STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

PLAN LEGEND

Town, County, State
Property Lines
R/W Lines-Existing
R/W Lines-Proposed
Culvert-Existing
Culvert Proposed
Curbing — Existing — Proposed
Type 1
Type 3
Type 5
Outline of Bodies of Water
Ledge
Buildings
Trees — Conifer — Deciduous
Tree Line
Clearing Limit Line — CLL — CLL
Centerline-Existing
Centerline-Proposed — 10+00
Travelway-Existing
Travelway-Proposed
Railroad
Catch Basins — Existing — Proposed
Manholes — Existing — Proposed
Proposed Underdrain
Proposed Ditch
Existing Ditch
Utlity Poles — Existing — Proposed
Fire Hydrants — Existing — Proposed
Existing Water Line — W
Existing San. Sewer
Existing Force Main — FM
Existing San. Sewer Manhole
Guardrail-Existing
Guardrail-Proposed
Guardrail-Cable, Other

JAY

FRANKLIN COUNTY

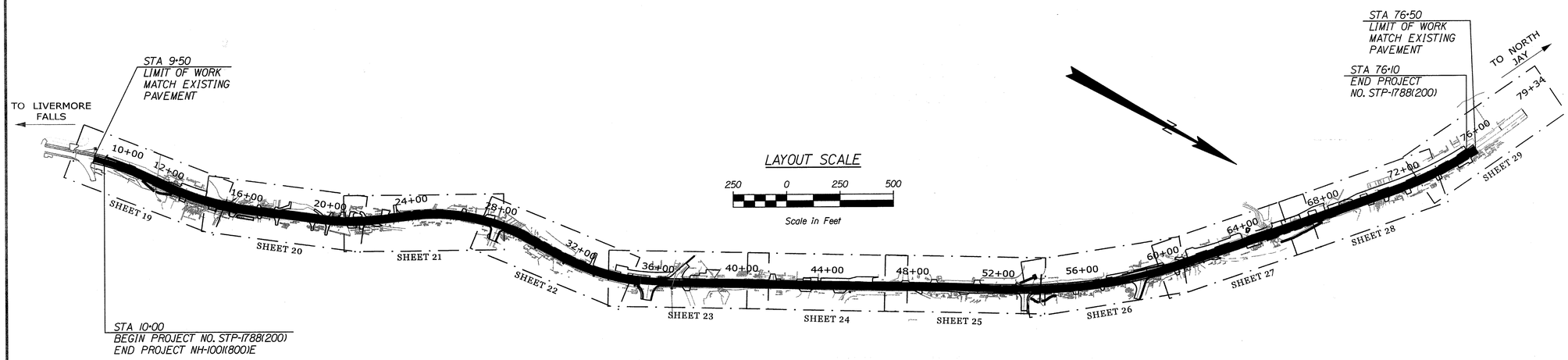
ROUTE 4/17

STP-1788(200)

PROJECT LENGTH: 1.25 MILES

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
Typical Sections	2-3
Quantities & Earthwork Summary	4
Drainage Summary	5-7
General Notes	8-9
Construction Notes	10a-10b
Special Details - Cellar Drain	11
Special Details - Miscellaneous Details	12a-12b
Special Details - Reinforced Soil Slope	13
Special Details - Retaining Walls	14-15
Special Details - Drainage Improvements	16-17
Special Details - Multi-Use Trail Crossing	18
Plan & Profile Sheets	19-29
Side Road Profiles	30
Geometric and Curb Layout Plans	31-36
Cross Sections	37-84
Side Road Cross Sections	85-89
Special Cross Sections	90-92
Right of Way Plans	93-102
Utility Plans	C1-C20



TRAFFIC DATA

	SR 4/17 SOUTHEAST OF RILEY ROAD
Current (2014) AADT	9070
Future (2034) AADT	10880
DHV - % of AADT	10%
Design Hour Volume	1088
% Heavy Trucks (AADT)	7%
% Heavy Trucks (DHV)	7%
Directional Distribution (DHV)	53%
18 kip Equivalent P 2.0	614
18 kip Equivalent P 2.5	585
Design Speed (mph)	35, 30 MPH

PROJECT LOCATION:	Route 4/17 at the end of PIN 10018.00 (Pineau Street) extending north westerly approximately 1.25 miles
PROGRAM AREA:	Highway Program
OUTLINE OF WORK:	Highway Reconstruction and other incidental work

WIN 17882.00 STP-1788(200)

Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
15 Shaker Road
Gray, ME 04039
Engineering Excellence Since 1998
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

		DATE
APPROVED	COMMISSIONER:	8/12/14
	CHIEF ENGINEER:	8-12-14

STATE OF MAINE — DONALD G. ETTINGER, JR. No. 8244 — LICENSED PROFESSIONAL ENGINEER

	SIGNATURE	
	P.E. NUMBER	8/12/14
	DATE	

PROJECT INFORMATION

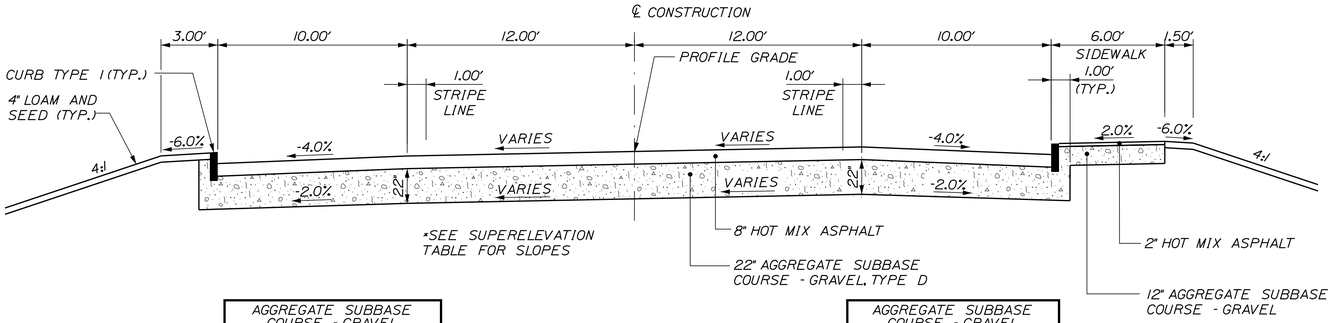
PROGRAM	HIGHWAY
PROJECT MANAGER	R. MOULTON
DESIGNER	D. ETTINGER
DESIGNER	GORRILL-PALMER
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

JAY
ROUTE 4\17

TITLE SHEET

SHEET NUMBER
1
OF 102

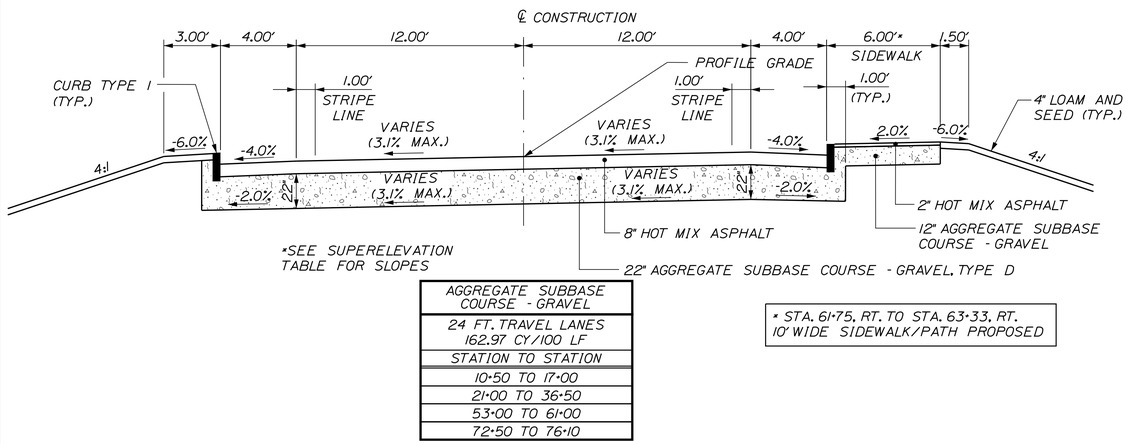
Filename: ...\00\highway\MSTA\001_Title.dgn Division: HIGHWAY Username: bhovu Date:8/12/2014



AGGREGATE SUBBASE COURSE - GRAVEL
10 FT. SHOULDER WITH CURB 74.21 CY/100 LF
STATION TO STATION
59+50 TO 60+00 LT

AGGREGATE SUBBASE COURSE - GRAVEL
10 FT. SHOULDER 72.55 CY/100 LF
STATION TO STATION
51+50 TO 52+00 RT

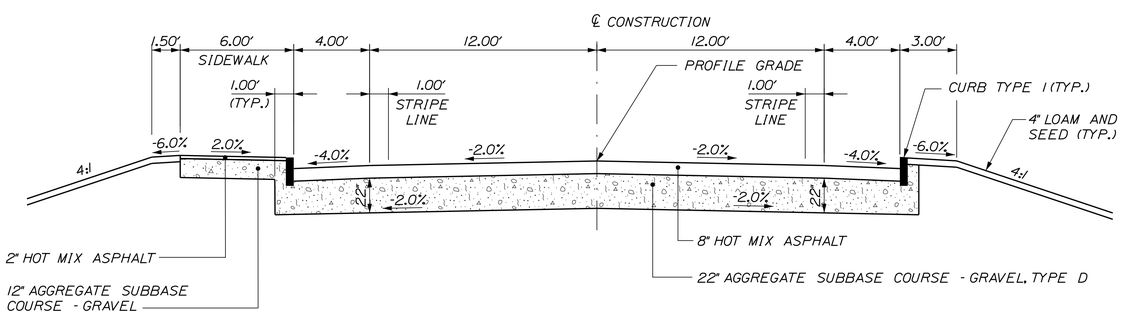
ROUTE 4/17
SUPERELEVATED SECTION



AGGREGATE SUBBASE COURSE - GRAVEL
24 FT. TRAVEL LANES 162.97 CY/100 LF
STATION TO STATION
10+50 TO 17+00
21+00 TO 36+50
53+00 TO 61+00
72+50 TO 76+10

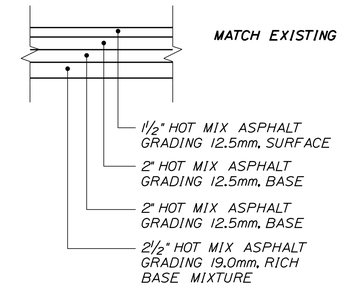
* STA. 61+75, RT. TO STA. 63+33, RT. 10' WIDE SIDEWALK/PATH PROPOSED

ROUTE 4/17
SUPERELEVATED SECTION

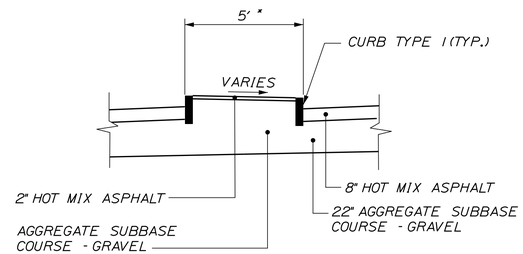


AGGREGATE SUBBASE COURSE - GRAVEL			
6 FT. SIDEWALK WITH CURB 27.05 CY/100 LF	4 FT. SHOULDER 26.57 CY/100 LF	24 FT. TRAVEL LANES 162.97 CY/100 LF	4 FT. SHOULDER WITH CURB 34.58 CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION	STATION TO STATION
10+50 TO 50+50 LT	11+60 TO 50+50 LT	18+50 TO 19+50	12+00 TO 12+50 RT
50+50 TO 75+73 RT *	12+50 TO 17+84 RT	38+00 TO 51+50	17+84 TO 50+50 RT
	53+00 TO 75+50 RT	62+50 TO 71+00	50+50 TO 53+00 LT
			57+40 TO 58+50 LT
			61+00 TO 64+95 LT
			66+71 TO 75+09 LT

ROUTE 4/17
NORMAL SECTION

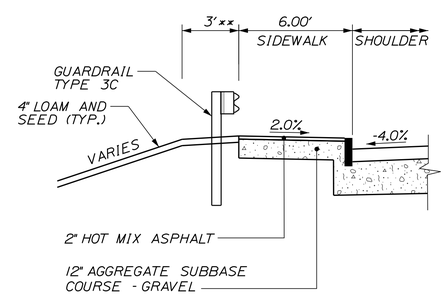


ROUTE 4/17
PAVEMENT DESIGN



RAISED ISLAND DETAIL

* ISLANDS LARGER THAN 5' IN WIDTH TO BE LOAMED AND SEEDED



** WIDTH VARIES. SEE CROSS SECTIONS.

GUARDRAIL BEHIND
SIDEWALK DETAIL

NOTES:

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 SHOULDER SHALL HAVE THE SAME SLOPE AS THE TRAVELWAY.

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 4" LOAM DEPTH. THE ACTUAL DEPTH MAY VARY. SEE THE GENERAL NOTES.

5. THE ALGEBRAIC DIFFERENCE BETWEEN THE SHOULDER AND TRAVEWAY CROSS SLOPES "ROLLOVER" SHALL NOT EXCEED 8%.

6. THE STATIONING SHOWN UNDER EACH TYPICAL IS APPROXIMATE.

7. THE PROJECT SHALL BE STRIPED AS 11' WIDE TRAVEL LANES AND 5' WIDE SHOULDERS.

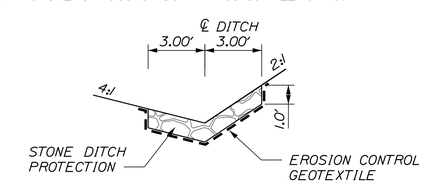
8. THE SHOULDER PAVEMENT THICKNESS SHALL BE THE SAME AS THE TRAVELWAY PAVEMENT THICKNESS FOR ALL ROADWAYS, UNLESS OTHERWISE NOTED.

SUPERELEVATION TABLE*

LT. SHOULDER	LT TRAVELWAY	STATION	RT TRAVELWAY	RT. SHOULDER
		START		
-3.3	-1.1	9+50	-2.5	-2.9
-4.0	0.95	10+00	-2.5	-4.0
-4.0	3.0	10+50	-3.0	-4.0
-4.0	3.0	11+00	-3.0	-4.0
-4.0	1.88	11+50	-1.88	-4.0
-4.0	0.76	12+00	-0.76	-4.0
-4.0	-0.36	12+50	0.36	-4.0
-4.0	-1.48	13+00	1.48	-4.0
-4.0	-2.6	13+50	2.6	-4.0
		TO		
-4.0	-2.6	17+00	2.6	-4.0
-4.0	-2.0	17+50	1.07	-4.0
-4.0	-2.0	18+00	-0.47	-4.0
-4.0	-2.0	18+50	-2.0	-4.0
-4.0	-2.0	19+00	-2.0	-4.0
-4.0	-2.0	19+50	-2.0	-4.0
-4.0	-2.0	20+00	-0.33	-4.0
-4.0	-2.0	20+50	1.33	-4.0
-4.0	-3.0	21+00	3.0	-4.0
		TO		
-4.0	-3.0	22+50	3.0	-4.0
-4.0	-1.98	23+00	1.98	-4.0
-4.0	-0.97	23+50	0.97	-4.0
-4.0	0.05	24+00	-0.05	-4.0
-4.0	1.07	24+50	-1.07	-4.0
-4.0	2.08	25+00	-2.08	-4.0
-4.0	3.1	25+50	-3.1	-4.0
		TO		
-4.0	3.1	30+00	-3.1	-4.0
-4.0	1.9	30+50	-1.9	-4.0
-4.0	0.7	31+00	-0.7	-4.0
-4.0	-0.5	31+50	0.5	-4.0
-4.0	-1.7	32+00	1.7	-4.0
-4.0	-2.9	32+50	2.9	-4.0
		TO		
-4.0	-2.9	36+50	2.9	-4.0
-4.0	-2.0	37+00	1.27	-4.0
-4.0	-2.0	37+50	-0.37	-4.0
-4.0	-2.0	38+00	-2.0	-4.0
		TO		
-4.0	-2.0	51+50	-2.0	-4.0
-4.0	-2.0	52+00	-0.67	-4.0
-4.0	-2.0	52+50	0.67	-4.0
-4.0	-2.0	53+00	2.0	-4.0
		TO		
-4.0	-2.0	56+00	2.0	-4.0
-4.0	-2.2	56+50	2.2	-4.0
		TO		
-4.0	-2.2	61+00	2.2	-4.0
-4.0	-2.0	61+50	0.8	-4.0
-4.0	-2.0	62+00	-0.6	-4.0
-4.0	-2.0	62+50	-2.0	-4.0
		TO		
-4.0	-2.0	71+00	-2.0	-4.0
-4.0	-2.0	71+50	-0.67	-4.0
-4.0	-2.0	72+00	0.67	-4.0
-4.0	-2.0	72+50	2.0	-4.0
		TO		
-4.0	-2.0	76+10	2.0	-4.0
		END		

* SUPERELEVATION RATE BASED ON AASHTO 4% MAXIMUM TABLES.

