

PI Sta 10+16.53 Δ = 48° 04' 35.4" (LT) D = 190' 59' 09.4" L = 25.17' T = 13.38' R = 30.00'	PI Sta 10+93.36 Δ = 47° 36' 57.1" (RT) D = 114' 35' 29.6" L = 41.55' T = 22.06' R = 50.00'
Ⓐ S 3° 05' 45.8" W	
Ⓑ S 44° 58' 49.6" E	
Ⓒ S 2° 38' 07.5" W	

-YI-
PI Sta 13+06.77 Δ = 13° 03' 27.5" (LT) D = 17° 37' 46.1" L = 74.07' T = 37.19' R = 325.00'
SE = 04
RO = SEE PLANS
Ⓐ S 11° 30' 32.9" E

ENVIRONMENTALLY SENSITIVE AREA
SEE PROJECT SPECIAL PROVISIONS

NOTE: USE GRAU 350 TL-2 ANCHOR UNITS PER SUB REGIONAL TIER DESIGN GUIDELINES FOR GUARDRAIL

NOTE: THE CONC. SIDEWALK LOCATED ON THE CULVERT IS A STRUCTURE PAY ITEM.

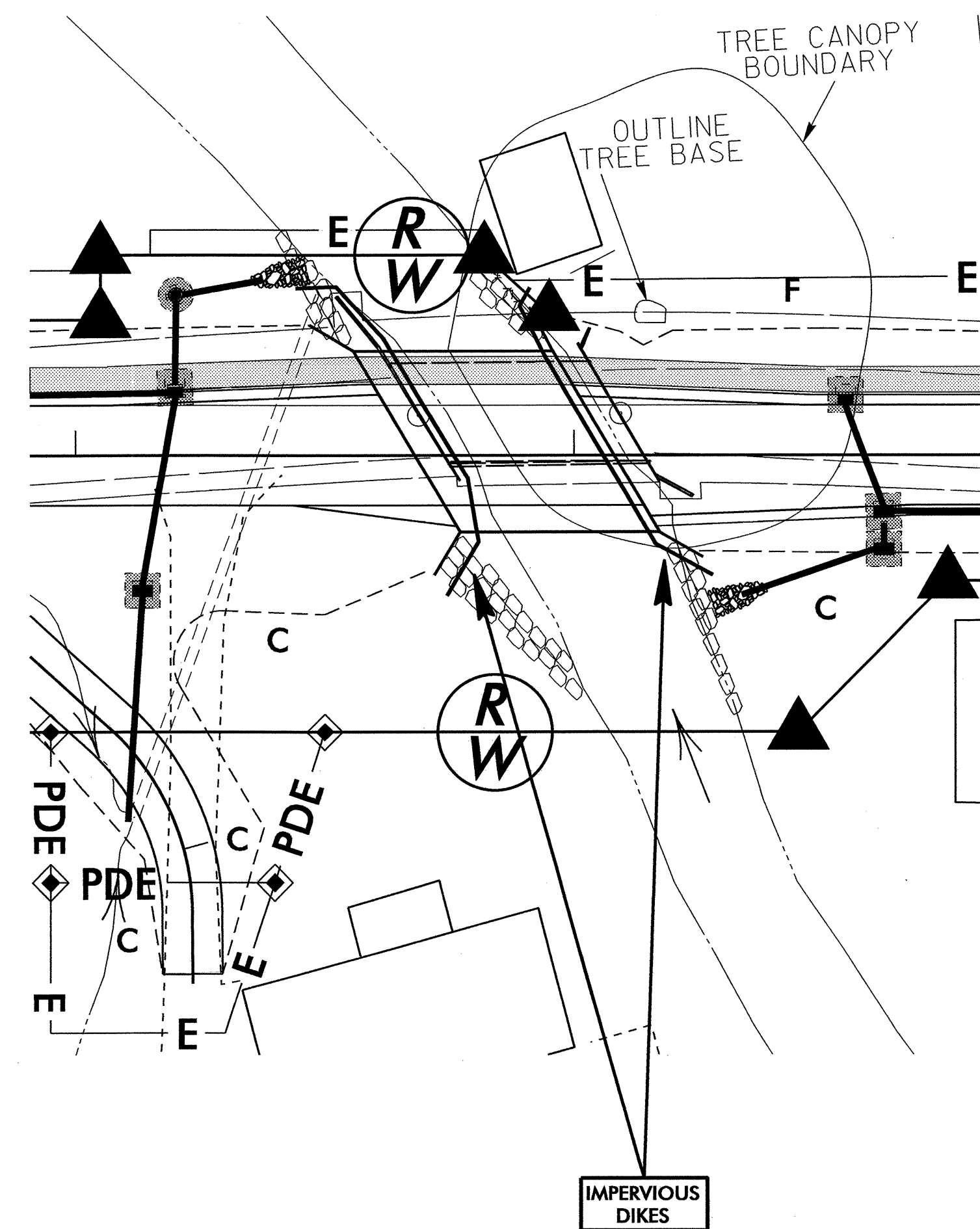
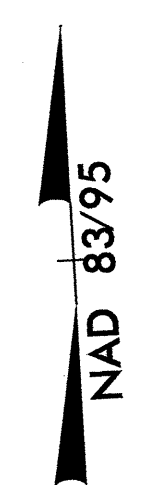
ALL DRIVEWAY RADII ARE 5' UNLESS NOTED OTHERWISE
SEE PMP FOR CURB RAMP LOCATIONS AND STATIONING
FOR -L- PROFILE, SEE SHEET NO. 5
 5' SIDEWALK
FOR CULVERT PLANS, SEE SHEET NO. C-1 THRU C-12

