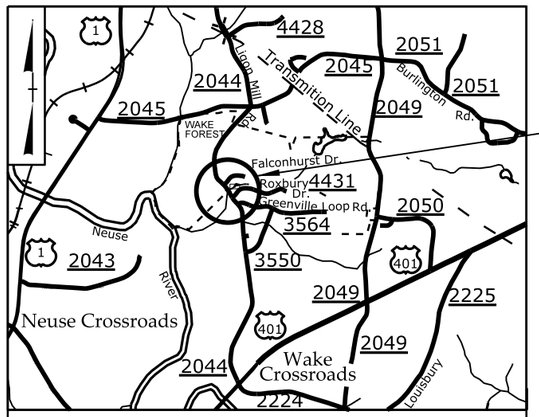
09/08/68

TIP PROJECT: W-5601FF

CONTRACT: DE00175

See Sheet 1-A For Index of Sheets.
See Sheet 1-B For Conventional Symbols.
See Sheet 1C-1&1C-2 For Survey Control.



VICINITY MAP SHOWING LOCATION OF PROJECT

PROJECT W-5601FF

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

WAKE COUNTY

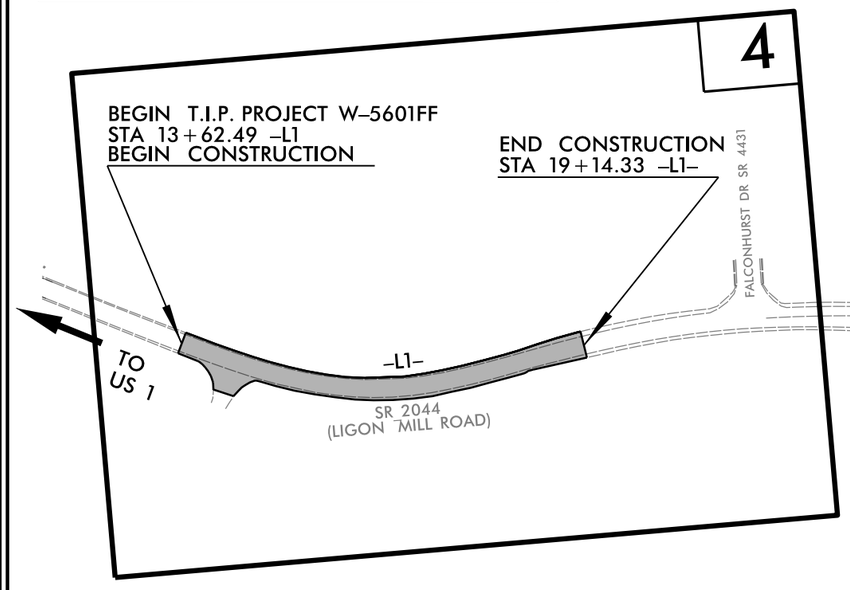
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5601FF	1	

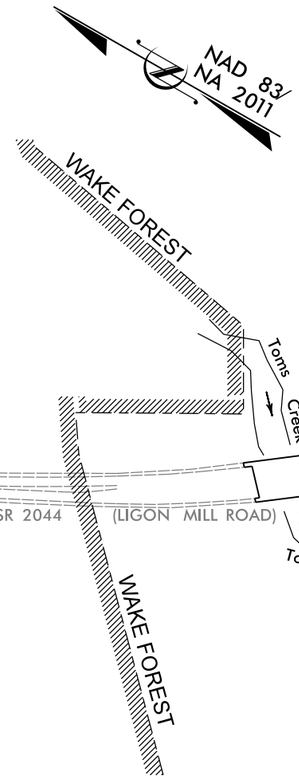
STATE PROJ. NO.	F. A. PROJ. NO.	DESCRIPTION
50138.1.163	HSIP-2044(005)	PE
50138.3.163	HSIP-2044(005)	CONST

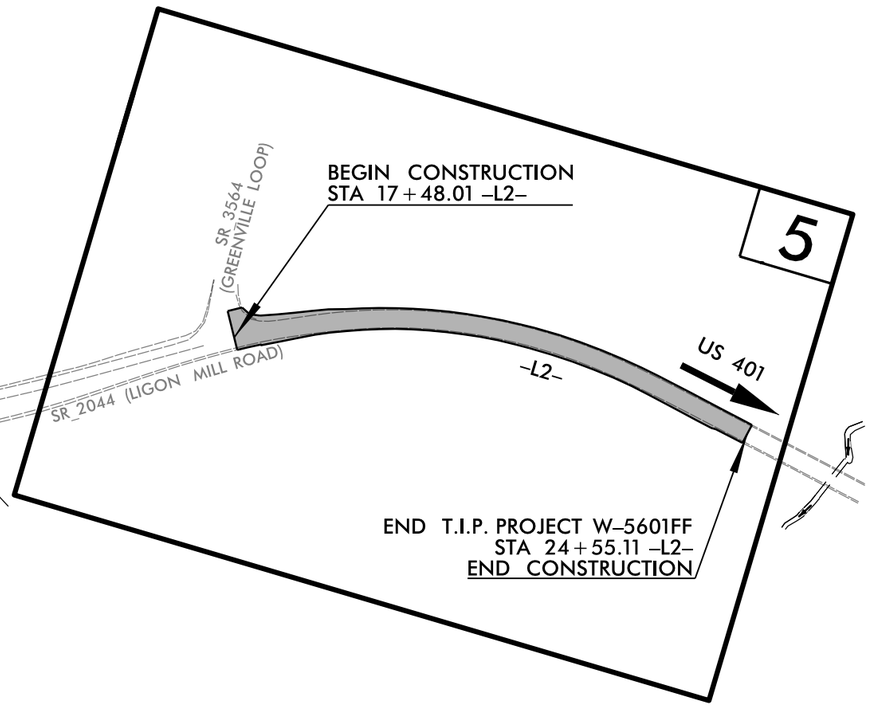
LOCATION: SR 2044(LIGON MILL RD.) NEAR SR 3564 (GREENVILLE LOOP ROAD) AND FALCONHURST DRIVE

TYPE OF WORK: GRADING AND PAVING

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED







GRAPHIC SCALES

PLANS: 30 15 0 30 60

PROFILE (HORIZONTAL): 50 25 0 50 100

PROFILE (VERTICAL): 10 5 0 10 20

DESIGN DATA

ADT 2013 = 7,800
ADT 2033 = 11,600
T = 5% *
V = 50 MPH
* TTST = 2% DUAL = 3%
FUNC CLASS = MAJOR COLLECTOR

PROJECT LENGTH

LENGHT ROADWAY PROJECT W-5601FF = 0.239 MILES

Prepared In the Office of:
DIVISION OF HIGHWAYS
2612 N. DUKE ST, DURHAM, NC 27704

2012 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:

LETTING DATE:

BEN J UPSHAW, P.E.
PROJECT ENGINEER

SUNIL PATEL
PROJECT DESIGN ENGINEER

DIVISION DESIGN ENGINEER
ROADWAY DESIGN AND HYDRAULICS

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN UPSHAW

DocuSigned by:
Ben Upshaw
SIGNATURE D6EB110D6E54E5...

3/30/2017
DATE

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA
FIFTH DIVISION
J. R. HOPKINS, P.E.
DIVISION ENGINEER

DIVISION OF HIGHWAYS DIVISION FIVE STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DESIGN UNIT

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jcharova AT DIV5-298390

PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	1A

DIVISION FIVE DESIGN

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN UPSHAW

DocuSigned by: Ben Upshaw P.E. 3/30/2017

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INDEX OF SHEETS

2012 ROADWAY ENGLISH STANDARD DRAWINGS

2012 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2012 are applicable to this project and by reference hereby are considered a part of these plans:

STD.NO.	TITLE
DIVISION 2 - EARTHWORK	
200.02	Method of Clearing - Method II
225.02	Guide for Grading Subgrade - Secondary and Local
225.04	Method of Obtaining Superelevation- Two Lane Pavement
DIVISION 3 - PIPE CULVERTS	
300.01	Method of Pipe Installation
DIVISION 5 - SUBGRADE, BASES AND SHOULDERS	
560.01	Method of Shoulder Construction - High Side of Superelevated Curve - Method I
DIVISION 8 - INCIDENTALS	
840.72	Pipe Collar

GENERAL NOTES:

2012 SPECIFICATIONS
EFFECTIVE: 01-17-12
REVISED: 07/30/12

GRADING AND SURFACING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. GRADE LINES MAY BE ADJUSTED AT THEIR BEGINNING AND ENDING AND AT STRUCTURES AS DIRECTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD II.

SUPERELEVATION:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SHOULDER CONSTRUCTION:

ASPHALT, EARTH, AND CONCRETE SHOULDER CONSTRUCTION ON THE HIGH SIDE OF SUPERELEVATED CURVES SHALL BE IN ACCORDANCE WITH STD. NO. 560.01

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

SUBSURFACE PLANS:

NO SUBSURFACE PLANS ARE AVAILABLE ON THIS PROJECT. THE CONTRACTOR SHOULD MAKE HIS OWN INVESTIGATION AS TO THE SUBSURFACE CONDITIONS. .

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE AT&T, PSNC ENERGY, TWC, CITY OF RALEIGH, CENTURY LINK, AND WAKE EMC.

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS.

