STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLAN LEGEND

Town, County, State
Property Lines
R/W Lines-Existing
R/W Lines-Proposed
Centerline-Existing
Centerline-Proposed
Travelway-Existing
Travelway-Proposed
Railroad
Culvert-Existing
Culvert Proposed
Catch Basins Existing Proposed
Manholes Existing Proposed
Proposed Underdrain
Proposed Ditch
Existing Ditch
Curbing Existing Proposed
Type 1
Type 3
Type 5
Utility Poles Existing Proposed
Fire Hydrants Existing Proposed
Existing Water Line
Existing San. Sewer
Existing San. Sewer Manhole
Outline of Bodies of Water
Ledge
Buildings
Trees Conifer Deciduous
Tree Line
Clearing Limit Line CLL
Guardrail-Existing
Guardrail-Proposed
Guardrail-Cable, Other

YARMOUTH

CUMBERLAND COUNTY
I-295 EXIT 15 (ROUTE 1)
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 & 17490.00
PROJECT LENGTH: 0.670 MILES
INTERCHANGE IMPROVEMENTS AND PARK & RIDE

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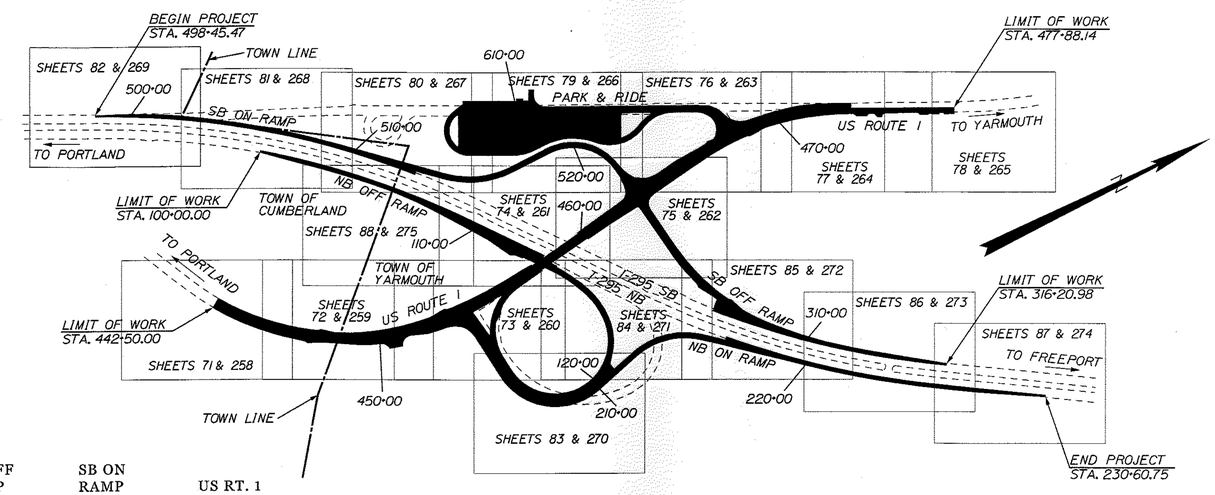


LAYOUT SCALE

0 300 600 900

Scale in Feet

TRAFFIC DATA

	NB OFF RAMP	NB ON RAMP	SB OFF RAMP	SB ON RAMP	US RT. 1
Current (2010) AADT	4000	1120	920	4040	14,870
Future (2030) AADT	4800	1340	1100	4850	17,840
DHV - % of AADT	16%	17%	8%	11%	11%
Design Hour Volume	774	223	89	553	2037
% Heavy Trucks (AADT)	3%	4%	4%	3%	4%
% Heavy Trucks (DHV)	3%	4%	4%	3%	4%
Directional Distribution (DHV)	100%	100%	100%	100%	64%
18 kip Equivalent P 2.0	149	51	38	180	372
18 kip Equivalent P 2.5	142	49	36	172	354
Design Speed (mph)	30	30-35	35	30-35	50
Functional Class:	PRINCIPAL ARTERIAL INERSTATE	PRINCIPAL ARTERIAL INERSTATE	PRINCIPAL ARTERIAL INERSTATE	PRINCIPAL ARTERIAL INERSTATE	MAJOR URBAN COLLECTOR

PROJECT LOCATION:	HIGHWAY CONSTRUCTION I-295 EXIT 15 TO UPGRADE SOUTHBOUND RAMPS, NORTHBOUND OFF RAMP AND CONSTRUCT A NEW NORTHBOUND ON RAMP. CONSTRUCTION OF A NEW PARK AND RIDE LOT IS ALSO INCLUDED IN THE SCOPE.
PROGRAM AREA:	HIGHWAY PROGRAM
SCOPE OF WORK:	PAVEMENT RECONSTRUCTION, GRADING, DRAINAGE, LIGHTING, RAMP CONSTRUCTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
COMMISSIONER: DATE 12/14/12
CHIEF ENGINEER: DATE 12-14-12

STATE OF MAINE WILLIAM J. REED No. 5949 LICENSED PROFESSIONAL ENGINEER

PROJECT INFORMATION
PROGRAM: HIGHWAY PROGRAM
PROJECT MANAGER: ERNIE MARTIN
DESIGNER: MARK DESOWITZ
CONSULTANT: RVE, STRAFFORD, THORNDIKE
PROJECT RESIDENT:
CONTRACTOR:
PROJECT COMPLETION DATE:

SIGNATURE 5949
P.E. NUMBER
12-12-12
DATE

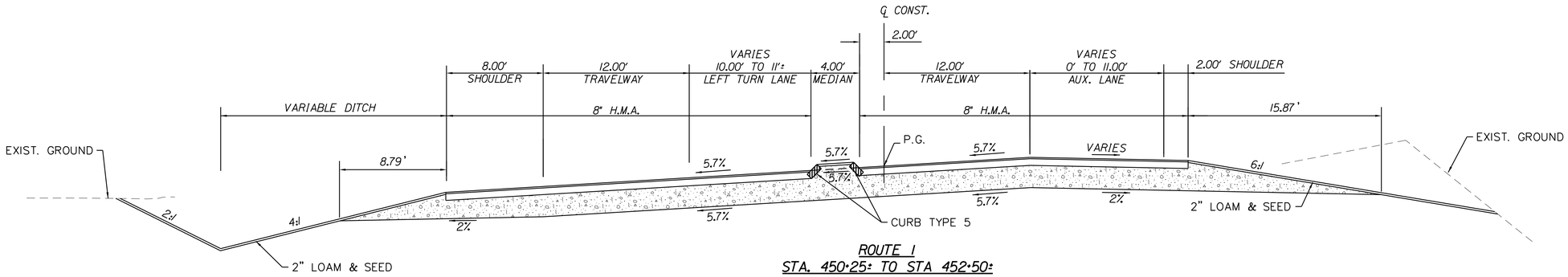
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00
WIN 17490.00

YARMOUTH
I-295 EXIT 15

TITLE SHEET

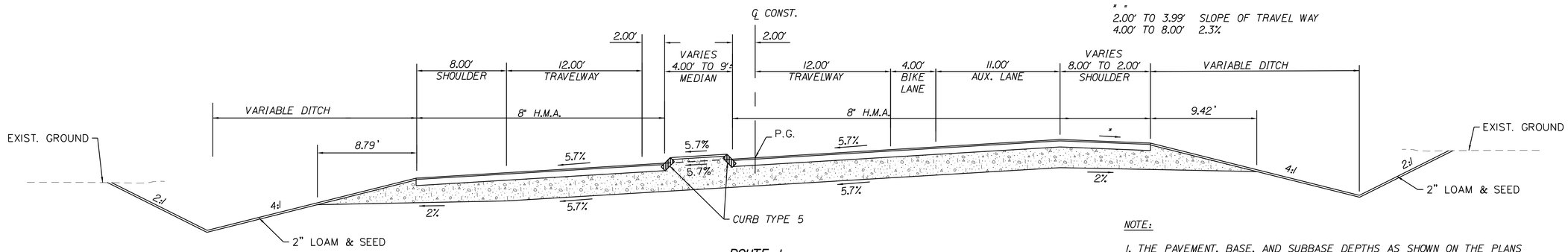
SHEET NUMBER
1
OF 283

Filename: ...\00\HIGHWAY\MSTA\001_TITLE.dgn Division: BRIDGE Username: common Date:12/12/2012



ROUTE 1
STA. 450+25± TO STA 452+50±
NOT TO SCALE

A.S.C.G. = 530.09 C.Y./100 L.F.



* *
2.00' TO 3.99' SLOPE OF TRAVEL WAY
4.00' TO 8.00' 2.3%

ROUTE 1
STA. 448+25± TO STA 450+25±
NOT TO SCALE

A.S.C.G. = 492.47 C.Y./100 L.F.

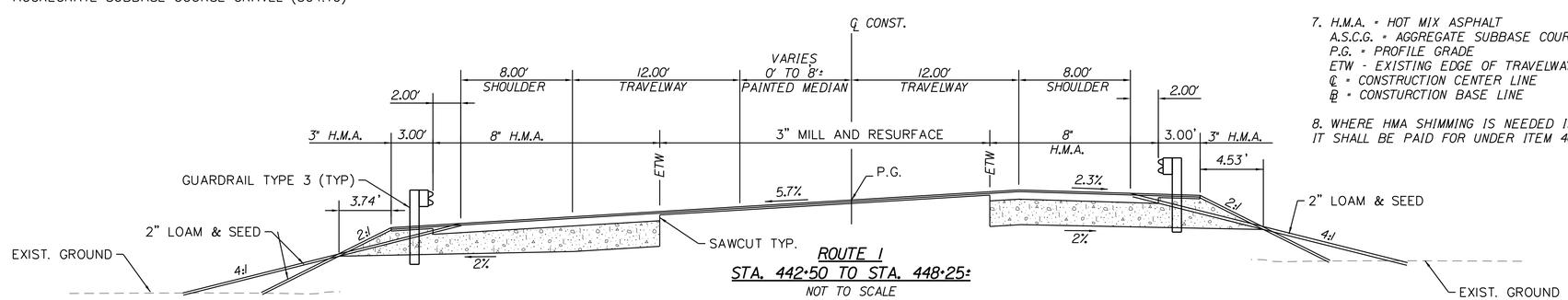
PAVEMENT NOTES – ROUTE 1

OVERLAY:
1.5" H.M.A. 12.5mm. SURFACE (403.208)
1.5" H.M.A. 12.5mm. BASE (403.213)
AFTER MILLING

FULL DEPTH PAVEMENT:
1.5" H.M.A. 12.5mm. SURFACE (403.208)
6.5" H.M.A. 12.5mm. BASE (403.213)
22.0" AGGREGRATE SUBBASE COURSE GRAVEL (304.10)

NOTE:

1. THE PAVEMENT, BASE, AND SUBBASE DEPTHS AS SHOWN ON THE PLANS ARE INTENDED TO BE NOMINAL.
2. WHEN SUPERELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE SHOULDER, THE LOW SIDE SHOULDERS PAVEMENTS SHALL HAVE THE SAME CROSS SLOPE AS THE TRAVEL WAY.
3. CROWNS FOR BOTH NORMAL AND SUPERELEVATION SECTIONS FOR ALL COURSES OF SUBBASE AND PAVEMENT SHALL BE STRAIGHT.
4. THE GRAVEL QUANTITY CALCULATION IS BASED ON A 2" LOAM OR DIRTY BORROW DEPTH. THE ACTUAL DEPTH MAY VARY. SEE THE GENERAL NOTES.
5. THE ALGEBRAIC DIFFERENCE BETWEEN SHOULDER AND TRAVEL LANE CROSS SLOPES "ROLL-OVER" SHALL NOT EXCEED 8%.
6. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE
7. H.M.A. = HOT MIX ASPHALT
   A.S.C.G. = AGGREGATE SUBBASE COURSE GRAVEL
   P.G. = PROFILE GRADE
   ETW - EXISTING EDGE OF TRAVELWAY
   ℄ = CONSTRUCTION CENTER LINE
   ⅊ = CONSTURCTION BASE LINE
8. WHERE HMA SHIMMING IS NEEDED IN AREAS OF MILLING AND RESURFACING, IT SHALL BE PAID FOR UNDER ITEM 403.213, HOT MIX ASPHALT 12.5MM BASE



ROUTE 1
STA. 442+50 TO STA. 448+25±
NOT TO SCALE

GUARDRAIL STA. 442+50 LT
TO STA. 447+40 LT

A.S.C.G. = 284.85 C.Y./100 L.F.
STA. 442+50 TO STA. 446+80

A.S.C.G. = 266.13 C.Y./100 L.F.
STA. 446+80 TO STA. 447+40

A.S.C.G. = 252.16 C.Y./100 L.F.
STA. 447+40 TO STA. 448+25

GUARDRAIL STA. 442+50 RT
TO STA. 446+80 RT

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED		WJG	
CHECKED-REVIEWED		MJD	
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

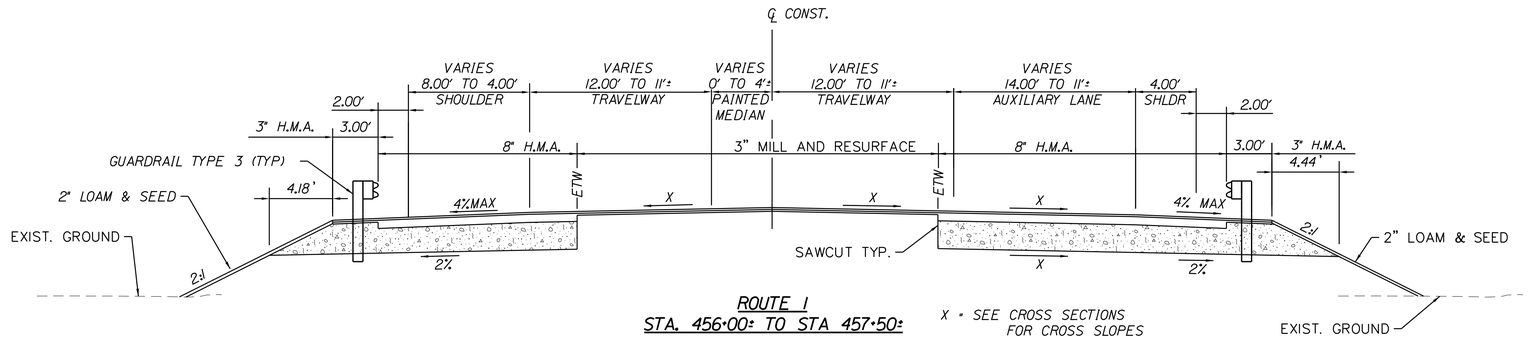
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

SHEET NUMBER
2
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

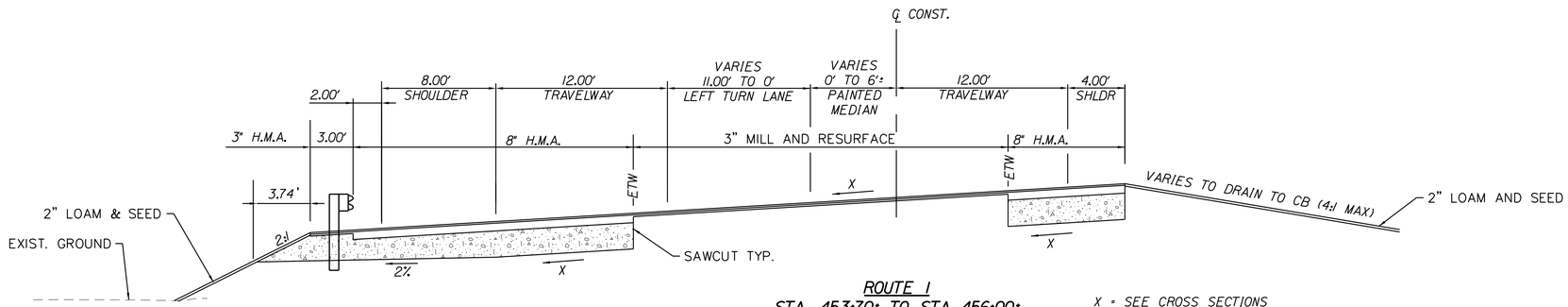


ROUTE I
STA. 456+00± TO STA 457+50±

NOT TO SCALE

A.S.C.G. = 312.46 C.Y./100 L.F.

X = SEE CROSS SECTIONS FOR CROSS SLOPES

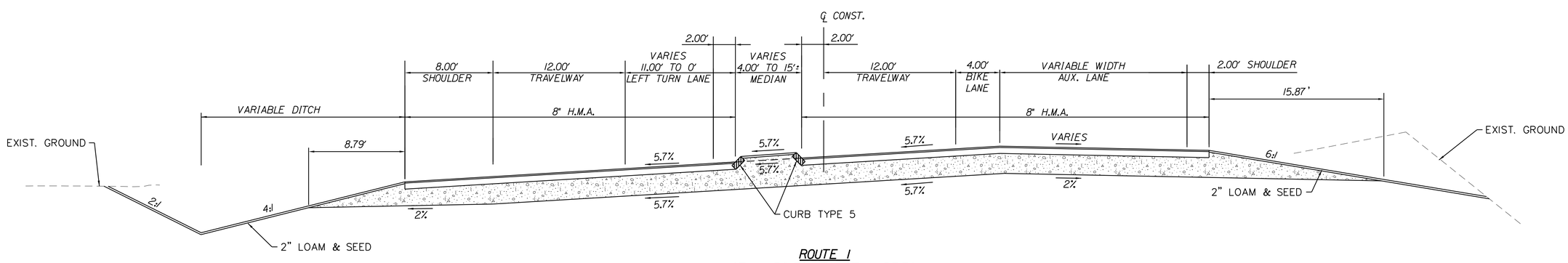


ROUTE I
STA. 453+70± TO STA 456+00±

NOT TO SCALE

A.S.C.G. = 232.75 C.Y./100 L.F.

X = SEE CROSS SECTIONS FOR CROSS SLOPES



ROUTE I
STA. 452+50± TO STA 453+70±

NOT TO SCALE

A.S.C.G. = 616.24 C.Y./100 L.F.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	WJG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

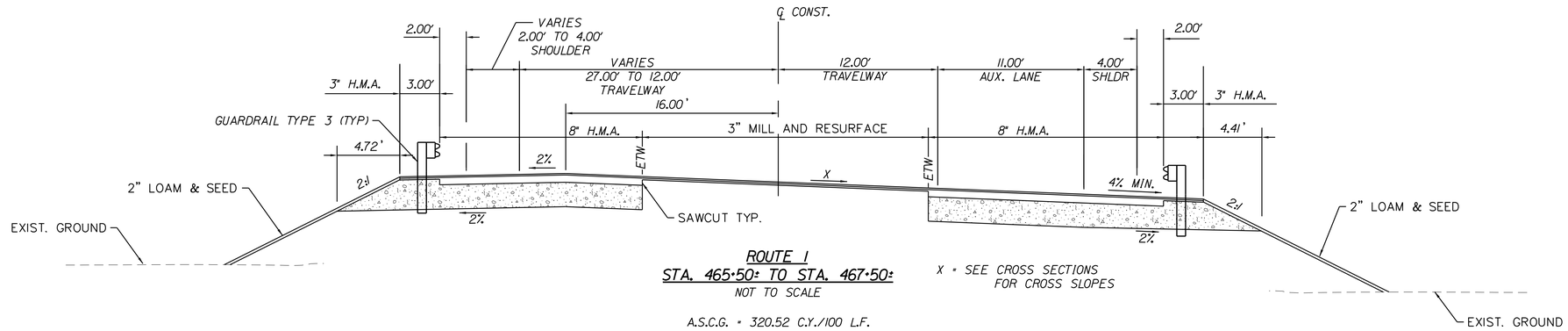
DATE

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

SHEET NUMBER
3
OF 283

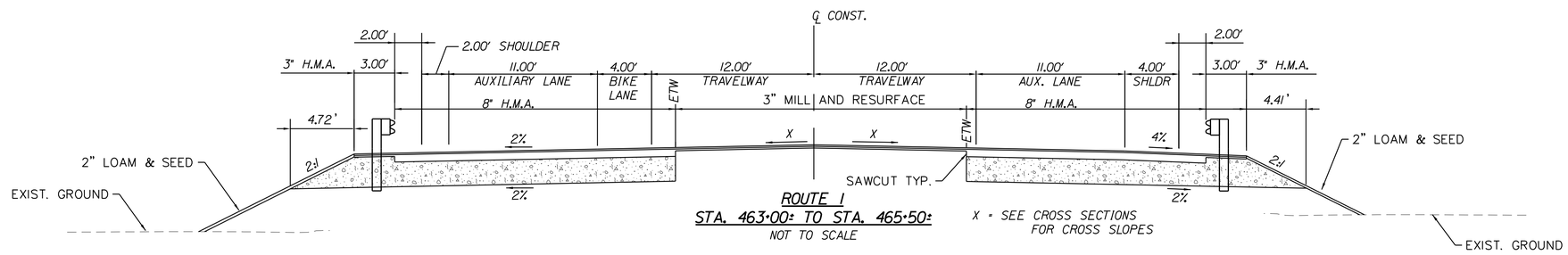
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



ROUTE 1
STA. 465+50± TO STA. 467+50±
NOT TO SCALE

X = SEE CROSS SECTIONS FOR CROSS SLOPES

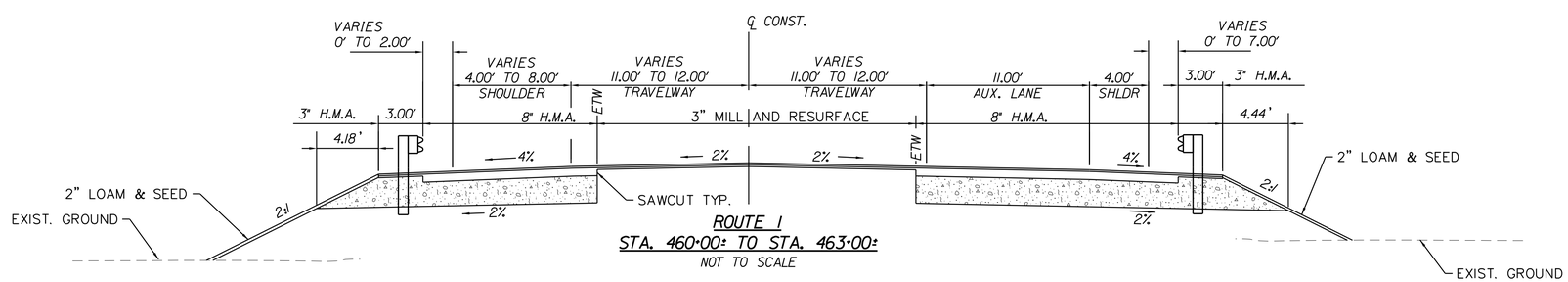
A.S.C.G. = 320.52 C.Y./100 L.F.



ROUTE 1
STA. 463+00± TO STA. 465+50±
NOT TO SCALE

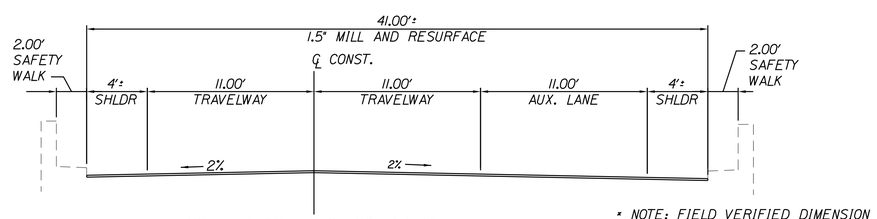
X = SEE CROSS SECTIONS FOR CROSS SLOPES

A.S.C.G. = 354.99 C.Y./100 L.F.



ROUTE 1
STA. 460+00± TO STA. 463+00±
NOT TO SCALE

A.S.C.G. = 295.43 C.Y./100 L.F.



ROUTE 1 ON EXISTING BRIDGE
STA. 457+50± TO STA. 460+00±
NOT TO SCALE

* NOTE: FIELD VERIFIED DIMENSION

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	W.JG	
CHECKED-REVIEWED	M.JD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

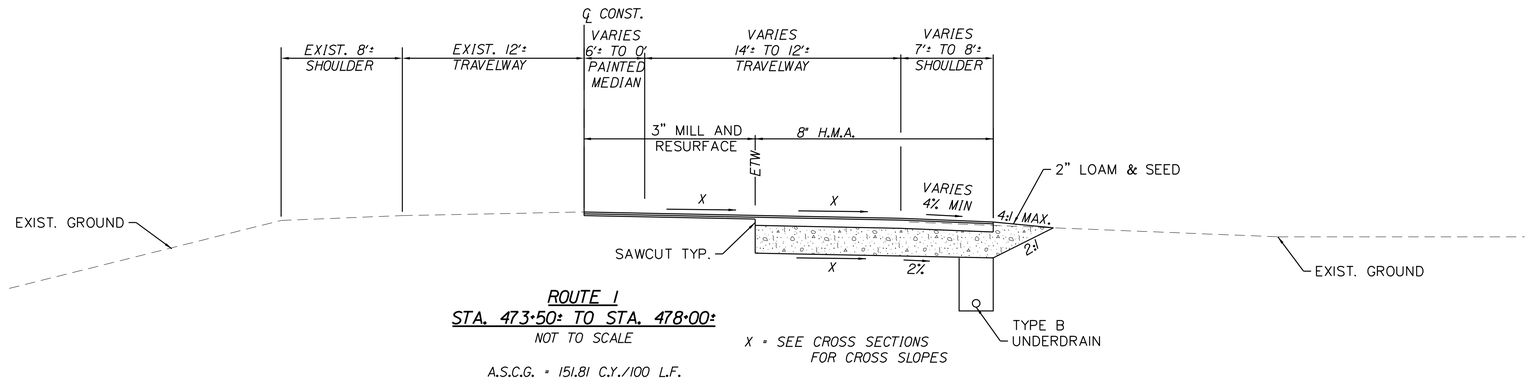
DATE

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

SHEET NUMBER
4
OF 283

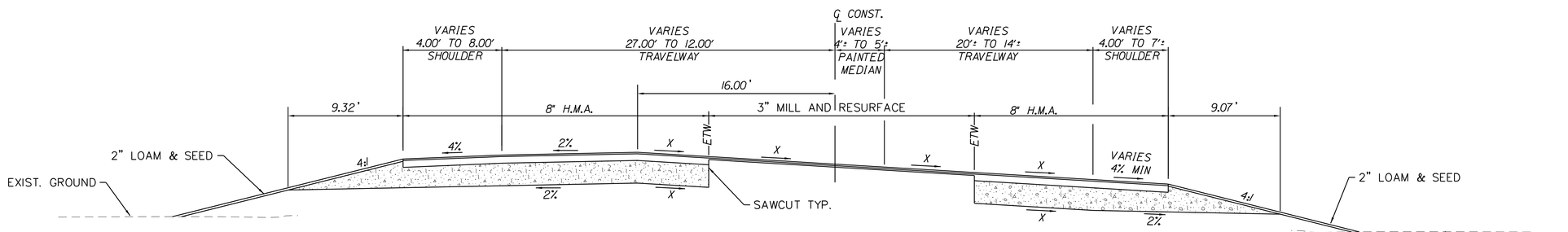
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



ROUTE 1
STA. 473+50± TO STA. 478+00±
NOT TO SCALE

X = SEE CROSS SECTIONS FOR CROSS SLOPES

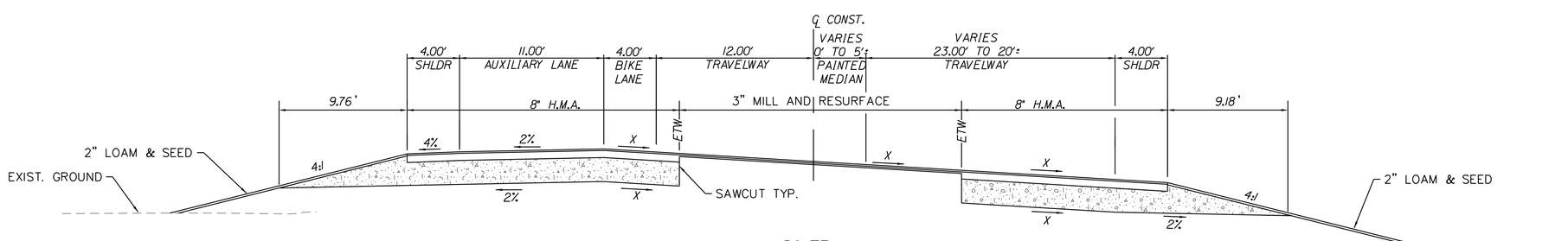
A.S.C.G. = 151.81 C.Y./100 L.F.



ROUTE 1
STA. 471+15± TO STA. 473+50±
NOT TO SCALE

X = SEE CROSS SECTIONS FOR CROSS SLOPES

A.S.C.G. = 359.56 C.Y./100 L.F.



ROUTE 1
STA. 467+50± TO STA. 471+15±
NOT TO SCALE

X = SEE CROSS SECTIONS FOR CROSS SLOPES

A.S.C.G. = 333.15 C.Y./100 L.F.

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	W.JG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

SHEET NUMBER
5
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

ROUTE 1 - SUPERELEVATION TABLE						
LT. SHOULDER	AUXILIARY	TRAVELWAY	STATION	TRAVELWAY	AUXILIARY	RT. SHOULDER
-5.7	-	-5.7	441+16.95	5.7	-	-2.3
			TO			
-5.7	-	-5.7	448+00	5.7	-	-2.3
-5.7	-	-5.7	448+50	5.7	-2.0	-2.0
			TO			
-5.7	-	-5.7	453+50	5.7	-2.0	-2.0
-5.7	-	-5.7	454+00	5.7	-	-
-5.7	-5.7	-5.7	454+50	5.7	-	5.7
-4.2	-4.2	-4.2	455+00	4.2	-	4.2
-4.0	-2.6	-2.6	455+50	2.6	-	2.6
-4.0	-	-2.0	456+00	1.1	-2.0	-4.0
-4.0	-	-2.0	456+50	-0.5	-2.0	-4.0
-4.0	-	-2.0	457+00	-2.0	-2.0	-4.0
			TO			
-2.0	-2.0	-2.0	464+00	-2.0	-2.0	-4.0
-2.0	-2.0	-0.4	464+50	-2.0	-	-4.0
-2.0	-2.0	1.2	465+00	-2.0	-	-4.0
-2.0	-2.0	2.7	465+50	-2.7	-	-4.0
-2.0	-2.0	4.3	466+00	-4.3	-	-4.3
			TO			
-2.0	-	4.3	467+00	-4.3	-	-4.3
-	-	5.7	467+50	-5.7	-	-5.7
			TO			
-4.0	-2.0	5.7	468+50	-5.7	-	-5.7
			TO			
-4.0	-2.0	5.7	472+00	-5.7	-	-5.7
-4.0	-2.0	4.8	472+50	-4.8	-	-4.8
-4.0	-	4.8	473+00	-4.8	-	-4.8
-	-	-	473+50	-4.1	-	-4.1
-	-	-	474+00	-3.4	-	-4.0
-	-	-	474+50	-2.7	-	-4.0
-	-	-	475+00	-2.0	-	-4.0
			TO			
-	-	-	477+00	-2.0	-	-4.0

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	WJG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

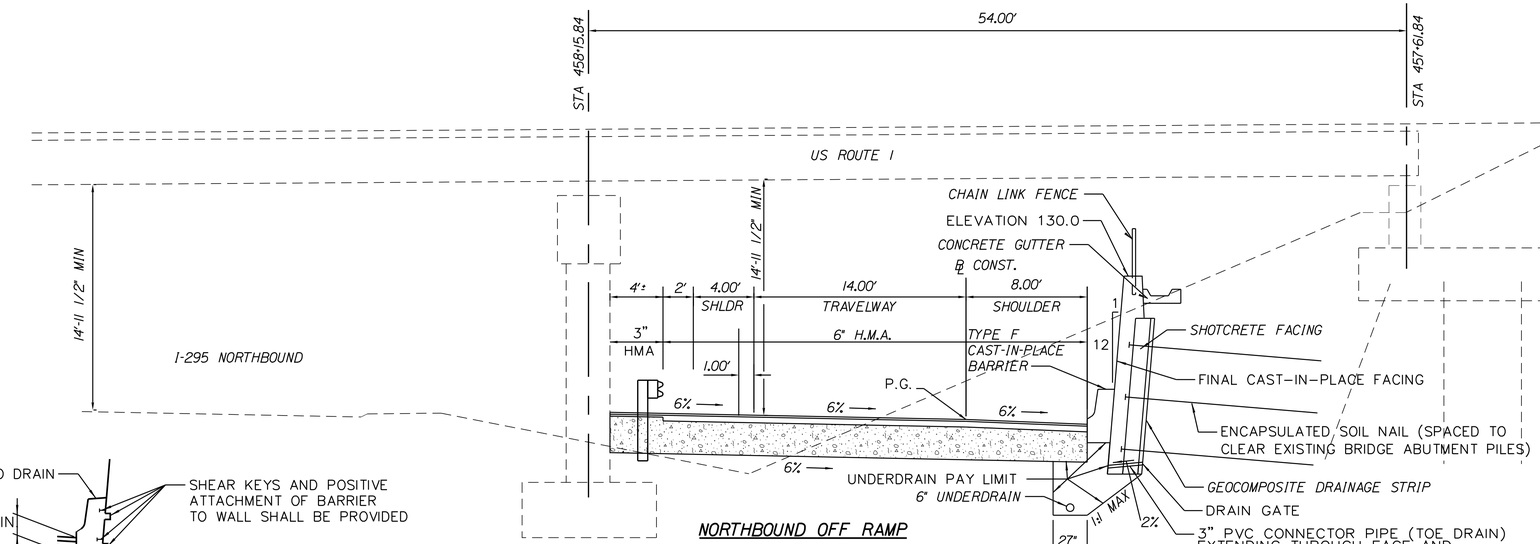
YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

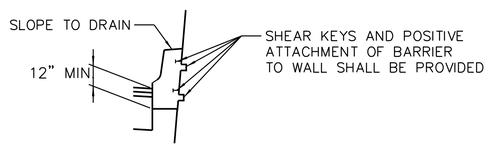
SHEET NUMBER

6

OF 283

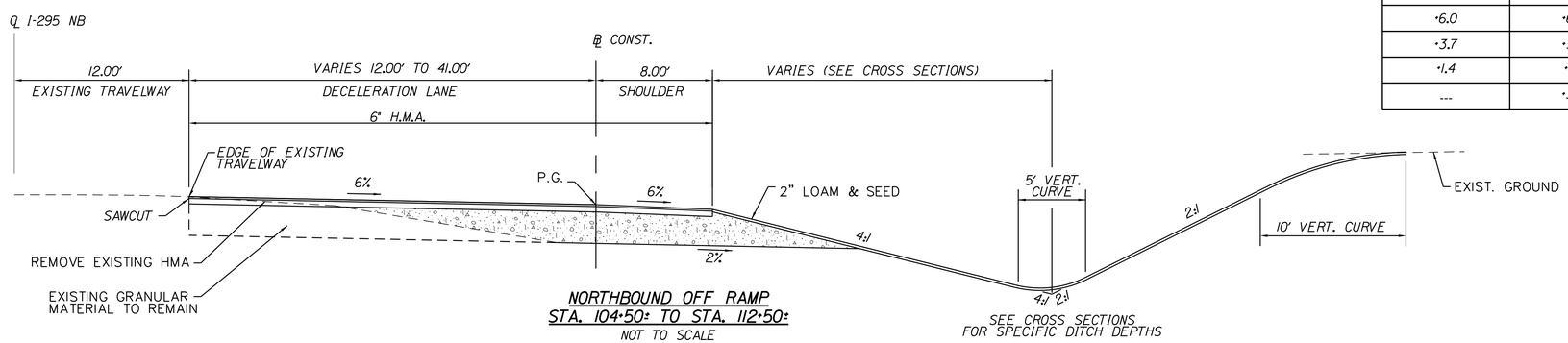


NORTHBOUND OFF RAMP
STA. 112+50± TO STA. 114+00±
NOT TO SCALE
A.S.C.G. = 298.04 C.Y./100 L.F.

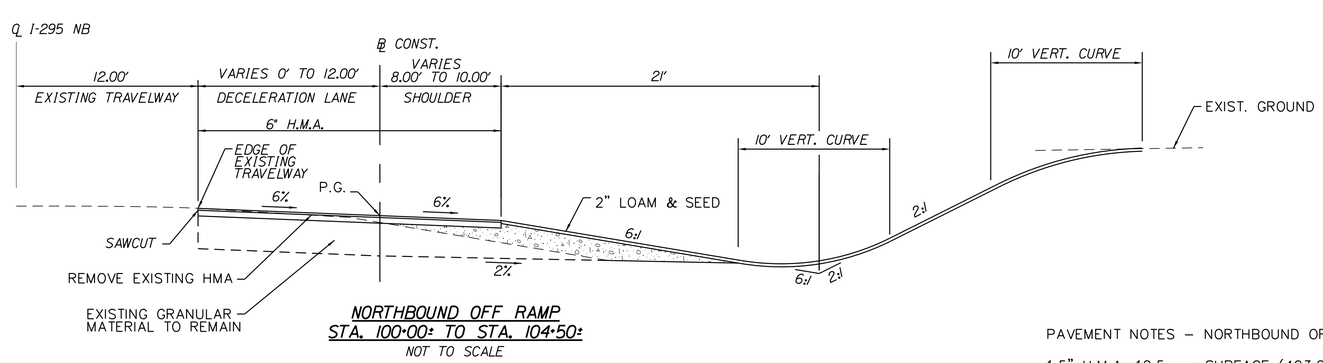


BARRIER DETAIL

NORTHBOUND OFF RAMP - SUPERELEVATION TABLE			
LT. SHOULDER	TRAVELWAY	STATION	RT. SHOULDER
-6.0	-6.0	100+00	-6.0
		TO	
-6.0	-6.0	114+00	-6.0
-2.0	-6.0	114+50	-6.0
-2.0	-6.0	115+00	-6.0
		TO	
-2.0	-6.0	118+00	-6.0
-2.0	-6.0	118+50	-6.0
-6.0	-6.0	119+00	-6.0
		TO	
-6.0	-6.0	127+00	-6.0
-3.7	-3.7	127+50	-4.0
-1.4	-1.4	128+00	-4.0
---	-3.4	128+47.50	-4.0



NORTHBOUND OFF RAMP
STA. 104+50± TO STA. 112+50±
NOT TO SCALE
A.S.C.G. = 342.89 C.Y./100 L.F.



NORTHBOUND OFF RAMP
STA. 100+00± TO STA. 104+50±
NOT TO SCALE
A.S.C.G. = 222.48 C.Y./100 L.F.

PAVEMENT NOTES – NORTHBOUND OFF RAMP

1.5" H.M.A. 12.5mm. SURFACE (403.208)
4.5" H.M.A. 12.5mm. BASE (403.213)
24.0" AGGREGRATE SUBBASE COURSE GRAVEL (304.10)

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

BY	DATE
WJG	
MJD	

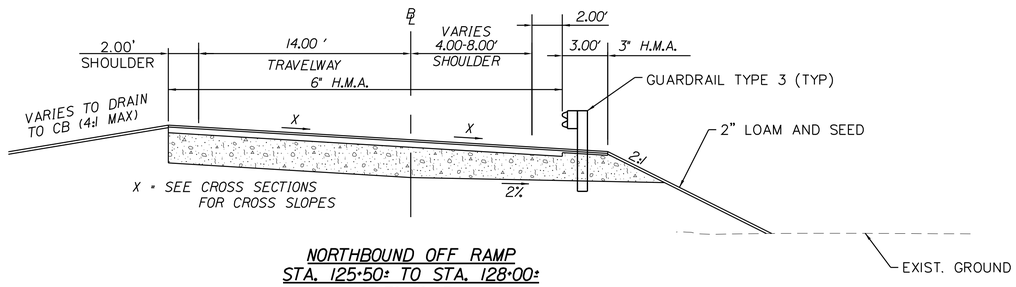
PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

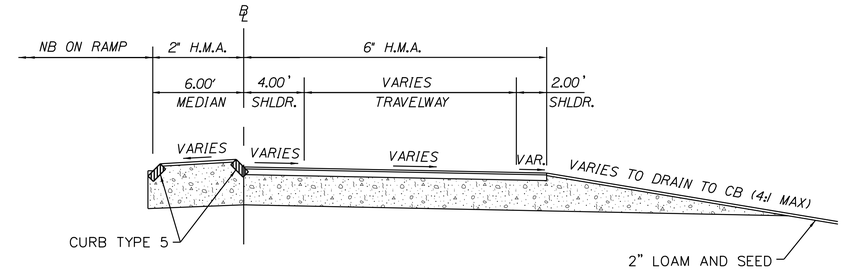
SHEET NUMBER
7
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



NORTHBOUND OFF RAMP
STA. 125+50± TO STA. 128+00±
NOT TO SCALE

A.S.C.G. = 208.81 C.Y./100 L.F.

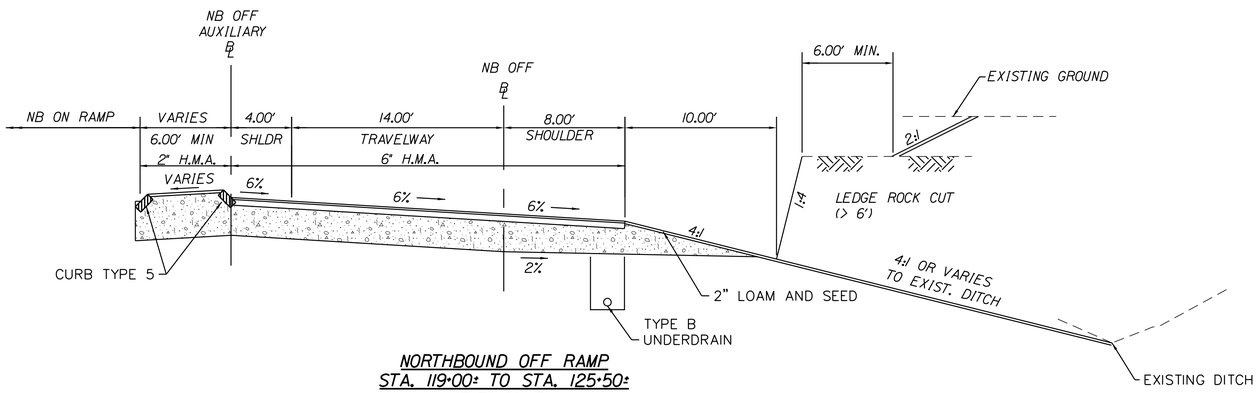


NORTHBOUND OFF AUXILIARY RAMP
STA. 150+00 TO STA. 152+35
NOT TO SCALE

A.S.C.G. = 271.89 C.Y./100 L.F.

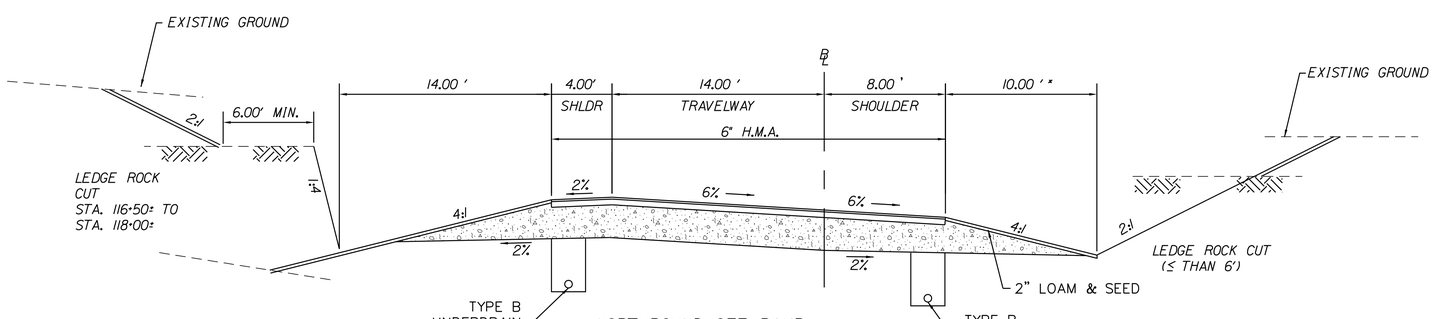
NORTHBOUND OFF AUXILIARY RAMP - SUPERELEVATION TABLE			
LT. SHOULDER	STATION	TRAVELWAY	RT. SHOULDER
-2.0	150+00	-2.0	-2.0
	TO		
-2.0	151+00	-2.0	-2.0
-1.0	151+50	-1.0	-1.0
0.0	152+00	0.0	0.0
+0.9 *	152+19.37 *	+0.9 *	+0.9 *

* MATCHES ROUTE 1 CROSS SECTION AND PROFILE



NORTHBOUND OFF RAMP
STA. 119+00± TO STA. 125+50±
NOT TO SCALE

A.S.C.G. = 217.74 C.Y./100 L.F.



NORTHBOUND OFF RAMP
STA. 114+00± TO STA. 119+00±
NOT TO SCALE

A.S.C.G. = 309.02 C.Y./100 L.F.

* NOTE:
STA. 114+00 TO STA. 116+00 DITCH DIMENSION VARIES TO ACHIEVE SPECIFIC DITCH DEPTHS (SEE CROSS SECTIONS)

NOTES:
1. STA. 113+50? TO STA 124+50? ADD ULTRA THIN BONDED WEARING COURSE TO TOP SURFACE

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	WJG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

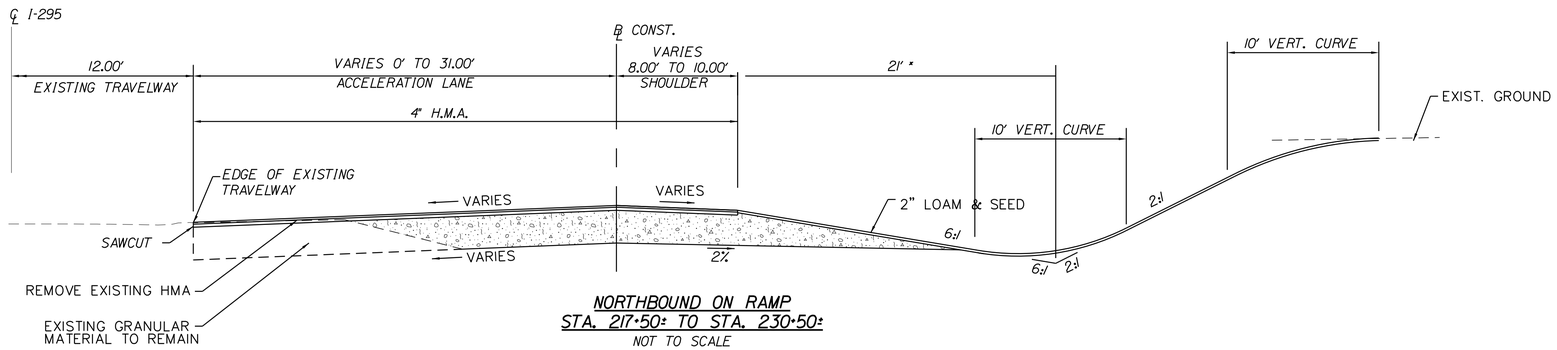
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

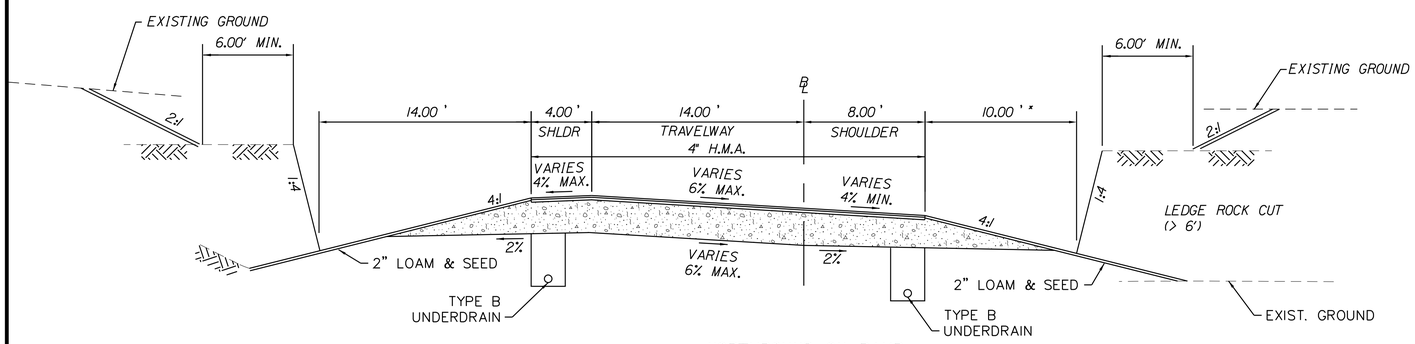
SHEET NUMBER
8
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



NORTHBOUND ON RAMP
STA. 217+50± TO STA. 230+50±
NOT TO SCALE

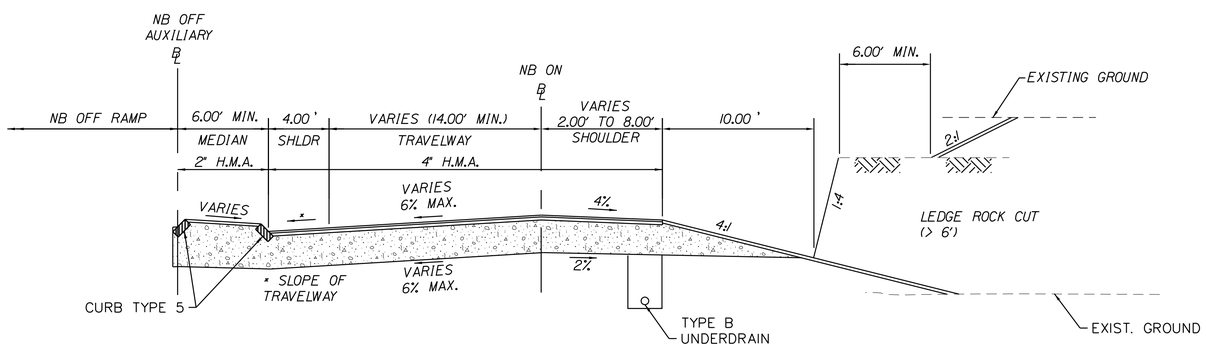
A.S.C.G. = 350.70 C.Y./100 L.F.



NORTHBOUND ON RAMP
STA. 210+50± TO STA. 217+50±
NOT TO SCALE

A.S.C.G. = 277.48 C.Y./100 L.F.

* NOTE:
STA. 212+50 TO STA. 214+00 DITCH DIMENSION VARIES TO ACHIEVE DITCH FLOW (SEE CROSS SECTIONS)



NORTHBOUND ON RAMP
STA. 203+00± TO STA. 210+50±
NOT TO SCALE

A.S.C.G. = 305.19 C.Y./100 L.F.

PAVEMENT NOTES - NORTHBOUND ON RAMP

1.5" H.M.A. 12.5mm. SURFACE (403.208)
2.5" H.M.A. 12.5mm. BASE (403.213)
26.0" AGGREGRATE SUBBASE COURSE GRAVEL (304.10)

NOT TO SCALE

NORTHBOUND ON RAMP - SUPERELEVATION TABLE

LT. SHOULDER	TRAVELWAY	STATION	RT. SHOULDER
		START	
-	+2.0	200+00	-2.0
-	+2.2	200+50	-2.0
-	+2.4	201+00	-2.0
-	+3.1	201+50	-2.0
-	+3.9	202+00	−3.9
-	+4.8	202+50	-4.8
+6.0	+6.0	203+00	-6.0
+3.6	+3.6	203+50	-4.0
1.2	1.2	204+00	-4.0
-1.2	-1.2	204+50	-4.0
-3.6	-3.6	205+00	-4.0
-6.0	-6.0	205+50	-2.0
		TO	
-6.0	-6.0	209+50	-2.0
-4.0	-4.0	210+00	-4.0
-4.0	-2.0	210+50	-4.0
-4.0	0	211+00	-4.0
-4.0	+2.0	211+50	-4.0
-4.0	+4.0	212+00	-4.0
-2.0	+6.0	212+50	-6.0
		TO	
-2.0	+6.0	214+50	-6.0
-4.0	+4.0	215+00	-4.0
-4.0	+2.0	215+50	-4.0
-4.0	0	216+00	-4.0
_	−1.6	216+50	-4.0
-	−2.0	217+00	-4.0
		TO	
-	-2.0	219+50	-4.0
-	−2.4	220+00	-4.0
-	−3.8	220+50	-3.4
-	−5.6	221+00	-2.0
-	−5.4	221+50	-2.0
-	−5.4	222+00	-2.0
-	−5.2	222+50	-2.0
-	−5.2	223+00	-2.0
-	−5.0	223+50	-2.0
-	−5.0	224+00	-2.0
-	−4.8	224+50	-2.0
-	−4.8	225+00	-2.0
-	−4.6	225+50	-3.6
-	-2.8	226+00	-4.0
-	-1.2	226+50	-4.0
-	+0.4	227+00	-4.0
-	+2.0	227+50	-4.0
		TO	
-	+2.0	230+00	-4.0
-	-	230+54.40	-4.0

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

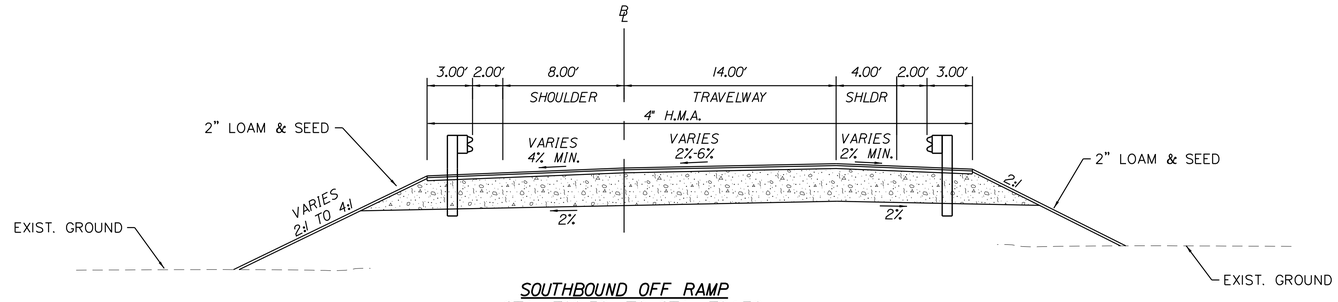
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	WJG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

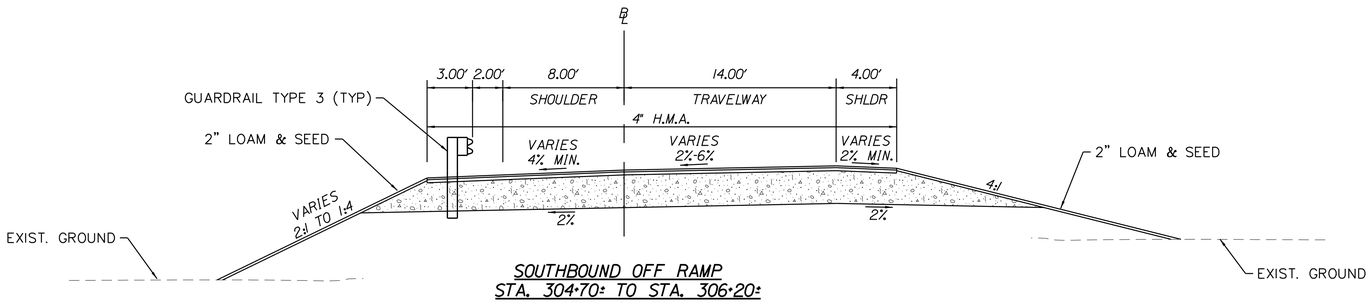
SHEET NUMBER
9
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



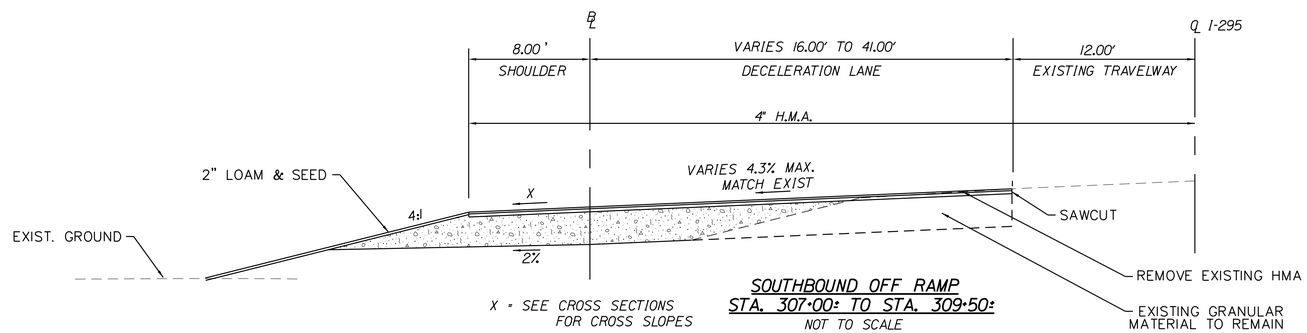
SOUTHBOUND OFF RAMP
STA. 300+50± TO STA. 304+70±
NOT TO SCALE

A.S.C.G. = 316.11 C.Y./100 L.F.



SOUTHBOUND OFF RAMP
STA. 304+70± TO STA. 306+20±
NOT TO SCALE

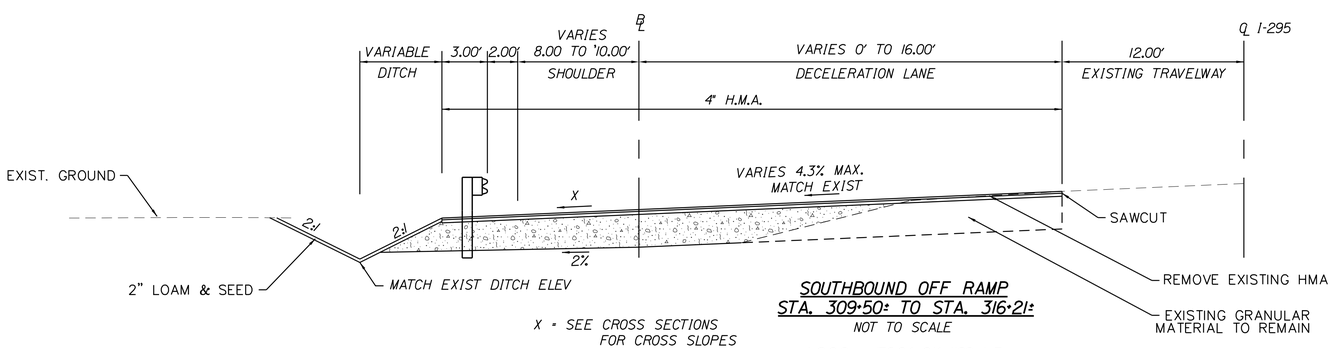
A.S.C.G. = 300.78 C.Y./100 L.F.



X = SEE CROSS SECTIONS FOR CROSS SLOPES

SOUTHBOUND OFF RAMP
STA. 307+00± TO STA. 309+50±
NOT TO SCALE

A.S.C.G. = 322.37 C.Y./100 L.F.



X = SEE CROSS SECTIONS FOR CROSS SLOPES

SOUTHBOUND OFF RAMP
STA. 309+50± TO STA. 316+21±
NOT TO SCALE

A.S.C.G. = 176.04 C.Y./100 L.F.

SOUTHBOUND OFF RAMP - SUPERELEVATION TABLE			
LT. SHOULDER	STATION	TRAVELWAY	RT. SHOULDER
	START		
-	300+00	-	-
-4.0	300+50	+2.0	-4.0
	TO		
-4.0	302+00	+2.0	-4.0
-4.0	302+50	+3.2	-4.0
-4.3	303+00	+4.3	-3.7
	TO		
-4.3	305+50	+4.3	-3.7
-4.3	306+00	+4.3	-
-4.3	306+50	+4.3	-
-4.3	307+00	+4.3	-
-4.3	307+50	+4.3	-
-4.3	308+00	+4.3	-
-5.6	308+50	+5.6	-
	TO		
-5.6	311+00	+5.6	-
-4.7	311+50	+4.7	-
	TO		
-4.7	314+00	+4.7	-
-4.0	314+50	+3.4	-
-4.0	315+00	+2.0	-
	TO		
-4.0	316+20.98	+2.0	-

PAVEMENT NOTES - SOUTHBOUND OFF RAMP

1.5" H.M.A. 12.5mm. SURFACE (403.208)
2.5" H.M.A. 12.5mm. BASE (403.213)
26.0" AGGREGRATE SUBBASE COURSE GRAVEL (304.10)

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

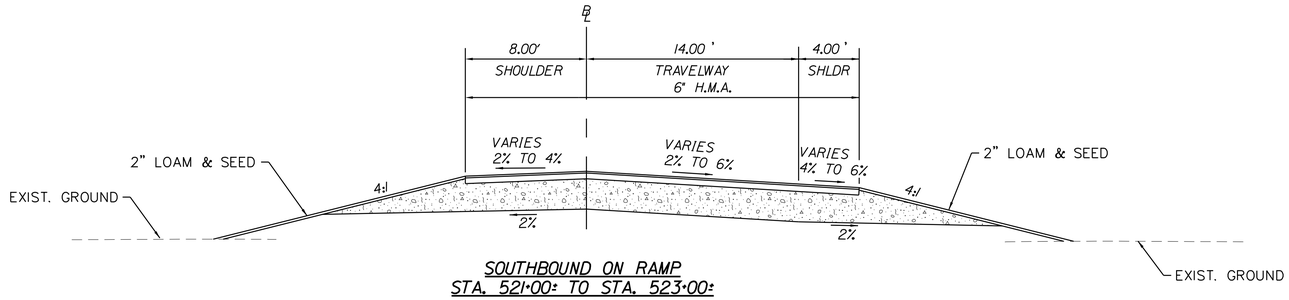
	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	WJG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

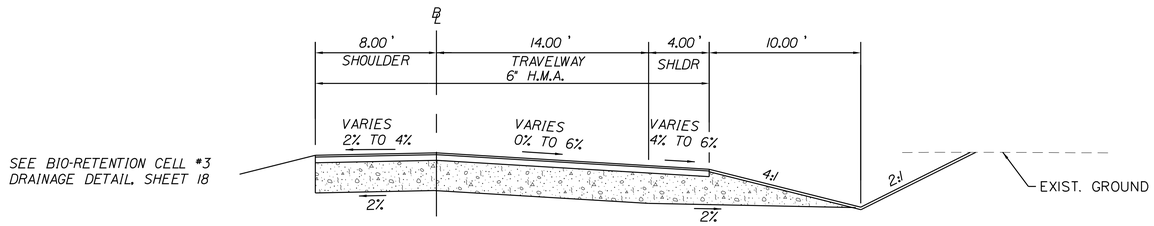
SHEET NUMBER
10
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



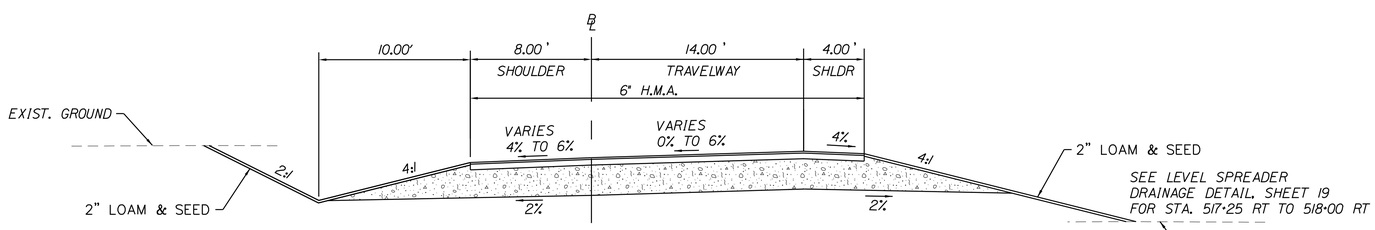
SOUTHBOUND ON RAMP
STA. 521+00± TO STA. 523+00±
NOT TO SCALE

A.S.C.G. = 271.89 C.Y./100 L.F.



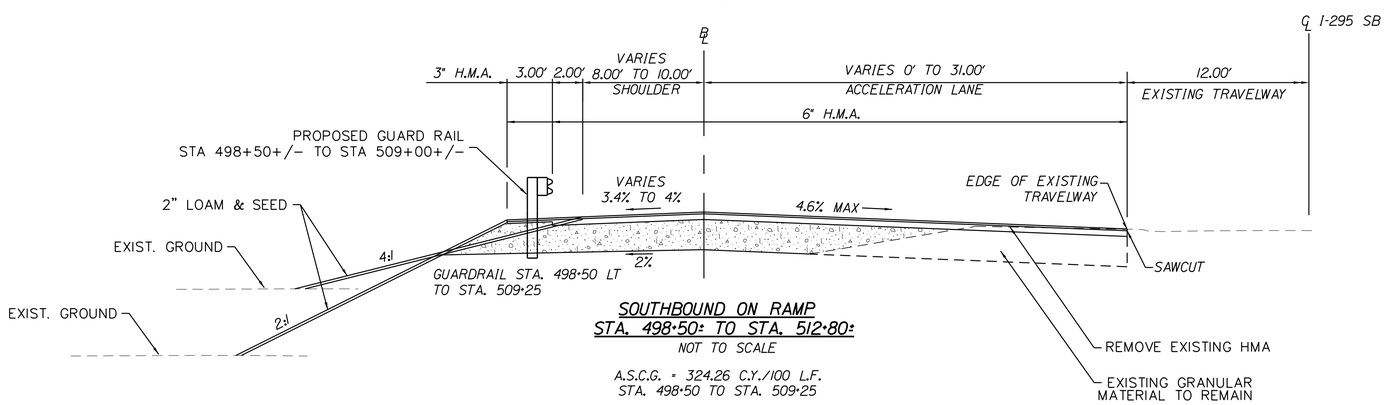
SOUTHBOUND ON RAMP
STA. 518+00± TO STA. 521+00±
NOT TO SCALE

A.S.C.G. = 236.11 C.Y./100 L.F.



SOUTHBOUND ON RAMP
STA. 512+80± TO STA. 518+00±
NOT TO SCALE

A.S.C.G. = 268.59 C.Y./100 L.F.



SOUTHBOUND ON RAMP
STA. 498+50± TO STA. 512+80±
NOT TO SCALE

A.S.C.G. = 324.26 C.Y./100 L.F.
STA. 498+50 TO STA. 509+25

A.S.C.G. = 307.07 C.Y./100 L.F.
STA. 509+25 TO STA. 512+80

SOUTHBOUND ON RAMP - SUPERELEVATION TABLE			
LT. SHOULDER	STATION	TRAVELWAY	RT. SHOULDER
	START		
-4.3	498+45.47	-	-
-4.3	499+00	+4.3	-
-4.0	499+50	+2.1	-
-4.0	500+00	0	-
-4.0	500+50	-1.5	-
-4.0	501+00	-2.3	-
-4.0	501+50	-3.4	-
-3.4	502+00	-4.6	-
	TO		
-3.4	508+50	-4.6	-
-4.0	509+00	-3.3	-
-4.0	509+50	-2.0	-
	TO		
-4.0	511+50	-1.6	-
-4.0	512+00	-1.3	-
-4.0	512+50	-1.4	-
-4.0	513+00	+0.9	-4.0
-4.0	513+50	+1.4	-4.0
-4.0	514+00	+3.7	-4.0
-6.0	514+50	+6.0	-2.0
	TO		
-6.0	516+50	+6.0	-2.0
-4.0	517+00	+4.0	-4.0
-4.0	517+50	+2.0	-4.0
-4.0	518+00	0	-4.0
-4.0	518+50	-2.0	-4.0
-4.0	519+00	-4.0	-4.0
-2.0	519+50	-6.0	-6.0
	TO		
-2.0	522+00	-6.0	-6.0
-4.0	522+50	-3.3	-4.0
-4.0	523+00	-0.7	-4.0
-	523+50	-	-
-	524+00	-	-

PAVEMENT NOTES – SOUTHBOUND ON RAMP

1.5" H.M.A. 12.5mm. SURFACE (403.208)
4.5" H.M.A. 12.5mm. BASE (403.213)
24.0" AGGREGRATE SUBBASE COURSE GRAVEL (304.10)

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	WJG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

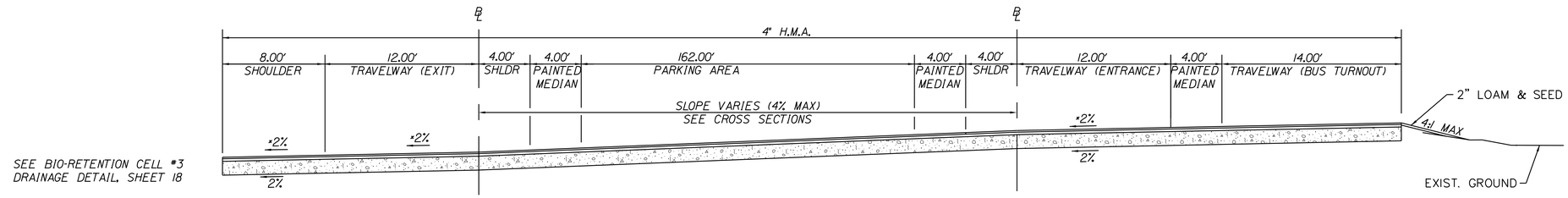
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

SHEET NUMBER
11
OF 283

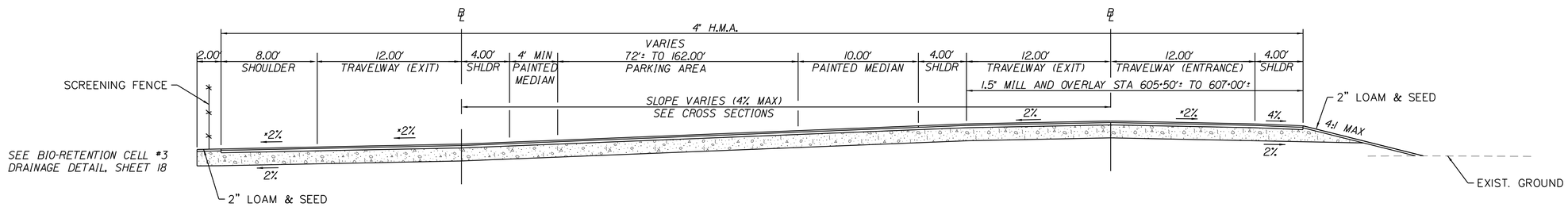
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



PARK AND RIDE
STA. 609+50± TO STA. 612+50±
NOT TO SCALE

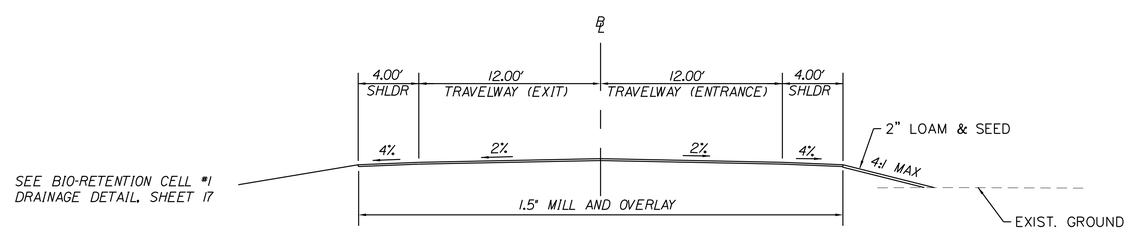
A.S.C.G. = 1,199.26 C.Y./100 L.F.

* TRAVELWAY AND SHOULDER CROSS SLOPE (RIGHT OF BASELINE IN DIRECTION OF TRAVEL)
601+00 TO 607+50: -2% 608+00: 0% 608+50 TO 613+75: +2% 614+25: 0% 614+75 TO 624+43: -2%



PARK AND RIDE
STA. 605+50± TO STA. 609+50±
NOT TO SCALE

A.S.C.G. = 613.89 C.Y./100 L.F.



PARK AND RIDE
STA. 602+00± TO STA. 607+00±
NOT TO SCALE

PAVEMENT NOTES - PARK AND RIDE LOT & ROAD

OVERLAY:
1.5" H.M.A. 12.5mm SURFACE (403.208)
AFTER MILLING

FULL DEPTH PAVEMENT:
1.5" H.M.A. 12.5mm. SURFACE (403.208)
2.5" H.M.A. 12.5mm. BASE (403.213)
17.0" AGGREGRATE SUBBASE COURSE GRAVEL (304.10)

NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	WJG	
CHECKED-REVIEWED	MJD	
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

TYPICAL SECTIONS

SHEET NUMBER
12
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

ESTIMATED QUANTITIES - WIN 11086.00 EXIT 15

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.110	CLEARING	5.0	AC
201.120	SELECTIVE CLEARING AND THINNING	1.0	AC
202.150	REMOVING MANHOLE OR CATCH BASIN	5.0	EA
202.202	REMOVING PAVEMENT SURFACE	7980.0	SY
203.200	COMMON EXCAVATION	45,300	CY
202.203	PAVEMENT BUTT JOINTS	150.0	SY
203.210	ROCK EXCAVATION	36,800	CY
203.212	SPECIAL PERIMETER CONTROL BLASTING	1,050	LF
203.213	SHATTER SOLID ROCK SUBGRADE	5,880	SY
203.270	ROCK BORROW	1,270	CY
206.061	STR EARTH EXCV-DRAIN & MINOR STRUC. BELOW GRAD	1,104	CY
206.070	STRUCTURAL ROCK EXCV - DRAIN & MINOR STRUC. BELOW GRAD	900	CY
304.100	AGGREGATE SUBBASE COURSE - GRAVEL	28,300	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	4,300	TON
403.209	HOT MIX ASPHALT 9.5 MM (SIDEWALKS, DRIVES, INCIDENTALS)	22	TON
403.213	HOT MIX ASPHALT 12.5 MM BASE	10,700	TON
409.150	BITUMINOUS TACK COAT - APPLIED	2,640	G
462.300	ULTRA THIN BONDED WEARING COURSE	3,180	SY
526.301	TEMPORARY CONCRETE BARRIER TYPE I	1	LS
527.305	QUADGUARD CRASH CUSHION	1	UN
527.340	WORKZONE TRAFFIC CUSHION	2	UN
603.155	12" RCP CLASS III	34	LF
603.159	12" CULVERT PIPE OPTION III	78	LF
603.161	15" CORRUGATED METAL PIPE	27	LF
603.169	15" CULVERT PIPE OPTION III	69	LF
603.179	18" CULVERT PIPE OPTION III	762	LF
603.191	24" CORRUGATED METAL PIPE	8	LF
603.195	24" RCP CLASS III	74	LF
603.199	24" CULVERT PIPE OPTION III	215	LF
604.090	CATCH BASIN TYPE BI	3	EA
604.092	CATCH BASIN TYPE BI-C	8	EA
604.150	MANHOLE	1	EA
604.182	CLEAN EXISTING CB AND MANHOLE	12	EA
605.090	6 INCH UNDERDRAIN TYPE B	3,777	LF
605.100	6 INCH UNDERDRAIN OUTLET	298	LF
606.1721	BRIDGE TRANSITION - TYPE I	4	EA
606.230	GUARDRAIL TYPE 3C - SINGLE RAIL	6,252	LF
606.265	TERMINAL END - SGL RAIL - GALV STEEL	4	EA
606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	30	EA
606.356	UNDERDRAIN DELINEATOR POST	8	EA
606.790	GUARDRAIL 350 FLARED TERMINAL	11	EA
609.340	CURB TYPE 5	2,820	LF
609.350	CURB TYPE 5 - CIRCULAR	100	LF
610.080	PLAIN RIPRAP	110	CY
613.319	EROSION CONTROL BLANKET	100	SY
615.070	LOAM	2,730	CY
618.1401	SEEDING, METHOD NUMBER 2 - PLAN QUANTITY	265	UN
618.1411	SEEDING, METHOD NUMBER 3 - PLAN QUANTITY	177	UN
619.1201	MULCH - PLAN QUANTITY	442	UN
619.130	BARK MULCH	2	UN
620.540	STABILIZATION GEOTEXTILE	7700	SY
621.025	EVERGREEN TREES (3 FOOT - 4 FOOT) GROUP A	20	EA
621.031	EVERGREEN TREES (4 FOOT - 5 FOOT) GROUP A	10	EA
621.037	EVERGREEN TREES (5 FOOT - 6 FOOT) GROUP A	15	EA
621.044	EVERGREEN TREES (6 FOOT - 8 FOOT) GROUP B	10	EA
621.045	EVERGREEN TREES (6 FOOT - 8 FOOT) GROUP C	5	EA
621.180	MEDIUM DECIDUOUS TREES (6 FOOT - 8 FOOT) GROUP C	15	EA
621.202	MEDIUM DECIDUOUS TREES (2 IN - 2.50 IN CALIPER) GROUP B	8	EA
621.245	LG DECIDUOUS TREES (2 FOOT - 3 FOOT) GROUP A	20	EA
621.255	LG DECIDUOUS TREES (8 FOOT - 10 FOOT) GROUP A	10	EA
621.273	LG DECIDUOUS TREES (2 IN - 2.50 IN CALIPER) GROUP A	16	EA
621.546	DECIDUOUS SHRUBS (2 FOOT - 3 FOOT) GROUP A	100	EA
621.552	DECIDUOUS SHRUBS (3 FOOT - 4 FOOT) GROUP A	40	EA
621.711	HERBACEOUS PERENNIALS GROUP B	650	EA
621.800	ESTABLISHMENT PERIOD	1	LS
626.110	PRECAST JUNCTION BOX	53	EA
626.22	NON-METALLIC CONDUIT	8,730	LF
626.31	18" FOUNDATION	6	EA
626.33	30" FOUNDATION	33	EA
627.180	12" SOLID WHITE PAVEMENT MARKING	3,800	LF
627.733	4" WHITE OR YELLOW PAINTED PAVE MRK LINE	17,100	LF
627.744	6" WHITE OR YELLOW PAINTED PAVE MRK LINE	32,000	LF
627.750	WHITE OR YELLOW PAVEMENT AND CURB MARKING	600	SF
627.760	TEMPORARY PVMT. MARK LINE, W OR YELLOW	1	LS
629.050	HAND LABOR - STRAIGHT TIME	50	HR
631.120	ALL-PURPOSE EXC (INC OPERATOR)	50	HR
631.172	TRUCK-LARGE (INC OPERATOR)	100	HR
631.32	CULVERT CLEANER (INCLUDING OPERATOR)	20	HR
634.180	RGS CONDUIT	140	LF
634.2042	LED LUMINAIRES	39	EA
634.2082	REMOVE EXISTING LIGHT STANDARD	7	EA
634.2101	TYPE A LIGHT STANDARD	33	EA
634.2102	TYPE B LIGHT STANDARD	6	EA

ESTIMATED QUANTITIES - WIN 11086.00 EXIT 15

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
634.25	SERVICE POLE COMPLETE WITH CABINET AND CONTROLS	1	EA
634.313	#4 AWG COPPER WIRING	26,360	LF
634.316	#10 AWG COPPER WIRING	5,100	LF
636.400	SOIL NAIL WALL DESIGN	1	LS
636.411	SOIL NAIL WALL	1,590	SF
639.180	FIELD OFFICE TYPE A	1	EA
643.72	TEMPORARY TRAFFIC SIGNAL EXIT 10 NB OFF RAMP	1	LS
643.72	TEMPORARY TRAFFIC SIGNAL EXIT 17 NB RAMP	1	LS
643.970	WOOD POLES WITH GUYS AND SPAN WIRE	1	EA
645.103	DEMOUNT GUIDE SIGN	6	EA
645.106	DEMOUNT REG. WRNG. CONF & RTE MARKER ASSY SGN	50	EA
645.113	REINSTALL GUIDE SIGNS	2	EA
645.116	REINST. REG. WRNG. CONF & RTE MARKER ASSY SGN	20	EA
645.251	ROADSIDE GUIDE SIGNS	350	SF
645.292	REG. WRNG. CONF & RTE MARKER SGN TYPE II	475	SF
645.511	FLASHING WARNING SIGN RIGHT CHEVRON SIGN	3	EA
645.511	FLASHING WARNING SIGN WRONG WAY SIGN	4	EA
652.300	FLASHING ARROW BOARD	2	EA
652.310	TYPE I BARRICADE	70	EA
652.312	TYPE III BARRICADE	40	EA
652.330	DRUM	240	EA
652.340	CONE	200	EA
652.350	CONSTRUCTION SIGNS	3,200	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.380	FLAGGER	10,000	HR
652.381	TRAFFIC OFFICER	300	HR
652.410	PORTABLE CHANGEABLE MESSAGE SIGN	6	EA
656.750	TEMPORARY SOIL EROSION & W.P. CONTROL	1	LS
658.20	ACRYLIC LATEX COLOR FINISH, GREEN	1,200	SY
659.100	MOBILIZATION	1	LS

ESTIMATED QUANTITIES - WIN 17490.00 PARK & RIDE LOT

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
201.110	CLEARING	3.0	AC
203.200	COMMON EXCAVATION	10,470	CY
206.061	STR EARTH EXCV-DRAIN & MINOR STRUC. BELOW GRAD	1,850	CY
304.100	AGGREGATE SUBBASE COURSE - GRAVEL	8,210	CY
403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	1,580	TON
403.213	HOT MIX ASPHALT 12.5 MM BASE	2,360	TON
409.150	BITUMINOUS TACK COAT - APPLIED	1,021	G
603.179	18" CULVERT PIPE OPTION III	150	LF
605.090	6 INCH UNDERDRAIN TYPE B	952	LF
607.220	CEDAR RAIL FENCE	50	LF
607.421	SCREENING FENCE	475	LF
609.340	CURB TYPE 5	180	LF
609.350	CURB TYPE 5 - CIRCULAR	40	LF
610.080	PLAIN RIPRAP	30	CY
615.070	LOAM	213	CY
615.250	BIORETENTION CELL	1	LS
618.1401	SEEDING METHOD NUMBER 2 - PLAN QUANTITY	35	UN
619.1201	MULCH - PLAN QUANTITY	35	UN
626.11	PRECAST JUNCTION BOX	15	EA
626.22	NON-METALLIC CONDUIT	2,615	LF
626.33	30" FOUNDATION	15	EA
627.180	12" SOLID WHITE PAVEMENT MARKING	80	LF
627.733	4" WHITE OR YELLOW PAINTED PAVE MRK LINE	28,300	LF
627.750	WHITE OR YELLOW PAVEMENT AND CURB MARKING	550	SF
634.2042	LED LUMINAIRES	15	EA
634.2082	REMOVE EXISTING LIGHT STANDARD	1	EA
634.2101	TYPE A LIGHT STANDARD	15	EA
634.313	#4 AWG COPPER WIRE	7,550	LF
634.316	#10 AWG COPPER WIRE	2,400	LF
645.292	REG. WRNG. CONF & RTE MARKER SGN TYPE II	175	SF
652.312	TYPE III BARRICADE	5	EA
652.330	DRUM	20	EA
652.350	CONSTRUCTION SIGNS	100	SF
656.750	TEMPORARY SOIL EROSION & W.P. CONTROL	1	LS
658.20	ACRYLIC LATEX COLOR FINISH, GREEN	110	SY
659.10	MOBILIZATION	1	LS

EARTHWORK SUMMARY - WIN 11086.00 EXIT 15

ALL QUANTITIES IN CUBIC YARDS (CY)

COMMON EXCAVATION FOR ESTIMATE		
COMMON EXCAVATION (FROM CROSS SECTIONS)	39,510	
GRUBBING IN FILL	4,560	
TRIANGULAR AREA FROM SHEET 84	87	
REMOVING EXISTING PAVEMENT	1,069	
TOTAL COMMON EXCAVATION		45,226
FILL FOR BORROW CALCULATIONS		
COMMON FILL (FROM CROSS SECTIONS)	12,428	
TOTAL FILL		12,428
ROCK EXCAVATION		
ROCK EXCAVATION (FROM CROSS SECTIONS)	36,782	
STRUCTURAL ROCK EXCAVATION (FOR DRAINAGE)	900	
TOTAL ROCK EXCAVATION		37,682
AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS		
(1) TOTAL COMMON EXCAVATION		45,226
DEDUCTIONS:		
GRUBBING IN FILL	4,560	
REMOVING EXISTING PAVEMENT	1,069	
(2) TOTAL DEDUCTIONS		5,629
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)		39,597
TOTAL AVAIABLE STRUCTURAL EXCAVATION (DRAINAGE)		1,104
TOTAL AVAILABLE NON-ROCK EXCAVATION		40,701
COMPUTATION OF WASTE MATERIAL		
GRUBBING IN FILL	4,560	
TOTAL WASTE MATERIAL		4,560
COMPUTATION OF COMMON BORROW FOR ESTIMATE		
(3) TOTAL FILL		12,428
TOTAL AVAILABLE NON-ROCK EXCAVATION	40,701 x 0.85 = 35,596	
TOTAL AVAILABLE ROCK EXCAVATION	37,682 x 1.33 = 50,117	
(4) TOTAL AVAILABLE EXACVATION		85,713
TOTAL SURPLUS MATERIAL = TOTAL AVAILABLE EXCAVATION MINUS TOTAL FILL PLUS TOTAL WASTE MATERIAL		77,845

EARTHWORK SUMMARY - WIN 17490.00 PARK & RIDE LOT

ALL QUANTITIES IN CUBIC YARDS (CY)

COMMON EXCAVATION FOR ESTIMATE		
COMMON EXCAVATION (FROM CROSS SECTIONS)	7,869	
GRUBBING IN FILL	2,596	
TOTAL COMMON EXCAVATION		10,465
FILL FOR BORROW CALCULATIONS		
COMMON FILL (FROM CROSS SECTIONS)	1,980	
TOTAL FILL		1,980
ROCK EXCAVATION		
ROCK EXCAVATION (FROM CROSS SECTIONS)	0	
STRUCTURAL ROCK EXCAVATION (FOR DRAINAGE)	0	
TOTAL ROCK EXCAVATION		0
AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS		
(1) TOTAL COMMON EXCAVATION		10,465
DEDUCTIONS:		
GRUBBING IN FILL	2,596	
REMOVING EXISTING PAVEMENT	0	
(2) TOTAL DEDUCTIONS		2,596
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)		7,869
TOTAL AVAIABLE STRUCTURAL EXCAVATION (DRAINAGE)		1,848
TOTAL AVAILABLE NON-ROCK EXCAVATION		9,717
COMPUTATION OF WASTE MATERIAL		
GRUBBING IN FILL	2,596	
TOTAL WASTE MATERIAL		2,596
COMPUTATION OF COMMON BORROW FOR ESTIMATE		
(3) TOTAL FILL		1,980
TOTAL AVAILABLE NON-ROCK EXCAVATION	9,717 x 0.85 = 8,259	
TOTAL AVAILABLE ROCK EXCAVATION	0 x 1.33 = 0	
(4) TOTAL AVAILABLE EXACVATION		8,259
TOTAL SURPLUS MATERIAL = TOTAL AVAILABLE EXCAVATION MINUS TOTAL FILL PLUS TOTAL WASTE MATERIAL		8,875

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER $PROJMANAGER$	BY	DATE
DESIGN-DETAILED $desr	$detailer1$	$projdate1$
CHECKED-REVIEWED ----	----	----
DESIGN2-DETAILED2 $desr	$detailer2$	$projdate2$
DESIGN3-DETAILED3 $desr	$detailer3$	$projdate3$
REVISIONS 1 ----	----	$revdate1$
REVISIONS 2 ----	----	$revdate2$
REVISIONS 3 $revision3$		$revdate3$
REVISIONS 4 $revision4$		$revdate4$
FIELD CHANGES $fieldchange$		$fielddate$

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

ESTIMATED QUANTITIES

SHEET NUMBER
13
OF 283

Filename: ...\MSTA\013_EST_QUANTITIES.dgn Division: HIGHWAY Username: common Date:12/13/2012

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH				UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III													TYPE B		OTHER					
								SMOOTHLINED		CORRUGATED										GAGE OR WALL THICKNESS	TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	B1	B1-C	MH	E	F	SPAN	RISE	LENGTH		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
ROADWAY CULVERTS																												
STA. 613+96.20, 19.2 LT TO 614+75.00, 33.5 RT								18"	95'																			
STA. 614+75.0, 33.5 RT TO 515+00.0, 32.8 LT								18"	55'																			
STA. 515+00.0, 29.4 LT TO 515+00.0, 45.7 RT								24"	75'																			
STA. 467+31.0, 48.2 LT TO 468+54.07, 51.0 LT								18"	128'																			
STA. 468+54.07, 51.0 LT TO 469+50.28, 44.5 RT								18"	135'																			
STA. 105+50.74, 16.2 RT TO 105+50.74, 33.5 RT				15"	17'																							TIE TO EXISTING PIPE
STA. 112+00.00, 29.0 RT TO 112+55.82, 19.4 LT	24"	74'	III																									TIE TO EXISTING PIPE
STA. 523+12.24, 77.5 LT TO 523+28.40, 60.2 RT								18"	139'																			
STA. 450+09.65, 35.6 LT TO 450+09.65, 51.6 LT	12"	15'	III																									TIE TO EXISTING PIPE
STA. 451+39.83, 0.6 LT TO 451+99.43, 0.6 LT								12"	56'																			
STA. 451+98.46, 35.0 LT TO 451+98.46, 54.0 LT	12"	19'	III																									TIE TO EXISTING PIPE
STA. 451+99.43, 0.6 LT TO 452+25.01, 0.6 LT								12"	22'																			
STA. 126+68.0, 47.3 LT TO 126+61.0, 52.5 RT								18"	100'																			
STA. 204+50.0, 19.9 LT TO 124+87.69, 43.2 RT								15"	69'																			
STA. 116+00.0, 21.3 RT TO 116+15.45, 41.4 LT								24"	65'																			
STA. 213+69.74, 20.4 RT TO 213+69.21, 55.1 LT								24"	75'																			
STA. 213+80.48, 77.1 LT TO 213+84.17, 84.0 LT				24"	8'																							INV. IN 116.39; TIE TO EX. PIPE
STA. 313+32.82, 13.9 LT TO 313+32.82, 23.3 LT				15"	10'																							TIE TO EXISTING PIPE
STA. 121+93.92, 34.4 RT TO 208+36.51, 18.0 LT								18"	74'																			
STA. 208+36.51, 18.0 LT TO 208+58.81, 24.0 RT								18"	46'																			
CATCH BASINS AND MANHOLES																												
CB 1, STA. 613+96.20, 19.1 LT												1																BIO-CELL #2, USE BEEHIVE GR.
CB 2, STA. 614+75.00, 33.5 RT												1																BIO-CELL #3, USE BEEHIVE GR.
CB 3, STA. 622+22.25, 28.5 LT												1																BIO-CELL #1, USE BEEHIVE GR.
CB 4, STA. 468+54.07, 51.0 LT													1															
CB 5, STA. 450+09.65, 0.8 LT													1															
CB 6, STA. 451+39.83, 0.8 LT													1															
DMH 1, STA. 451+99.43, 0.8 LT														1														
CB 7, STA. 452+25.01, 0.8 LT													1															
CB 8, STA. 126+68.00, 47.3 LT													1															
CB 9, STA. 204+50.00, 19.9 LT													1															
CB 10, STA. 208+36.51, 18.0 LT													1 1/4															
UNDERDRAIN																												
STA. 112+50 RT TO 116+13 LT																					332'	57'						
STA. 614+25 RT TO 614+75 RT																							4"	115'				BIO-RETENTION CELL #3
STA. 614+75 RT TO 615+10 RT																							4"	40'				BIO-RETENTION CELL #3
STA. 614+75 RT TO 622+22 LT																							6"	790'				BIO-RETENTION CELL #3
STA. 613+50 LT																							4"	155'				BIO-RETENTION CELL #2
STA. 622+50 LT																							4"	260'				BIO-RETENTION CELL #1
STA. 116+00 RT TO 121+50 RT																					519'	19'						
STA. 116+00 LT TO 119+00 LT																					292'	30'						
STA. 124+25 RT TO 122+00 RT																					205'	35'						
STA. 205+20 RT TO 208+50 RT																					323'	29'						
STA. 208+50 RT TO 213+75 RT																					495'	21'						
STA. 211+00 LT TO 213+50 LT																					260'	40'						
STA. 213+75 RT TO 216+00 RT																					215'	17'						
STA. 473+25 RT TO 477+88 RT																					463'	60'						
STA. 612+75 LT TO 614+46 LT																					167'							
STA. 614+10 RT TO 614+66 RT																					68'							
STA. 614+66 RT TO 621+73 RT																					717'							
STA. 515+00 LT TO 521+69 LT																					673'							

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

SIGNATURE
P.E. NUMBER
DATE

BY	DATE

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

YARMOUTH
I-295 EXIT 15

DRAINAGE SUMMARY

SHEET NUMBER
14
OF 283

Filename: ...\HIGHWAY\MSTA\014_DRN_SUM.dgn Division: HIGHWAY Username: common Date:12/13/2012

GENERAL NOTES

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE AS FOLLOWS: CENTRAL MAINE POWER

2. ALL UTILITY FACILITIES SHALL BE ADJUSTED BY THE RESPECTIVE UTILITIES UNLESS OTHERWISE NOTED.

3. ALL DITCH ELEVATIONS SHOWN ON THE CROSS SECTIONS ARE FOR THE FINISH DITCH FLOW LINE.

4. ALL JOINTS BETWEEN EXISTING AND PROPOSED HOT BITUMINOUS PAVEMENT SHALL BE BUTTED. PAYMENT SHALL BE MADE UNDER ITEM 202.203 PAVEMENT BUTT JOINT.

5. CONSTRUCT BUTT JOINTS AT ALL PAVED DRIVES AND ENTRANCES.

6. GRIND TRANSITION TAPERS AT CATCH BASINS UNDER ITEM 202.203 PAVEMENT BUTT JOINTS. AS DIRECTED BY THE RESIDENT.

7. ALL ROADWAY CULVERT INLETS AND OUTLETS ARE TO RECEIVE SLOPE AND RIPRAP TREATMENT IN ACCORDANCE WITH MAINE DOT STANDARD DETAIL 802(05).

8. CLEARING LIMITS SHALL BE 10' BEYOND AND PARALLEL TO THE CONSTRUCTION SLOPE LINES OR AS SHOWN ON THE PLANS UNLESS OTHERWISE AUTHORIZED BY THE RESIDENT. IN WETLAND AREAS AS DELINEATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT, THE CLEARING LIMIT SHALL BE THE TOE OF SLOPE.

9. REQUIRED DITCH PROTECTION SHOWN ON THE PLANS IS FOR ESTIMATING PURPOSES ONLY. ACTUAL TYPE AND LOCATION FOR EROSION CONTROL BLANKET, STONE DITCH PROTECTION, AND RIPRAP SHALL BE DETERMINED IN THE FIELD BY THE RESIDENT.

10. SHOULDERS ARE TO BE WIDENED AT GUARDRAIL ENDS AS SHOWN IN MAINE DOT STANDARD DETAIL 606(18).

11. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION OR IN LOW WET AREAS TO 1 FT ABOVE WATER LEVEL OR OLD GROUND SHALL MEET REQUIREMENTS FOR GRANULAR BORROW UNDERWATER BACKFILL.

12. EXISTING INSLOPES STEEPER THAN 2:1 IN PROPOSED FILL AREAS SHALL BE BENCHED AS DIRECTED BY THE RESIDENT.

13. GRUBBING IN FILL AREAS HAS BEEN SHOWN ON THE CROSS SECTIONS AND THE QUANTITIES NOTED. THESE LIMITS ARE APPROXIMATE AND HAVE BEEN USED FOR ESTIMATING PURPOSES ONLY. ACTUAL GRUBBING LIMITS MAY VARY BASED ON FIELD CONDITIONS AS DIRECTED BY THE RESIDENT. ESTIMATED GRUBBING DEPTHS ARE 6 INCHES IN FIELD AREAS AND 12 INCHES IN WOODED AREAS.

14. ALL INSLOPE AND DITCHES IN CUT AREAS SHALL BE GRADED AS SHOWN ON THE TYPICALS OR FLATTER, OR AS DIRECTED BY THE RESIDENT.

15. WHERE NO DITCHING OR INSLOPE EXCAVATION IS NEEDED, THE GRADNG OF EXISTING MATERIAL OR THE ADDITION OF MATERIAL FOR 3 FEET BEYOND SHOULDER BREAK TO MATCH THE EXISTING SLOPE SHALL BE INCIDENTAL TO THE CONTRACT. ANY ADDITIONAL MATERIAL SHALL BE APPROVED BY THE RESIDENT.

16. DRIVEWAY FILL SIDE SLOPES SHALL BE THE SAME AS THE NON-GUARDRAIL FILL SLOPES UNLESS OTHERWISE NOTED ON THE PLANS.

17. IF FOUNDATION MATERIAL IS REQUIRED UNDER CULVERTS, IT SHALL MEET THE REQUIREMENTS FOR GRANULAR BORROW - UNDERWATER BACKFILL AND WILL PAID FOR AS GRANULAR BORROW.

18. RESIDENTIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 2" HOT MIX ASPHALT AND 12" AGGREGATE SUBBASE COURSE GRAVEL.

19. COMMERCIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 3" HOT MIX ASPHALT AND 11" AGGREGATE SUBBASE COURSE GRAVEL.

20. EXTENDED USE EROSION CONTROL BLANKET, SEEDED DITCHES, RIPRAP DOWNSPOUTS, AND OTHER DITCHES LINED WITH STONE DITCH PROTECTION SHALL BE CONSTRUCTED AFTER PAVING AND SHOULDER WORK IS COMPLETED. WHERE IT IS APPARENT THAT RUNOFF WILL CAUSE CONTINUAL EROSION, PAYMENT WILL BE MADE UNDER APPROPRIATE CONTRACT ITEMS.

21. ANY NECESSARY CLEANING OF EXISTING PAVEMENT PRIOR TO PAVING SHALL BE INCIDENTAL TO THE RELATED PAVING ITEMS.

22. REMOVAL OF EXISTING CURBING SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20 COMMON EXCAVATION.

23. WHEN SUPER ELEVATION EXCEEDS THE SLOPE OF THE LOW SIDE SHOULDER, THE SHOULDER PAVEMENT WILL HAVE SAME SLOPE AS TRAVELED WAY.

24. EXISTING CULVERTS AND CATCH BASINS WILL BE CLEANED AS DIRECTED BY THE RESIDENT UNDER THE APPROPRIATE PAY ITEMS.

25. NO EXISTING DRAINAGE SHALL BE ABANDONED, REMOVED OR PLUGGED WITHOUT PRIOR APPROVAL OF THE RESIDENT.

26. THE CULVERT SIZES SHOWN ON THE PLANS AND CROSS SECTIONS ARE FOR SMOOTHLINED PIPES. FOR COMPARABLE CORRUGATED SIZES SEE THE DRAINAGE TABULATION.

27. ANY NECESSARY CUTTING OF EXISTING PIPES TO FIT IN AREAS OF PROPOSED CATCH BASINS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEM 604.

28. ANY NECESSARY CUTTING OF EXISTING CATCH BASINS TO ALLOW FOR PROPOSED PIPE CONNECTIONS WILL NOT BE PAID FOR SEPARATELY AND WILL BE CONSIDERED INCIDENTAL TO ITEM 603 OR 605.

29. ALL UNDERDRAIN SHOWN ON THE CROSS SECTIONS WILL HAVE A FLOW LINE WITH ELEVATIONS SPECIFIED ON THE CROSS SECTIONS. ALL FLOW LINE ELEVATIONS ARE SUBJECT TO APPROVAL BY THE RESIDENT.

30. ALL CONNECTIONS FOR UNDERDRAIN (U.D.) TO ROADWAY CULVERTS WILL BE INCIDENTAL TO U.D. PIPE ITEMS.

31. A 3 FT. X 3 FT. SQUARE RIPRAP PAD SHALL BE CONSTRUCTED AT U.D. OUTLETS.

32. GUARDRAIL END TREATMENTS SHALL BE INSTALLED CONCURRENTLY WITH THE PLACEMENT OF EACH SECTION OF BEAM GUARDRAIL.

33. HOLES CREATED BY GUARDRAIL REMOVAL WILL BE FILLED AND COMPACTED WITH APPROVED MATERIALS AS DIRECTED BY THE RESIDENT. PAYMENT TO BE CONSIDERED INCIDENTAL TO THE GUARDRAIL ITEMS.

34. ALL EXISTING GUARDRAIL SHALL BE REMOVED AND BECOME THE PROPERTY OF THE CONTRACTOR. REMOVAL AND DISPOSAL SHALL BE CONSIDERED INCIDENTAL TO THE GUARDRAIL ITEMS.

35. TWO REFLECTORIZED FLEXIBLE G.R. MARKERS (ITEM 606.353) WILL BE INSTALLED AT EACH GUARDRAIL END. A DELINEATOR POST (ITEM 606.356) WILL BE INSTALLED AT EACH UNDERDRAIN OUTLET.

36. CONNECTIONS FOR PROPOSED GUARDRAIL TO EXISTING GUARDRAIL WILL BE CONSIDERED INCIDENTAL TO ITEM 606.

37. REMOVAL OF EXISTING DRAIANGE PIPE AS DIRECTED BY THE RESIDENT SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20 COMMON EXCAVATION.

38. LOAM HAS BEEN ESTIMATED FOR DISTURBED AREAS. ACTUAL PLACEMENT OF THE LOAM SHALL BE AS NOTED ON THE PLANS OR DESIGNATED BY THE RESIDENT.

39. UNLESS OTHERWISE NOTED SEEDING METHOD NO. 1 SHALL BE UTILIZED ON ALL LAWNS AND DEVELOPED AREAS; SEEDING METHOD NO. 2 SHALL BE UTILIZED ON ALL NON-GUARDRAIL SLOPES. SEEDING METHOD NO. 3 SHALL BE UTILIZED ON ALL GUARDRAIL FILL SLOPES. ON LONG NON-GUARDRAIL BACKSLOPES, SEEDING METHOD NO. 3 MAY BE USED INSTEAD OF METHOD NO. 2 IF NOTED OR DIRECTED BY THE RESIDENT.

40. LOAM SHALL BE PLACED TO A NOMINAL DEPTH OF 2 INCHES UNLESS OTHERWISE NOTED OR DIRECTED.

41. ACRYLIC LATEX COLOR FINISH GREEN (ITEM 658.20) SHALL BE PLACED ON ALL PAVED ISLANDS.

42. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK; IT SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

43. ANY DAMAGE TO THE SLOPES CAUSED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL, OR OPERATION SHALL BE REPAIRED TO THE SATISFACTION OF THE RESIDENT. ALL WORK, EQUIPMENT, AND MATERIALS REQUIRED TO MAKE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.

44. PLANS OF PREVIOUSLY CONSTRUCTED PROJECTS ARE AVAILABLE ON REQUEST. THESE PROJECTS ARE:
- FEDERAL AID PROJECT NO. I-95-4(6)
- FEDERAL AID PROJECT NO. I-95-4(8)58
- FEDERAL AID PROJECT NO. I-95-4(9)

45. IF SOFT AND WET SOIL IS ENCOUNTERED AT THE SUBGRADE LEVEL, UTILIZE ITEM 620.54 STABILIZATION GEOTEXTILE PLACED ON SUBGRADE

46. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE EXCAVATION FROM EXCAVATION AREAS.

47. ESTIMATED QUANTITIES FOR REQUIRED STRUCTURAL EARTH EXCAVATION, DRAINAGE AND MINOR STRUCTURES ARE INFORMATIONAL ONLY AND REPRESENT THE APPROXIMATE MINIMUM QUANTITY REQUIRED TO INSTALL DRAINAGE STRUCTURES. ADDITIONAL EXCAVATION FOR THE CONTRACTOR'S CONVENIENCE OR TO COMPLY WITH BACKSLOPING REQUIREMENTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE RELATED DRAINAGE ITEMS.

48. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.

49. "UNDETERMINED LOCATIONS" SHALL BE DETERMINED BY THE RESIDENT.

50. STATIONS REFERENCED ARE APPROXIMATE.

51. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION CONTROL & SEDIMENT CONTROL, FEBRUARY, 2008.

52. 2" MINIMUM DEPTH MULCH SHALL BE APPLIED TO ALL SEEDED AREAS.

53. THE LOCATION OF THE EXISTING UTILITIES AND DRAINAGE SHOWN ON THE PLANS AND CROSS SECTIONS WERE COMPLIED FROM FIELD SURVEY. LOCATIONS ARE APPROXIMATE AND ARE NOT GUARANTEED TO BE ACCURATE, NOR IS IT GUARANTEED THAT ALL UTILITIES ARE SHOWN. NO SEPARATE OR ADDITIONAL COMPENSATION WILL BE ALLOWED TO THE CONTRACTOR DUE TO THE VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED.

54. ANY NECESSARY FINE GRADING OR COMPACTION OF EXISTING GRAVEL SHALL NOT BE PAID FOR SEPARATELY AND SHALL BE INCIDENTAL TO ITEM 304.10.

55. PAVEMENT CUT LINES SHALL BE NEAT, CLEAN, AND STRAIGHT AS DIRECTED BY THE RESIDENT. PAYMENT FOR CUTTING OF EXISTING PAVEMENT SHALL BE INCIDENTAL TO ITEM 403.

56. PAYMENT FOR PAVEMENT REMOVAL WHERE SHOWN ON THE PLANS SHALL BE PAID FOR UNDER ITEM 203.20 COMMON EXCAVATION.

57. PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS," U.S.D.O.T., F.H.W.A., LATEST EDITION.

58. FOLLOW STANDARD DETAIL 801(10) FOR PAVEMENT TRANSITION AT BRIDGE.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

GENERAL NOTES

SHEET NUMBER
15
OF 283

Filename: ...\HIGHWAY\MSTA\015_GENNOTES.dgn Division: BRIDGE Username: common Date:12/12/2012

DRIVEWAYS AND ENTRANCES

STATION	TYPE	OPENING
450+65 RT	PAVED	126′
473+80 RT	PAVED	78′
474+60 RT	PAVED	56′
476+52 RT	PAVED	60′
477+32 RT	PAVED	124′

CLEARING - ITEM # 201.11

STATION TO STATION

ROUTE 1
- 442+50 - 442+85 RT
- 443+21 - 443+83 LT
- 446+80 - 447+15 RT
- 444+20 - 457+60 LT
- 459+90 - 464+85 LT
- 460+40 - 462+36 RT
- 463+75 - 465+60 RT
- 469+44 - 473+40 RT
- 474+80 - 476+20 RT

PARK AND RIDE
- 613+06 - 623+01 LT
- 613+06 - 623+01 RT

SB ON
- 512+82 - 523+40 LT
- 514+54 - 523+17 RT

SB OFF
- 304+65 - 305+00 LT
- 305+57 - 306+50 LT

NB OFF
- 100+58 - 112+90 RT
- 113+75 - 120+71 RT
- 115+34 - 120+15 LT

NB ON
- 201+96 - 208+49 RT
- 203+03 - 207+24 LT
- 210+28 - 212+83 LT
- 210+66 - 212+51 RT
- 214+00 - 214+85 LT
- 214+00 - 216+00 RT
- 217+21 - 219+45 RT

REMOVING MANHOLE OR CATCH BASIN - ITEM # 202.150

LOCATION	QUANTITY
ROUTE 1, 445+23.90, 21.27 LT	1 EA
ROUTE 1, 450+09.64, 6.01 RT	1 EA
ROUTE 1, 451+99.43, 8.41 RT	1 EA
ROUTE 1, 468+54.07, 50.32 LT	1 EA
NB OFF, 213+83.71, 83.16 LT	1 EA

GUARDRAIL TYPE 3C - SINGLE RAIL - ITEM # 606.23

STATION TO STATION	LENGTH
ROUTE 1	
442+50 LT - 447+38 LT	488 LF
453+10 LT - 457+52 LT	442 LF
442+50 RT - 446+87 RT	437 LF
463+52 LT - 466+89 LT	337 LF
SB ON / ROUTE 1	
459+95 LT - 522+97 RT	334 LF
SB OFF/ROUTE 1	
304+74 RT - 460+19 RT	706 LF
306+18 LT - 468+68 RT	1,112 LF
NB OFF/ROUTE 1	
126+98 RT - 457+76 RT	272 LF
SB ON	
498+45 LT - 509+25 LT	1,080 LF
SB OFF	
309+50 LT - 316+59 LT	709 LF
NB OFF	
112+00 RT - 112+50 RT	50 LF
112+70 LT - 114+00 LT	225 LF
112+70 LT - 113+30 LT	60 LF

TERMINAL END - SGL RAIL - GALV STEEL - ITEM # 606.265

LOCATION	QUANTITY
ROUTE 1, 463+52 LT	1 EA
NB OFF, 114+00 LT	1 EA
SB ON, 522+97 RT	1 EA
SB OFF, 309+50 LT	1 EA

GUARDRAIL 350 FLARED TERMINAL - ITEM # 606.790

LOCATION	QUANTITY
ROUTE 1	
446+87 RT	1 EA
447+38 LT	1 EA
453+10 LT	1 EA
466+89 LT	1 EA
468+68 RT	1 EA
NB OFF	
112+00 RT	1 EA
126+98 RT	1 EA
SB ON	
509+25 LT	1 EA
SB OFF	
304+74 RT	1 EA
306+18 LT	1 EA
316+59 LT	1 EA

CEDAR RAIL FENCE - ITEM # 607.22

STATION TO STATION	LENGTH
PARK AND RIDE	
612+50 - 613+00 RT	50 LF

SCREENING FENCE - ITEM # 607.421

STATION TO STATION	LENGTH
PARK AND RIDE	
617+00 - 621+75 RT	475 LF

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

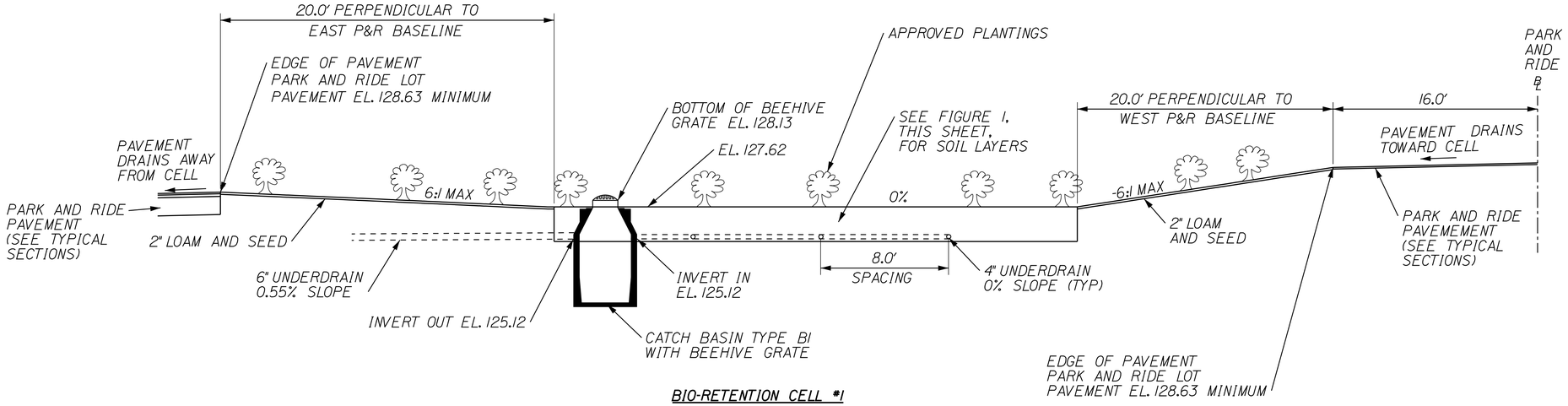
CONSTRUCTION NOTES

SHEET NUMBER

16

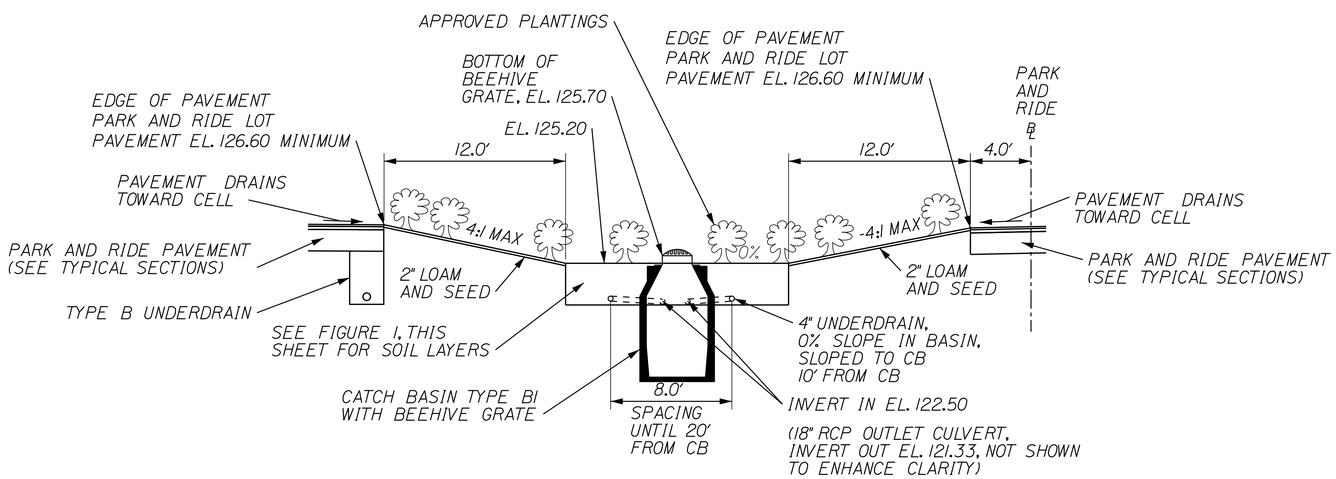
OF 283

Date:$date$ Username: $user$ Division: $wkgroup$ Filename: $file$



BIO-RETENTION CELL #1

STA. 604+18.02 LT TO STA. 605+33.27 LT



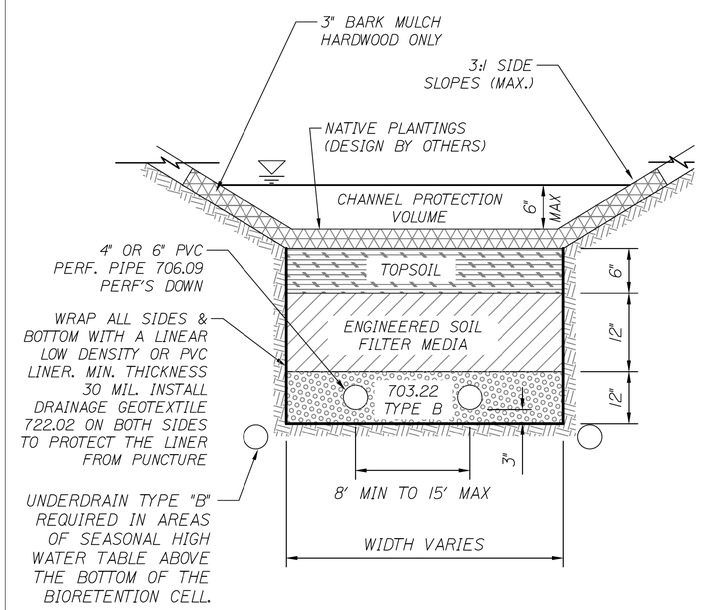
BIO-RETENTION CELL #2

STA. 612+71.09 LT TO STA. 614+31.50 LT

NOTE: IN EACH TREATMENT CELL PROVIDE CLEANOUTS FOR EACH 4" LINE AT THE FARTHEST POINT FROM THE CATCH BASIN

FIGURE 1

THE BIORETENTION CELL(S) LOCATION, LAYOUT, GRADING, DRAINAGE, EROSION CONTROL MEASURES AND PLANTING ARE INDICATED ON THE CONTRACT DRAWINGS



BIORETENTION CELL
TYPICAL SECTION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

BY	DATE

SIGNATURE
P.E. NUMBER
DATE

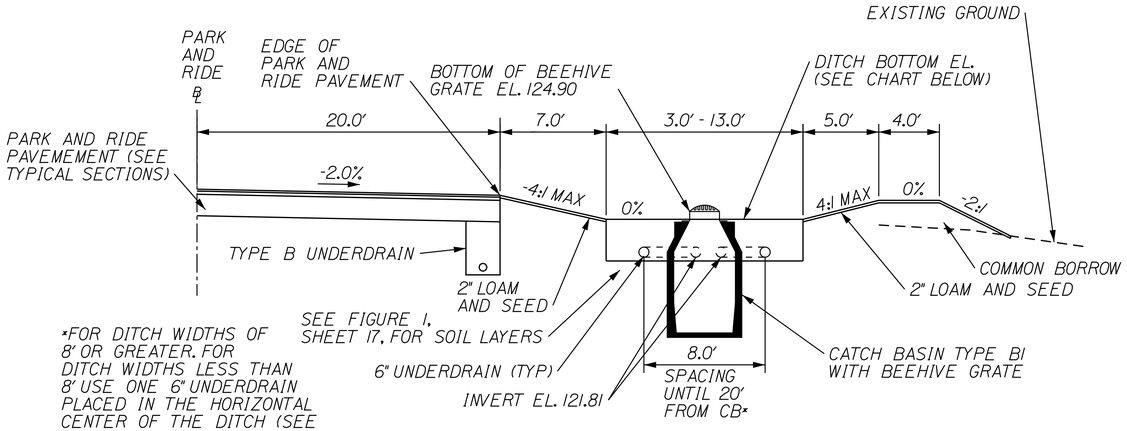
PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

YARMOUTH
I-295 EXIT 15

DRAINAGE DETAILS

SHEET NUMBER
17
OF 283

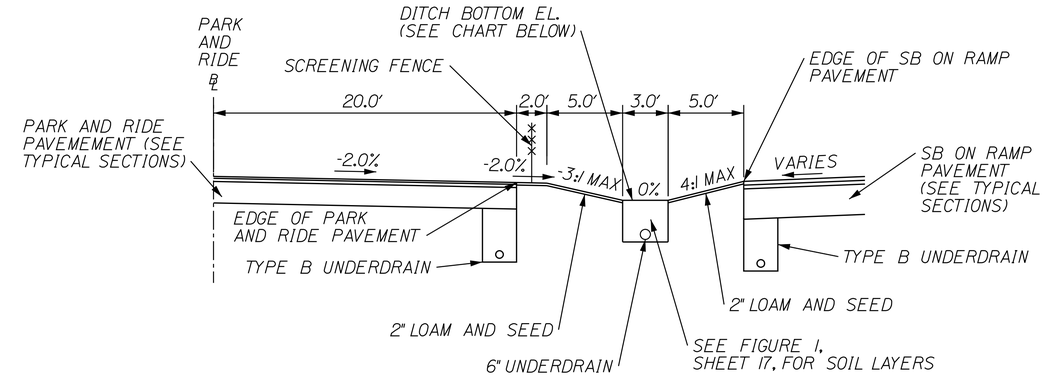
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



*FOR DITCH WIDTHS OF 8' OR GREATER. FOR DITCH WIDTHS LESS THAN 8' USE ONE 6" UNDERDRAIN PLACED IN THE HORIZONTAL CENTER OF THE DITCH (SEE WATER QUALITY DITCH NORTH DETAIL)

(18" RCP INLET AND OUTLET CULVERTS, INVERTS 120.85, NOT SHOWN TO ENHANCE CLARITY)

BIO-RETENTION CELL #3
STA. 614+25 RT TO STA. 617+00 RT



BIO-RETENTION CELL #3
STA. 617+00 RT TO STA. 621+75 RT

WATER QUALITY DITCH BOTTOM ELEVATIONS		
STATION, OFFSET	ELEVATION	SLOPE DOWNSTATION
621+75, 28.5 RT	127.64	-0.24%
621+25, 28.5 RT	127.51	-0.24%
620+75, 28.5 RT	127.37	-0.50%
620+25, 28.5 RT	127.13	-0.50%
619+75, 28.5 RT	126.90	-0.50%
619+25, 28.5 RT	126.68	-0.50%
618+75, 28.5 RT	126.45	-0.50%
618+25, 28.5 RT	126.23	-0.50%
617+75, 28.5 RT	125.98	-0.50%
617+25, 28.5 RT	125.69	-0.50%
616+75, 28.5 RT	125.41	-0.50%
616+25, 28.5 RT	125.16	-0.50%
615+75, 28.5 RT	124.91	-0.50%
615+25, 28.5 RT	124.66	-0.50%
614+75, 28.5 RT	124.39	+0.50%
614+25, 28.5 RT	124.72	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

SIGNATURE
P.E. NUMBER
DATE

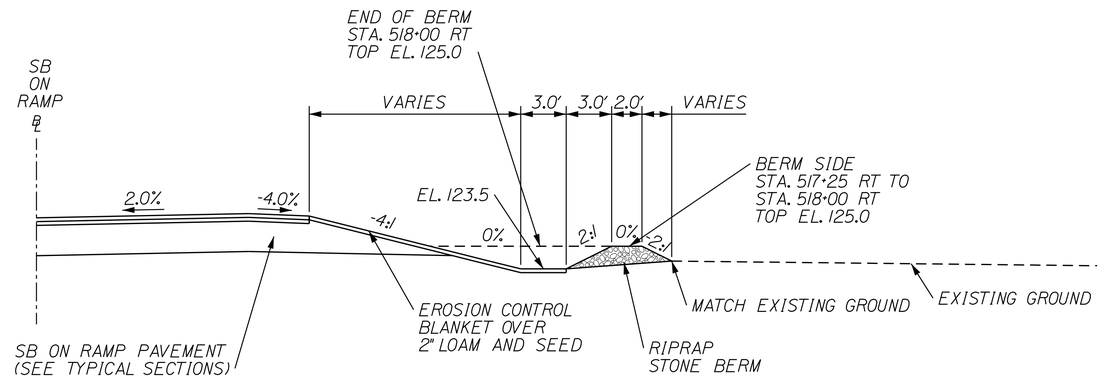
	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

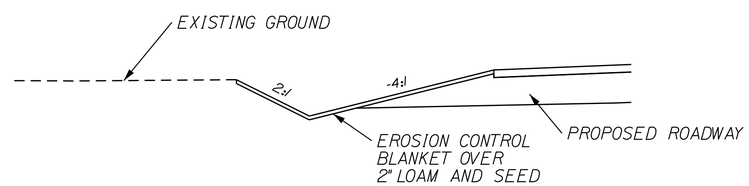
DRAINAGE DETAILS

SHEET NUMBER
18
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



LEVEL SPREADER
STA. 517+25 RT TO STA. 518+00 RT



VEGETATIVE DITCH TREATMENT
FOR DITCHES WITH SLOPES
GREATER THAN 5%

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

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YARMOUTH
I-295 EXIT 15

DRAINAGE DETAILS

SHEET NUMBER
19
OF 283

Filename:
Division: HIGHWAY
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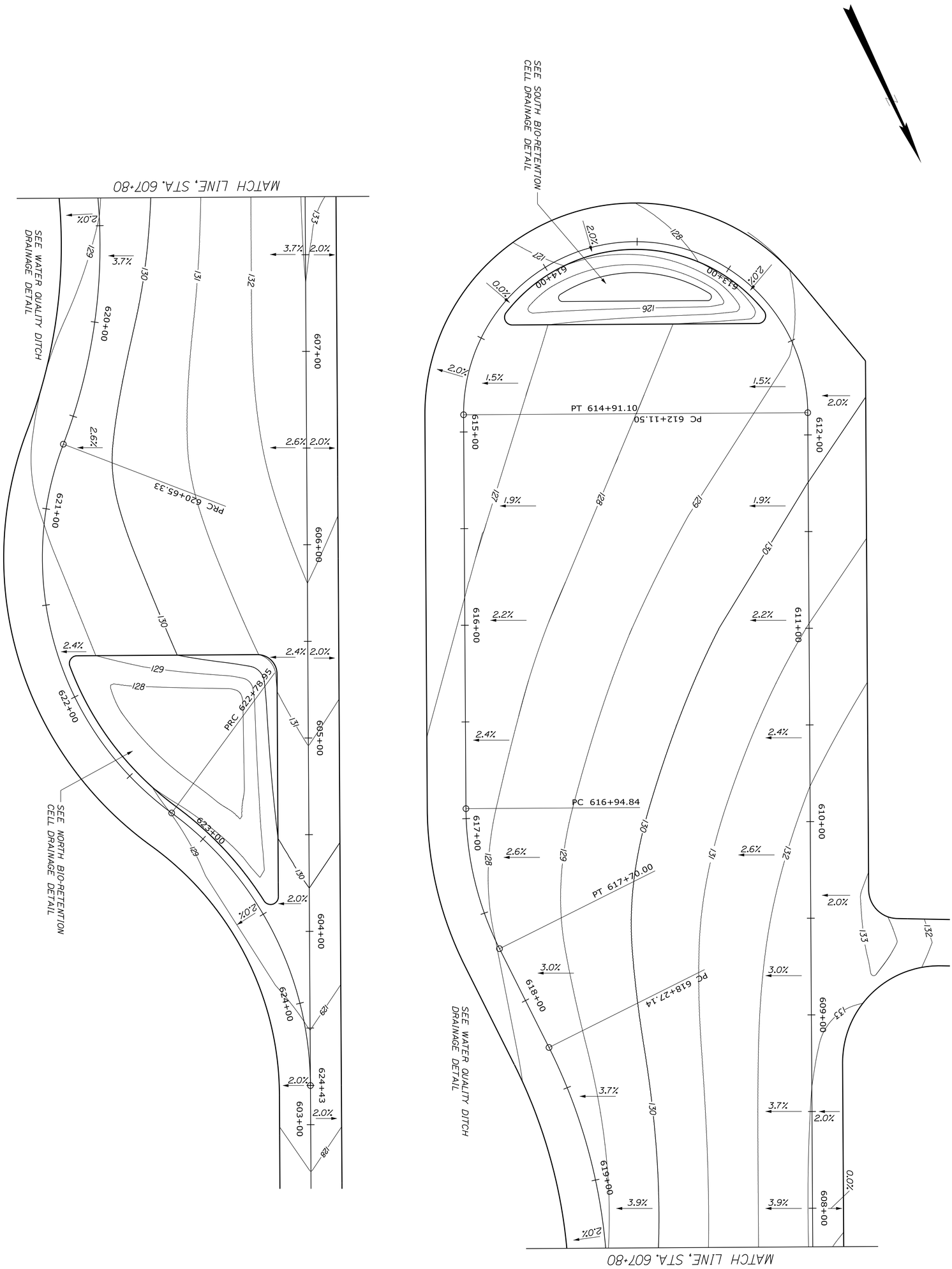
Date:2/21/2011



SHEET NUMBER 20 OF 283	YARMOUTH I-295 EXIT 15	PROJ. MANAGER / DESIGN-DETAILED / CHECKED-REVIEWED / DESIGN2-DETAILED2 / DESIGN3-DETAILED3 / REVISIONS 1 / REVISIONS 2 / REVISIONS 3 / REVISIONS 4 / FIELD CHANGES (BY, DATE)	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
	PARK & RIDE GRADING PLAN	SIGNATURE / P.E. NUMBER / DATE	IM-1108(600) EXIT 15 CM-1749(000)X PARK & RIDE LOT
			WIN 11806.00 EXIT 15 WIN 17490.00 PARK & RIDE LOT — HIGHWAY PLANS

GENERAL NOTES:

1. THE CRITERIA ON THIS SHEET ARE MINIMUM CRITERIA. THE CONTRACTOR SHALL USE OTHER CRITERIA, AS NECESSARY, TO COMPLETE THE WORK IN ACCORDANCE WITH THE CONTRACT REQUIREMENTS. THE PERMANENT SOIL NAIL RETAINING WALL SHALL BE DESIGNED BY THE CONTRACTOR FOR A DESIGN LIFE OF 75 YEARS.
2. THE LIMITS OF THE PERMANENT SOIL NAIL RETAINING WALL ARE SHOWN ON THE DRAWINGS.
3. UNLESS MODIFIED BY THE CONTRACT DRAWINGS AND SPECIFICATIONS, THE STRUCTURAL DESIGN AND ALLOWABLE UNIT STRESSES SHALL BE GOVERNED BY THE CURRENT EDITIONS OF THE FOLLOWING MANUALS, CODES, OR SPECIFICATIONS, AND SHALL BE CONSIDERED PART OF THE SPECIFICATIONS.

GENERAL:
"GEOTECHNICAL ENGINEERING CIRCULAR NO. 7, SOIL NAIL WALLS," REPORT NO. FHWA-IF-03-017.

STEEL:
"SPECIFICATIONS FOR THE DESIGN, FABRICATION, AND ERECTIONS OF STRUCTURAL STEEL FOR BUILDINGS" AND "THE MANUAL OF STEEL CONSTRUCTION" (ASD EDITION), THE AMERICAN INSTITUTE FOR STEEL CONSTRUCTION.

WELDING:
"STRUCTURAL STEEL WELDING CODE STEEL," ANSI/AWS D1.1 OF THE AMERICAN WELDING SOCIETY, INC.

REINFORCED CONCRETE:
"BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE," ACI 318 OF THE AMERICAN CONCRETE INSTITUTE.

ANALYSIS AND DESIGN:

1. DESIGN OF THE PERMANENT SOIL NAIL RETAINING WALL SHALL BE COMPLETED IN ACCORDANCE WITH SPECIAL PROVISION 636 DESIGN OF SOIL NAIL WALL AND WILL BE PAID FOR UNDER ITEM NO. 636.40.
2. THE PERMANENT SOIL NAIL RETAINING WALL SHALL BE DESIGNED USING THE PROCEDURES CONTAINED IN THE FEDERAL HIGHWAY ADMINISTRATION "GEOTECHNICAL ENGINEERING CIRCULAR NO. 7, SOIL NAIL WALLS," REPORT NO. FHWA-IF-03-017, DATED MARCH 2003, AND THE RECOMMENDATIONS INCLUDED IN THE GEOTECHNICAL DESIGN REPORT PREPARED BY HALEY & ALDRICH, INC. ENTITLED "GEOTECHNICAL DESIGN REPORT, INTERSTATE 295/U.S. ROUTE 1 INTERCHANGE IMPROVEMENTS, MAINEDOT PIN 11086.00, YARMOUTH, MAINE."
3. THE DESIGN OF THE PERMANENT SOIL NAIL RETAINING WALL SYSTEM SHALL SATISFY THE MOST CRITICAL CONDITIONS ANTICIPATED DURING BOTH THE TEMPORARY CONSTRUCTION SEQUENCE AND PERMANENT OPERATION OF THE SYSTEM.
4. THE CONTRACTOR SHALL SUBMIT THE FOLLOWING INFORMATION, STAMPED AND SIGNED BY A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF MAINE: WRITTEN DESCRIPTION OF THE INTENDED SEQUENCE OF CONSTRUCTION, PLAN LIMITS OF THE SYSTEM, CROSS SECTIONS OF EACH DESIGN SECTION, DETAILS OF SOIL NAILS AND ANCHOR HEADS, AND DESIGN CALCULATIONS FOR THE COMPLETE SYSTEM.
5. VARIOUS DESIGN CASES SHALL BE DETERMINED BY COMBINING TOGETHER THE LOADING CONDITIONS FOR SOIL, SURCHARGES, AND SEISMIC LOADINGS.
6. THE FOLLOWING ENGINEERING PROPERTIES SHALL BE ASSUMED FOR SOILS PRESENT AT THE SITE:

SOIL UNIT	TOTAL UNIT WEIGHT (PCF)	INTERNAL ANGLE OF FRICTION (DEGREES)	COHESION (LB/SQFT)
FILL	120	28	NA
MARINE SAND	115	30	NA
MARINE CLAY	115	NA	500

7. THE PERMANENT SOIL NAIL RETAINING WALL SHALL BE ANALYZED/DESIGNED FOR MINIMUM LATERAL PRESSURES DUE TO TRAFFIC AND CONSTRUCTION EQUIPMENT BASED ON AN ASSUMED SURFACE SURCHARGE EQUAL TO 250 POUNDS PER SQUARE FOOT (PSF) ACTING OVER A 20-FT WIDE INFLUENCE AREA. THE CONTRACTOR SHALL DETERMINE IF THE 250 PSF VERTICAL SURCHARGE LOAD IS SUFFICIENT. THE CONTRACTOR SHALL ALSO ACCOUNT FOR CRITICAL SURCHARGE LOADING CONDITIONS NOT DESCRIBED HEREIN, WHICH MAY INCLUDE POINT LOADS OR UNIFORM LINE OR STRIP LOADS RESULTING FROM CRANES OR MATERIAL STOCKPILES. IF ADDITIONAL CONSTRUCTION SURCHARGE LOADS ARE ANTICIPATED EITHER ON TOP OF THE SOIL NAIL RETAINING WALL AND/OR ON TOP OF THE ROUTE 1 EMBANKMENT, THESE SURCHARGE LOADS SHALL ALSO BE INCLUDED IN THE ANALYSIS/DESIGN.
8. THE DESIGN OF THE SOIL NAIL RETAINING WALL SYSTEM SHALL INCLUDE ACCOMMODATIONS FOR THE DESIGN PHREATIC SURFACE.
9. THE DESIGN OF ALL STRUCTURAL COMPONENTS OF THE PERMANENT SOIL NAIL RETAINING WALL SYSTEM SHALL INCLUDE THE SEISMIC LOADING CONDITION.
10. THE EXCAVATION DEPTH SHALL BE DEFINED AS A VERTICAL DISTANCE FROM THE LOWEST EXCAVATION TO THE HIGHEST GROUND SURFACE ELEVATION BEHIND THE PERMANENT SOIL NAIL RETAINING WALL.

SOIL NAILS:

1. NAIL BARS SHALL BE EPOXY COATED.
2. THE FOLLOWING TOLERANCES SHALL BE STRICTLY ADHERED TO:

ELEVATIONS: +/- 0.1 FT
WALL HEIGHT: +/- 0.1 FT

STRAIGHTNESS & FLATNESS (SHOTCRETE FACE)
EDGE BOW (ASTM C-550): 1/4 IN. MAXIMUM PER 96-IN. LENGTH
FACE BOW (ASTM C-550): 1/2 IN. MAXIMUM PER 96-IN. LENGTH
SAUCER (FP-201): 1/8 IN. MAXIMUM PER 24-IN. WIDTH

3. EXCAVATION TO THE FINAL WALL EXCAVATION FACE SHALL BE PERFORMED USING PROCEDURES THAT: (1) PREVENT GROUND LOSS, SWELLING, AIR SLAKING, OR LOOSENING; (2) MINIMIZE DEGRADATION OF SOIL BEARING SUPPORT BELOW THE OVERLYING PORTIONS OF THE SOIL NAIL WALL AND BELOW THE SOIL NAILS CURRENTLY BEING INSTALLED; (3) PREVENT PREMATURE LOSS OF SOIL MOISTURE AT THE FACE; (4) PREVENT GROUND FREEZING; (5) PREVENT POTENTIAL FOR SHOTCRETE OVERAGES; (6) MINIMIZE GROUNDWATER SEEPAGE FROM THE EXCAVATED FACE; AND (7) MAINTAIN SATISFACTORY MOISTURE CONTROL OF EXCAVATED FACE TO ALLOW PROPER PLACEMENT OF SHOTCRETE.
4. LOSS OF GROUND AS A RESULT OF SLOUGHING OR RAVELING OF THE EXCAVATED FACE SHALL NOT BE PERMITTED.
5. PROVIDE CONTRACTION AND EXPANSION JOINS IN ACCORDANCE WITH ACI 506.2-90 (SPECIFICATION OF SHOTCRETE) SECTION 3.6 AND ACI 506R-90 (GUIDE TO SHOTCRETE) SECTION 5.7.
6. PRIOR TO SHOTCRETING THE SOIL SURFACE, CLEAN ALL SURFACES OF LOOSE MATERIAL.
7. PROVIDE 3 IN. (MINIMUM) CLEAR COVER AROUND ALL REBAR.
8. SOIL NAILS SHALL BE INSTALLED USING ROTARY/ROTARY PERCUSSIVE DRILLING. AIR OR WATER SHALL BE USED TO FLUSH CUTTINGS FROM DRILL HOLES AS THE HOLE IS ADVANCE. CASING SHALL BE EMPLOYED FOR FULL SOIL NAIL LENGTH. THE DRILLHOLE DIAMETER SHALL BE SELECTED TO PROVIDE A MINIMUM OF 1.5 INCHES OF GROUT COVER OVER AN EPOXY-COATED SOIL NAIL BAR; AND TO DEVELOP THE REQUIRED SOIL-GROUT BOND STRENGTH. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE FINAL DRILLHOLE DIAMETER REQUIRED TO PROVIDE THE ULTIMATE SOIL-GROUT BOND STRENGTH VALUE REQUIRED BY THE SOIL NAIL WALL DESIGN. THE DRILLHOLE SHALL BE DRILLED TO THE DEPTHS INDICATED ON THE CONTRACTOR'S PLANS TO ACCOMMODATE THE REQUIRED LENGTH OF SOIL NAIL. UPON REACHING THE DESIGN DEPTH, INSERT THE NAIL BAR AND TREMIE GROUT THE DRILLHOLE FROM THE BOTTOM. A FULL HEAD OF GROUT SHALL BE MAINTAINED DURING WITHDRAWAL OF CASING TO ENSURE COMPLETE FILLING OF THE DRILLHOLE. ALL HOLES DRILLED EACH DAY SHALL BE GROUTED THE SAME DAY.
9. THE EARTH FACE SHALL BE TRIMMED TO THE TOLERANCES SPECIFIED AND ROLLS OF GEOCOMPOSITE DRAIN STRIPS SUFFICIENT IN LENGTH TO BE CONTINUOUS FOR THE WALL HEIGHT AT EACH LOCATION SHALL BE INSTALLED. THE ROLL SHALL BE UNROLLED AND APPLIED TO THE SOIL FACE, AS NEEDED FOR EACH LIFT. THE REMAINDER OF THE ROLL SHALL BE COLLECTED NEATLY AT THE BASE OF THE WALL. A COVER SHALL BE PLACED OVER THE REMAINING ROLL TO PREVENT REBOUND FROM BONDING TO THE MEDIA DURING SHOTCRETE APPLICATION. "U"-SHAPED BENT PINS SHALL BE USED TO AFFIX THE BOARD TO THE SOIL SURFACE. THEY SHALL WRAP ALL EDGES AND RETURN 6 INCHES ON THE BACK OF THE STRIP OF DRAINAGE MEDIA.
10. SHOTCRETING SHALL BE PERFORMED THE SAME DAY AS THE EXCAVATION OF THE LIFT OR TEMPORARY BERM (IF USED). SHOTCRETING SHALL START FROM THE BASE OF THE EXCAVATION LIFT WORKING UPWARDS. WHENEVER POSSIBLE, THE FULL SECTION SHOULD BE GUNNED TO FULL DESIGN THICKNESS IN ONE LAYER. THE SHOTCRETE THICKNESS DURING GUNNING SHALL BE MONITORED AND APPLIED SUCH THAT SAGS AND SLOUGHS DO NOT FORM.
11. ALL EXTERIOR CORNERS AND EDGES SHALL HAVE A *-IN. CHAMFER AND ALL INTERIOR CORNERS HALL HAVE A *-IN. FILLET.
12. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING STABLE SLOPES ABOVE AND BELOW THE SOIL NAIL RETAINING WALL AT ALL TIMES.
13. NO OPEN CUTS STEEPER THAN 1H:1V SHALL BE MADE WITHIN 20 FEET IN FRONT OF THE SOIL NAIL RETAINING WALL WITHOUT APPROVAL OF THE GEOTECHNICAL ENGINEER.
14. THE FINAL CAST-IN-PLACE FACING SHALL HAVE CONTRACTION JOINTS AT MAXIMUM 30-FT SPACING.
15. AT A MINIMUM, THE FINAL CAST-IN-PLACE FACING SHALL CONTAIN TEMPERATURE REINFORCEMENT CONSISTING OF #5 EPOXY COATED REBAR IN A GRID PATTERN WITH AND 18 IN. SPACING.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
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BY | DATE

PROJ. MANAGER
DESIGN-DETAILED
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REVISIONS 1
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REVISIONS 3
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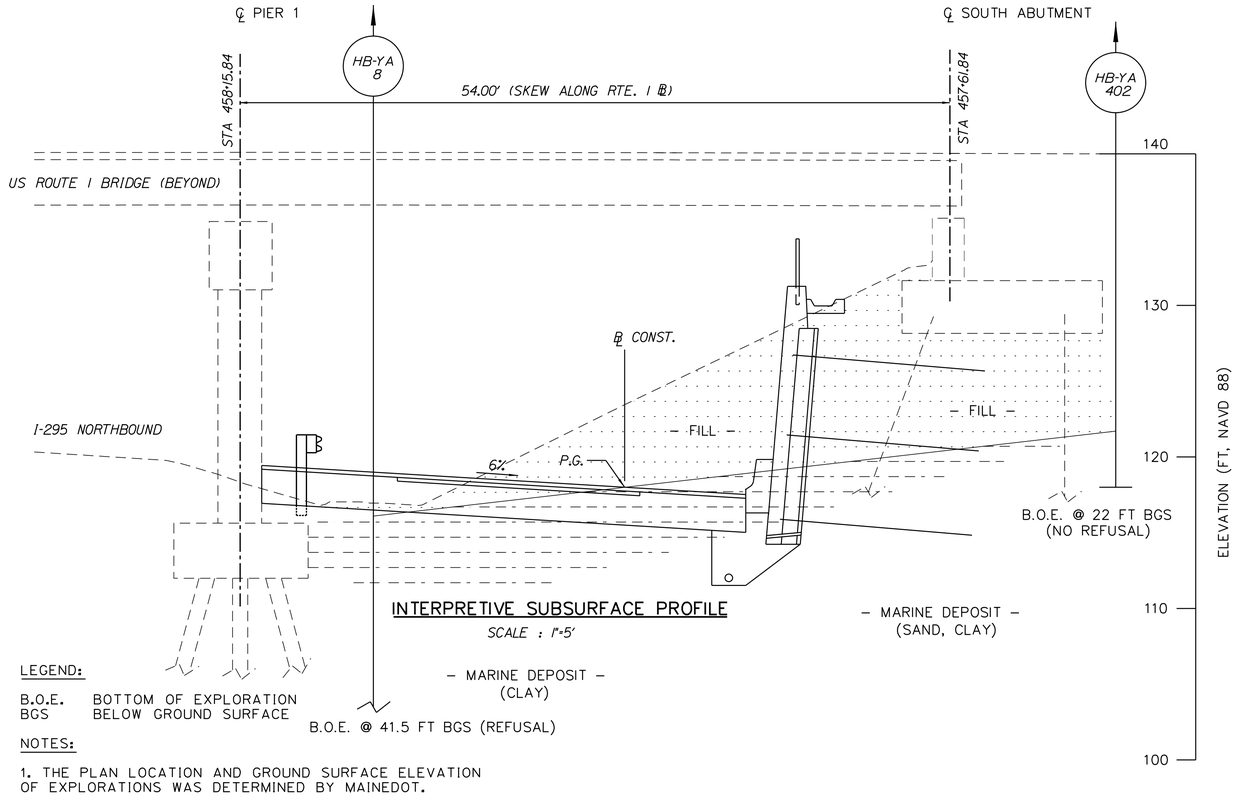
FIELD CHANGES

YARMOUTH
I-295 EXIT 15

SOIL NAIL WALL GENERAL NOTES

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



INTERPRETIVE SUBSURFACE PROFILE

SCALE : 1"=5'

LEGEND:

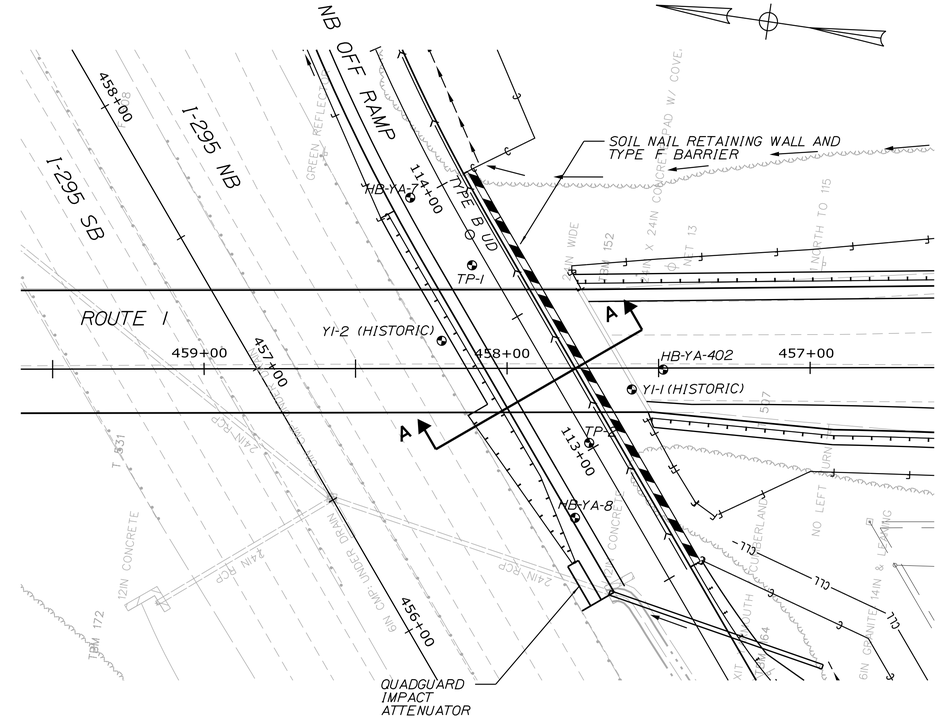
B.O.E. BOTTOM OF EXPLORATION
BGS BELOW GROUND SURFACE

NOTES:

1. THE PLAN LOCATION AND GROUND SURFACE ELEVATION OF EXPLORATIONS WAS DETERMINED BY MAINEDOT.

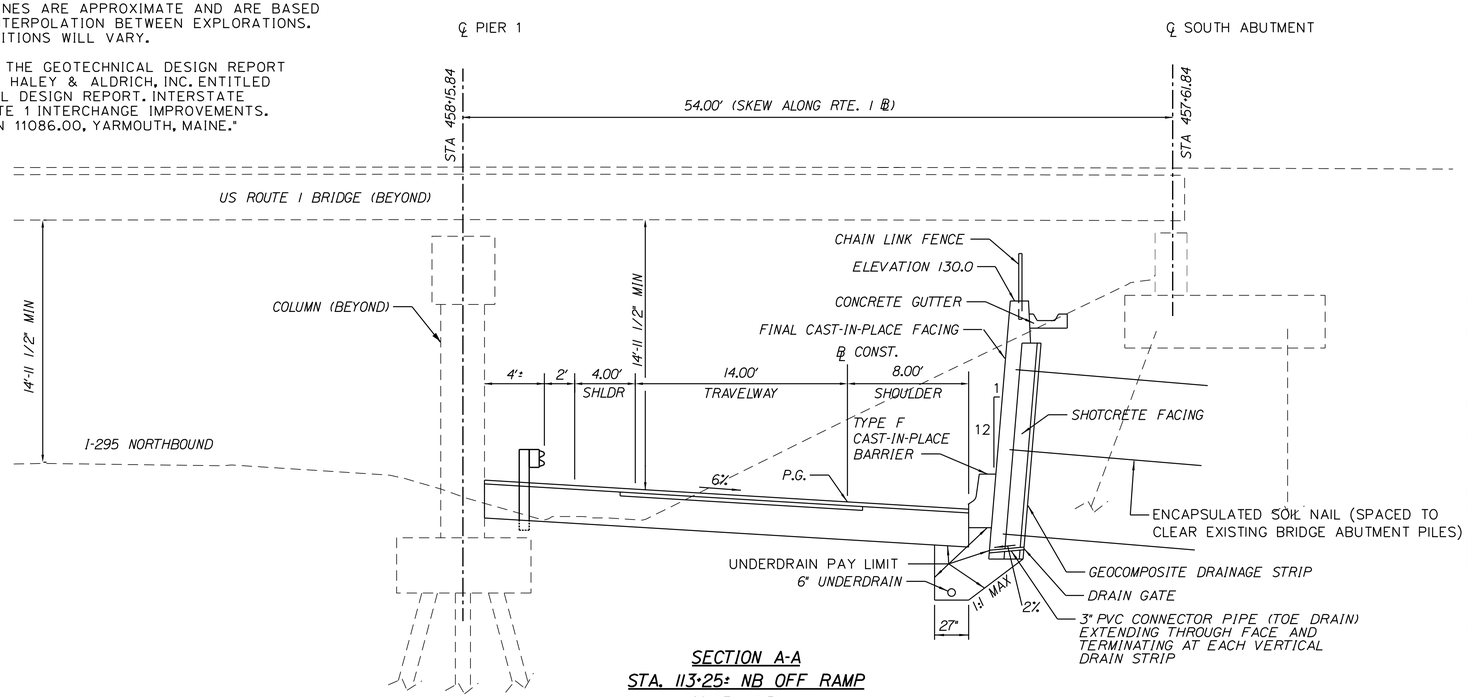
2. STRATA LINES ARE APPROXIMATE AND ARE BASED ON LINEAR INTERPOLATION BETWEEN EXPLORATIONS. ACTUAL CONDITIONS WILL VARY.