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PROJECT REFERENCE NO.	SHEET NO.
B-4122	EC-4/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

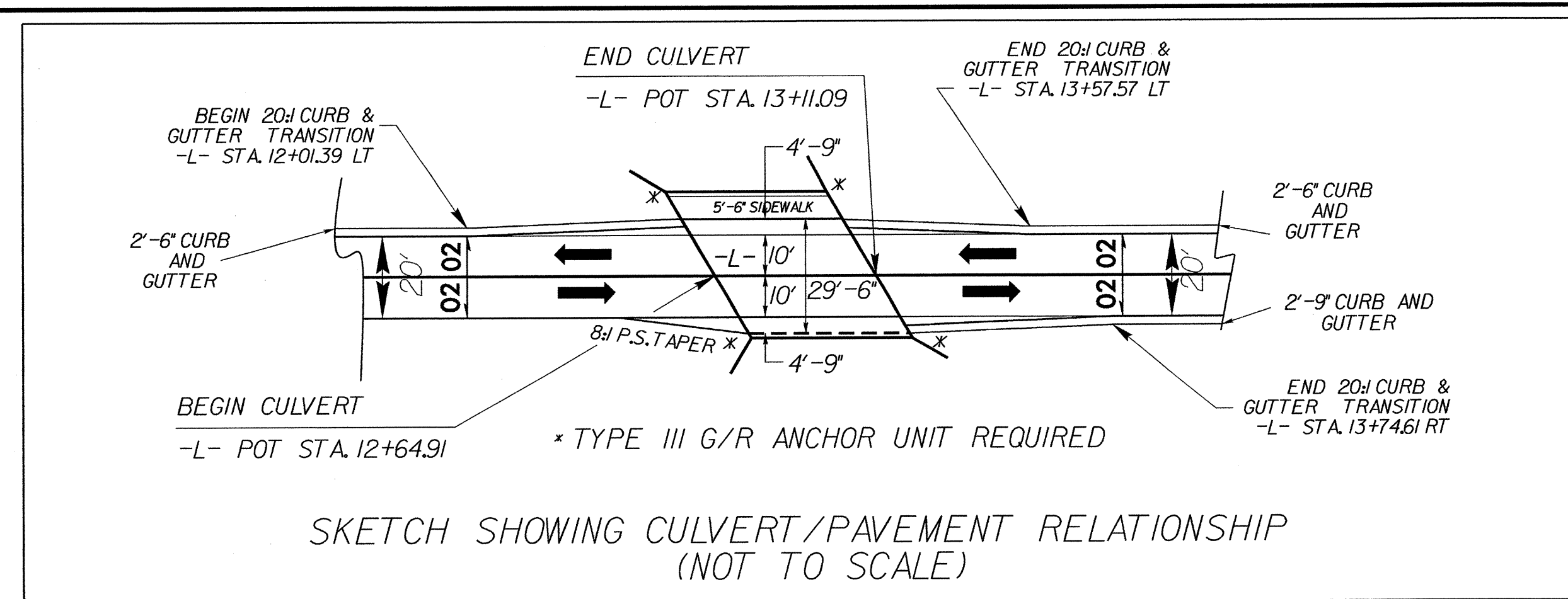
CROWNSPAN CONSTRUCTION SEQUENCE STA. 12+88 -L-

