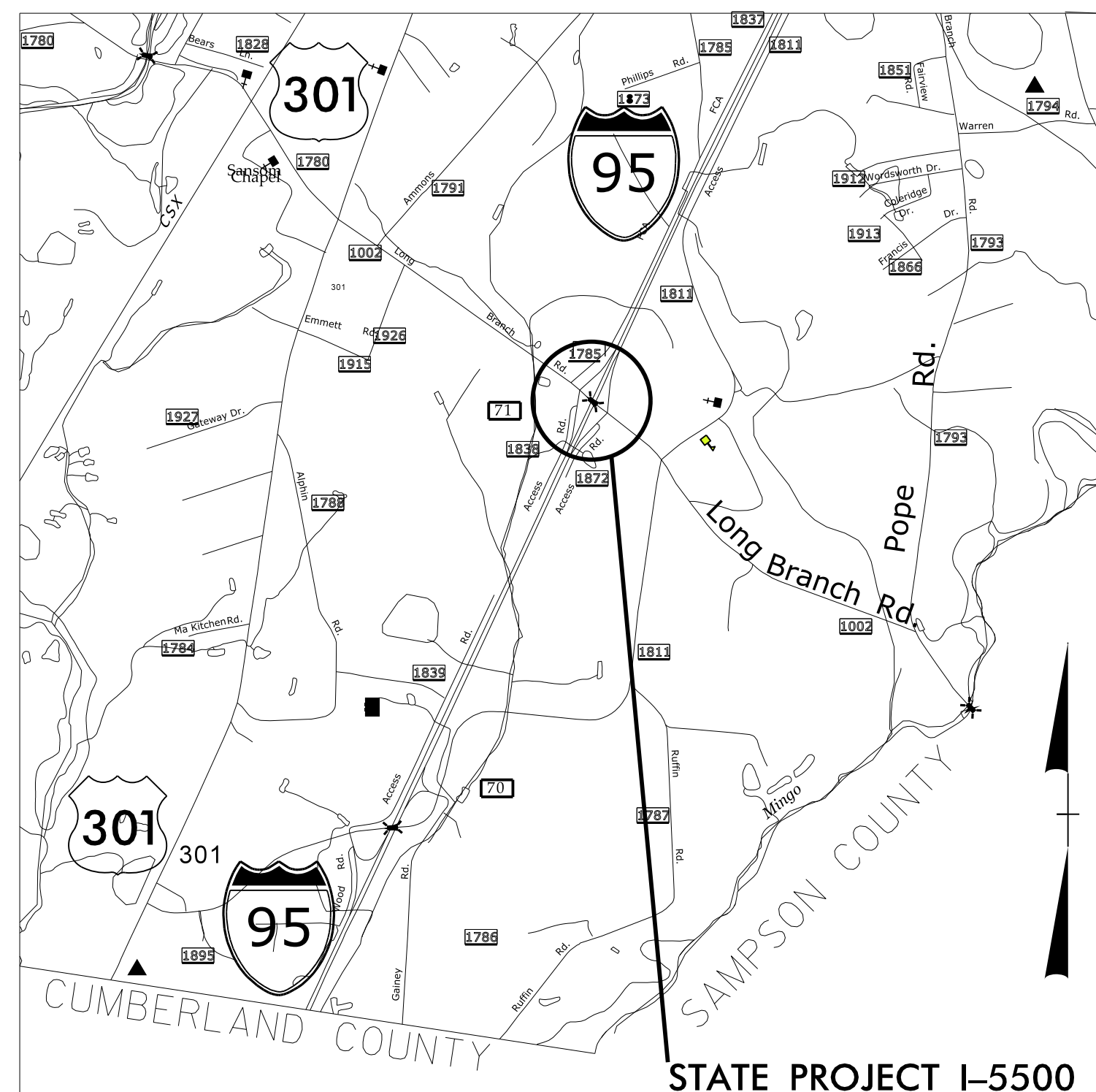


14-MAY-2014 07:56 S:\DDC\Projects\I-5500 45470 Long Branch Rd over I-95 Exit 71\Harnett Co\Roadway\proj\42634\_Rdy\_tsh.dgn  
 \$\$\$USERNAME\$\$\$

**TIP PROJECT: I-5500**

**45470.3.FSI**

**WBS:**



VICINITY MAP

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**HARNETT COUNTY**

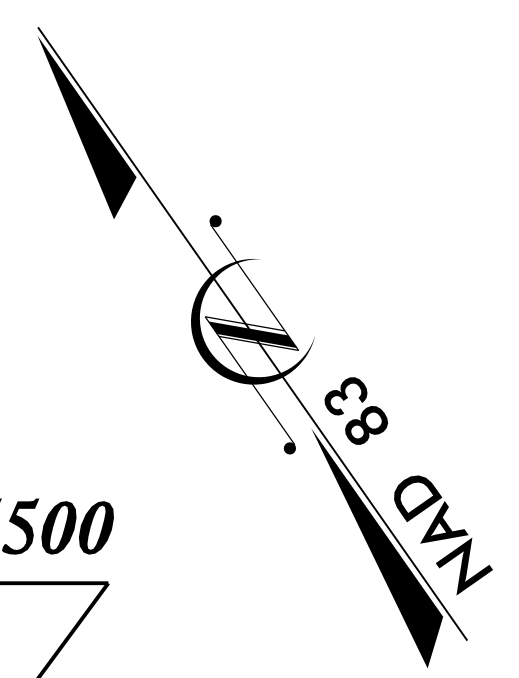
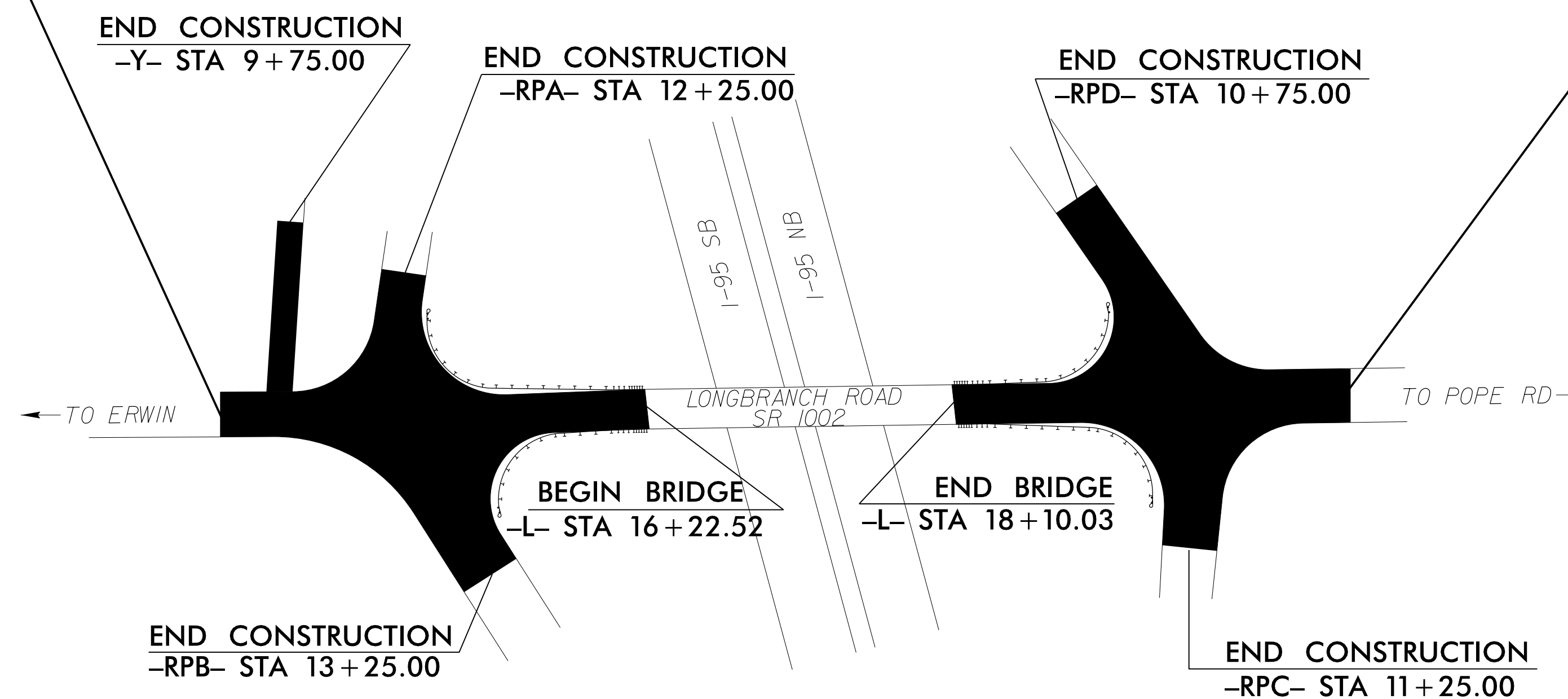
**LOCATION: LONGBRANCH ROAD (SR 1002) AT I-95 EXIT 71**

**TYPE OF WORK: PAVING, GUARDRAIL, AND PAVEMENT MARKINGS & SIGNING**

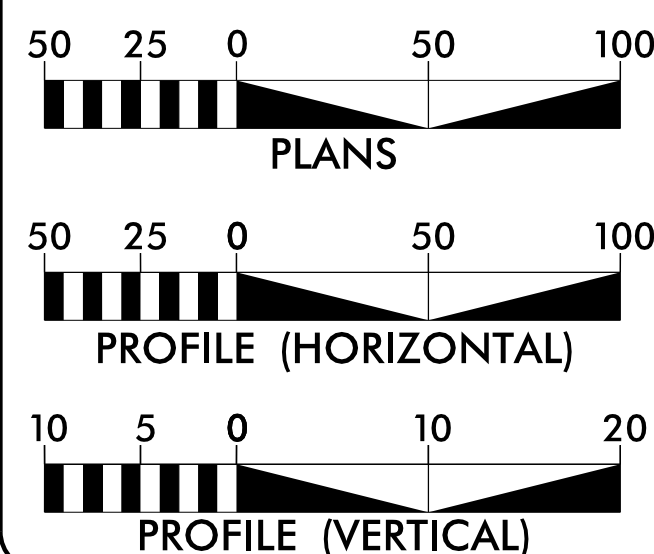
STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	I-5500	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
45470.1.1	IMS-095-2(123)71	PE	
45470.3.FSI	IMS-095-2(123)71	CONST	

**BEGIN STATE PROJECT I-5500**  
**-L- STA 10+00.00**

**END STATE PROJECT I-5500**  
**-L- STA 21+50.00**



**GRAPHIC SCALES**



**DESIGN DATA**

V = 45 MPH

**PROJECT LENGTH**

LENGTH OF ROADWAY PROJECT I-5500 = 0.218 mi

Prepared in the Office of:  
**DIVISION OF HIGHWAYS**

431 Transportation Dr., Fayetteville NC, 28301

2012 STANDARD SPECIFICATIONS

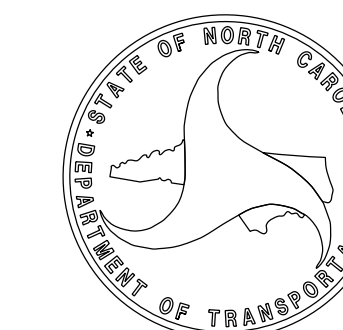
**RIGHT OF WAY DATE:**  
N/A

**LETTING DATE:**  
JUNE 18, 2014

**SCOTT PRIDGEN**  
PROJECT ENGINEER

**NEIL BUTLER**  
PROJECT DESIGN ENGINEER

**DIVISION OF HIGHWAYS**  
STATE OF NORTH CAROLINA



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	○ EP
Property Corner	----->
Property Monument	□ ECM
Parcel/Sequence Number	⑫③
Existing Fence Line	-x-x-x-
Proposed Woven Wire Fence	○
Proposed Chain Link Fence	□
Proposed Barbed Wire Fence	◇
Existing Wetland Boundary	--- MLB
Proposed Wetland Boundary	--- MLB
Existing Endangered Animal Boundary	--- EAB
Existing Endangered Plant Boundary	--- EPB
Known Soil Contamination: Area or Site	☠
Potential Soil Contamination: Area or Site	☠?

### BUILDINGS AND OTHER CULTURE:

Gas Pump Vent or U/G Tank Cap	○
Sign	○
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	-----
False Sump	▽

### RAILROADS:

Standard Gauge	-----
RR Signal Milepost	○ CSX TRANSPORTATION 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	----- RW
Proposed Right of Way Line with Iron Pin and Cap Marker	----- RW ▲
Proposed Right of Way Line with Concrete or Granite R/W Marker	----- RW ▲
Proposed Control of Access Line with Concrete CA Marker	----- CA
Existing Control of Access	----- CA
Proposed Control of Access	----- CA
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	○
Storm Sewer	----- S

### UTILITIES:

POWER:	
Existing Power Pole	●
Proposed Power Pole	○
Existing Joint Use Pole	●
Proposed Joint Use Pole	○
Power Manhole	⊕
Power Line Tower	⊗
Power Transformer	⊗
U/G Power Cable Hand Hole	□
H-Frame Pole	●●
Recorded U/G Power Line	----- P
Designated U/G Power Line (S.U.E.*)	----- P

### TELEPHONE:

Existing Telephone Pole	●
Proposed Telephone Pole	○
Telephone Manhole	⊕
Telephone Booth	□
Telephone Pedestal	⊕
Telephone Cell Tower	●
U/G Telephone Cable Hand Hole	□
Recorded U/G Telephone Cable	----- T
Designated U/G Telephone Cable (S.U.E.*)	----- T
Recorded U/G Telephone Conduit	----- TC
Designated U/G Telephone Conduit (S.U.E.*)	----- TC
Recorded U/G Fiber Optics Cable	----- T FO
Designated U/G Fiber Optics Cable (S.U.E.*)	----- T FO

### WATER:

Water Manhole	⊕
Water Meter	○
Water Valve	⊗
Water Hydrant	⊕
Recorded U/G Water Line	----- W
Designated U/G Water Line (S.U.E.*)	----- W
Above Ground Water Line	----- A/G Water

### TV:

TV Satellite Dish	☼
TV Pedestal	□
TV Tower	⊗
U/G TV Cable Hand Hole	□
Recorded U/G TV Cable	----- TV
Designated U/G TV Cable (S.U.E.*)	----- TV
Recorded U/G Fiber Optic Cable	----- TV FO
Designated U/G Fiber Optic Cable (S.U.E.*)	----- TV FO

### GAS:

Gas Valve	◇
Gas Meter	⊕
Recorded U/G Gas Line	----- G
Designated U/G Gas Line (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
Recorded SS Forced Main Line	----- FSS
Designated SS Forced Main Line (S.U.E.*)	----- FSS