*SUPERELEVATION TRANSITIONS BASED ON MAINEDOT LOW SPEED URBAN CRITERIA USING 150' TRANSITION LENGTHS.



STONE DITCH
PROTECTION DETAIL

NOT TO SCALE

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHODE MOULTON		
DESIGN-DETAILED	L.MEEK	7-18-14
CHECKED-REVIEWED	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

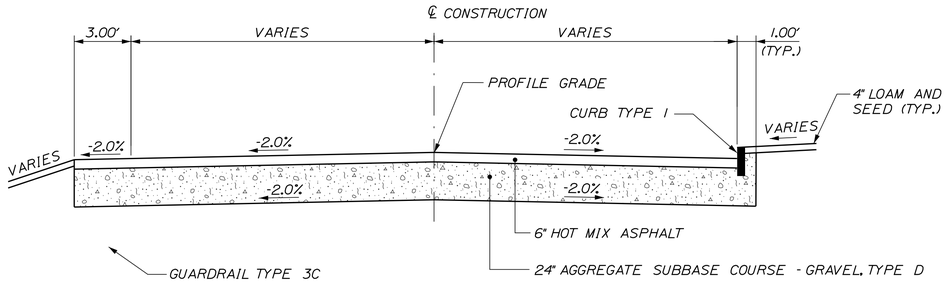
DATE

JAY
ROUTE 4\17

TYPICAL SECTIONS

SHEET NUMBER
2
OF 102

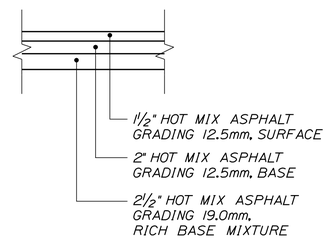
Filename: ...\highway\MSTA\002_Typical.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



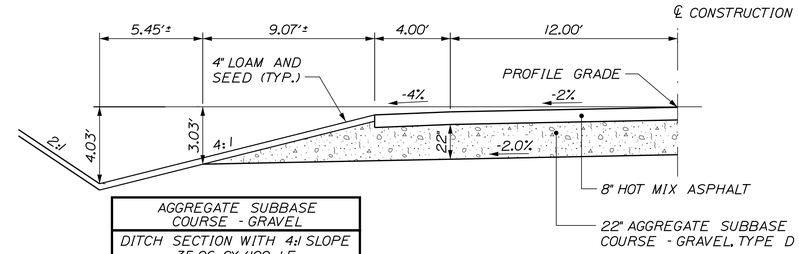
AGGREGATE SUBBASE COURSE - GRAVEL	
X FT. TRAVEL LANE X CY/100 LF	X FT. TRAVEL LANE W/ CURB X CY/100 LF
STATION TO STATION	STATION TO STATION
300+00 TO 301+07 LT	300+00 TO 301+07 RT

X = VARIES

TYPICAL SECTION FRENCH FALLS LANE

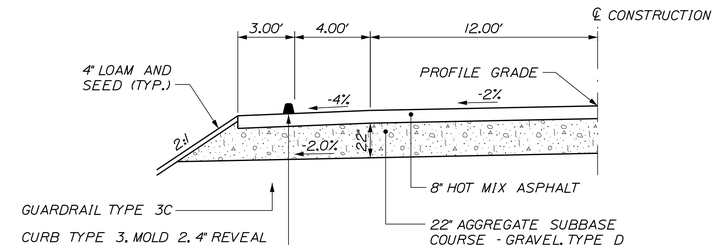


SIDE ROADS PAVEMENT DESIGN



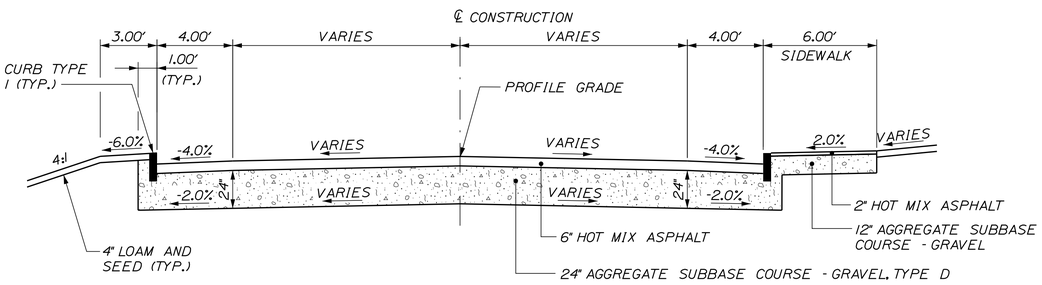
AGGREGATE SUBBASE COURSE - GRAVEL
DITCH SECTION WITH 4:1 SLOPE 35.06 CY/100 LF
STATION TO STATION
53+00 TO 54+00 LT

ROUTE 4/17 DITCH SECTION



AGGREGATE SUBBASE COURSE - GRAVEL
3' GUARDRAIL SECTION WITH 2:1 SLOPE 35.56 CY/100 LF
STATION TO STATION
55+00 to 55+50 LT

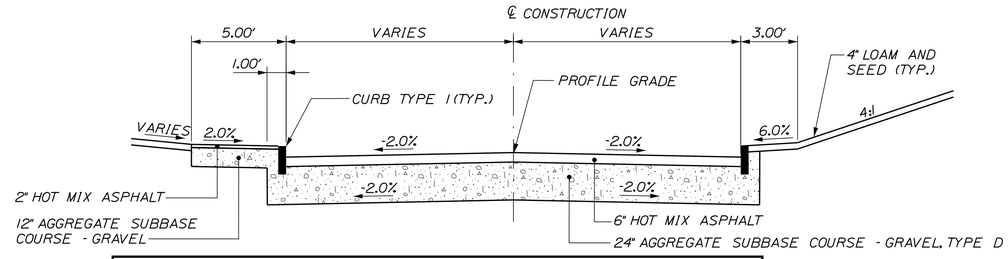
ROUTE 4/17 GUARDRAIL SECTION WITH 2:1 SLOPE



AGGREGATE SUBBASE COURSE - GRAVEL			
4 FT. SHOULDER WITH CURB 37.05 CY/100 LF	X FT. TRAVEL LANES X CY/100 LF	4 FT. SHOULDER 29.04 CY/100 LF	6 FT. SIDEWALK WITH CURB 27.67 CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION	STATION TO STATION
200+00 TO 200+83 LT	200+00 TO 200+83	200+00 TO 200+83 RT	200+00 TO 200+83 RT

X = VARIES

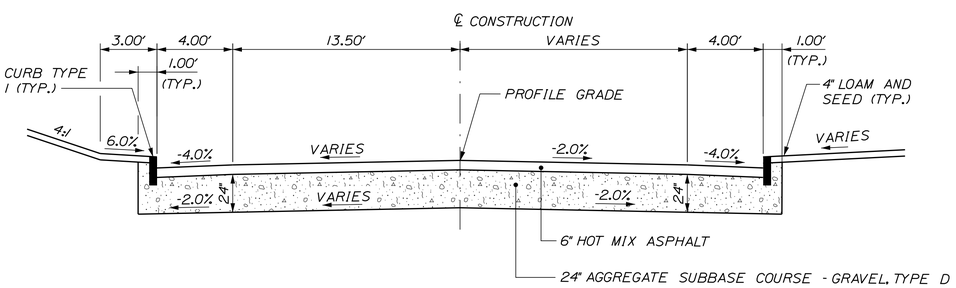
TYPICAL SECTION COMMUNITY CENTER DRIVE



AGGREGATE SUBBASE COURSE - GRAVEL		
5 FT. SIDEWALK W/ CURB 23.97 CY/100 LF	X FT. TRAVEL LANE X CY/100 LF	X FT. TRAVEL LANE W/ CURB X CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION
600+16 TO 601+10	600+16 TO 601+10	600+16 TO 601+10

X = VARIES

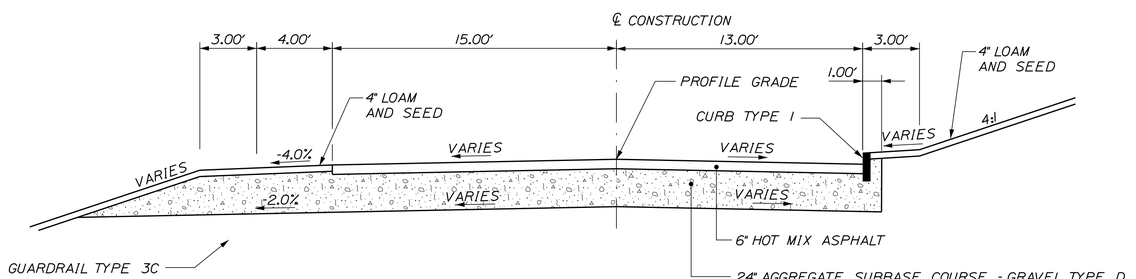
TYPICAL SECTION HYDE ROAD



AGGREGATE SUBBASE COURSE - GRAVEL		
4 FT. SHOULDER 29.04 CY/100 LF	X FT. TRAVEL LANES X CY/100 LF	4 FT. SHOULDER WITH CURB 37.05 CY/100 LF
STATION TO STATION	STATION TO STATION	STATION TO STATION
100+45 TO 100+75 RT	100+00 TO 100+75	100+00 TO 100+75 LT
		100+00 TO 100+45 RT

X = VARIES

TYPICAL SECTION OUELLETTE STREET



AGGREGATE SUBBASE COURSE - GRAVEL	
15 FT. TRAVEL LANE 111.11 CY/100 LF	13 FT. TRAVEL LANE W/ CURB 104.83 CY/100 LF
STATION TO STATION	STATION TO STATION
500+75 TO 501+00 LT	500+75 TO 501+00 RT

TYPICAL SECTION LUDDEN DRIVE

NOT TO SCALE

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHODE MOULTON		
DESIGN-DETAILED	L.MEEK	7-18-14
CHECKED-REVIEWED	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

TYPICAL SECTIONS

SHEET NUMBER

3

OF 102

Filename: ...\highway\MSTA\003_Typical.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

	ITEM NO.	DESCRIPTION	WIN 17882.00 JAY ROUTE 4/17	LIVERMORE FALLS WATER DISTRICT	JAY WATER DISTRICT	JAY SEWER UTILITIES	TOTAL	UNIT
	201.11	CLEARING	1.3	0	0	0	1.3	AC
	201.23	REMOVING SINGLE TREE TOP ONLY	16	0	0	0	16	EA
	201.24	REMOVING STUMP	23	0	0	0	23	EA
	202.15	REMOVING EXISTING MANHOLE OR CATCH BASIN	18	0	0	0	18	EA
	203.20	COMMON EXCAVATION	29100	0	0	150	29250	CY
*	203.21	ROCK EXCAVATION	1200	0	0	0	1200	CY
*	203.25	GRANULAR BORROW	50	0	0	0	50	CY
*	203.26	GRAVEL BORROW	1600	0	0	0	1600	CY
*	206.061	STRUCTURAL EARTH EXCAVATION, BELOW GRADE	50	0	0	0	50	CY
*	206.07	STR ROCK EXCAVATION - DRAINAGE & MINOR STR	670	50	100	100	920	CY
	304.10	AGGR SUBBASE COURSE - GRAVEL	22100	0	45	220	22365	CY
	403.207	HOT MIX ASPHALT 19.0 MM HMA	0	0	20	85	105	T
	403.2072	HOT MIX ASPHALT 19.0 MM HMA, RICH BASE MIXTURE	3800	0	0	0	3800	T
	403.208	HOT MIX ASPHALT 12.5 MM HMA SURFACE	2300	0	15	70	2385	T
	403.209	HOT MIX ASPHALT 9.5 MM HMA (INCID.)	1750	0	0	0	1750	T
	403.213	HOT MIX ASPHALT 12.5 MM BASE	5850	0	0	0	5850	T
	409.15	BITUMINOUS TACK COAT - APPLIED	2100	0	0	0	2100	G
	504.07	CONCRETE PIPE TIES	4	0	0	0	4	GP
	509.201	CULVERT SLIPLINING	300	0	0	0	300	LF
	527.303	ENERGY ABSORBING SYSTEM (ET-PLUS)	9	0	0	0	9	EA
	534.71	PRECAST CONCRETE BOX CULVERT (3' x 6' x 52')	1	0	0	0	1	LS
	602.30	FLOWABLE CONCRETE FILL	0	125	150	200	475	CY
	603.159	12" CULVERT PIPE OPTION III	352	0	0	0	352	LF
	603.16	15" CULVERT PIPE OPTION I	0	0	0	45	45	LF
	603.169	15" CULVERT PIPE OPTION III	96	0	0	0	96	LF
	603.17	18" CULVERT PIPE OPTION I	144	0	0	0	144	LF
	603.175	18" RCP CLASS III	116	0	0	0	116	LF
	603.179	18" CULVERT PIPE OPTION III	104	0	0	0	104	LF
	603.195	24" RCP CLASS III	80	0	0	0	80	LF
	603.199	24" CULVERT PIPE OPTION III	104	0	0	0	104	LF
	603.209	30" CULVERT PIPE OPTION III	64	0	0	0	64	LF
	603.219	36" CULVERT PIPE OPTION III	8	0	0	0	8	LF
	603.235	48" RCP CLASS III	84	0	0	0	84	LF
	603.275	72" RCP CLASS III	84	0	0	0	84	LF
	604.072	CATCH BASIN TYPE A1-C	17.375	0	0	0	17.375	EA
	604.076	60" CATCH BASIN TYPE A1-C	3.5	0	0	0	3.5	EA
	604.078	84" CATCH BASIN TYPE A1-C	1.5	0	0	0	1.5	EA
	604.092	CATCH BASIN TYPE B1-C	1.25	0	0	0	1.25	EA
	604.095	84" CATCH BASIN TYPE B1	1.625	0	0	0	1.625	EA
	604.18	ADJUST MANHOLE OR CB TO GRADE	1	0	0	0	1	EA
	604.245	CATCH BASIN TYPE F4-C	5	0	0	0	5	EA
	604.247	CATCH BASIN TYPE F5-C	1	0	0	0	1	EA
	604.252	CATCH BASIN TYPE A5-C	35.625	0	0	0	35.625	EA
	604.2521	60" CATCH BASIN A5-C	1.125	0	0	0	1.125	EA
	605.09	6" UNDERDRAIN TYPE B	5850	0	0	0	5850	LF
	605.10	6" UNDERDRAIN OUTLET	70	0	0	0	70	LF
	605.11	12" UNDERDRAIN TYPE C	5100	0	0	0	5100	LF
	605.12	15" UNDERDRAIN TYPE C	320	0	0	0	320	LF
	605.13	18" UNDERDRAIN TYPE C	350	0	0	0	350	LF
	605.14	21" UNDERDRAIN TYPE C	74	0	0	0	74	LF
	605.15	24" UNDERDRAIN TYPE C	420	0	0	0	420	LF
	606.23	GUARDRAIL TYPE 3C - SINGLE RAIL	1800	0	0	0	1800	LF
	606.231	GUARDRAIL TYPE 3C - 15' RADIUS AND LESS	100	0	0	0	100	LF
	606.232	GUARDRAIL TYPE 3C - OVER 15' RADIUS	325	0	0	0	325	LF
	606.234	GUARDRAIL TYPE 3C - SINGLE RAIL, 7' POSTS	625	0	0	0	625	LF
	606.265	TERMINAL END - SINGLE RAIL - GALVANIZED STEEL	14	0	0	0	14	EA
	606.353	REFLECTORIZED FLEXIBLE GUARDRAIL MARKER	46	0	0	0	46	EA
	606.356	UNDERDRAIN DELINEATOR POST	2	0	0	0	2	EA
*	606.47	SINGLE WOOD POST	18	0	0	0	18	EA
*	606.51	MULIPLE MAILBOX SUPPORT	3	0	0	0	3	EA
	607.163	CHAIN LINK FENCE - 4' P.V.C. COATED	120	0	0	0	120	LF
	608.26	CURB RAMP DETECTABLE WARNING FIELD	236	0	0	0	236	SF
	609.11	VERTICAL CURB TYPE 1	9150	0	0	0	9150	LF
	609.12	VERTICAL CURB TYPE 1-CIRCULAR	330	0	0	0	330	LF
	609.234	TERMINAL CURB TYPE 1-4 FOOT	94	0	0	0	94	EA
	609.237	TERMINAL CURB TYPE 1-7 FOOT	100	0	0	0	100	EA
	609.31	CURB TYPE 3	580	0	0	0	580	LF
	610.08	PLAIN RIPRAP	470	0	0	0	470	CY
	610.09	HAND LAID RIPRAP	115	0	0	0	115	CY
	610.18	STONE DITCH PROTECTION	170	0	0	0	170	CY
	610.21	RIVER STONES	20	0	0	0	20	CY
	613.319	EROSION CONTROL BLANKET	630	0	0	0	630	SY
	615.07	LOAM	1750	0	0	0	1750	CY
	618.1301	SEEDING METHOD NUMBER 1 - PLAN QUANTITY	73	0	0	0	70	UN
	618.1401	SEEDING METHOD NUMBER 2 - PLAN QUANTITY	10	0	0	0	10	UN
	618.1411	SEEDING METHOD NUMBER 3 - PLAN QUANTITY	60	0	0	0	60	UN
	619.1201	MULCH - PLAN QUANTITY	143	0	0	0	143	UN
	620.58	EROSION CONTROL GEOTEXTILE	1450	0	0	0	1450	SY
	620.65	REINFORCEMENT GEOGRID	370	0	0	0	370	SY
	627.733	4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE	24000	0	0	0	24000	LF
	627.75	WHITE OR YELLOW PAVEMENT AND CURB MARKING	1200	0	0	0	1200	SF
	627.76	TEMP PAVEMENT MARKING LINE, WHITE OR YELLOW	1	0	0	0	1	LS
*	629.05	HAND LABOR, STRAIGHT TIME	80	0	0	0	80	HR
*	631.12	ALL-PURPOSE EXCAVATOR (INC OPERATOR)	40	0	0	0	40	HR
*	631.13	BULLDOZER (INC OPERATOR)	10	0	0	0	10	HR
*	631.14	GRADER (INC OPERATOR)	40	0	0	0	40	HR
*	631.15	ROLLER, EARTH AND BASE (INC OPERATOR)	10	0	0	0	10	HR
*	631.172	TRUCK-LARGE (INC OPERATOR)	40	0	0	0	40	HR
*	631.18	CHAIN SAW RENTAL(INC OPERATOR)	20	0	0	0	20	HR
*	631.20	STUMP CHIPPER (INC OPERATOR)	20	0	0	0	20	HR
*	631.22	FRONT END LOADER (INC OPERATOR)	40	0	0	0	40	HR
*	631.32	CULVERT CLEANER (INC OPERATOR)	20	0	0	0	20	HR
	635.31	PRECAST CONCRETE BLOCK GRAVITY WALL	2200	0	0	0	2200	SF
	639.18	FIELD OFFICE TYPE A	1	0	0	0	1	EA
	645.271	REG. WARNING CONF ROUTE SIGNS, TYPE 1	200	0	0	0	200	SF

