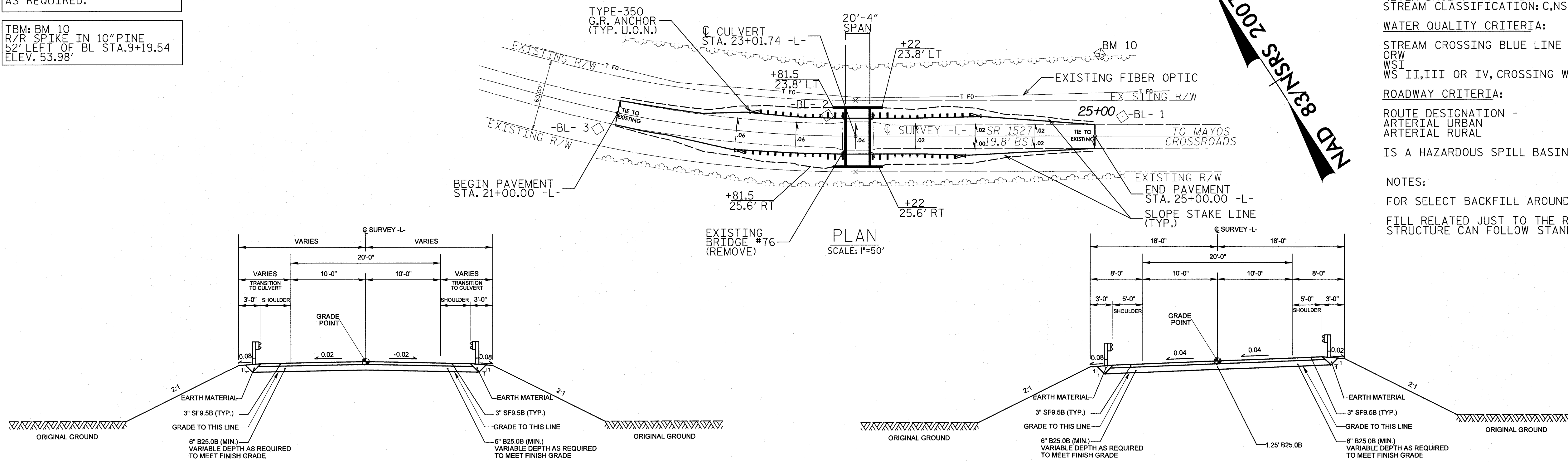


EXISTING UTILITIES TO BE RELOCATED BY OTHERS AS REQUIRED.

TBM: BM 10  
R/R SPIKE IN 10" PINE  
52' LEFT OF BL STA. 9+19.54  
ELEV. 53.98'

RECOMMENDED STRUCTURE

1 @ 20'-4" X 4'-6" ALUMINUM BOX CULVERT (ABC), L=49'-6", 90° SKEW W/ US & DS HWs



TYPICAL ROADWAY SECTION WITHIN CONSTRUCTION LIMITS

TYPICAL ROADWAY SECTION AT CULVERT CENTERLINE

HAZARDOUS SPILL BASIN CHECKLIST

RIVER BASIN: TAR-PAMLICO  
STREAM CLASSIFICATION: C,NSW

WATER QUALITY CRITERIA:

STRAIN CROSSING BLUE LINE ON USGS ORW WSI	YES	NO
WS II, III OR IV, CROSSING WITH 0.5mi OF W.S. CRITICAL AREA	<input type="checkbox"/>	<input type="checkbox"/>

ROADWAY CRITERIA:

ROUTE DESIGNATION - ARTERIAL URBAN	YES	NO
ARTERIAL RURAL	<input checked="" type="checkbox"/>	<input type="checkbox"/>

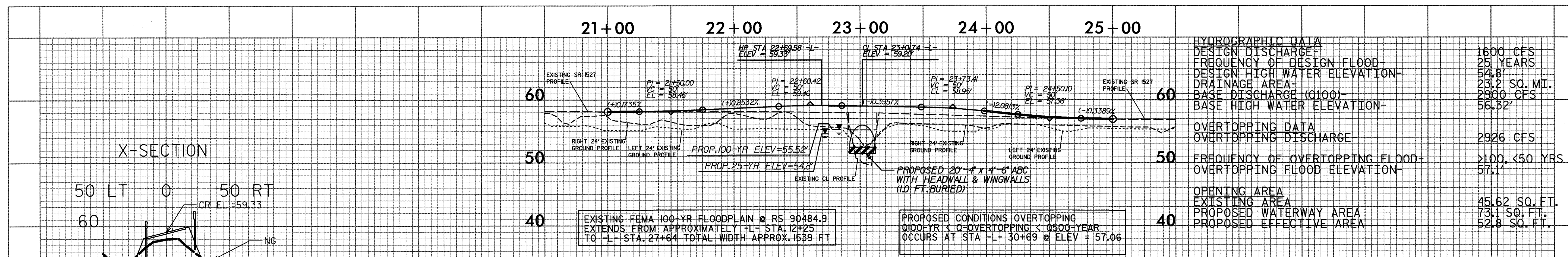
IS A HAZARDOUS SPILL BASIN REQUIRED?

	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	-------------------------------------

NOTES:  
FOR SELECT BACKFILL AROUND CULVERT, USE TYPE IV - ABC  
FILL RELATED JUST TO THE REMOVAL OF THE EXISTING STRUCTURE CAN FOLLOW STANDARD SELECT FILL MATERIALS.

