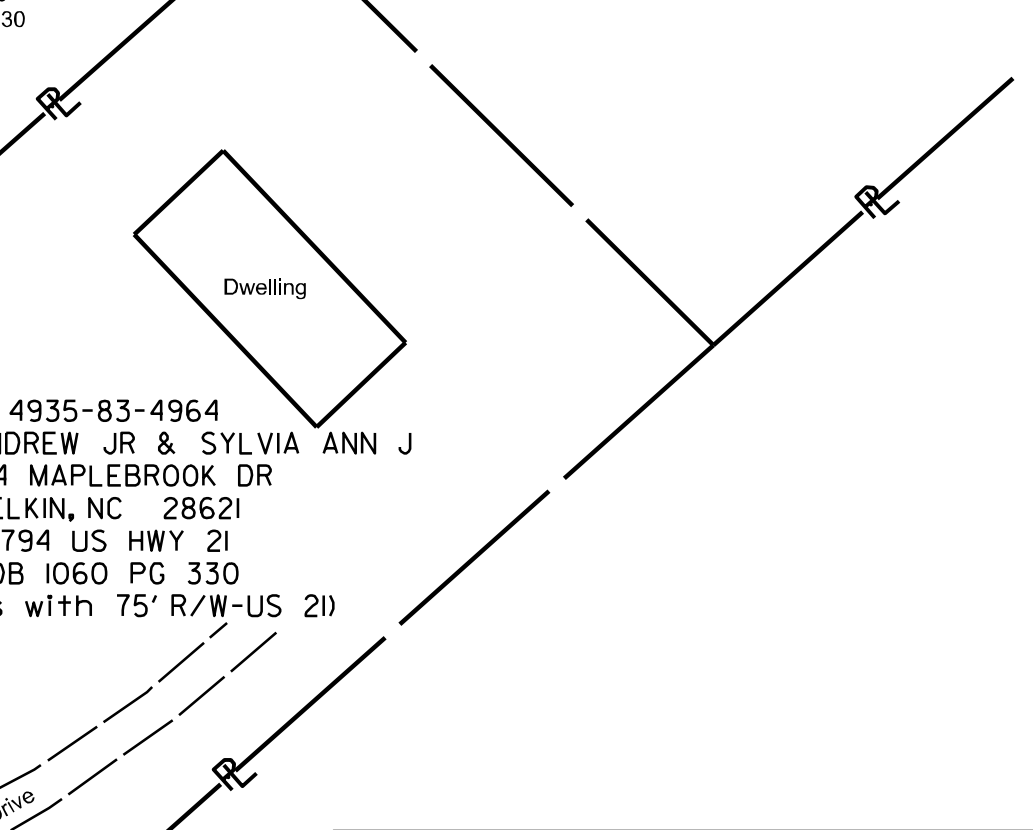
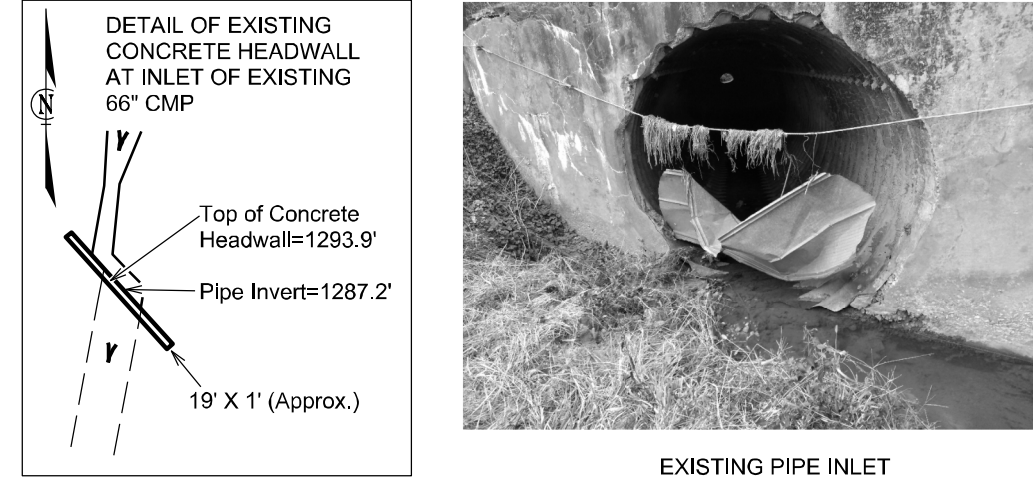
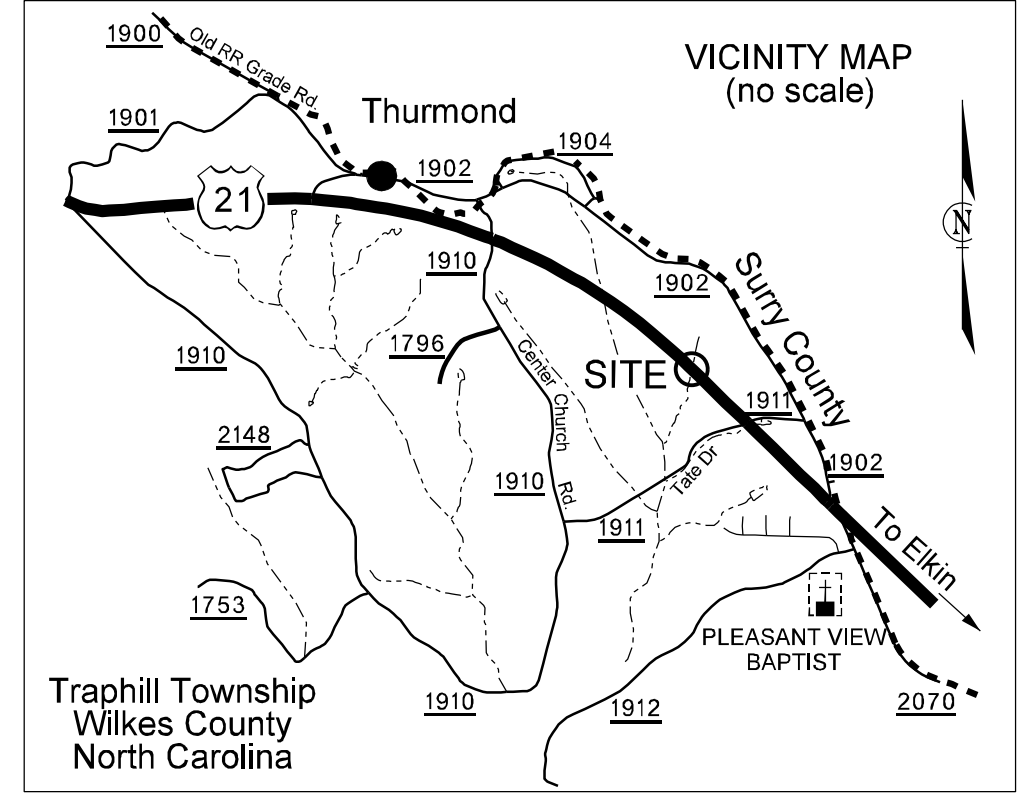


DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



"Easement of Right-of-Way" described in Consent Judgement between Hugh A. Royall and wife, Beulah H. Royall; and J.S. Atkinson vs. State Highway Commission, recorded October 17, 1960 in Deed Book 367, Page 389 in Wilkes County Registry.

"DW2"

PI 0+47.44	PI 2+11.40	PI 3+53.41
N 954.270.5455	N 954.179.3646	N 954.208.5422
E 1,436.057.2501	E 1,436.194.9068	E 1,436.342.1555
- 35° 00' 10" (RT)	- 44° 43' 40" (LT)	- 109° 46' 48" (RT)
D 98° 47' 09"	D 29° 50' 30"	D 114° 35' 29"
R 58.00	R 192.00	R 50.00
Lc 35.57	Lc 149.98	Lc 86.80
T 18.36	T 79.00	T 71.12

4935-74-7809
WOOD, HORACE RANDLE & GINA R
PO BOX 9, THURMOND, NC 28683
876 US HWY 21
DB 1283 PG 282
(P/L is with C/L-US 21)

4935-74-8693
WOOD, HORACE RANDLE
PO BOX 9, THURMOND, NC 28683
US HWY 21
DB 1190 PG 262
(P/L is with 75' R/W-US 21)

4935-84-4294
795 US HWY 21
WILL/IBE-376
NICHOLS, SUSAN
204 MAPLE BROOK DR
ELKIN, NC 28621
Formerly: Clyde Byrd et ux
DB 836 PG 351
(P/L is with 75' R/W-US 21)

4935-83-4964
JACKSON, ANDREW JR & SYLVIA ANN J
204 MAPLEBROOK DR
ELKIN, NC 28621
794 US HWY 21
DB 1060 PG 330
(P/L is with 75' R/W-US 21)

4935-74-5176
NABORS, L HOWARD &
JOAN REBECCA
P O BOX 430
ELKIN, NC 28621
863 US HWY 21
DB 827 PG 285
(P/L is with 75' R/W-US 21)

4935-73-1404
BALZER, M FAITH
297 RIVERRIDGE TRAIL
DOBSON, NC 27017
US HWY 21
DB 380 PG 41
(P/L is with 75' R/W-US 21)

4935-73-9134
BALZER, M FAITH
297 RIVERRIDGE TRAIL
DOBSON, NC 27017
US HWY 21
DB 380 PG 40
(P/L is with 75' R/W-US 21)

DW1- ESTIMATED QUANTITIES
FILL VOLUME = 2,090 CYDS
(total for finished grade, inclusive of stone)
Calculated by the Prismoidal Method
Disturbed Area = 10,241 SQ. FT. (0.24 Acres)
Proposed 100-foot of 24" HDPE.
Proposed 2:1 Slopes; 12-foot road with 2-foot shoulders.

BORING PIT
CUT VOLUME = 398 CYDS
Disturbed Area = 1,894.2 SQ. FT. (0.04 Acres)
Calculated by the Prismoidal Method
72" X 185' PIPE (10' of the 195' pipe is within boring pit)
VOLUME = 193.72 CYDS.
TOTAL = 591.7 CYDS.