	ITEM NO.	DESCRIPTION	WIN 17882.00 JAY ROUTE 4/17	LIVERMORE FALLS WATER DISTRICT	JAY WATER DISTRICT	JAY SEWER UTILITIES	TOTAL	UNIT
*	652.30	FLASHING ARROW BOARD	2	0	0	0	2	EA
*	652.312	TYPE III BARRICADE	4	0	0	0	4	EA
*	652.33	DRUM	220	0	0	0	220	EA
*	652.34	CONE	220	0	0	0	220	EA
*	652.35	CONSTRUCTION SIGNS	1100	0	0	0	1100	SF
*	652.36	MAINTENANCE OF TRAFFIC CONTROL DEVICES	450	0	0	0	450	CD
*	652.38	FLAGGER	10000	100	200	200	10500	HR
*	652.41	PORTABLE - CHANGEABLE MESSAGE SIGN	2	0	0	0	2	EA
	656.75	TEMPORARY SOIL EROS. AND WATER POLLUTION CONTROL	1	0	0	0	1	LS
	658.20	ACRYLIC LATEX FINISH, GREEN	330	0	0	0	330	SY
	659.10	MOBILIZATION	1	0	0	0	1	LS
	801.011	BYPASS PUMPING SYSTEM	0	0	0	1	1	LS
	801.131	10" FORCE MAIN	0	0	0	2975	2975	LF
	801.141	4" PVC SANITARY SEWER (SDR-35)	40	0	0	0	40	LF
	801.16	6" PVC SANITARY SEWER (SDR-35)	20	0	0	0	20	LF
	801.17	8 INCH PVC SANITARY SEWER (SDR-35)	0	0	0	2150	2150	LF
	801.18	12 INCH PVC SANITARY SEWER (SDR-35)	0	0	0	30	30	LF
	801.51	DEMOLISH EXISTING FORCE MAIN	0	0	0	1	1	LS
	802.2021	REBUILD SEWER STRUCTURE	0	0	0	5	5	EA
	802.211	RELINE EXISTING SEWER	0	0	0	25	25	LF
	803.01	TEST PITS	0	3	2	3	8	EA
	803.134	4 INCH SERVICE LEADS	0	0	0	500	500	LF
	803.135	6 INCH SERVICE LEADS	0	0	0	300	300	LF
	803.173	SEWER MANHOLE - 4 FOOT DIAMETER	0	0	0	10	10	EA
	803.18	STANDARD SEWER FRAMES AND COVER	0	0	0	20	20	EA
	803.181	REMOVE/ABANDON MANHOLE	0	0	0	9	9	EA
	822.3220	6" WATER MAIN	0	130	120	0	250	LF
	822.331	6" NITRILE GASKET	0	2	2	0	4	EA
	822.340	8" NITRILE GASKET	0	6	2	0	8	EA
	822.3410	8" WATER MAIN	0	2300	75	0	2375	LF
	822.3511	10" NITRILE GASKET	0	0	10	0	10	EA
	822.353	10" WATER MAIN	0	50	4500	0	4550	LF
	823.31	12 INCH GATE VALVE	0	0	0	2	2	EA
	823.32	10 INCH GATE VALVE	0	2	3	0	5	EA
	823.325	8 INCH GATE VALVE	0	3	2	0	5	EA
	823.3253	TAPPING SLEEVE & GATE VALVE WITH BOX	0	0	1	0	1	EA
	823.331	6 INCH GATE VALVE	0	3	5	0	8	EA
	823.34	BLOW OFF VALVE ASSEMBLY	0	1	0	0	1	EA
	824.30	FIRE HYDRANT	0	3	4	0	7	EA
	825.311	3/4 INCH CORPORATION	0	20	0	0	20	EA
	825.312	3/4 INCH CURB STOP	0	20	0	0	20	EA
	825.33	1 INCH CORP STOP	0	2	29	0	31	EA
	825.331	1" CURB STOP	0	2	29	0	31	EA
	825.411	3/4" CTS SERVICE	0	700	0	0	700	LF
	825.430	1" CTS SERVICE	0	75	1050	0	1125	LF
	825.45	CONNECTIONS AND TIE-INS	0	2	4	0	6	EA
	827.31	UNSUITABLE SOIL EXCAVATION, REMOVE AND REFILL - ABOVE GRADE	0	50	50	50	150	CY
	827.311	UNSUITABLE SOIL EXCAVATION, REMOVE AND REFILL - BELOW GRADE	0	50	50	50	150	CY
	827.33	TRENCH INSULATION	0	100	125	100	325	LF

EARTHWORK SUMMARY

COMMON EXCAVATION FOR ESTIMATE			
COMMON EXCAVATION (FROM CROSS SECTIONS)	23,716		
EARTH FROM DRIVES	3,522		
GRUBBING IN FILL	287		
FROST SUCEPTIBLE SOILS EXCAVATION	1,565		
TOTAL COMMON EXCAVATION			29,090
FILL FOR BORROW CALCULATIONS			
COMMON FILL (FROM CROSS SECTIONS)	4,228		
FILL FOR DRIVES	33		
GRUBBING IN FILL	287		
TOTAL FILL			4,548
ROCK EXCAVATION	1,200		
ROCK EXCAVATION			
TOTAL ROCK EXCAVATION			1,200
AVAILABLE COMMON EXCAVATION FOR BORROW CALCULATIONS			
(1) TOTAL COMMON EXCAVATION			29,090
DEDUCTIONS:			
GRUBBING IN FILL	287		
GRUBBING IN CUT	1776		
PAVEMENT REMOVAL	4,200		
(2) TOTAL DEDUCTIONS			6,263
TOTAL AVAILABLE COMMON EXCAVATION (1) MINUS (2)			22,827
TOTAL AVAILABLE STRUCTURAL EXCAVATION (UNDERDRAIN ONLY)			3,920
TOTAL AVAILABLE NON-ROCK EXCAVATION			26,747
COMPUTATION OF WASTE MATERIAL			
GRUBBING IN CUT	1,776		
GRUBBING IN FILL	287		
TOTAL WASTE MATERIAL			2,063
COMPUTATION OF COMMON BORROW FOR ESTIMATE			
(3) TOTAL FILL			4,548
TOTAL AVAILABLE NON-ROCK EXCAVATION	26,747 x 0.85	22,735	
TOTAL AVAILABLE ROCK EXCAVATION	1,200 x 1.33	1,596	
TOTAL AVAILABLE STRUCTURAL ROCK EXCAVATION	664 x 1.33	883	
(4) TOTAL AVAILABLE EXCAVATION			25,214
TOTAL SURPLUS MATERIAL = TOTAL AVAILABLE EXCAVATION MINUS TOTAL FILL PLUS TOTAL WASTE MATERIAL			22,729

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	9-16-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	9-16-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

QUANTITIES AND
EARTHWORK SUMMARY

SHEET NUMBER

4

OF 102

Filename: ...\HIGHWAY\MSTA\004_Estimate.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:9/16/2014

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH			MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III													TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED											TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	A5-C	B1-C	F4-C	F5-C	SPAN	RISE	LENGTH		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
STA. 9+56.84, 18.08' RT																												ADJUST CB TO GRADE
STA. 10+00.00 LT TO STA 12+41.00 LT																					239.0'							
STA. 10+00.00 RT TO STA 12+41.00 RT																					239.0'							
STA. 12+27.51, 128.09' LT TO STA. 12+74.37, 32.78' RT								30"	168'																			SLIPLINE EX. 3'x3' BOX CULVERT
STA. 12+41.00, 14.87' LT													1															2' CONE
STA. 12+41.00, 13.87' LT TO STA. 12+41.00, 13.87' RT	18"	28'	III																									
STA. 12+41.00, 14.87' RT													1															2' CONE
STA. 12+41.00, 17.87' RT TO STA. 12+41.00, 27.87' RT								18"	12'																			
STA. 12+41.00 LT TO STA. 13+00.00 LT																							12"	55.0'				
STA. 12+41.00 RT TO STA. 16+00.00 RT																					357.0'							
STA. 13+00.00, 14.87' LT													1															2' CONE
STA. 13+00.00 LT TO STA 15+13.05 LT																							12"	207.1'				
STA. 13+81.04, 25.24' RT TO STA. 14+32.12, 25.35' RT						18"	52'																					
STA. 15+13.05, 14.87' LT													1 1/4															
STA. 15+13.05 LT TO STA 15+95.00 LT																					80.0'							
STA. 15+29.72 RT TO STA 15+74.94 RT						18"	48'																					
STA. 15+97.63, 47.15' LT TO STA. 16+11.34, 33.30' RT	72"	84'	III																									INSTALL PIPE TIES
STA. 16+06.62 LT TO STA. 18+25.88 LT																							12"	217.3'				
STA. 16+19.06, 35.80' RT TO STA. 16+69.74, 33.50' RT																												3' x 6' x 52' CONC. BOX CULVERT
STA. 17+29.00, 31.00' RT TO STA. 17+92.13, 15.00' RT								15"	60'																			
STA. 18+25.88, 14.87' LT													1															2' CONE
STA. 17+92.13, 14.87' RT													1															2' CONE
STA. 18+25.88 LT TO STA. 21+25.00 LT																							12"	295.1'				
STA. 17+92.13 RT TO STA. 20+74.02 RT																							12"	277.9'				
STA. 20+74.02, 14.87' RT												1 1/8																2' CONE
STA. 20+74.02 RT TO STA. 23+35.00 RT																					259.0'							
STA. 21+25.00, 14.87' LT													1 1/8															
STA. 21+25.00 LT TO STA. 23+35.00 LT																					208.0'							
STA. 23+40.00 LT TO STA. 27+75.00 LT																					433.0'							
STA. 23+40.00 RT TO STA. 26+00.00 RT																					258.0'							
STA. 26+00.00, 14.87' RT												1																2' CONE
STA. 26+00.00 RT TO STA. 27+75.00 RT																							12"	171.0'				
STA. 27+75.00, 17.87' LT TO STA. 27+75.00, 53.50' LT								24"	36'																			
STA. 27+75.00, 13.87' LT TO STA. 27+75.00, 12.37' RT	24"	27'	III																									
STA. 27+75.00, 14.87' LT													1 1/8															2' CONE
STA. 27+75.00, 14.87' RT												1																5' DIAMETER, FLAT TOP
STA. 27+75.00 LT TO STA. 28+12.57 LT																							12"	33.6'				
STA. 27+75.00 RT TO STA. 28+45.20 RT																							18"	66.2'				
STA. 28+12.57, 14.87' LT													1 1/8															2' CONE
STA. 28+12.57 LT TO STA. 29+35.00 LT																					120.4'							
STA. 28+45.20, 14.87' RT												1																2' CONE
STA. 28+45.20 RT TO STA. 29+19.67 RT																							15"	69.2'				
STA. 29+40.00 LT TO STA. 33+25.00 LT																					383.0'							
STA. 29+40.00 RT TO STA. 31+00.00 RT																					158.0'							
STA. 31+00.00, 14.87' RT													1															2' CONE
STA. 31+00.00, 21.00' RT															1													
STA. 31+00.00 RT TO STA. 31+00.00 RT								12"	4'																			
STA. 31+00.00 RT TO STA. 32+50.00 RT																							12"	146.0'				
STA. 32+50.00, 14.87' RT													1 1/8															2' CONE
STA. 32+50.00, 15.87' RT TO STA. 32+50.00, 20.00' RT								12"	4'																			
STA. 32+50.00, 21.00' RT															1													
STA. 32+50.00 RT TO STA. 34+00.00 RT																							12"	146.0'				
STA. 33+25.00 LT TO STA. 35+95.00 LT																							12"	266.0'				
STA. 33+25.00, 14.87' LT													1															2' CONE
STA. 34+00.00, 14.87' RT													1															2' CONE
STA. 34+00.00, 21.00' RT															1													
STA. 34+00.00 RT TO STA. 34+00.00 RT								12"	4'																			
STA. 34+00.00 RT TO STA. 35+95.00 RT																							12"	191.0'				
STA. 35+95.00 RT TO STA. 36+00.00 RT								12"	6'																			
STA. 35+95.00, 14.87' LT													1 1/8															2' CONE
STA. 35+95.00, 14.87' RT												1 1/4																2' CONE
STA. 36+00.00, 21.00' RT															1													
STA. 35+95.00 LT TO STA. 37+23.22 LT																							12"	124.2'				
STA. 35+95.00 RT TO STA. 36+20.49 RT																							15"	27.4'				
STA. 37+23.22, 14.87' LT													1 1/8															
STA. 37+23.22 LT TO STA. 37+75.00 LT								12"	47'																			
STA. 37+75.00, 18.37' LT TO STA. 37+90.75, 73.80' LT	48"	60'	III																									INSTALL PIPE TIES
STA. 37+75.00, 14.87' LT														1 5/8														7' DIA., 2' CONE, TYPE BI, SOLID COVER
STA. 37+75.00, 11.37' LT TO STA. 37+68.00, 11.87' RT	48"	24'	III																									
STA. 37+68.00, 14.87' RT												1 1/2																7' DIA., 2' CONE
STA. 37+68.00, 17.87' RT TO STA. 37+65.07, 23.13' RT								36"	5'																			CONNECT TO EXIST. CB
STA. 37+75.00 LT TO STA 38+41.15 LT								30"	62'																			
STA. 37+68.00 RT TO STA. 38+01.08 RT																							12"	27.6'				
STA. 38+01.08, 14.87' RT												1 1/8																2' CONE
STA. 38+01.08 RT TO STA. 39+76.00 RT																					170.9'							
STA. 38+41.15, 14.87' LT													1 1/8															2' CONE
STA. 38+41.15 LT TO STA. 39+76.00 LT																							24"	130.9'				
STA. 39+76.00, 12.37' LT TO STA. 39+81.00, 11.87' RT	24"	25'	III																									
STA. 39+76.00, 14.87' LT												1 1/4																5' DIAMETER, 2' CONE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER	RHOBE MOULTON	BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4/17