BL1 N=775071.9500  
E=2476267.6510  
ELEV=55.94' 15" LT  
BL2 N=775207.4480  
E=2476061.7500  
ELEV=56.55' 17.0" LT  
BL3 N=775303.1540  
E=2475895.0400  
ELEV.=58.27' 16" RT

DATUM DESCRIPTION  
THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "BL1" WITH NAD 83/NSRS 2007 STATE PLANE GRID COORDINATES OF NORTHING: 775071.950(+1) EASTING: 2476267.651(+1) ELEVATION: 55.940(+1) THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.99993386 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL DISTANCE FROM "BL1" TO "L" STATION IS ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES VERTICAL DATUM USED IS NAVD 88



NOTE: THIS SITE IS LOCATED IN A FLOOD ZONE, LIMITED DETAIL STUDY. (CONETOE, NC QUAD)

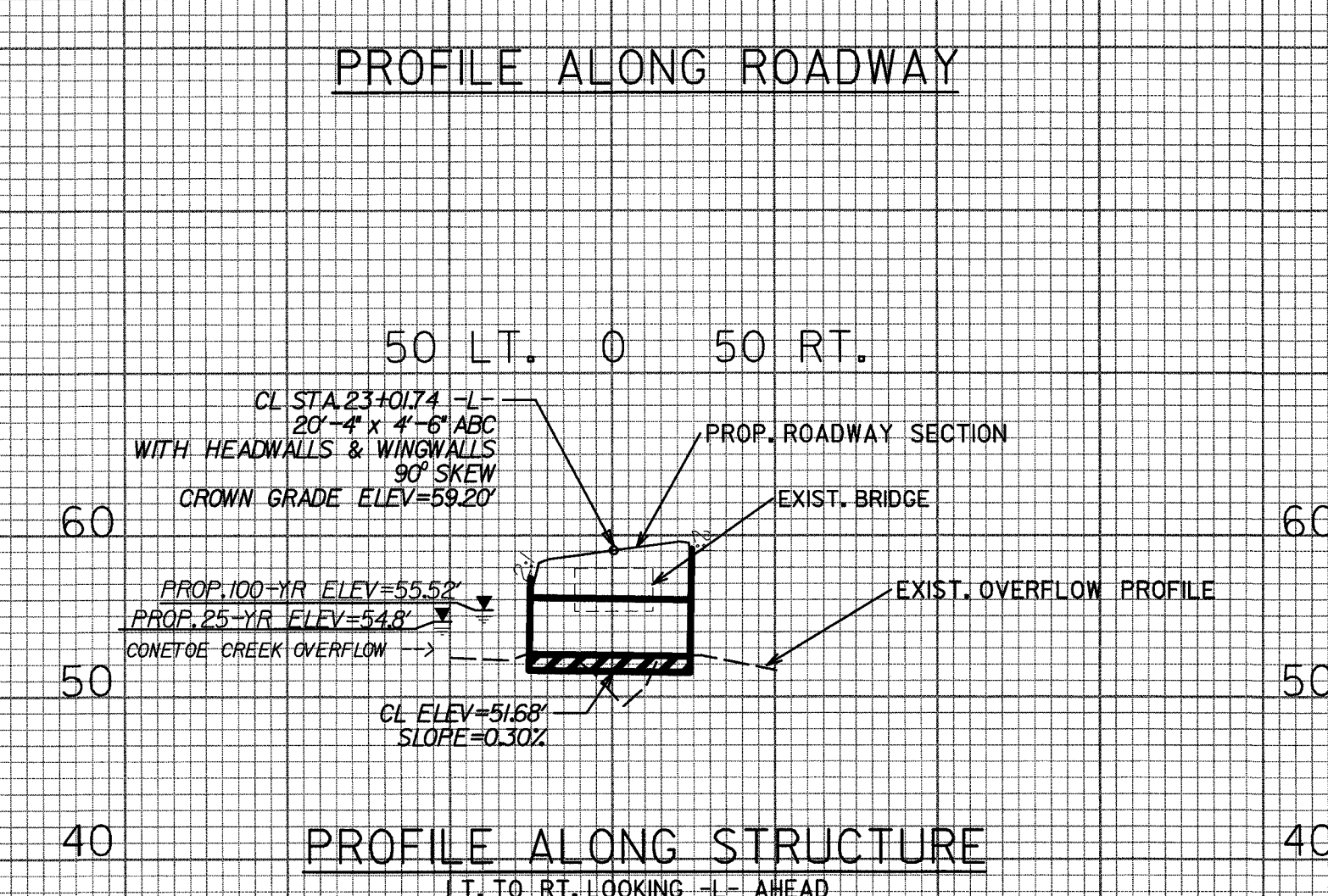
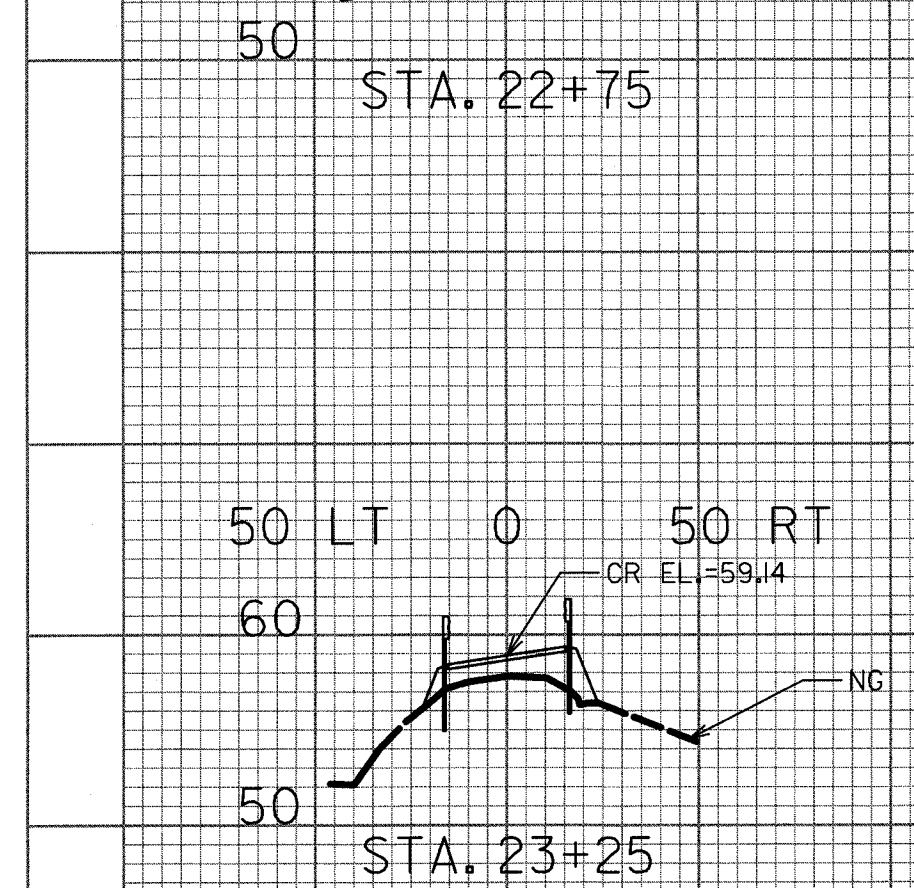
D.A. = 23.2 SQ. MI.