### MISCELLANEOUS:

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

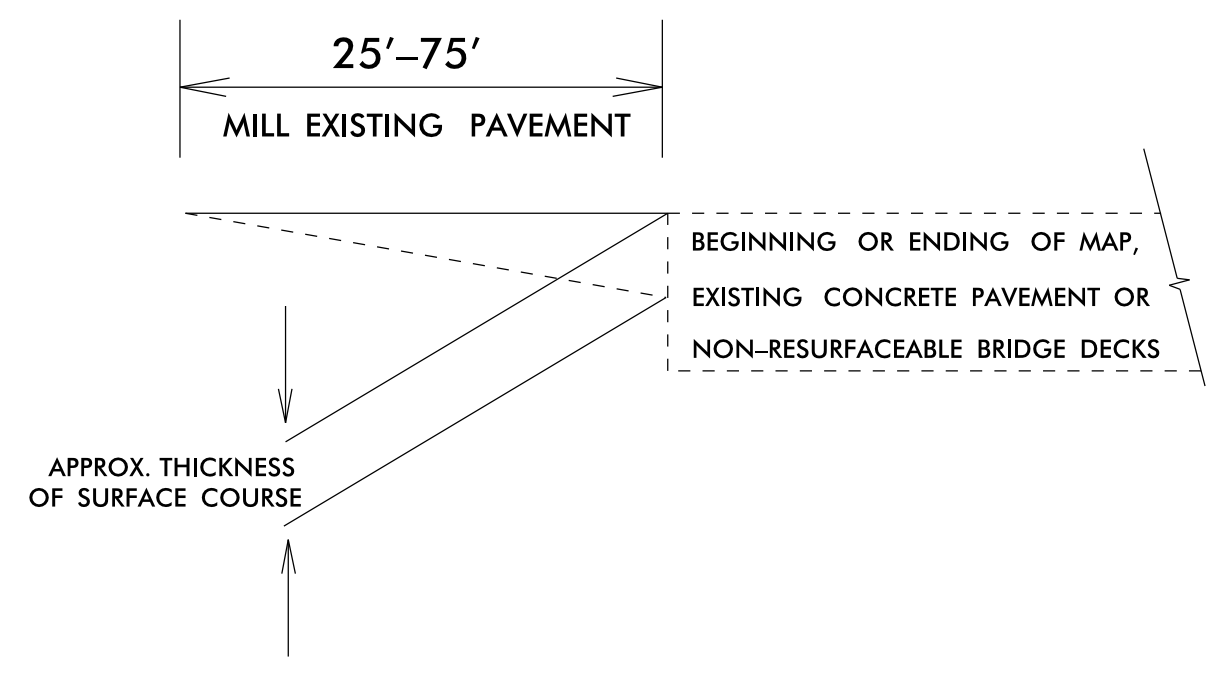
## MILLING AT PAVEMENT TIE-INS

### NOTES TO CONTRACTOR

For surface mixes over 1" in thickness, mill the existing pavement in accordance with the following sketch as directed by the Engineer.

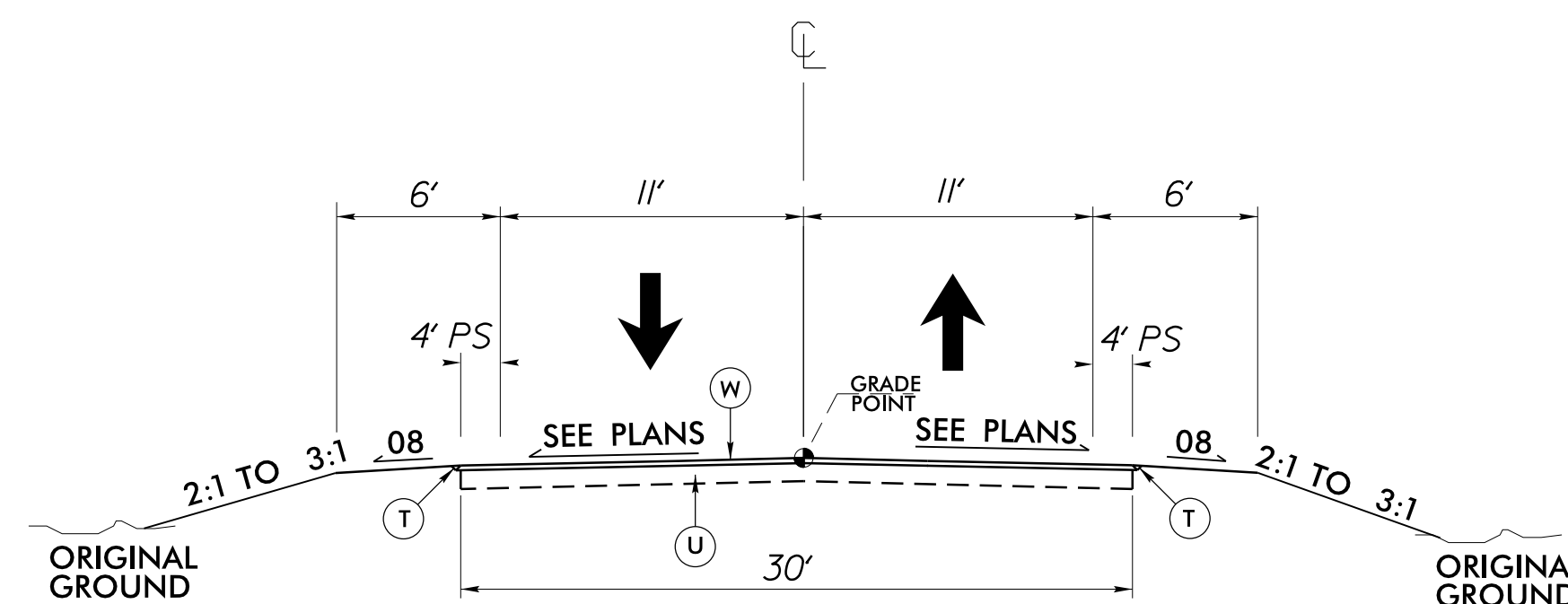
Locations shall include ties into existing concrete pavement, at bridge approaches where the bridge will not be resurfaced, and at the beginning and ending point of each resurfacing map.

Perform the work in accordance with Section 607 of the January 2012 North Carolina Department of Transportation Standard Specifications for Roads and Structures. Resurfacing will be accomplished at the same time as the milling operation.



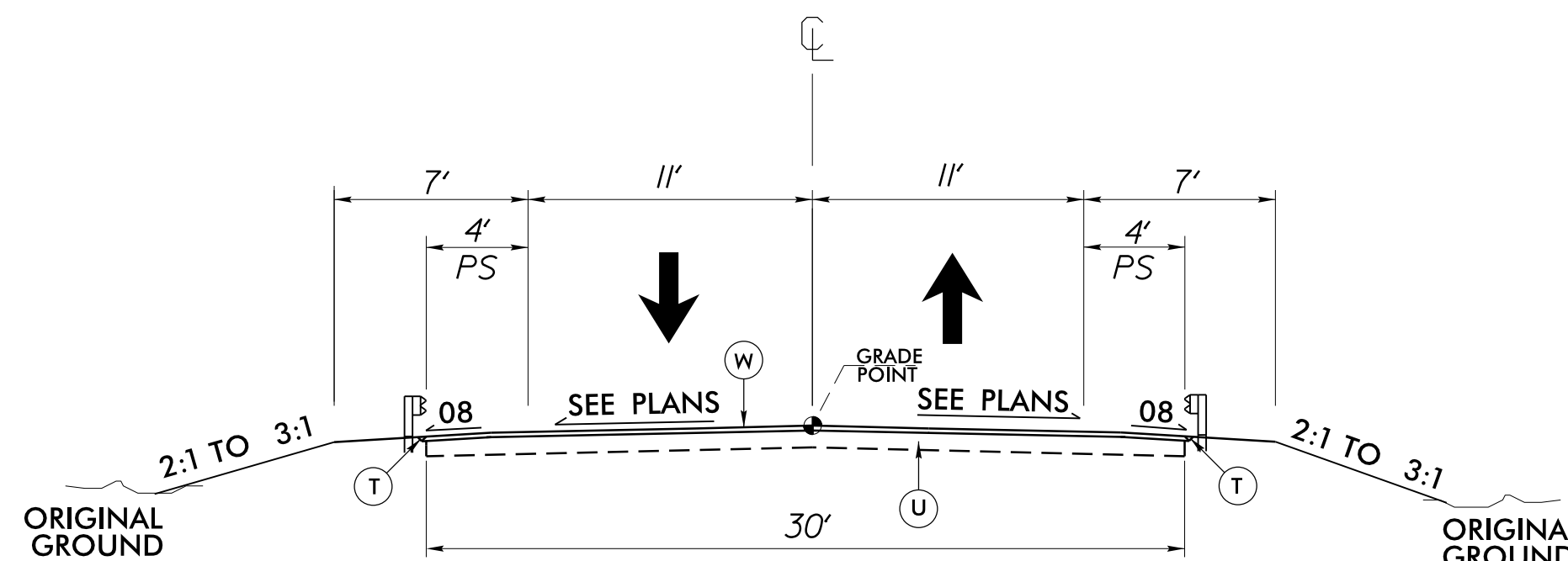
## PROJECT NOTES

- The Contractor shall not work on both sides of the road simultaneously within the same area.
- Ingress and egress shall be maintained to all businesses and dwellings on the project.
- At the end of each workday, the Contractor shall be required to backfill any area adjacent to existing travelway that has been graded leaving no more than a 3" drop-off.
- A minimum of two-way, two-lane traffic (plus all existing left and right turn lanes) shall be maintained during periods of construction inactivity.
- The Contractor shall not be allowed to stop traffic for more than 5 minutes at a time in any one direction.
- During periods of construction inactivity, the difference in elevation between lanes shall not exceed 1-1/2 inch.
- Access to police and fire station, fire hydrants, and hospitals shall be maintained at all times.
- During periods of construction inactivity, place cones/drums 3' from existing edge of pavement (travelway) as directed by the Engineer.
- Channelizing devices in work areas shall be spaced not greater than 45' on center in tangent areas, 45' on center in tapers, and 10' on center in radii, and shall be set 3' off the edge of travelway, unless otherwise indicated on plans.
- Contractor to install Erosion Control devices as directed by the Engineer.