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04/06/15

PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	1B

STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

Note: Not to Scale **S.U.E. = Subsurface Utility Engineering*

BOUNDARIES AND PROPERTY:

- State Line
- County Line
- Township Line
- City Line
- Reservation Line
- Property Line
- Existing Iron Pin (EIP)
- Property Corner
- Property Monument (ECM)
- Parcel/Sequence Number (123)
- Existing Fence Line
- Proposed Woven Wire Fence
- Proposed Chain Link Fence
- Proposed Barbed Wire Fence
- Existing Wetland Boundary (WLB)
- Proposed Wetland Boundary (WLB)
- Existing Endangered Animal Boundary (EAB)
- Existing Endangered Plant Boundary (EPB)
- Existing Historic Property Boundary (HPB)
- Known Contamination Area: Soil
- Potential Contamination Area: Soil
- Known Contamination Area: Water
- Potential Contamination Area: Water
- Contaminated Site: Known or Potential

BUILDINGS AND OTHER CULTURE:

- Gas Pump Vent or U/G Tank Cap
- Sign (S)
- Well (W)
- Small Mine
- Foundation
- Area Outline
- Cemetery
- Building
- School
- Church
- Dam

HYDROLOGY:

- Stream or Body of Water
- Hydro, Pool or Reservoir
- Jurisdictional Stream (JS)
- Buffer Zone 1 (BZ 1)
- Buffer Zone 2 (BZ 2)
- Flow Arrow
- Disappearing Stream
- Spring
- Wetland
- Proposed Lateral, Tail, Head Ditch (FLOW)
- False Sump

RAILROADS:

- Standard Gauge (CSX TRANSPORTATION)
- RR Signal Milepost (MILEPOST 35)
- Switch (SWITCH)
- RR Abandoned
- RR Dismantled

RIGHT OF WAY:

- Baseline Control Point
- Existing Right of Way Marker
- Existing Right of Way Line
- Proposed Right of Way Line
- Proposed Right of Way Line with Iron Pin and Cap Marker
- Proposed Right of Way Line with Concrete or Granite R/W Marker
- Proposed Control of Access Line with Concrete C/A Marker
- Existing Control of Access
- Proposed Control of Access
- Existing Easement Line (E)
- Proposed Temporary Construction Easement (E)
- Proposed Temporary Drainage Easement (TDE)
- Proposed Permanent Drainage Easement (PDE)
- Proposed Permanent Drainage / Utility Easement (DUE)
- Proposed Permanent Utility Easement (PUE)
- Proposed Temporary Utility Easement (TUE)
- Proposed Aerial Utility Easement (AUE)
- Proposed Permanent Easement with Iron Pin and Cap Marker

ROADS AND RELATED FEATURES:

- Existing Edge of Pavement
- Existing Curb
- Proposed Slope Stakes Cut (C)
- Proposed Slope Stakes Fill (F)
- Proposed Curb Ramp (CR)
- Existing Metal Guardrail
- Proposed Guardrail
- Existing Cable Guiderail
- Proposed Cable Guiderail
- Equality Symbol
- Pavement Removal

VEGETATION:

- Single Tree
- Single Shrub
- Hedge
- Woods Line
- Orchard
- Vineyard (Vineyard)

EXISTING STRUCTURES:

MAJOR:

- Bridge, Tunnel or Box Culvert (CONC)
- Bridge Wing Wall, Head Wall and End Wall (CONC WW)

MINOR:

- Head and End Wall (CONC HW)
- Pipe Culvert
- Footbridge
- Drainage Box: Catch Basin, DI or JB (CB)
- Paved Ditch Gutter
- Storm Sewer Manhole (S)
- Storm Sewer (S)

UTILITIES:

POWER:

- Existing Power Pole
- Proposed Power Pole
- Existing Joint Use Pole
- Proposed Joint Use Pole
- Power Manhole (P)
- Power Line Tower
- Power Transformer
- U/G Power Cable Hand Hole
- H-Frame Pole
- U/G Power Line LOS B (S.U.E.*) (P)
- U/G Power Line LOS C (S.U.E.*) (P)
- U/G Power Line LOS D (S.U.E.*) (P)

TELEPHONE:

- Existing Telephone Pole
- Proposed Telephone Pole
- Telephone Manhole (T)
- Telephone Pedestal (T)
- Telephone Cell Tower
- U/G Telephone Cable Hand Hole (HH)
- U/G Telephone Cable LOS B (S.U.E.*) (T)
- U/G Telephone Cable LOS C (S.U.E.*) (T)
- U/G Telephone Cable LOS D (S.U.E.*) (T)
- U/G Telephone Conduit LOS B (S.U.E.*) (TC)
- U/G Telephone Conduit LOS C (S.U.E.*) (TC)
- U/G Telephone Conduit LOS D (S.U.E.*) (TC)
- U/G Fiber Optics Cable LOS B (S.U.E.*) (T FO)
- U/G Fiber Optics Cable LOS C (S.U.E.*) (T FO)
- U/G Fiber Optics Cable LOS D (S.U.E.*) (T FO)

WATER:

- Water Manhole (W)
- Water Meter
- Water Valve
- Water Hydrant
- U/G Water Line LOS B (S.U.E*) (W)
- U/G Water Line LOS C (S.U.E*) (W)
- U/G Water Line LOS D (S.U.E*) (W)
- Above Ground Water Line (A/G Water)

TV:

- TV Pedestal (C)
- TV Tower
- U/G TV Cable Hand Hole (TH)
- U/G TV Cable LOS B (S.U.E.*) (TV)
- U/G TV Cable LOS C (S.U.E.*) (TV)
- U/G TV Cable LOS D (S.U.E.*) (TV)
- U/G Fiber Optic Cable LOS B (S.U.E.*) (TV FO)
- U/G Fiber Optic Cable LOS C (S.U.E.*) (TV FO)
- U/G Fiber Optic Cable LOS D (S.U.E.*) (TV FO)

GAS:

- Gas Valve
- Gas Meter
- U/G Gas Line LOS B (S.U.E.*) (G)
- U/G Gas Line LOS C (S.U.E.*) (G)
- U/G Gas Line LOS D (S.U.E.*) (G)
- Above Ground Gas Line (A/G Gas)

SANITARY SEWER:

- Sanitary Sewer Manhole
- Sanitary Sewer Cleanout
- U/G Sanitary Sewer Line (SS)
- Above Ground Sanitary Sewer (A/G Sanitary Sewer)
- SS Forced Main Line LOS B (S.U.E.*) (FSS)
- SS Forced Main Line LOS C (S.U.E.*) (FSS)
- SS Forced Main Line LOS D (S.U.E.*) (FSS)

MISCELLANEOUS:

- Utility Pole
- Utility Pole with Base
- Utility Located Object
- Utility Traffic Signal Box (S)
- Utility Unknown U/G Line LOS B (S.U.E.*) (?UTL)
- U/G Tank; Water, Gas, Oil
- Underground Storage Tank, Approx. Loc. (UST)
- A/G Tank; Water, Gas, Oil
- Geoenvironmental Boring
- U/G Test Hole LOS A (S.U.E.*)
- Abandoned According to Utility Records (AATUR)
- End of Information (E.O.I.)

PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	2A-1

ROADWAY DESIGN ENGINEER — PAVEMENT DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN UPSHAW

DocuSigned by: Ben Upshaw 3/30/2017 CD6EB110D6E54E5...

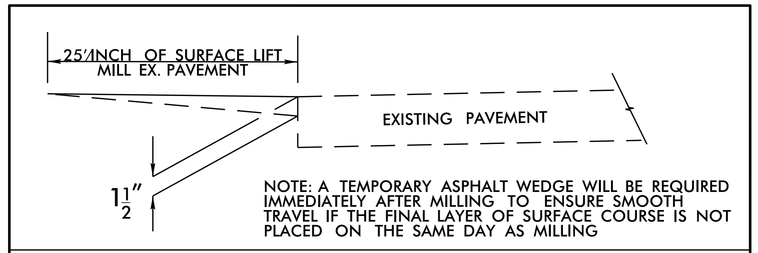
DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

PAVEMENT SCHEDULE

FINAL PAVEMENT DESIGN

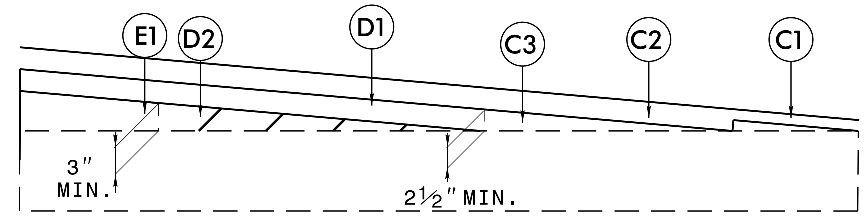
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD..
C2	PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF TWO LAYERS.
C3	PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 112 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT TO EXCEED 2" IN DEPTH.
D1	PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD.
D2	PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT LESS THAN 2½" IN DEPTH OR GREATER THAN 4" IN DEPTH.
E1	PROP. VAR. DEPTH ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" IN DEPTH OR GREATER THAN 5½" IN DEPTH.
T	EARTH MATERIAL.
U	EXISTING PAVEMENT.
W	VARIABLE DEPTH ASPHALT PAVEMENT (SEE STANDARD WEDGING DETAIL)

NOTES:
1). THE PORTION OF EACH EXISTING PAVED SHOULDER THAT IS NOT FULL DEPTH IS TO BE REMOVED AND PAVED TO FULL DEPTH.
2). PAVEMENT EDGE SLOPES ARE 1:1 UNLESS SHOWN OTHERWISE.
3). FOR VARIABLE DEPTH WEDGING SEE CROSS SECTIONS.