DRAINAGE SUMMARY

SHEET NUMBER

5

OF 102

Filename: ...\highway\MSTA\005_Drainage.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH			MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III													TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED											TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	A5-C	B1-C	F4-C	F5-C	SPAN	RISE	LENGTH		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
STA. 39+81.00, 14.87' RT													1 1/8															
STA. 39+81.00, 16.00' RT TO STA. 39+84.50, 35.70' RT								18"	20'																			
STA. 39+76.00 LT TO STA. 42+83.39 LT																							12"	303.2'				
STA. 39+81.00 RT TO STA. 42+83.39 RT																							12"	298.4'				
STA. 42+83.39, 14.87' LT													1															
STA. 42+83.39, 14.87' RT													1															
STA. 42+83.39 LT TO STA. 46+33.26 LT																							12"	345.8'				
STA. 42+83.39 RT TO STA. 46+00.00 RT																							12"	312.6'				
STA. 46+00.00, 15.87' RT TO STA. 46+00.00, 26.40' RT								12"	11'																			
STA. 46+00.00, 14.87' RT													1 1/8															2' CONE
STA. 46+00.00, 27.40' RT															1													
STA. 46+00.00 RT TO STA. 49+82.00 RT																					380.0'							
STA. 46+33.26, 14.87' LT												1 1/8																2' CONE
STA. 46+33.26 LT TO STA. 49+82.00 LT																					346.7'							
STA. 49+86.00 RT TO STA. 53+63.20 RT																					375.2'							
STA. 49+86.00 LT TO STA. 53+50.00 LT																					362.0'							
STA. 53+50.00, 14.87' LT												1																2' CONE
STA. 53+63.20, 14.87' RT													1															2' CONE
STA. 53+50.00 LT TO STA. 54+00.00, 29.7' LT								12"	52'																			
STA. 53+76.50 RT TO STA. 57+50.00 RT																					371.5'							
STA. 53+63.20 RT TO STA. 54+47.13, 45.5' RT								12"	88'																			
STA. 54+86.21, 65.60' RT TO STA. 54+98.99, 65.78' LT								30"	132'																			SLIPLINE EX. PIPE W/ HYDROBELL INLET
STA. 57+50.00, 14.87' RT													1 1/8															2' CONE
STA. 57+50.00 LT TO STA. 60+17.16 LT																					265.2'							
STA. 57+50.00 RT TO STA. 58+91.87 RT																							12"	137.9'				
STA. 58+91.87, 14.87' RT													1															2' CONE
STA. 58+91.87 RT TO STA. 59+78.70 RT								12"	86'																			
STA. 60+17.48, 26.42' LT TO STA. 60+17.16, 21.87' LT								12"	5'																			
STA. 60+17.48, 27.42' LT													1															2' CONE
STA. 60+17.16, 20.87' LT													1 1/8															2' CONE
STA. 60+17.16 LT TO STA. 61+96.03 LT																							12"	174.3'				
STA. 61+15.29, 38.00' RT TO STA. 61+54.49, 34.42' RT						18"	40'																					
STA. 61+96.03, 14.87' RT													1 1/8															5' DIAMETER, 2' CONE
STA. 61+96.03, 14.87' LT												1 1/4																5' DIAMETER, 2' CONE
STA. 61+96.03, 12.37' LT TO STA. 61+96.03, 13.37' RT	24"	26'	III																									
STA. 61+96.03, 18.37' RT TO STA. 61+91.13, 46.75' RT								24"	30'																			
STA. 61+96.03 LT TO STA. 64+86.49 LT																							24"	285.5'				
STA. 62+06.00 RT TO STA. 66+20.00 RT																					410.0'							
STA. 64+86.49, 16.87' LT TO STA. 65+05.00, 41.00' LT								24"	32'																			
STA. 64+86.49, 14.87' LT												1 1/8																2' CONE
STA. 66+15.00, 14.87' LT														1 1/4														2' CONE
STA. 66+15.00, 16.87' LT TO STA. 65+93.25, 46.16' LT	18"	36'	III																									INSTALL PIPE TIES
STA. 66+15.00, 12.87' LT TO STA. 66+20.00, 11.87' RT	18"	26'	III																									
STA. 66+20.00, 14.87' RT													1 1/4															
STA. 66+15.00 LT TO STA. 68+93.00 LT																							18"	274.0'				
STA. 66+20.00 RT TO STA. 66+72.92 RT																							12"	48.9'				
STA. 66+72.92, 14.87' RT													1 1/8															
STA. 66+72.92 RT TO STA. 68+87.00 RT																					212.1'							
STA. 68+93.00, 12.87' LT TO STA. 68+93.00, 11.87' RT	18"	24'	III																									
STA. 68+93.00, 14.87' LT													1 1/4															2' CONE
STA. 68+93.00, 14.87' RT													1 1/8															
STA. 68+93.00 LT TO STA. 71+59.00 LT																							12"	262.0'				
STA. 68+93.00 RT TO STA. 71+50.00 RT																							12"	253.0'				
STA. 71+59.00, 22.13' LT													1															2' CONE
STA. 71+59.00, 15.87' LT TO STA. 71+59.00, 21.00' LT								12"	6'																			
STA. 71+59.00, 14.87' LT													1 1/4															2' CONE
STA. 71+50.00, 14.87' RT													1															1' SUMP, 2' CONE
STA. 71+50.00, 15.87' RT TO STA. 71+50.00, 28.00' RT								12"	13'																			
STA. 71+50.00, 29.00' RT																1												
STA. 71+59.00 LT TO STA. 75+02.50 LT																							12"	339.5'				
STA. 71+50.00 RT TO STA. 75+64.37 RT																							12"	412.4'				
STA. 75+02.50, 14.87' LT												1																2' CONE
STA. 75+02.50 LT TO STA. 76+00.00 LT																					95.5'							
STA. 75+64.37, 15.03' RT													1															2' CONE
STA. 75+64.37 RT TO STA. 76+00.00 RT																					33.6'							

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER	RHOBE MOULTON	BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------		------
REVISIONS 2	------		------
REVISIONS 3	------		------
REVISIONS 4	------		------
FIELD CHANGES	------		------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4/17

DRAINAGE SUMMARY

SHEET NUMBER

6

OF 102

Filename: ...\highway\MSTA\005_Drainage.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

STATION	CULVERT PIPE											CATCH BASIN					PIPE ARCH			MH	UNDERDRAIN						ELBOWS, TEES, WYES AND INLET GRATE UNITS	REMARKS
	RCP			CMP		OPTION I		OPTION III													TYPE B		TYPE C					
								SMOOTHLINED		CORRUGATED											TYPE B	OUTLET	SMOOTHLINED		CORRUGATED		DESCRIPTIONS	
	SIZE	LENGTH	CLASS	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	SIZE	LENGTH	A1-C	A5-C	B1-C	F4-C	F5-C	SPAN	RISE	LENGTH		LENGTH	LENGTH	SIZE	LENGTH	SIZE	LENGTH		
STA. 100+18.97, 20.30' LT												1																2' CONE
STA. 200+21.13 LT TO STA. 37+68.00 RT																							21"	73.9'				
STA. 200+21.13, 35.33' LT												1 1/4																2' CONE
STA. 200+33.51, 38.03' RT												1 1/4																2' CONE
STA. 200+21.13, 27.00' LT TO STA. 200+33.51, 36.03' RT								18"	71'																			
STA. 300+23.00 LT TO STA. 300+72.00 LT																					55.4'							
STA. 300+72.00 LT TO STA.300+83.00 LT																						17.1'						
STA. 300+85.00, 7.97' RT TO STA. 300+85.00, 24.03' LT								15"	32'																			
STA. 300+85.00, 9.97' RT												1																2' CONE
STA. 300+95.00 LT TO STA. 300+87.00 LT																						16.5'						
STA. 300+95.00 LT TO STA. 301+07.17 LT																					12.0'							
STA. 600+28.36, 22.58' LT												1																2' CONE
STA. 600+28.36, 22.71' RT TO STA. 61+96.03, 14.87' RT																							15"	221.1'				
STA. 600+70.00 LT TO STA. 59+78.70 RT																							12"	43.4'				
STA. 600+70.00, 13.16' LT												1 1/8																2' CONE
STA. 600+70.00, 10.93' LT TO STA. 600+70.00, 7.87' RT								12"	19'																			
STA. 600+70.00, 10.37' RT												1																2' CONE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------		------
REVISIONS 2	------		------
REVISIONS 3	------		------
REVISIONS 4	------		------
FIELD CHANGES	------		------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4/17

DRAINAGE SUMMARY

SHEET NUMBER
7
OF 102

Filename: ...\highway\MSTA\005_Drainage.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

GENERAL NOTES:

1. THE UTILITIES INVOLVED IN THIS CONTRACT ARE NOTED IN THE SPECIAL PROVISIONS. SEE SPECIAL PROVISIONS 104. UTILITIES FOR ADDITIONAL INFORMATION.

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

3. CLEARING LIMITS SHALL BE 5' BEYOND AND PARALLEL TO THE CONSTRUCTION SLOPE LINES OR AS SHOWN ON THE PLANS UNLESS OTHERWISE AUTHORIZED BY THE RESIDENT.

4. THE CLEARING AND SELECTIVE CLEARING AND THINNING LINES SHOWN ON THE PLANS ARE FOR ESTIMATING PURPOSES ONLY. THE ACTUAL LINES FOR CLEARING AND THINNING SHALL BE ESTABLISHED IN THE FIELD BY THE CONTRACTOR AND APPROVED BY THE RESIDENT.

5. STUMPS HAVE BEEN ESTIMATED TO BE REMOVED UNDER ITEM 201.24 REMOVE STUMP. HOWEVER, WHERE DIRECTED BY THE RESIDENT, ITEM 631.20 STUMP CHIPPER RENTAL MAY BE USED TO REMOVE STUMPS.

6. 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.

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

8. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN ACCEPTABLE WASTE AREAS REVIEWED BY THE RESIDENT. GRADING, SEEDING AND MULCHING OF WASTE AREAS SHALL BE CONSIDERED INCIDENTAL.

9. REQUIRED DITCH PROTECTION SHOWN ON THE PLANS OR IN THE CONSTRUCTION NOTES IS FOR ESTIMATING PURPOSES ONLY. THE ACTUAL TYPE AND LOCATION OF DITCH PROTECTION MAY BE ALTERED BY THE RESIDENT.

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

11. GRANULAR BORROW USED TO BACKFILL MUCK EXCAVATION OR IN LOW WET AREAS TO 1' 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. RESIDENTIAL PAVED ENTRANCES SHALL BE CONSTRUCTED WITH: 2" HOT MIX ASPHALT AND 12" AGGREGATE SUBBASE COURSE GRAVEL.

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

15. UNPAVED ENTRANCES SHALL BE CONSTRUCTED WITH 14" AGGREGATE SUBBASE COURSE GRAVEL OR 11" AGGREGATE SUBBASE COURSE GRAVEL AND 3" UNTREATED AGGREGATE SURFACE COURSE UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

16. GRASSED ENTRANCES SHALL BE CONSTRUCTED WITH 12" AGGREGATE SUBBASE COURSE GRAVEL AND 2" LOAM, SEED & MULCH UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

17. A 3' PAVED LIP SHALL BE PLACED AT ALL GRAVEL ENTRANCES UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

18. ALL PAVED WALKS TO BE CONSTRUCTED WITH 12" AGGREGATE SUBBASE COURSE-GRAVEL AND 2" HOT MIX ASPHALT UNLESS OTHERWISE NOTED IN THE PLANS OR DIRECTED BY THE RESIDENT.

19. PLACE 12" AGGREGATE SUBBASE COURSE GRAVEL AND 2" HOT MIX ASPHALT AROUND CATCH BASINS IN GRASSED AREAS (2' OUTSIDE OF FRAME) AND PAINT WITH ACRYLIC LATEX COLOR FINISH - GREEN. PAYMENT SHALL BE UNDER THE APPLICABLE CONTRACT ITEMS.

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

21. EXISTING CULVERTS TO REMAIN SHALL BE CLEANED AS DIRECTED BY THE RESIDENT. PAYMENT WILL BE MADE UNDER ITEM 631.32 CULVERT CLEANER (INCLUDING OPERATOR).

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

23. INLETS AND OUTLETS OF ALL CULVERTS SHALL BE RIPRAPPED UNLESS OTHERWISE NOTED ON THE PLANS OR DIRECTED BY THE RESIDENT.

24. THE CULVERT SIZES SHOWN ON THE PLANS AND CROSS SECTIONS ARE FOR SMOOTH LINED PIPES. INFORMATION ON COMPARABLE CORRUGATED SIZES IS NOT PROVIDED. IF CORRUGATED PIPES ARE PROPOSED, CONTRACTOR IS REQUIRED TO DETERMINE COMPARABLE PIPE SIZES.

25. AI-C AND BI-C CATCH BASINS SHALL BE SHAPE 1 WITH A HAUNCHED CONE, AS PER STANDARD DETAIL 604(02), UNLESS OTHERWISE NOTED ON THE PLANS.

26. PLASTIC END CAPS SHALL BE USED ON ALL DEAD-END 6-INCH TYPE B UNDERDRAIN.

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 NOT LABELED ON THE CROSS SECTIONS SHALL HAVE 5.5 FEET OF COVER FROM THE FINISH GRADE DIRECTLY ABOVE THE UNDERDRAIN AND UNDERDRAIN SAND BACKFILL PLACED TO AN ELEVATION EQUAL TO THE BOTTOM OF THE NEW GRAVEL LAYER. ALL UNDERDRAIN SHOWN ON THE CROSS SECTIONS WILL HAVE THE FLOW LINE SCALED FROM THE CROSS SECTIONS. ALL FLOW LINE ELEVATIONS ARE SUBJECT TO APPROVAL BY THE RESIDENT.

30. ALL CONNECTIONS FOR UNDERDRAIN TO ROADWAY CULVERTS WILL BE INCIDENTAL TO UNDERDRAIN PIPE ITEMS.

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

32. EXISTING ABANDONED WATER MAINS BROKEN BY THE CONTRACTOR DURING CONSTRUCTION SHALL HAVE THE ENDS PLUGGED WITH BRICK AND MORTAR. COST FOR ALL LABOR AND MATERIAL WILL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO DIRECT PAYMENT WILL BE MADE.

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

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.

36. A DELINEATOR POST (ITEM 606.356) WILL BE INSTALLED AT EACH UNDERDRAIN OUTLET.

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

38. ALL CATCH BASINS TYPE A PLACED ON CIRCULAR CURB TYPE 1 SHALL HAVE THE CURB INLET CUT THE SAME RADIUS AS ADJACENT CIRCULAR CURB. PAYMENT SHALL BE INCIDENTAL TO ITEM 604.

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 4 INCHES IN LAWN AREAS AND 2 INCHES IN ALL OTHER AREAS UNLESS OTHERWISE NOTED OR DIRECTED.

41. ACRYLIC LATEX COLOR FINISH GREEN (ITEM 658.20) SHALL BE PLACED ON ALL PAVED ISLANDS AND AROUND CATCH BASINS IN GRASS AREAS.

42. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EXISTING MAILBOXES TO ENSURE THAT THE MAIL WILL BE DELIVERABLE. PAYMENT FOR THIS WORK WILL BE MADE UNDER THE APPROPRIATE RENTAL ITEMS.

43. CONTRACTOR SHALL INSTALL NEW MAILBOX POSTS AS REQUIRED FOR THE PROJECT. LOCATION OF NEW MAILBOX POSTS SHALL BE COORDINATED WITH THE RESIDENT AND SPECIFIC PROPERTY OWNERS. IF PLACED WITHIN THE SIDEWALK LIMITS, THE MAILBOX POST LOCATIONS SHALL BE IN ACCORDANCE WITH THE SPECIAL DETAILS.

44. A COPY OF THE SOILS REPORT FOR THIS PROJECT IS AVAILABLE AT HTTP://WWW.MAINE.GOV/MDOT/CONTRACTORS/.

45. AREAS REQUIRING FILL ON THE PROJECT WILL COME FROM SUITABLE AREAS OF COMMON EXCAVATION.

46. 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 BACK SLOPING REQUIREMENTS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE CONSIDERED INCIDENTAL TO THE RELATED DRAINAGE ITEMS.

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

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

49. STATIONS REFERENCED ARE APPROXIMATE.

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

51. IN NON-SIDEWALK LOCATIONS, THE FACE OF THE GUARDRAIL (BARRIER) SHOULD BE FLUSH WITH THE FACE OF THE CURB (I.E., AT THE GUTTER LINE). THE HEIGHT OF THE BARRIER IS MEASURED FROM THE PAVEMENT SURFACE. CURB HEIGHT SHALL NOT EXCEED 4 INCHES.

52. IN NON-SIDEWALK LOCATIONS WITH GUARDRAIL AND CURBING, THE CURB HEIGHT SHOULD BE REDUCED TO 2 INCHES APPROXIMATELY 50 FEET IN ADVANCE OF THE GUARDRAIL TERMINAL. FOR FLARED TERMINALS, THE 2 INCH HEIGHT SHOULD BE CARRIED AN ADDITIONAL 37 FEET BEYOND THE UPSTREAM END. FOR TANGENT TERMINALS, THE 2 INCH HEIGHT SHOULD BE CARRIED 12 FEET BEYOND THE UPSTREAM END AND THE TERMINAL SHOULD BE OFFSET 1 FOOT TO KEEP THE IMPACT HEAD BEHIND THE FACE OF CURB.