3. REFER TO THE GEOTECHNICAL DESIGN REPORT PREPARED BY HALEY & ALDRICH, INC. ENTITLED "GEOTECHNICAL DESIGN REPORT. INTERSTATE 295/U.S. ROUTE 1 INTERCHANGE IMPROVEMENTS. MAINEDOT WIN 11086.00, YARMOUTH, MAINE."



PLAN

SCALE : 1"=25'



SECTION A-A
STA. 113+25± NB OFF RAMP

SCALE : 1"=5'

SOIL NAIL RETAINING WALL NOTES:

1. DESIGN OF THE SOIL NAIL RETAINING WALL SHALL BE COMPLETED IN ACCORDANCE WITH SPECIAL PROVISION 636 - DESIGN OF SOIL NAIL WALL AND THE RECOMMENDATIONS OF THE GEOTECHNICAL DESIGN REPORT PREPARED BY HALEY & ALDRICH, INC. ENTITLED "GEOTECHNICAL DESIGN REPORT, INTERSTATE 295/U.S. ROUTE 1 INTERCHANGE IMPROVEMENTS, MAINEDOT PIN 11086.00, YARMOUTH, MAINE." DESIGN OF THE SOIL NAIL RETAINING WALL WILL BE PAID FOR UNDER ITEM NO. 636.400.

2. CONSTRUCTION OF THE SOIL NAIL RETAINING WALL SHALL BE COMPLETED IN ACCORDANCE WITH SPECIAL PROVISION 636 - SOIL NAIL WALL AND WILL BE PAID FOR UNDER ITEM NO. 636.411. ANY WALL PROJECTIONS BEYOND THE LIMITS SHOWN, TO ACCOMMODATE SPACING OF WALL FACING WILL BE CONSIDERED INCIDENTAL TO THIS ITEM.

3. THE CONTRACTOR SHALL TAKE ALL MEASURES NECESSARY TO PROTECT THE EXISTING U.S. ROUTE 1 OVERPASS BRIDGE AND ANY EXISTING UTILITIES FROM DAMAGE THROUGH THE ENTIRE CONSTRUCTION OPERATION. THE CONTRACTOR SHALL COORDINATE THE SPACING OF SOIL NAILS TO AVOID INTERFERENCE WITH THE EXISTING BRIDGE ABUTMENT PILES. ANY AND ALL DAMAGE TO THE EXISTING U.S. ROUTE 1 OVERPASS BRIDGE STRUCTURE OR EXISTING UTILITIES CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT HIS/HER OWN EXPENSE, AT NO ADDITIONAL COST TO THE DEPARTMENT.

4. FOR PLAN LOCATION AND SPACING OF EXISTING U.S. ROUTE 1 OVERPASS BRIDGE ABUTMENT PILES, SEE BRIDGE PLAN, SHEET NO. 32 OF 103 ENTITLED "PORTLAND-YARMOUTH INTERSTATE, RELOCATED ROUTE 1 OVER INTERSTATE, SOUTH ABUTMENT."

5. CHAIN LINK FENCE INCIDENTAL TO SOIL WALL ITEM 636.411 SOIL NAIL WALL.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

SOIL NAIL WALL PLANS

SHEET NUMBER
22
OF 283

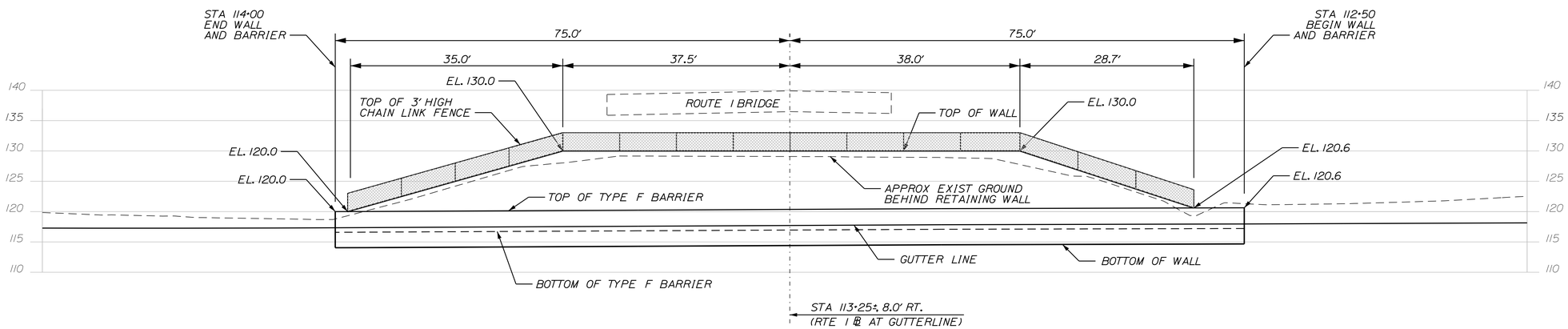
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename:

Division: HIGHWAY

Username: COMMON

Date:2/21/2011



SOIL NAIL WALL ELEVATION

SCALE: 1" =10'

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

YARMOUTH
I-295 EXIT 15

SOIL NAIL WALL PLANS

SHEET NUMBER

23

OF 283

VIEW OF I-295 NB DECELERATION LANE BENEATH THE EXISTING ROUTE 1 OVERPASS BRIDGE WITH PIER NO. 1 (LEFT) VISIBLE, LOOKING NORTH.

VIEW OF I-295 NB DECELERATION LANE BENEATH THE EXISTING ROUTE 1 OVERPASS BRIDGE WITH PIER NO. 1 (LEFT) VISIBLE, LOOKING NORTH.

VIEW OF CONCRETE PAVER SLOPE PROTECTION BENEATH THE EXISTING ROUTE 1 OVER PASS BRIDGE WITH ABUTMENT A (RIGHT) VISIBLE, LOOKING NORTHEAST.

VIEW OF CONCRETE PAVER SLOPE PROTECTION BENEATH THE EXISTING ROUTE 1 OVERPASS BRIDGE WITH ABUTMENT A (LEFT) AND PIER NO. 1 (RIGHT) VISIBLE, LOOKING SOUTHEAST.

VIEW OF CONCRETE PAVER SLOPE PROTECTION BENEATH THE EXISTING ROUTE 1 OVERPASS BRIDGE WITH PIER NO. 1 VISIBLE, LOOKING SOUTHWEST.

PHOTOGRAPHS OF EXISTING SITE CONDITIONS IN THE VICNITY OF THE ROUTE 1 OVERPASS BRIDGE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

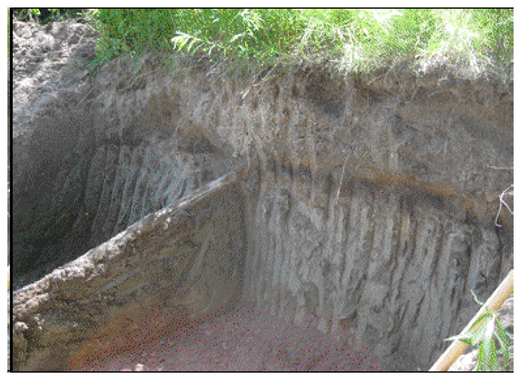
SOIL NAIL WALL EXIST. CONDITIONS

SHEET NUMBER
24
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

VIEW OF I-295 NB DECELERATION LANE BENEATH THE EXISTING ROUTE 1 OVERPASS BRIDGE WITH PIER NO. 1 (LEFT) VISISBLE, LOOKING NORTH.

VIEW OF TEST PIT NO. 1 EXCAVATED ON THE NORTH SIDE OF THE EXISTING ROUTE 1 OVERPASS BRIDGE IMMEDIATELY AFTER EXCAVATION, LOOKING EAST, 20 JUNE 2011. THIN GRANULAR FILL OVERLYING FORMER TOPSOIL/ORGANIC LAYER AND UNDERLYING MARINE SILT/CLAY DEPOSIT.



VIEW OF TEST PIT NO. 1 EXCAVATED ON THE NORTH SIDE OF THE EXISTING ROUTE 1 OVERPASS BRIDGE IMMEDIATELY AFTER EXCAVATION, LOOKING EAST, 20 JUNE 2011. THIN GRANULAR FILL OVERLYING FORMER TOPSOIL/ORGANIC LAYER AND UNDERLYING MARINE SILT/CLAY DEPOSIT.

CLOSE-UP VIEW OF TEST PIT NO. 1 EXCAVATED ON THE NORTH SIDE OF THE EXISTING ROUTE 1 OVERPASS BRIDGE IMMEDIATELY AFTER EXCAVATION, LOOKING NORTHEAST, 20 JUNE 2011. THIN GRANULAR FILL OVERLYING FORMER TOPSOIL/ORGANIC LAYER AND UNDERLYING MARINE SILT/CLAY DEPOSIT.

VIEW OF TEST PIT NO. 1 EXCAVATED ON THE NORTH SIDE OF THE EXISTING ROUTE 1 OVERPASS BRIDGE APPROXIMATELY ONE WEEK AFTER EXCAVATION, LOOKING EAST, 30 JUNE 2011. THIN GRANULAR FILL OVERLYING FORMER TOPSOIL/ORGANIC LAYER AND UNDERLYING MARINE SILT/CLAY DEPOSIT.

TEST PIT NO. 1 DESCRIPTION:

SOIL DESCRIPTIONS PRESENTED IN ORDER OF INCREASING DEPTH BELOW GROUND SURFACE.

1. SURFICIAL LAYER OF TOPSOIL RANGED IN THICKNESS FROM APPROXIMATELY 0.1 TO 0.3 FT.
2. TOPSOIL UNDERLAIN BY VARIABLE THICKNESS OF GRAY, SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE TO COARSE GRAVEL. THE THICKNESS RANGED FROM APPROXIMATELY 0.8 TO 2.0 FT IN THE NORTHERN AND SOUTHERN PORTIONS OF THE EXPOSED FACE.
3. VARIABLE THICKNESS OF LIGHT BROWN, WELL-GRADED SAND WITH GRAVEL (NORTHERN HALF OF TEST PIT), TO ORANGE-BROWN POORLY-GRADED SAND, TRACE FINE AND COARSE SAND AND FINE GRAVEL (SOUTHERN HALF OF TEST PIT). THE THICKNESS IN THE NORTHERN HALF OF THE TEST PIT RANGED FROM APPROXIMATELY 0.2 TO 1.3 FT AND THE THICKNESS IN THE SOUTHERN HALF OF THE TEST PIT RANGED FROM APPROXIMATELY 0.1 TO 0.8 FT.
4. VARIABLE THICKNESS OF DARK BROWN SILTY FINE TO BLACK ORGANIC SOIL. THE THICKNESS RANGED FROM APPROXIMATELY 0.1 TO 0.5-FT THICK.
5. VARIABLE THICKNESS OF LIGHT GRAY, FINE SAND. THE THICKNESS RANGED FROM APPROXIMATELY 0.1 TO 0.8 FT.
6. GRAY, MOTTLED, SILTY CLAY EXTENDING TO BOTTOM OF TEST PIT.
7. ENCOUNTERED EXISTING UNKNOWN UTILITY PIPE WITHIN LIMITS OF TEST PIT. PIPE CONSISTS OF 3.5-IN. DIAMETER, BITUMEN COATED METAL PIPE SLOPING DOWN FROM EAST TO WEST, TOWARDS INTERSTATE 295, AT APPROXIMATELY 3H:1V.

PHOTOGRAPHS OF TEST PIT 1, NORTH OF THE ROUTE 1 OVERPASS BRIDGE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

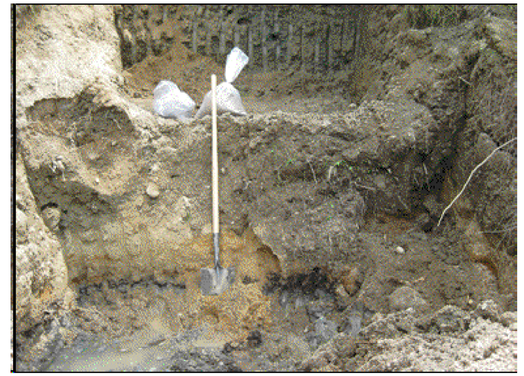
YARMOUTH
I-295 EXIT 15

SOIL NAIL WALL EXIST. CONDITIONS

SHEET NUMBER
25
OF 283

Division: HIGHWAY Username: COMMON Date:2/21/2011
Filename:

VIEW OF TEST PIT NO. 2 EXCAVATED ON THE SOUTH SIDE OF THE EXISTING ROUTE 1 OVERPASS BRIDGE IMMEDIATELY AFTER EXCAVATION, LOOKING EAST, 20 JUNE 2011.



CLOSE-UP VIEW OF THE LOWER PORTION OF TEST PIT NO. 2 IMMEDIATELY AFTER EXCAVATION WITH GRANULAR MATERIAL VISIBLE OVERLYING A FORMER TOPSOIL/ORGANIC LAYER AND MARINE SILT/CLAY DEPOSIT, LOOKING EAST, 20 JUNE 2011.

VIEW OF TEST PIT NO. 2 EXCAVATED ON THE NORTH SIDE OF THE EXISTING ROUTE 1 OVERPASS BRIDGE APPROXIMATELY ONE WEEK AFTER EXCAVATION, LOOKING EAST, 30 JUNE 2011.

CLOSE-UP VIEW OF THE UPPER PORTION OF TEST PIT NO. 2 IMMEDIATELY AFTER EXCAVATION WITH GRANULAR MATERIAL VISIBLE OVERLYING SILT/CLAY DEPOSIT, LOOKING EAST, 20 JUNE 2011.

CLOSE-UP VIEW OF TEST PIT NO. 2 EXCAVATED ON THE NORTH SIDE OF THE EXISTING ROUTE 1 OVERPASS BRIDGE APPROXIMATELY ONE WEEK AFTER EXCAVATION, LOOKING EAST, 30 JUNE 2011.

TEST PIT NO. 2 DESCRIPTION:

SOIL DESCRIPTIONS PRESENTED IN ORDER OF INCREASING DEPTH BELOW GROUND SURFACE.

UPPER PORTION OF TEST PIT (EAST):

1. SURFICIAL LAYER OF TOPSOIL RANGED IN THICKNESS FROM APPROXIMATELY 0.1 TO 0.3 FT.
2. TOPSOIL UNDERLAIN BY VARIABLE THICKNESS OF GRAY, SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE TO COARSE GRAVEL. THE THICKNESS RANGED FROM APPROXIMATELY 0.5 TO 1.2 FT IN THE NORTHERN AND SOUTHERN PORTIONS OF THE EXPOSED FACE.
3. VARIABLE THICKNESS OF GRAY AND BROWN, WELL-GRADED SAND WITH GRAVEL. CONTAINS SOME COBBLES AND SMALL BOULDERS. THE THICKNESS RANGED FROM APPROXIMATELY 0.7 TO 2.1 FT AND THE THICKNESS IN THE SOUTHERN HALF OF THE TEST PIT RANGED FROM APPROXIMATELY 0.1 TO 0.8 FT.
4. VARIABLE THICKNESS OF GRAY, SILTY FINE SAND, TRACE MEDIUM TO COARSE SAND AND FINE GRAVEL. VERY SILTY IN SOME AREAS AND CONTAINS LOCALIZED LENSES OF MEDIUM TO COARSE SAND AND FINE GRAVEL. THE THICKNESS RANGED FROM APPROXIMATELY 0.4 TO 1.2 FT AND TRANSITIONED INTO GRAY, MOTTLED, SILTY CLAY EXTENDING TO THE BOTTOM OF THE TEST PIT.
5. WATER OBSERVED SEEPING FROM EXPOSED FACE AT TOP OF GRAY, SILTY FINE SAND LAYER.

LOWER PORTION OF TEST PIT (WEST):

1. SAND AND GRAVEL ENCOUNTERED FROM GROUND SURFACE TO A DEPTH OF 6 FT AT THE NORTHERN FACE OF TEST PIT. THE TOP 1 TO 2 FT OF THIS MATERIAL CONSISTED OF GRAY, SILTY FINE SAND. THE MIDDLE 1 TO 2 FT CONSISTED OF SILTY FINE SAND WITH GRAVEL. THE LOWEST PORTION OF THIS LAYER CONSISTED OF WELL-GRADED SAND.
2. VARIABLE THICKNESS OF ORGANIC MATERAL MEASURING APPROXIMATELY 0.1 TO 0.4-FT THICK.
3. GRAY, SILTY FINE SAND AND MOTTLED, SILTY CLAY VISIBLE TO BOTTOM OF TEST PIT.
4. WATER OBSERVED ENTERING LOWER PORTION OF TEST PIT THROUGH ORAGANIC MATERIAL AND SILTY FINE SAND OVERLYING THE SILTY CLAY.

PHOTOGRAPHS OF TEST PIT 2, NORTH OF THE ROUTE 1 OVERPASS BRIDGE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

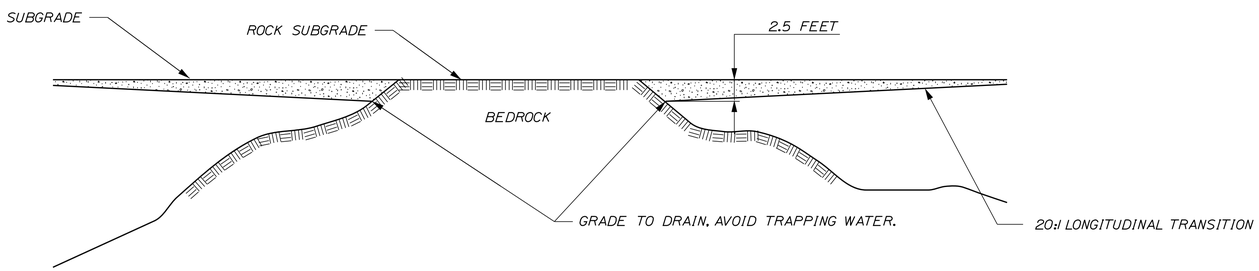
YARMOUTH
I-295 EXIT 15

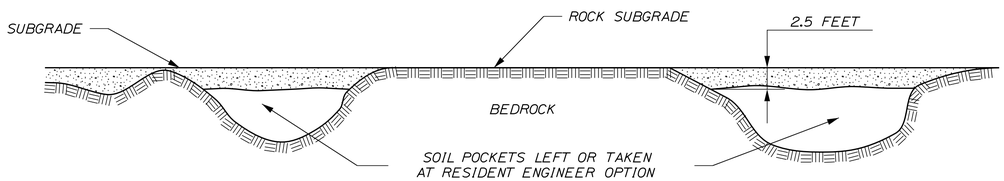
SOIL NAIL WALL EXIST. CONDITIONS

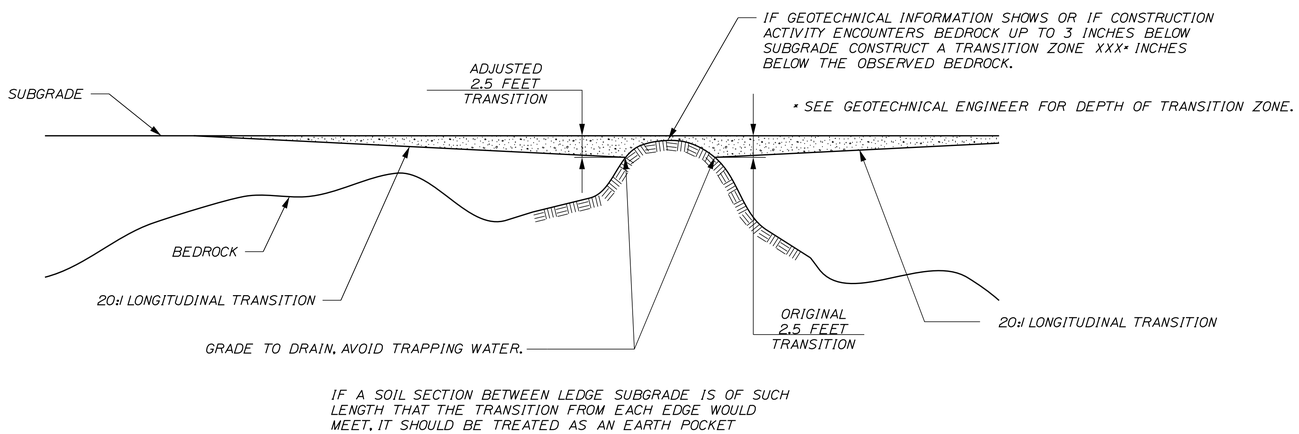
SHEET NUMBER
26
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

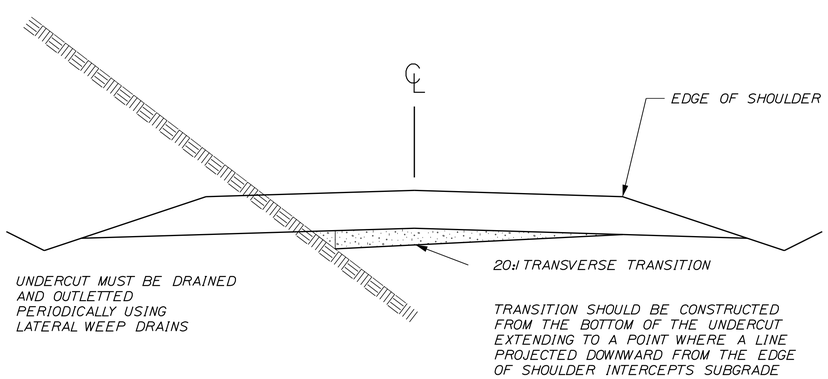
PROFILE OF UNDERCUT OF FROST SUSCEPTIBLE SOILS OVER LEDGE







TRANSVERSE UNDERCUT OF FROST SUSCEPTIBLE SOILS OVER LEDGE



NOTES:

1. EXCAVATION OF THE TRANSITION ZONES SHALL BE PAID FOR AS COMMON EXCAVATION. THE CONTRACTOR SHALL REPLACE THE FROST SUSCEPTIBLE SOILS WITH GRAVEL BORROW AND SHALL BE PAID FOR UNDER THE GRAVEL BORROW PAY ITEM.

2. FOR POTENTIAL BEDROCK LOCATIONS, REFER TO THE BORING LOG SHEETS AND CROSS SECTIONS. ACTUAL BEDROCK LOCATIONS WILL VARY. ADDITIONAL AREAS OF LEDGE MAY BE ENCOUNTERED AND THE NEED FOR UNDERCUT SHOULD BE VERIFIED BY THE RESIDENT

SOLID BEDROCK

FROST SUSCEPTIBLE SOIL TO BE UNDERCUT AND REPLACED WITH NON FROST SUSCEPTIBLE MATERIAL

FROST SUSCEPTIBLE SOIL

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

HIGHWAY PLANS
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

UNDERCUT OF FROST SUSCEPTIBLE SOILS OVER LEDGE

SHEET NUMBER
27
OF 283

Filename: ...\MSTA\027_SUBGRADE_DETAIL.dgn Division: BRIDGE Username: common Date:12/12/2012

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-1
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	124.7	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/09/11-2/09/11	**Drilling Method:**	HSA to 10 ft	**Core Barrel:**	--
Boring Location:	STA. 99+98, 12' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/20	0.5 - 2.5	32/52/55/18	107	107	HSA		Brown, damp (frozen), very dense, gravelly fine to coarse SAND, little silt -FILL-(SP-SM)	G#11716a A-1-a, SP-SM WC=8.5%
								121.2	3.5	
5	2D	24/22	5.0 - 7.0	4/9/15/14	24	24			Grayish-brown, moist, very stiff, silty CLAY, trace fine to medium sand, desiccated with mottling -MARINE DEPOSIT-(CL)	G#11716b A-7-6(28), CL WC=24.5% LL=49, PL=24 PI=25
10	3D	24/24	10.0 - 12.0	9/8/8/9	16	16			Brown-gray, moist to wet, very stiff, silty CLAY, with occasional gray-brown, fine sandy silt seams, mottling -MARINE DEPOSIT-(CL)	
								112.7	12.0	
15									**Bottom of Exploration at 12.0 feet below ground surface.**	
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-2
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	120.2	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/07/11-2/07/11	**Drilling Method:**	HSA to 5.5 ft	**Core Barrel:**	--
Boring Location:	STA. 102+98, 15' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/7	0.0 - 2.0	4/5/7/3	12	12	HSA	119.2	Grey-brown, wet, medium dense, fine to medium SAND, little coarse sand and organic silt, abundant rootlets, slight organic odor -FILL-(SW-SP)	
									1.0	
	2D	24/17	2.0 - 4.0	7/30/34/52	64	64			Brown, wet, medium dense, GRAVEL, little fine to coarse sand, gravel in tip (GP)	G#11716c A-1-a, SP-SM WC=11.2%
									Gray, wet, very dense, gravelly fine to coarse SAND, trace silt, rusty decomposed rock -WEATHERED BEDROCK-(SP-SM)	
5	2D	24/22	5.5 - 7.5	4/9/15/14	24	24		115.2	5.0	
								114.7	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 5.5 ft.	
									5.5	
									Bottom of Exploration at 5.5 feet below ground surface.	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-3
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	120.2	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/09/11-2/09/11	**Drilling Method:**	HSA to 30 ft	**Core Barrel:**	--
Boring Location:	STA. 107+97, 8' LT.	**Casing ID/OD:**	--	**Water Level*:**	14.7 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/20	0.5 - 2.5	24/24/25/16	49	49	HSA		Dark brown-brown, dense (frozen), fine to coarse SAND, some gravel, trace silt -FILL-(SP-SM)	G#11716d A-1-b, SP-SM WC=5.2%
								116.2	4.0	
5	2D	24/19	5.0 - 7.0	4/5/5/8	10	10			Gray, moist to wet, stiff, silty CLAY, slightly blocky texture -MARINE DEPOSIT-(CL)	G#11716e A-7-6(22), CL WC=27.6% LL=42, PL=22 PI=20
10	3D	24/24	10.0 - 12.0	1/1/1/WOH	2	2			Gray, wet, very soft, silty CLAY to clayey SILT -MARINE DEPOSIT-(CL/ML)	
15	4D	24/24	15.0 - 17.0	WOH/WOH/WOH/1					Gray, wet, very soft, silty CLAY to clayey SILT, with occasional gray, fine sandy silt seams -MARINE DEPOSIT-(CL/ML)	
20	5D	24/24	20.0 - 22.0	WOH/WOH/WOH/1					Gray, wet, very soft, silty CLAY to clayey SILT, with occasional gray, fine sandy silt seams -MARINE DEPOSIT-(CL/ML)	
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-3
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	120.2	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/09/11-2/09/11	**Drilling Method:**	HSA to 30 ft	**Core Barrel:**	--
Boring Location:	STA. 107+97, 8' LT.	**Casing ID/OD:**	--	**Water Level*:**	14.7 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
25	6D	24/24	25.0 - 27.0	1/5/3/1	8	8	HSA		Gray, wet, medium stiff, silty CLAY to clayey SILT, with occasional pockets of fine sandy silt -MARINE DEPOSIT-(CL/ML)	
30	7D	24/8	30.0 - 32.0	WOH/4/6/9	10	10			Gray, wet, soft, silty CLAY to clayey SILT, with occasional pockets of fine sandy silt -MARINE DEPOSIT-(ML)	
								89.2	31.0	
								88.2	Gray, wet, medium dense, fine to medium SAND, little silt, trace gravel and coarse sand -GLACIAL TILL-(SM)	
									32.0	
									Bottom of Exploration at 32.0 feet below ground surface.	
35										
40										
45										
50										

Remarks:

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
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REVISIONS 1		
REVISIONS 2		
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REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
29
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-7
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	116.7	**Auger ID/OD:**	HW 4 in. I.D.
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	C. Helstrom	**Rig Type:**	Mobile Drill B47 Bombardier	**Hammer Wt./Fall:**	300/24 HW; 140/30 SS
Date Start/Finish:	6/28/11-6/28/11	**Drilling Method:**	HW to 10 ft	**Core Barrel:**	--
Boring Location:	STA. 114+01, 11' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
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U = Thin Wall Tube Sample
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/10	0.0 - 2.0	WOH/WOH/1/1	1	1	HW Drive	116.3	Gray and dark brown, wet, very loose, SILT with sand, contains seams of clean fine sand, slight organic odor, contains grass, roots and trace organic soil -TOPSOIL-(ML) (0.4)	
	2D	24/24	2.0 - 4.0	1/3/1/2	4	4			Gray-brown, wet, very loose, silty SAND, no structure, no odor -MARINE DEPOSIT-(SM) Gray, moist to wet, soft, SILT with sand, occasional fine sand layers, no odor -MARINE DEPOSIT-(ML)	
5	3D	24/24	5.0 - 7.0	3/2/1/1	3	3			Gray, moist to wet, soft, SILT with sand, occasional fine sand layers, no odor, coarse gravel embedded in silt near top of sample, fine sand layers much more frequent than above -MARINE DEPOSIT-(ML) (7.5)	
								109.2	Note: Coarse sand and fine gravel observed in wash at 7.5 ft. Casing blows increased from 7 to 8 ft. Change of drilling action at 7.5 ft. -GLACIAL TILL-(SP)	
10	4D	24/6	10.0 - 12.0	11/25(5.0")				105.7	Gray and brown, wet, dense, poorly-graded SAND with gravel, somewhat bonded, contains weathered rock fragments, evidence of weathered rock in sampler tip (11.0) Probable top of bedrock at 11.0 ft. Advanced rollerbit into probable bedrock to 14.0 ft.	
								102.7	**Bottom of Exploration at 14.0 feet below ground surface.** (14.0)	
15										
20										
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-8
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	116.4	**Auger ID/OD:**	HW 4 in. I.D.
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	C. Helstrom	**Rig Type:**	Mobile Drill B47 Bombardier	**Hammer Wt./Fall:**	300/24 HW; 140/30 SS
Date Start/Finish:	6/28/11-6/28/11	**Drilling Method:**	HW to 35 ft	**Core Barrel:**	--
Boring Location:	STA. 112+83, 16' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/18	0.0 - 2.0	WOH/1/1/2	2	2	HW Drive	116.0	Gray and dark brown, wet, very loose, silty SAND, no structure, slight organic odor, contains trace fine gravel, roots, grass and organic soil. Thin layer of red-brown coarse to fine sand with fine gravel (0.2 ft thick) before transitioning to very soft gray-brown marine clay -TOPSOIL-(SM) (0.4)	
	2D	24/24	2.0 - 4.0	3/3/5/5	8	8			Light gray and light brown, damp, medium stiff, silty CLAY, contains layers of sandy silt, fine sand and orange-brown mottled clay, no odor -MARINE DEPOSIT-(CL)	
5	3D	24/24	5.0 - 7.0	3/2/1/1	3	3			Light gray, wet, very soft, silty CLAY, contains trace isolated fine gravel fragments, no odor -MARINE DEPOSIT-(CL) Note: Drop stones observed in wash from 5 to 7 ft	
	V1A		7.0 - 8.0	Su=740/140 psf					65x110 mm vane raw torque readings: V1A: 310/60 in-lbs	
	V1B		8.0 - 9.0	Su=710/140 psf					65x110 mm vane raw torque readings: V1B: 300/60 in-lbs	
10	4D	24/24	10.0 - 12.0	WOH/WOH/WHO/2					Light gray, wet, very soft, silty CLAY, contains trace isolated fine gravel fragments, no odor -MARINE DEPOSIT-(CL)	
15	V2A		15.0 - 16.0	Su=795/225 psf					65x110 mm vane raw torque readings: V2A: 340/90 in-lbs	
	V2B		16.0 - 17.0	Su=795/255 psf					65x110 mm vane raw torque readings: V2B: 340/110 in-lbs	
20	5D	24/17	20.0 - 22.0	3/1/1/1	2	2			Gray, wet, very loose, poorly-graded SAND, interbedded with layers of gray silt and gray sandy silt, no odor -MARINE DEPOSIT-(SP)	
								93.4	(23.0) Note: Casing driving resistance increased from 23 to 25 ft. Gravel observed in wash water.	
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
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HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
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SIGNATURE
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YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
30
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-8
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	116.4	**Auger ID/OD:**	HW 4 in. I.D.
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	C. Helstrom	**Rig Type:**	Mobile Drill B47 Bombardier	**Hammer Wt./Fall:**	300/24 HW; 140/30 SS
Date Start/Finish:	6/28/11-6/28/11	**Drilling Method:**	HW to 35 ft	**Core Barrel:**	--
Boring Location:	STA. 112+83, 16' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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SSA = Solid Stem Auger
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WOH = weight of 140lb. hammer
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S_u = Insitu Field Vane Shear Strength (psf)
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N-uncorrected = Raw field SPT N-value
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WC = water content, percent
LL = Liquid Limit
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G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
25	6D	24/8	25.0 - 27.0	11/11/13/11	24	24	HW Drive			Gray, wet, medium dense, poorly-graded SAND with gravel, somewhat bonded, no odor -GLACIAL TILL-(SP)	
30	7D	24/24	30.0 - 32.0	18/26/43/55	69	69				Gray, wet, very dense, poorly-graded SAND with gravel, somewhat bonded, no odor, contains layers approximately 0.3 to 0.4 ft thick of clean medium to coarse sand and fine gravel -GLACIAL TILL-	
35							OPEN			Note: Advanced casing to 35 ft. Washed ahead without further sampling to bottom of exploration.	
40										Note: Rollerbit through cobbles from approximately 40.0 to 40.8 ft.	
								74.9		41.5	
								73.9		Top of probable bedrdock at 41.5 ft. Advanced rollerbit 1 ft into probable bedrock.	
										42.5	
										Bottom of Exploration at 42.5 feet below ground surface.	
45											
50											

Remarks:

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-9
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**		**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:		**Drilling Method:**	SSA to ___ft	**Core Barrel:**	--
Boring Location:		**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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SSA = Solid Stem Auger
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S_u = Insitu Field Vane Shear Strength (psf)
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N-uncorrected = Raw field SPT N-value
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N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
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WC = water content, percent
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Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0											
5								-5.2		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 6.2 ft.	
								-6.2		5.2 / 6.2	
										Bottom of Exploration at 6.2 feet below ground surface.	
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
SIGNATURE		
P.E. NUMBER		
DATE		
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
31
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-10
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	124.7	**Auger ID/OD:**	NW 3.0 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/15/11-02/16/11	**Drilling Method:**	NW Spun to 7.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 116+00, 1' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WOTP = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							NW		Note: Brown, dry to damp, fine to medium SAND, little silt, trace coarse sand observed from approximately 2 to 4 ft.	
5								118.5	-WEATHERED BEDROCK- (6.2)	
	R1	60/57	7.0 - 12.0	RQD = 87%				117.7	(7.0) Top of Bedrock at El. 117.7 R1: Gray, medium to fine grained, hard, fresh to slightly weathered GRANOFELS. Joints dipping at horizontal to low angles, very close to close, tight. One high angle secondary joint, occasional quartz veins. Rock Mass Quality-Good -HUTCHINS CORNER FORMATION- R1 Core Times (min:sec): 7.0-8.0' (4:00), 8.0-9.0' (2:00), 9.0-10.0' (1:00), 10.0-11.0' (2:00), 11.0-12.0' (1:00)	
10	R2	60/59	12.0 - 17.0	RQD = 98%					R2: Gray, medium to fine grained, hard, fresh to slightly weathered GRANOFELS. Joints dipping at horizontal to low angles, close to moderately close, tight. Occasional quartz veins. Rock Mass Quality-Excellent -HUTCHINS CORNER FORMATION- R2 Core Times (min:sec): 12.0-13.0' (2:00), 13.0-14.0' (1:00), 14.0-15.0' (1:00), 15.0-16.0' (1:00), 16.0-17.0' (1:00)	
15	R3	60/60	17.0 - 22.0	RQD = 100%					R3: Gray, fine grained, hard, fresh to slightly weathered GRANOFELS. Joints dipping at horizontal to low angles, moderately close, tight to open, occasional quartz veins. Pegmatite intrusion at approximately 18.8 ft. Rock Mass Quality=Excellent -HUTCHINS CORNER FORMATION- R3 Core Times (min:sec): 17.0-18.0' (2:00), 18.0-19.0' (1:00), 19.0-20.0' (2:00), 20.0-21.0' (2:00), 21.0-22.0' (1:00)	
20								102.7	(22.0) **Bottom of Exploration at 22.0 feet below ground surface.**	
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-11
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	129.6	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 3.1 ft	**Core Barrel:**	--
Boring Location:	STA. 116+52, 15' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WOTP = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA			
								128.0	(1.6) -WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.1 ft.	
								126.5	(3.1) **Bottom of Exploration at 3.1 feet below ground surface.**	
5										
10										
15										
20										
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
32
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-12
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	124.5	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 3.1 ft	**Core Barrel:**	--
Boring Location:	STA. 116+55, 28' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
								121.9		2.6	
								121.4		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.1 ft. 3.1	
										Bottom of Exploration at 3.1 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-12

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-13
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	136.3	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 2.5 ft	**Core Barrel:**	--
Boring Location:	STA. 117+01, 22' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
								134.8		1.5	
								133.8		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 2.5 ft. 2.5	
										Bottom of Exploration at 2.5 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-13

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
33
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-14
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**		**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA	**Core Barrel:**	--
Boring Location:		**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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SSA = Solid Stem Auger
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WOH = weight of 140lb. hammer
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S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0										**Bottom of Exploration at 0.0 feet below ground surface.** Note: Bedrock exposed at ground surface, confirmed with hand tools did not drill.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Page 1 of 1

Boring No.: HB-YA-14

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-15
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	137.8	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/17/11-2/17/11	**Drilling Method:**	SSA to 3.0 ft	**Core Barrel:**	--
Boring Location:	STA 117+43, 20' RT	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
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N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
								135.9		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.0 ft. (1.9)	
								134.8		**Bottom of Exploration at 3.0 feet below ground surface.** (3.0)	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Page 1 of 1

Boring No.: HB-YA-15

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
34
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-16
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	142.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 1.8 ft	**Core Barrel:**	--
Boring Location:	STA. 117+55, 36' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	141.7		1.2	
								141.1		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 1.8 ft. 1.8	
										Bottom of Exploration at 1.8 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Boring No.: HB-YA-16

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-17
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	144.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 3.2 ft	**Core Barrel:**	--
Boring Location:	STA. 117+98, 14' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	143.1		1.6	
								141.5		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.2 ft. 3.2	
										Bottom of Exploration at 3.2 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-17

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
35
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-18
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	147.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 1.6 ft	**Core Barrel:**	--
Boring Location:	STA. 118+00, 37' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
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U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	146.8		0.9 -WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 1.6 ft. 1.6 **Bottom of Exploration at 1.6 feet below ground surface.**	
								146.1			
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-18

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-19
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	146.1	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 2.2 ft	**Core Barrel:**	--
Boring Location:	STA. 118+52, 21' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
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MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	144.3		1.8 -WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 2.2 ft. 2.2 **Bottom of Exploration at 2.2 feet below ground surface.**	
								143.9			
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-19

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
36
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-20
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	150.3	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 4.3 ft	**Core Barrel:**	--
Boring Location:	STA. 118+53, 30' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
								149.1		Cobbles/boulders encountered at 1.2 ft -COBBLES/BOULDERS- 1.2	
								147.3		-WEATHERED BEDROCK- 3.0 Note: Auger refusal on probable top of bedrock at 4.3 ft.	
								146.0		4.3	
										Bottom of Exploration at 4.3 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-21
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	146.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 6.3 ft	**Core Barrel:**	--
Boring Location:	STA. 118+99, 18' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0										Grayish-brown, moist, silty fine SAND, trace medium sand and gravel (SM)	
							SSA				
								142.2		-WEATHERED BEDROCK- 4.7 Note: Auger refusal on probable top of bedrock at 6.3 ft.	
								140.6		6.3	
										Bottom of Exploration at 6.3 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-22
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	147.9	**Auger ID/OD:**	--
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/16/11-02/16/11	**Drilling Method:**	NW Spun to 8.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 119+02, 5' RT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							NW			
5								144.9	3.0 Note: Encountered apparent weathered bedrock from approximately 3.0 to 7.8 ft. -WEATHERED BEDROCK-	
	R1	58/58	8.0 - 12.8	RQD = 63%				140.1	7.8 Top of Bedrock at El. 140.1 R1: Gray, coarse to fine grained, hard, fresh to slightly weathered GRANOFELS with occasional moderately weathered joints. Joints dipping at horizontal to moderate angles, very close to close, open, frequent quartz veins and intrusions. Rock Mass Quality=Fair -HUTCHINS CORNER FORMATION- R1 Core Times (min:sec): 8.0-9.0' (2:00), 9.0-10.0' (2:00), 10.0-11.0' (1:00), 11.0-12.0' (1:00), 12.0-12.8' (2:00)	
10	R2	60/52	12.8 - 17.8	RQD = 77%					R2: Gray, coarse to fine grained, hard, fresh to slightly weathered GRANOFELS with occasional moderately weathered joints. Joints dipping at horizontal to low angles, very close to close, open, frequent quartz veins and intrustions. Rock Mass Quality=Good -HUTCHINS CORNER FORMATION- R2 Core Times (min:sec): 12.8-13.8' (2:00), 13.8-14.8' (1:00), 14.8-15.8' (2:00), 15.8-16.8' (1:00), 16.8-17.8' (2:00)	
15	R3	60/58.5	17.8 - 22.8	RQD = 65%					R3: Gray, medium to fine grained, hard, fresh to slightly weathered GRANOFELS with occasional moderately weathered joints. Joints dipping at horizontal to low angles, very close to close, tight to open, frequent quartz veins and intrusions. Rock Mass Quality=Good -HUTCHINS CORNER FORMATION- R3 Core Times (min:sec): 17.8-18.8' (2:00), 18.8-19.8' (1:00), 19.8-20.8' (1:00), 20.8-21.8' (2:00), 21.8-22.8' (1:00)	
20	R4	60/56	22.8 - 27.8	RQD = 85%					R4: Gray, coarse to fine grained, hard, fresh to slightly weathered GRANOFELS. Joints dipping at low angles, very close to moderately close, tight to open, frequent quartz veins. Pegmatite intrusion from approximately 25.3 to 26.0 ft.	
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS
Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine
Boring No.: HB-YA-22
PIN: 11086.00
Driller: Maine Test Borings | Elevation (ft.) 147.9 | Auger ID/OD: --
Operator: T. Schaefer | Datum: NAVD 88 | Sampler: Split Spoon 1.375 in. I.D.
Logged By: D. Dearden | Rig Type: Mobile B53 Bombardier | Hammer Wt./Fall: 140/30 SS
Date Start/Finish: 02/16/11-02/16/11 | Drilling Method: NW Spun to 8.0 ft | Core Barrel: NQ
Boring Location: STA. 119+02, 5' RT. | Casing ID/OD: NW 3.0 in. I.D. | Water Level*: --
Hammer Efficiency Factor: 0.6 | Hammer Type: Automatic ☐ Hydraulic ☐ Rope & Cathead ☒
Definitions: D = Split Spoon Sample; MD = Unsuccessful Split Spoon Sample attempt; U = Thin Wall Tube Sample; MU = Unsuccessful Thin Wall Tube Sample attempt; V = Insitu Vane Shear Test; MV = Unsuccessful Insitu Vane Shear Test attempt; R = Rock Core Sample; SSA = Solid Stem Auger; HSA = Hollow Stem Auger; RC = Roller Cone; WOH = weight of 140lb. hammer; WOR = weight of rods; WO1P = Weight of one person; S_u = Insitu Field Vane Shear Strength (psf); T_v = Pocket Torvane Shear Strength (psf); q_p = Unconfined Compressive Strength (ksf); N-uncorrected = Raw field SPT N-value; Hammer Efficiency Factor = Annual Calibration Value; N_{60} = SPT N-uncorrected corrected for hammer efficiency; N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected; $S_{u(lab)}$ = Lab Vane Shear Strength (psf); WC = water content, percent; LL = Liquid Limit; PL = Plastic Limit; PI = Plasticity Index; G = Grain Size Analysis; C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
25									Rock Mass Quality-Good -HUTCHINS CORNER FORMATION- R4 Core Times (min:sec): 22.8-23.8' (2:00), 23.8-24.8' (2:00), 24.8-25.8' (1:00), 25.8-26.8' (1:00), 26.8-27.8' (2:00)	
	R5	60/60	27.8 - 32.8	RQD = 89%					R5: Gray, coarse to fine grained, hard, fresh to slightly weathered GRANOFELS. Joints dipping at low angles, very close to moderately close, tight to open, frequent quartz veins. One secondary high angle joint. Pegmatite intrusion from approximately 29.9 to 31.1 ft. Rock Mass Quality=Good -HUTCHINS CORNER FORMATION- R5 Core Times (min:sec): 27.8-28.8' (1:00), 28.8-29.8' (2:00), 29.8-30.8' (1:00), 30.8-31.8' (3:00), 31.8-32.8' (1:00)	
30								115.1	32.8 **Bottom of Exploration at 32.8 feet below ground surface.**	
35										
40										
45										
50										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
38
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-23
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	150.0	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 1.1 ft	**Core Barrel:**	--
Boring Location:	STA. 119+01, 38' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	148.9		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 1.1 ft. 1.1 **Bottom of Exploration at 1.1 feet below ground surface.**	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-23

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-24
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	146.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 3.5 ft	**Core Barrel:**	--
Boring Location:	STA. 119+53, 23' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	144.0		2.7	
								143.2		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.5 ft. 3.5 **Bottom of Exploration at 3.5 feet below ground surface.**	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-24

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
39
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-25
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	145.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 3.7 ft	**Core Barrel:**	--
Boring Location:	STA. 120+04, 21' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
								143.7		-WEATHERED BEDROCK- 2.2 Note: Auger refusal on probable top of bedrock at 3.7 ft.	
								142.2		3.7 **Bottom of Exploration at 3.7 feet below ground surface.**	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-26
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	149.6	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 6.4 ft	**Core Barrel:**	--
Boring Location:	STA. 120+53, 20' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
										Brown, moist, medium to fine SAND, trace gravel, trace silt (SP-SM)	
5								143.6		6.0	
								143.2		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 6.4 ft.	
										6.4 **Bottom of Exploration at 6.4 feet below ground surface.**	
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
40
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-27
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	148.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 2.2 ft	**Core Barrel:**	--
Boring Location:	STA. 120+95, 32' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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SSA = Solid Stem Auger
HSA = Hollow Stem Auger
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WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
								147.2		1.5 -WEATHERED BEDROCK-	
								146.5		Note: Auger refusal on probable top of bedrock at 2.2 ft. 2.2	
										Bottom of Exploration at 2.2 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-28
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	146.8	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 2.8 ft	**Core Barrel:**	--
Boring Location:	STA. 121+40, 45' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
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SSA = Solid Stem Auger
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WOH = weight of 140lb. hammer
WOR = weight of rods
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S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA				
								144.8		2.0 -WEATHERED BEDROCK-	
								144.0		Note: Auger refusal on probable top of bedrock at 2.8 ft. 2.8	
										Bottom of Exploration at 2.8 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
41
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-29
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	129.4	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/09/11-2/09/11	**Drilling Method:**	SSA to 5.2 ft	**Core Barrel:**	--
Boring Location:	STA. 122+00, 16' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	129.0	-BITUMINOUS CONCRETE- 0.4	
	1D	12/3	1.0 - 2.0	50(4")					Light brown, dry to damp, dense, fine to medium SAND, little coarse sand, trace gravel -FILL-(SP)	
	2D	24/14	2.0 - 4.0	19/12/10/42	22	22				
								125.4	Brown to grayish-brown, damp, medium dense, fine to medium SAND, little silt -FILL-(SM) 4.0	
5								124.2	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 5.2 ft. 5.2	
									Bottom of Exploration at 5.2 feet below ground surface.	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-30
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	130.3	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 5.8 ft	**Core Barrel:**	--
Boring Location:	STA. 122+49, 25' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA 4.5	129.9	-BITUMINOUS CONCRETE- 0.4	
	1D	5/3	1.0 - 1.4	50(5")					Light brown, dry, fine to medium SAND, little gravel and coarse sand, trace silt -FILL-(SP)	
	2D	24/19	2.0 - 4.0	17/17/14/20	31	31			Light brown, damp, dense, fine to coarse SAND, trace gravel, trace silt -FILL-(SW)	
	3D	16/8	4.5 - 5.8	5/15/50(4")				125.8	Brownish-gray, damp, medium dense, silty medium to fine SAND, trace gravel -FILL-(SM) 4.5	
5								124.5	Grayish-brown, dry to damp, very dense, sandy GRAVEL, trace silt -WEATHERED/BLASTED BEDROCK-(GW) Note: Auger refusal on probable top of bedrock at 5.8 ft. 5.8	
									Bottom of Exploration at 5.8 feet below ground surface.	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
42
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-31
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	131.0	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 6.8 ft	**Core Barrel:**	--
Boring Location:	STA. 123+00, 31' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA			
	1D	24/17	1.0 - 3.0	34/30/24/25	54	54			Light brown, dry to damp, very dense, fine to coarse SAND, little gravel, trace silt -FILL-(SW)	
	2D	24/13	3.0 - 5.0	26/42/17/16	59	59			Brown, dry to damp, very dense to dense, fine to medium, sandy GRAVEL, trace coarse sand, trace silt -FILL-(GW)	
5	3D	24/19	5.0 - 7.0	20/20/50/50(4")	70	70		125.5	Brown, dry to damp, very dense to dense, fine to medium, sandy GRAVEL, trace coarse sand, trace silt -FILL-(GW)	
								124.2	5.5 Grayish-brown, dry to moist, very dense, sandy GRAVEL, trace silt -WEATHERED/BLASTED ROCK-(GW) Note: Split-spoon refusal on probable top of bedrock at 6.8 ft. 6.8	
10									**Bottom of Exploration at 6.8 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-32
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	131.6	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 4.8 ft	**Core Barrel:**	--
Boring Location:	STA. 123+50, 32' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	131.2	-BITUMINOUS CONCRETE- 0.4	
	1D	4/2	1.0 - 1.3	50(4")					Frozen sub-base - FILL- Dark brown, damp, gravelly fine to medium SAND -FILL-(SW)	
	2D	14/9	2.0 - 3.2	20/27/50(2")					Cobbles/frozen material to 2.0 ft Light brown, dry to damp, fine to coarse SAND, little gravel, trace silt -FILL-(SW) Note: Cobbles encountered from approximately 3.2 to 3.8 ft	
5	3D	2/2	4.0 - 4.2	50(2")				127.4	Brown, damp to moist gravelly SAND 4.2	
								126.8	-WEATHERED/BLASTED BEDROCK- Note: Split-spoon refusal at 4.8 ft. 4.8	
10									**Bottom of Exploration at 4.8 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
43
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-33
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	132.3	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	HSA to 8.0 ft	**Core Barrel:**	--
Boring Location:	STA. 124+01, 28' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA	131.7	-BITUMINOUS CONCRETE- (0.6)	
	1D	2/0	1.0 - 1.2	50(2")					Brown-gray, fine to medium SAND, little coarse sand, little gravel, trace silt observed in auger cuttings from 0.6 to 1.0 ft -FILL-(SP)	
	2D	24/14	2.0 - 4.0	16/16/11/15	27	27			Light brown, dry to damp, medium dense, fine to medium SAND, little gravel, trace silt -FILL-(SP)	
	3D	24/13	4.0 - 6.0	13/22/30/30	52	52			Grayish-brown, damp, medium dense, fine to medium SAND, little silt, trace gravel -FILL-(SP-SM)	
5	4D	24/18	6.0 - 8.0	24/23/27/20	50	50			Light brown to brown, damp to moist, very dense, fine to coarse SAND, some gravel, trace silt -FILL-(SW)	
								124.3	Grayish-brown, damp to moist, dense, fine to medium SAND, some gravel, little silt, trace coarse sand -FILL-(SM) (8.0)	
10									**Bottom of Exploration at 8.0 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-34
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	132.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 7.0 ft	**Core Barrel:**	--
Boring Location:	STA. 124+50, 20' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	131.9	-BITUMINOUS CONCRETE- (1.0)	
	1D	24/16	1.0 - 3.0	27/18/12/10	30	30			Brown, dry to damp, medium dense, fine to medium SAND, trace gravel, trace coarse sand -FILL-(SP)	
								129.9	(3.0)	
	2D	24/17	3.0 - 5.0	2/3/5/7	8	8			Gray and brown, damp to moist, loose, alternating layers of brown silty fine SAND and gray fine sandy SILT, little medium sand -MARINE DEPOSIT-(SM)	
5	3D	24/15	5.0 - 7.0	5/12/18/25	30	30				
								126.9	(6.0)	
								126.0	Grayish-brown, moist, medium dense, fine to medium SAND, some gravel, little silt, trace coarse sand -GLACIAL TILL-(SP)	
								125.9	(6.9)	
									-WEATHERED BEDROCK- (7.0)	
10									**Bottom of Exploration at 7.0 feet below ground surface.**	
15										
20										
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
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DESIGN2-DETAILED2		
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REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
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DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
44
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-35
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	133.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 8.0 ft	**Core Barrel:**	--
Boring Location:	STA. 124+99, 14' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	132.7	-BITUMINOUS CONCRETE- (1.0)	
	1D	24/16	2.0 - 4.0	40/22/9/6	31	31		130.2	Brown, fine to medium SAND, little gravel and coarse sand (auger cuttings) -FILL-(SP)	
	2D	24/19	4.0 - 6.0	3/3/4/8	7	7		129.7	Light brown, damp to moist, dense, fine to coarse SAND, trace gravel and silt -FILL-(SW) (3.5)	
5	3D	24/20	6.0 - 8.0	3/5/7/10	12	12		127.2	Gray, moist, dense, fine SAND, some silt, little medium sand (SP) (4.0) Brownish-gray, moist, medium stiff, clayey SILT, trace fine sand, with rust-colored mottling (ML)	
								125.7	Brownish-gray, moist, stiff, clayey SILT, trace fine sand, with rust-colored mottling (ML) (6.5) Grading to a brownish-gray, moist to wet, silty CLAY with blocky texture and mottling -MARINE DEPOSIT-(CL) (8.0)	
10									**Bottom of Exploration at 8.0 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-37
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	134.5	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 7.0 ft	**Core Barrel:**	--
Boring Location:	STA. 125+48, 10' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	133.7	-BITUMINOUS CONCRETE- (0.8)	
	1D	24/11	2.5 - 4.5	16/5/15/16	20	20		132.0	Note: Augered to 2.5 ft due to apparent cobbles. Gravelly SAND with cobbles -FILL-(SW) (2.5)	
	2D	24/19	5.0 - 7.0	5/5/6/6	11	11		131.0	Light brown, dry to damp, medium dense, medium to fine SAND, little coarse sand, trace gravel (SP) (3.5)	
5								127.5	Gray, moist, silty, fine to medium SAND with gravel, fragments in tip of spoon -FILL-(SW) Brownish-gray, moist, medium dense, fine to medium SAND, some silt, trace gravel and coarse sand with small fragments -FILL-(SM) (7.0)	
10									**Bottom of Exploration at 7.0 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
45
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-38
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	135.2	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 6.0 ft	**Core Barrel:**	--
Boring Location:	STA. 125+99, 7' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	134.4		-BITUMINOUS CONCRETE- 0.8	
										Augered through sub-base from 1.0 to 2.0 ft with cobbles -FILL-	
	1D	24/14	2.0 - 4.0	35/37/26/30	63	63				Brown, dry to damp, very dense, fine to medium SAND, some gravel, little coarse sand, contains stick 1 in. in diameter -FILL-(SW)	
	2D	24/13	4.0 - 6.0	3/2/4/5	6	6				Grayish-brown, damp, loose, fine to medium SAND, little gravel, little silt, trace coarse sand -FILL-(SP-SM)	
5								129.2		6.0 **Bottom of Exploration at 6.0 feet below ground surface.**	
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-39
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	135.8	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/10/11-2/10/11	**Drilling Method:**	SSA to 6.0 ft	**Core Barrel:**	--
Boring Location:	STA. 126+48, 6' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	134.8		-BITUMINOUS CONCRETE- 1.0	
										Note: Collected soil from auger flights from 1 to 2 ft -FILL-	
	1D	24/12	2.0 - 4.0	12/11/6/6	17	17				Light brown, damp, medium dense, gravelly fine to coarse SAND -FILL-(SW)	
	2D	24/14	4.0 - 6.0	8/10/8/8	18	18				Brown, damp, medium dense, fine to medium SAND, little gravel, trace coarse sand, trace silt -FILL-(SP) Grayish-brown, damp, medium dense, gravelly fine to medium SAND, trace coarse sand and silt -FILL-(SP)	
5								129.8		6.0 **Bottom of Exploration at 6.0 feet below ground surface.**	
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-201
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	130.5	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/03/11-2/03/11	**Drilling Method:**	HSA to 18.1 ft	**Core Barrel:**	NQ
Boring Location:	STA. 204+09, 4' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/17	0.0 - 2.0	1/1/3/5	4	4	HSA	130.3	-TOPSOIL- (0.2)	
									Gray-brown, moist, soft, silty CLAY, trace fine to coarse sand, mottled, contains rootlets -MARINE DEPOSIT-(CL)	G#11717a A-6(16), CL WC=23.5% LL=38, PL=20 PI=18
	2D	24/24	2.0 - 4.0	6/7/9/13	16	16			Gray-brown, moist, very stiff, silty CLAY, trace fine to coarse sand, mottled, blocky texture -MARINE DEPOSIT-(CL)	G#11717b A-6(19), CL WC=25.1% LL=40, PL=22 PI=18
5	3D	24/24	4.0 - 6.0	6/8/11/12	19	19			Olive, moist, very stiff, silty CLAY, trace fine to medium sand, contains some decomposed gravel, slightly mottled -MARINE DEPOSIT-(CL)	
	4D	24/21	6.0 - 8.0	3/8/7/10	15	15			Gray, moist, stiff, silty CLAY, some fine sand, slightly mottled -MARINE DEPOSIT-(CL)	G#11717c A=6(19), CL WC=23.2% LL=39, PL=20 PI=19
	5D	24/24	8.0 - 10.0	2/2/3/4	5	5			Brown, moist, medium stiff, sandy CLAY (CL)	
									Gray, moist, medium stiff, silty CLAY with fine sand seams (CL)	
10	6D	24/24	10.0 - 12.0	3/5/5/4	10	10			Olive, wet, stiff, sandy CLAY, frequent fine sand seams, trace mottling -MARINE DEPOSIT-(CL)	
	7D	24/24	12.0 - 14.0	5/5/5/5	10	10		118.5	(12.0) Olive, saturated, loose, silty fine SAND, layers of iron-stained fine sand, (2 to 4 in.) layers of fine sand/silt (SM)	
	8D	24/20	14.0 - 16.0	1/6/14/16	20	20			Light brown, saturated, medium dense, fine SAND, little silt -MARINE DEPOSIT-(SM)	
15								115.0	(15.5)	
	9D	24/24	16.0 - 18.0	3/6/5/17	11	11		114.5	Dark gray, wet, medium dense, GRAVEL, some sand (GP) (16.0)	
									Brown, saturated, medium dense, fine to medium SAND, little coarse sand, gravel, little silt -GLACIAL TILL-(SP)	
	10D	1.2/3	18.0 - 18.1	50(1.2")				112.4	Brown, saturated, very dense, fine SAND, little medium to coarse sand, little gravel (SP) Note: Split spoon refusal on probable top of bedrock at 18.1 ft. (18.1)	
20									**Bottom of Exploration at 18.1 feet below ground surface.**	
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-202
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	133.2	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/03/11-2/03/11	**Drilling Method:**	SSA to 19.8 ft	**Core Barrel:**	--
Boring Location:	STA. 204+39, 28' RT.	**Casing ID/OD:**	--	**Water Level*:**	4.7 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA		Brown, wet, sandy CLAY, slightly mottled -MARINE DEPOSIT-(CL)	
5								129.2	(4.0) Brown, saturated, SILT, some sand -MARINE DEPOSIT-(ML)	
10								121.2	(12.0) Brown, saturated, sandy SILT, trace medium to coarse sand -MARINE DEPOSIT-(ML)	
									Note: Encountered gravel at 12.0 ft based on drill action.	
15									Gray-brown, wet to saturated, silty SAND, some gravel (SM)	
20								113.4	Note: Auger refusal on probable top of bedrock at 19.8 ft. (19.8) **Bottom of Exploration at 19.8 feet below ground surface.**	
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
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DESIGN2-DETAILED2		
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REVISIONS 1		
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REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
47
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-203
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	140.8	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/03/11-2/03/11	**Drilling Method:**	SSA to 3.7 ft	**Core Barrel:**	--
Boring Location:	STA. 205+02, 12' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA		Brown, dry to damp, fine to medium SAND, little coarse, trace gravel	
								138.0	2.8	
								137.1	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.7 ft. 3.7	
									Bottom of Exploration at 3.7 feet below ground surface.	
5										
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-204
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	145.3	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS, 300/16 NW
Date Start/Finish:	2/04/11-2/04/11	**Drilling Method:**	SSA to 5.0 ft, NW to 7.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 205+52, 13' RT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/9	0.0 - 2.0	2/2/2/3	4	4	SSA	145.0	-TOPSOIL- 0.3	
									Orange-brown, dry to moist, loose, fine to medium SAND, little silt, trace coarse sand and gravel, abundant rootlets -MARINE DEPOSIT-(SM)	G#11717d A-2-4, SM WC=10.1%
	2D	24/15	2.0 - 4.0	1/2/10/10	12	12			Orange-brown, dry to moist, medium dense, fine to medium SAND, little silt, trace coarse sand and gravel -MARINE DEPOSIT-(SM)	
	3D	24/17	4.0 - 6.0	7/9/20/25(4")				141.3	Brown, dry to moist, medium dense, silty fine SAND, little medium sand and gravel, trace coarse sand -GLACIAL TILL-(SM) 4.0	G#11718a A-4, SM WC=12.8%
5							NW	139.5	Brown, dry to moist, medium dense, fine SAND, little medium to coarse sand, trace silt (SP)	
								138.3	Brown, dry to moist, medium dense, fine SAND, some gravel, little medium to coarse sand, well bonded -GLACIAL TILL-(SP) 5.8	
	R1	60/60	8.0 - 13.0	RQD = 83%					-WEATHERED BEDROCK- 7.0	
10									Top of Bedrock at El. 138.3 ft R1: Pinkish-white, aphanitic to coarse-grained igneous GRANITE, very hard, slightly weathered, horizontal to low angle, close, open joints. Contains 2 to 3 in. thick pegmatite veins. Secondary vertical, close, open, joint set, moderately dipping biotite foliation. Rock Mass Qaulity=Good -HUTCHINS CORNER FORMATION- R1 Core Times (min:sec): 8.0-9.0' (3:00), 9.0-10.0' (2:00), 10.0-11.0' (2:00), 11.0-12.0' (2:00), 12.0-13.0' (2.00)	
	R2	60/60	13.0 - 18.0	RQD = 67%				132.1	3 in. thick layer of granofels with baked boundaries -GRANITE- 13.2	
15									R2: Dark gray, aphanitic to fine-grained GRANOFELS, hard, slightly weathered, horizontal to low angles, close, open joints. Pegmatite veins and intrusions (1 to 11 in. thickness), parallel to foliation. Rock Mass Quality=Fair -HUTCHIINS CORNER FORMATION- R2 Core Times (min:sec): 13.0-14.0' (2:00), 14.0-15.0' (2:00), 15.0-16.0' (2:00), 16.0-17.0' (2:00), 17.0-18.0' (2:00)	
	R3	60/60	18.0 - 23.0	RQD = 85%					R3: Dark gray, aphanitic to fine-grained GRANOFELS, moderately hard to hard, slightly weathered to fresh, horizontal to low angle, close, open joints with weathering along joint surfaces. Rock Mass Quality=Good -HUTCHINS CORNER FORMATION- R3 Core Times (min:sec): 18.0-19.0' (1:00), 19.0-20.0' (1:00), 20.0-21.0' (1:00), 21.0-22.0' (1:00), 22.0-23.0' (2:00)	
20										
	R4	60/52	23.0 - 28.0	RQD = 87%					R4: Dark gray, aphanitic to fine-grained GRANOFELS, moderately hard to hard, slightly weathered to fresh, horizontal to low angle, close, open joints with weathering along joint surfaces. Rock Mass Quality=Good	
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
48
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-204
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	145.3	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS, 300/16 NW
Date Start/Finish:	2/04/11-2/04/11	**Drilling Method:**	SSA to 5.0 ft, NW to 7.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 205+52, 13' RT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
25										-HUTCHINS CORNER FORMATION- R4 Core Times (min:sec): 23.0-24.0' (1:00), 24.0-25.0' (2:00), 25.0-26.0' (2:00), 26.0-27.0' (2:00), 27.0-28.0' (2:00)	
	R5	62/61	27.8 - 33.0	RQD = 98%						Note: 2 in. of R4 recovered in R5. R5: Dark gray, aphanitic to fine-grained GRANOFELS, hard, fresh, horizontal to low angle, close to moderately close, open joints, 10 in. pegmatite vein at 2.7 ft. Rock Mass Quality=Excellent -HUTCHINS CORNER FORMATION- R5 Core Times (min:sec): 28.0-29.0' (2:00), 29.0-30.0' (2:00), 30.0-31.0' (2:00), 31.0-32.0' (2:00), 32.0-33.0' 2:00)	
30											
	R6	61/60	33.0 - 38.1	RQD = 98%						R6: Dark gray, aphanitic to fine-grained GRANOFELS, hard, fresh, low angle, moderately close, open joints, 0.5 to 5 in. pegmatite veins parallel to foliation (low angle foliation). Rocm Mass Quality=Excellent -HUTCHINS CORNER FORMATION- R6 Core Times (min:sec): 33.0-34.0' (2:00), 34.0-35.0' (2:00), 35.0-36.0' (2:00), 36.0-37.0' (2:00), 37.0-38.0' (3:00)	
35											
40											
45											
50								107.3		38.0 **Bottom of Exploration at 38.0 feet below ground surface.**	

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-205
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	147.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/03/11-2/03/11	**Drilling Method:**	SSA to 8.8 ft	**Core Barrel:**	--
Boring Location:	STA. 206+00, 4' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA			Light brown, dry to moist, fine SAND, some silt, little medium sand, trace coarse sand and gravel (SM)	G#11718b A-2-4, SM WC=9.1%
										Note: Cobbles encountered from 4.0 to 5.0 ft.	
5										Brown, moist, fine to medium SAND, some gravel (SP)	
								140.5		7.4 -WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 8.8 ft.	
								139.1		8.8 **Bottom of Exploration at 8.8 feet below ground surface.**	
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
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IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15
BORING LOGS

SHEET NUMBER
49
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-206
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	150.5	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/04/11-2/04/11	**Drilling Method:**	SSA to 3.3 ft	**Core Barrel:**	--
Boring Location:	STA. 206+26, 15' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	149.5		Brown, dry to damp, fine to medium SAND (SP) — 1.0	
								147.2		-WEATHERED BEDROCK-	
										Note: Auger refusal on probable top of bedrock at 3.3 ft. — 3.3	
										Bottom of Exploration at 3.3 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-208
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	170.9	**Auger ID/OD:**	--
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	1/31/11-1/31/11	**Drilling Method:**	NW Spun to 5.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 207+66, 55' RT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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SSA = Solid Stem Auger
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WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	19/14	0.0 - 1.6	1/1/4/50(1")	5	5	NW	170.7		-TOPSOIL- — 0.2	
								169.3		Light brown to orange-brown, dry to moist, loose, fine SAND, little medium sand and silt, trace coarse sand, trace gravel, poorly graded, weathered rock in spoon tip (SP) — 1.6	
										-WEATHERED BEDROCK-	
								166.4		— 4.5	
5	R1	60/60	5.0 - 10.0	RQD = 23%						Top of Bedrock at El. 166.4 R1: Dark gray, fine to coarse-grained GRANOFELS, moderately hard, slightly to moderately severe weathering, horizontal to low angle, very close to close, open joints. Rust staining on most joint surfaces. Rock Mass Quality=Poor -HUTCHINS CORNER FORMATION- R1 Core Times (min:sec) 5.0-6.0' (2:00), 6.0-7.0' (2:00), 7.0-8.0' (2:00), 8.0-9.0' (1:00), 9.0-10.0' (1.00)	
10	R2	60/60	10.0 - 15.0	RQD = 68%						R2: Dark gray, fine to coarse-grained GRANOFELS, moderately hard, slightly to moderately weathered, horizontal to low angle, very close to moderate, open joints. Increased weathering and rust along joint surfaces. Occasional pegmatite veins. Pegmatite intrusion from approximately 19.0 to 19.8 ft. Rock Mass Quality=Fair -HUTCHINS CORNER FORMATION- R2 Core Times (min:sec): 10.0-11.0' (2:00), 11.0-12.0' (2:00), 12.0-13.0' (2:00), 13.0-14.0' (1:00), 14.0-15.0' (2:00)	
15	R3	60/60	15.0 - 20.0	RQD = 47%						R3: Dark gray, fine to coarse-grained GRANOFELS, moderately hard, fresh to slightly weathered with occasional moderately weathered joints. Horizontal to moderately dipping, very close to close, open joints. Increased weathering and rust staining on joint surfaces. Occasional pegmatite veins. Pegmatite intrusions from approximately 18.6 to 19.0 ft and 19.3 to 21. 0 ft. Rock Mass Quality=Poor -HUTCHINS CORNER FORMATION- R3 Core Times (min:sec): 15.0-16.0' (1:00), 16.0-17.0' (1:00), 17.0-18.0' (1:00), 18.0-19.0' (1:00), 19.0-20.0' (2:00)	
20	R4	60/60	20.0 - 25.0	RQD = 67%						R4: Dark gray, fine to coarse-grained GRANOFELS, moderately hard, fresh to slightly weathered with occasional moderately weathered joints. Horizontal to moderately dipping, very close to close, open joints. Increased weathering and rust staining on joint surfaces. Occasional pegmatite veins. Rock Mass Quality=Fair -HUTCHINS CORNER FORMATION- R4 Core Times (min:sec): 20.0-21.0' (2:00), 21.0-22.0' (2:00), 22.0-23.0' (2:00), 23.0-24.0' (2:00), 24.0-25.0' (2:00)	
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
50
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-208
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	170.9	**Auger ID/OD:**	--
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	1/31/11-1/31/11	**Drilling Method:**	NW Spun to 5.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 207+66, 55' RT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
25	R5	60/60	25.0 - 30.0	RQD = 73%						R5: Dark gray, fine to coarse-grained GRANOFELS, moderately hard, fresh to slightly weathered, horizontal to low angle, very close to close, tight to open joints. Rock Mass Quality=Fair -HUTCHINS CORNER FORMATION- R5 Core Times (min:sec): 25.0-26.0' (2:00), 26.0-27.0' (2:00), 27.0-28.0' (2:00), 28.0-29.0' (2:00), 29.0-30.0' (2:00)	
30	R6	60/60	30.0 - 35.0	RQD = 92%						R6: Gray to dark gray, fine to medium-grained GRANOFELS, moderately hard, slightly weathered, horizontal to low angle, close, open joints, occasional pegmatite veins. Rock Mass Quality=Excellent -HUTCHINS CORNER FORMATION- R6 Core Times (min:sec): 30.0-31.0' (2:00), 31.0-32.0' (2:00), 32.0-33.0' (2:00), 33.0-34.0' (2:00), 34.0-35.0' (2:00)	
35	R7	48/48	35.0 - 39.0	RQD = 69%						R7: Gray to dark gray, fine to medium-grained GRANOFELS, moderately hard, slightly weathered, horizontal to low angle, close, open joints, occasional pegmatite veins. Rock Mass Quality=Fair -HUTCHINS CORNER FORMATION- R7 Core Times (min:sec): 35.0-36.0' (1:00), 36.0-37.0' (1:00), 37.0-38.0' (2:00), 38.0-39.0' (1:00)	
40								131.9		39.0 **Bottom of Exploration at 39.0 feet below ground surface.**	
45											
50											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-209
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	147.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 8.0 ft	**Core Barrel:**	--
Boring Location:	STA. 210+10, 12' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0										Grayish-brown, moist, fine sandy SILT (ML)	
5								140.6		7.3 -WEATHERED BEDROCK-	
								139.9		Note: Auger refusal on probable top of bedrock at 8.0 ft. 8.0 **Bottom of Exploration at 8.0 feet below ground surface.**	
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15
BORING LOGS

SHEET NUMBER
51
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-210
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	148.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 7.0 ft	**Core Barrel:**	--
Boring Location:	STA. 210+51, 11' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0									Grayish-brown, moist, silty fine SAND, little medium sand, trace coarse sand and gravel (SM)	G#11718c A-2-4, SM WC=17.8%
5								142.6	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 7.0 ft. (6.1)	
								141.7	**Bottom of Exploration at 7.0 feet below ground surface.** (7.0)	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Page 1 of 1

Boring No.: HB-YA-210

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-211
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	149.1	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 3.5 ft	**Core Barrel:**	--
Boring Location:	STA. 210+99, 26' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0								146.2	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.5 ft. (2.9)	
								145.6	**Bottom of Exploration at 3.5 feet below ground surface.** (3.5)	
5										
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Page 1 of 1

Boring No.: HB-YA-211

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
52
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-212
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	145.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 2.6 ft	**Core Barrel:**	--
Boring Location:	STA. 211+45, 39' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0								143.9		2.0 -WEATHERED BEDROCK-	
								143.3		Note: Auger refusal on probable top of bedrock at 2.6 ft. 2.6	
										Bottom of Exploration at 2.6 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-212

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-213
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	140.9	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 4.1 ft	**Core Barrel:**	--
Boring Location:	STA. 211+97, 30' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0										Brown, moist, medium to fine SAND, little silt, trace gravel (SM)	
								137.4		3.5 -WEATHERED BEDROCK-	
								136.8		Note: Auger refusal on probable top of bedrock at 4.1 ft. 4.1	
										Bottom of Exploration at 4.1 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Boring No.: HB-YA-213

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
53
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-214
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	147.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/15/11-2/15/11	**Drilling Method:**	SSA to 2.1 ft	**Core Barrel:**	--
Boring Location:	STA. 212+05, 32' LT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
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$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0								146.1			
								145.6		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 2.1 ft. (1.6)	
										Bottom of Exploration at 2.1 feet below ground surface. (2.1)	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-215
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	133.4	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	02/14/11-02/14/11	**Drilling Method:**	SSA to 4.5 ft	**Core Barrel:**	--
Boring Location:	STA. 212+57, 18' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0										Brown, moist, fine SAND, little silt, trace gravel and medium sand (SM)	
								129.5		(3.9)	
								128.9		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 4.5 ft. (4.5)	
										Bottom of Exploration at 4.5 feet below ground surface.	
5											
10											
15											
20											
25											

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-216
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	125.4	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/01/11-2/01/11	**Drilling Method:**	SSA to 5.8 ft, NW to 8.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 214+12, 23' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/17	0.0 - 2.0	2/3/4/7	7	7	SSA	124.9	-TOPSOIL- (0.5) Brown, moist, loose, fine SAND, some medium sand, little coarse sand and gravel, trace silt, seams of medium sand, with wood fragments (SP)	
									Note: Augered through cobbles from 2.0 to 3. 0 ft.	
	2D	24/8	3.0 - 5.0	8/38/43/41	81	81			Brown, moist, very dense, fine SAND, some gravel, trace medium to coarse sand, gravel in spoon tip -GLACIAL TILL-(SP)	
5	3D	5/5	5.5 - 5.9	50/(5")				119.6	Note: Augered through cobble from 5.0 to 5.5 ft. Brown, moist, very dense, fine SAND, little medium to coarse sand, trace gravel, weathered rock in tip (SP) (5.8)	
							NW	117.9	-WEATHERED BEDROCK- (7.5)	
	R1	60/60	8.0 - 13.0	RQD = 82%					Top of Bedrock at El. 117.9 R1: Blueish-dark gray, aphanitic to medium-grained GRANOFELS, moderately hard to hard, slightly weathered, low angle, close, open joints, occasional 2.0 to 6.0 in. pegmatite veins. Rock Mass Quality=Good -HUTCHINS CORNER FORMATION- R1 Core Times (min:sec): 8.0-9.0' (3:00), 9.0-10.0' (3:00), 10.0-11.0' (2:00), 11.0-12.0' (2:00), 12.0-13.0' (2:00)	
10										
	R2	60/60	13.0 - 18.0	RQD = 87%					R2: Blueish to dark gray, aphanitic to medium-grained GRANOFELS, moderately hard to hard, slightly weathered to fresh, horizontal to low angle, close, open joints. Some healed, vertical joints. 1 to 5 in. thick pegmatite veins. Rock Mass Quality=Good -HUTCHINS CORNER FORMATION- R2 Core Times (min:sec): 13.0-14.0' (2:00), 14.0-15.0' (2:00), 15.0-16.0' (2:00), 16.0-17.0' (2:00), 17.0-18.0' (2:00)	
15										
	R3	60/60	18.0 - 23.0	RQD = 93%					R3: Blueish to dark gray, aphanitic to medium-grained GRANOFELS, moderately hard to hard, slightly weathered to fresh, low angle, close, open joints. 0.5 to 4 in. pegmatite veins. Rock Mass Quality=Excellent -HUTCHINS CORNER FORMATION- R3 Core Times (min:sec): 18.0-19.0' (2:00), 19.0-20.0' (2:00), 20.0-21.0' (2:00), 21.0-22.0' (2:00), 22.0-23.0' (2:00)	
20										
	R4	60/59	23.0 - 28.0	RQD = 83%					R4: Blueish to dark gray, aphanitic to medium-grained GRANOFELS, moderately hard to hard, slightly weathered to fresh, horizontal to low angle, close, open joints. One vertical weathered calc-silicate seam at the bottom of the core. 0.5 to 2 in. pegmatite veins.	
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Boring No.: HB-YA-216

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-216
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	125.4	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/01/11-2/01/11	**Drilling Method:**	SSA to 5.8 ft, NW to 8.0 ft	**Core Barrel:**	NQ
Boring Location:	STA. 214+12, 23' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
25								97.4	Rock Mass Quality=Good -HUTCHINS CORNER FORMATION- R4 Core Times (min:sec): 23.0-24.0' (2:00), 24.0-25.0' (2:00), 25.0-26.0' (2:00), 26.0-27.0' (2:00), 27.0-28.0' (2:00) (28.0)	
									Bottom of Exploration at 28.0 feet below ground surface.	
30										
35										
40										
45										
50										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Boring No.: HB-YA-216

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
55
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-217
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	128.8	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/01/11-2/01/11	**Drilling Method:**	SSA to 3.4 ft	**Core Barrel:**	--
Boring Location:	STA. 214+68, 37' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/10	0.0 - 2.0	1/1/1/3	2	2	SSA	127.8	-TOPSOIL- (1.0)	
	2D	17/11	2.0 - 3.4	24/40/50(1")				126.8	Orange-brown, dry to moist, very loose, fine SAND, some gravel, some silt, trace medium to coarse sand (SM) (2.0)	
								125.4	Brown, dry to moist, very dense, gravelly fine to coarse SAND, trace silt -WEATHERED BEDROCK-(GW) Note: Auger refusal on probable top of bedrock at 3.4 ft. (3.4)	
5									**Bottom of Exploration at 3.4 feet below ground surface.**	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-218
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	122.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/01/11-2/01/11	**Drilling Method:**	SSA to 3.5 ft	**Core Barrel:**	--
Boring Location:	STA. 214+61, 10' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/9	0.0 - 2.0	1/1/1/2	2	2	SSA	121.2	-TOPSOIL- (1.5)	
	2D	14/14	2.0 - 3.2	6/5/50(2")				119.5	Brown, moist to wet, medium dense, fine SAND, some medium sand, little gravel, little silt, trace coarse sand -GLACIAL TILL-(SW) (3.2)	
								119.2	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 3.5 ft. (3.5)	
5									**Bottom of Exploration at 3.5 feet below ground surface.**	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
56
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-219
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	121.1	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/01/11-2/01/11	**Drilling Method:**	SSA to 2.0 ft	**Core Barrel:**	--
Boring Location:	STA. 216+16, 13' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/14	0.0 - 2.0	1/1/4/25(2")	5	5	SSA	120.6	-TOPSOIL- 0.5	
								119.4	Brown, moist to wet, loose, fine SAND, little medium sand and silt, trace coarse sand, trace gravel (SP-SM) 1.7	
								119.1	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 2.0 ft. 2.0	
									Bottom of Exploration at 2.0 feet below ground surface.	
5										
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-220
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	122.8	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/01/11-2/01/11	**Drilling Method:**	SSA to 5.7 ft	**Core Barrel:**	--
Boring Location:	STA. 217+17, 22' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/16	0.0 - 2.0	2/2/5/7	7	7	SSA	122.5	-TOPSOIL- 0.3	
									Brown, dry to moist, loose, fine to medium SAND, little coarse sand and silt, little gravel, grading to medium sand (SP-SM) 2.0	
	2D	24/14	2.0 - 4.0	16/19/20/22	39	39		120.8	Brown, moist, dense, fine SAND, some silt, little medium sand and gravel, trace coarse sand -GLACIAL TILL-(SM)	G#11718d A-2-4, SM WC=10.1%
	3D	16/14	4.0 - 5.3	9/10/50(4")					Brown, moist, medium dense, fine SAND, some silt, little medium sand and gravel, trace coarse sand, weathered rock in tip -GLACIAL TILL-(SM) 5.3	
5								117.5		
								117.1	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 5.7 ft. 5.7	
									Bottom of Exploration at 5.7 feet below ground surface.	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
57
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-301
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	117.7	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/17/11-2/17/11	**Drilling Method:**	HSA to 15.0 ft	**Core Barrel:**	--
Boring Location:	STA. 302+17, 100' RT.	**Casing ID/OD:**	--	**Water Level*:**	
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA			
	1D	24/19	1.0 - 3.0	1/2/5/7	7	7			Brown, damp, very loose, fine SAND, some silt, trace medium to coarse sand -MARINE DEPOSIT-(SM)	G#11719a A-2-4, SM WC=20.3% LL=29, PL=NP PI=NP
5	2D	24/24	5.0 - 7.0	5/5/7/9	12	12		112.7	5.0 — Brownish-gray, damp to moist, stiff, silty CLAY, with blocky texture and mottling -MARINE DEPOSIT-(CL)	
10	3D	24/24	10.0 - 12.0	1/1/WOH/1	1	1			Gray, wet, very soft, silty CLAY, trace fine sand -MARINE DEPOSIT-(CL)	G#11719b A-6(16), CL WC=31.8% LL=34, PL=18 PI=16
15								102.7	15.0 — **Bottom of Exploration at 15.0 feet below ground surface.** Note: Installed Observation Well in completed borehole. See Observation Well Installation and Groundwater Monitoring Reports for details.	
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. NP = non plastic.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-302
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	122.1	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/17/11-2/17/11	**Drilling Method:**	SSA to 10.0 ft	**Core Barrel:**	--
Boring Location:	STA. 309+98, 0.6' RT.	**Casing ID/OD:**	--	**Water Level*:**	7.6 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA			
	1D	24/18	1.0 - 3.0	8/7/4/4	11	11			Brown, damp, medium dense, fine to medium SAND, little gravel and silt, trace coarse sand -FILL-(SP-SM)	
	2D	24/15	3.0 - 5.0	4/7/7/13	14	14			Light brown, damp, medium dense, fine to medium SAND, trace silt, coarse sand and gravel -FILL-(SP)	G#11720a A-1-b, SP WC=6.7%
5	3D	24/15	5.0 - 7.0	9/60/17/8	77	77			Grayish-brown to brown, damp to moist, medium dense, fine to medium SAND, some silt, little gravel, trace coarse sand -FILL-(SM)	G#11720b A-2-4, SM WC=13.8%
	4D	24/18	8.0 - 10.0	4/5/4/7	9	9		114.1	Grayish-brown to brown, moist, very dense, gravelly medium to fine SAND, little silt, trace coarse sand -FILL-(SM) Note: Cobble from 7 to 7.5 ft — 8.0 — Gray to grayish-brown, moist to wet, loose, silty fine SAND (SM) grading to a stiff, clayey SILT to silty CLAY with mottling and blocky texture -MARINE DEPOSIT-(CL)	G#11720c A-1-b, SM WC=6.8%
10								112.1	10.0 — **Bottom of Exploration at 10.0 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
DESIGN-DETAILED		
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DESIGN2-DETAILED2		
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REVISIONS 1		
REVISIONS 2		
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FIELD CHANGES		

PROJ. MANAGER
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15
BORING LOGS

SHEET NUMBER
58
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-303
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	115.7	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/17/11-2/17/11	**Drilling Method:**	HSA to 7.0 ft	**Core Barrel:**	--
Boring Location:	STA. 314+98, 4.4' LT.	**Casing ID/OD:**	--	**Water Level*:**	7.6 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA			
	1D	24/13	1.0 - 3.0	12/12/10/4	22	22			Light brown, dry to damp, medium dense, poorly graded fine to medium SAND, little coarse sand, trace silt and gravel -FILL-(SP)	G#11719c A-1-b, SP WC=2.8%
	2D	24/16	3.0 - 5.0	3/4/12/15	16	16			Brownish-gray to grayish-brown, damp to moist, very stiff, silty CLAY, some fine sand, trace medium to coarse sand -FILL-(CL)	G#11719d A-4(4), CL WC=18.8% LL=24, PL=15 PI=9
5	3D	24/17	5.0 - 7.0	7/9/10/11	19	19		110.2	5.5	
								110.1	Note: Evidence of former topsoil from 5.5 to 5.6 ft 5.6	
								108.7	Grayish-brown, moist to wet, very stiff, fine sandy SILT (ML) to silty fine SAND -MARINE DEPOSIT-(SM) 7.0	
10									**Bottom of Exploration at 7.0 feet below ground surface.**	
15										
20										
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-304
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	118.1	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/17/11-2/17/11	**Drilling Method:**	HSA to 15.0 ft	**Core Barrel:**	--
Boring Location:	STA. 303+79, 71' RT.	**Casing ID/OD:**	--	**Water Level*:**	11.8 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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SSA = Solid Stem Auger
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RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA			
	1D	24/20	1.0 - 3.0	2/2/5/8	7	7		116.6	-TOPSOIL- 1.5	
								115.1	Grayish-brown, damp, medium stiff, clayey SILT, trace fine sand (ML) grading to a silty CLAY with mottling and blocky texture (CL) 3.0	
	2D	24/19	3.0 - 5.0	4/4/9/9	13	13			Gray-brown, damp to moist, stiff, silty CLAY, with mottling and blocky texture -MARINE DEPOSIT-(CL)	
5	3D	24/21	5.0 - 7.0	5/9/10/14	19	19			Gray-brown, damp to moist, very stiff, silty CLAY, with mottling and blocky texture, occasional fine sandy silt seams -MARINE DEPOSIT-(CL)	
10	4D	24/18	10.0 - 12.0	2/2/3/4	5	5			Gray, wet, medium stiff, silty CLAY to clayey SILT, with occasional gray fine sandy silt seams -MARINE DEPOSIT-(CL)	
15								103.1	15.0	
									Bottom of Exploration at 15.0 feet below ground surface.	
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD 83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
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YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
59
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-401
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	134.9	**Auger ID/OD:**	2.5 in. I.D.
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	CME 45 Truck	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/03/11-01/03/11	**Drilling Method:**	HSA to 10.4 ft	**Core Barrel:**	--
Boring Location:	STA. 452+00, 15' LT.	**Casing ID/OD:**	--	**Water Level*:**	5.6 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
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N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA	134.0	-BITUMINOUS CONCRETE- (0.9)	
	1D	24/14	1.0 - 3.0	17/12/6/5	18	18			Brown, dry, medium dense, fine to medium SAND, little coarse sand, little gravel -FILL-(SW)	
	2D	24/14	3.0 - 5.0	4/3/2/9	5	5			Light brown, moist to wet, loose, fine SAND, little medium sand -FILL-(SP)	
5	3D	24/19	5.0 - 7.0	8/7/9/10	16	16		129.4	Dark gray, wet, medium dense, fine to medium SAND, little coarse sand with organics, trace silt -FILL-(SW) (5.5)	
									Brown to gray, moist to wet, medium dense, fine SAND, some silt, mottled -MARINE DEPOSIT-(SM)	
								126.4	(8.5) Gravel and clay encountered from 8.5 to 9 ft	
10	4D	0/0	10.0 - 10.0	50(0")				124.5	Note: Auger refusal on probable top of bedrock at 10.4 ft. (10.4) **Bottom of Exploration at 10.4 feet below ground surface.**	
15										
20										
25										

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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Boring No.: HB-YA-401

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-402
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	139.7	**Auger ID/OD:**	2.5 in. I.D.
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	CME 45 Truck	**Hammer Wt./Fall:**	140/30 SS - 300/24 NW
Date Start/Finish:	01/04/11-01/04/11	**Drilling Method:**	HSA to 5 ft, NW Drive to 14 ft	**Core Barrel:**	--
Boring Location:	STA. 457+49, CL.	**Casing ID/OD:**	NW - 3.0 in. I.D.	**Water Level*:**	11.3 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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R = Rock Core Sample
SSA = Solid Stem Auger
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RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0								139.3	-BITUMINOUS CONCRETE- (0.4)	
	1D	24/14	1.0 - 3.0	20/20/20/30	40	40	HSA		Brown, dry, dense, fine to coarse SAND, some gravel, trace silt -FILL-(SP-SM)	G#11721a A-1-b, SP-SM WC=0.9%
	2D	24/4	3.0 - 5.0	30/18/15/28	33	33			Brown, dry, dense, fine to coarse SAND, some gravel, trace silt -FILL-(SP-SM)	
5	3D	24/18	5.0 - 7.0	15/13/13/13	26	26	19		Brown to rust-brown, dry, medium dense, silty fine SAND, little medium sand and gravel, contains rootlets -FILL-(SM)	G#11721b A-4, SM WC=9.5%
							30			
	4D	24/17	7.0 - 9.0	9/8/12/26	20	20	27		Brown to rust-brown, dry, medium dense, silty fine SAND, little medium sand and gravel, contains rootlets -FILL-(SM)	
							59			
10	5D	24/10	9.5 - 11.5	12/13/12/13	25	25	41		Note: Encountered cobble at 9.0 ft. Brown, wet, medium dense, fine to medium SAND, some gravel, trace coarse sand, little silt -FILL-(SM)	G#11721c A-1-b, SM WC=9.2%
							26			
	6D	24/5	11.5 - 13.5	9/8/11/19	19	19	26		Brown, wet, medium dense, fine to medium SAND, some gravel, trace coarse sand, little silt -FILL-(SM)	
							28			
							18			
15	7D	24/14	14.0 - 16.0	10/5/9/11	14	14			Gray, wet, stiff, silty CLAY, some fine sand, trace medium to coarse sand, trace gravel, slightly mottled, contains rootlets -FILL-(CL)	G#11721d A-4(1), CL WC=15.0% LL=23, PL=15 PI=8
	8D	24/15	16.0 - 18.0	11/8/17/20	25	25			Gray to brown, moist, medium dense, fine SAND, some silt and gravel, little medium sand, trace coarse sand, well bonded -FILL-(SM)	G#11721e A-2-4, SM WC=9.5%
								121.7	(18.0)	
	9D	24/14	18.0 - 20.0	8/5/10/5	15	15			Gray to brown, wet, medium dense, fine SAND, little medium to coarse sand, little silt, trace gravel, organics -MARINE DEPOSIT-(SP)	
								120.2	(19.5)	
20	10D	24/24	20.0 - 22.0	6/7/10/13	17	17			Thin (1 in.) layer of organics with wood fragments in bottom of split spoon Gray, wet, very stiff, silty CLAY, mottled, with rootlets -MARINE DEPOSIT-(CL)	
								117.7	(22.0) **Bottom of Exploration at 22.0 feet below ground surface.**	
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Boring No.: HB-YA-402

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
60
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-403
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	136.9	**Auger ID/OD:**	2.5 in. I.D.
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	CME 45 Truck	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/03/11-01/03/11	**Drilling Method:**	HSA to 11.0 ft	**Core Barrel:**	--
Boring Location:	STA. 461+00, 10' RT.	**Casing ID/OD:**	--	**Water Level*:**	Dry
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA	136.3	-BITUMINOUS CONCRETE- 0.6'	
	1D	24/14	1.0 - 3.0	34/29/23/17	52	52			Brown, dry to damp, very dense, fine to coarse SAND, some gravel -FILL-(SW)	
	2D	24/17	3.0 - 5.0	9/13/14/28	27	27			Brown, dry to damp, medium dense, fine SAND, little medium to coarse sand, little gravel, trace silt, well bonded -FILL-(SW)	
5	3D	24/16	5.0 - 7.0	13/15/15/12	30	30			Light brown, dry to damp, medium dense, fine to medium SAND -FILL-(SP)	
	4D	24/18	7.0 - 9.0	14/13/9/11	22	22			Brown, dry to damp, medium dense, fine to medium SAND, little coarse sand, little gravel -FILL-(SW)	
10	5D	24/18	9.0 - 11.0	6/6/13/14	19	19		125.9	Gray, moist, very stiff, silty CLAY, mottled, blocky (CL) Gray, moist, very stiff, silty CLAY, little fine to medium sand, trace coarse sand, contains 1 to 2 in. sand layers -FILL-(CL) 11.0'	
15									**Bottom of Exploration at 11.0 feet below ground surface.**	
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Boring No.: HB-YA-403

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-404
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	129.2	**Auger ID/OD:**	--
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	CME 45 Truck	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/04/11-01/04/11	**Drilling Method:**	HSA to 11.0 ft	**Core Barrel:**	--
Boring Location:	STA. 465+00, 13' LT.	**Casing ID/OD:**	--	**Water Level*:**	Dry
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA	128.8	-BITUMINOUS CONCRETE- 0.4'	
	1D	24/19	1.0 - 3.0	18/15/15/15	30	30			Dark brown, dry to damp, medium dense, fine to medium SAND, little coarse sand and gravel -FILL-(SW)	
	2D	24/17	3.0 - 5.0	10/18/18/32	36	36			Brown, dry to damp, medium dense, fine SAND, little coarse sand, trace gravel, trace medium sand -FILL-(SP)	
5	3D	24/16	5.0 - 7.0	13/50/17/11	67	67			Gray-brown, dry to damp, dense, fine SAND, some silt, trace medium to coarse sand, contains layers of silty gray to brown sand, slightly mottled, clay layers -FILL-(SP-SM)	
	4D	24/6	7.0 - 9.0	5/4/5/10	9	9			Gray-brown, damp to moist, very dense, fine SAND, little gravel, little coarse sand, trace medium sand, trace silt, contains brick fragments -FILL-(SP) Gray, wet, loose, fine SAND, little silt and gravel, trace coarse to medium sand -FILL-(SP)	
10	5D	24/24	9.0 - 11.0	8/8/7/10	15	15		120.2	9.0' Gray-brown, wet, stiff, sandy SILT, slightly mottled, frequent brown fine sand seams -MARINE DEPOSIT-(ML)	
								118.2	11.0' **Bottom of Exploration at 11.0 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Boring No.: HB-YA-404

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
61
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-405
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	121.3	**Auger ID/OD:**	--
Operator:	B. Enos	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	CME 45 Truck	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/03/11-01/03/11	**Drilling Method:**	HSA to 12.0 ft	**Core Barrel:**	--
Boring Location:	STA. 469+00, 9' RT.	**Casing ID/OD:**	--	**Water Level*:**	Dry
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							HSA	120.3	-BITUMINOUS CONCRETE- (1.0) -FORMER PAVEMENT-(frozen)	
	1D	24/18	1.0 - 3.0	18/17/13/10	30	30		116.3	Brown, dry to damp, medium dense, fine to medium SAND, little coarse sand, little gravel -FILL-(SW) (5.0) Brown to dark brown, damp to moist, medium dense, fine SAND, little medium to coarse sand, little silt, little gravel -FILL-(SW)	
	2D	24/10	3.0 - 5.0	22/12/6/7	18	18				
5	3D	24/19	5.0 - 7.0	4/7/6/8	13	13		112.8	Gray-brown, damp to moist, medium dense, silty fine SAND, trace medium sand, slightly mottled, with gray fine sand seams -MARINE DEPOSIT-(SM) (8.5)	
10	4D	24/24	10.0 - 12.0	3/3/3/4	6	6		109.3	Gray, moist, medium stiff, sandy SILT, little clay, occasional sand seams 1 to 3 cm thick -MARINE DEPOSIT-(ML) (12.0) **Bottom of Exploration at 12.0 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Page 1 of 1

Boring No.: HB-YA-405

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-503
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	121.0	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	D. Dearden	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	2/18/11-2/18/11	**Drilling Method:**	SSA to 2.6 ft	**Core Barrel:**	--
Boring Location:	STA. 511+00, 7' LT.	**Casing ID/OD:**	--	**Water Level*:**	11.8 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0							SSA	120.5	-TOPSOIL- (0.5) Sandy GRAVEL with cobbles -FILL-(GW)	
								118.8 / 118.4	(2.2) -WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 2.6 ft. (2.6) **Bottom of Exploration at 2.6 feet below ground surface.** Note: Moved borehole approximately 3 ft east and re-drilled. Encountered weathered bedrock at 2.6 ft; auger refusal at approximately 3.0 ft.	
5										
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.
3. No split spoon samples taken. Soil descriptions provided based on observed auger cuttings. Actual soil descriptions will differ from those shown on the log.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Page 1 of 1

Boring No.: HB-YA-503

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
62
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-504
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	123.5	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	1/19/11-1/19/11	**Drilling Method:**	SSA to 10.5 ft	**Core Barrel:**	--
Boring Location:	STA. 516+00, 7' RT.	**Casing ID/OD:**	--	**Water Level*:**	3.0 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/14	0.0 - 2.0	1/2/4/7	6	6	SSA	123.2	-TOPSOIL- (0.3)	
								122.5	Gray, wet, loose, silty fine SAND, trace medium to coarse sand -MARINE DEPOSIT-(SM) (1.0)	
									Dark brown, wet, loose, fine SAND, little silt -MARINE DEPOSIT-(SP)	
								120.5	Orange-brown, wet, loose, fine SAND, little medium sand, little silt -MARINE DEPOSIT-(SP) (3.0)	
5	2D	24/24	5.0 - 7.0	5/8/11/11	19	19			Change to gray, slightly mottled, silty SAND observed in auger cuttings from 3.0 to 5.0 ft Gray, moist, very stiff, silty CLAY, some fine sand -MARINE DEPOSIT-(CL)	G#11722a A-4(4), CL WC=21.7% LL=25 PL=17, PI=8
	3D	24/24	7.0 - 9.0	2/3/6/8	9	9		116.5	Brown, moist to wet, medium dense, fine SAND, some silt, trace coarse sand Gray-brown, wet, silty fine SAND, trace medium sand, mottled -MARINE DEPOSIT-(SM) (7.0)	
	4D	24/7	9.0 - 11.0	10/50(0")				114.0	Gray-brown, moist to wet, medium dense, fine SAND, some silt, trace medium sand (SM) (9.5)	
10								113.0	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 10.5 ft. (10.5)	
									Bottom of Exploration at 10.5 feet below ground surface.	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-505
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	129.2	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	1/25/11-1/25/11	**Drilling Method:**	SSA to 7.4 ft	**Core Barrel:**	--
Boring Location:	STA. 519+01, 1' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/7	0.0 - 2.0	1/1/1/2	2	2	SSA	129.1	-TOPSOIL- (0.1)	
									Brown, dry to moist, very loose, fine SAND, trace medium to coarse sand, contains occasional rootlets (SP)	
	2D	24/16	2.0 - 4.0	3/6/6/7	12	12			Brown, moist to wet, medium dense, silty fine SAND, little gravel, trace medium to coarse sand, thin layers with higher silt content, contains trace decomposed rock -MARINE DEPOSIT-(SM)	G#11722b A-4, SM WC=18.0%
5	3D	24/15	5.0 - 7.0	9/22/50(4")				124.0	(5.2)	
								122.9	Brown, moist to wet, very dense, fine SAND, some gravel, little coarse to medium sand, trace silt, contains decomposed bedrock -GLACIAL TILL-(SW) Note: Gravel in spoon tip.	
								121.8	(6.3)	
									-WEATHERED BEDROCK- Note: Auger refusal on top of probable bedrock at 7.4 ft. (7.4)	
									Bottom of Exploration at 7.4 feet below ground surface.	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
63
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-506
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	128.2	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	1/25/11-1/25/11	**Drilling Method:**	SSA to 5.0 ft	**Core Barrel:**	--
Boring Location:	STA. 520+94, 1' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/9	0.0 - 2.0	1/1/1/1	2	2	SSA	128.0	-TOPSOIL- (0.2)	
									Rusty-brown, dry to moist, very loose, fine SAND, some silt, trace medium to coarse sand and gravel, contains rootlets and wood fragments (SP)	
	2D	24/10	2.0 - 4.0	6/13/50(2")				125.7	Orange-brown, dry to moist, very dense, fine SAND, some medium sand, trace coarse sand and gravel, contains decomposed rock and iron-stained soils (SP) (2.5)	
								125.0	Dark gray, moist, very dense, well graded SAND, some gravel, contains decomposed bedrock -GLACIAL TILL-(SW) (3.2)	
5								123.2	-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 5.0 ft. (5.0)	
10									**Bottom of Exploration at 5.0 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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Boring No.: HB-YA-506

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-507
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	120.7	**Auger ID/OD:**	--
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS, 300/14 NW
Date Start/Finish:	1/25/11-1/25/11	**Drilling Method:**	NW to 28.3 ft	**Core Barrel:**	--
Boring Location:	STA. 523+32, 52' RT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/11	0.0 - 2.0	1/WOH/1/2			Auger	120.6	-TOPSOIL- (0.1)	
									Olive-brown, wet, very loose, silty fine SAND, trace medium sand, little organic silt, strong organic odor, wood fragments and rootlets (SM)	
	2D	24/16	2.0 - 4.0	4/5/9/11	14	14			Olive-brown, wet, stiff, silty CLAY, trace fine sand, mottled with fine sand seams and pockets of fine sand -MARINE DEPOSIT-(CL)	G#11722c A-6(10), CL WC=20.4% LL=29, PL=17 PI=12
5	3D	24/22	5.0 - 7.0	6/9/12/17	19	19			Olive-brown, wet, very stiff, silty CLAY, little fine sand seams, slightly mottled -MARINE DEPOSITS-(CL)	G#11722d A-4(6), CL WC=20.9% LL=27, PL=18 PI=9
10	4D	24/24	10.0 - 12.0	5/5/7/8	12	12			Olive-brown, moist, stiff, silty CLAY, little fine sand, trace medium to coarse sand, trace organic silt, horizontal and vertical fine sand seams, some seams composed of coarser sand, occasional blocky texture -MARINE DEPOSIT-(CL)	G#11722e A-4(6), CL WC=23.9% LL=26, PL=17 PI=9
15	5D	24/11	15.0 - 17.0	15/15/17/17	32	32	38	105.7	(15.0) Brown, wet, dense, medium SAND, some fine sand, little coarse sand, little gravel and silt, contains decomposed bedrock -GLACIAL TILL-(SW)	
							42			
							55			
							72			
							75			
20	6D	24/20	20.0 - 22.0	25/13/11/14	24	24	33		Gray grading to brown, wet, medium dense, fine to medium SAND, little gravel and coarse sand, trace silt -GLACIAL TILL-(SW)	
							52			
							82			
							69			
25							30			

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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Boring No.: HB-YA-507

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
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DESIGN2-DETAILED2		
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REVISIONS 1		
REVISIONS 2		
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REVISIONS 4		
FIELD CHANGES		

SIGNATURE
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DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
64
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-507
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	120.7	**Auger ID/OD:**	--
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS, 300/14 NW
Date Start/Finish:	1/25/11-1/25/11	**Drilling Method:**	NW to 28.3 ft	**Core Barrel:**	--
Boring Location:	STA. 523+32, 52' RT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
25	7D	24/14	25.0 - 27.0	11/17/15/23	32	32	36	95.7		Gray, moist to wet, hard SILT, some gravel, some fine sand, trace coarse sand, bonded -GLACIAL TILL-(ML) (25.0)	
							30				
							38				
							50(4")	92.4		Note: Casing refusal on probable top of bedrock at 28.3 ft. (28.3)	
30										**Bottom of Exploration at 28.3 feet below ground surface.**	
35											
40											
45											
50											

Remarks:

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Boring No.: HB-YA-507

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-508
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	121.7	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	1/25/11-1/25/11	**Drilling Method:**	SSA to 6.9 ft	**Core Barrel:**	--
Boring Location:	STA. 522+81, 60' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/14	0.0 - 2.0	1/2/4/5	6	6	SSA	121.5		-TOPSOIL- (0.2)	
										Gray-brown, moist, loose, silty SAND grading to sandy SILT, trace medium sand, mottled, contains rootlets -MARINE DEPOSIT-(SM/ML)	
	2D	24/24	2.0 - 4.0	4/4/5/6	9	9				Gray-brown, moist to wet, SILT, some fine to coarse sand, trace medium sand, occasional vertical seams of fine sand, pockets of clay, mottled -MARINE DEPOSIT-(ML)	G#11723a A-4, ML WC=22.2%
5	3D	20/19	5.0 - 6.7	4/8/8/50(2")	16	16				Gray-brown, wet, medium dense, fine sandy SILT, trace medium to coarse sand and gravel, silt content increases with depth -MARINE DEPOSIT-(ML)	G#11723b A-4, ML WC=23.1%
								115.0		(6.7)	
								114.8		-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 6.9 ft. (6.9)	
10										**Bottom of Exploration at 6.9 feet below ground surface.**	
15											
20											
25											

Remarks:

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2. Hammer consisted of rope and cathead and safety hammer.

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Boring No.: HB-YA-508

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
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YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-509
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	120.0	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS, 300/14 NW
Date Start/Finish:	1/19/11-1/19/11	**Drilling Method:**	SSA to 4.5 ft	**Core Barrel:**	--
Boring Location:	STA. 508+98, 81' LT.	**Casing ID/OD:**	NW 3.0 in. I.D.	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/17	0.0 - 2.0	1/4/5/7	9	9	SSA	119.8	-TOPSOIL- 0.2	
									Gray, wet, loose, silty SAND, trace medium to coarse sand, slightly mottled -MARINE DEPOSIT-(SM)	
								117.1	2.9	
									-WEATHERED BEDROCK-	
								115.5	Note: Auger refusal on probable top of bedrock at 4.5 ft. 4.5	
5									**Bottom of Exploration at 4.5 feet below ground surface.**	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-510
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	120.9	**Auger ID/OD:**	NW 3.0 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS, 300/14 NW
Date Start/Finish:	1/26/11-1/26/11	**Drilling Method:**	NW Drive to 12.7 ft	**Core Barrel:**	--
Boring Location:	STA. 523+03, 3' LT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/8	0.0 - 2.0	1/1/1/2	2	2	SSA	120.7	-TOPSOIL- 0.2	
									Olive-gray, moist to wet, very soft, clayey SILT, little fine sand, trace medium sand, contains rootlets, slightly mottled -MARINE DEPOSIT-(ML)	
	2D	24/16	2.0 - 4.0	2/5/7/7	12	12			Olive-gray, moist to wet, stiff, silty CLAY, trace brown fine sand, slightly blocky texture -MARINE DEPOSIT-(CL)	G#11723c A-6(9), CL WC=22.8% LL=29, PL=18 PI=18
	3D	24/24	4.0 - 6.0	3/3/5/9	8	8			Olive-gray to brown, moist, medium stiff, SILT and silty CLAY, slightly mottled, little fine sand -MARINE DEPOSIT-(CL-ML)	G#11723d A-4(4), CL-ML WC=23.2% LL=25, PL=18 PI=7
5								114.9	6.0	
	4D	24/24	6.0 - 8.0	5/7/7/10	14	14	19		Gray-brown, wet, medium dense, silty fine SAND, with fine to coarse sand seams and layers -MARINE DEPOSIT-(SM)	
							29			
							35			
							20			
10	5D	14/13	10.0 - 11.2	15/16/50(2")				110.6	Gray, wet, hard, sandy SILT (ML) 10.3	
								109.7	Brown, wet, dense, well graded SAND, some gravel, weak to moderately bonded -GLACIAL TILL-(SW) 11.2	
								108.2	-WEATHERED BEDROCK- Note: Weathered rock in spoon tip and observed in wash water. Roller cone refusal on probable top of bedrock at 12.7 ft. 12.7	
15									**Bottom of Exploration at 12.7 feet below ground surface.**	
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Interchange Improvements
Location: Yarmouth, Maine

Boring No.: HB-YA-511
PIN: 11086.00

Driller:	Maine Test Borings	**Elevation (ft.)**	123.5	**Auger ID/OD:**	SSA 4.0 in. O.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	1/26/11-1/26/11	**Drilling Method:**	SSA to 5.5 ft	**Core Barrel:**	--
Boring Location:	STA. 521+97, 14' RT.	**Casing ID/OD:**	--	**Water Level*:**	--
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/17	0.0 - 2.0	1/1/1/3	2	2	SSA		-TOPSOIL- (2.0)	
	2D	24/18	2.0 - 4.0	5/10/13/17	23	23		121.5	Brown, wet, medium dense, fine SAND, some silt, little medium sand, trace coarse sand and gravel, 0.2 to 0.5 in. thick layers of iron staining, 1.2 in. layer of coarse/fine sand -GLACIAL TILL-(SM)	G#11723e A-2-4, SM WC=12.9%
5	3D	2/2	5.0 - 5.2	50(2")				118.5 (5.0) 118.0	Weathered rock in a maxtrix of fine brown SAND -WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 5.5 ft. (5.5)	
10									**Bottom of Exploration at 5.5 feet below ground surface.**	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provded in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Park and Ride Facility
Location: Yarmouth, Maine

Boring No.: HB-YA-601
PIN: 17490.00

Driller:	Maine Test Borings	**Elevation (ft.)**	125.8	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile Drill B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/18/11-01/18/11	**Drilling Method:**	HSA to 13.0 ft	**Core Barrel:**	--
Boring Location:	STA. 601+92, 32'LT.	**Casing ID/OD:**	--	**Water Level*:**	7.8 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/17	0.0 - 2.0	1/2/3/6	5	5	HSA		-TOPSOIL- (1.0)	
								124.8	Light brown, moist, loose, fine SAND, little medium to coarse sand, contains decomposed wood (SP)	
	2D	24/24	2.0 - 4.0	3/5/6/16	11	11			Gray, moist, stiff, silty CLAY, little fine sand, trace medium to coarse sand (reworked native material) -FILL-(SP)	
5	3D	24/24	5.0 - 7.0	5/5/6/7	11	11		120.8	Gray-brown, moist, stiff, fine sandy SILT, trace medium to coarse sand -MARINE DEPOSIT-(ML) (5.0)	
10	4D	24/10	10.0 - 12.0	2/7/7/6	14	14		115.3	Brown, moist, stiff, silty CLAY, trace fine to coarse sand (CL) (10.5)	
									Gray, wet, medium dense, fine SAND, little silt, one 2 in. gravel piece -MARINE DEPOSIT-(SP)	
	5D	24/3	13.0 - 15.0	5/13/10/10	23	23			Gray, wet, medium dense, fine SAND, trace medium to coarse sand and silt, little gravel, one 2 in. gravel piece -MARINE DEPOSIT-(SP)	
15								110.8	**Bottom of Exploration at 15.0 feet below ground surface.** (15.0)	
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST. Station and offset information reference the Park and Ride Facility baseline.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Park and Ride Facility
Location: Yarmouth, Maine

Boring No.: HB-YA-602
PIN: 17490.00

Driller:	Maine Test Borings	**Elevation (ft.)**	131.3	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile Drill B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/18/11-01/18/11	**Drilling Method:**	HSA to 8.1 ft	**Core Barrel:**	--
Boring Location:	STA. 605+91, 32'LT.	**Casing ID/OD:**	--	**Water Level*:**	5.3 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/10	0.0 - 2.0	2/3/6/8	9	9	HSA	131.0	-TOPSOIL- (0.3)	
								129.3	Dark brown, moist, loose, fine SAND, little medium sand, trace coarse sand, trace silt, wood pieces, roots (SP) (2.0)	
	2D	24/20	2.0 - 4.0	6/9/13/21	22	22			Olive to light brown, moist, medium dense, silty, fine to medium SAND, trace coarse sand, grading to sandy SILT, occasional organics, roots -MARINE DEPOSIT-(SM/ML)	
5	3D	24/17	5.0 - 7.0	11/12/14/15	26	26		126.3	Orange-brown, wet, dense, fine to medium SAND, little coarse sand and gravel, trace silt -MARINE DEPOSIT-(SW) (5.0)	
	4D	0/0	8.1 - 8.1	50(0")				123.4 / 123.2	-WEATHERED BEDROCK- Note: Auger and split spoon refusal on probable top of bedrock at 8.1 ft. (7.9)	
10									**Bottom of Exploration at 8.1 feet below ground surface.** (8.1)	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST. Station and offset information reference the Park and Ride Facility baseline.
2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Park and Ride Facility
Location: Yarmouth, Maine

Boring No.: HB-YA-603
PIN: 17490.00

Driller:	Maine Test Borings	**Elevation (ft.)**	127.8	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile Drill B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/20/11-01/20/11	**Drilling Method:**	HSA to 9.0 ft	**Core Barrel:**	--
Boring Location:	STA. 617+09, 65'LT.	**Casing ID/OD:**	--	**Water Level*:**	4.6 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/14	0.0 - 2.0	1/1/1/4	2	2	HSA	127.6	-TOPSOIL- (0.2)	
									Brown to orange-brown, wet, very loose, fine to medium SAND, trace coarse sand, little silt -MARINE DEPOSIT-(SM)	G#11713a A=2-4, SM WC=36.1%
	2D	24/16	2.0 - 4.0	3/4/4/6	8	8		125.3	Light brown, wet, loose, fine SAND, trace medium sand, trace silt (SP) (2.5)	
									Gray-brown, moist, medium stiff, silty CLAY, little fine sand, trace medium to coarse sand and fine gravel, mottled -MARINE DEPOSIT-(CL)	G#11713b A-6(9), CL WC=22.8% LL=33, PL=20 PI=13
5	3D	24/20	4.0 - 6.0	5/7/7/7	14	14			Gray-brown, moist, stiff, silty CLAY, little fine sand, trace medium to coarse sand and fine gravel, mottled -MARINE DEPOSIT-(CL)	
	4D	24/24	6.0 - 8.0	15/12/12/11	24	24			Gray, moist, very stiff, silty CLAY, little fine sand, trace medium to coarse sand and fine gravel, mottled (CL)	
	5D	24/5	8.0 - 10.0	2/50(2")					Gray-brown/orange-brown, moist, very stiff, sandy CLAY, frequent sand seams and layers -MARINE DEPOSIT-(CL) (8.0)	
								119.1 / 118.8	Brown, wet, very dense, fine SAND, little silt (SP-SM) (8.7)	
10									-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 9.0 ft. (9.0)	
									Bottom of Exploration at 9.0 feet below ground surface.	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST. Station and offset information reference the Park and Ride Facility baseline.
2. Hammer consisted of rope and cathead and safety hammer.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

	BY	DATE
FROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
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REVISIONS 1		
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FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15
BORING LOGS

SHEET NUMBER
68
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Park and Ride Facility
Location: Yarmouth, Maine

Boring No.: HB-YA-604
PIN: 17490.00

Driller:	Maine Test Borings	**Elevation (ft.)**	125.8	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile Drill B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/20/11-01/20/11	**Drilling Method:**	HSA to 11.0 ft	**Core Barrel:**	--
Boring Location:	STA. 613+07, 1'RT.	**Casing ID/OD:**	--	**Water Level*:**	2.9 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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U = Thin Wall Tube Sample
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V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WOTP = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/11	0.0 - 2.0	1/1/1/5	2	2	HSA	125.3	-TOPSOIL- 0.5	
									Gray to brown, moist to wet, very loose, silty fine SAND, trace medium to coarse sand and fine gravel, slightly mottled -MARINE DEPOSIT-(SM)	G#11713c A-4, SM WC=23.6%
	2D	24/24	2.0 - 4.0	3/3/5/8	8	8		122.8	Gray-brown, moist to wet, loose, silty fine SAND, mottled -MARINE DEPOSIT-(SP-SM) 3.0	
								121.8	Gray-brown, moist to wet, stiff, sandy SILT mottled (ML) 4.0	
5	3D	24/24	4.0 - 6.0	4/6/8/16	14	14			Olive, moist, stiff, silty CLAY, trace fine to coarse sand and fine gravel, mottled, frequent light brown fine sand seams, increasing sand content with depth -MARINE DEPOSIT-(CL)	G#11713d A-6(16), CL WC=23.8% LL=36, PL=20 PI=16
	4D	24/24	6.0 - 8.0	5/6/7/11	13	13			Olive, moist, stiff, sandy SILT, mottled, trace gravel (ML)	
								118.5	Brown, wet, medium dense, fine SAND, some silt, occasional mottling -MARINE DEPOSIT-(SP-SM) 7.3	
10	5D	2/2	10.0 - 10.2	50(2")				115.8	-WEATHERED BEDROCK- 10.0	
								114.8	Note: Auger refusal on probable top of bedrock at 11.0 ft. 11.0	
									Bottom of Exploration at 11.0 feet below ground surface.	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST. Station and offset information reference the Park and Ride Facility baseline.
2. Hammer consisted of rope and cathead and safety hammer.

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Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Park and Ride Facility
Location: Yarmouth, Maine

Boring No.: HB-YA-605
PIN: 17490.00

Driller:	Maine Test Borings	**Elevation (ft.)**	125.7	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile Drill B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/19/11-01/19/11	**Drilling Method:**	HSA to 5.0 ft	**Core Barrel:**	--
Boring Location:	STA. 613+49, 182'RT.	**Casing ID/OD:**	--	**Water Level*:**	3.6 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
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MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WOTP = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/10	0.0 - 2.0	2/3/3/3	6	6	HSA	125.5	-TOPSOIL- 0.2	
									Brown, wet, loose, fine SAND, some silt, little medium sand, trace coarse sand, contains rootlets (reworked topsoil with fill) -FILL-(SP-SM)	
	2D	24/15	2.0 - 4.0	1/2/5/10	7	7		123.4	2.3	
								123.2	-FORMER TOPSOIL- with organics 2.5	
									Gray, wet, loose, clayey fine SAND, trace medium to coarse sand, some brown mottling -MARINE DEPOSIT-(SC)	
5	3D	0/0	5.0 - 5.0	50(0")				121.0	4.7	
								120.7	-WEATHERED BEDROCK- Note: Auger and split spoon refusal on probable top of bedrock at 5.0 ft. 5.0	
									Bottom of Exploration at 5.0 feet below ground surface.	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST. Station and offset information reference the Park and Ride Facility baseline.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT
HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Park and Ride Facility
Location: Yarmouth, Maine

Boring No.: HB-YA-606
PIN: 17490.00

Driller:	Maine Test Borings	**Elevation (ft.)**	125.0	**Auger ID/OD:**	HSA 2.5 in. I.D.
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile Drill B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/21/11-01/21/11	**Drilling Method:**	HSA to 7.6 ft	**Core Barrel:**	--
Boring Location:	STA. 615+84, 15'LT	**Casing ID/OD:**	--	**Water Level*:**	3.0 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/10	0.0 - 2.0	1/1/2/2	3	3	HSA	124.8	-TOPSOIL- 0.2	
									Brown, moist, soft, sandy SILT, slightly mottled, organic odor -MARINE DEPOSIT-(ML)	
	2D	24/24	2.0 - 4.0	3/4/5/5	9	9			Gray-brown, moist to wet, stiff, silty CLAY, little fine sand, trace medium sand, mottled -MARINE DEPOSIT-(CL)	G#11714a A-6(10), CL WC=23.1% LL=32, PL=20 PI=12
	3D	24/24	4.0 - 6.0	3/4/10/9	14	14			Gray-brown, moist, stiff, silty CLAY, little fine sand, trace medium sand, mottled -MARINE DEPOSIT-(CL)	
5								119.5	5.5	
	4D	18/18	6.0 - 7.5	11/7/10/50(0")	17	17		119.0	Brown, wet, medium dense, silty fine SAND with clay layers (SM) 6.0	
								117.6	Olive brown, moist, medium dense, clayey SAND -MARINE DEPOSIT-(SC)	
								117.4	7.4	
									-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 7.6 ft. 7.6	
									Bottom of Exploration at 7.6 feet below ground surface.	
10										
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST. Station and offset information reference the Park and Ride Facility baseline.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

* Water level readings have been made at times and under conditions stated. Groundwater fluctuations may occur due to conditions other than those present at the time measurements were made.

Maine Department of Transportation

Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Interstate 295/U.S. Route 1 Park and Ride Facility
Location: Yarmouth, Maine

Boring No.: HB-YA-607
PIN: 17490.00

Driller:	Maine Test Borings	**Elevation (ft.)**	127.1	**Auger ID/OD:**	SSA
Operator:	T. Schaefer	**Datum:**	NAVD 88	**Sampler:**	Split Spoon 1.375 in. I.D.
Logged By:	M. Foley	**Rig Type:**	Mobile Drill B53 Bombardier	**Hammer Wt./Fall:**	140/30 SS
Date Start/Finish:	01/24/11-01/24/11	**Drilling Method:**	SSA to 8.7 ft	**Core Barrel:**	--
Boring Location:	STA. 622+13, 21'RT.	**Casing ID/OD:**	--	**Water Level*:**	3.7 ft
Hammer Efficiency Factor:	0.6	**Hammer Type:**	Automatic ☐ Hydraulic ☐ Rope & Cathead ☒		

Definitions:
D = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample attempt
V = Insitu Vane Shear Test
MV = Unsuccessful Insitu Vane Shear Test attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = weight of 140lb. hammer
WOR = weight of rods
WO1P = Weight of one person
S_u = Insitu Field Vane Shear Strength (psf)
T_v = Pocket Torvane Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw field SPT N-value
Hammer Efficiency Factor = Annual Calibration Value
N_{60} = SPT N-uncorrected corrected for hammer efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
$S_{u(lab)}$ = Lab Vane Shear Strength (psf)
WC = water content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/12	0.0 - 2.0	1/1/1/3	2	2	SSA	126.9	-TOPSOIL- 0.2	
									Light brown, moist, very loose, fine to medium SAND, some silt, little coarse sand and fine gravel -MARINE DEPOSIT-(SM)	G#11714b A-2-4, SM WC=24.6%
	2D	24/19	2.0 - 4.0	4/9/19/20	28	28			Brown, moist, medium dense, fine to medium SAND, some silt, little gravel, trace coarse sand -MARINE DEPOSIT-(SM) Note: Augered through cobble at 2.0 ft.	G#11714c A-2-4, SM WC=9.1%
5	3D	24/20	5.0 - 7.0	15/25/23/30	48	48			Brown, moist to wet, dense, fine to medium SAND, some gravel, little silt, trace coarse sand -MARINE DEPOSIT-(SM)	G#11714d A-1-b, SM WC=8.0%
								119.8	7.3	
									-WEATHERED BEDROCK- Note: Auger refusal on probable top of bedrock at 8.7 ft.	
								118.4	8.7	
									Bottom of Exploration at 8.7 feet below ground surface.	
10									Note: Observation Well installed in completed borehole. See Well Installation and Groundwater Monitoring Reports for details.	
15										
20										
25										

Remarks:

1. As-drilled coordinates of test borings determined by MaineDOT and provided in NAD83 Maine 2000 West Zone Coordinate System. As-drilled coordinates related to Station and Offset information by FST. Station and offset information reference the Park and Ride Facility baseline.
2. Hammer consisted of rope and cathead and safety hammer.

Stratification lines represent approximate boundaries between soil types; transitions may be gradual.