C/L Station = 1+15+81.22
PROPOSED
72" STEEL PIPE
LENGTH = 195'
INLET INVERT ELEV = 1287.0'
OUTLET INVERT ELEV = 1279.62'
SLOPE = 3.8%
Inlet = 1+16+20.8 / 73.3' RT
Outlet = 1+16+29 / 97' LT

C/L Station = 15+57.49
Existing 66" CMP
Length = 174.0' (Horizontal)
Elev. Difference = 8.4'
Slope = 4.83%
(Slope is approximate because outlet of pipe has dropped)

Un-Named Tributary of Elkin Creek,
Watershed: WS-II; HQW
River Basin: Yadkin

Control Point
80d Nail
N=953.713.2208
E=1,438.226.9284
Elev.=1280.74
14+46.80
248.40' LT

Control Point
80d Nail
N=953.817.8593
E=1,438.276.0897
Elev.=1284.19
14+84.33
139.04' LT

Control Point
80d Nail
N=953.749.1470
E=1,438.337.5438
Elev.=1296.78
13+92.31
145.73' LT

Existing 66" CMP
Pipe Outlet
Invert=1278.8'
15+06.34
77.13' LT

Existing Concrete R/W Monument
953528.1140
1438669.5970
10+00.00
73.56' LT

US HIGHWAY 21
(P#8.17796)

US HIGHWAY 21

WILKES COUNTY
US HIGHWAY 21
PIPE REPLACEMENT

DIVISION II - DISTRICT I CONSTRUCTION

REVISIONS	INIT.	DATE

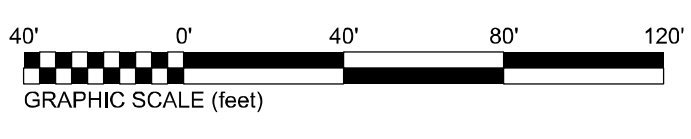
N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