53. PAYMENT FOR LONGER GUARDRAIL POSTS (4'-5" POST EMBEDMENT) WHERE CALLED FOR ON THESE PLANS SHALL BE PAID AS ITEM 606.234.

54. A MAINE DEPARTMENT OF TRANSPORTATION (MAINEDOT) ENVIRONMENTAL OFFICE INVESTIGATION SPECIFIC WITH THIS PROJECT ENCOUNTERED DATA SUGGESTING PETROLEUM RELATED CONTAMINATION WAS PRESENT AT ROUGHLY MAINEDOT STATION 38+50 TO ROUGHLY STATION 39+10 , ROUGHLY MAINEDOT STATION 64+40 TO ROUGHLY STATION 65+30, ROUGHLY MAINEDOT STATION 71+25 TO ROUGHLY STATION 72+30 AND ROUGHLY MAINEDOT STATION 73+40 TO ROUGHLY STATION 74+40. SUBSEQUENT ON-SITE WORK FAILED TO UNEARTH ANY ISSUES WITHIN THESE AREAS. HOWEVER, IN LIGHT OF THE AVAILABLE ENVIRONMENTAL DATA, THE CONTRACTOR SHALL EMPLOY APPROPRIATE HEALTH AND SAFETY MEASURES TO PROTECT ITS WORKERS AGAINST HAZARDS ASSOCIATED WITH WORKING NEAR PETROLEUM-IMPACTED SOILS. FURTHERMORE, THE CONTRACTOR SHALL REMAIN ALERT FOR ANY ADDITIONALLY EVIDENCE OF CONTAMINATION. IF THE CONTRACTOR ENCOUNTERS EVIDENCE OF SOIL OR GROUNDWATER CONTAMINATION, THE CONTRACTOR SHALL SECURE THE EXCAVATION, STOP WORK IN THE CONTAMINATED AREA, AND IMMEDIATELY NOTIFY THE RESIDENT. THE RESIDENT SHALL CONTACT THE HYDROGEOLOGIST IN MAINEDOT'S ENVIRONMENTAL OFFICE AT 207-624-3100 AND THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION AT 800-482-0777. WORK MAY ONLY CONTINUE WITH AUTHORIZATION FROM THE RESIDENT.

55. EXISTING UNDERGROUND UTILITIES ARE PARTIALLY SHOWN ON THE ROADWAY PLANS. NO PROPOSED UNDERGROUND UTILITIES ARE SHOWN ON THE ROADWAY PLANS. SEE THE UTILITY PLANS FOR SPECIFICS ON EXISTING AND PROPOSED UNDERGROUND UTILITIES. THE CONTRACTOR SHALL PLAN THEIR WORK ACCORDINGLY.

56. THE EXISTING SEWER INFORMATION SHOWN ON THE HIGHWAY PLANS WERE SCALED FROM SEWER AS-BUILT DRAWINGS AND NOT FIELD SURVEYED. THE CONTRACTOR SHALL PLAN THEIR WORK ACCORDINGLY.

57. LEDGE LIMITS ARE NOT SHOWN ON THE PLANS. SEE THE GEOTECHNICAL REPORT FOR INFORMATION ON LEDGE LIMITS.

58. MINOR ADJUSTMENTS ARE PROPOSED TO THE ROADWAY CURBING, SIDEWALK AND DRAINAGE BETWEEN STA. 9+50 AND 10+00. FIELD ADJUSTMENT OF THE WORK REQUIREMENTS IN THIS AREA SHALL BE COORDINATED AND APPROVED BY THE RESIDENT.

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

60. WHERE PAVEMENT UNDER THIS CONTRACT JOINS AN EXISTING PAVEMENT OR CONCRETE, THE EXISTING PAVEMENT OR CONCRETE SHALL BE SAW CUT ALONG A SMOOTH LINE TO A NEAT, EVEN, VERTICAL JOINT, AS DIRECTED BY THE RESIDENT. BROKEN OR RAVELED EDGES SHALL NOT BE PERMITTED. ALL WORK NECESSARY FOR THE PREPARATION OF THIS JOINT SHALL BE CONSIDERED INCIDENTAL TO THE RELATED CONTRACT ITEMS.

61. REMOVAL OF EXISTING DRAINAGE PIPES, AS NOTED ON THE PLANS, SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20, COMMON EXCAVATION.

62. LOAM HAS BEEN ESTIMATED FOR 100% OF THE DISTURBED SLOPE AREA. ACTUAL PLACEMENT OF THE LOAM USED SHALL BE AS DESIGNATED BY THE RESIDENT.

63. MULCH SHALL BE APPLIED IN AREAS SEEDED BY SEEDING METHOD NO. 1, SEEDING METHOD NO. 2 AND SEEDING METHOD NO. 3.

64. ALL PEDESTRIAN RAMPS SHALL BE 6 FT. WIDE MINIMUM, UNLESS OTHERWISE NOTED ON THE PLANS.

65. THE LOCATION OF THE EXISTING UTILITIES AND DRAINAGE SHOWN ON THE PLANS AND CROSS SECTIONS WERE COMPILED FROM FIELD SURVEY AND VARIOUS OTHER SOURCES. LOCATIONS ARE APPROXIMATE AND 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 ANY VARIANCE BETWEEN THE DATA SHOWN ON THE PLANS AND THE ACTUAL FIELD CONDITIONS ENCOUNTERED.

66. ANY NECESSARY FINE GRADING OR RECOMPACTION OF EXISTING GRAVEL SHALL NOT BE PAID FOR DIRECTLY AND SHALL BE CONSTRUCTION INCIDENTAL TO ITEM 304.10.

67. 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.

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

69. PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAY" U.S.D.O.T. F.H.W.A. LATEST EDITION. PAVEMENT MARKING PAY ITEMS ARE LISTED ON THE QUANTITY SHEET.

GP Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

GENERAL NOTES

SHEET NUMBER

8

OF 102

Filename: ...\highway\MSTA\008_GenNotes.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

GENERAL NOTES CONTINUED:

70. EARTHWORK SUMMARY CALCULATIONS ASSUME NO LOAM SALVAGE. HOWEVER, IN ACCORDANCE WITH THE GENERAL CONDITIONS, SECTION 104.3.13, THE DEPARTMENT WILL APPROVE THE CONTRACTOR TO PROCESS SUITABLE EXCAVATED MATERIAL AS SHOWN ON THE PLANS FOR REUSE AS LOAM ON THE PROJECT. PAYMENT SHALL BE MADE UNDER COMMON EXCAVATION AND LOAM. NO ADDITIONAL PAYMENT WILL BE MADE FOR PROCESSING OR HANDLING OF THE MATERIAL. AS THIS WOULD BE A REDUCTION IN THE WASTE. THE CONTRACTOR WILL NOT BE REQUIRED TO REPLACE THE EXCAVATED MATERIAL SALVAGED FOR LOAM. THE CONTRACTOR MAY ELECT TO SALVAGE LOAM IN FILL BEYOND THE GRUBBING LIMITS SHOWN ON THE PLANS. EXCAVATION FOR SUCH SALVAGING LOAM IN FILL SHALL NOT BE PAID FOR. THE CONTRACTOR SHALL REPLACE SUCH EXCAVATED MATERIAL WITH OTHER APPROVED MATERIAL AND PROPERLY COMPACT IT AT NO COST TO THE DEPARTMENT.

71. THE CONTRACTOR SHALL INSTALL DETECTABLE WARNING DEVICES ON PEDESTRIAN RAMPS AT STREET CROSSINGS AND INTERSECTIONS. IN ACCORDANCE WITH THE SPECIAL DETAILS AND SPECIAL PROVISION 608, "DETECTABLE WARNINGS." COORDINATE WORK WITH RESIDENT.

72. REMOVAL OF EXISTING CURBING SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20, COMMON EXCAVATION. UNLESS OTHERWISE NOTED.

73. GUARDRAIL STATION AND OFFSET INFORMATION IS TO FACE OF RAIL.

74. THE 4 FOOT OR 7 FOOT OF CIRCULAR CURB TYPE I REQUIRED TO BE CUT FOR A TERMINAL CURB SECTION SHALL BE PAID FOR UNDER ITEM 609.234 OR ITEM 609.237 RESPECTIVELY.

75. ALL GRANITE CURBING THAT IS REMOVED AND STACKED AND NOT REUSED ON THE PROJECT SHALL BE TURNED OVER TO THE CONTRACTOR. PAYMENT FOR WORK SHALL BE CONSIDERED INCIDENTAL TO ITEM 203.20, COMMON EXCAVATION.

76. ANY BASE PAVEMENT NOT SURFACED BEFORE WINTER WILL REQUIRE TEMPORARY PAVEMENT MARKINGS OF PAINT, BOTH YELLOW CENTERLINE AND WHITE EDGE LINES AND WILL BE CONSIDERED PART OF ITEM 627.78.

77. REMOVAL OF SIGN BASE, DRAINAGE, EXISTING WALLS, SHRUBS, ETC AS SHOWN ON THE PLANS SHALL BE INCIDENTAL TO THE PROJECT AND NO SEPARATE PAYMENT WILL BE MADE.

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

GENERAL NOTES

SHEET NUMBER
9
OF 102

Filename: ...\highway\MSTA\009_GenNotes.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

DRIVEWAYS & ENTRANCES

LOCATION	SIDE	DESCRIPTION	OPENING
13+15 TO 15+04	LT	PAVED ENTRANCE	189 FT
14+05	RT	PAVED ENTRANCE	27 FT
15+50	RT	PAVED ENTRANCE	34 FT
16+28	LT	PAVED ENTRANCE	26 FT
16+42	RT	GRAVEL ENTRANCE	35 FT
17+66	LT	PAVED ENTRANCE	26 FT
17+71	RT	PAVED ENTRANCE	26 FT
18+45	LT	PAVED ENTRANCE	36 FT
18+55	LT	PAVED ENTRANCE	36 FT
18+55	RT	PAVED ENTRANCE	26 FT
20+24	RT	PAVED ENTRANCE	29 FT
20+62	LT	PAVED ENTRANCE	26 FT
20+92	RT	PAVED ENTRANCE	26 FT
21+03	LT	PAVED ENTRANCE	26 FT
21+60	LT	PAVED ENTRANCE	26 FT
22+00	LT	PAVED ENTRANCE	26 FT
22+00	RT	PAVED ENTRANCE	45 FT
22+45	RT	PAVED ENTRANCE	26 FT
22+53	RT	PAVED ENTRANCE	38 FT
22+63	LT	PAVED ENTRANCE	26 FT
23+62	LT	PAVED ENTRANCE	36 FT
24+13	LT	FIELD ENTRANCE	26 FT
27+28	LT	PAVED ENTRANCE	26 FT
28+40	LT	PAVED ENTRANCE	30 FT
33+75	LT	PAVED ENTRANCE	26 FT
35+37	LT	PAVED ENTRANCE	35 FT
36+80	LT	PAVED ENTRANCE	39 FT
38+40	RT	PAVED ENTRANCE	39 FT
38+57	LT	PAVED ENTRANCE	26 FT
38+92 TO 39+65	LT	PAVED ENTRANCE	73 FT
42+41	LT	PAVED ENTRANCE	38 FT
42+70	LT	PAVED ENTRANCE	19 FT
43+65	LT	PAVED ENTRANCE	30 FT
43+93	RT	PAVED ENTRANCE	77 FT
44+30	LT	PAVED ENTRANCE	33 FT
44+79	LT	PAVED ENTRANCE	31 FT
45+32	LT	PAVED ENTRANCE	35 FT
45+50	RT	PAVED ENTRANCE	66 FT
46+09	LT	PAVED ENTRANCE	30 FT
46+83	LT	PAVED ENTRANCE	45 FT
48+60	LT	PAVED ENTRANCE	65 FT
48+76	RT	PAVED ENTRANCE	36 FT
49+93	LT	PAVED ENTRANCE	64 FT
51+35	RT	PAVED ENTRANCE	50 FT
52+00	LT	PAVED ENTRANCE	65 FT
56+56	RT	PAVED ENTRANCE	26 FT
57+80	RT	PAVED ENTRANCE	26 FT
58+50	LT	PAVED ENTRANCE	50 FT
61+35	RT	FIELD ENTRANCE	26 FT
62+00	LT	PAVED TRAIL	10 FT
62+22	LT	PAVED ENTRANCE	42 FT
62+37	RT	PAVED ENTRANCE	27 FT
63+20	LT	PAVED ENTRANCE	42 FT
64+50	LT	PAVED ENTRANCE	65 FT
65+00	RT	PAVED ENTRANCE	69 FT
66+50	LT	PAVED ENTRANCE	42 FT
67+83	LT	PAVED ENTRANCE	42 FT
68+65	LT	PAVED ENTRANCE	42 FT
69+28	LT	PAVED ENTRANCE	53 FT
70+41	LT	PAVED ENTRANCE	42 FT
71+00	RT	GRAVEL ENTRANCE	33 FT
71+20	LT	PAVED ENTRANCE	57 FT
71+73	RT	GRAVEL ENTRANCE	26 FT
72+00 TO 72+90	LT	PAVED ENTRANCE	90 FT
72+80	RT	PAVED ENTRANCE	26 FT
73+40 TO 74+58	LT	PAVED ENTRANCE	118 FT
74+35	RT	PAVED ENTRANCE	27 FT
75+34	LT	PAVED ENTRANCE	51 FT
75+88	RT	PAVED ENTRANCE	37 FT

ITEM 201.11 - CLEARING

STATION	TO STATION
9+10	TO 12+89, LT.
10+71	TO 11+85, RT.
12+51	TO 13+35, RT.
15+79	TO 16+34, LT.
15+81	TO 15+97, RT.
24+24	TO 26+77, LT.
26+00	TO 28+58, RT.
27+67	TO 27+89, LT.
30+54	TO 31+77, RT.
30+36	TO 32+08, LT.
39+59	TO 40+27, RT.
47+72	TO 48+27, LT.
52+40	TO 52+75, RT.
53+78	TO 55+13, LT.
55+23	TO 57+96, LT.
54+38	TO 55+66, RT.
57+43	TO 57+72, RT.
64+64	TO 66+18, LT.
65+53	TO 70+42, RT.
300+60	TO 300+99, LT.

ITEM 201.23 - REMOVE SINGLE TREE TOP ONLY

STATION	DESCRIPTION
25+90, 32' LT.	20" OAK
25+93, 32' LT.	16" OAK
25+97, 32' LT.	16" ASH
26+54, 37' RT.	20" PINE
29+29, 30' LT.	26" SPRUCE
29+47, 29' LT.	14" SPRUCE
29+63, 29' LT.	14" SPRUCE
29+72, 30' LT.	12" SPRUCE
29+80, 30' LT.	14" SPRUCE
29+88, 30' LT.	12" SPRUCE
29+97, 30' LT.	12" SPRUCE
30+56, 27' LT.	24" PINE
30+68, 24' LT.	14" PINE
32+61, 23' LT.	22" MAPLE
59+14, 75' RT.	18" PINE
59+17, 58' RT.	24" PINE

ITEM 201.24 - REMOVE STUMP

STATION	DESCRIPTION	STATION	DESCRIPTION
25+90, 32' LT.	20" OAK	26+27, 31' RT.	STUMP
25+93, 32' LT.	16" OAK	71+28, 31' RT.	14" STUMP
25+97, 32' LT.	16" ASH	71+29, 29' RT.	14" STUMP
26+54, 37' RT.	20" PINE	71+36, 29' RT.	16" STUMP
29+29, 30' LT.	26" SPRUCE	71+42, 30' RT.	12" STUMP
29+47, 29' LT.	14" SPRUCE	71+49, 30' RT.	12" STUMP
29+63, 29' LT.	14" SPRUCE	71+59, 29' RT.	16" STUMP
29+72, 30' LT.	12" SPRUCE		
29+80, 30' LT.	14" SPRUCE		
29+88, 30' LT.	12" SPRUCE		
29+97, 30' LT.	12" SPRUCE		
30+56, 27' LT.	24" PINE		
30+68, 24' LT.	14" PINE		
32+61, 23' LT.	22" MAPLE		
59+14, 75' RT.	18" PINE		
59+17, 58' RT.	24" PINE		

ITEM 527.303 - ENERGY ABSORBING SYSTEM (ET-PLUS)

STATION	TO STATION	LENGTH
8+67.50, 25.40' LT.	9+05.00, 25.40' LT.	37.50 LF
11+59.76, 16.17' RT.	11+97.28, 16.00' RT.	37.50 LF
12+37.40, 22.00' LT.	12+74.90, 22.00' LT.	37.50 LF
18+76.87, 22.00' LT.	19+14.26, 22.00' LT.	37.50 LF
20+01.76, 22.00' LT.	20+39.26, 22.00' LT.	37.50 LF
29+95.20, 22.25' LT.	30+31.80, 22.00' LT.	37.50 LF
37+08.94, 23.45' LT.	37+46.65, 23.50' LT.	37.50 LF
68+90.87, 22.00' RT.	69+28.37, 22.00' RT.	37.50 LF
301+21.70, 10.06' LT.	301+59.18, 8.66' LT.	37.50 LF