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER		BY	DATE
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

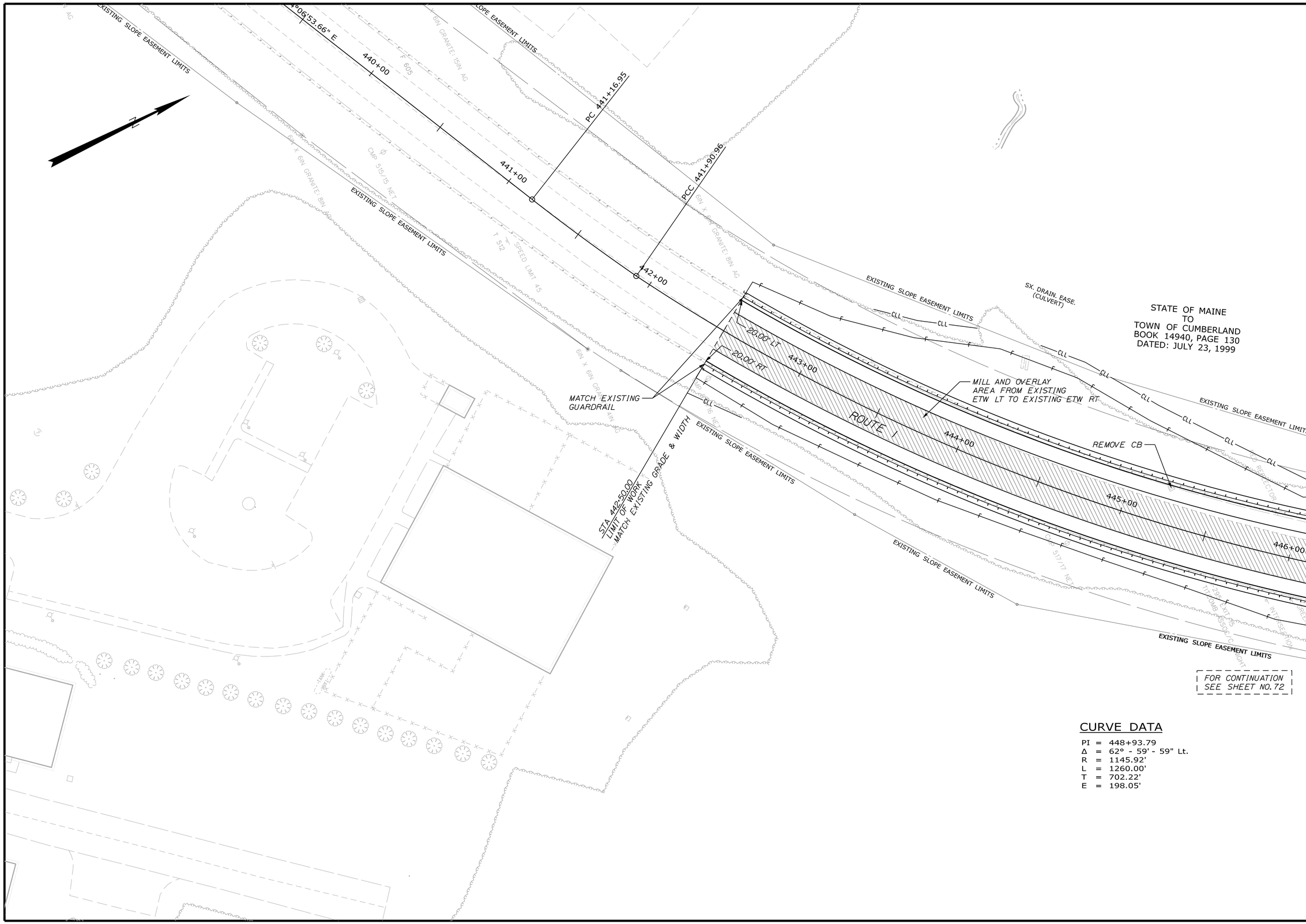
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

BORING LOGS

SHEET NUMBER
70
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



CURVE DATA

PI = 448+93.79
Δ = 62° - 59' - 59" Lt.
R = 1145.92'
L = 1260.00'
T = 702.22'
E = 198.05'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

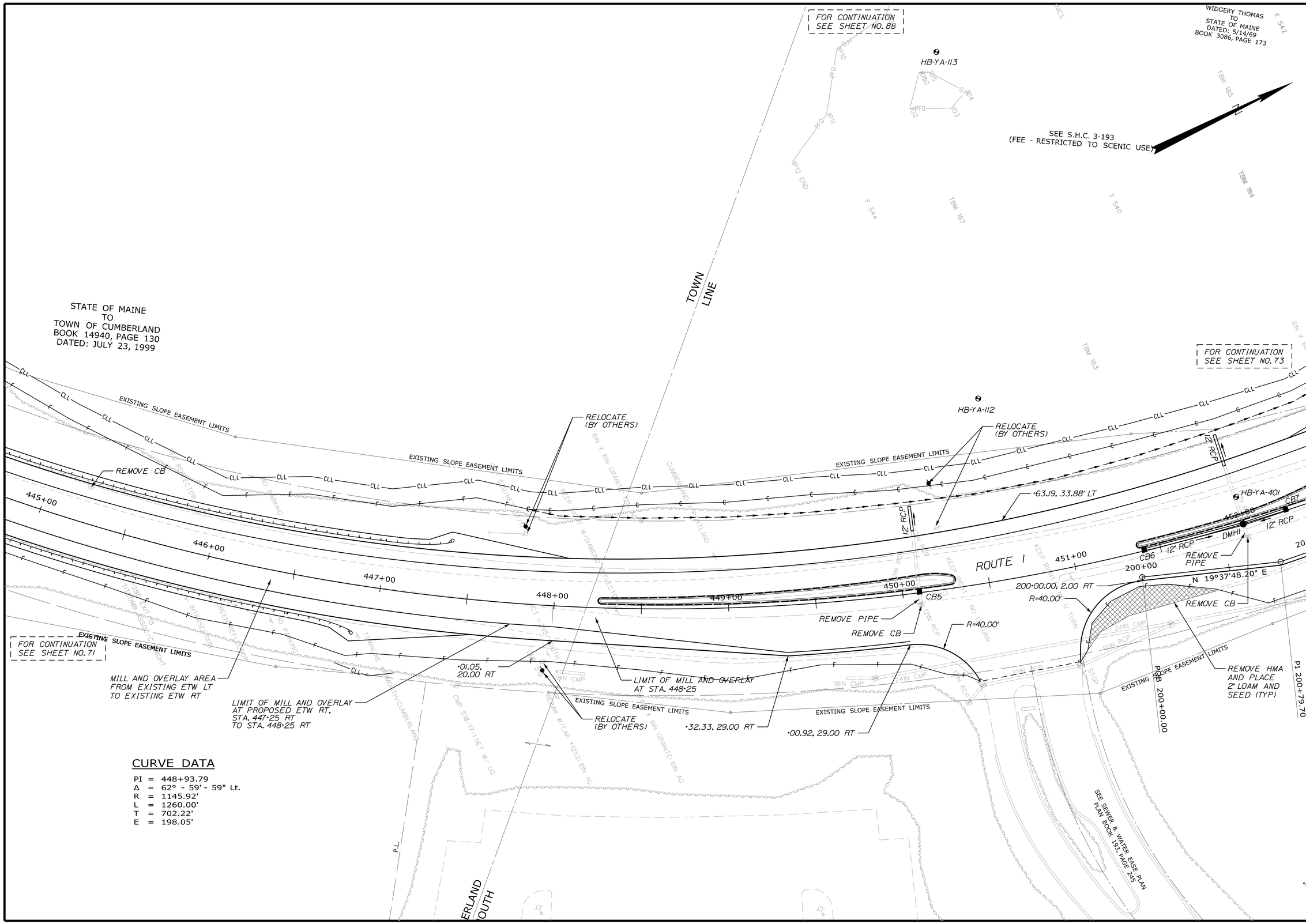
PLANS

SHEET NUMBER

71

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



CURVE DATA

PI = 448+93.79
Δ = 62° - 59' - 59" Lt.
R = 1145.92'
L = 1260.00'
T = 702.22'
E = 198.05'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER			
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

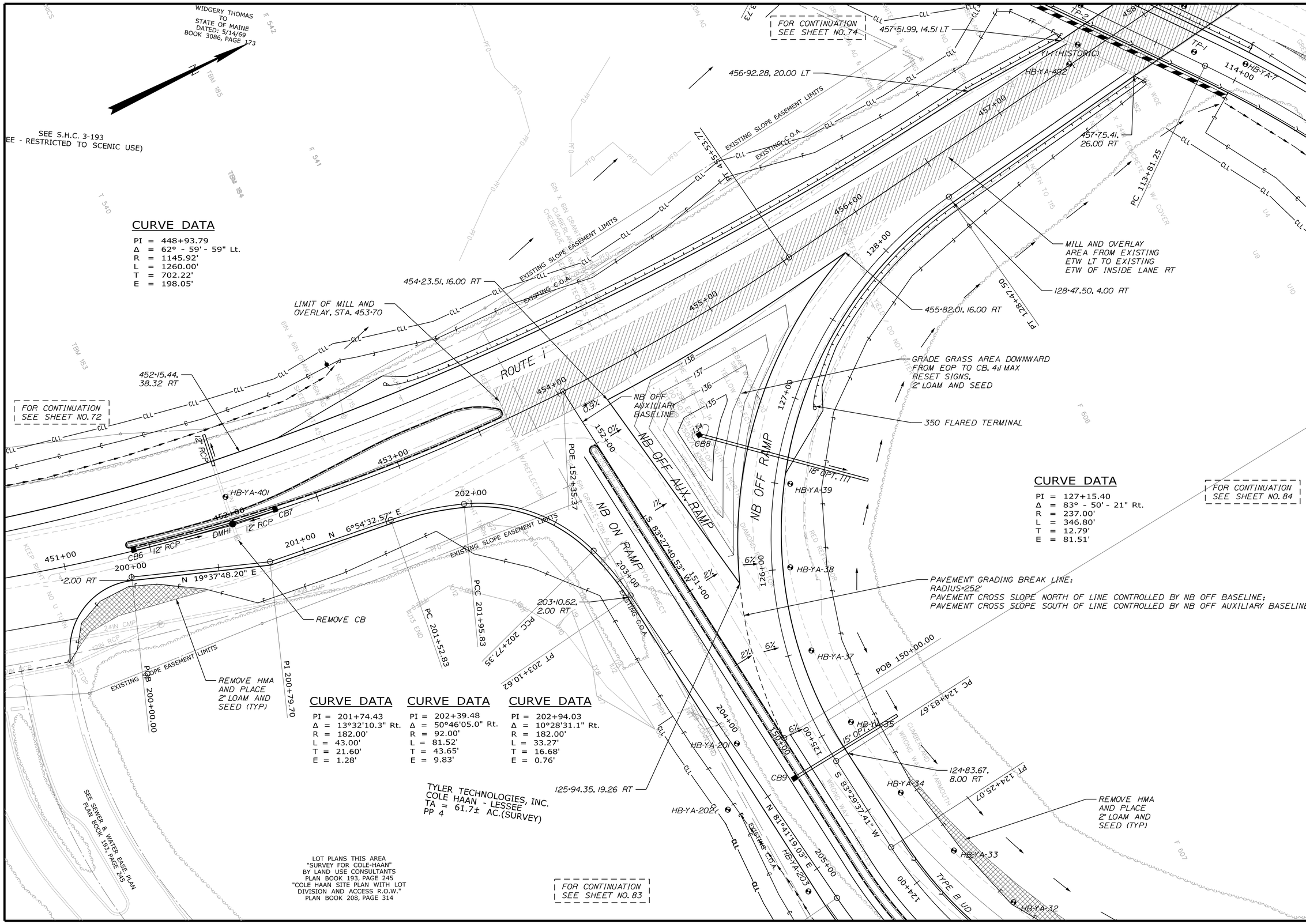
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH I-295 EXIT 15

PLANS

SHEET NUMBER
72
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



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R = 1145.92'
L = 1260.00'
T = 702.22'
E = 198.05'

CURVE DATA

PI = 127+15.40
Δ = 83° - 50' - 21" Rt.
R = 237.00'
L = 346.80'
T = 12.79'
E = 81.51'

CURVE DATA

PI = 201+74.43
Δ = 13°32'10.3" Rt.
R = 182.00'
L = 43.00'
T = 21.60'
E = 1.28'

CURVE DATA

PI = 202+39.48
Δ = 50°46'05.0" Rt.
R = 92.00'
L = 81.52'
T = 43.65'
E = 9.83'

CURVE DATA

PI = 202+94.03
Δ = 10°28'31.1" Rt.
R = 182.00'
L = 33.27'
T = 16.68'
E = 0.76'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

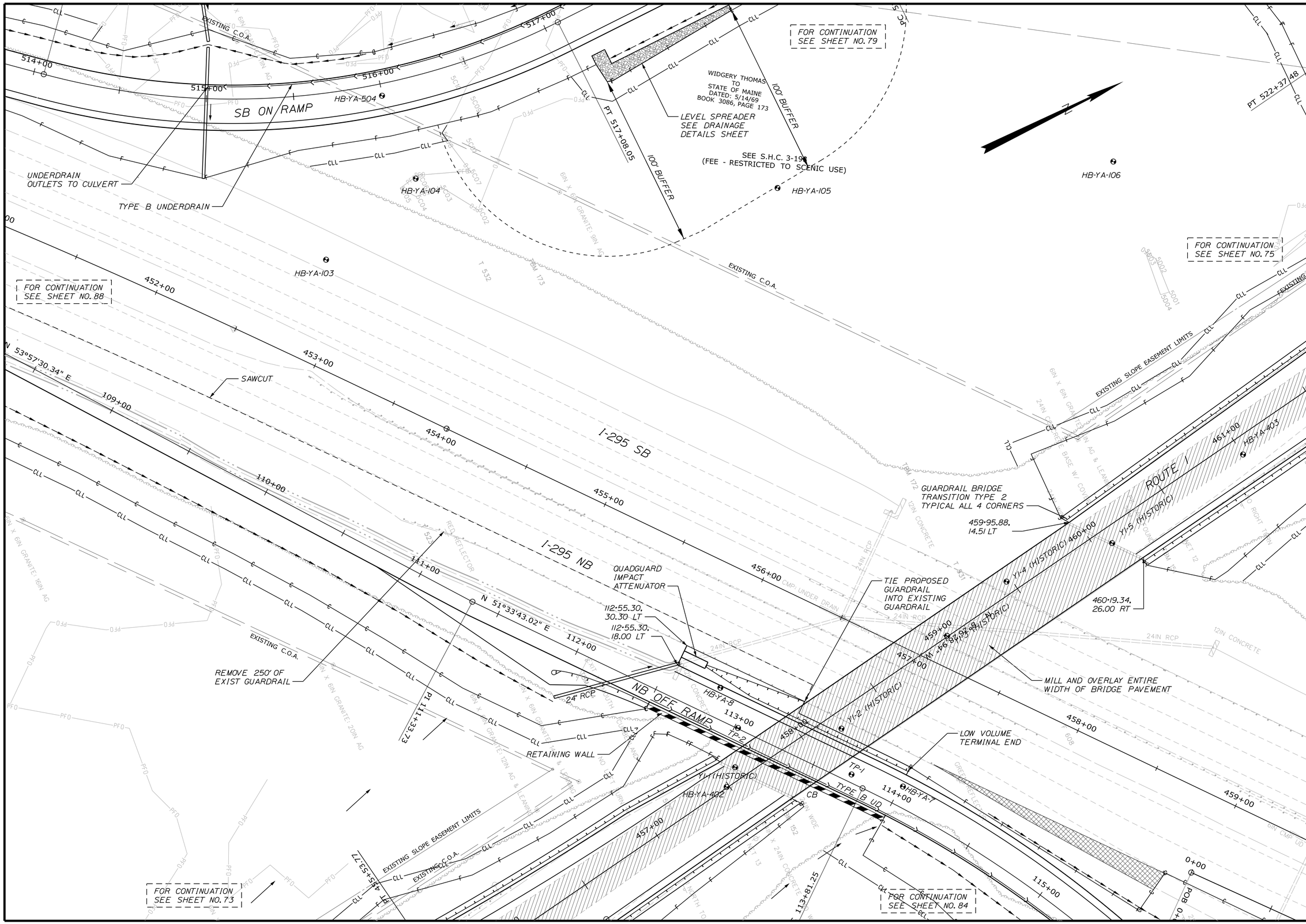
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
73
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

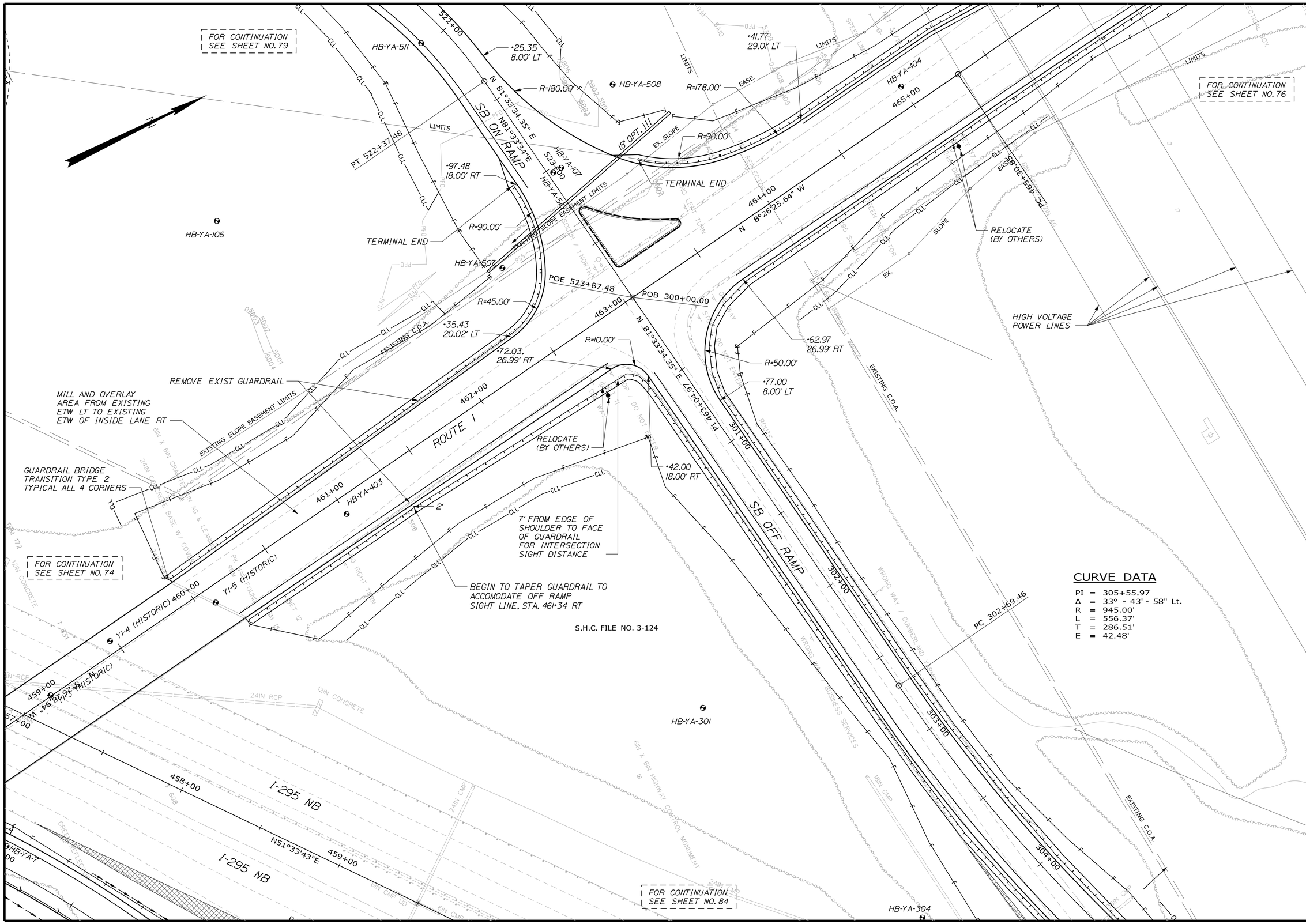
PLANS

SHEET NUMBER

74

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

BY	DATE	
		SIGNATURE
		P.E. NUMBER
		DATE

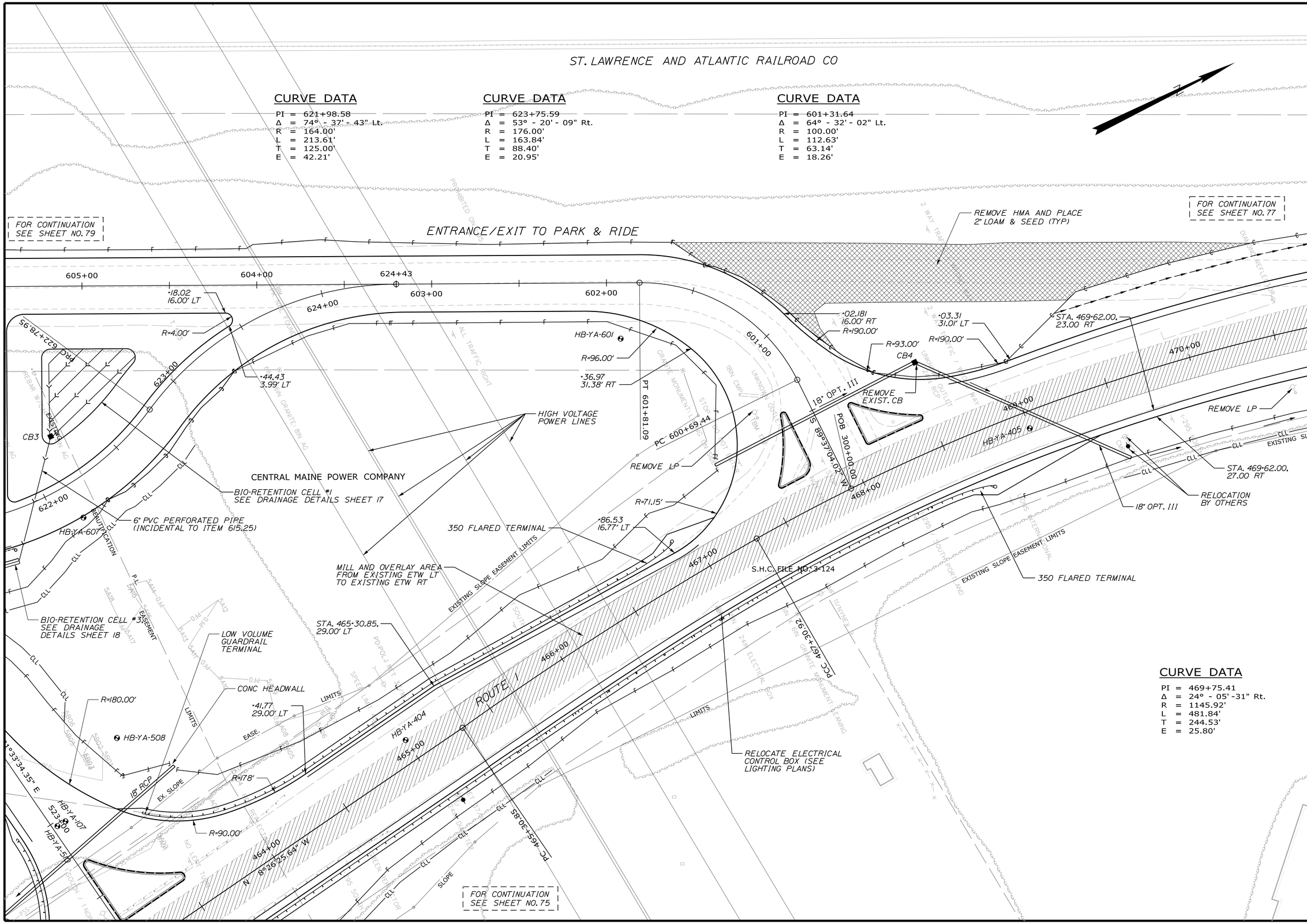
PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
75
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

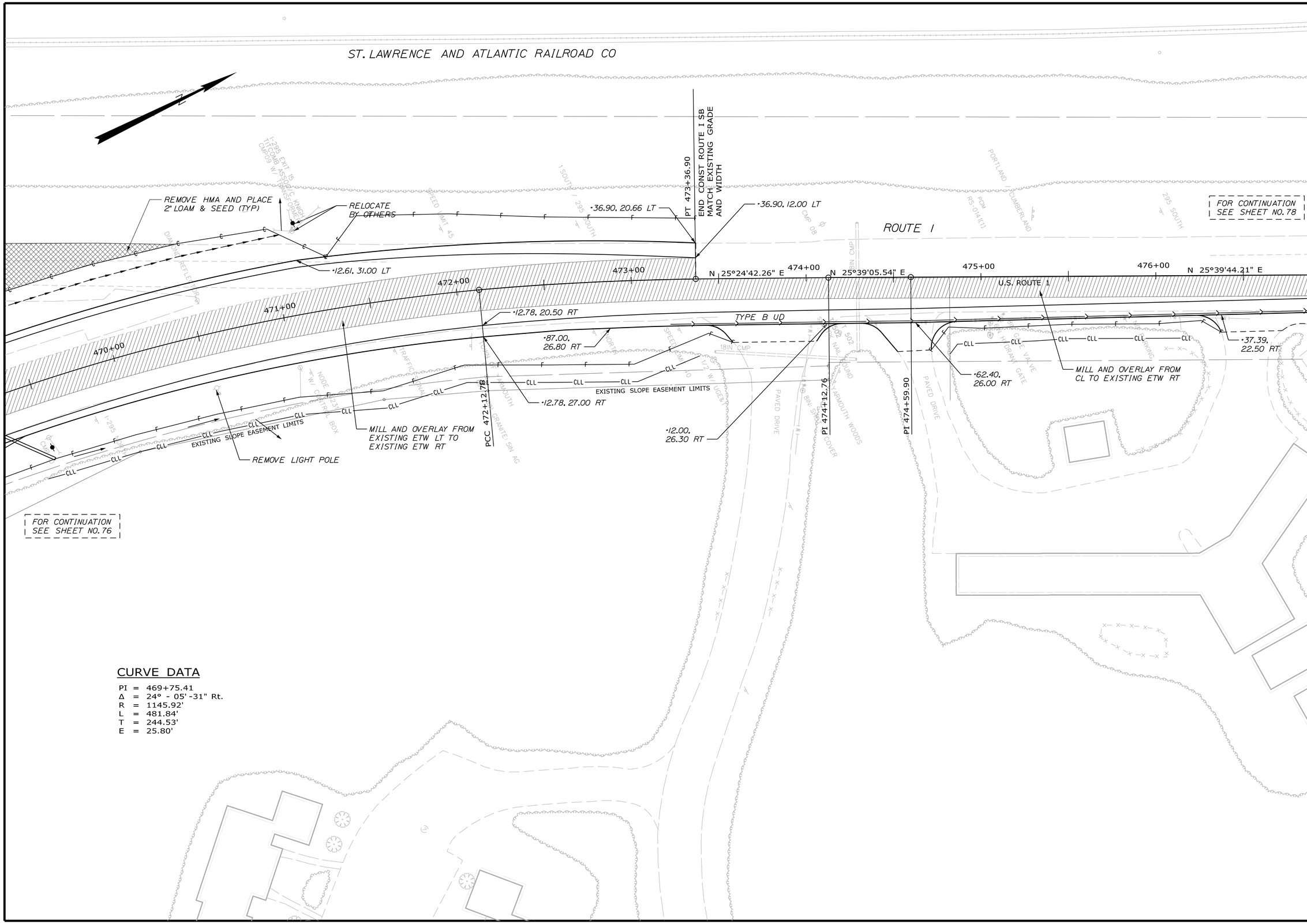
DATE

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
76
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



CURVE DATA

PI = 469+75.41
Δ = 24° - 05'-31" Rt.
R = 1145.92'
L = 481.84'
T = 244.53'
E = 25.80'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

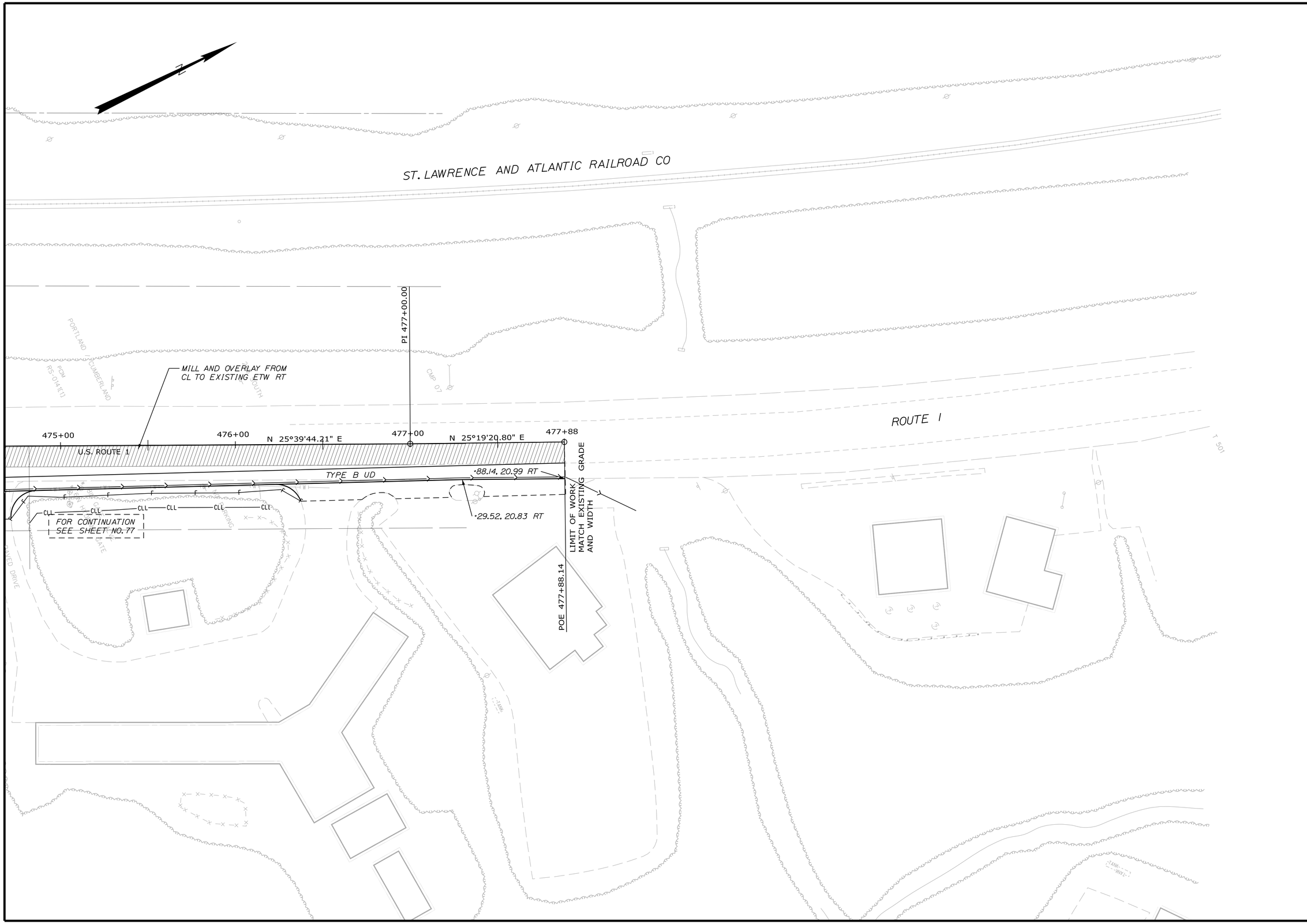
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
77
OF 283

Division: HIGHWAY Username: COMMON Date:2/21/2011
Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

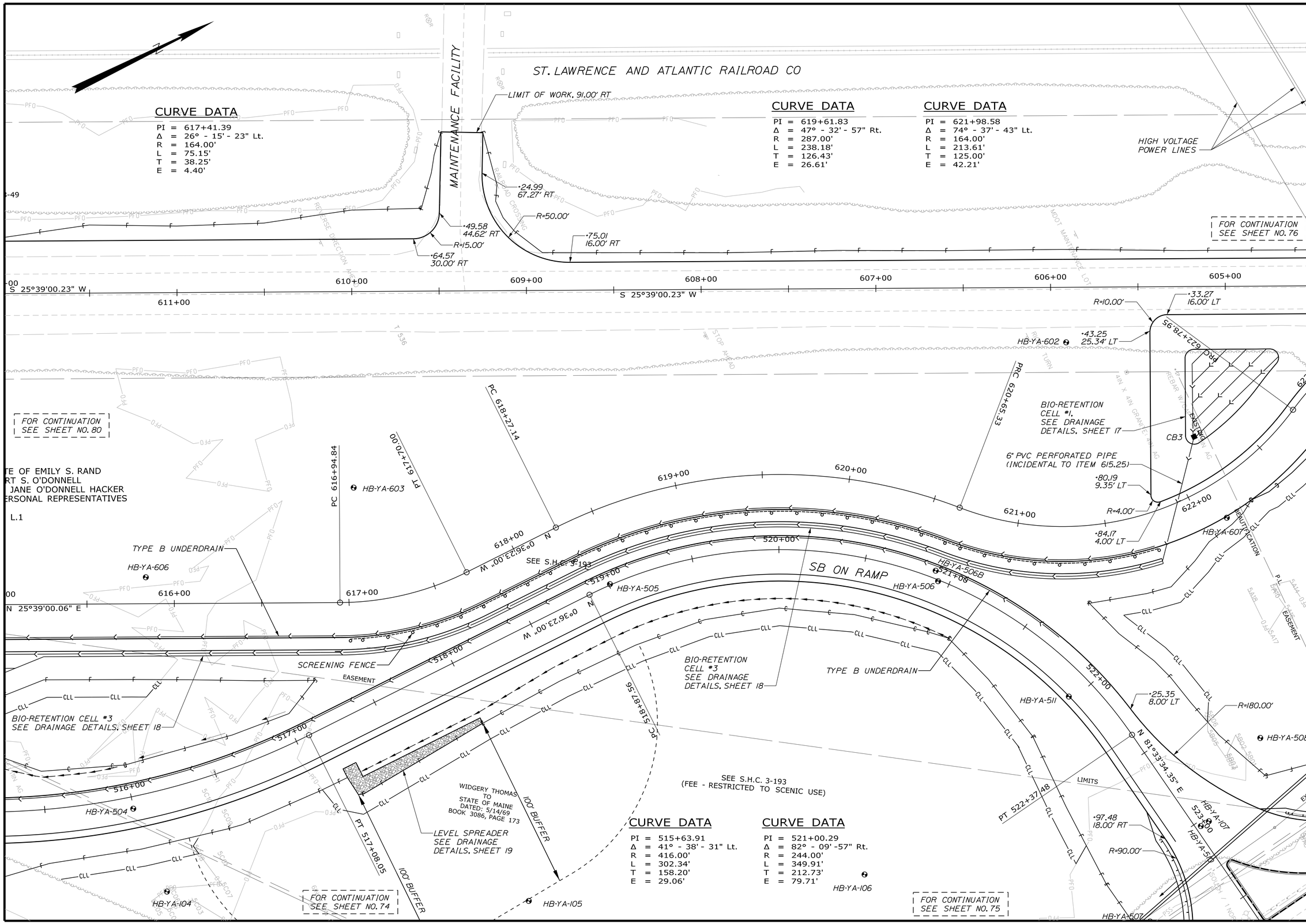
PLANS

SHEET NUMBER

78

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

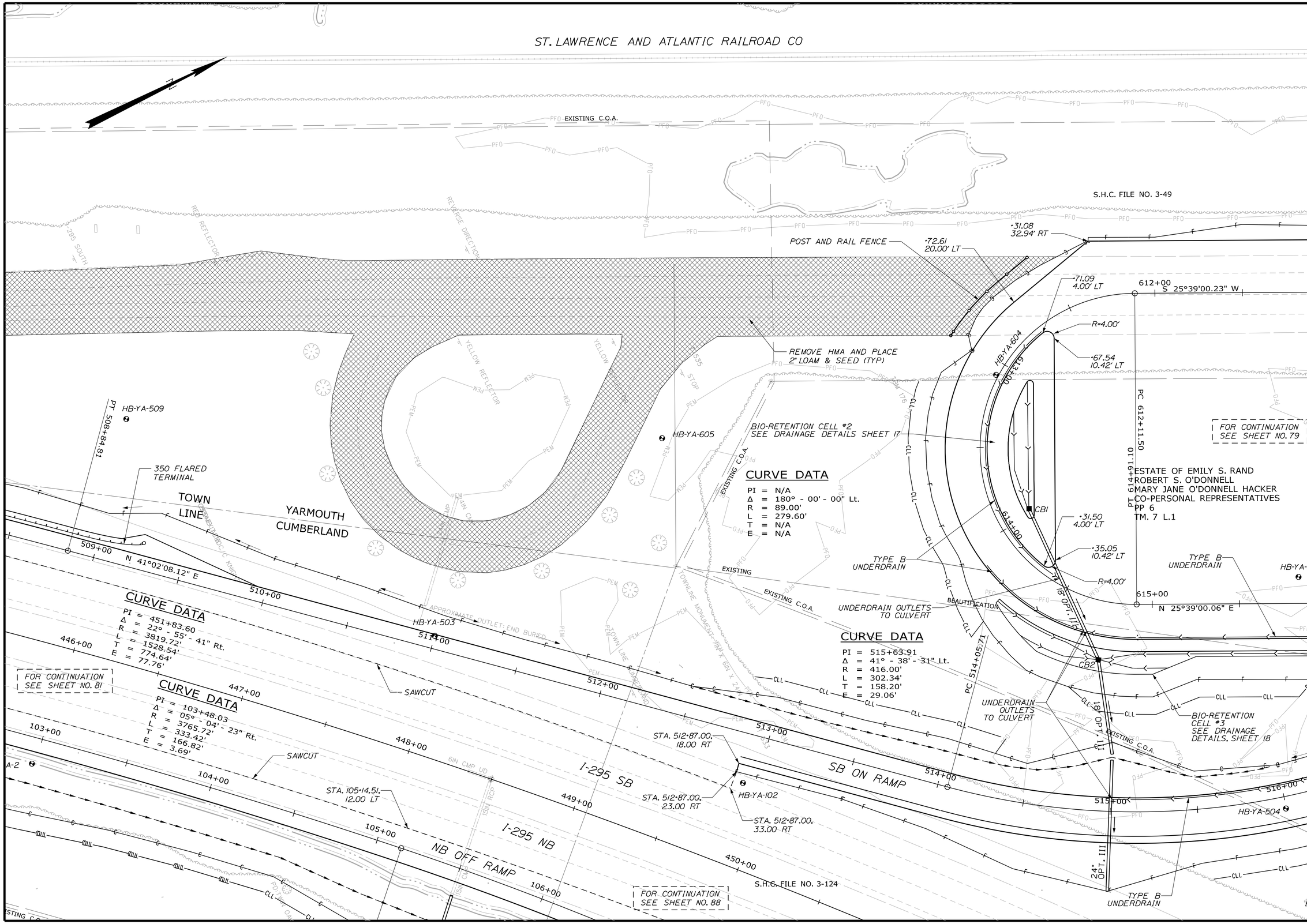
PROJ. MANAGER			
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15
PLANS

SHEET NUMBER
79
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

DATE	BY	
		SIGNATURE
		P.E. NUMBER
		DATE

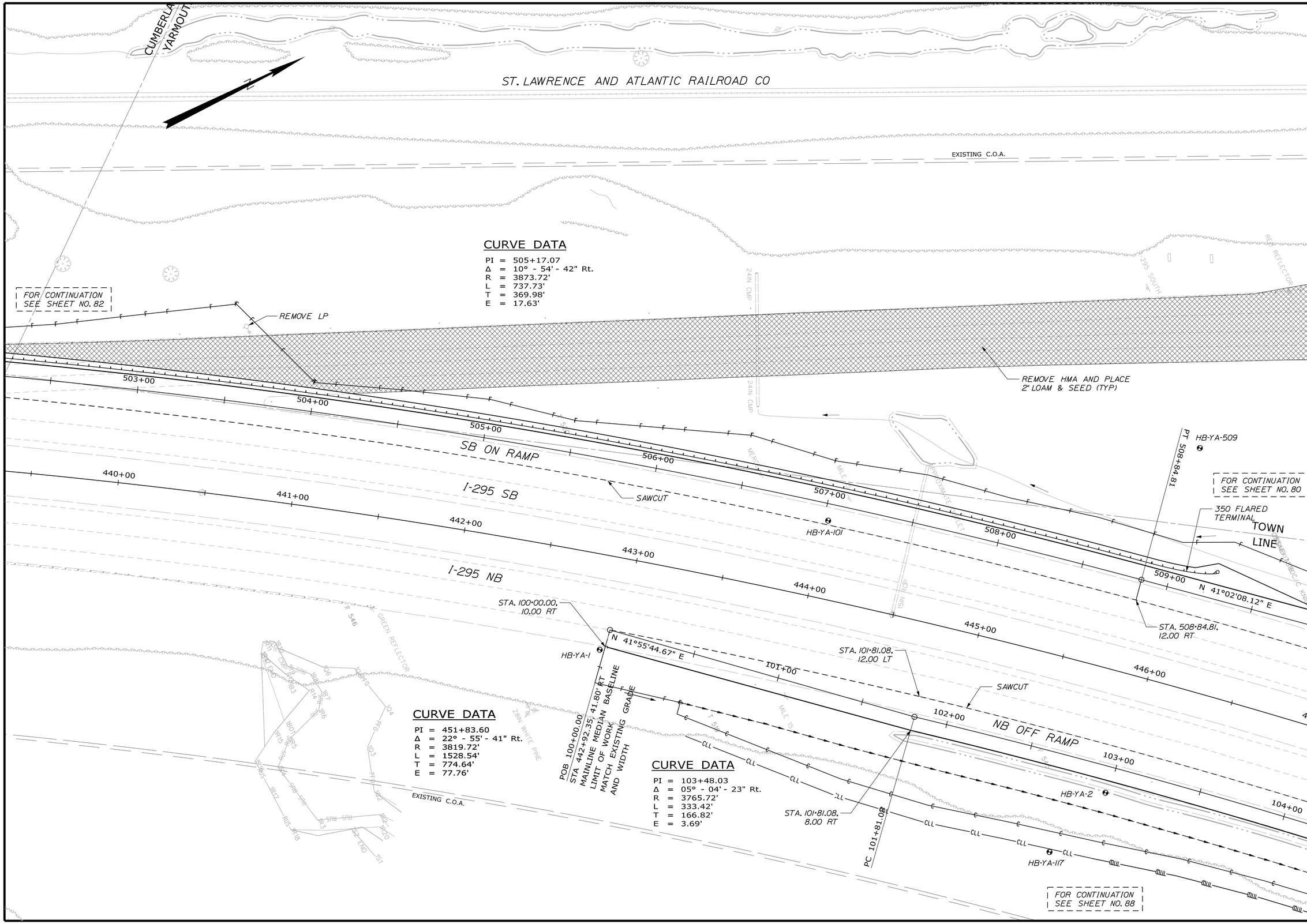
PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
80
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

SIGNATURE
P.E. NUMBER
DATE

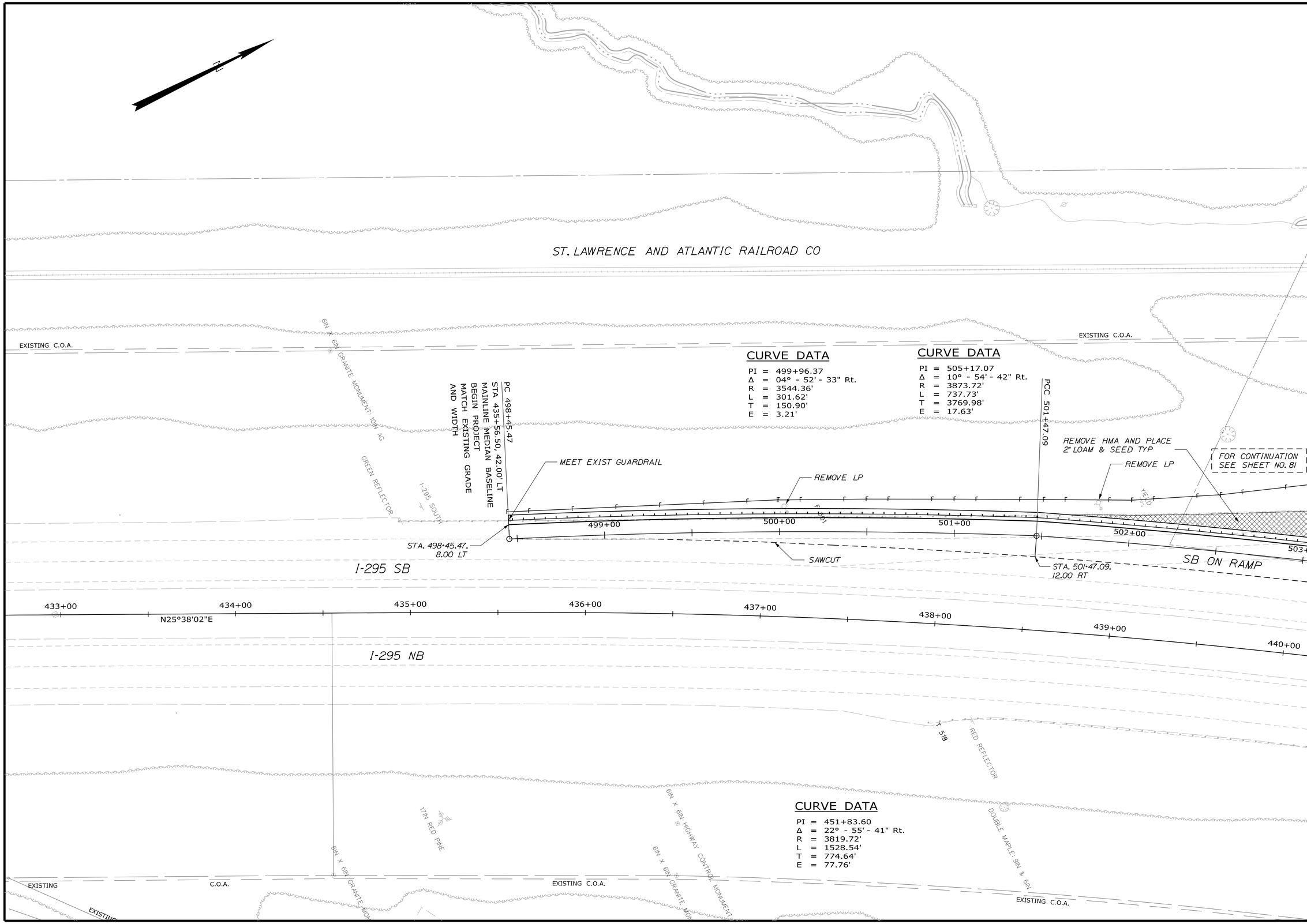
	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
81
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

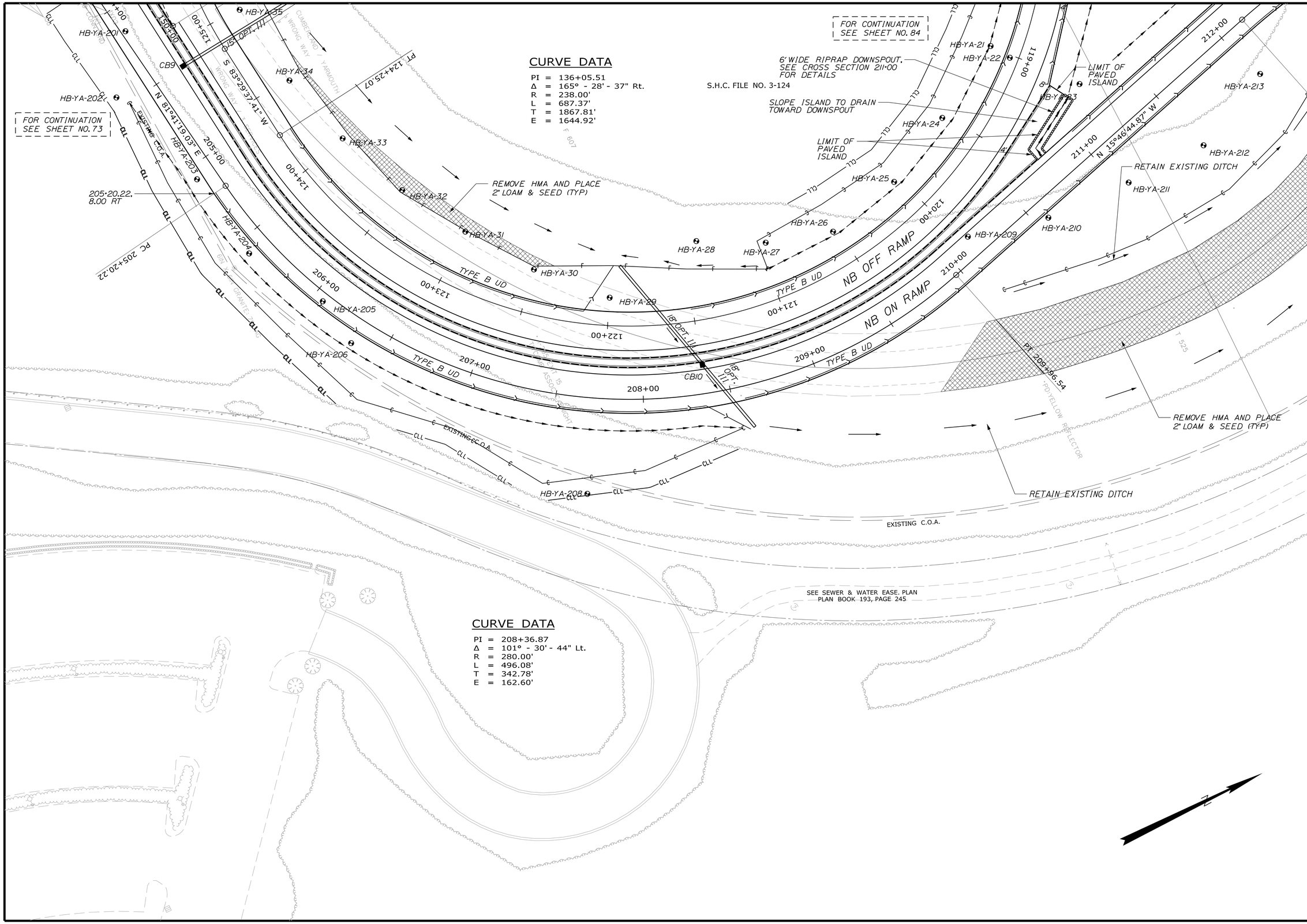
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
82
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

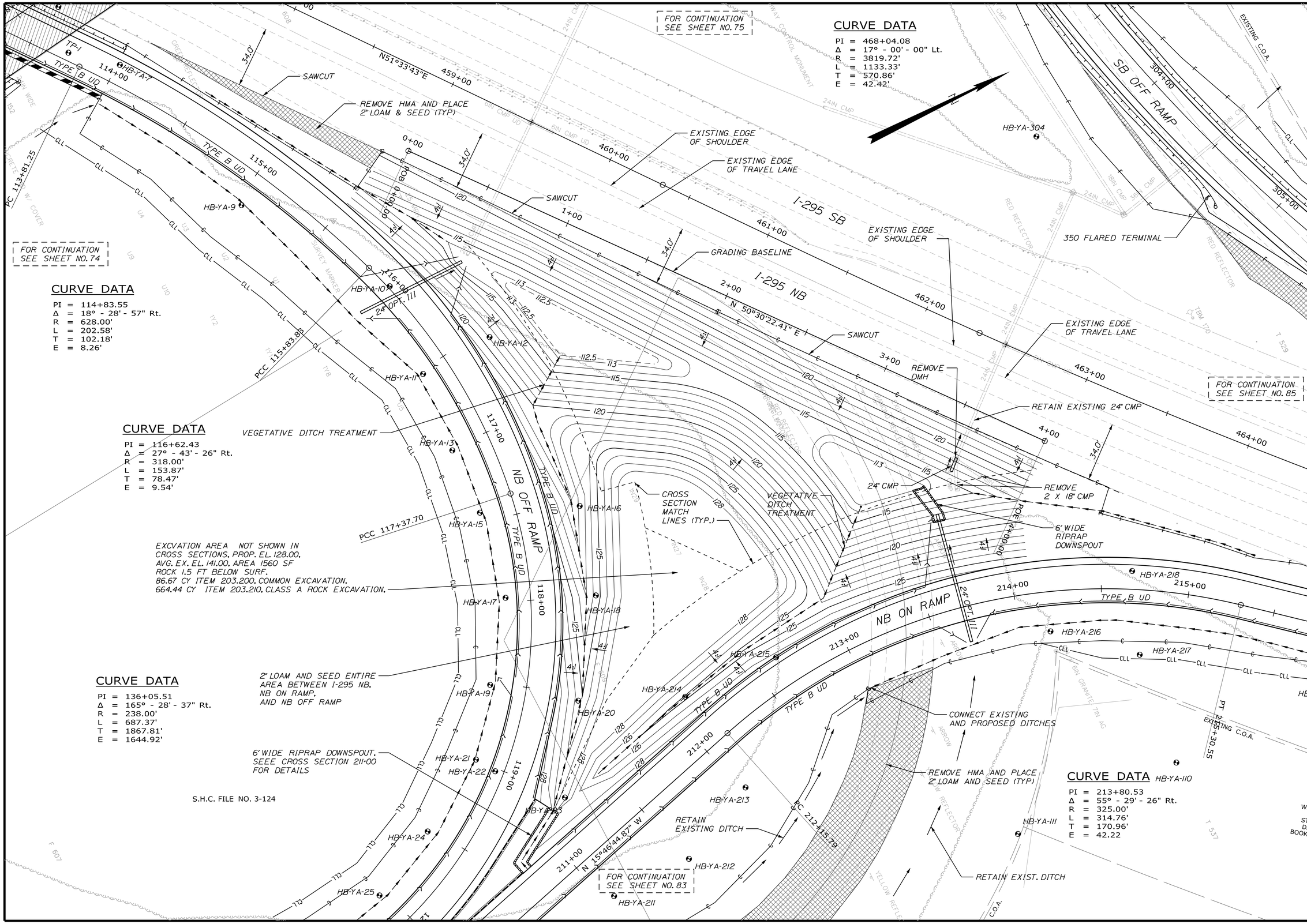
DATE

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
83
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

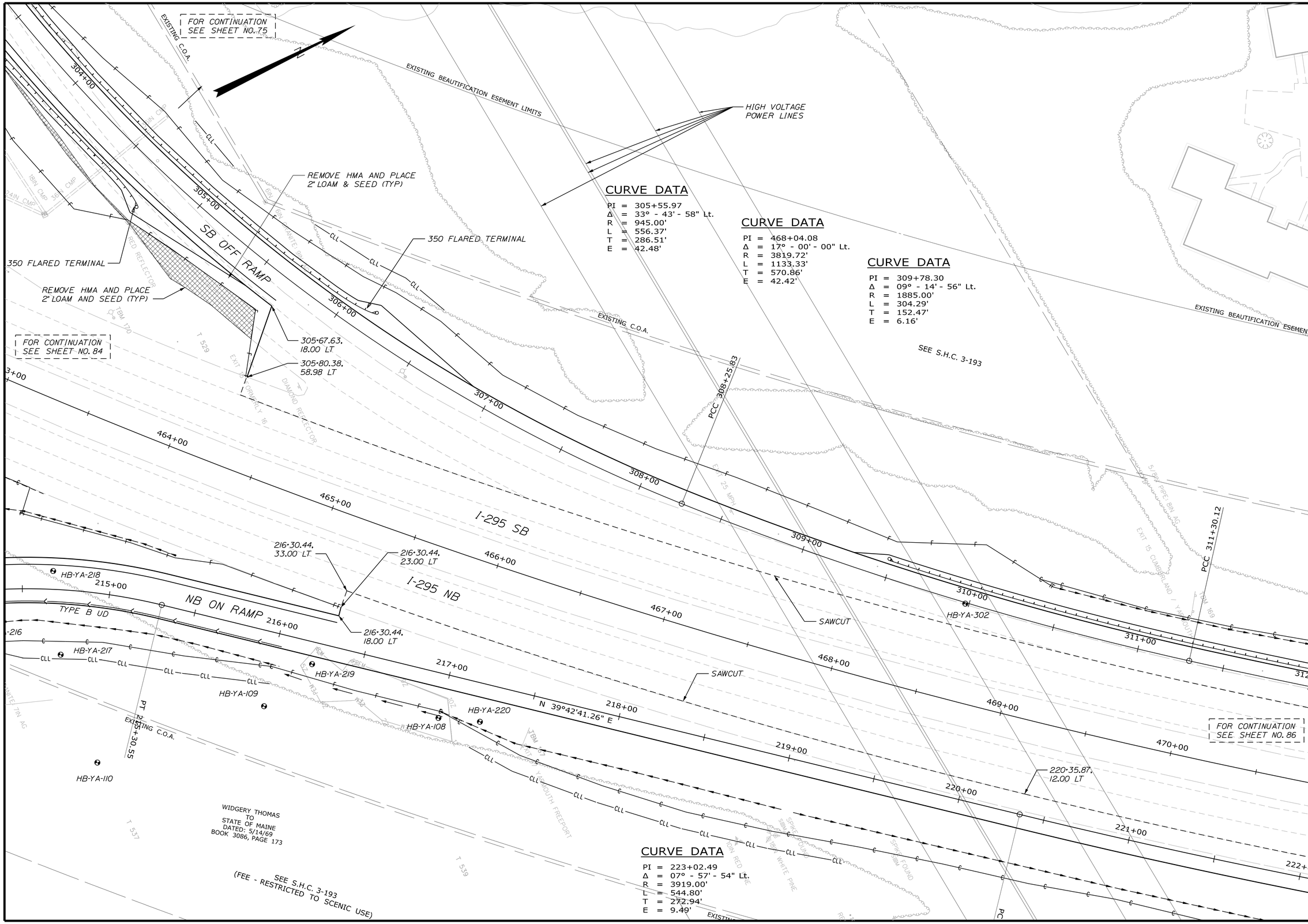
PLANS

SHEET NUMBER

84

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

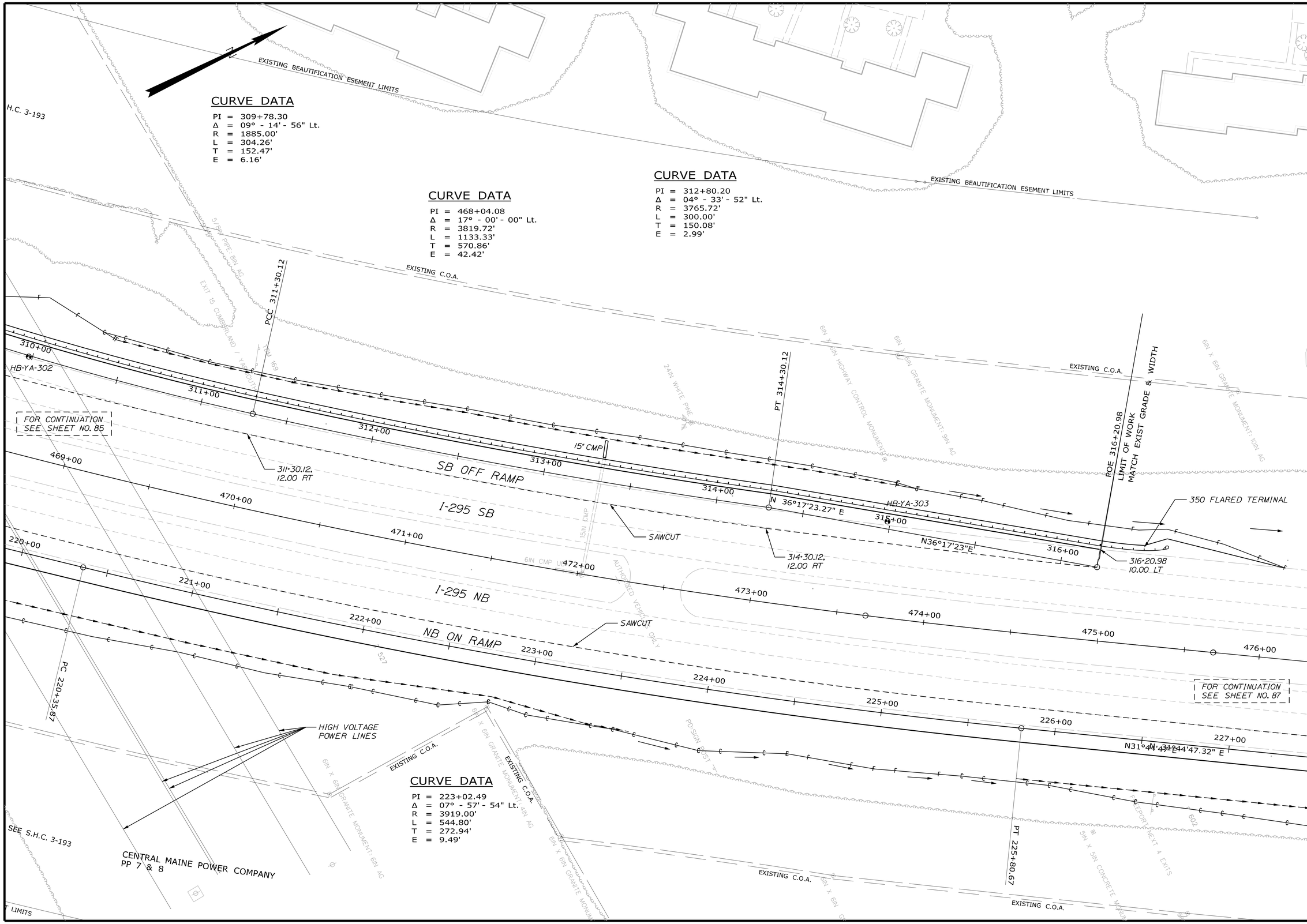
PLANS

SHEET NUMBER

85

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

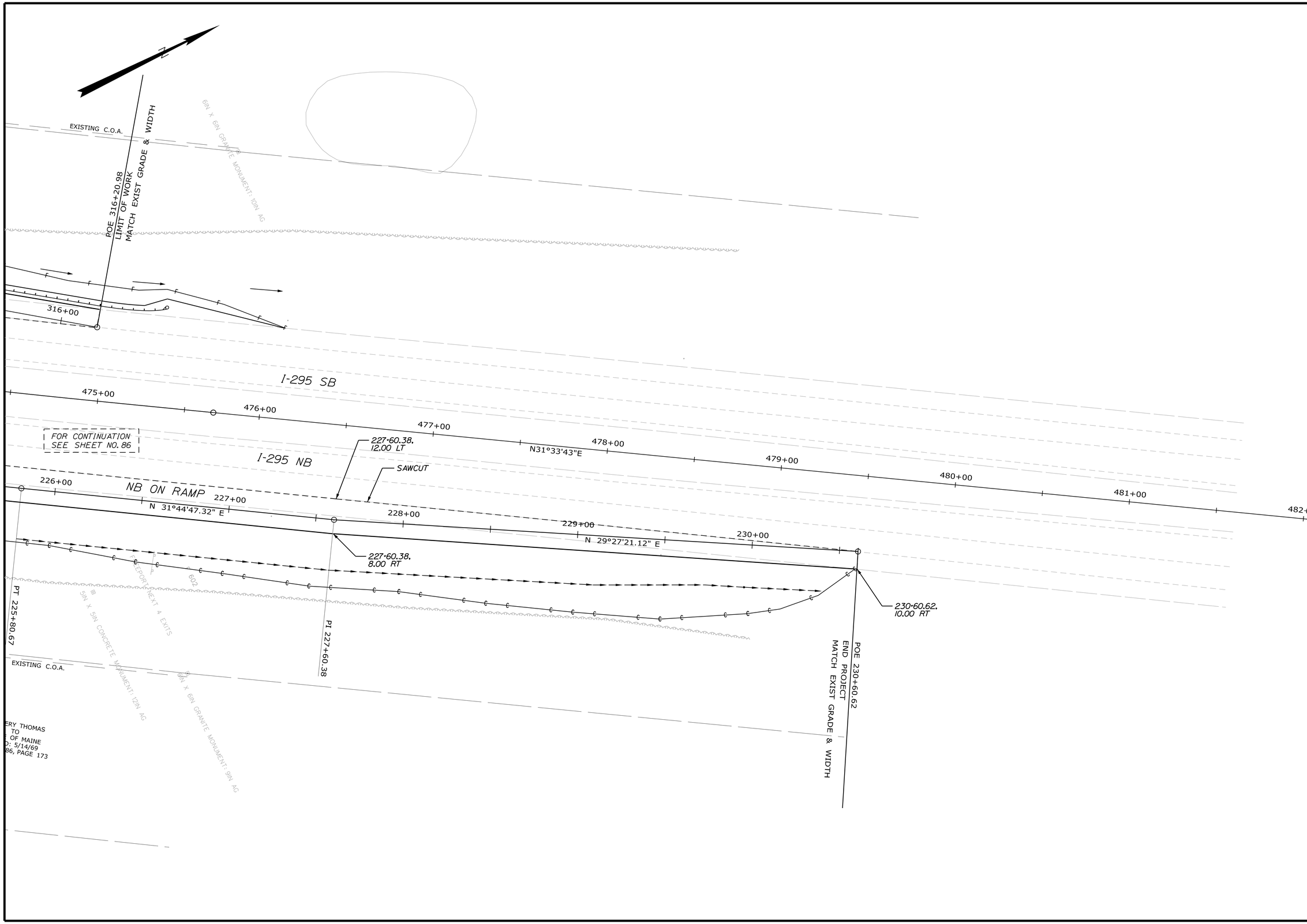
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER
86
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

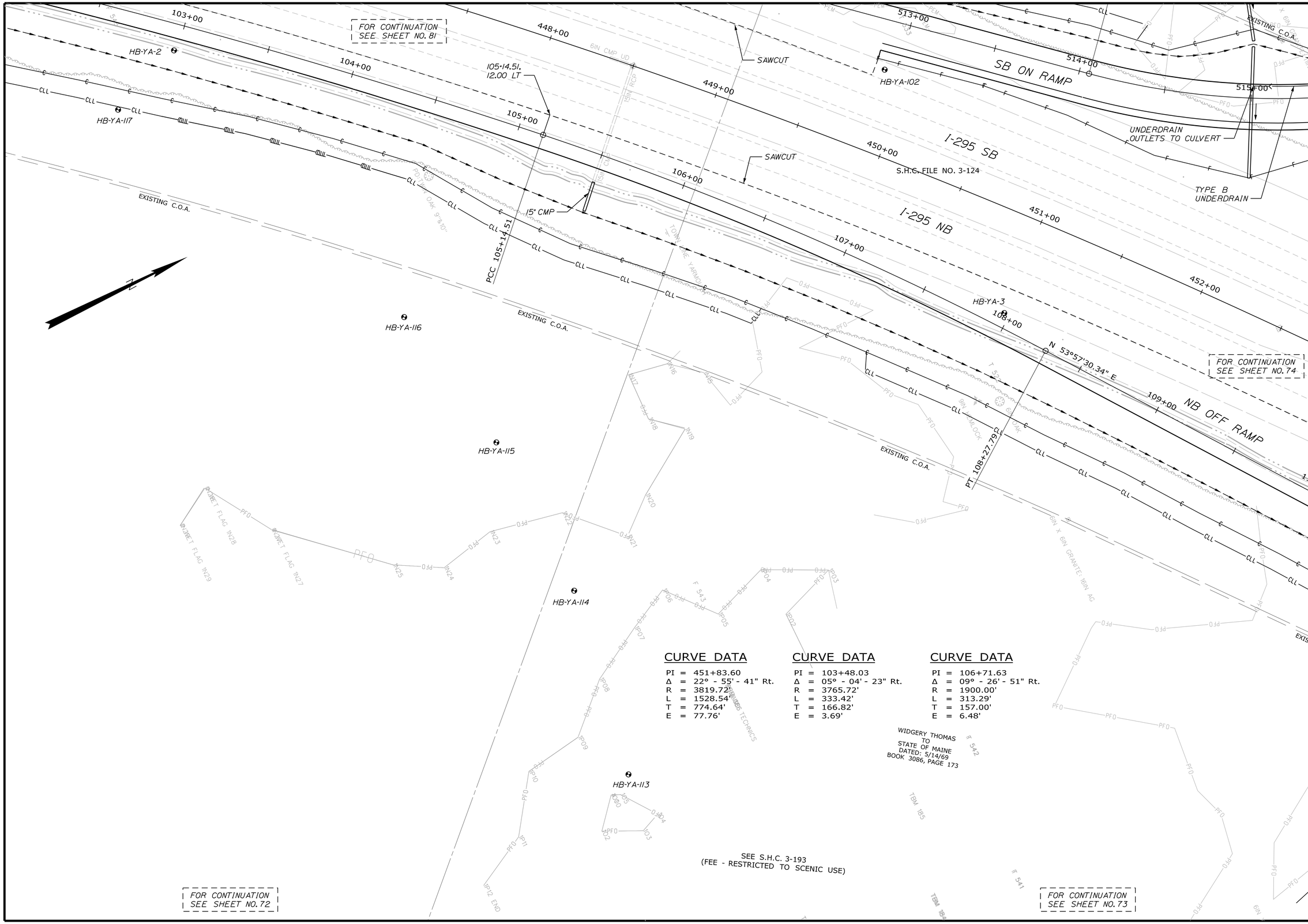
PLANS

SHEET NUMBER

87

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PLANS

SHEET NUMBER

88

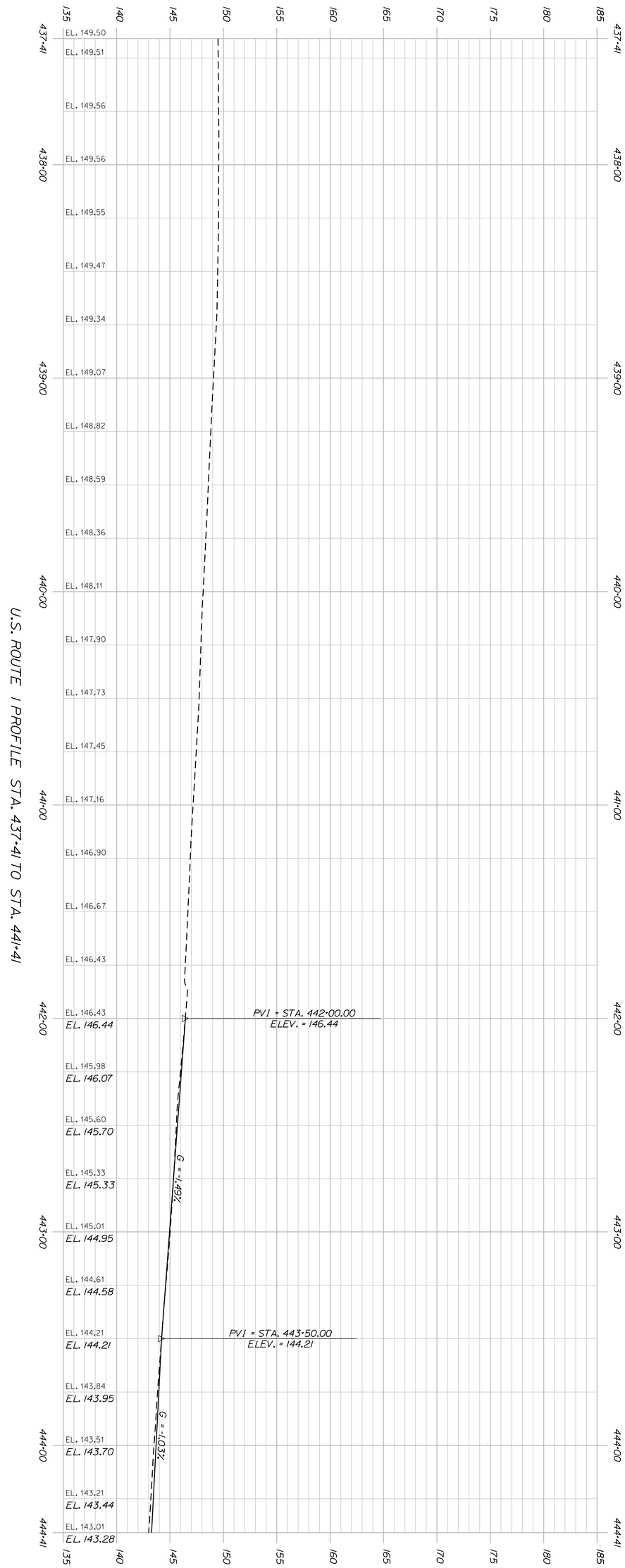
OF 283

Filename:

Division: HIGHWAY

Username: COMMON

Date:2/21/2011



SHEET NUMBER 89 OF 283

YARMOUTH
I-295 EXIT 15

PROFILE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

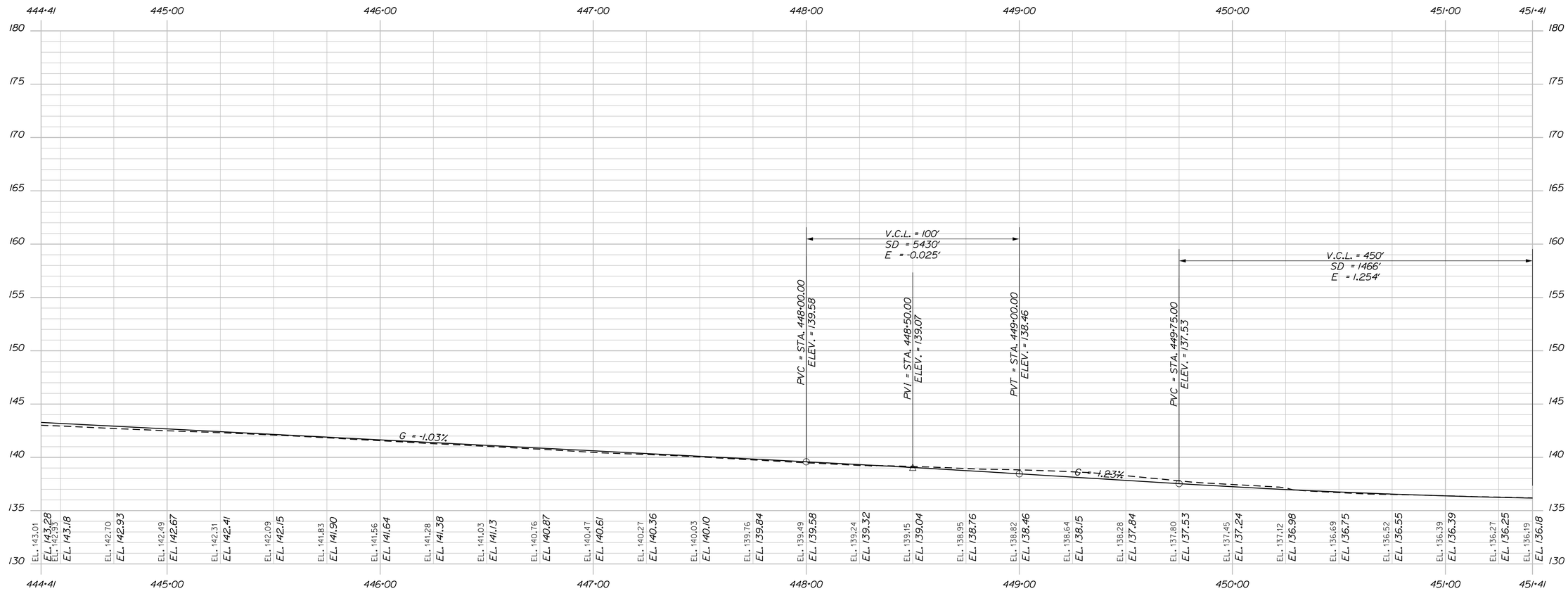
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS



U.S. ROUTE 1 PROFILE STA. 444+41 TO STA. 451+41

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

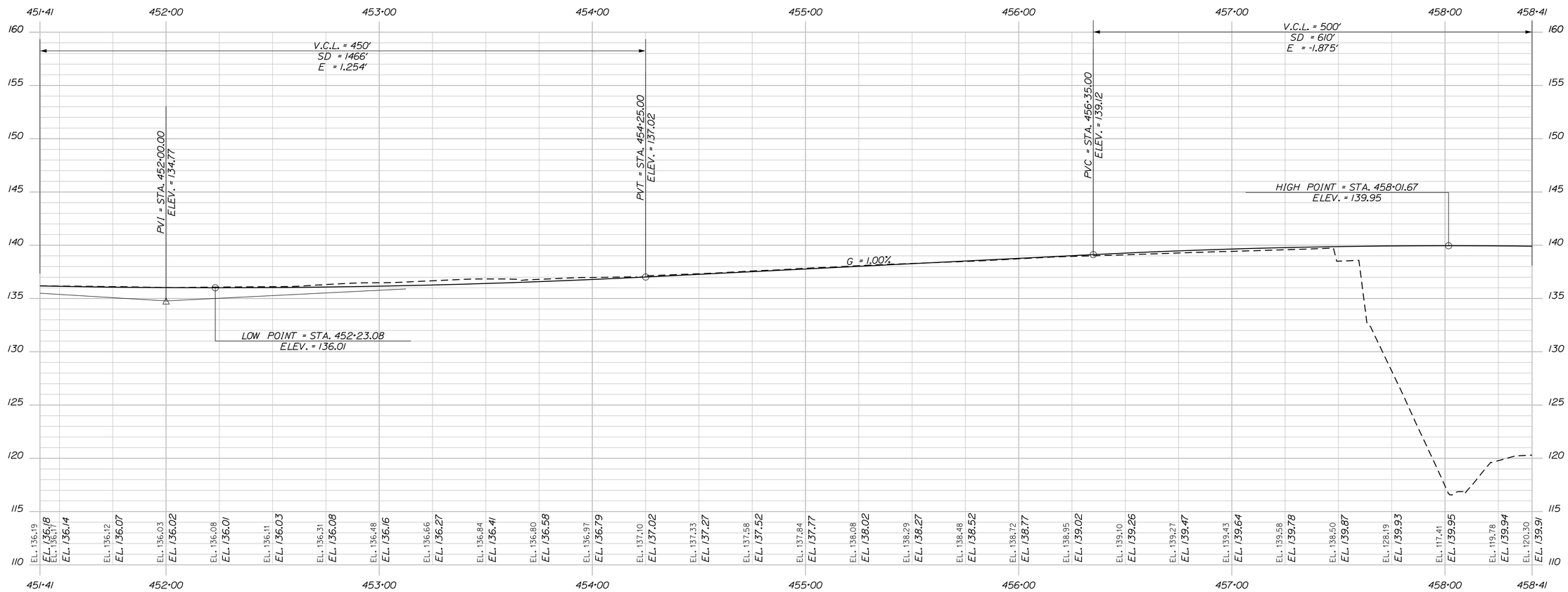
SHEET NUMBER

90

OF 283

Filename:

Division: HIGHWAY Username: COMMON Date:2/21/2011



U.S. ROUTE 1 PROFILE STA. 451+41 TO STA. 458+41

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER

91

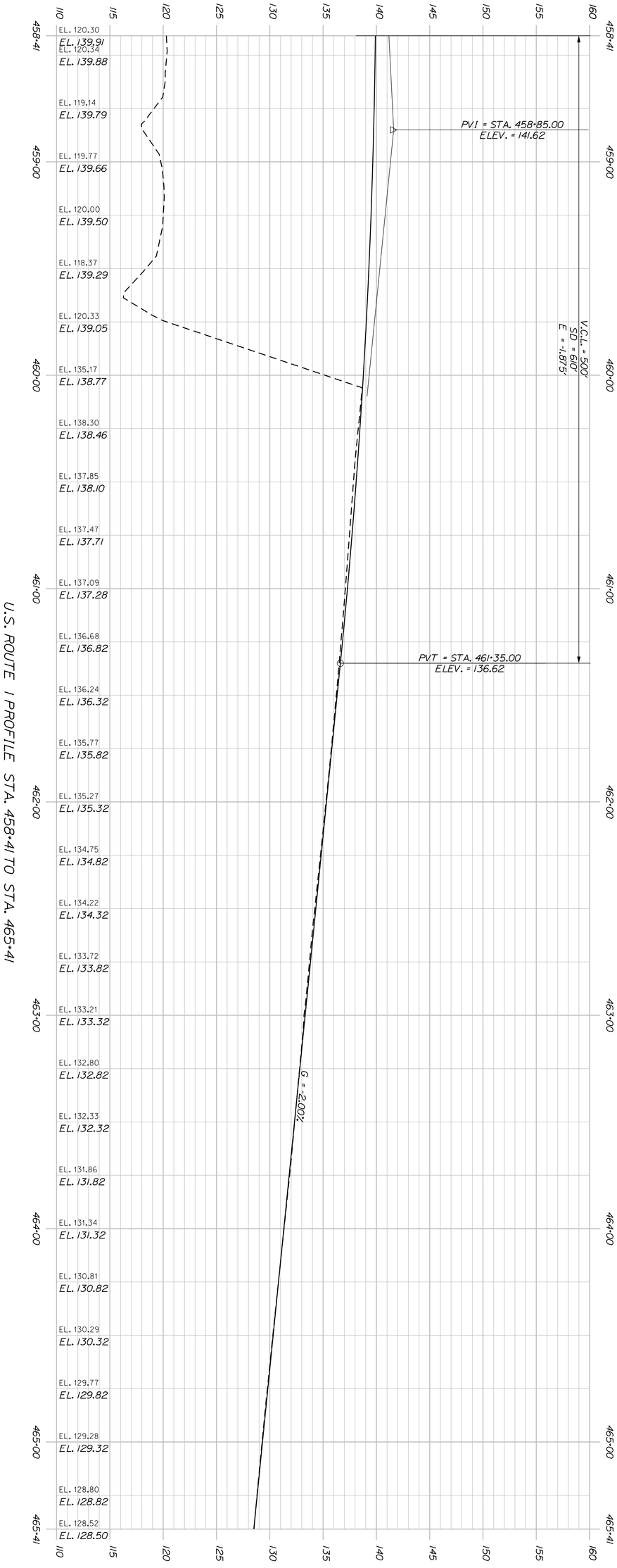
OF 283

Filename:

Division: HIGHWAY

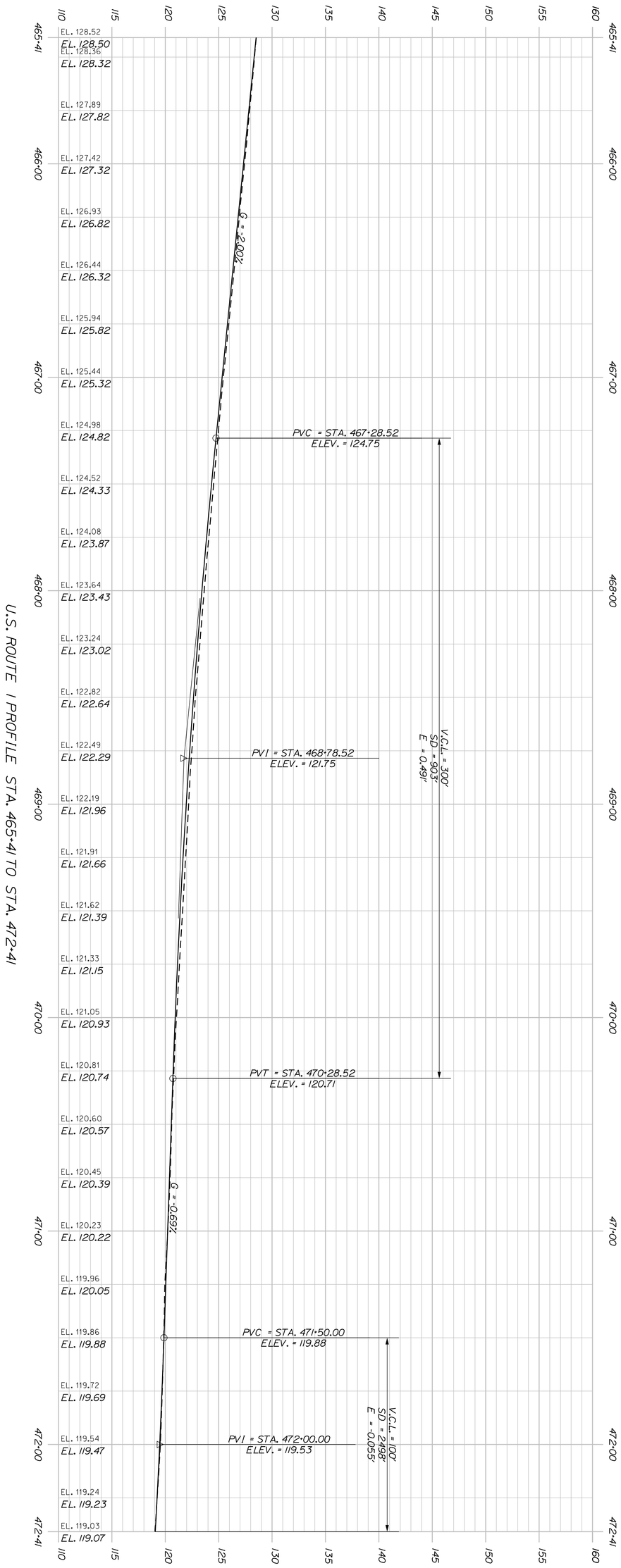
Username: COMMON

Date:2/21/2011

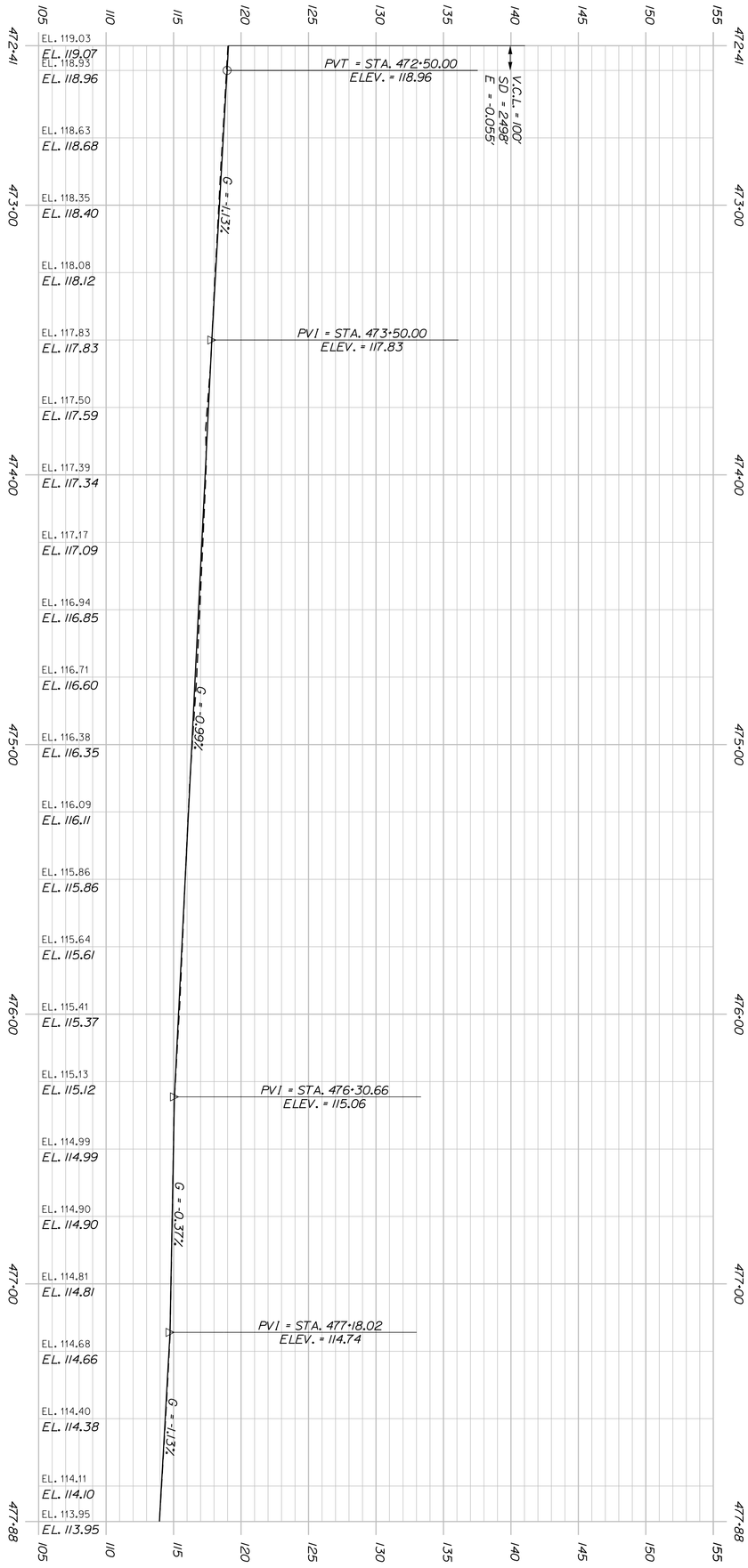


U.S. ROUTE 1 PROFILE STA. 458+41 TO STA. 465+41

YARMOUTH I-295 EXIT 15	PROJ. MANAGER	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
	DESIGN-DETAILED			IM-1108(600) EXIT 15 CM-1749(000)X PARK & RIDE LOT
	CHECKED-REVIEWED			SIGNATURE
	DESIGN2-DETAILED2			
	DESIGN3-DETAILED3			P.E. NUMBER
PROFILE	REVISIONS 1			
	REVISIONS 2			
	REVISIONS 3			DATE
	REVISIONS 4			WIN 11086.00 EXIT 15 WIN 17490.00 PARK & RIDE LOT
	FIELD CHANGES			HIGHWAY PLANS



SHEET NUMBER 93 OF 283	YARMOUTH I-295 EXIT 15	PROJ. MANAGER	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED			IM-1108(600) EXIT 15 CM-1749(000)X PARK & RIDE LOT
		CHECKED-REVIEWED			SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			P.E. NUMBER
	PROFILE	REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			
		FIELD CHANGES			WIN 11086.00 EXIT 15 WIN 17490.00 PARK & RIDE LOT HIGHWAY PLANS



U.S. ROUTE 1 PROFILE STA. 472+41 TO STA. 477+88

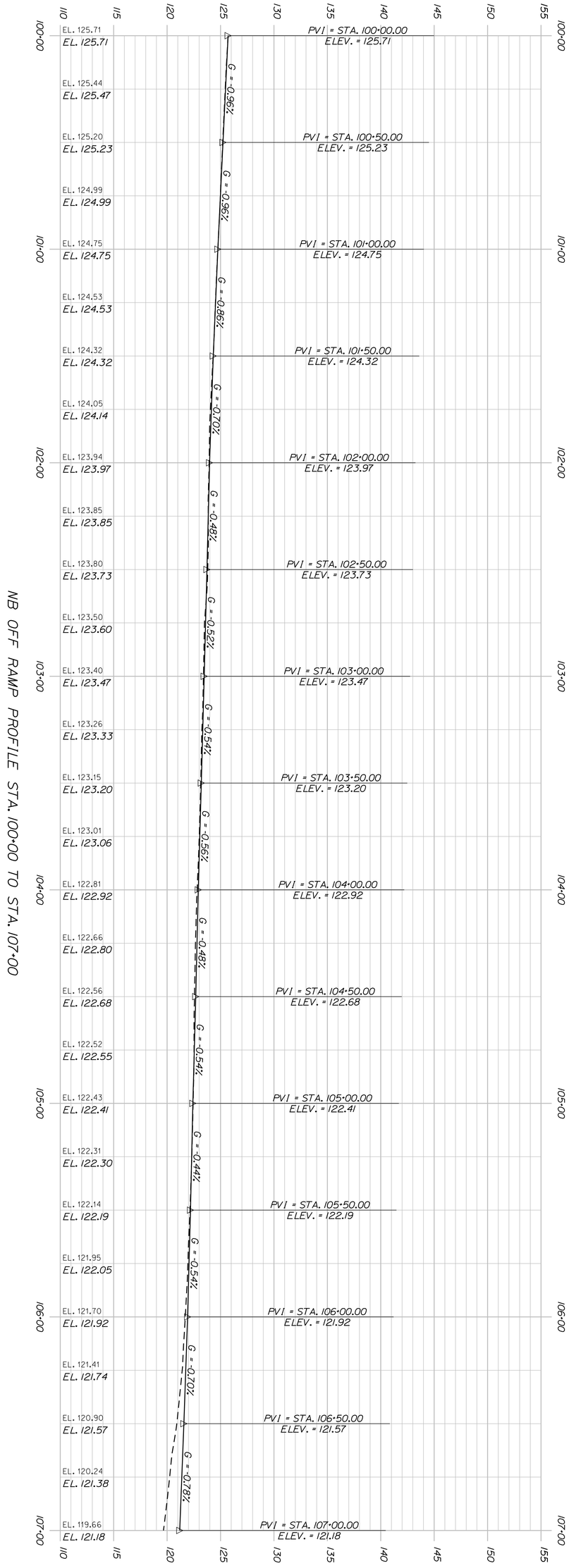
SHEET NUMBER 94 OF 283	YARMOUTH I-295 EXIT 15 PROFILE	PROJ. MANAGER / DESIGN-DETAILED / CHECKED-REVIEWED / DESIGN2-DETAILED2 / DESIGN3-DETAILED3 / REVISIONS 1 / REVISIONS 2 / REVISIONS 3 / REVISIONS 4 / FIELD CHANGES	BY / DATE	SIGNATURE P.E. NUMBER DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS



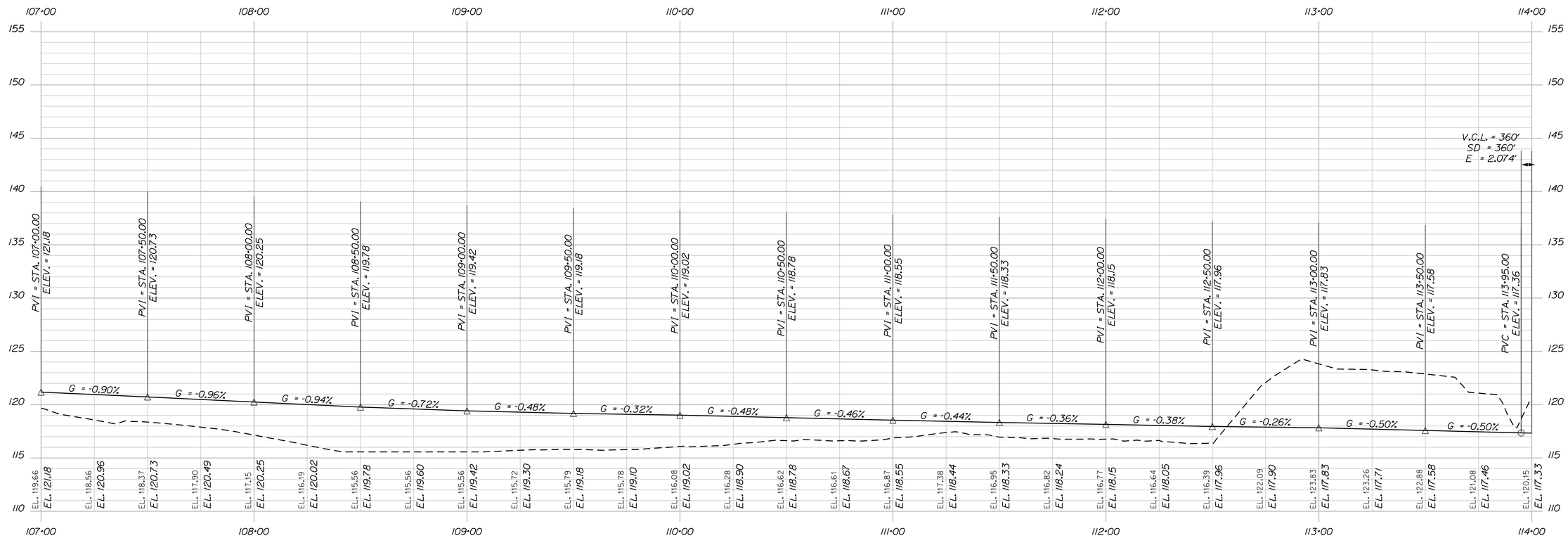
SHEET NUMBER 95 OF 283	YARMOUTH I-295 EXIT 15 PROFILE	PROJ. MANAGER / BY / DATE DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	SIGNATURE P.E. NUMBER DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS



NB OFF RAMP STA. 107+00 TO STA. 114+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER

96

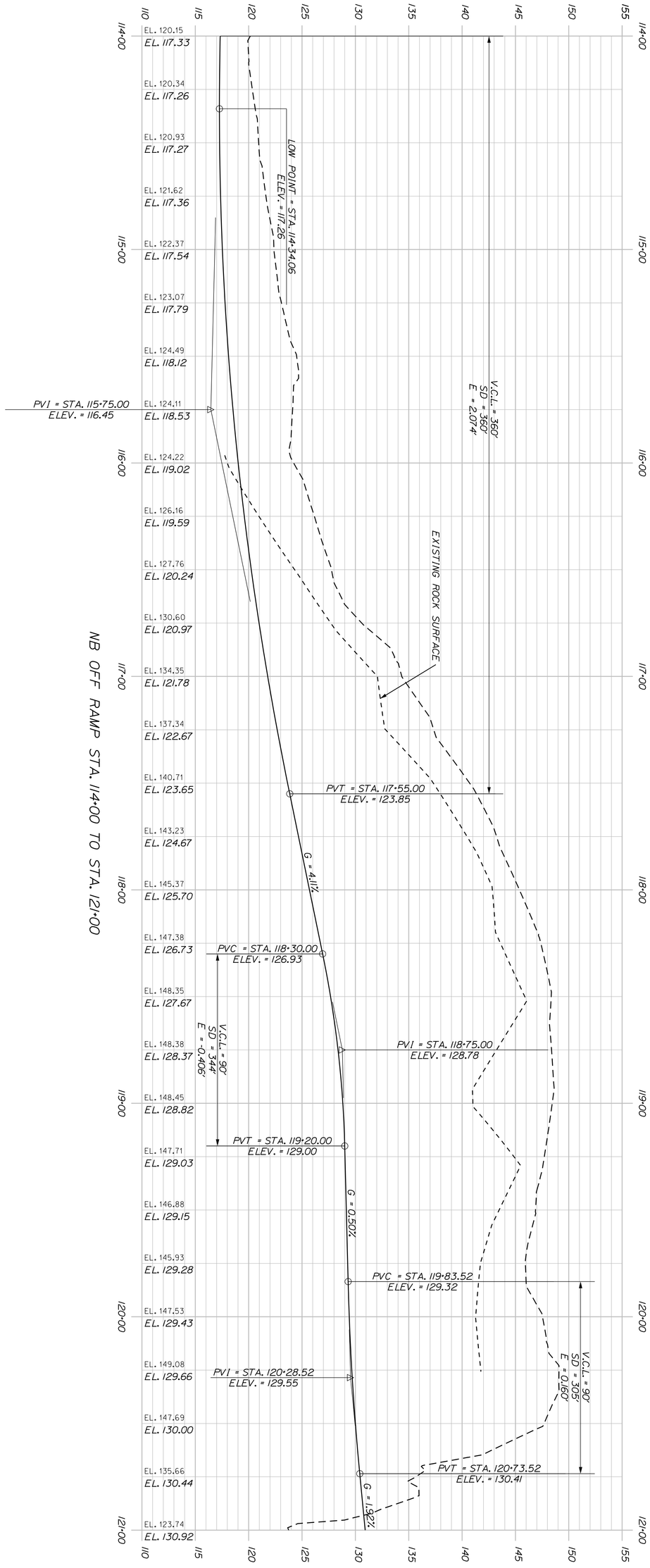
OF 283

Filename:

Division: HIGHWAY

Username: COMMON

Date:2/21/2011



SHEET NUMBER 97 OF 283	YARMOUTH I-295 EXIT 15 PROFILE	PROJ. MANAGER / BY / DATE DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	SIGNATURE P.E. NUMBER DATE

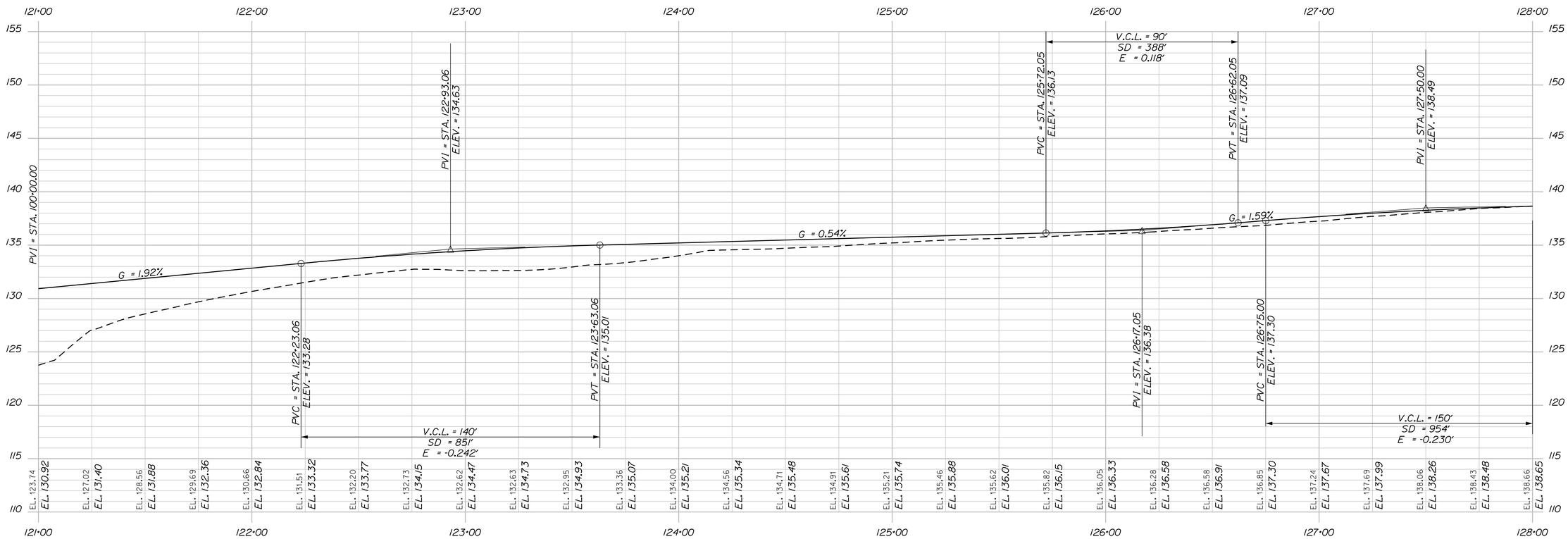
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



NB OFF RAMP PROFILE STA. 121+00 TO STA. 128+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

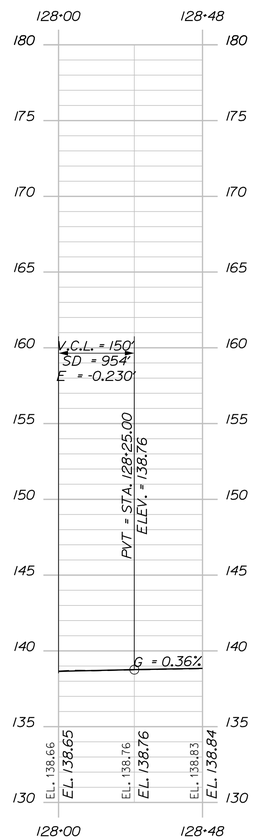
YARMOUTH
I-295 EXIT 15

PROFILE

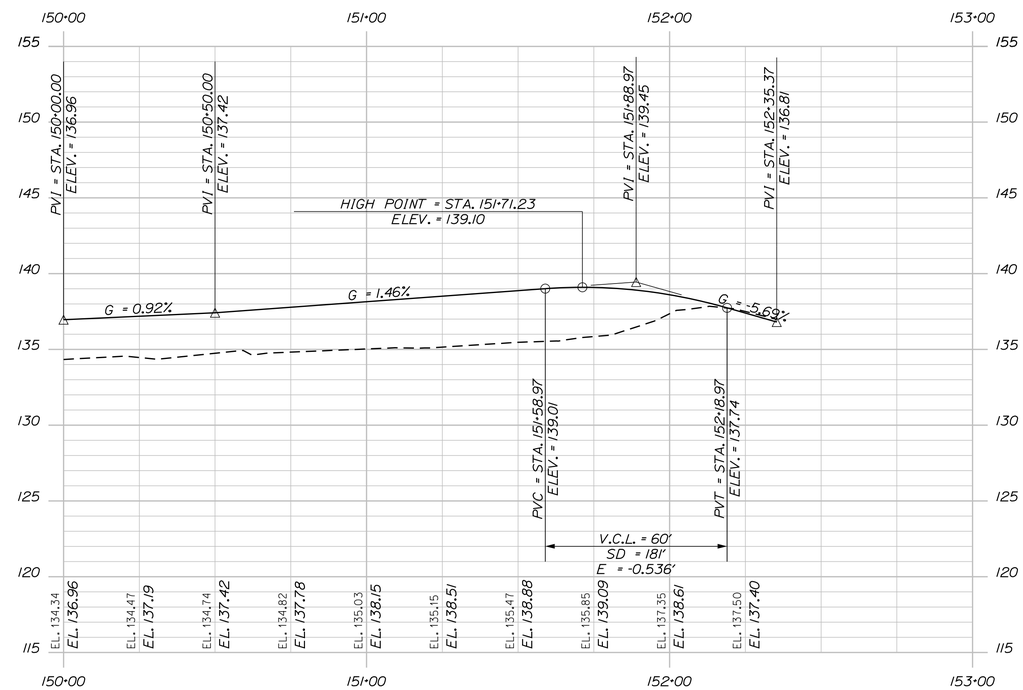
SHEET NUMBER

98

OF 283



NB OFF RAMP PROFILE STA. 128+00 TO STA. 128+48



NB OFF RAMP AUXILIARY PROFILE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

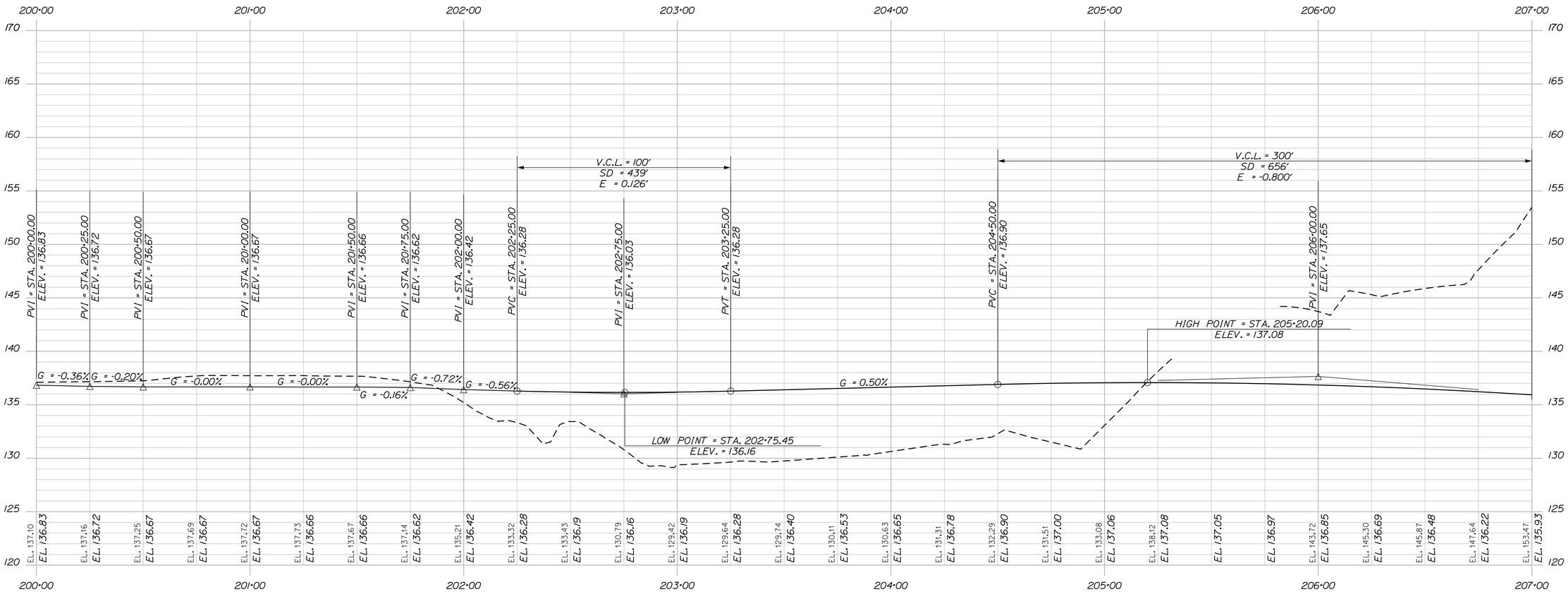
PROFILE

SHEET NUMBER

99

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



NB ON RAMP PROFILE STA. 200+00 TO STA. 207+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

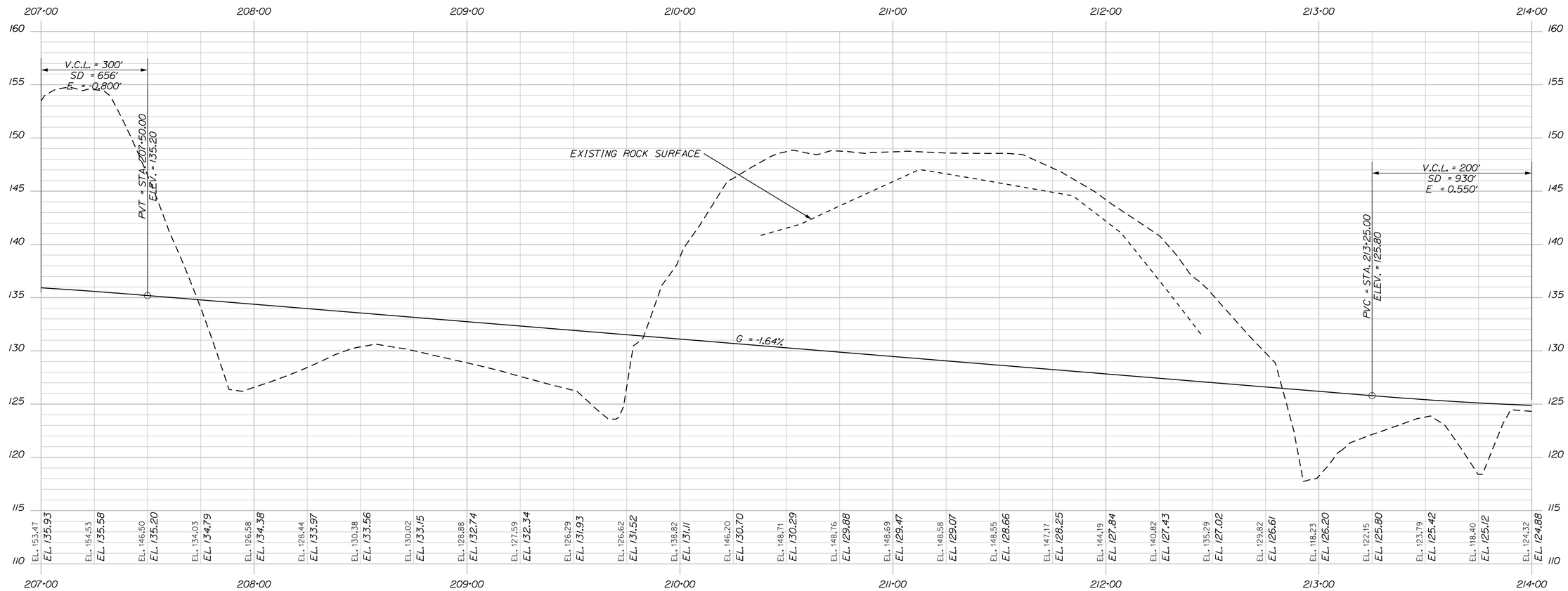
DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER
100
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



NB ON RAMP PROFILE STA. 207+00 TO STA. 214+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

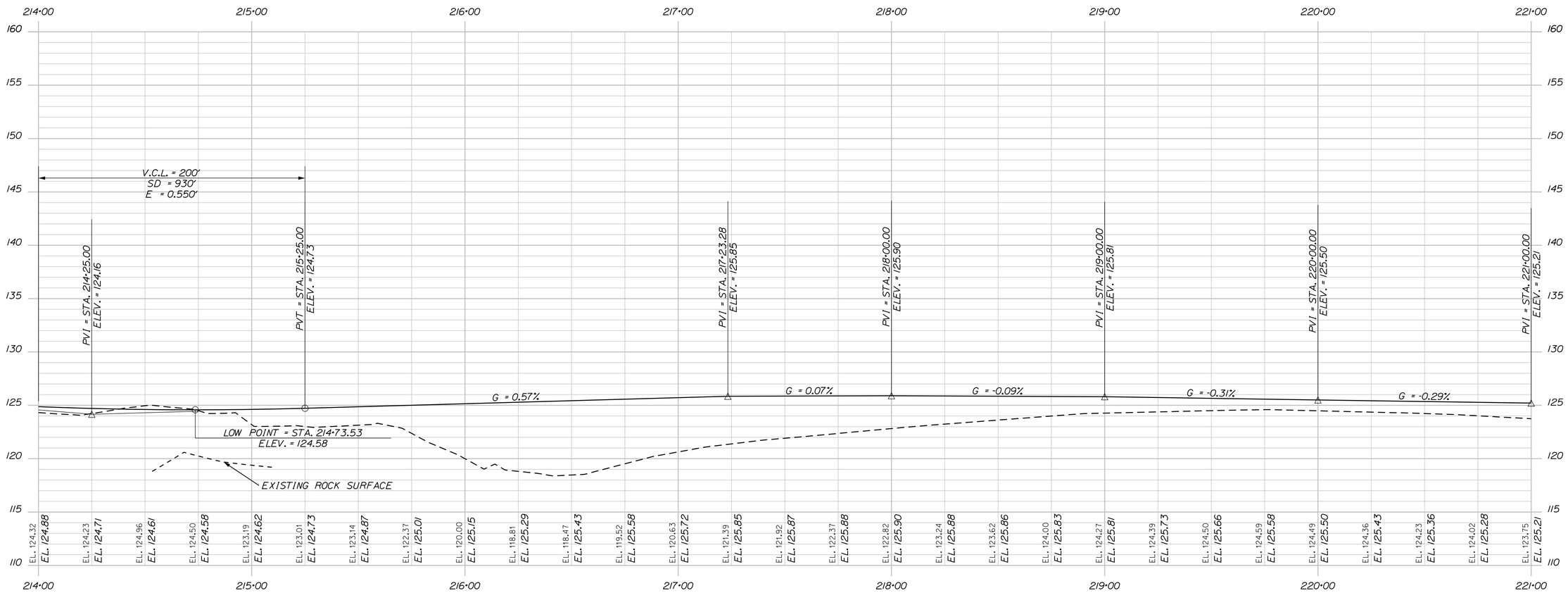
SHEET NUMBER

101

OF 283

Filename:

Division: HIGHWAY Username: COMMON Date:2/21/2011



NB ON RAMP PROFILE STA. 214+00 TO STA. 221+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

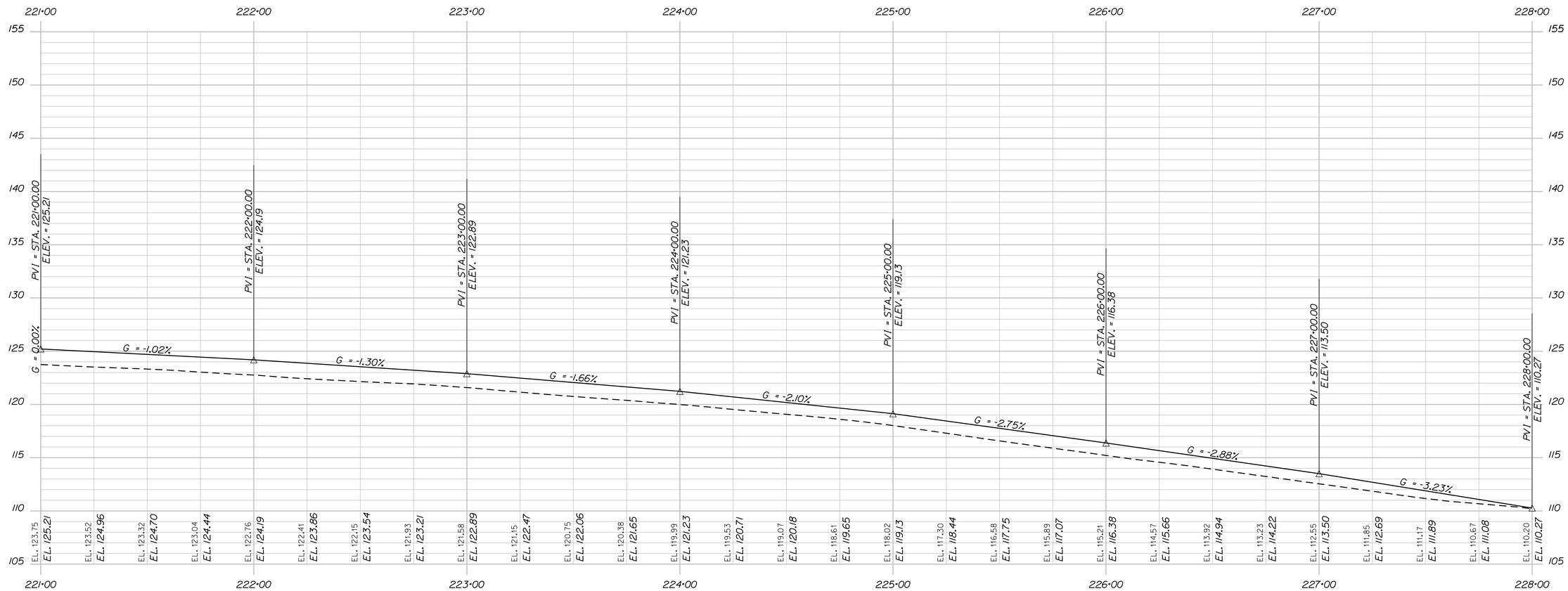
DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER
102
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



NB ON RAMP PROFILE STA. 221+00 TO STA. 228+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

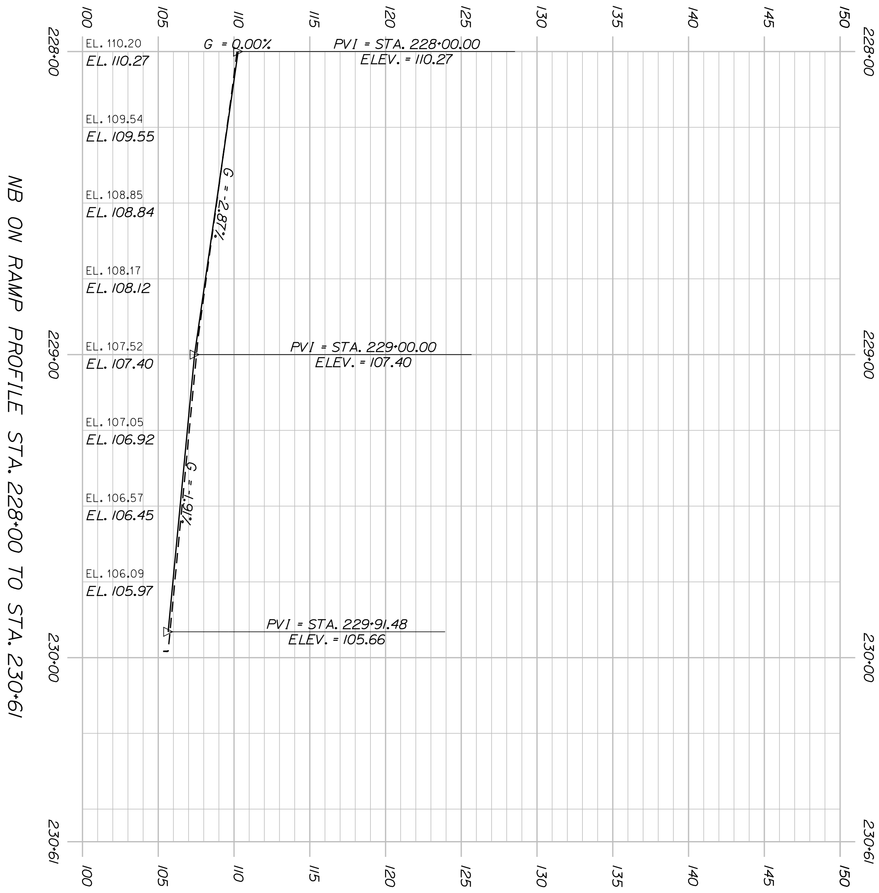
SHEET NUMBER

103

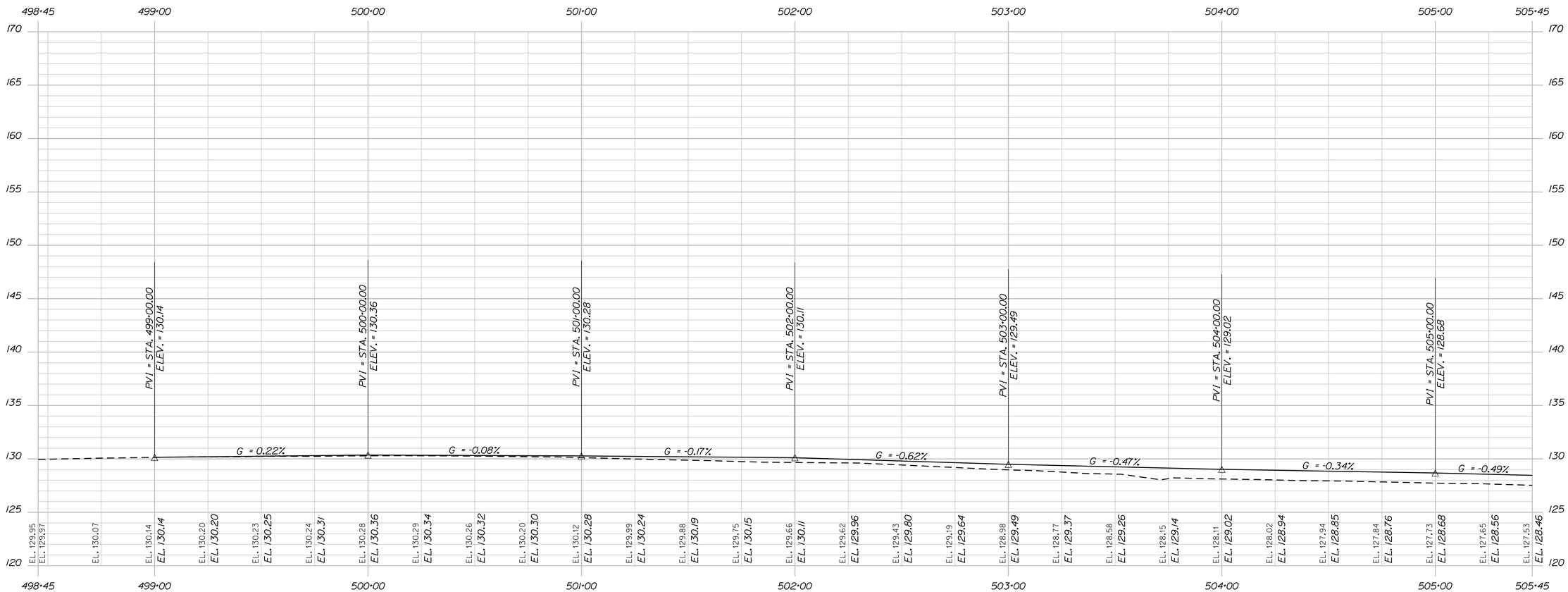
OF 283

Filename:

Division: HIGHWAY Username: COMMON Date:2/21/2011



SHEET NUMBER 104 OF 283	YARMOUTH I-295 EXIT 15 PROFILE	PROJ. MANAGER / BY / DATE DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	SIGNATURE P.E. NUMBER DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION IM-1108(600) EXIT 15 CM-1749(000)X PARK & RIDE LOT WIN 11086.00 EXIT 15 WIN 17490.00 PARK & RIDE LOT HIGHWAY PLANS



SB ON RAMP PROFILE STA. 498+45 TO STA. 505+45

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

PROFILE

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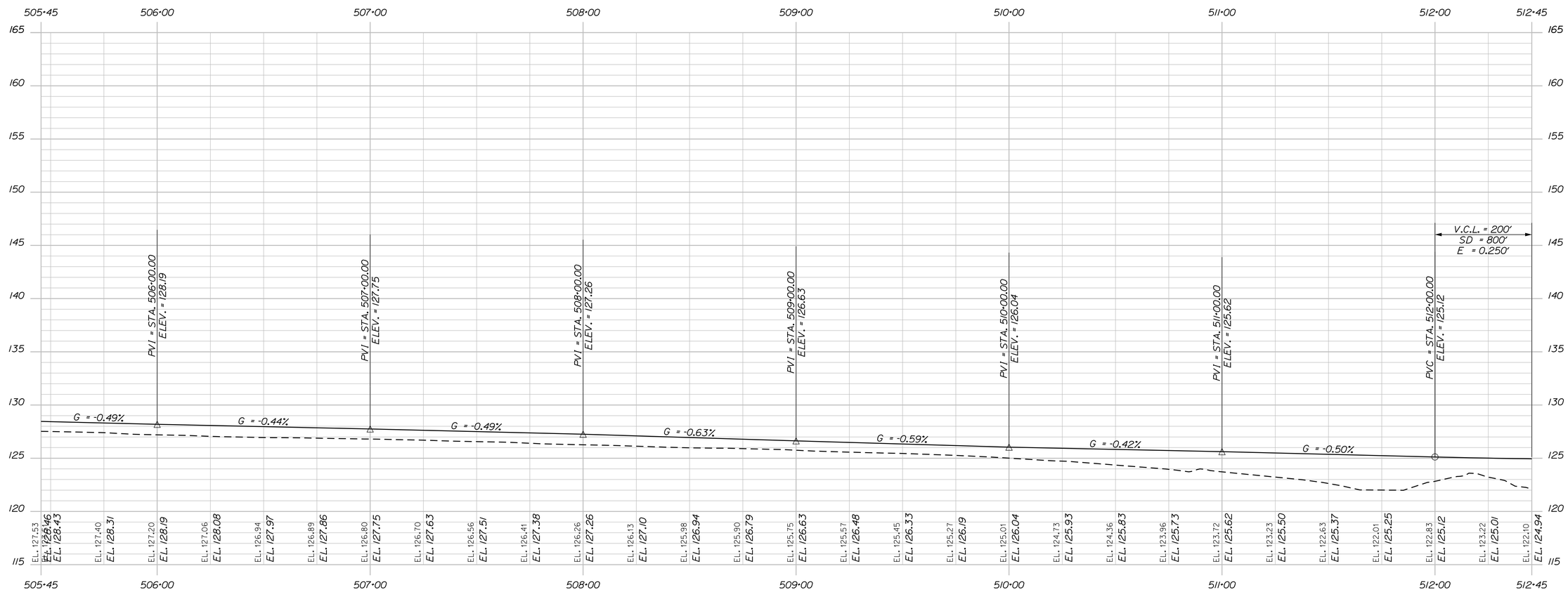
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



SB ON RAMP PROFILE STA. 505+45 TO STA. 512+45

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

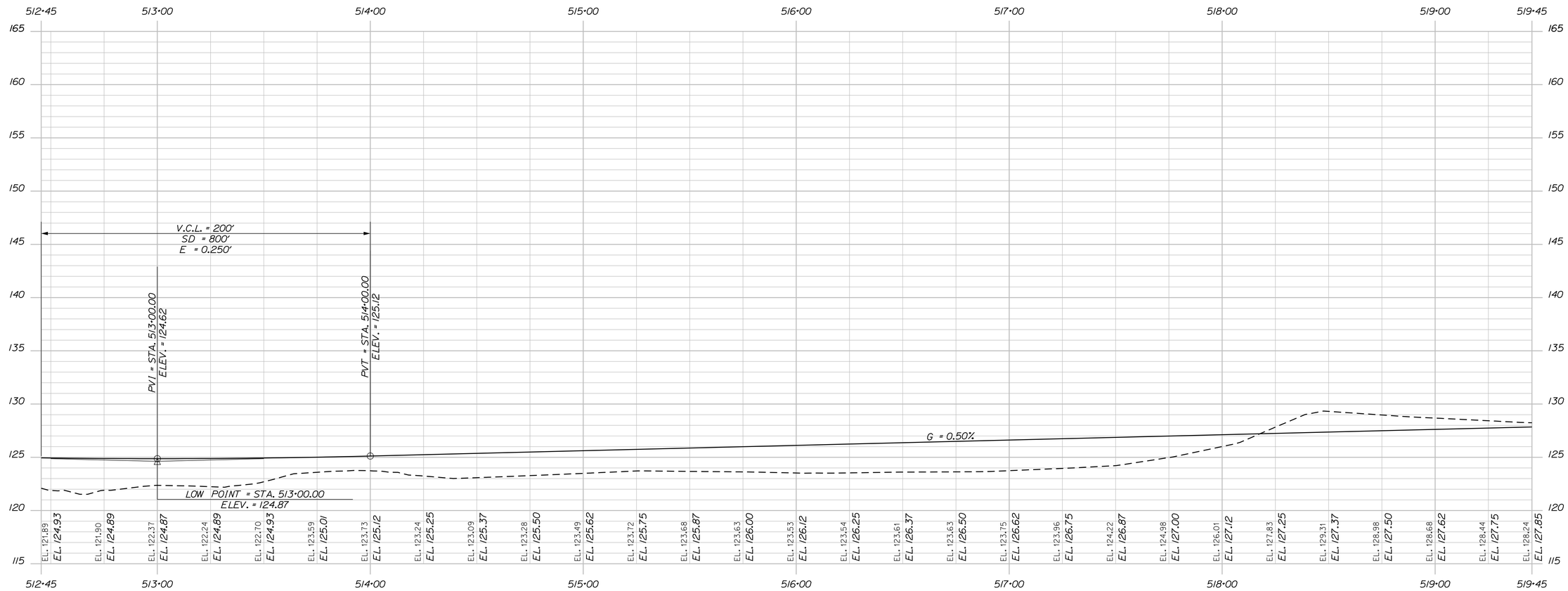
DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER
106
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



SB ON RAMP PROFILE STA. 512+45 TO STA. 519+45

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

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YARMOUTH
I-295 EXIT 15

PROFILE

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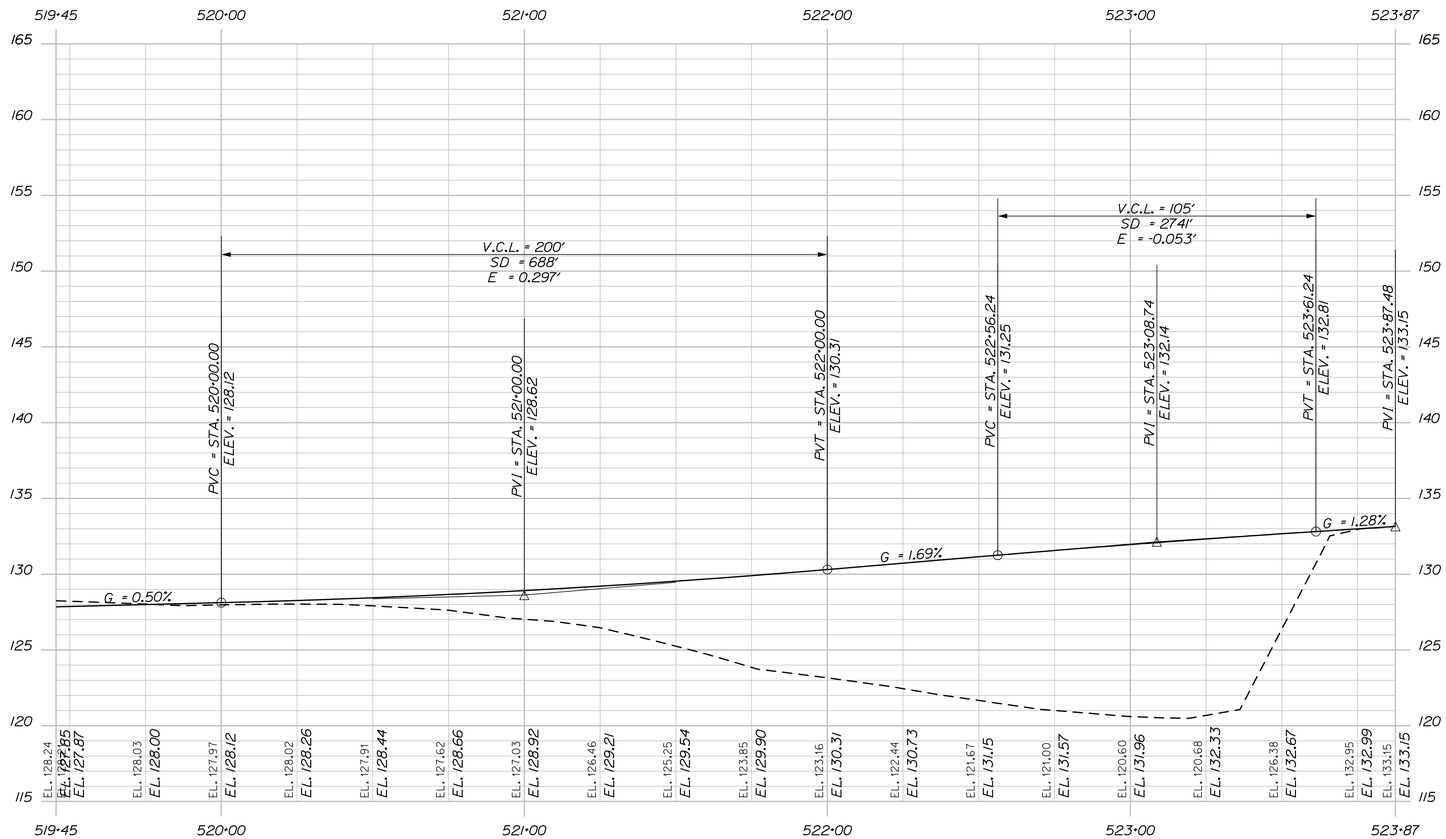
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



SB ON RAMP PROFILE STATION STA. 519+45 TO STA. 523+87

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER

108

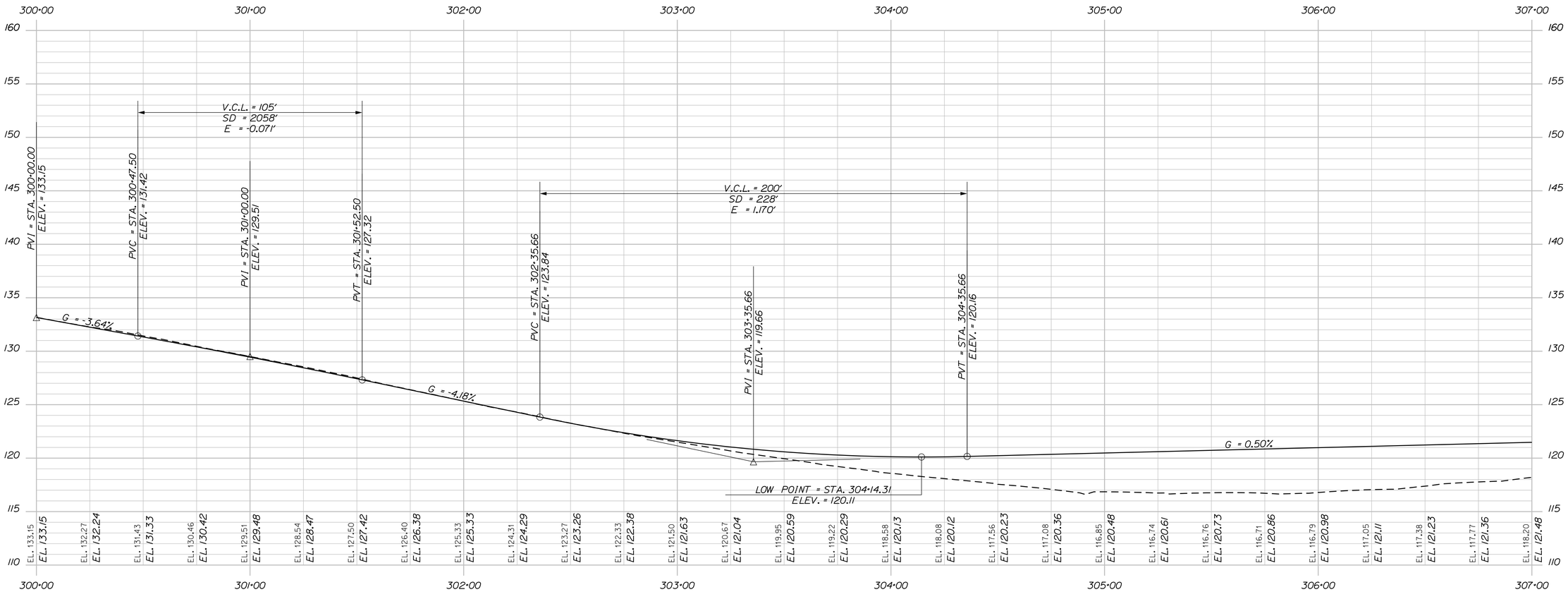
OF 283

Filename:

Division: HIGHWAY

Username: COMMON

Date:2/21/2011



SB OFF RAMP PROFILE STA. 300+00 TO STA. 307+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
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DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

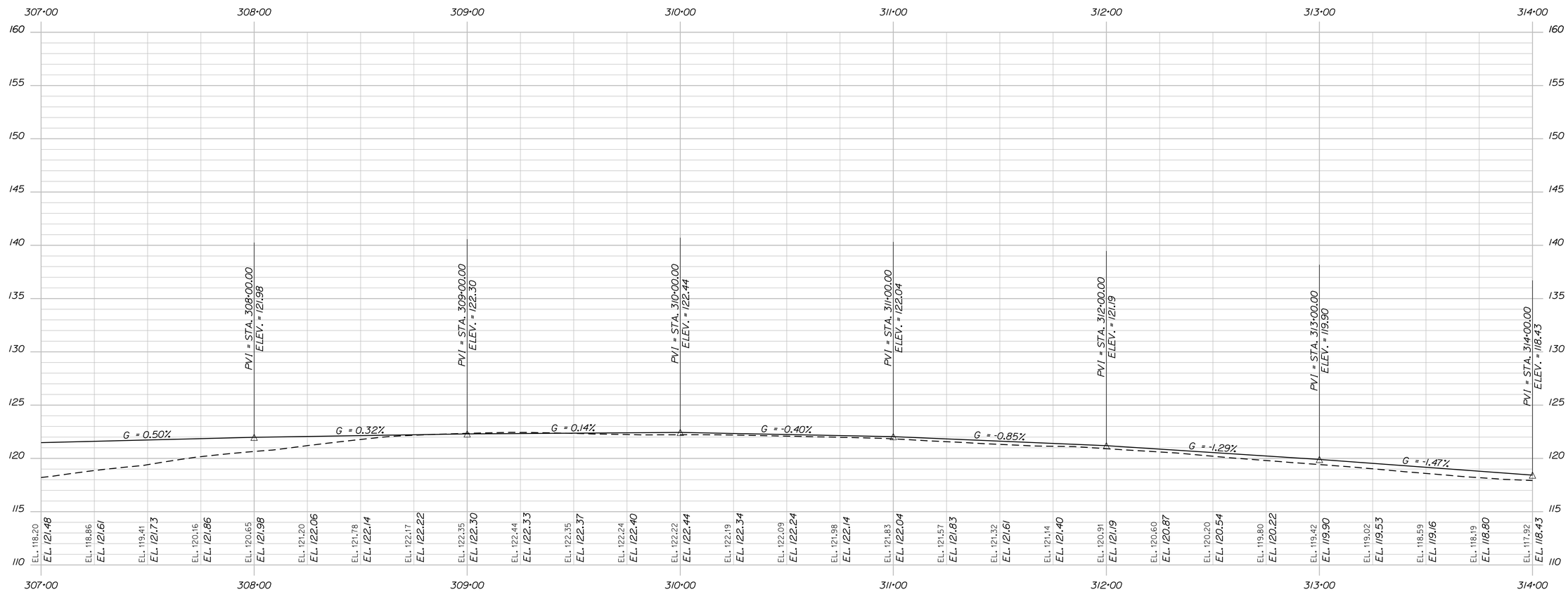
DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER
109
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



SB OFF RAMP PROFILE STA. 307+00 TO STA. 314+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
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FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

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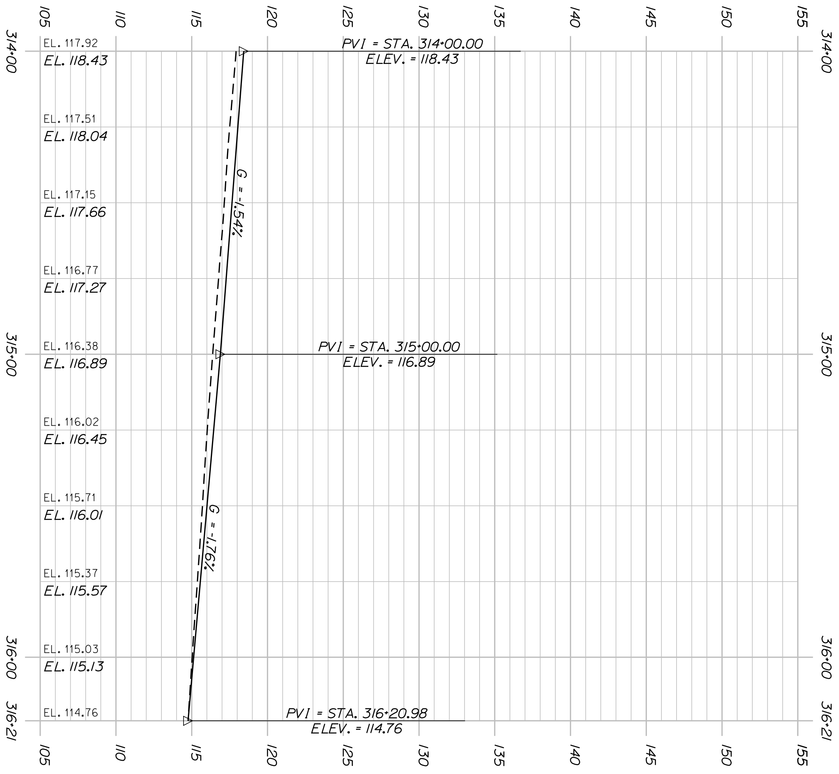
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



SB OFF RAMP PROFILE STA. 3+14.00 TO STA. 3+16.21

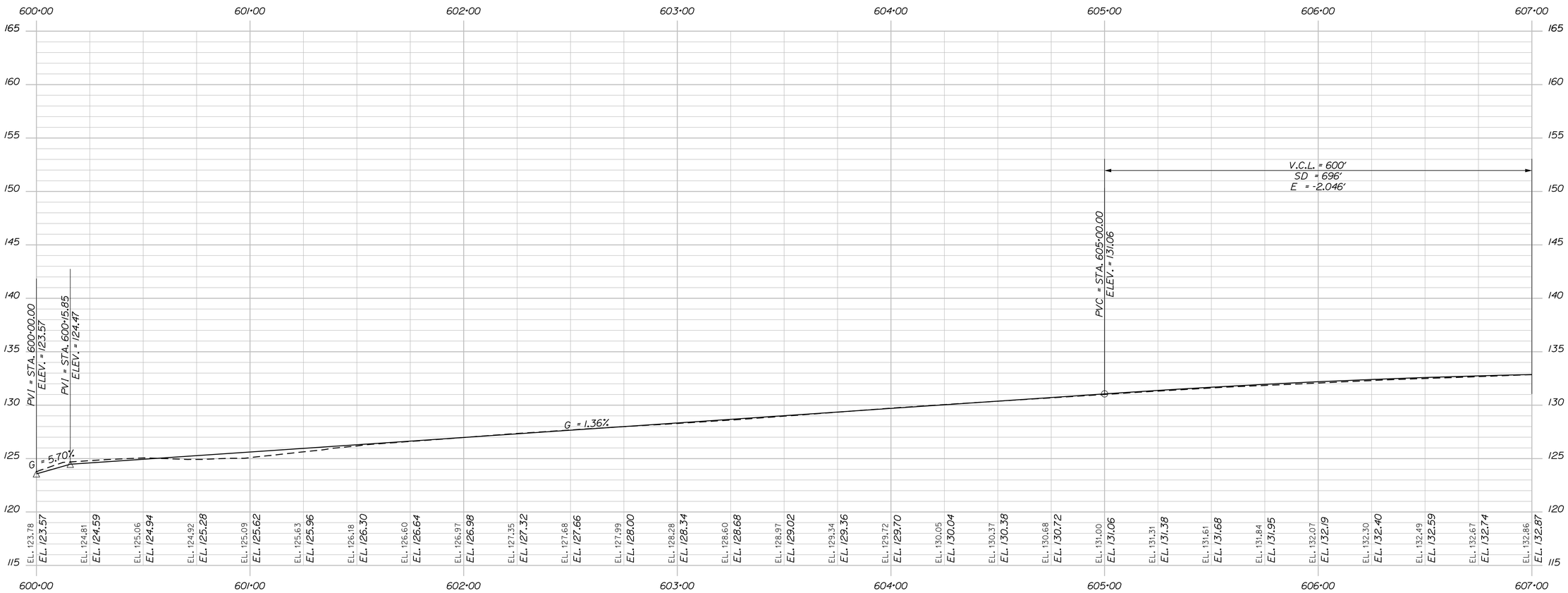
SHEET NUMBER 111 OF 283	YARMOUTH I-295 EXIT 15 PROFILE	PROJ. MANAGER / BY / DATE DESIGN-DETAILED CHECKED-REVIEWED DESIGN2-DETAILED2 DESIGN3-DETAILED3 REVISIONS 1 REVISIONS 2 REVISIONS 3 REVISIONS 4 FIELD CHANGES	SIGNATURE P.E. NUMBER DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS



PARK AND RIDE PROFILE STA. 600+00 TO STA. 607+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

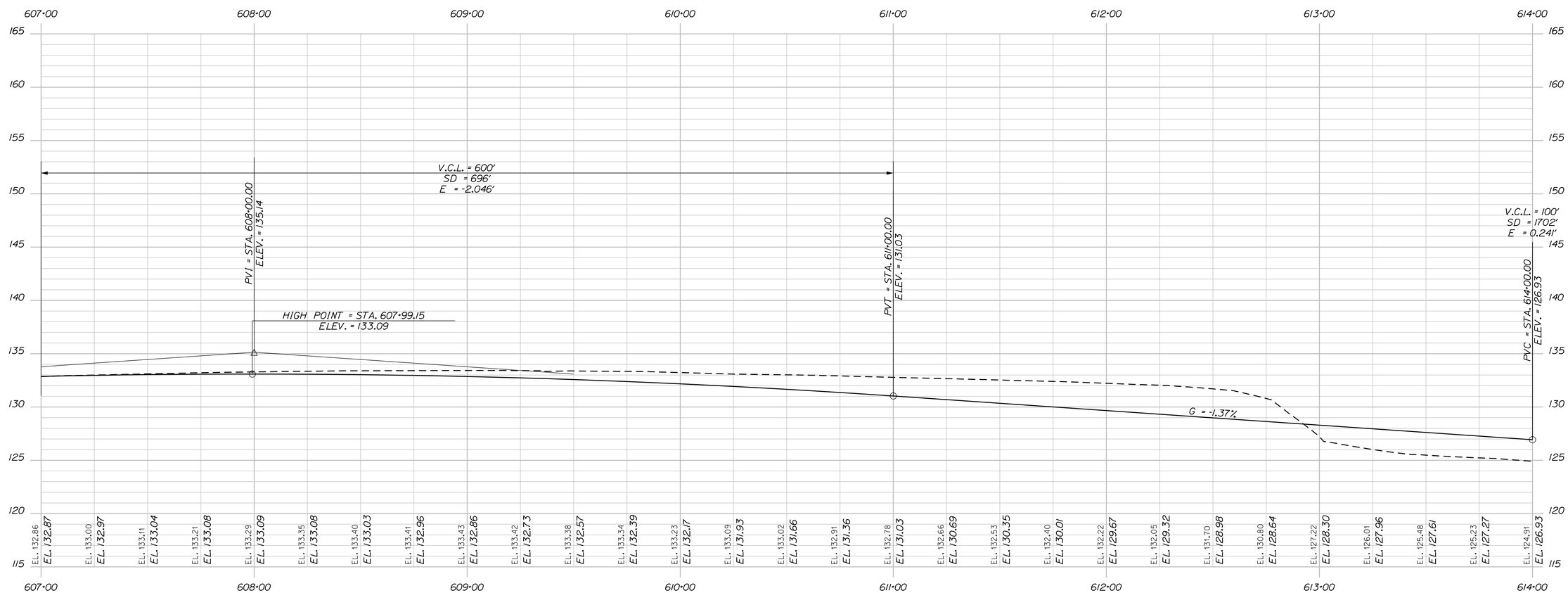
DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER
112
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



PARK AND RIDE PROFILE STA. 607+00 TO STA. 614+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER

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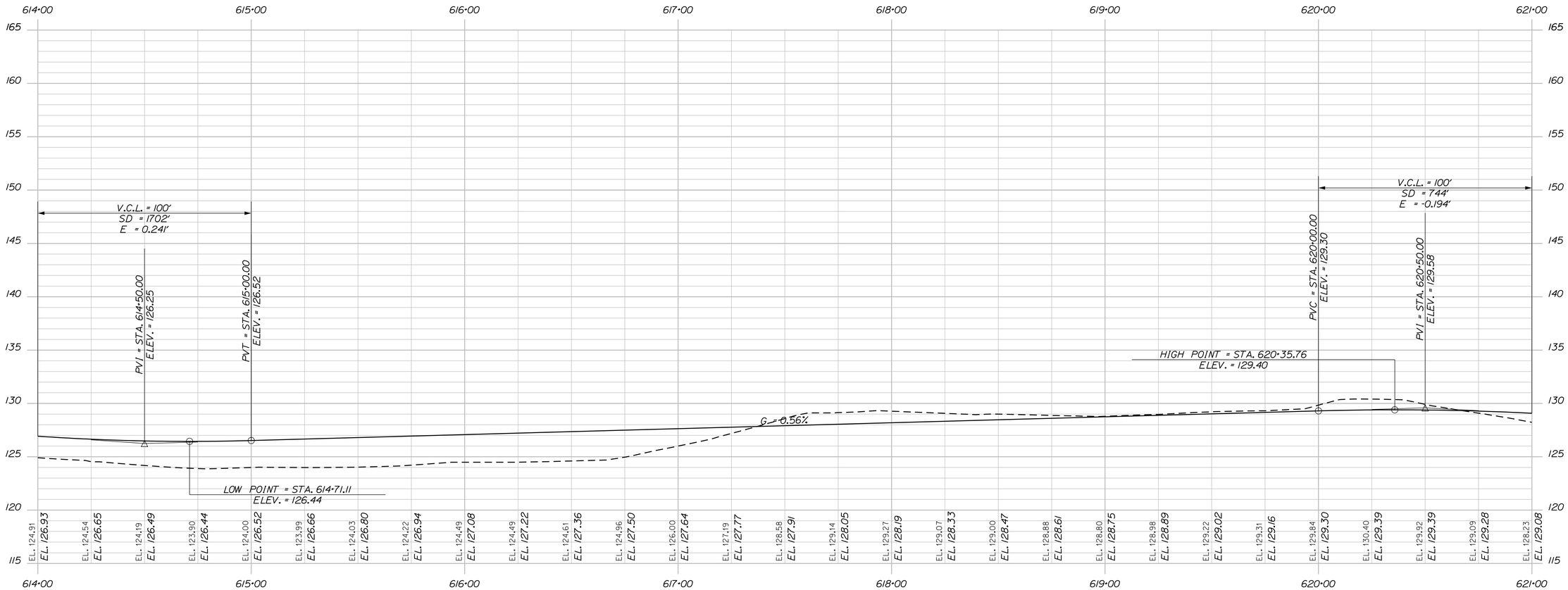
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



PARK AND RIDE PROFILE STA. 614+00 TO STA. 621+00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

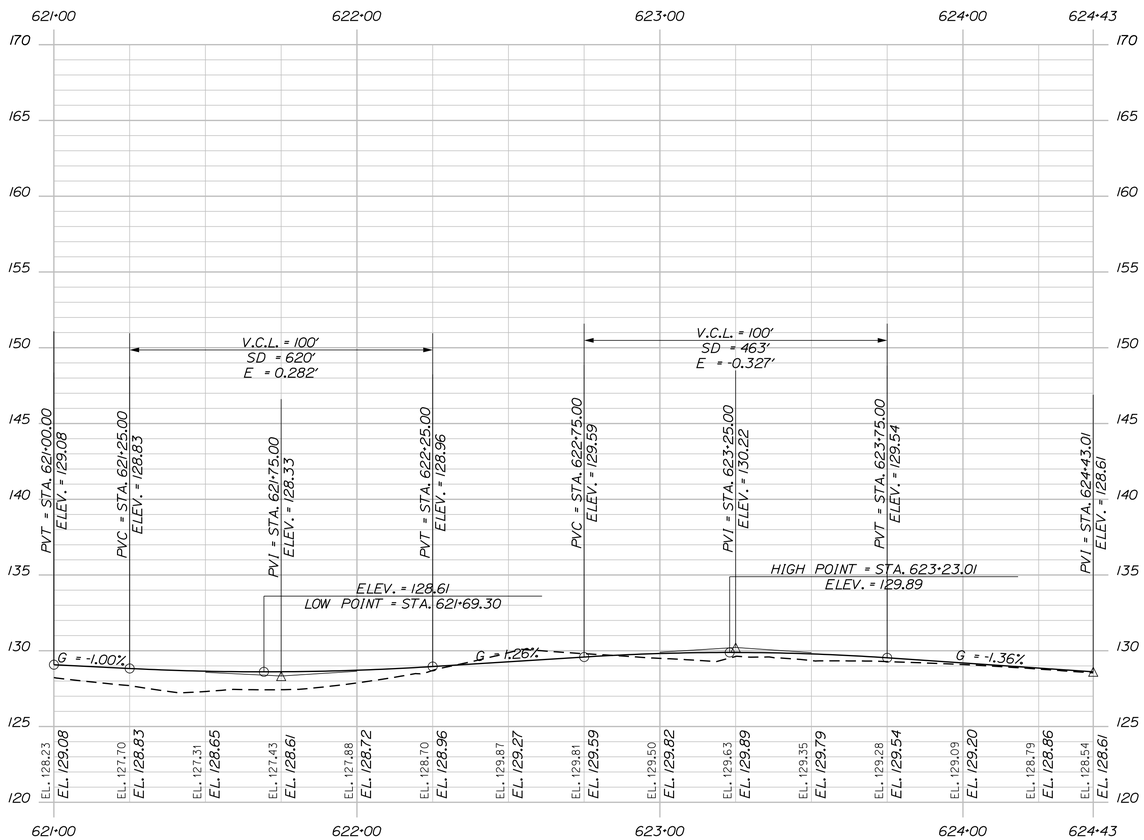
PROFILE

SHEET NUMBER

114

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



PARK AND RIDE PROFILE STA. 621+00 TO STA. 624+43

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

BY	DATE

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

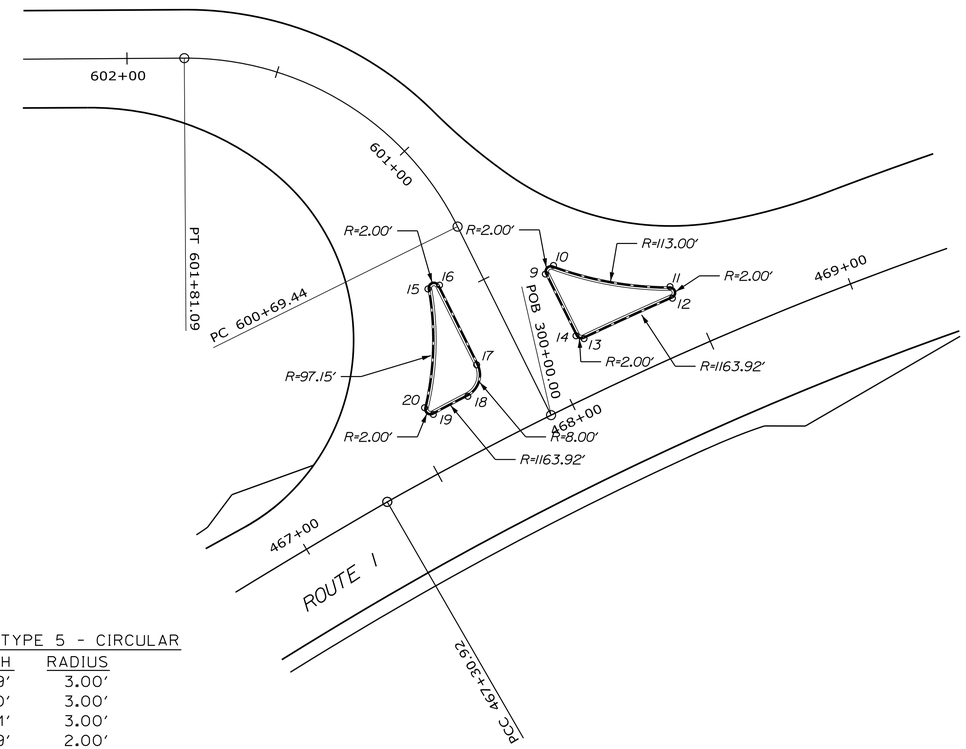
YARMOUTH
I-295 EXIT 15

PROFILE

SHEET NUMBER
115
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

ENTRANCE/EXIT TO PARK & RIDE



Control Points for Curb Type 5				
Point	Station	Offset	X-Coord	Y-Coord
9	600+42.52	19.00' RT	1032839.722	347769.355
10	600+43.91	22.45' RT	1032838.322	347772.796
11	468+45.10	21.81' LT	1032861.465	347804.506
12	468+44.30	18.00' LT	1032865.258	347803.544
13	468+12.73	18.00' LT	1032864.451	347771.483
14	468+10.76	20.00' LT	1032862.464	347769.506