Q<sub>100</sub> = 1200 CFS } USGS RURAL  
Q<sub>25</sub> = 1600 CFS  
Q<sub>50</sub> = 2500 CFS

Q<sub>100</sub> (FEMA) = 2900 CFS

HISTORIC HIGHWATER INFORMATION  
EUNICE CRAWFORD, LOCAL RESIDENT, STATED THAT FLOOD OVERTOPPED SR 1527 IN SEPTEMBER 1999. THE RESIDENT'S PERIOD OF KNOWLEDGE IS 50+ YEARS.

PER NCDOT PROVIDED INFORMATION, ERELYN DAVIS STATED THAT THE FLOOD ELEVATION REACHED 58.0 FEET DURING FLOOD IN SEPTEMBER 1999. THE PERIOD OF KNOWLEDGE IS UNKNOWN.



USGS

NATURAL 25 YR. WS. EL. = 53.9'  
EXISTING 25 YR. WS. EL. = 54.8'  
PROPOSED 25 YR. WS. EL. = 54.8'

NATURAL 100 YR. WS. EL. = 55.0'  
EXISTING 100 YR. WS. EL. = 55.5'  
PROPOSED 100 YR. WS. EL. = 55.5'

FEMA

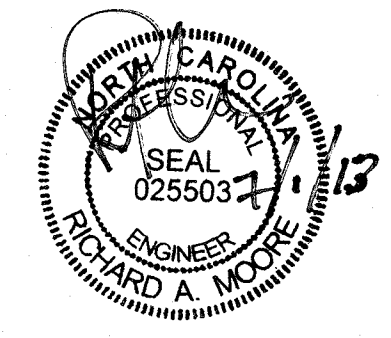
CORRECTED EFFECTIVE 100 YR. WS. EL. = 56.32'  
REVISED (PROPOSED) 100 YR. WS. EL. = 56.32'