ITEM 606.23 - GUARDRAIL TYPE 3C - SINGLE RAIL

STATION	TO STATION	LENGTH
13+91.99, 23.96' RT.	13+93.21, 36.39' RT.	12.50 LF
15+71.05, 22.00' LT.	16+21.85, 22.00' LT.	50.00 LF
15+66.31, 36.46' RT.	15+66.34, 23.96' RT.	12.50 LF
15+74.20, 16.00' RT.	16+23.64, 16.00' RT.	50.00 LF
16+31.50, 27.25' RT.	16+32.73, 36.39' RT.	12.50 LF
16+32.73, 26.87' LT.	16+39.93, 37.75' LT.	12.50 LF
24+35.79, 22.00' LT.	26+32.15, 22.00' LT.	200.00 LF
30+31.80, 22.00' LT.	33+46.85, 22.00' LT.	312.50 LF
54+12.65, 16.00' LT.	57+83.56, 16.00' LT.	368.75 LF
500+46.06, 18.64' LT.	501+08.56, 18.63' LT.	62.50 LF
54+56.28, 22.00' RT.	55+55.64, 22.00' RT.	100.00 LF
58+04.86, 27.39' LT.	58+09.93, 38.85' LT.	12.50 LF
64+76.50, 41.56' LT.	64+80.44, 29.69' LT.	12.50 LF
64+99.42, 16.00' LT.	66+11.93, 16.00' LT.	112.50 LF
65+78.62, 22.00' RT.	68+90.87, 22.00' RT.	312.50 LF
66+27.98, 31.85' LT.	66+28.10, 44.35' LT.	12.50 LF
300+26.20, 19.63' LT.	301+21.70, 10.06' LT.	112.50 LF

ITEM 606.234 - GUARDRAIL TYPE 3C - SINGLE RAIL, 7' POSTS

STATION	TO STATION	LENGTH
9+05.00, 25.40' LT.	12+37.40, 22.00' LT.	337.50 LF
11+97.28, 16.00' RT.	13+84.13 16.00' RT.	187.50 LF
19+14.26, 22.00' LT.	20+01.76, 22.00' LT.	87.50 LF

ITEM 606.231 - GUARDRAIL - TYPE 3C - 15' RADIUS OR LESS

STATION	TO STATION	LENGTH	RADIUS
13+84.13, 16.00' RT.	13+91.99, 23.96' RT.	12.50 LF	8.00 LF
15+55.69, 38.35' LT.	15+71.05, 22.00' LT.	25.00 LF	15.00 LF
15+66.34, 23.96' RT.	15+74.20, 16.00' RT.	12.50 LF	8.00 LF
16+23.64, 16.00' RT.	16+31.50, 23.96' RT.	12.50 LF	8.00 LF
16+21.85, 22.00' LT.	16+32.73, 26.87' LT.	12.50 LF	15.00 LF
24+20.85, 38.44' LT.	24+35.79, 22.00' LT.	25.00 LF	15.00 LF

ITEM 609.31 - CURB TYPE 3, MOLD 2 (4" REVEAL) - UNDER GUARDRAIL

STATION	TO STATION	LENGTH	RADIUS
54+12.65, 16.00' LT.	56+24.02, 16.00' LT.	210.37 LF	3384.00 LF
56+24.02, 16.00' LT.	57+25.19, 16.00' LT.	100.43 LF	2184.00 LF

ITEM 606.232 - GUARDRAIL - TYPE 3C - OVER 15' RADIUS

STATION	TO STATION	LENGTH	RADIUS
26+32.15, 22.00' LT.	26+72.21, 45.95' LT.	50.00 LF	50.00 LF
33+46.85, 22.00' LT.	33+66.49, 35.52' LT.	25.00 LF	20.00 LF
53+78.32, 29.37' LT.	54+12.65, 16.00' LT.	50.00 LF	50.00 LF
55+55.64, 22.00' RT.	55+71.34, 37.90' RT.	25.00 LF	16.00 LF
57+83.56, 16.00' LT.	58+04.86, 27.39' LT.	25.00 LF	25.00 LF
64+80.44, 29.69' LT.	64+99.42, 16.00' LT.	25.00 LF	20.00 LF
66+11.93, 16.00' LT.	66+27.98, 31.85' LT.	25.00 LF	16.00 LF
65+63.84, 39.01' RT.	65+78.62, 22.00' RT.	25.00 LF	16.00 LF
500+20.50, 41.19' LT.	500+46.06, 18.64' LT.	37.50 LF	25.00 LF
300+11.56, 36.07' LT.	300+26.20, 19.63' LT.	25.00 LF	30.00 LF

ITEM 606.265 - TERMINAL END - SINGLE RAIL

STATION
13+93.21, 36.39' RT.
15+55.69, 38.35' LT.
15+66.31, 36.46' RT.
16+32.73, 36.39' RT.
16+39.93, 37.75' LT.
24+20.85, 38.44' LT.
26+72.21, 45.95' LT.
33+66.49, 35.52' LT.
53+78.32, 29.37' LT.
55+71.34, 37.90' RT.
58+09.93, 38.85' LT.
64+76.50, 41.56' LT.
65+63.84, 39.01' RT.
66+28.10, 44.35' LT.

GUARDRAIL - REMOVE & DISPOSE

STATION	TO STATION	LENGTH
26+52.8, LT.	26+91.5, LT.	39.8 LF
65+73.4, RT.	66+49.8, RT.	77.3 LF
65+20.5, LT.	66+13.8, LT..	102.4 LF

ITEM 607.163 - CHAIN LINK FENCE - 4' PVC COATED

STATION	TO STATION	LENGTH
65+43.89, 30.31' LT.	65+99.63, 30.65' LT.	55.74 LF
65+80.10, 27.86' RT.	66+35.82, 28.06' RT.	55.80 LF

ITEM 608.26 - CURB RAMP DETECTABLE WARNING FIELD

STATION	SF
36+10, LT.	12
36+10, RT.	12
37+33, LT.	12
38+29, LT.	12
42+16, LT.	12
42+75, LT.	12
44+13, LT.	14
53+75, LT.	20
53+82, RT.	34
54+58, RT.	12
59+02, RT.	12
59+90, RT.	12
61+75, LT.	40
61+80, RT.	20

GP Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER RHOBE MOULTON			
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

CONSTRUCTION NOTES

SHEET NUMBER

10a

OF 102

Filename: ...\00\highway\MSTA\010_Notes.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

ITEM 610.08 - PLAIN RIPRAP

STATION	TO STATION	CY
10+00, RT.	11+94, RT.	92
12+50, RT.	12+56, RT.	6
15+85, LT.	16+08, LT.	25
15+75, RT.	16+22, RT.	86
16+71, RT.	17+44, RT.	27
54+47, RT.	55+39, RT.	77
54+79, RT.	54+89, RT.	4
54+93, LT.	55+16, LT.	7
55+08, LT.	55+23, LT.	4
57+25, LT.	57+32, LT.	11
65+38, LT.	65+57, LT.	17
65+75, RT.	65+95, RT.	18
66+25, RT.	66+40, RT.	18
300+45, LT.	300+66, LT.	8

ITEM 610.09 - HAND LAID RIPRAP

STATION	TO STATION	CY
18+76, LT.	20+40, LT.	115

ITEM 610.18 - STONE DITCH PROTECTION

STATION	TO STATION	CY
12+00, RT.	12+68, RT.	16
12+81, RT.	13+50, RT.	16
16+69, RT.	17+42, RT.	32
54+00, LT.	54+60, LT.	24
54+46, RT.	54+80, RT.	8
54+96, RT.	55+62, RT.	16
65+00, LT.	65+20, LT.	8
66+40, RT.	68+52, RT.	48

ITEM 613.319 - EROSION CONTROL BLANKET

STATION	TO STATION	SY
13+50, RT.	13+75, RT.	16
14+35, RT.	15+25, RT.	60
29+50, RT.	36+00, RT.	433
37+00, RT.	38+10, RT.	73
60+75, RT.	61+10, RT.	23
61+60, RT.	61+85, RT.	16

ITEM 627.733 - 4" WHITE OR YELLOW PAINTED PAVEMENT MARKING LINE

1. FINAL STRIPING SHALL NOT COMMENCE UNTIL 10 DAYS HAVE ELAPSED FROM THE COMPLETION OF SURFACE PAVEMENT AND SHALL BE COMPLETED WITHIN 20 DAYS OF THE COMPLETION OF SURFACE PAVEMENT. UNLESS OTHERWISE DIRECTED, FAILURE TO COMPLY SHALL RESULT IN A TRAFFIC CONTROL VIOLATION.

2. ONCE CONSTRUCTION IS COMPLETE, MAINTENANCE OF TRAFFIC CONTROL DEVICES (652.36) SHALL NOT BE PAID WHILE WAITING TO FINAL STRIPE.

3. ONCE CONSTRUCTION IS COMPLETE, LIQUIDATED DAMAGES SHALL NOT BE CHARGED WHILE WAITING TO FINAL STRIPE.

ITEM 627.78 - TEMPORARY 4" PAINTED PAVEMENT MARKING, WHITE OR YELLOW

1. TEMPORARY CENTER LINES SHALL BE PAINTED ON ALL MATCHED PAVEMENT WITHIN ONE WEEK.

2. TEMPORARY EDGE LINES SHALL BE PAINTED ON ALL PAVEMENT LAYERS WITHIN FOUR WEEKS.

3. ALL TEMPORARY LINES SHALL BE PAINTED PRIOR TO FINAL STRIPING.

4. MULTI-LANE SECTIONS, TRUCK LANES, AND MILLED SURFACES SHALL BE STRIPED DAILY ON ALL MATCHED PAVEMENT LAYERS.

5. TOMS SHALL BE USED ON ALL PAVEMENT LAYERS UNTIL TEMPORARY PAINT IS APPLIED.

6. TOMS SHALL BE REMOVED BEFORE FINAL STRIPING.

7. TOM REMOVAL SHALL BE ADDRESSED IN THE TRAFFIC CONTROL PLAN.

8. ONLY PAINTED TEMPORARY LINES WILL BE PAID UNDER THIS ITEM. TOMS SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT.

FINAL STRIPING

ROUTE 4/17 SHALL BE STRIPED AS 11' WIDE TRAVEL LANES AND 5' WIDE SHOULDERS. STRIPED CROSSWALKS WITH 6' WIDTH SHALL BE PROVIDED ON ROUTE 4/17 AT STA. 36+10, 44+20 AND 53+70. STRIPED CROSSWALKS WITH 6' WIDTH AT SIDE STREETS SHALL BE PROVIDED AT FRENCH FALLS LANE, EMERY STREET, LUDDEN DRIVE AND HYDE ROAD. A 10' WIDE STRIPED CROSSWALK AT STA. 61+80 SHALL BE PROVIDED. STRIPED CROSSWALKS SHALL BE BLOCK STYLE IN ACCORDANCE WITH THE CROSS WALK DETAIL SHOWN ON THE SPECIAL DETAILS MULTI-USE TRAIL CROSSING SHEET.

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

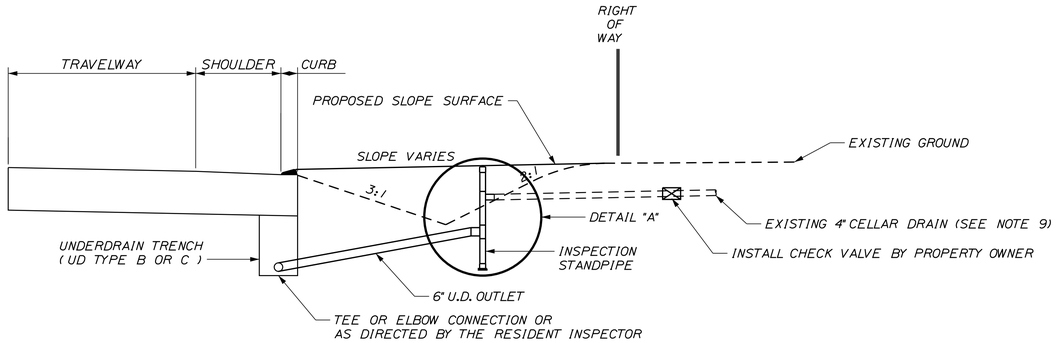
DATE

JAY
ROUTE 4\17

CONSTRUCTION NOTES

SHEET NUMBER
10b
OF 102

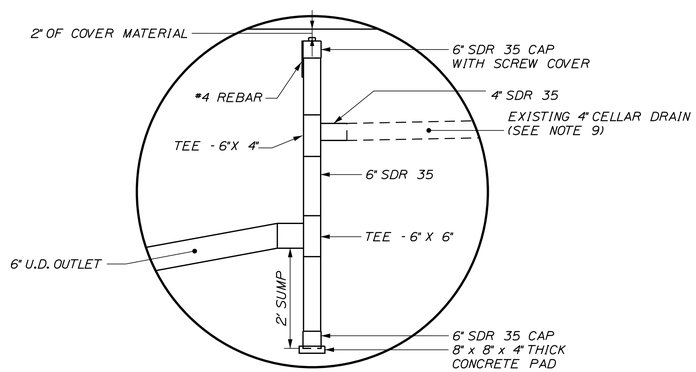
Filename: ...\00\highway\MSTA\010_Notes.dgn Division: HIGHWAY Username: bhovu Date:8/15/2014



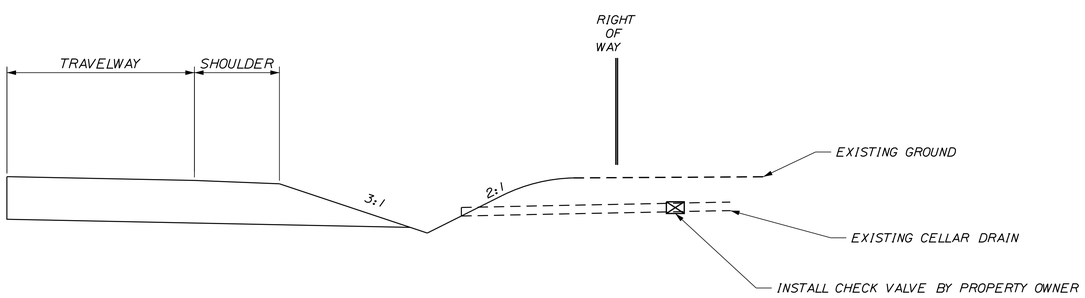
CELLAR DRAIN CONNECTION DETAIL: UNDERDRAIN SECTION

KNOWN LOCATIONS

STATION	OFFSET	DESCRIPTION
15+01	29' RT.	4" PVC
41+88	36' LT.	4" PIPE



DETAIL "A"
INSPECTION STANDPIPE



CELLAR DRAIN CONNECTION DETAIL: DITCH SECTION

CELLAR DRAIN NOTES

1. PAYMENT FOR CONNECTION OF THE EXISTING CELLAR DRAIN TO THE INSPECTION STANDPIPE SHALL BE INCIDENTAL TO THE ITEM NO. 801.141 OR 801.16.

2. PAYMENT FOR CONNECTION FROM THE INSPECTION STANDPIPE TO THE PROPOSED UNDERDRAIN SYSTEM SHALL BE A 6" UNDERDRAIN OUTLET. ITEM NO. 605.10. OR AS DIRECTED BY THE RESIDENT.

3. PAYMENT FOR CONNECTION FROM EXISTING CELLAR DRAIN TO DRAINAGE DITCH SHALL BE 6" UNDERDRAIN OUTLET PIPE. ITEM NO. 605.10. OR AS DIRECTED BY THE RESIDENT.

4. INSPECTION STANDPIPE SHALL HAVE A SOLID COVER AND BE INSTALLED WITHIN THE STATE'S RIGHT OF WAY.

5. A 3' LENGTH OF #4 REBAR SHALL BE PLACED ADJACENT TO STANDPIPE AND FLUSH WITH CAP. INSTALLATION OF THE REBAR SHALL BE INCIDENTAL TO ITEM NO. 801.141 OR 801.16.

6. A CHECK VALVE TO PREVENT BACK FLOW TO PROPERTY MAY BE INSTALLED. CHECK VALVE SHOULD BE INSTALLED AT THE UPSTREAM SIDE OF THE ROAD DRAINAGE AND OUTSIDE OF THE STATE'S RIGHT OF WAY. INSTALLATION OF CHECK VALVE SHALL BE THE RESPONSIBILITY OF THE PROPERTY OWNER.