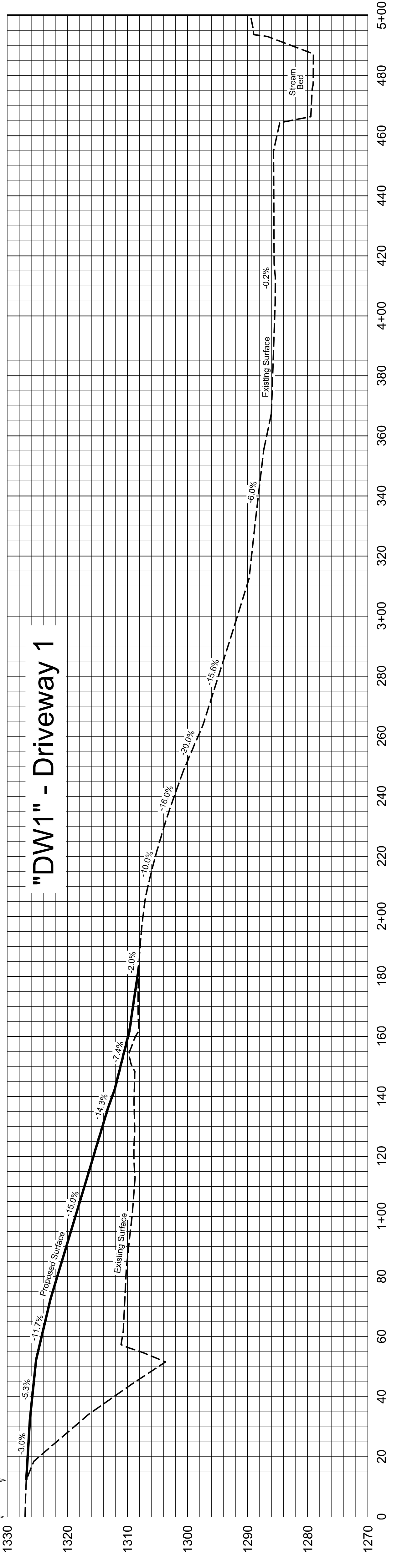
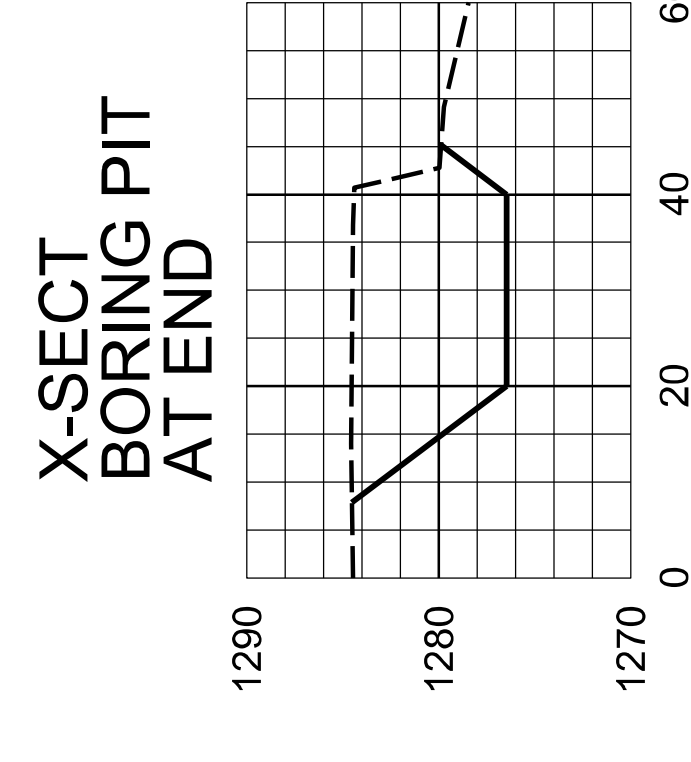
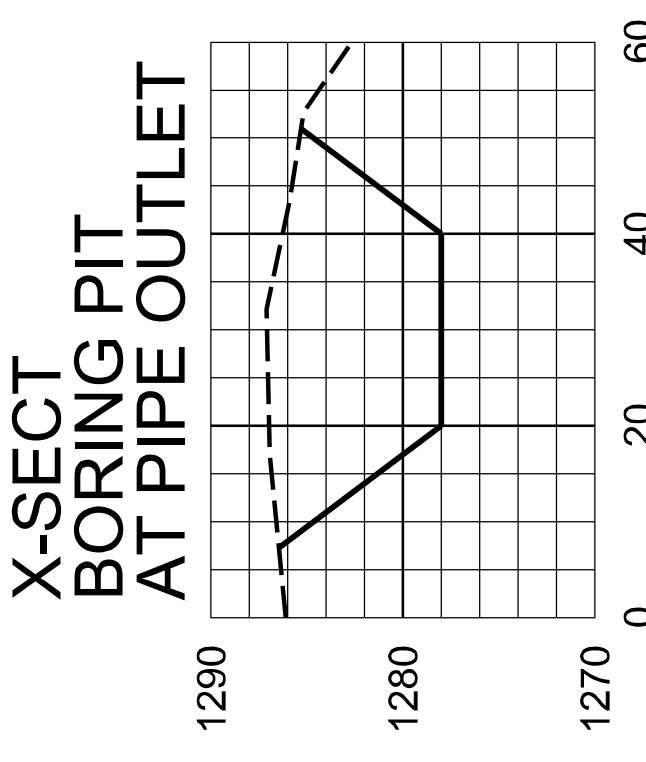
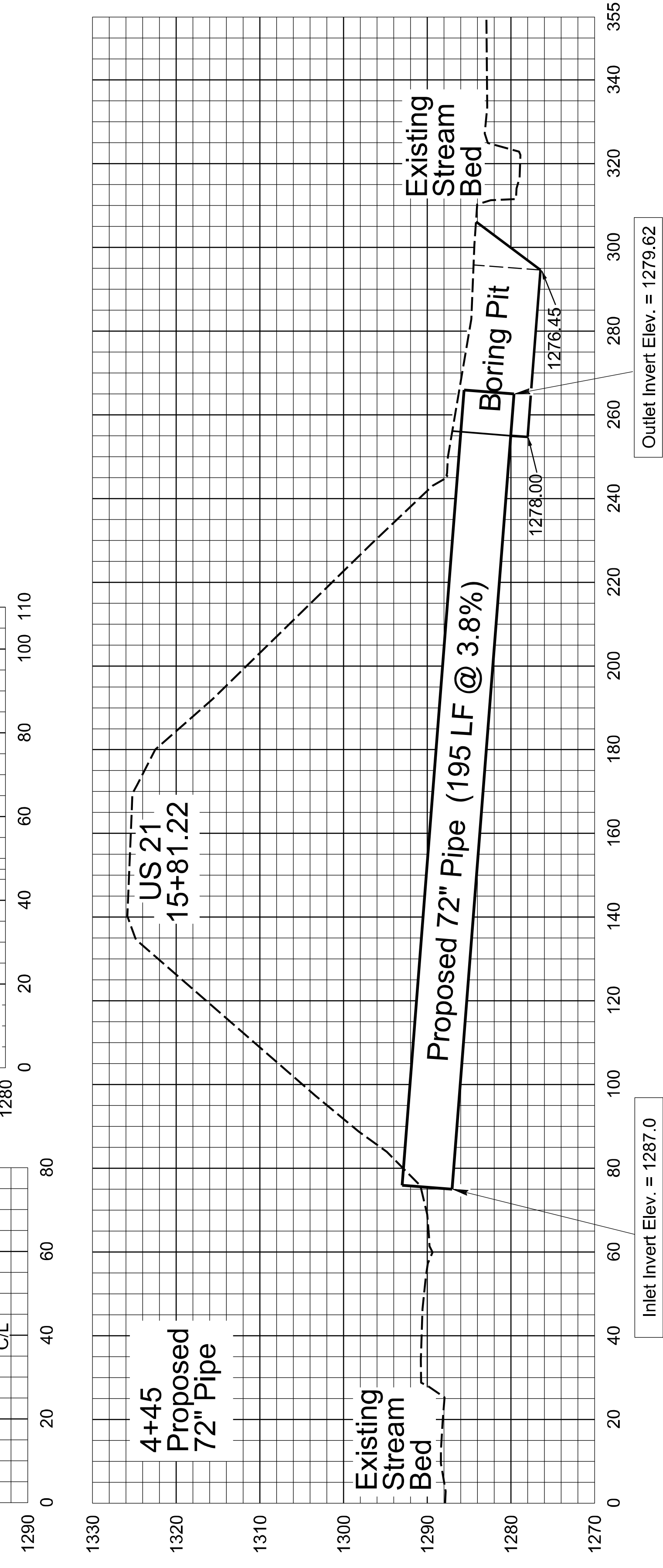
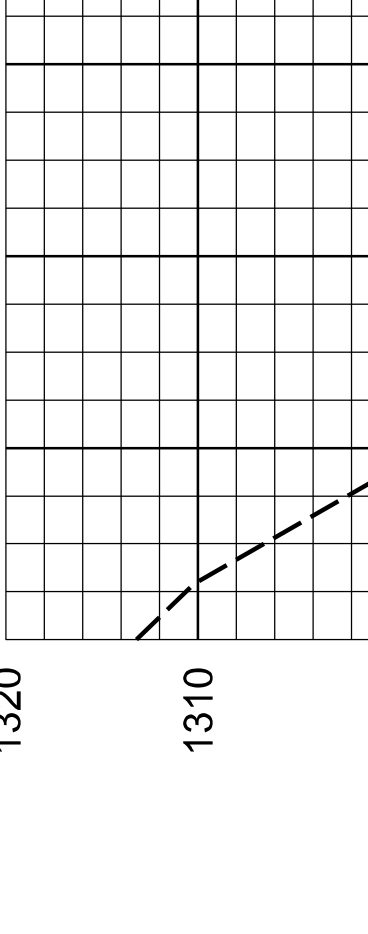
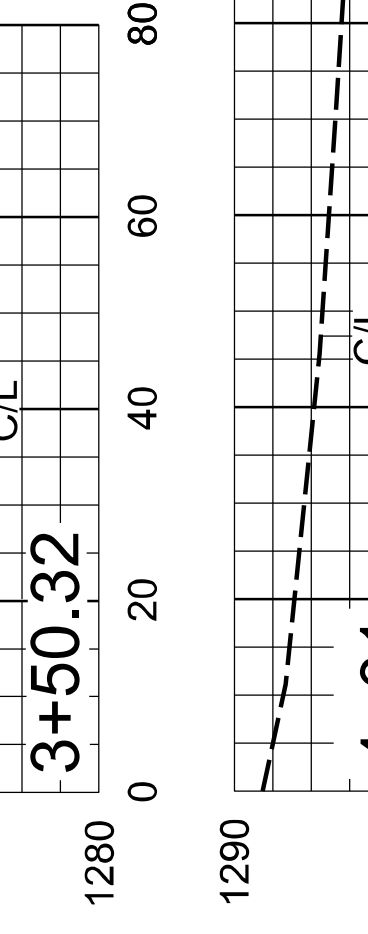
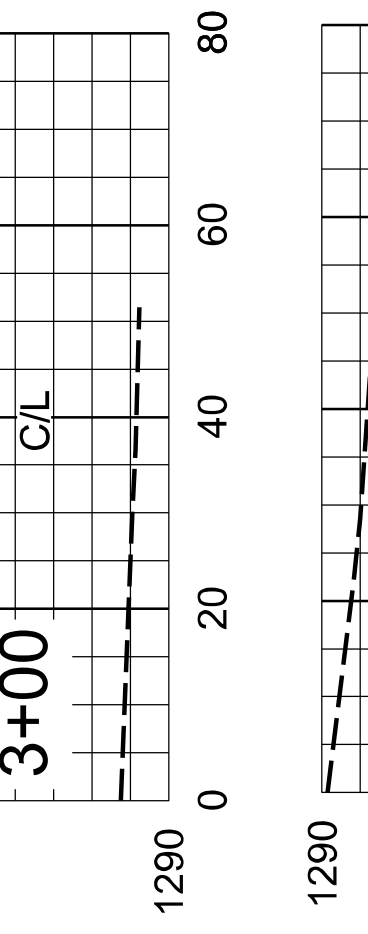
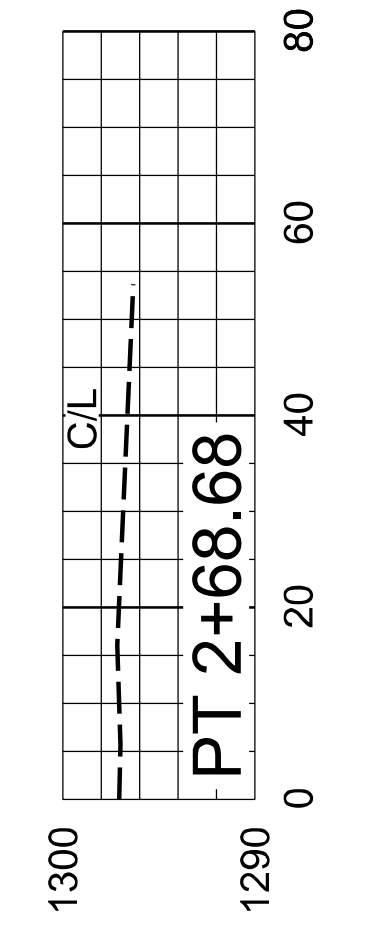
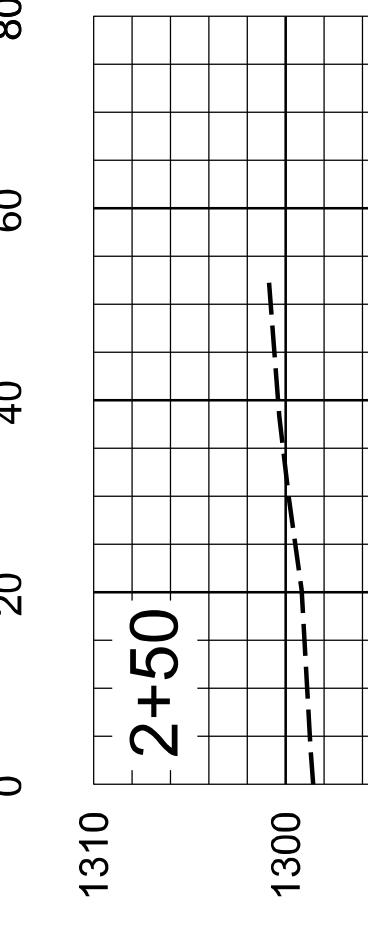
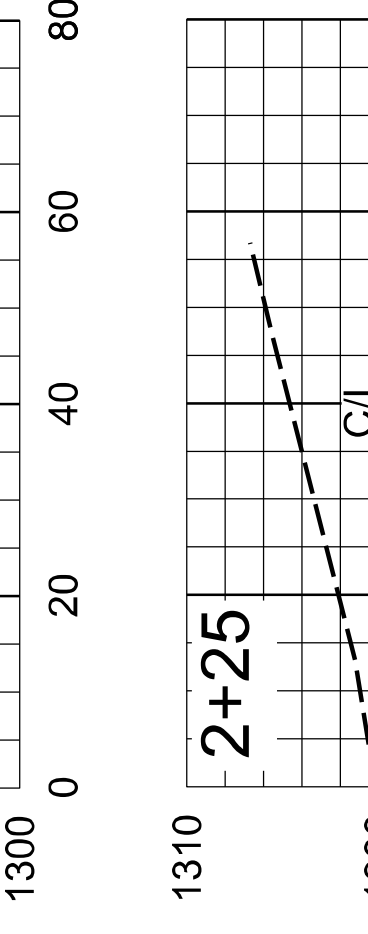
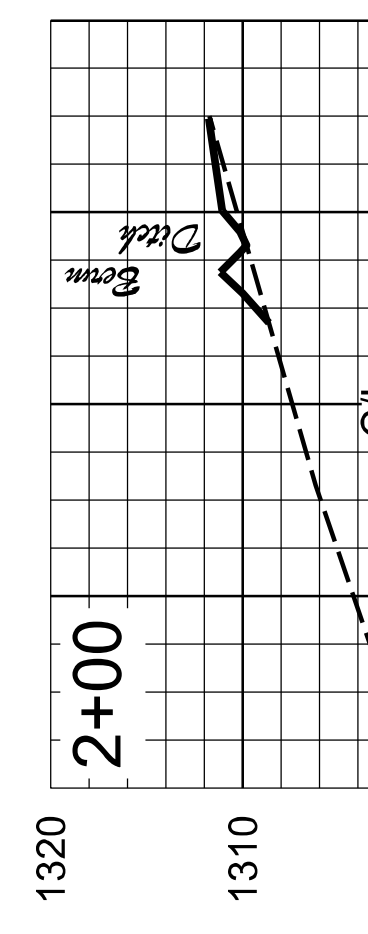
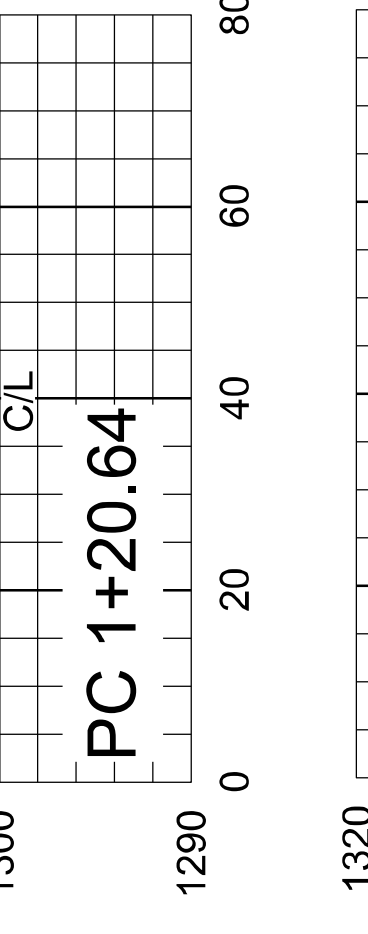
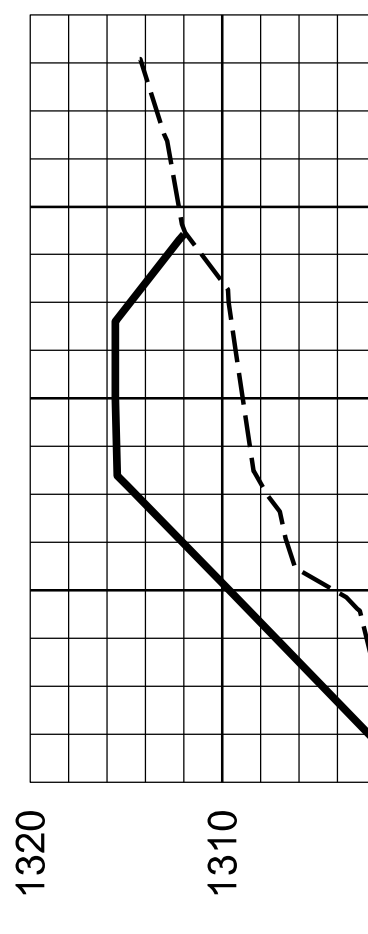
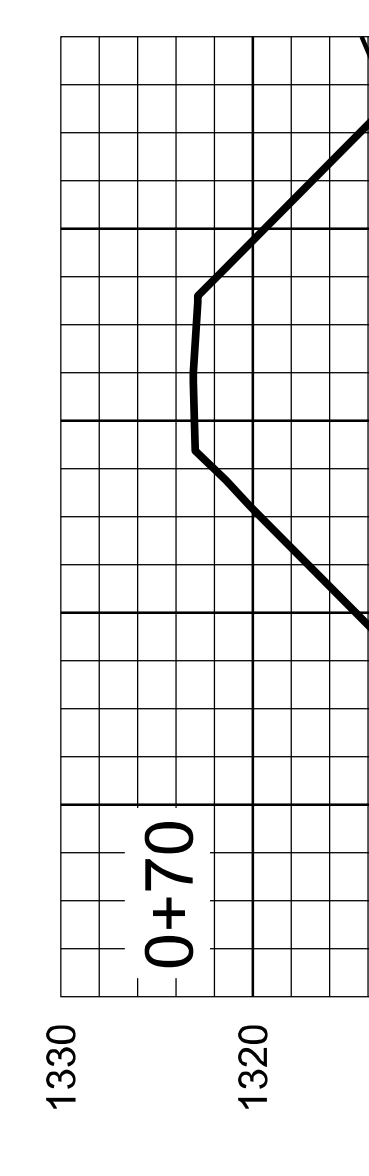
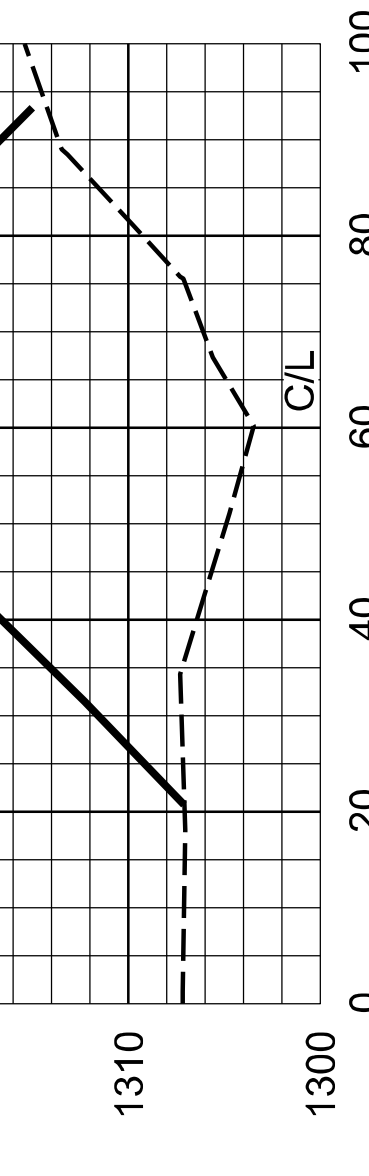
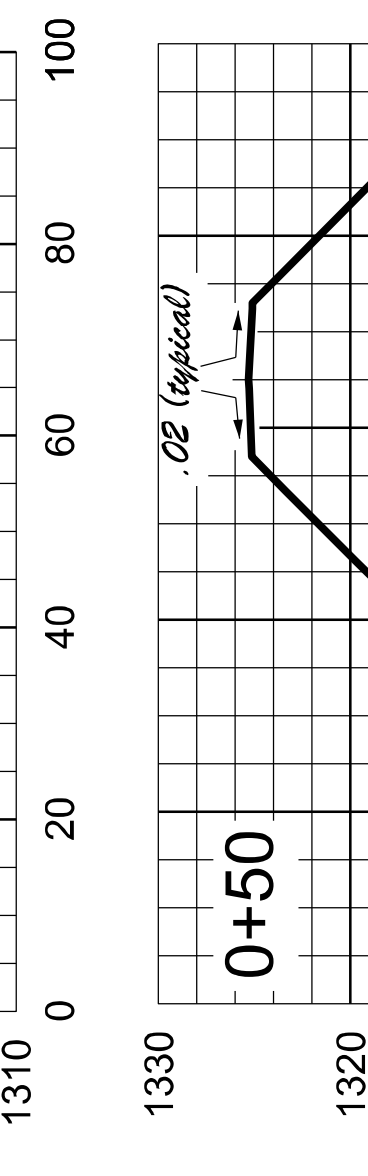
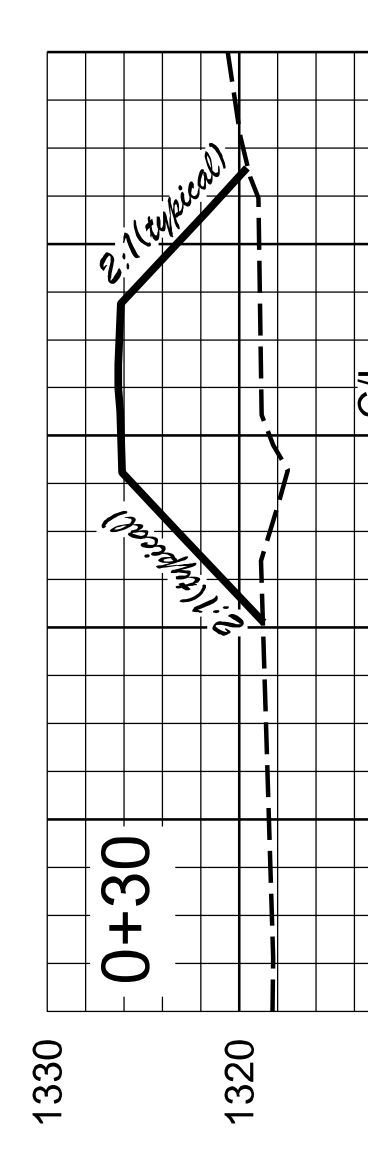
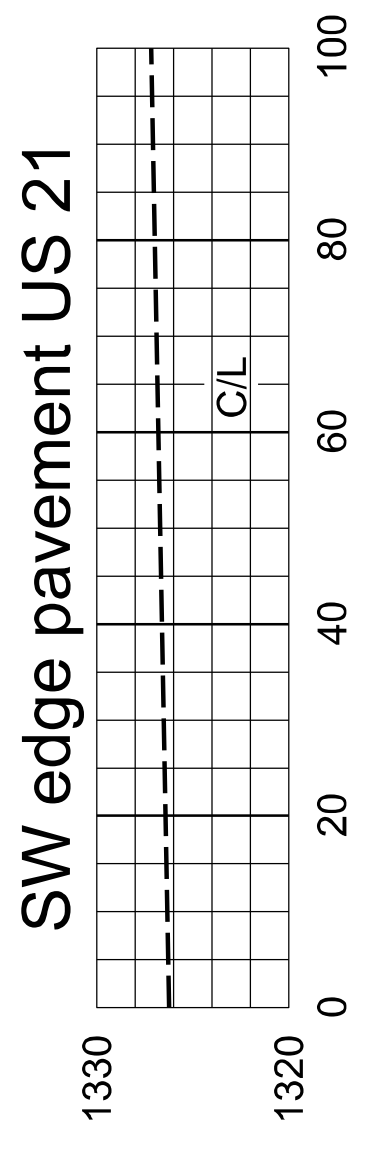
SCALE: DATE: 01/28/2020