NOTE: WATER SURFACE ELEVATIONS FROM HEC-RAS V.4.1.0

PROJECT NO. 17BP.4.R.13  
EDGECOMBE COUNTY  
STATION: 23+01.74 -L-  
REPLACES BRIDGE NO. 76

STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION  
RALEIGH

BRIDGE #76 ON SR 1527  
OVER CONETOE CREEK  
BETWEEN SR 1587 & NC 42  
22'-0" CLEAR ROADWAY - 90° SKEW



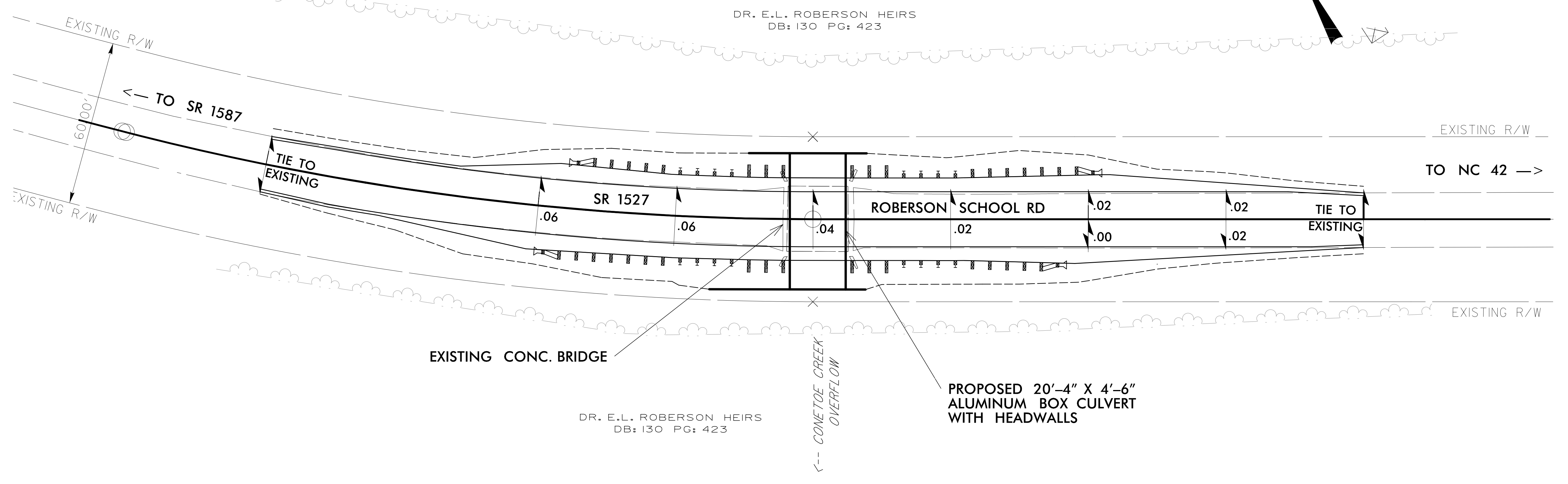
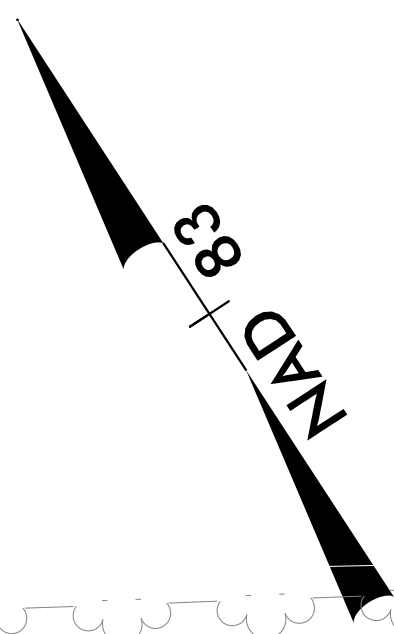
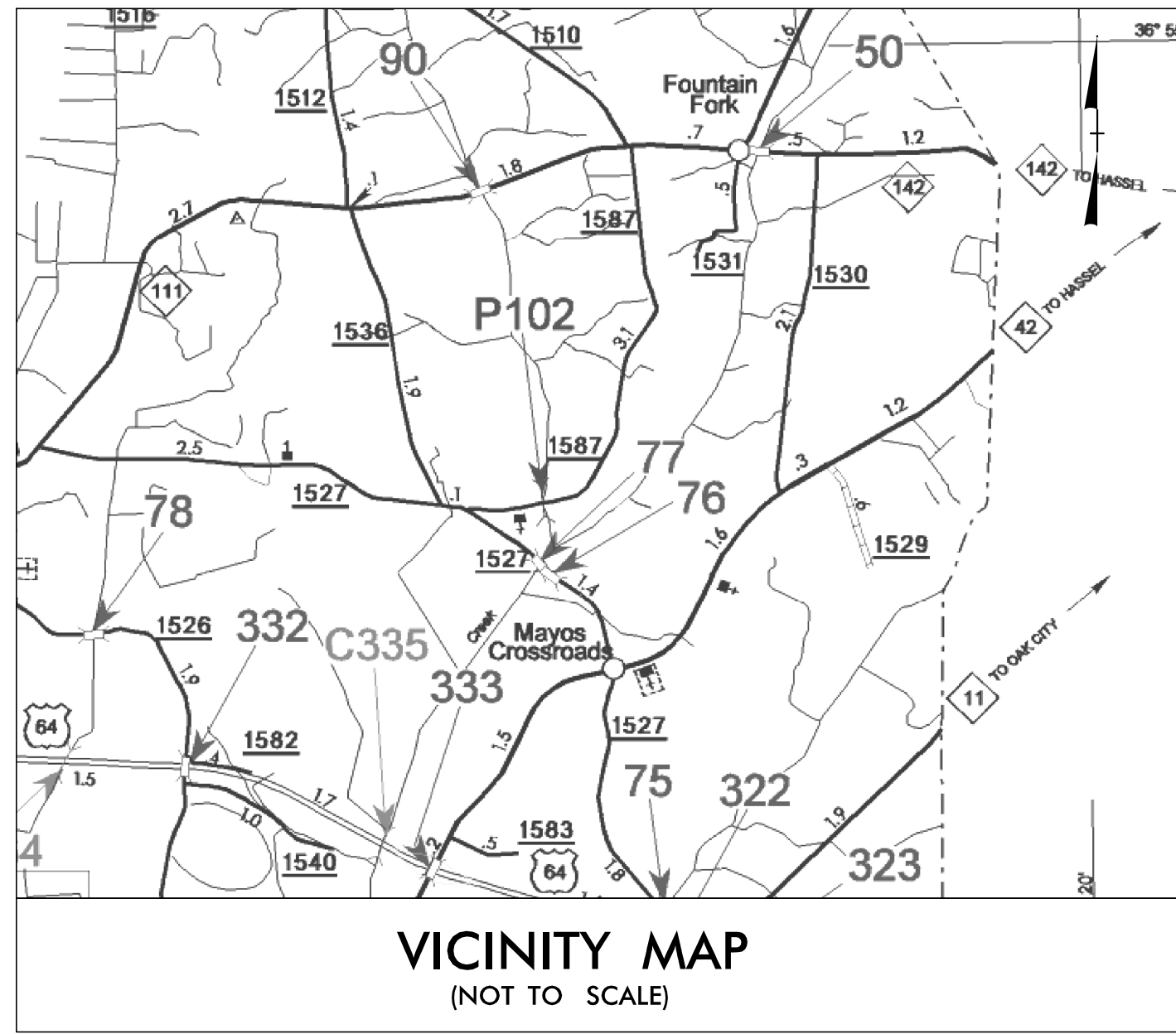
REVISIONS						SHEET NO. 1
NO.	BY:	DATE:	NO.	BY:	DATE:	
1			3			TOTAL SHEETS 1
2			4			