1. UTILIZE SPECIAL STILLING BASIN(S) AS NEEDED THROUGHOUT CROWNSPAN CONSTRUCTION.
2. REMOVE EXISTING BRIDGE.
3. CONSTRUCT IMPERVIOUS DIKES.
4. CONSTRUCT FOOTINGS WITH SHEET PILING SUPPORTS.
5. CONSTRUCT CROWNSPAN AND ANY NECESSARY UPSTREAM/DOWNSTREAM CHANNEL IMPROVEMENTS.
6. REMOVE IMPERVIOUS DIKES AND ANY REMAINING SPECIAL STILLING BASIN(S).
7. COMPLETE ROADWAY.



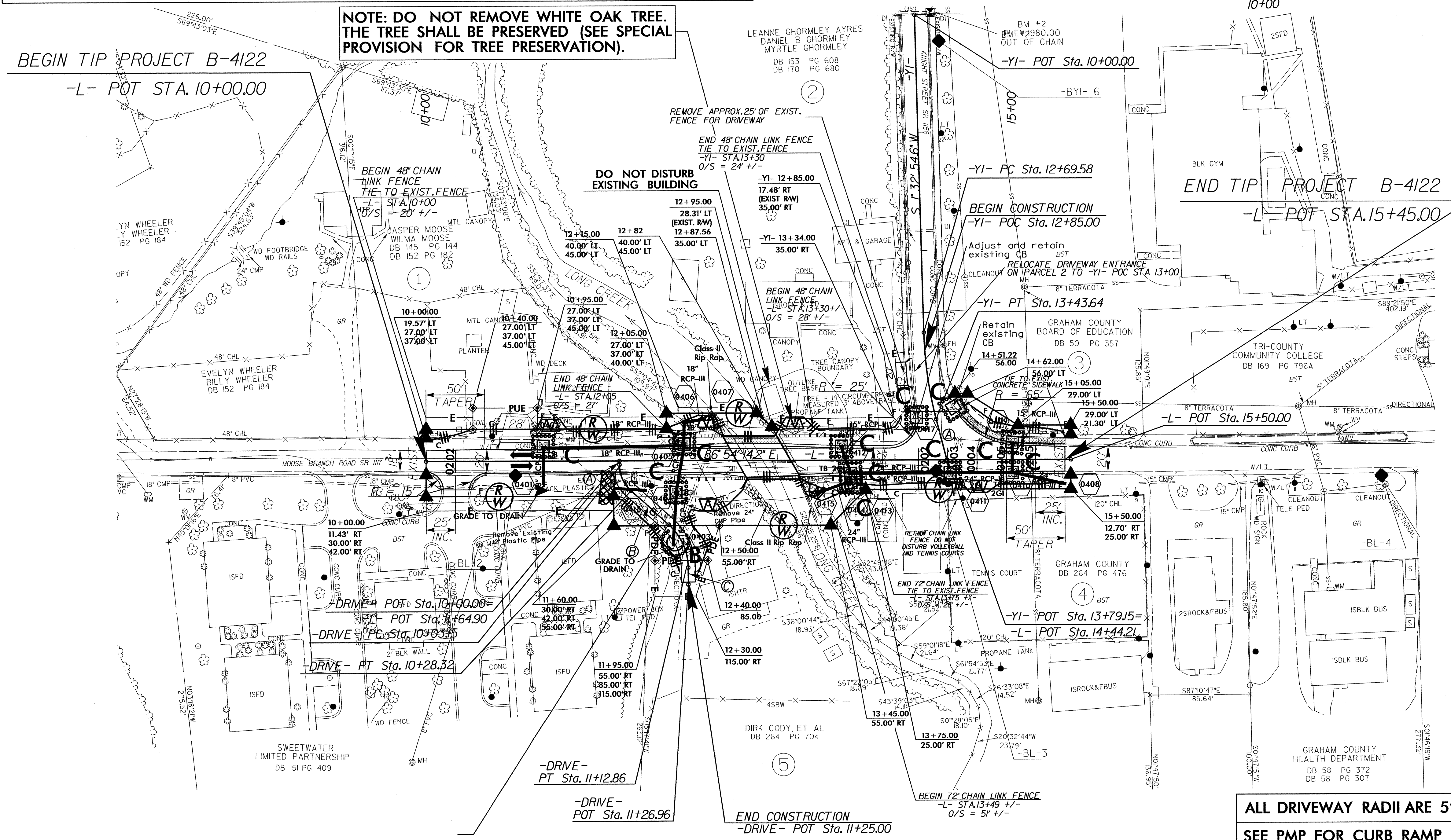
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PROJECT REFERENCE NO. B-4122	SHEET NO. EC-5/CONST.4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER



SKETCH SHOWING CULVERT/PAVEMENT RELATIONSHIP (NOT TO SCALE)

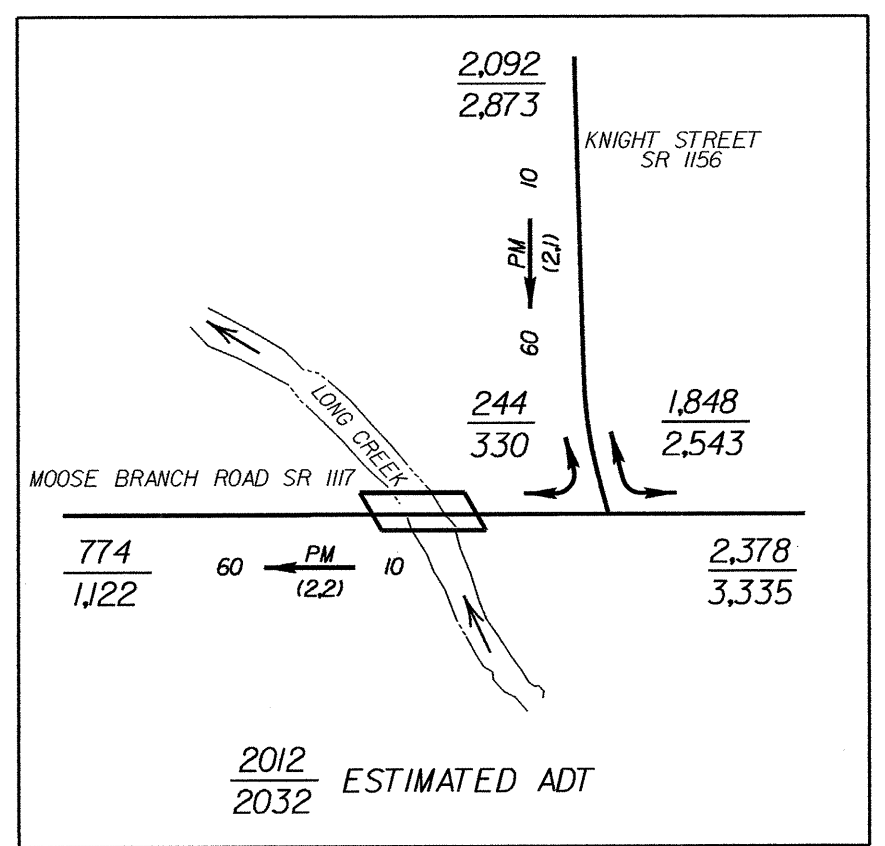
NOTE: DO NOT REMOVE WHITE OAK TREE. THE TREE SHALL BE PRESERVED (SEE SPECIAL PROVISION FOR TREE PRESERVATION).



RIP-RAP AND GEOTEXTILE QUANTITIES

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FOR -L- PROFILE, SEE SHEET NO. 5
5' SIDEWALK
FOR CULVERT PLANS, SEE SHEET NO. C-1 THRU C-12

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NAD 83/95