PREPARED BY: S.B. DARNELL

REVIEWED BY: DAVID WAYNE, PE

REVIEWED BY:





"DW1" - Driveway 1

WILKES COUNTY
US HIGHWAY 21
PIPE REPLACEMENT

DIVISION II - DISTRICT I CONSTRUCTION

REVISIONS	INT.	DATE

SCALE: DATE: 01/28/2020
 PREPARED BY: S.B. DARNELL
 REVIEWED BY: DAVID WAYNE, PE
 REVIEWED BY:

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

EROSION CONTROL

DOCUMENT NOT CONSIDERED FINAL
 UNLESS ALL SIGNATURES COMPLETED

4935-74-8693
 WOOD, HORACE RANDLE
 PO BOX 9, THURMOND, NC 28683
 US HWY 21
 DB 190 PG 262

4935-84-4294
 796 US HWY 21
 WILLIAMS-376
 NICHOLS, SUSAN
 204 MAPLE BROOK DR
 ELKIN, NC 28621
 Formerly: Clyde Byrd et ux
 DB 836 PG 351

Existing 18" CMP
 INLET EL. = 1326.2
 OUTLET EL. = 1323.1

05.30
 280.2312
 7,998.5064
 9' 15" (LT)
 0' 00"
 59.20
 60
 5

Existing 18" CMP
 INLET EL. = 1324.8
 OUTLET EL. = 1323.8

4935-74-5176
 NABORS, L. HOWARD &
 JOAN REBECCA
 P O BOX 430
 ELKIN, NC 28621
 863 US HWY 21
 DB 827 PG 285

Un-Named Tributary of Elkin Creek.
 Watershed: WS-II; HQW
 River Basin: Yadkin

Silt Fence to be Installed as needed
 along stream bank as directed by Engineer.

See: STREAM CROSSING DETAIL
 (1645.01) on Page 4
 Proposed Dike & Inlet of 24" HDPE
 to be installed 30' upstream from
 inlet of the existing 66" CMP.

30 feet of
 Existing Channel
 to be abandoned,
 Remove existing
 Headwall.

New Stream Connection will be
 approximately 30' in length
 along inlet. Channel will be
 trapezoidal in shape with a
 3.5' wide base and 2:1 side
 slopes. Extent of connection
 will be staked in the field by
 NCDOT representative.