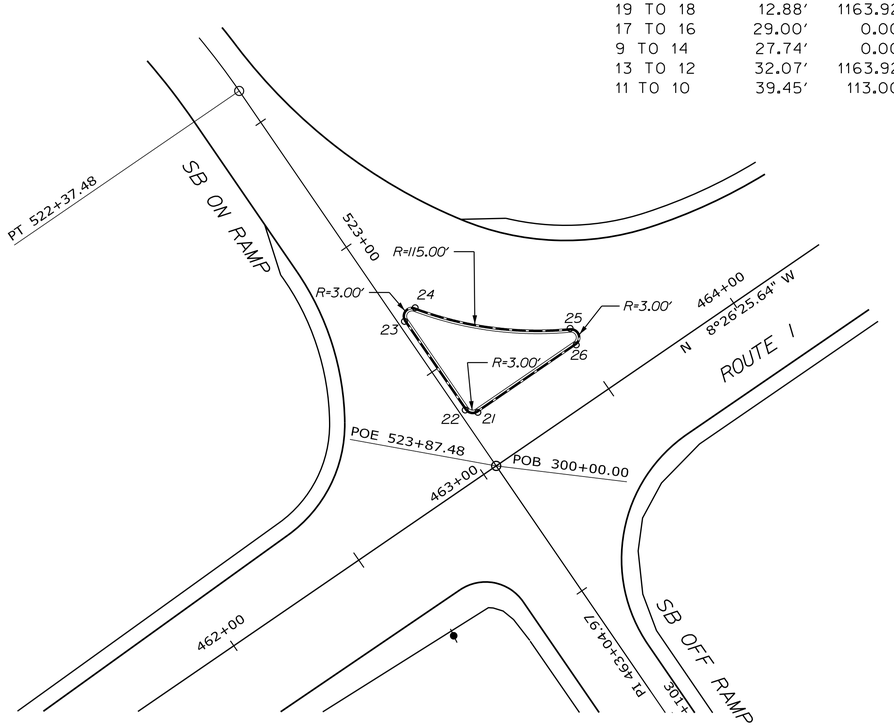
Control Points for Curb Type 5				
Point	Station	Offset	X-Coord	Y-Coord
15	600+55.35	17.92' LT	1032827.159	347732.351
16	600+54.78	14.00' LT	1032827.697	347736.274
17	600+25.78	14.00' LT	1032856.700	347736.476
18	467+70.57	18.00' LT	1032864.751	347728.670
19	467+57.89	18.00' LT	1032865.149	347715.798
20	467+56.42	21.31' LT	1032861.884	347714.177

ITEM 609.34 CURB TYPE 5

POINT	LENGTH	RADIUS
23 TO 22	36.45'	0.00'
21 TO 26	39.34'	0.00'
25 TO 24	54.09'	115.00'
15 TO 20	39.46'	97.15'
19 TO 18	12.88'	1163.92'
17 TO 16	29.00'	0.00'
9 TO 14	27.74'	0.00'
13 TO 12	32.07'	1163.92'
11 TO 10	39.45'	113.00'

ITEM 609.35 CURB TYPE 5 - CIRCULAR

POINT	LENGTH	RADIUS
23 TO 24	7.59'	3.00'
25 TO 26	7.90'	3.00'
21 TO 22	4.71'	3.00'
20 TO 19	4.59'	2.00'
18 TO 17	12.42'	8.00'
15 TO 16	5.71'	2.00'
9 TO 10	4.77'	2.00'
14 TO 13	3.11'	2.00'
12 TO 11	5.45'	2.00'



Control Points for Curb Type 5				
Point	Station	Offset	X-Coord	Y-Coord
21	523+69.48	5.00' LT	1032922.639	347269.793
22	523+66.48	2.00' LT	1032920.112	347266.385
23	521+31.03	2.00' LT	1032885.050	347261.183
24	523+29.31	7.46' LT	1032882.546	347266.328
25	463+50.76	23.63' LT	1032911.090	347309.319
26	463+49.31	18.00' LT	1032916.865	347308.703

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
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YARMOUTH
I-295 EXIT 15

GEOMETRIC CURB LAYOUT

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Control Points for Curb Type 5				
Point	Station	Offset	X-Coord	Y-Coord
27	448+26.85	6.00′ LT	1032925.779	345822.593
28	450+12.10	10.59′ LT	1032994.070	345993.210
29	450+29.28	7.84′ LT	1033001.900	346008.582
30	450+28.29	2.00′ LT	1033007.155	346005.864
31	448+26.89	2.00′ LT	1032929.336	345820.765
56	450+09.66	2.00′ LT	1033001.333	345988.200

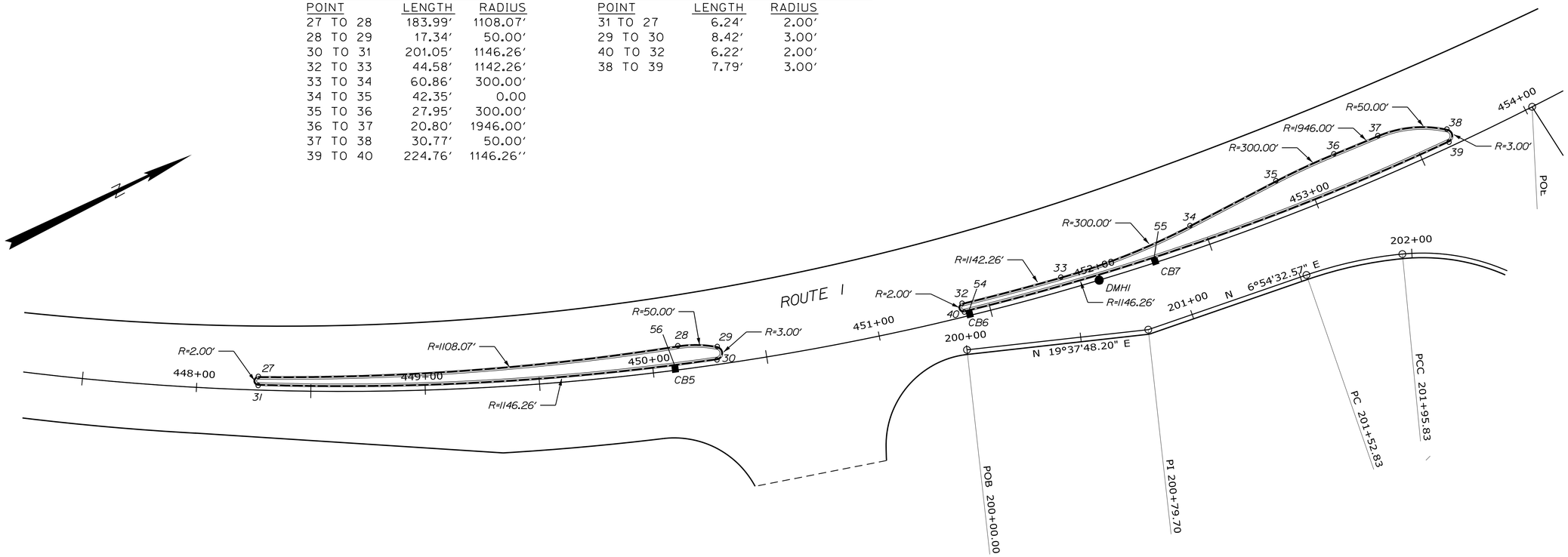
Control Points for Curb Type 5				
Point	Station	Offset	X-Coord	Y-Coord
32	451+38.59	6.00′ LT	1033031.781	346113.007
33	451+83.46	6.00′ LT	1033040.417	346156.804
34	452+44.50	10.55′ LT	1033044.892	346217.397
35	452+86.98	16.09′ LT	1033043.718	346239.729
36	453+15.29	17.60′ LT	1033044.245	346287.663
37	453+36.42	17.41′ LT	1033045.494	346308.429
38	453+65.38	7.58′ LT	1033056.159	346336.774
39	453+63.80	2.00′ LT	1033061.706	346335.104
40	451+38.64	2.00′ LT	1033035.702	346112.214
54	451+40.67	2.00′ LT	1033036.129	346114.189
55	452+25.03	2.00′ LT	1033050.846	346197.092

ITEM 609.34 CURB TYPE 5

POINT	LENGTH	RADIUS
27 TO 28	183.99′	1108.07′
28 TO 29	17.34′	50.00′
30 TO 31	201.05′	1146.26′
32 TO 33	44.58′	1142.26′
33 TO 34	60.86′	300.00′
34 TO 35	42.35′	0.00
35 TO 36	27.95′	300.00′
36 TO 37	20.80′	1946.00′
37 TO 38	30.77′	50.00′
39 TO 40	224.76′	1146.26′′

ITEM 609.35 CURB TYPE 5 - CIRCULAR

POINT	LENGTH	RADIUS
31 TO 27	6.24′	2.00′
29 TO 30	8.42′	3.00′
40 TO 32	6.22′	2.00′
38 TO 39	7.79′	3.00′



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
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YARMOUTH
I-295 EXIT 15

GEOMETRIC CURB LAYOUT

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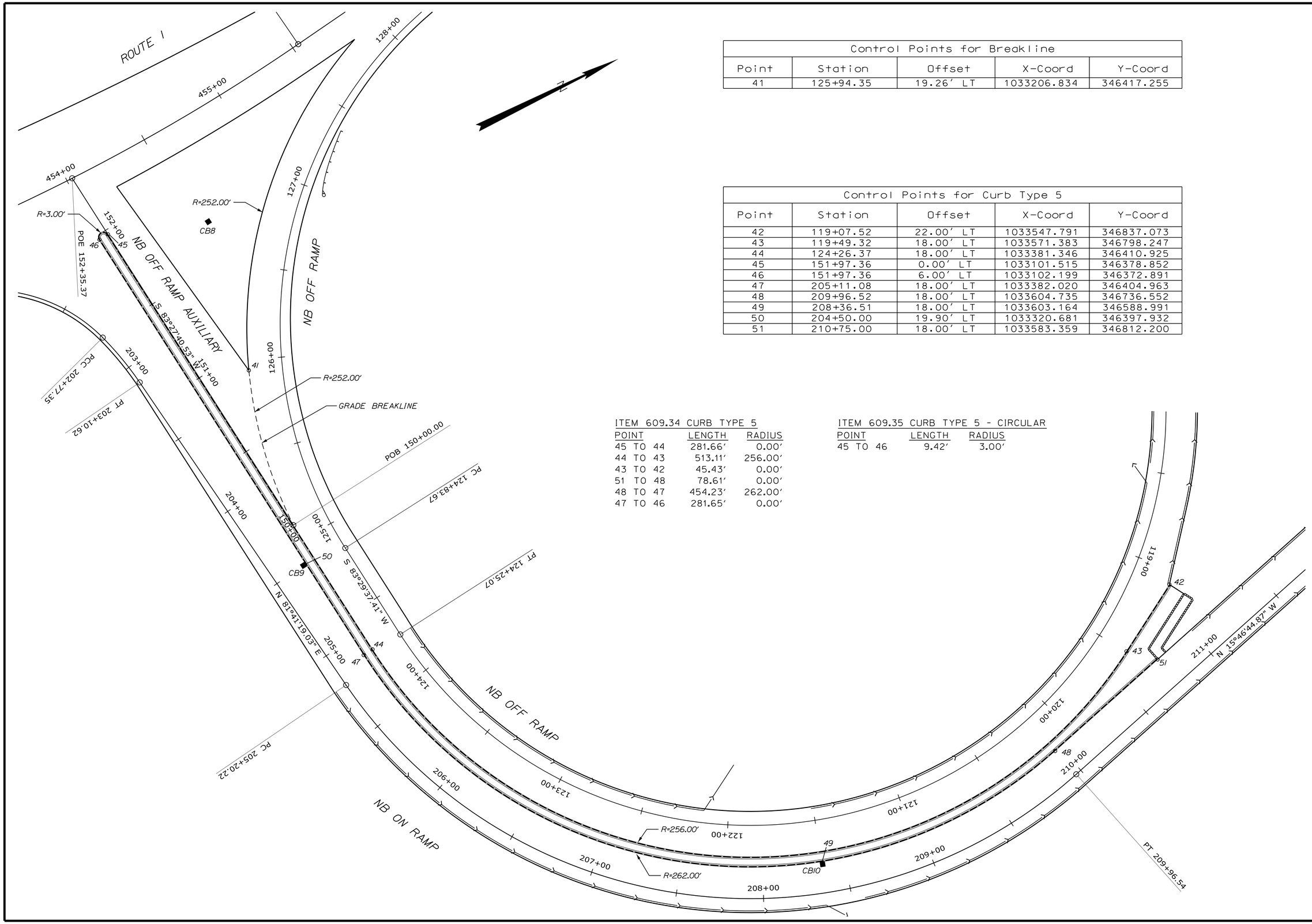

Control Points for Breakline				
Point	Station	Offset	X-Coord	Y-Coord
41	125+94.35	19.26' LT	1033206.834	346417.255

Control Points for Curb Type 5				
Point	Station	Offset	X-Coord	Y-Coord
42	119+07.52	22.00' LT	1033547.791	346837.073
43	119+49.32	18.00' LT	1033571.383	346798.247
44	124+26.37	18.00' LT	1033381.346	346410.925
45	151+97.36	0.00' LT	1033101.515	346378.852
46	151+97.36	6.00' LT	1033102.199	346372.891
47	205+11.08	18.00' LT	1033382.020	346404.963
48	209+96.52	18.00' LT	1033604.735	346736.552
49	208+36.51	18.00' LT	1033603.164	346588.991
50	204+50.00	19.90' LT	1033320.681	346397.932
51	210+75.00	18.00' LT	1033583.359	346812.200

ITEM 609.34 CURB TYPE 5

POINT	LENGTH	RADIUS
45 TO 44	281.66'	0.00'
44 TO 43	513.11'	256.00'
43 TO 42	45.43'	0.00'
51 TO 48	78.61'	0.00'
48 TO 47	454.23'	262.00'
47 TO 46	281.65'	0.00'

ITEM 609.35 CURB TYPE 5 - CIRCULAR

POINT	LENGTH	RADIUS
45 TO 46	9.42'	3.00'

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

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WIN 17490.00 PARK & RIDE LOT

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YARMOUTH
I-295 EXIT 15

GEOMETRIC CURB LAYOUT

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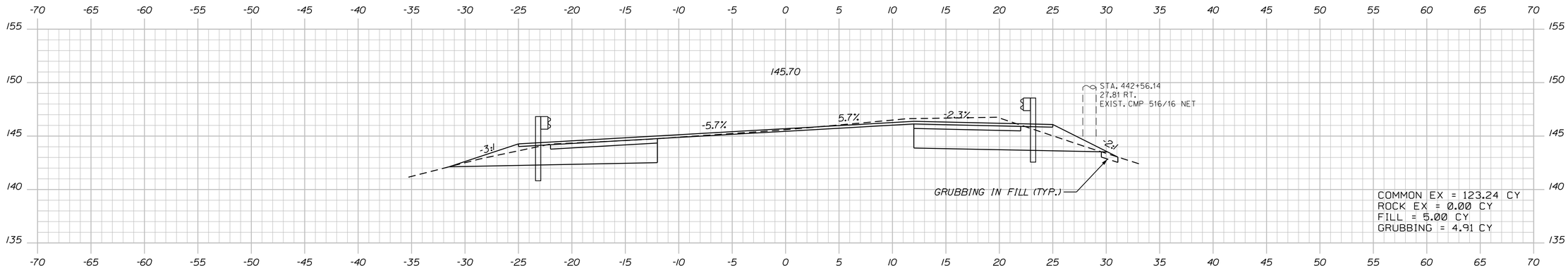
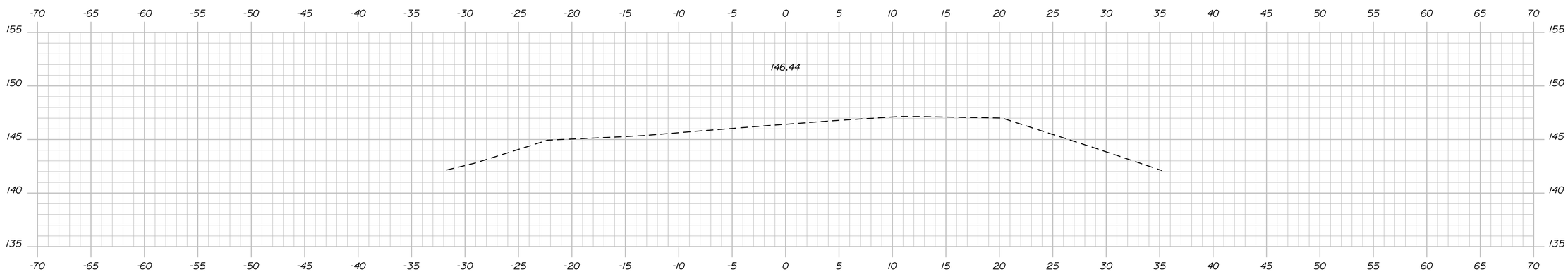
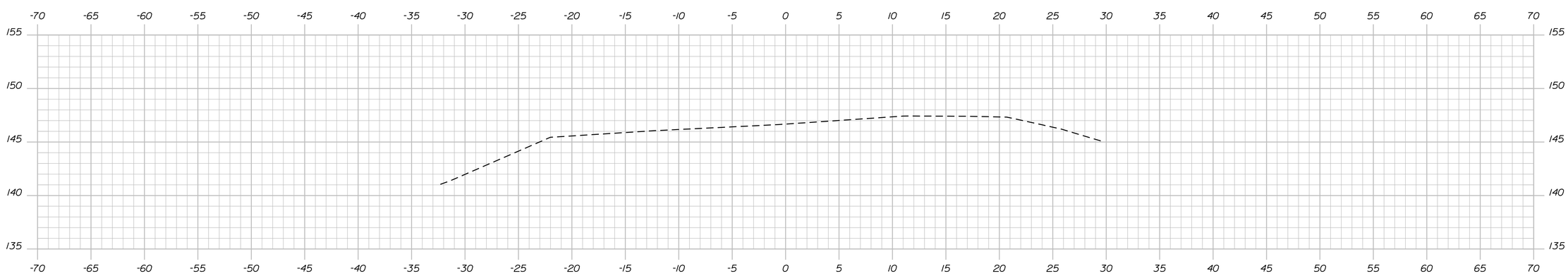


442+50.00



442+00.00



441+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

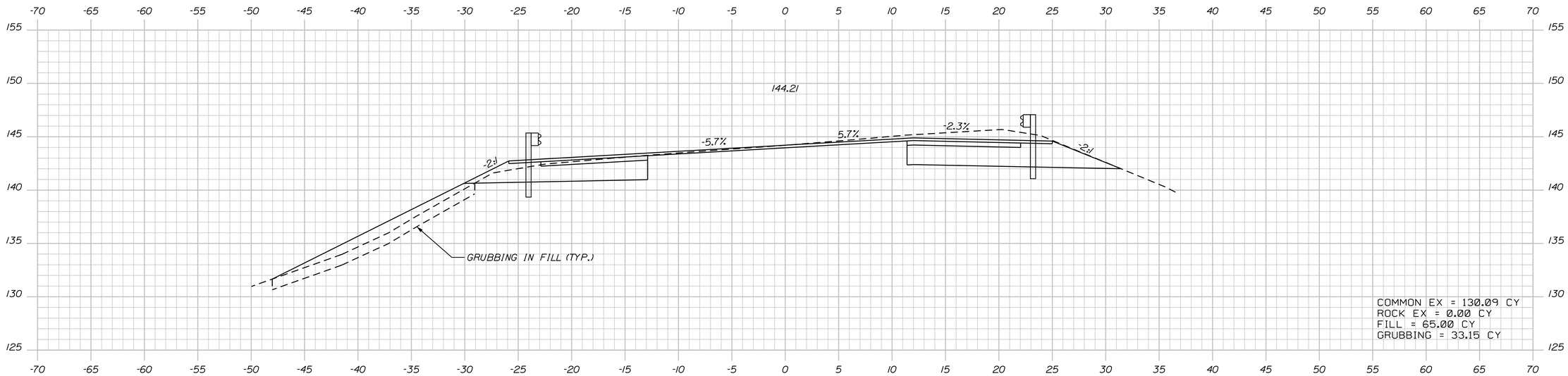
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

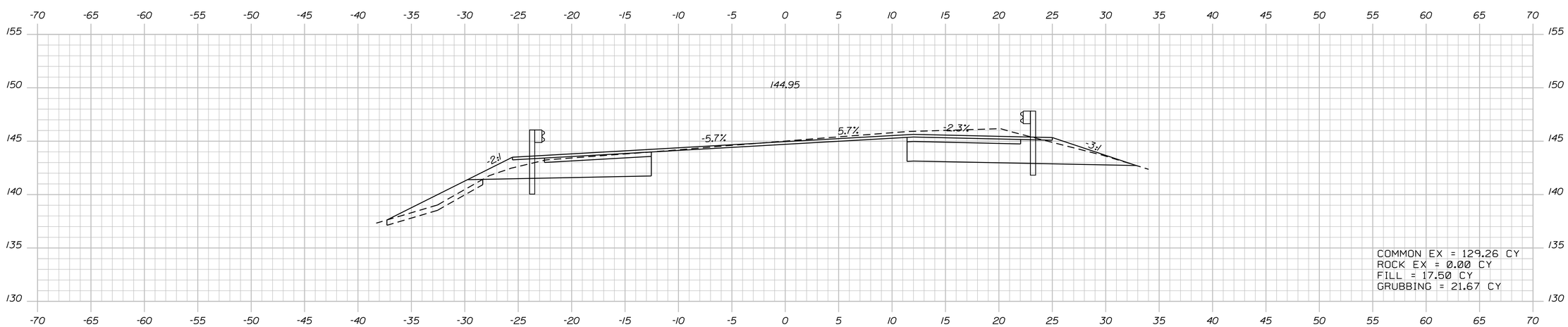
SHEET NUMBER
119
OF 283

ROUTE 1 Sta. 441+50.00 to Sta. 442+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



443+50.00



443+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

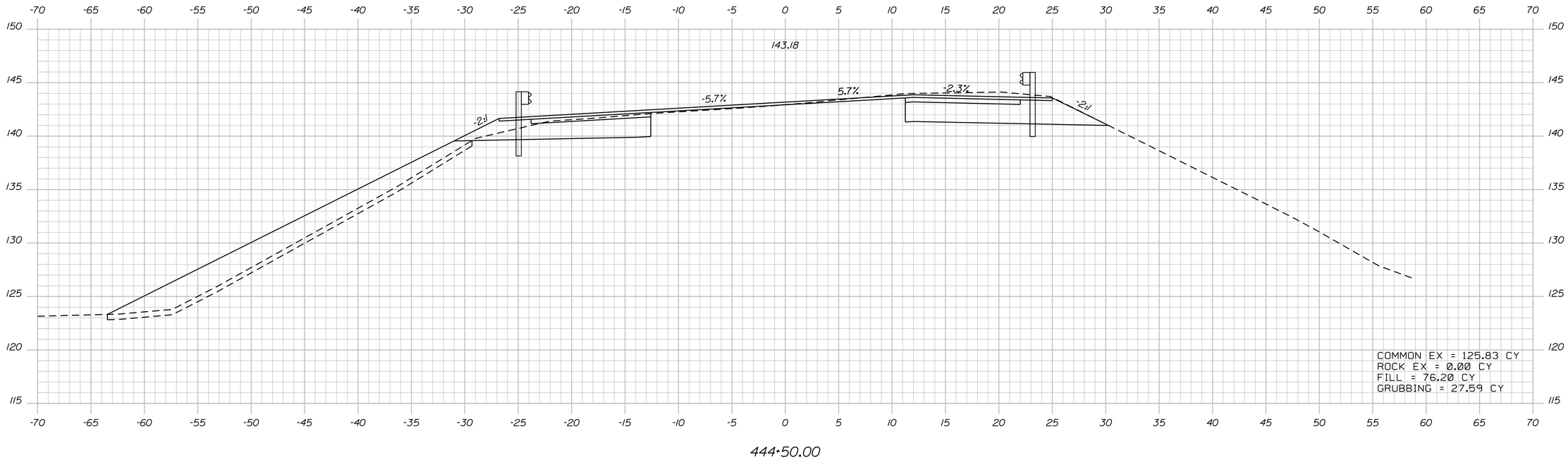
YARMOUTH
I-295 EXIT 15

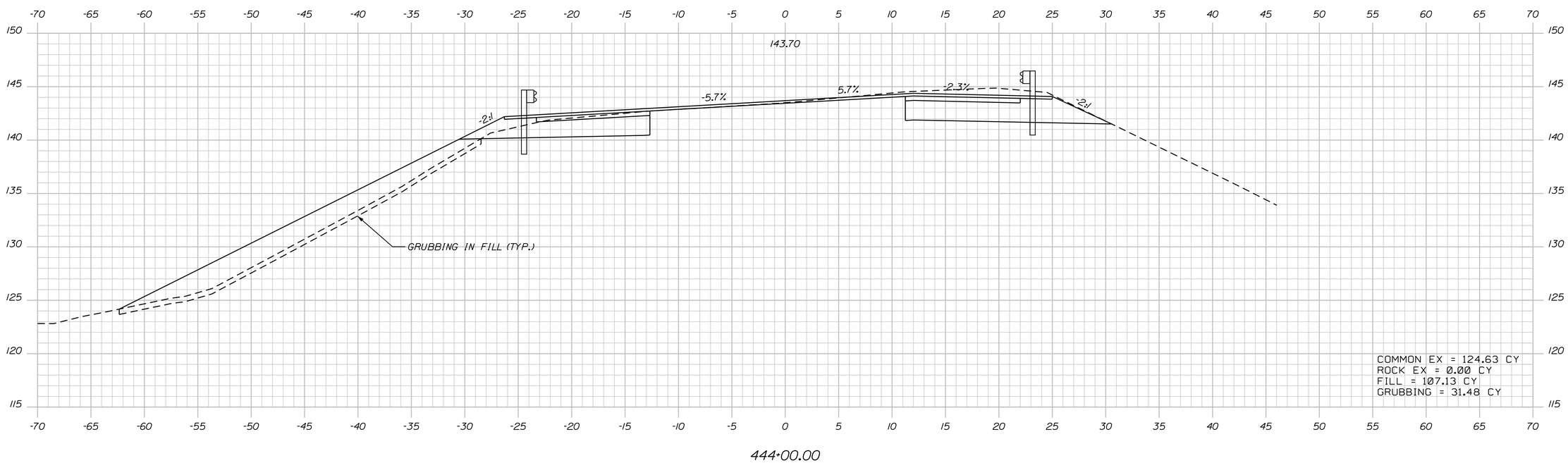
CROSS SECTIONS

SHEET NUMBER
120
OF 283

ROUTE 1 Sta. 443+00.00 to Sta. 443+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

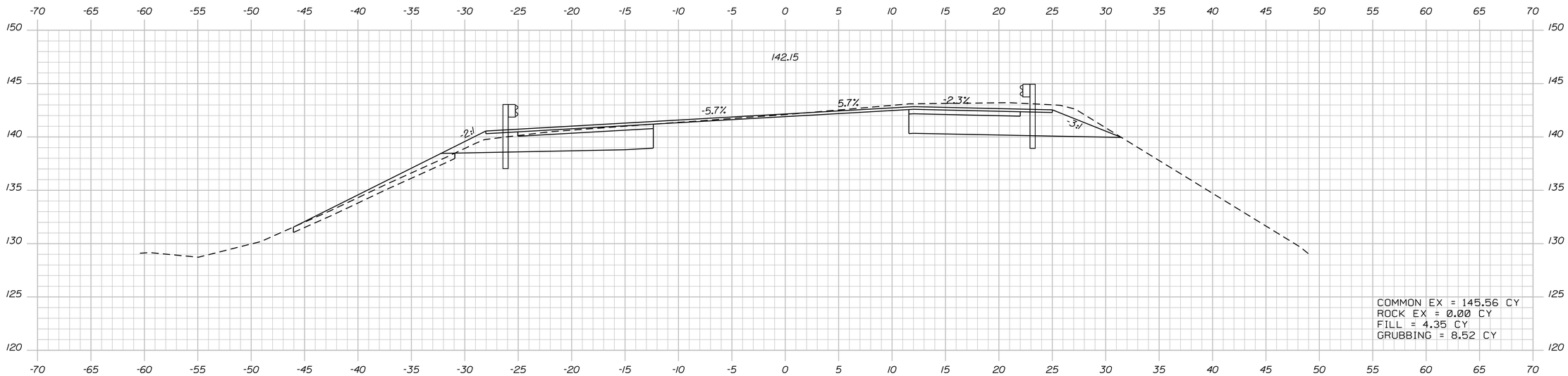
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

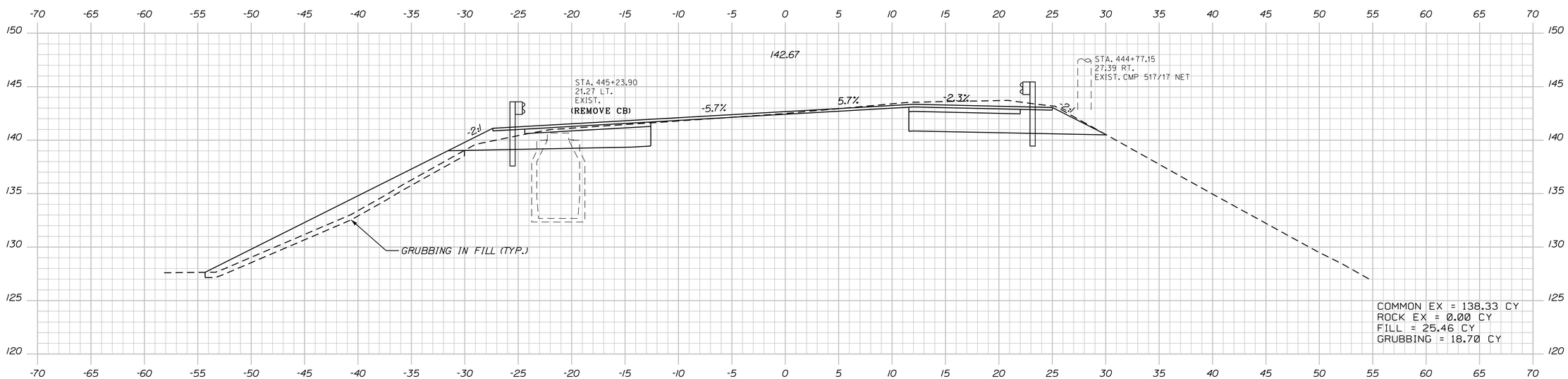
SHEET NUMBER
121
OF 283

ROUTE 1 Sta. 444+00.00 to Sta. 444+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



445+50.00



445+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

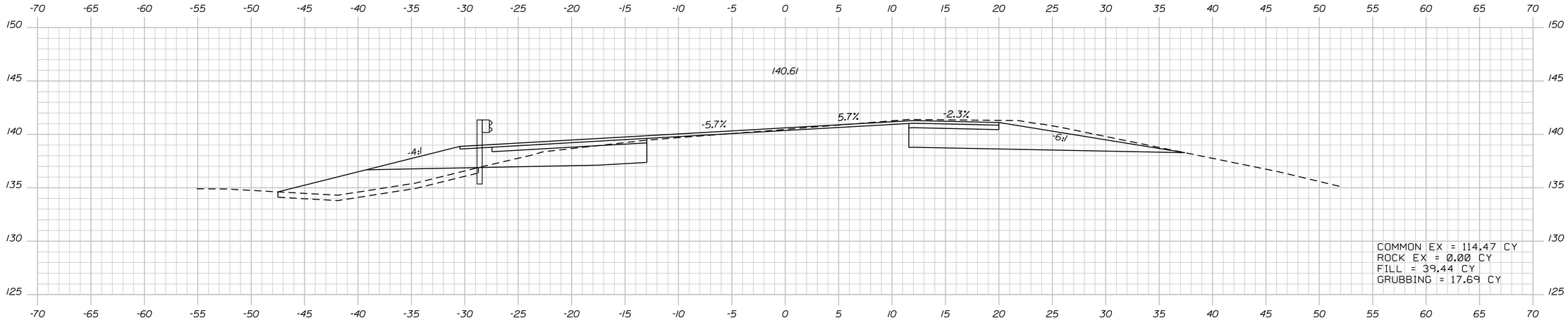
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

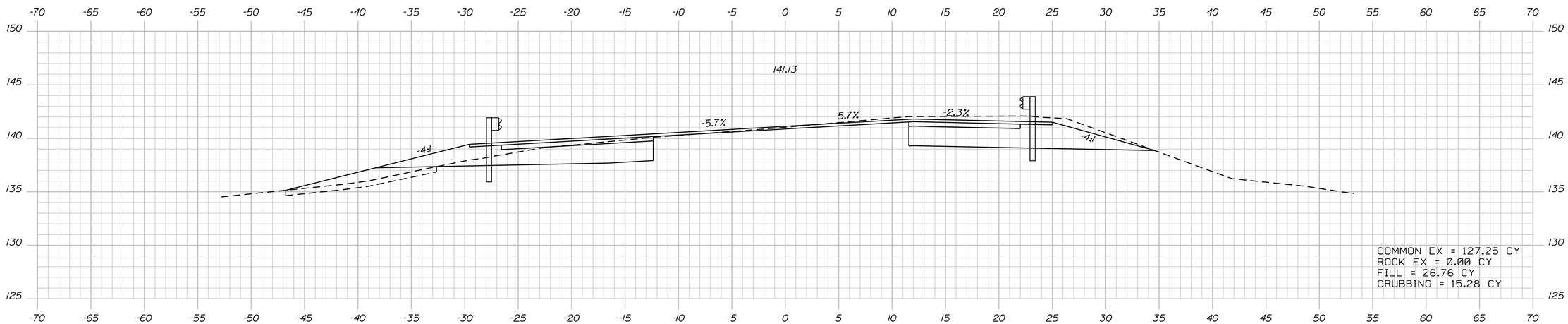
SHEET NUMBER
122
OF 283

ROUTE 1 Sta. 445+00.00 to Sta. 445+50.00

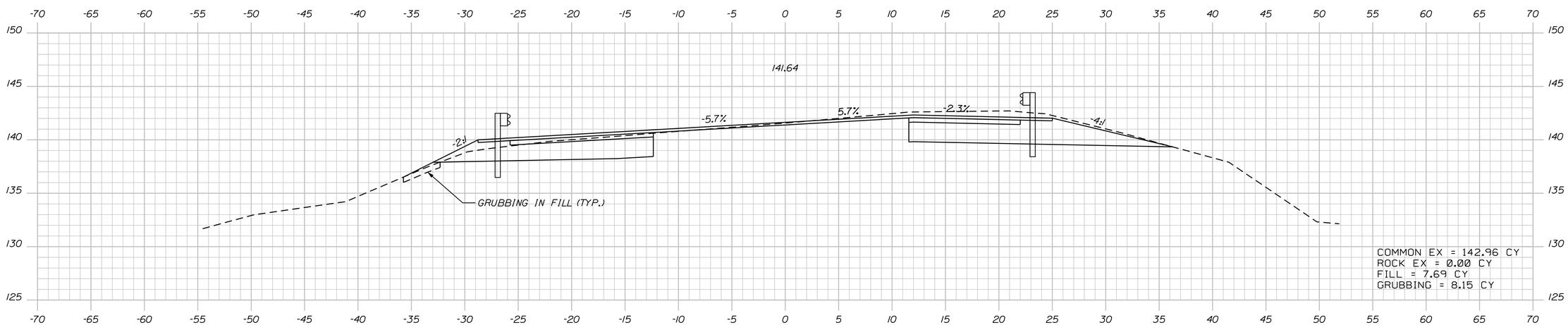
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



447+00.00



446+50.00



446+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

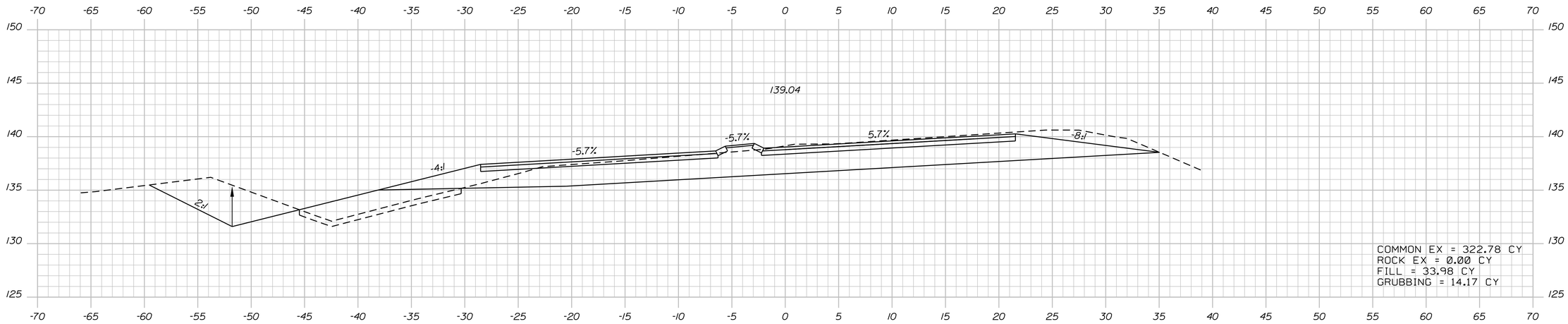
CROSS SECTIONS

SHEET NUMBER
123
OF 283

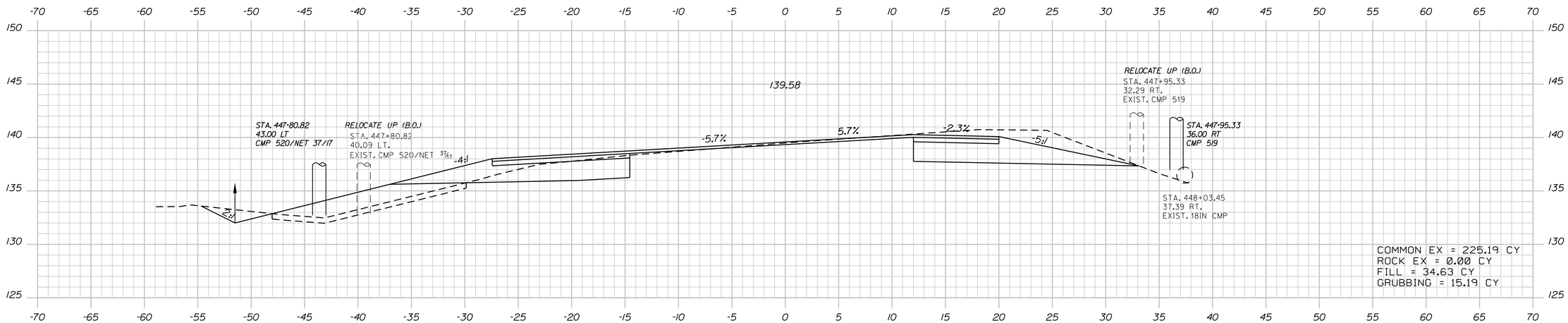
ROUTE 1 Sta. 446+00.00 to Sta. 447+00.00

Division: HIGHWAY Username: COMMON Date:2/21/2011

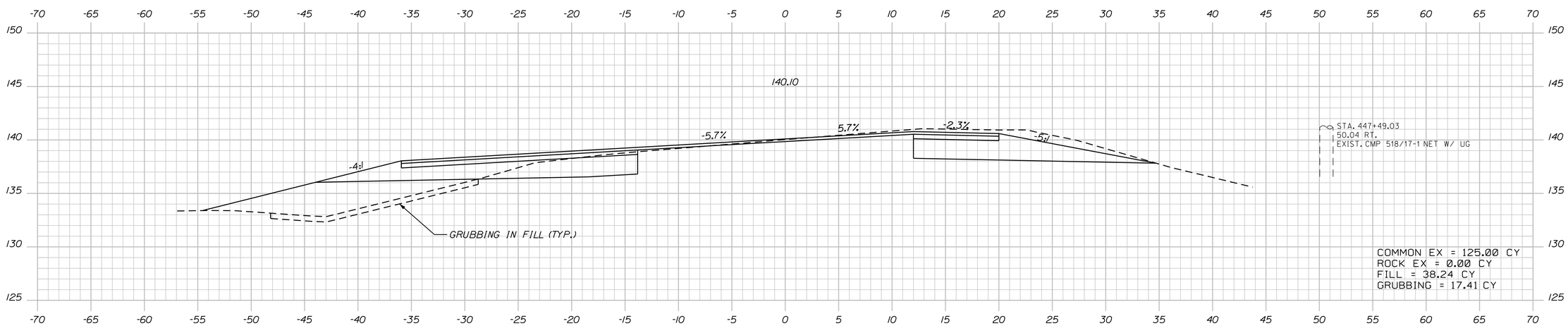
Filename:



448+50.00



448+00.00



447+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

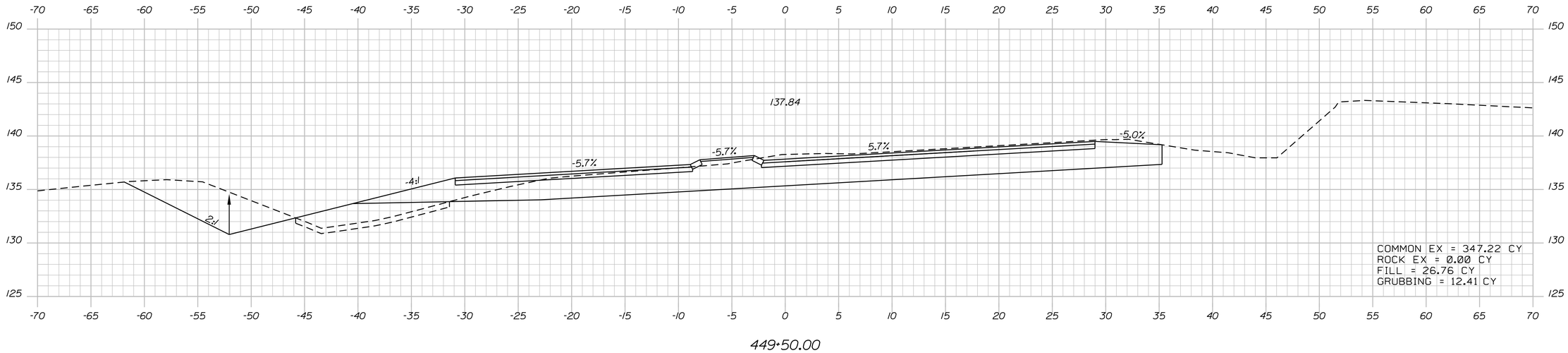
YARMOUTH
I-295 EXIT 15

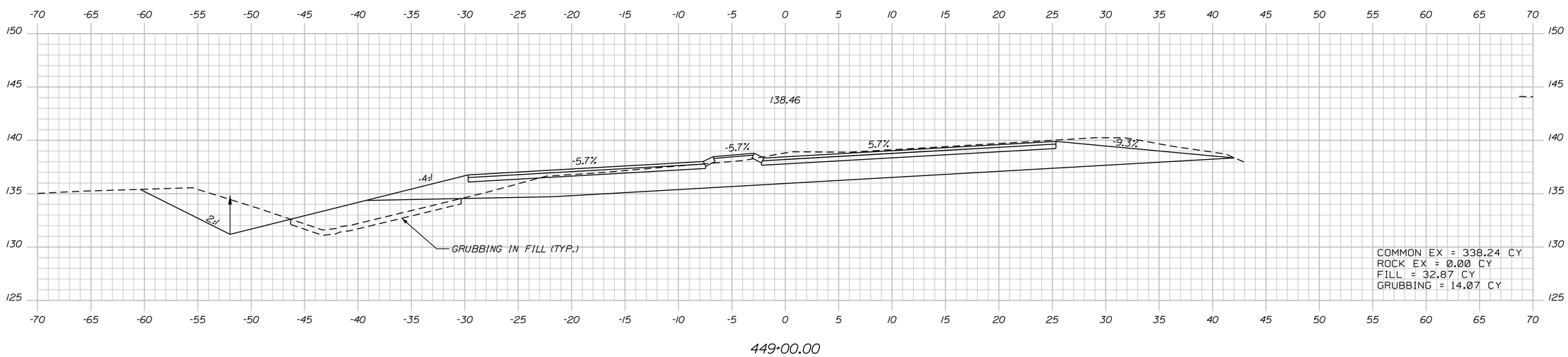
CROSS SECTIONS

SHEET NUMBER
124
OF 283

ROUTE 1 Sta. 447+50.00 to Sta. 448+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

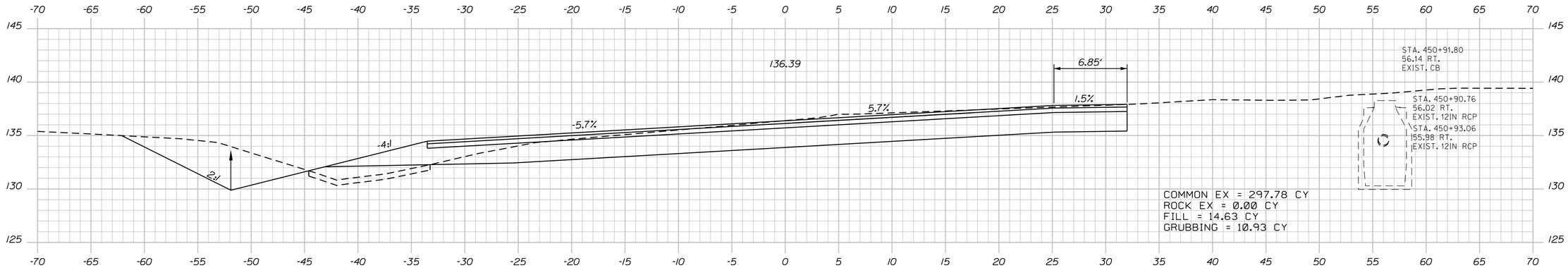
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

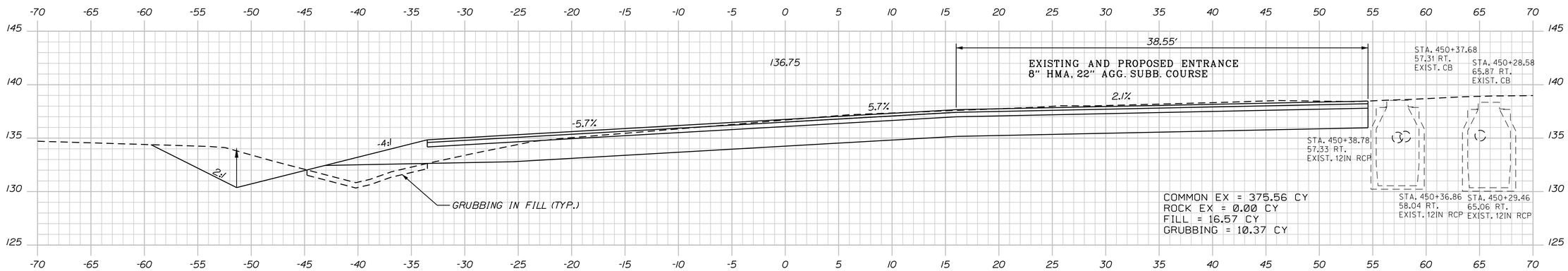
SHEET NUMBER
125
OF 283

ROUTE 1 Sta. 449+00.00 to Sta. 449+50.00

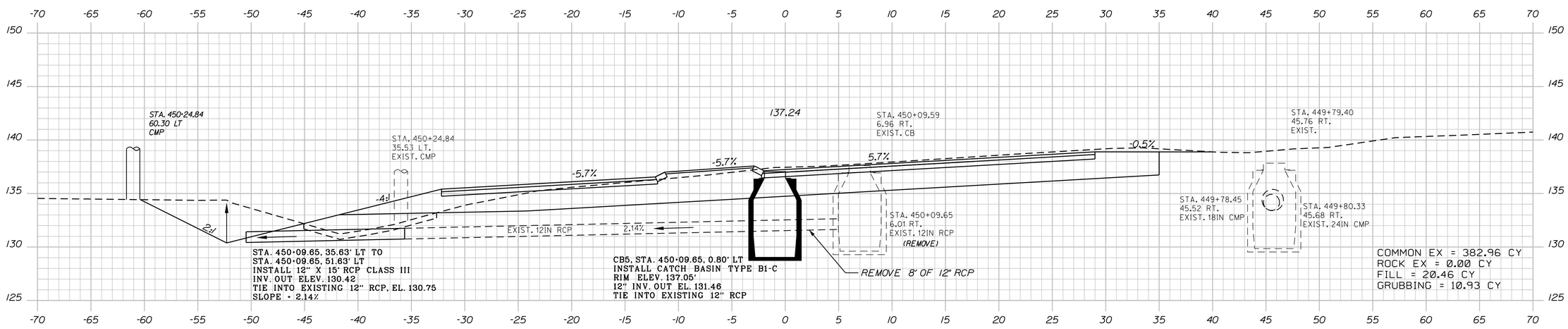
Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



451+00.00



450+50.00



450+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	DATE	BY	
PROJ. MANAGER			
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

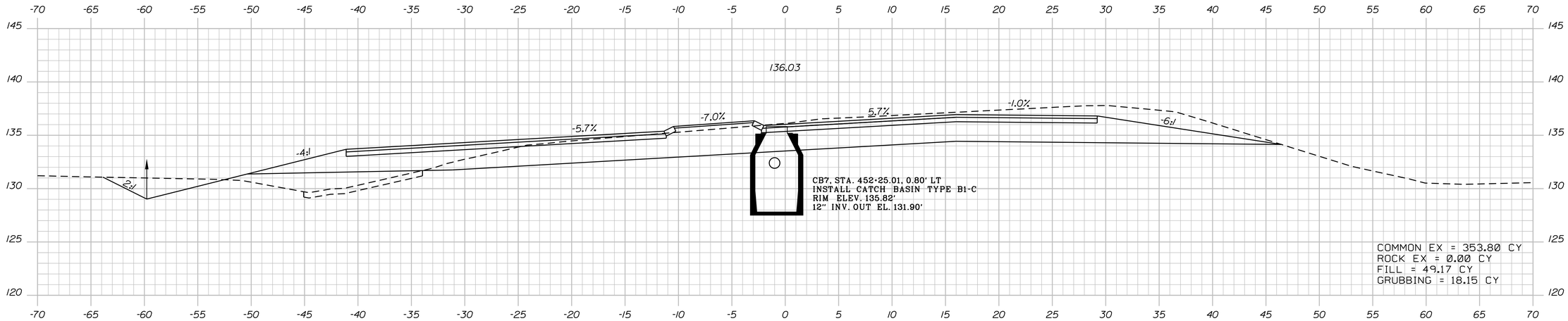
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

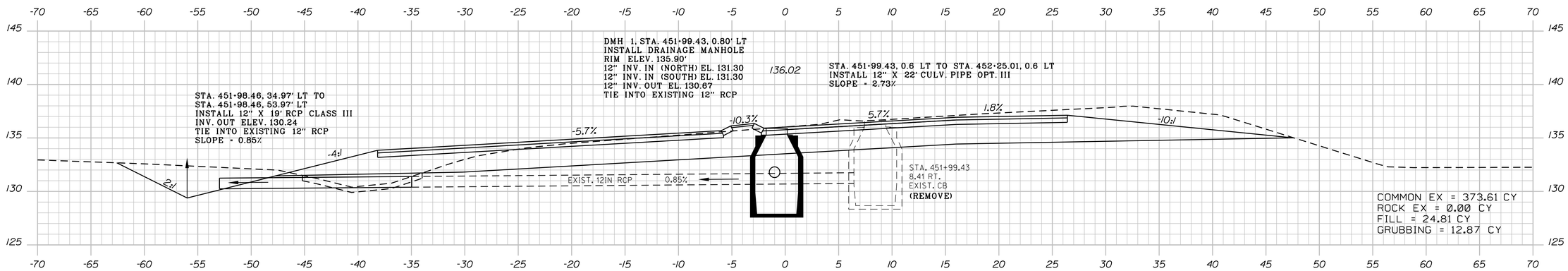
SHEET NUMBER
126
OF 283

ROUTE 1 Sta. 450+00.00 to Sta. 451+00.00

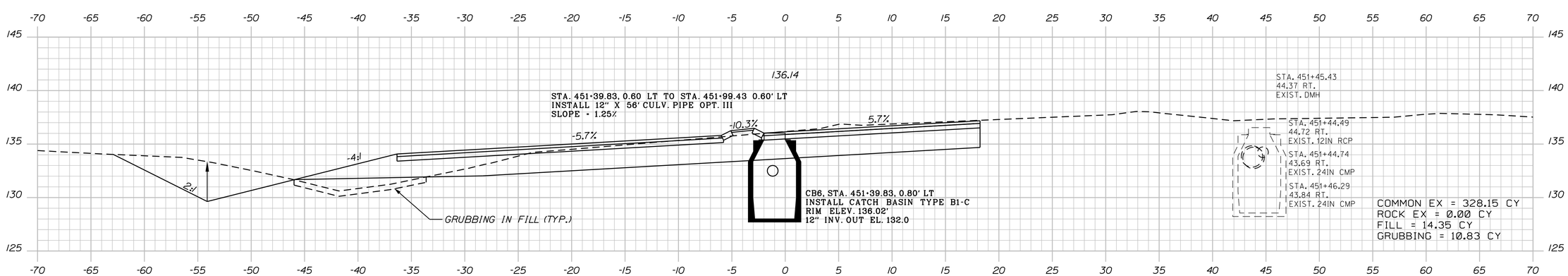
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



452+50.00



452+00.00



451+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

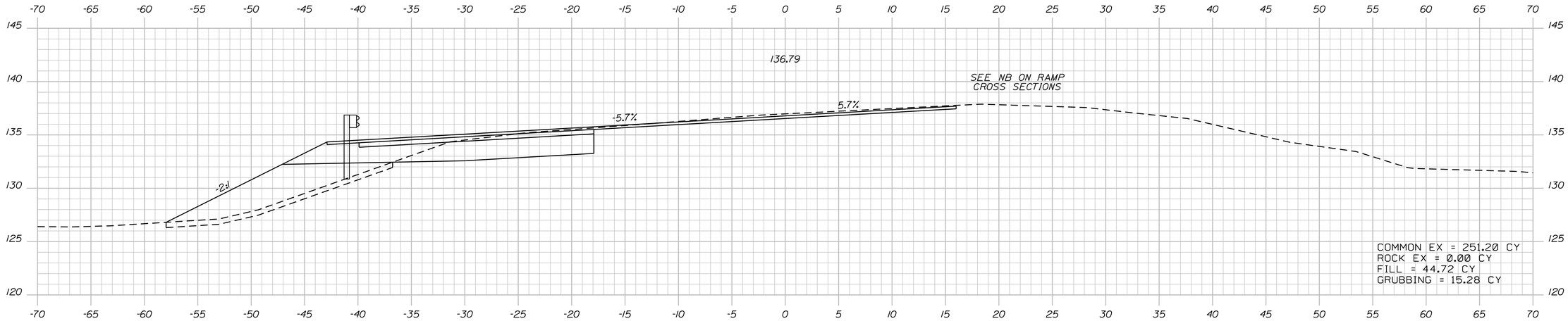
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

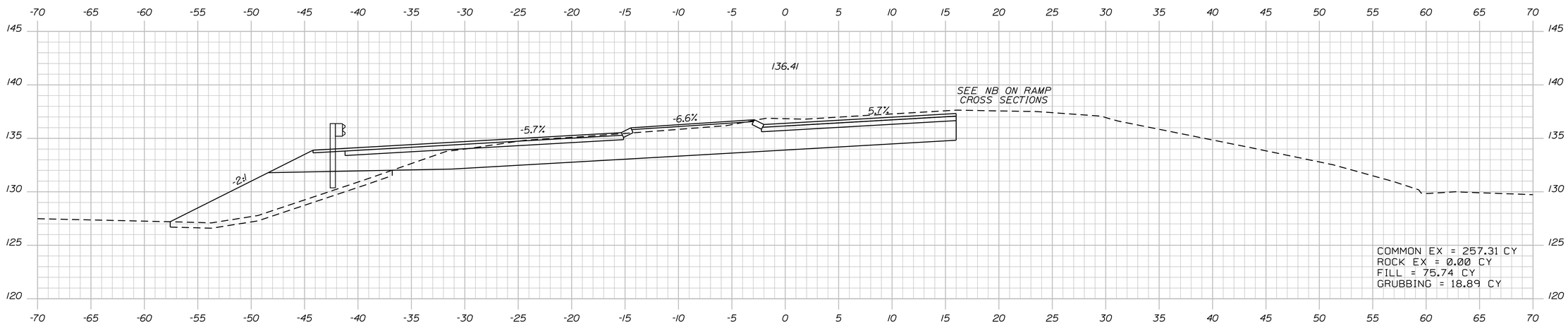
SHEET NUMBER
127
OF 283

ROUTE 1 Sta. 451+50.00 to Sta. 452+50.00

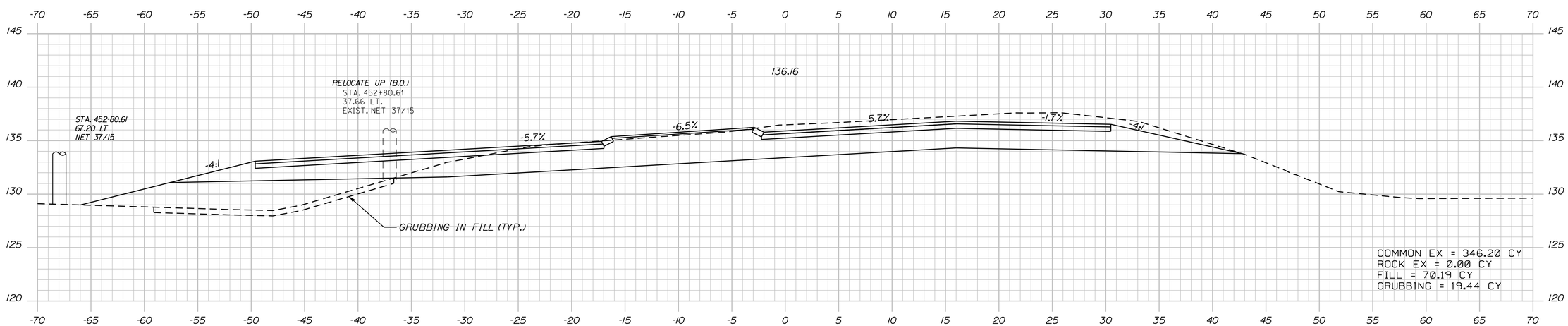
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



454+00.00



453+50.00



453+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

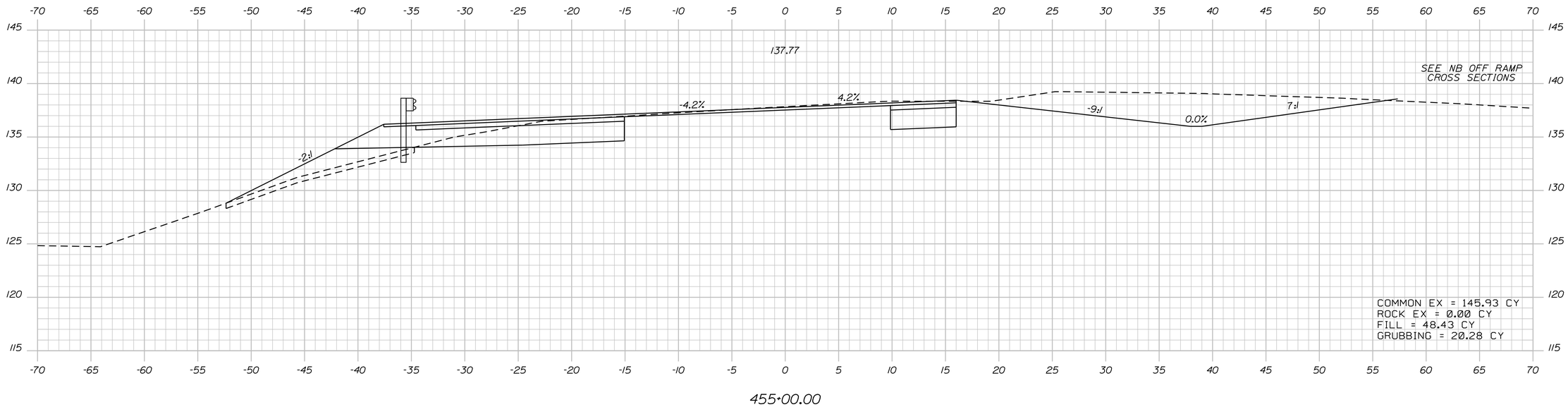
YARMOUTH
I-295 EXIT 15

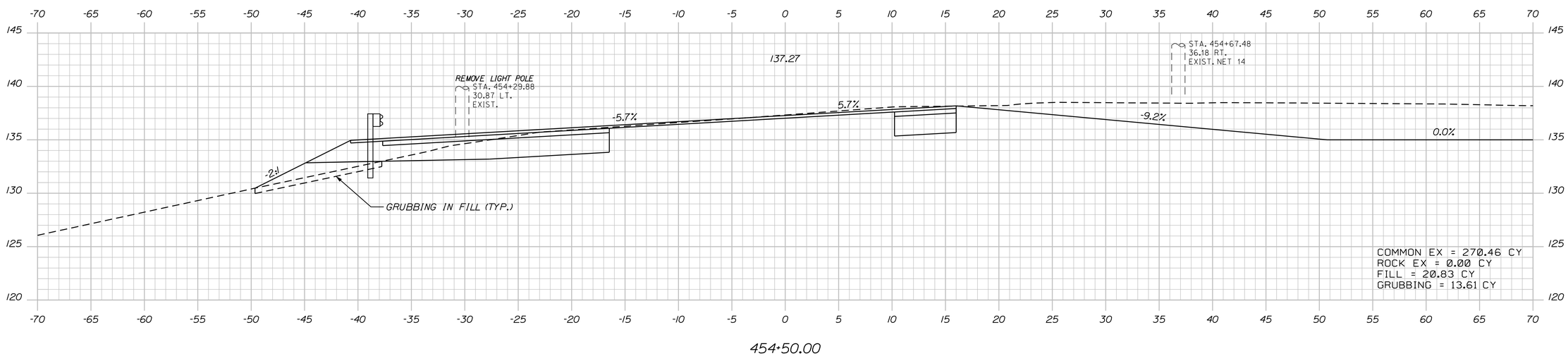
CROSS SECTIONS

SHEET NUMBER
128
OF 283

ROUTE 1 Sta. 453+00.00 to Sta. 454+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

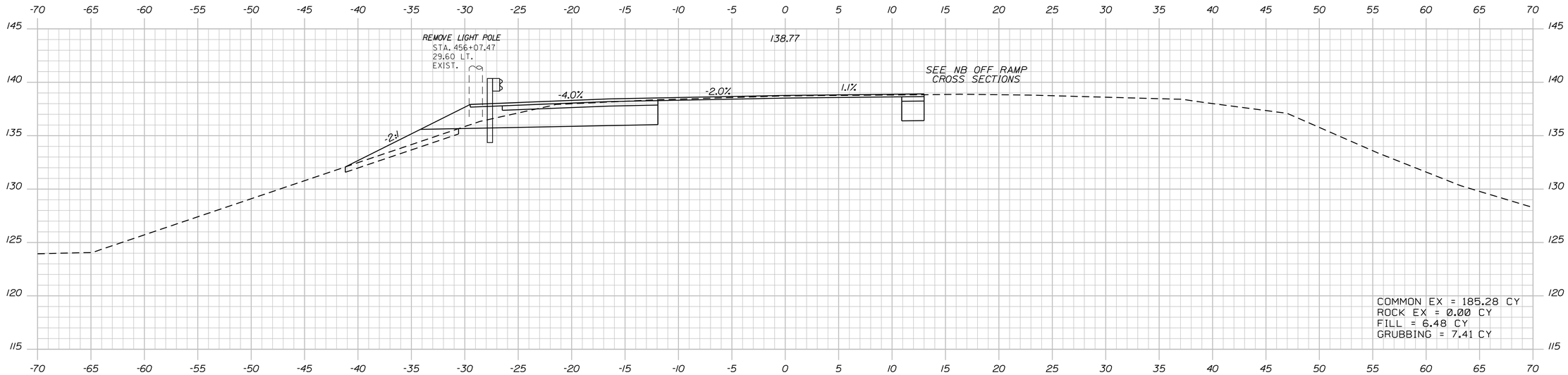
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

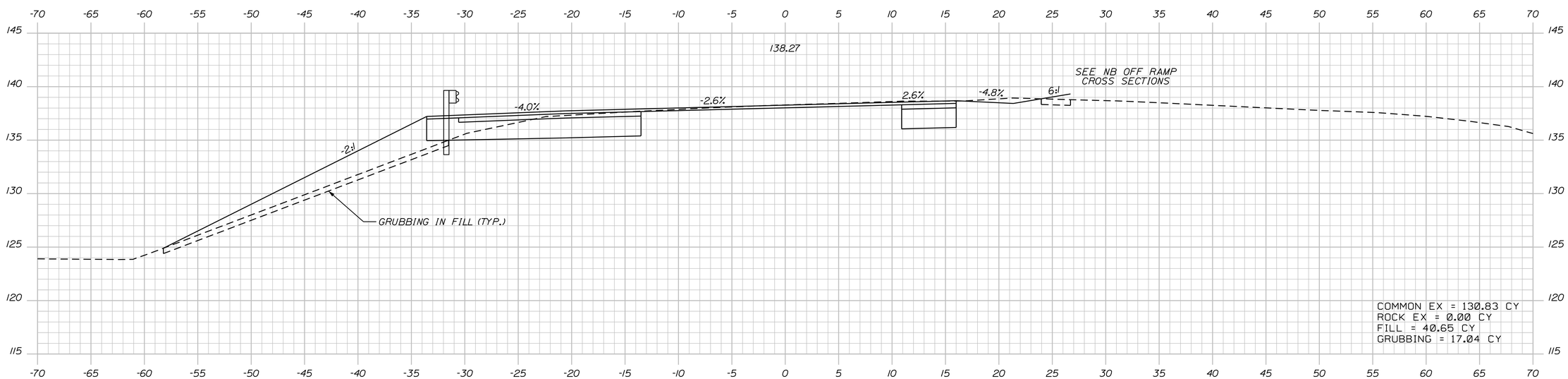
SHEET NUMBER
129
OF 283

ROUTE 1 Sta. 454+50.00 to Sta. 455+00.00

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



456+00.00



455+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

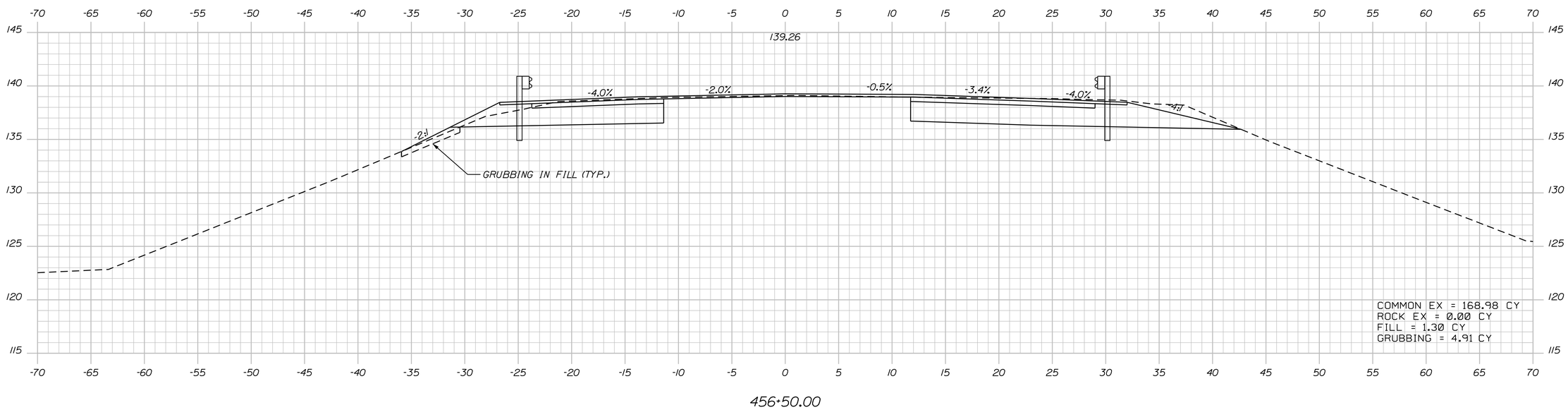
CROSS SECTIONS

SHEET NUMBER
130
OF 283

ROUTE 1 Sta. 455+50.00 to Sta. 456+00.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

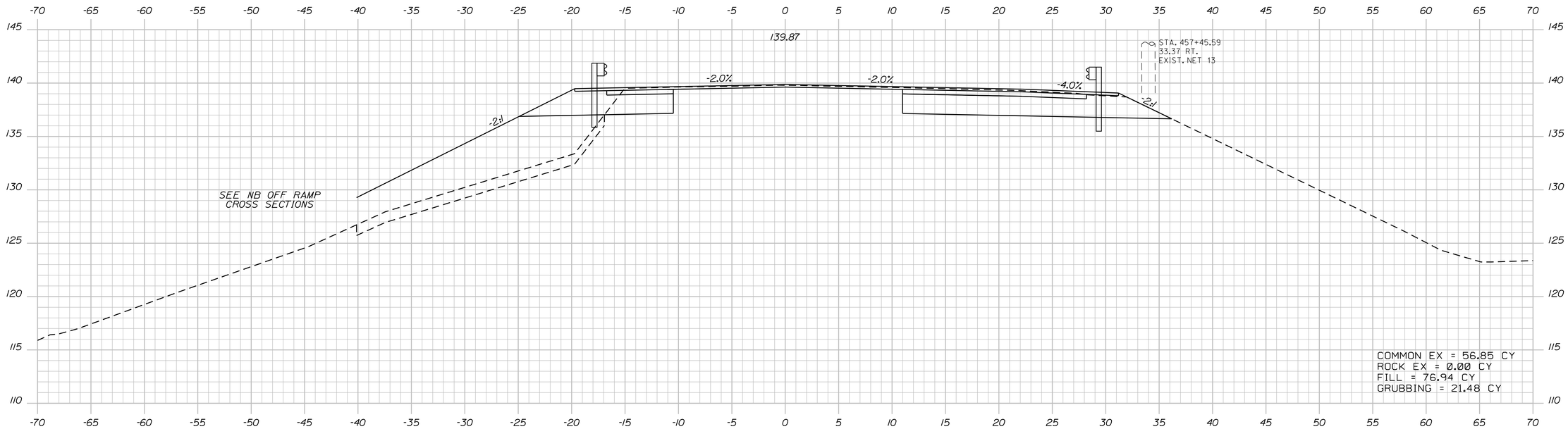
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

YARMOUTH
I-295 EXIT 15

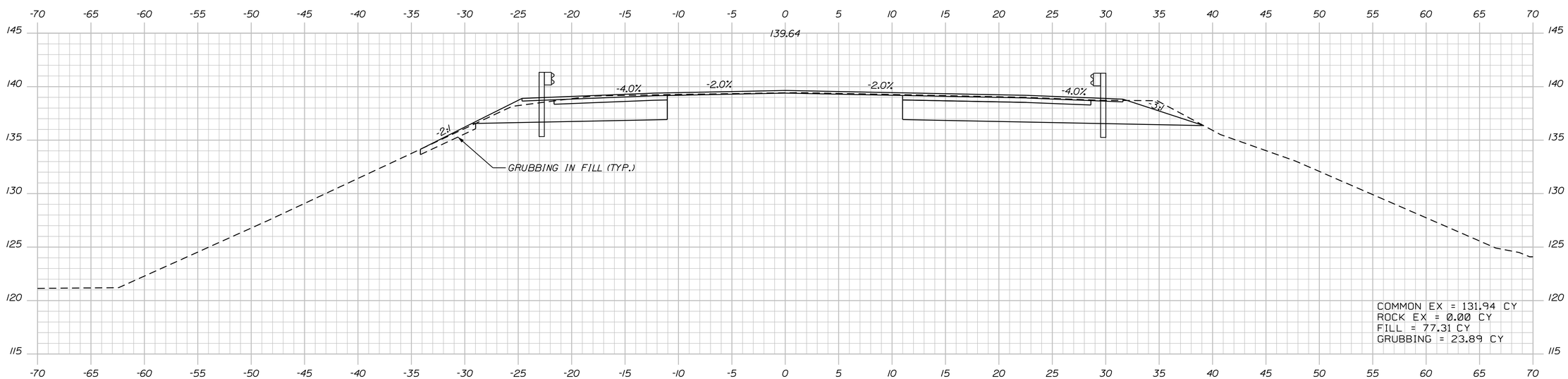
CROSS SECTIONS

SHEET NUMBER
131
OF 283

ROUTE 1 Sta. 456+50.00 to Sta. 457+00.00



457+50.00



457+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

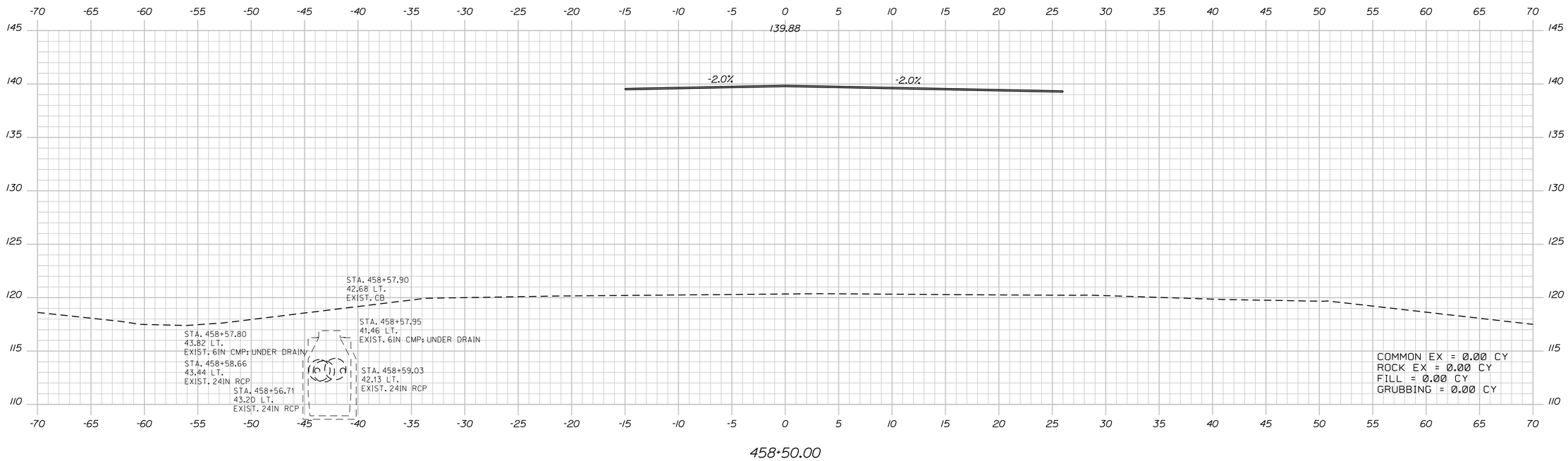
YARMOUTH
I-295 EXIT 15

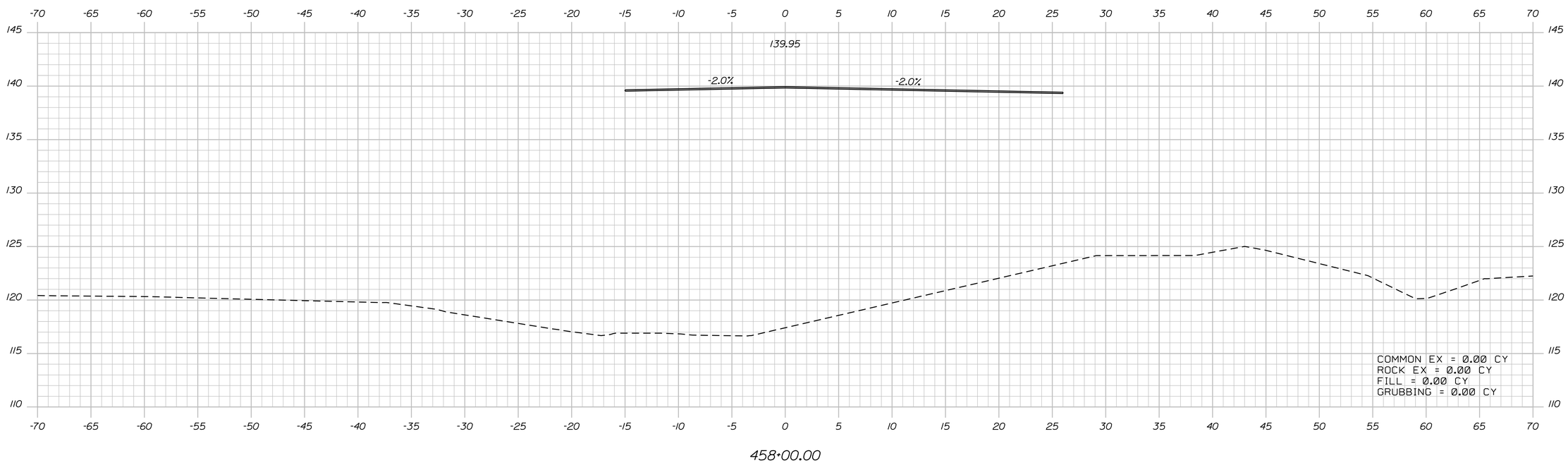
CROSS SECTIONS

SHEET NUMBER
132
OF 283

ROUTE 1 Sta. 457+00.00 to Sta. 457+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

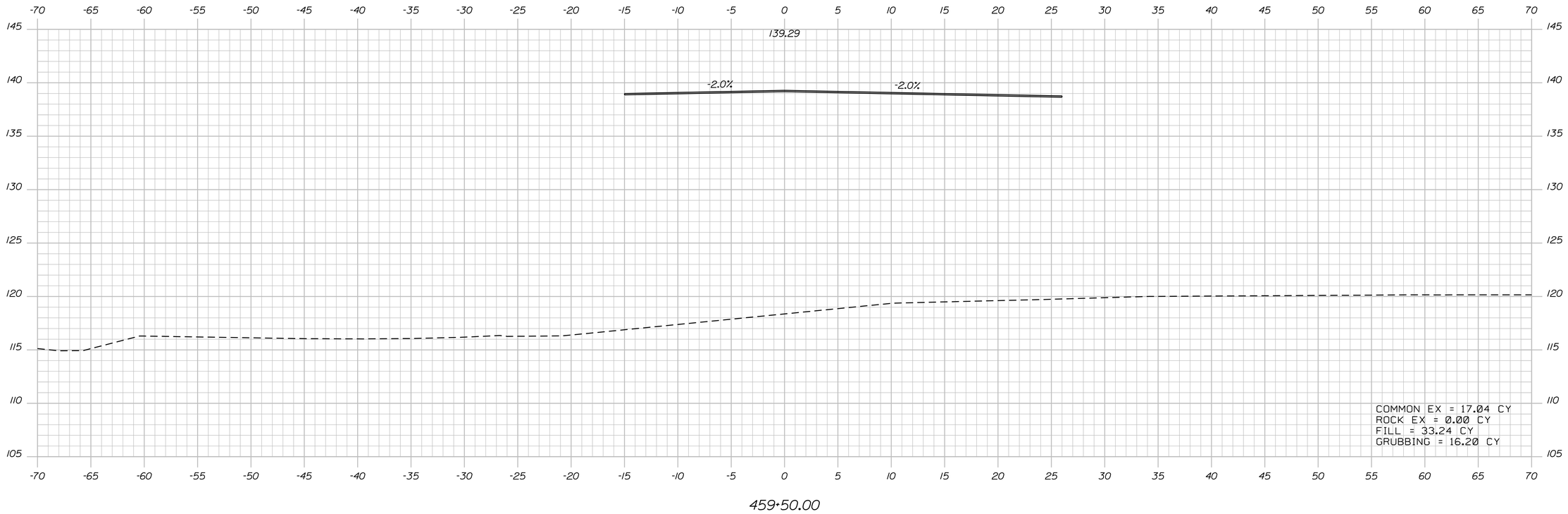
SHEET NUMBER

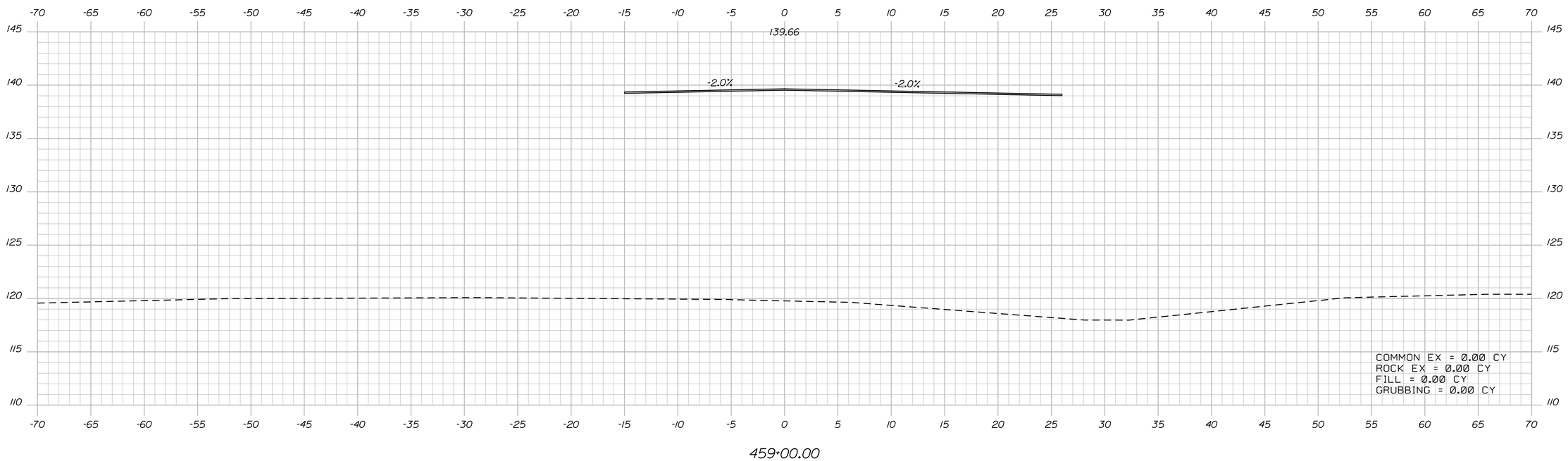
133

OF 283

ROUTE 1 Sta. 458+00.00 to Sta. 458+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

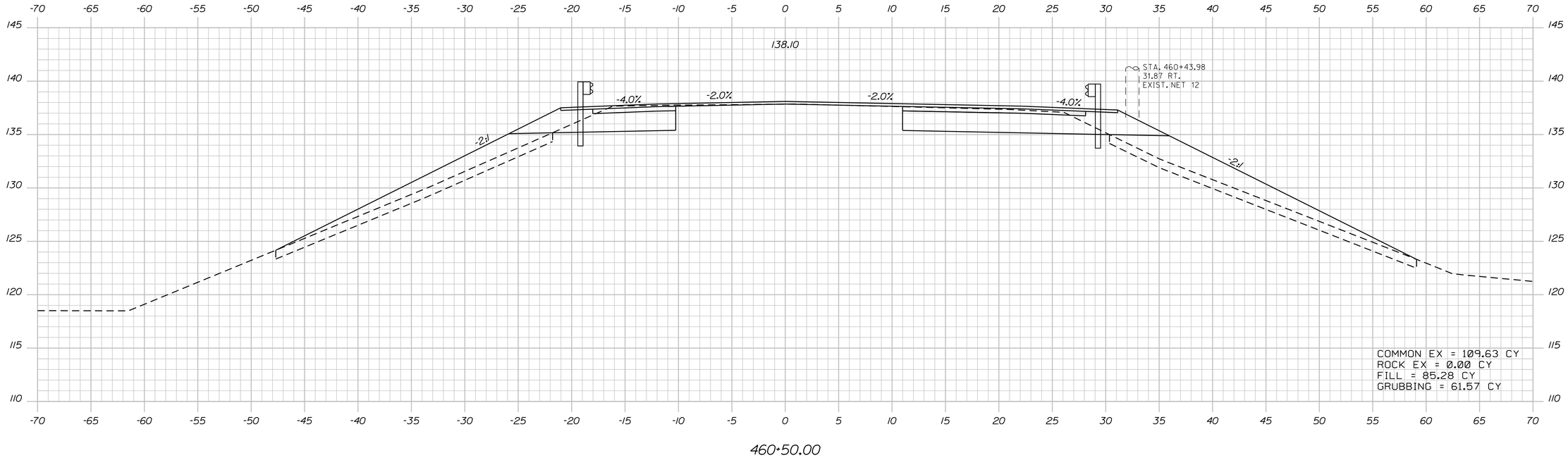
YARMOUTH
I-295 EXIT 15

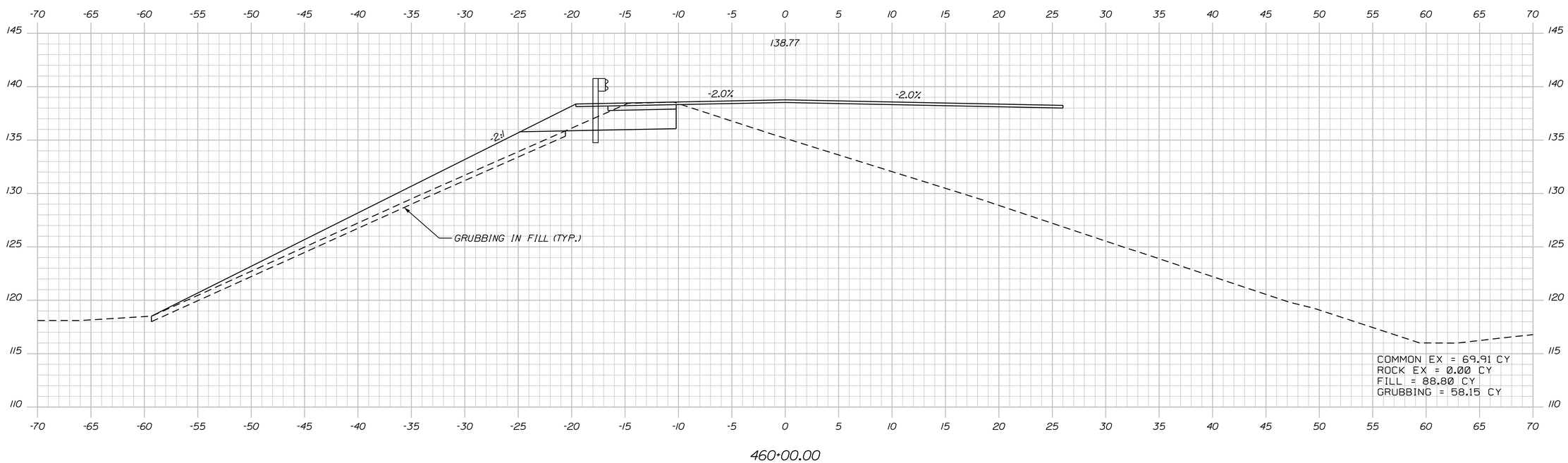
CROSS SECTIONS

SHEET NUMBER
134
OF 283

ROUTE 1 Sta. 459+00.00 to Sta. 459+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

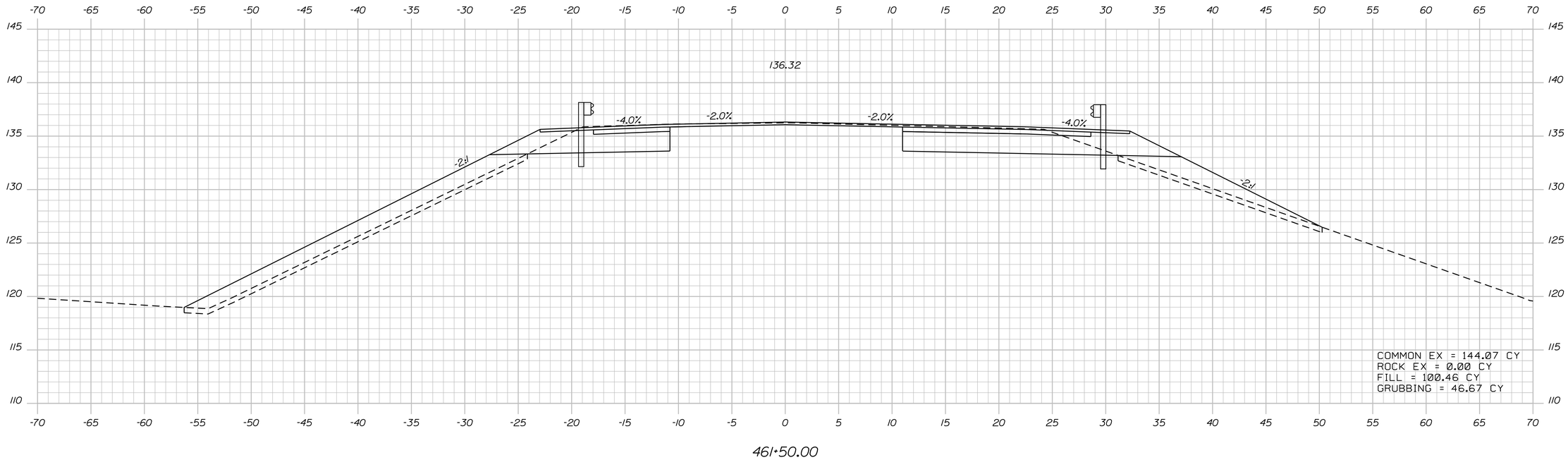
YARMOUTH
I-295 EXIT 15

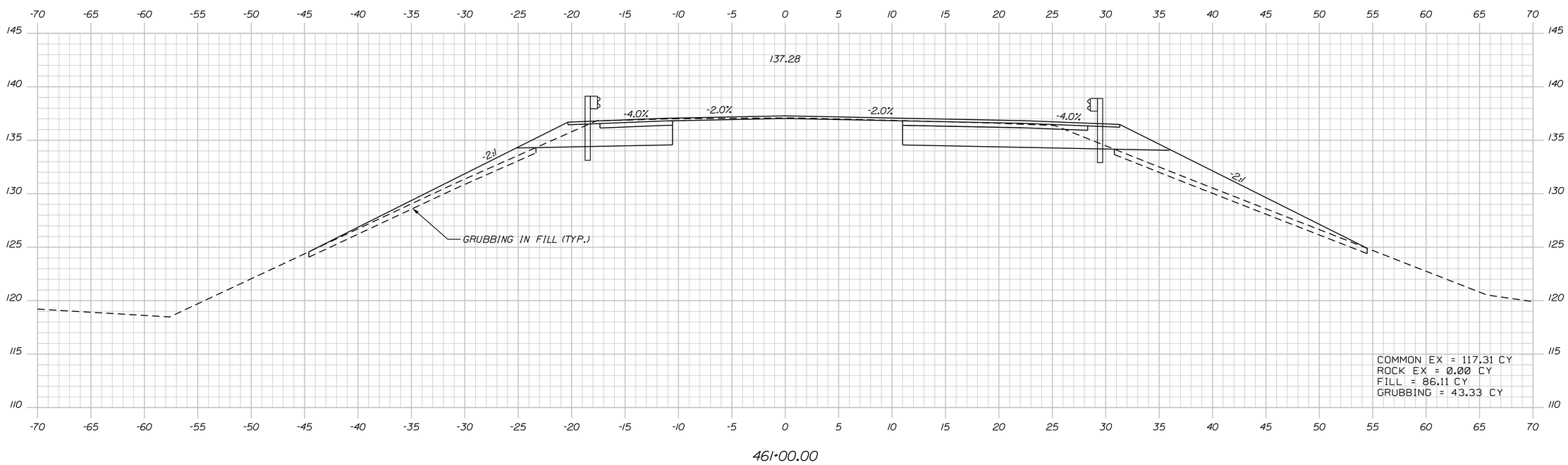
CROSS SECTIONS

SHEET NUMBER
135
OF 283

ROUTE 1 Sta. 460+00.00 to Sta. 460+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

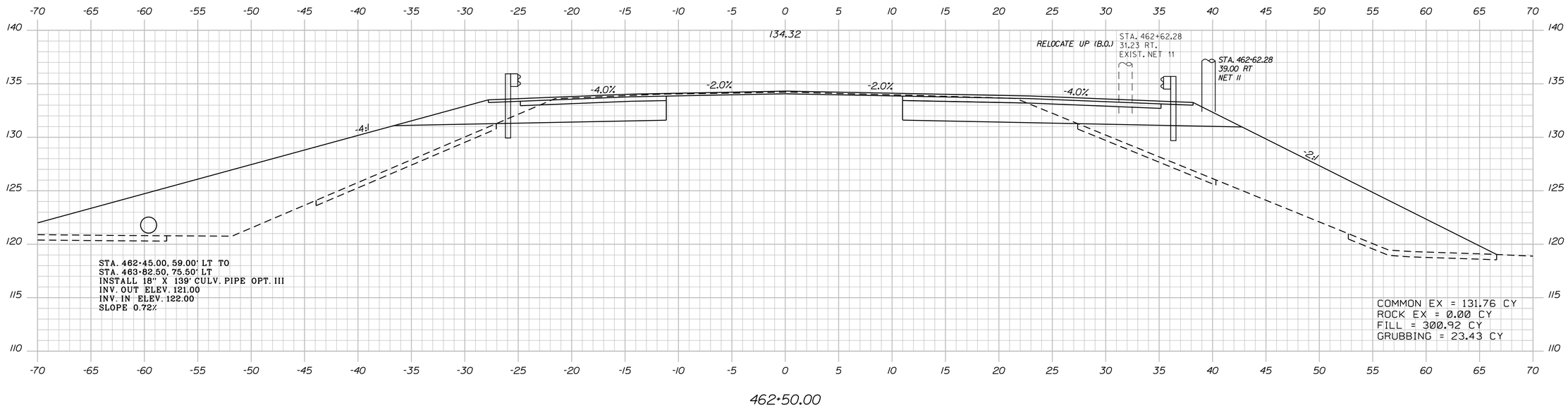
YARMOUTH
I-295 EXIT 15

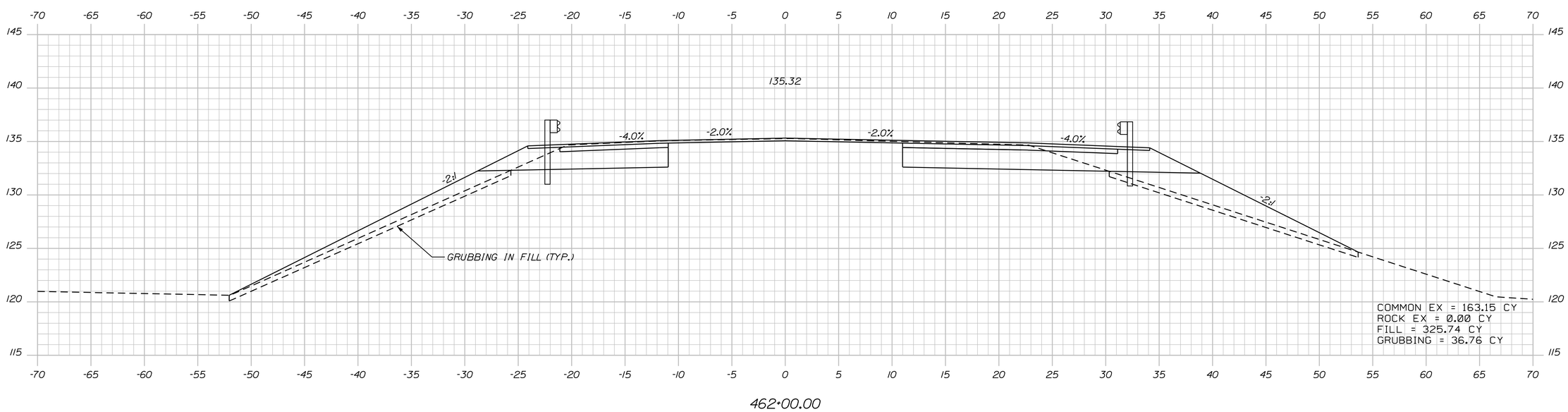
CROSS SECTIONS

SHEET NUMBER
136
OF 283

ROUTE 1 Sta. 461+00.00 to Sta. 461+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

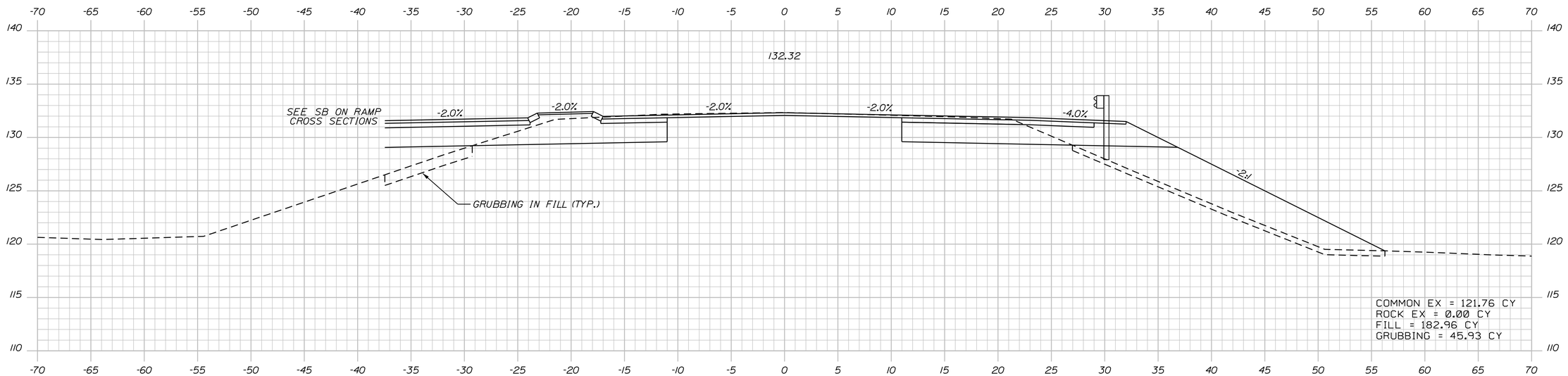
YARMOUTH
I-295 EXIT 15

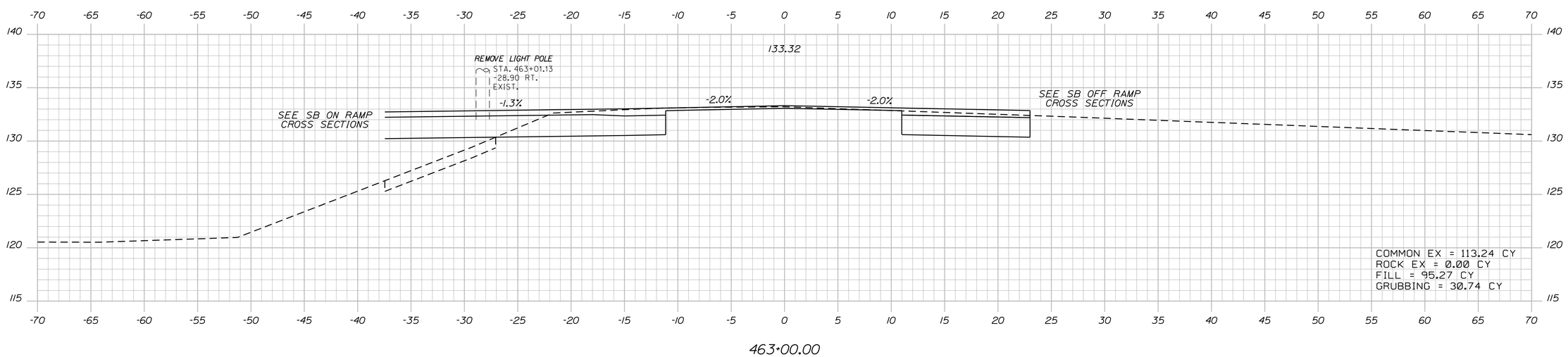
CROSS SECTIONS

SHEET NUMBER
137
OF 283

ROUTE 1 Sta. 462+00.00 to Sta. 462+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

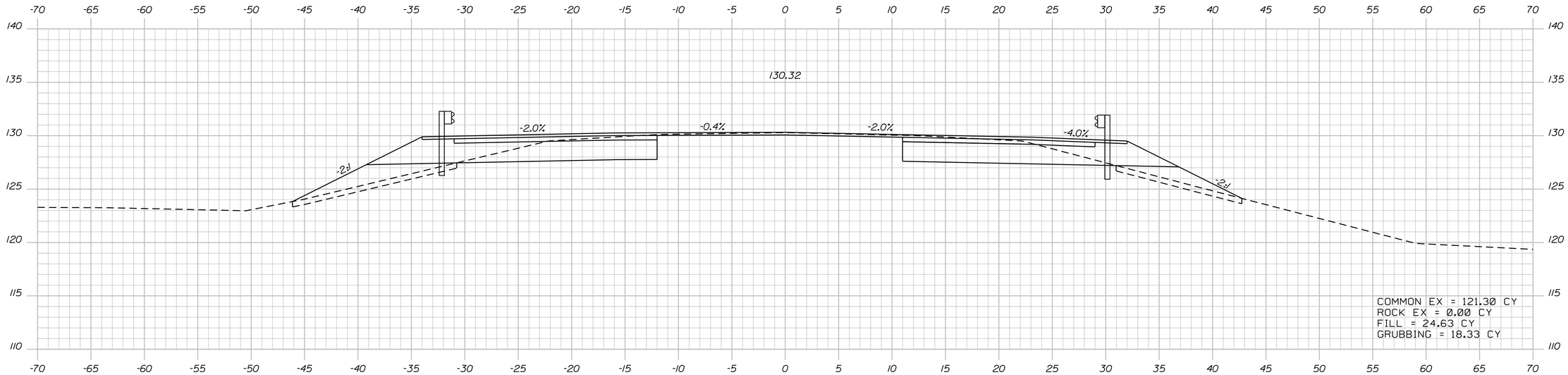
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

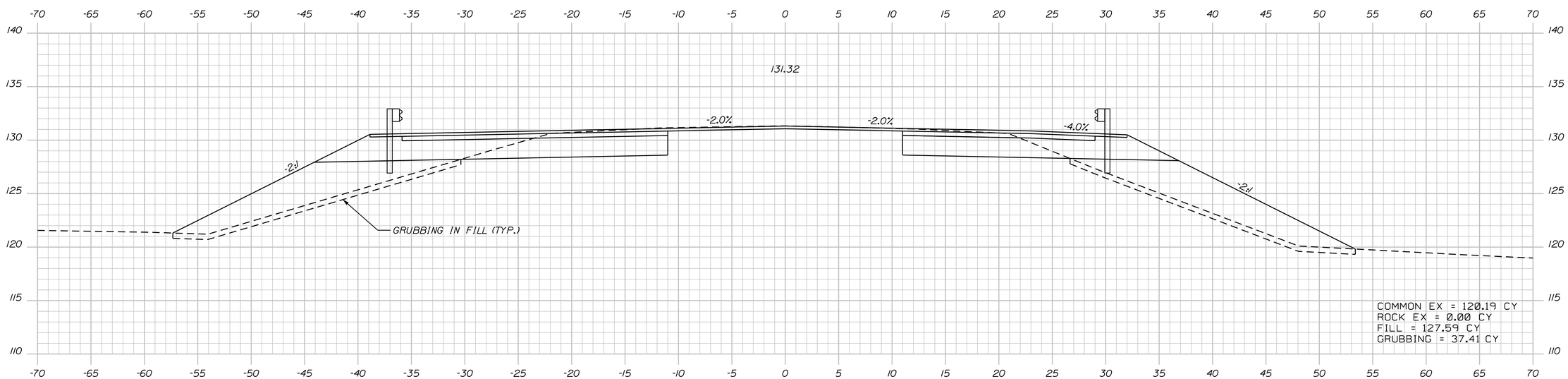
SHEET NUMBER
138
OF 283

ROUTE 1 Sta. 463+00.00 to Sta. 463+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



464+50.00



464+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

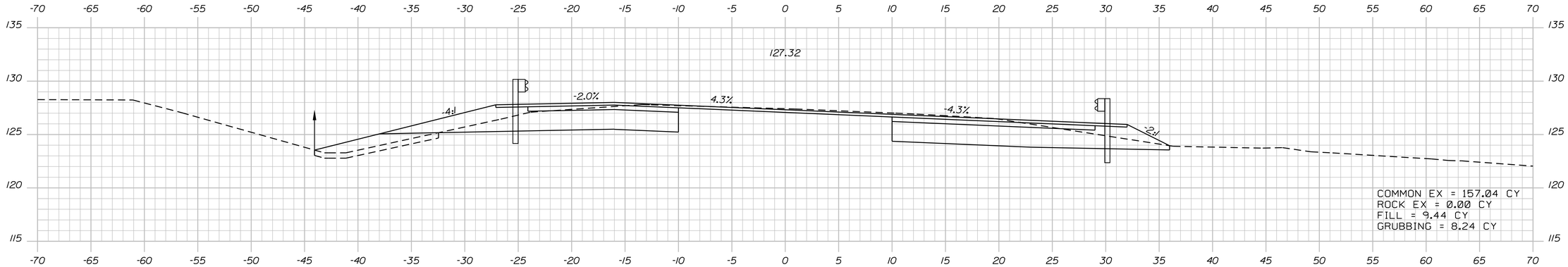
SHEET NUMBER

139

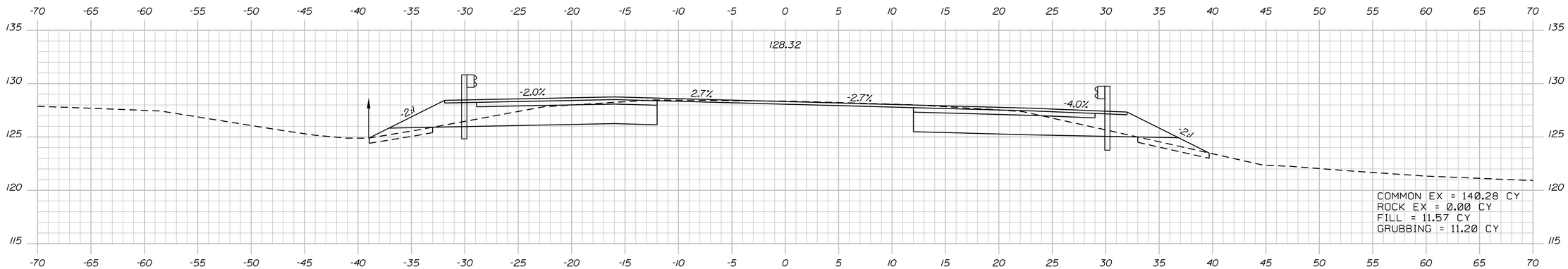
OF 283

ROUTE 1 Sta. 464+00.00 to Sta. 464+50.00

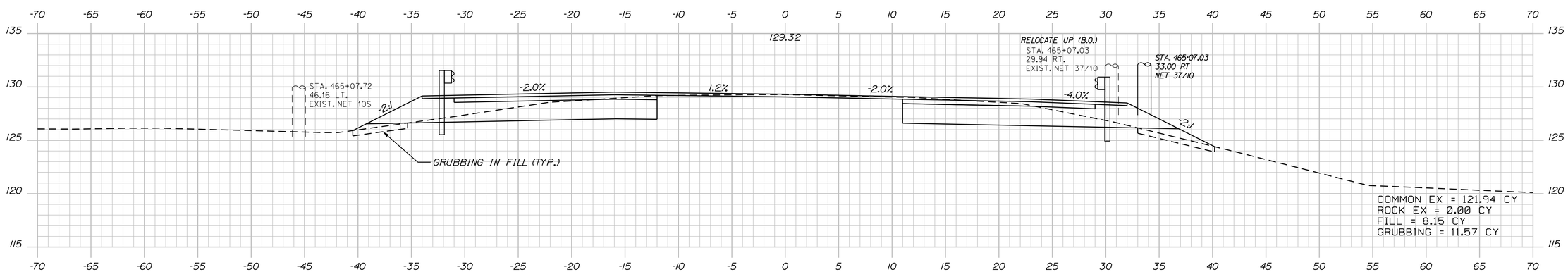
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



466+00.00



465+50.00



465+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

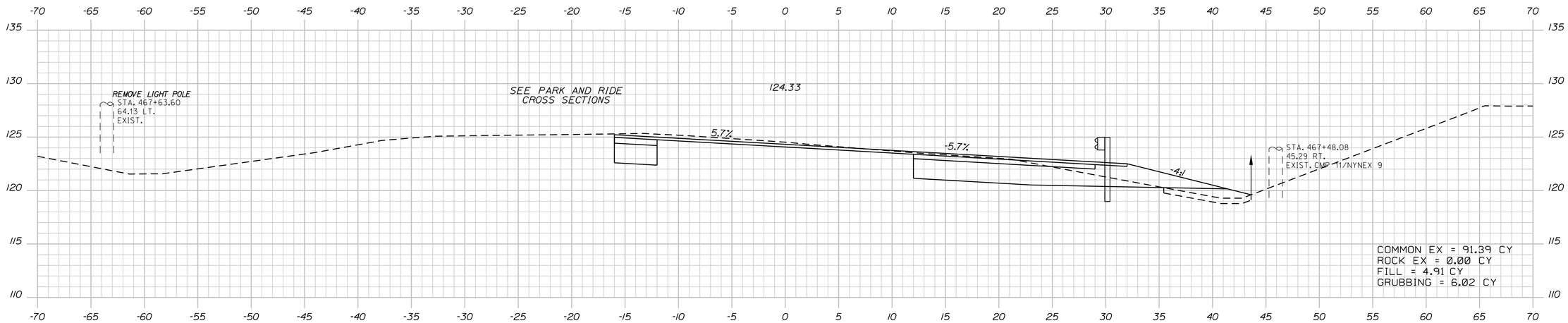
SHEET NUMBER

140

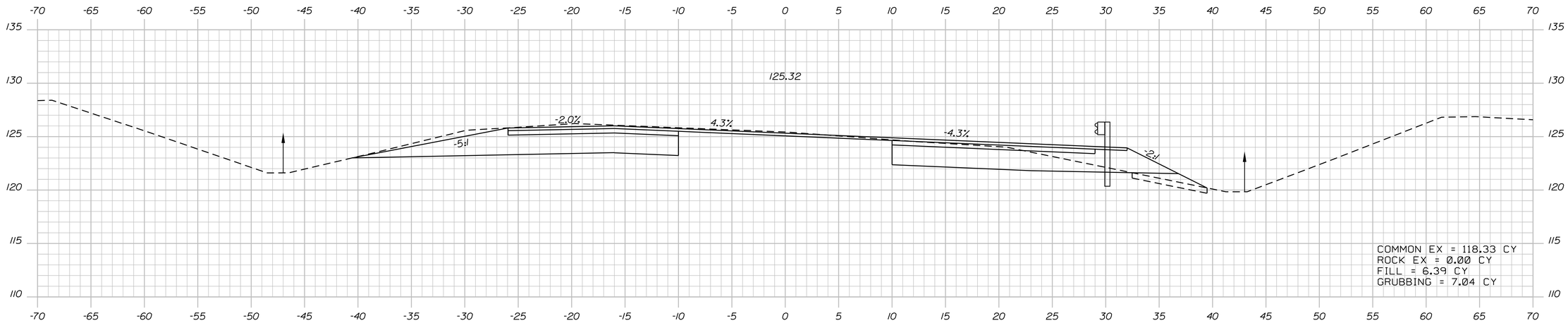
OF 283

ROUTE 1 Sta. 465+00.00 to Sta. 466+00.00

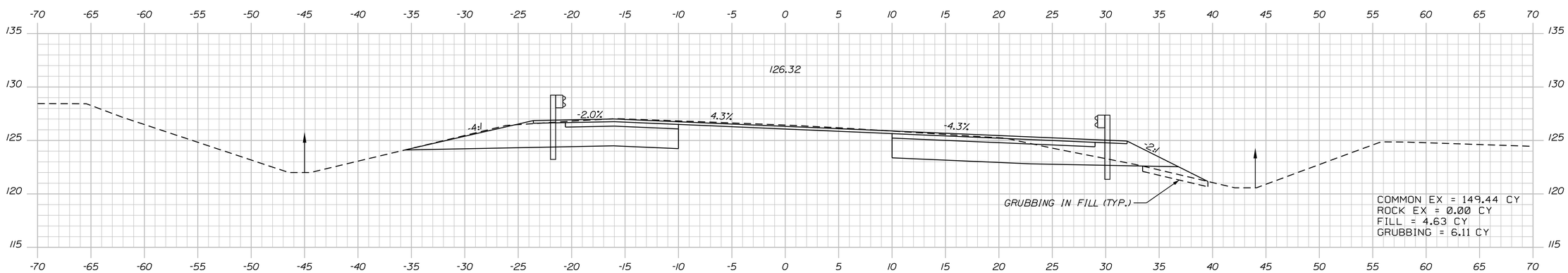
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



467+50.00



467+00.00



466+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER

141

OF 283

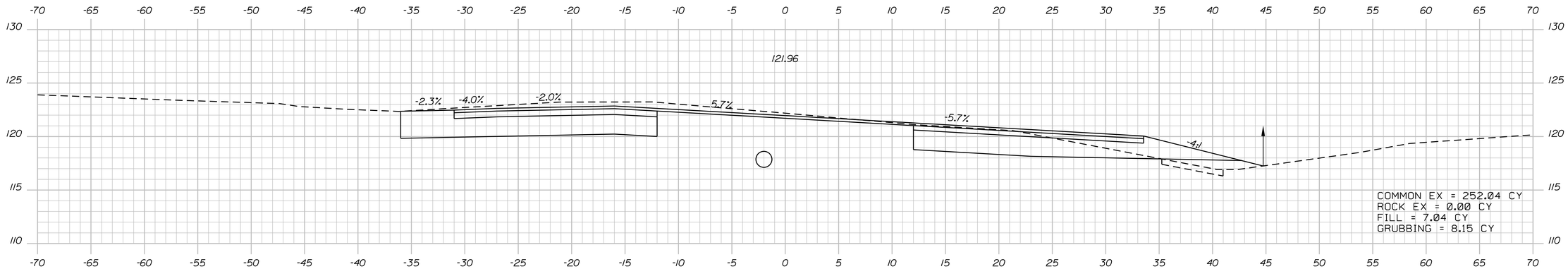
ROUTE 1 Sta. 466+50.00 to Sta. 467+50.00

Date:2/21/2011

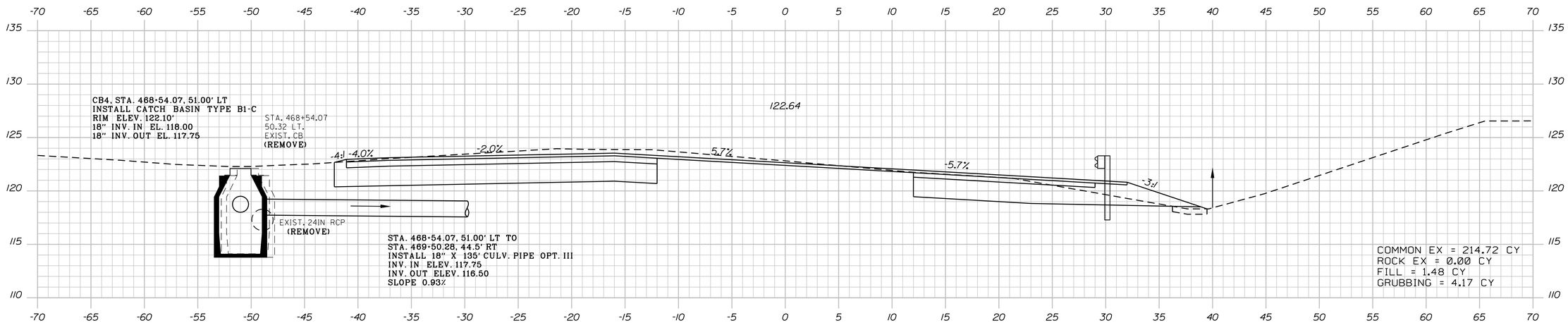
Username: COMMON

Division: HIGHWAY

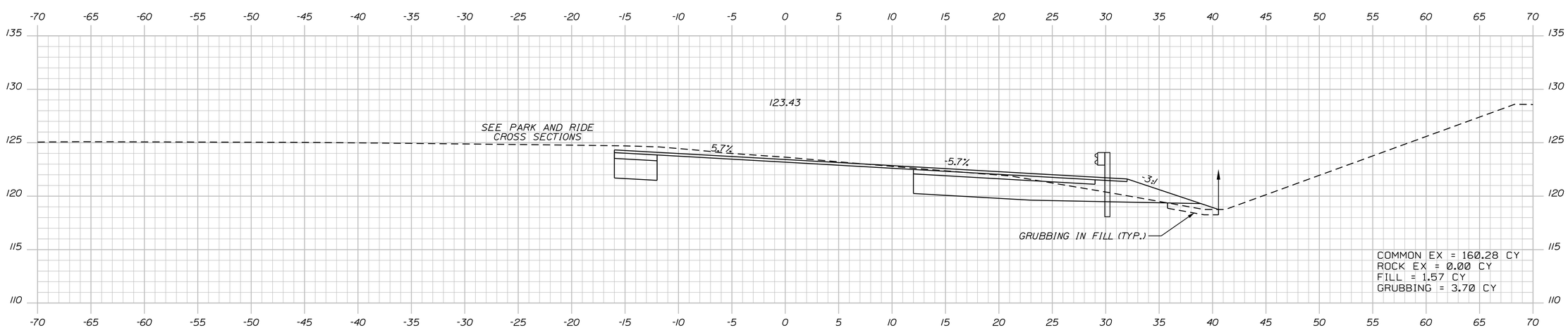
Filename:



469+00.00



468+50.00



468+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

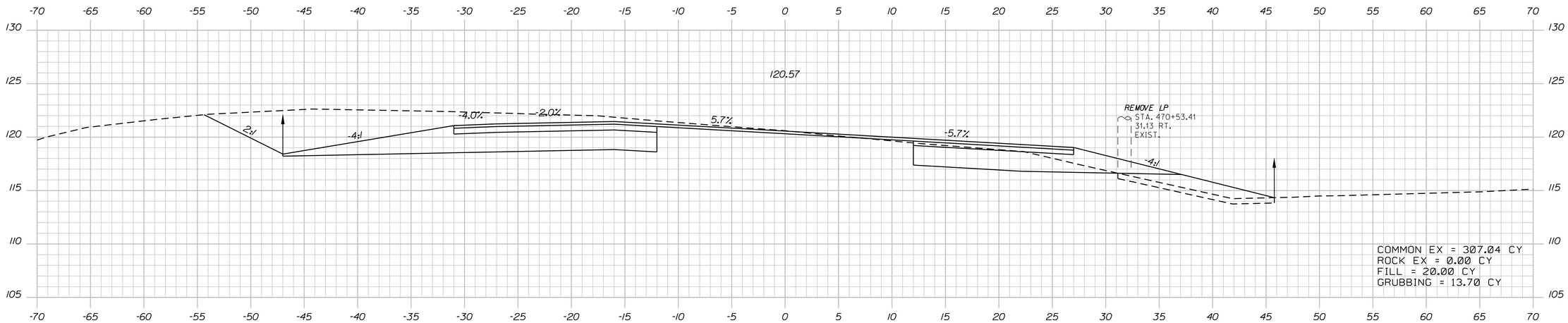
CROSS SECTIONS

SHEET NUMBER

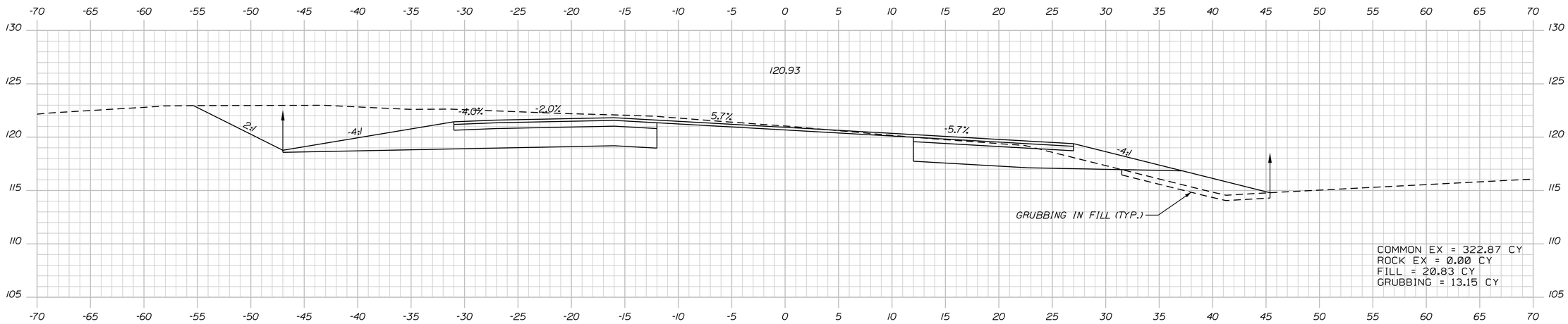
142

OF 283

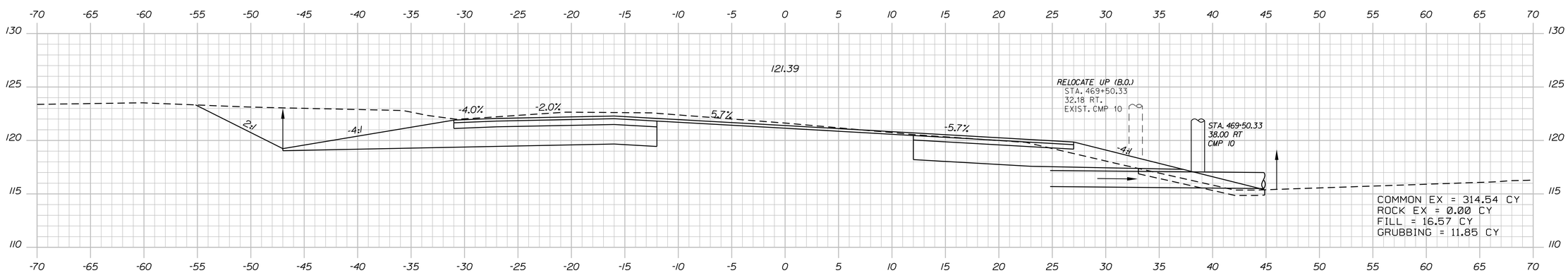
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



470+50.00



470+00.00



469+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

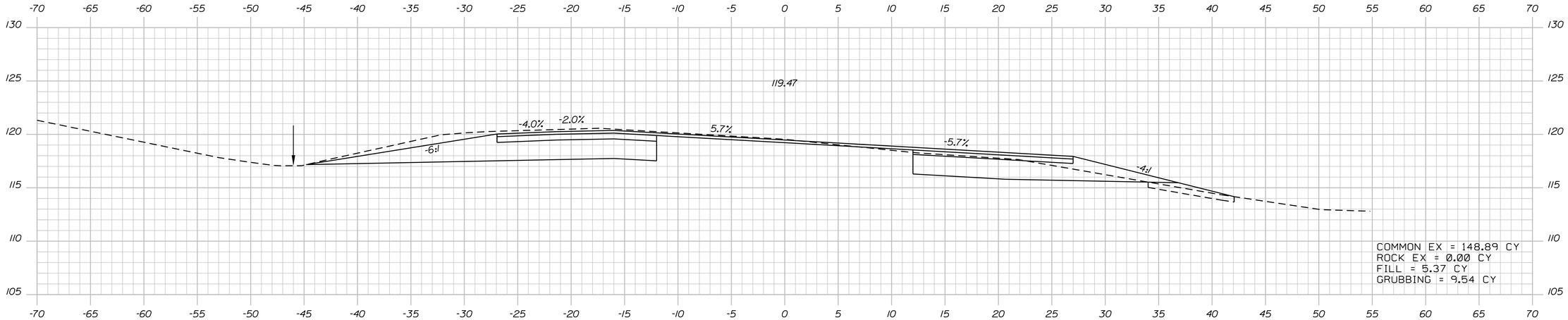
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

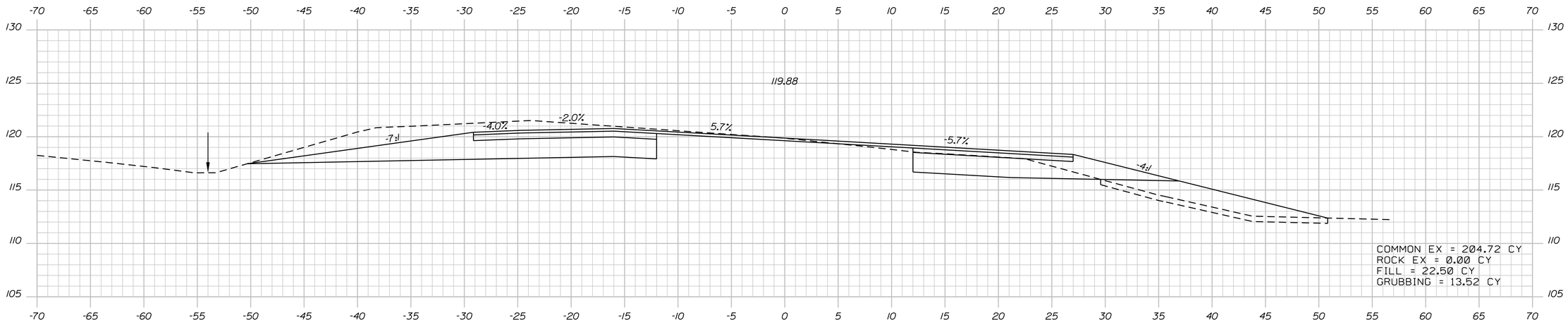
SHEET NUMBER
143
OF 283

ROUTE 1 Sta. 469+50.00 to Sta. 470+50.00

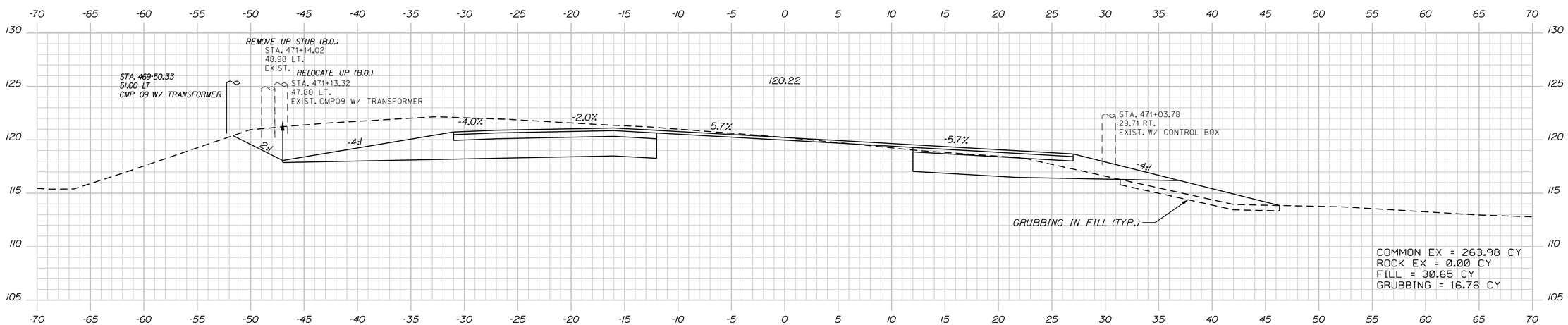
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



472+00.00



471+50.00



471+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

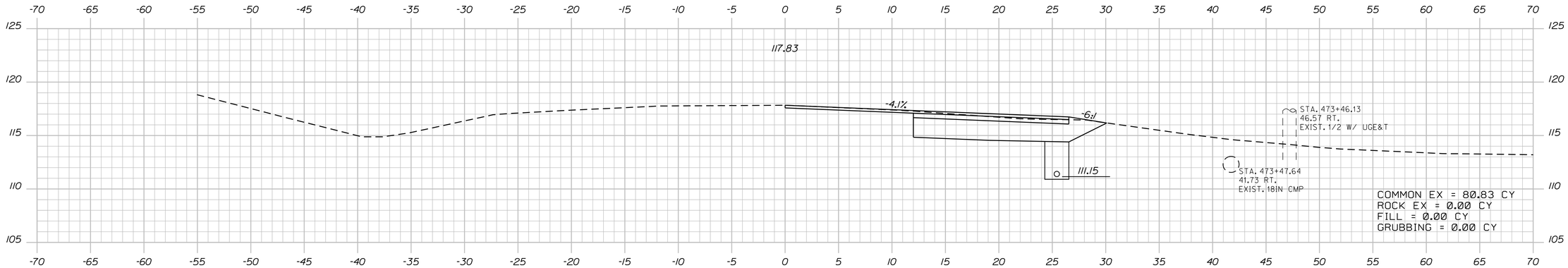
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

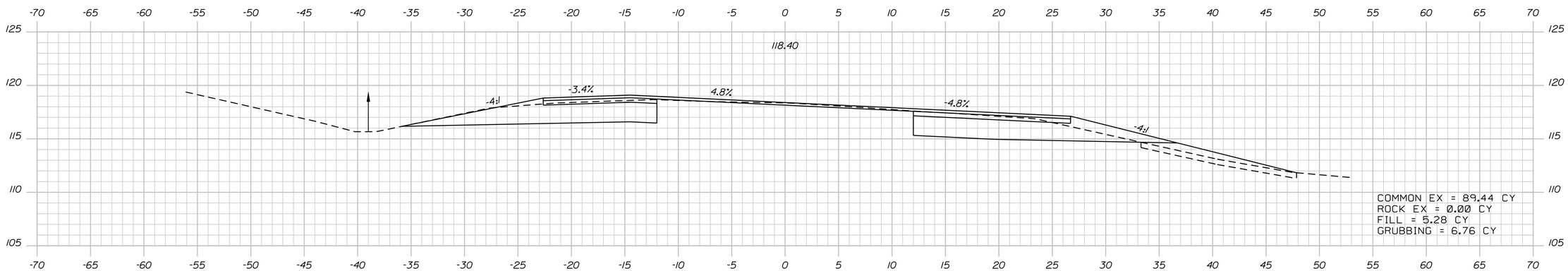
SHEET NUMBER
144
OF 283

ROUTE 1 Sta. 471+00.00 to Sta. 472+00.00

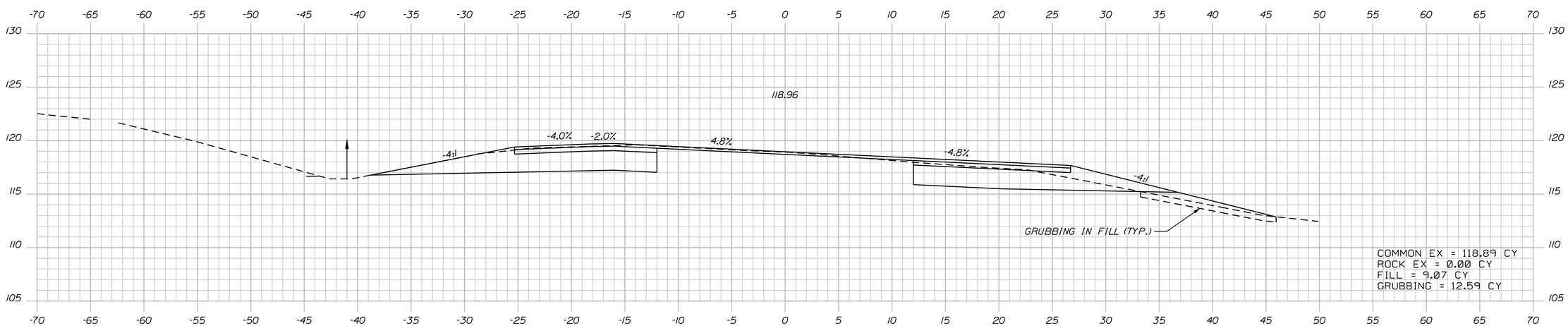
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



473+50.00



473+00.00



472+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

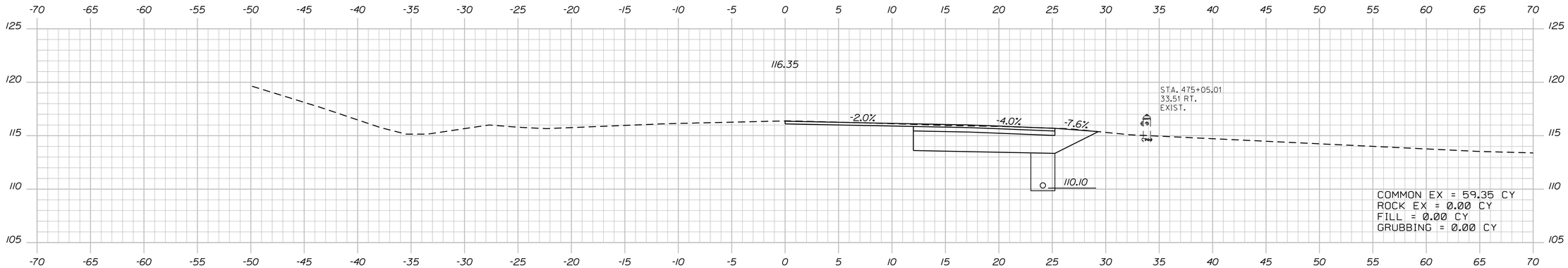
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

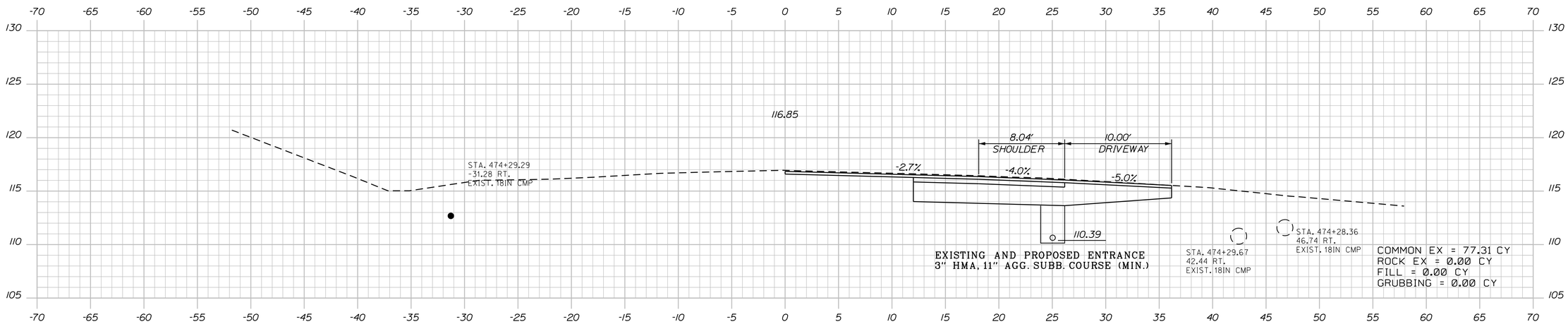
SHEET NUMBER
145
OF 283

ROUTE 1 Sta. 472+50.00 to Sta. 473+50.00

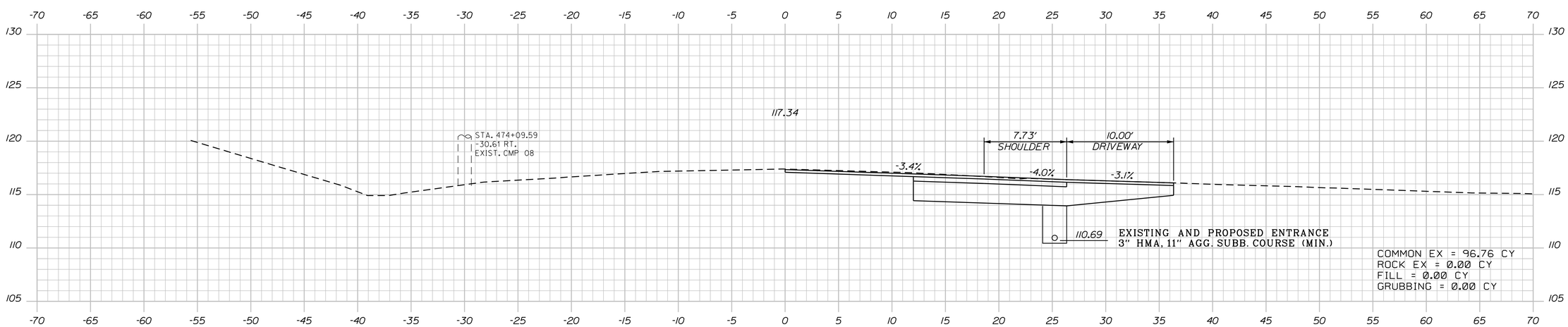
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



475+00.00



474+50.00



474+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

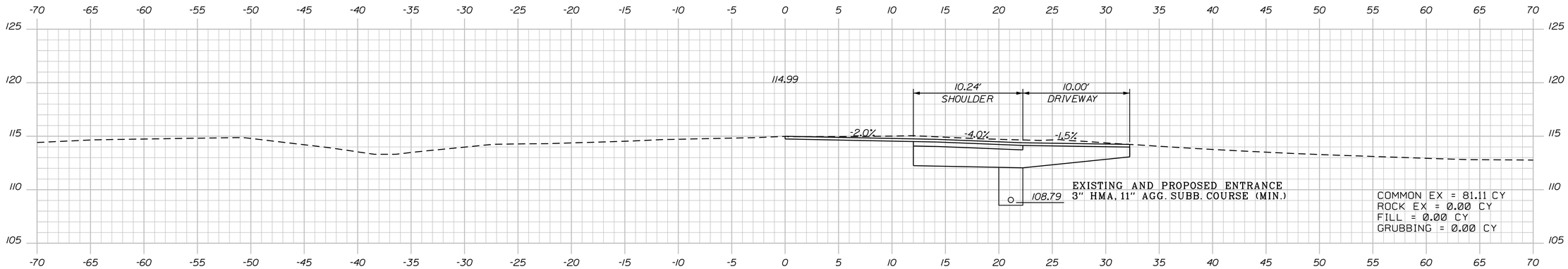
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

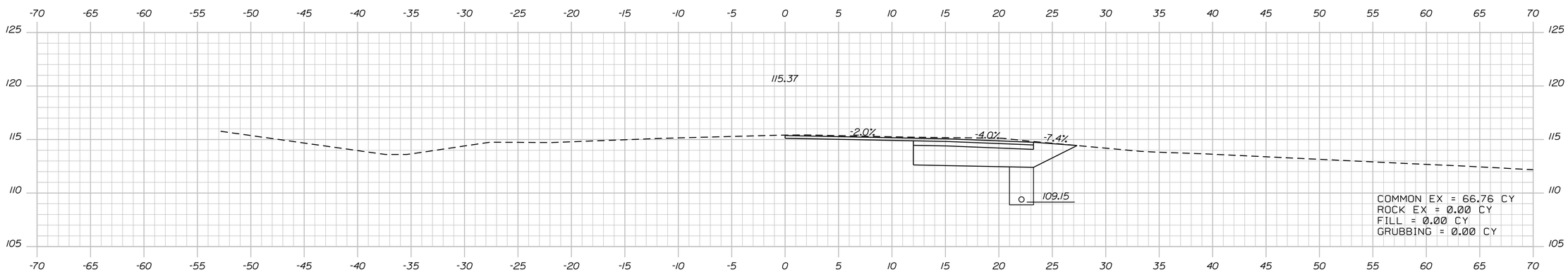
SHEET NUMBER
146
OF 283

ROUTE 1 Sta. 474+00.00 to Sta. 475+00.00

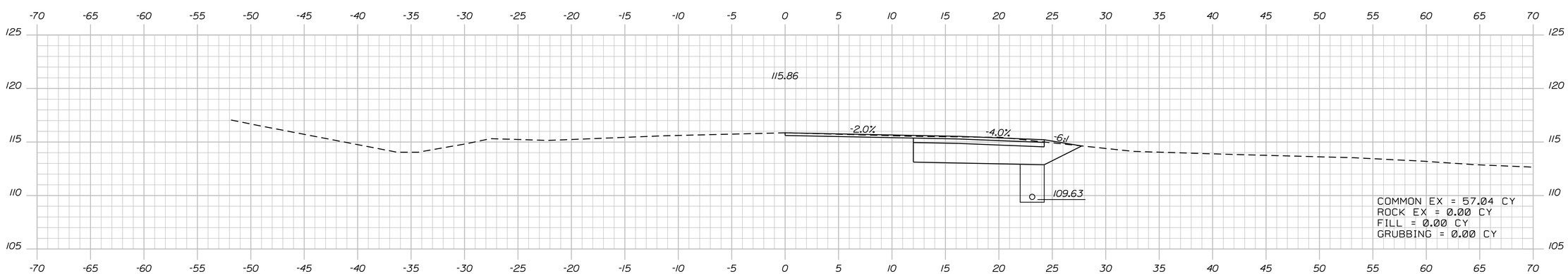
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