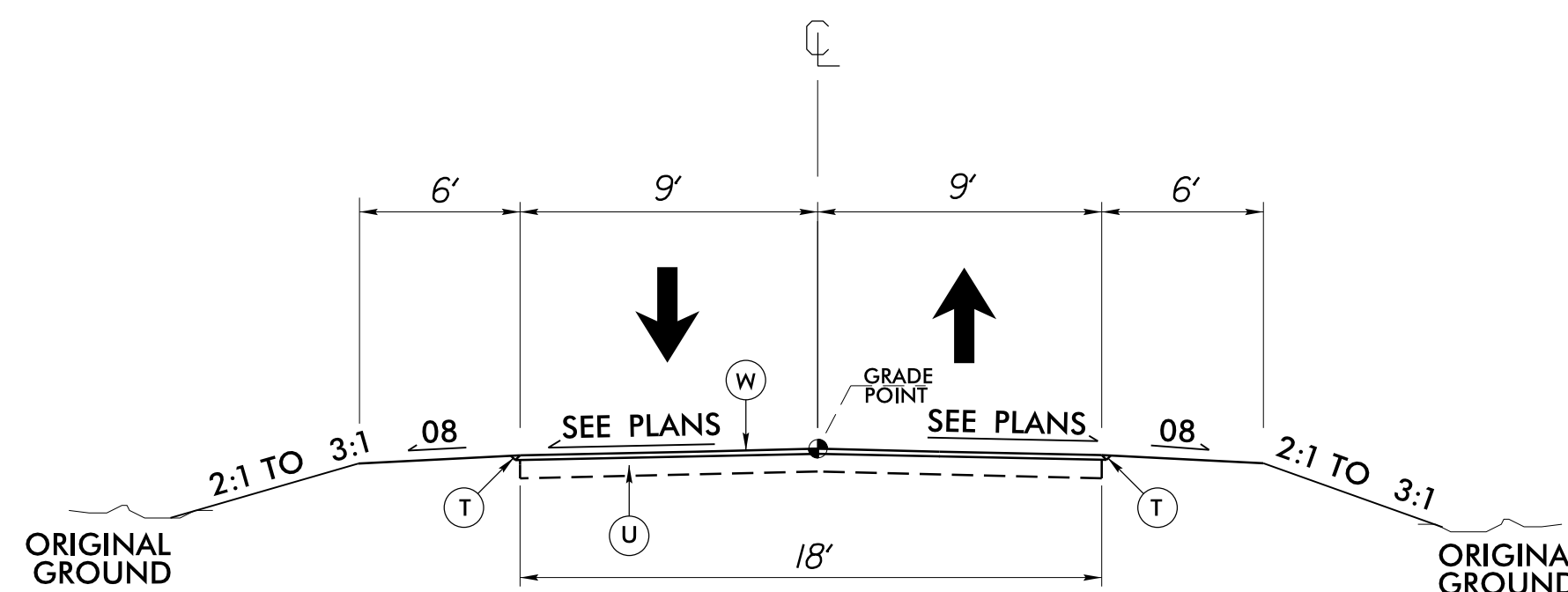
### TYPICAL SECTION NO. 1

-L- STA. 10+00.00 TO STA 14+75.00  
-L- STA. 19+50.00 TO STA 21+50.00



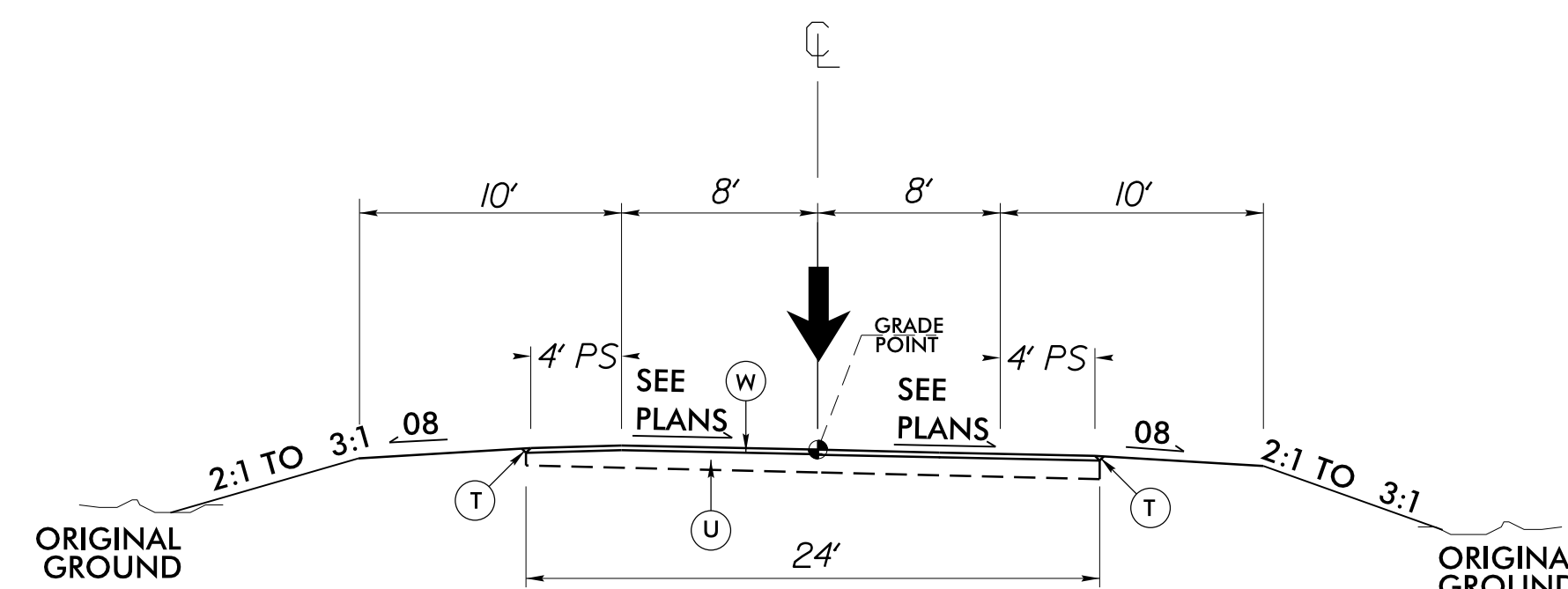
### TYPICAL SECTION NO. 2

-L- STA. 14+75.00 TO STA 16+22.64 BEGIN BRIDGE  
-L- STA. 18+09.89 END BRIDGE TO STA 19+50.00



### TYPICAL SECTION NO. 3

-Y- STA. 10+00.00 TO STA 13+28.31

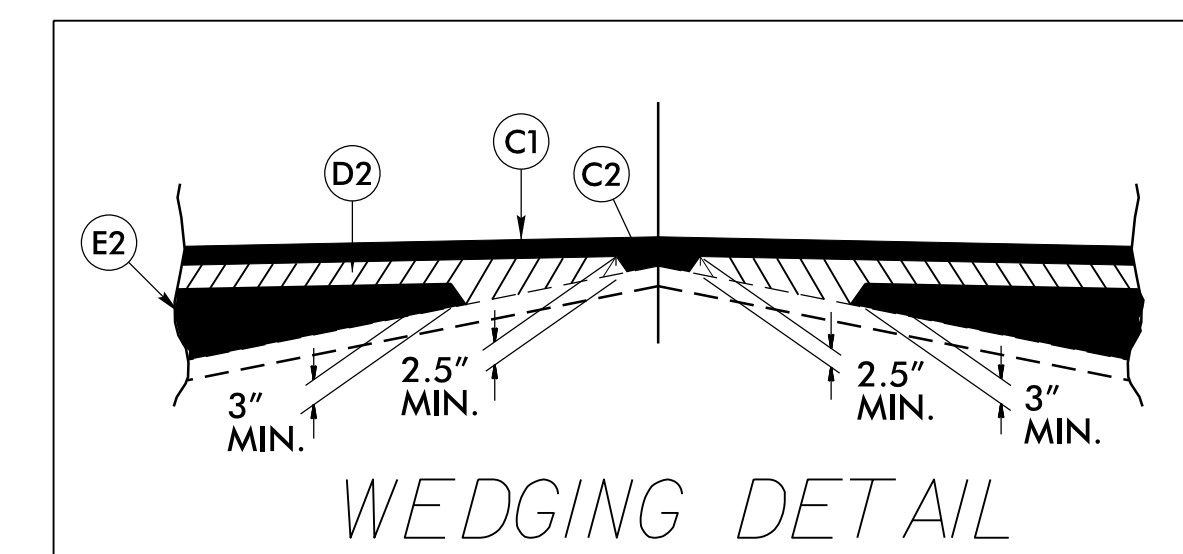


### TYPICAL SECTION NO. 4

-RPA- STA. 12+25.00 TO STA 13+89.29

## PAVEMENT SCHEDULE

C1	PROP. APPROX. 1 1/2" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	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. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VAR DEPTH ASPHALT CONC. 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 2 1/2" OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONC. BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT GREATER THAN 5.5" IN DEPTH OR LESS THAN 3" IN DEPTH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING

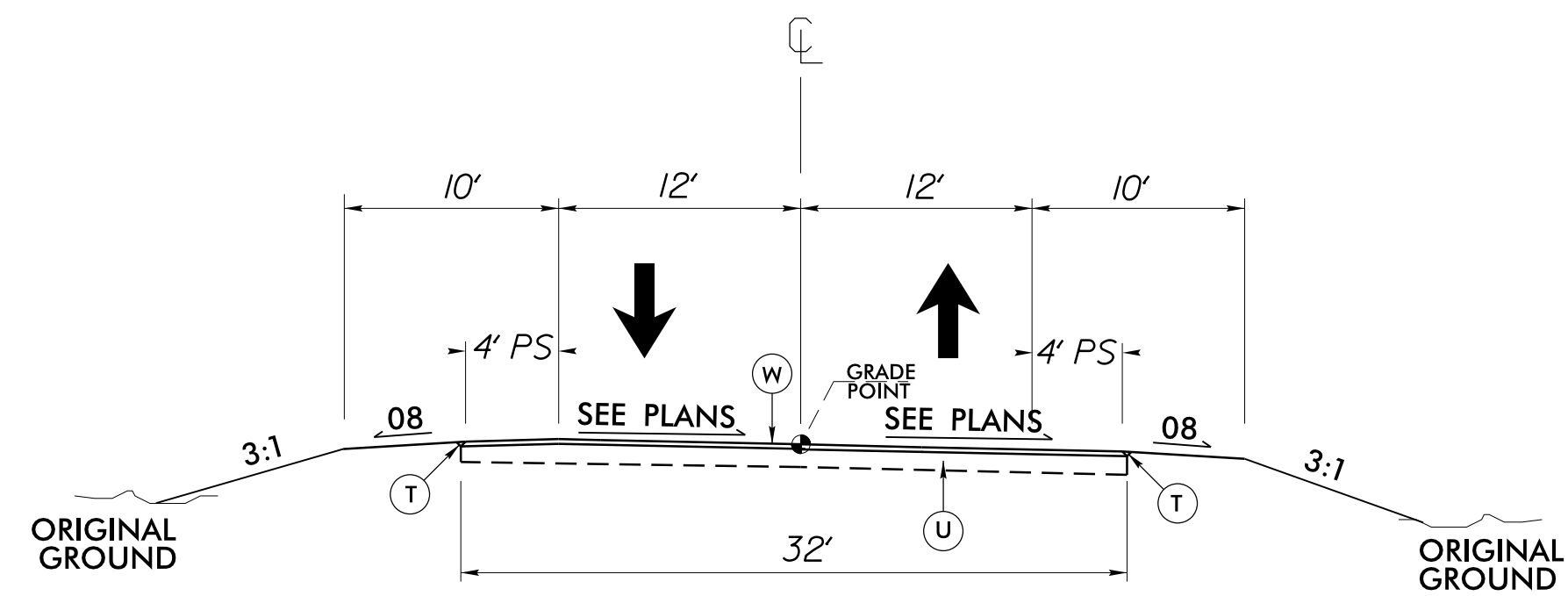


CONTRACTOR SHALL COORDINATE WITH LOCAL TRAFFIC SERVICES UNIT FOR PROPOSED SIGNAL DESIGN AND PLACEMENT OF ALL PAVEMENT MARKINGS.

FOR SIGNAL WORK, CONTACT FRANK WEST 910-486-1452, 28 DAYS PRIOR TO PLACEMENT.

FOR PAVEMENT MARKING, CONTACT KENT LANGDON 910-486/452, 14 DAYS PRIOR TO FINAL PLACEMENT.

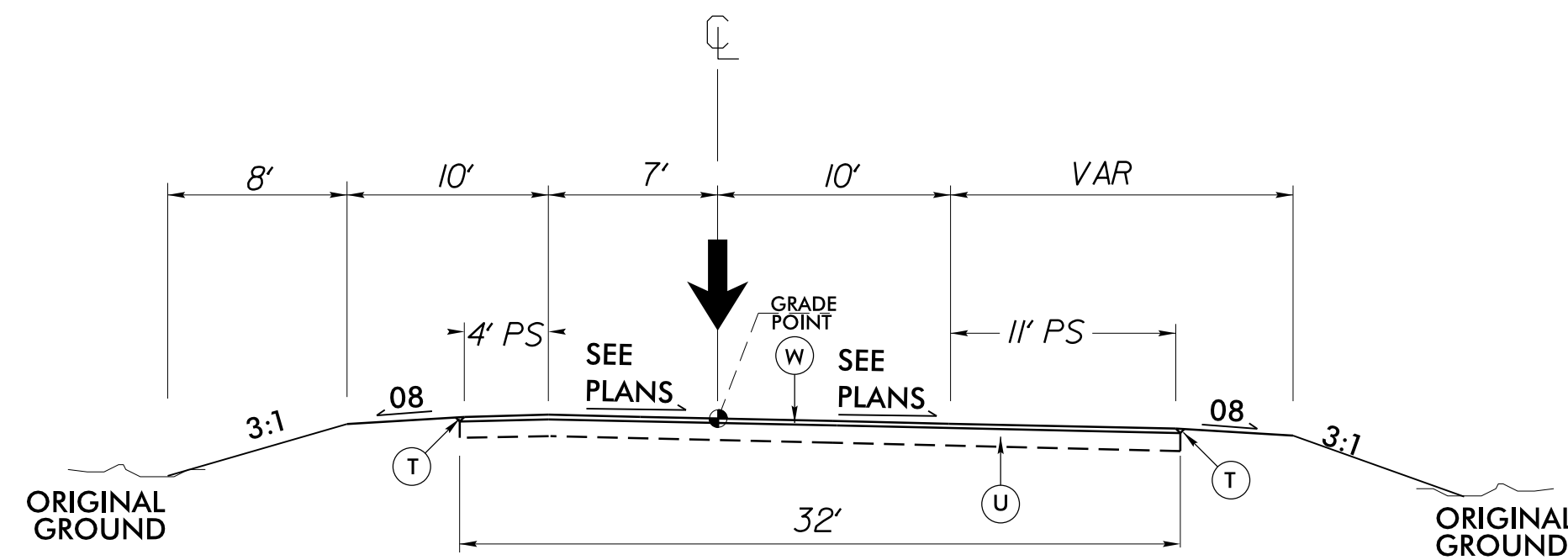




**TYPICAL SECTION NO. 5**

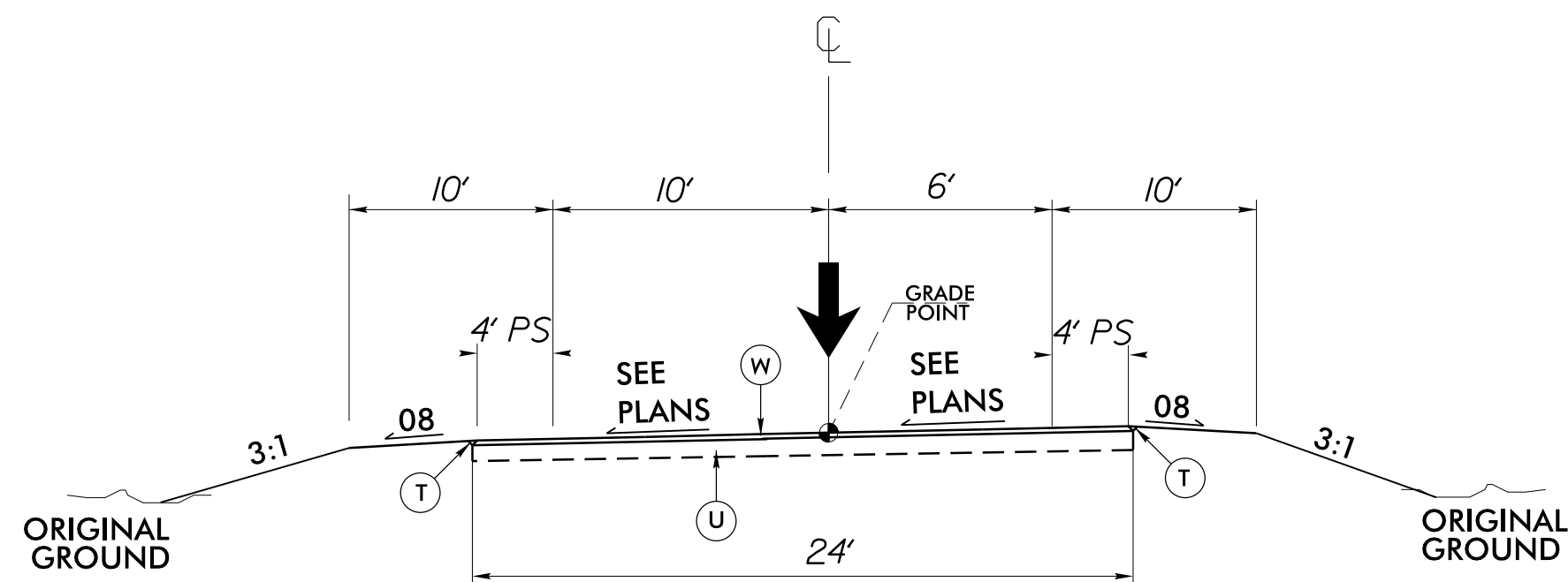
-RPB- STA. 10+17.05 TO STA 12+30.00  
 -RPC- STA. 10+11.88 TO STA 11+25.00

TRANSITION FROM TYPICAL NO. 5 TO TYPICAL NO. 6  
 -RPB- STA. 12+30.00 TO STA 12+90.00



**TYPICAL SECTION NO. 6**

-RPB- STA. 12+90.00 TO STA 13+25.00



**TYPICAL SECTION NO. 7**

-RPD- STA. 10+75.00 TO STA 13+08.86

PAVEMENT SCHEDULE	
C1	PROP. APPROX. 1½" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD.
C2	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. 3" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0B, AT AN AVERAGE RATE OF 342 LBS. PER SQ. YD.
D2	PROP. VAR DEPTH ASPHALT CONC. 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" OR GREATER THAN 4" IN DEPTH.
E1	PROP. APPROX. 5" ASPHALT CONCRETE BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 570 LBS. PER SQ. YD.
E2	PROP. VAR. DEPTH ASPHALT CONC. BASE COURSE, TYPE B25.0B, AT AN AVERAGE RATE OF 114 LBS PER SQ. YD. PER 1" DEPTH, TO BE PLACED IN LAYERS NOT GREATER THAN 5.5" IN DEPTH OR LESS THAN 3" IN DEPTH
T	EARTH MATERIAL
U	EXISTING PAVEMENT
W	WEDGING

CONTRACTOR SHALL COORDINATE WITH LOCAL TRAFFIC SERVICES UNIT FOR PROPOSED SIGNAL DESIGN AND PLACEMENT OF ALL PAVEMENT MARKINGS.

FOR SIGNAL WORK, CONTACT FRANK WEST 910-486-1452, 28 DAYS PRIOR TO PLACEMENT.