7. THE STATION LOCATIONS MAY BE CHANGED TO FIT FIELD CONDITIONS. AS DIRECTED BY THE RESIDENT.

8. INVERTS AND SLOPES OF PIPES SHALL BE INSTALLED AS DIRECTED BY THE RESIDENT IN THE FIELD.

9. EXISTING CELLAR DRAIN SIZES MAY VARY. CONTRACTOR SHALL ADJUST INSPECTION STANDPIPE MATERIAL SIZES AS NEEDED TO MATCH EXISTING CELLAR DRAIN SIZES. PAYMENT SHALL BE INCIDENTAL TO 801 PAY ITEMS.

NOT TO SCALE

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

SPECIAL DETAILS
CELLAR DRAIN

SHEET NUMBER

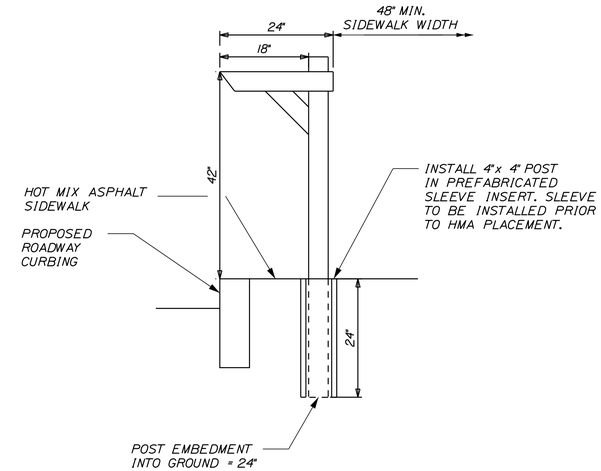
11

OF 102

Filename: ...\011_Typical_Cellar Drain Detail.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

30" x 24"
WHITE ON BROWN

MULTI-USE SIGN DETAIL



NOTES:

1. COORDINATE MAILBOX LOCATIONS WITH THE RESIDENT INSPECTOR.
2. PROVIDE SHOP DRAWING OF SLEEVE INSERTS TO RESIDENT INSPECTOR FOR APPROVAL. PRIOR TO PURCHASE.
3. MAILBOX POST AS DETAILED ABOVE WILL BE PAID FOR UNDER ITEM 606.47. SINGLE WOOD POST.
4. PAYMENT FOR SLEEVE INSERT TO BE CONSIDERED INCIDENTAL TO PAY ITEM 606.47.

MAILBOX POST DETAIL

NOT TO SCALE

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

PROJ. MANAGER	RHOBE MOULTON	BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

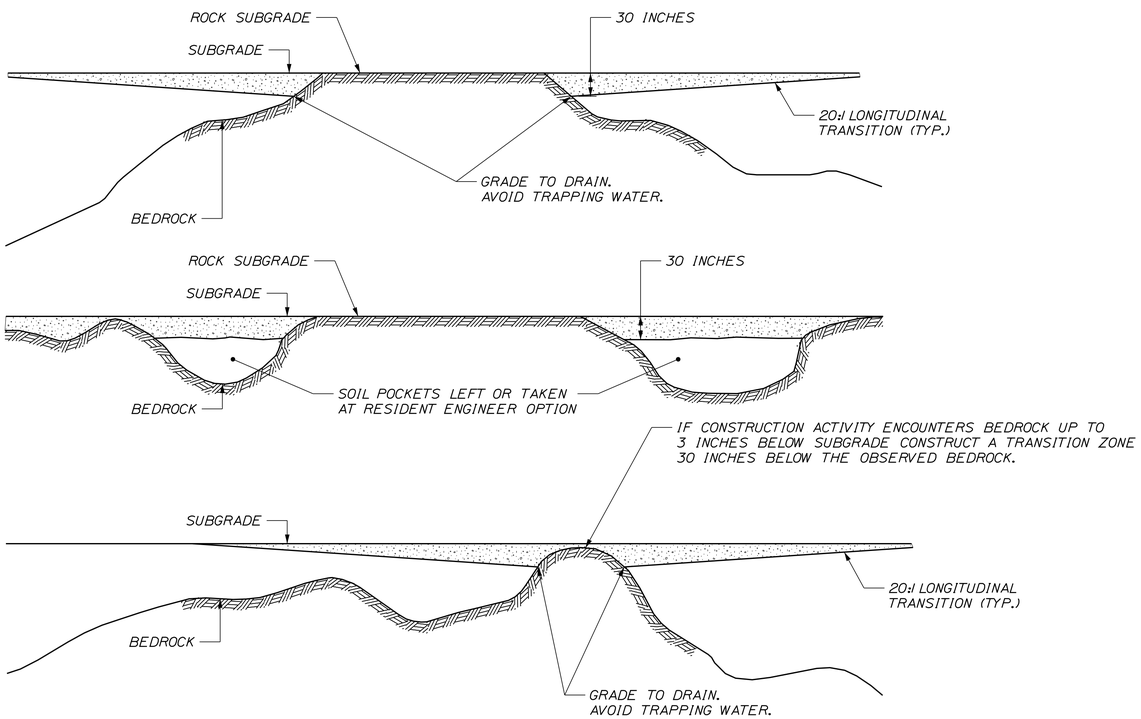
DATE

JAY
ROUTE 4\17

SPECIAL DETAILS
MISCELLANEOUS DETAILS

SHEET NUMBER
12a
OF 102

Filename: ...\MSTA\12a_Misc Details.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



IF A SOIL SECTION BETWEEN LEDGE SUBGRADE IS OF SUCH LENGTH THAT THE TRANSITION FROM EACH EDGE WOULD MEET, IT SHOULD BE TREATED AS AN EARTH POCKET.

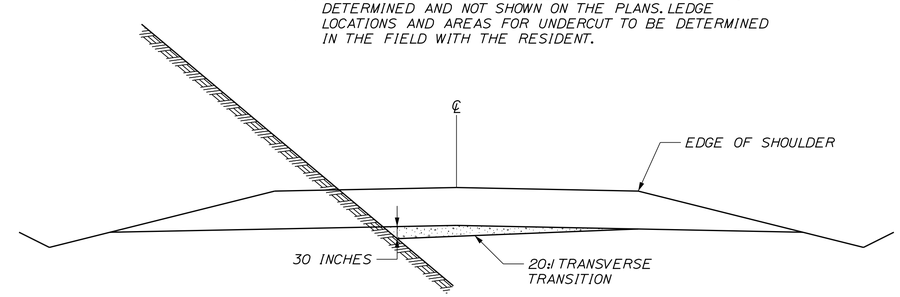
PROFILE OF UNDERCUT OF FROST SUSCEPTIBLE SOILS OVER LEDGE

LEGEND

- SOLID BEDROCK
- FROST SUSCEPTIBLE SOIL TO BE UNDERCUT AND REPLACED WITH NON FROST SUSCEPTIBLE MATERIAL
- FROST SUSCEPTIBLE SOIL

NOTES:

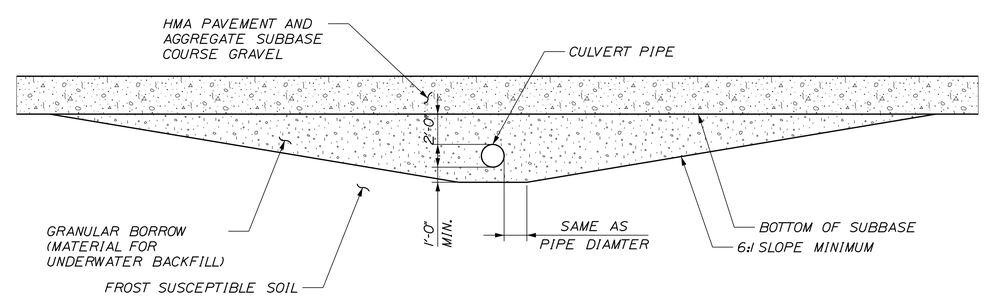
1. EXCAVATION OF THE TRANSITION ZONES SHALL BE PAID FOR AS COMMON EXCAVATION. THE CONTRACTOR SHALL REPLACE THE FROST SUSCEPTIBLE SOILS WITH GRAVEL BORROW AND SHALL BE PAID FOR UNDER THE GRAVEL BORROW PAY ITEM.
2. FOR POTENTIAL BEDROCK LOCATIONS, REFER TO GEOTECHNICAL REPORT. ACTUAL BEDROCK LOCATIONS WILL VARY.
3. REFER TO SOILS REPORT FOR ADDITIONAL TRANSITION ZONE DETAILS.
4. LOCATIONS FOR AREAS OF LEDGE TRANSITIONS ARE NOT DETERMINED AND NOT SHOWN ON THE PLANS. LEDGE LOCATIONS AND AREAS FOR UNDERCUT TO BE DETERMINED IN THE FIELD WITH THE RESIDENT.



UNDERCUT MUST BE DRAINED AND OUTLETTED PERIODICALLY USING LATERAL WEEP DRAINS.

TRANSITION SHOULD BE CONSTRUCTED FROM THE BOTTOM OF THE UNDERCUT EXTENDING TO A POINT WHERE A LINE PROJECTED DOWNWARD FROM THE EDGE OF SHOULDER INTERCEPTS SUBGRADE

TRANSVERSE UNDERCUT OF FROST SUSCEPTIBLE SOILS OVER LEDGE



CROSS CULVERT IN FROST SUSCEPTIBLE SOILS

NOT TO SCALE

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER	RHOBE MOULTON	BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

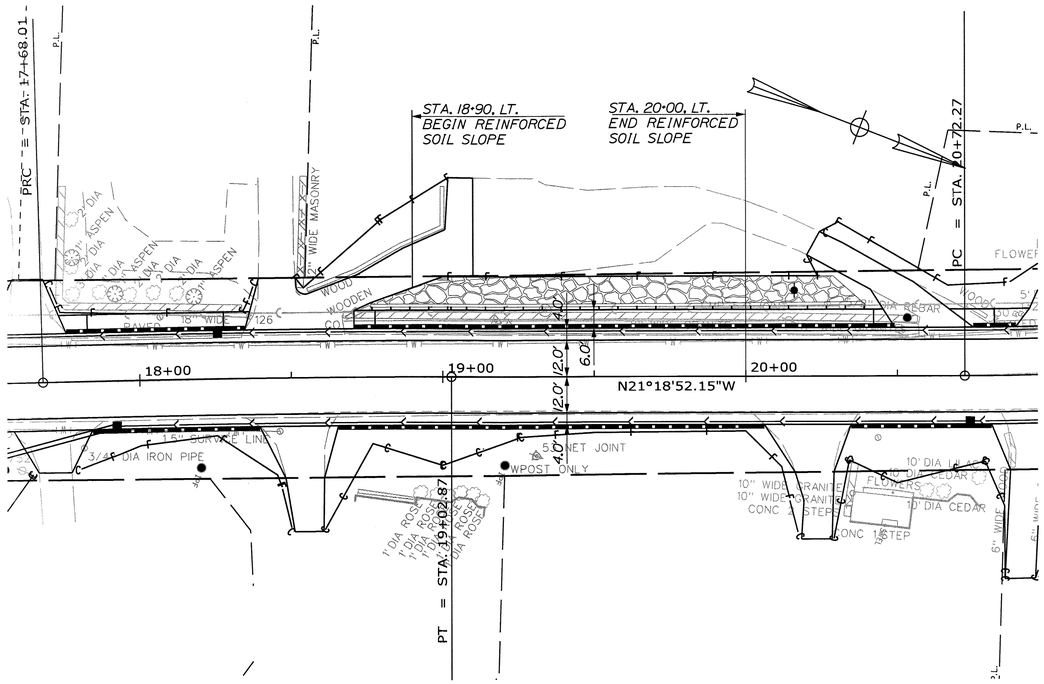
DATE

JAY
ROUTE 4\17

SPECIAL DETAILS
MISCELLANEOUS DETAILS

SHEET NUMBER
12b
OF 102

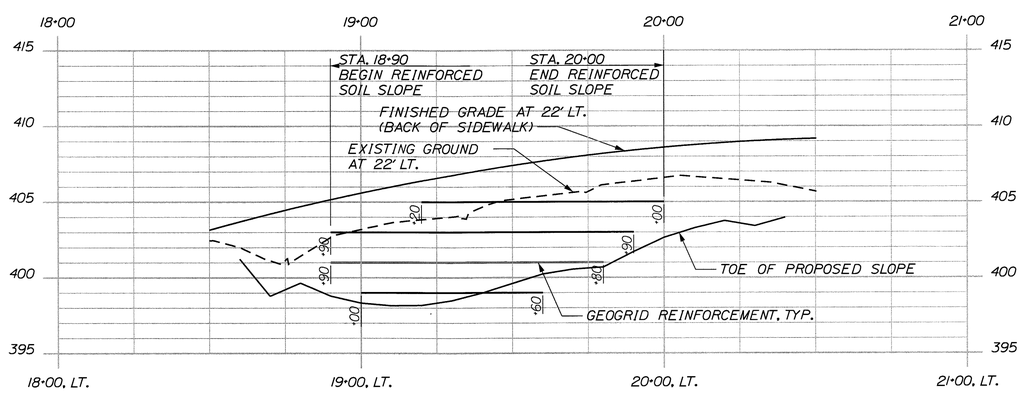
Filename: ...\MSTA\12b_Misc Details.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



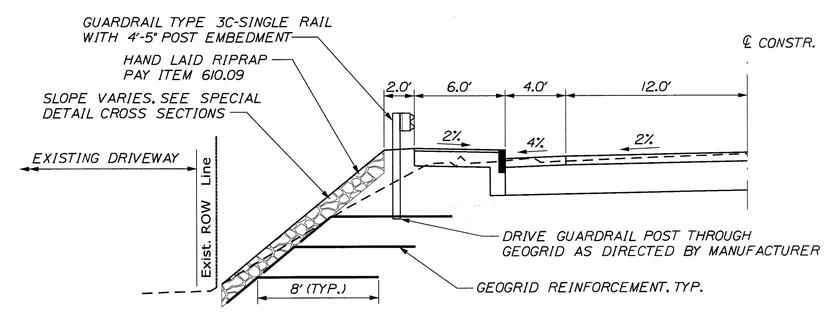
PLAN
SCALE: 1" = 25'

NOTES:

1. EITHER GEOGRID OR GEOTEXTILE REINFORCEMENT MAY BE USED AS DESCRIBED IN SPECIAL PROVISION 620. REINFORCEMENT GEOGRID. THE MATERIAL MAY BE PLACED EITHER PARALLEL OR PERPENDICULAR TO THE HIGHWAY CENTERLINE IF STRENGTH REQUIREMENTS ARE MET FOR THE DIRECTION IN WHICH THE MATERIAL IS PLACED.
2. REINFORCEMENT GRID OR FABRIC WILL BE PLACED AT EACH TWO FOOT LIFT, EMBEDDED AT LEAST 8-FEET INTO THE SLOPE AND COVERING THE FACE OF THE SLOPE BELOW EACH LIFT.
3. IF GEOGRID REINFORCEMENT IS USED, A LAYER OF SEPARATION GEOTEXTILE SHALL BE PLACED BETWEEN THE GEOGRID AND THE RIPRAP TO PREVENT MIGRATION OF FINES THROUGH THE RIPRAP.
4. RIPRAP IS AN INTEGRAL PART OF THIS STRUCTURE, AND IT SHOULD BE PLACED OVER EACH LIFT AS SLOPE CONSTRUCTION PROCEEDS. RIPRAP MUST BE PLACED NO LATER THAN IMMEDIATELY AFTER SLOPE CONSTRUCTION IS COMPLETED.
5. SEE SPECIAL CROSS SECTIONS FOR SLOPE AND GRADING REQUIREMENTS.