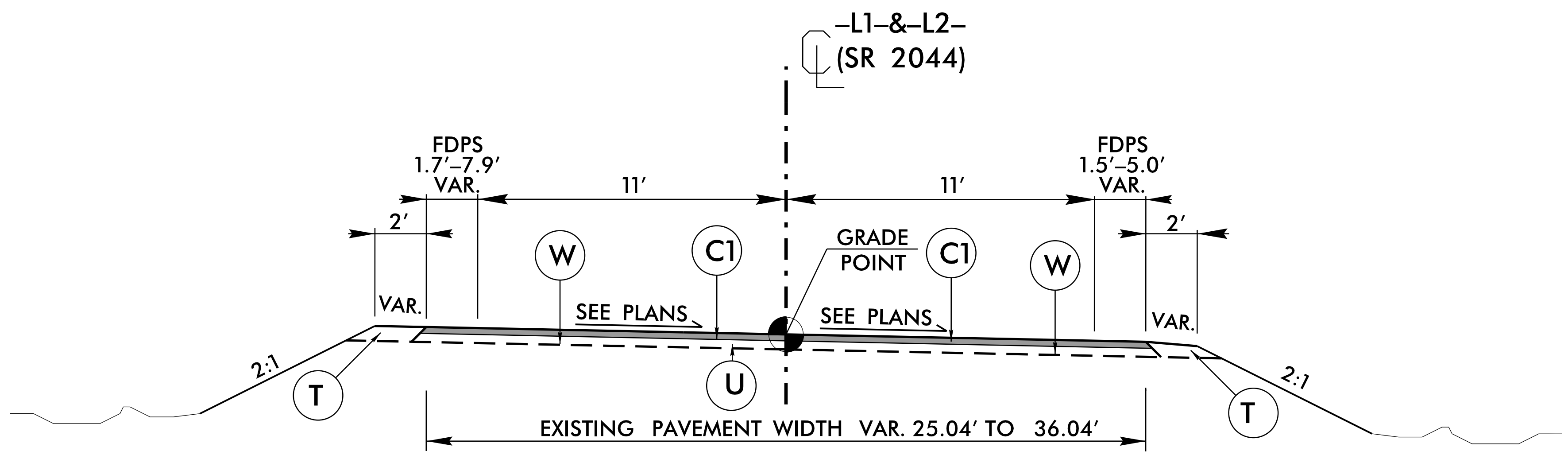


INCIDENTAL MILLING PAVEMENT KEY–IN DETAIL (TIE–IN)

–L1– STA. 13+62.49 TO 14+02.49
–L1– STA. 18+74.33 TO 19+14.33
–L2– STA. 17+48.01 TO 17+88.01
–L2– STA. 24+15.11 TO 24+55.11



Wedging Detail (W)



TYPICAL SECTION NO. 1

–L1– STA. 13+62.49 TO 19+14.33
–L2– STA. 17+48.01 TO 24+55.11

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PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	4
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER

DocuSigned by: BEN GRAHAM

3/30/2017

HYDRAULICS ENGINEER

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SEE SHEET 6 FOR -L1- PROFILE

-L1-

PI Sta 14+69.78	PI Sta 16+54.10	PI Sta 20+73.51
△ = 7° 41' 59.8" (LT)	△ = 29° 12' 05.6" (LT)	△ = 17° 21' 31.9" (RT)
D = 5° 43' 46.5"	D = 12° 43' 56.6"	D = 4° 46' 28.7"
L = 134.39'	L = 229.35'	L = 363.56'
T = 67.30'	T = 117.22'	T = 183.18'
R = 1,000.00'	R = 450.00'	R = 1,200.00'
e_{max} = 6%	e_{max} = 6%	e_{max} = 6%
Inc. = 24'	Inc. = 24'	Inc. = 24'

BEGIN T.I.P. PROJECT W-5601FF STA. 13+62.49 -L1-

PC Sta. 14+02.49 -L1-

PCC Sta. 15+36.88 -L1-

PT Sta. 17+66.23 -L1-

END CONSTRUCTION STA. 19+14.33 -L1-

15+00

20+00

DAVIS AND NICOLE BRONSON DB 11622 PG 685 (1)

GWENDOLYN WALKER DB 11068 PG 834 (2)

DARRELL M ATKINS RYAN T ATKINS DB 11491 PG 24 (3)

JAMES AND CAROLE LUMIA DB 11113 PG 1994 (5)

CHADWICK BAREFOOT JORDAN BAREFOOT DB 15469 PG 943 (7)

HOWARD AND ELLEN RICHARDSON DB 11771 PG 2529 (8)

NIKKIA BROWN DB 14059 PG 2619 (9)

ROLAND AND BARBARA FALANA DB 8555 PG 2196 (10)

S 7° 58' 00.2" E

26' BST SR-2044 (LIGON MILL ROAD)

EXIST. 02 05

11' 11' 03 04 05 06

24' TYP.

-L1- +74.49

WATER MARKER

401

18" COLLAR & EXTEND

RIPRAP

60'- 80' Var. Exist. R/W

TURBY GUY

4" PL

ASPHALT

BL-104

RETAIN

VAR. FDPS 1.7'-5.0'

VAR. FDPS 1.7'-6.5'

-L1- +18.23

24' TYP.

60'- 80' Var. Exist. R/W

SR-4431 (FALCONHURST DR)

12" DI

SR-2044 (LIGON MILL ROAD)

8" PVC

4" PL

2" PL

EXIST. 00 01 02 03 04 05 06

11'-11'

S 44° 52' 05.6" E

-L1- PC Sta. 18+90.33

SOIL

(4) WILLIAM AND ASHLEY BUTCHER DB 15733 PG 2589

TBM #2
N - 786994
E - 2139372
ELEV 254.20'
-BL- STA. 41+01.82 48' LT
=-LI- 15+08.99 75.13' RT
BENCH TIE WITH YELLOW TAG IN 10" PINE

(6) CITY OF RALEIGH DB 15632 PG 983

(6) CITY OF RALEIGH DB 15632 PG 983

LIST OF PIPES

SHEET 4 / STATION / SIZE	LOCATION (LT,RT, OR CL)	STRUCTURE NO.	INVERT ELEVATION (EXIST.)	INVERT ELEVATION	CLASS III R.C. PIPE 18"	CONC. COLLARS CL. "B" C.Y. STD 840.72	REMARKS
15+26.59-L1-	LT	401	252.58	252.62	4'	.4465	ADD COLLAR AND EXTEND

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PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	5
R/W SHEET NO.	

ROADWAY DESIGN ENGINEER — HYDRAULICS ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER

DocuSigned by: BEN ASHAW 3/30/2017

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SEE SHEET 6 FOR -L2- PROFILE

-L2-

PI =Sta 17+91.29
△ = 11° 29' 57.2" (RT)
D = 7° 32' 20.1"
L = 152.53'
T = 76.52'
R = 760.00'
e_{max} = 6%
Inc.= 24'

PI=Sta 20+82.80
△ = 32° 08' 37.2" (RT)
D = 8° 18' 13.5"
L = 387.10'
T = 198.79'
R = 690.00'
e_{max} = 6%
Inc.= 24'

(16) JOSHUA AND SHONDRA GIFFORD
DB 12660 PG 1437

(17) ROBERT AND FRANCES CHARBONEAU
DB 16236 PG 1268

(15) ERIC R STEGMANN
DB 8198 PG 422

(13) JUAN AND ELIZABETH JIMENEZ
DB 8680 PG 1827

BEGIN CONSTRUCTION
STA. 17+48.01 -L2-

END T.I.P. PROJECT
W-5601FF
STA. 24+55.11 -L2-

SR_3564 (GREENVILLE LOOP)

SR_2044 (LIGON MILL ROAD)

VAR. FDPS 1.7'-7.9'

VAR. FDPS 1.5'-4.1'

60'- 90' Var. Exist. R/W

-L2-

BL-102

BL-101

-L2- 17+08.82

-L2- 17+60.01

-L2- 17+65.70

-L2- 17+84.76

-L2- 18+67.29

-L2- 18+84.01

-L2- 24+15.11

12' TYP.

24' TYP.

R=30'

S 34° 40' 59.2" E

S 46° 10' 56.4" E

S 2° 32' 22.0" E

RETAIN

RETAIN

RETAIN

26' BST

18" RCP

15" R&P

EXIST.

PC Sta. 17+14.76

POT Sta. 17+08.82

PT Sta. 18+67.29

PT Sta. 18+84.01

PT Sta. 22+71.11

PT Sta. 24+58.08

TBM #1
N - 785181
E - 2140576
ELEV 224.38'
-BL- STA. 18+96.17 52' LT
=-L2- 23+48.50 41.35' LT
BENCH TIE WITH YELLOW TAG IN 19" PINE

(14) ANN ANSON TRUSTEE ETAL
ELIZABETH CHESHIRE ANSON
DB 952 PG 00-E

(14) ANN ANSON TRUSTEE ETAL
ELIZABETH CHESHIRE ANSON
DB 952 PG 00-E

SUMMARY OF EARTHWORK

STATION	STATION	UNCL. EXCAV.	EMBANK. +20%	BORROW	WASTE
-L1- 13+62.49	19+14.33	0	34	34	0
SUBTOTALS:		0	34	34	0
-L2- 17+48.01	24+55.11	0	74	74	0
SUBTOTALS:		0	74	74	0
PROJECT TOTALS:		0	108	108	0
EST. 5% TO REPLACE TOP SOIL ON BORROW PIT				5	
GRAND TOTALS:		0	108	113	0
SAY:		0		120	

Approximate quantities only. Unclassified excavation, removal of existing pavement, and clearing &grubbing will be paid for at the lump sum price for "Grading".