476+50.00



476+00.00



475+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

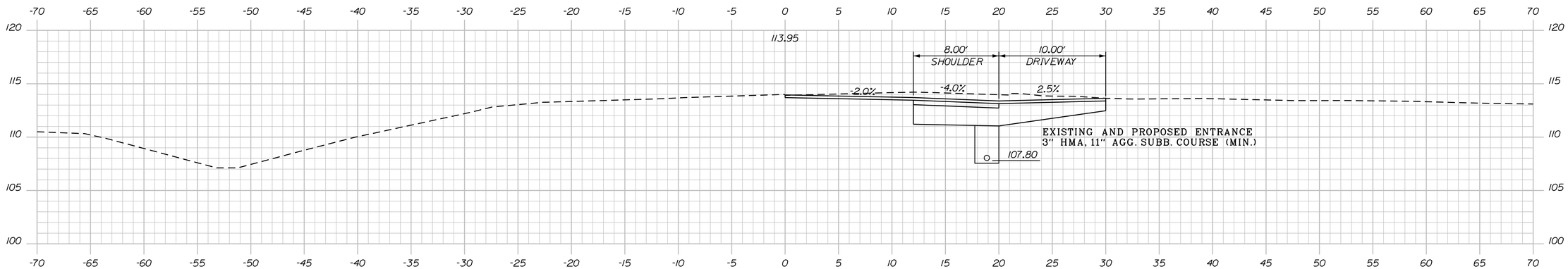
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

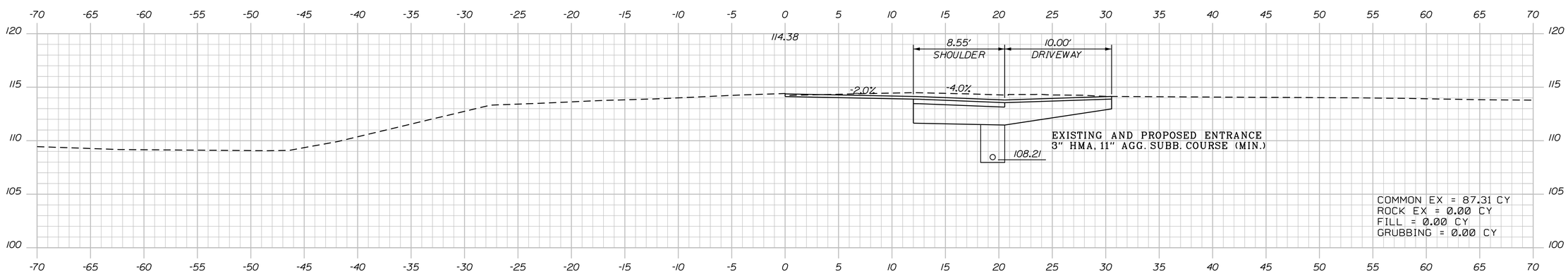
SHEET NUMBER
147
OF 283

ROUTE 1 Sta. 475+50.00 to Sta. 476+50.00

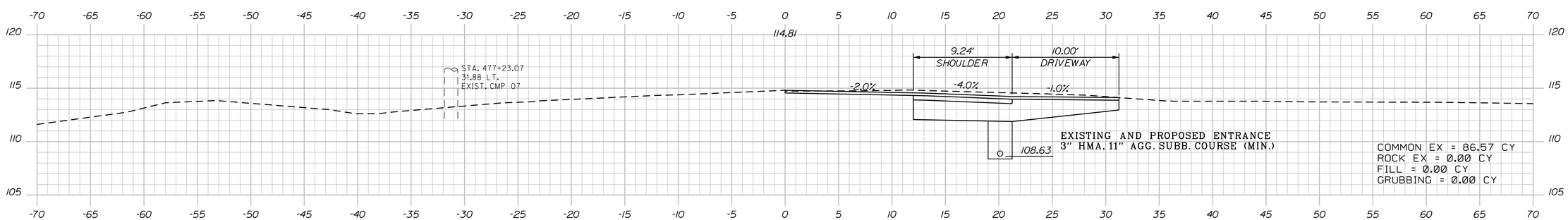
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



477+88.14



477+50.00



477+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

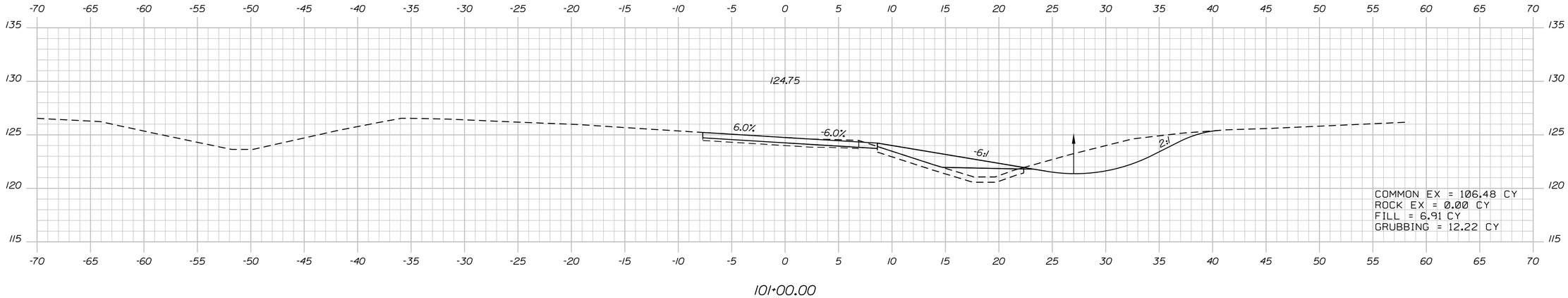
SHEET NUMBER

148

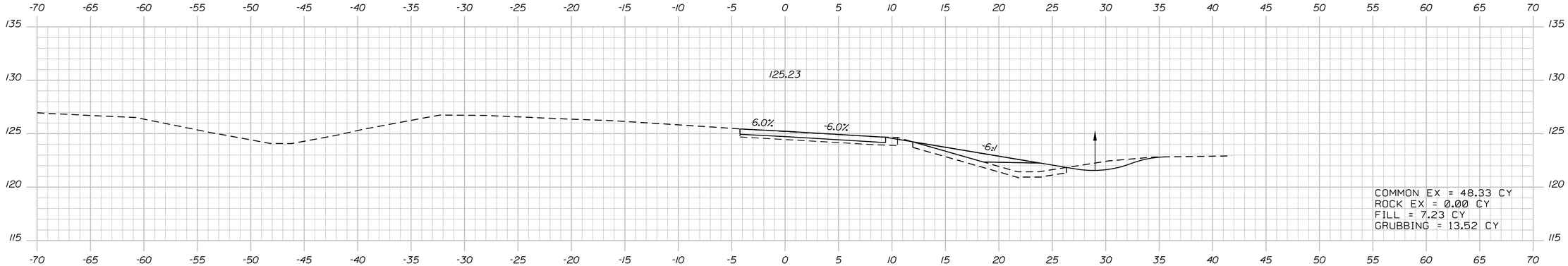
OF 283

ROUTE 1 Sta. 477+00.00 to Sta. 477+88.14

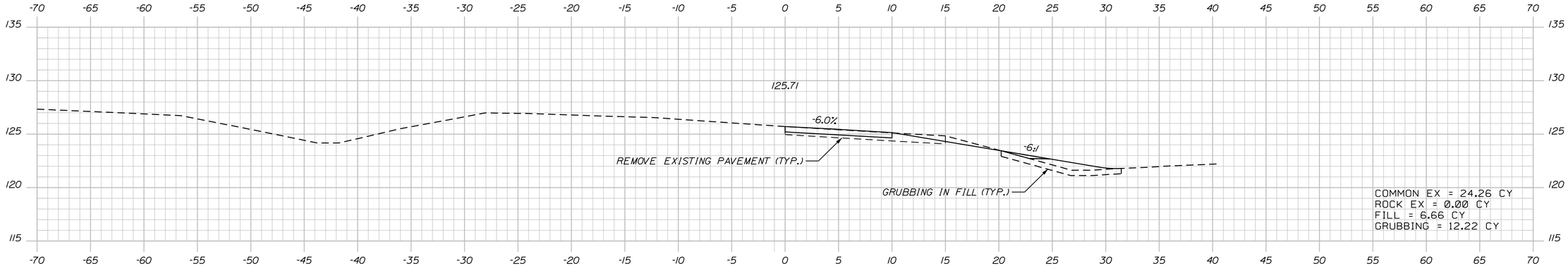
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



101+00.00



100+50.00



100+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

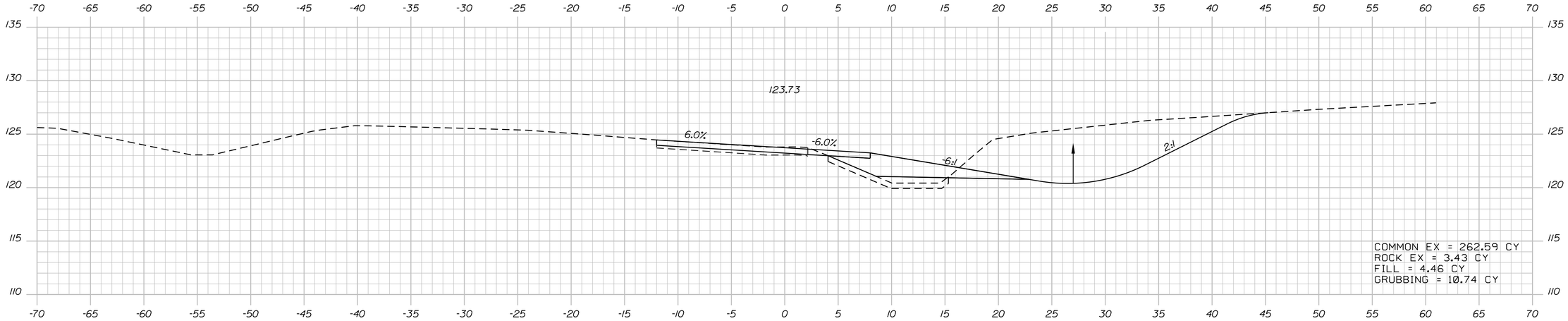
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

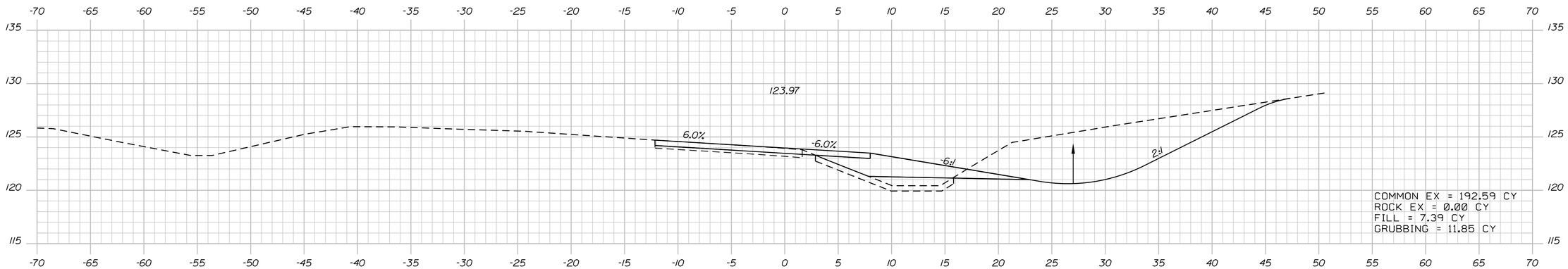
SHEET NUMBER
149
OF 283

Northbound Off Ramp Sta. 100+00.00 to Sta. 101+00.00

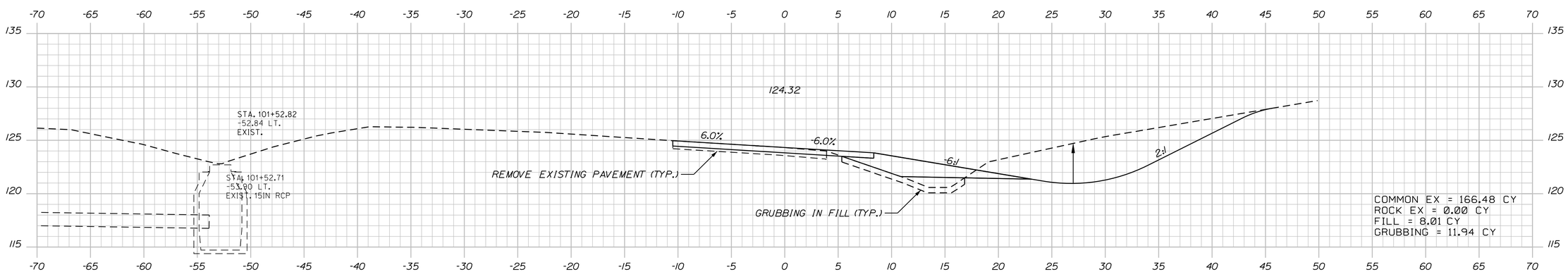
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



102+50.00



102+00.00



101+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

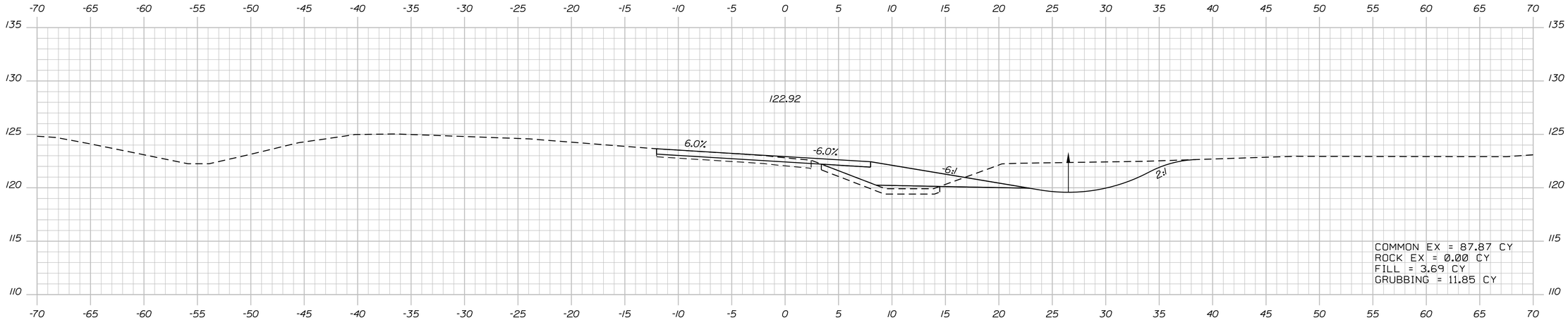
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

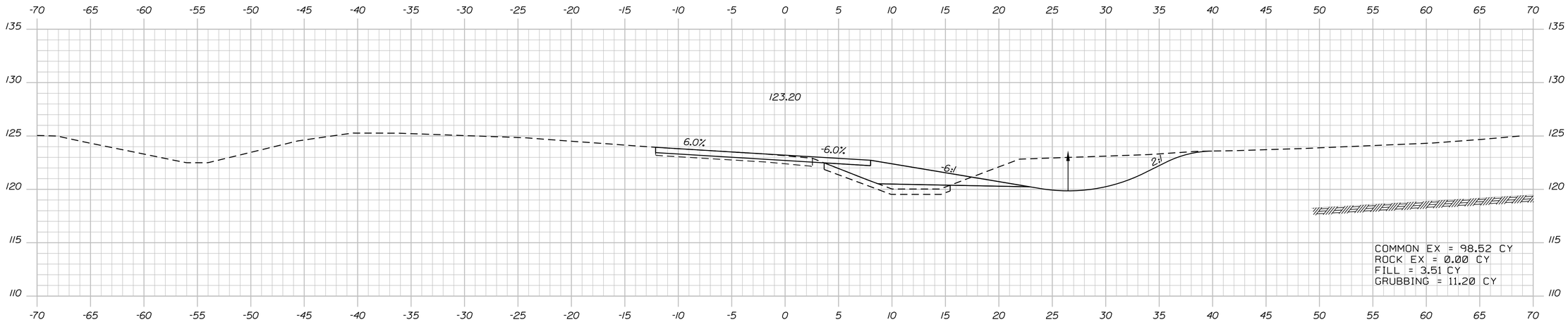
SHEET NUMBER
150
OF 283

Northbound Off Ramp Sta. 101+50.00 to Sta. 102+50.00

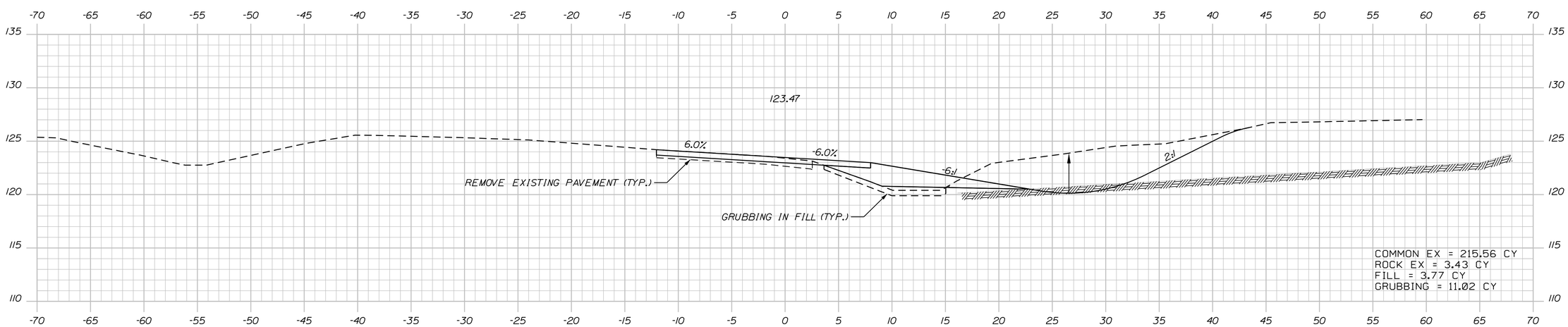
Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



104+00.00



103+50.00



103+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

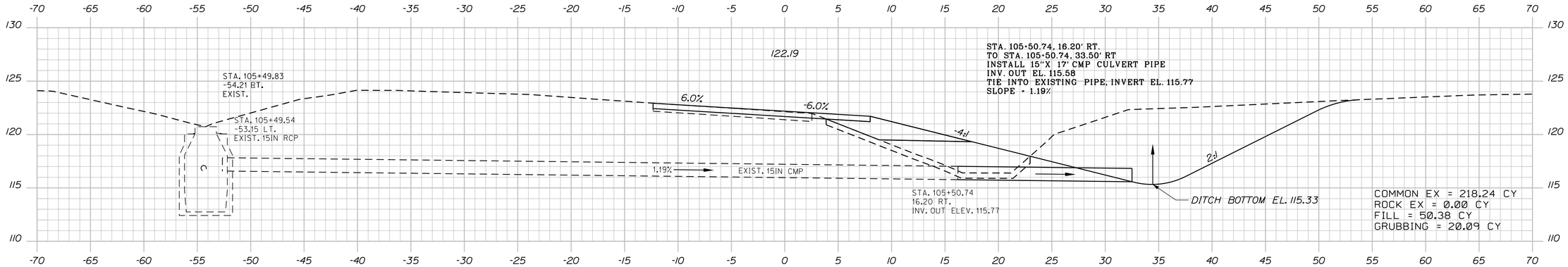
CROSS SECTIONS

SHEET NUMBER
151
OF 283

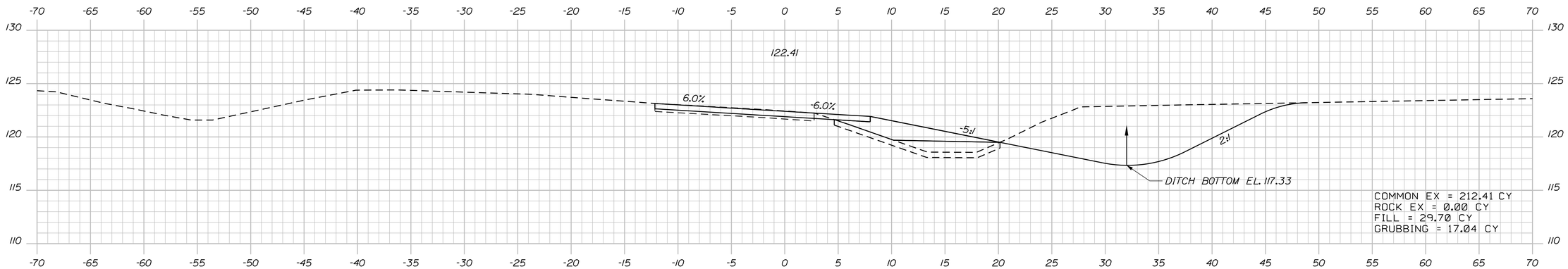
Northbound Off Ramp Sta. 103+00.00 to Sta. 104+00.00

Division: HIGHWAY Username: COMMON Date:2/21/2011

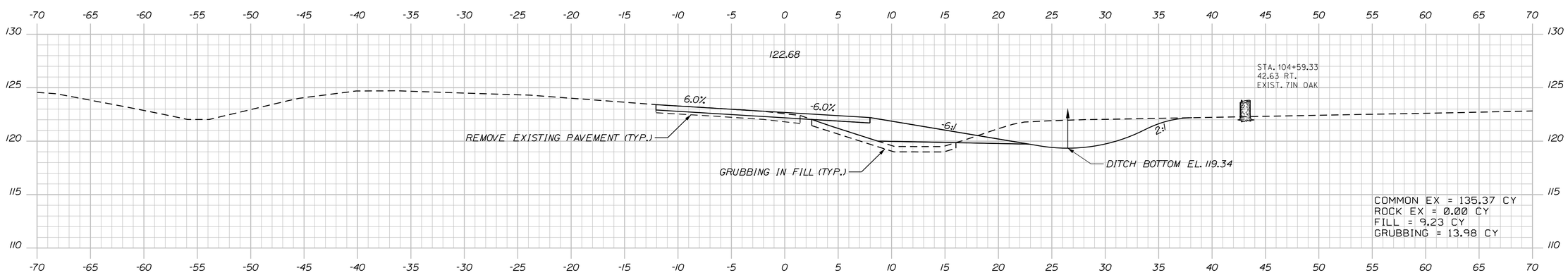
Filename:



105+50.00



105+00.00



104+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

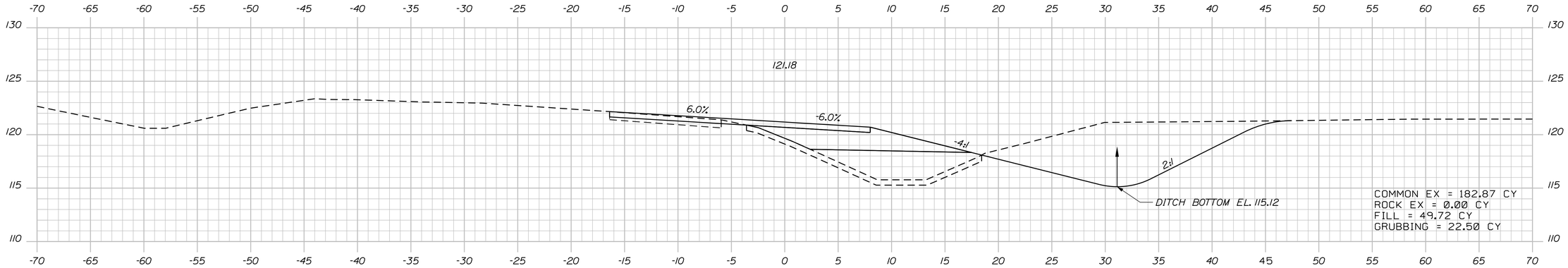
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

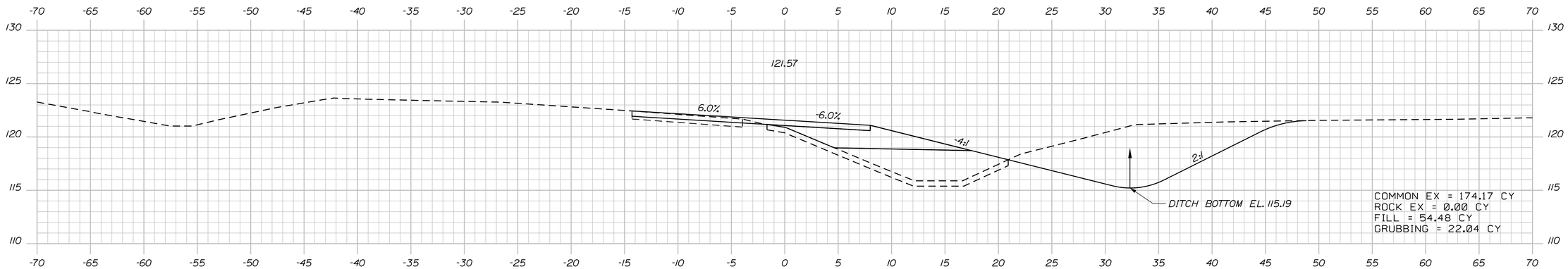
SHEET NUMBER
152
OF 283

Northbound Off Ramp Sta. 104+50.00 to Sta. 105+50.00

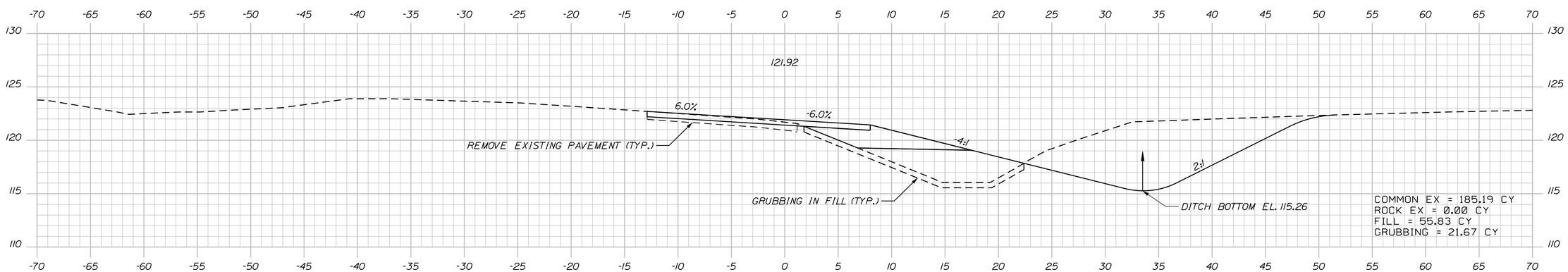
Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



107+00.00



106+50.00



106+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

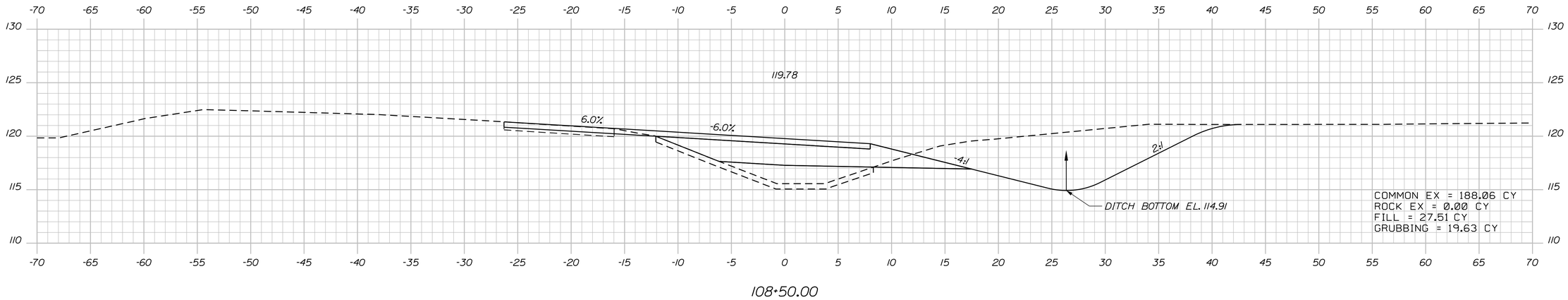
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

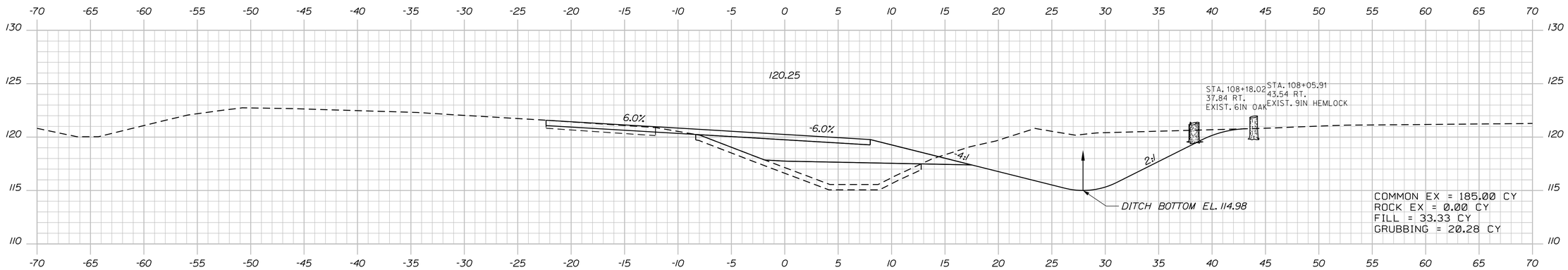
SHEET NUMBER
153
OF 283

Northbound Off Ramp Sta. 106+00.00 to Sta. 107+00.00

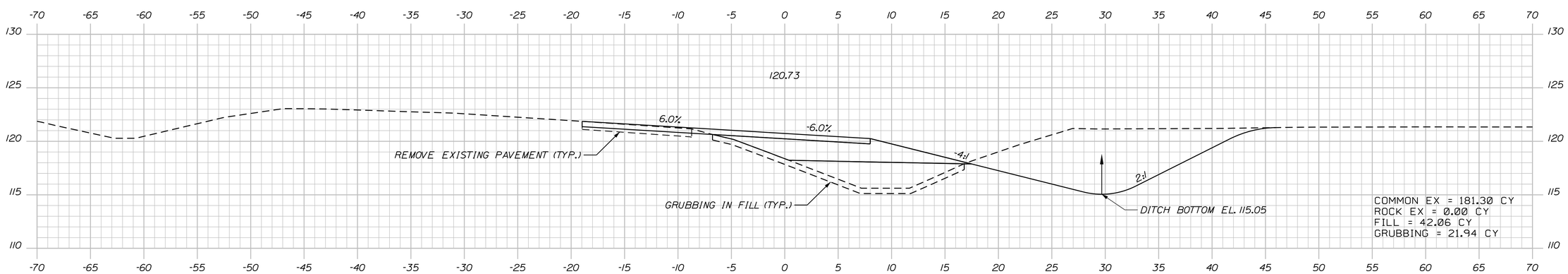
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



108+50.00



108+00.00



107+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

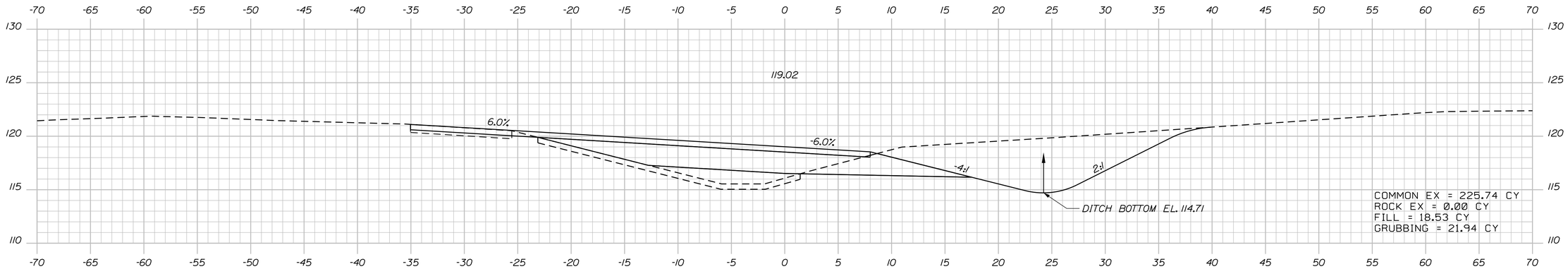
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

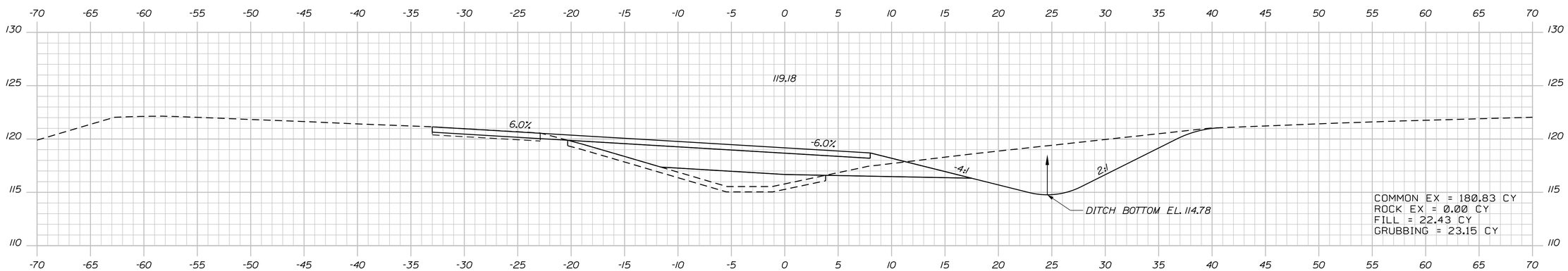
SHEET NUMBER
154
OF 283

Northbound Off Ramp Sta. 107+50.00 to Sta. 108+50.00

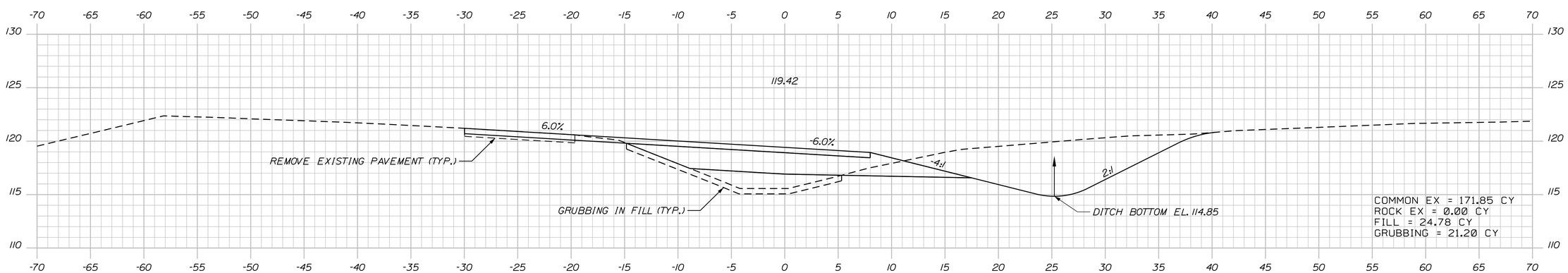
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



110+00.00



109+50.00



109+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

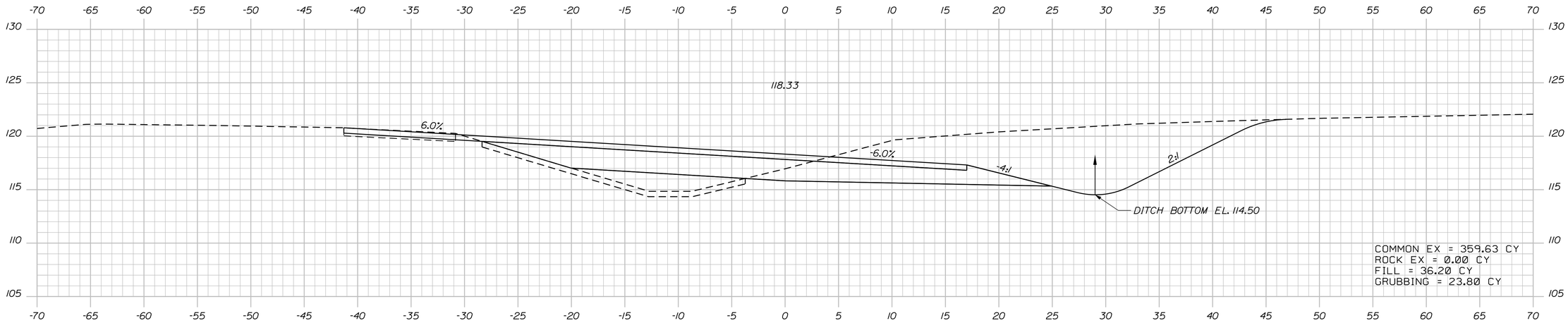
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

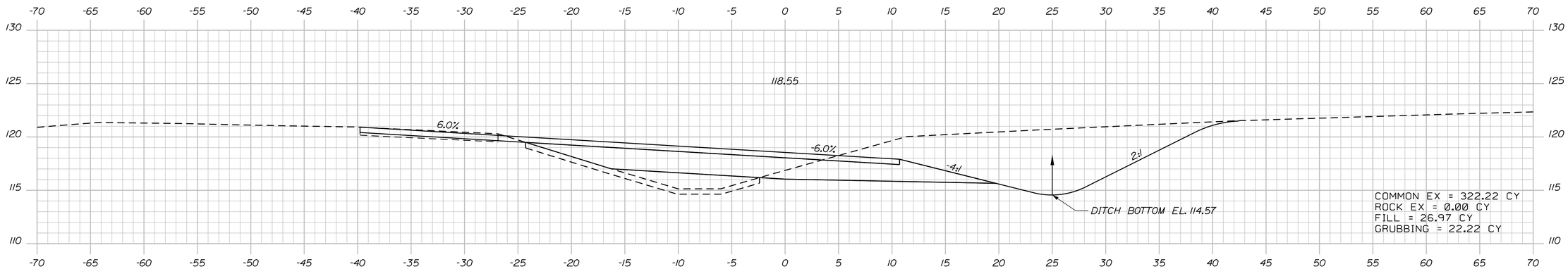
SHEET NUMBER
155
OF 283

Northbound Off Ramp Sta. 109+00.00 to Sta. 110+00.00

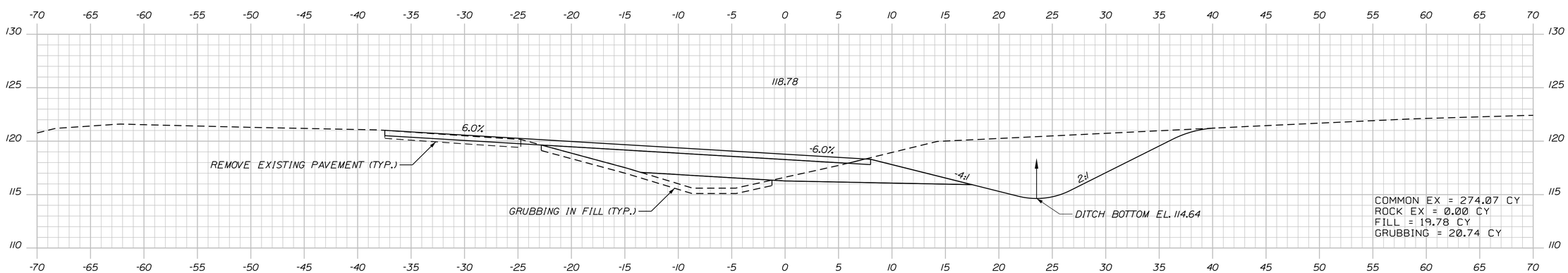
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



111+50.00



111+00.00



110+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

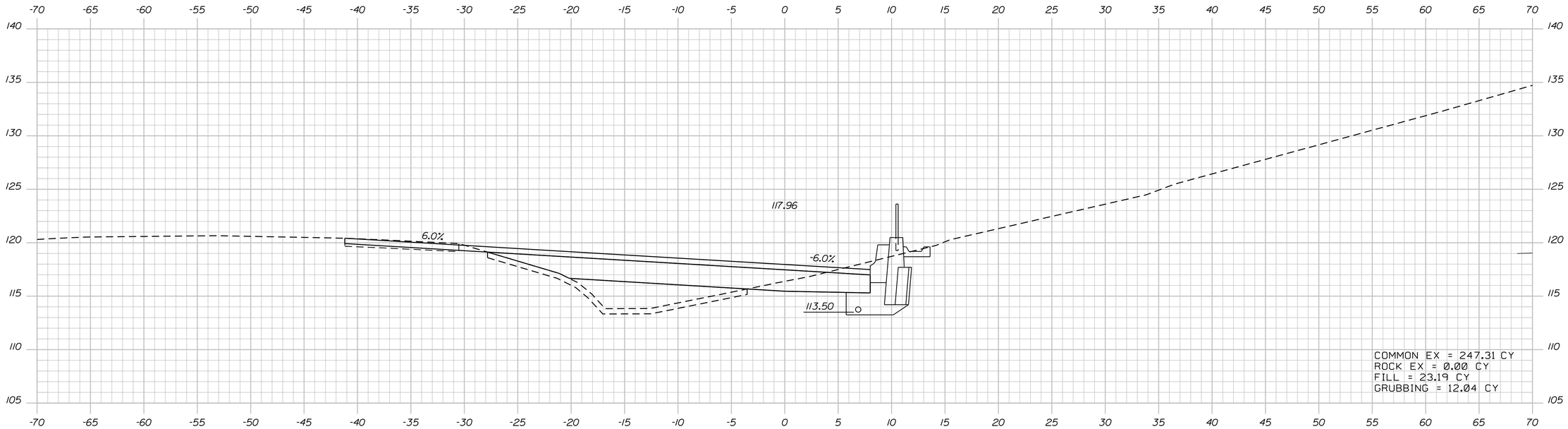
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

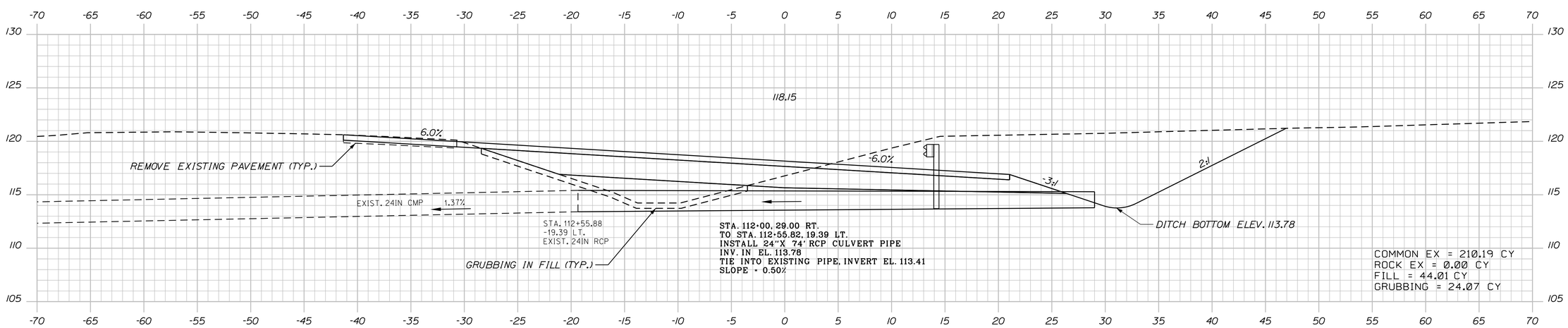
SHEET NUMBER
156
OF 283

Northbound Off Ramp Sta. 110+50.00 to Sta. 111+50.00

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



112+50.00



112+00.00

Northbound Off Ramp Sta. 112+00.00 to Sta. 112+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

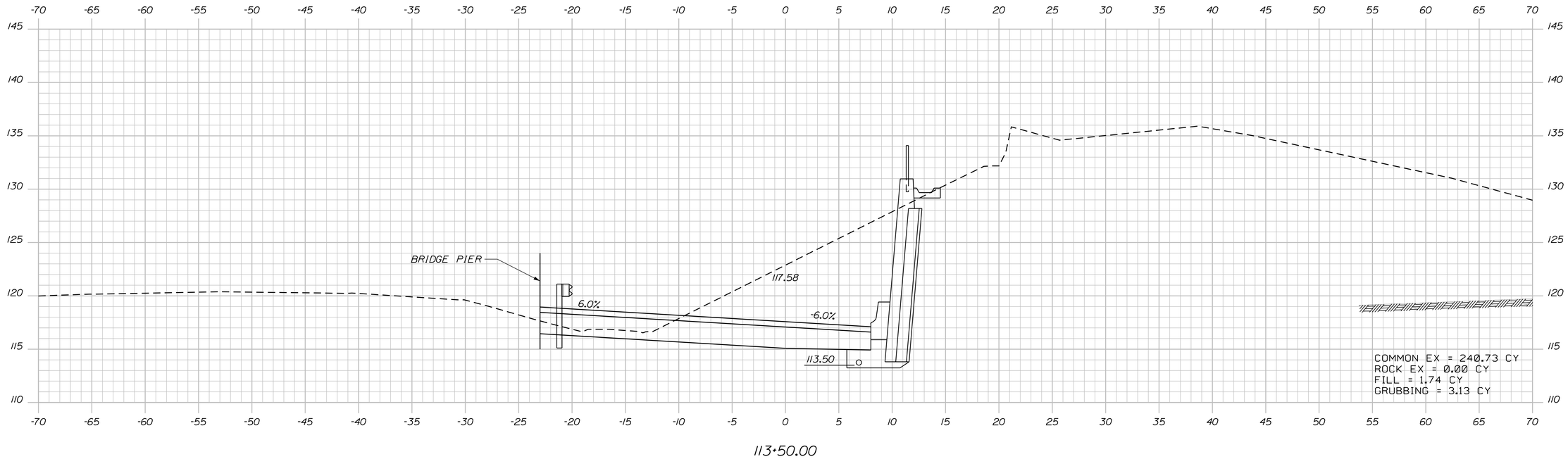
YARMOUTH
I-295 EXIT 15

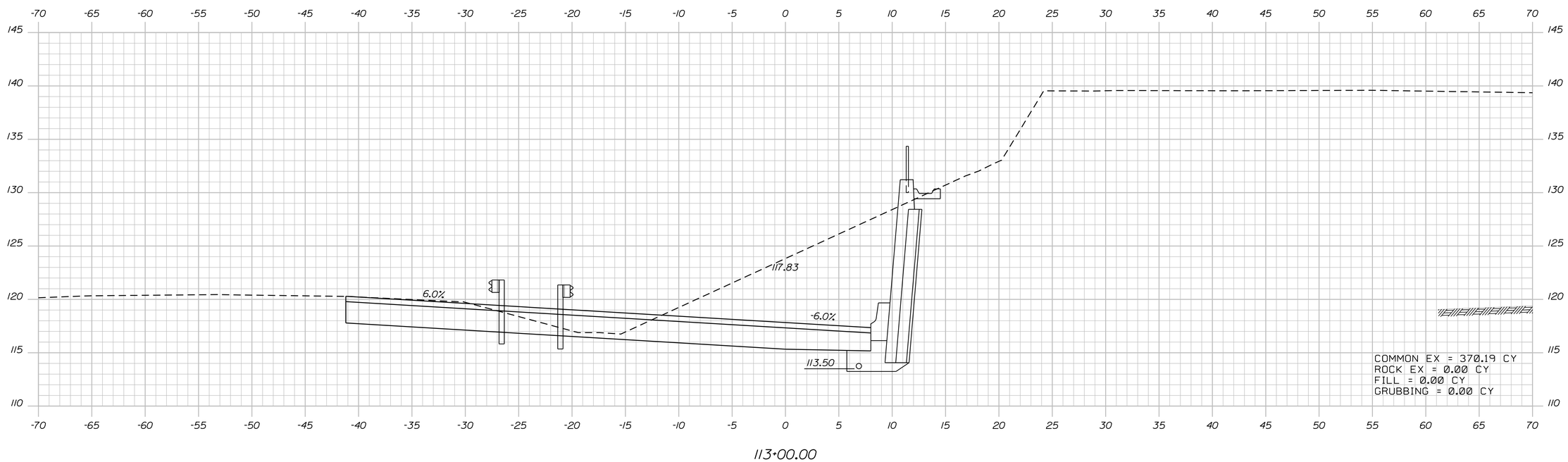
CROSS SECTIONS

SHEET NUMBER
157
OF 283

Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename:





Northbound Off Ramp Sta. 113+00.00 to Sta. 113+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

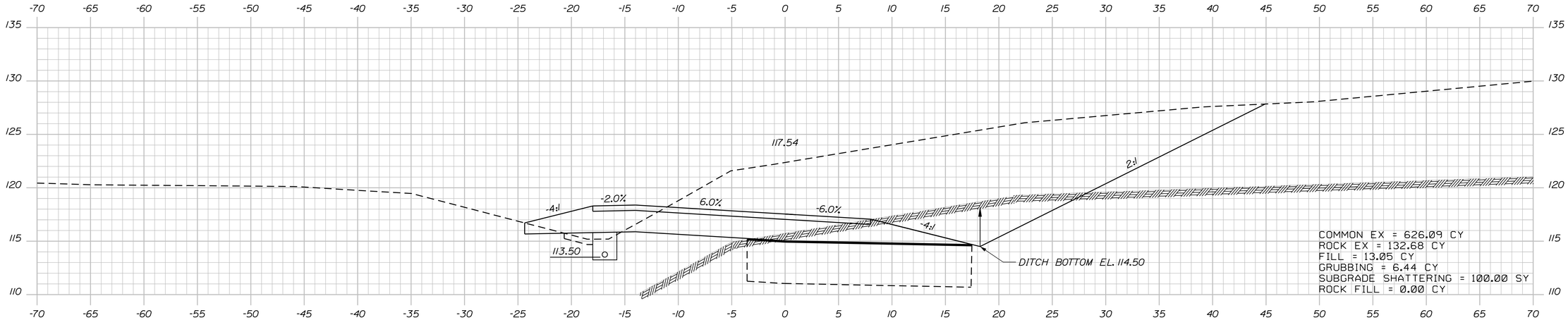
DATE

YARMOUTH
I-295 EXIT 15

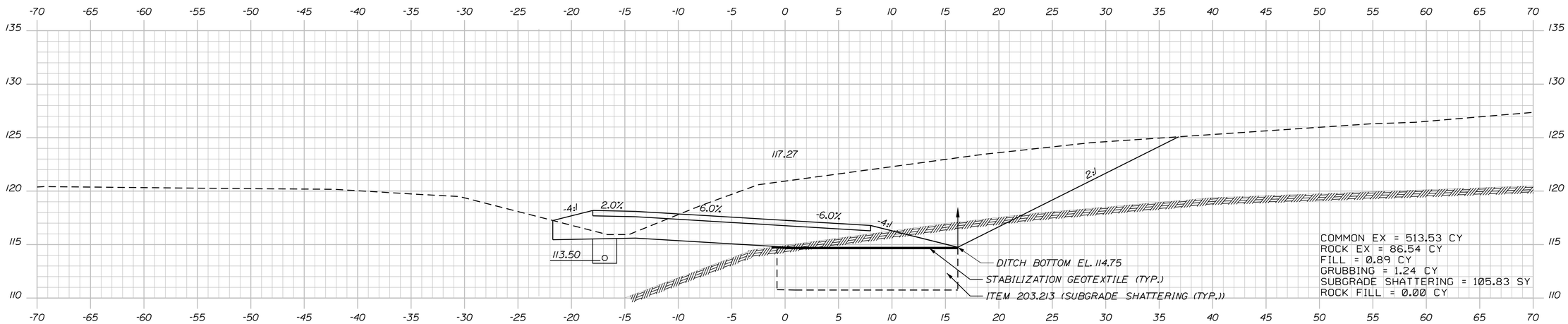
CROSS SECTIONS

SHEET NUMBER
158
OF 283

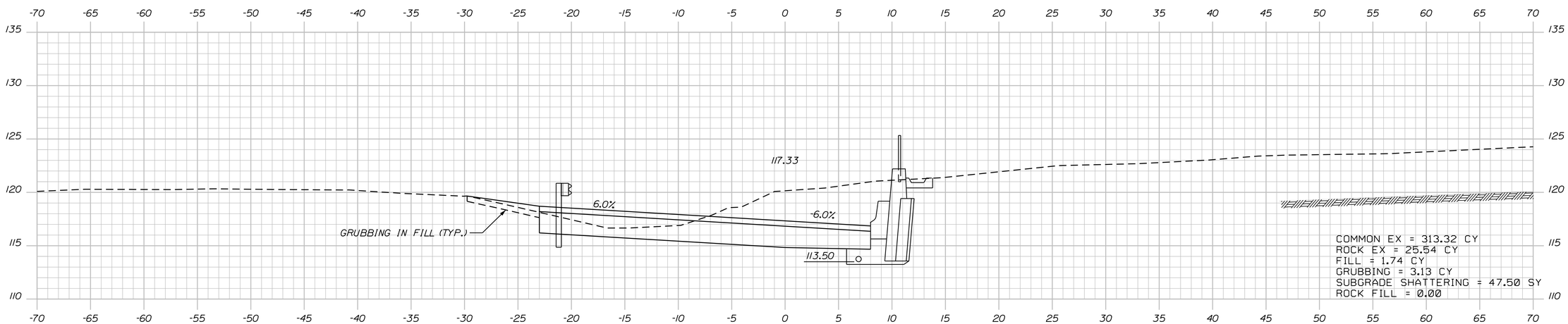
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



115+00.00



114+50.00



114+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

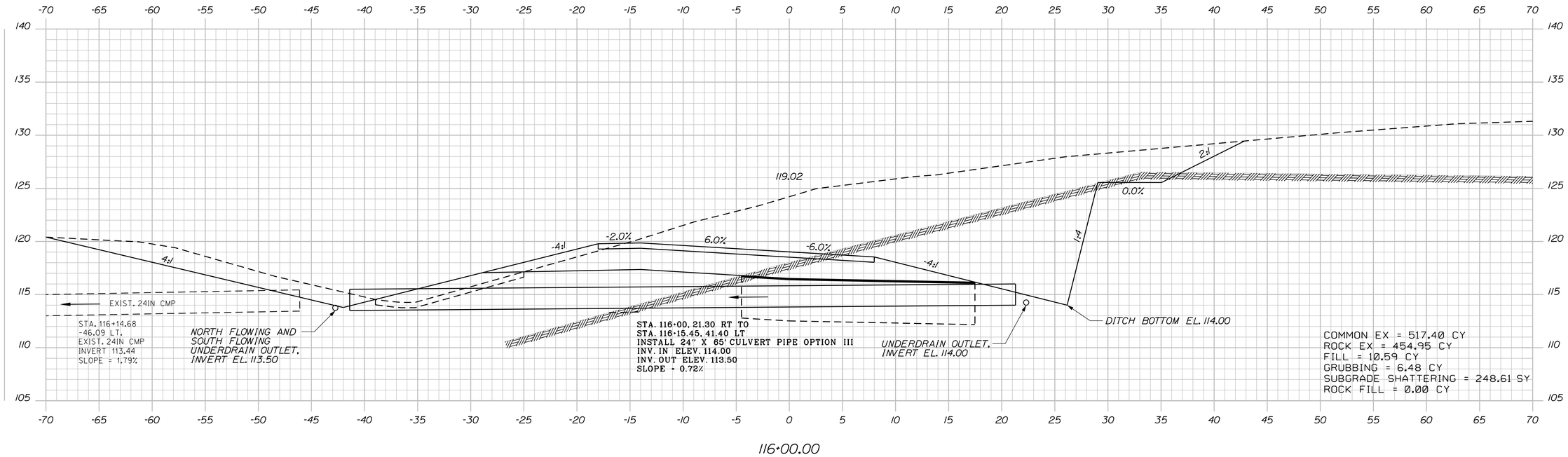
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

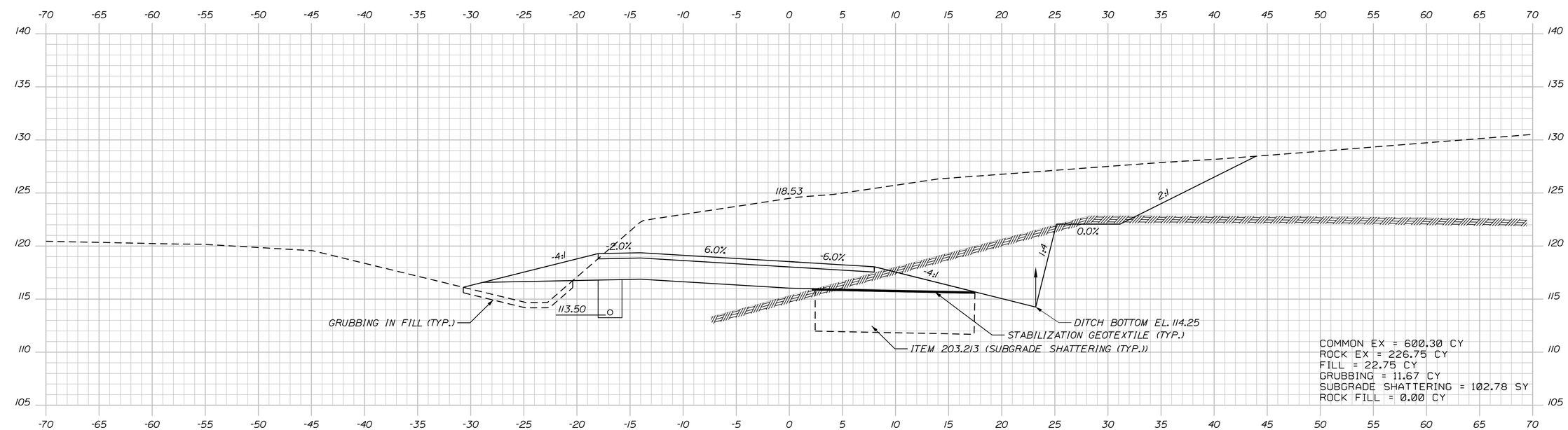
SHEET NUMBER
159
OF 283

Northbound Off Ramp Sta. 114+00.00 to Sta. 115+00.00

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



116+00.00



115+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

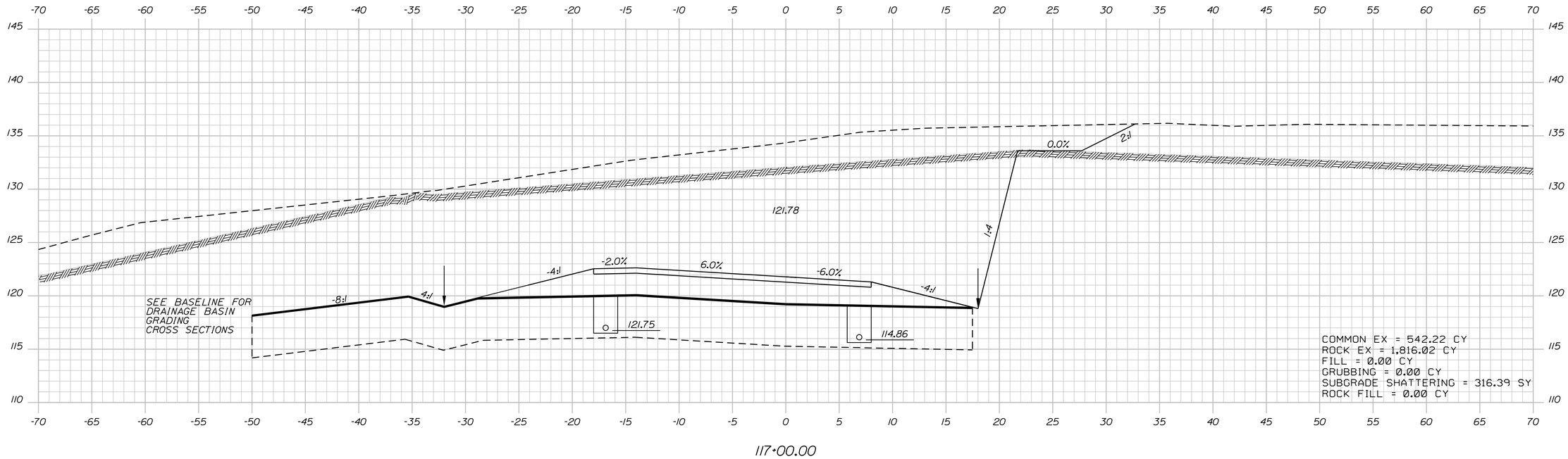
CROSS SECTIONS

SHEET NUMBER
160
OF 283

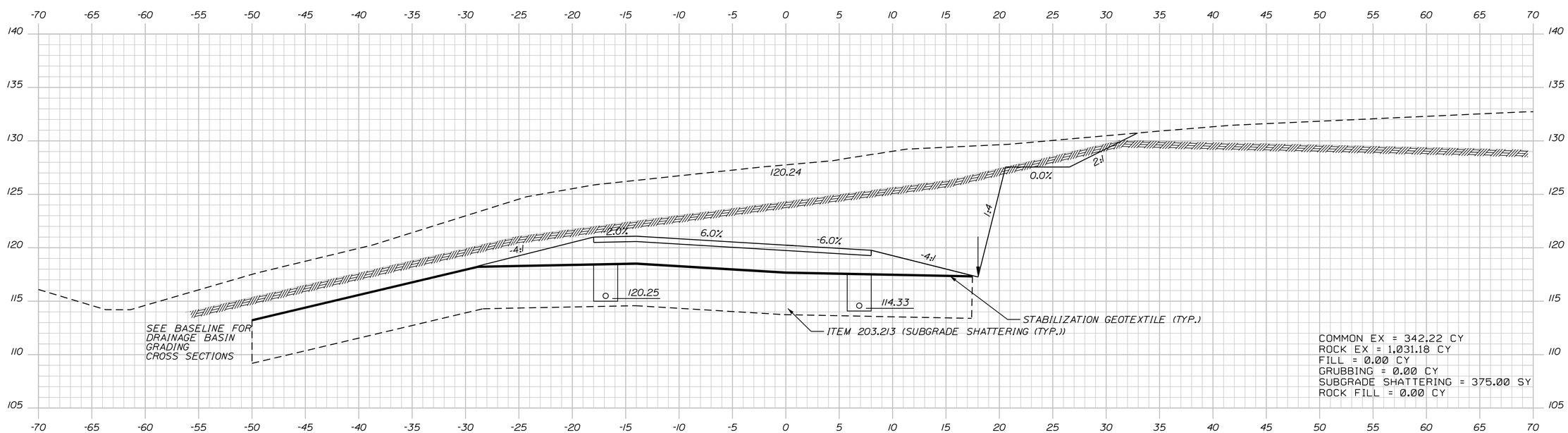
Northbound Off Ramp Sta. 115+50.00 to Sta. 116+00.00

Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename:



117+00.00



116+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

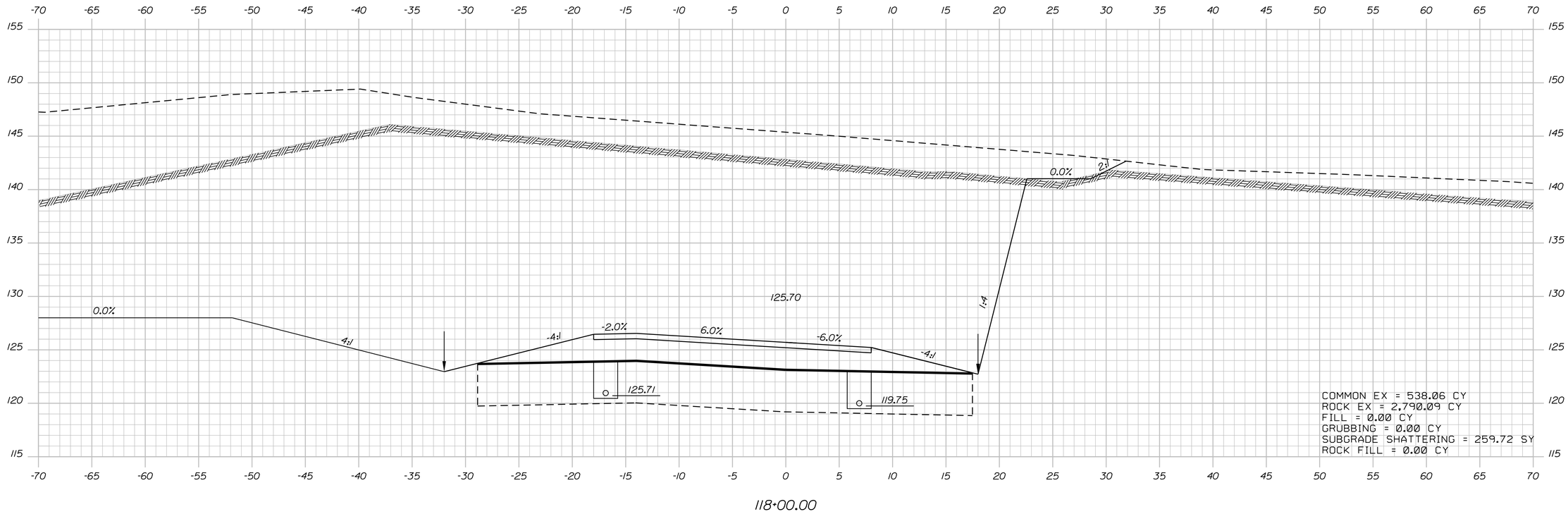
CROSS SECTIONS

SHEET NUMBER
161
OF 283

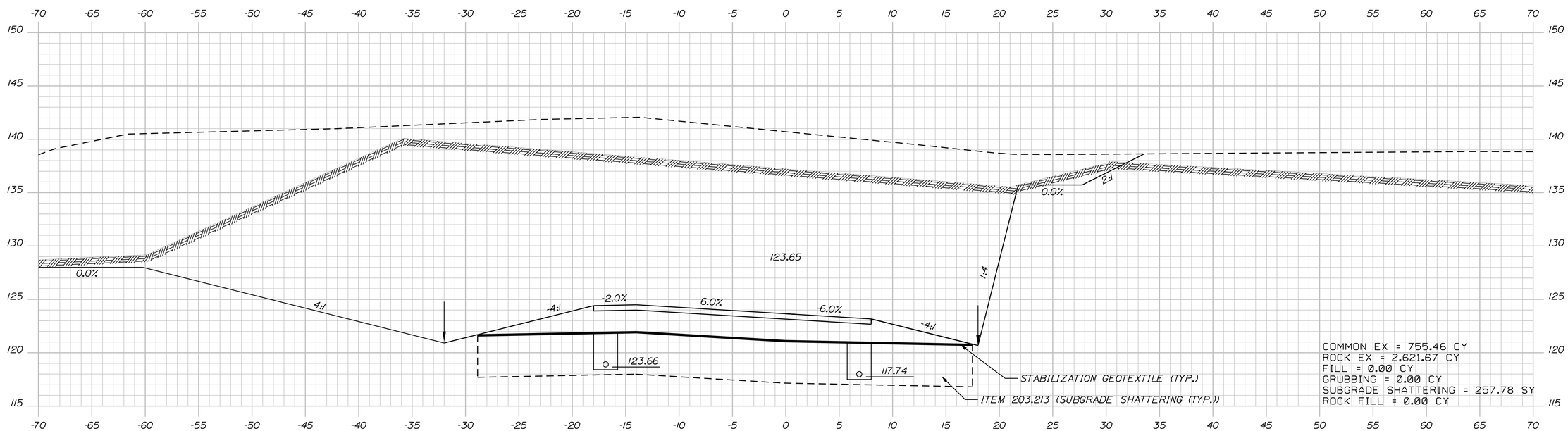
Northbound Off Ramp Sta. 116+50.00 to Sta. 117+00.00

Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename:



118+00.00



117+50.00

Northbound Off Ramp Sta. 117+50.00 to Sta. 118+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

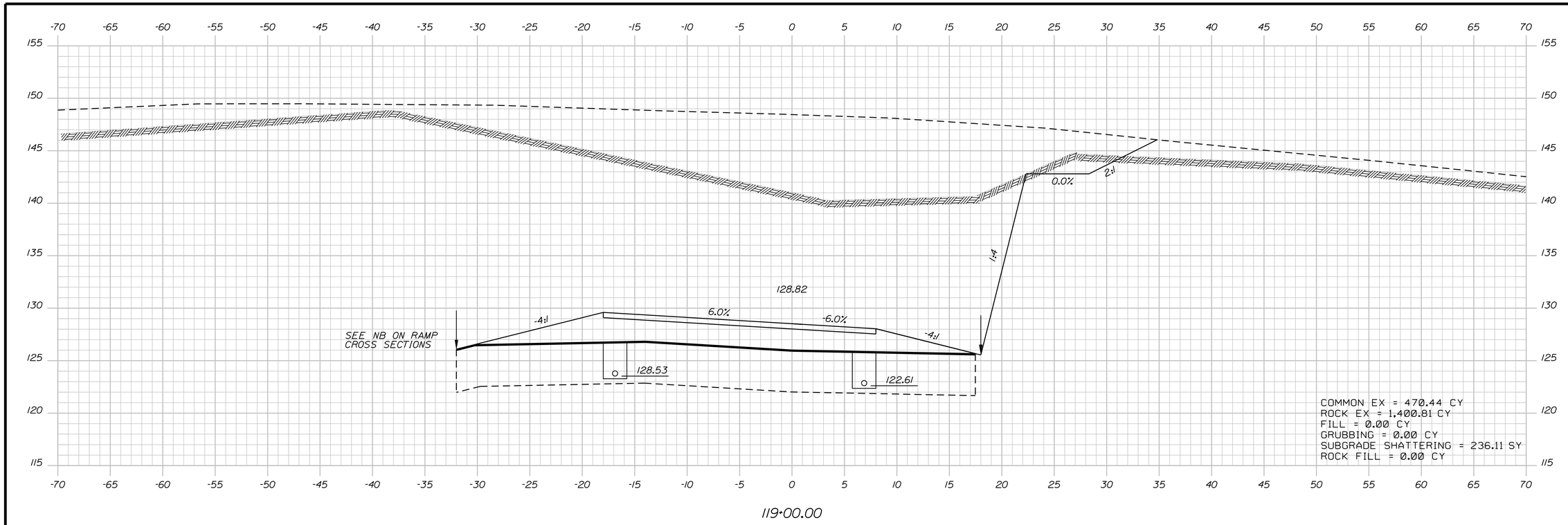
CROSS SECTIONS

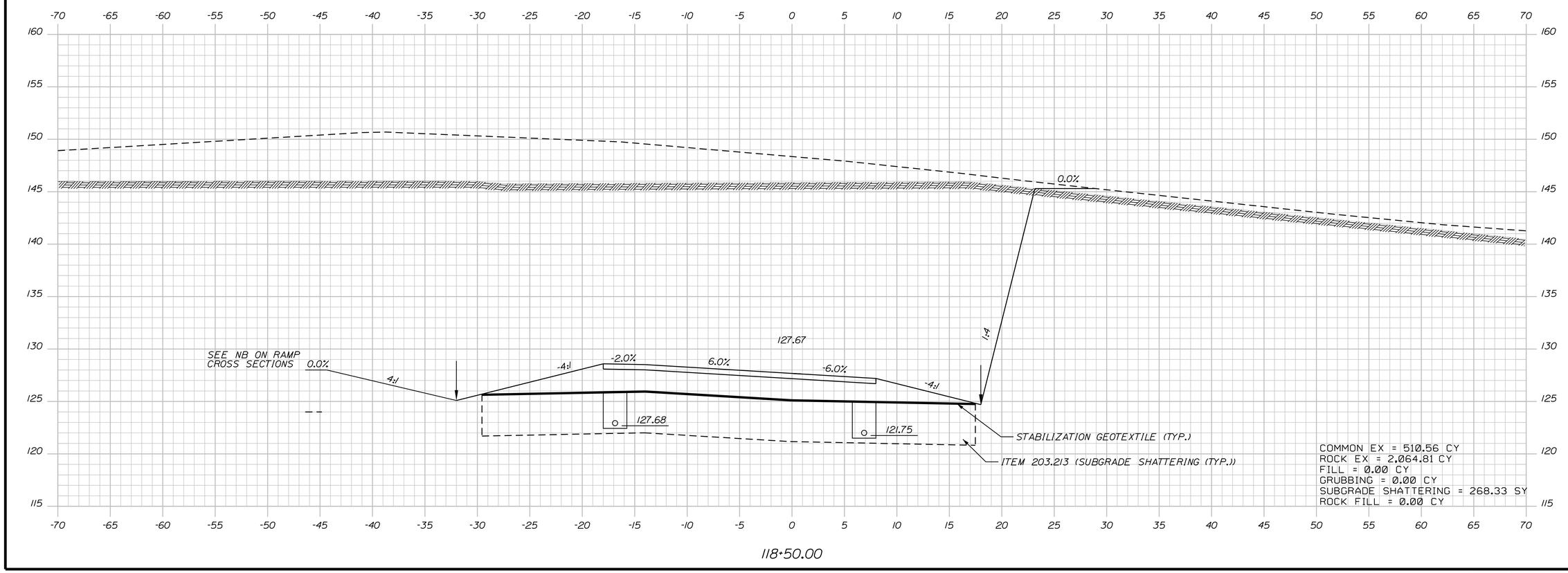
SHEET NUMBER

162

OF 283

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

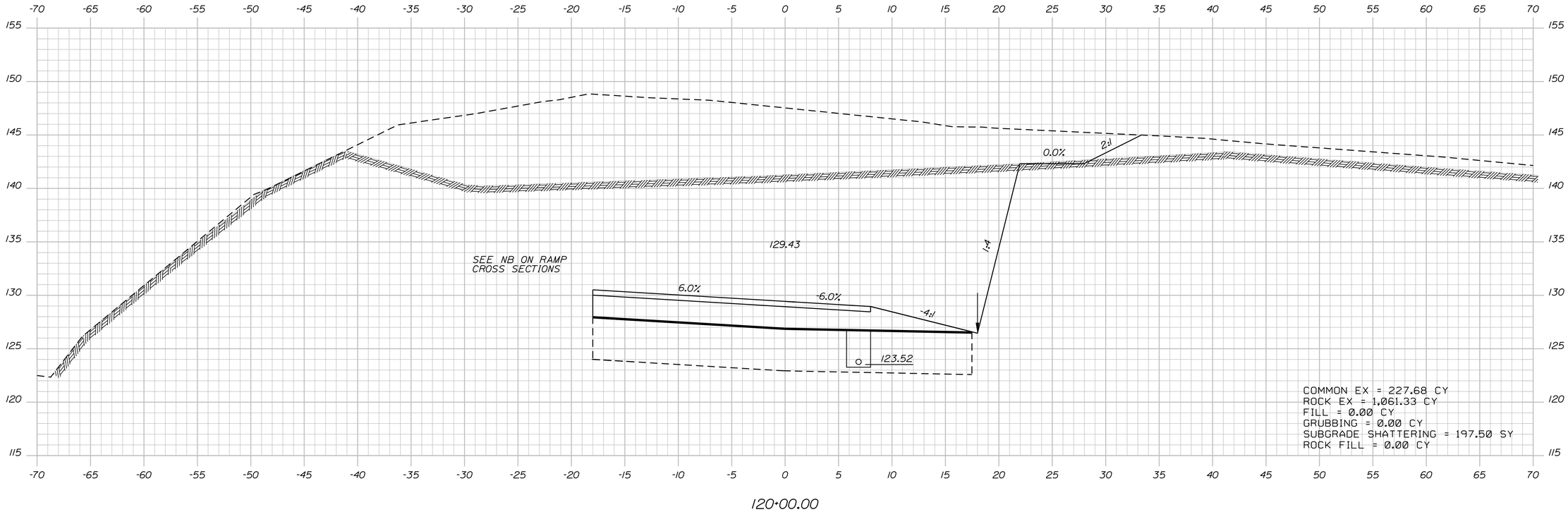
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

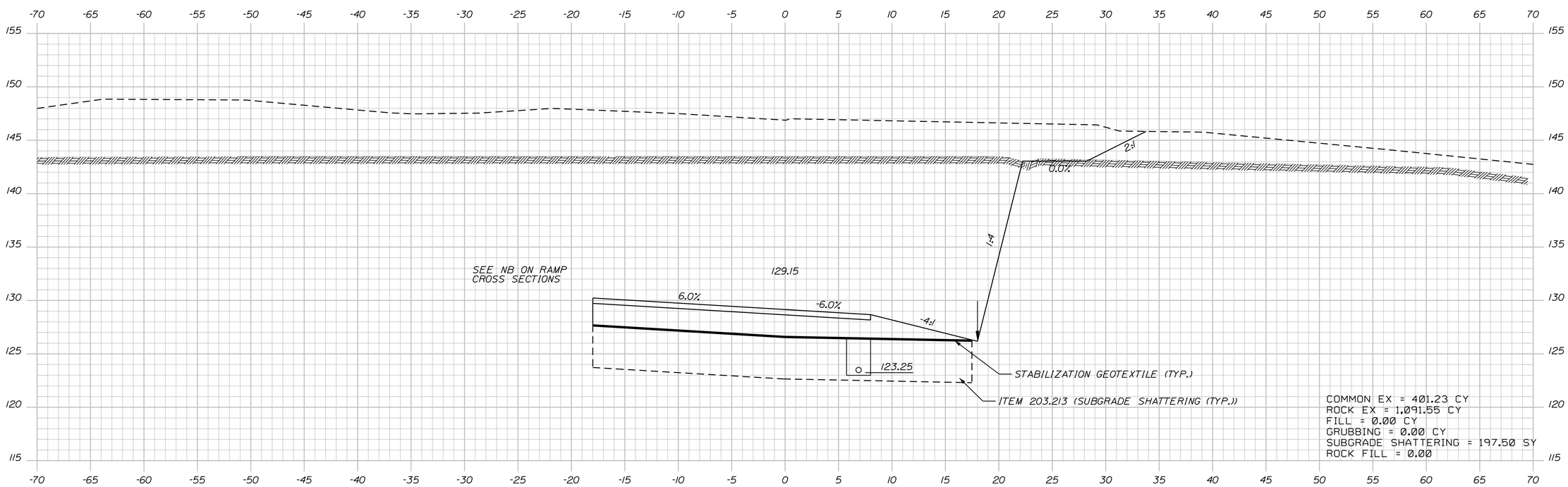
SHEET NUMBER
163
OF 283

Northbound Off Ramp Sta. 118+50.00 to Sta. 119+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



120+00.00



119+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

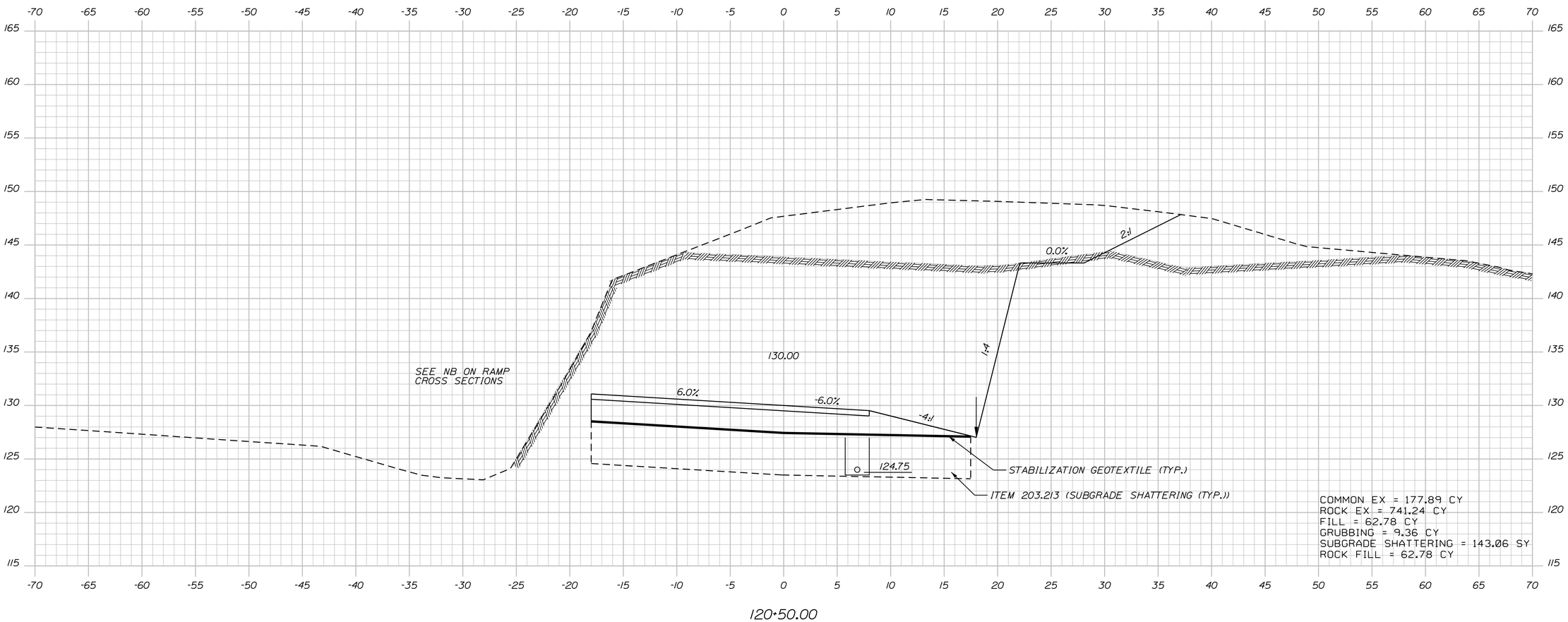
CROSS SECTIONS

SHEET NUMBER
164
OF 283

Northbound Off Ramp Sta. 119+50.00 to Sta. 120+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

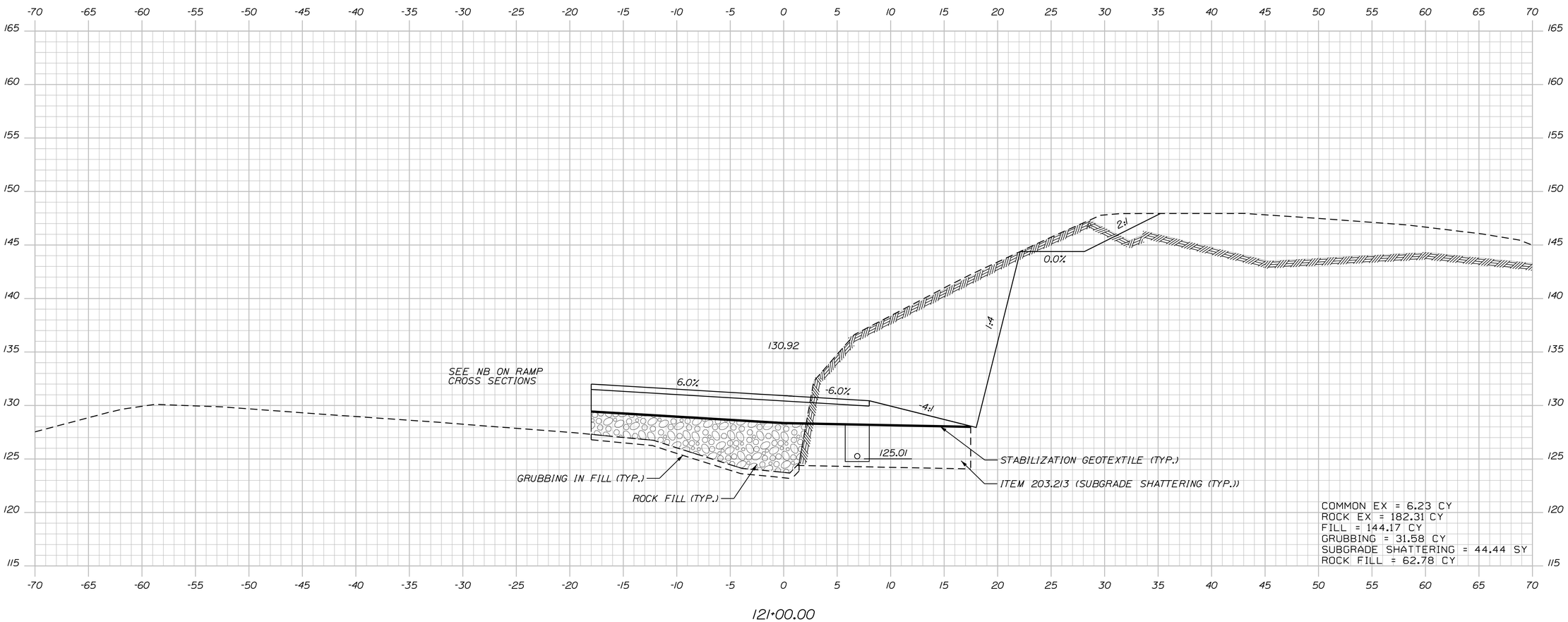
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
165
OF 283

Northbound Off Ramp Sta. 120+50.00 to Sta. 120+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
166
OF 283

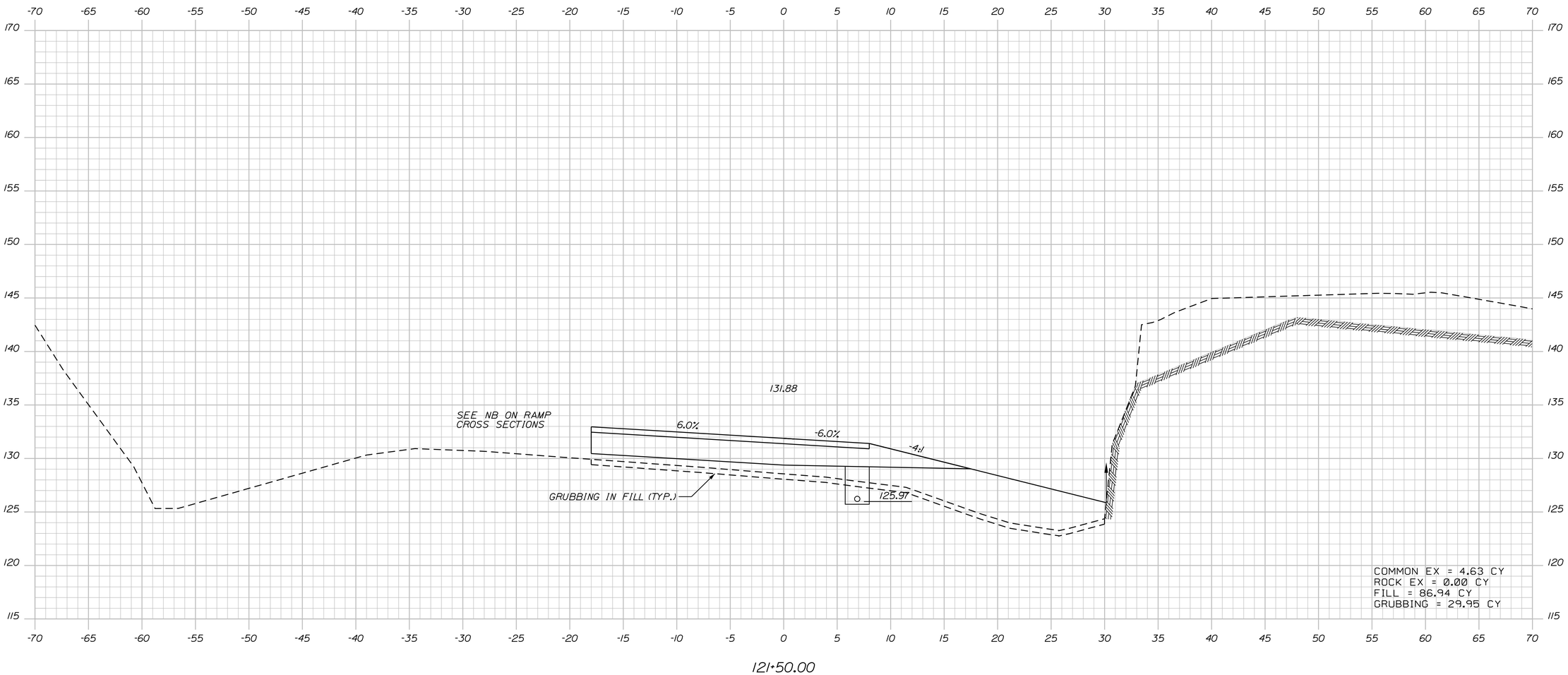
Northbound Off Ramp Sta. 121+00.00 to Sta. 121+00.00

Date:2/21/2011

Username: COMMON

Division: HIGHWAY

Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

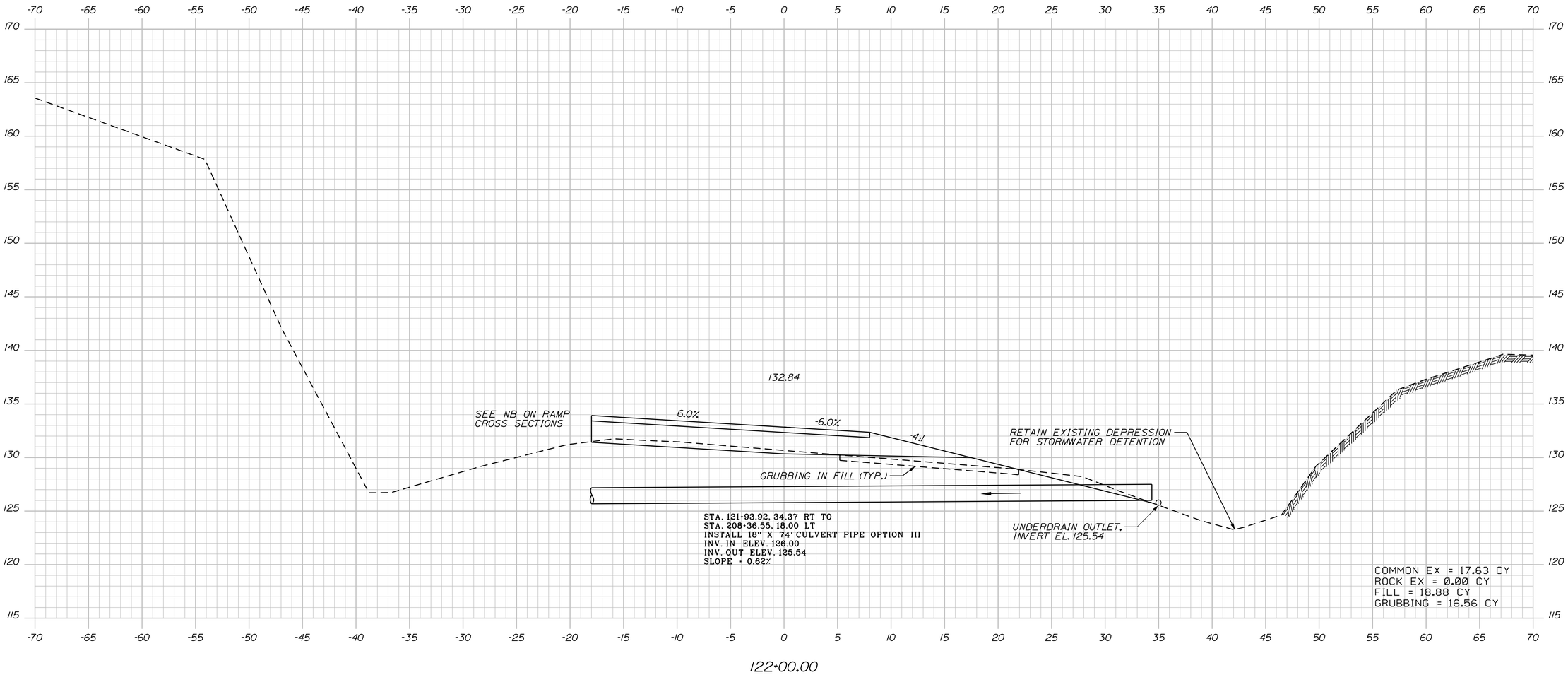
CROSS SECTIONS

SHEET NUMBER

167

OF 283

Northbound Off Ramp Sta. 121+50.00 to Sta. 121+50.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
168
OF 283

Northbound Off Ramp Sta. 122+00.00 to Sta. 122+00.00

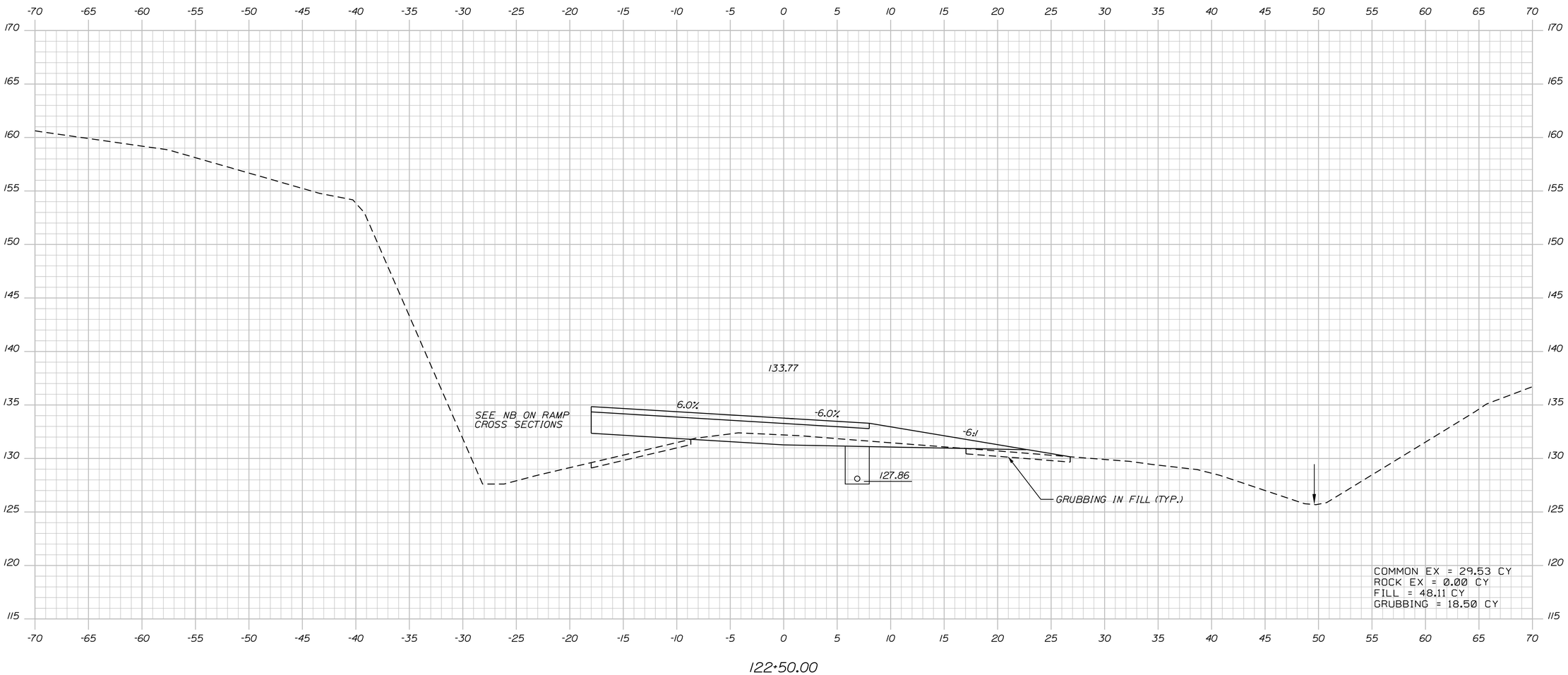
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Date:2/21/2011

Username: COMMON

Division: HIGHWAY

Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

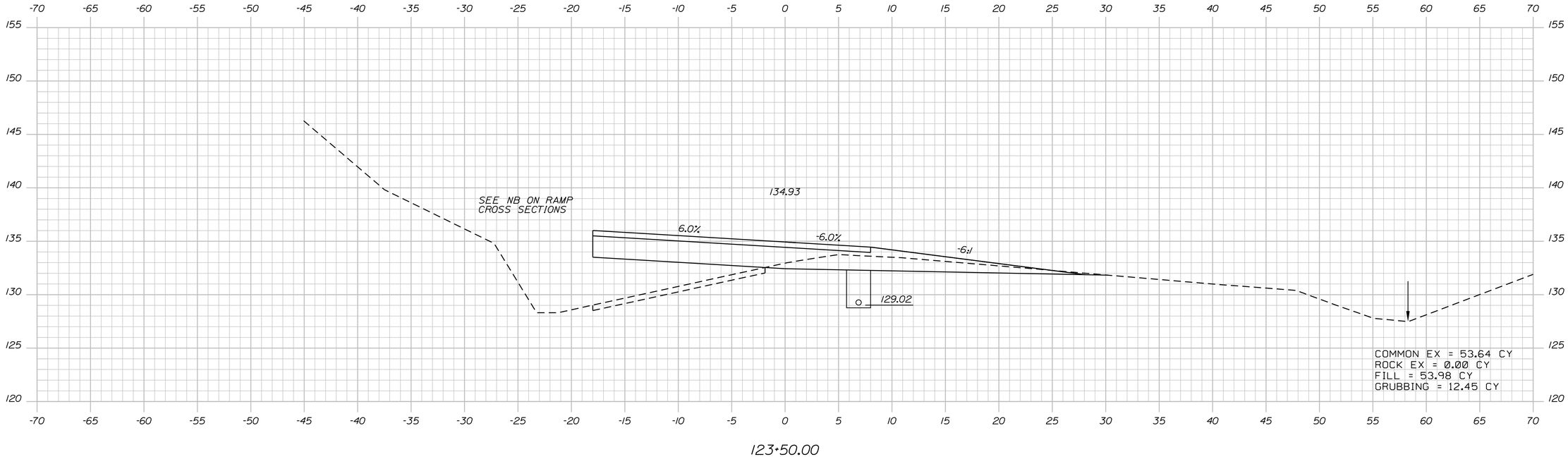
CROSS SECTIONS

SHEET NUMBER

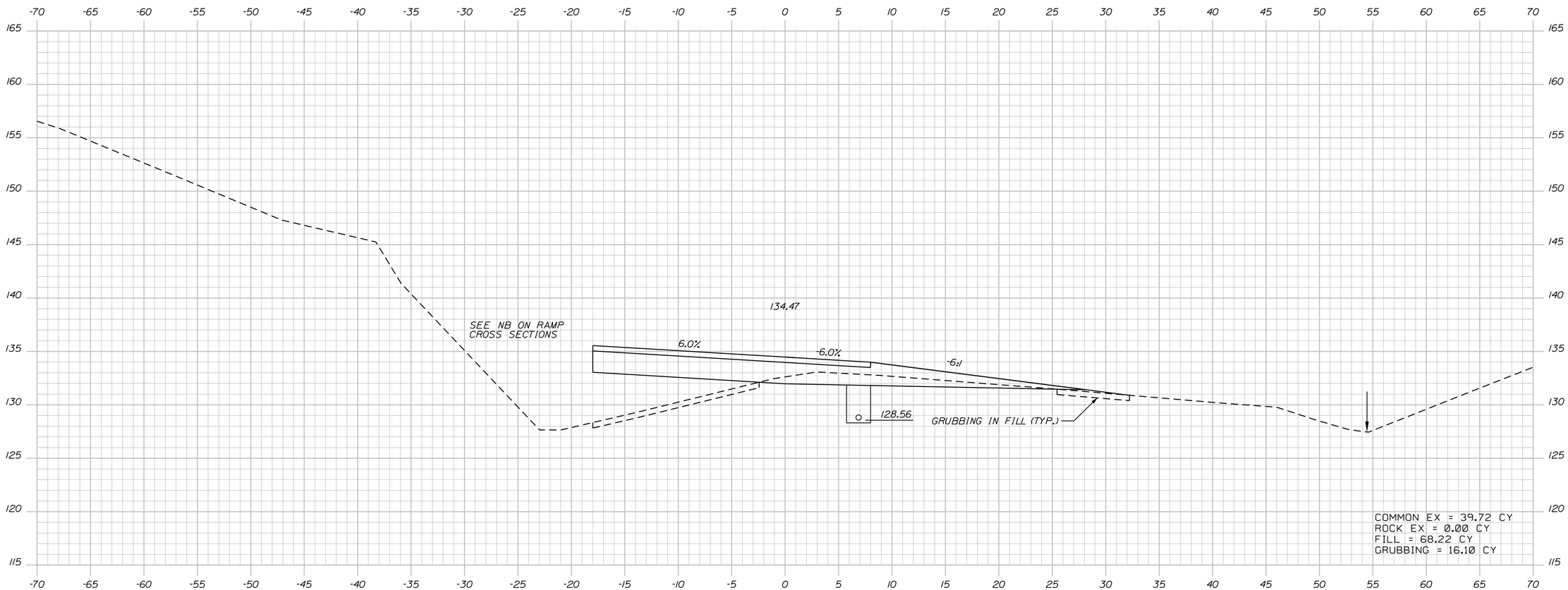
169

OF 283

Northbound Off Ramp Sta. 122+50.00 to Sta. 122+50.00



123+50.00



123+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

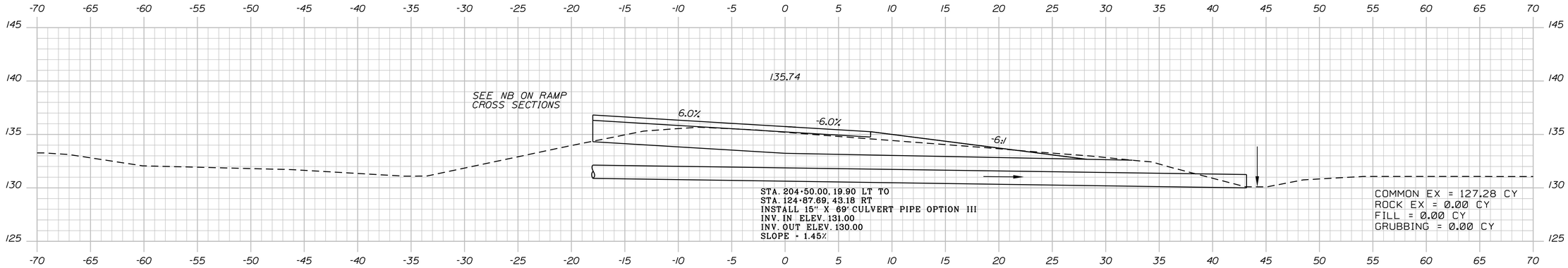
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

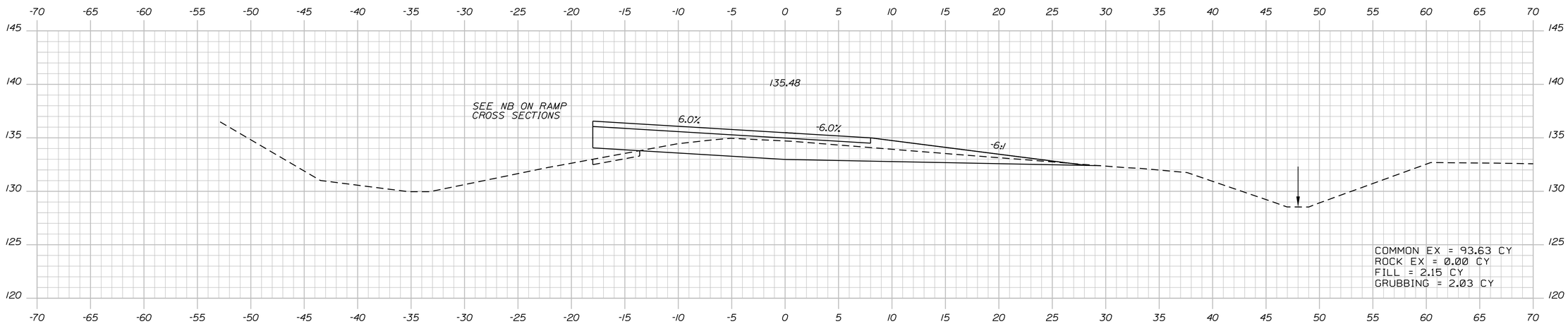
SHEET NUMBER
170
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:

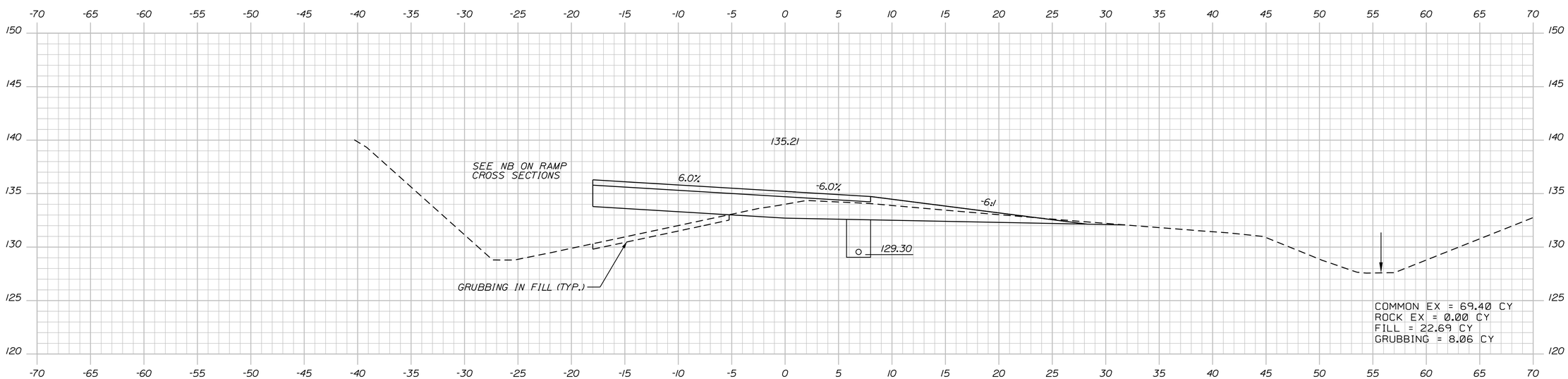
Northbound Off Ramp Sta. 123+00.00 to Sta. 123+50.00



125+00.00



124+50.00



124+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

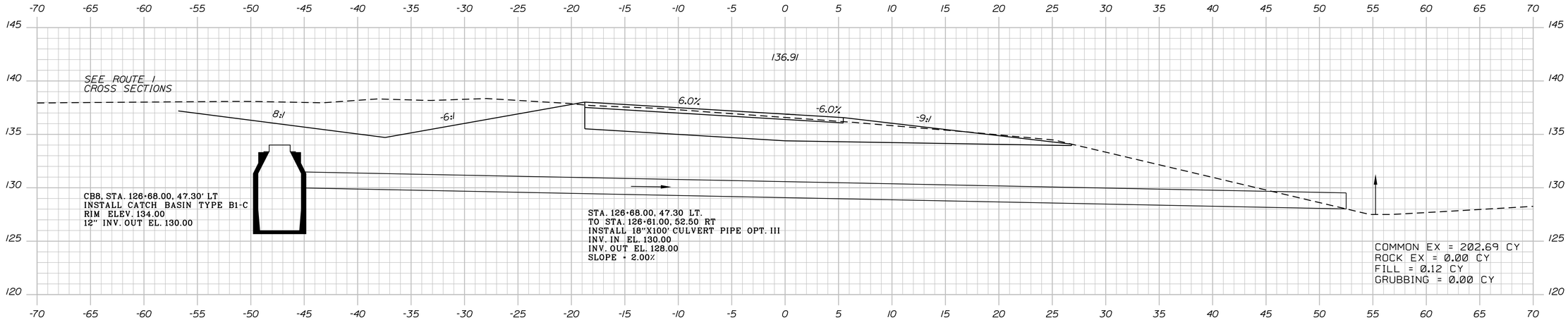
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

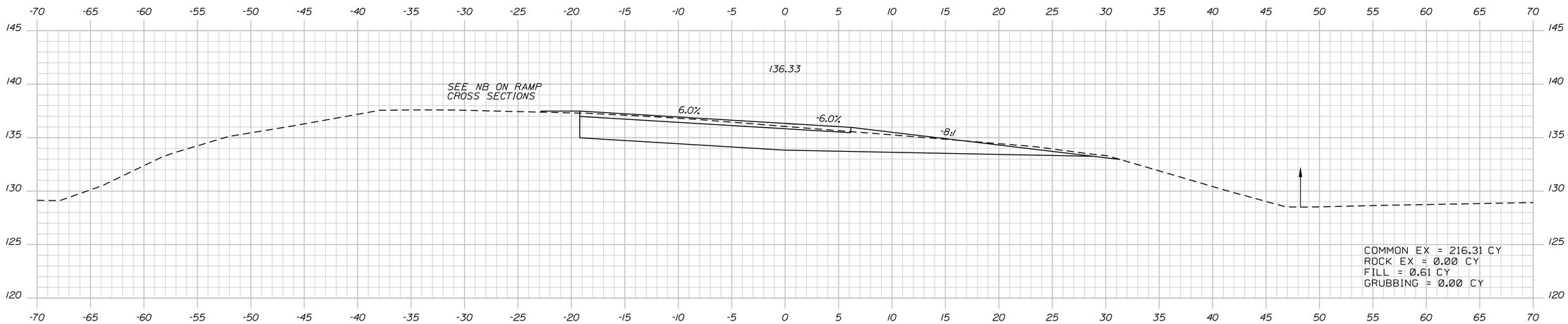
SHEET NUMBER
171
OF 283

Northbound Off Ramp Sta. 124+00.00 to Sta. 125+00.00

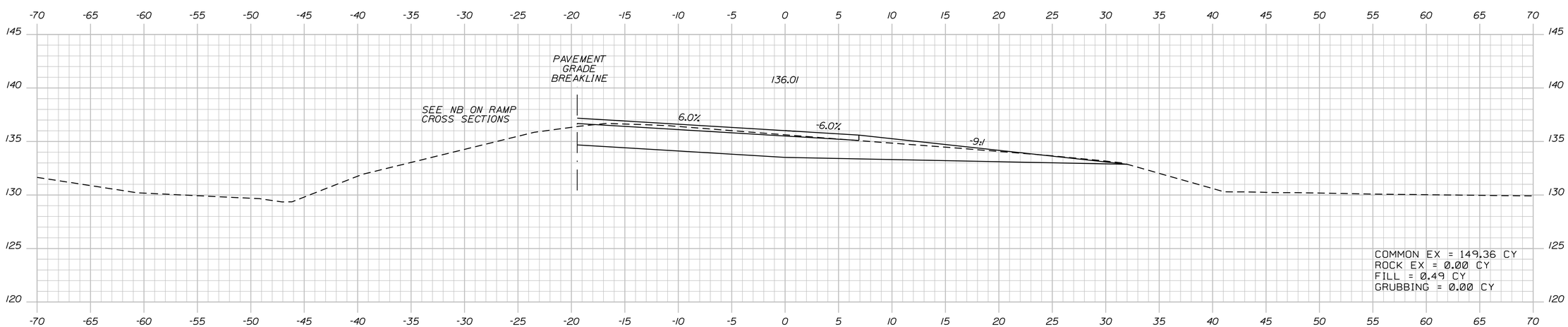
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



126+50.00



126+00.00



125+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

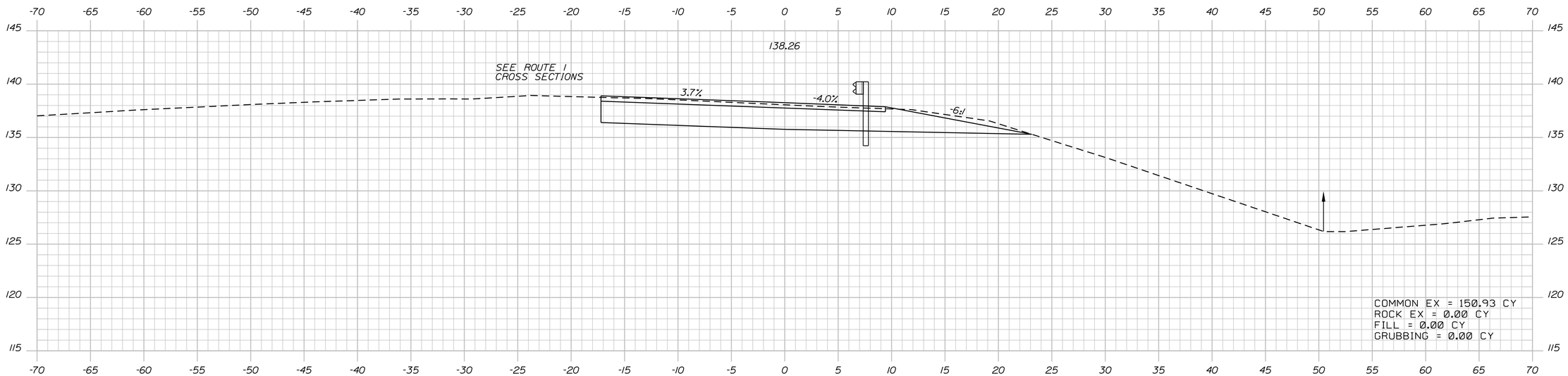
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

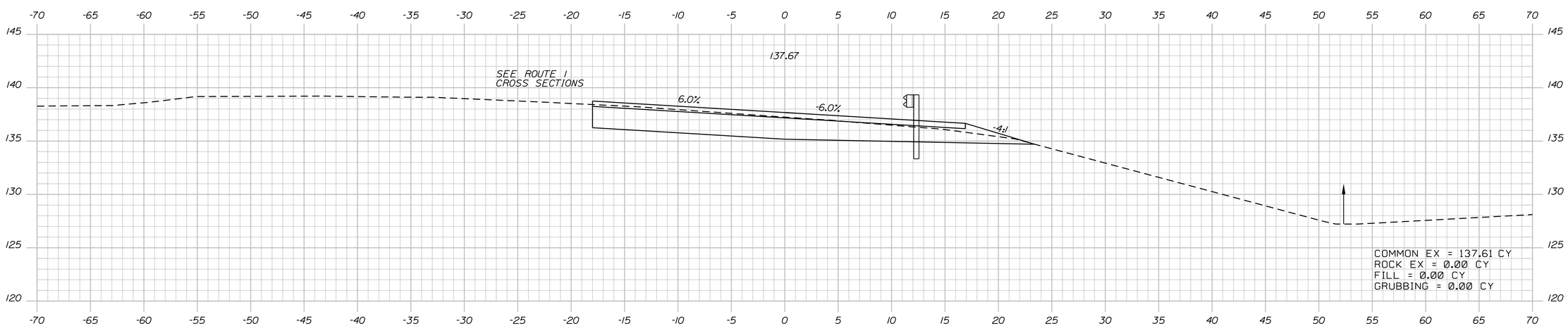
SHEET NUMBER
172
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:

Northbound Off Ramp Sta. 125+50.00 to Sta. 126+50.00



127+50.00



127+00.00

Northbound Off Ramp Sta. 127+00.00 to Sta. 127+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

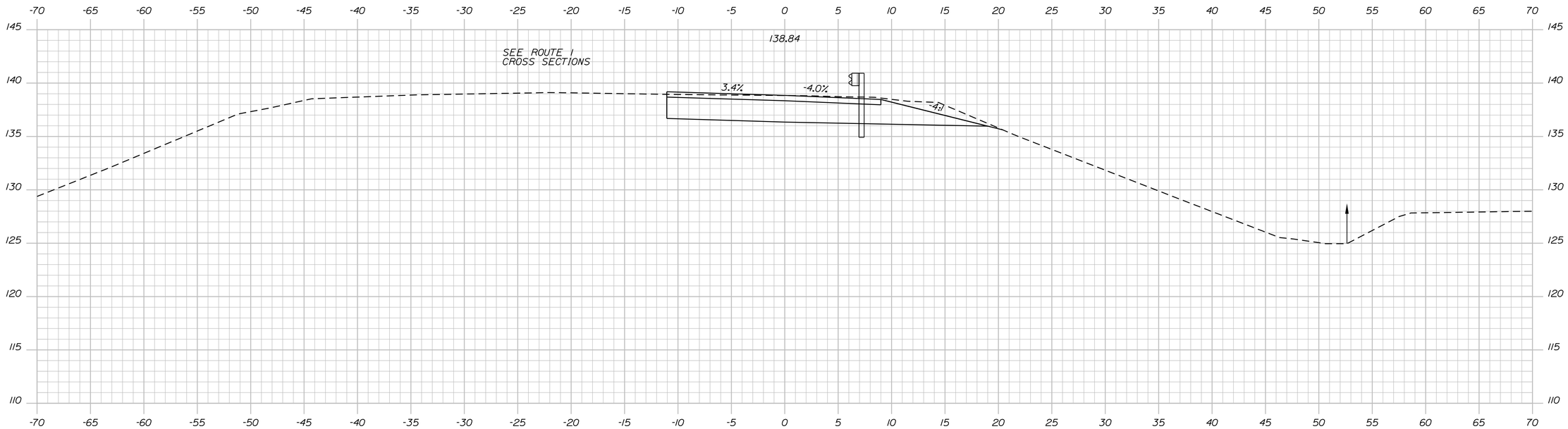
DATE

YARMOUTH
I-295 EXIT 15

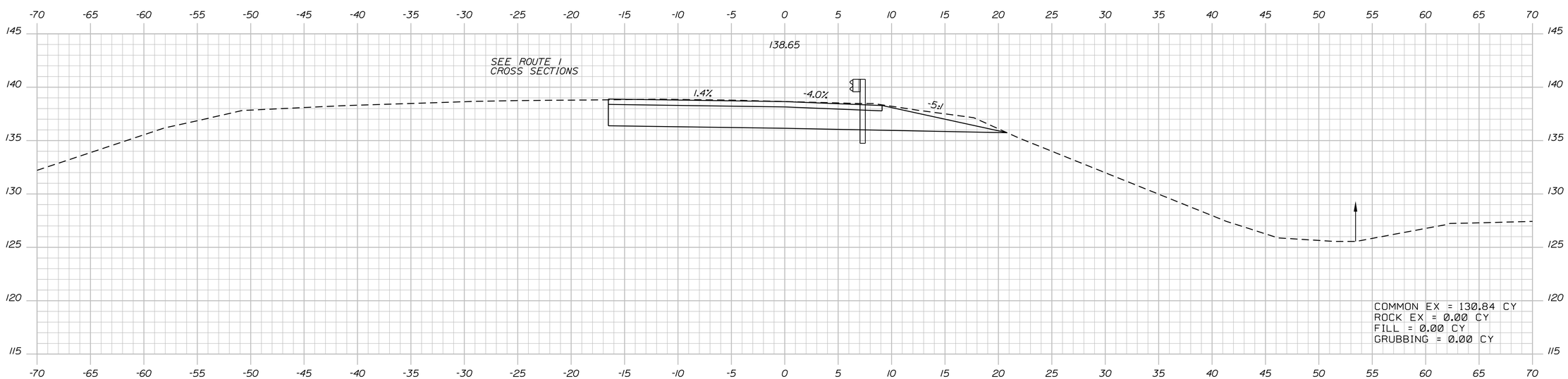
CROSS SECTIONS

SHEET NUMBER
173
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



128+47.50



COMMON EX = 130.84 CY
ROCK EX = 0.00 CY
FILL = 0.00 CY
GRUBBING = 0.00 CY

128+00.00

Northbound Off Ramp Sta. 128+00.00 to Sta. 128+47.50

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

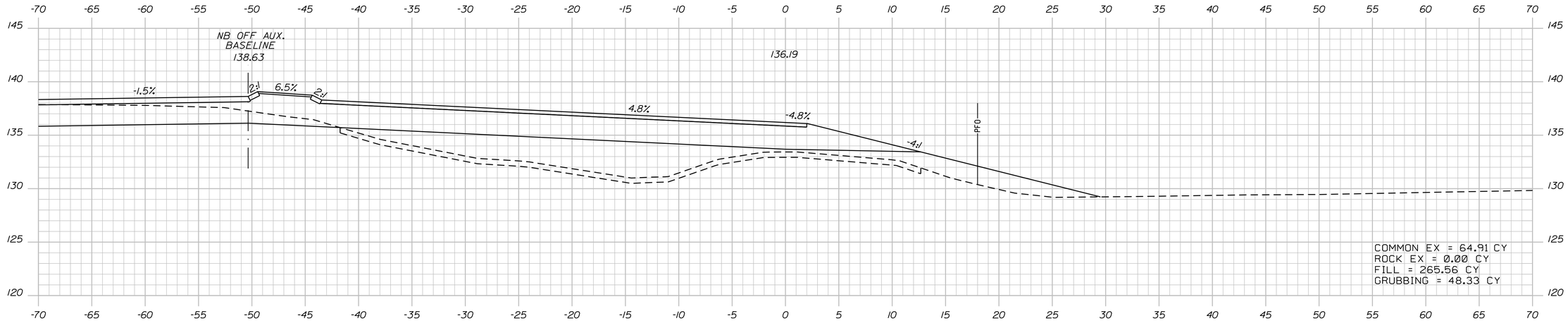
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

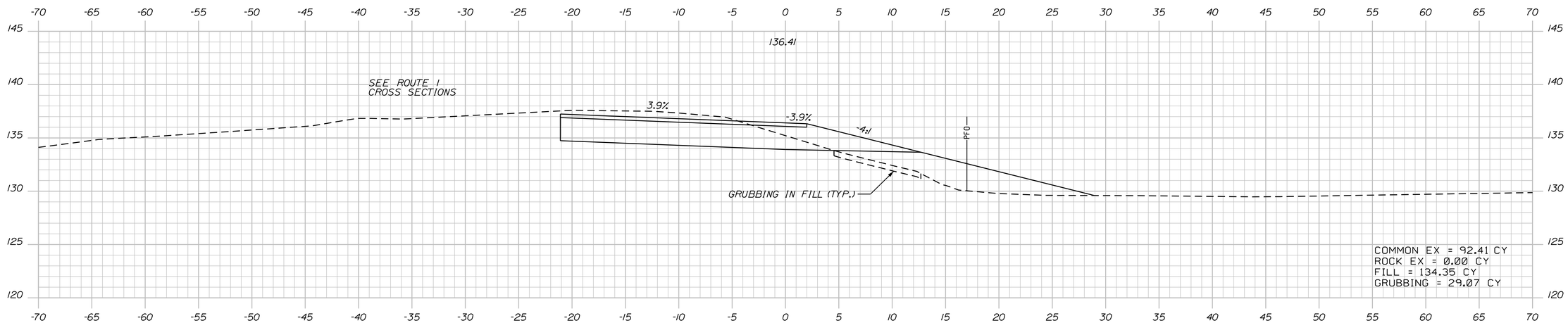
CROSS SECTIONS

SHEET NUMBER
174
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



202+50.00



202+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

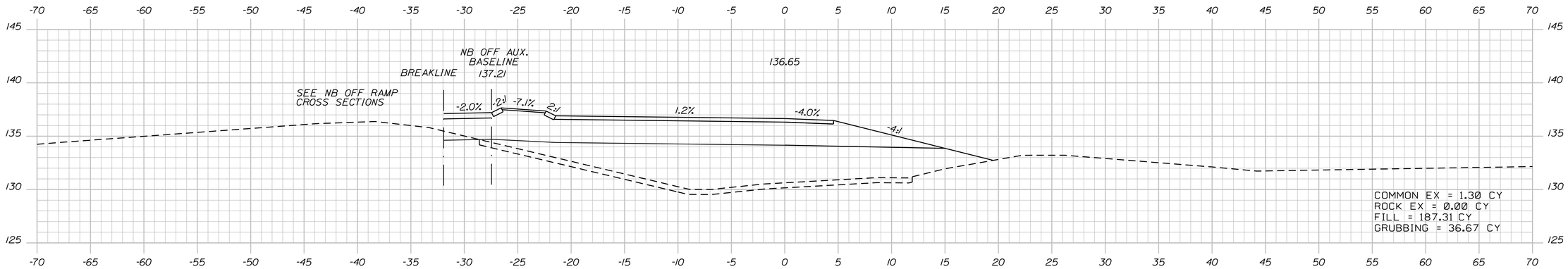
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

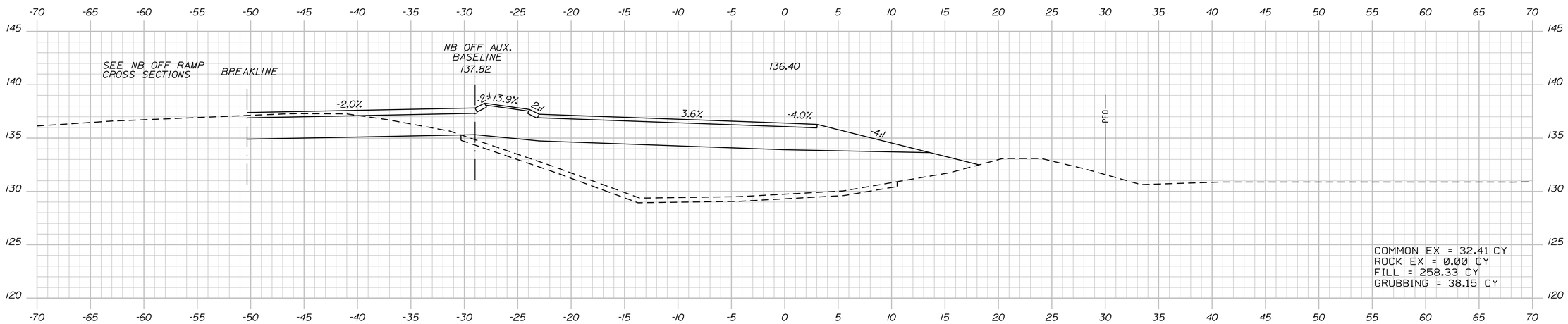
SHEET NUMBER
175
OF 283

Northbound On Ramp Sta. 202+00.00 to Sta. 202+50.00

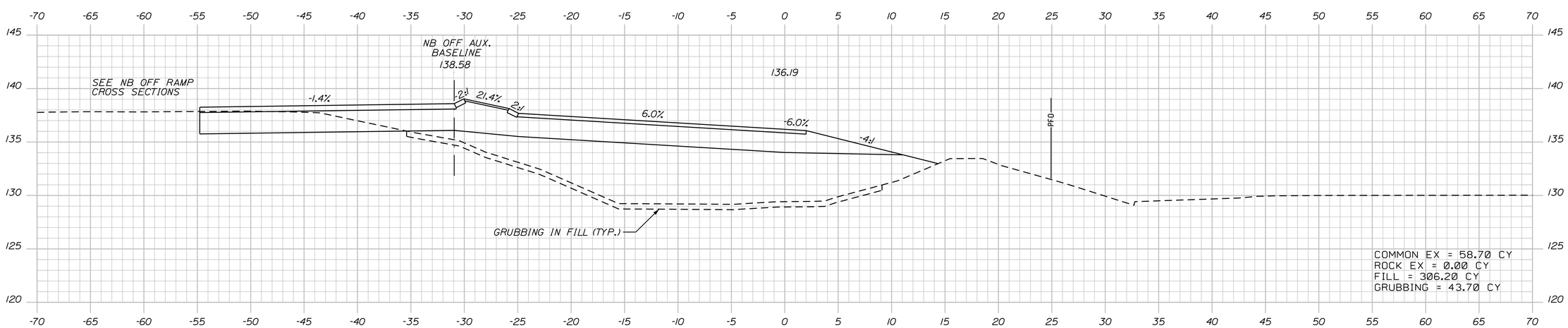
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



204+00.00



203+50.00



203+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

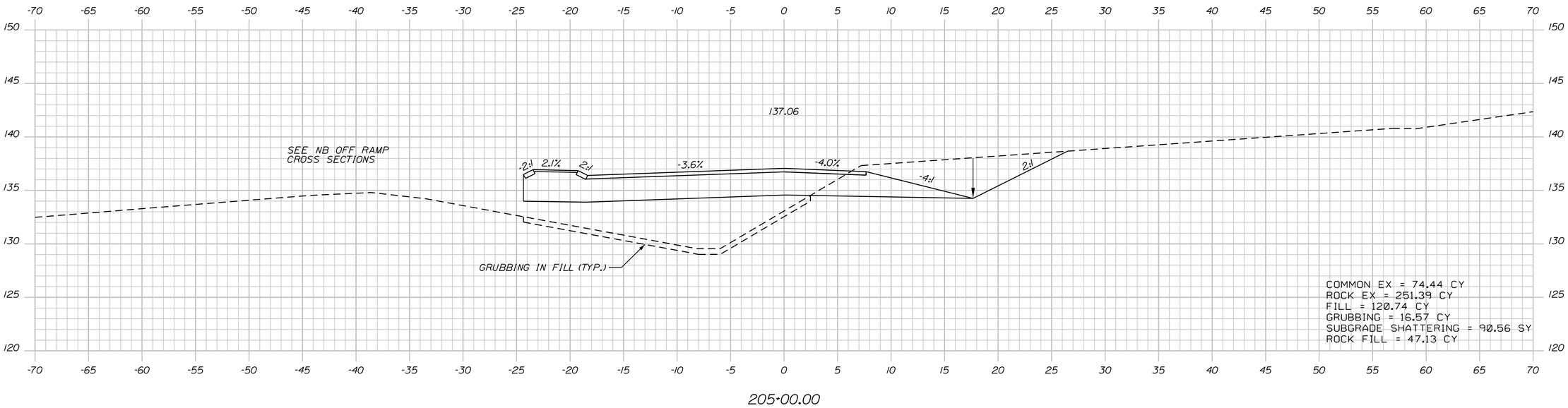
SHEET NUMBER

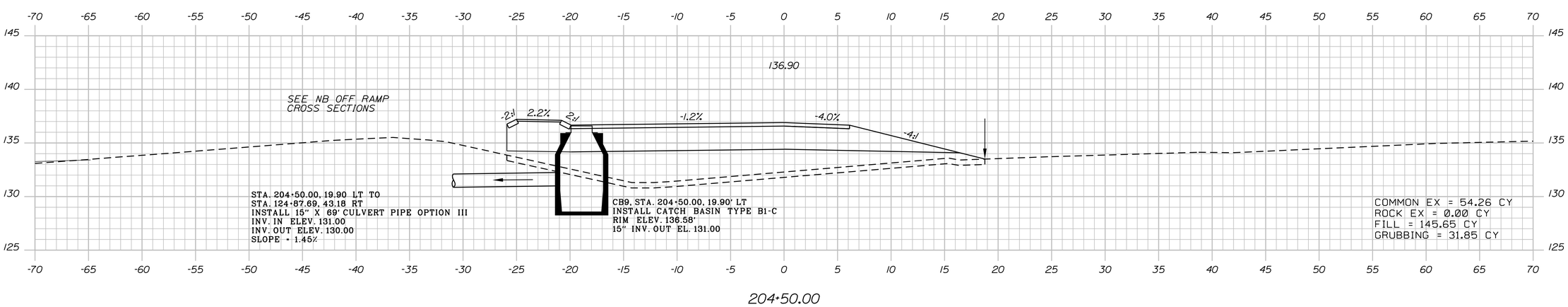
176

OF 283

Northbound On Ramp Sta. 203+00.00 to Sta. 204+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





Northbound On Ramp Sta. 204+50.00 to Sta. 205+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

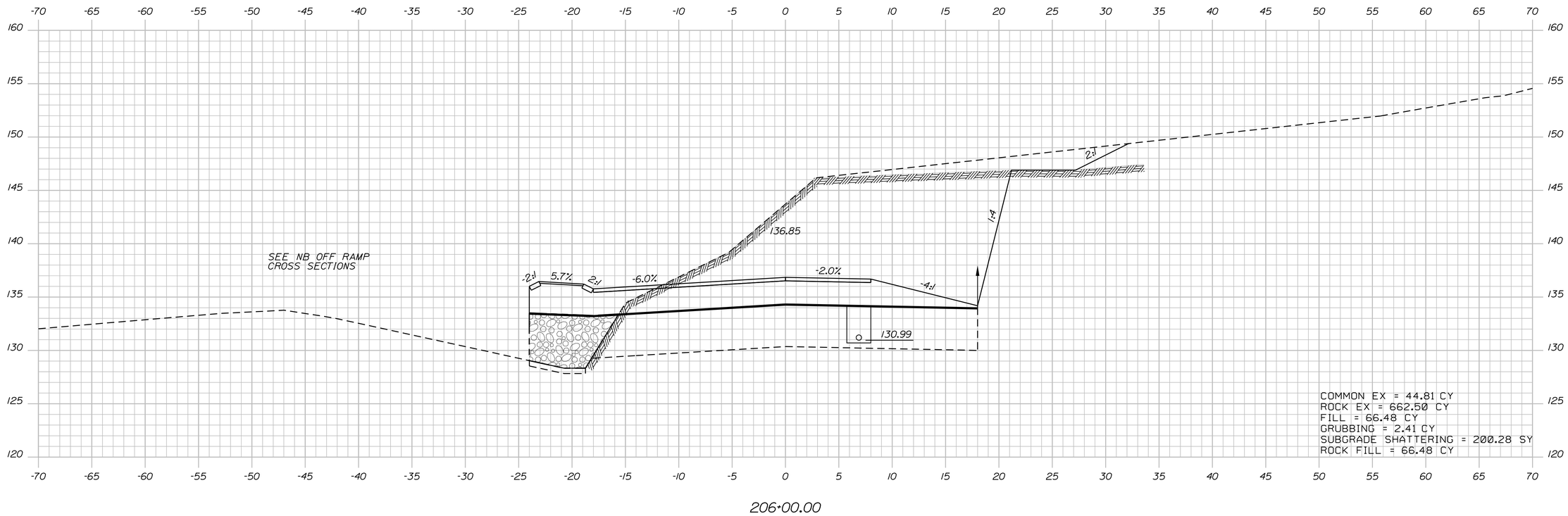
CROSS SECTIONS

SHEET NUMBER

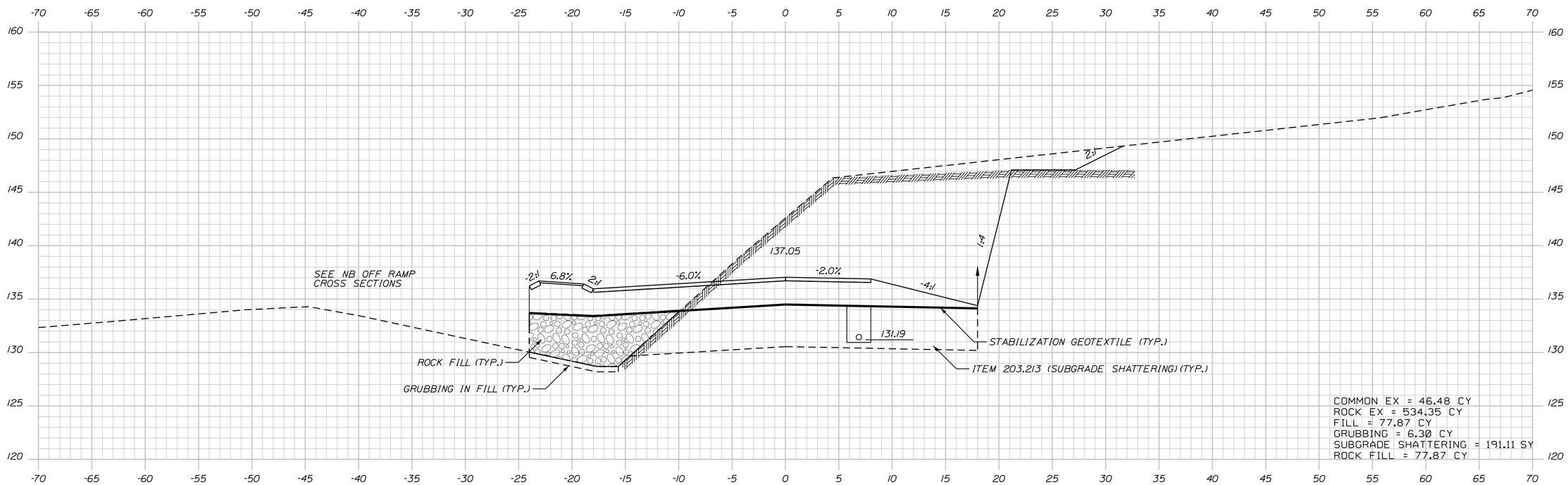
177

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



206+00.00



205+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

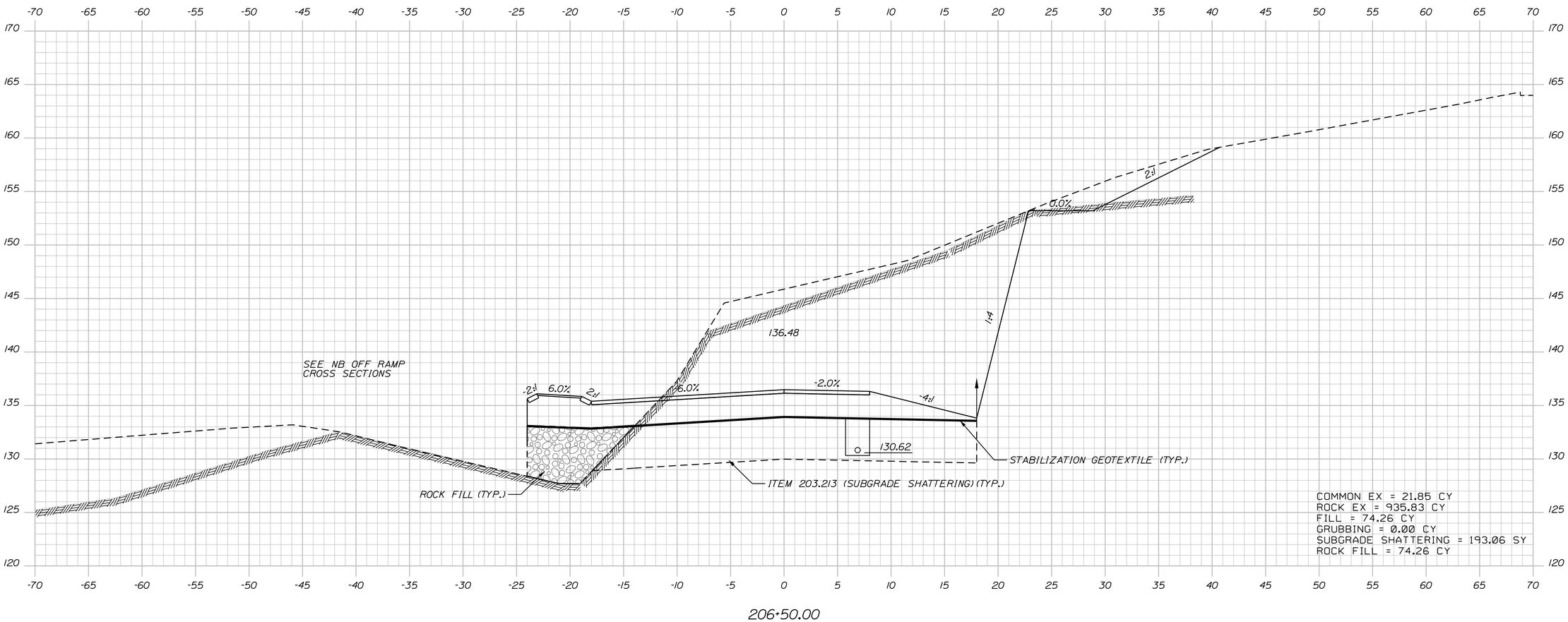
SHEET NUMBER

178

OF 283

Northbound On Ramp Sta. 205+50.00 to Sta. 206+00.00

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

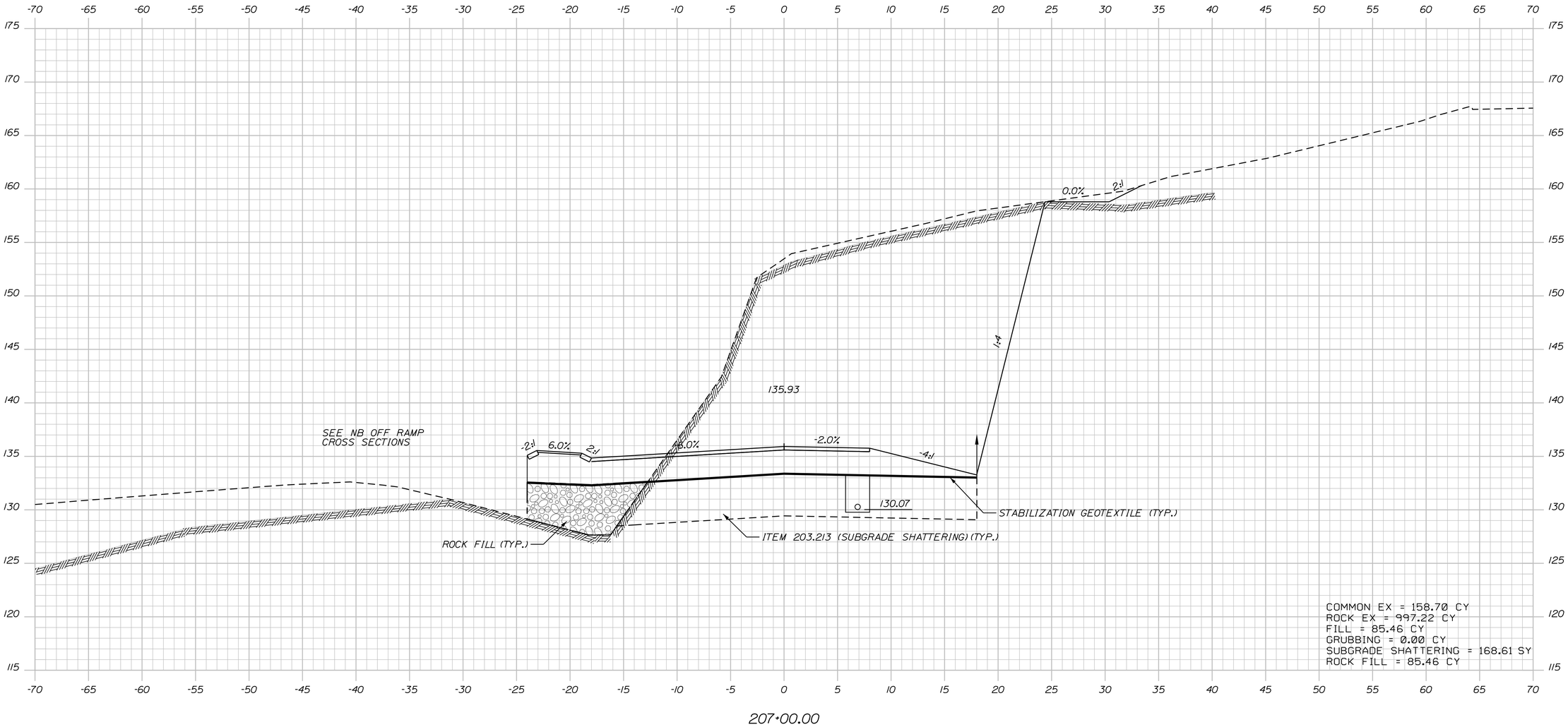
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
179
OF 283

Northbound On Ramp Sta. 206+50.00 to Sta. 206+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



Northbound On Ramp Sta. 207+00.00 to Sta. 207+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