SEE TYPICAL SECTION
 FOR "DW1" ON PAGE 4

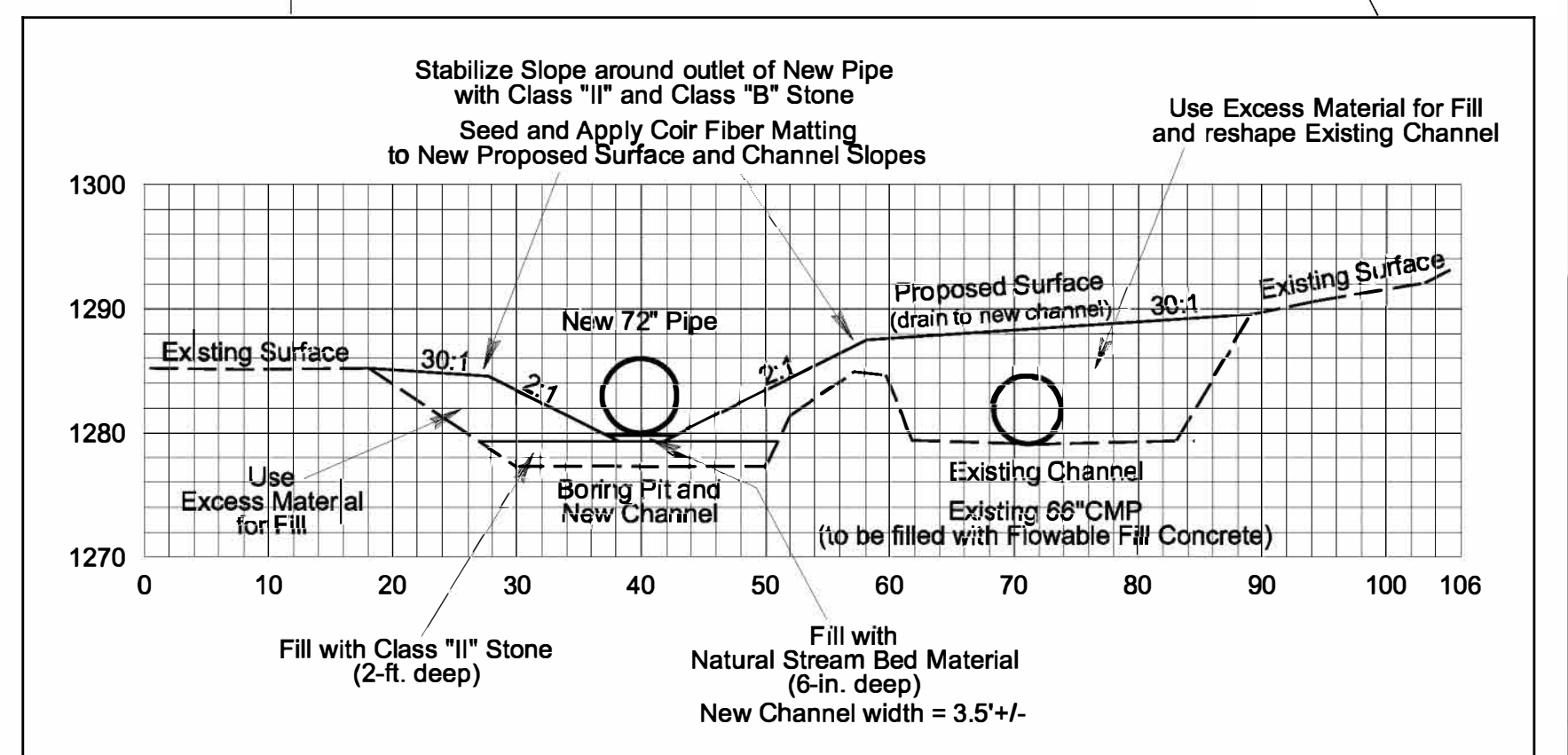
"DW1"
 PI 2+44.79
 N 953,954.2074
 E 1,437,983.3216
 ~ 121° 10' 17" (LT)
 D 81° 51' 04"
 R 70.00
 Lc 148.04
 T 124.16

4935-73-1404
 BALZER, M. FAITH
 297 RIVERRIDGE TRAIL
 DOBSON, NC 27017
 US HWY 21
 DB 380 PG 41

Un-Named Tributary of Elkin Creek.
 Watershed: WS-II; HQW
 River Basin: Yadkin

4935-73-9134
 BALZER, M. FAITH
 297 RIVERRIDGE TRAIL
 DOBSON, NC 27017
 US HWY 21
 DB 380 PG 40

FINAL GRADING DETAIL
 FOR NEW AND EXISTING CHANNEL AT OUTLET



**WILKES COUNTY
 US HIGHWAY 21
 PIPE REPLACEMENT**

DIVISION II - DISTRICT I CONSTRUCTION

REVISIONS	INIT.	DATE

N.C. DEPARTMENT of TRANSPORTATION
 DIVISION of HIGHWAYS
 DIVISION ELEVEN

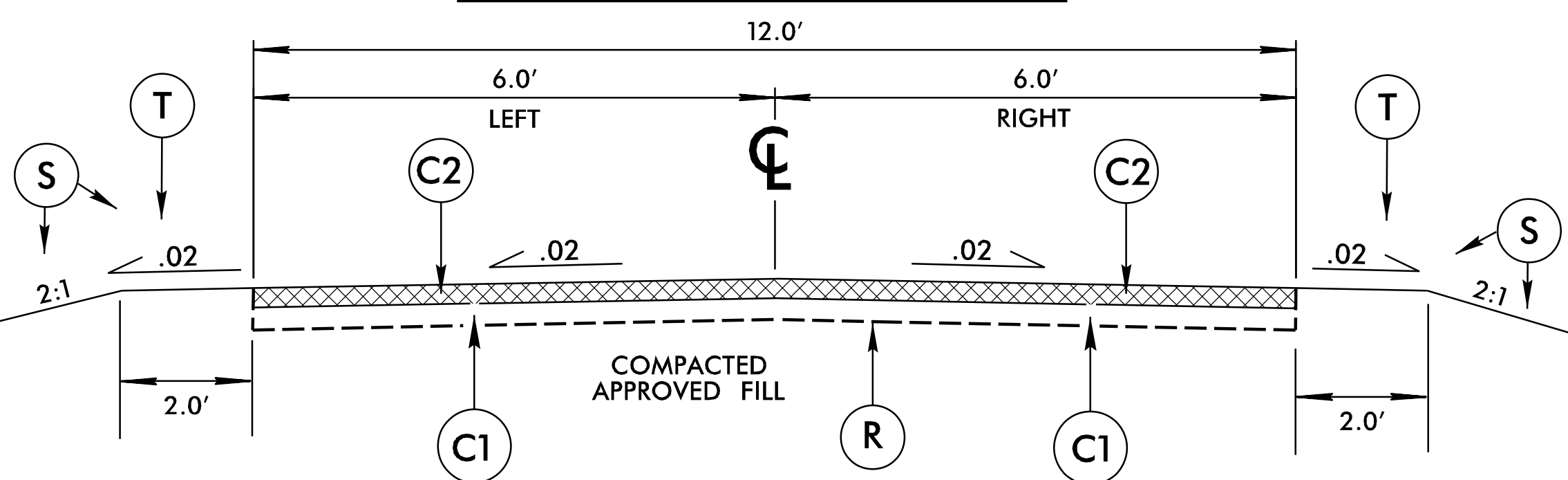
4935-73-9134
 BALZER, M. FAITH
 297 RIVERRIDGE TRAIL
 DOBSON, NC 27017
 US HWY 21
 DB 380 PG 40

SCALE: 1"=23'
 DATE: 01/28/2020

PREPARED BY: S. D. BARNELL
 REVIEWED BY: D. A. WAYNE, P.E.
 REVIEWED BY:



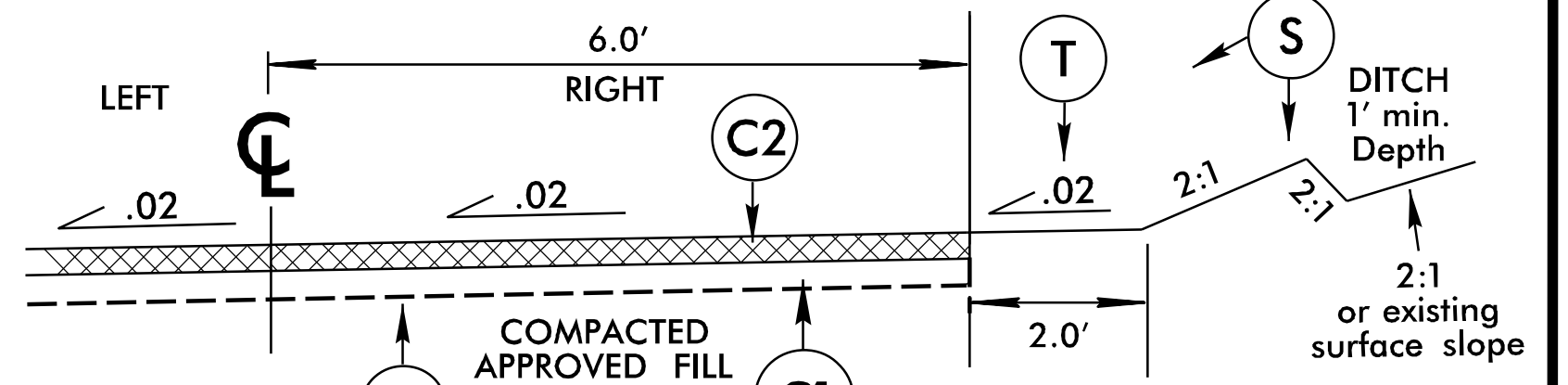
TYPICAL SECTION "DW1"



USE FOR ALL STATIONS EXCEPT IN CURVE
(Curve Stations are: 1+20.64 to 2+68.68)

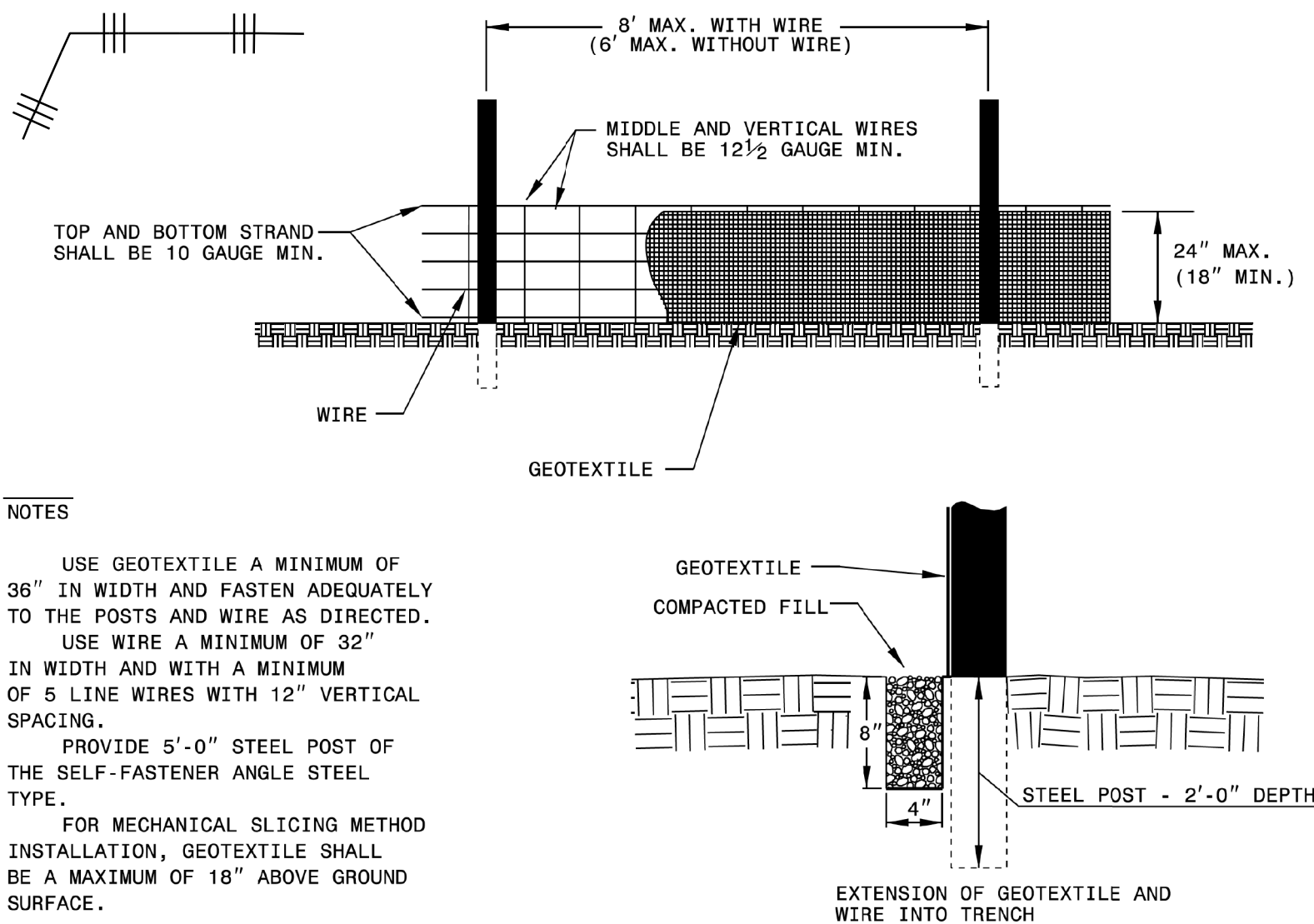
PAVEMENT SCHEDULE	
C1	3" - 6" CLASS "A" STONE BASE COURSE
C2	2" - 4" ABC SURFACE COURSE
R	SOIL STABILIZATION FABRIC
T	SHOULDER CONSTRUCTION
S	SEED AND MAT SHOULDER & SLOPES