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PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	6

ROADWAY DESIGN ENGINEER

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN H. SHAW

DocuSigned by: Ben Shaw 8/30/2017

HYDRAULICS ENGINEER

CHECKED BY: [illegible]

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

SEE SHEET 4 FOR PLAN VIEW

270
260
250
240
230

BEGIN T.I.P. PROJECT W-5601FF -L1- STA.13+62.49

-L1-

END CONSTRUCTION -L1- STA.19+14.33

10+00 11+00 12+00 13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00

230
220
210
200

BEGIN CONSTRUCTION -L2- STA.17+48.01

-L2-

BEGIN PROPOSED GRADE -L2- STA.21+59.11

224.77

END T.I.P. PROJECT W-5601FF -L2- STA.24+55.11 END PROPOSED GRADE

224.11

(-) 0.5783% (-) 0.7121% (-) 1.0254% (-) 0.9079% (-) 0.2983% (+) 0.8075% (+) 0.0858% (-) 0.7875% (+) 0.6554% (+) 0.9237%

PI = 21+99.11 EL = 224.535
PI = 22+23.11 EL = 224.364
PI = 22+47.110 EL = 224.118
PI = 22+71.11 EL = 223.849
PI = 22+95.11 EL = 223.631
PI = 23+19.11 EL = 223.442
PI = 23+43.11 EL = 223.371
PI = 23+67.11 EL = 223.391
PI = 23+91.11 EL = 223.549
PI = 24+15.11 EL = 223.742

13+00 14+00 15+00 16+00 17+00 18+00 19+00 20+00 21+00 22+00 23+00 24+00

SEE SHEET 5 FOR PLAN VIEW

23-MAR-2017 17:20
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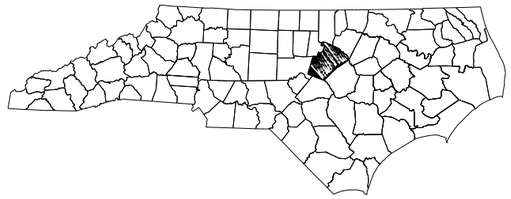
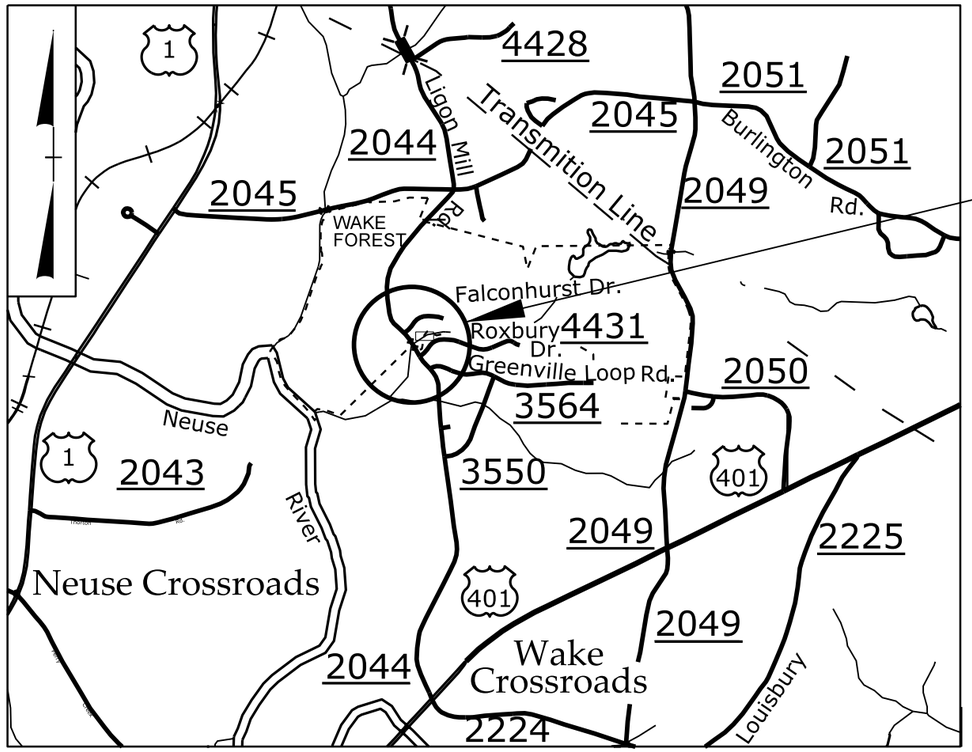
jshannon

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

TRANSPORTATION MANAGEMENT PLAN

WAKE COUNTY





PROJECT
W-5601FF

INDEX OF SHEETS

SHEET NO.	TITLE
TMP-1	TITLE SHEET, VICINITY MAP AND INDEX OF SHEETS
TMP-1A	GENERAL NOTES, LIST OF APPLICABLE ROADWAY STANDARD DRAWINGS, AND LEGEND

SHEET NO.
TMP-1

TIP PROJECT: W-5601FF

WORK ZONE SAFETY & MOBILITY
"from the MOUNTAINS to the COAST"

N.C.D.O.T. WORK ZONE TRAFFIC CONTROL
1561 MAIL SERVICE CENTER (MSC) RALEIGH, NC 27699-1561
750 N. GREENFIELD PARKWAY, GARNER, NC 27529 (DELIVERY)
PHONE: (919) 773-2800 FAX: (919) 771-2745

_____ STATE TRAFFIC MANAGEMENT ENGINEER

_____ TRAFFIC CONTROL PROJECT ENGINEER

_____ TRAFFIC CONTROL PROJECT DESIGN ENGINEER

_____ TRAFFIC CONTROL DESIGN ENGINEER

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · WORK ZONE TRAFFIC CONTROL

DIVISION OF HIGHWAYS · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNIT

APPROVED: DocuSigned by: Ben Upshaw
DATE: 3/30/2017
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SEAL
NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN UPSHAW

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gngrove AT DNS-28350

PROJ. REFERENCE NO.	SHEET NO.
W-5601FF	TMP-2

LEGEND

GENERAL

- DIRECTION OF TRAFFIC FLOW
- DIRECTION OF PEDESTRIAN TRAFFIC FLOW
- EXIST. PVMT.
- NORTH ARROW
- PROPOSED PVMT.
- TEMP. SHORING (LOCATION PURPOSES ONLY)
- WORK AREA
- REMOVAL

SIGNALS

EXISTING PROPOSED TEMPORARY (TEMP)

PAVEMENT MARKINGS

- EXISTING LINES
- TEMPORARY LINES

TRAFFIC CONTROL DEVICES

- BARRICADE (TYPE III)
- CONE
- DRUM SKINNY DRUM TUBULAR MARKER
- TEMPORARY CRASH CUSHION
- FLASHING ARROW BOARD
- FLAGGER
- LAW ENFORCEMENT
- TRUCK MOUNTED ATTENUATOR (TMA)
- CHANGEABLE MESSAGE SIGN

TEMPORARY SIGNING

- PORTABLE SIGN
- STATIONARY SIGN
- STATIONARY OR PORTABLE SIGN

PAVEMENT MARKERS

- CRYSTAL/CRYSTAL
- CRYSTAL/RED
- YELLOW/YELLOW

PAVEMENT MARKING SYMBOLS

- PAVEMENT MARKING SYMBOLS

ROADWAY STANDARD DRAWINGS

REV. SEPTEMBER 2011

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD.NO.	TITLE
1101.01	WORK ZONE ADVANCE WARNING SIGNS
1101.02	TEMPORARY LANE CLOSURES
1101.04	TEMPORARY SHOULDER CLOSURES
1101.05	WORK ZONE VEHICLE ACCESSES
1101.11	TRAFFIC CONTROL DESIGN TABLES
1110.02	PORTABLE WORK ZONE SIGNS
1130.01	DRUM
1135.01	CONES
1150.01	FLAGGING DEVICES
1180.01	SKINNY-DRUM
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1250.04	PAVEMENT MARKINGS - INTERSECTIONS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

GENERAL NOTES

CHANGES MAY BE REQUIRED WHEN PHYSICAL DIMENSIONS IN THE DETAIL DRAWINGS, STANDARD DETAILS, AND ROADWAY DETAILS ARE NOT ATTAINABLE TO MEET FIELD CONDITIONS OR RESULT IN DUPLICATE OR UNDESIRED OVERLAPPING OF DEVICES. MODIFICATION MAY INCLUDE: MOVING, SUPPLEMENTING, COVERING, OR REMOVAL OF DEVICES AS DIRECTED BY THE ENGINEER.

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT EXCEPT WHEN OTHERWISE NOTED IN THE PLAN OR DIRECTED BY THE ENGINEER.

TIME RESTRICTIONS

A) DO NOT CLOSE OR NARROW TRAVEL LANES AS FOLLOWS:

ROAD NAME	DAY AND TIME RESTRICTIONS
SR-2044 (LIGON MILL ROAD)	MONDAY THRU FRIDAY 6 AM TO 9 AM & 4 PM TO 7 PM

B) REMOVE LANE CLOSURE DEVICES FROM THE LANE WHEN WORK IS NOT BEING PERFORMED BEHIND THE LANE CLOSURE OR WHEN A LANE CLOSURE IS NO LONGER NEEDED OR AS DIRECTED BY THE ENGINEER.

C) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN 15 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN SHOULDER USING ROADWAY STANDARD DRAWING NO. 1101.04 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL OR A LANE CLOSURE IS INSTALLED.

D) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO AN UNDIVIDED FACILITY AND WITHIN 5 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING ON THE SHOULDER ADJACENT TO A DIVIDED FACILITY AND WITHIN 10 FT OF AN OPEN TRAVEL LANE, CLOSE THE NEAREST OPEN TRAVEL LANE USING ROADWAY STANDARD DRAWING NO. 1101.02 UNLESS THE WORK AREA IS PROTECTED BY BARRIER OR GUARDRAIL.

E) WHEN PERSONNEL AND/OR EQUIPMENT ARE WORKING WITHIN A LANE OF TRAVEL OF AN UNDIVIDED OR DIVIDED FACILITY, CLOSE THE LANE ACCORDING TO THE TRAFFIC CONTROL PLANS, ROADWAY STANDARD DRAWINGS, OR AS DIRECTED BY THE ENGINEER. CONDUCT THE WORK SO THAT ALL PERSONNEL AND/OR EQUIPMENT REMAIN WITHIN THE CLOSED TRAVEL LANE.

F) DO NOT WORK SIMULTANEOUSLY WITHIN 15 FT ON BOTH SIDES OF AN OPEN TRAVELWAY, RAMP, OR LOOP WITHIN THE SAME LOCATION UNLESS PROTECTED WITH GUARDRAIL OR BARRIER.

G) PROVIDE TRAFFIC CONTROL FOR APPROPRIATE LANE CLOSURES FOR SURVEYING DONE BY THE DEPARTMENT.

PAVEMENT EDGE DROP OFF REQUIREMENTS

H) BACKFILL AT A 6:1 SLOPE UP TO THE EDGE AND ELEVATION OF EXISTING PAVEMENT IN AREAS ADJACENT TO AN OPENED TRAVEL LANE THAT HAS AN EDGE OF PAVEMENT DROP-OFF AS FOLLOWS:

BACKFILL DROP-OFFS THAT EXCEED 2 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS OF 45 MPH OR GREATER.