FOR PAVEMENT MARKING, CONTACT KENT LANGDON 910-4861452, 14 DAYS PRIOR TO FINAL PLACEMENT.



8/17/99

REVISIONS

01-APR-2014 11:43  
 I:\APR-2014\I-5500\45470 Long Branch Rd over I-95 Ext 71-Harrett Co\Roadway\pro\42634\_Rdy.psh\_4.dgn  
 3:38:53 PM  
 3:38:53 PM

**BEGIN STATE PROJECT**  
**-L- PC STA 10+00.00**

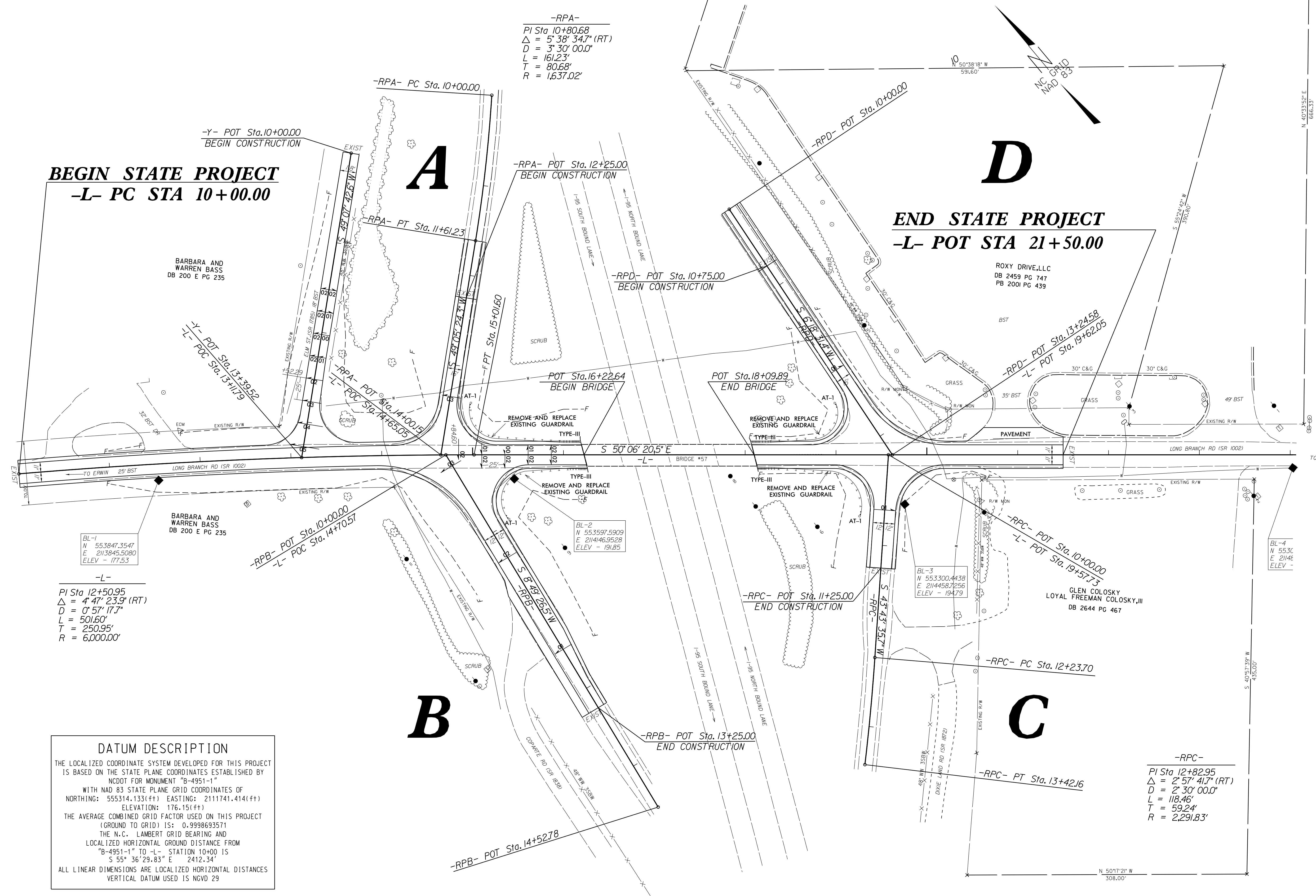
**END STATE PROJECT**  
**-L- POT STA 21+50.00**

**-L-**  
 PI Sta 12+50.95  
 $\Delta = 4' 47" 23.9" (RT)$   
 $D = 0' 57" 17.7"$   
 $L = 501.60'$   
 $T = 250.95'$   
 $R = 6,000.00'$

**-RPA-**  
 PI Sta 10+80.68  
 $\Delta = 5' 38" 34.7" (RT)$   
 $D = 3' 30' 00.0"$   
 $L = 161.23'$   
 $T = 80.68'$   
 $R = 1,637.02'$

**-RPC-**  
 PI Sta 12+82.95  
 $\Delta = 2' 57" 41.7" (RT)$   
 $D = 2' 30' 00.0"$   
 $L = 118.46'$   
 $T = 59.24'$   
 $R = 2,291.83'$

**DATUM DESCRIPTION**  
 THE LOCALIZED COORDINATE SYSTEM DEVELOPED FOR THIS PROJECT IS BASED ON THE STATE PLANE COORDINATES ESTABLISHED BY NCDOT FOR MONUMENT "B-4951-1" WITH NAD 83 STATE PLANE GRID COORDINATES OF NORTHING: 555314.133(±±) EASTING: 2111741.414(±±) ELEVATION: 176.15(±±)  
 THE AVERAGE COMBINED GRID FACTOR USED ON THIS PROJECT (GROUND TO GRID) IS: 0.9998693571  
 THE N.C. LAMBERT GRID BEARING AND LOCALIZED HORIZONTAL GROUND DISTANCE FROM "B-4951-1" TO -L- STATION 10+00 IS S 55° 36' 29.83" E 2412.34'  
 ALL LINEAR DIMENSIONS ARE LOCALIZED HORIZONTAL DISTANCES  
 VERTICAL DATUM USED IS NGVD 29



N 40°33'52" E 666.33'

TO EID HA

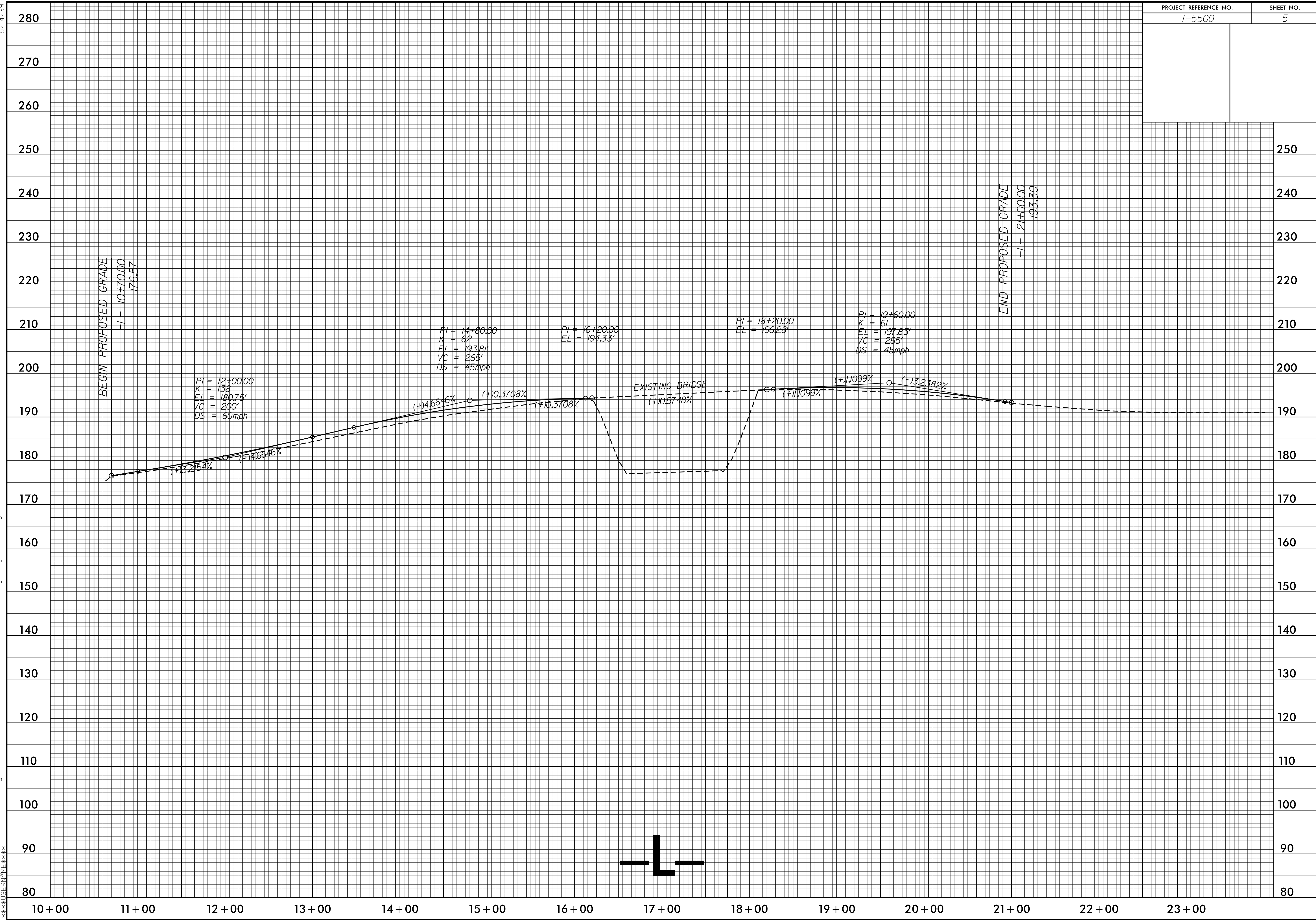
S 40°57'39" W 435.00'

N 50°17'27" W 308.00'

5/14/99

14-MAY-2014 08:25  
I:\Projects\55500\45470 Long Branch Rd over I-95 Exit 71\Harnett Co\Roadway\proj\42634\_Rdy\_sht\_5.DGN