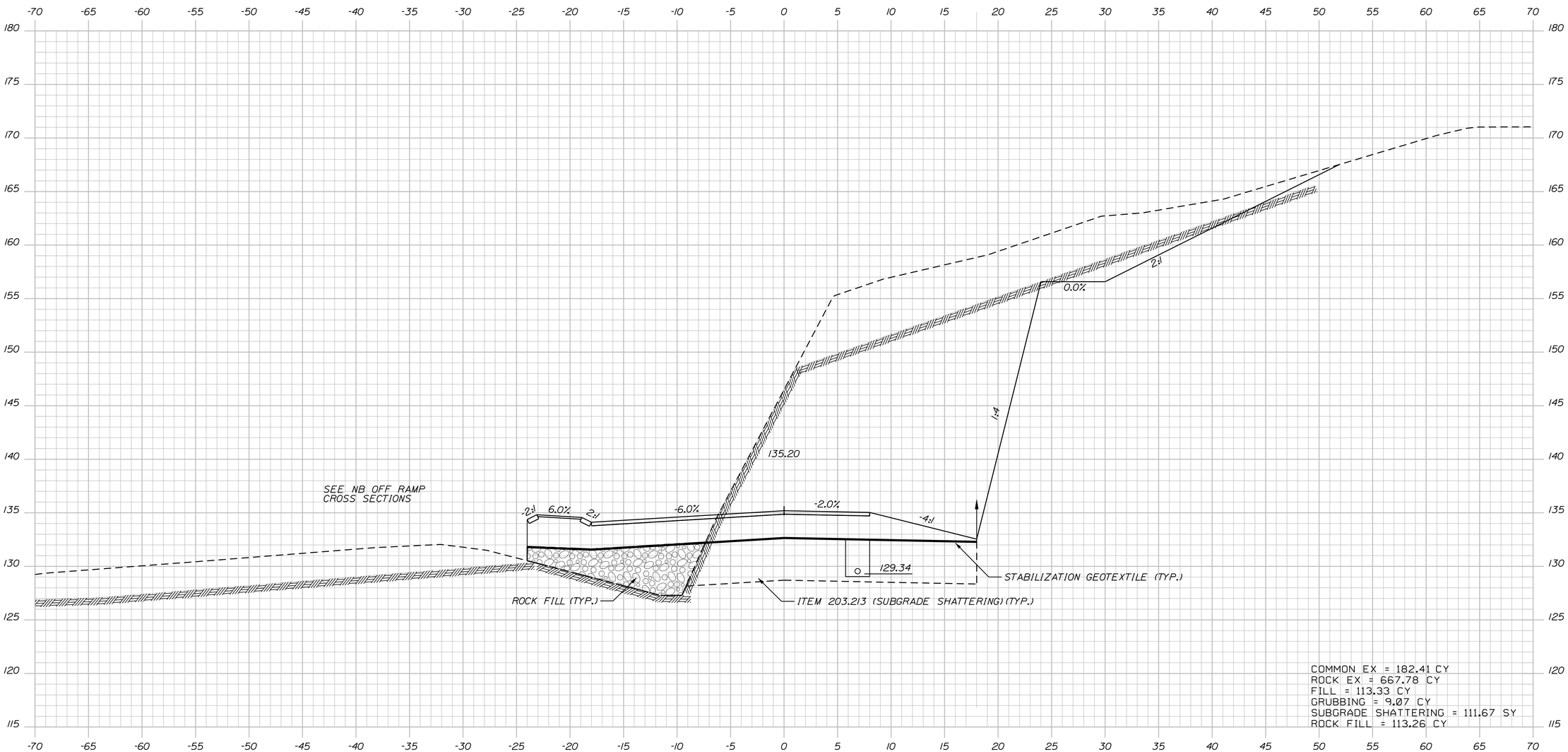
CROSS SECTIONS

SHEET NUMBER

180

OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

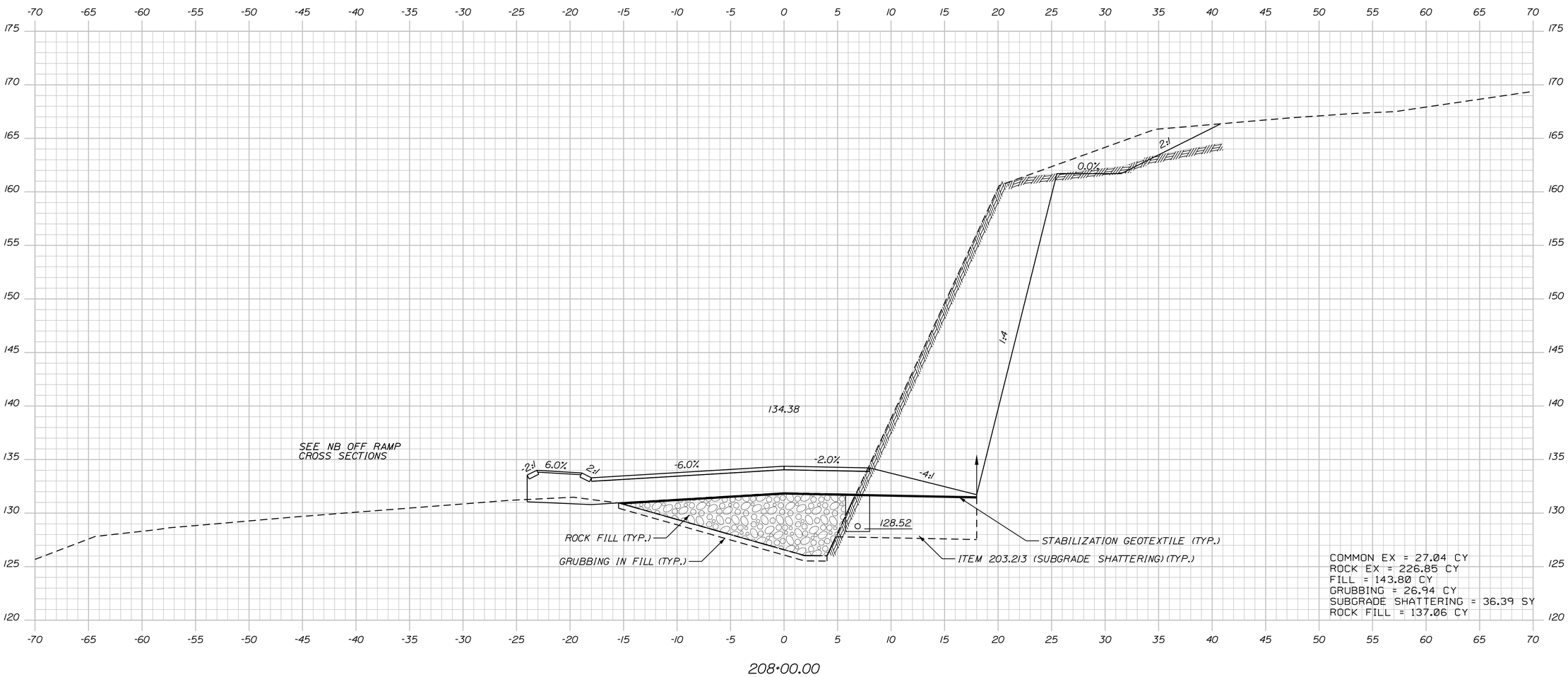
SHEET NUMBER

181

OF 283

Northbound On Ramp Sta. 207+50.00 to Sta. 207+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

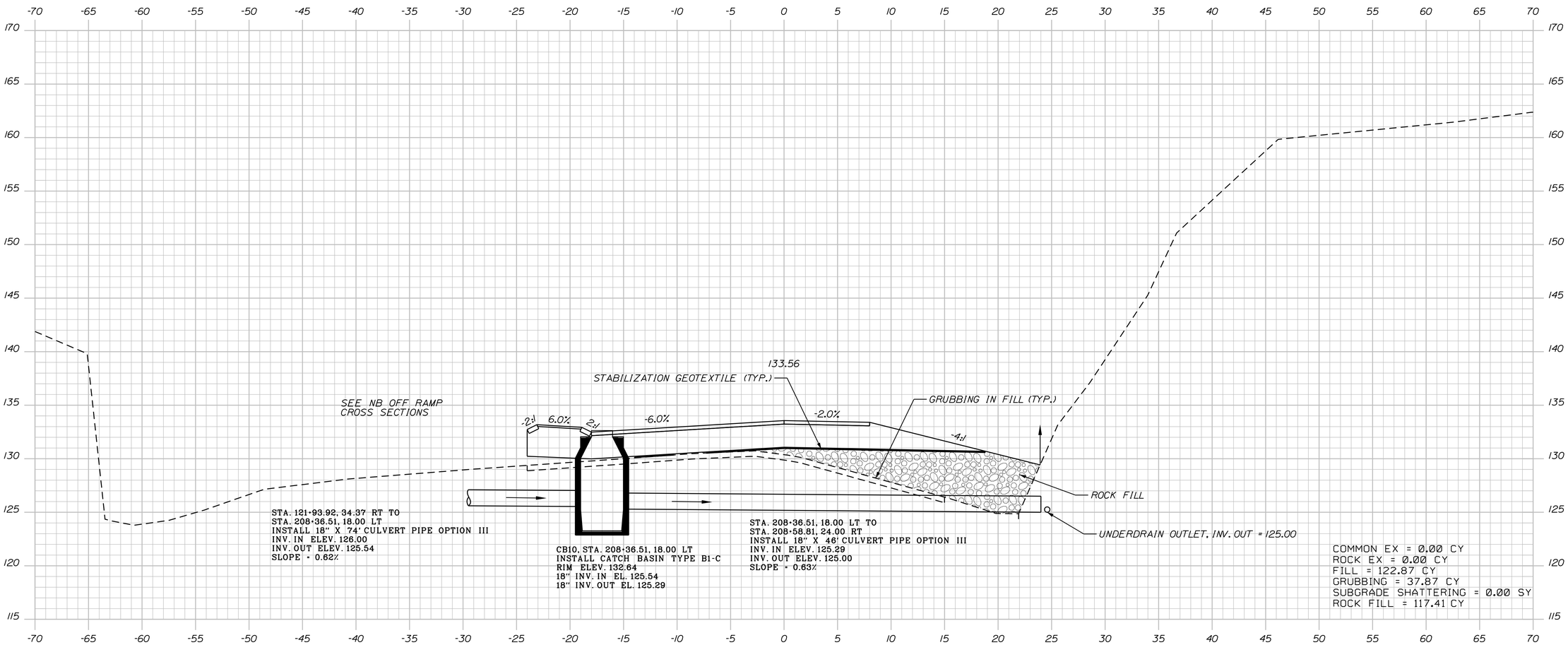
SHEET NUMBER

182

OF 283

Northbound On Ramp Sta. 208+00.00 to Sta. 208+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER

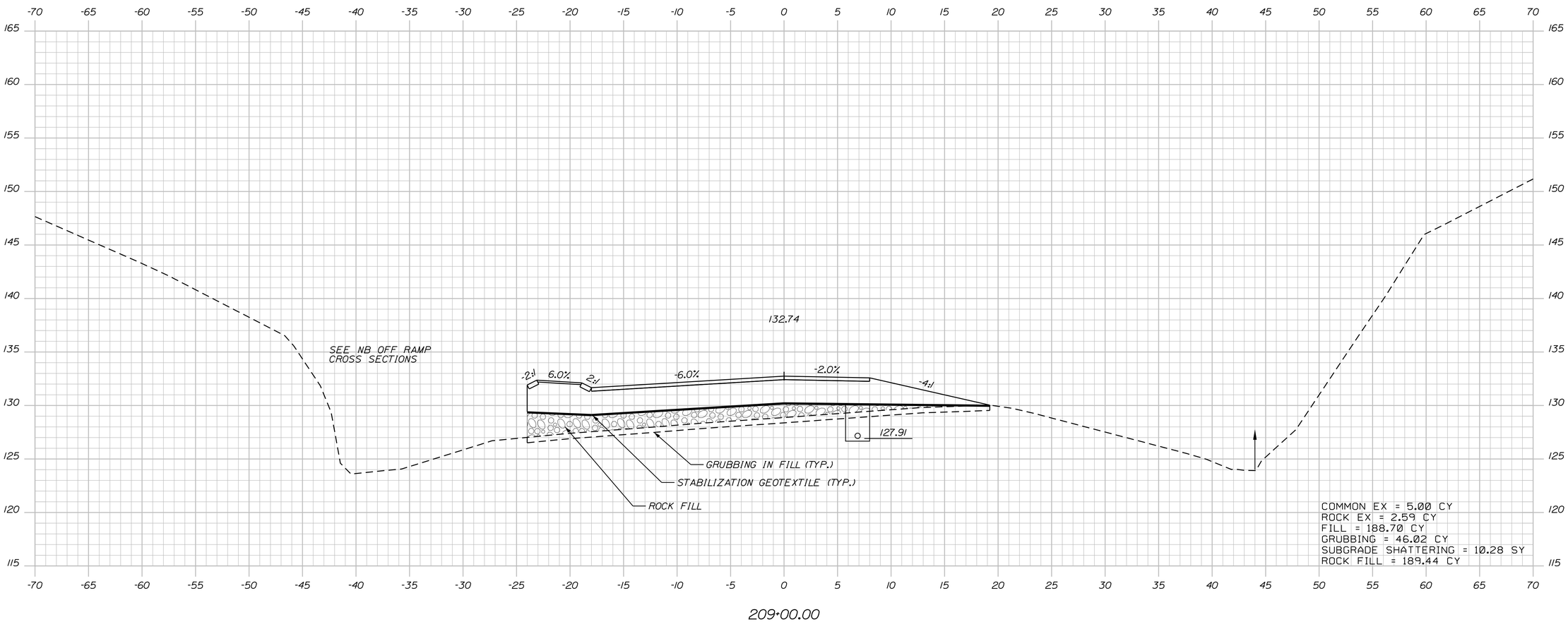
183

OF 283

Northbound On Ramp Sta. 208+50.00 to Sta. 208+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

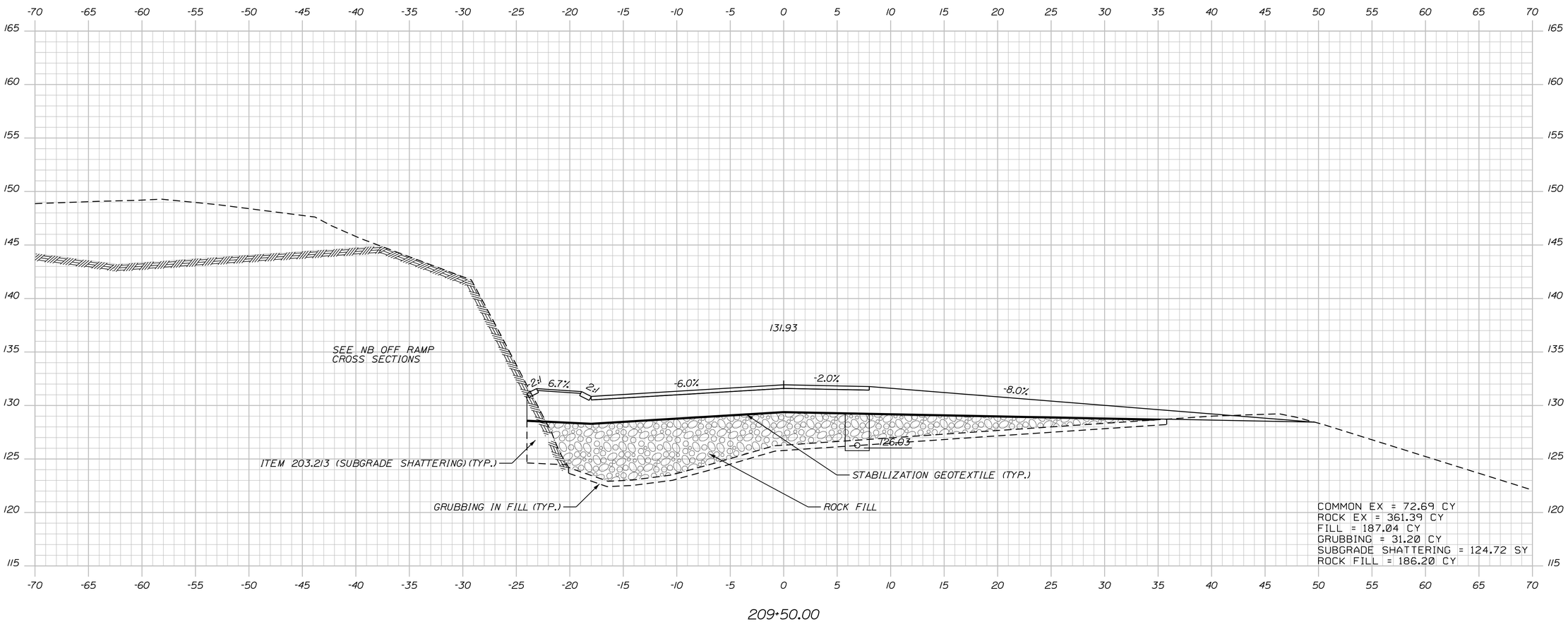
CROSS SECTIONS

SHEET NUMBER

184

OF 283

Northbound On Ramp Sta. 209+00.00 to Sta. 209+00.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

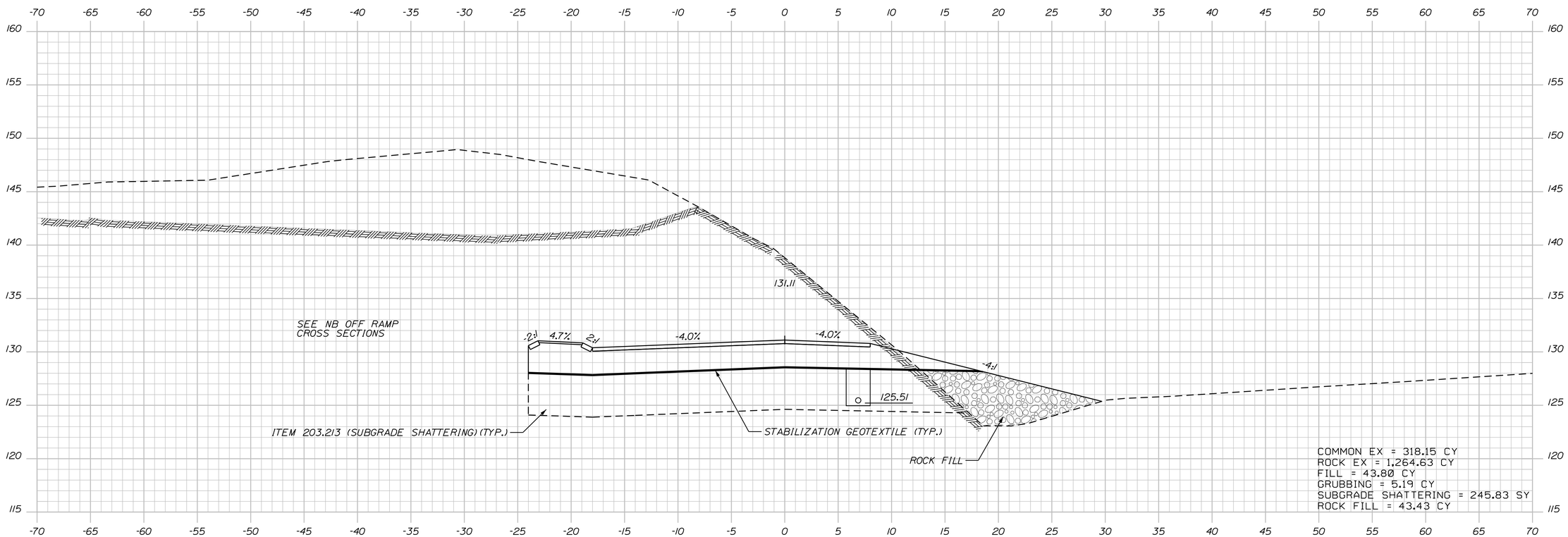
CROSS SECTIONS

SHEET NUMBER
185
OF 283

Northbound On Ramp Sta. 209+50.00 to Sta. 209+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

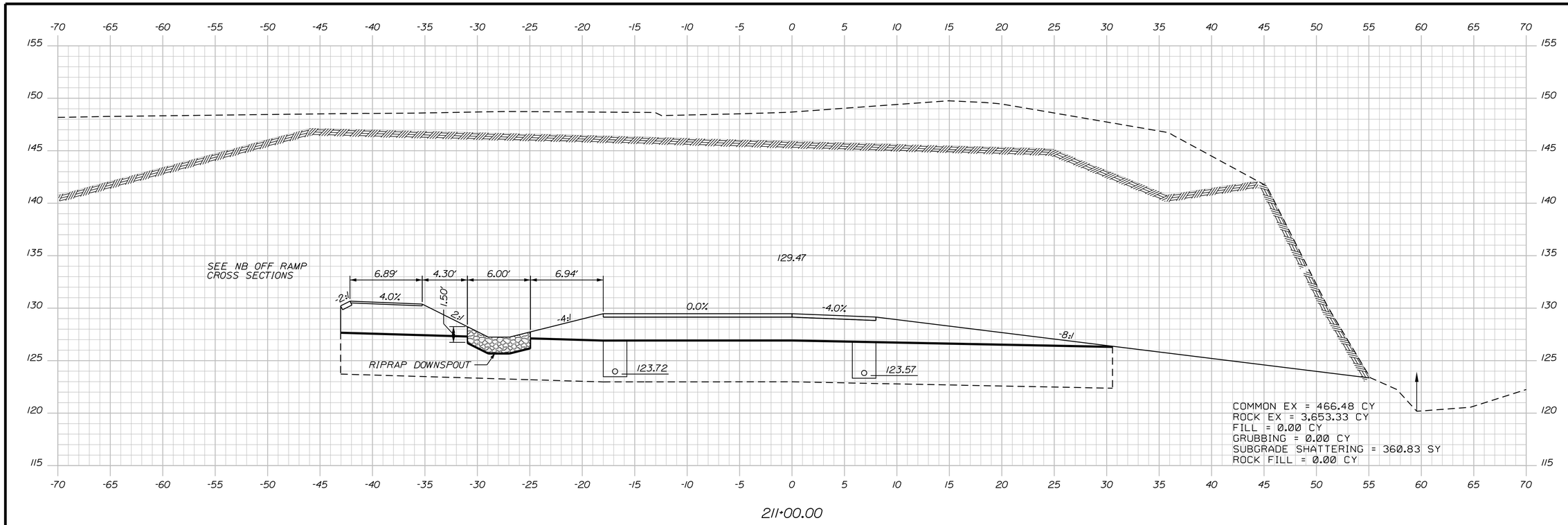
DATE

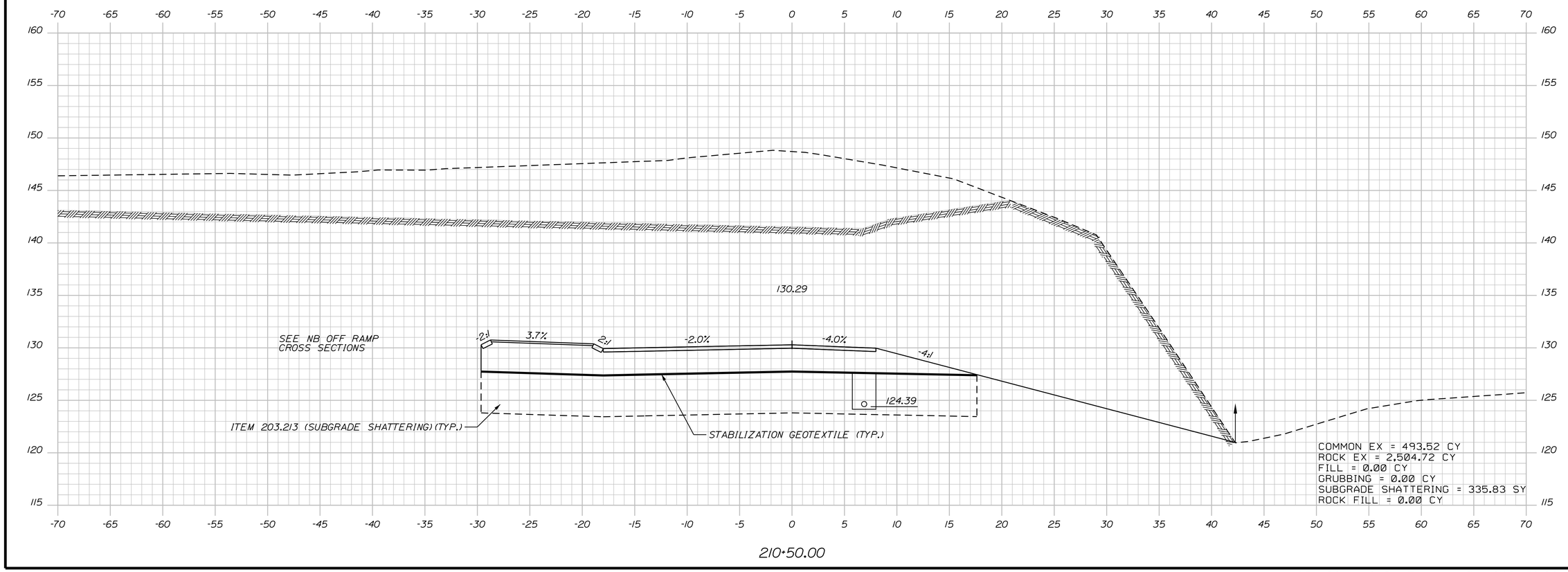
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
186
OF 283

Northbound On Ramp Sta. 210+00.00 to Sta. 210+00.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

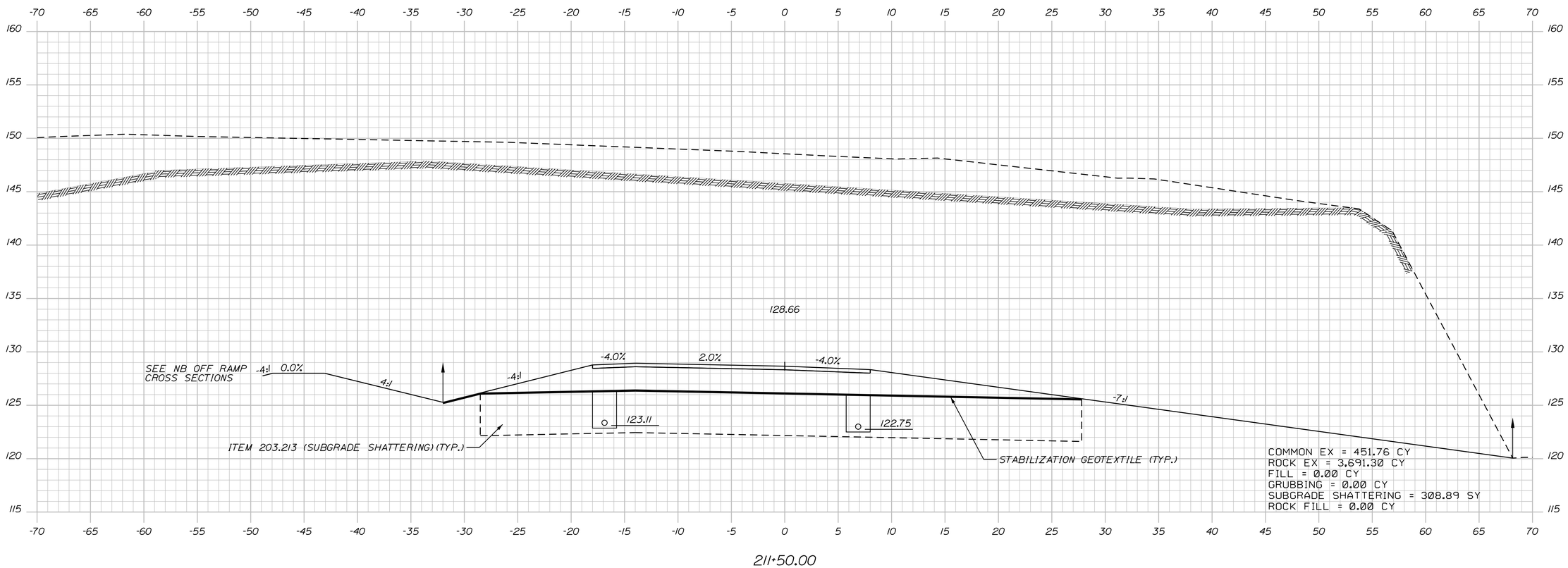
CROSS SECTIONS

SHEET NUMBER
187
OF 283

Northbound On Ramp Sta. 210+50.00 to Sta. 211+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

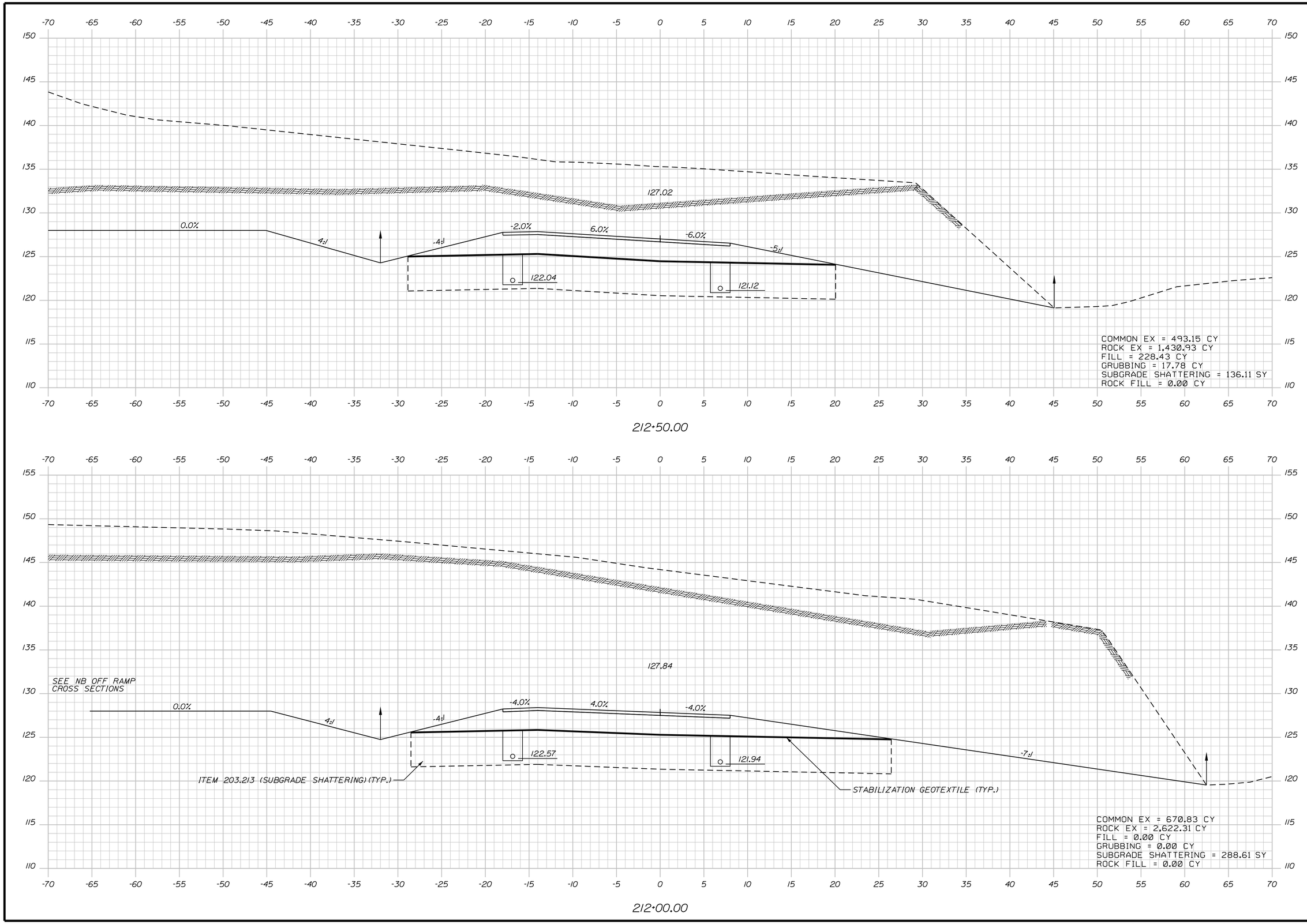
CROSS SECTIONS

SHEET NUMBER

188

OF 283

Northbound On Ramp Sta. 211+50.00 to Sta. 211+50.00



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

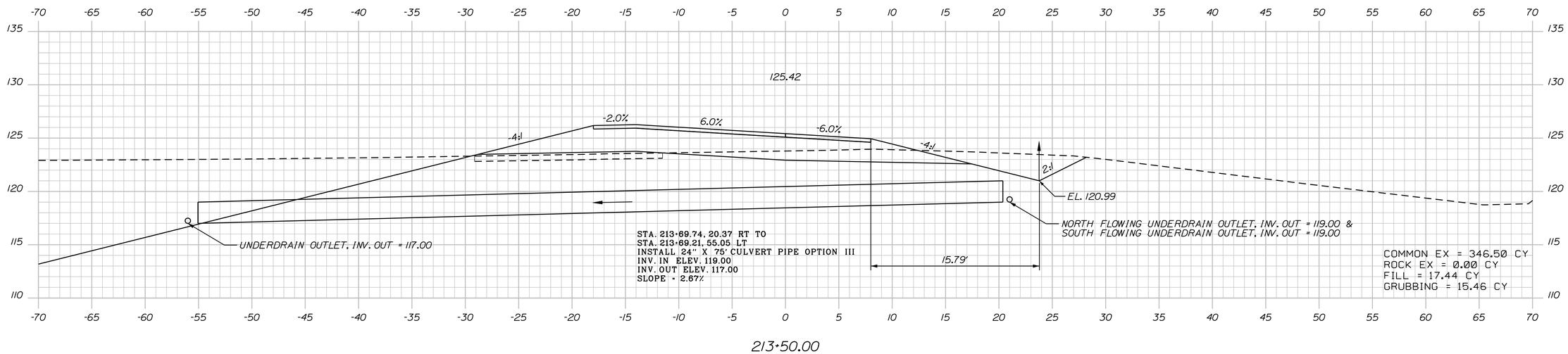
SHEET NUMBER

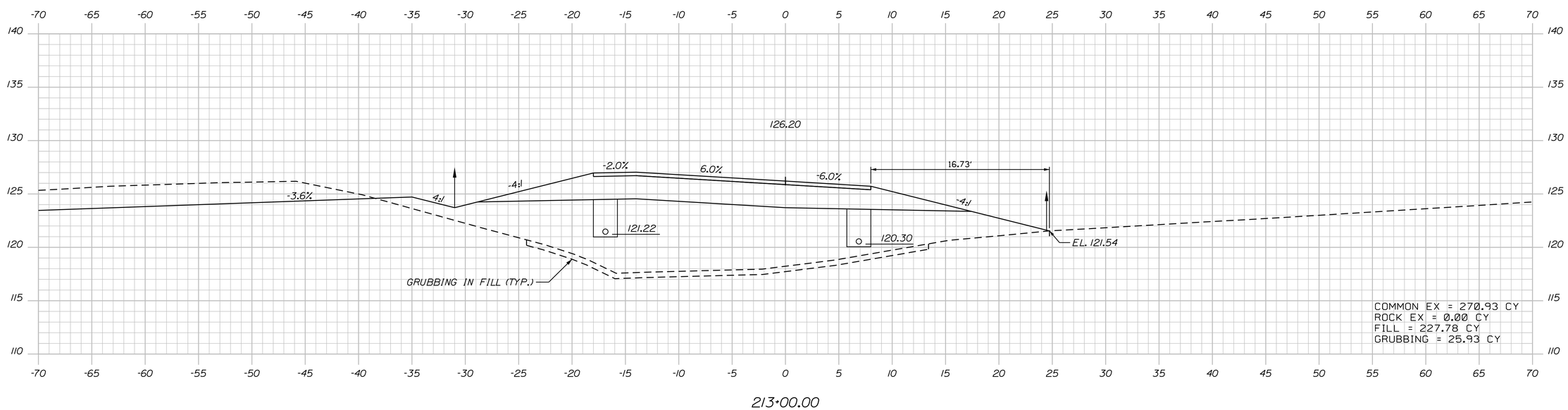
189

OF 283

Northbound On Ramp Sta. 212+00.00 to Sta. 212+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

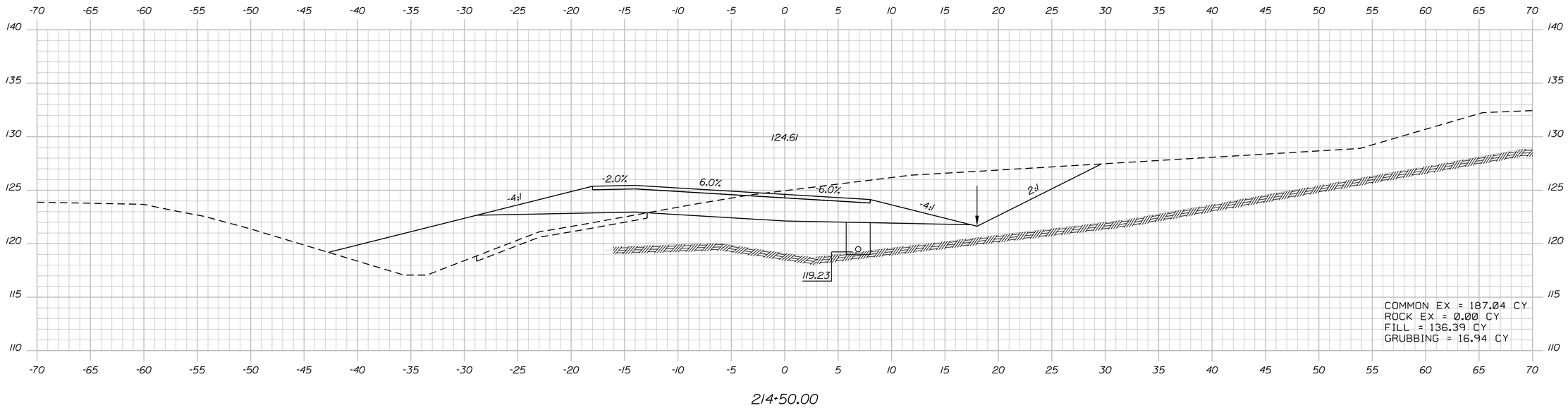
SHEET NUMBER

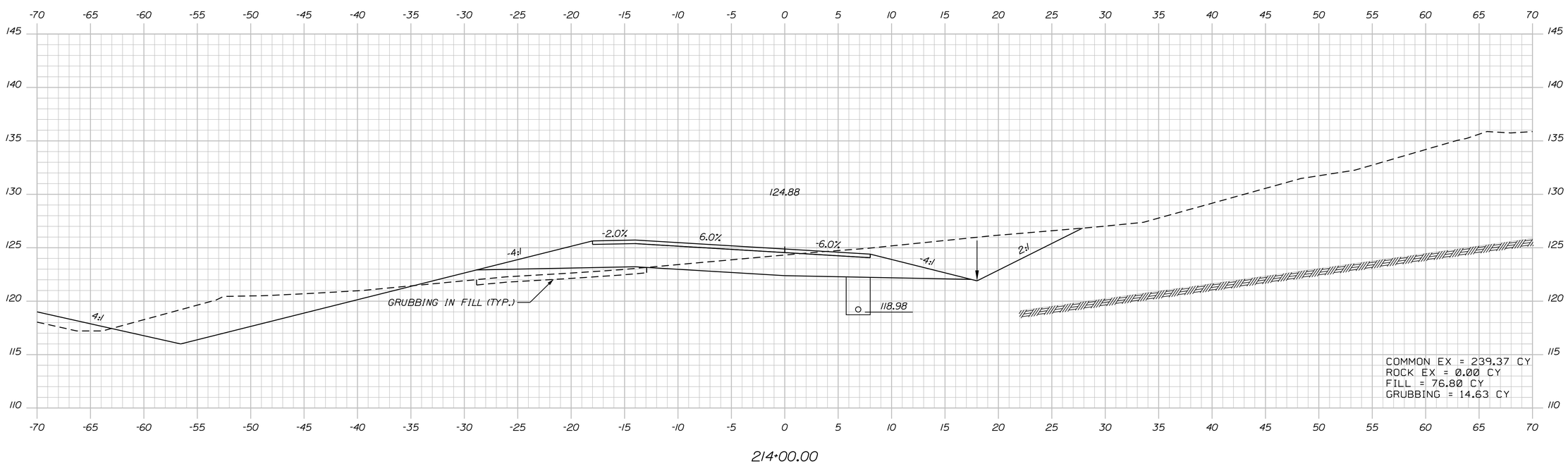
190

OF 283

Northbound On Ramp Sta. 213+00.00 to Sta. 213+50.00

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

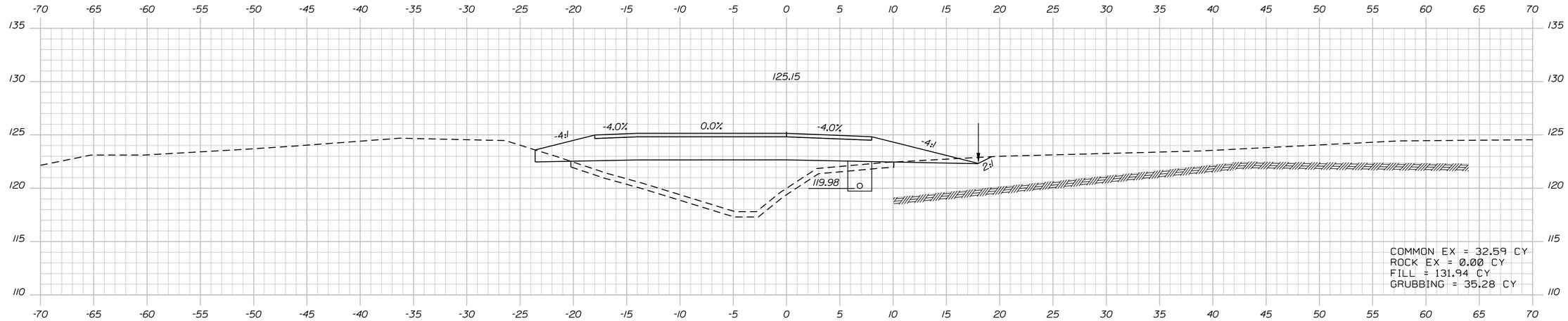
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

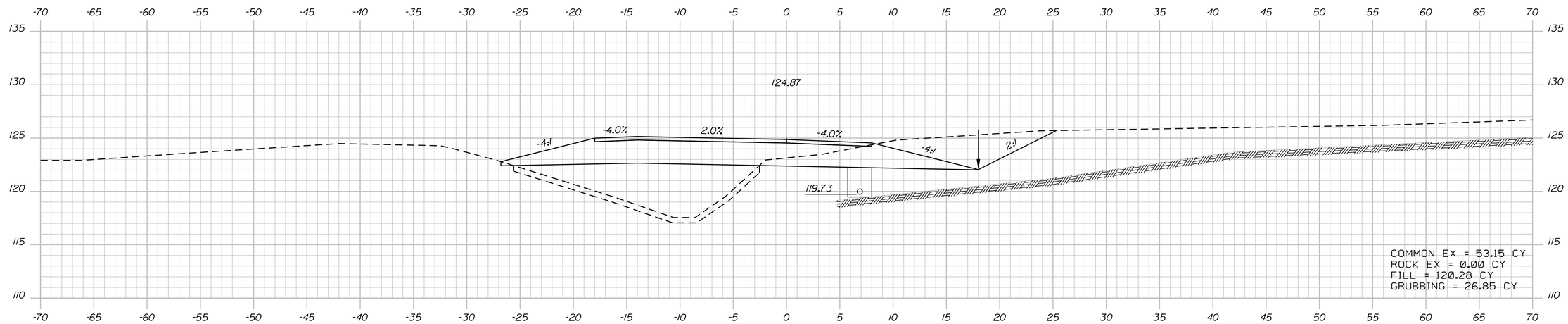
SHEET NUMBER
191
OF 283

Northbound On Ramp Sta. 214+00.00 to Sta. 214+50.00

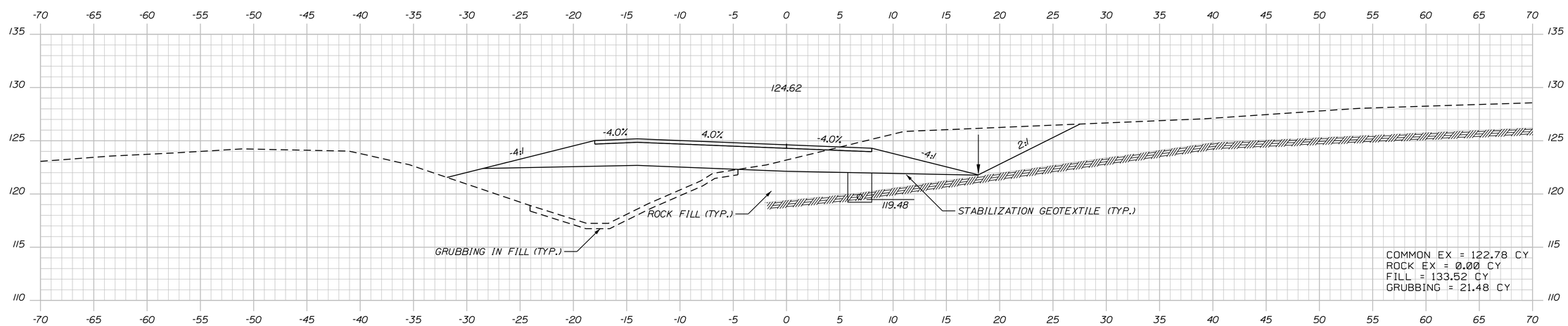
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



216+00.00



215+50.00



215+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

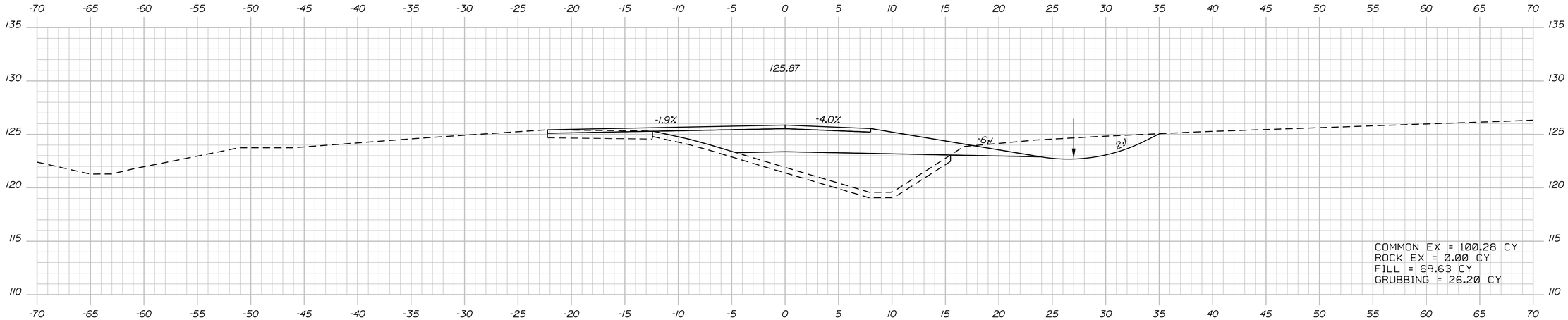
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

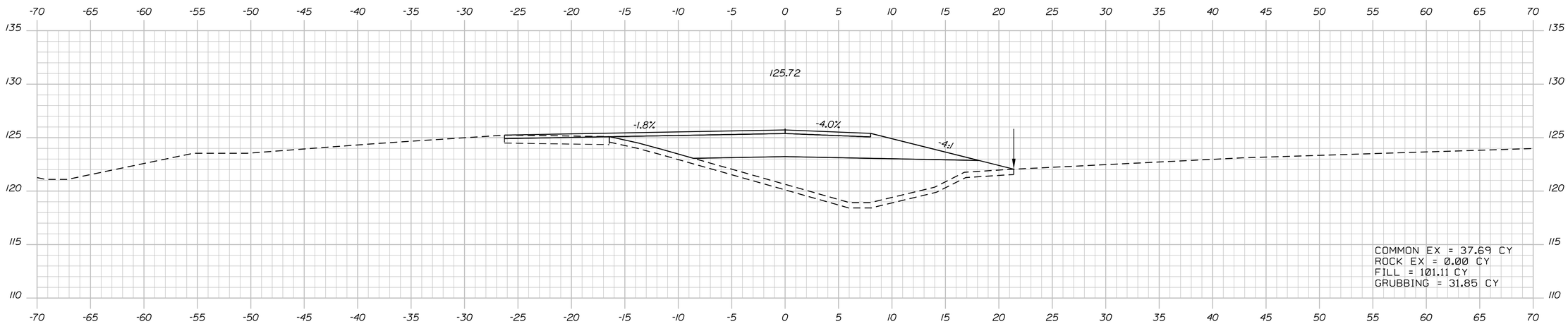
SHEET NUMBER
192
OF 283

Northbound On Ramp Sta. 215+00.00 to Sta. 216+00.00

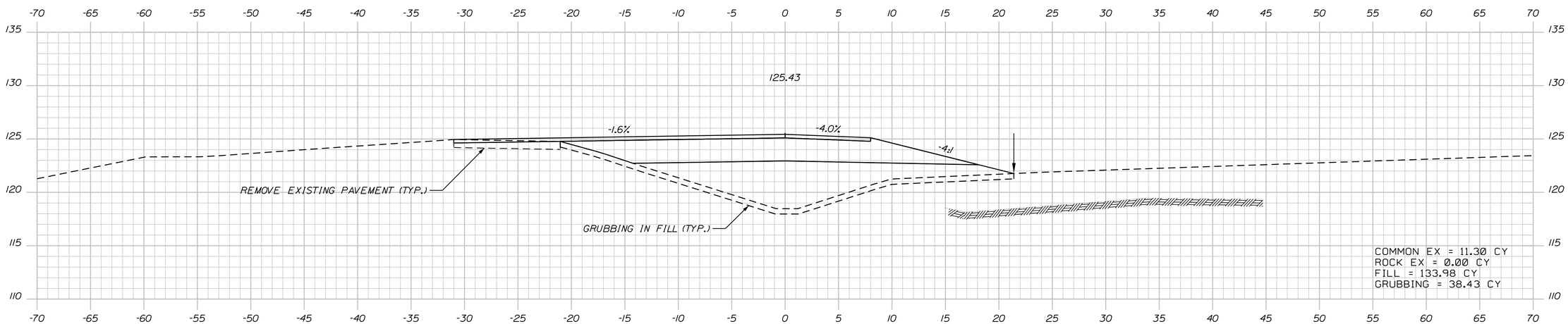
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



217+50.00



217+00.00



216+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

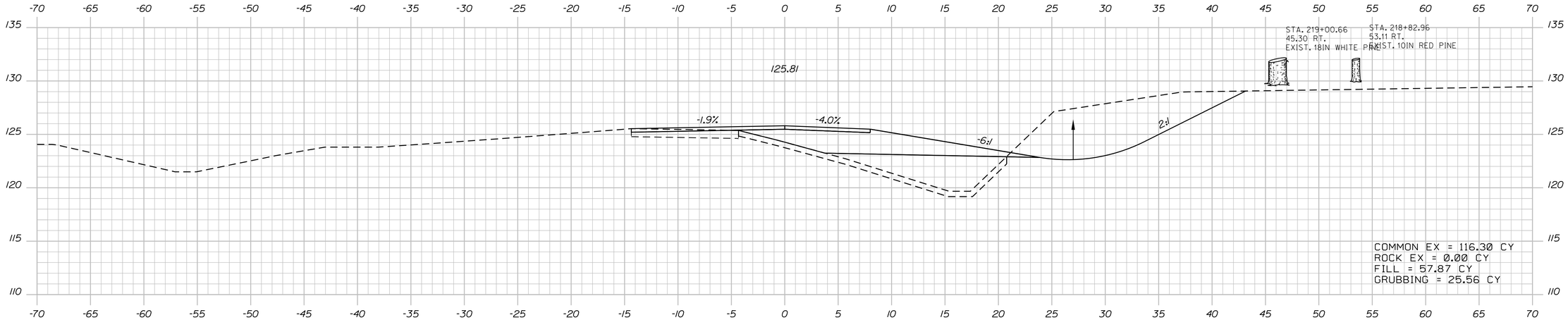
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

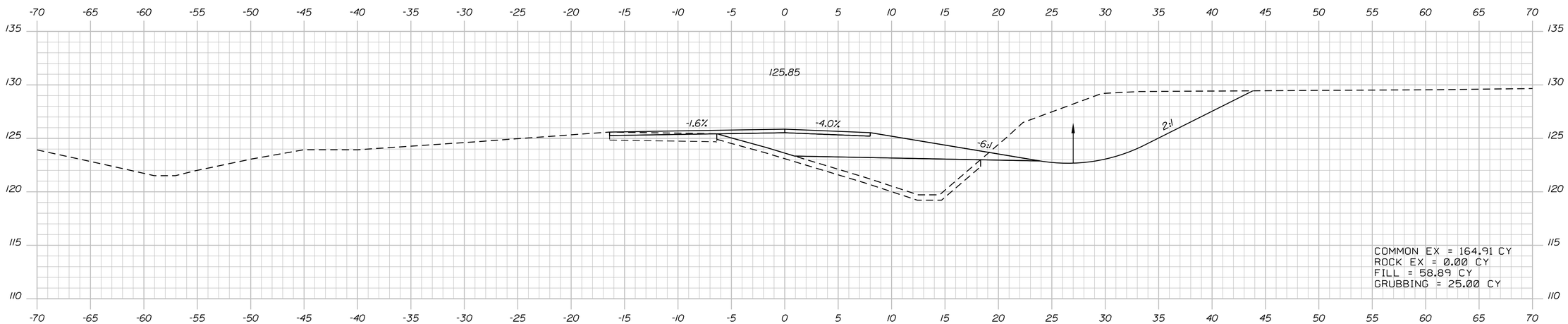
SHEET NUMBER
193
OF 283

Northbound On Ramp Sta. 216+50.00 to Sta. 217+50.00

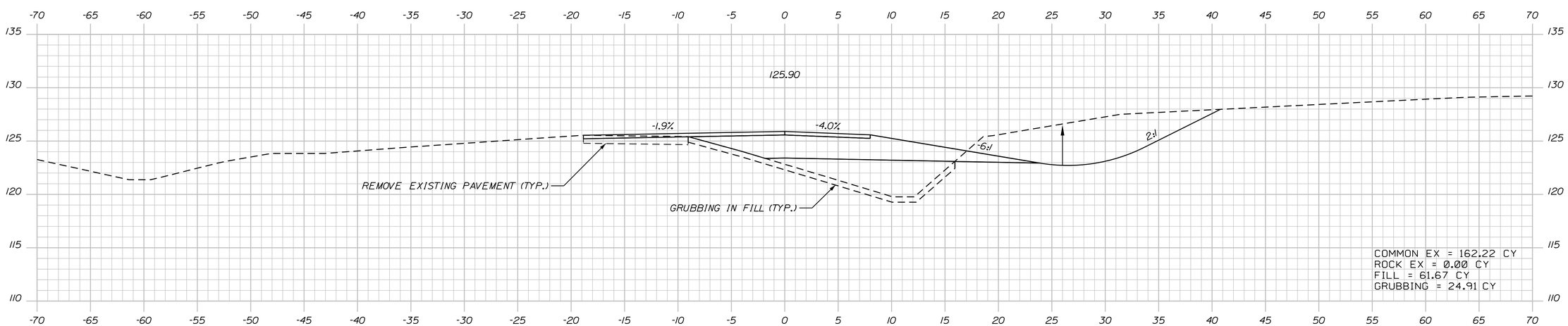
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



219+00.00



218+50.00



218+00.00

Northbound On Ramp Sta. 218+00.00 to Sta. 219+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

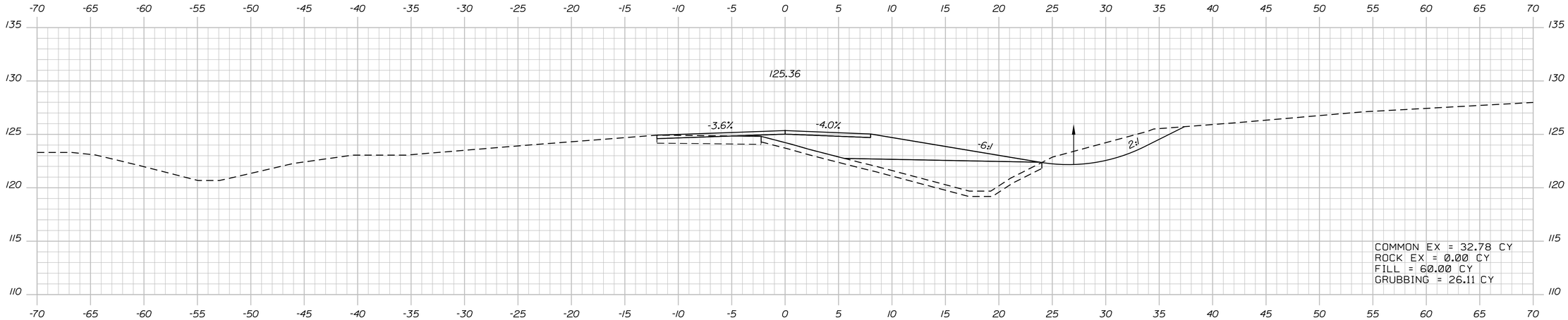
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

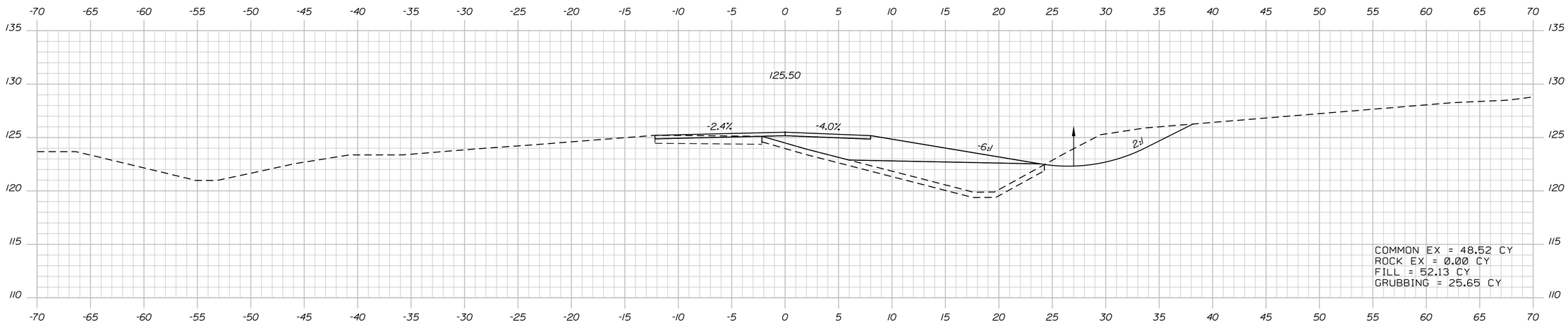
SHEET NUMBER
194
OF 283

Division: HIGHWAY Username: COMMON Date:2/21/2011

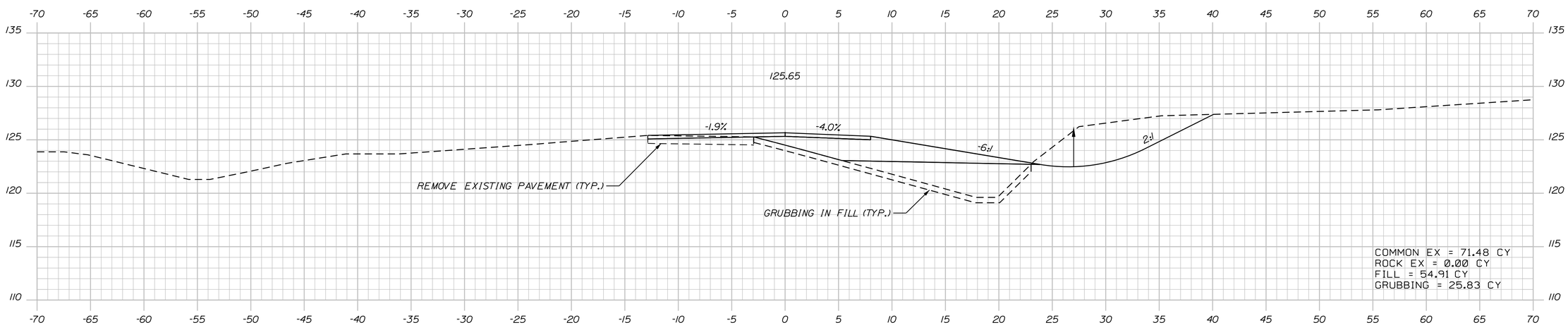
Filename:



220+50.00



220+00.00



219+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

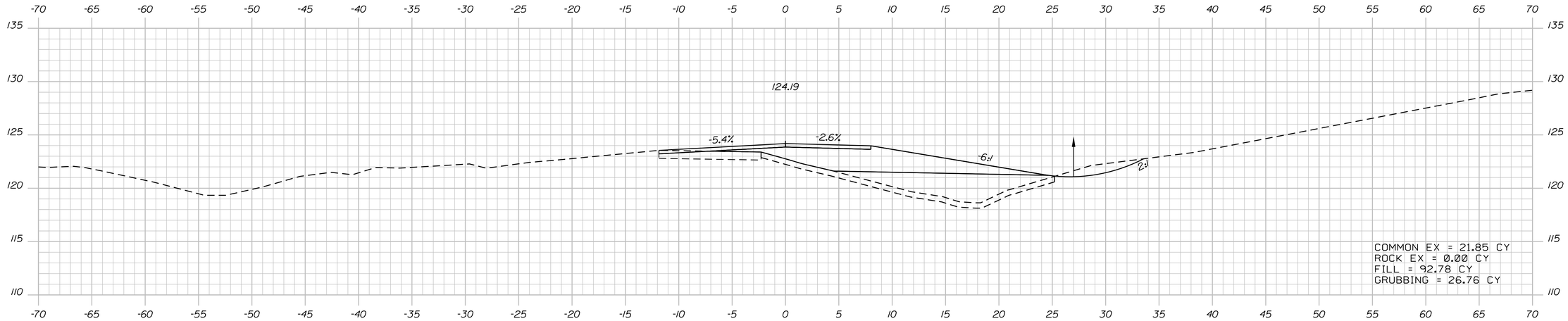
SHEET NUMBER

195

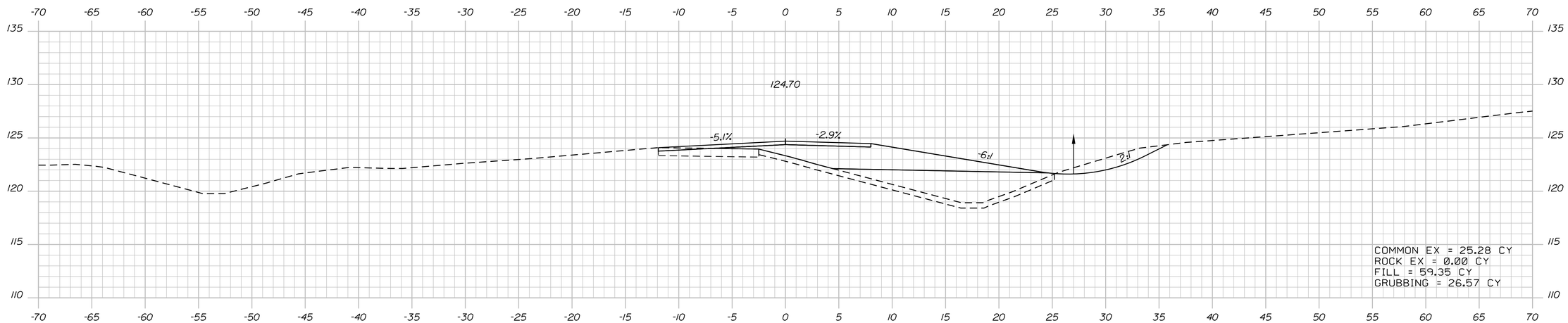
OF 283

Northbound On Ramp Sta. 219+50.00 to Sta. 220+50.00

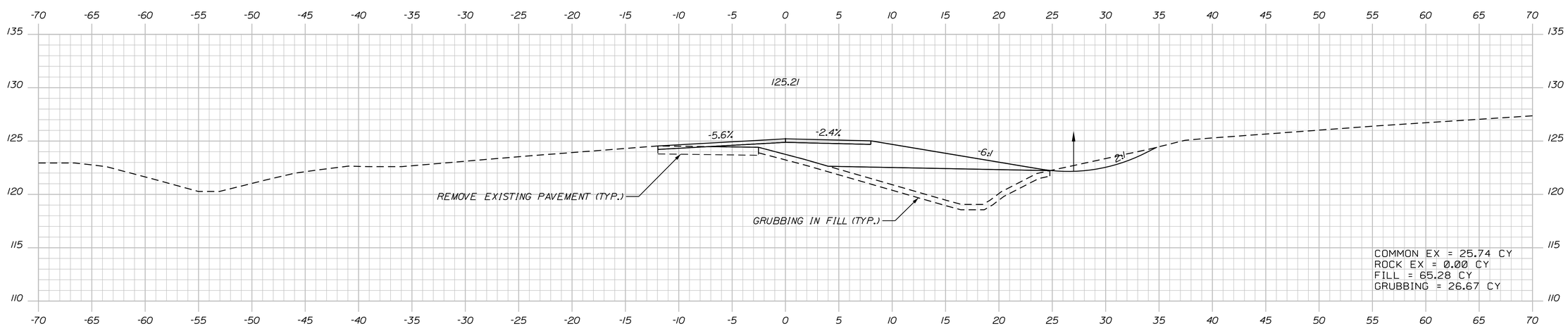
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



222+00.00



221+50.00



221+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

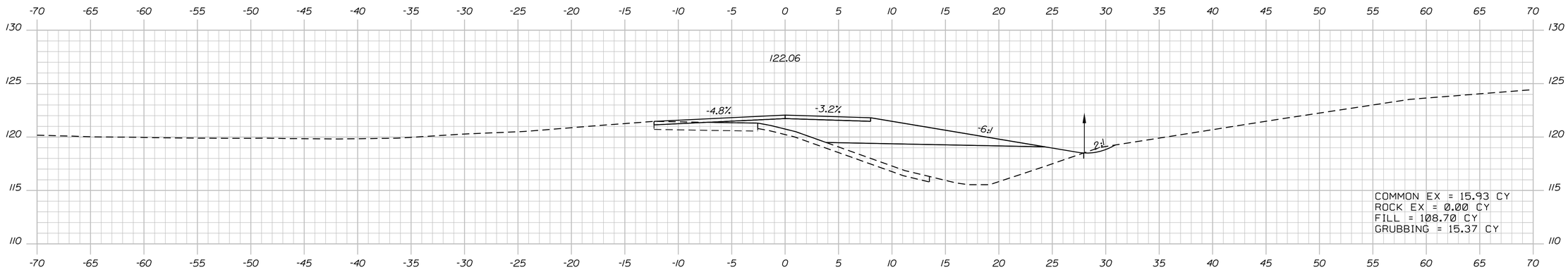
SHEET NUMBER

196

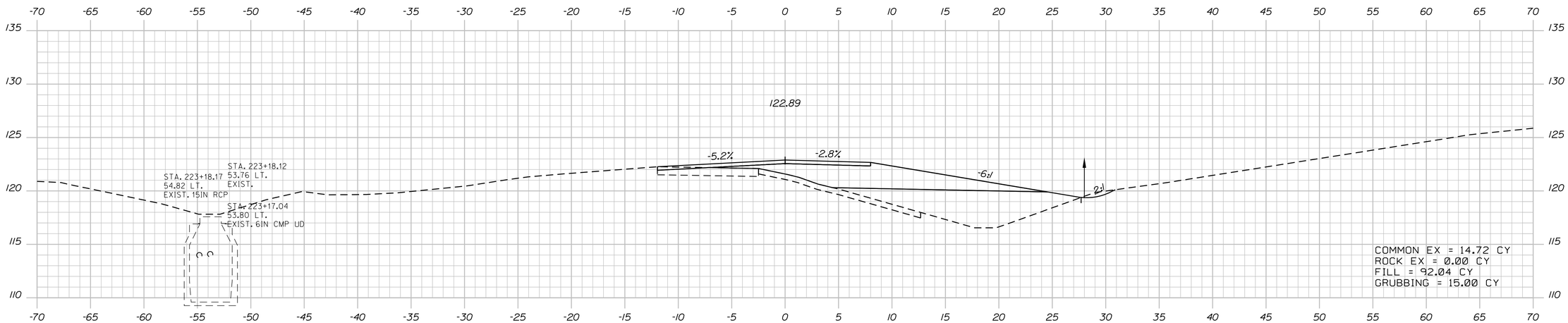
OF 283

Northbound On Ramp Sta. 221+00.00 to Sta. 222+00.00

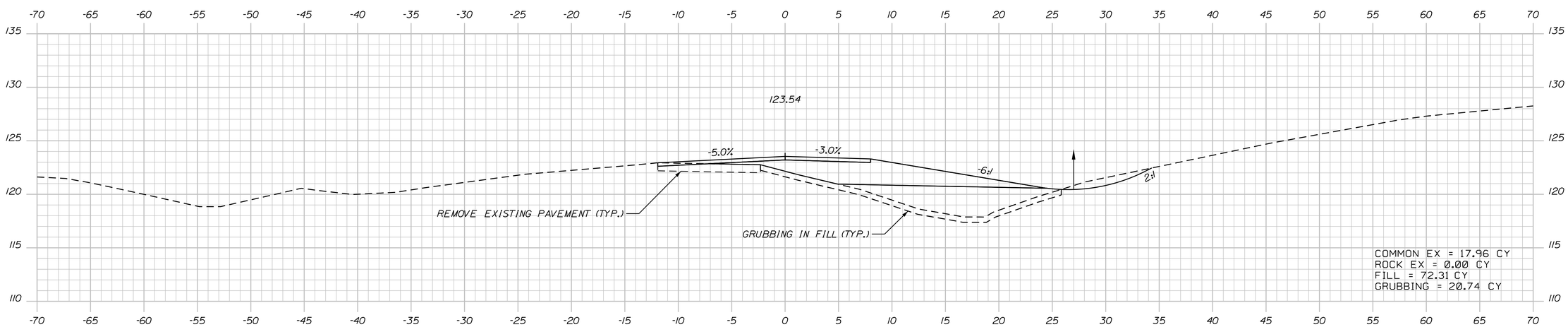
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



223+50.00



223+00.00



222+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

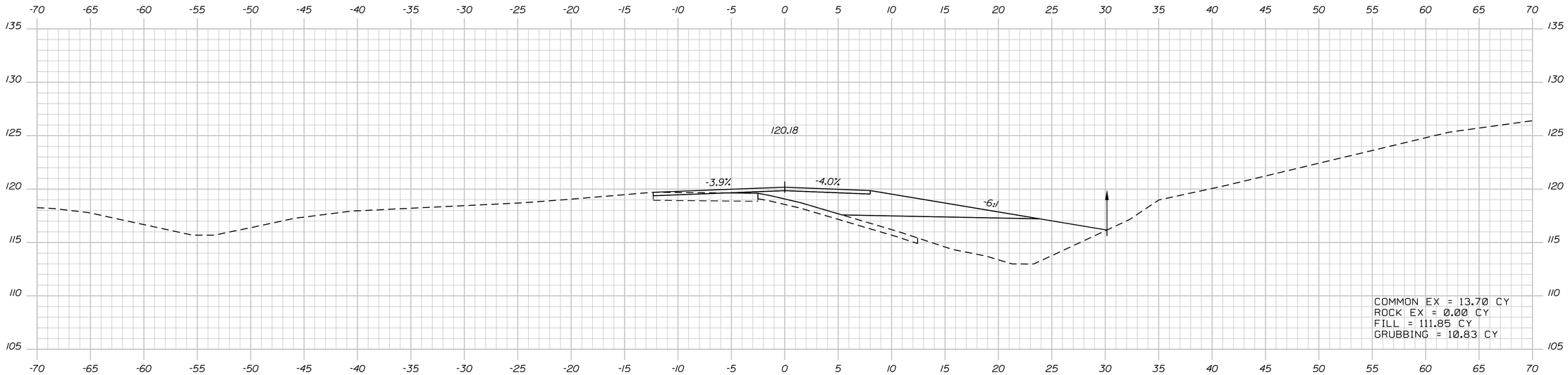
YARMOUTH
I-295 EXIT 15

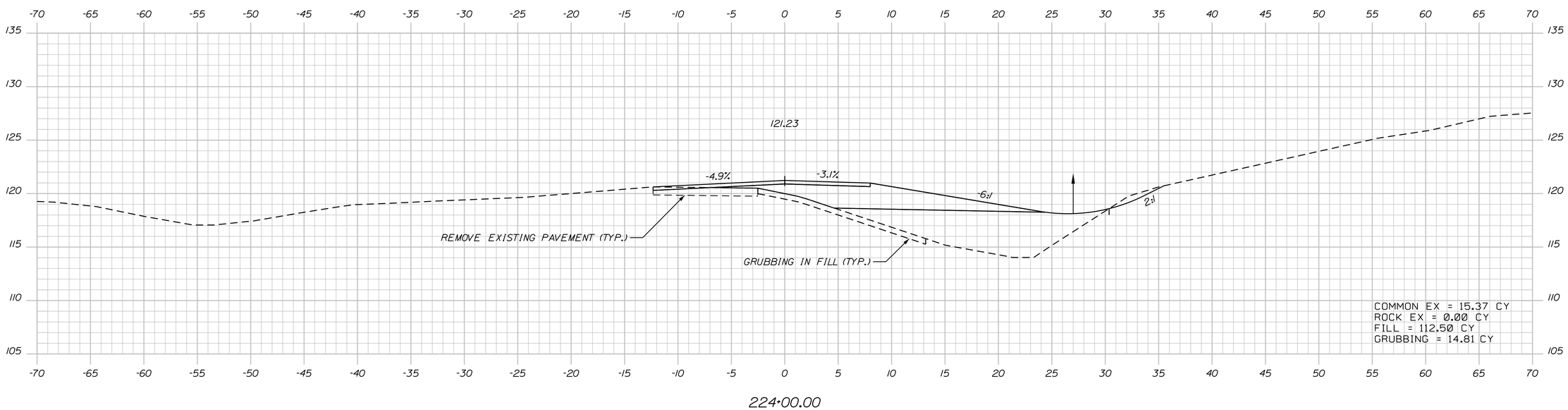
CROSS SECTIONS

SHEET NUMBER
197
OF 283

Northbound On Ramp Sta. 222+50.00 to Sta. 223+50.00

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011





Northbound On Ramp Sta. 224+00.00 to Sta. 224+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

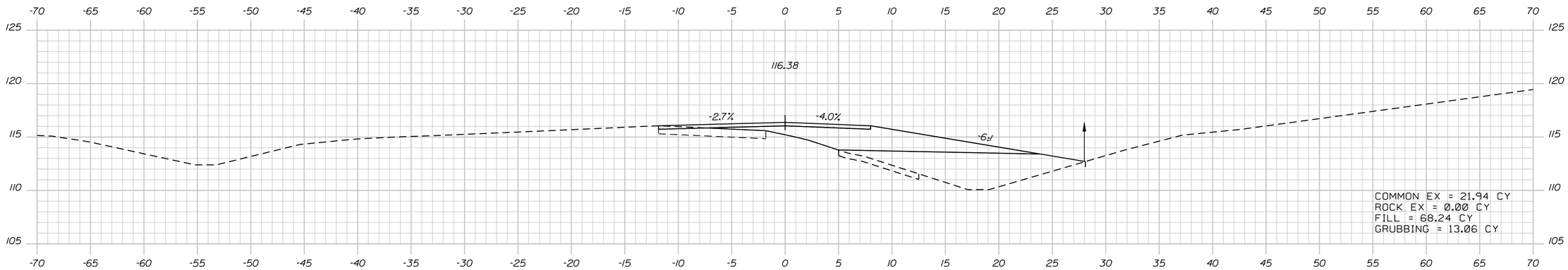
DATE

YARMOUTH
I-295 EXIT 15

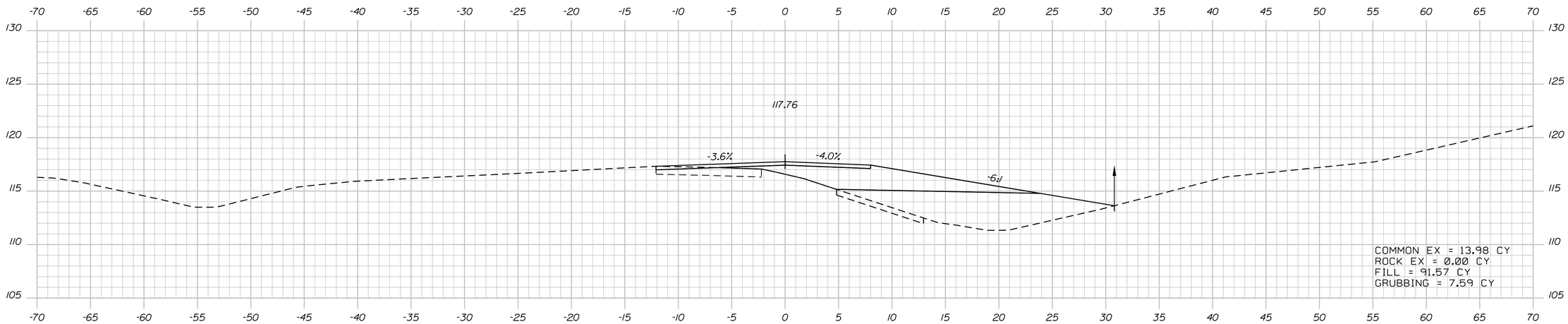
CROSS SECTIONS

SHEET NUMBER
198
OF 283

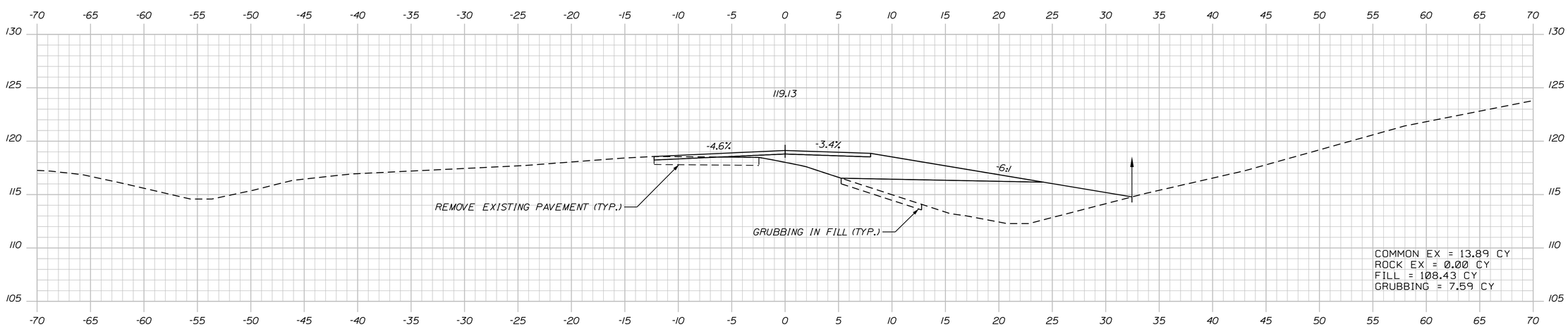
Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



226+00.00



225+50.00



225+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

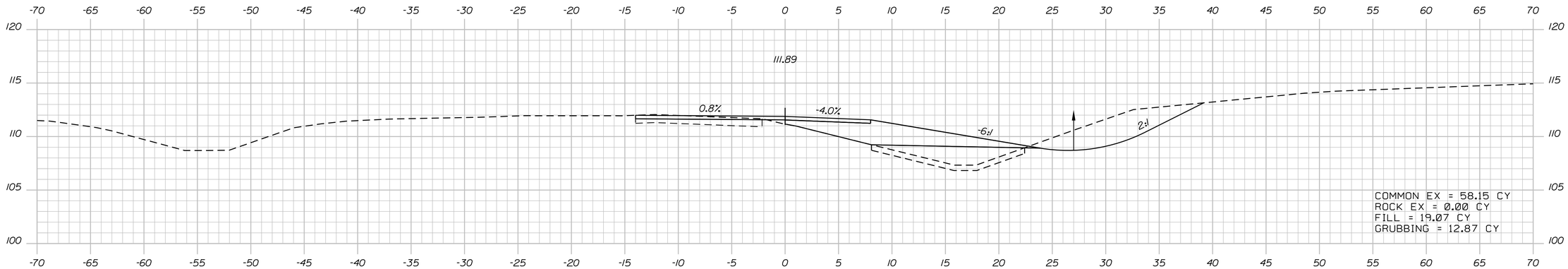
SHEET NUMBER

199

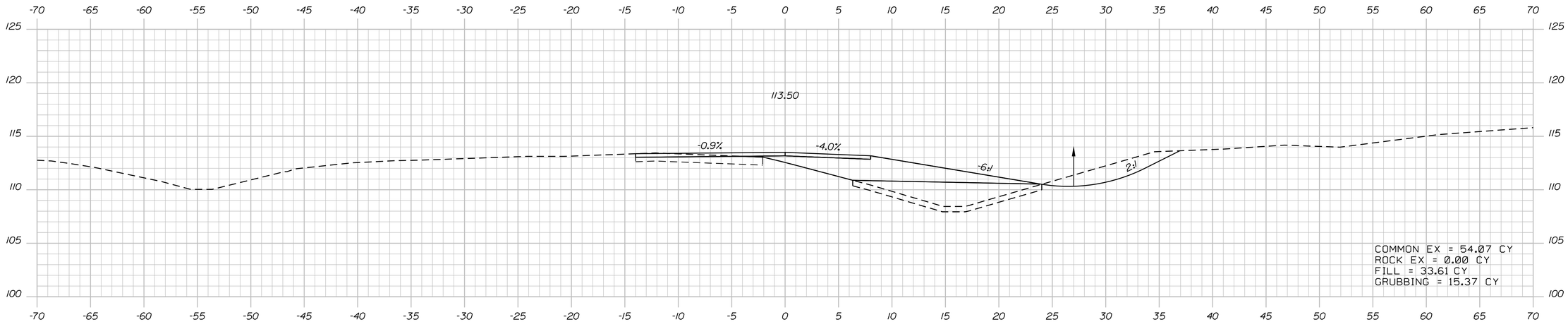
OF 283

Northbound On Ramp Sta. 225+00.00 to Sta. 226+00.00

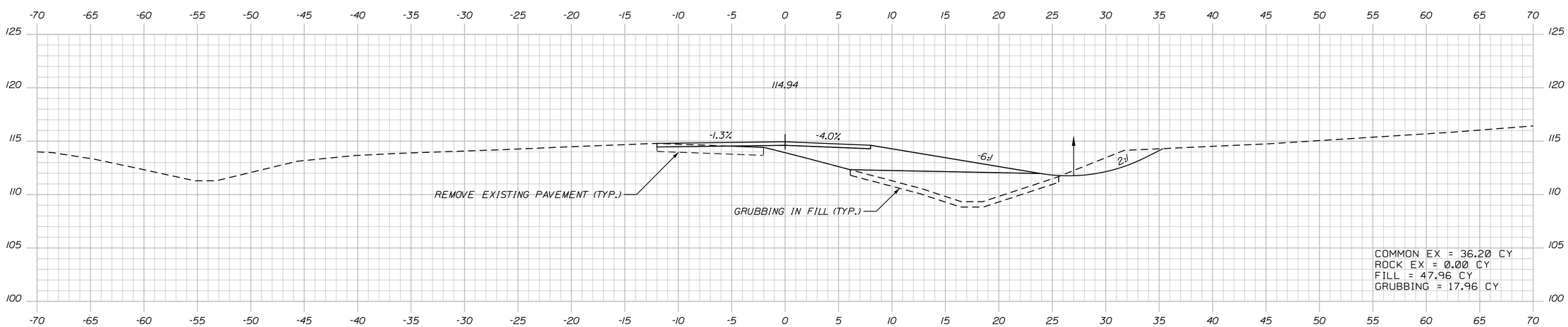
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



227+50.00



227+00.00



226+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

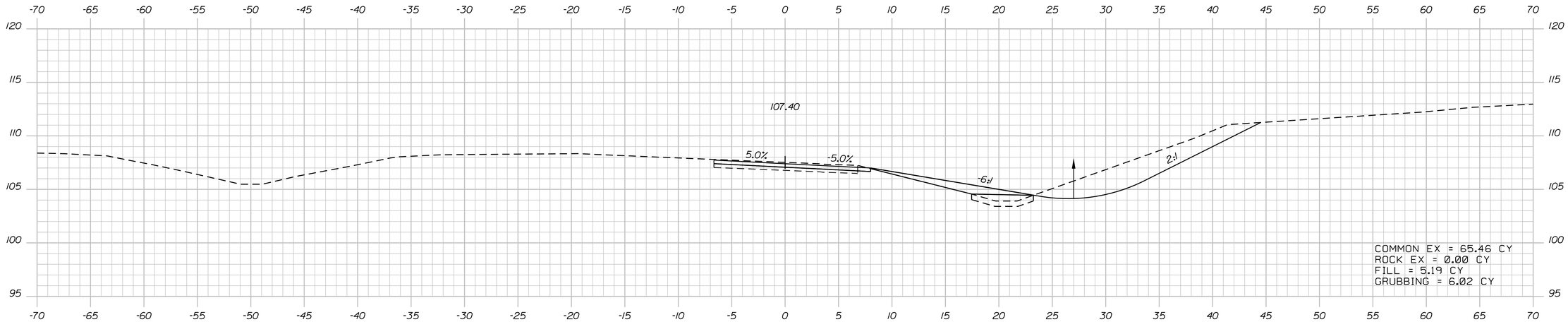
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

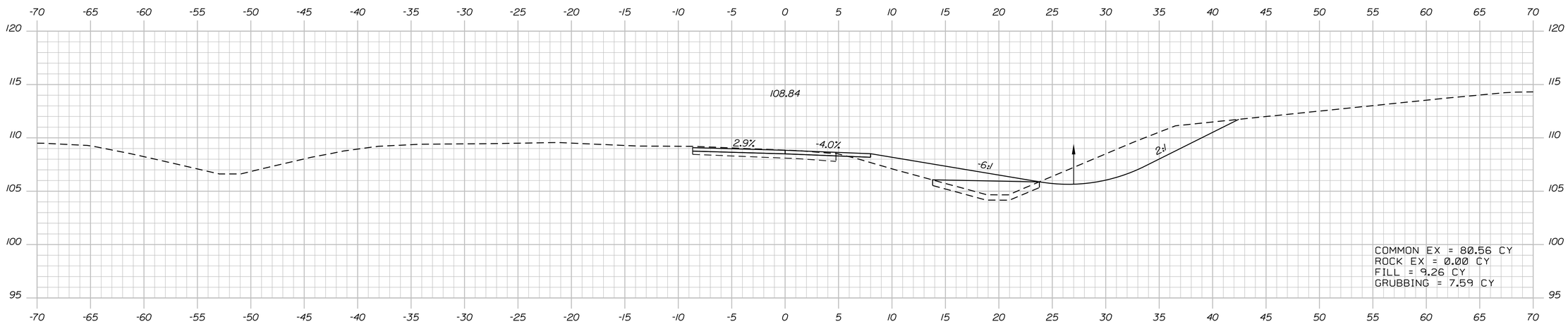
SHEET NUMBER
200
OF 283

Northbound On Ramp Sta. 226+50.00 to Sta. 227+50.00

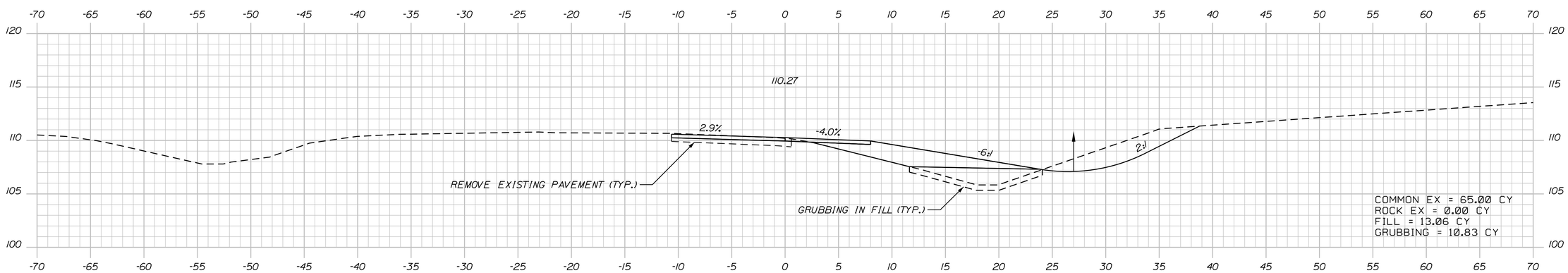
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



229+00.00



228+50.00



228+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

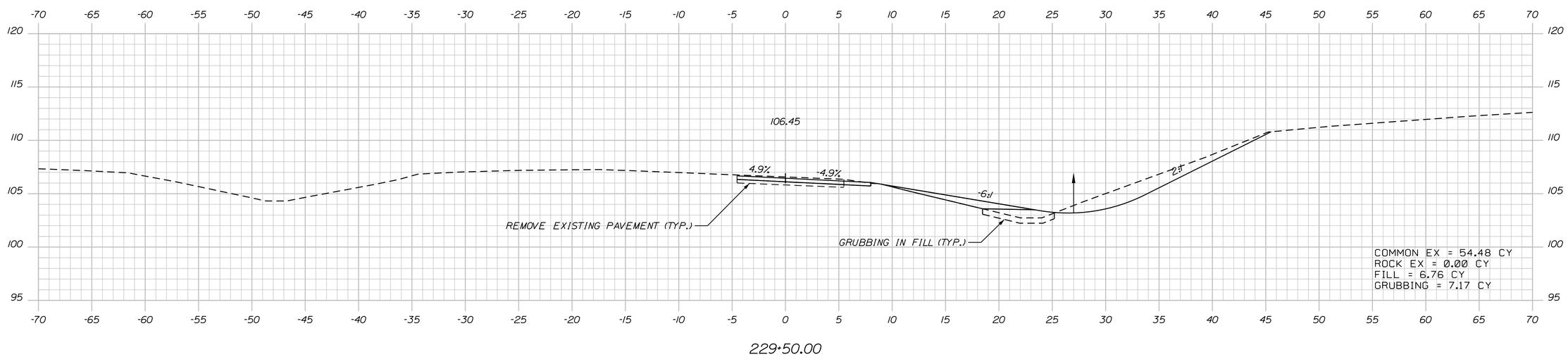
CROSS SECTIONS

SHEET NUMBER
201
OF 283

Northbound On Ramp Sta. 228+00.00 to Sta. 229+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

YARMOUTH
I-295 EXIT 15

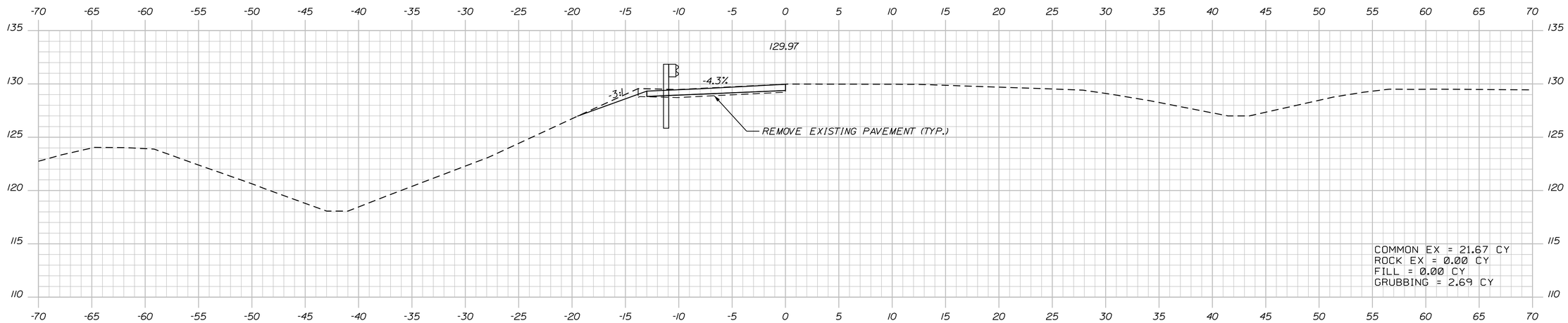
CROSS SECTIONS

SHEET NUMBER

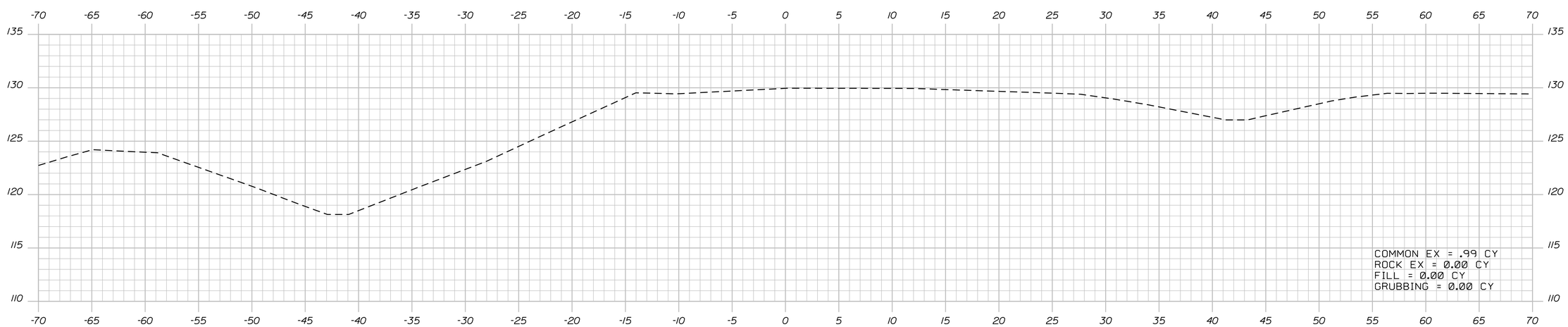
202

OF 283

Northbound On Ramp Sta. 229+50.00



498+50.00



498+45.47

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

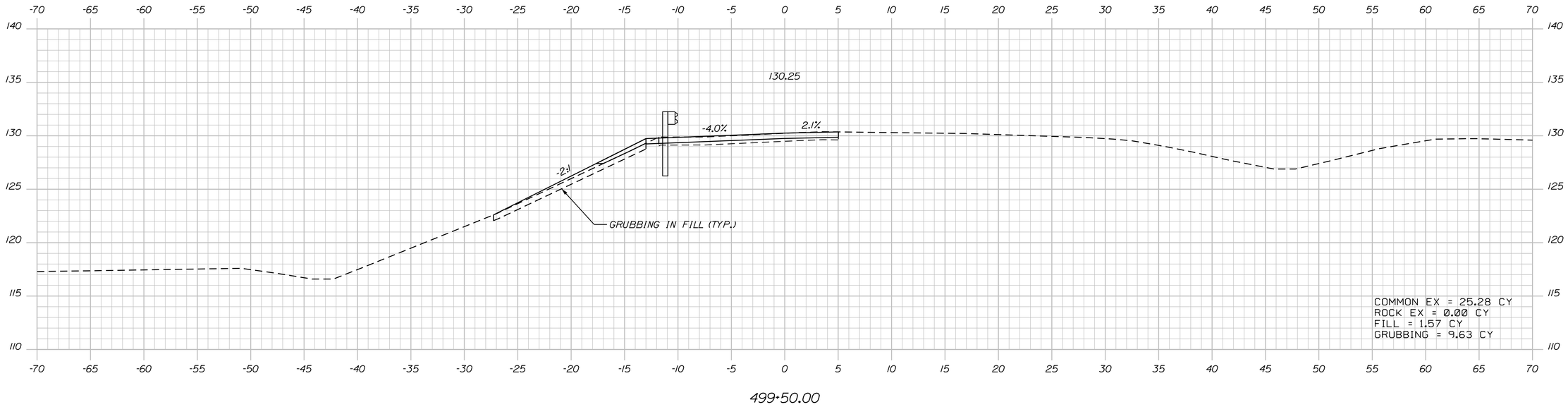
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

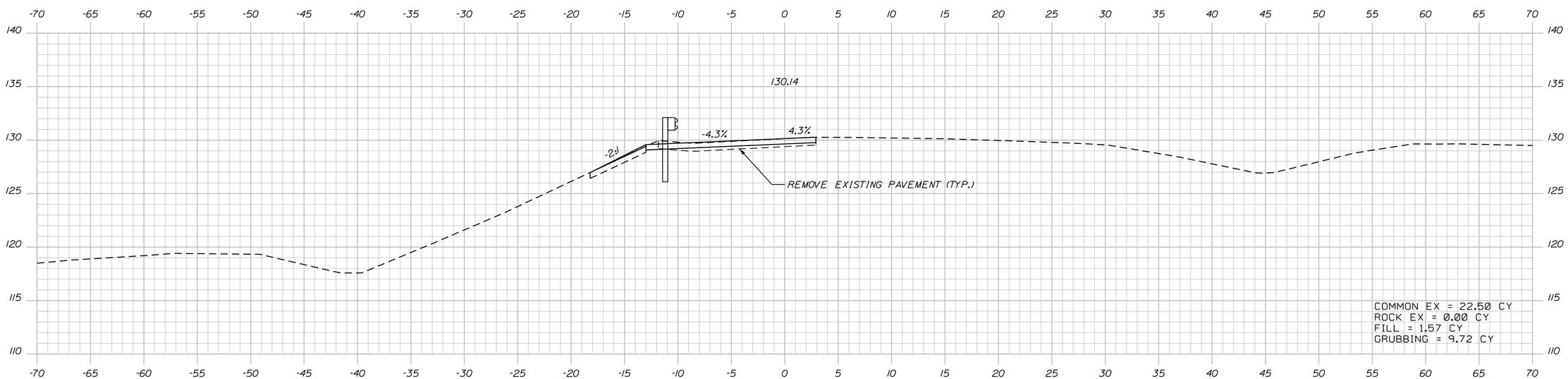
SHEET NUMBER
203
OF 283

Southbound On Ramp Sta. 498+45.47 to Sta. 498+50.00

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



499+50.00



499+00.00

Southbound On Ramp Sta. 499+00.00 to Sta. 499+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

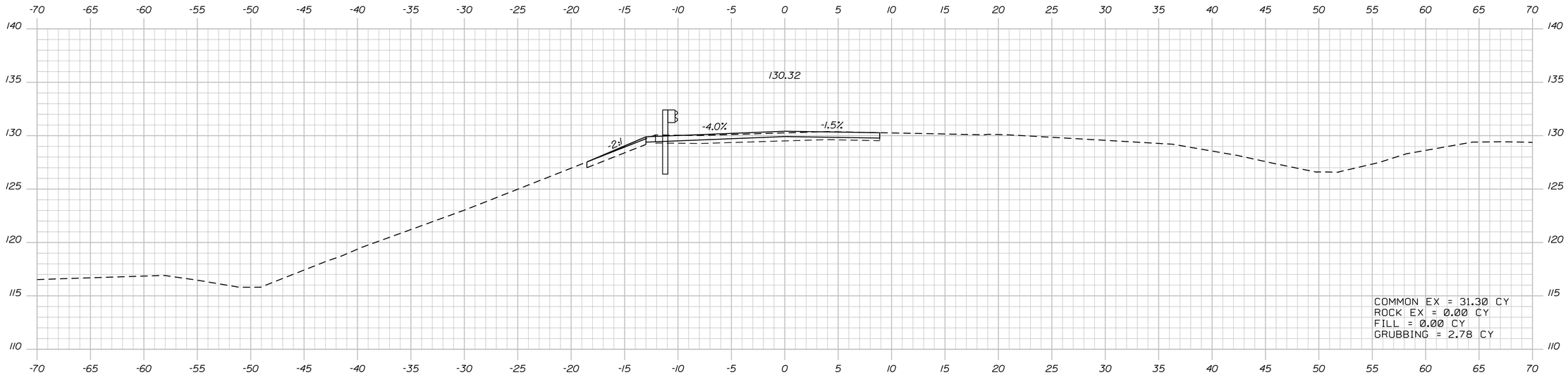
DATE

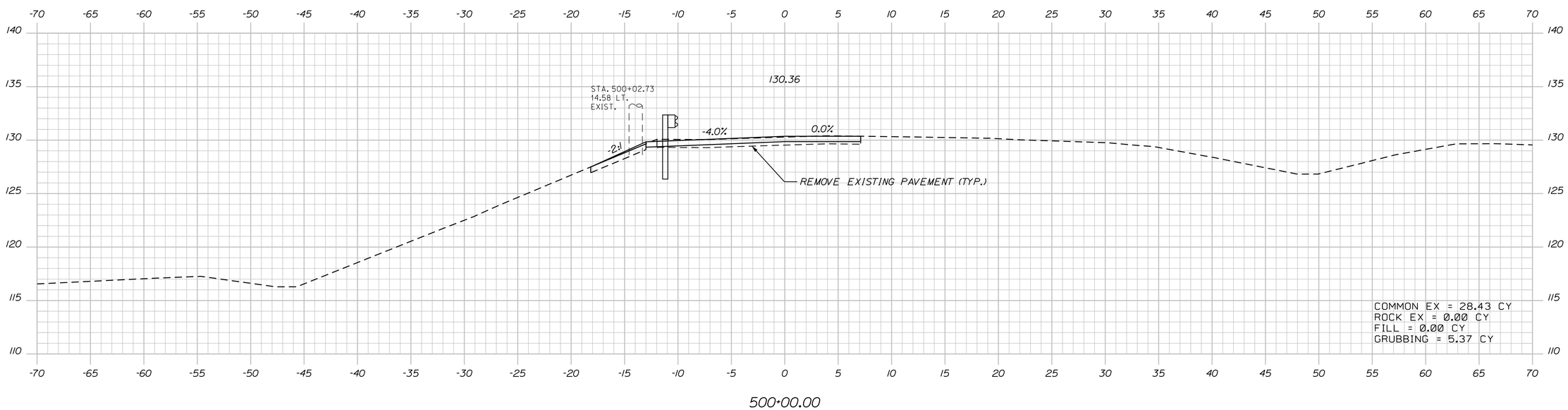
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
204
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011





Southbound On Ramp Sta. 500+00.00 to Sta. 500+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

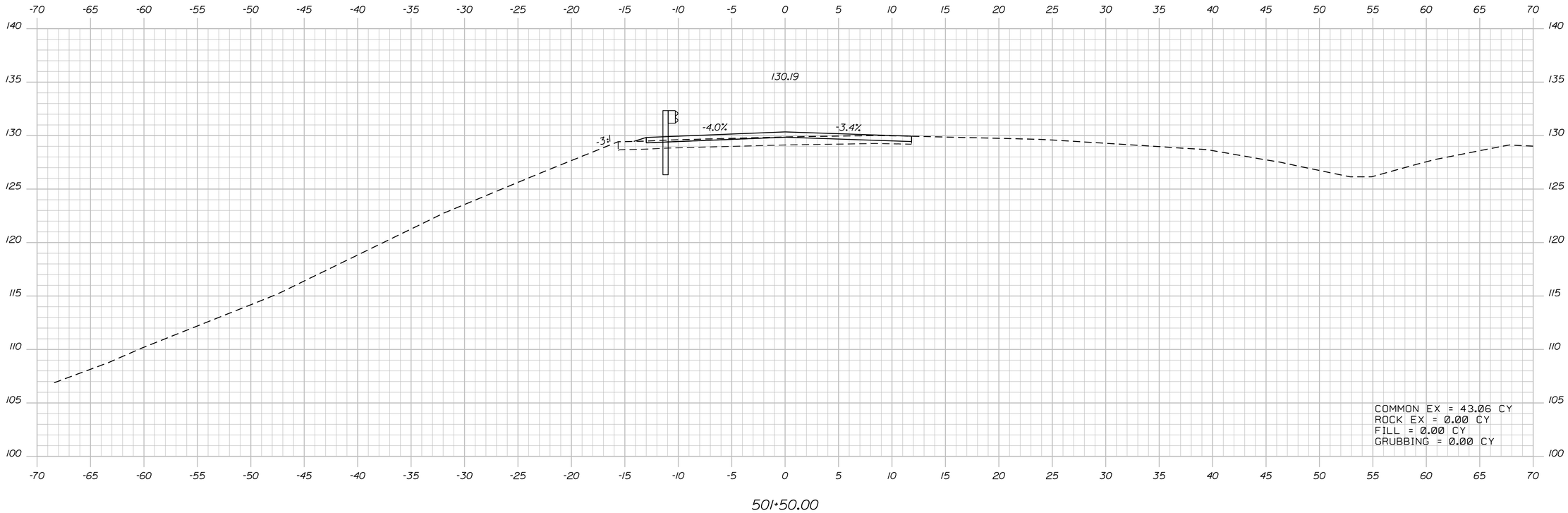
PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

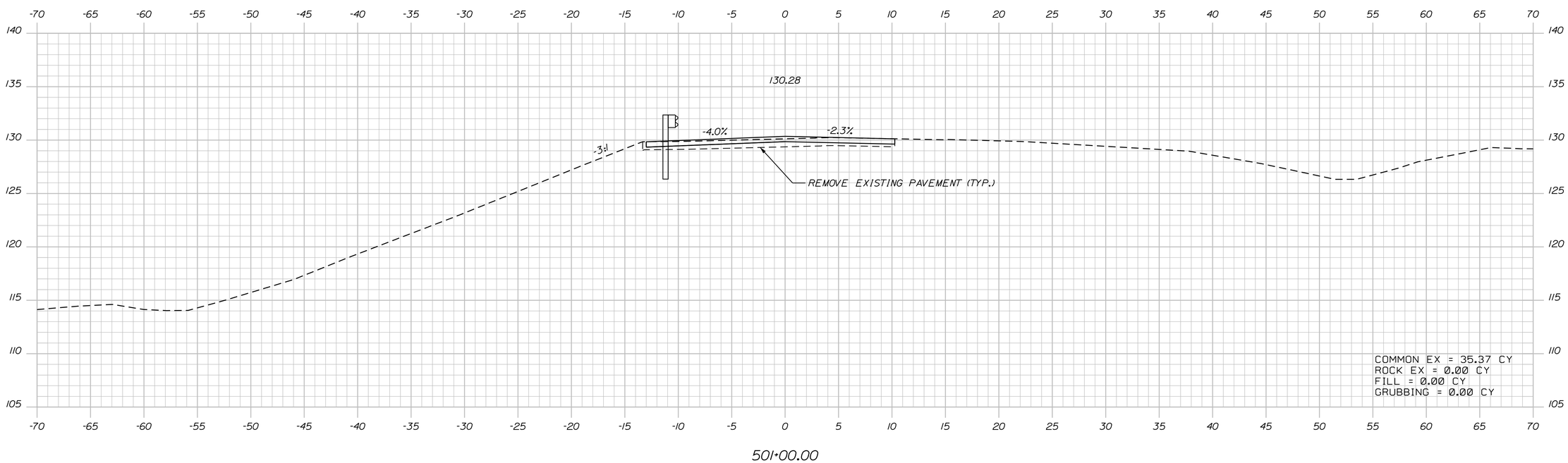
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
205
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

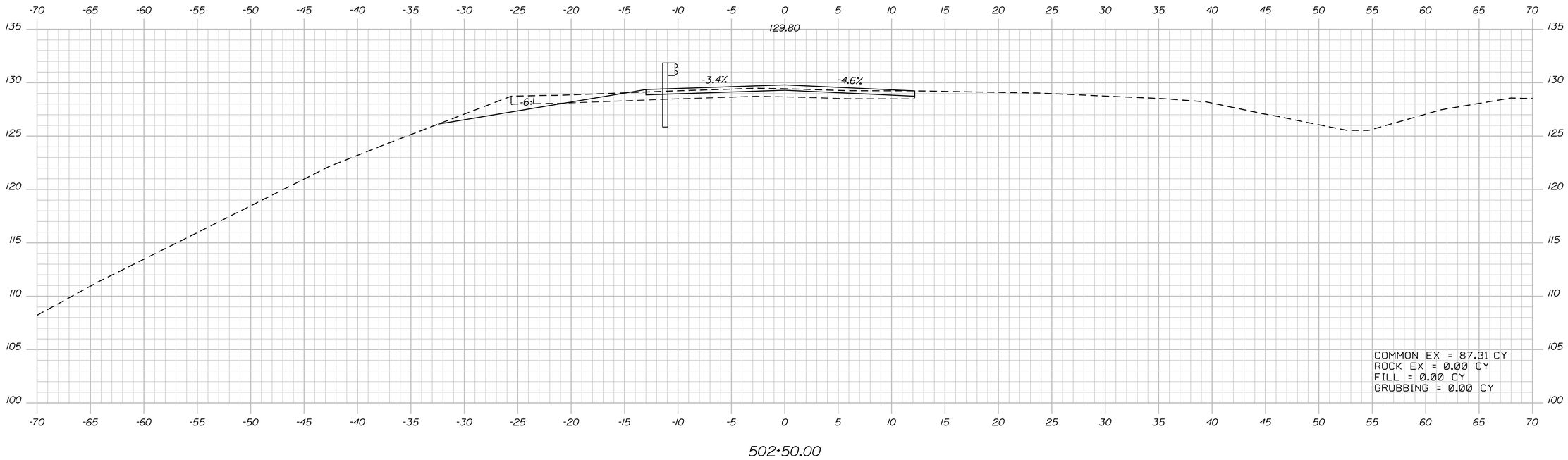
YARMOUTH
I-295 EXIT 15

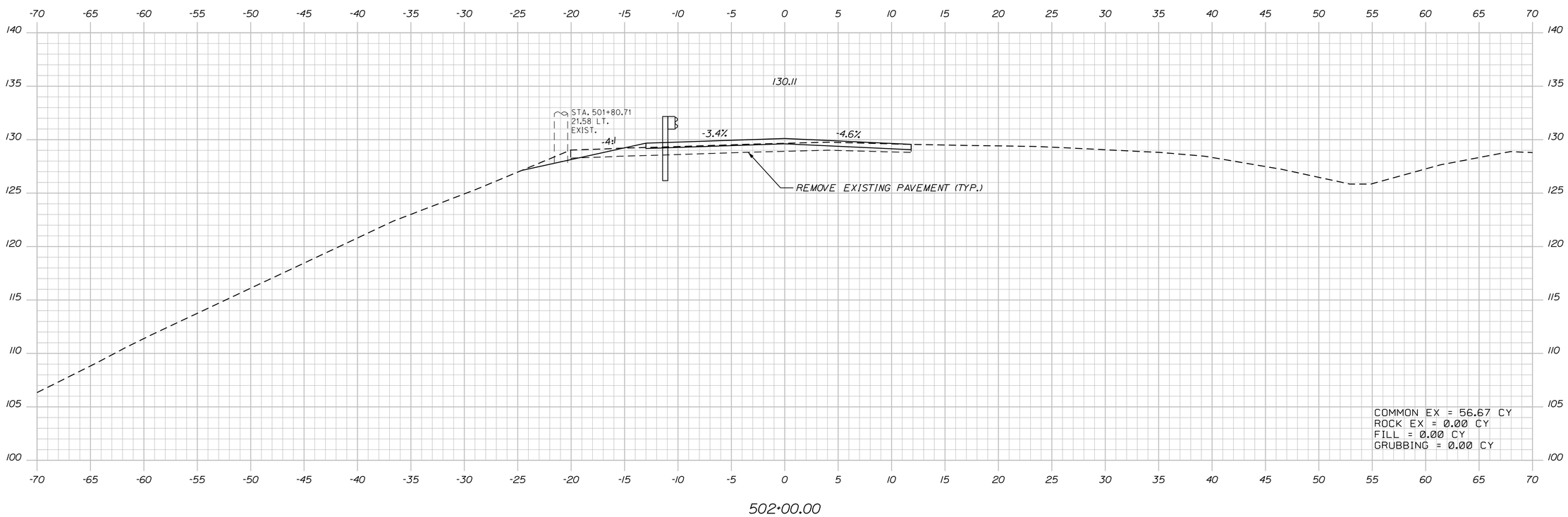
CROSS SECTIONS

SHEET NUMBER
206
OF 283

Southbound On Ramp Sta. 501+00.00 to Sta. 501+50.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

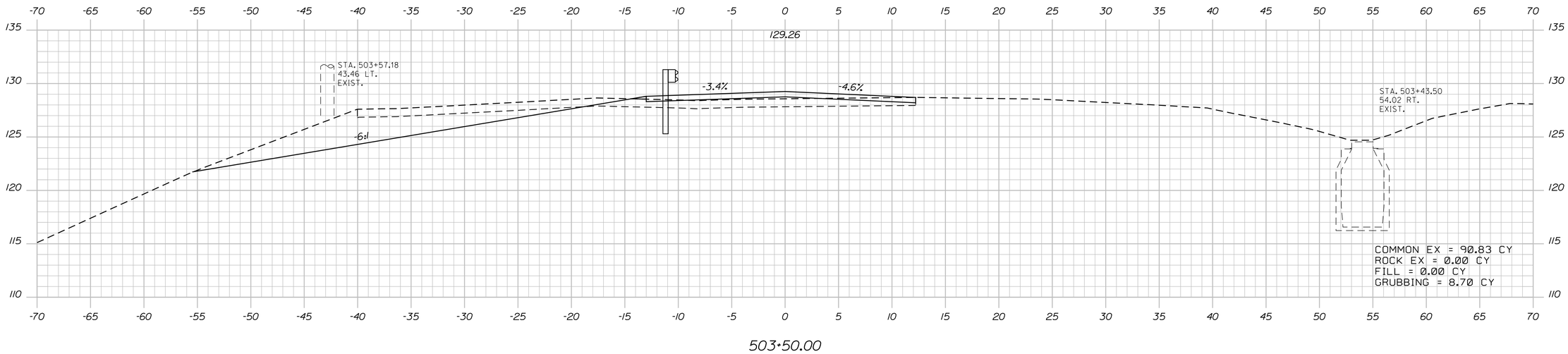
YARMOUTH
I-295 EXIT 15

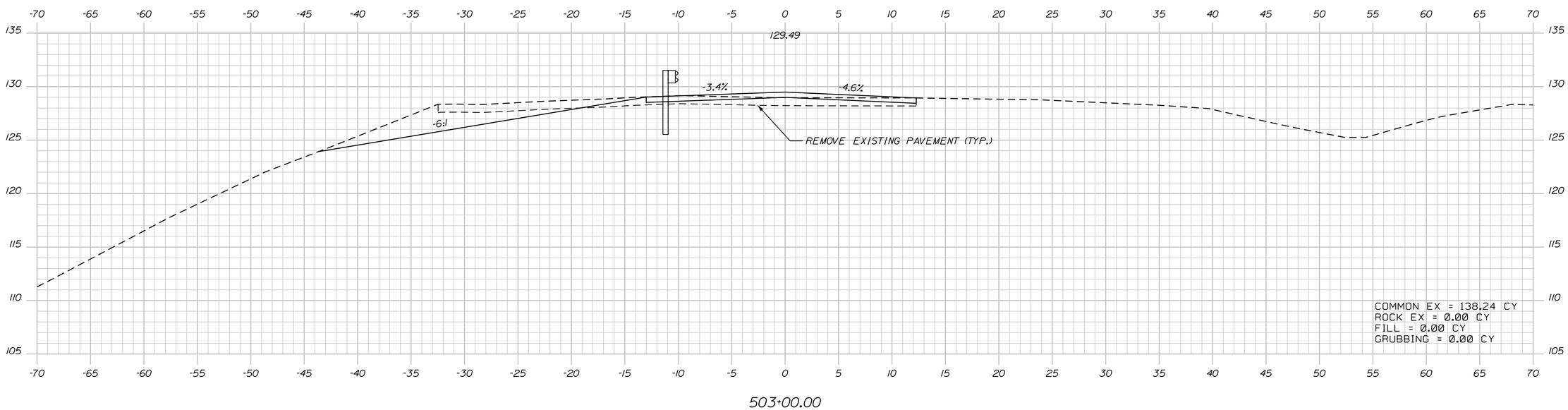
CROSS SECTIONS

SHEET NUMBER
207
OF 283

Southbound On Ramp Sta. 502+00.00 to Sta. 502+50.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

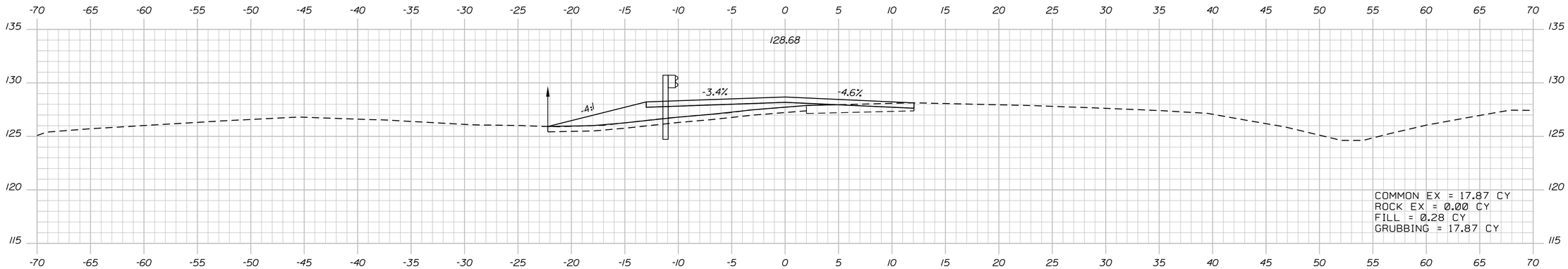
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

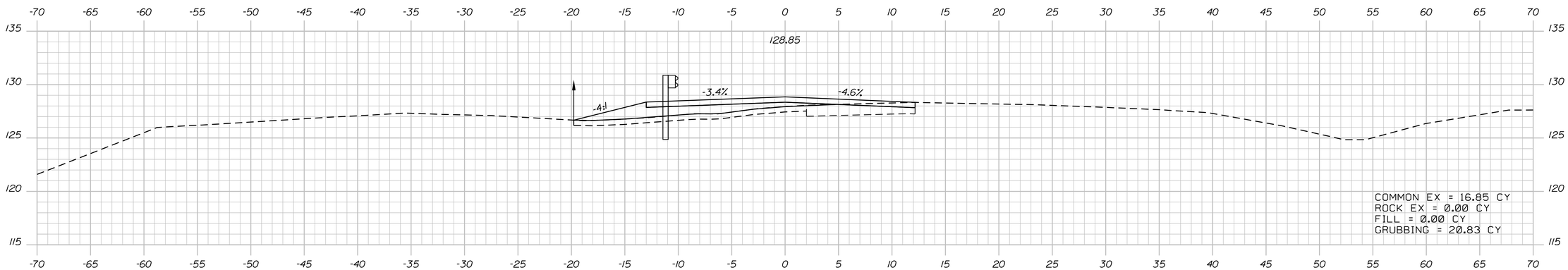
SHEET NUMBER
208
OF 283

Southbound On Ramp Sta. 503+00.00 to Sta. 503+50.00

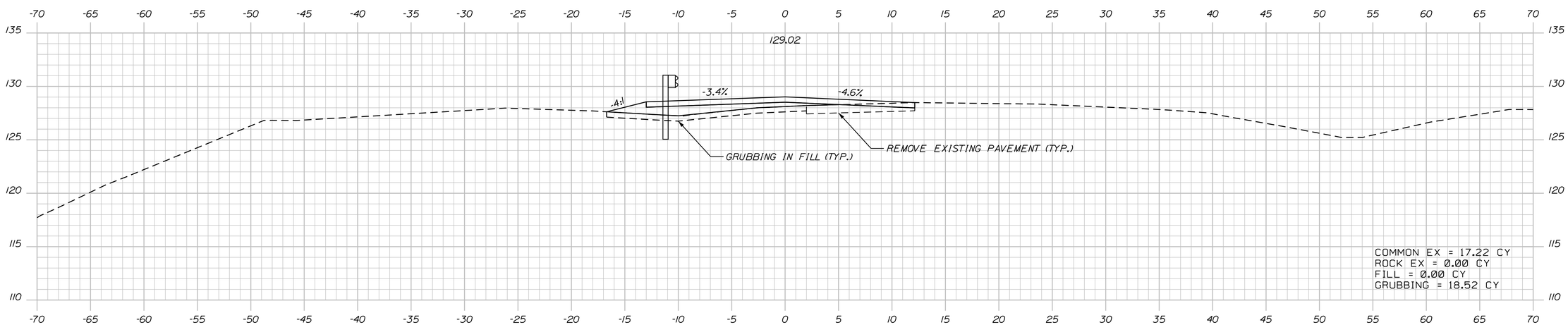
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



505+00.00



504+50.00



504+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

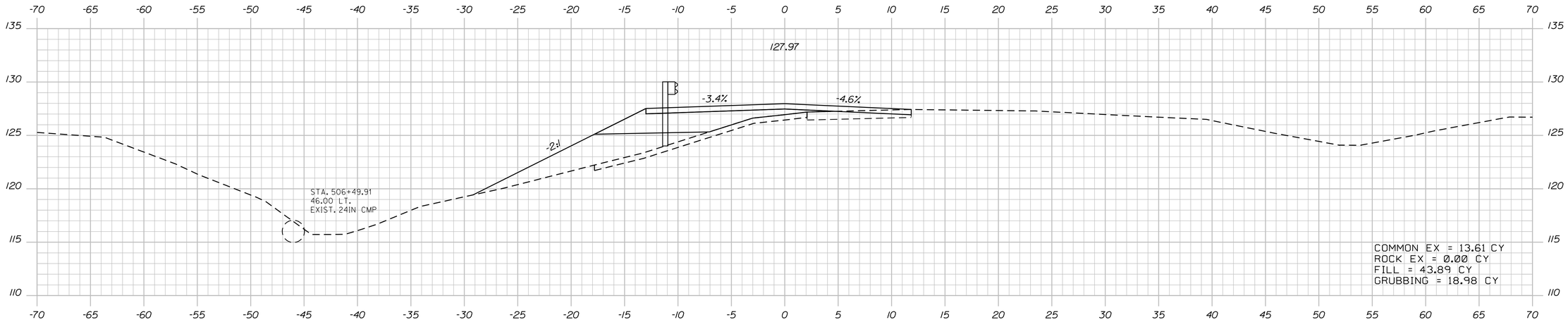
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

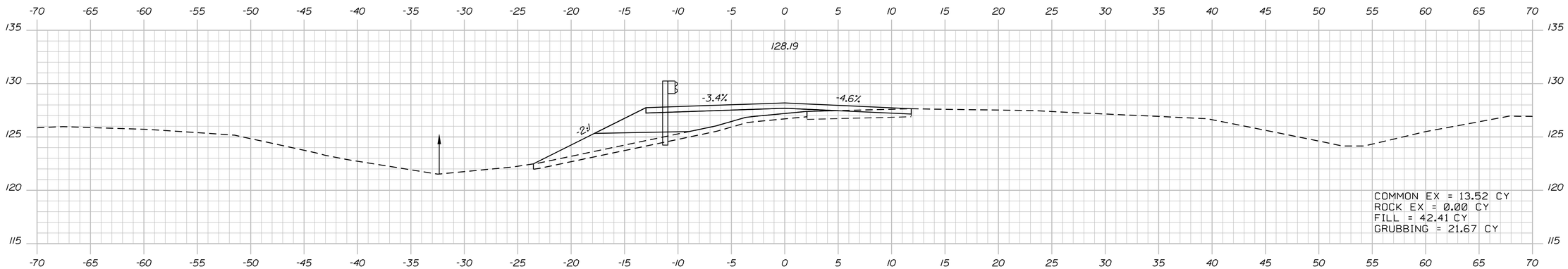
SHEET NUMBER
209
OF 283

Southbound On Ramp Sta. 504+00.00 to Sta. 505+00.00

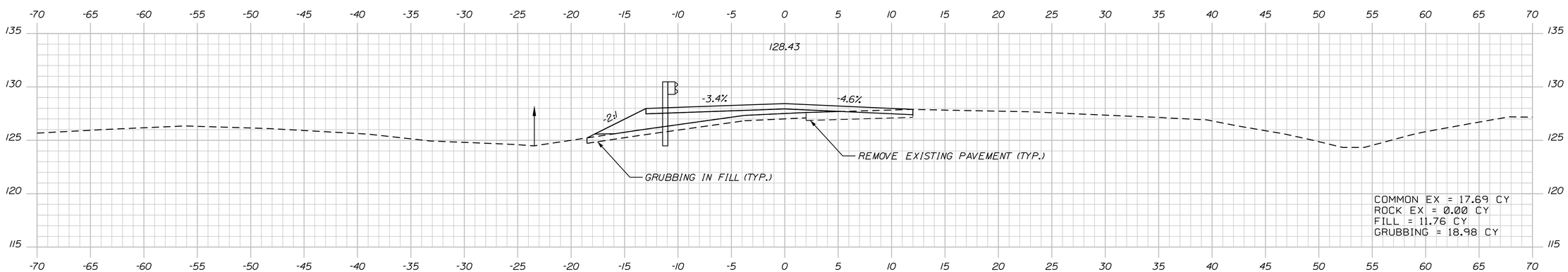
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



506+50.00



506+00.00



505+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

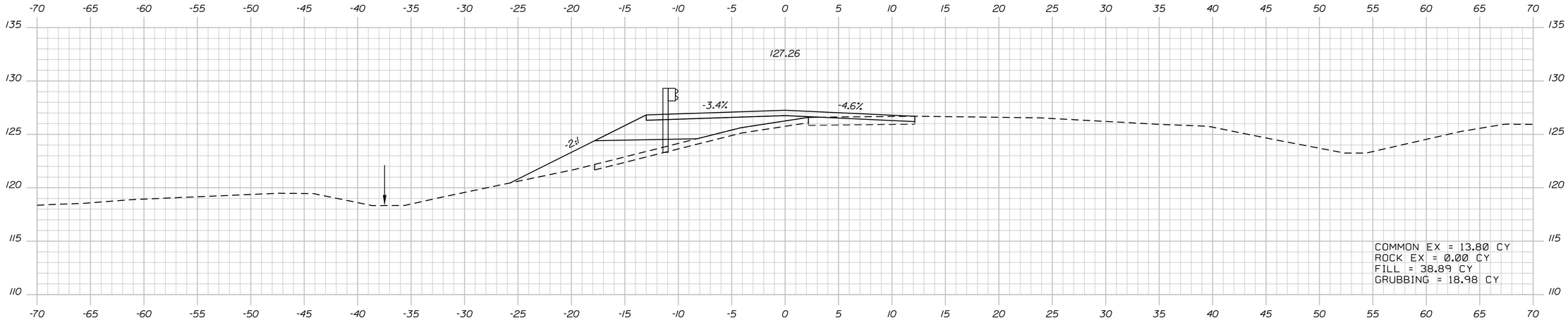
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

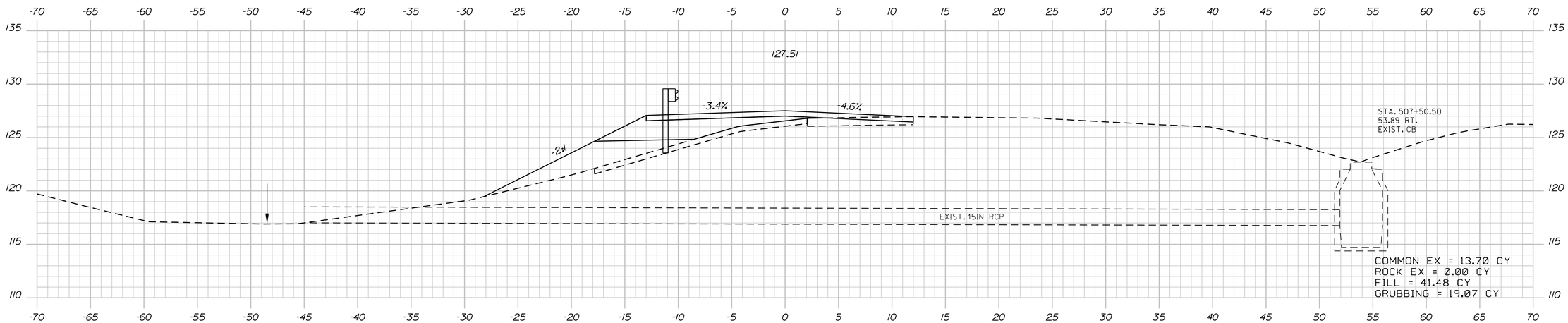
SHEET NUMBER
210
OF 283

Southbound On Ramp Sta. 505+50.00 to Sta. 506+50.00

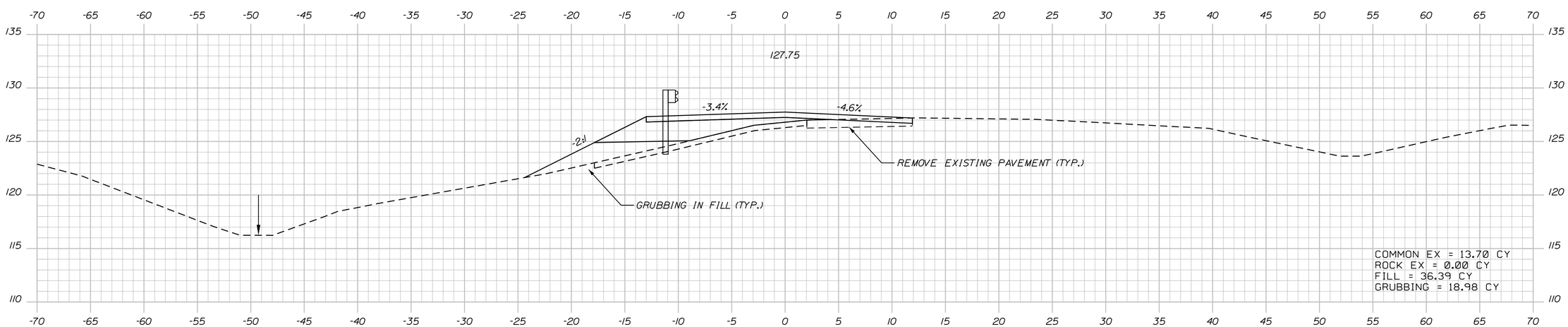
Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



508+00.00



507+50.00



507+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

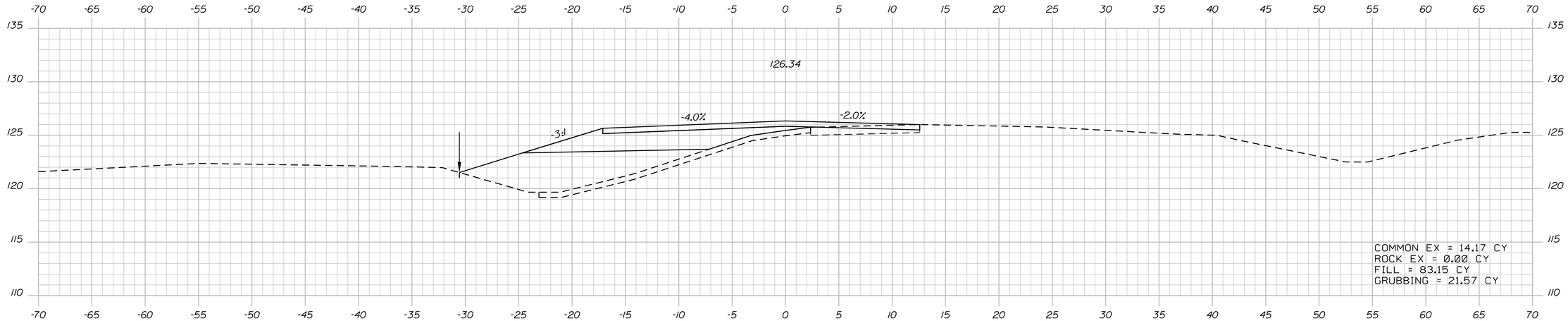
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

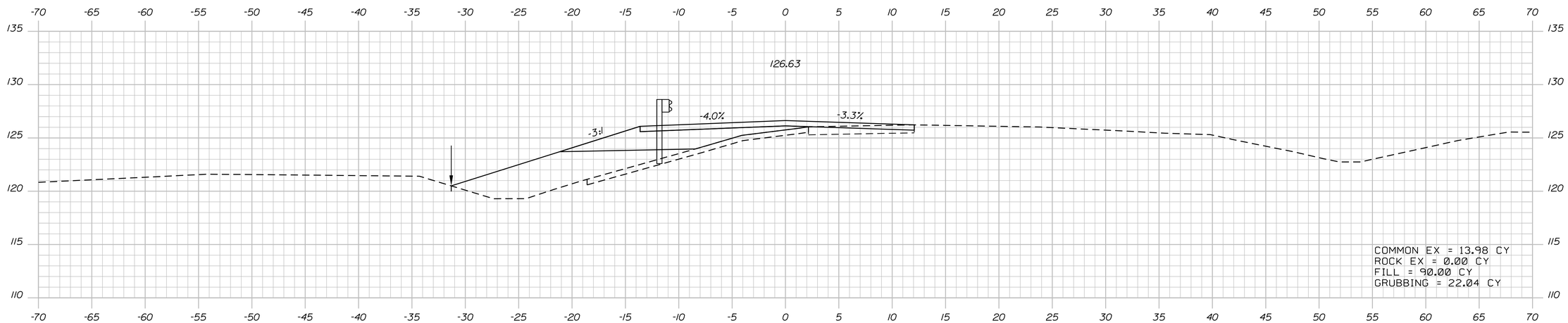
SHEET NUMBER
211
OF 283

Southbound On Ramp Sta. 507+00.00 to Sta. 508+00.00

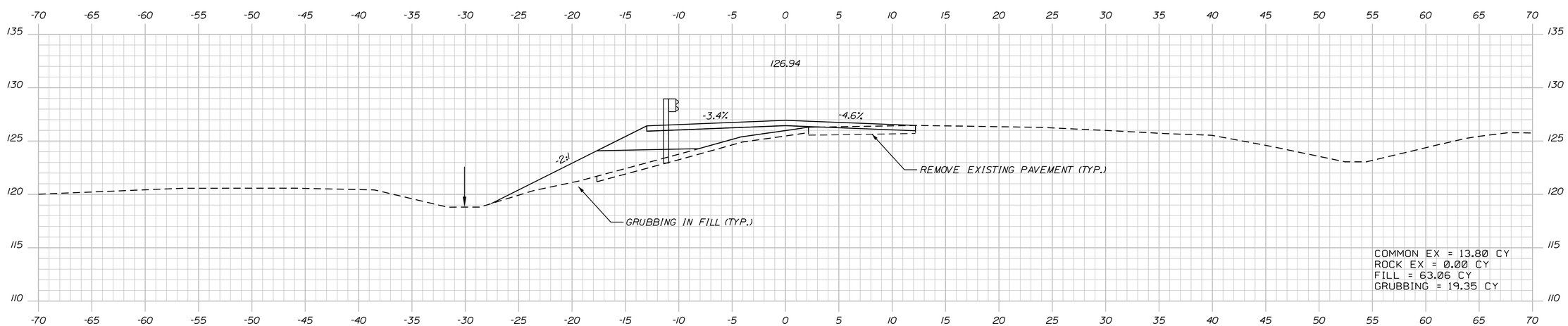
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



509+50.00



509+00.00



508+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

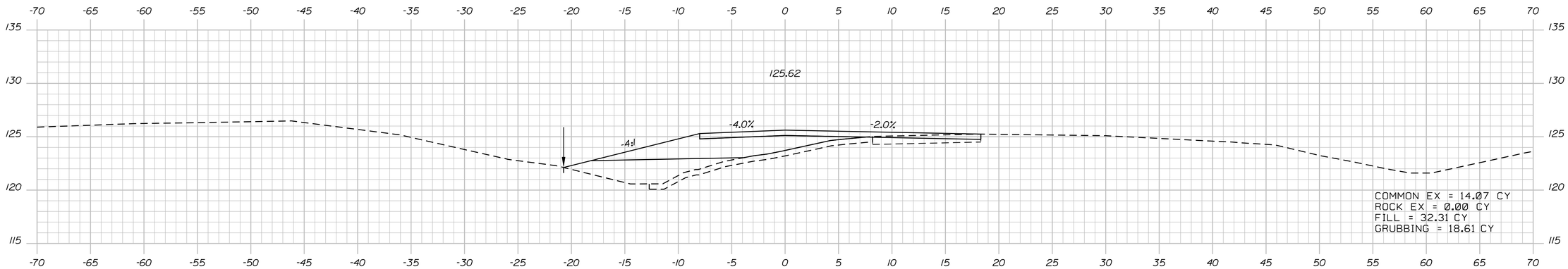
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

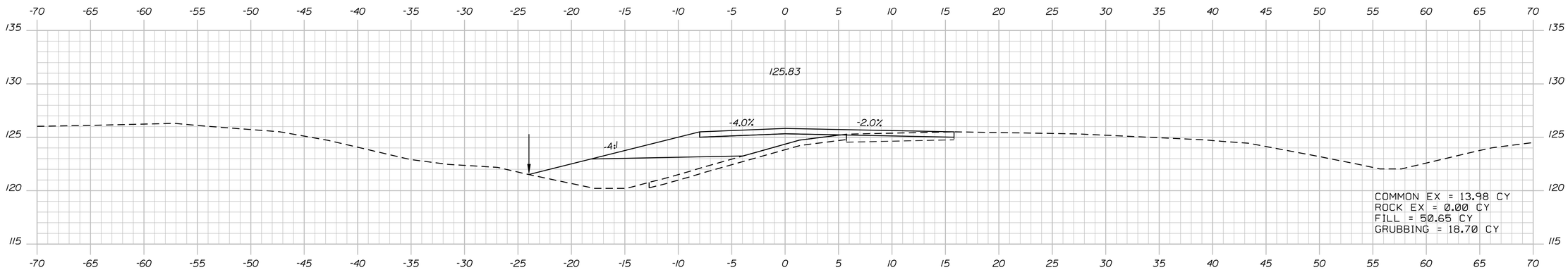
SHEET NUMBER
212
OF 283

Southbound On Ramp Sta. 508+50.00 to Sta. 509+50.00

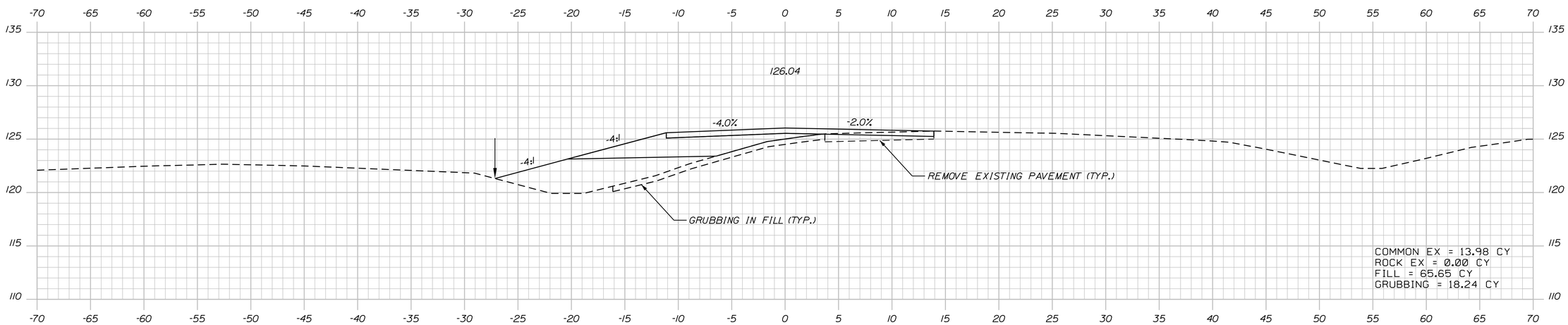
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



511+00.00



510+50.00



510+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

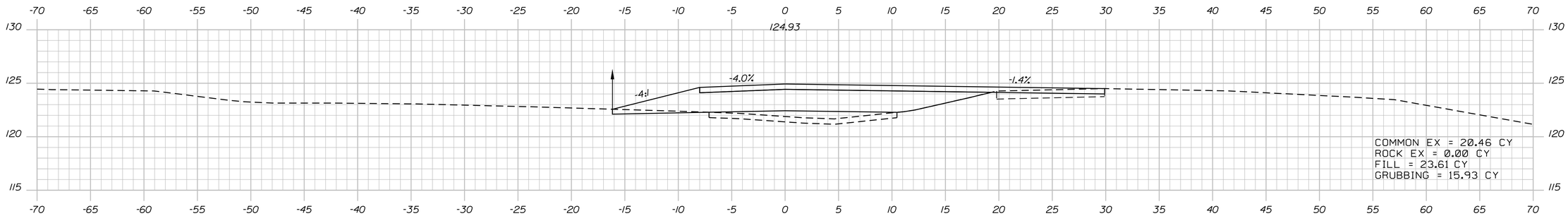
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

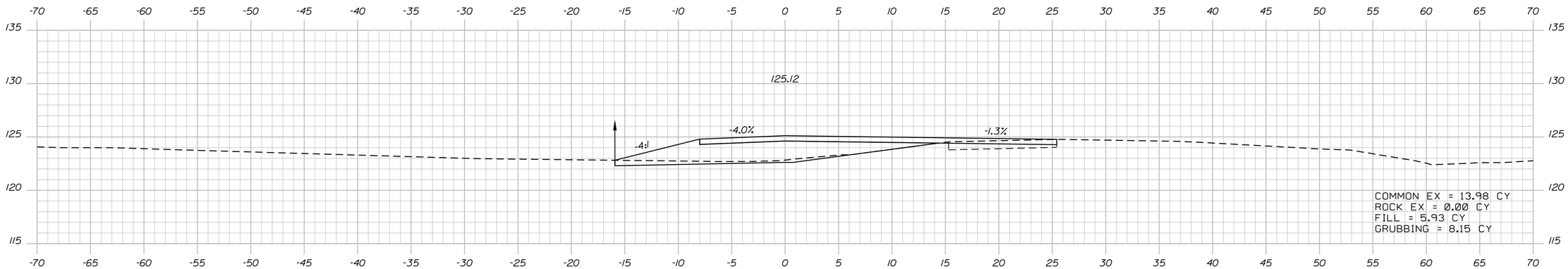
SHEET NUMBER
213
OF 283

Southbound On Ramp Sta. 510+00.00 to Sta. 511+00.00

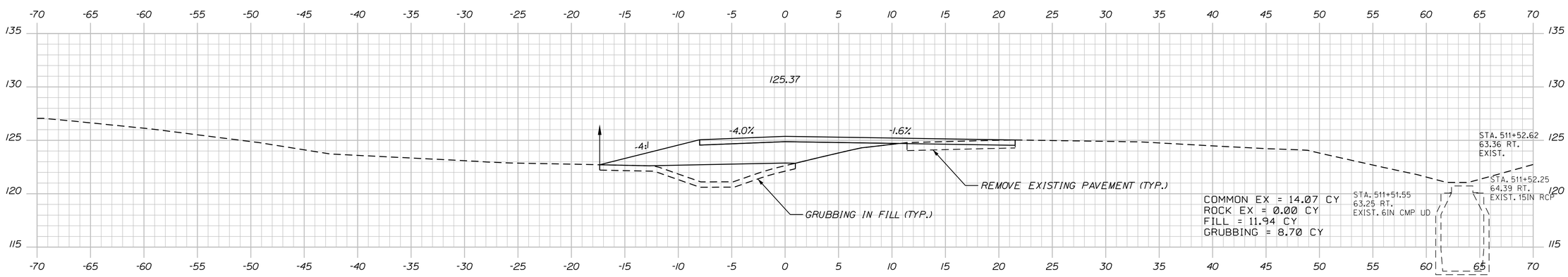
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