BACKFILL DROP-OFFS THAT EXCEED 3 INCHES ON ROADWAYS WITH POSTED SPEED LIMITS LESS THAN 45 MPH.

BACKFILL WITH SUITABLE COMPACTED MATERIAL, AS APPROVED BY THE ENGINEER, AT NO EXPENSE TO THE DEPARTMENT.

I) DO NOT EXCEED A DIFFERENCE OF 2 INCHES IN ELEVATION BETWEEN OPEN LANES OF TRAFFIC FOR NOMINAL LIFTS OF 1.5 INCHES. INSTALL ADVANCE WARNING "UNEVEN LANES" SIGNS (W8-11) 50FT IN ADVANCE AND A MINIMUM OF EVERY HALF MILE THROUGHOUT THE UNEVEN AR

TRAFFIC PATTERN ALTERATIONS

J) NOTIFY THE ENGINEER THIRTY (30) CALENDAR DAYS PRIOR TO ANY TRAFFIC PATTERN ALTERATION.

SIGNING

K) INSTALL ADVANCE WORK ZONE WARNING SIGNS WHEN WORK IS WITHIN 40 FT FROM THE EDGE OF TRAVEL LANE AND NO MORE THAN THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION.

L) ENSURE ALL NECESSARY SIGNING IS IN PLACE PRIOR TO ALTERING ANY TRAFFIC PATTERN.

TRAFFIC CONTROL DEVICES

M) WHEN LANE CLOSURES ARE NOT IN EFFECT SPACE CHANNELIZING DEVICES IN WORK AREAS NO GREATER IN FEET THAN TWICE THE POSTED SPEED LIMIT (MPH) EXCEPT, 10 FT ON-CENTER IN RADII, AND 3 FT OFF THE EDGE OF AN OPEN TRAVELWAY. REFER TO STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES SECTIONS 1130 (DRUMS), 1135 (CONES) AND 1180 (SKINNY DRUMS) FOR ADDITIONAL REQUIREMENTS.

PAVEMENT MARKINGS AND MARKERS

N) INSTALL TEMPORARY PAVEMENT MARKINGS AND TEMPORARY PAVEMENT MARKERS ON INTERIM LAYERS OF PAVEMENT AS FOLLOWS:

ROAD NAME	MARKING	MARKER
SR 2044(LIGON MILL ROAD)	PAINT	TEMPORARY RAISED

O) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

P) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS BY THE END OF EACH DAY'S OPERATION.

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DocuSigned by:

APPROVED: Ben Upshaw

DATE: 3/30/2017

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DIVISION OF HIGHWAYS · DIVISION FIVE · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNIT

SEAL

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN UPSHAW

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lcharova AT DIV5-298390

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STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	W-5601FF	PMP-1	3

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

SIGNING & PAVEMENT MARKING PLAN
WAKE COUNTY

LOCATION: SR 2044(LIGON MILL RD.) NEAR SR 3564 (GREENVILLE LOOP ROAD) AND FALCONHURST DRIVE

INDEX

PAVEMENT MARKING SCHEDULE

SYMBOL	DESCRIPTION
THERMOPLASTIC(4", 90 MILS)	
TA	WHITE SOLID EDGELINE LINE
THERMOPLASTIC(4", 120 MILS)	
T8	2 FT. - 6 FT./SP WHITE MIN SKP LINE
TI	YELLOW DOUBLE CENTER LINE
MARKERS	
PERMANENT RAISED PAVEMENT MARKERS	
MA	YELLOW & YELLOW

GENERAL NOTES PAVEMENT MARKING

THE FOLLOWING GENERAL NOTES APPLY AT ALL TIMES FOR THE DURATION OF THE CONSTRUCTION PROJECT, EXCEPT WHEN OTHERWISE NOTED IN THE PLAN, OR DIRECTED BY THE ENGINEER.

A) INSTALL PAVEMENT MARKINGS AND PAVEMENT MARKERS ON THE FINAL SURFACE AS FOLLOWS:

ROAD NAME	MARKING	MARKER
ALL ROADS	THERMOPLASTIC	PERMANENT RAISED

B) TIE PROPOSED PAVEMENT MARKING LINES TO EXISTING PAVEMENT MARKING LINES.

C) REMOVE/REPLACE ANY CONFLICTING/DAMAGED PAVEMENT MARKINGS AND MARKERS.

D) UNLESS OTHERWISE SPECIFIED, HEATED-IN-PLACE THERMOPLASTIC MAY BE USED IN LIEU OF EXTRUDED THERMOPLASTIC FOR STOP BARS, SYMBOLS, CHARACTERS AND DIAGONALS. IF HEATED-IN-PLACE IS USED, IT SHALL BE PAID FOR USING THE EXTRUDED THERMOPLASTIC PAY ITEM.

ROADWAY STANDARD DRAWINGS

THE FOLLOWING ROADWAY STANDARDS AS APPEAR IN "ROADWAY STANDARD DRAWINGS" - PROJECT SERVICES UNIT - N.C. DEPARTMENT OF TRANSPORTATION - RALEIGH, N.C., DATED JANUARY 2012 ARE APPLICABLE TO THIS PROJECT AND BY REFERENCE HEREBY ARE CONSIDERED A PART OF THESE PLANS:

STD. NO.	TITLE
1205.01	PAVEMENT MARKINGS - LINE TYPES & OFFSETS
1205.02	PAVEMENT MARKINGS - 2 LANE & MULTILANE ROADWAYS
1250.01	RAISED PAVEMENT MARKERS - INSTALLATION SPACING
1251.01	RAISED PAVEMENT MARKERS - PERMANENT AND TEMPORARY

GENERAL NOTES SIGNING

A) SIGNS FURNISHED BY THE STATE.

B) WHEN NOT STATIONED OR DIMENSIONED ON PLANS, ALL 'E' AND 'F' SIGNS SHALL BE FIELD LOCATED BY THE ENGINEER.

C) WHEN EXISTING SIGNS ARE REMOVED AND INSTALLED ON NEW SUPPORTS, THE RE-ERECTION SHALL IMMEDIATELY FOLLOW THE REMOVAL.

D) ALL EXISTING SIGNS ON "U" CHANNEL POST WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND DISPOSED OF UNLESS OTHERWISE NOTED ON PLANS.

E) THE BACKGROUND FOR TYPE E & F SIGNS SHALL BE TYPE C REFLECTIVE SHEETING.

DocuSigned by:
APPROVED: Ben Upshaw
DATE: 3/30/2017
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NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN UPSHAW

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

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PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	PMP-2

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L1-

PI Sta 14+69.78	PI Sta 16+54.10	PI Sta 20+73.51
△ = 7° 41' 59.8" (LT)	△ = 29° 12' 05.6" (LT)	△ = 17° 21' 31.9" (RT)
D = 5° 43' 46.5"	D = 12° 43' 56.6"	D = 4° 46' 28.7"
L = 134.39'	L = 229.35'	L = 363.56'
T = 67.30'	T = 117.22'	T = 183.18'
R = 1,000.00'	R = 450.00'	R = 1,200.00'
$e_{max.}$= 6%	$e_{max.}$= 6%	$e_{max.}$= 6%
Inc. = 24'	Inc. = 24'	Inc. = 24'

BEGIN T.I.P. PROJECT
W-5601FF
-L1- STA. 13+62.49

END CONSTRUCTION
STA. 19+14.33 -L1-

15+00

20+00

TIE EXIST.

TIE EXIST.

26' BST SR-2044 (LIGON MILL ROAD)

11'

11'

TA

ASPHALT

STOP

STREET SIGN

VAR. FDPS 1.7'-6.5'

-L1-

TI

CHEVRON

CHEVRON

CHEVRON

RESET

VAR. FDPS 1.7'-5.0'

11'

11'

TIE EXIST.

TIE EXIST.

SR-2044 (LIGON MILL ROAD)

SR-4431 (FALCONHURST DR)

THERMOPLASTIC PAVEMENT MARKING LEGEND	
TA SOLID WHITE EDGE LINE	TI YELLOW DOUBLE CENTER LINE

APPROVED: DocuSigned by: Ben Upshaw
DATE: 3/30/2017
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SEAL 030459 NORTH CAROLINA PROFESSIONAL ENGINEER BEN UPSHAW