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	17BP.4.R.13	EC-1	3
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
17BP.4.R.13	N/A	BRIDGE REPLACEMENT	

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**EDGECOMBE COUNTY**

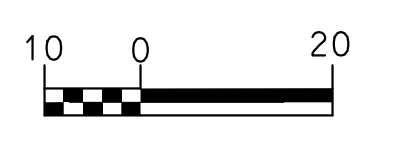
PLAN FOR PROPOSED  
HIGHWAY EROSION CONTROL



WBS #17BP.4.R.13

CONTRACT #DD000075A

**GRAPHIC SCALE**



**EXISTING STRUCTURE:** SINGLE SPAN REINFORCED CONCRETE DECK ON STEEL AND CONCRETE ENCASED I-BEAMS ON CONC. END BENTS WITH CONC. WINGWALLS

**PROPOSED STRUCTURE:** SINGLE 20'-4" X 4'-6" ALUMINUM BOX CULVERT 90° SKEW WITH HEADWALLS AND WINGWALLS BURIED 1-FT

ROADSIDE ENVIRONMENTAL UNIT  
DEPARTMENT OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
RALEIGH, N.C.

2012 STANDARD SPECIFICATIONS

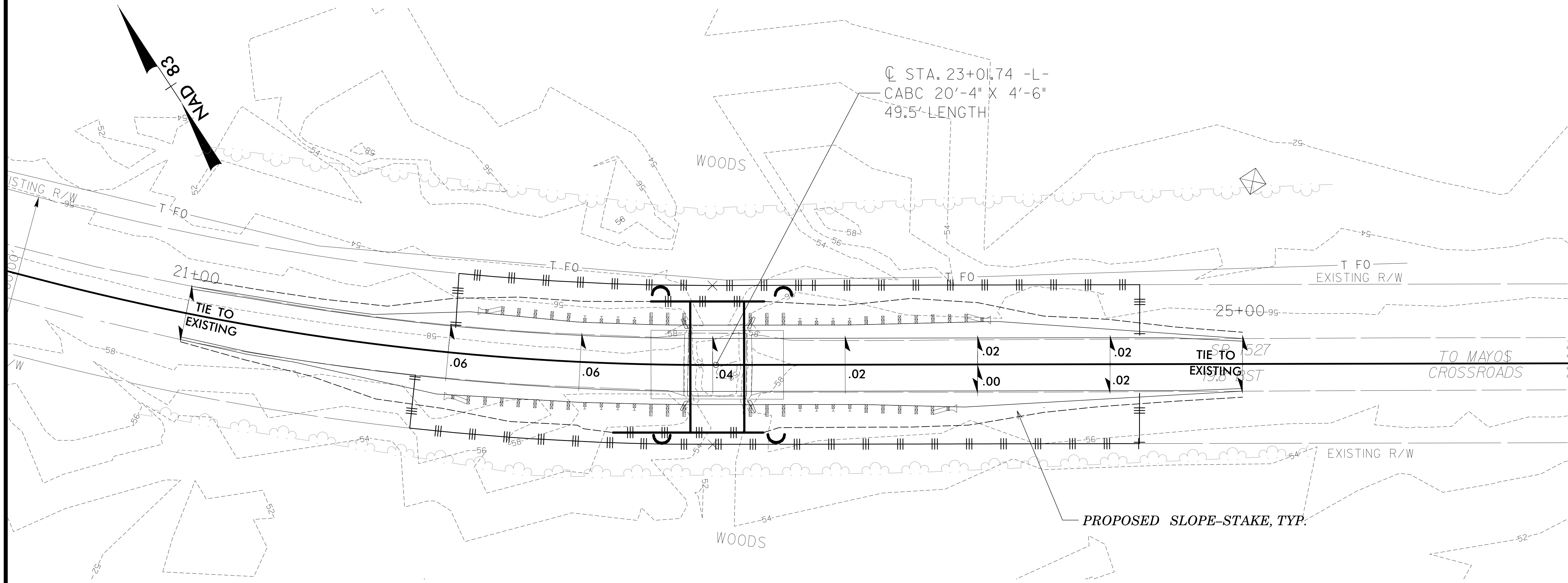
J. BRANCH SMITH  
LEVEL III NAME

3355  
LEVEL III CERTIFICATION NO.

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	



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.

EROSION CONTROL MEASURES

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
S.P.	Silt Fence Wattle Break	

SOIL STABILIZATION TIMEFRAMES

SITE DESCRIPTION	STABILIZATION TIME	TIMEFRAME EXCEPTIONS
PERIMETER DIKS, 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.

GENERAL EROSION CONTROL NOTES:

INSTALL EROSION/SEDIMENT CONTROL MEASURES ACCORDING TO PLANS, CONTRACT, AND SPECIAL PROVISIONS.

TEMPORARY SILT FENCE SHALL BE INSTALLED MIN. 3-FT. FROM THE TOE OF FILL. SILT FENCE OUTLETS MUST ALLOW FOR SEDIMENT TO DISCHARGE WITHIN ROW AND NOT OFFSITE.

ANY DEVIATION FROM OPTIONS GIVEN WILL REQUIRE PRIOR APPROVAL BY ENGINEER.