PROJECT REFERENCE NO.	SHEET NO.
I-5500	5



10+00

11+00

12+00

13+00

14+00

15+00

16+00

17+00

18+00

19+00

20+00

21+00

22+00

23+00

80

90

100

110

120

130

140

150

160

170

180

190

200

210

220

230

240

250

260

270

280

80

90

100

110

120

130

140

150

160

170

180

190

200

210

220

230

240

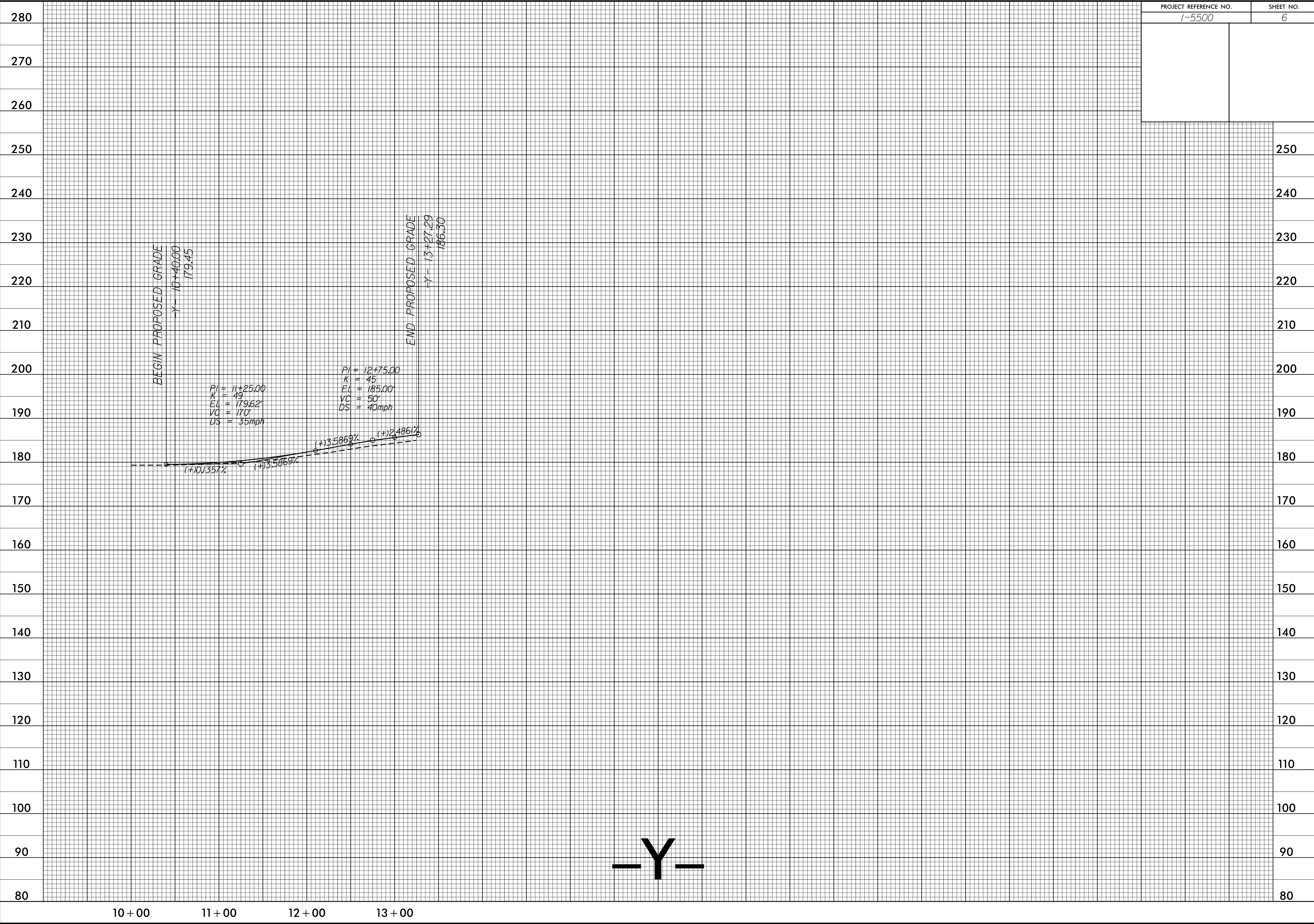
250

260

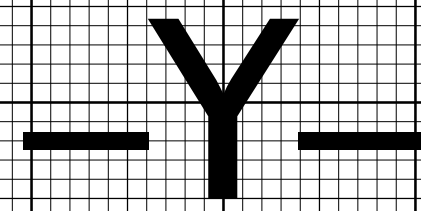
270

280

5/14/99

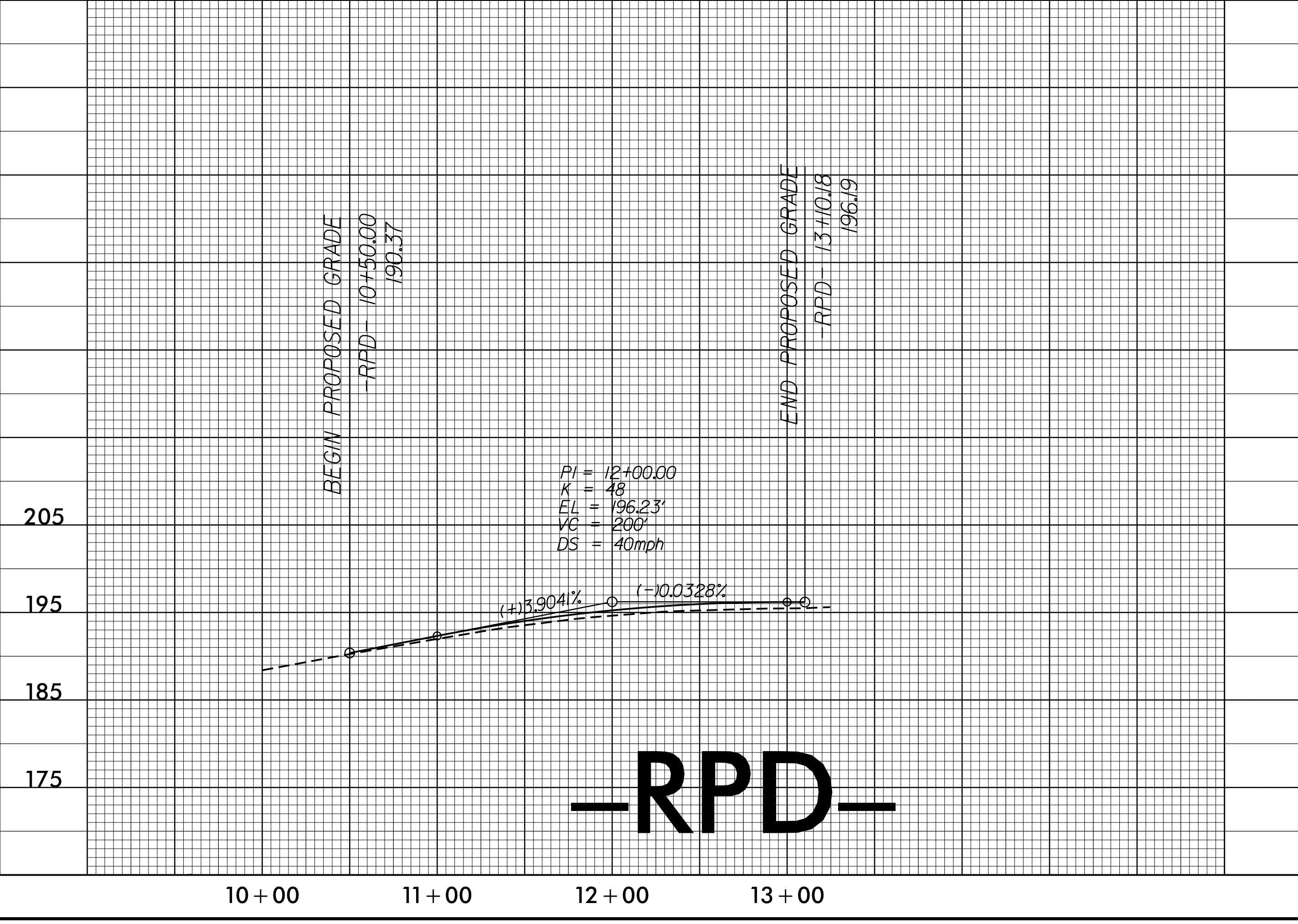
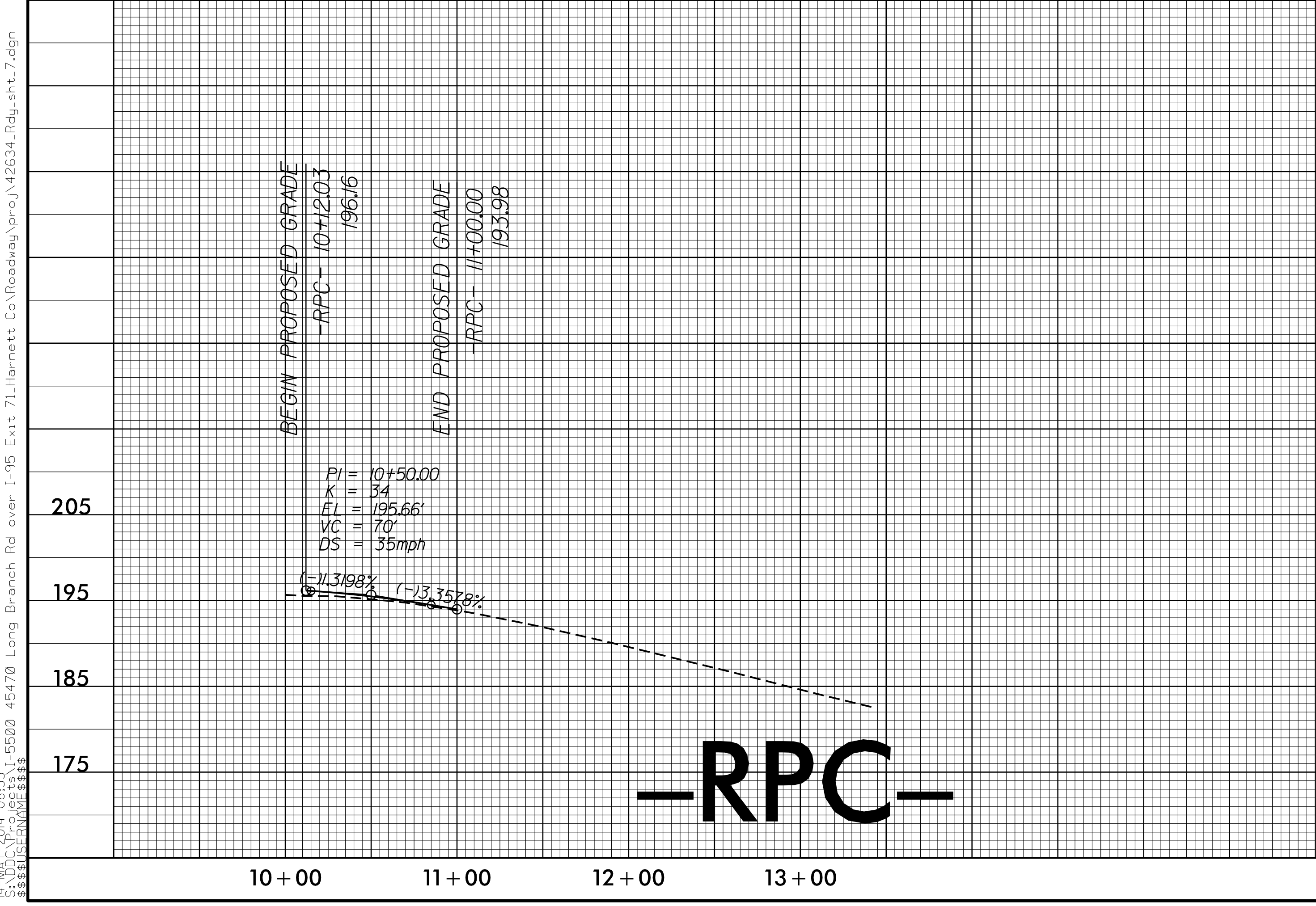
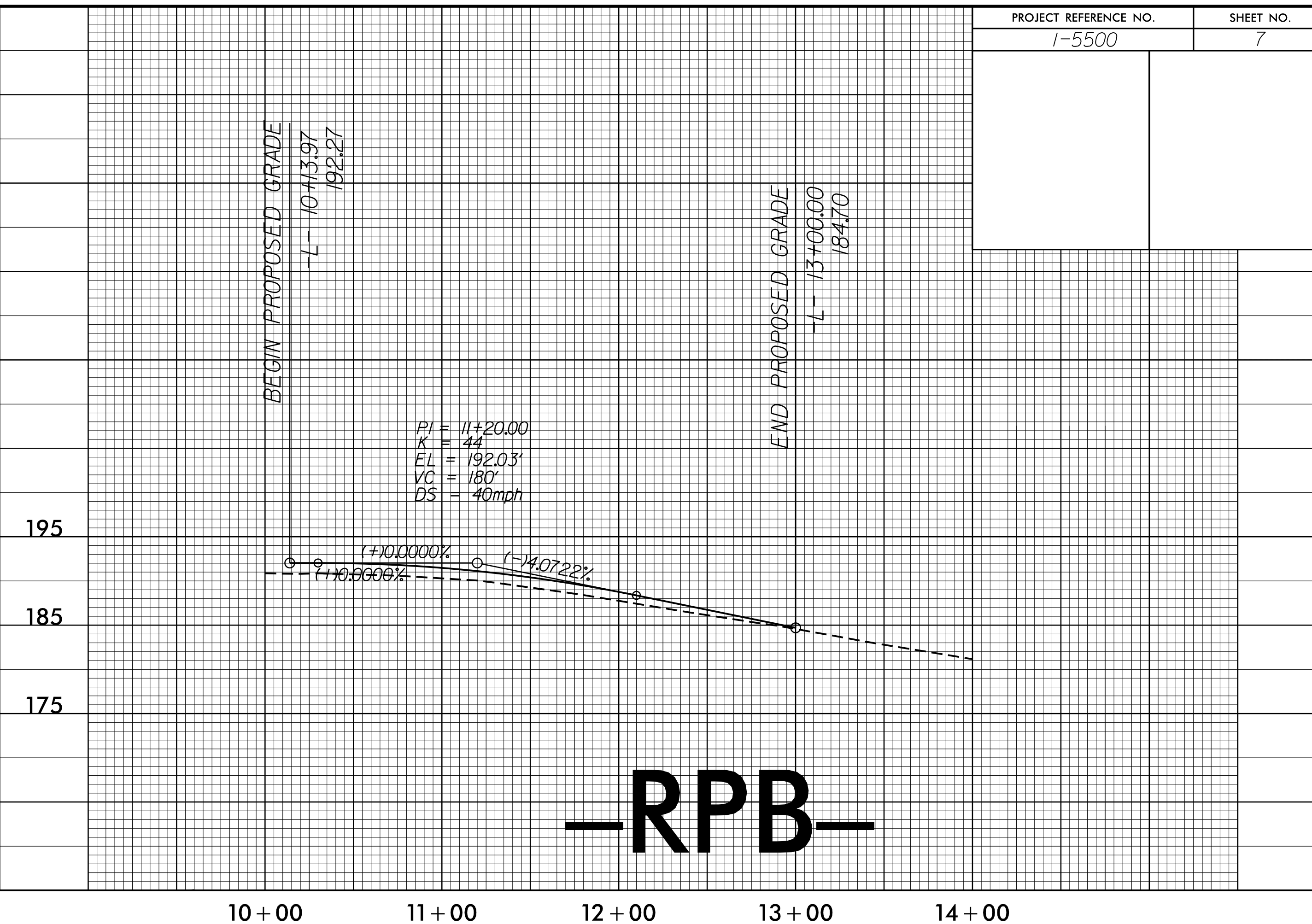
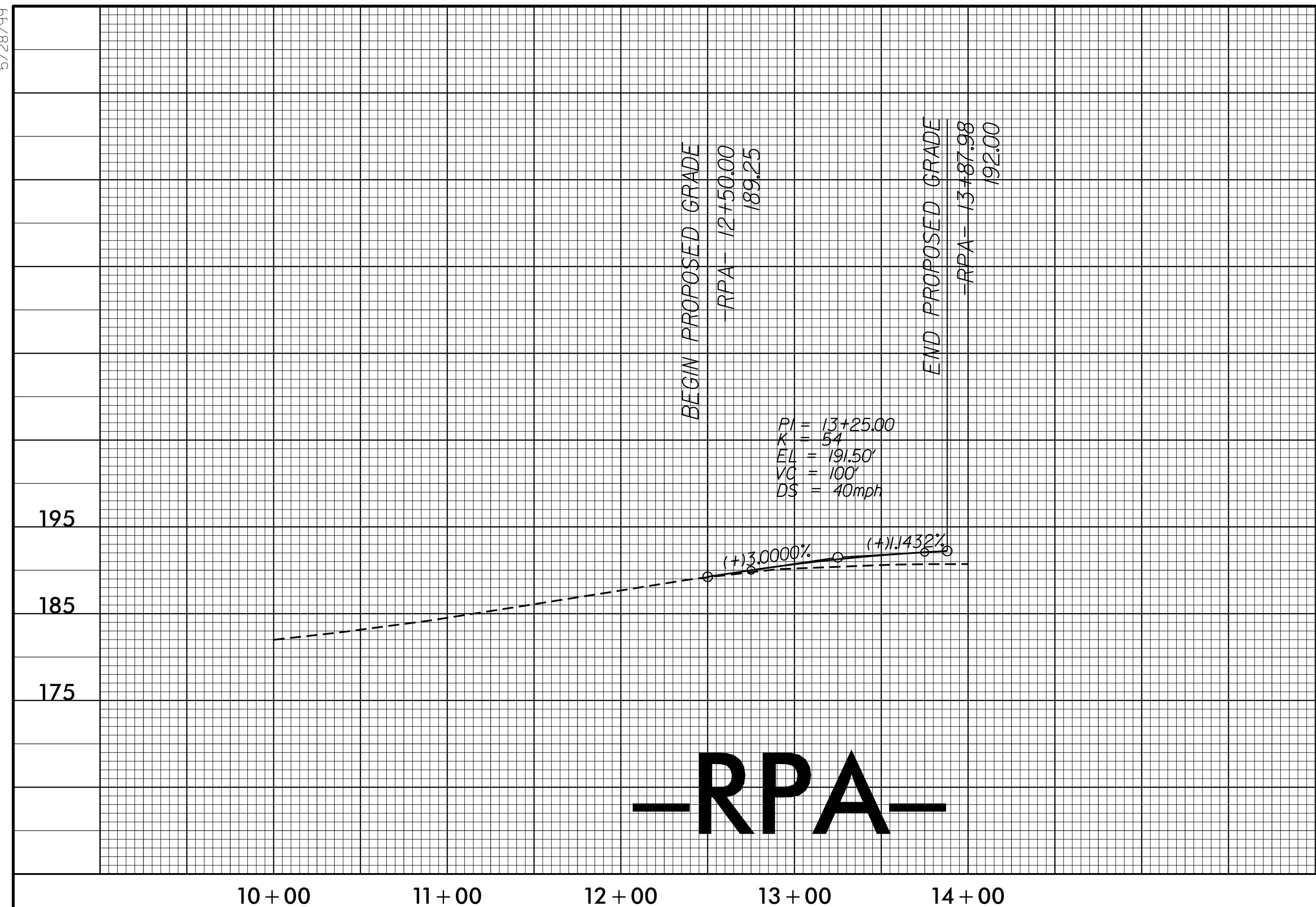