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

DIVISION OF HIGHWAYS · DIVISION 5 · STATE OF NORTH CAROLINA · DEPARTMENT OF TRANSPORTATION · DIVISION DESIGN UNITS

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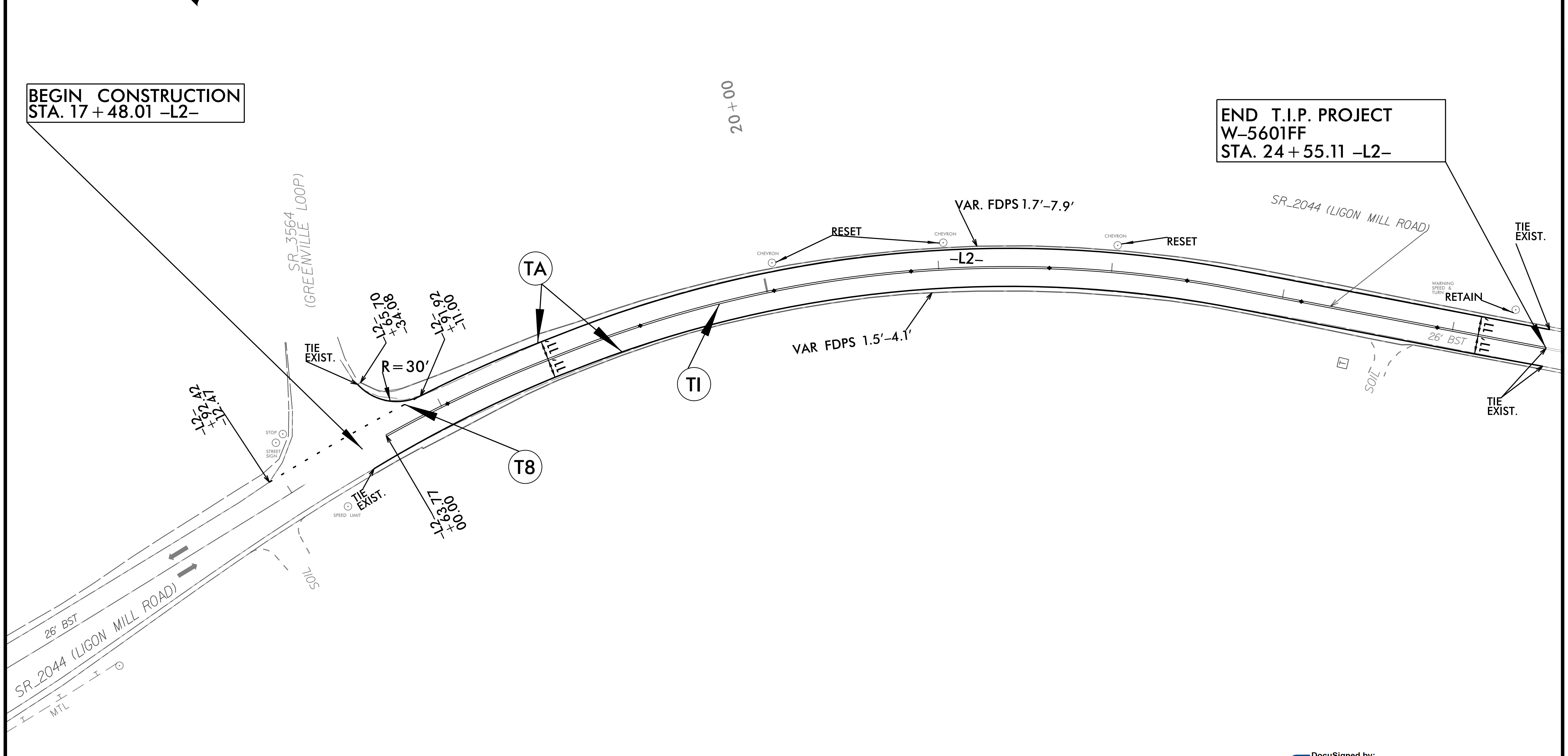
chavez
AT (NAD83)

PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	PMP-3

DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

-L2-

PI Sta 17+91.29	PI Sta 20+82.80
Δ = 11° 29′ 57.2″ (RT)	Δ = 32° 08′ 37.2″ (RT)
D = 7° 32′ 20.1″	D = 8° 18′ 13.5″
L = 152.53′	L = 387.10′
T = 76.52′	T = 198.79′
R = 760.00′	R = 690.00′
e_{max} = 6%	e_{max} = 6%
Inc. = 24′	Inc. = 24′



THERMOPLASTIC PAVEMENT MARKING LEGEND	
(TA) SOLID WHITE EDGE LINE	(T8) 2 FT. - 6 FT./SP WHITE MIN SKP LINE
	(TI) YELLOW DOUBLE CENTER LINE

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DocuSigned by:

APPROVED: Ben Upshaw

DATE: 3/30/2017 ...6EB110D6E54E5...

NORTH CAROLINA PROFESSIONAL SEAL 030459 ENGINEER BEN UPSHAW

DIVISION OF HIGHWAYS DIVISION FIVE STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION DIVISION DESIGN UNIT

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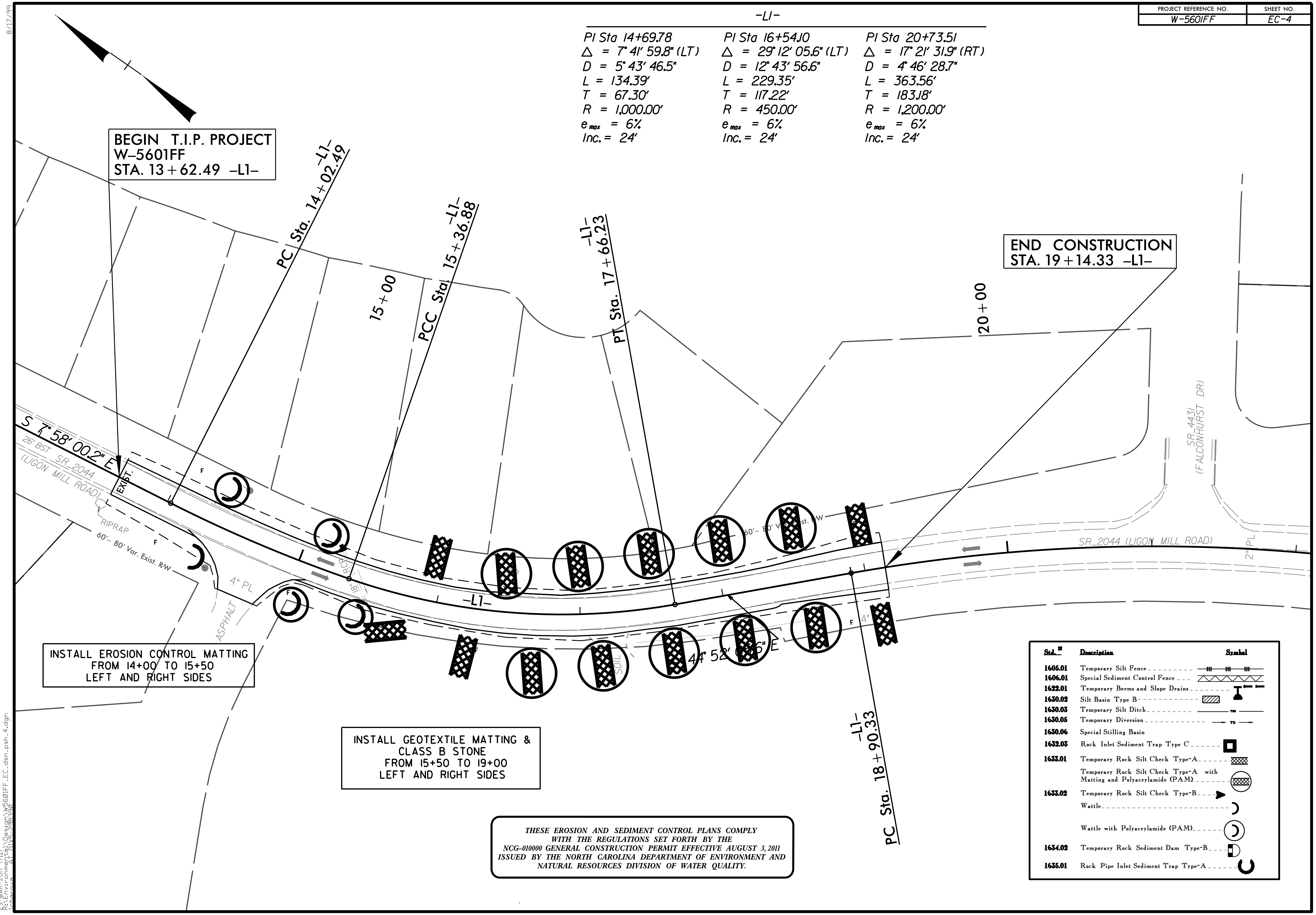
PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	EC-4

-L1-

PI Sta 14+69.78	PI Sta 16+54.10	PI Sta 20+73.51
△ = 7° 41' 59.8" (LT)	△ = 29° 12' 05.6" (LT)	△ = 17° 21' 31.9" (RT)
D = 5° 43' 46.5"	D = 12° 43' 56.6"	D = 4° 46' 28.7"
L = 134.39'	L = 229.35'	L = 363.56'
T = 67.30'	T = 117.22'	T = 183.18'
R = 1,000.00'	R = 450.00'	R = 1,200.00'
e_{max} = 6%	e_{max} = 6%	e_{max} = 6%
Inc. = 24'	Inc. = 24'	Inc. = 24'



INSTALL EROSION CONTROL MATTING
FROM 14+00 TO 15+50
LEFT AND RIGHT SIDES

INSTALL GEOTEXTILE MATTING &
CLASS B STONE
FROM 15+50 TO 19+00
LEFT AND RIGHT SIDES

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.

Std. #	Description	Symbol
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.02	Silt Basin Type B	
1630.03	Temporary Silt Ditch	TSD
1630.05	Temporary Diversion	TD
1630.06	Special Stilling Basin	
1632.03	Rock Inlet Sediment Trap Type C	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-A with Matting and Polyacrylamide (PAM)	
1633.02	Temporary Rock Silt Check Type-B	
	Wattle	
	Wattle with Polyacrylamide (PAM)	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	

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PROJECT REFERENCE NO.	SHEET NO.
W-5601FF	EC-5

-L2-

PI =Sta 17+91.29
△ = 11° 29' 57.2" (RT)
D = 7° 32' 20.1"
L = 152.53'
T = 76.52'
R = 760.00'
e_{max} = 6%
Inc.= 24'

PI=Sta 20+82.80
△ = 32° 08' 37.2" (RT)
D = 8° 18' 13.5"
L = 387.10'
T = 198.79'
R = 690.00'
e_{max} = 6%
Inc.= 24'