512+50.00



512+00.00



511+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

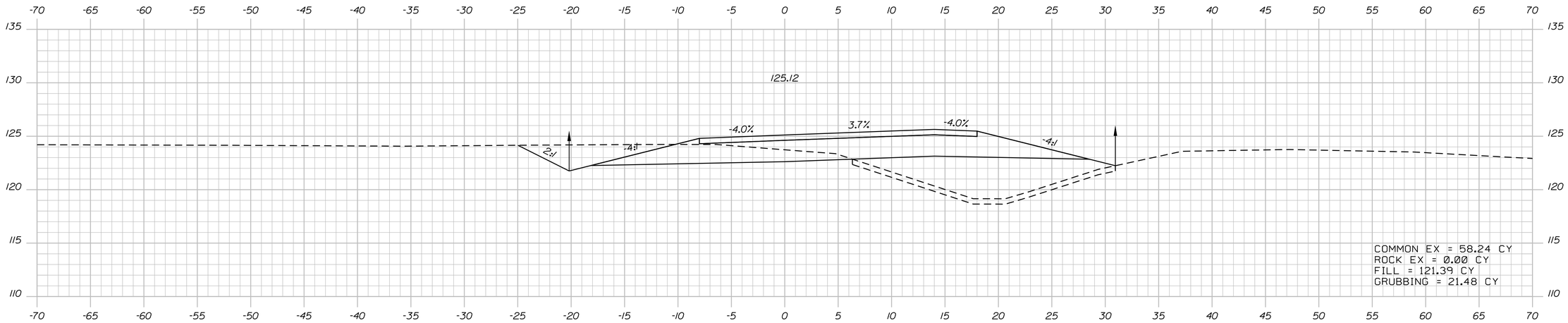
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

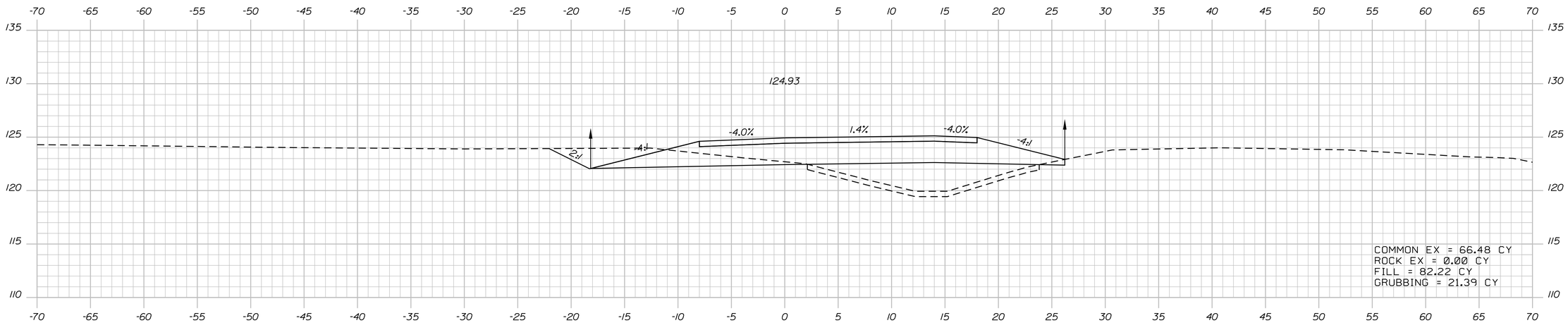
SHEET NUMBER
214
OF 283

Southbound On Ramp Sta. 511+50.00 to Sta. 512+50.00

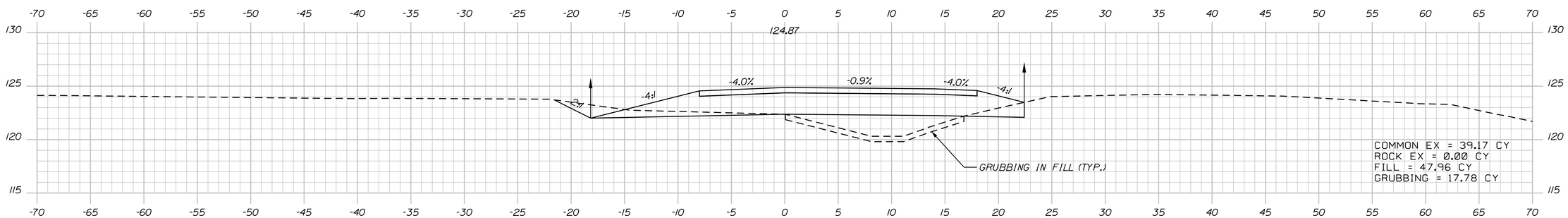
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



514+00.00



513+50.00



513+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

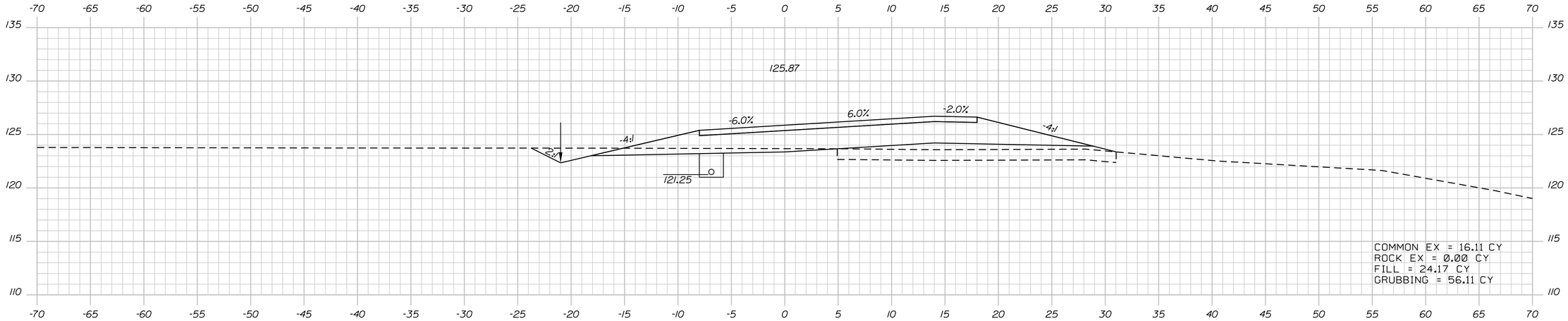
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

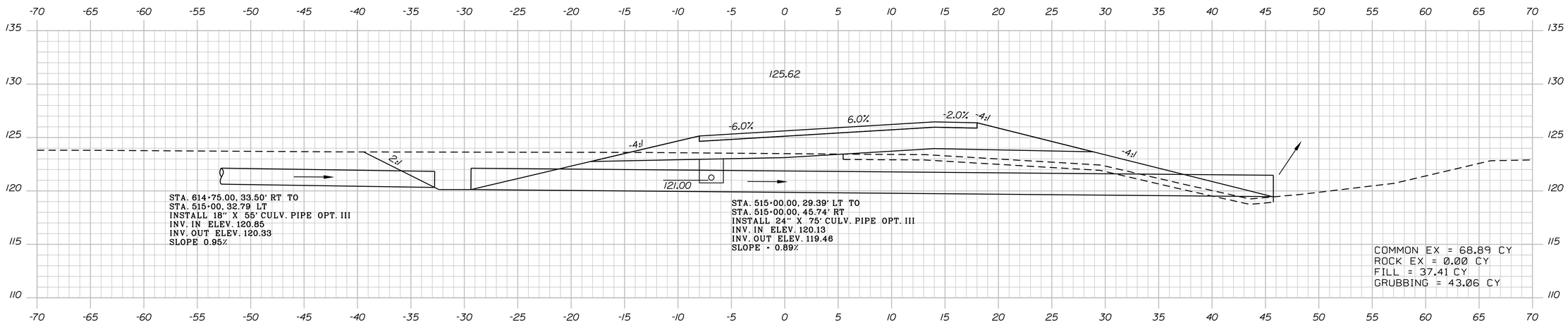
SHEET NUMBER
215
OF 283

Southbound On Ramp Sta. 513+00.00 to Sta. 514+00.00

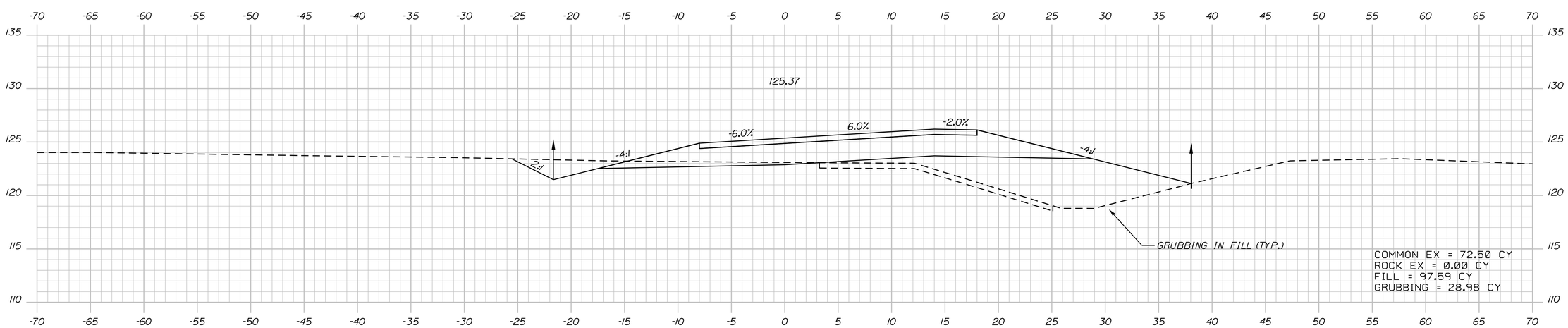
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



515+50.00



515+00.00



514+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

BY	DATE

SIGNATURE
P.E. NUMBER
DATE

PROJ. MANAGER
DESIGN-DETAILED
CHECKED-REVIEWED
DESIGN2-DETAILED2
DESIGN3-DETAILED3
REVISIONS 1
REVISIONS 2
REVISIONS 3
REVISIONS 4
FIELD CHANGES

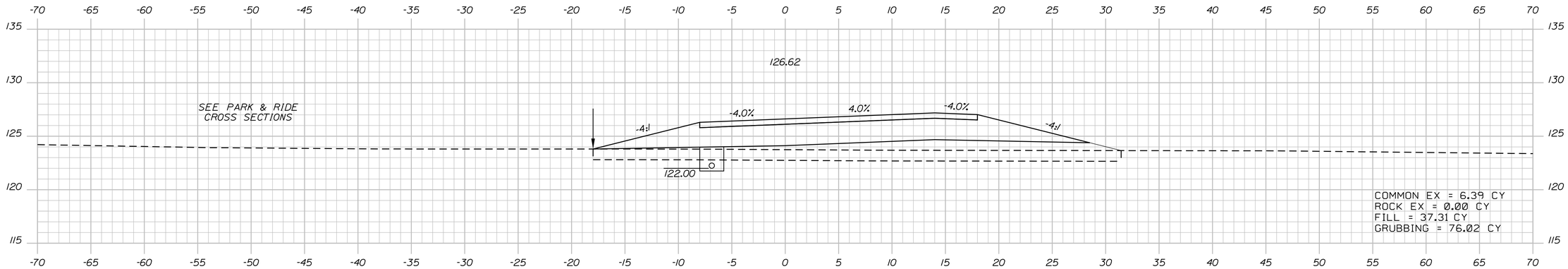
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

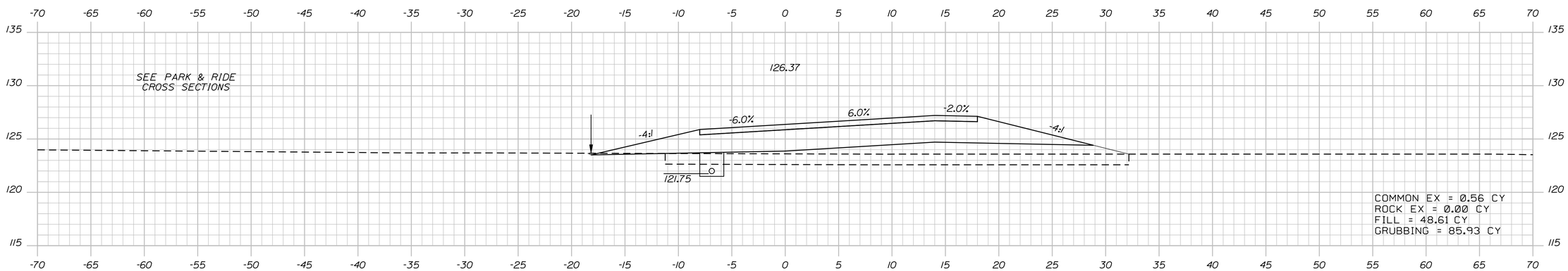
SHEET NUMBER
216
OF 283

Southbound On Ramp Sta. 514+50.00 to Sta. 515+50.00

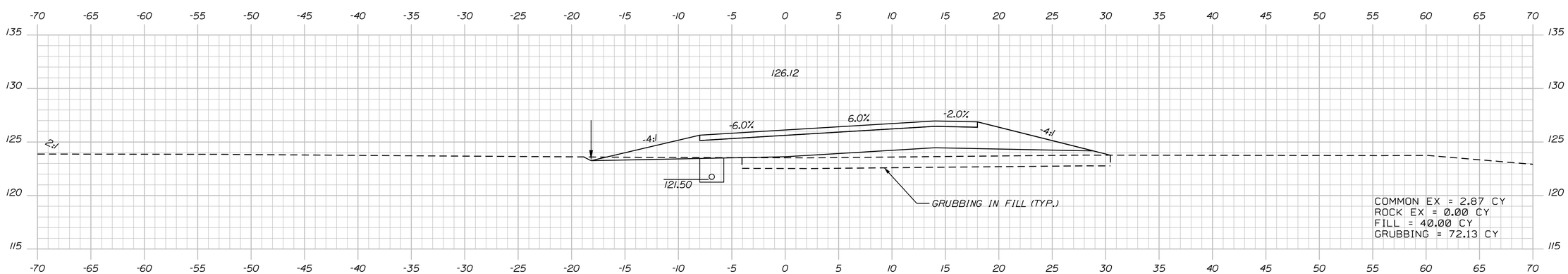
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



517+00.00



516+50.00



516+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE

P.E. NUMBER

DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

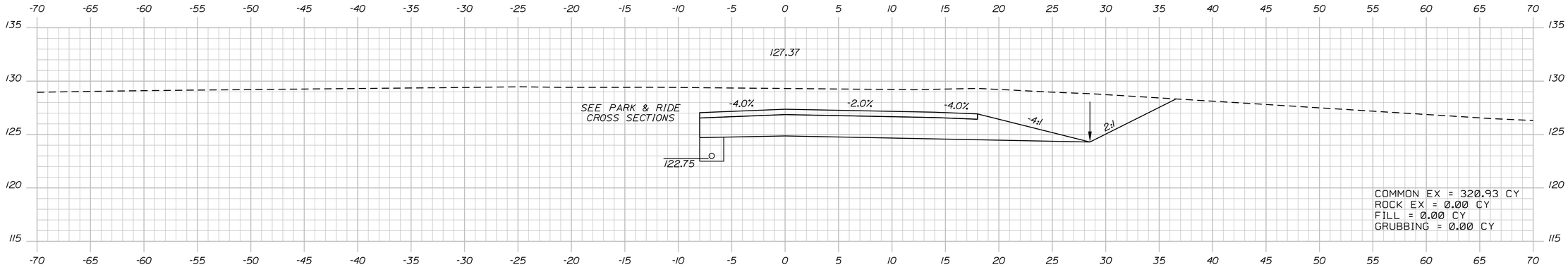
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

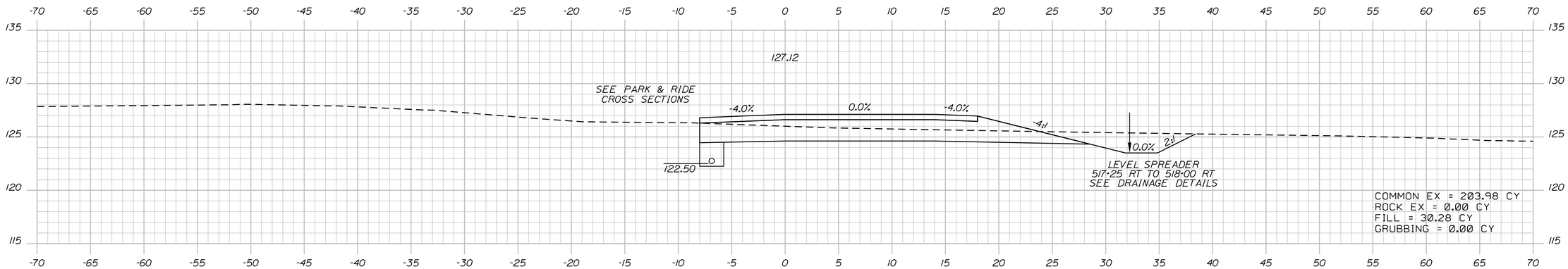
SHEET NUMBER
217
OF 283

Southbound On Ramp Sta. 516+00.00 to Sta. 517+00.00

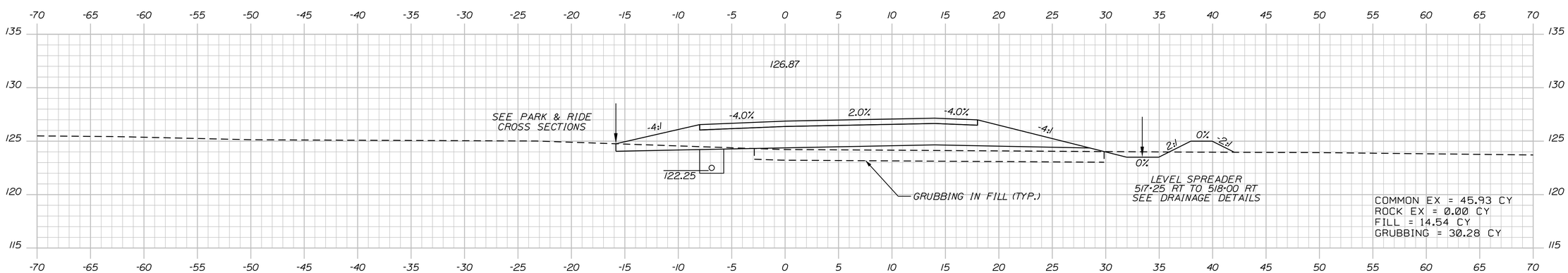
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



518+50.00



518+00.00



517+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

SIGNATURE			
P.E. NUMBER			
DATE			

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

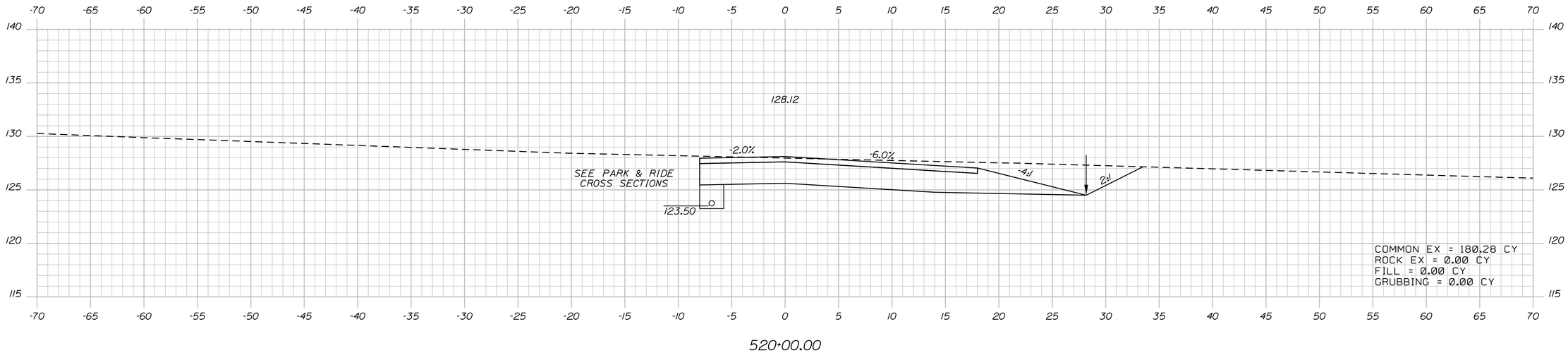
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

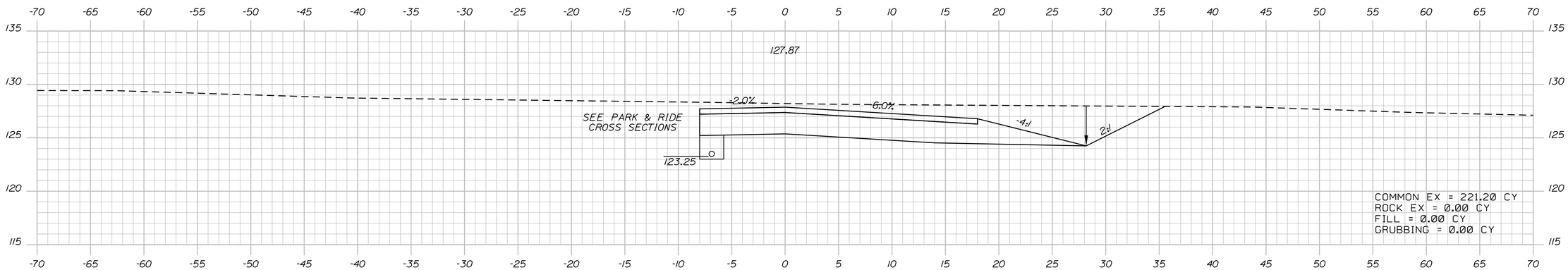
SHEET NUMBER
218
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:

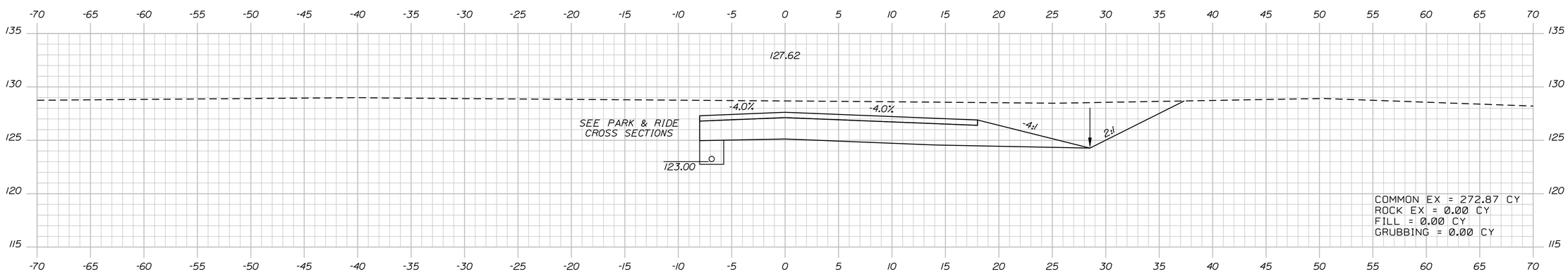
Southbound On Ramp Sta. 517+50.00 to Sta. 518+50.00



520+00.00



519+50.00



519+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

SIGNATURE
P.E. NUMBER
DATE

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

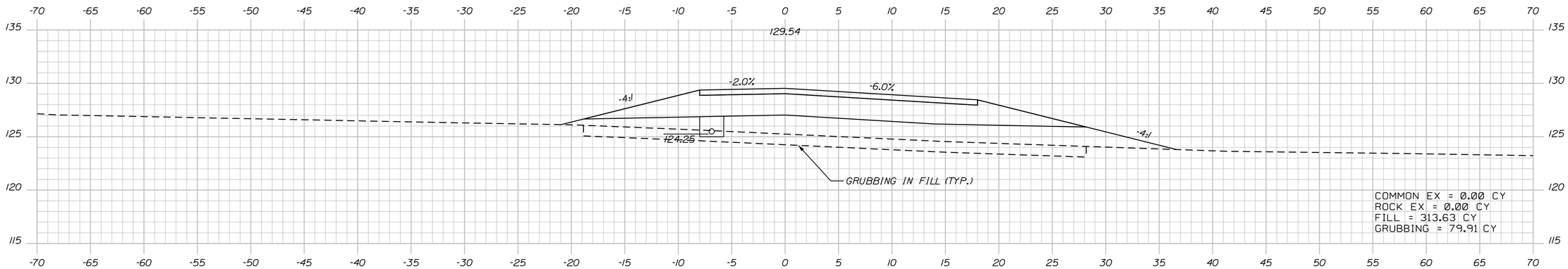
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

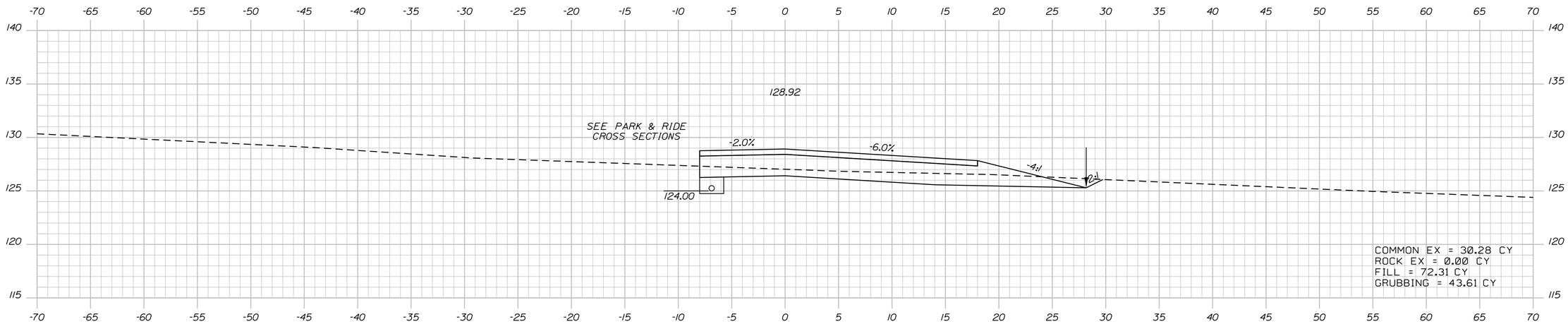
SHEET NUMBER
219
OF 283

Southbound On Ramp Sta. 519+00.00 to Sta. 520+00.00

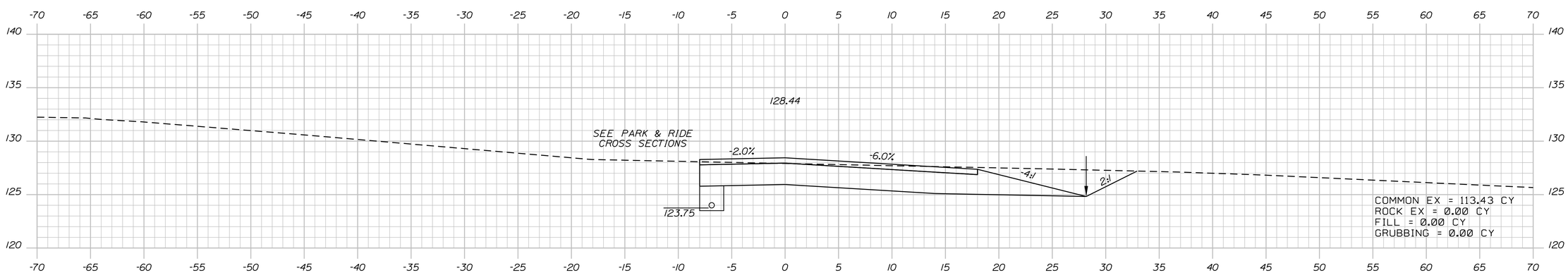
Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



521+50.00



521+00.00



520+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

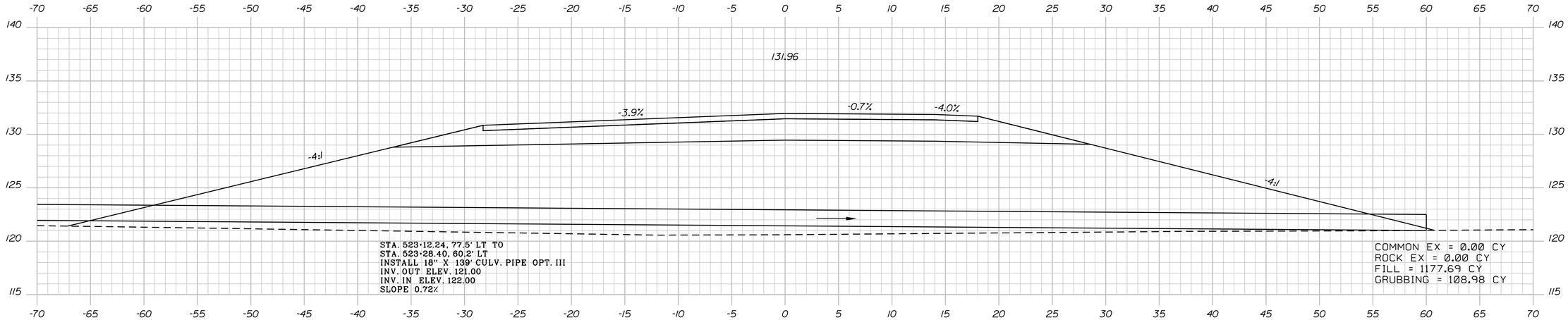
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

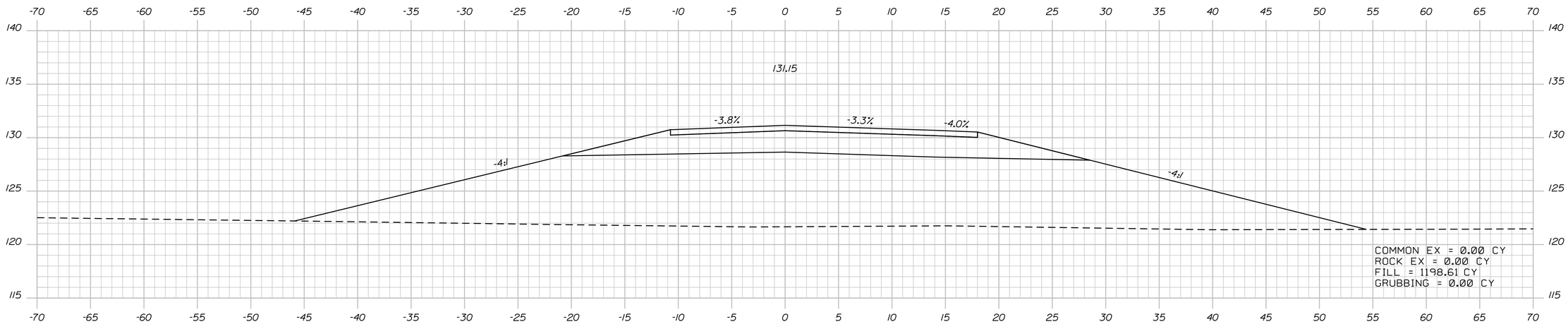
SHEET NUMBER
220
OF 283

Southbound On Ramp Sta. 520+50.00 to Sta. 521+50.00

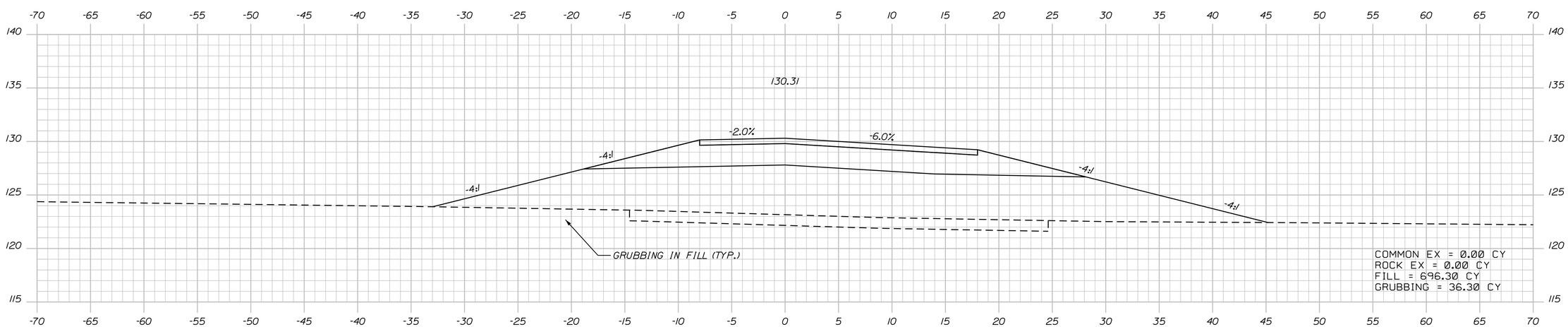
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



523+00.00



522+50.00



522+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

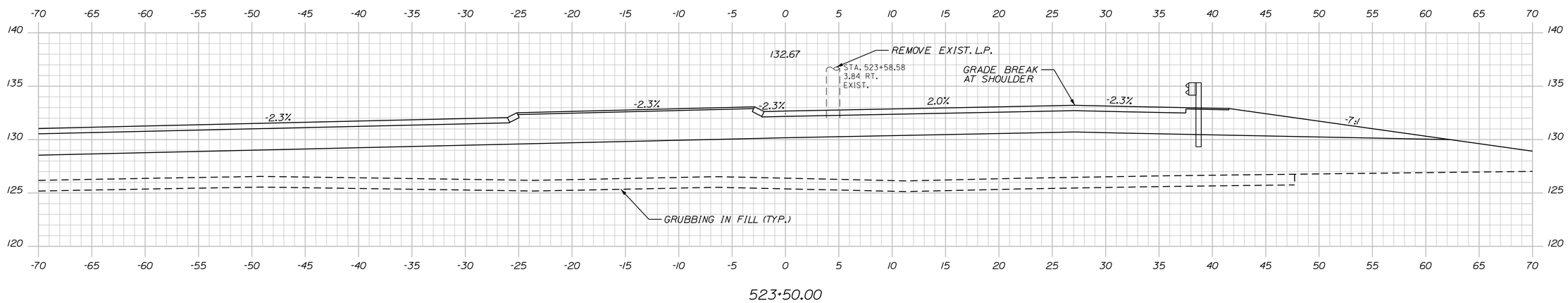
CROSS SECTIONS

SHEET NUMBER
221
OF 283

Southbound On Ramp Sta. 522+00.00 to Sta. 523+00.00

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

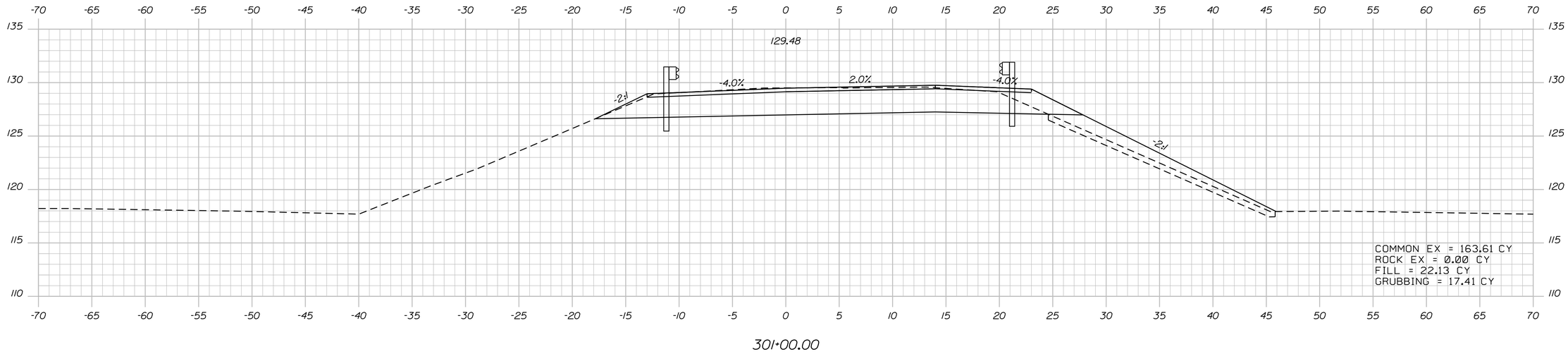
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

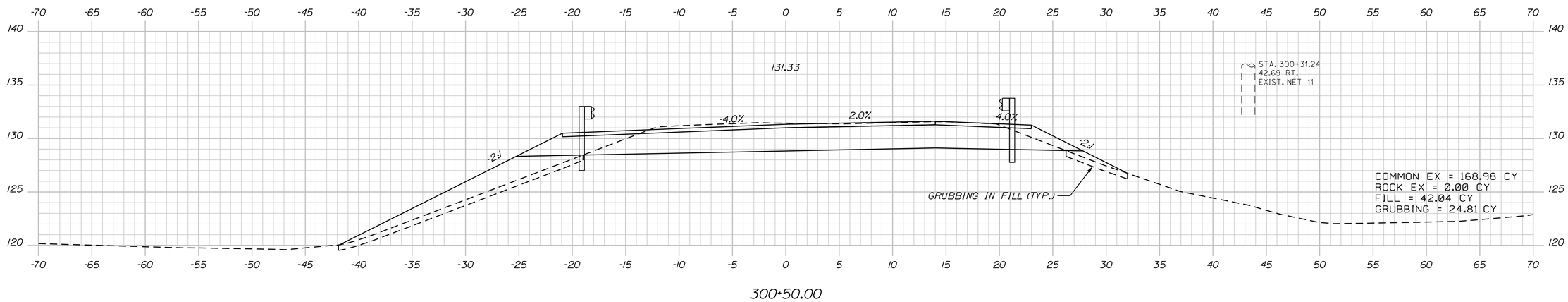
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
222
OF 283

Sta. 523+50.00 to Sta. 523+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

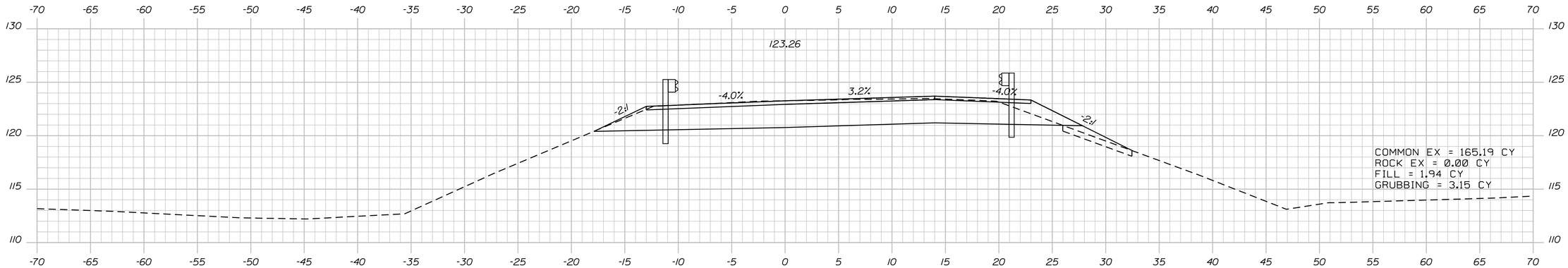
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

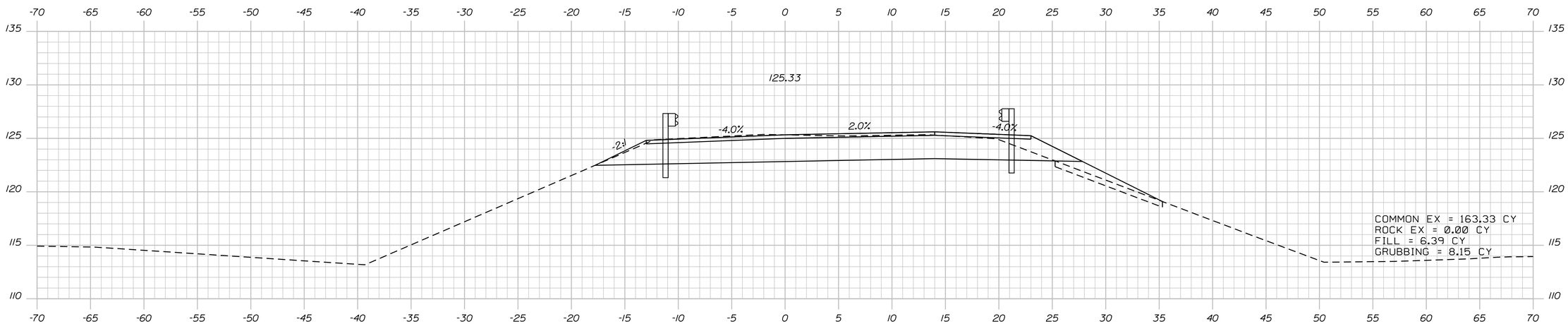
SHEET NUMBER
223
OF 283

Southbound Off Ramp Sta. 300+00.00 to Sta. 301+00.00

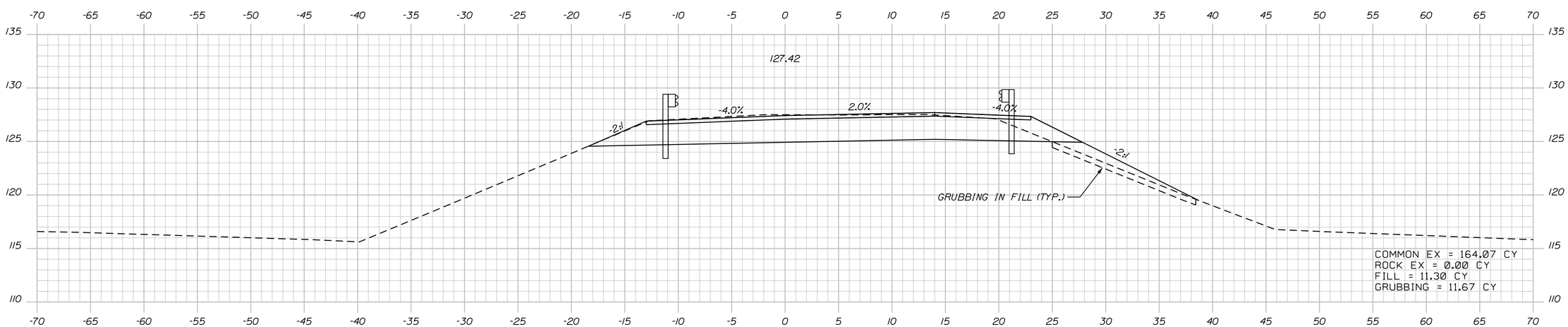
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



302+50.00



302+00.00



301+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

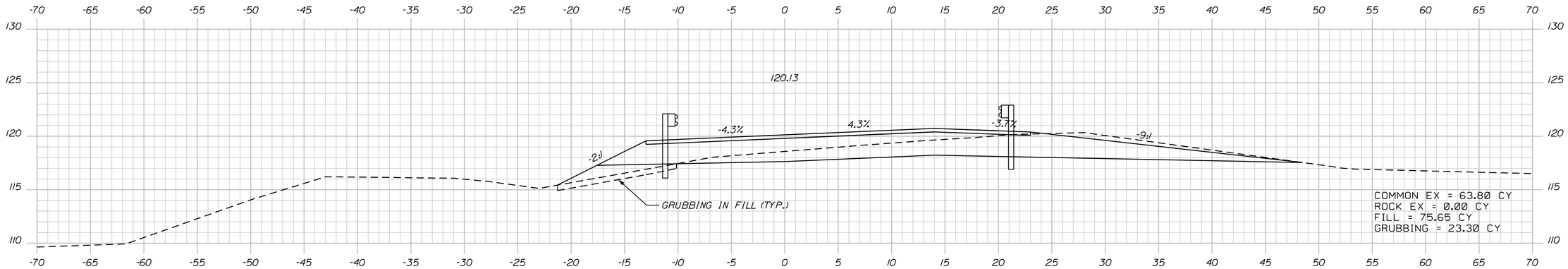
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

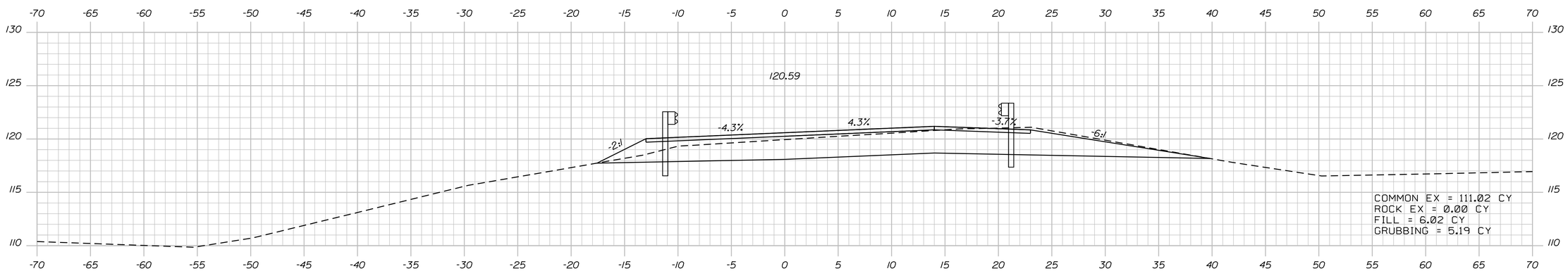
SHEET NUMBER
224
OF 283

Southbound Off Ramp Sta. 301+50.00 to Sta. 302+50.00

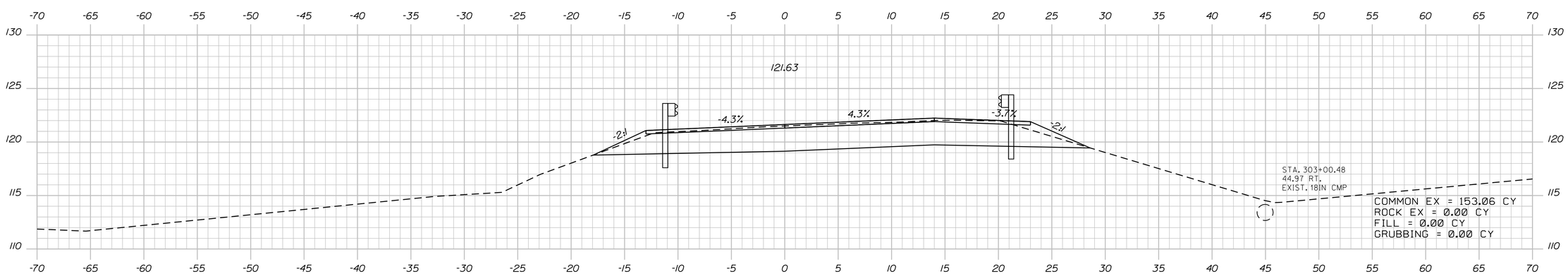
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



304+00.00



303+50.00



303+00.00

Southbound Off Ramp Sta. 303+00.00 to Sta. 304+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

SIGNATURE
P.E. NUMBER
DATE

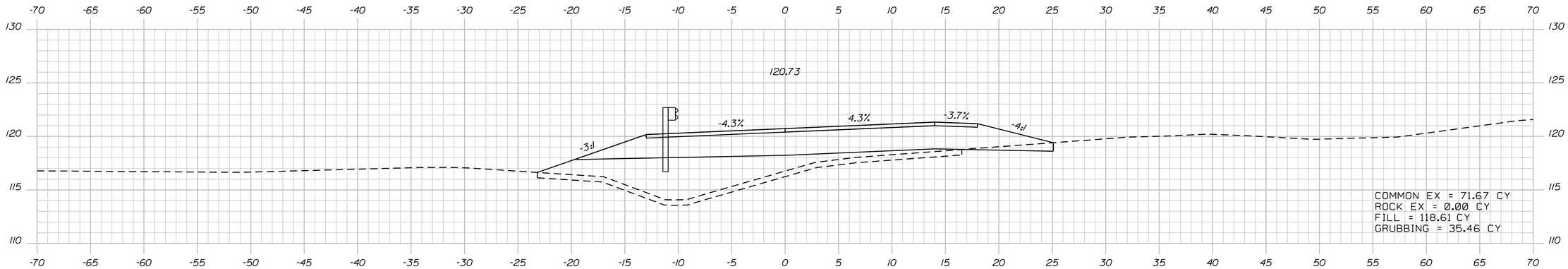
	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

YARMOUTH
I-295 EXIT 15

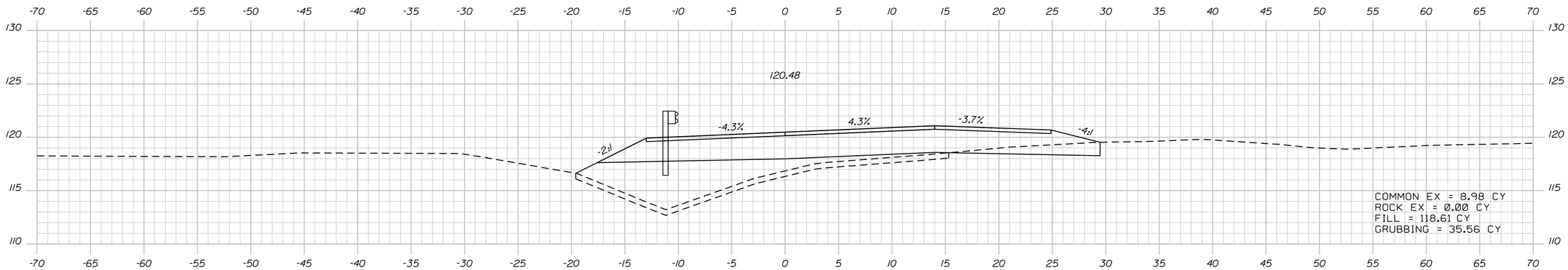
CROSS SECTIONS

SHEET NUMBER
225
OF 283

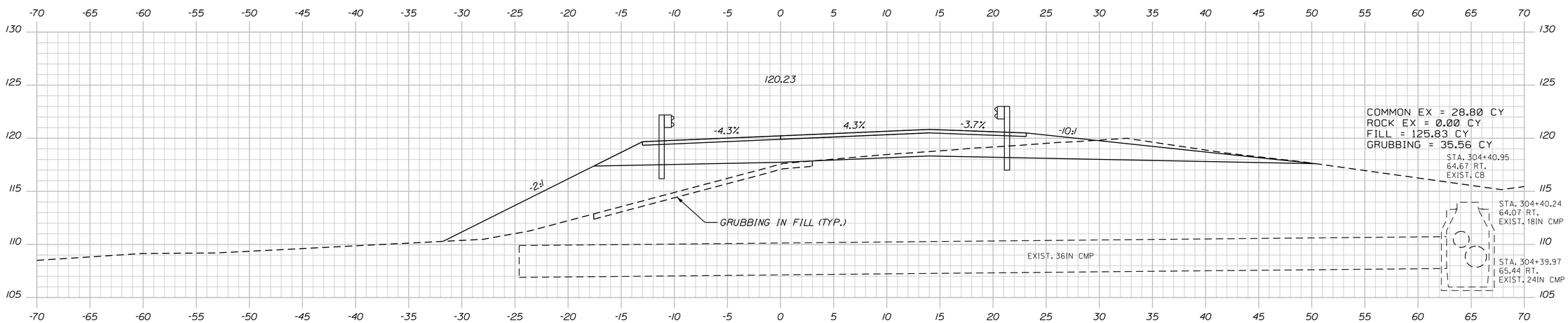
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



305+50.00



305+00.00



304+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

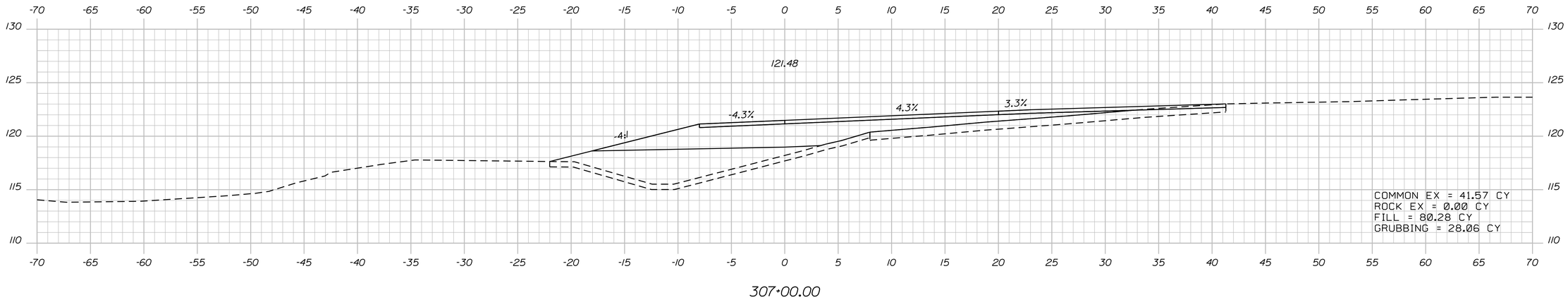
YARMOUTH
I-295 EXIT 15

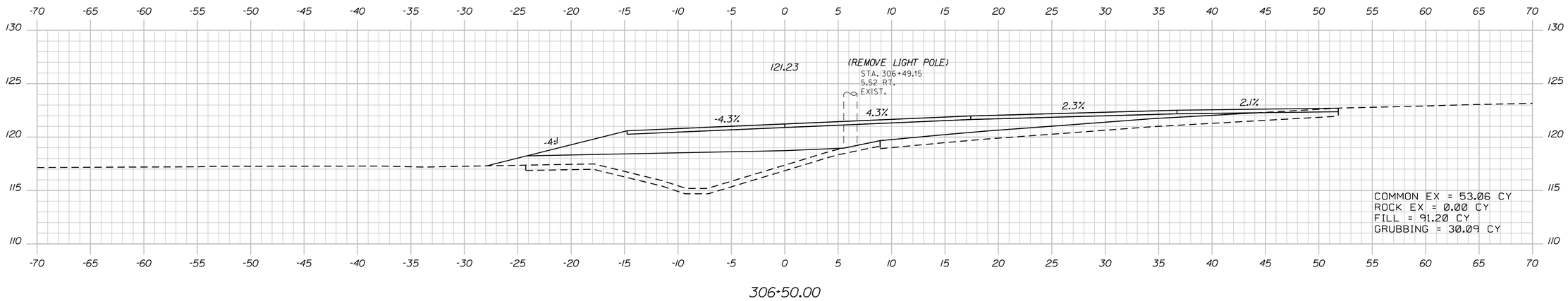
CROSS SECTIONS

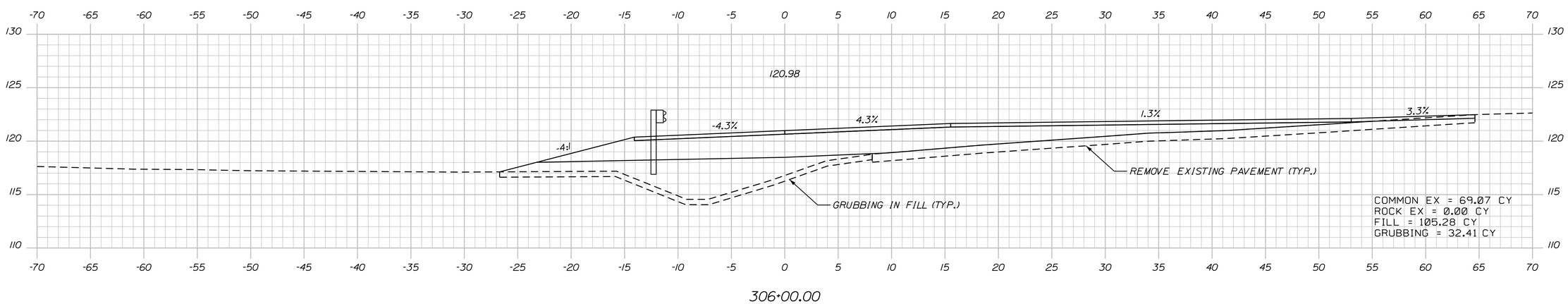
SHEET NUMBER
226
OF 283

Southbound Off Ramp Sta. 304+50.00 to Sta. 305+50.00

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:







STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

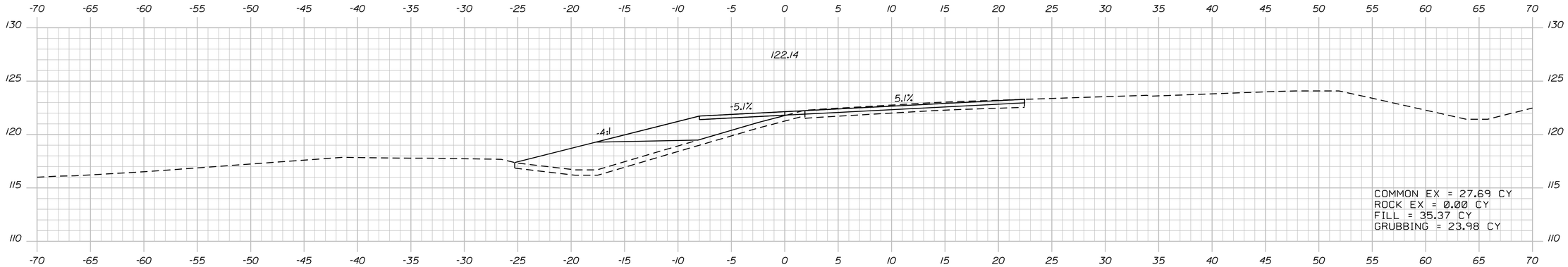
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

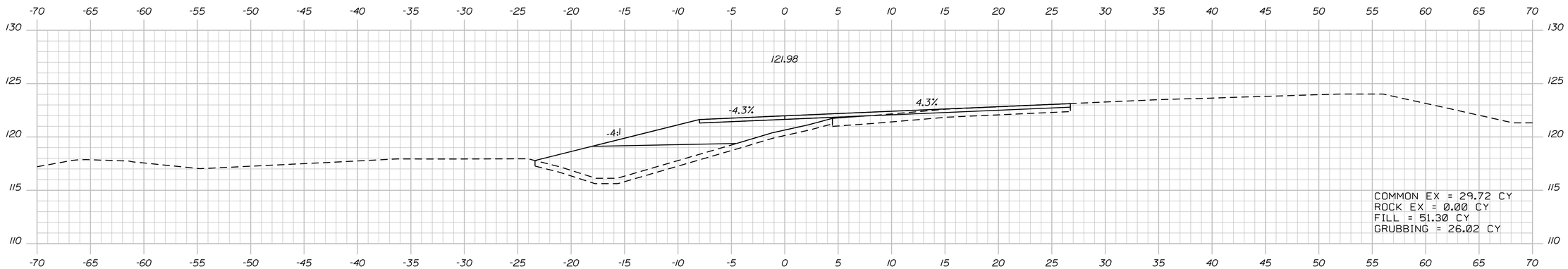
SHEET NUMBER
227
OF 283

Southbound Off Ramp Sta. 306+00.00 to Sta. 307+00.00

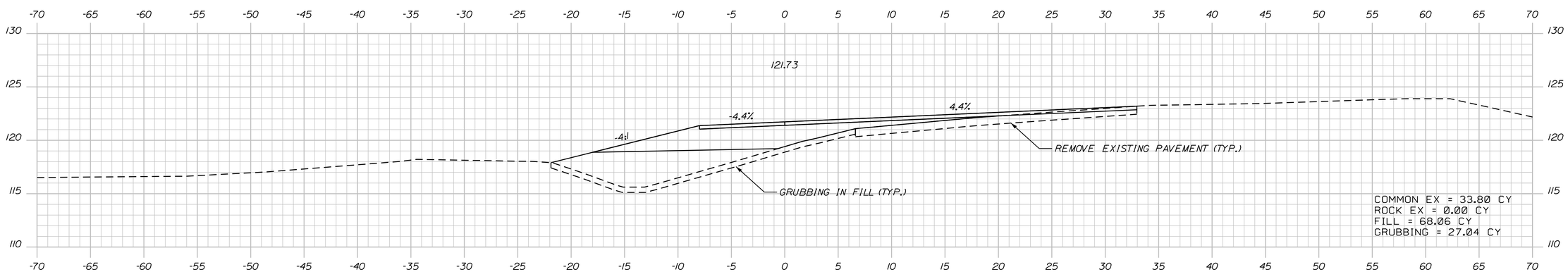
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



308+50.00



308+00.00



307+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

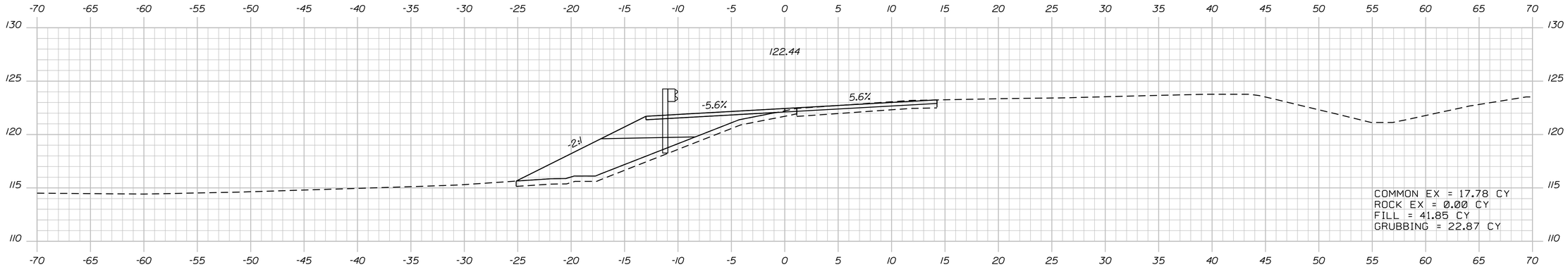
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

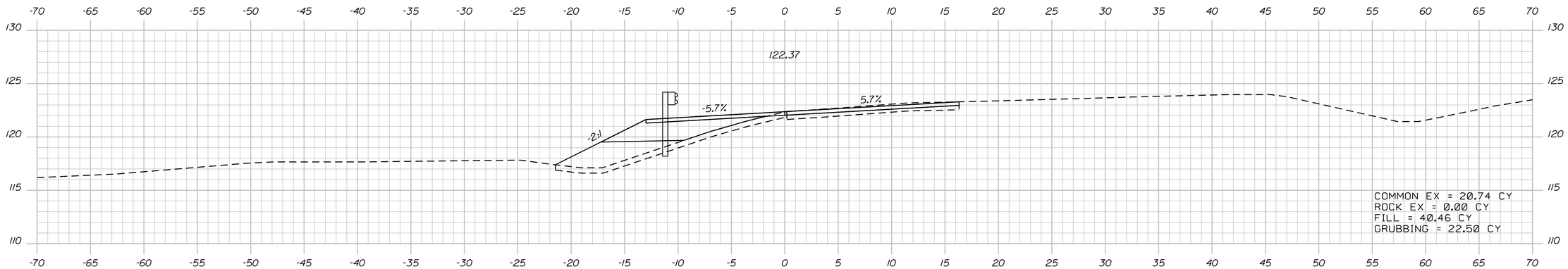
SHEET NUMBER
228
OF 283

Southbound Off Ramp Sta. 307+50.00 to Sta. 308+50.00

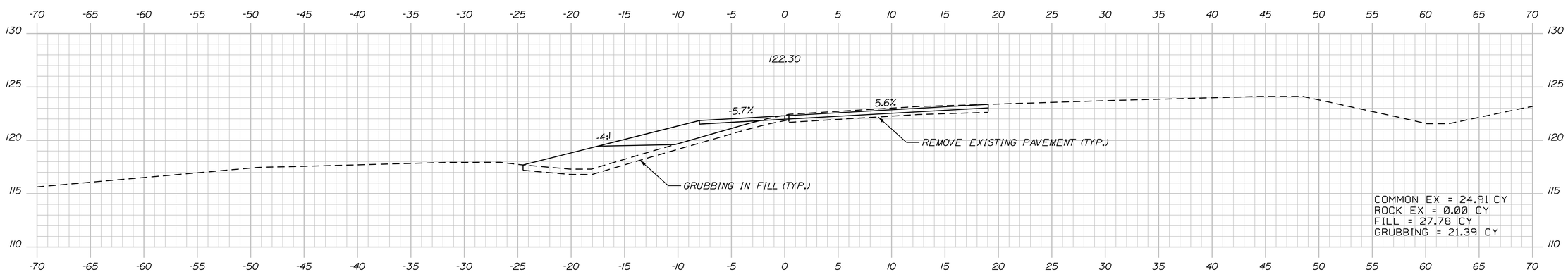
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



310+00.00



309+50.00



309+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

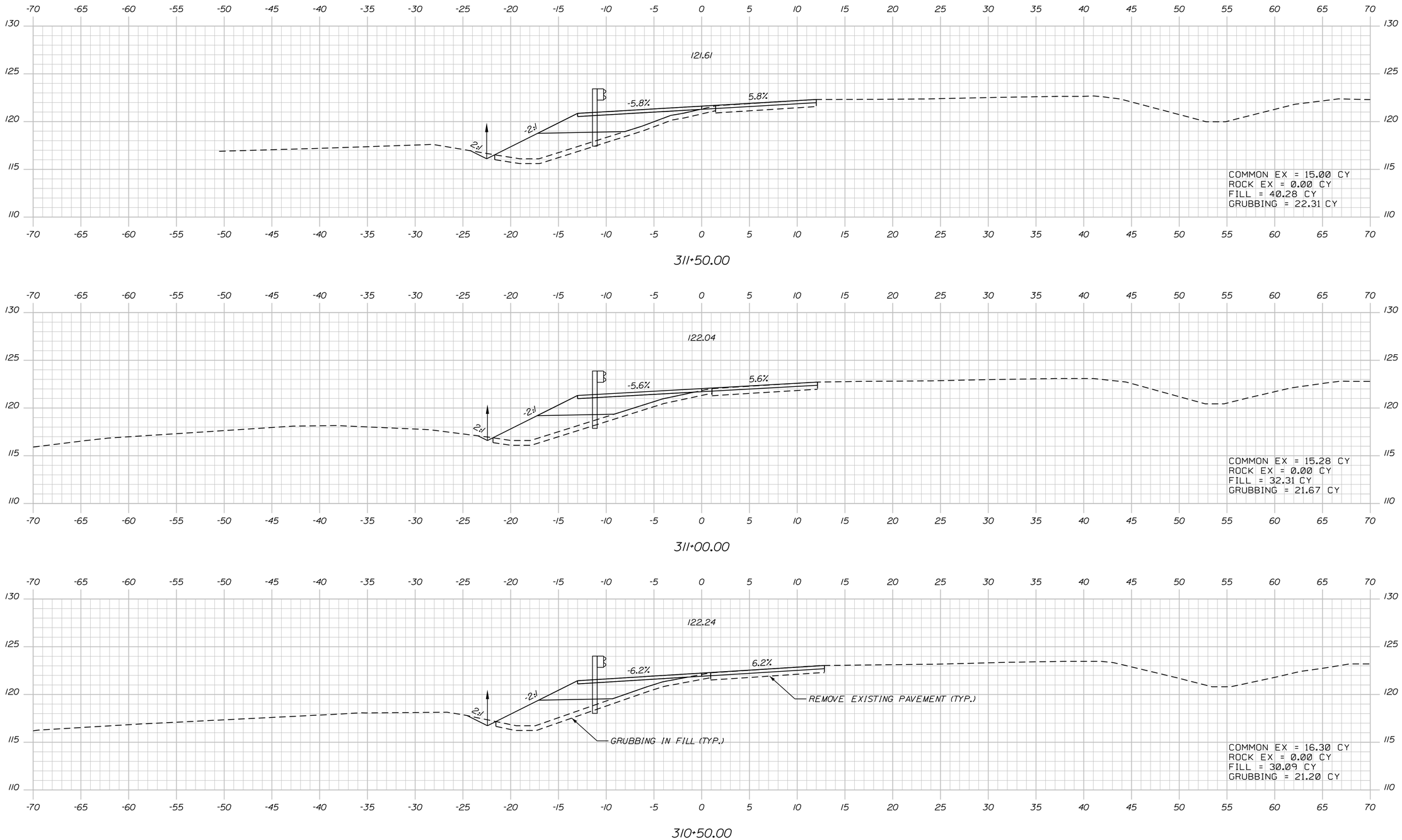
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
229
OF 283

Southbound Off Ramp Sta. 309+00.00 to Sta. 310+00.00

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

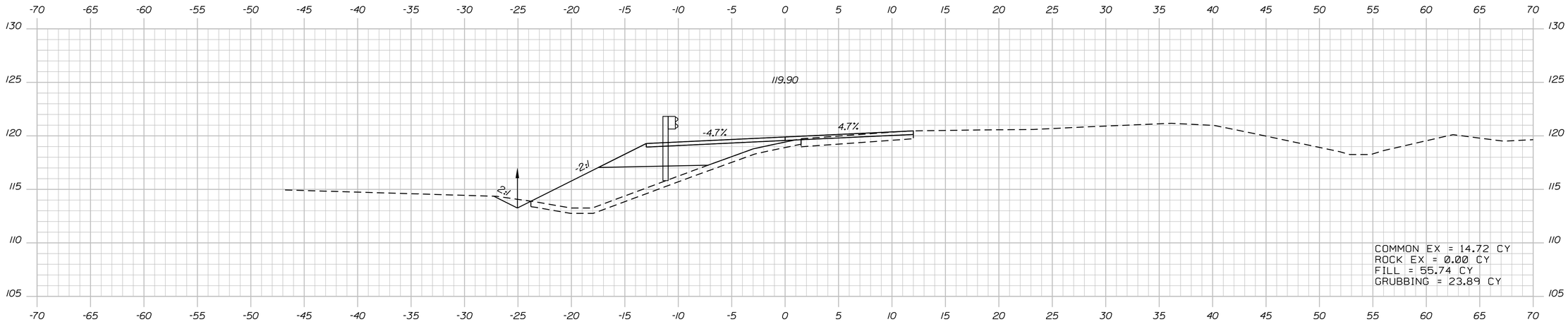
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

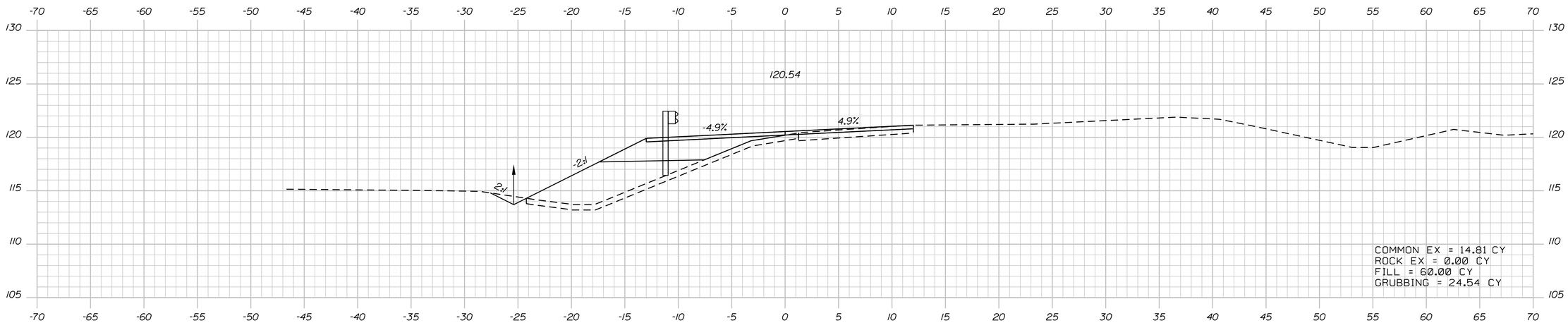
SHEET NUMBER
230
OF 283

Southbound Off Ramp Sta. 310+50.00 to Sta. 311+50.00

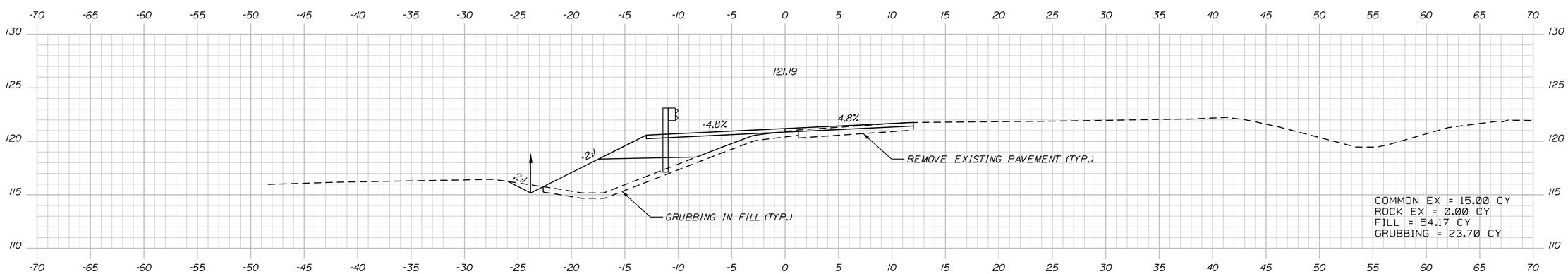
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



313+00.00



312+50.00



312+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

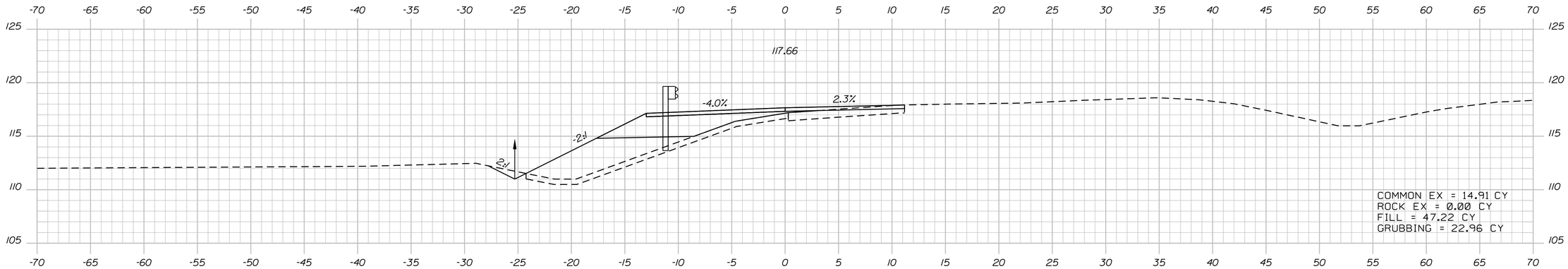
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

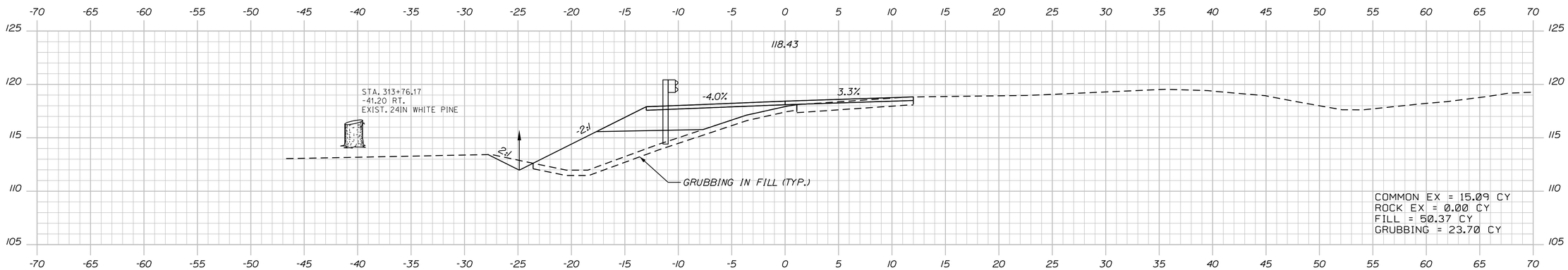
SHEET NUMBER
231
OF 283

Southbound Off Ramp Sta. 312+00.00 to Sta. 313+00.00

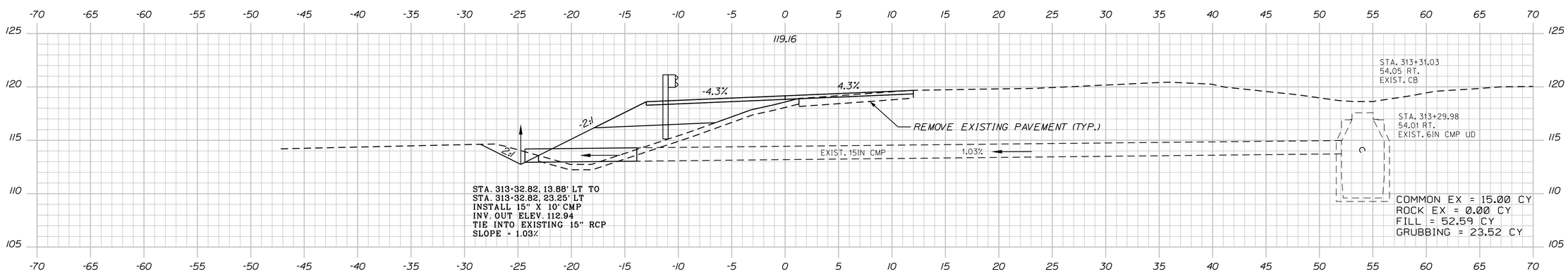
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



314+50.00



314+00.00



313+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

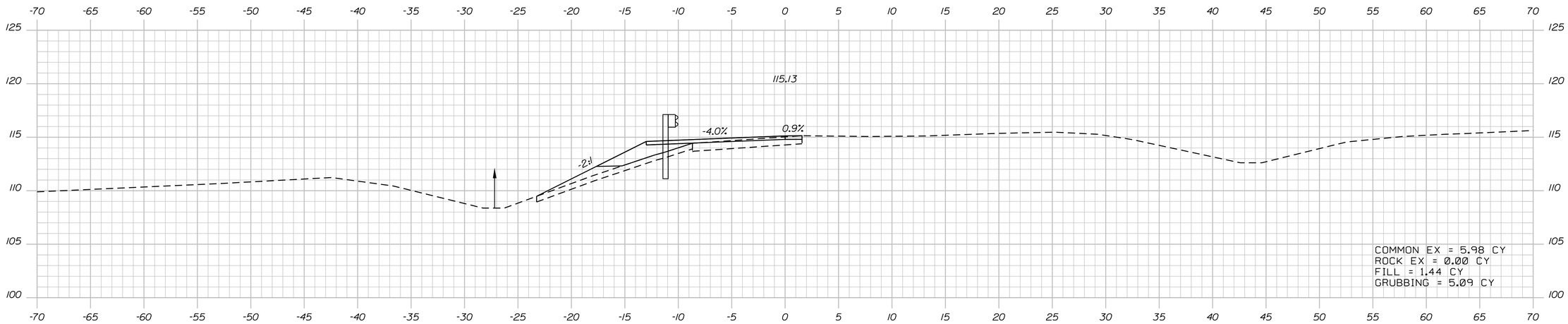
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

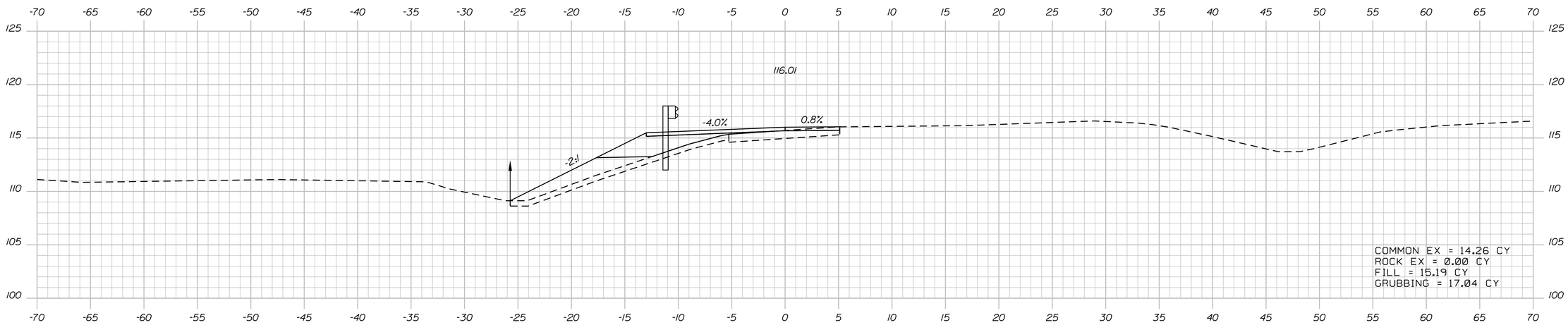
SHEET NUMBER
232
OF 283

Southbound Off Ramp Sta. 313+50.00 to Sta. 314+50.00

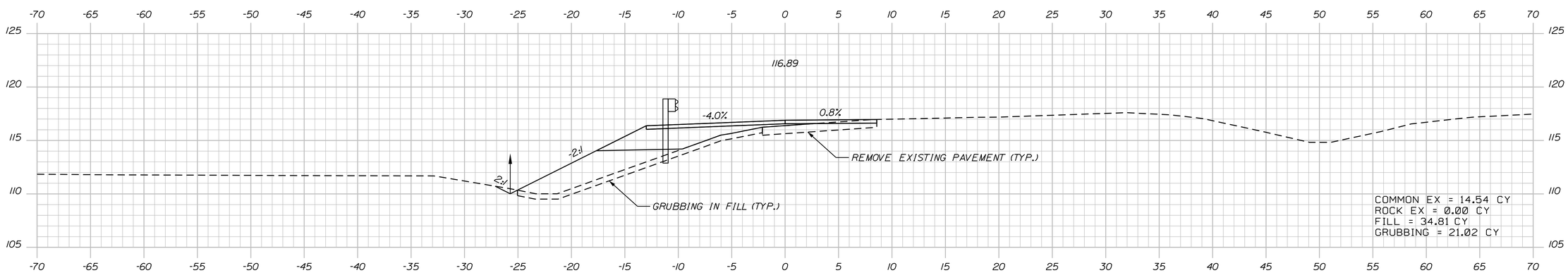
Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



316+00.00



315+50.00



315+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

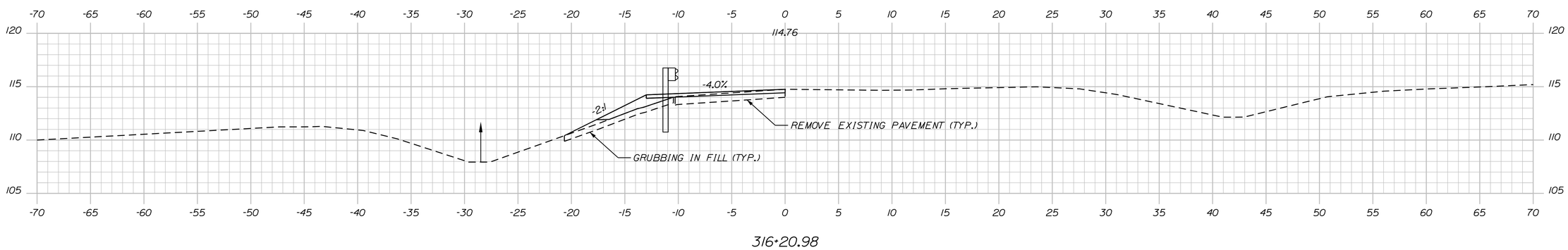
CROSS SECTIONS

SHEET NUMBER
233
OF 283

Southbound Off Ramp Sta. 315+00.00 to Sta. 316+00.00

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



PROJ. MANAGER		BY	DATE
DESIGN-DETAILED			
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

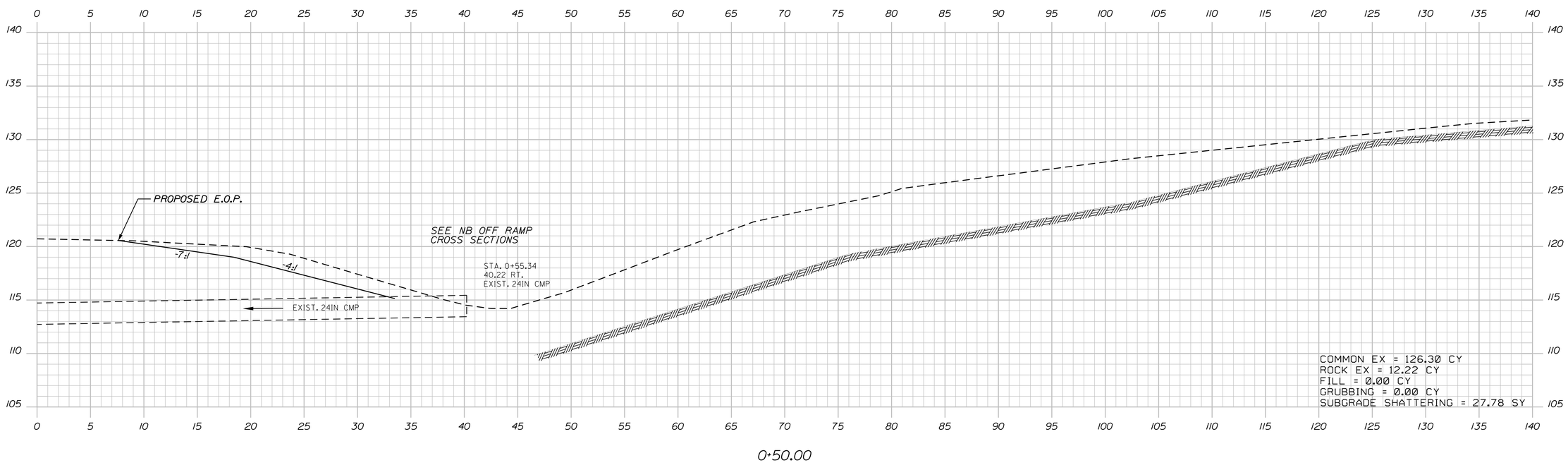
SHEET NUMBER

234

OF 283

Southbound Off Ramp Sta. 316+20.98 to Sta. 316+20.98

Filename: ...\235-238_Xsect_Basin Grading.dgn Division: BRIDGE Username: common Date:12/12/2012



PROJ. MANAGER		BY	DATE
DESIGN-DETAILED	MJD		
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

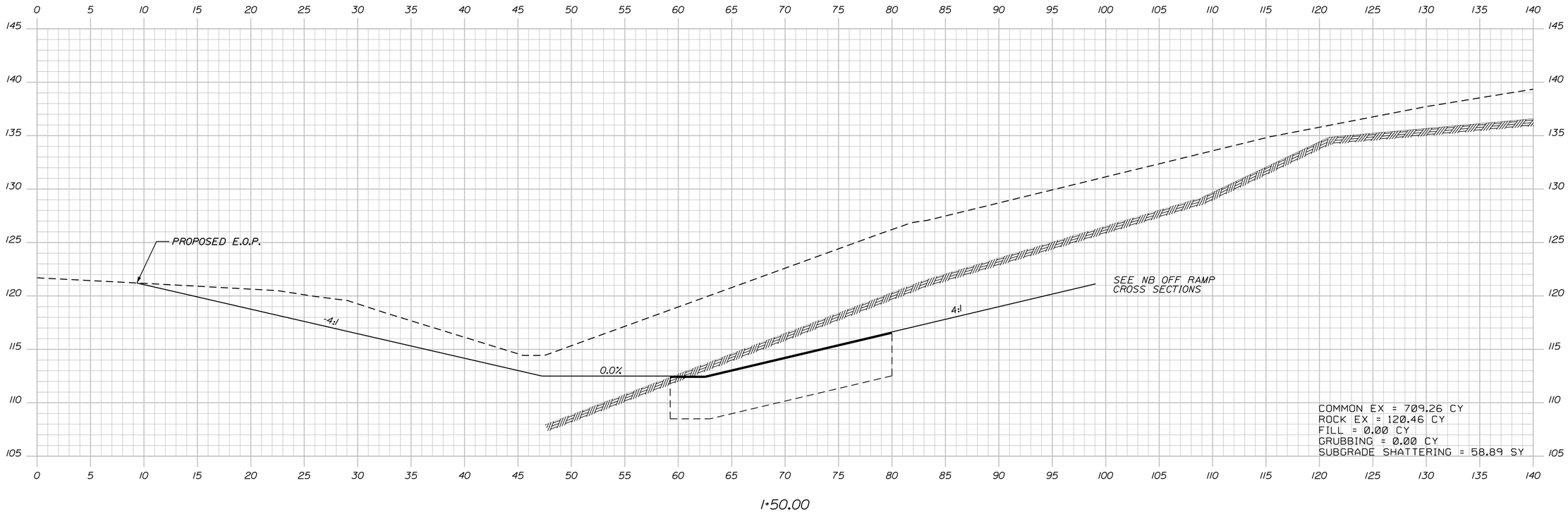
WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

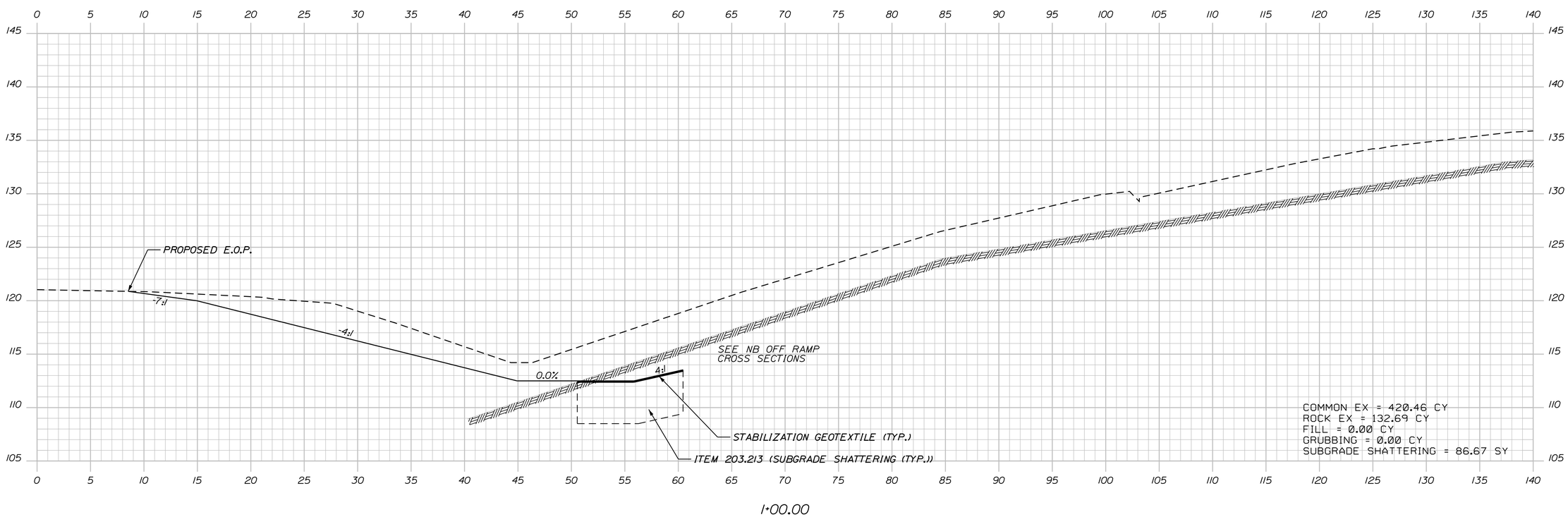
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
235
OF 283

BASELINE FOR DRAINAGE BASIN GRADING Sta. 0+00.00 to Sta. 0+50.00





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	MJD	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

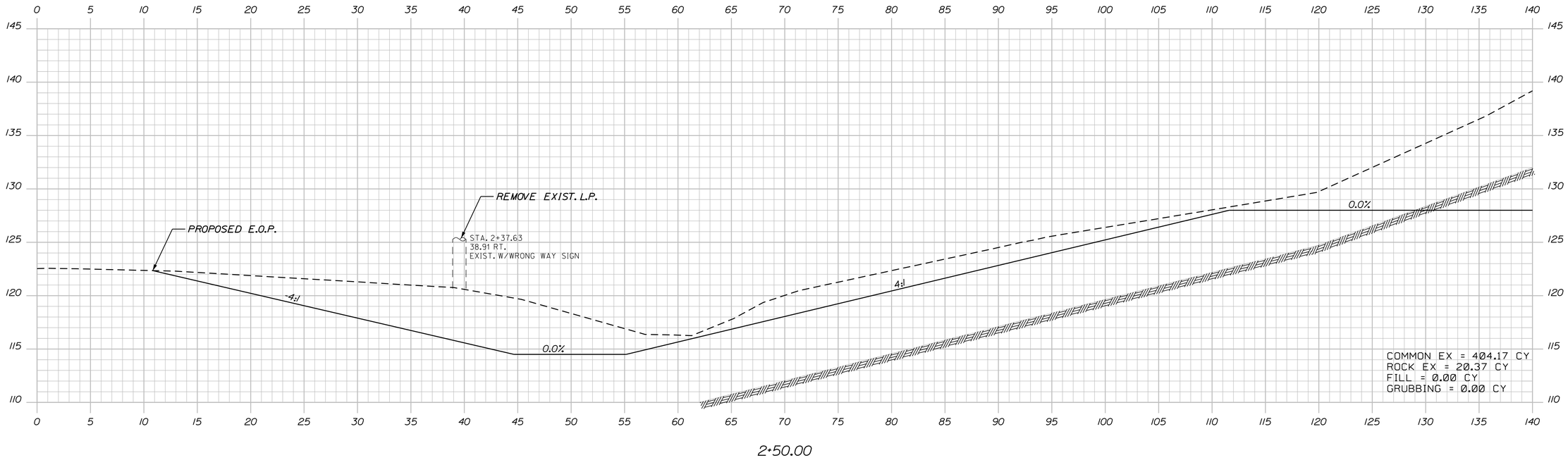
SHEET NUMBER

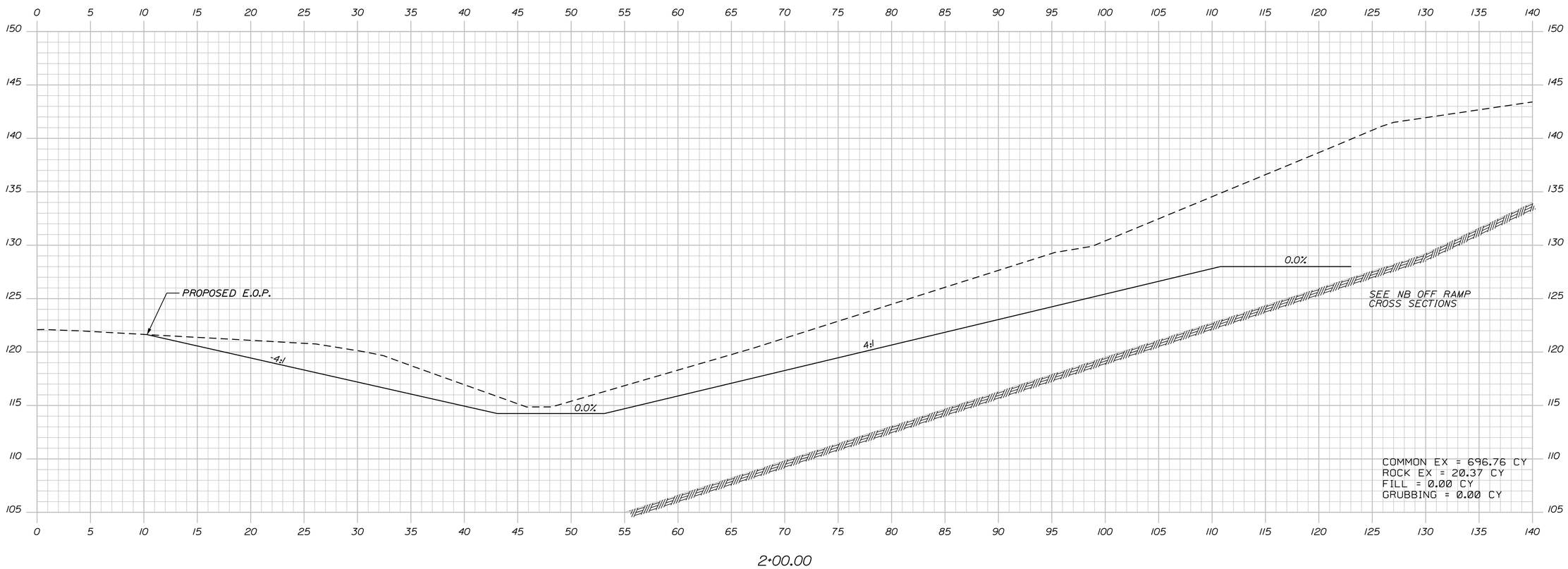
236

OF 283

BASELINE FOR DRAINAGE BASIN GRADING Sta. 1+00.00 to Sta. 1+50.00

Filename: ...\235-238_Xsect_Basin Grading.dgn Division: BRIDGE Username: common Date:12/12/2012





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	MJD	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

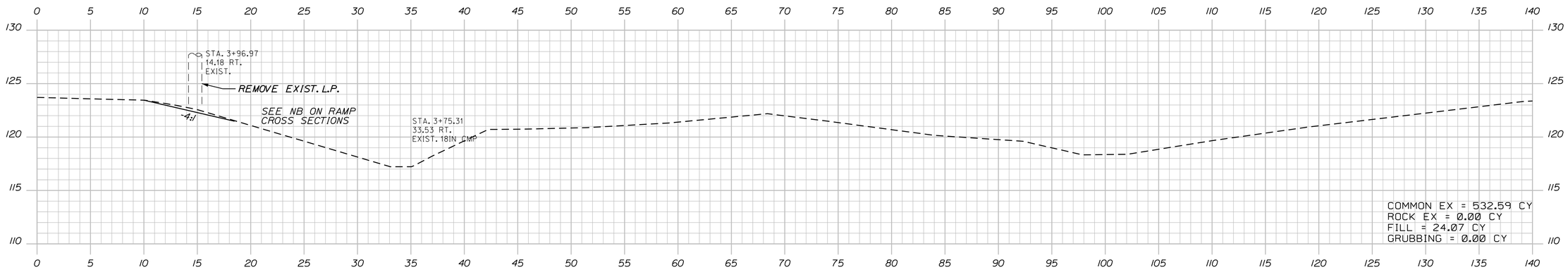
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

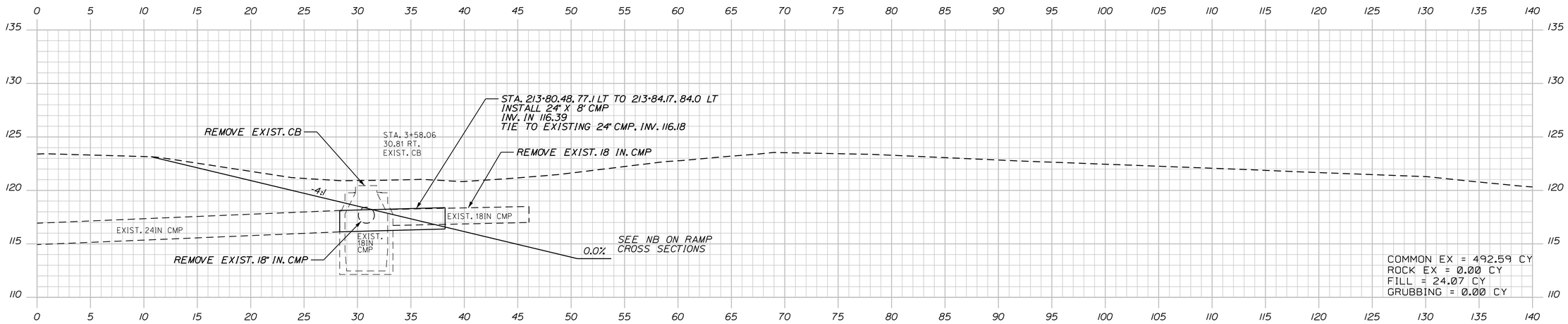
SHEET NUMBER
237
OF 283

BASELINE FOR DRAINAGE BASIN GRADING Sta. 2+00.00 to Sta. 2+50.00

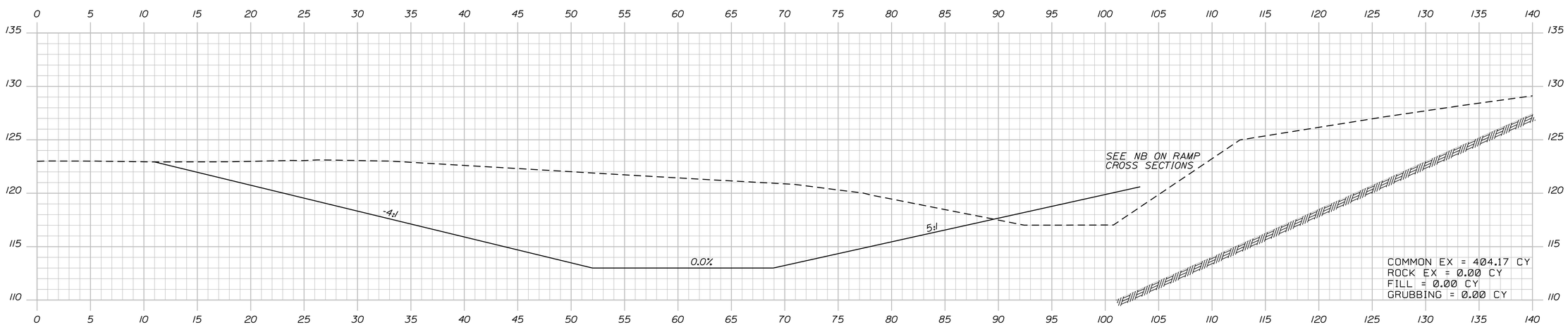
Filename: ...\235-238_Xsect_Basin Grading.dgn Division: BRIDGE Username: common Date:12/12/2012



4+00.00



3+50.00



3+00.00

BASELINE FOR DRAINAGE BASIN GRADING Sta. 3+00.00 to Sta. 4+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	MJD	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

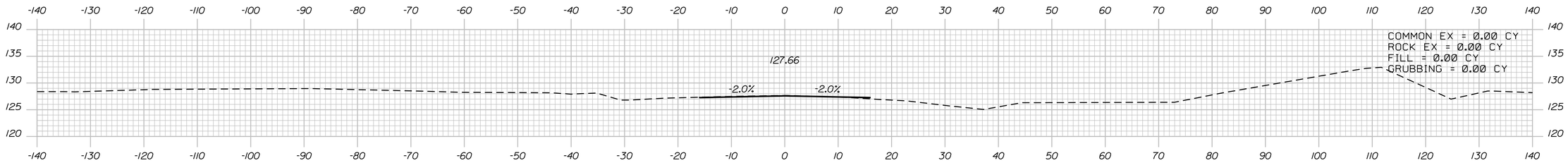
DATE

YARMOUTH
I-295 EXIT 15

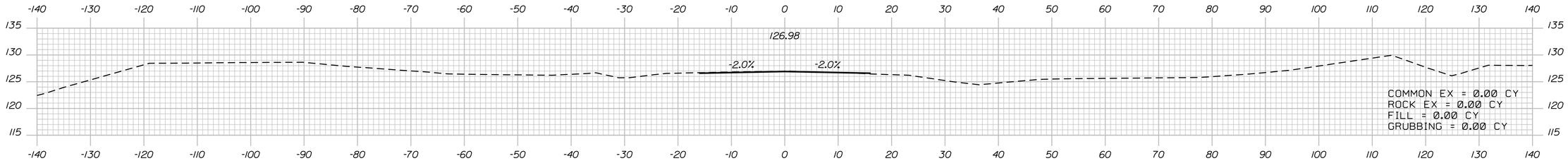
CROSS SECTIONS

SHEET NUMBER
238
OF 283

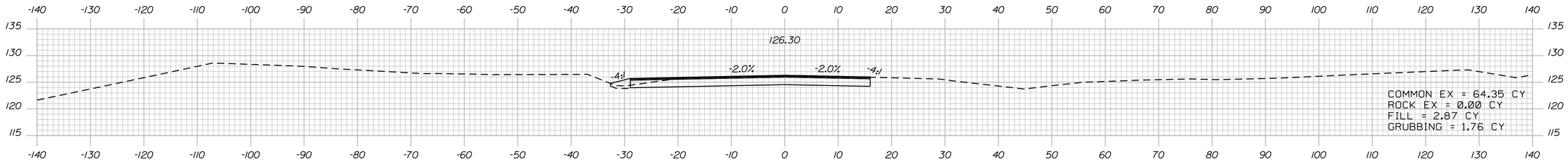
Filename: ...\235-238_Xsect_Basin Grading.dgn Division: BRIDGE Username: common Date:12/12/2012



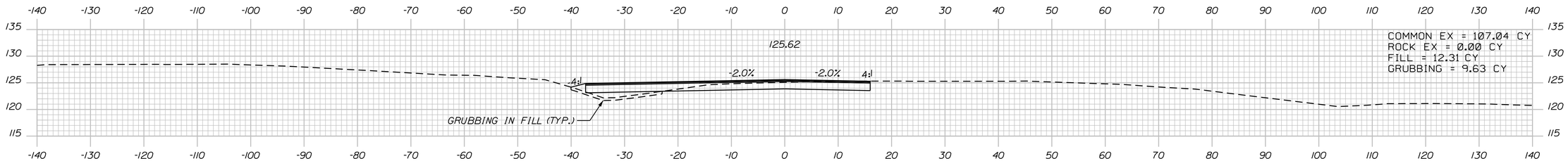
602+50.00



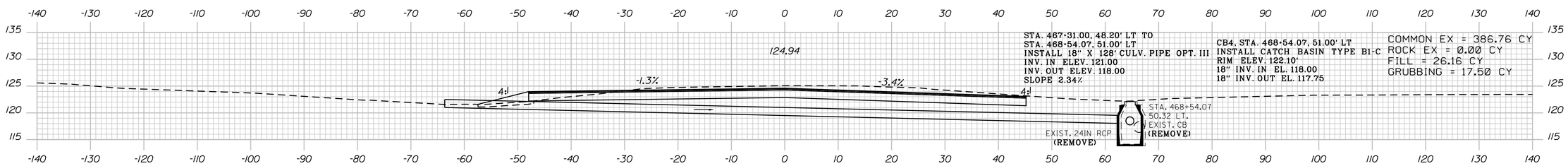
602+00.00



601+50.00



601+00.00



600+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	MJD	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

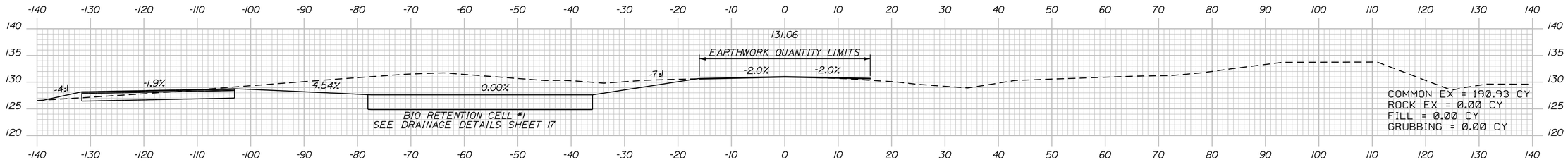
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

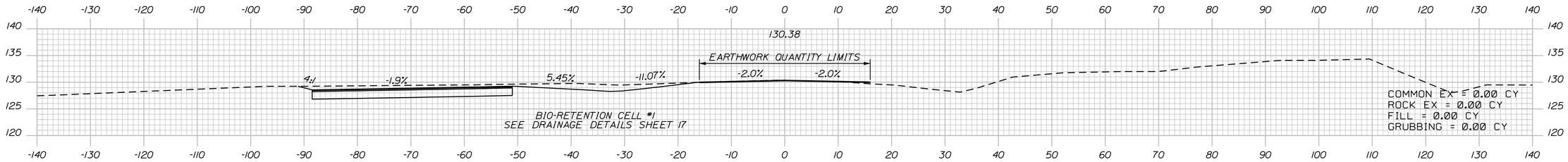
SHEET NUMBER
239
OF 283

Park and Ride Lot Sta. 600+50.00 to Sta. 602+50.00

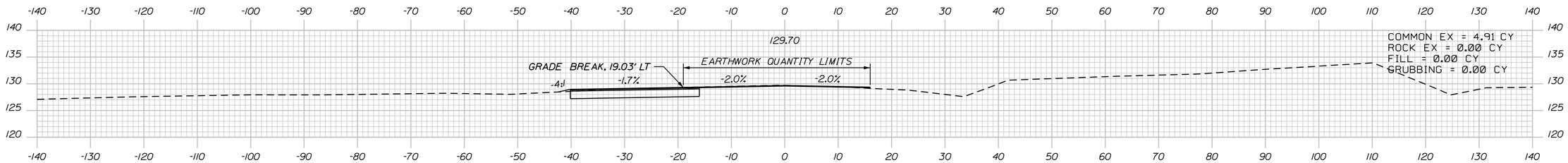
Filename: ...\239-250_XSect_Park and Ride.dgn Division: BRIDGE Username: common Date:12/12/2012



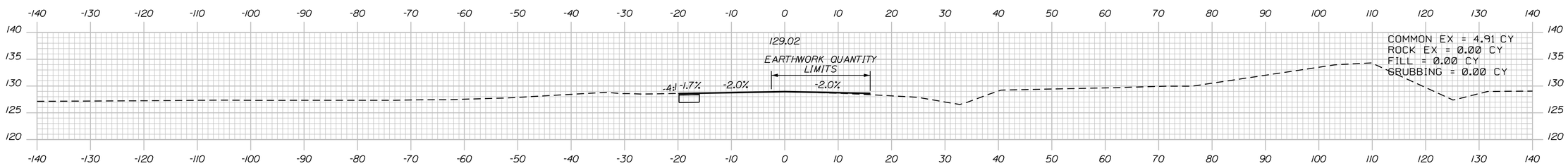
605+00.00



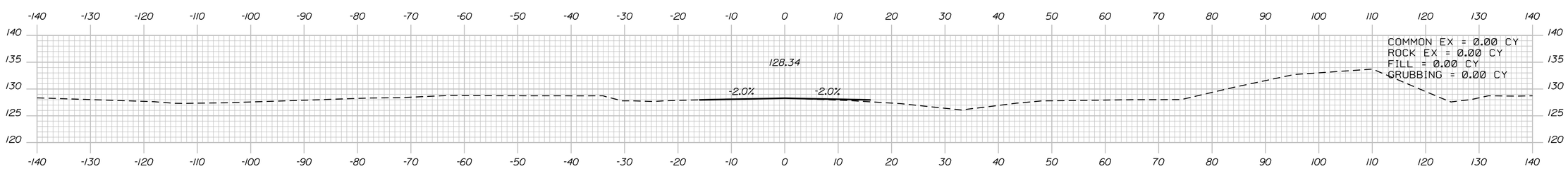
604+50.00



604+00.00



603+50.00



603+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	MJD	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

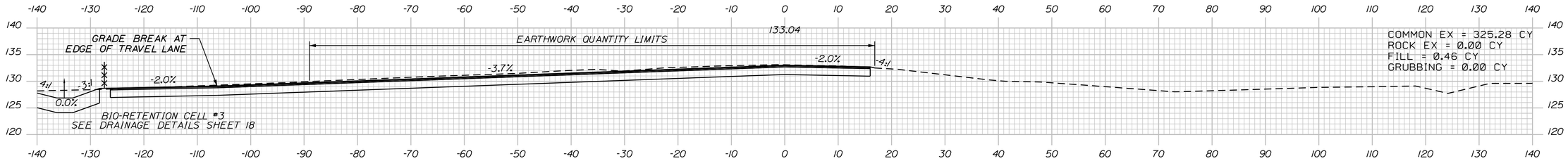
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

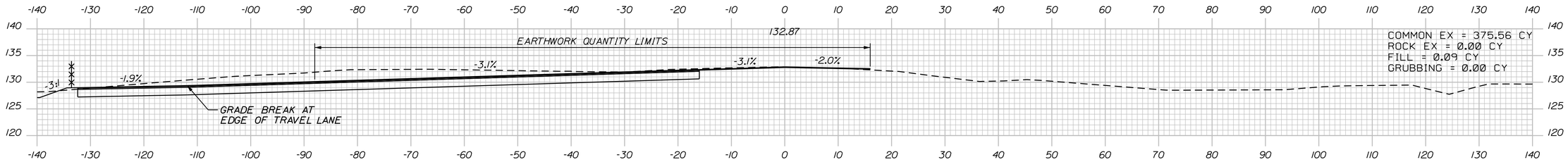
SHEET NUMBER
240
OF 283

Park and Ride Lot Sta. 603+00.00 to Sta. 605+00.00

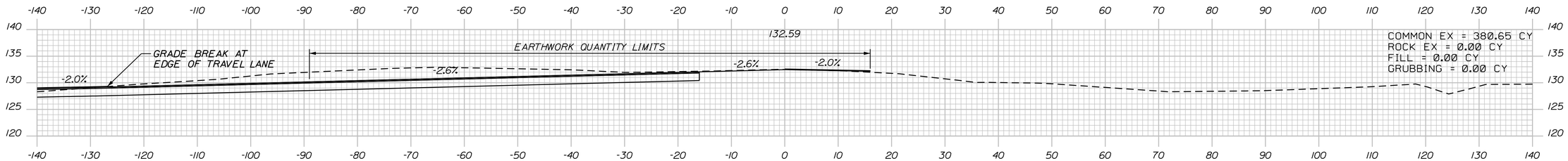
Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



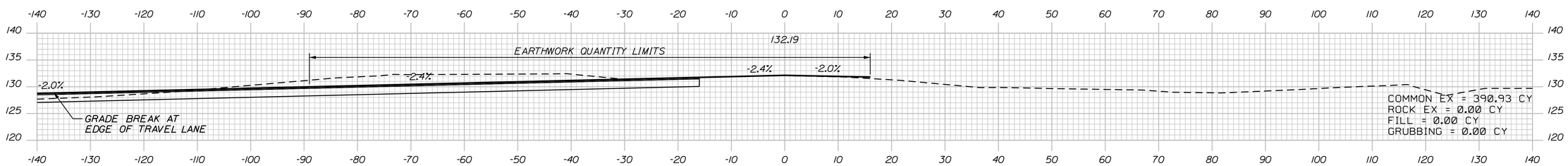
607+50.00



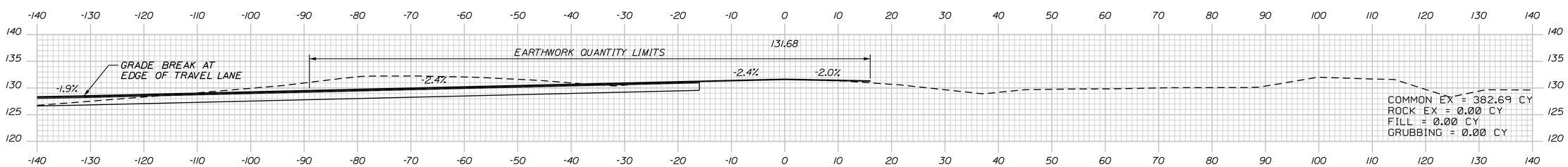
607+00.00



606+50.00



606+00.00



605+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED	MJD	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

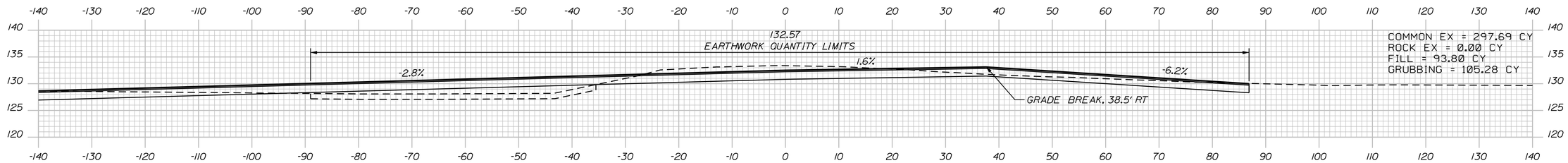
YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

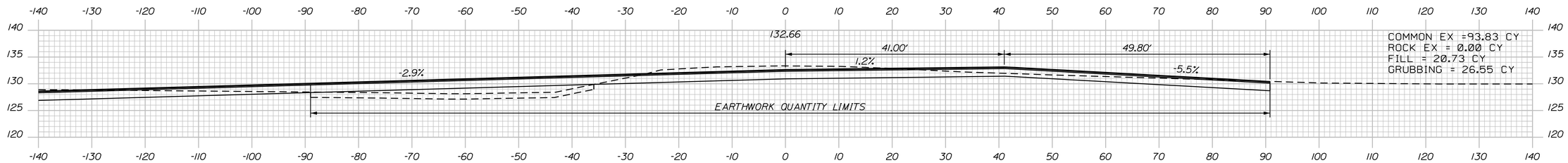
SHEET NUMBER
241
OF 283

Park and Ride Lot Sta. 605+50.00 to Sta. 607+50.00

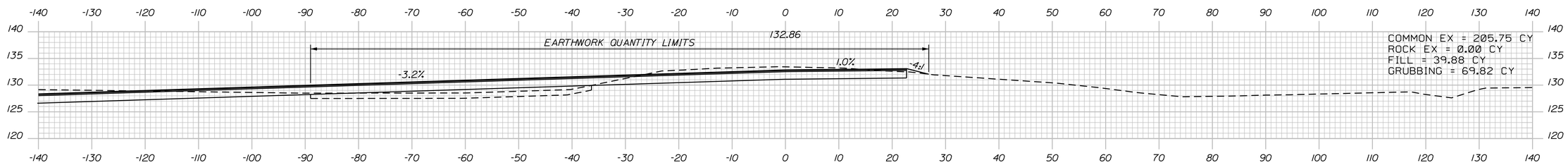
Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



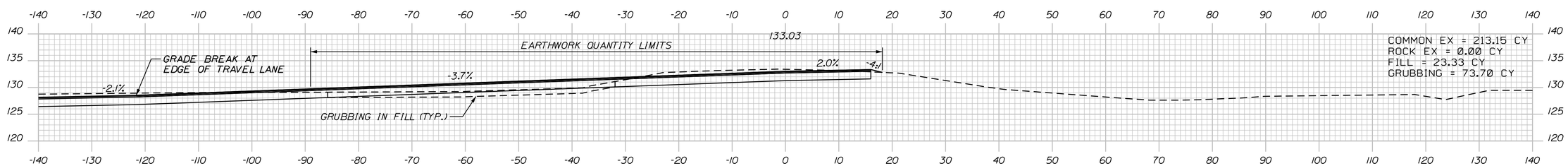
609+50.00



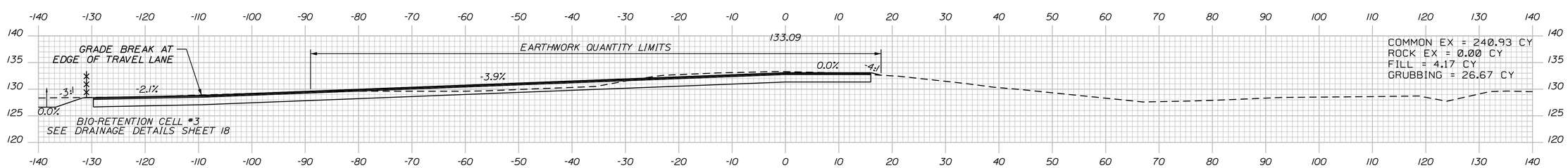
609+36.50



609+00.00



608+50.00



608+00.00

Park and Ride Lot Sta. 608+00.00 to Sta. 609+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	MJD	
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

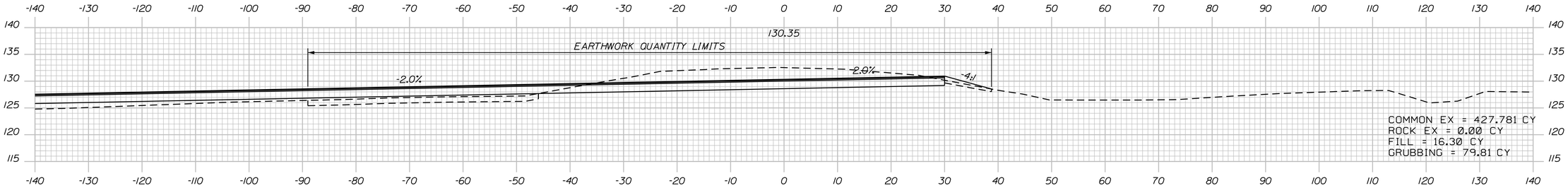
DATE

YARMOUTH
I-295 EXIT 15

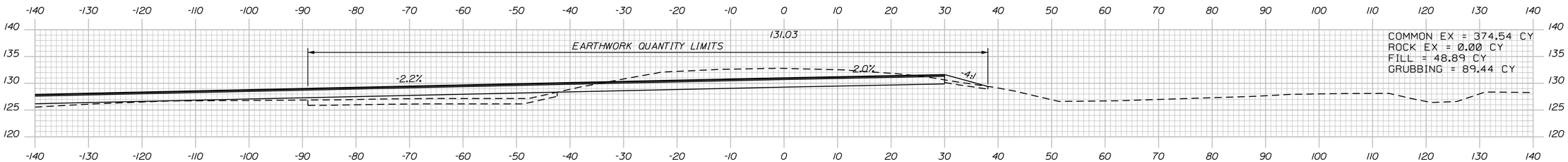
CROSS SECTIONS

SHEET NUMBER
242
OF 283

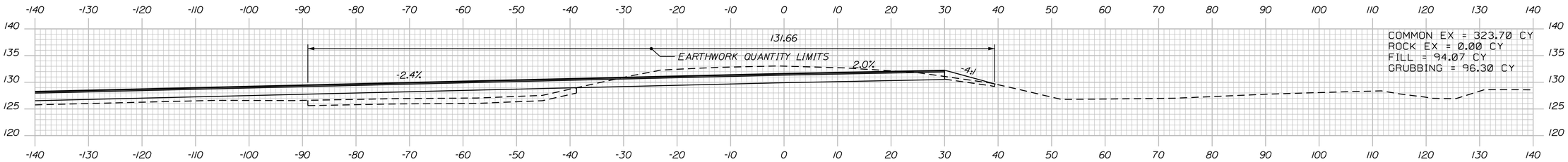
Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



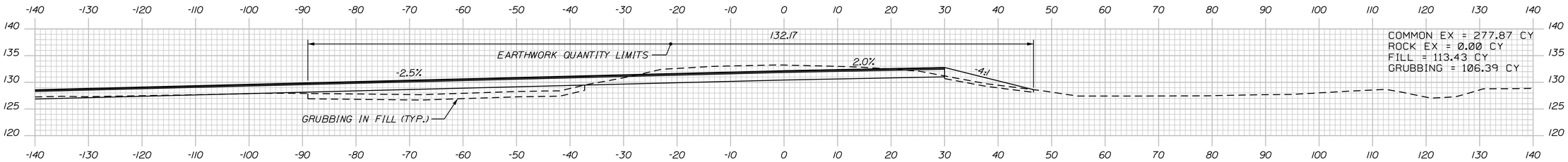
611+50.00



611+00.00



610+50.00



610+00.00

Park and Ride Lot Sta. 610+00.00 to Sta. 611+50.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED	MJD	
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DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

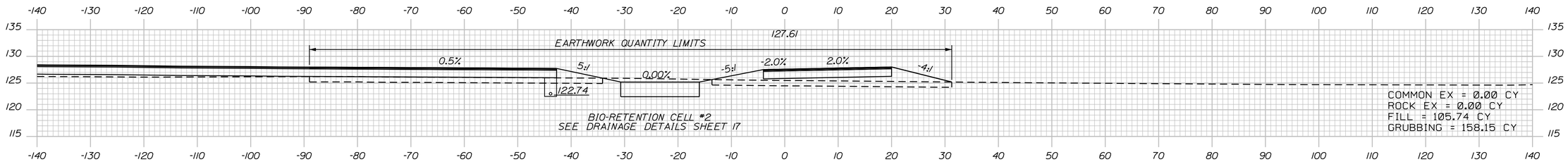
DATE

YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
243
OF 283

Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



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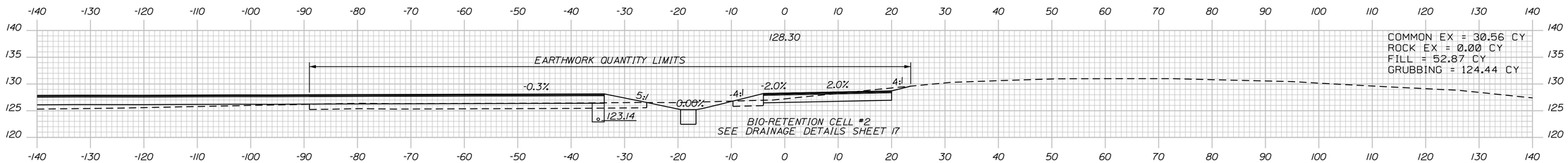

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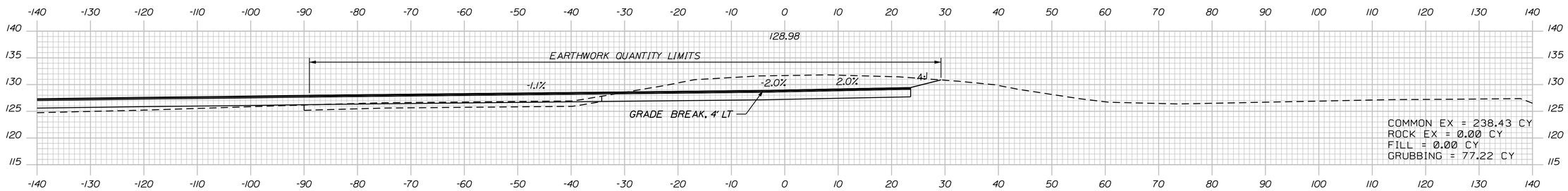

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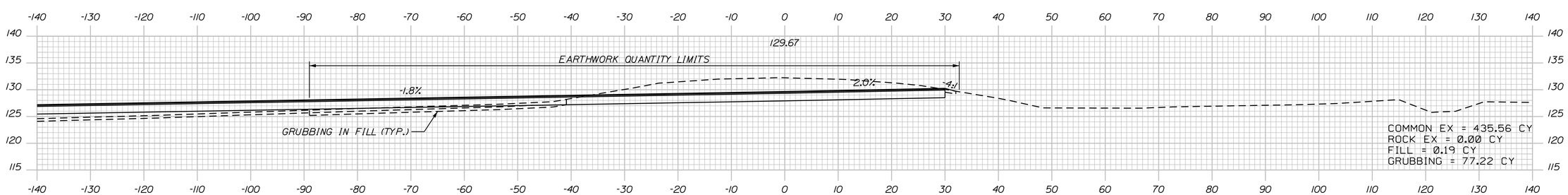

612+00.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

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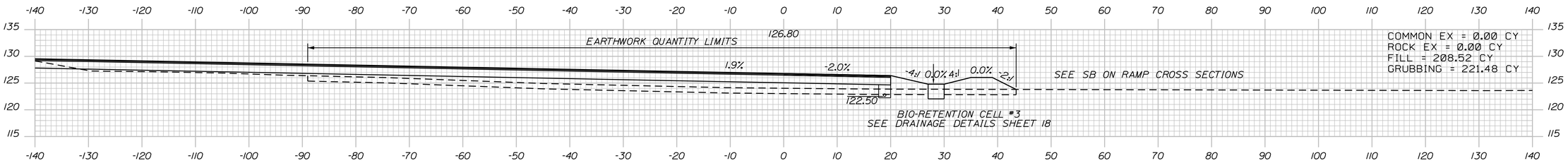
Park and Ride Lot Sta. 612+00.00 to Sta. 613+50.00

Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



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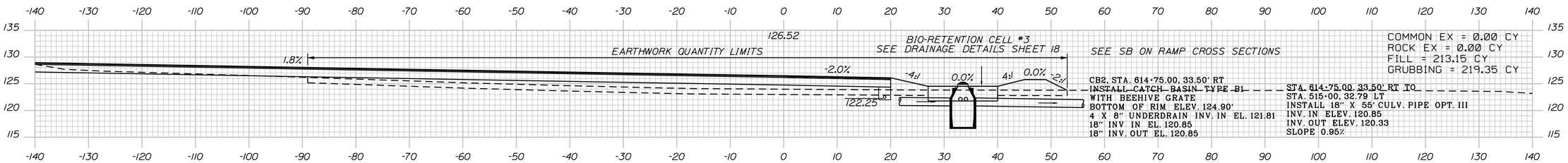

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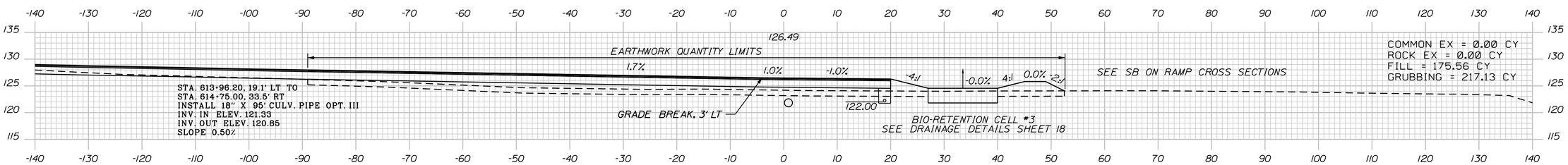

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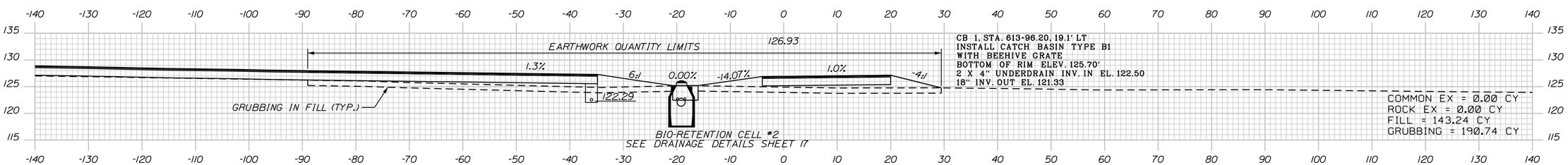

614+00.00

STATE OF MAINE
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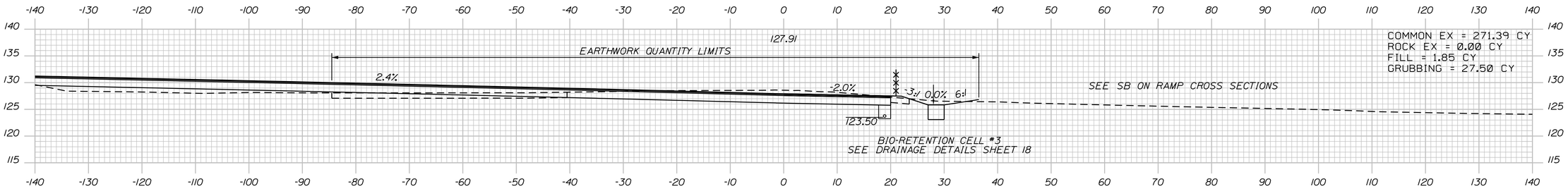
Park and Ride Lot Sta. 614+00.00 to Sta. 615+50.00



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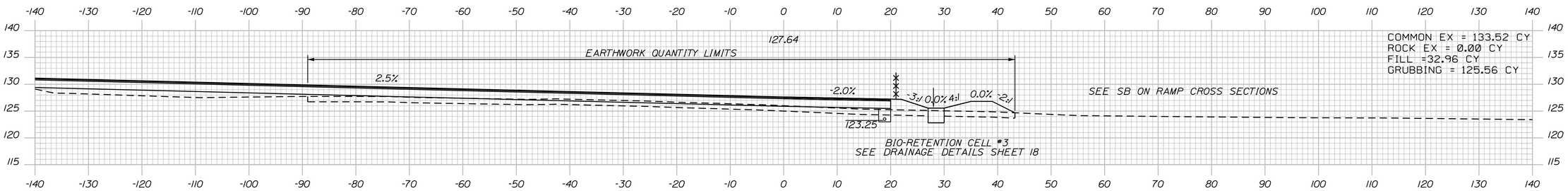

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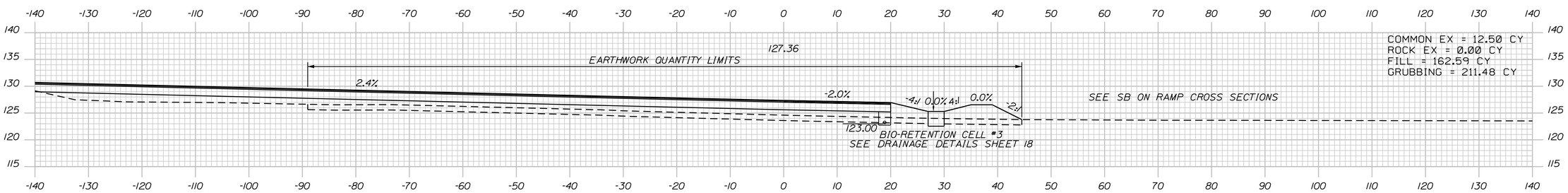

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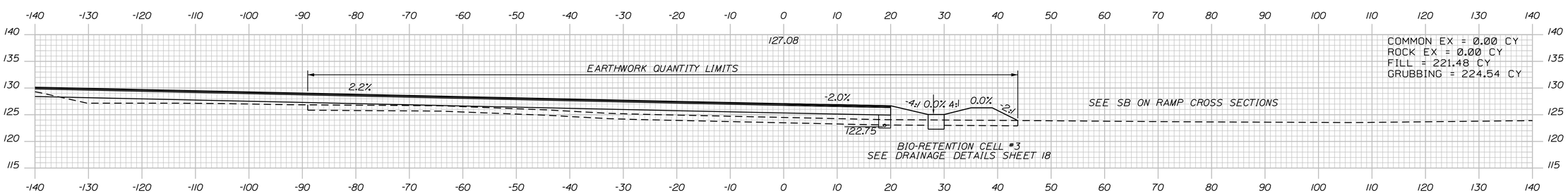

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I-295 EXIT 15

CROSS SECTIONS

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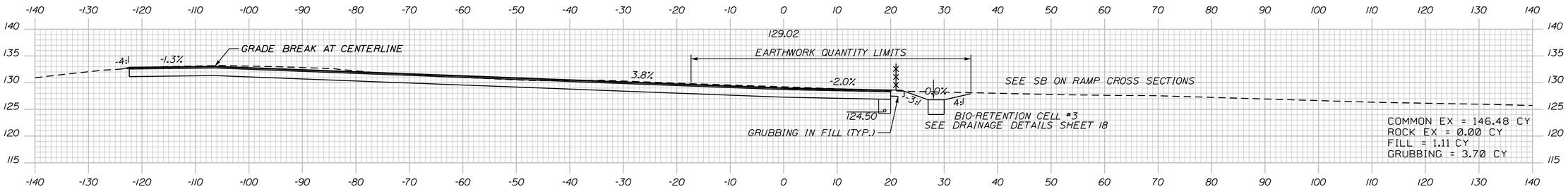
Park and Ride Lot Sta. 616+00.00 to Sta. 617+50.00

Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



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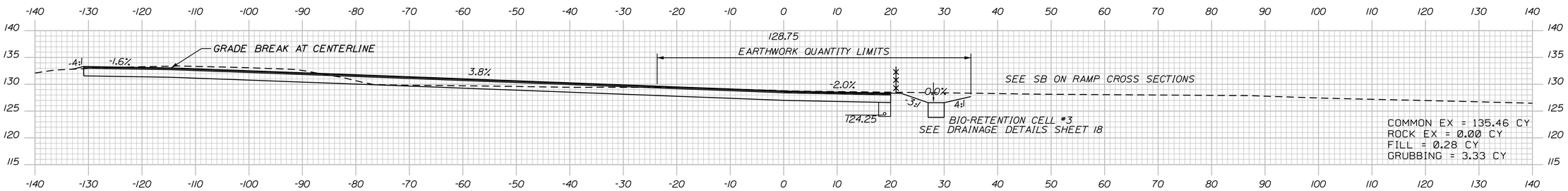

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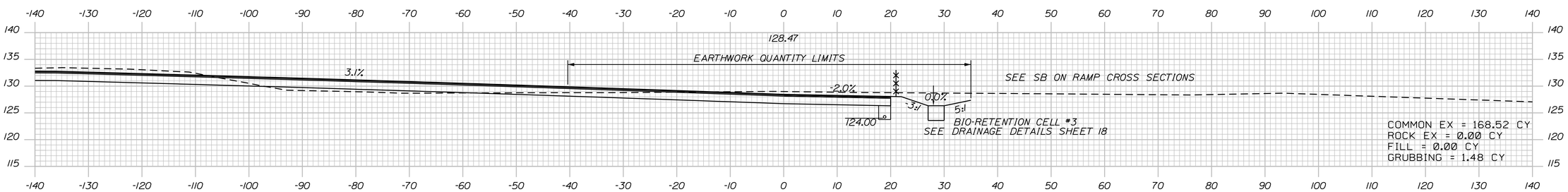

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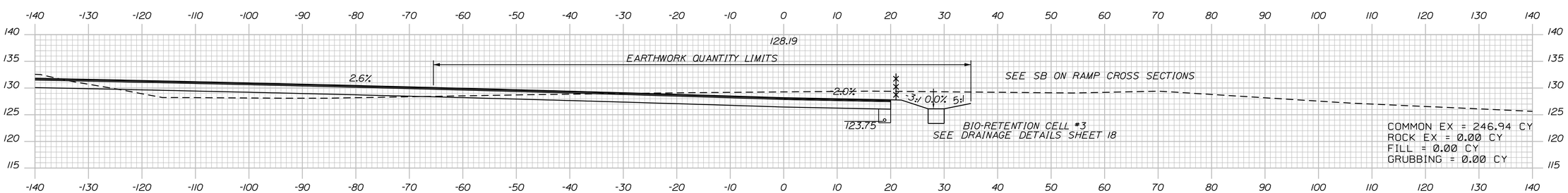

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YARMOUTH
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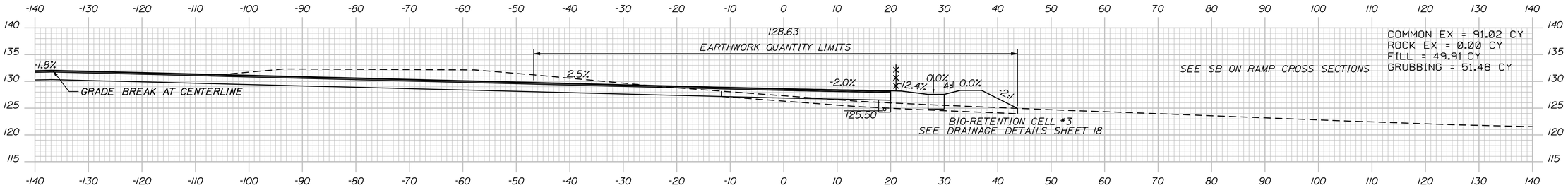
Park and Ride Lot Sta. 618+00.00 to Sta. 619+50.00

Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



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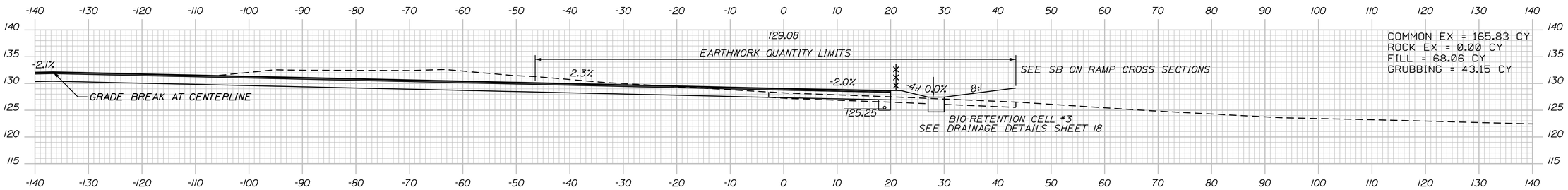

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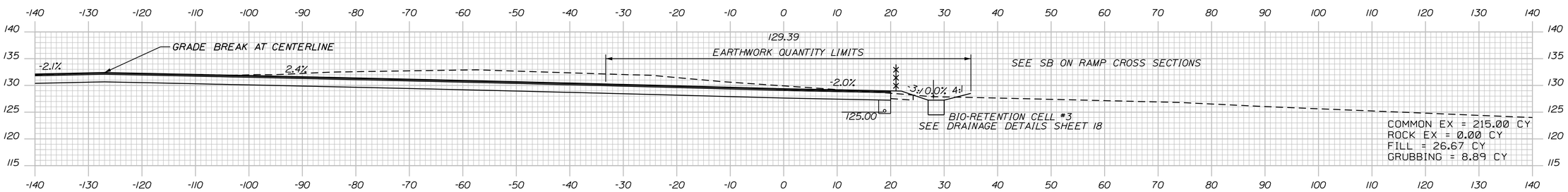

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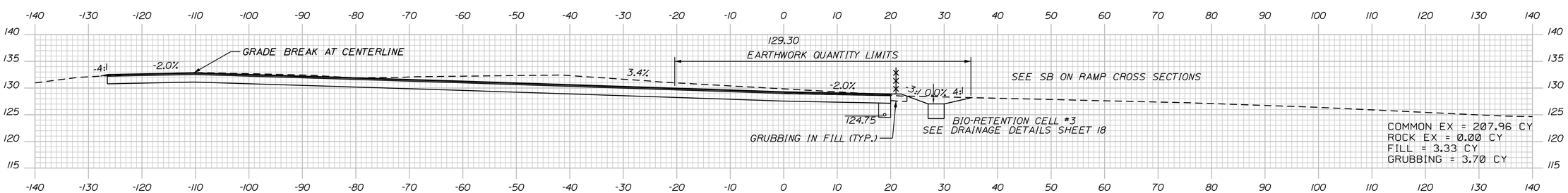

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STATE OF MAINE
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YARMOUTH
I-295 EXIT 15

CROSS SECTIONS

SHEET NUMBER
248
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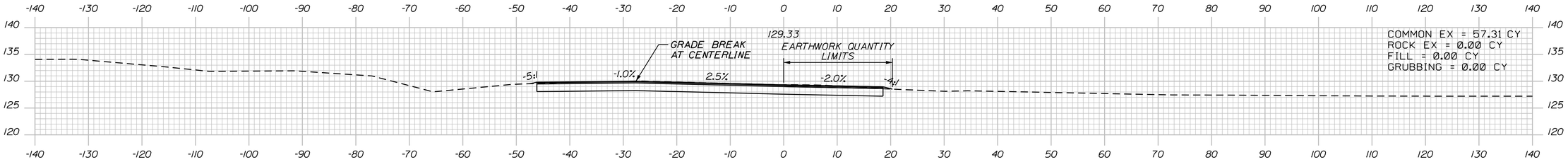
Park and Ride Lot Sta. 620+00.00 to Sta. 621+50.00

Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012



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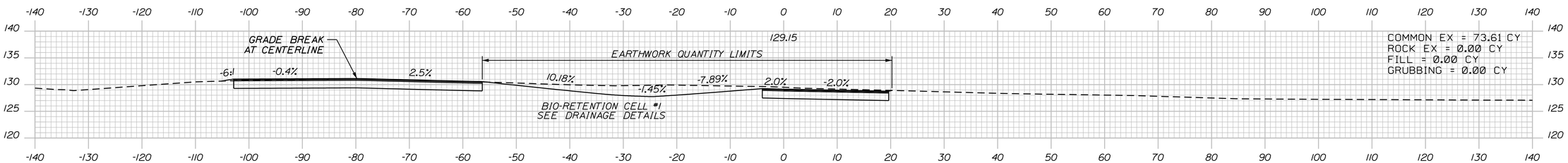

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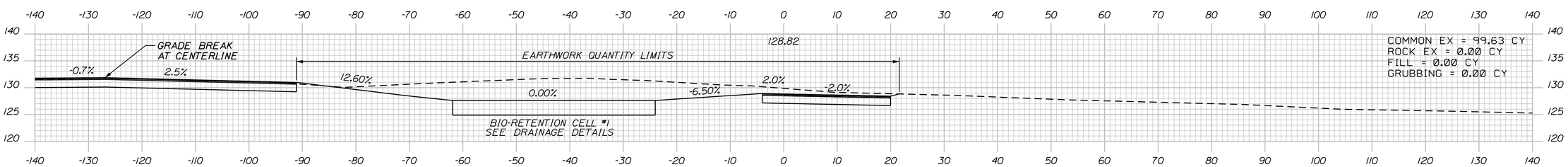

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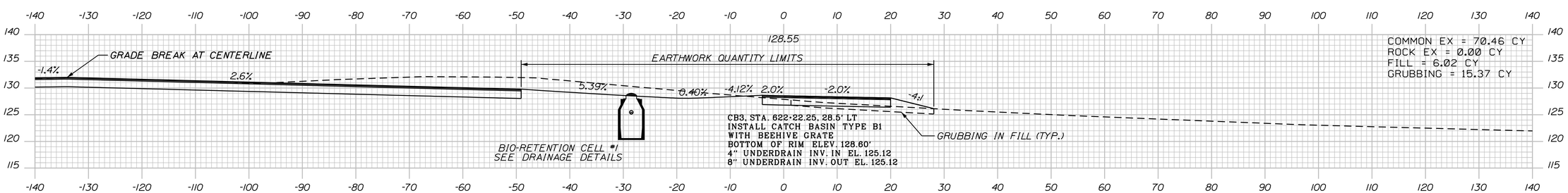

622+00.00

Park and Ride Lot Sta. 622+00.00 to Sta. 623+50.00

STATE OF MAINE
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YARMOUTH
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CROSS SECTIONS

SHEET NUMBER
249
OF 283

Filename: ...\239-250_XSect_Park and Ride.dgn Division: HIGHWAY Username: common Date:12/13/2012

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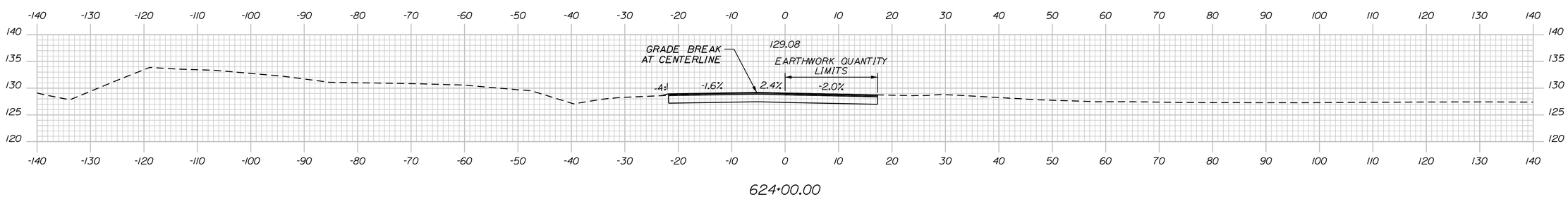

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YARMOUTH
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Park and Ride Lot Sta. 624+00.00 to Sta. 624+00.00

GENERAL NOTES

1. CONDUIT RUNS ARE SHOWN APPROXIMATE. LOCATIONS MAY BE ADJUSTED TO MATCH EXISTING AND PROPOSED CONDITIONS AS DIRECTED BY THE RESIDENT ENGINEER.