14-MAY-2014 07:23  
 33431\SEFRM\15500 45470 Long Branch Rd over I-95 Exit 71-Harrett Co.Roadway\proj\42634\_Rdy.sht\_6.DGN



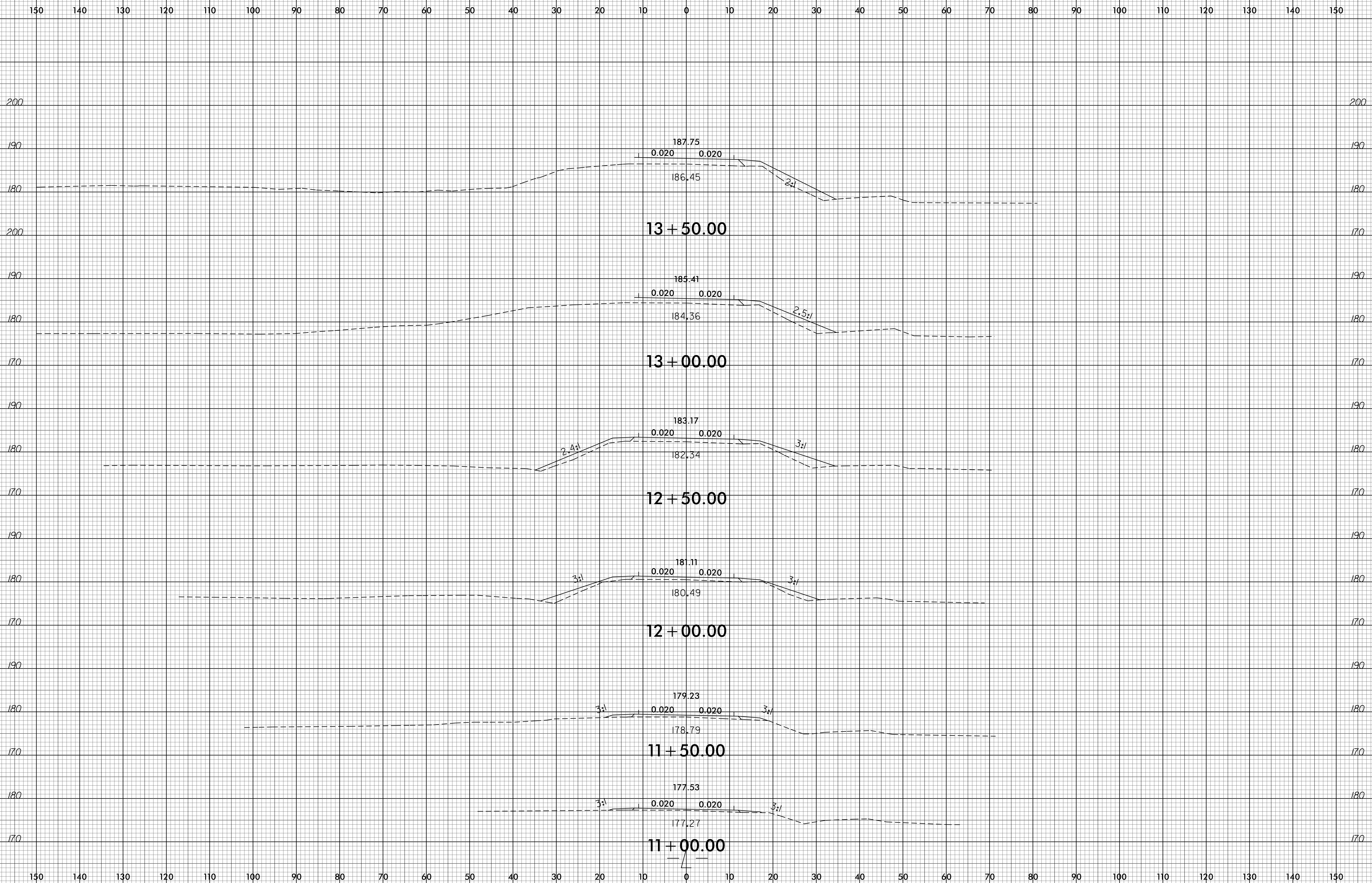


5/28/99



14-MAY-2014 08:53 1-5500 45470 Long Branch Rd over I-95 Exit 71-Harrett Co.Roadway\proj\42634\_Rdy.sht\_7.dgn  
 3:33:31 PM  
 3:33:31 PM

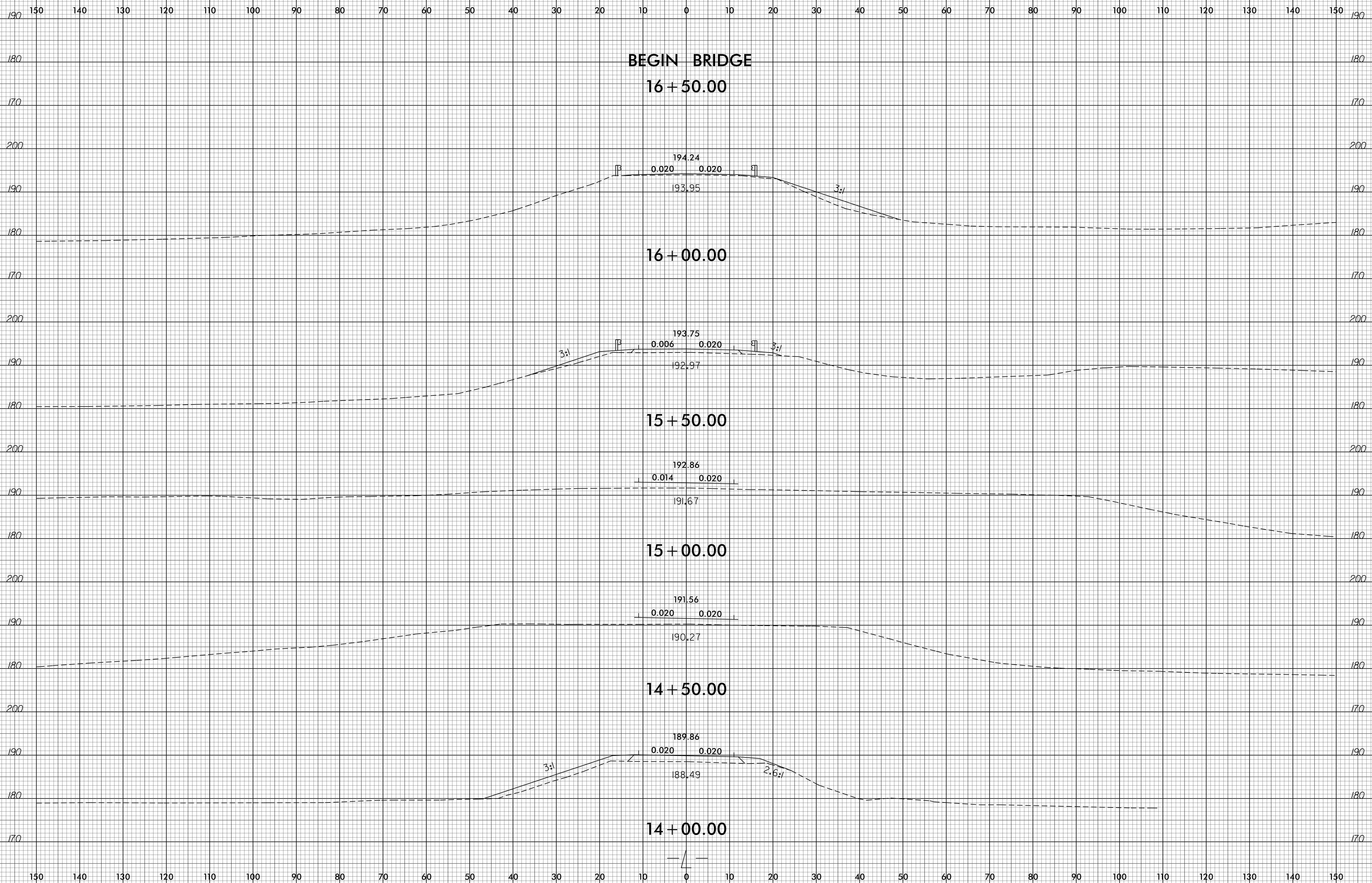
8/23/99



22-AUG-2013 15:42 S:\DOC\PROJECTS\I-5500 45470 Long Branch Rd over I-95 Exit 71-Harnett Co\Roadway\Xsc\42634\_RdJ\_xp1.L.dgn \$\$\$USERNAME\$\$\$

8/23/99

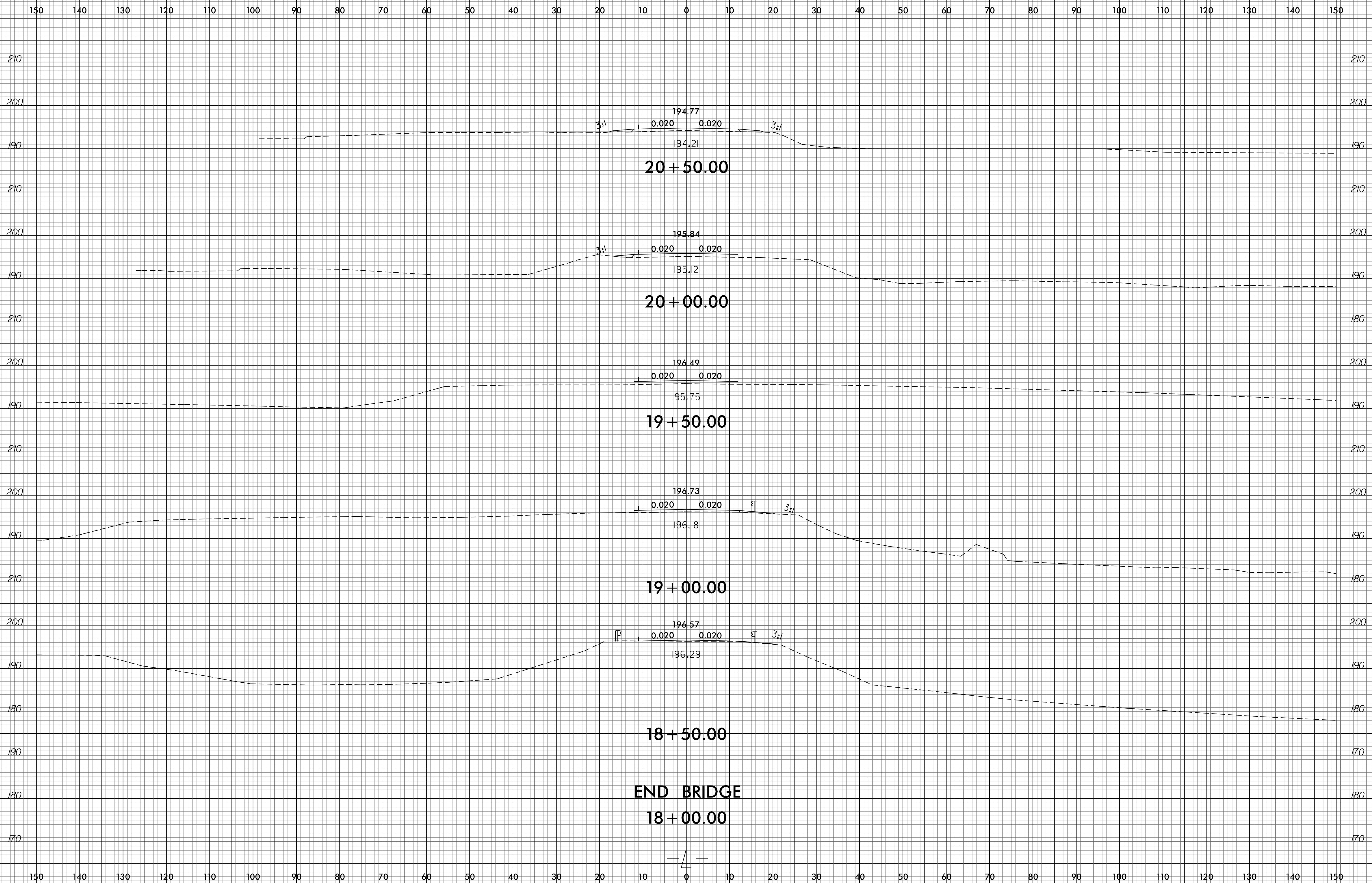
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5500	X-2



22-AUG-2013 15:43 S:\DOC\PROJECTS\I-5500 45470 Long Branch Rd over I-95 Exit 71 Harnett Co\Roadway\asc\42634\_RdJ\_xpl.L.dgn \$\$\$USERNAME\$\$\$

8/23/99

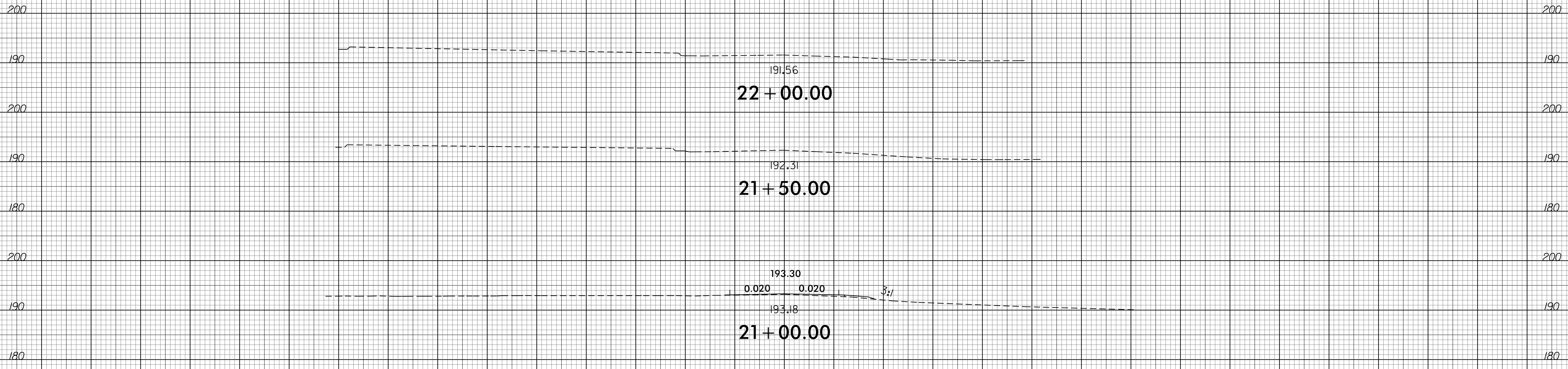
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5500	X-3



22-AUG-2013 15:44 S:\DOC\PROJECTS\I-5500 45470 Long Branch Rd over I-95 Exit 71 Harnett Co\Roadway\Xsc\42634\_RdJ\_xp1.L.dgn \$\$\$USERNAME\$\$\$