BEGIN CONSTRUCTION
STA. 17+48.01 -L2-

END T.I.P. PROJECT
W-5601FF
STA. 24+55.11 -L2-

-L2-

60'- 90' Var. Exist. R/W

F

S 34° 40' 59.2" E

S 46° 10' 56.4" E

S 2° 32' 22.0" E

POT Sta. 17+08.82 -L2-

PC Sta. 17+91.29 -L2-

PT Sta. 18+67.29 -L2-

PT Sta. 18+84.01 -L2-

PT Sta. 22+71.11 -L2-

PT Sta. 24+58.08 -L2-

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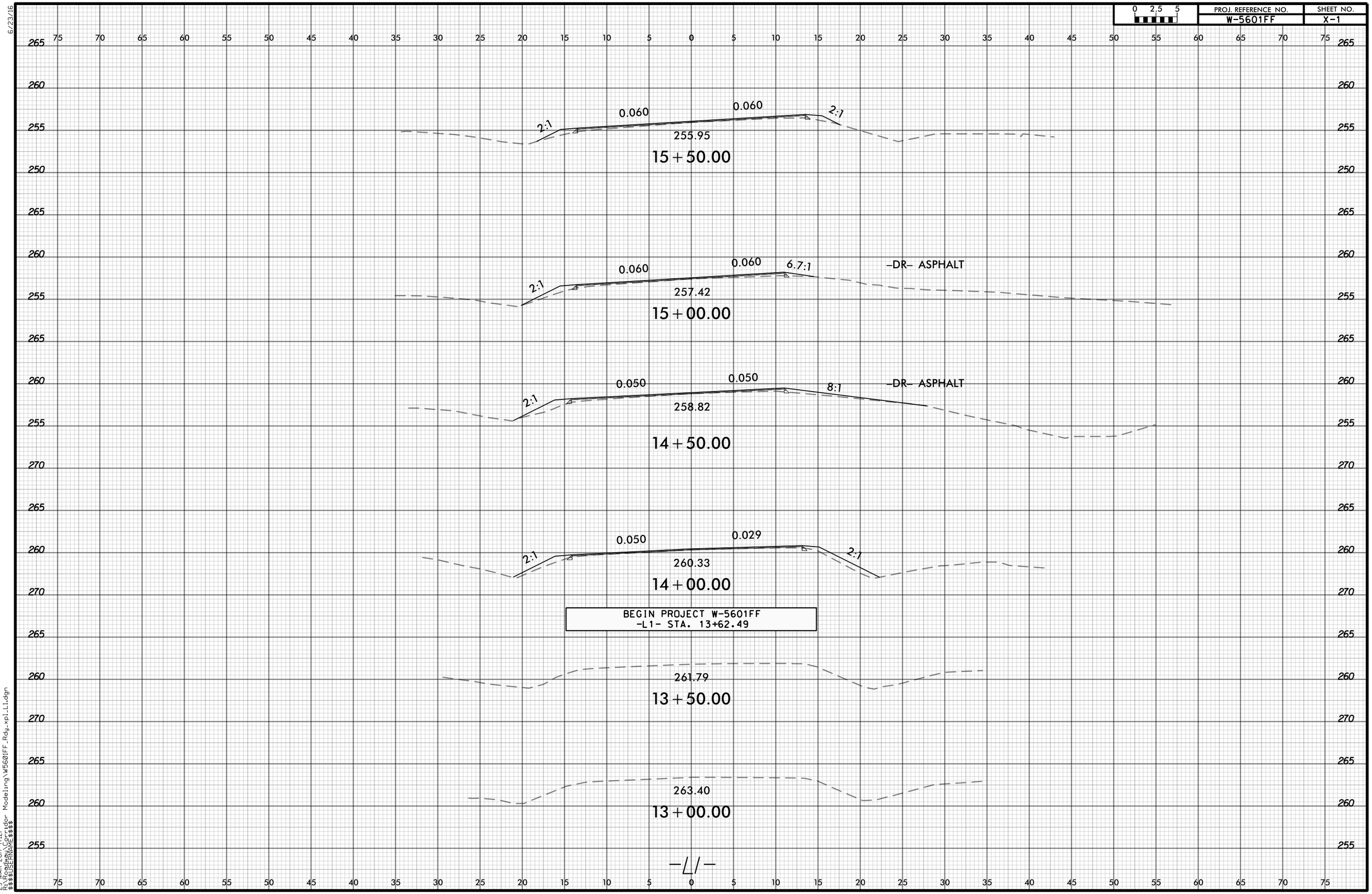

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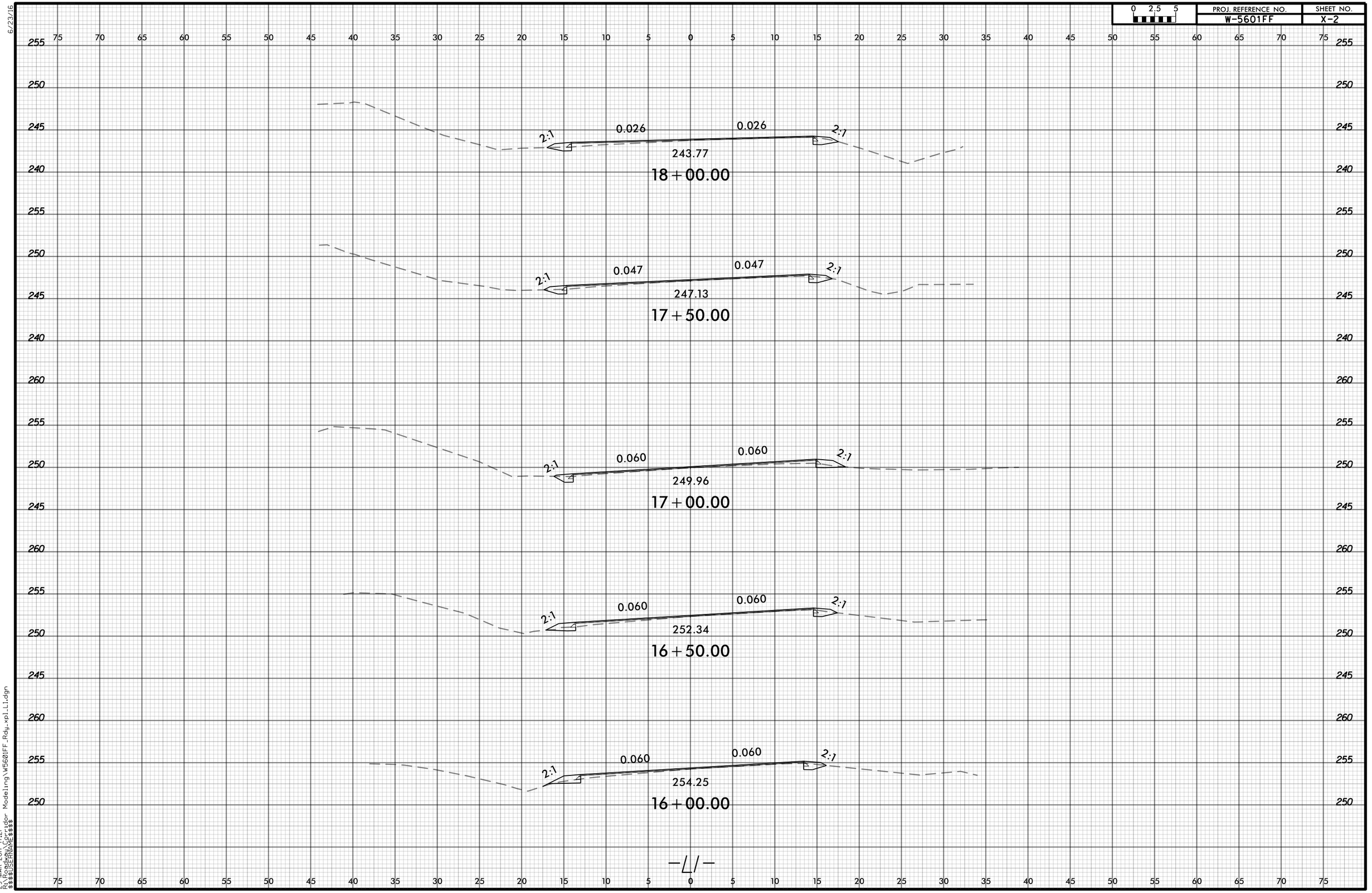

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6/23/16

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	W-5601FF	X-3

225.23
20+50.00

228.74
20+00.00

232.43
19+50.00

END CONSTRUCTION W-5601FF
-L1- STA. 19+14.33

0.003 0.004
2:1 2:1
236.26
19+00.00

0.017 0.017
2:1 2:1
240.08
18+50.00
-L1-

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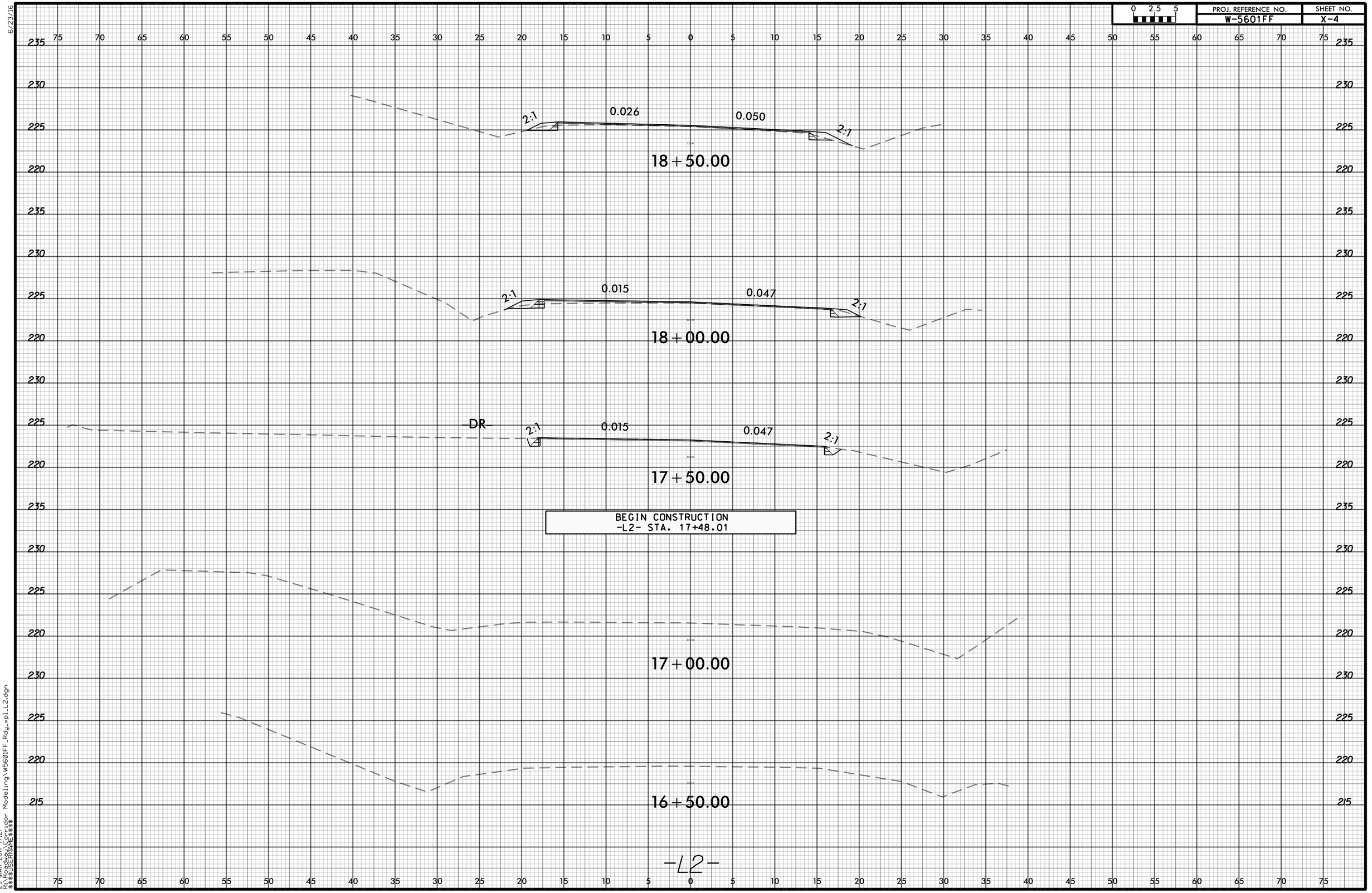