2. THE CONTRACTOR SHALL VISIT THE JOB SITE WITH THE CONTRACT DOCUMENTS AND INVESTIGATE ALL CONDITIONS AFFECTING THIS WORK. THE CONTRACTOR SHALL BE FAMILIAR WITH THE LOCATION AND SITE OF THE WORK, AND SHALL VERIFY DIMENSIONS, QUANTITIES, ACTUAL INSTALLATION CONDITIONS, CONFLICTS, AND STORAGE FACILITIES.

3. STATIONING FOR POLES IS GIVEN FROM THE BASELINE CLOSEST TO THE POLE. OFFSET DISTANCE FROM STREET IS DEFINED ON POLE FOUNDATION DETAIL.

4. ALL WIRING IN THE HANDHOLES, PANELBOARDS AND CABINETS SHALL BE PERMANENTLY LABELED AND NEATLY INSTALLED.

5. ALL CONDUIT AND EQUIPMENT TO BE INSTALLED AND GROUNDED IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE, MAINE ELECTRICAL CODE AND APPLICABLE LOCAL CODES.

6. ALL EQUIPMENT AND MATERIALS SHALL BE UL LISTED FOR ITS INTENDED PURPOSE.

7. WIRE SIZES SHALL BE BASED ON AMERICAN WIRE GAUGE (AWG), AS APPLIED TO COPPER CONDUCTORS. THE CONDUCTOR INSULATION SHALL BE TYPE THW.

8. WIRE AND CABLE FURNISHED AND USED SHALL BE NEW. WIRE AND CABLE SHALL BE PROTECTED FROM WEATHER AND DAMAGE DURING STORAGE AND HANDLING.

9. THE CONTRACTOR SHALL CAREFULLY MARK THE PROPOSED LOCATION OF THE CONCRETE FOUNDATION AND THEN SHALL DETERMINE IF ANY UTILITIES, OR UNDERGROUND OR OVERHEAD OBSTRUCTION WILL PREVENT THE INSTALLATION AT THIS LOCATION. SIMILAR MARKING SHALL BE DONE FOR THE CONDUIT RUNS TO THE FOUNDATION. IF SUCH AN OBSTRUCTION IS EVIDENT, THE CONTRACTOR SHALL REQUEST PERMISSION FROM THE ENGINEER TO MOVE OR ADJUST THE LOCATION OF THE FOUNDATION.

10. ELECTRICAL SERVICE TO EACH LIGHTING CONTROL CABINET WILL BE PROVIDED BY THE ELECTRIC UTILITY. CONTRACTOR SHALL PROVIDE CONDUIT AND WIRE UP POLE WITH ENOUGH SLACK FOR SERVICE CONNECTION. CONTRACTOR SHALL COORDINATE WITH THE MAINE DOT AND THE ELECTRIC UTILITY, FOR SERVICE CONNECTION. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRIC SERVICE CONNECTION AND RELATED FEES FROM THE UTILITY.

11. UNLESS OTHERWISE NOTED, CONDUIT SHALL BE AS FOLLOWS:

    ALL DIRECT BURIED CONDUIT SHALL BE SCH. 80 WITH APPROVED METALLIC DETECTABLE WARNING TAPE. EXCEPT AS NOTED.

    ALL EXPOSED CONDUITS SHALL BE RIGID GALVANIZED STEEL.

    2"C BETWEEN LIGHTING HANDHOLES

    2"C BETWEEN LIGHTING HANDHOLE AND LIGHTING CONTROLLER

    2"C FROM HANDHOLE TO LIGHT POLE FOUNDATION (IN GROUND)

    2" RGS STEEL CONDUIT EXPOSED AT BRIDGE CROSSINGS.

12. ALL WIRE SHALL BE CONTINUOUS FROM HANDHOLE TO HANDHOLE WITHOUT RUNNING SPLICES IN CONDUITS. ALL WIRES SHALL EXTEND 24" ABOVE THE PULL BOX, CONNECTED AT ENDS AND ROLLED BACK INTO THE PULL BOX.

13. THE HOT LINE(S) AND NEUTRAL CONNECTION IN THE POLE HANDHOLE SHALL BE WITH AN APPROVED STREET LUMINAIRE FUSE CONNECTOR.

14. PROVIDE EXPANSION FITTINGS IN ALL CONDUIT RUNS ON STRUCTURES AT EXPANSION JOINTS.

15. THE CONTRACTOR IS ADVISED THAT THE INTENT OF THIS CONTRACT IS TO ABANDON THE EXISTING LIGHTING CONDUIT IN PLACE, AND REMOVE THE EXISTING CONDUCTORS FROM THE ABANDONED CONDUITS.

16. THE LOCATIONS OF EXISTING SUBSURFACE UTILITIES SHOWN ON THE PLANS WERE COMPILED FROM AVAILABLE RECORD DRAWINGS AND ARE NOT WARRANTED TO BE CORRECT. THE LOCATIONS ARE APPROXIMATE ONLY AND IN SOME CASES MAY BE INCOMPLETE. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES REQUIRED AND VERIFY THE LOCATION OF ALL EXISTING SUBSURFACE UTILITIES PRIOR TO PERFORMING ANY WORK.

17. WHERE A NEW PAVEMENT SHALL MEET EXISTING PAVEMENT, THE JOINT SHALL BE SAWCUT TO A NEAT VERTICAL LINE.

18. THE CONTRACTOR SHALL MAINTAIN AREAS IN AND AROUND THE WORK ZONE FREE AND CLEAR OF DEBRIS AT ALL TIMES. NO STOCK PILING OF EQUIPMENT OR MATERIAL SHALL BE PERMITTED OUTSIDE OF FIXED WORK ZONES.

19. THE CONTRACTOR SHALL INSTALL OTHER NECESSARY TEMPORARY REGULATORY AND WARNING SIGNS DURING CONSTRUCTION AS DIRECTED BY THE ENGINEER FOR OTHER INCIDENTAL CONSTRUCTION ACTIVITIES. ALL SIGNAGE AND TRAFFIC CONTROL DEVICES USED MUST CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2009 EDITION.

20. POLE FOUNDATIONS FOR 30' POLES SHALL BE STANDARD DETAIL 626(01), ITEM 626.31, 450mm FOUNDATION. POLE FOUNDATIONS FOR 40' POLES SHALL BE STANDARD DETAIL 626(03), ITEM 626.33, 750mm FOUNDATION.

21. HANDHOLES SHALL BE STANDARD DETAIL 626(09), ITEM 626.11.

22. SERVICE POLE SHALL BE STANDARD DETAIL 634(01) AND AS DETAILED IN STANDARD SPECIFICATION PARAGRAPHS 715.10 AND 715.11.

23. CONTROL CABINET CIRCUITING SHALL BE STANDARD DETAIL 634(03).

24. CONDUIT TRENCH SHALL BE STANDARD DETAIL 626(07) AND AS DETAILED IN STANDARD SPECIFICATION PARAGRAPH 626.031.

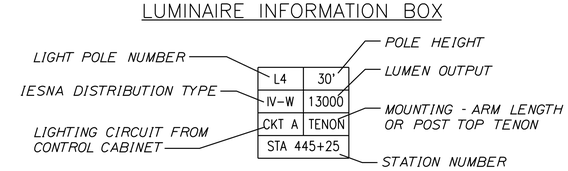
ABBREVIATIONS:

A	AMPERE
AWG	AMERICAN WIRE GAUGE
BRGS	BEARINGS
CKT, CKTS	CIRCUIT, CIRCUITS
CCTV	CLOSED CIRCUIT TELEVISION
CEM	CEMENT
CONC	CONCRETE
CONN.	CONNECTOR
DCR	DEPARTMENT OF CONSERVATION AND RECREATION
EB.	EASTBOUND
ELEC.	ELECTRIC
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EXP	EXPANSION
G	GROUND
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HH	HANDHOLE
HLLC	HIGHWAY LIGHTING LOAD CENTER
HMA	HOT MIX ASPHALT
ITS	INTELLIGENT TRANSPORTATION SYSTEM
LC	LIGHTING CIRCUIT
MIN.	MINIMUM
NB.	NORTHBOUND
O.C.	ON CENTER
PROP	PROPOSED
P	POLE
PVC	POLYVINYL CHLORIDE
R&D	REMOVE AND DISPOSE
R&T	REMOVE AND TRANSPORT
RC	RECEPTACLE CIRCUIT
RM	RIGID METAL
RGS	RIGID GALVANIZED STEEL
RTE	ROUTE
SDWK	SIDEWALK
SPST	SINGLE POLE SINGLE THROW
SPDT	SINGLE POLE DOUBLE THROW
SB.	SOUTHBOUND
TYP.	TYPICAL
VMS	VARIABLE MESSAGE SIGN
V	VOLT
WB.	WESTBOUND
W	WATT / WHITE-NEUTRAL
W/	WITH

LIGHTING LEGEND

—E—E—	UNDERGROUND PVC CONDUITS AND WIRING TO BE INSTALLED AS INDICATED ON THE DETAILS
	NEW POLE FOUNDATION, POLE AND SINGLE LUMINAIRE. SEE GENERAL NOTE 20 FOR FOUNDATION TYPE.
	NEW POLE FOUNDATION, POLE AND TWO LUMINAIRES AT 180 DEGREES. SEE GENERAL NOTE 20 FOR FOUNDATION TYPE.
HH	HANDHOLE - ITEM NO 626.112 PRECAST JUNCTION BOX
	REMOVE AND DISPOSE OF EXISTING LUMINAIRE, LIGHT POLE, CONCRETE FOUNDATION AND CONDUCTORS IN THE CONDUIT THAT FEEDS THE POLE.
HH	REMOVE AND DISPOSE OF EXISTING HANDHOLE

LUMINAIRE INFORMATION BOX



STATE OF MAINE
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WIN 11086.00 EXIT 15 HIGHWAY PLANS
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YARMOUTH
I-295 EXIT 15

LIGHTING PLANS

SHEET NUMBER

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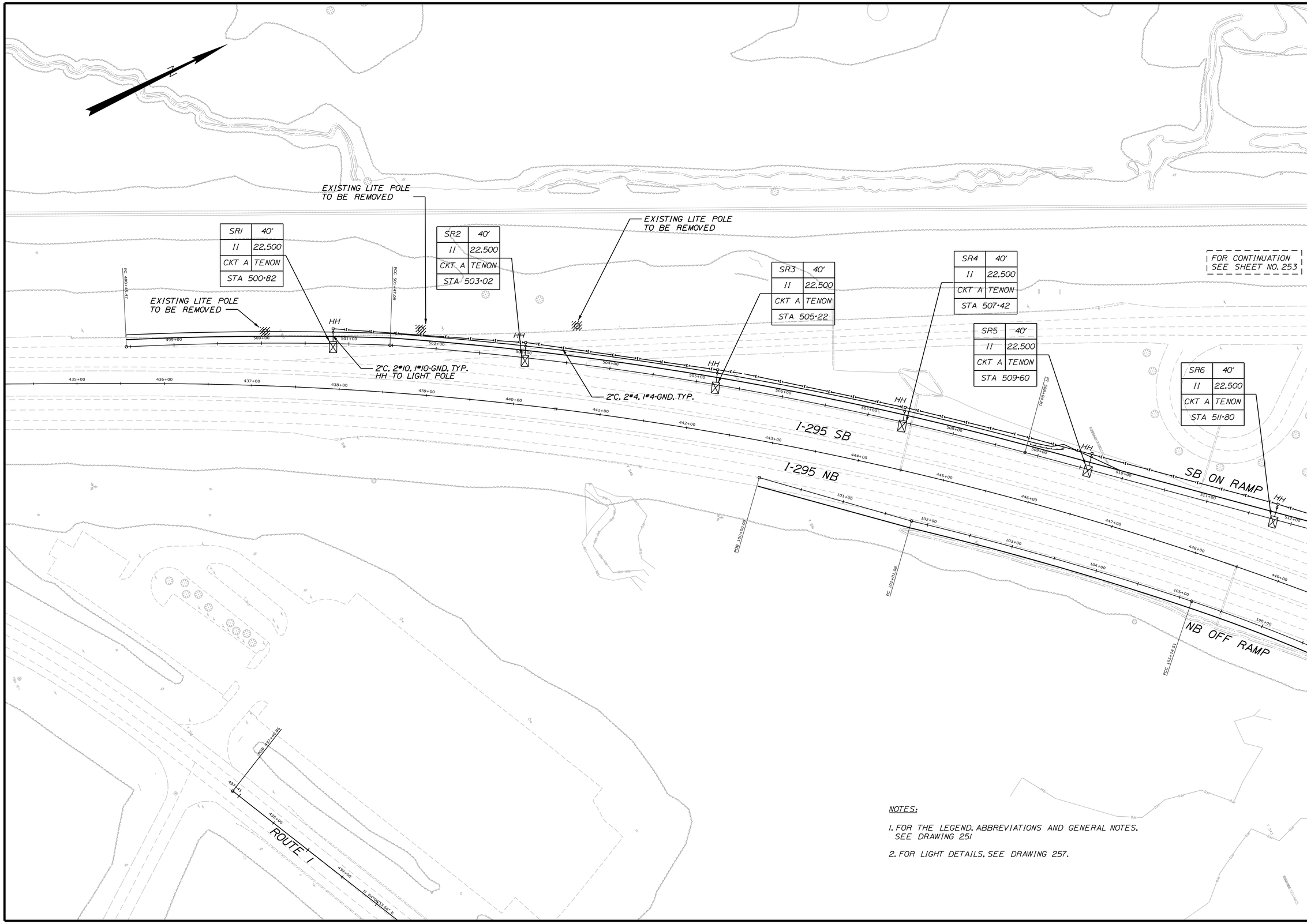
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



NOTES:

1. FOR THE LEGEND, ABBREVIATIONS AND GENERAL NOTES, SEE DRAWING 251
2. FOR LIGHT DETAILS, SEE DRAWING 257.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

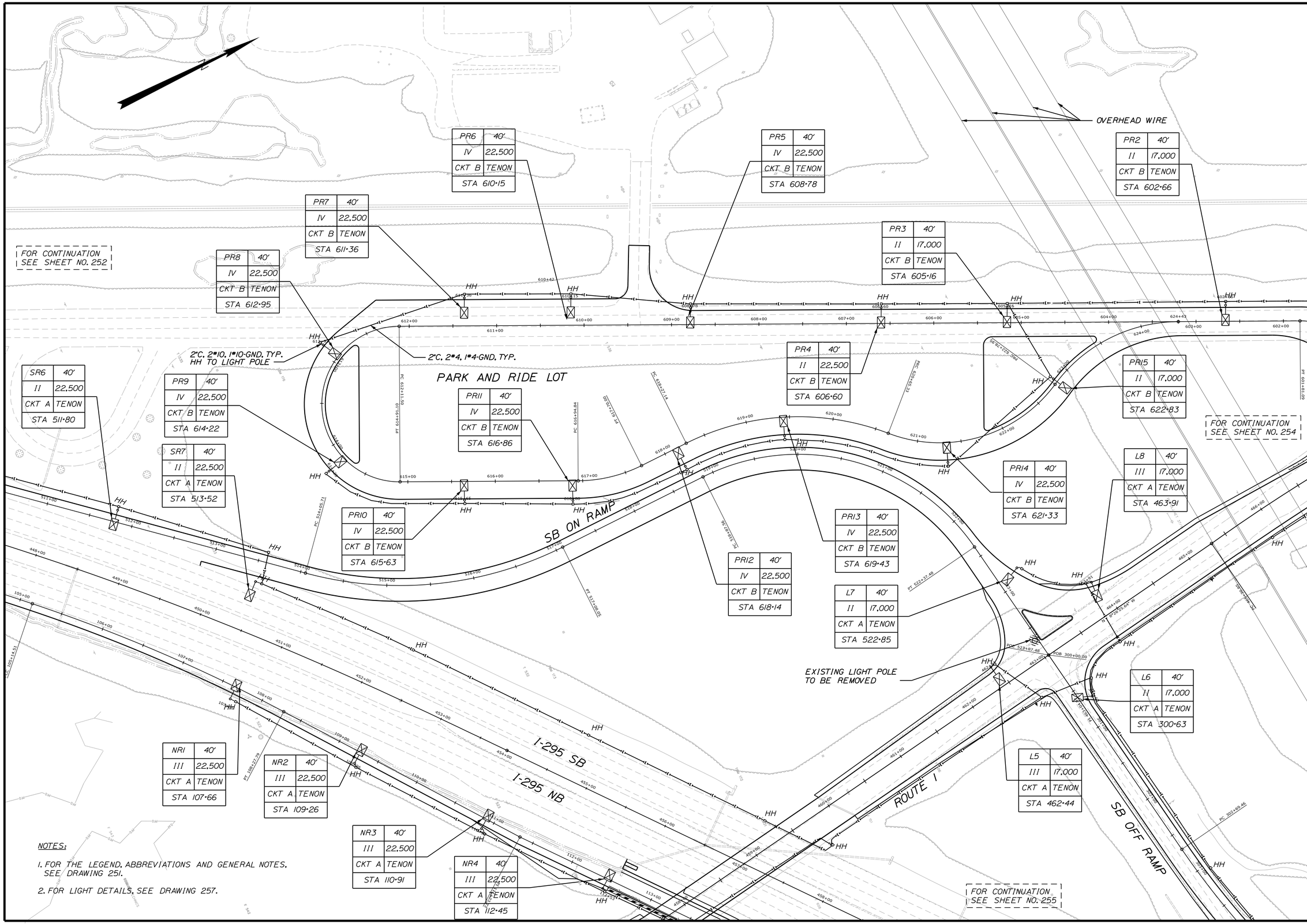
DATE

YARMOUTH
I-295 EXIT 15

LIGHTING PLANS

SHEET NUMBER
252
OF 283

Date:2/21/2011
Username: COMMON
Division: HIGHWAY
Filename:



NOTES:

1. FOR THE LEGEND, ABBREVIATIONS AND GENERAL NOTES, SEE DRAWING 251.
2. FOR LIGHT DETAILS, SEE DRAWING 257.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
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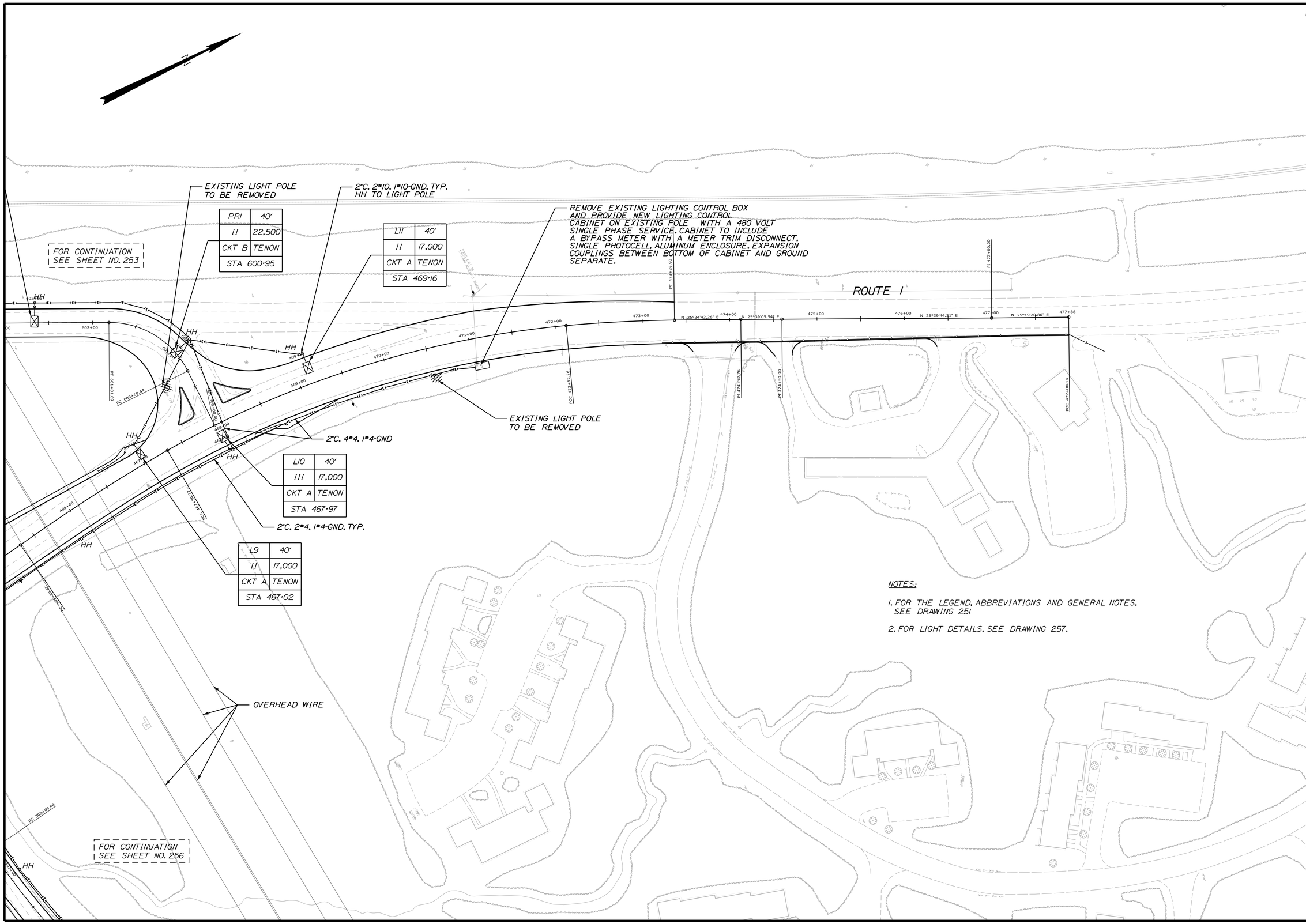
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15
LIGHTING PLANS

SHEET NUMBER
253
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



NOTES:

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
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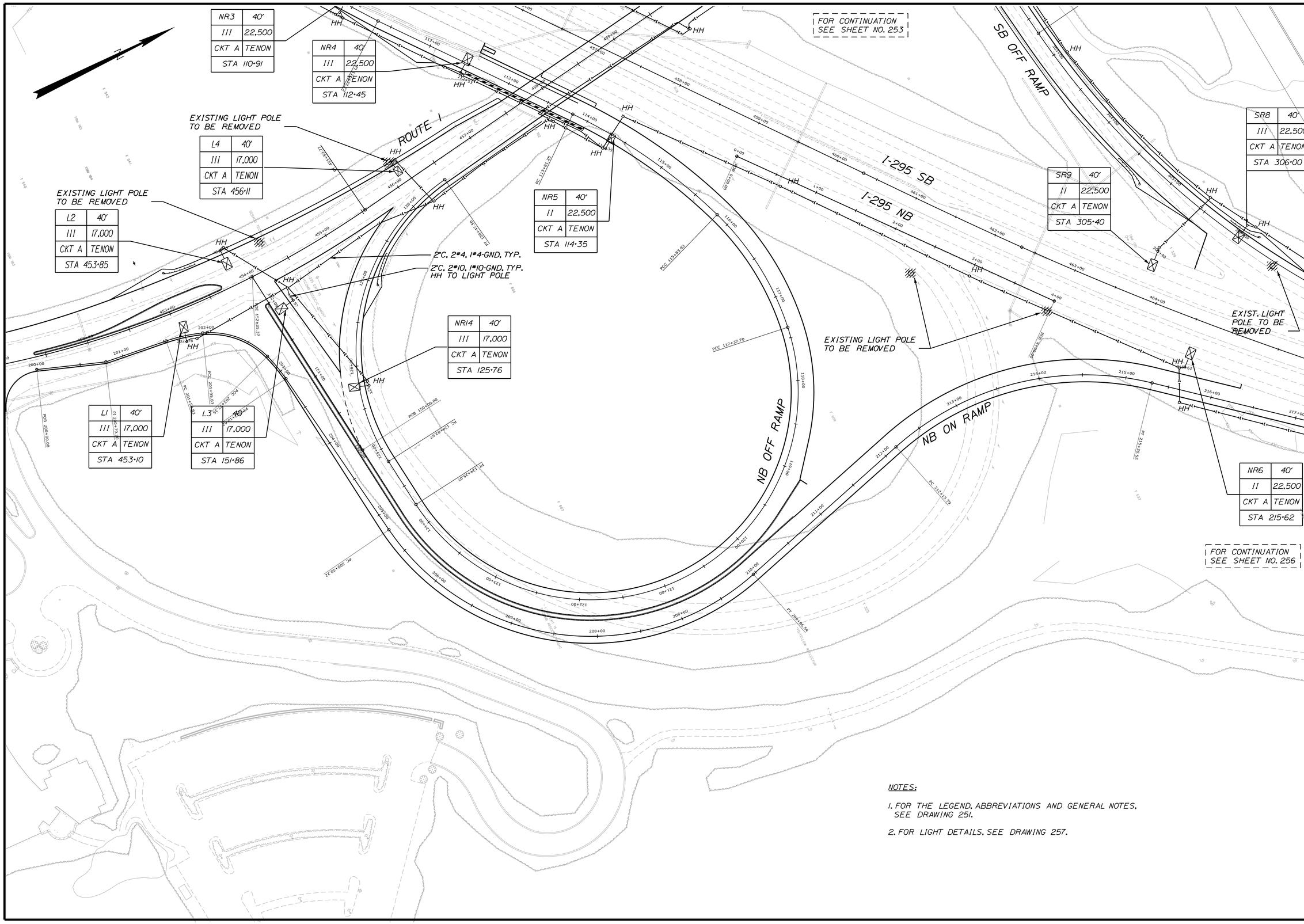
YARMOUTH
I-295 EXIT 15

LIGHTING PLANS

SHEET NUMBER
254
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



NOTES:

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2. FOR LIGHT DETAILS, SEE DRAWING 257.

STATE OF MAINE
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IM-1108(600) EXIT 15
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REVISIONS 4		
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YARMOUTH
I-295 EXIT 15

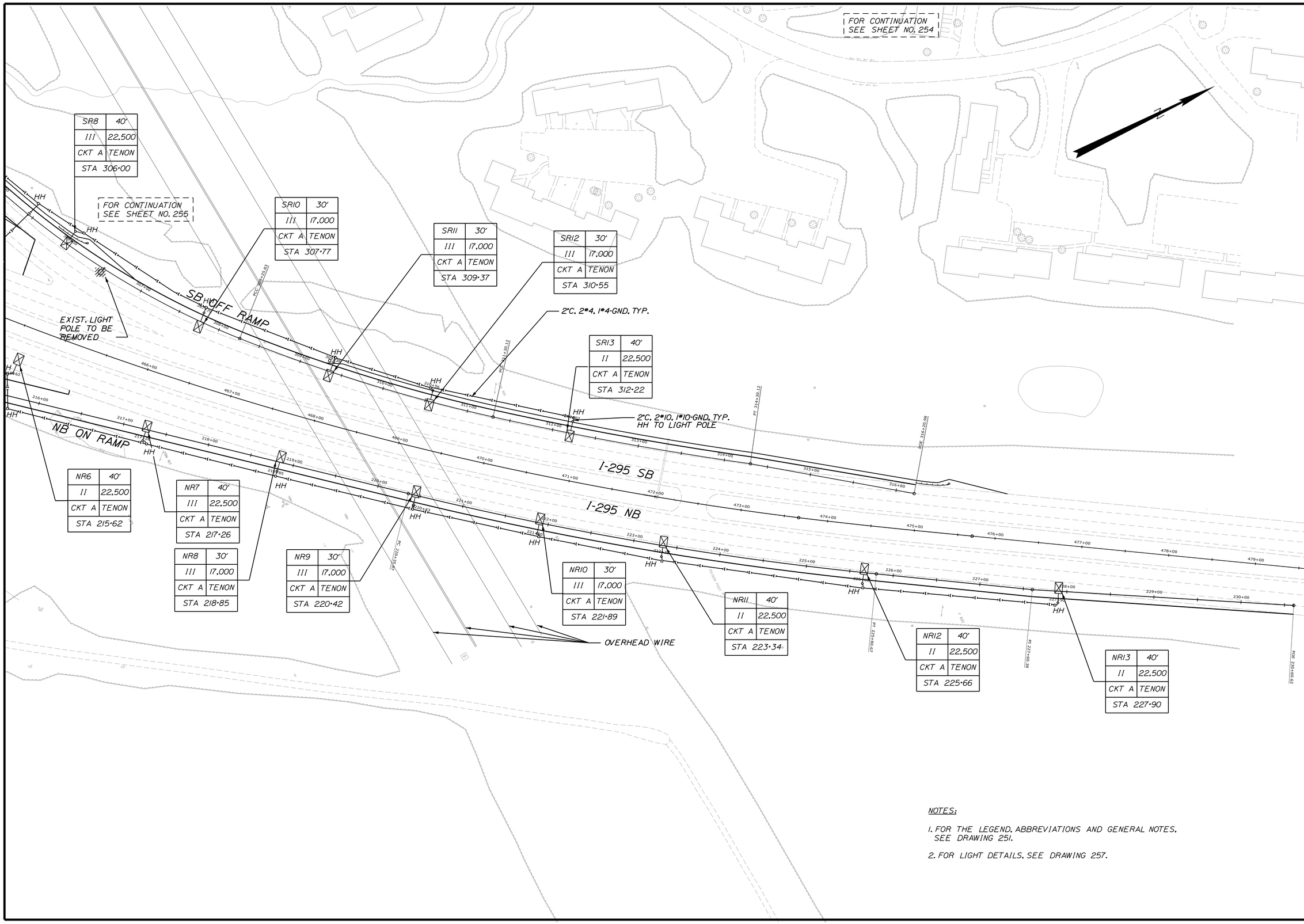
LIGHTING PLANS

SHEET NUMBER

255

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



NOTES:

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
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WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

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YARMOUTH
I-295 EXIT 15

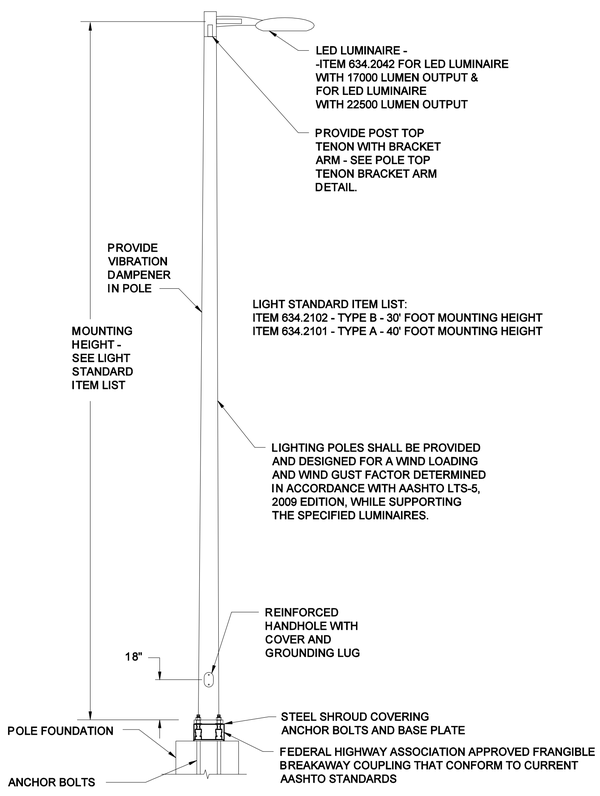
LIGHTING PLANS

SHEET NUMBER

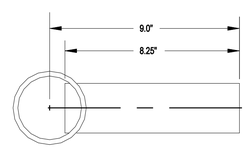
256

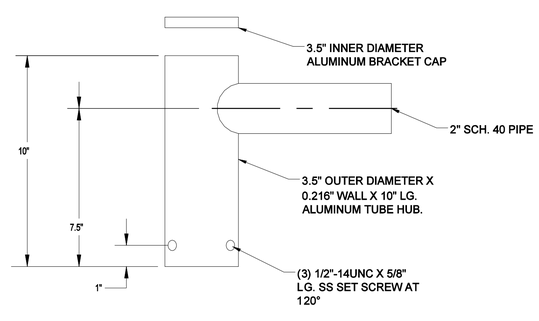
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



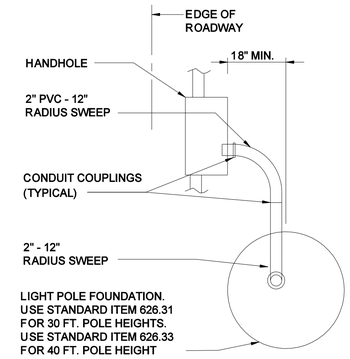
LIGHT POLE DETAIL



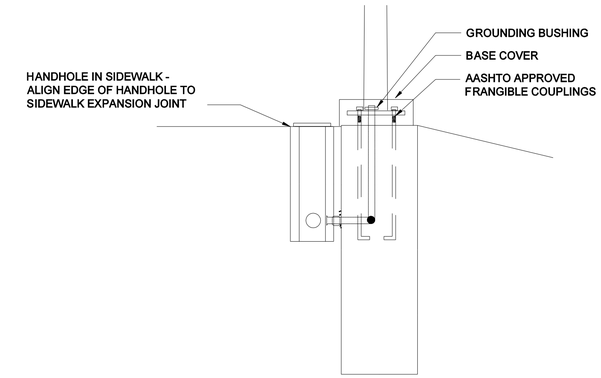


POLE TOP TENON BRACKET ARM DETAIL

LIGHT POLE DETAIL - NEW INSTALLATION
NOT TO SCALE

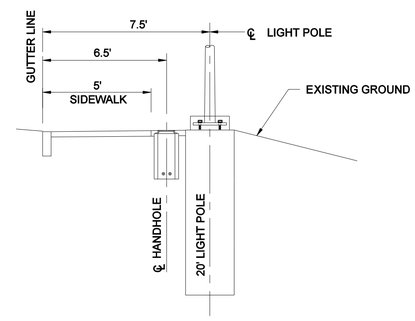


PLAN

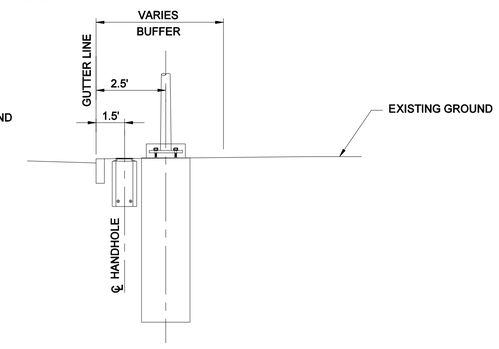


ELEVATION

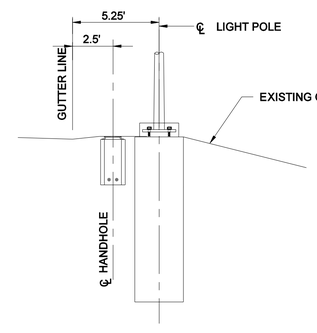
HIGHWAY LIGHTING HANDHOLE AND POLE BASE LAYOUT
NOT TO SCALE



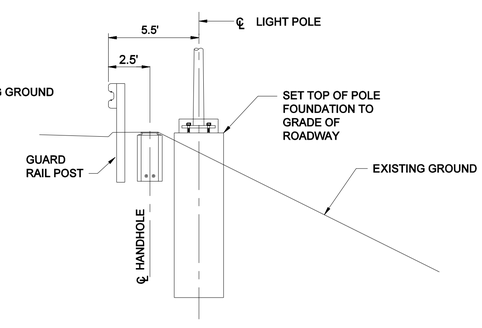
TYPE A
BEHIND SIDEWALK - PARK AND RIDE CONCOURSE



TYPE B
ALONG ROADWAY WITH CURB



TYPE C
RAMP/HIGHWAY-WITHOUT GUARD RAIL



TYPE D
RAMP/HIGHWAY-WITH GUARD RAIL

TYPICAL LIGHT POLE AND HANDHOLE LAYOUT DETAILS AT SIDEWALKS OR RAMPS
NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

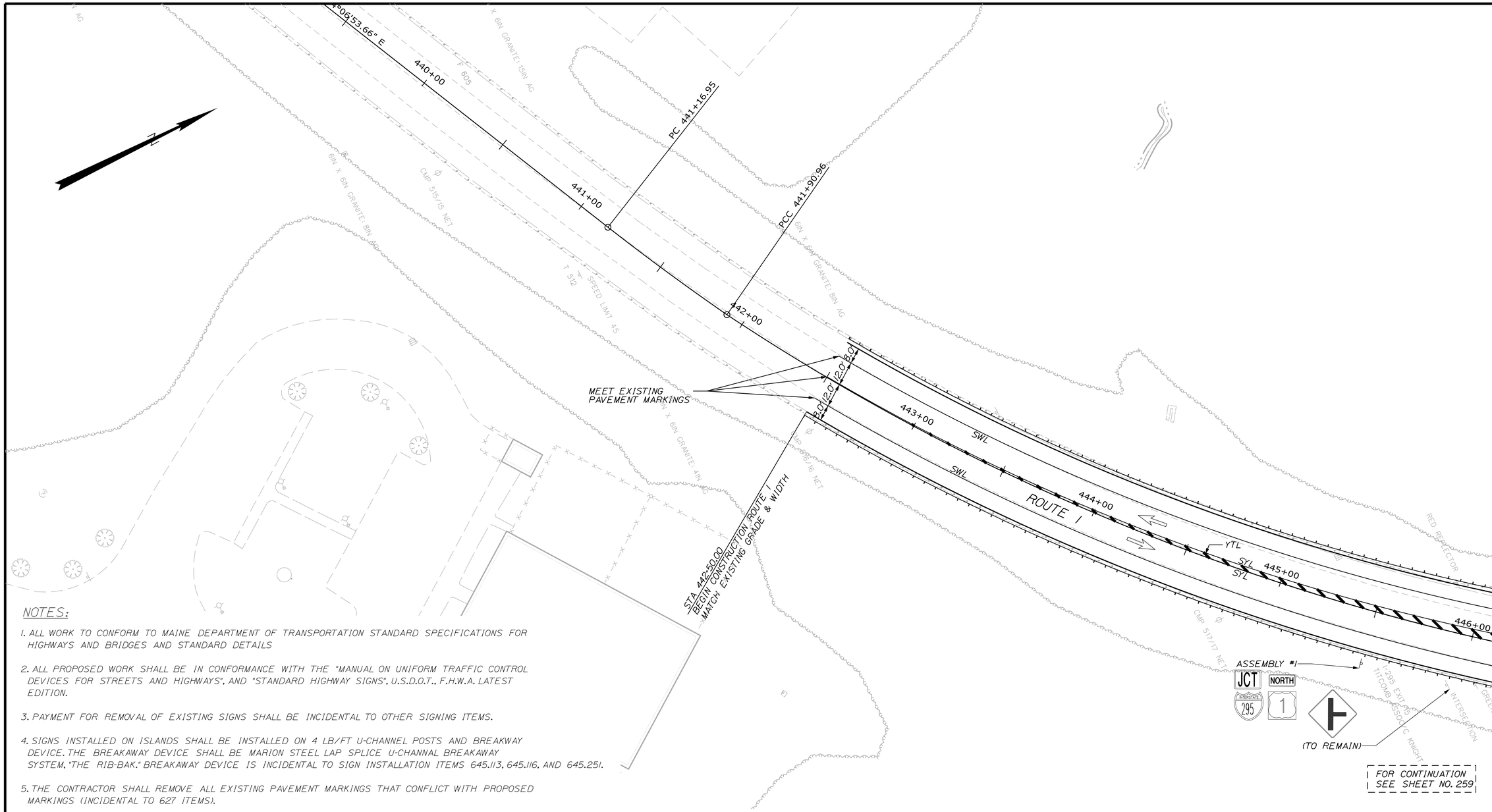
SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

LIGHTING PLANS

SHEET NUMBER
257
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



NOTES:

1. ALL WORK TO CONFORM TO MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES AND STANDARD DETAILS
2. ALL PROPOSED WORK SHALL BE IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS", AND "STANDARD HIGHWAY SIGNS", U.S.D.O.T., F.H.W.A. LATEST EDITION.
3. PAYMENT FOR REMOVAL OF EXISTING SIGNS SHALL BE INCIDENTAL TO OTHER SIGNING ITEMS.
4. SIGNS INSTALLED ON ISLANDS SHALL BE INSTALLED ON 4 LB/FT U-CHANNEL POSTS AND BREAKAWAY DEVICE. THE BREAKAWAY DEVICE SHALL BE MARION STEEL LAP SPLICE U-CHANNAL BREAKAWAY SYSTEM, "THE RIB-BAK." BREAKAWAY DEVICE IS INCIDENTAL TO SIGN INSTALLATION ITEMS 645.113, 645.116, AND 645.251.
5. THE CONTRACTOR SHALL REMOVE ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH PROPOSED MARKINGS (INCIDENTAL TO 627 ITEMS).

LEGEND

SWL	SOLID WHITE LINE (6")
SYL	SOLID YELLOW LINE (6")
DYL	DOUBLE YELLOW LINE (6")
BWL	BROKEN WHITE LINE (6")
DL	6" DOTTED WHITE LINE (2' LINE & 6" GAP)
WGL	WHITE GORE LINES (12" @ 45° TO TRAFFIC)
CWL	CHANNELIZING WHITE LINE
YTL	YELLOW TRANSVERSE LINE (12" LINE @ 45° TO TRAFFIC - 10' O.C.)
SL	STOP LINE (24")
	SINGLE SIGN POST
	DOUBLE SIGN POST

STRAIGHT ARROW PAVEMENT MARKING

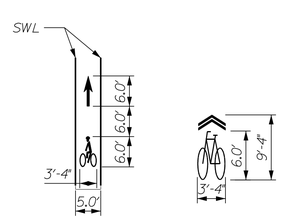
LEFT ARROW PAVEMENT MARKING

RIGHT ARROW PAVEMENT MARKING

"ONLY" PAVEMENT MARKING

HANDICAP PAVEMENT MARKING

DIRECTIONAL FLOW ARROW



BIKE LANE MARKINGS
NOT TO SCALE

SHARED LANE MARKING
NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

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DESIGN-DETAILED		
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REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

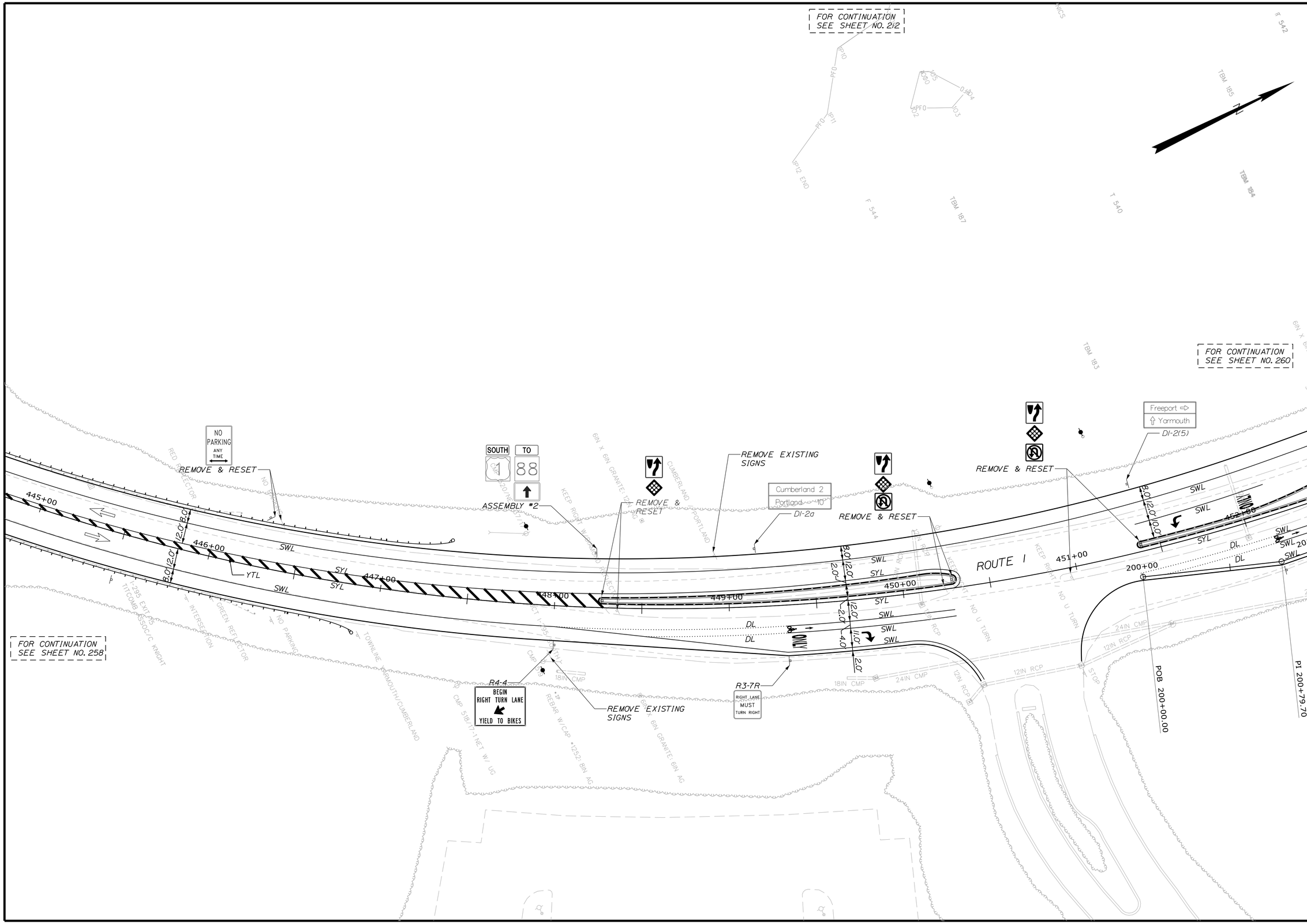
SIGNS & PVMT. MARKINGS

SHEET NUMBER

258

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

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YARMOUTH
I-295 EXIT 15

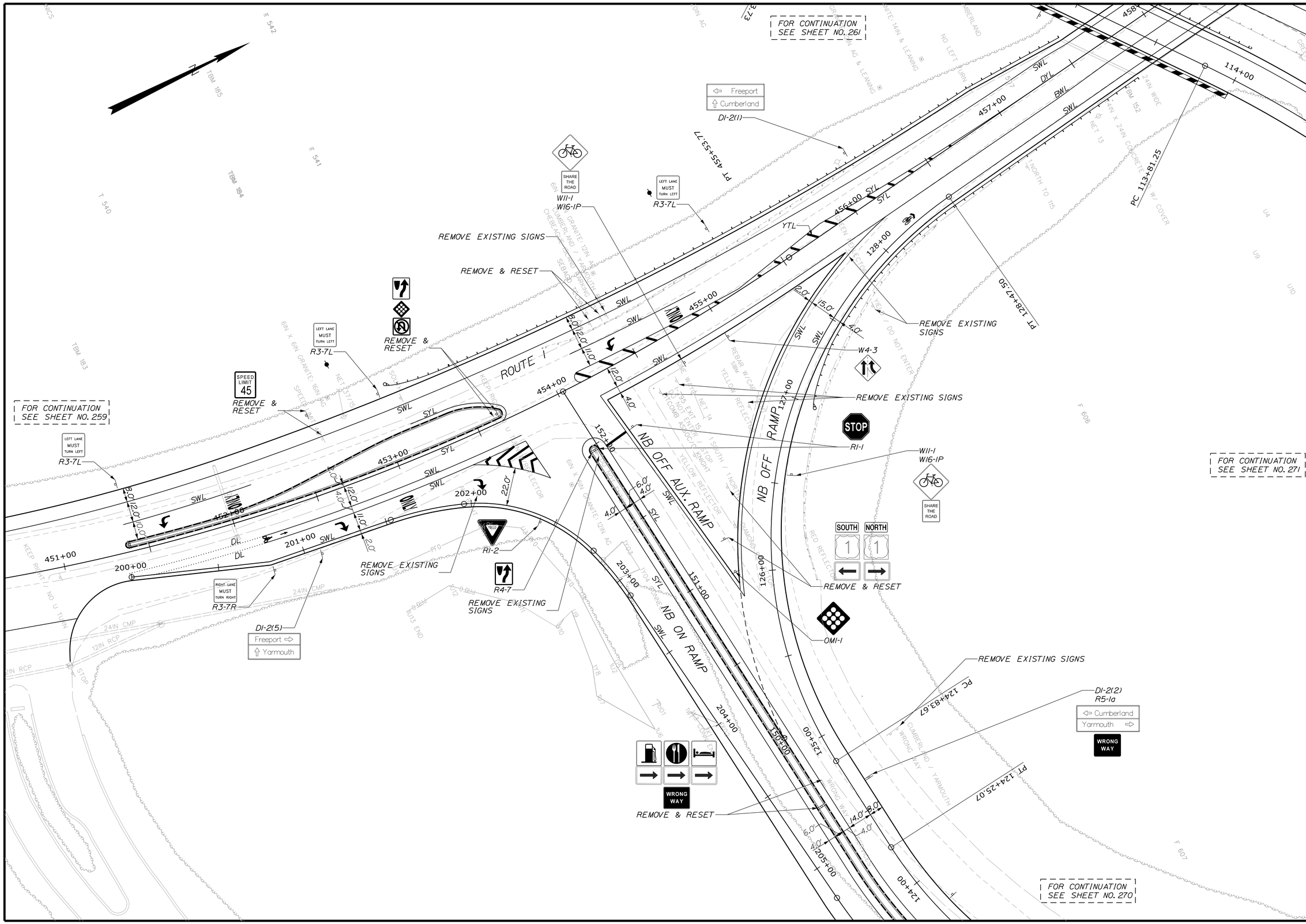
SIGNS & PVMT. MARKINGS

SHEET NUMBER

259

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
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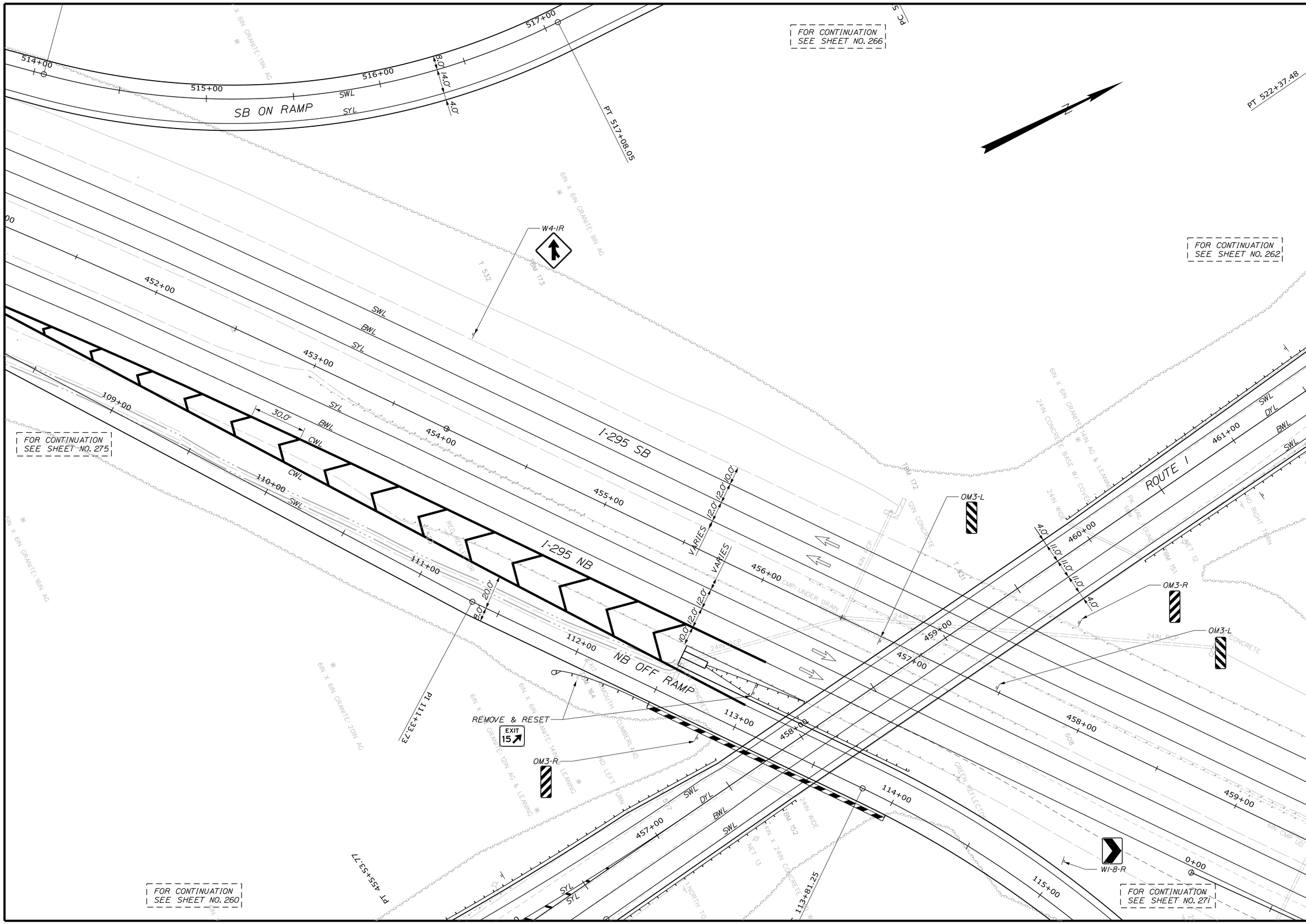
YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
260
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



Date:2/21/2011

Username: COMMON

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STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
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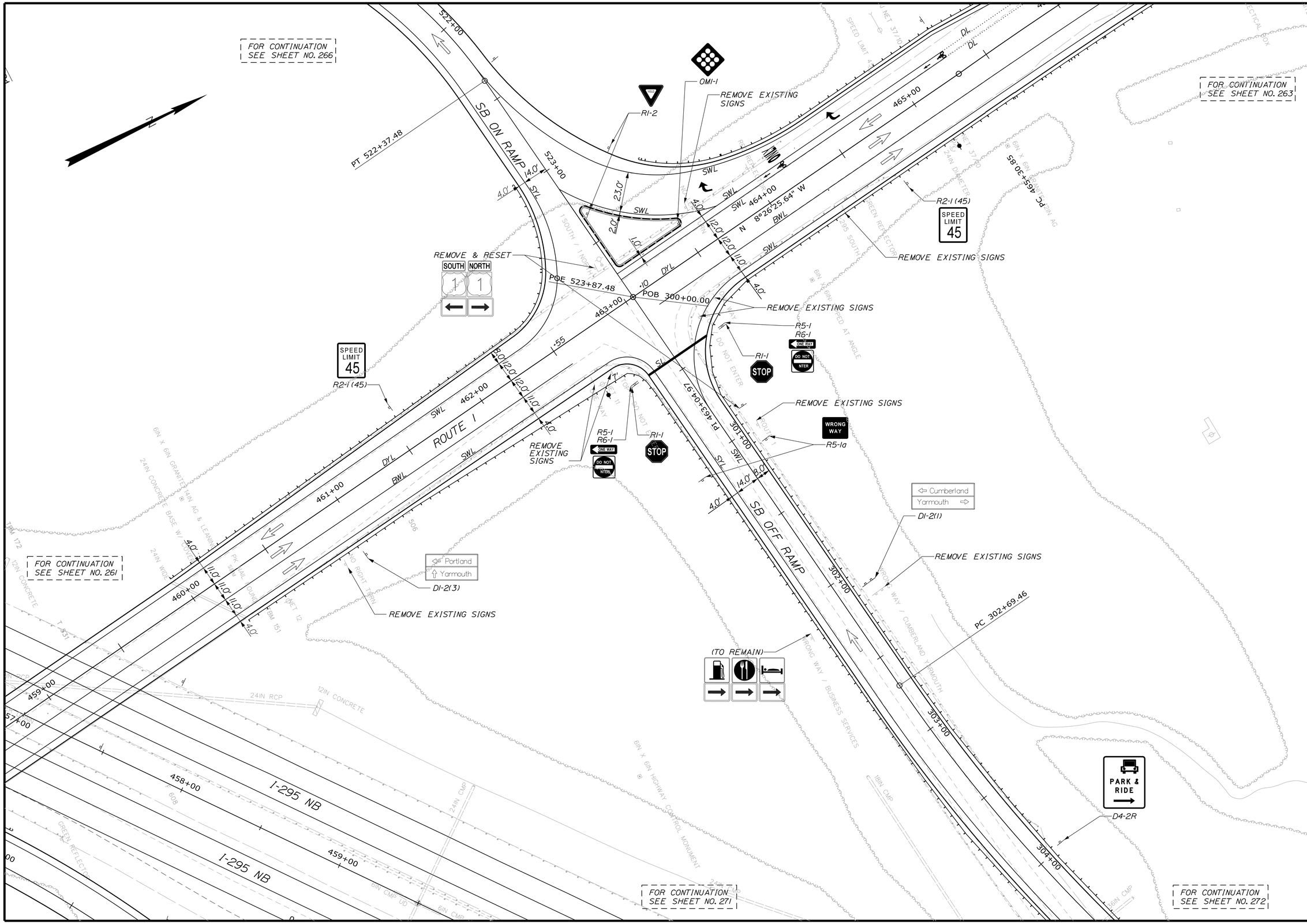
YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER

261

OF 283



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YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

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262
OF 283

Filename:
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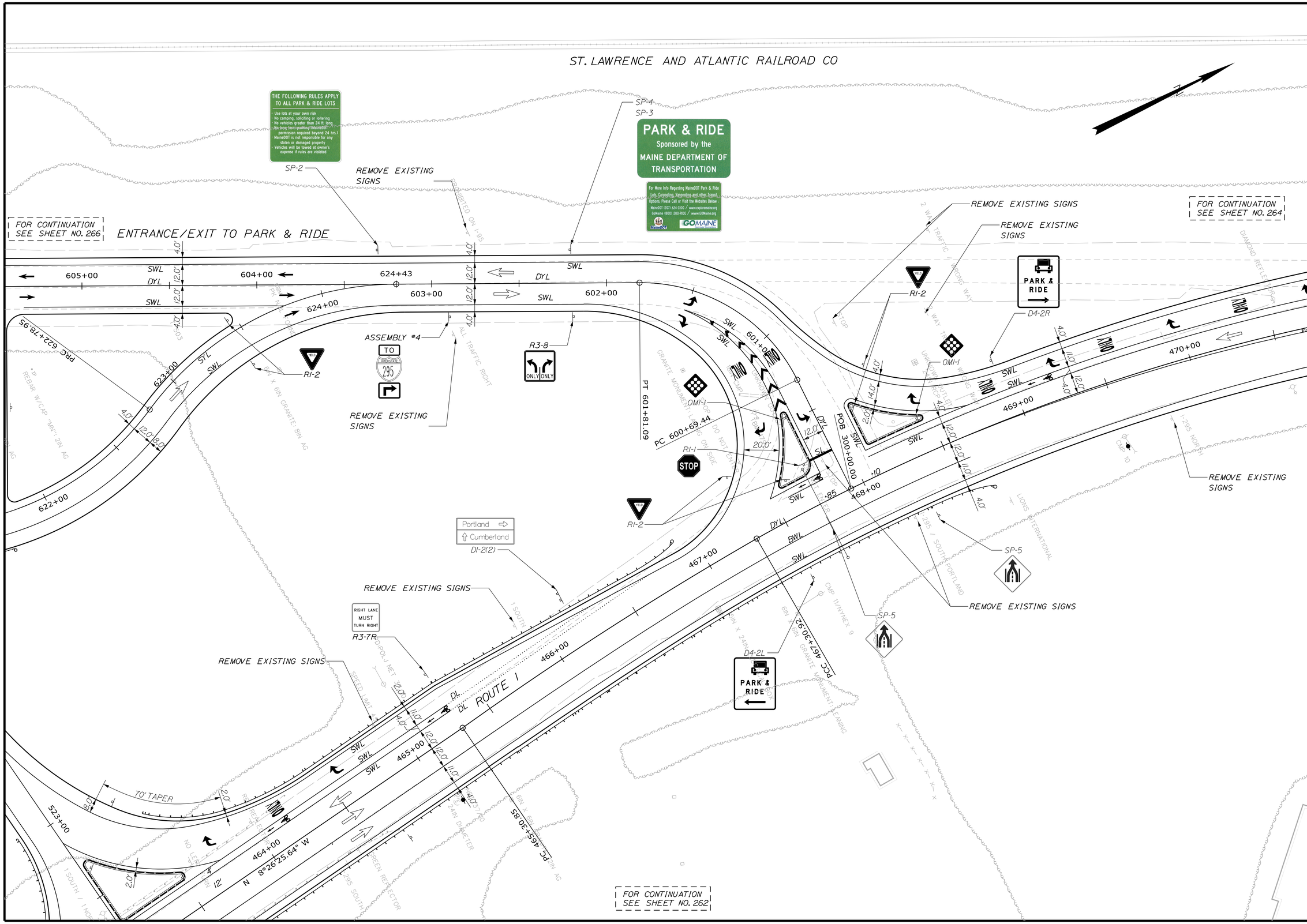

STATE OF MAINE
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IM-1108(600) EXIT 15
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YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
263
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

ST. LAWRENCE AND ATLANTIC RAILROAD CO

SPEED LIMIT 45

REMOVE & RESET

JCT INTERSTATE 295 SOUTH 1

ASSEMBLY #5

REMOVE EXISTING SIGNS

BEGIN RIGHT TURN LANE YIELD TO BIKES

R4-4

RIGHT LANE MUST TURN RIGHT

R3-7R

PT 473+36.90

END CONST ROUTE 1 SB MATCH EXISTING GRADE AND WIDTH

REMOVE EXISTING SIGNS

REMOVE EXISTING SIGNS

FOR CONTINUATION SEE SHEET NO. 265

ROUTE 1

DL

SWL

SYL

470+00

471+00

472+00

473+00

474+00

475+00

476+00

N 25°24'42.26" E

N 25°39'05.54" E

N 25°39'44.21" E

12.0'

8.0'

6.0'

4.0'

VARIES

(TO REMAIN)

NORTH 1

SPEED LIMIT 40

ASSEMBLY #6

TO 115

STAMPED PAVEMENT ISLAND

PCC 472+12.76

PI 474+12.76

PI 474+59.90

FOR CONTINUATION SEE SHEET NO. 263

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
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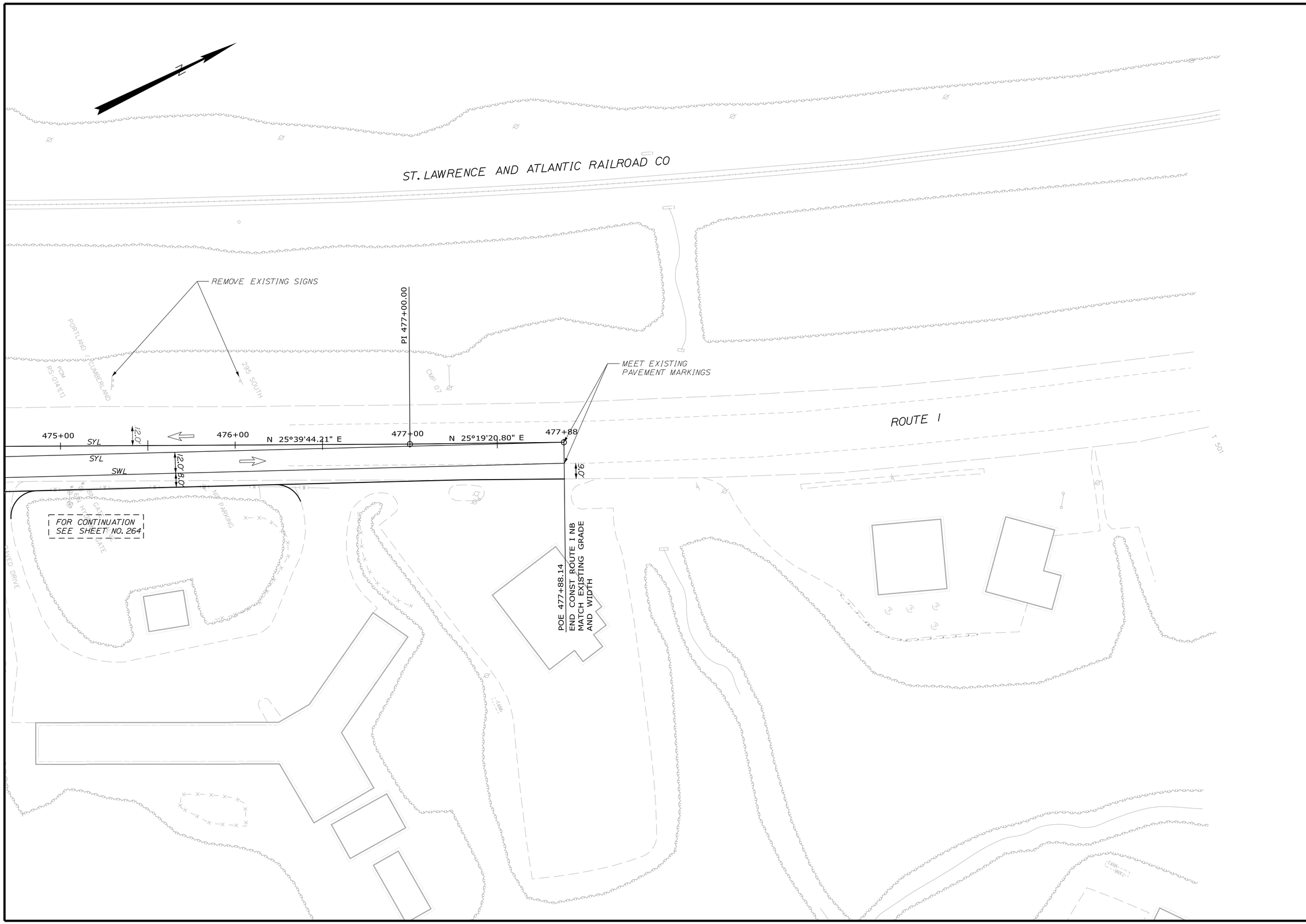

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SIGNS & PVMT. MARKINGS

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265

OF 283

Filename:
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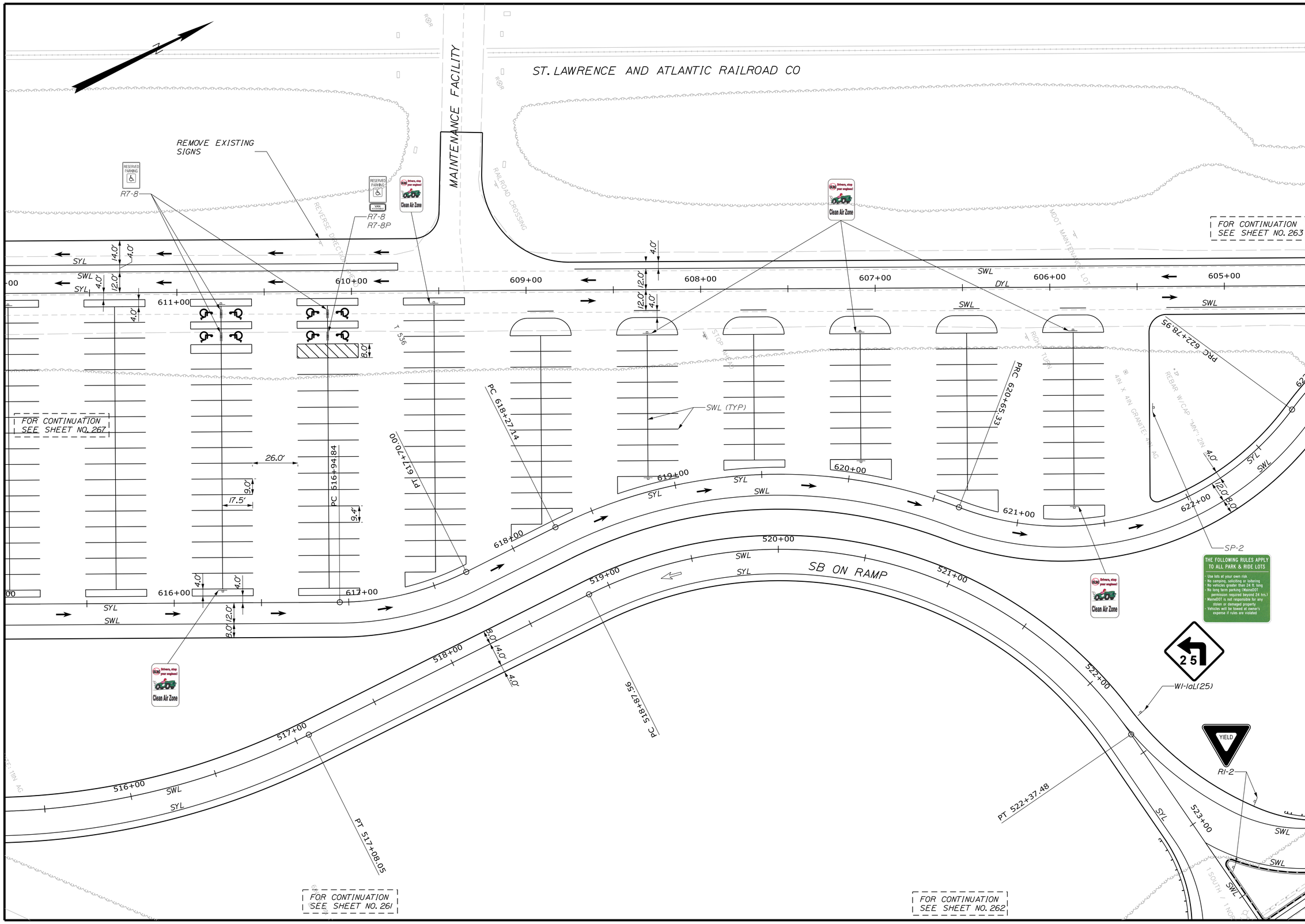

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

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YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
266
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

ST. LAWRENCE AND ATLANTIC RAILROAD CO

N

REMOVE EXISTING SIGNS

REVERSE DIRECTION

RED REFLECTOR

I-295 SOUTH

YELLOW REFLECTOR

YELLOW REFLECTOR

T 535

STOP

REMOVE EXISTING SIGNS

FOR CONTINUATION SEE SHEET NO. 268

PT 508+84.81

509+00

510+00

511+00

512+00

513+00

514+00

515+00

516+00

446+00

447+00

448+00

449+00

450+00

103+00

104+00

105+00

106+00

24IN CMP

APPROXIMATE OUTLET: END BURIED

TOWN LINE
ENTERING
CUMBERLAND

REMOVE & RESET

TOWN LINE CUMBERLAND

MONUMENT: 7IN X 6IN X 24IN

YIELD

R1-2

ONE WAY

NO TURNS

R3-3
R6-1

VARIES

14.0'

12.0'

4.0'

24.0'

8.0'

10.0'

SWL

BWL

SYL

CWL

I-295 SB

I-295 NB

SB ON RAMP

NB OFF RAMP

6IN CMP UD

18IN RCP

POI TWIN OAK

FOR CONTINUATION SEE SHEET NO. 275

SP-2

THE FOLLOWING RULES APPLY TO ALL PARK & RIDE LOTS

- Use lots at your own risk
- No camping, soliciting or loitering
- No vehicles greater than 24 ft. long
- No long term parking (MaineDOT permission required beyond 24 hrs.)
- MaineDOT is not responsible for any stolen or damaged property
- Vehicles will be towed at owner's expense if rules are violated

Clean Air Zone

Drivers, stop your engines!

612+00

613+00

614+00

615+00

PC 612+11.50

PT 614+91.10

26.0'

9.0'

17.5'

SWL (TYP)

PC 514+05.71

FOR CONTINUATION SEE SHEET NO. 266

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

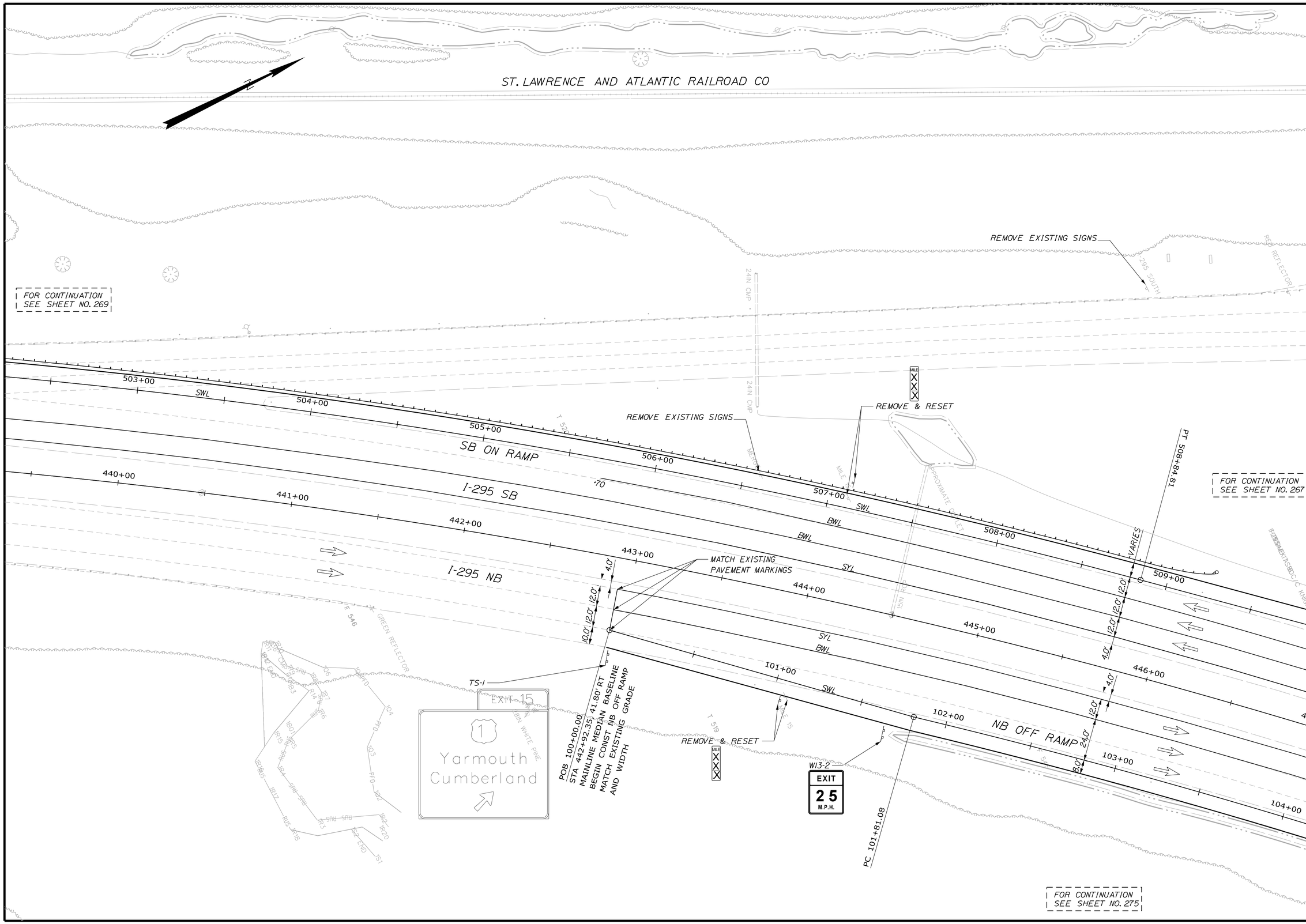
DATE

YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
267
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS: 1		
REVISIONS: 2		
REVISIONS: 3		
REVISIONS: 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

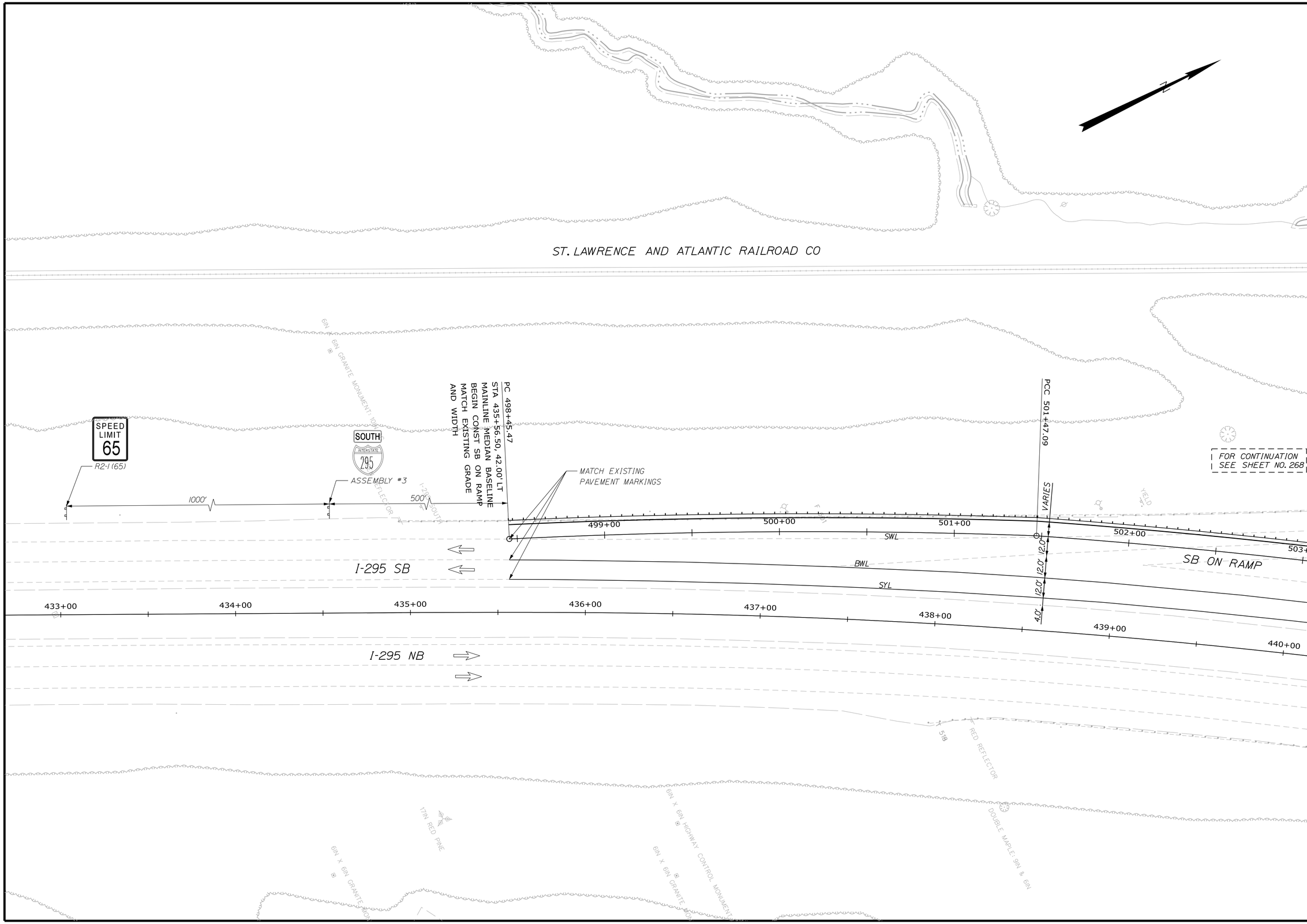
SIGNS & PVMT. MARKINGS

SHEET NUMBER

268

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

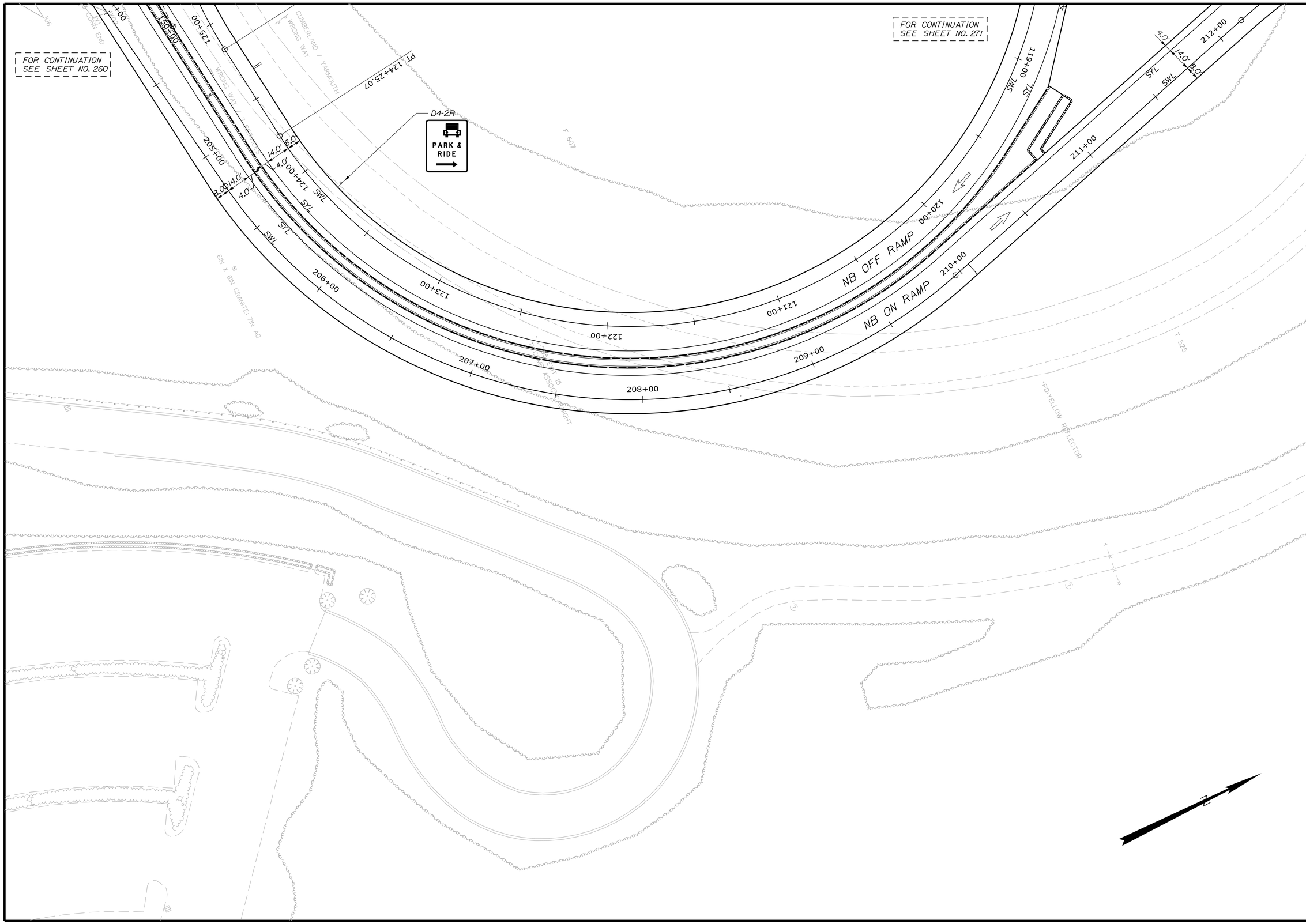
YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
269
OF 283

Username: COMMON Date:2/21/2011
Division: HIGHWAY
Filename:

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
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FIELD CHANGES		

SIGNATURE

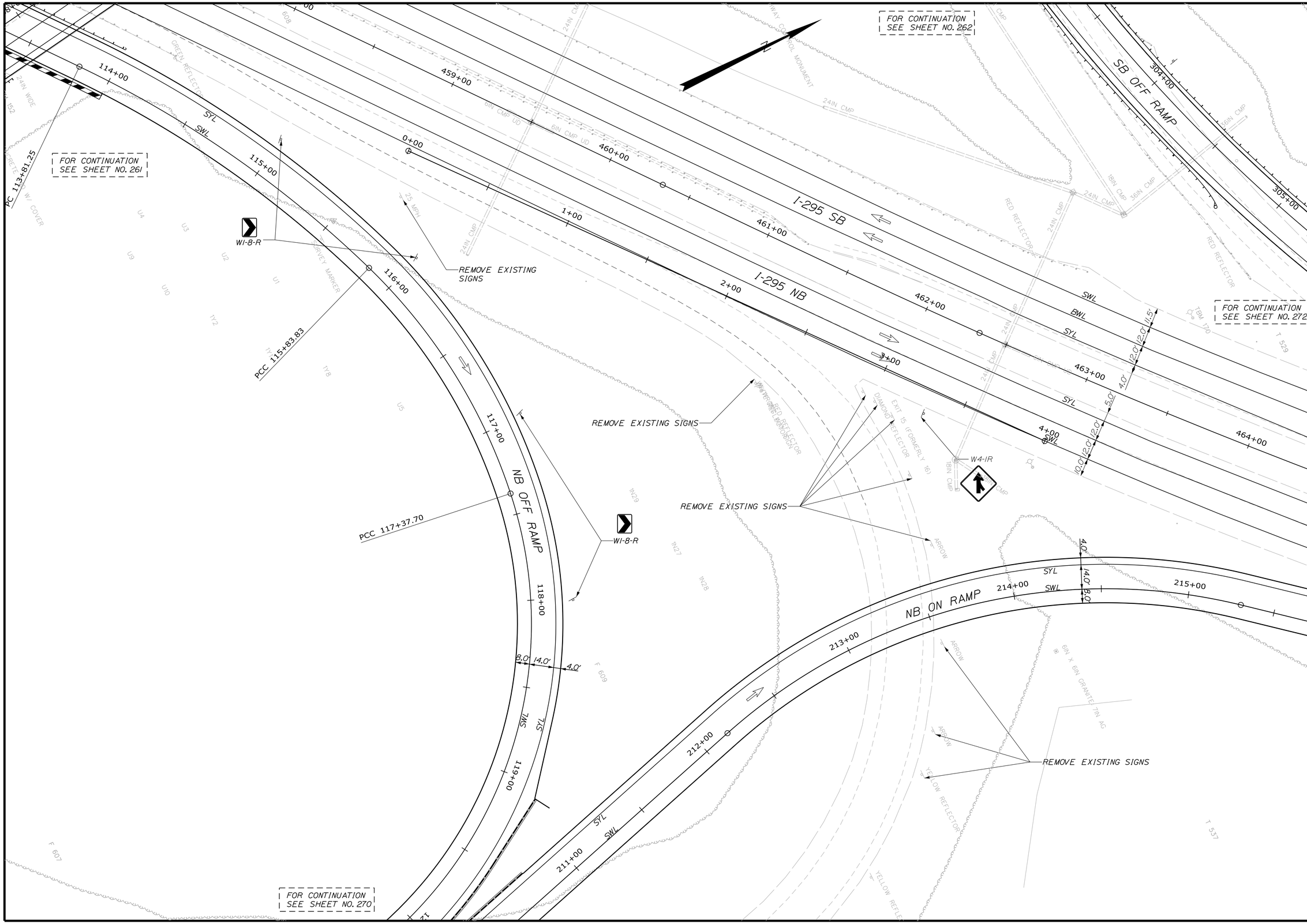
P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
270
OF 283



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

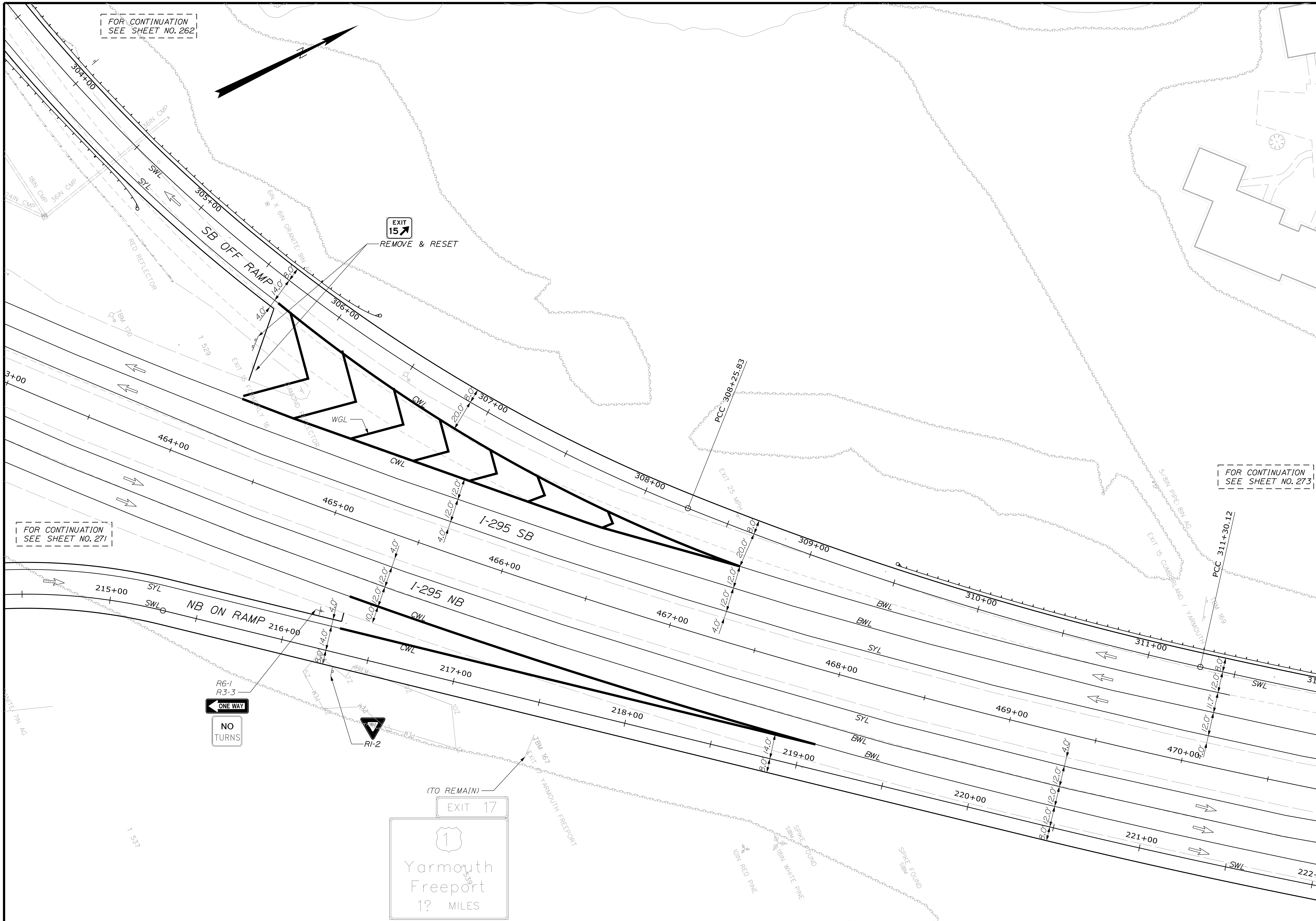
YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
271
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

Date:2/21/2011 Username: COMMON Division: HIGHWAY Filename:



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
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REVISIONS 1		
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FIELD CHANGES		

SIGNATURE

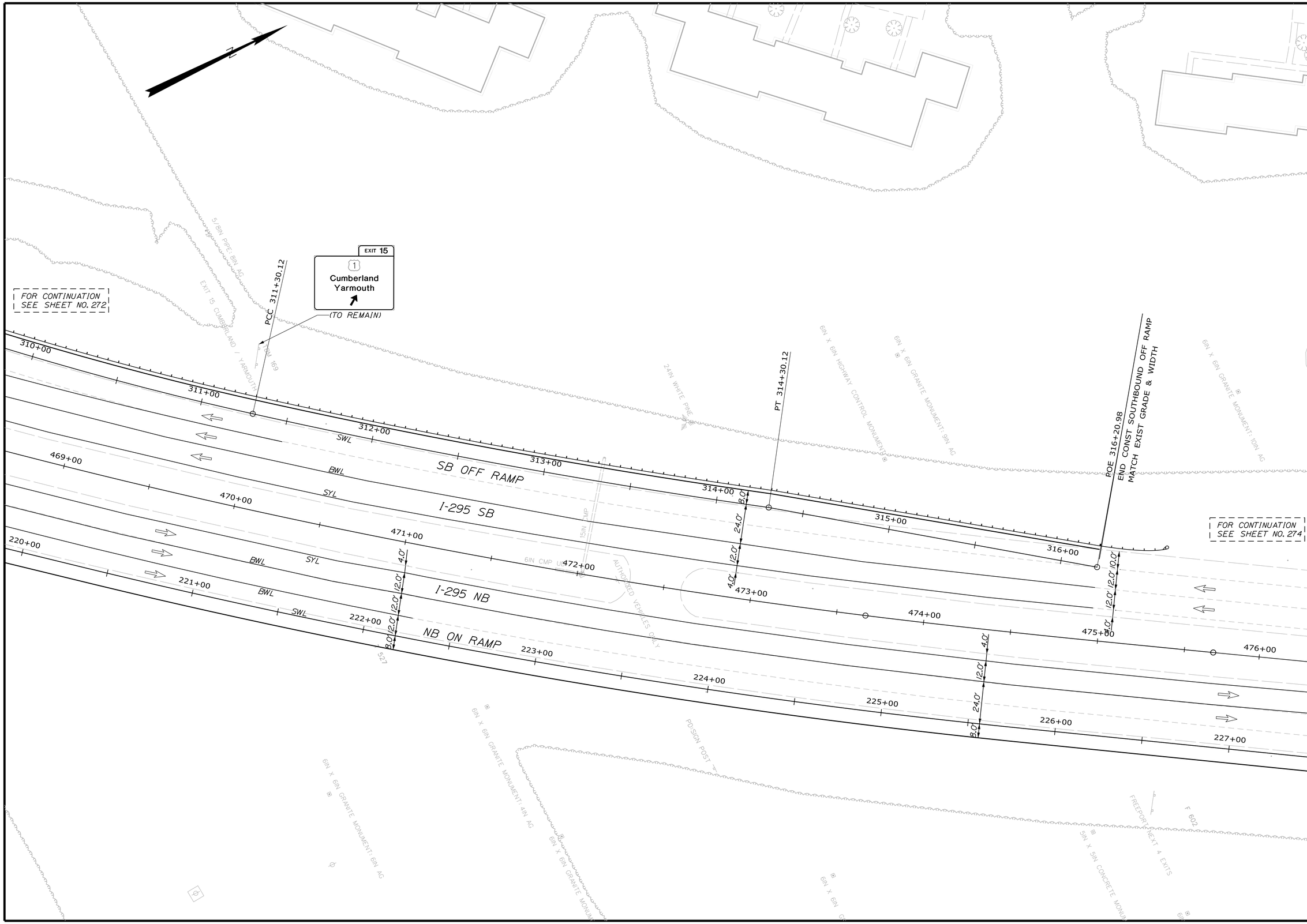
P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
272
OF 283



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

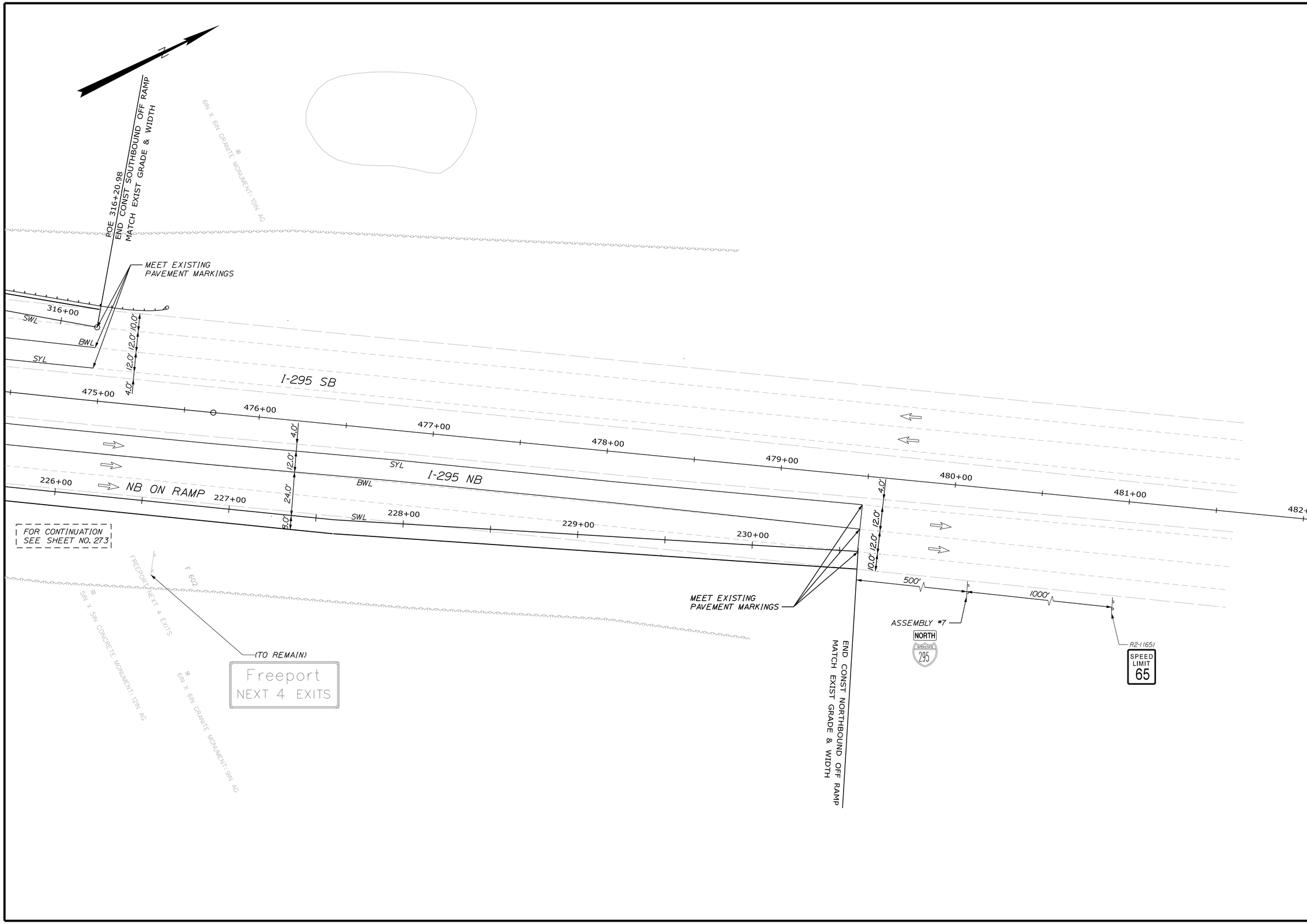
DATE

YARMOUTH
I-295 EXIT 15

SIGNS & PVMT. MARKINGS

SHEET NUMBER
273
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
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CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

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YARMOUTH
I-295 EXIT 15

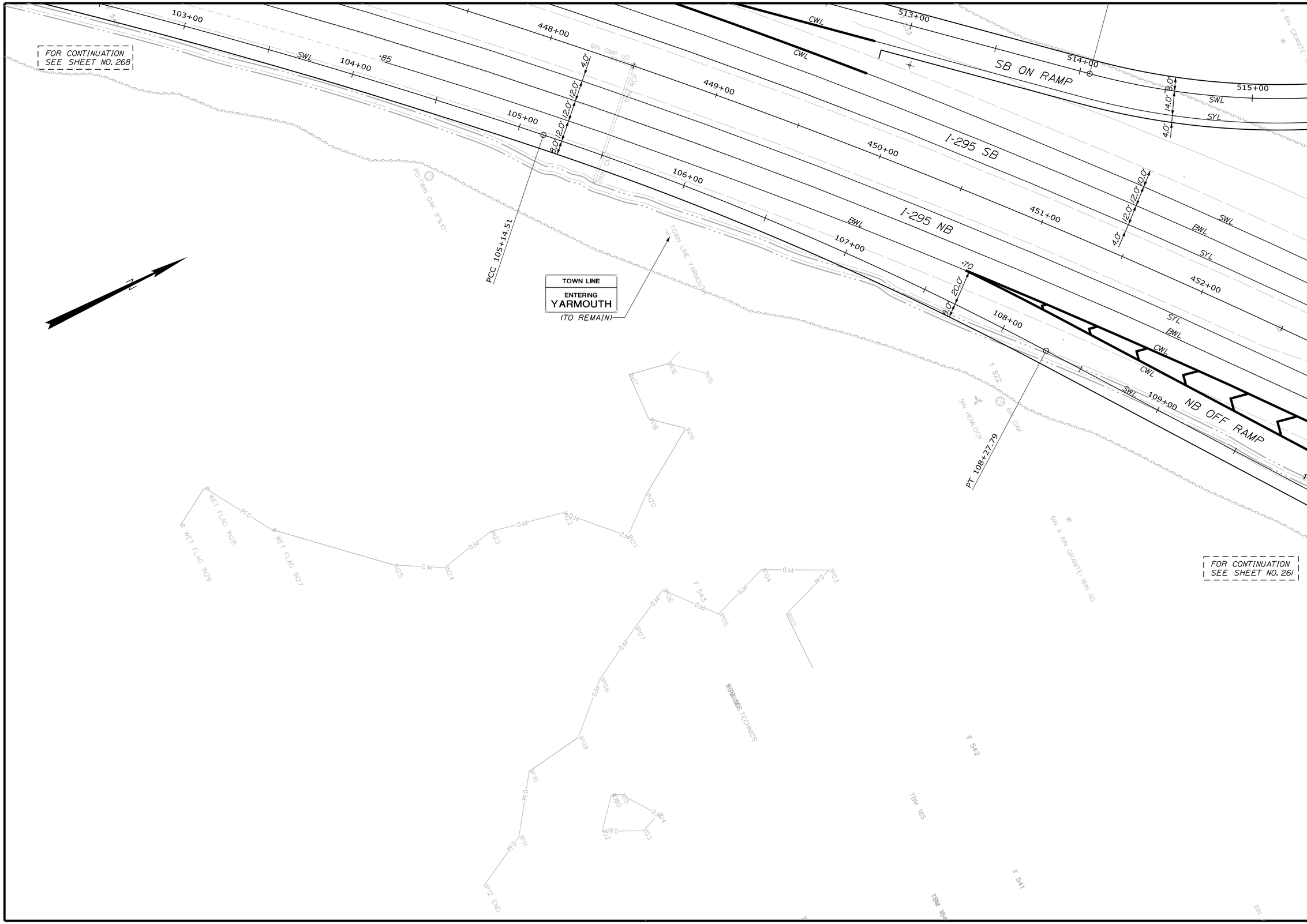
SIGNS & PVMT. MARKINGS

SHEET NUMBER

274

OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

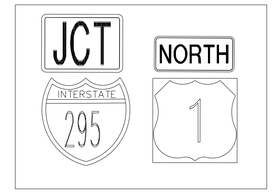
SIGNS & PVMT. MARKINGS

SHEET NUMBER
275
OF 283

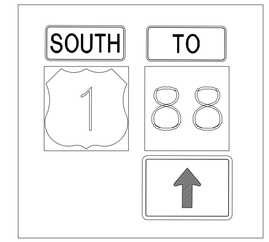
Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

PROPOSED SIGN SUMMARY

ITEM NUMBER	IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	SIGN AREA (SQ. FT.)		REMARKS
		WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	SHIELD/ ARROW		NOM. AREA	TOTAL AREA	
645.292	OMI-I	24'	24"					2	4.00	8.00	
645.292	OM3-L	12"	36"					2	3.00	6.00	
645.292	OM3-L	12"	36"					2	3.00	6.00	
645.292	D4-2L	36"	48'	PARK & RIDE ←				1	12.00	6.00	
645.292	D4-2R	36"	48'	PARK & RIDE →				2	12.00	24.00	
645.292	SP-1	12"	18"	Clean Air Zone				11	1.50	16.5	
645.292	SP-2	48"	48"	THE FOLLOWING RULES APPLY TO ALL PARK & RIDE LOTS • Use lots at your own risk • No camping, soliciting or loitering • No vehicles greater than 24 ft. long • No long term parking (MaineDOT permission required beyond 24 hrs.) • MaineDOT is not responsible for any stolen or damaged property • Vehicles will be towed at owner's expense if rules are violated	2.75 CAPS 2" UPPER			3	16.00	48.00	
645.292	SP-3	24"	36"	For More Info Regarding MaineDOT Park & Ride Lots, Carpooling, Vanpooling and other Transit Options, Please Call or Visit the Websites Below: MaineDOT (207) 624-3000 / www.expressmaine.org GoMaine (800) 280-8116 / www.GOMaine.org GOMAINE	1.75 UPPER			1	6.00	6.00	
645.292	SP-4	30"	48"	PARK & RIDE Sponsored by the MAINE DEPARTMENT OF TRANSPORTATION	5" CAPS 3" UPPER 3" CAPS			1	10.00	10.00	
645.292	SP-5	36"	36"					2	9.00	18.00	
645.251	DI-2(1)	72"	30"	⇦ Cumberland Yarmouth ⇨	6"D 6"D	4.75" 3.875" 3.875" 4.75"	6" ARROW 0.75" HOR. LINE 6" ARROW	2	15	30	
645.251	DI-2(2)	66"	30"	Portland ⇨ ⇧ Cumberland	6"D 6"D	4.75" 3.875" 3.875" 4.75"	6" ARROW 0.75" HOR. LINE 6" ARROW	1	13.75	13.75	
645.251	DI-2(3)	60"	30"	⇦ Portland ⇧ Yarmouth	6"D 6"D	4.75" 3.875" 3.875" 4.75"	6" ARROW 0.75" HOR. LINE 6" ARROW	1	12.50	12.50	
645.251	DI-2(4)	66"	30"	⇦ Freeport ⇧ Cumberland	6"D 6"D	4.75" 3.875" 3.875" 4.75"	6" ARROW 0.75" HOR. LINE 6" ARROW	1	13.75	13.75	
645.251	DI-2(5)	60"	30"	Freeport ⇨ ⇧ Yarmouth	6"D 6"D	4.75" 3.875" 3.875" 4.75"	6" ARROW 0.75" HOR. LINE 6" ARROW	1	12.50	12.50	
645.251	DI-2a	72"	30"	Cumberland 2 Portland 10	6"D 6"D	4.75" 3.875" 3.875" 4.75"	0.75" HOR. LINE	1	15	15	

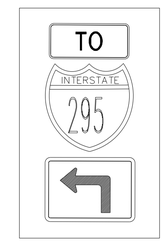


ASSEMBLY #1

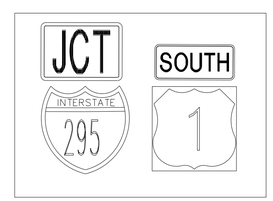


ASSEMBLY #2

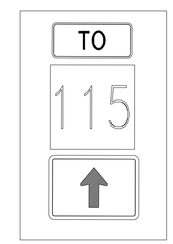
ASSEMBLY #3



ASSEMBLY #4



ASSEMBLY #5



ASSEMBLY #6

ASSEMBLY #7

SIGN SUMMARY NOTES:

1. REFER TO STANDARD SPECIFICATIONS SECTION TO DETERMINE SIZE OF POSTS.
2. SIGN TEXT SHALL CONFORM TO MUTCD.
3. SIGN TYPE AND LOCATIONS SHALL BE IN ACCORDANCE WITH MUTCD.
4. SIGN LOCATIONS ARE APPROXIMATE AND TO BE VERIFIED IN THE FIELD.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

YARMOUTH
I-295 EXIT 15

SIGN SUMMARY

SHEET NUMBER
276
OF 283

Filename:
Division: HIGHWAY
Username: COMMON
Date:2/21/2011

PROPOSED SIGN SUMMARY

ITEM NUMBER	IDENTIFI-CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	SIGN AREA (SQ. FT.)		REMARKS
		WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	SHIELD/ ARROW		NOM. AREA	TOTAL AREA	
645.292	MI-1	45"	36"	INTERSTATE 295	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			2	11.25	22.5	
645.292	MI-1	30"	24"	INTERSTATE 295				3	5.00	15.00	
645.292	MI-4	24"	24"	1				3	4.00	12.00	
645.292	MI-5	24"	24"	88				1	4.00	4.00	
645.292	MI-5	24"	24"	115				1	4.00	4.00	
645.292	M2-1	21"	15"	JCT				2	2.19	4.38	
645.292	M3-1	36"	18"	NORTH				1	4.5	4.5	
645.292	M3-1	24"	12"	NORTH				1	2.00	2.00	
645.292	M3-3	36"	18"	SOUTH				1	4.5	4.5	
645.292	M3-3	24"	12"	SOUTH				2	2.00	4.00	
645.292	M4-5	24"	12"	TO				3	2.00	6.00	
645.292	M5-1R	21"	15"					1	2.19	2.19	
645.292	M6-3	21"	15"					1	2.19	4.38	
645.292	R1-1	30"	30"	STOP				5	6.25	31.25	
645.292	R1-2	60" X 60" X 60"		YIELD				2	10.83	21.65	
645.292	R1-2	36" X 36" X 36"		YIELD				9	3.90	35.1	
645.292	R2-1	48"	60"	SPEED LIMIT 65				2	20.00	40.00	
645.292	R2-1	24"	30"	SPEED LIMIT 45				2	5.00	10.00	
645.292	R3-3	36"	36"	NO TURNS				2	9.00	18.00	

ITEM NUMBER	IDENTIFI-CATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	SIGN AREA (SQ. FT.)		REMARKS
		WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	SHIELD/ ARROW		NOM. AREA	TOTAL AREA	
645.292	R3-8	30"	30"	ONLY ONLY	TEXT DIMENSIONS SHALL CONFORM TO "STANDARD HIGHWAY SIGNS"			1	6.25	6.25	
645.292	R4-4	36"	30"	BEGIN RIGHT TURN LANE YIELD TO BIKES				2	7.50	15.00	
645.292	R3-7L	30"	30"	LEFT LANE MUST TURN LEFT				3	6.25	18.75	
645.292	R3-7R	30"	30"	RIGHT LANE MUST TURN RIGHT				3	6.25	18.75	
645.292	R4-7	24"	30"					1	5.00	5.00	
645.292	R5-1	30"	30"	DO NOT NTER				2	6.25	12.5	
645.2511	R5-1a	36"	24"	WRONG WAY				3	6.00	18.00	RADAR SENSOR & LED ILLUMINATED
645.292	R6-1	54"	18"	ONE WAY				2	6.75	13.5	
645.292	R6-1	36"	12"	ONE WAY				2	3.00	6.00	
645.292	R7-8	12"	18"	RESERVED PARKING				8	1.50	12.00	
645.292	R7-8P	18"	9"	VAN ACCESSIBLE				2	1.13	2.25	
645.292	W1-1a	36"	36"	25				1	9.00	9.00	
645.2512	W1-8R	18"	24"					4	3.00	12.00	RADAR SENSOR & LED ILLUMINATED
645.292	W4-1R	48"	48"					2	16.00	32.00	
645.292	W4-3	36"	36"					1	9.00	9.00	
645.292	W11-1	30"	30"					2	6.25	12.5	
645.292	W16-1P	18"	24"	SHARE THE ROAD				2	3.00	6.00	
645.292	W13-2	36"	48"	EXIT 25 M.P.H.				1	12.00	12.00	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15
WIN 17490.00 PARK & RIDE LOT

HIGHWAY PLANS

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

YARMOUTH
I-295 EXIT 15

SIGN SUMMARY

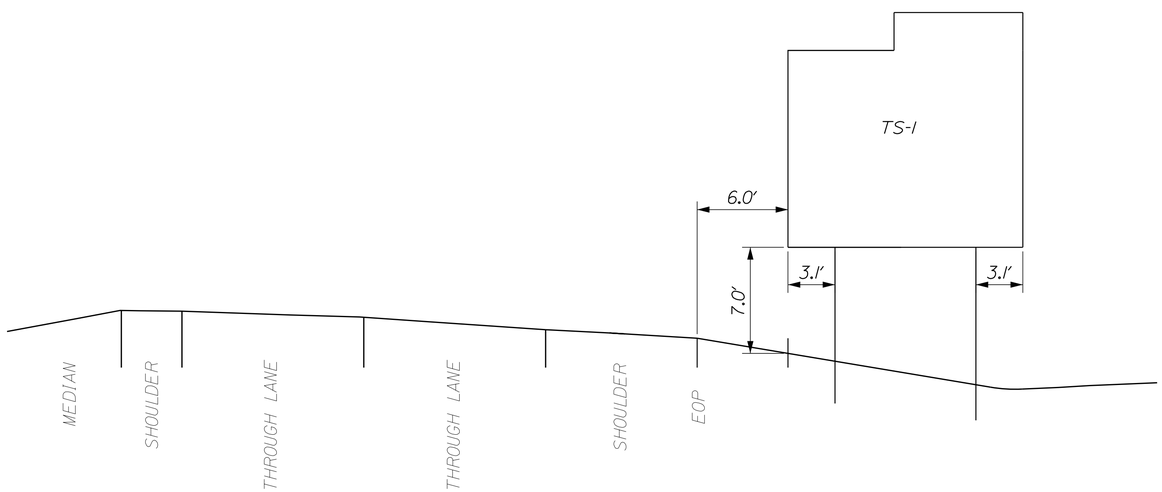
SHEET NUMBER
277
OF 283

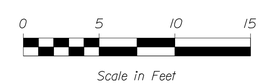
Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011

PROPOSED GUIDE SIGN SUMMARY

ITEM NUMBER	IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS			NUMBER OF SIGNS REQUIRED	SIGN AREA (SQ. FT.)		REMARKS
		WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	SHIELD/ ARROW		NOM. AREA	TOTAL AREA	
645.251	TS-1	102" 186"	30" 156"	EXIT 15 1 Yarmouth Cumberland	10"E/15"E 16" EM 16" EM	10" 7.5" 10" 7.5" 13" 12" 12" 12" 11"	RMO 36"x36" W/18"D 22"x34" @60°	1	222.75	222.75	

APPROXIMATE CROSS-SECTION





STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

IM-1108(600) EXIT 15
CM-1749(000)X PARK & RIDE LOT

WIN 11086.00 EXIT 15 HIGHWAY PLANS
WIN 17490.00 PARK & RIDE LOT

PROJ. MANAGER	BY	DATE
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

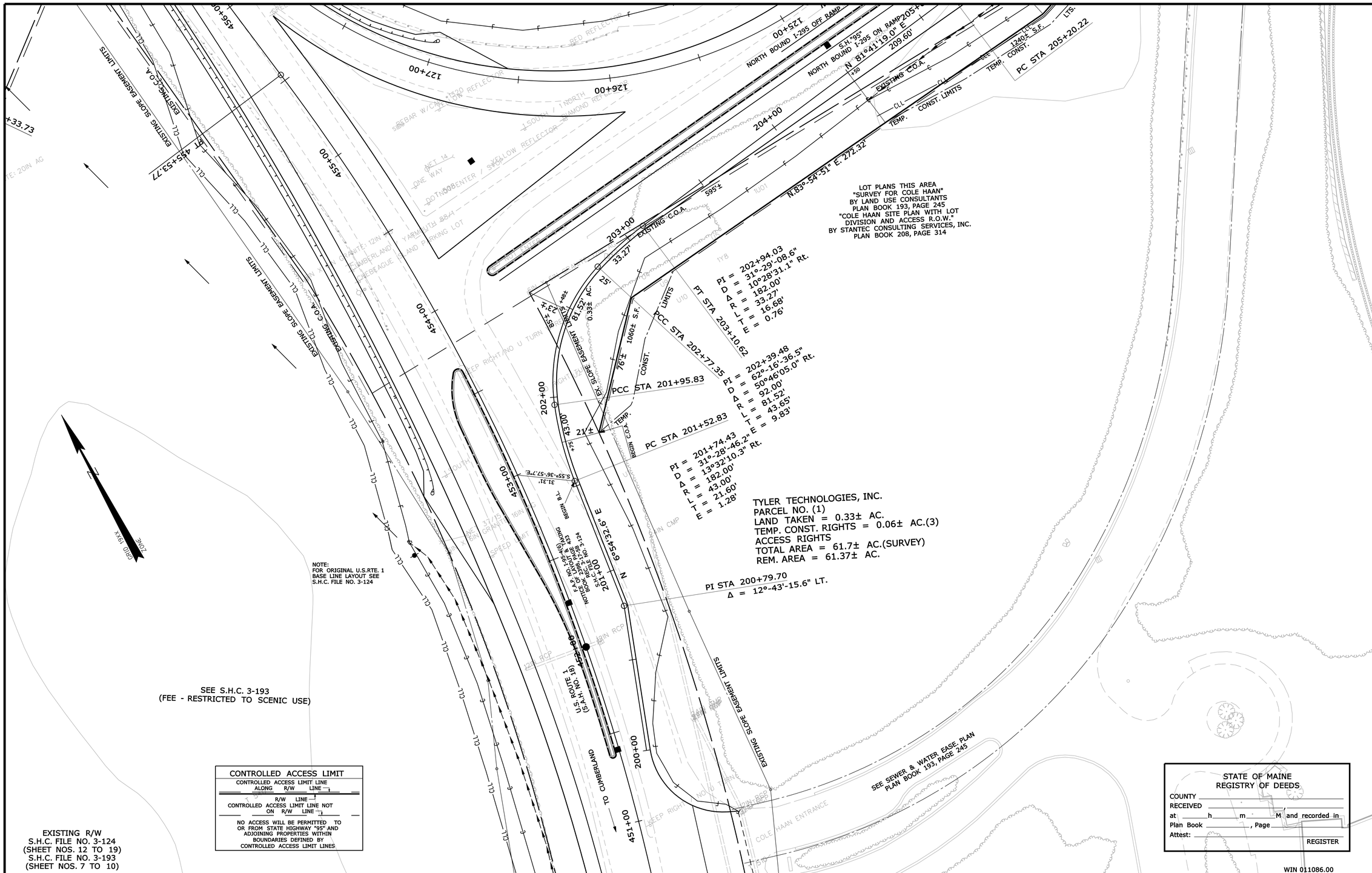
DATE

YARMOUTH
I-295 EXIT 15

GROUND-MOUNTED GUIDE SIGN

SHEET NUMBER
278
OF 283

Filename: Division: HIGHWAY Username: COMMON Date:2/21/2011



SYMBOLS

- IP or IPF (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- (ROW MONUMENT)
- &BM (TRAVERSE POINT)
- WELL
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF "RIGHT-OF-WAY"
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	T.L.B.	
PROP. LINES	T.L.B.	
AREAS	T.L.B.	D.S.G.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016
YARMOUTH
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE
		COND.	11/26/12	30152	334

DAVID BERNHARDT
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER

DATE

STATE OF MAINE
PETER A. BELANGER
1341
PROFESSIONAL LAND SURVEYOR

STATE HIGHWAY "95"
INTERSTATE 295 (EXIT 15)
YARMOUTH CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. IM-1108(600) SECT. I

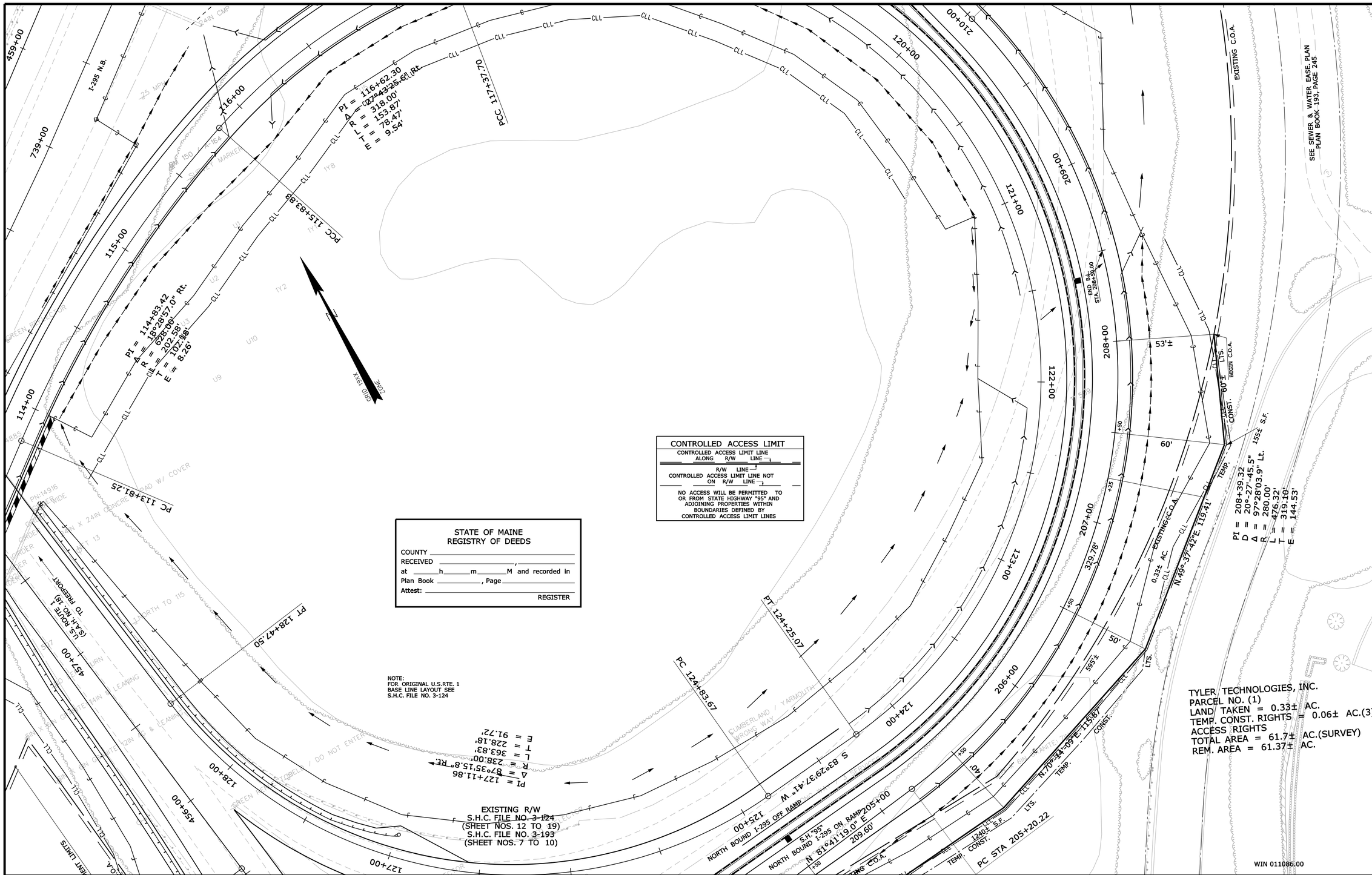
AUGUST 2012 | RIGHT-OF-WAY MAP | SCALE 1" = 25' | SHEET 1 OF 5

D.O.T. FILE NO. 3-585

SHEET NUMBER
279
OF 283

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: ROW Username: terry.blair Date:12/12/2012

Filename: ...\00\row\msta\002_RWPLAN2.dgn Division: ROW Username: terry.blair Date:12/12/2012



SYMBOLS

- IP or IPF (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- (ROW MONUMENT)
- &BM (TRAVERSE POINT)
- WELL
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF "RIGHT TO RETAIN (L.O.W.R.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	T.L.B.	
PROP. LINES	T.L.B.	
AREAS	T.L.B.	D.S.G.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

YARMOUTH
RIGHT OF WAY MAP

REVISIONS

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NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE	
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DAVID BERNHARDT
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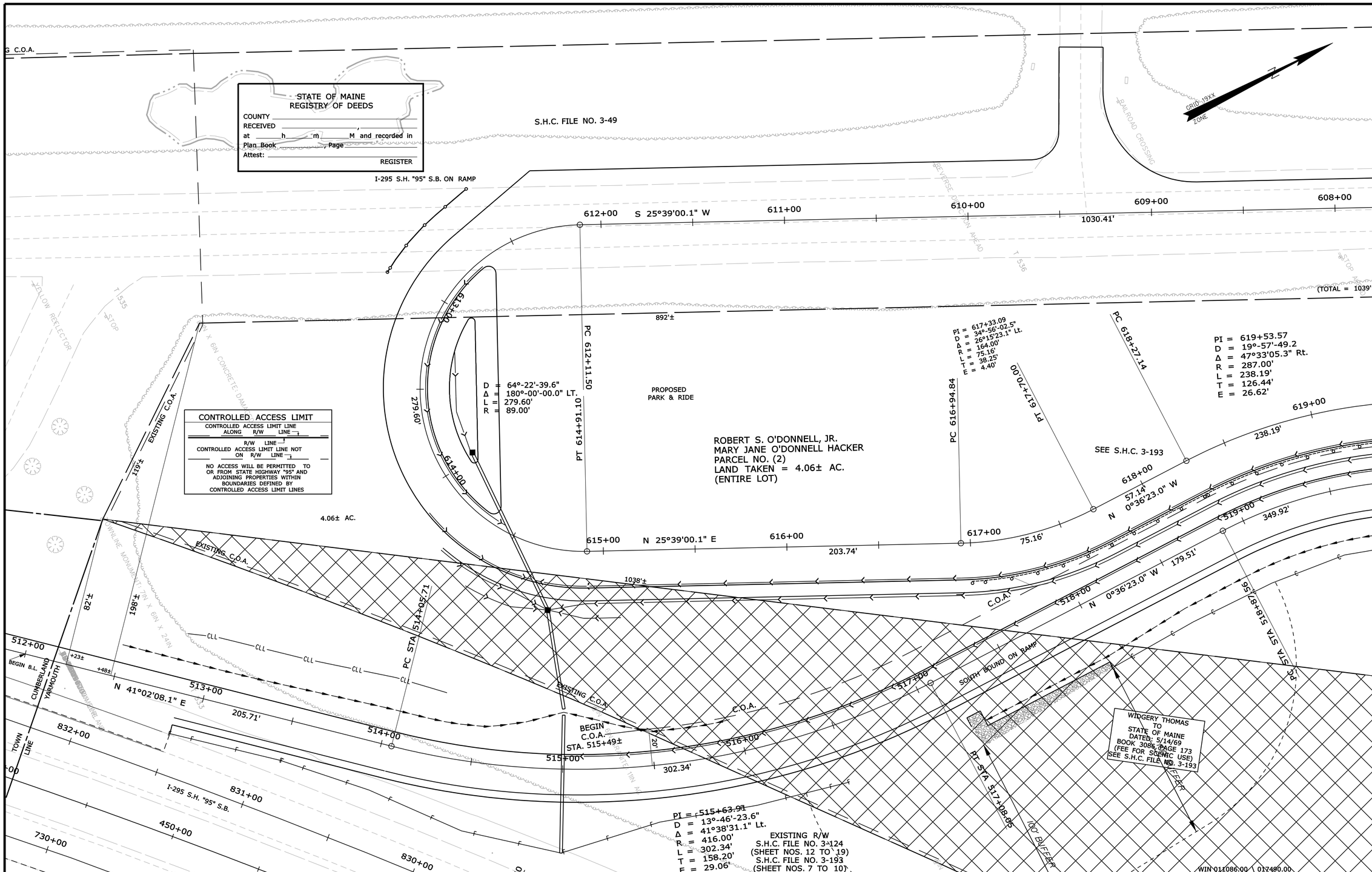
STATE OF MAINE
PETER A. BELANGER
1341
PROFESSIONAL LAND SURVEYOR

STATE HIGHWAY "95"
INTERSTATE 295 (EXIT 15)
YARMOUTH CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. IM-1108(600) SECT. I

AUGUST 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 3-585
SCALE 1" = 25'	SHEET 2 OF 5	

SHEET NUMBER
280
OF 283

Filename: ...\00\row\mmsto\003_RWPLAN3.dgn Division: ROW Username: terry.blair Date:12/12/2012



SYMBOLS

- IP or IPF (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- &BM (ROW MONUMENT) (TRAVERSE POINT)
- WELL
- GROUNDING ANT LINE
- CONS. PROPERTY LIMIT LINE
- EXISTING RIGHT OF WAY
- LIMITS OF NEW RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	T.L.B.	
PROP. LINES	T.L.B.	
AREAS	T.L.B.	D.S.G.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

YARMOUTH
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK				PAGE	COUNTY RECORD		
NO.	GRANTOR		INSTRUMENT	DATE	BOOK	PAGE	
			COND.	11/26/12	30152	334	

DAVID BERNHARDT
COMMISSIONER
KENNETH L. SWEENEY
CHIEF ENGINEER

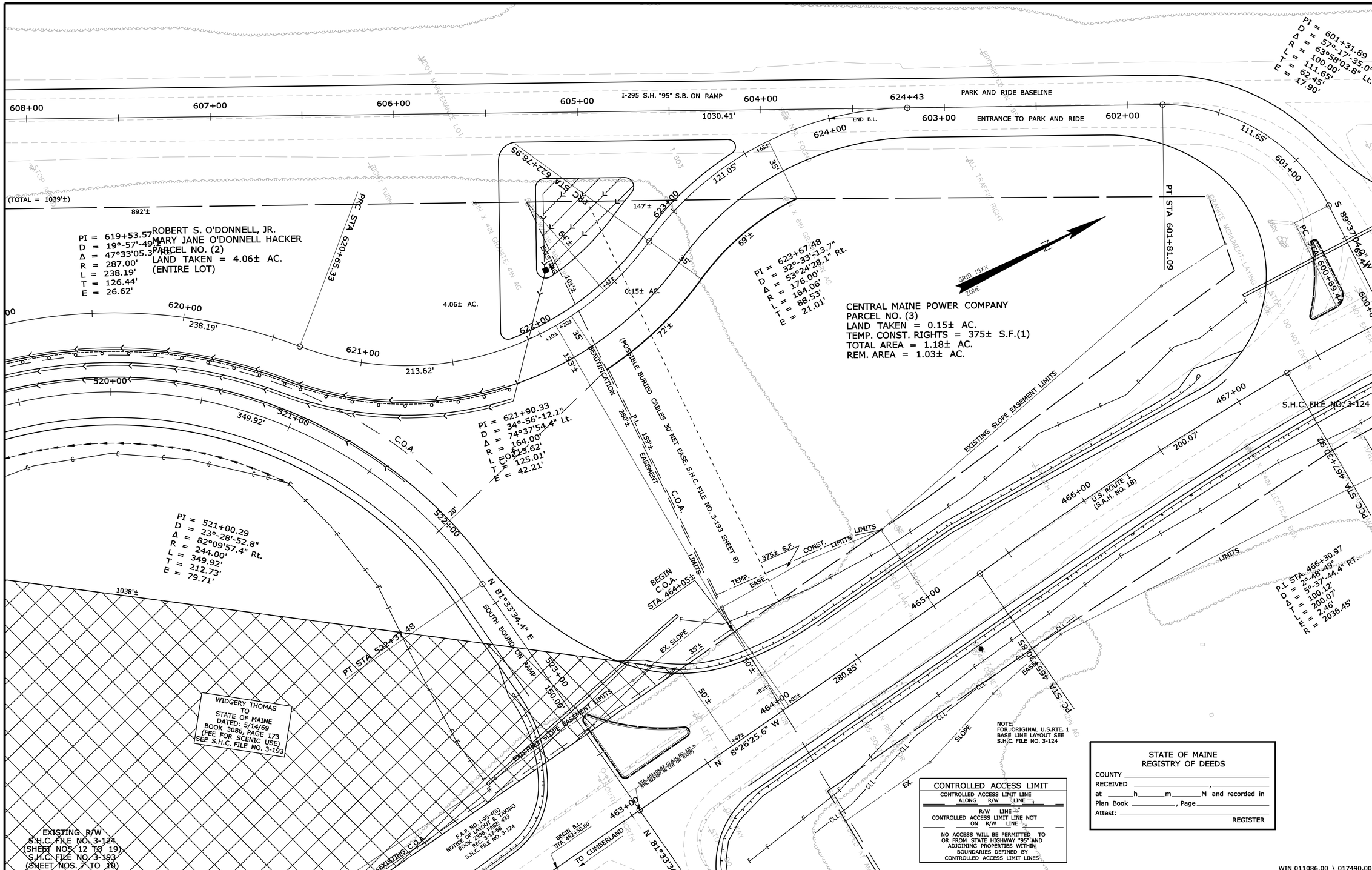
DATE

STATE OF MAINE
PETER A. BELANGER 1341
PROFESSIONAL LAND SURVEYOR

STATE HIGHWAY "95"
INTERSTATE 295 (EXIT 15)
YARMOUTH CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. IM-1108(600) SECT. II
FEDERAL AID PROJECT NO. CM-1749(000)X

AUGUST 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 3-585
SCALE 1" = 25'	SHEET 3 OF 5	

SHEET NUMBER
281
OF 283



CONTROLLED ACCESS LIMIT

CONTROLLED ACCESS LIMIT LINE ALONG R/W LINE

R/W LINE

CONTROLLED ACCESS LIMIT LINE NOT ON R/W LINE

NO ACCESS WILL BE PERMITTED TO OR FROM STATE HIGHWAY "95" AND ADJOINING PROPERTIES WITHIN BOUNDARIES DEFINED BY CONTROLLED ACCESS LIMIT LINES

STATE OF MAINE
REGISTRY OF DEEDS

COUNTY _____
RECEIVED _____, _____
at _____h_____m_____M and recorded in
Plan Book _____, Page _____
Attest: _____ REGISTER

SYMBOLS

- IP or IPF (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- (ROW MONUMENT)
- BM (TRAVERSE POINT)
- WELL
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF "ARROUGHT" PORTION (L.O.W.P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	T.L.B.	
PROP. LINES	T.L.B.	
AREAS	T.L.B.	D.S.G.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

YARMOUTH
RIGHT OF WAY MAP

REVISIONS			
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STATE OF MAINE
PETER A. BELANGER
1341
PROFESSIONAL LAND SURVEYOR

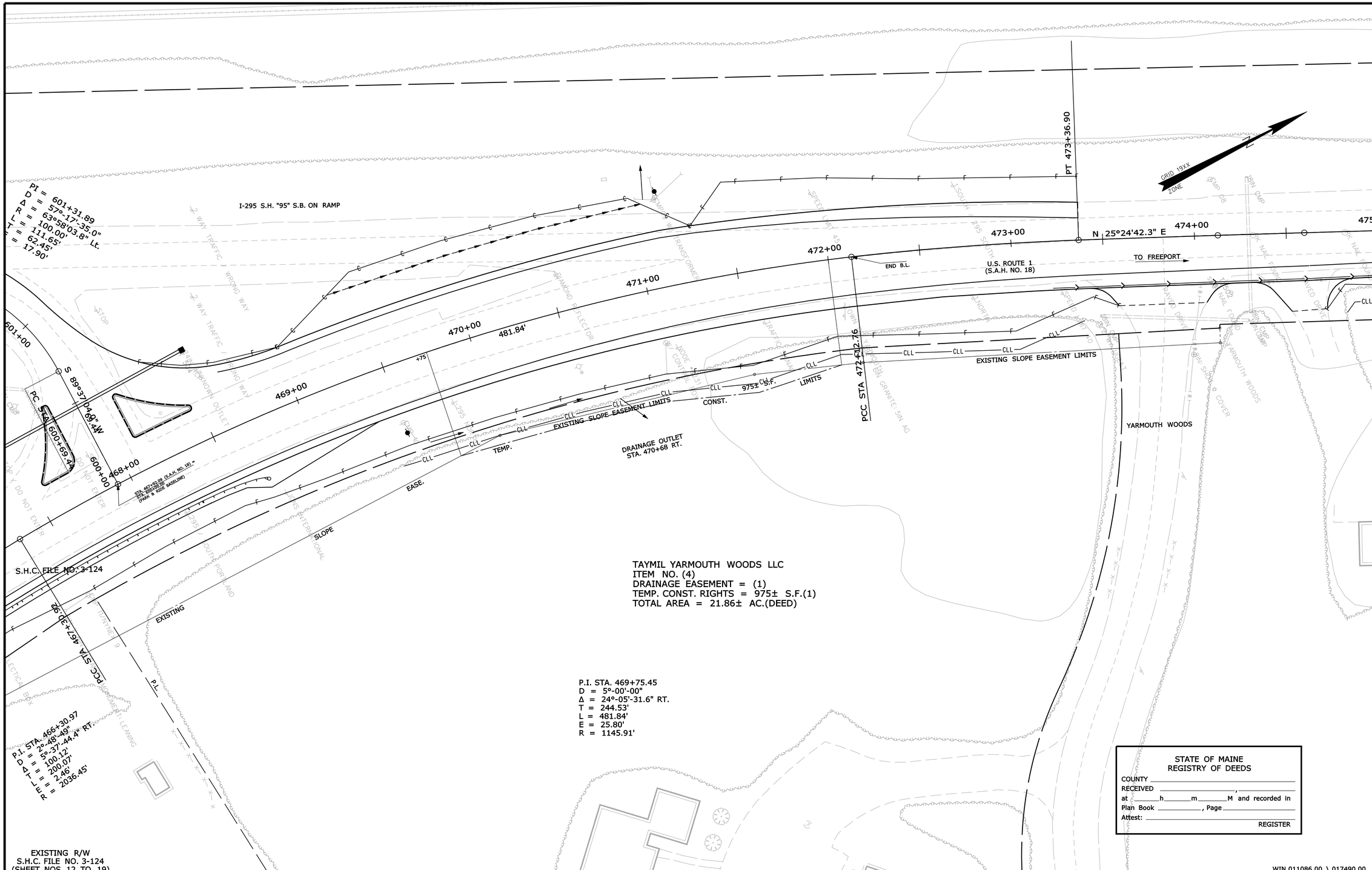
STATE HIGHWAY "95"
INTERSTATE 295 (EXIT 15)
YARMOUTH CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. IM-1108(600) SECT. II
FEDERAL AID PROJECT NO. CM-1749(000)X

AUGUST 2012	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 3-585
SCALE 1" = 25'	SHEET 4 OF 5	

SHEET NUMBER
282
OF 283

Filename: ...\00\row\msto\004_RWPLAN4.dgn Division: ROW Date:12/12/2012 Username: terry.blair

Filename: ...\00\row\msto\005_RWPLAN5.dgn Division: ROW Username: terry.blair Date:12/12/2012



SYMBOLS

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- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE
- (WELL)
- BEGINNING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF "RIGHT TO PORTION (L.O.W.P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	T.L.B.	
PROP. LINES	T.L.B.	
AREAS	T.L.B.	D.S.G.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016
YARMOUTH
RIGHT OF WAY MAP

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STATE OF MAINE
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PROFESSIONAL LAND SURVEYOR

STATE HIGHWAY "95"
INTERSTATE 295 (EXIT 15)
YARMOUTH CUMBERLAND COUNTY
FEDERAL AID PROJECT NO. IM-1108(600) SECT. II
FEDERAL AID PROJECT NO. CM-1749(000)X

AUGUST 2012 | RIGHT-OF-WAY MAP
SCALE 1" = 25' | SHEET 5 OF 5
D.O.T. FILE NO. 3-585

SHEET NUMBER
283
OF 283