150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150

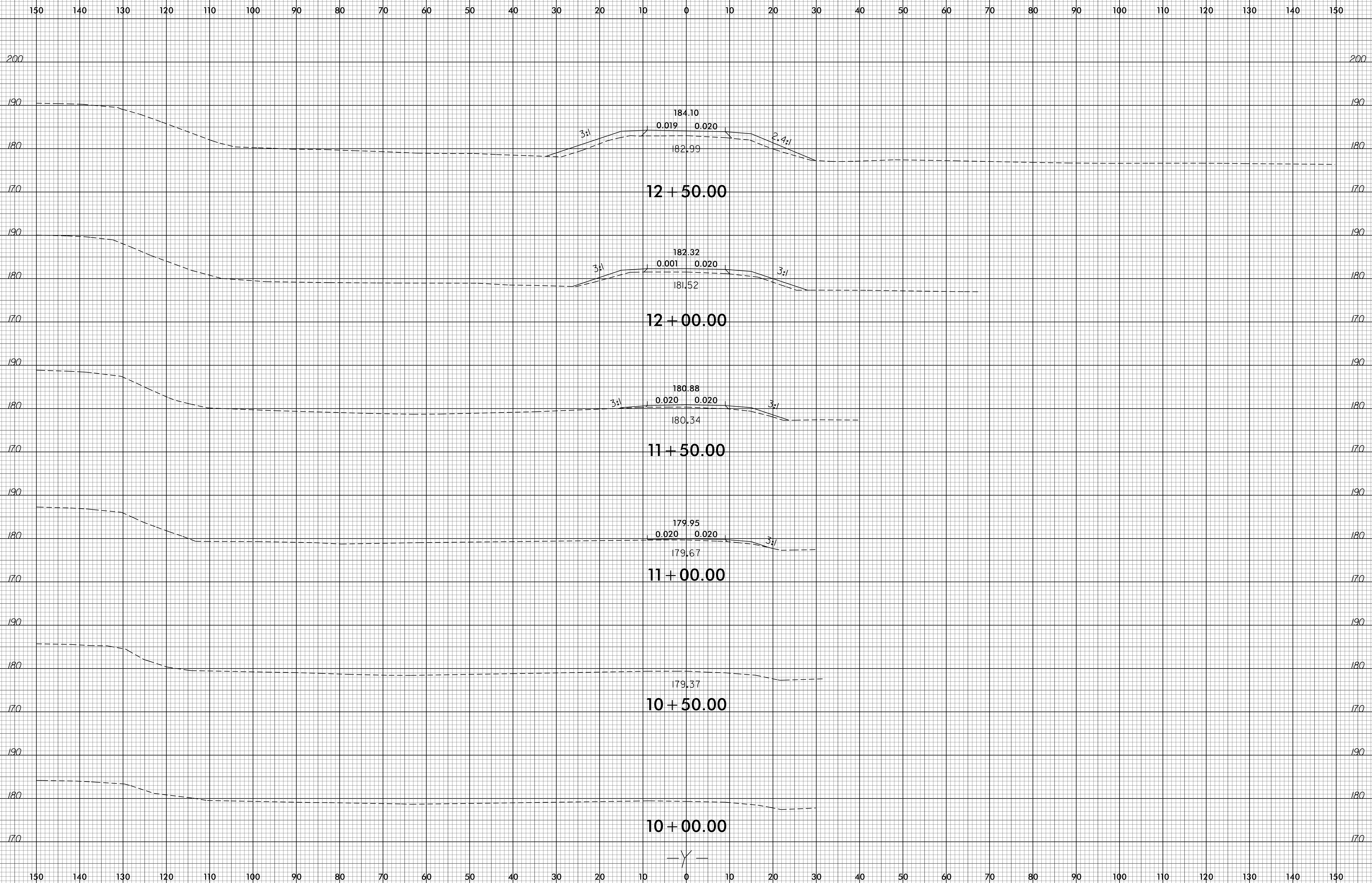


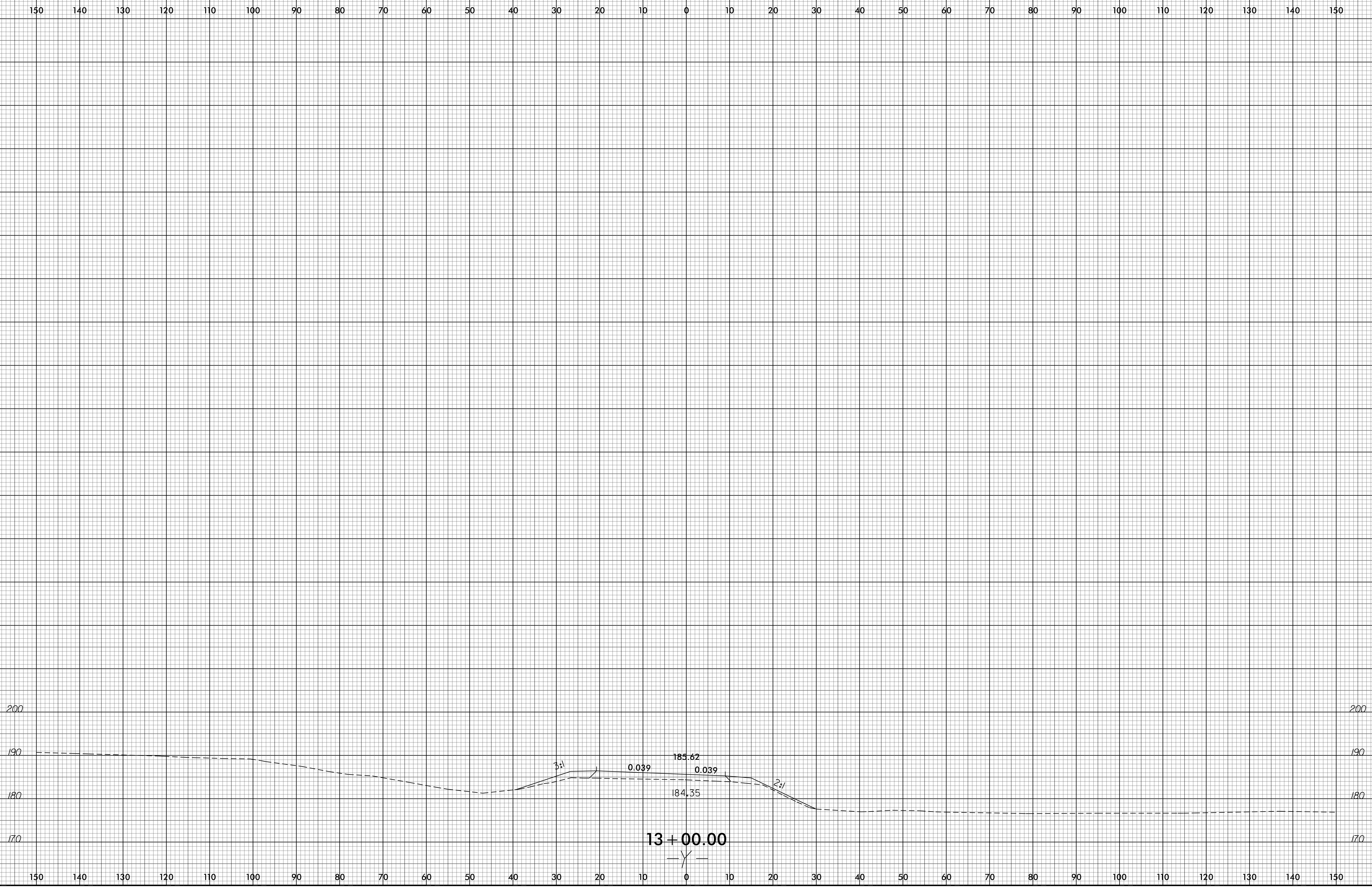
191.56  
**22 + 00.00**

192.31  
**21 + 50.00**

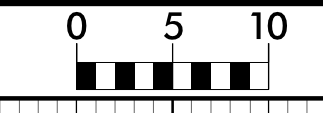
193.30  
0.020 0.020 5:1  
193.18  
**21 + 00.00**

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150



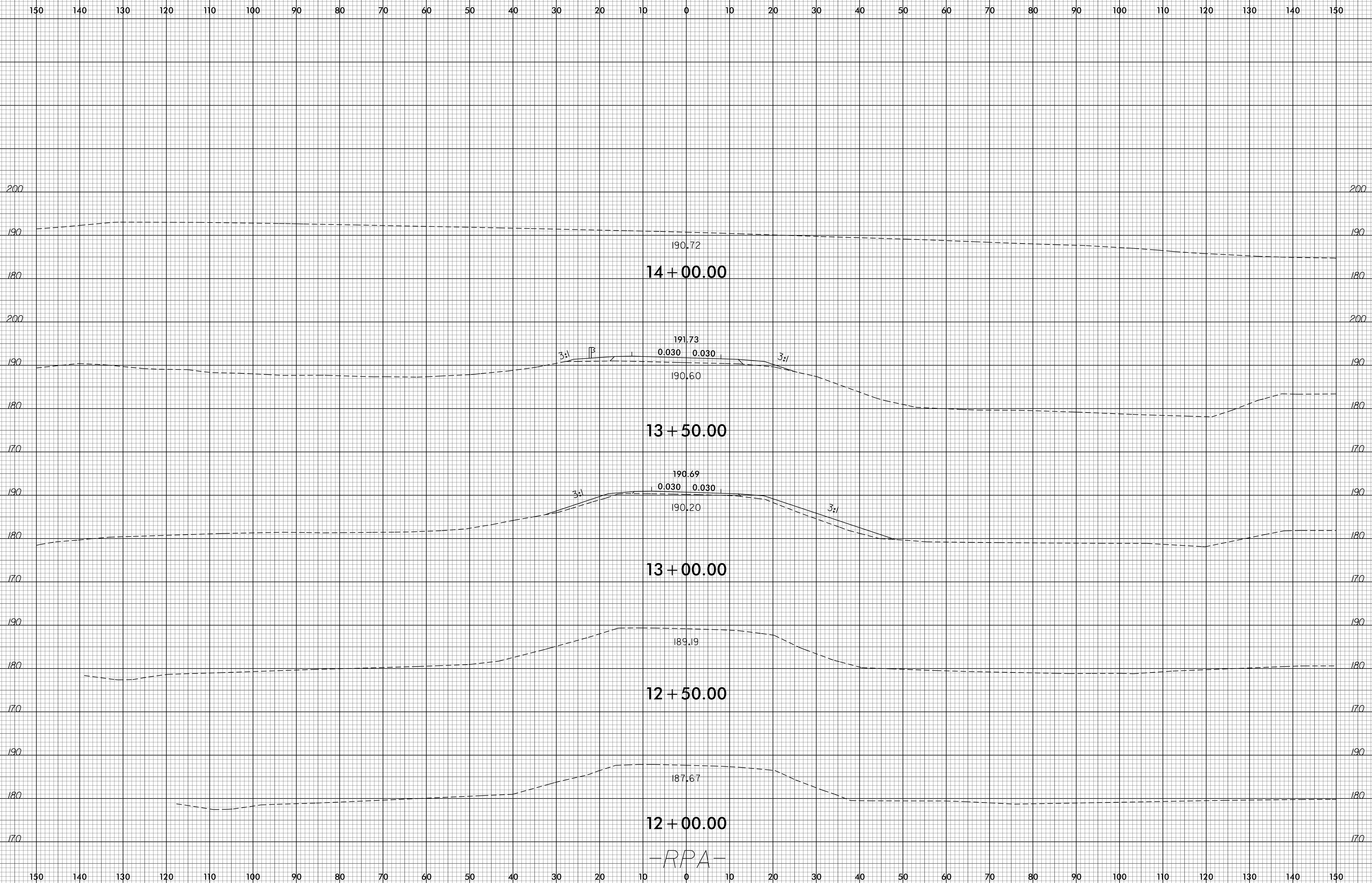


8/23/99



PROJ. REFERENCE NO.  
I-5500

SHEET NO.  
X-7

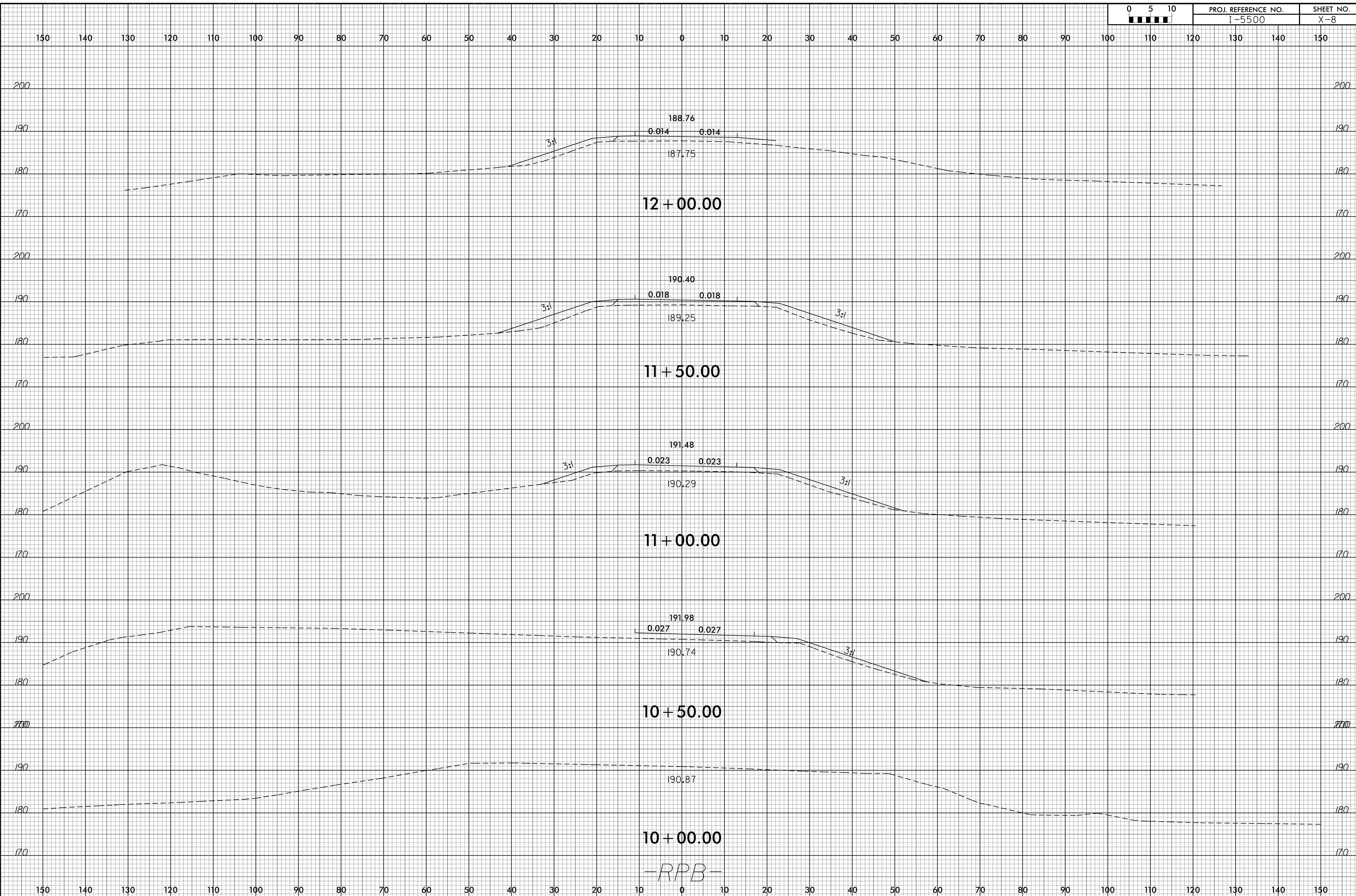


22-AUG-2013 15:53  
S:\DOC\PROJECTS\I-5500 45470 Long Branch Rd over I-95 Exit 71 Harnett Co\Roadway\Xsc\42634\_RdJ\_xp1\_RPA.dgn  
\$\$\$\$\$USERNAME\$\$\$\$\$