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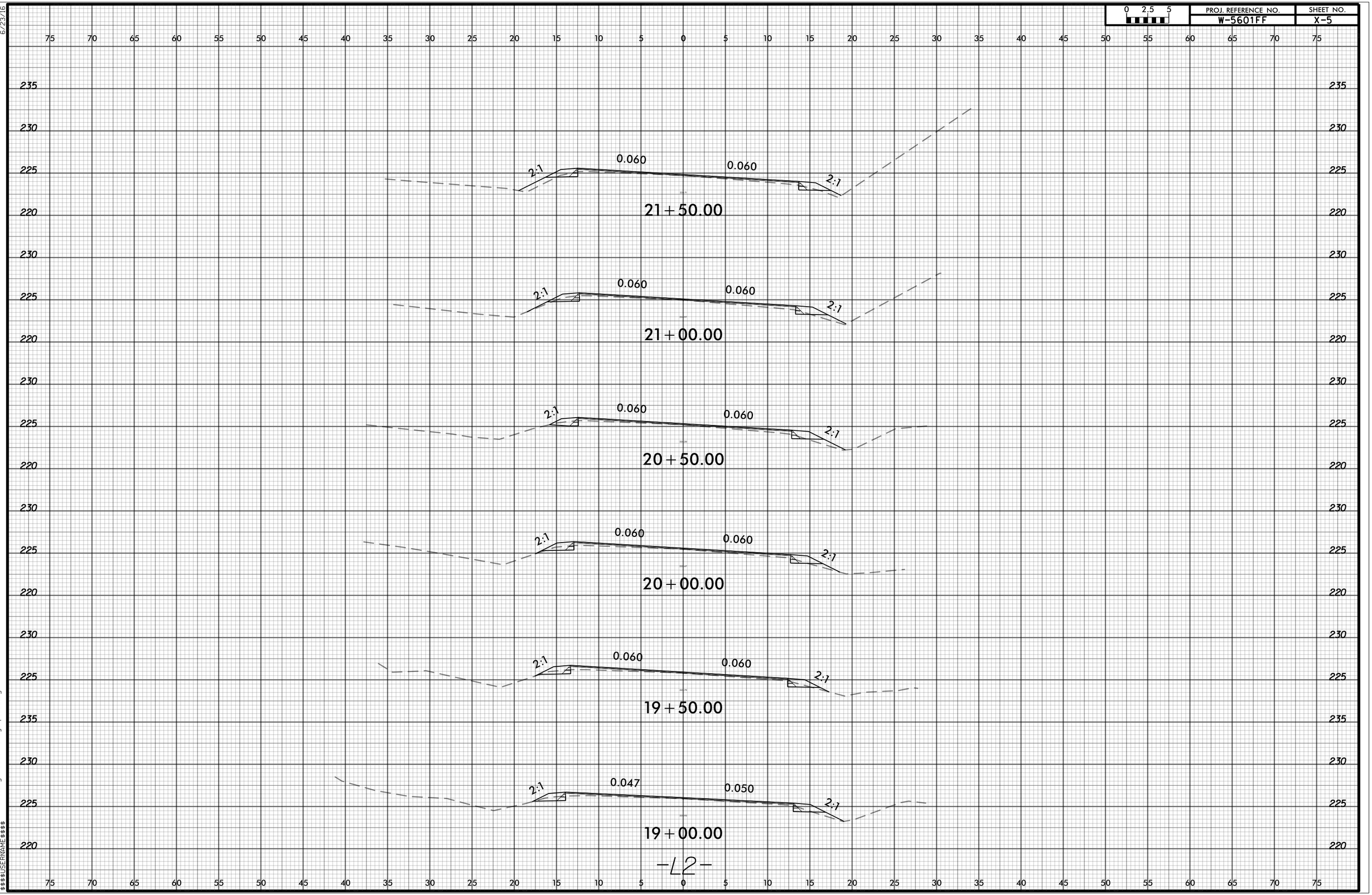

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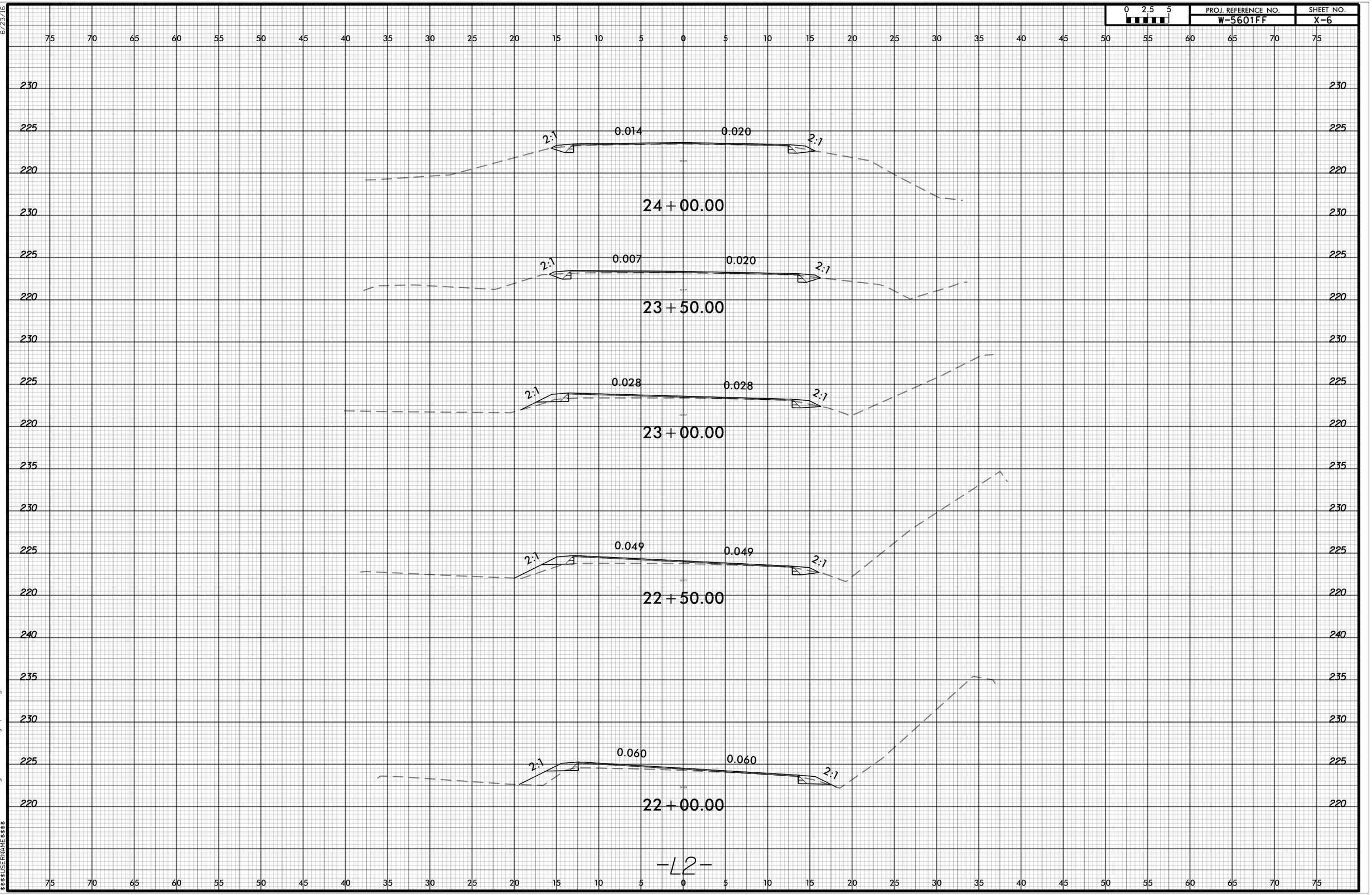
0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	W-5601FF	X-6



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0 2.5 5	PROJ. REFERENCE NO.	SHEET NO.
	W-5601FF	X-7

END PROJECT W-5601FF
-L2- STA. 24+55.11

2:1 0.035 0.017 2:1

24+50.00

-L2-

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