ADDITIONAL EROSION CONTROL DEVICES MAY NEED TO BE INSTALLED AS DIRECTED BY THE ENGINEER.

SEED ALL DISTURBED AREAS ACCORDING TO THE SITE STABILIZATION TIMEFRAMES.

INSTALLATION SCHEDULE:

INSTALL SILT FENCE PRIOR TO DEMOLITION OF EXISTING STRUCTURE.

PREPARE CULVERT FOUNDATION WHILE LIMITING MATERIAL AND SEDIMENT FROM ENTERING THE CHANNEL.

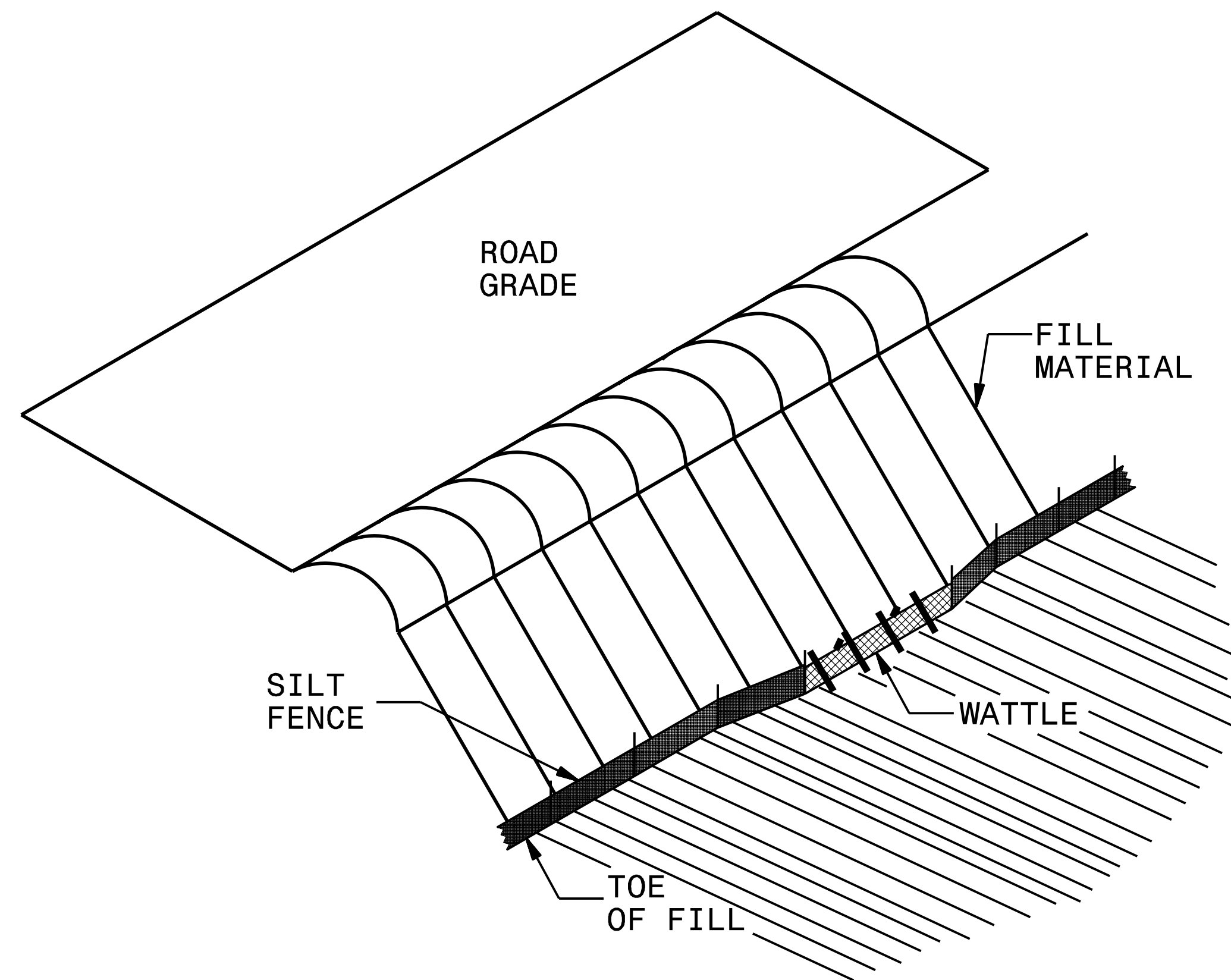
INSTALL PROPOSED ALUMINUM BOX CULVERT, HEADWALLS, AND WINGWALLS.

COMPLETE BACKFILL OF PROPOSED BOX CULVERT AND INSTALL SILT FENCE ALONG EACH HEADWALL AS SHOWN TO PREVENT BACKFILL FROM ENTERING CHANNEL.

REMOVE ALL SEDIMENT CONTROL DEVICES AFTER PERMANENT VEGETATIVE COVER HAS BEEN ESTABLISHED.