STATE PROJECT REFERENCE NO. SHEET TOTAL
N.C. WBS: 15511.1097800 4 4
DETAIL & STAND. DWG.
DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED



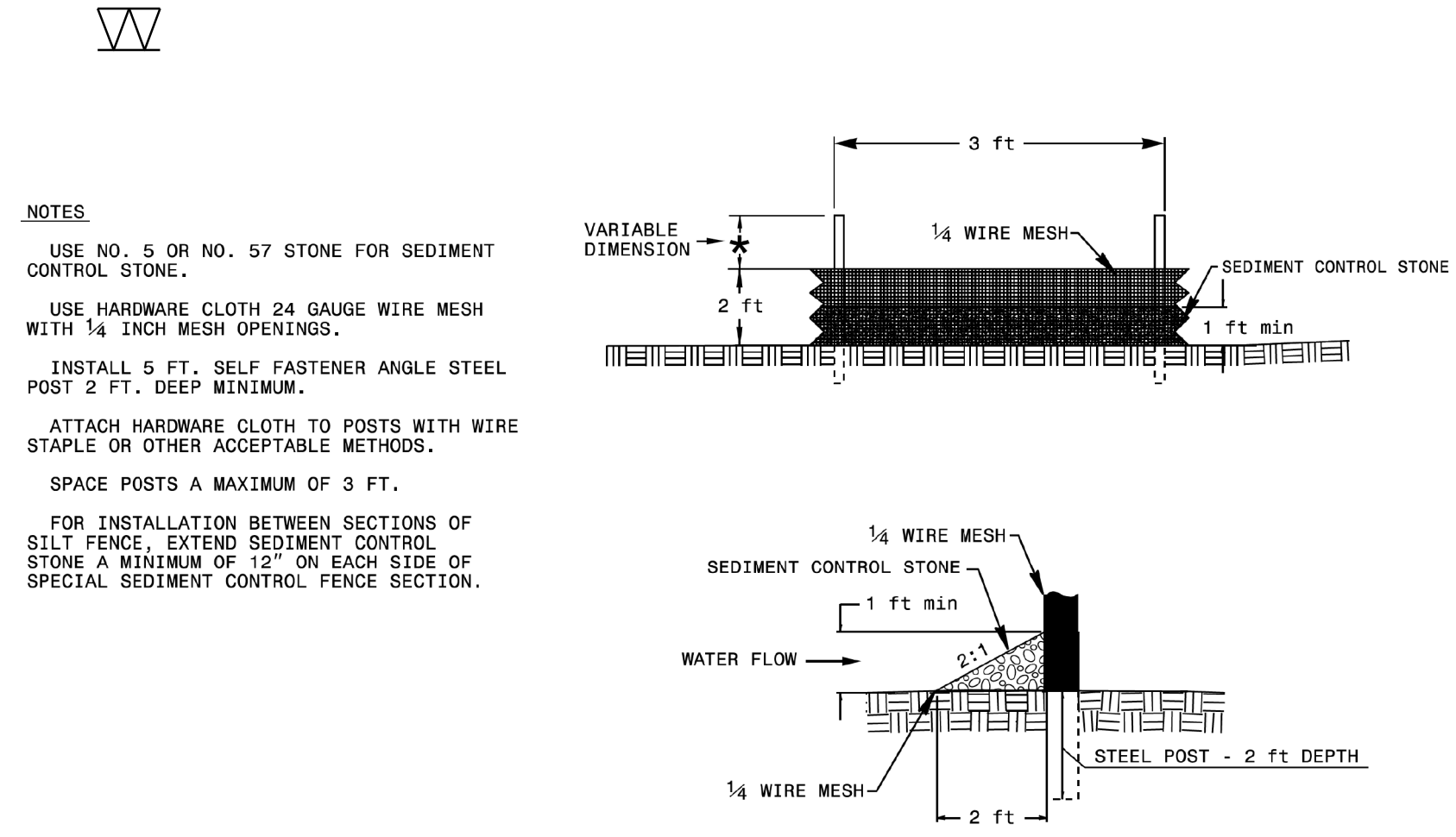
USE ON RIGHT SIDE FOR STATIONS WITHIN CURVE
(Curve Stations are: 1+20.64 to 2+68.68)