8/23/99

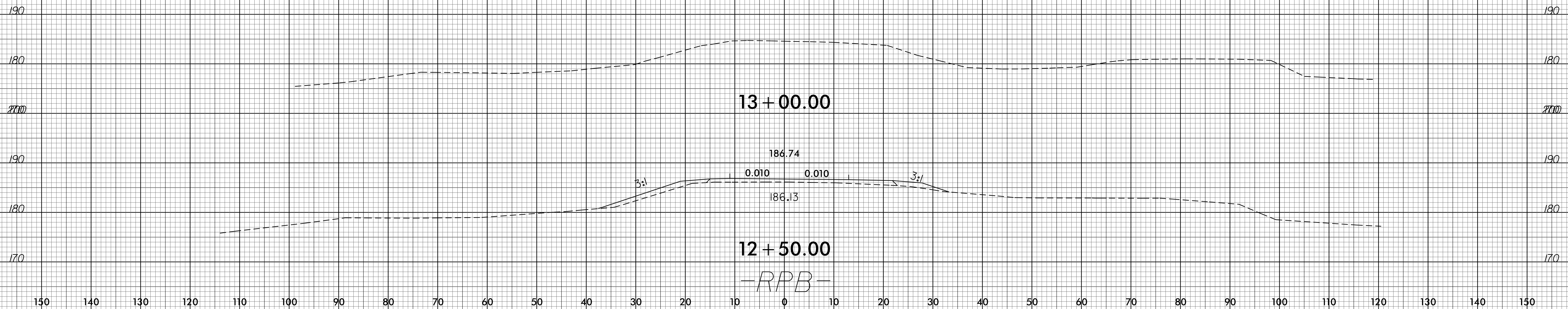
0 5 10	PROJ. REFERENCE NO.	SHEET NO.
	I-5500	X-8

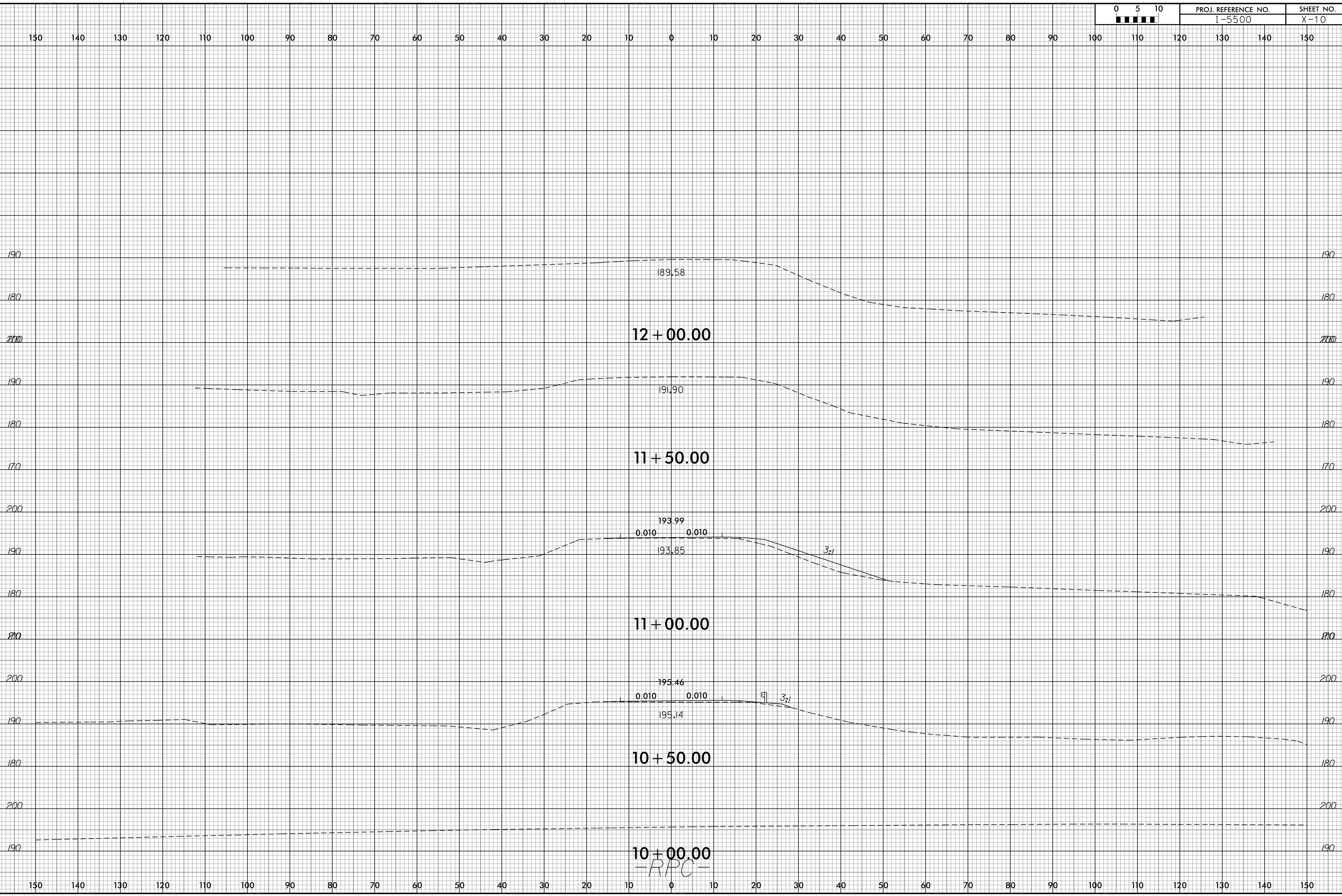


22-AUG-2013 15:55  
 S:\DOC\PROJECTS\I-5500\45470 Long Branch Rd over I-95 Exit 71\_Harnett Co\Roadway\Xsc\42634\_Rdy\_xp1\_RPB.dgn  
 \$\$\$USERNAME\$\$\$

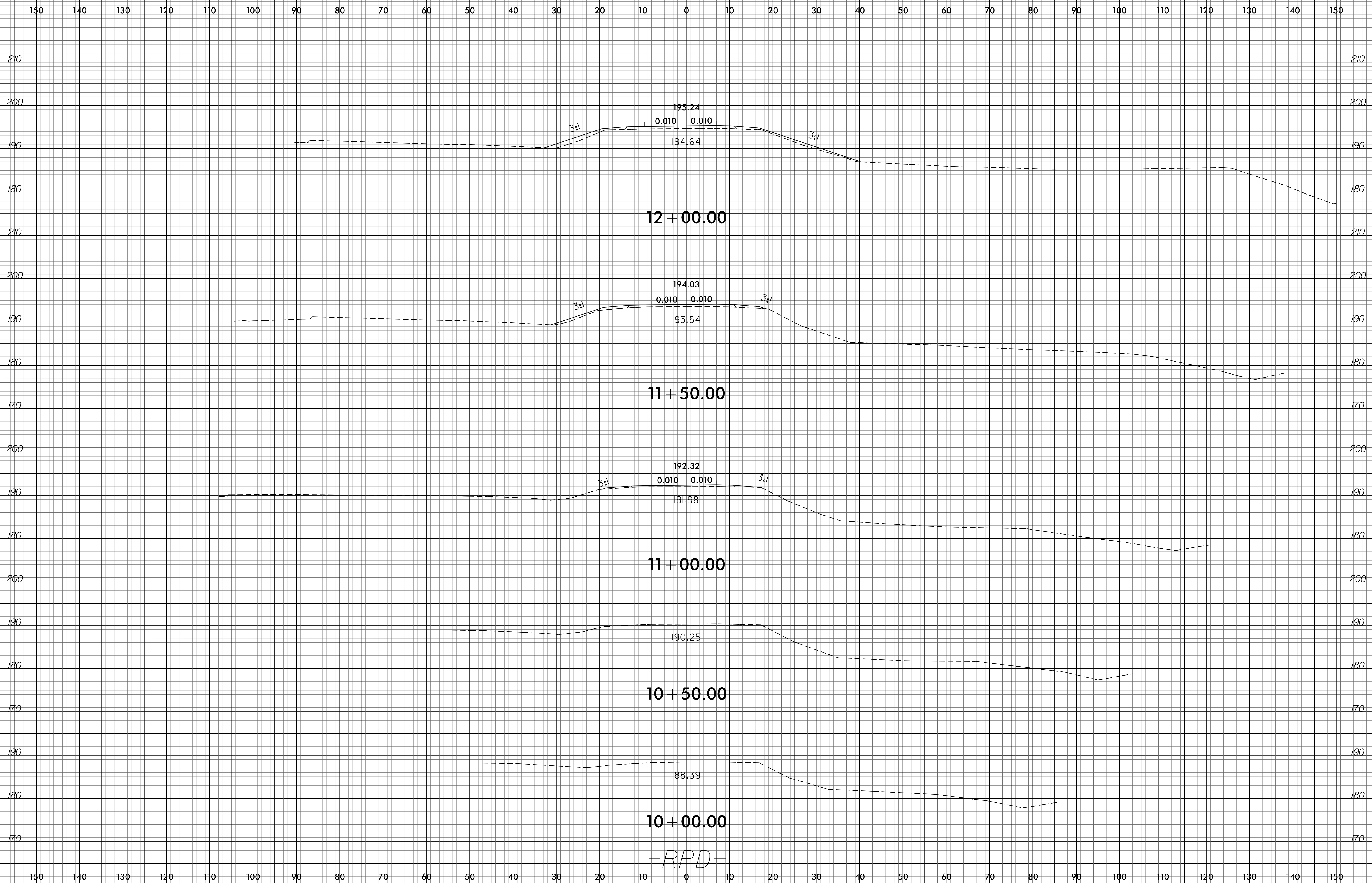
-RPB-

150 140 130 120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150





8/23/99

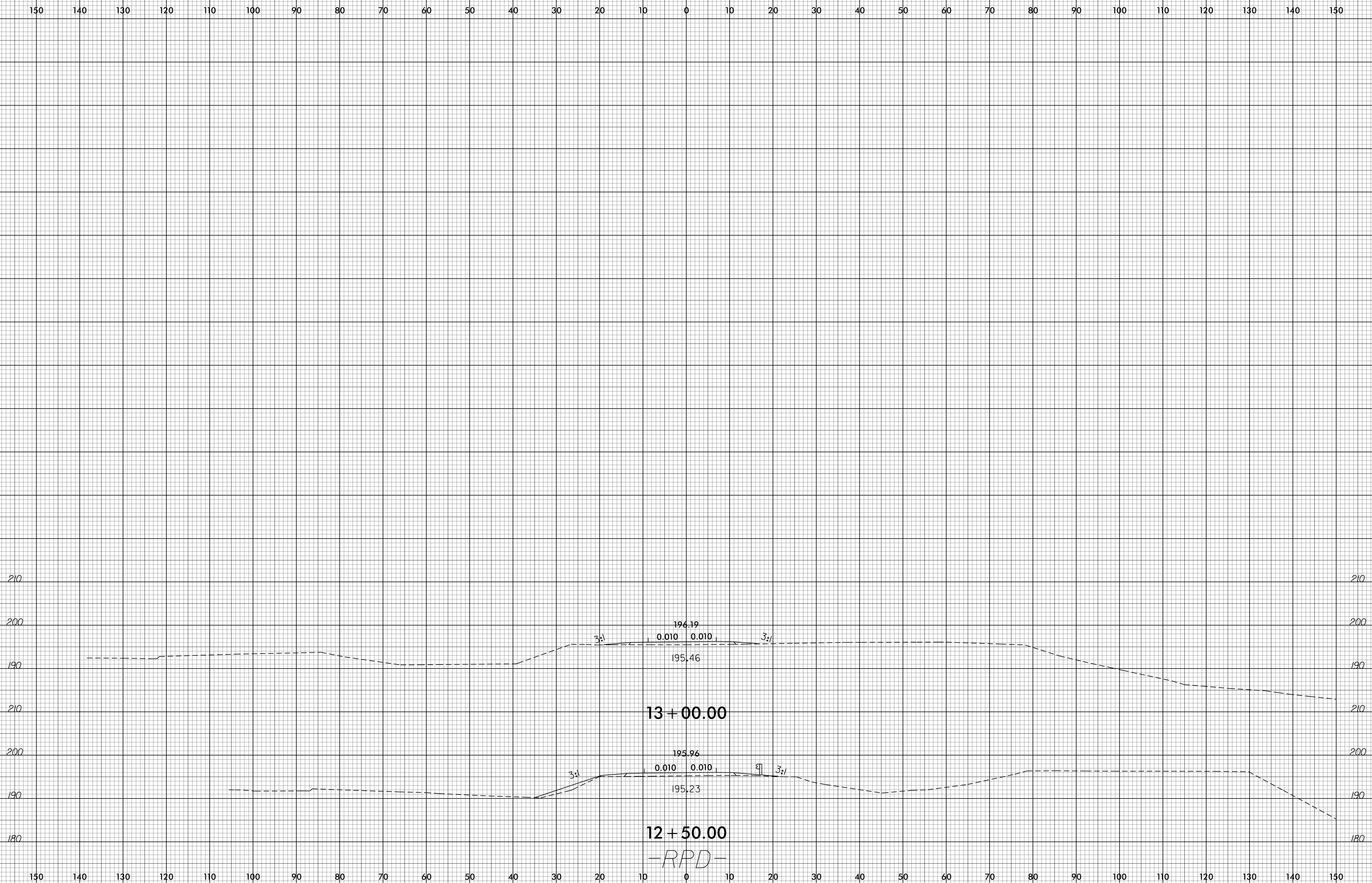


-RPD-

22-AUG-2013 16:10 S:\DOC\PROJECTS\I-5500\45470 Long Branch Rd over I-95 Exit 71 Harnett Co\Roadway\Xsc\42634\_RdJ\_xp1\_RPD.dgn \$\$\$USERNAME\$\$\$



8/23/99



22-AUG-2013 16:42 S:\DOC\PROJECTS\I-5500 45470 Long Branch Rd over I-95 Exit 71 Harnett Co\Roadway\Xsc\42634\_RdJ\_xp1\_RPD.dgn \$\$\$USERNAME\$\$\$