PROJECT REFERENCE NO. <i>17BP.4.R.13</i>	SHEET NO. <i>EC-3</i>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

# SILT FENCE WATTLE BREAK DETAIL

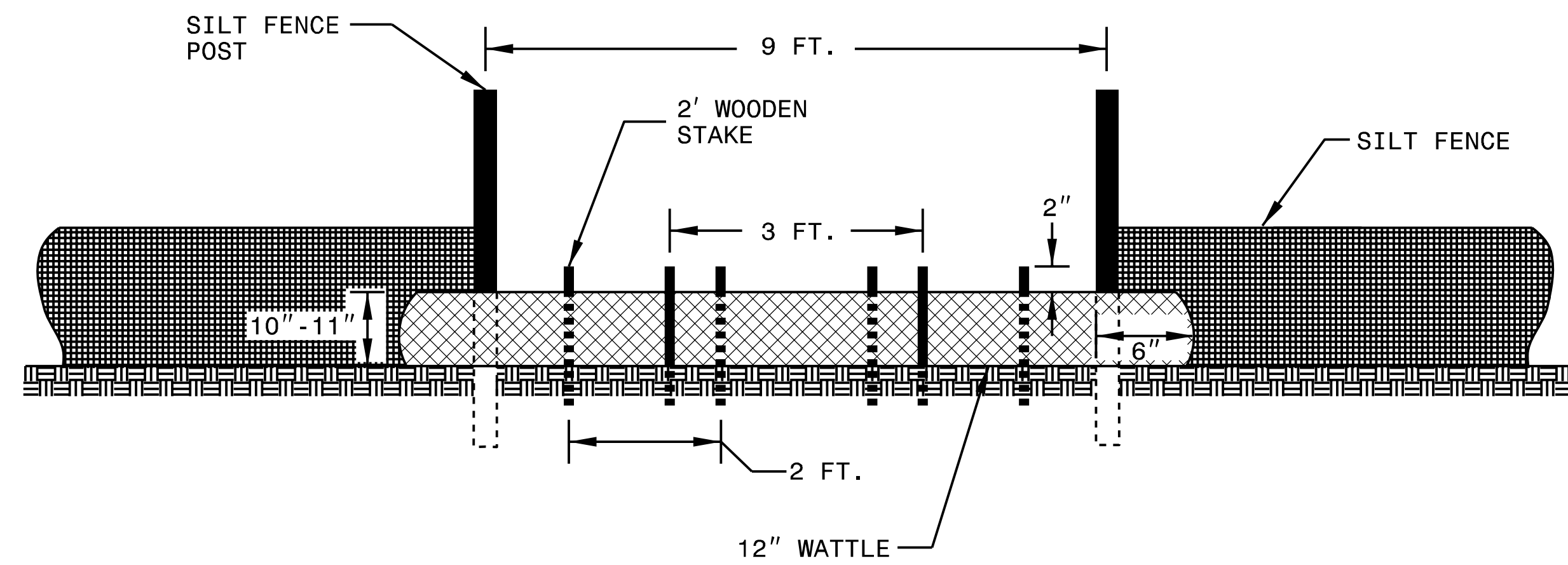
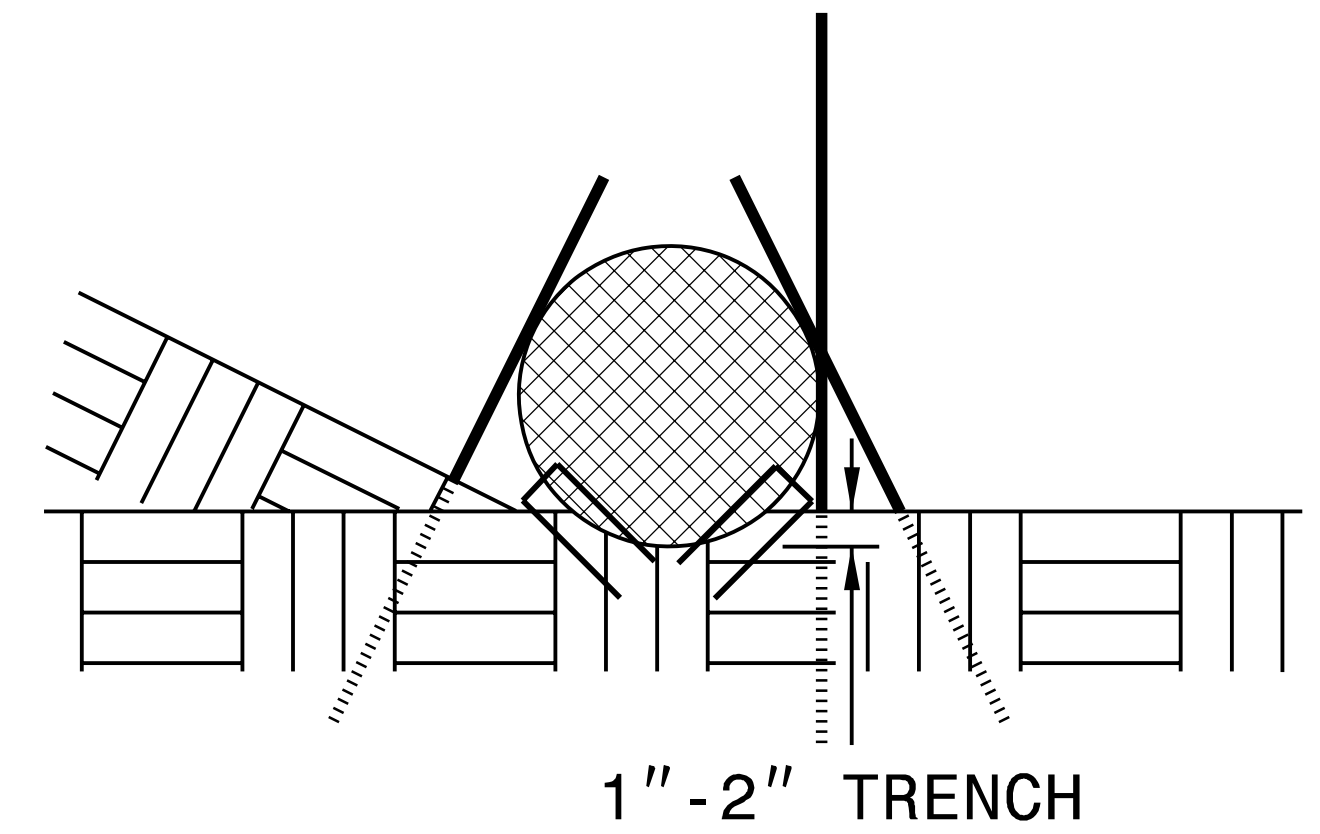