Erosion Control Plan Symbol



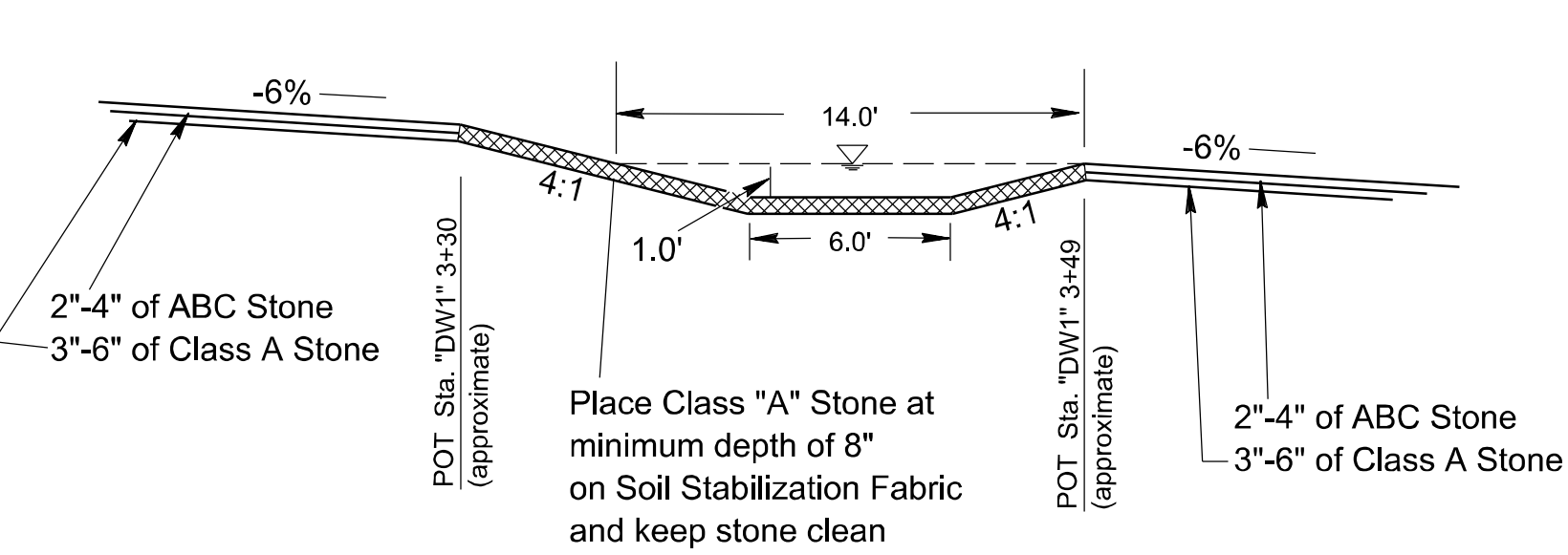
ROADWAY STANDARD DRAWING FOR
TEMPORARY SILT FENCE
SHEET 1 OF 1
1605.01

Erosion Control Plan Symbol



ROADWAY STANDARD DRAWING FOR
SPECIAL SEDIMENT CONTROL FENCE
SHEET 1 OF 1
1606.01

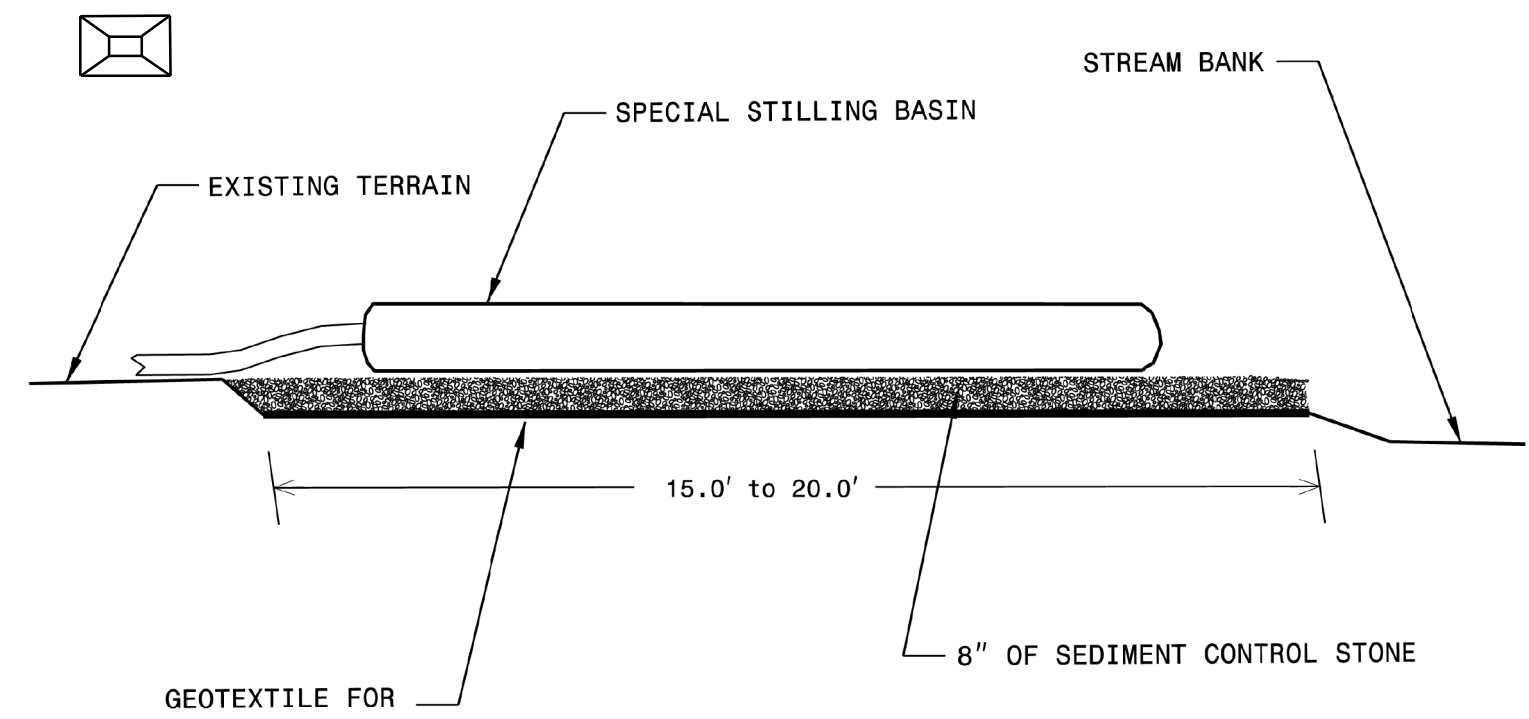
SWALE CROSS SECTION DETAIL 3.1



* Longitudinal Slope = 3.2% for 22'.
* Install a Rock Silt Check Type B (1633.02) at outlet,
Station "DW1" 3+42 / 12' RT. +/-

Erosion Control Plan Symbol

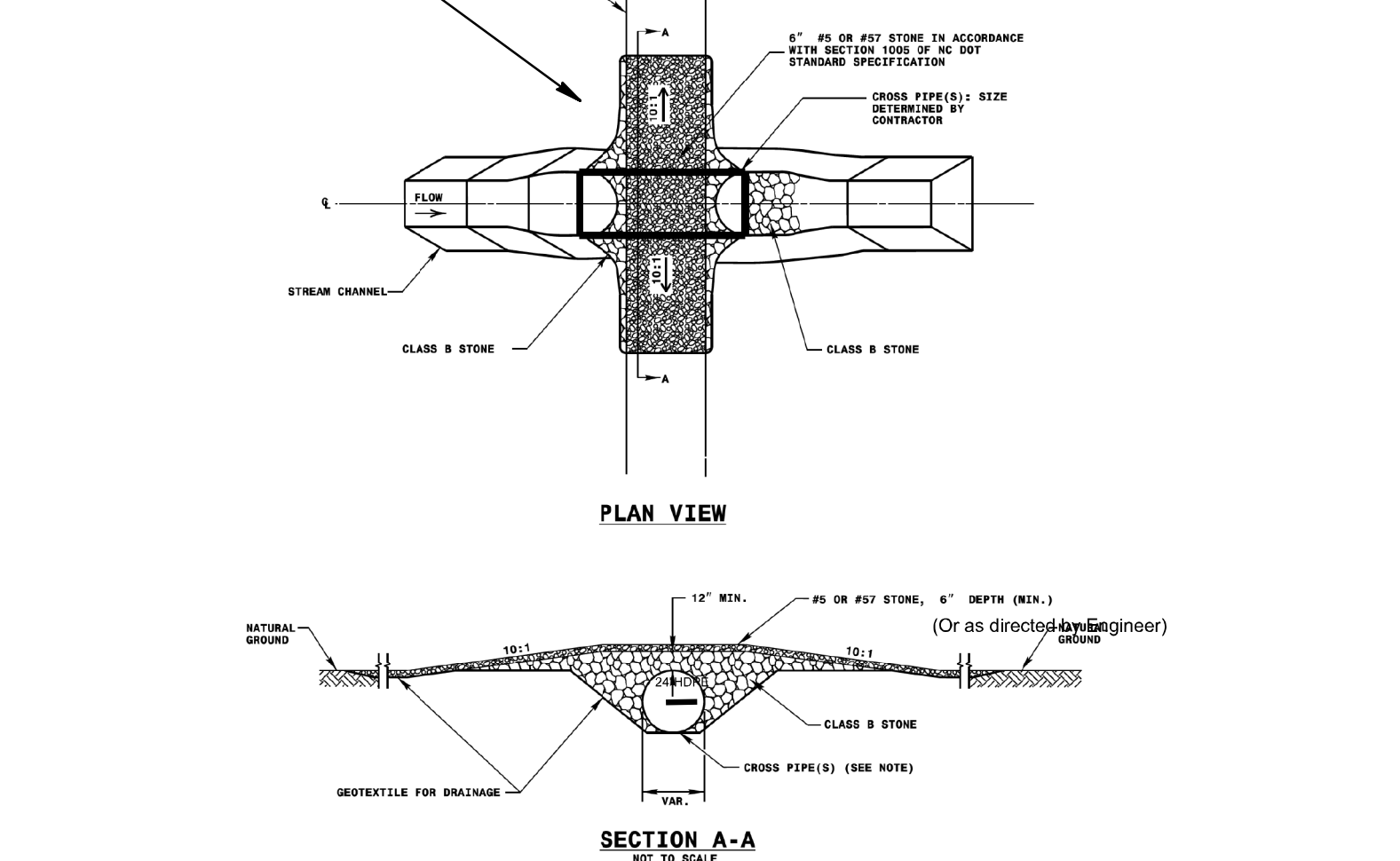
Located at Station "DW1" 4+05 / 30' RT. +/-



USE NO. 5 OR NO. 57 STONE FOR SEDIMENT CONTROL STONE.
PROVIDE STABILIZED OUTLET TO STREAM BANK. WOOD PALLETS MAY BE USED IN LIEU OF STONE AND GEOTEXTILE AS DIRECTED. A SUFFICIENT NUMBER OF PALLETS MUST BE PROVIDED TO ELEVATE THE ENTIRE SPECIAL STILLING BASIN ABOVE NATURAL GROUND.

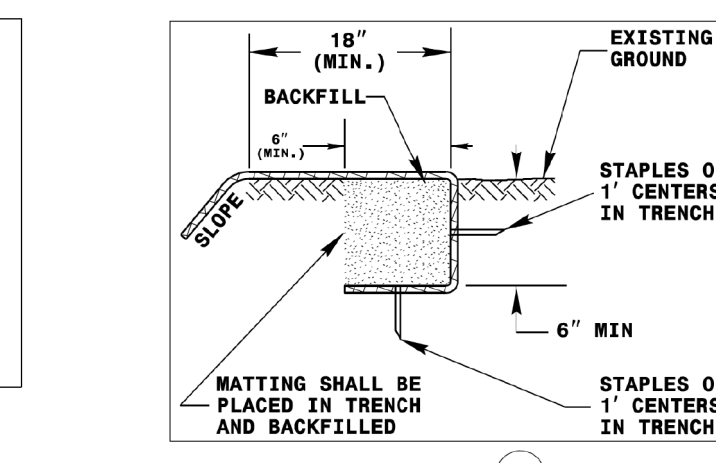
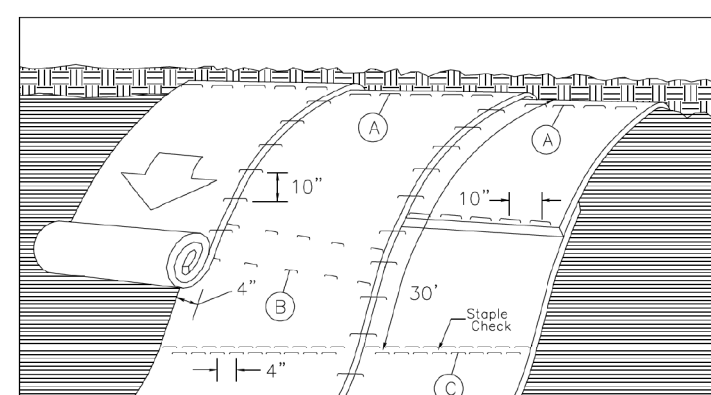
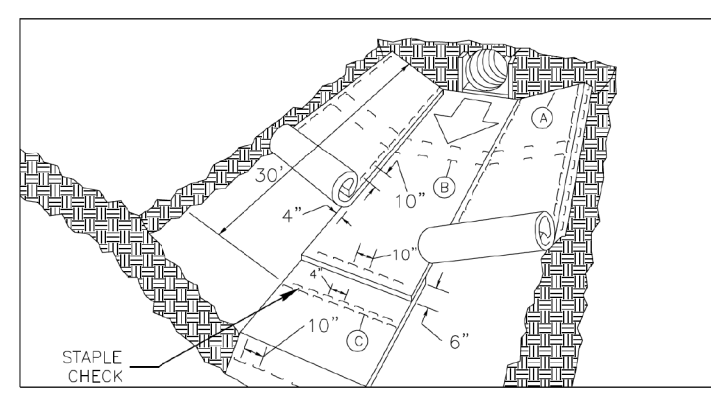
ROADWAY STANDARD DRAWING FOR
SPECIAL STILLING BASIN
SHEET 1 OF 1
1630.06

* Pipe Inlet & Proposed Dike located 30' upstream from Inlet of the existing 66" CMP.
* Install above inlet of Existing 66" CMP.



PIPE(S) FOR TEMPORARY STREAM CROSSING SHALL BE DESIGNED TO PASS THE PEAK OR BANKFULL FLOW, WHICHEVER IS LESS, FROM A 2-YEAR PEAK STORM, WITHOUT OVER TOPPING.