**ISOMETRIC VIEW**

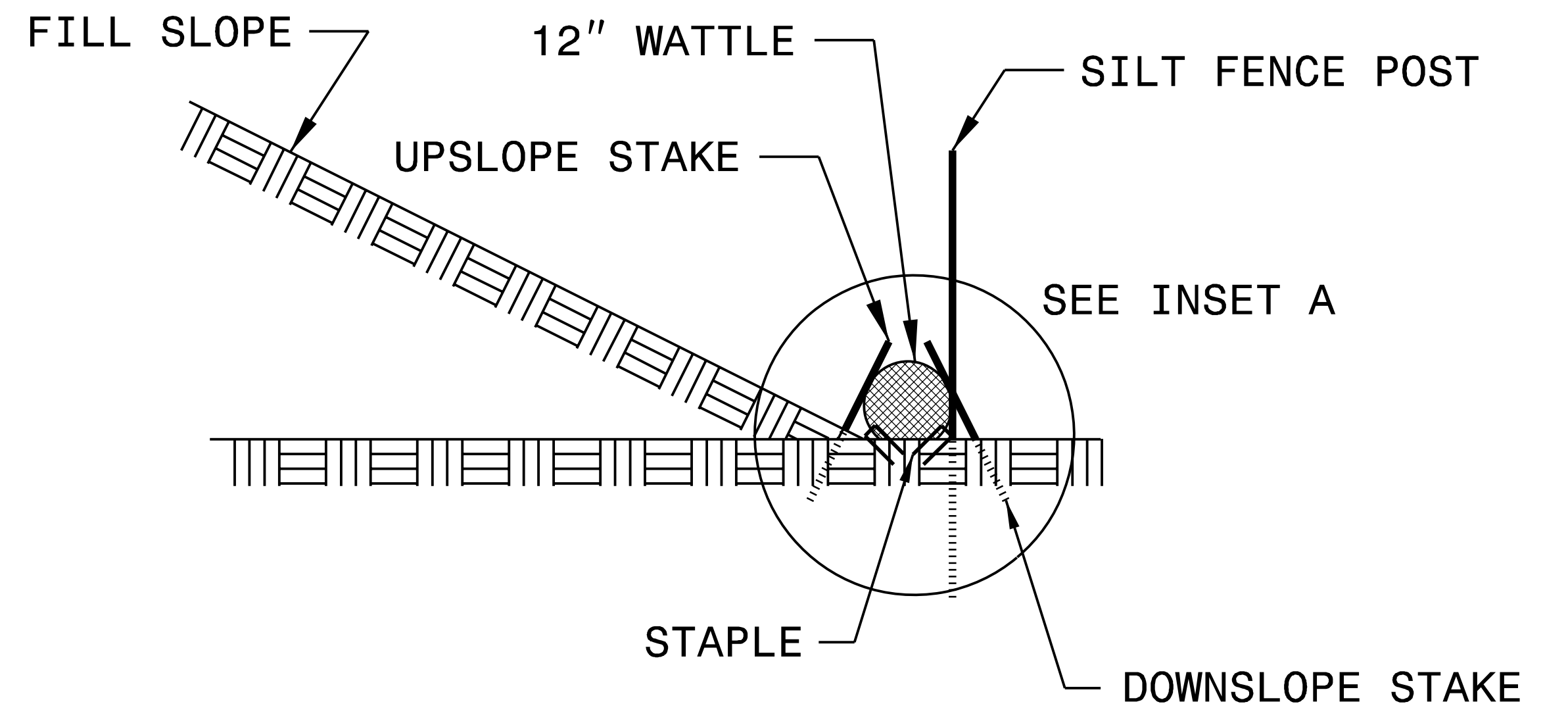
**NOTES:**

- USE MINIMUM 12 IN. DIAMETER EXCELSIOR WATTLE AND LENGTH OF 10 FT.
- EXCAVATE A 1 TO 2 INCH TRENCH FOR WATTLE TO BE PLACED.
- DO NOT PLACE WATTLE ON TOE OF SLOPE.
- USE 2 FT. WOODEN STAKES WITH A 2 IN. BY 2 IN. NOMINAL CROSS SECTION.
- INSTALL A MINIMUM OF 2 UPSLOPE STAKES AND 4 DOWNSLOPE STAKES AT AN ANGLE TO WEDGE WATTLE TO GROUND.
- PROVIDE STAPLES MADE OF 0.125 IN. DIAMETER STEEL WIRE FORMED INTO A U SHAPE NOT LESS THAN 12" IN LENGTH.
- INSTALL STAPLES APPROXIMATELY EVERY 1 LINEAR FOOT ON BOTH SIDES OF WATTLE AND AT EACH END TO SECURE IT TO THE SOIL.
- WATTLE INSTALLATION CAN BE ON OUTSIDE OF THE SILT FENCE AS DIRECTED.
- INSTALL TEMPORARY SILT FENCE IN ACCORDANCE WITH SECTION 1605 OF THE STANDARD SPECIFICATIONS.

**INSET A**



**VIEW FROM SLOPE**



**SIDE VIEW**