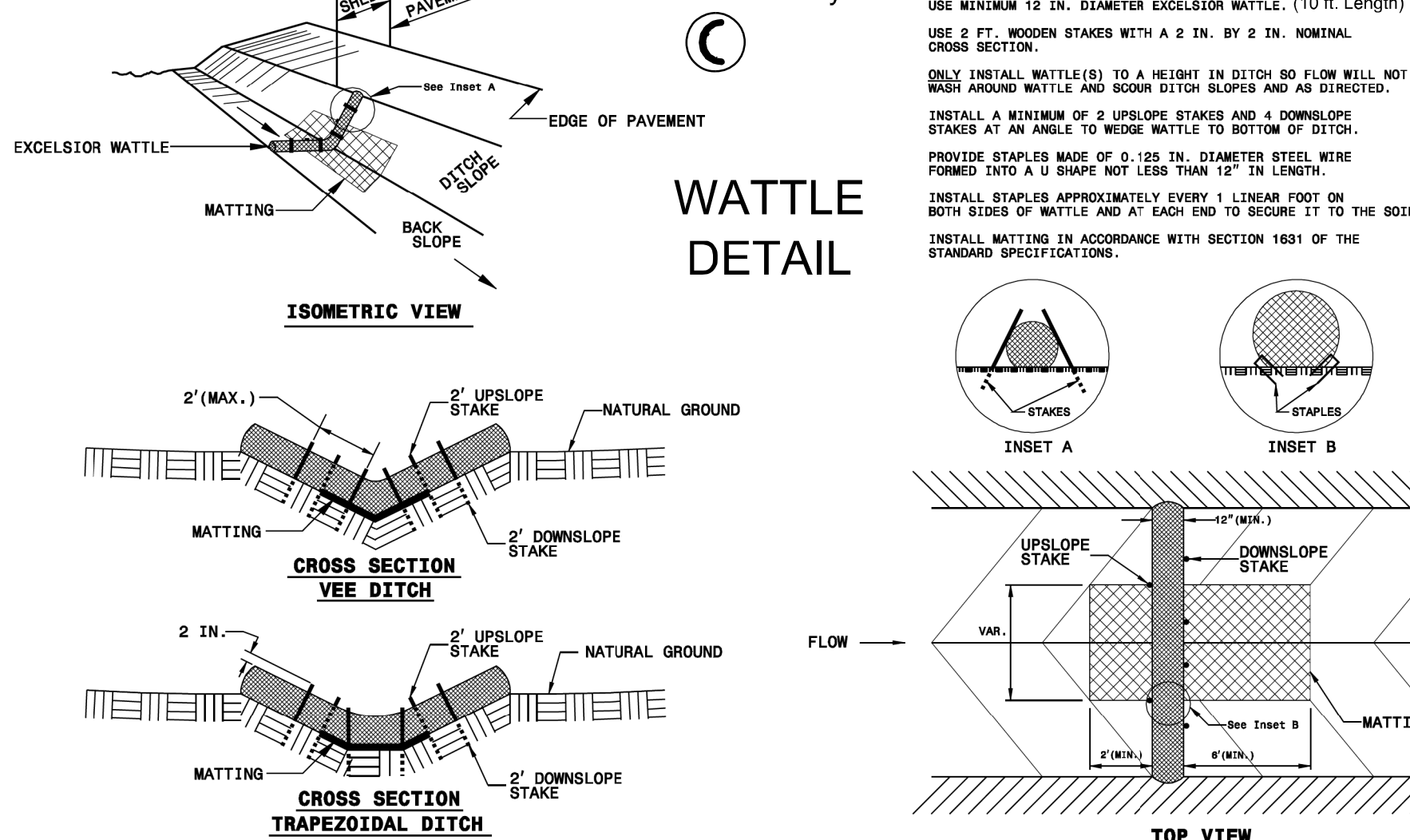
ROADWAY STANDARD DRAWING FOR
TEMPORARY STREAM CROSSING
SHEET 1 OF 1
1645.01



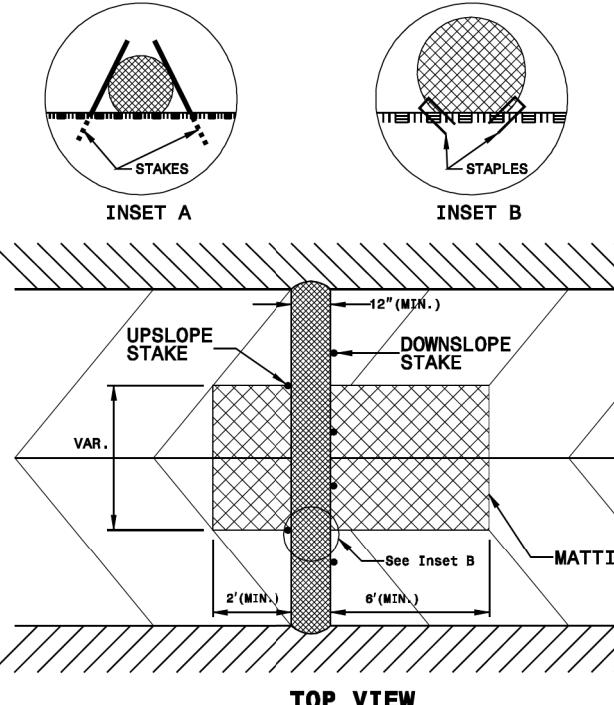
NOTES
THIS DETAIL APPLIES TO STRAW, EXCELISOR, COIR FIBER MAT AND PERMANENT SOIL REINFORCEMENT MAT (PSRM) INSTALLATION AND AS DIRECTED.
STAPLES SHALL BE NO. 11 GAUGE STEEL WIRE FORMED INTO A "U" SHAPE WITH A MINIMUM THROAT WIDTH OF 1/2" AND NOT LESS THAN 6" IN LENGTH.

ROADWAY STANDARD DRAWING FOR
MATTING INSTALLATION
SHEET 1 OF 1
1631.01

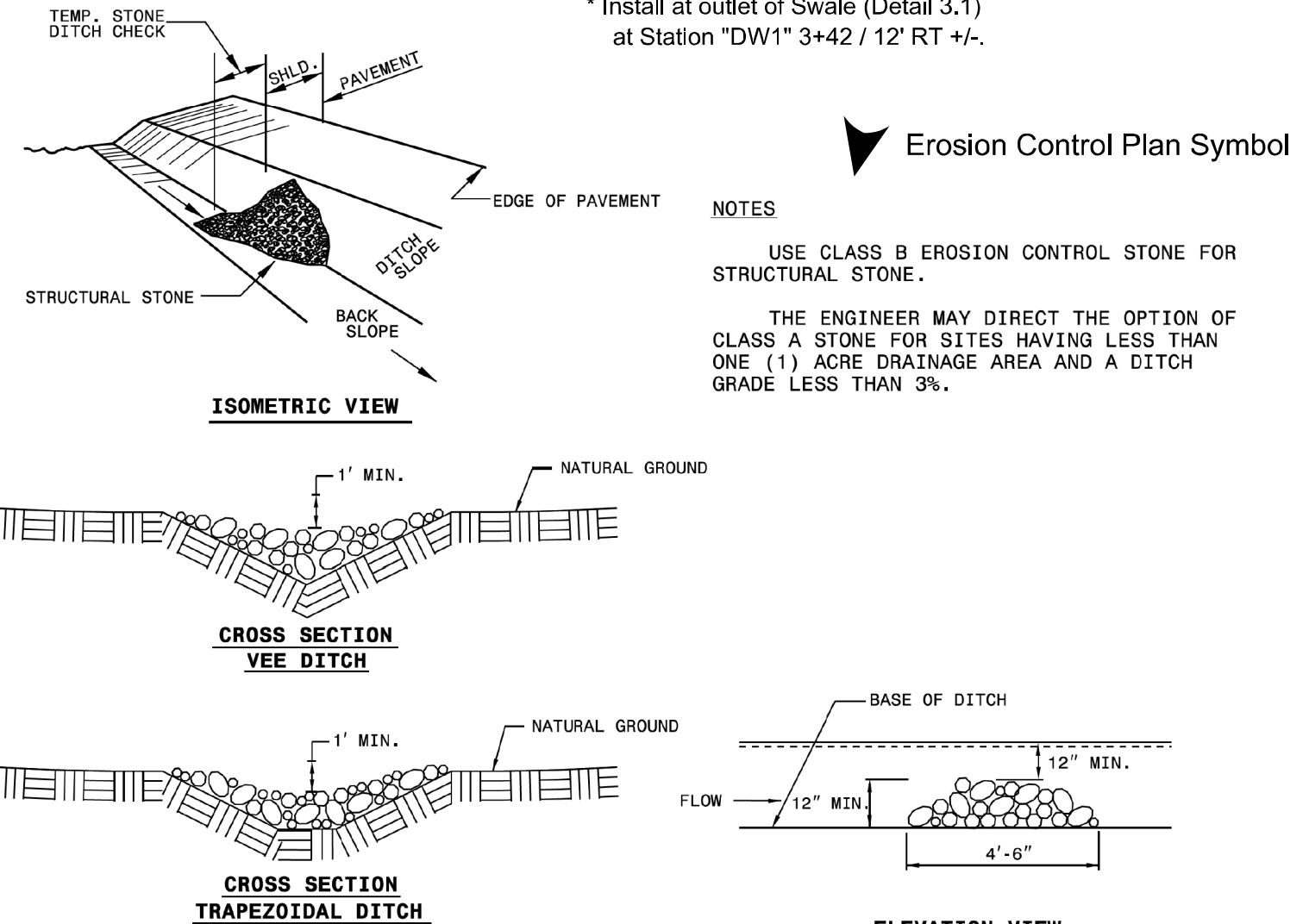
Erosion Control Plan Symbol



WATTLE DETAIL



* Install at outlet of Swale (Detail 3.1) at Station "DW1" 3+42 / 12' RT +/-.



USE CLASS B EROSION CONTROL STONE FOR STRUCTURAL STONE.
THE ENGINEER MAY DIRECT THE OPTION OF CLASS A STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.

ROADWAY STANDARD DRAWING FOR
TEMPORARY ROCK SILT CHECK TYPE B
SHEET 1 OF 1
1633.02

**WILKES COUNTY
US HIGHWAY 21
PIPE REPLACEMENT**

DIVISION II - DISTRICT I CONSTRUCTION



SCALE: DATE: 01/28/2020
PREPARED BY: S.B. DARNELL
REVIEWED BY: DAVID WAYNE, PE

N.C. DEPARTMENT of TRANSPORTATION
DIVISION of HIGHWAYS
DIVISION ELEVEN

REVISIONS	INIT.	DATE