ELEVATION
SCALE: 1" = 25' H, 1" = 5' V



TYPICAL SECTION
SCALE: 1" = 5'

Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
15 Shaker Road
Gray, ME 04039
Engineering Excellence Since 1998
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

STATE OF MAINE
Kaleb Brechler
8581
LICENSED
PROFESSIONAL ENGINEER

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

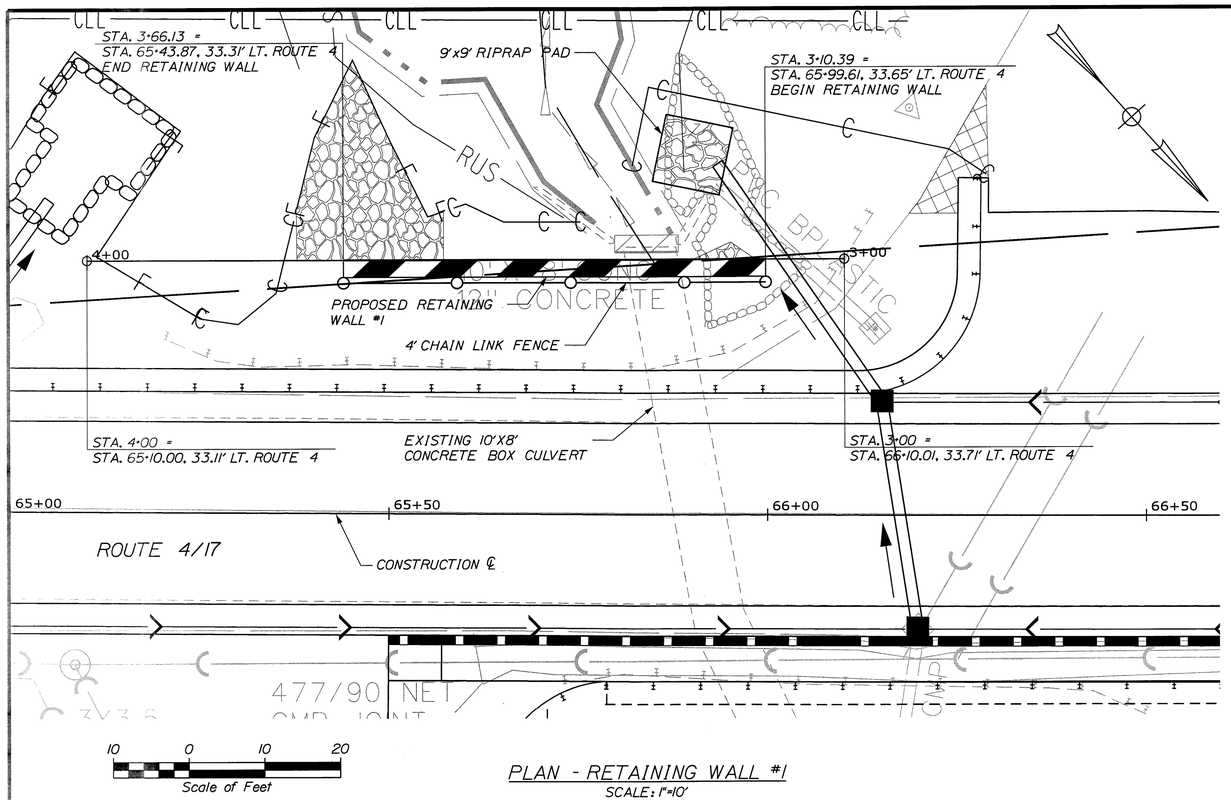
SIGNATURE
8581
P.E. NUMBER
8/13/2014
DATE

JAY
ROUTE 4\17

SPECIAL DETAILS
REINFORCED SOIL SLOPE

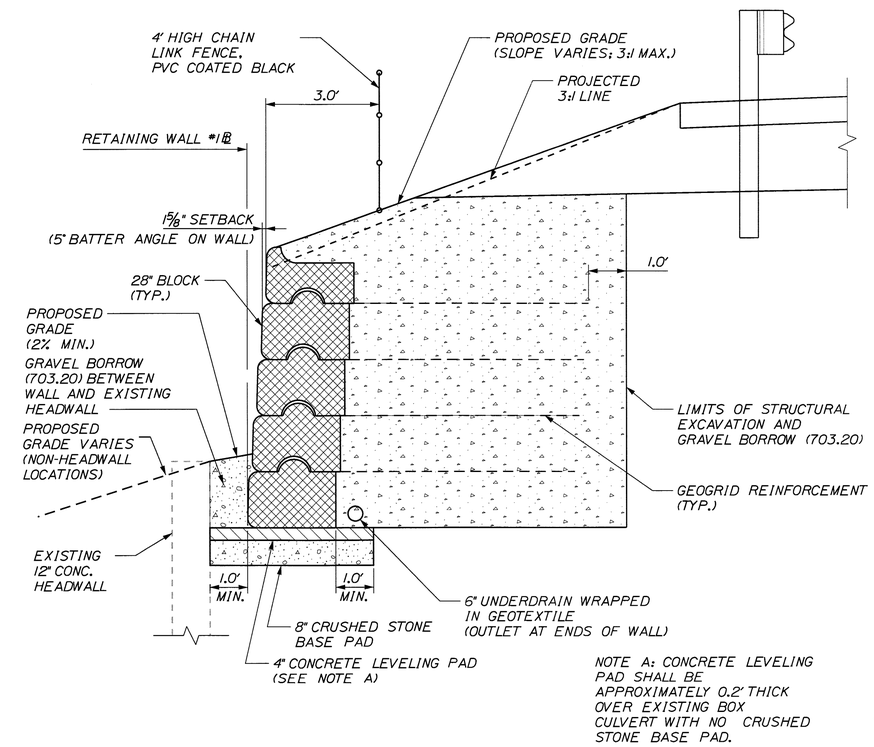
SHEET NUMBER
13
OF 102

Filename: ...\00\highway\MSTA\013_Wall.dgn Division: HIGHWAY Username: bhavu Date:8/13/2014



PLAN - RETAINING WALL #1

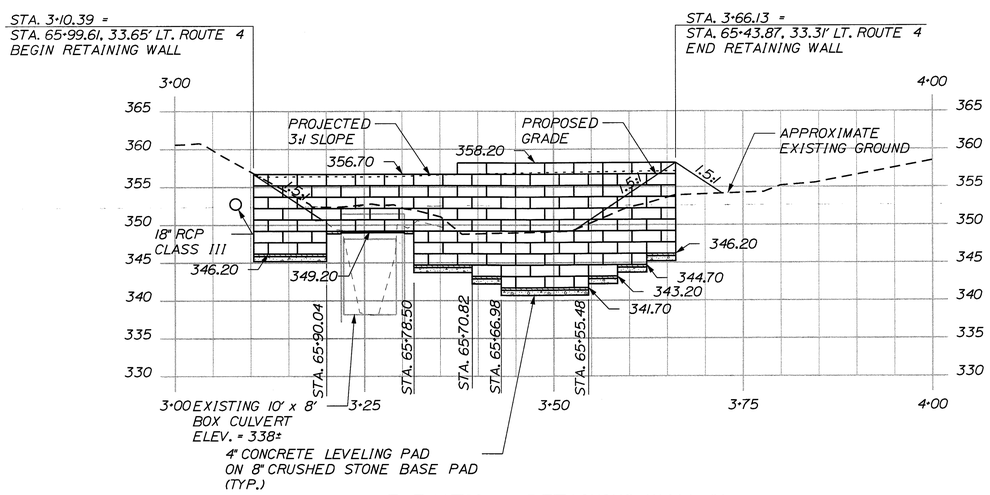
SCALE: 1"=10'



NOTE A: CONCRETE LEVELING PAD SHALL BE APPROXIMATELY 0.2' THICK OVER EXISTING BOX CULVERT WITH NO CRUSHED STONE BASE PAD.

TYPICAL SECTION - RETAINING WALL

NOT TO SCALE



ELEVATION - RETAINING WALL #1

SCALE: 1"=10'

GEOTECHNICAL NOTES

1. THE CONTRACTOR SHALL PROVIDE A PRECAST CONCRETE BLOCK GRAVITY WALL OR PRECAST AGGREGATE-FILLED GRAVITY WALL IN ACCORDANCE WITH SPECIAL PROVISION 635 FOR THE RELEVANT WALL SYSTEM. THE WALL SHALL BE DESIGNED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. AND THE DESIGN AND SHOP DRAWINGS SHALL BE SUBMITTED TO THE RESIDENT FOR REVIEW. PLAN DETAILS ARE SHOWN FOR ESTIMATING PURPOSES ONLY.
2. BACKFILL AND FOUNDATION SOIL PARAMETERS FOR USE IN THE SUBMITTED DESIGN SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION 635.
3. THE PRECAST CONCRETE BLOCK GRAVITY WALLS SHALL BE DESIGNED IN ACCORDANCE WITH THE AASHTO LFRD BRIDGE DESIGN SPECIFICATIONS. 2012 EDITION.
4. THE FACTORED BEARING PRESSURE FOR RETAINING WALLS SHALL NOT EXCEED THE FACTORED BEARING RESISTANCE FOR THE STRENGTH LIMIT STATE OF 2.4 KSF FOR RETAINING WALLS WITH BASE LESS THAN 10.5 FEET. THE FACTORED BEARING PRESSURE FOR THE SERVICE LIMIT STATE SHALL NOT EXCEED A FACTORED BEARING RESISTANCE OF 3 KSF.
5. ALL RETAINING WALLS SHALL HAVE REINFORCEMENT. UNREINFORCED GRAVITY WALLS WILL NOT BE ALLOWED AT ANY HEIGHT. CALCULATION OF THE ACTIVE EARTH PRESSURE COEFFICIENT ka SHALL INCLUDE EFFECTIVE SLOPE ON TOP OF THE WALL. WHICH MAY BE AS MUCH AS 3H:1V.
6. ALL BLOCKS AT THE ENDS OF THE WALLS MUST BE FINISHED ON THREE SIDES: THE FRONT, TOP AND EXPOSED END. BLOCKS WITH EXPOSED SURFACES AT THE ENDS AND TOP OF THE WALL MUST BE MANUFACTURED FOR THIS PURPOSE AND MUST BE FINISHED TO MATCH THE FACE OF THE BLOCKS.
7. A MINIMUM EMBEDMENT OF ONE FOOT IS REQUIRED IN THE DESIGN AND CONSTRUCTION OF THE PRECAST BLOCK GRAVITY WALL.
8. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF THE RETAINING WALLS WITH UTILITY COMPANIES IN AN EFFORT TO AVOID UTILITY IMPACTS.

Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
15 Shaker Road
Gray, ME 04039
Engineering Excellence Since 1998
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

STATE OF MAINE — Kaila Bhavsu — No. 8581 — LICENSED PROFESSIONAL ENGINEER

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

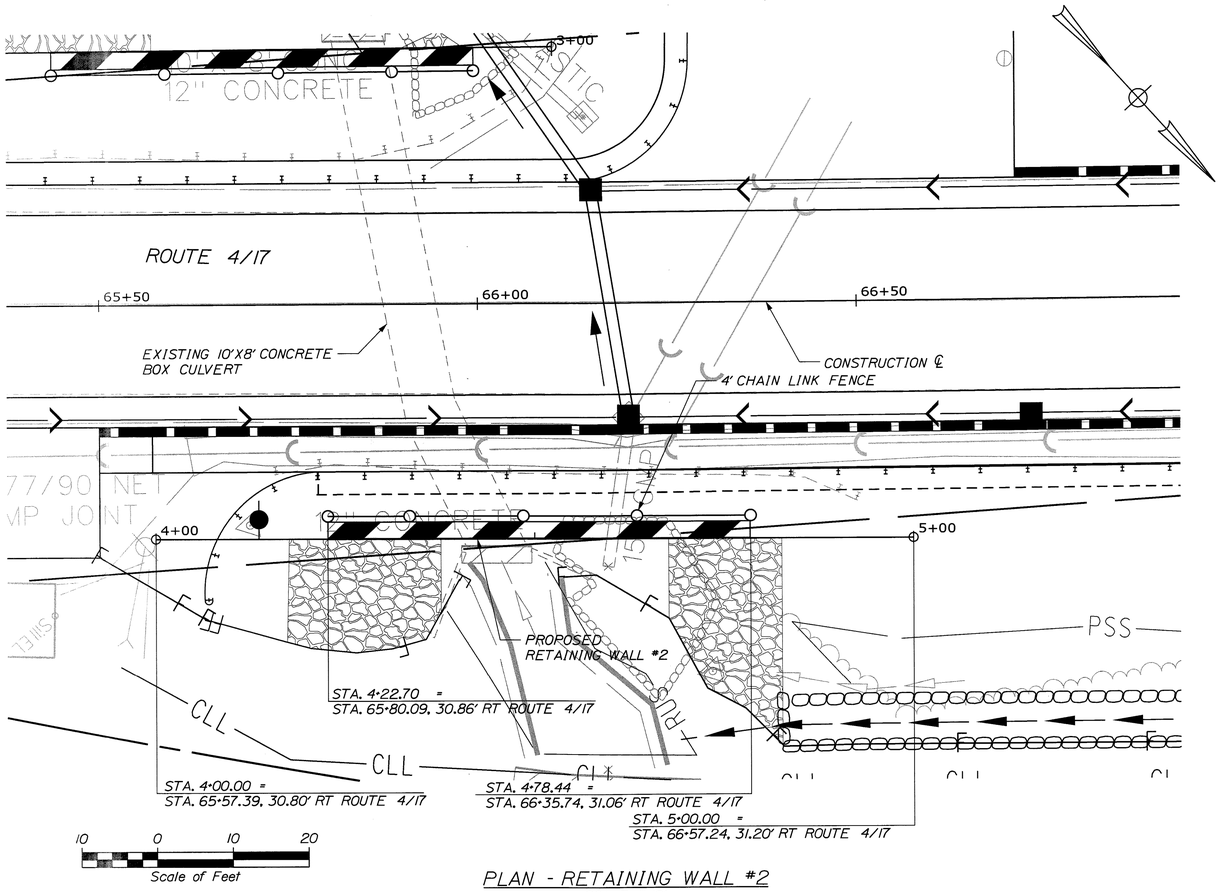
SIGNATURE
P.E. NUMBER 8581
8/12/2014
DATE

JAY
ROUTE 4\17

SPECIAL DETAILS
RETAINING WALL #1

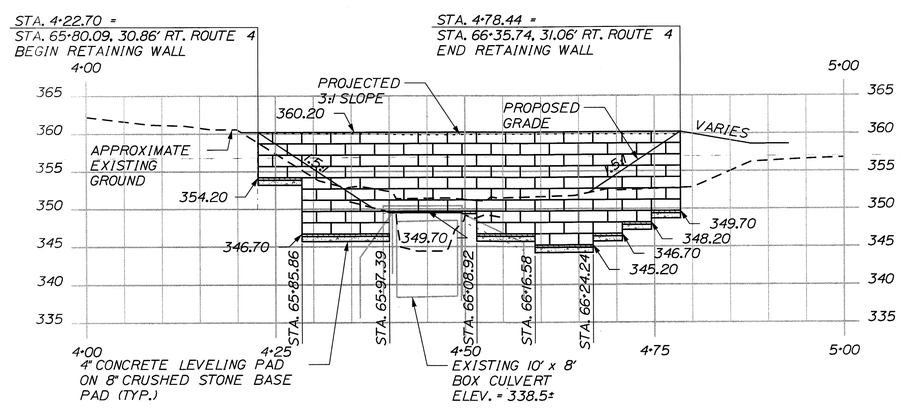
SHEET NUMBER
14
OF 102

Filename: ...\highway\MSTA\014_RWall_001.dgn Division: HIGHWAY Username: bhavu Date:8/13/2014



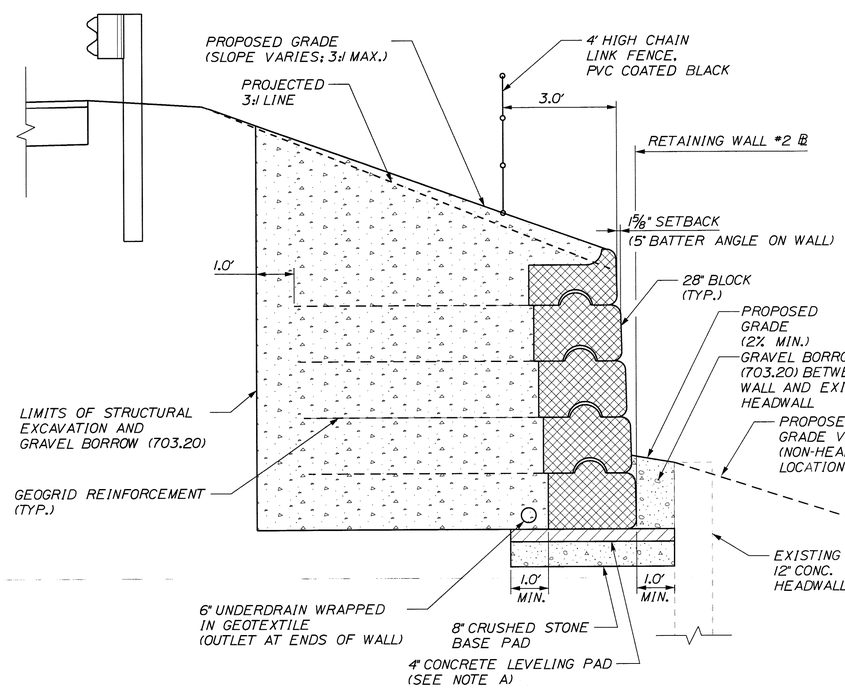
PLAN - RETAINING WALL #2

SCALE: 1"=10'



ELEVATION - RETAINING WALL #2

SCALE: 1"=10'



TYPICAL SECTION - RETAINING WALL

NOT TO SCALE

NOTE A: CONCRETE LEVELING PAD SHALL BE APPROXIMATELY 0.2' THICK OVER EXISTING BOX CULVERT WITH NO CRUSHED STONE BASE PAD.

NOTE: SEE PREVIOUS SHEET FOR GEOTECHNICAL NOTES.

GP Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

STATE OF MAINE — Kaila Bressette Vaughan — 25581 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE 25581	P.E. NUMBER	8/13/2014	DATE

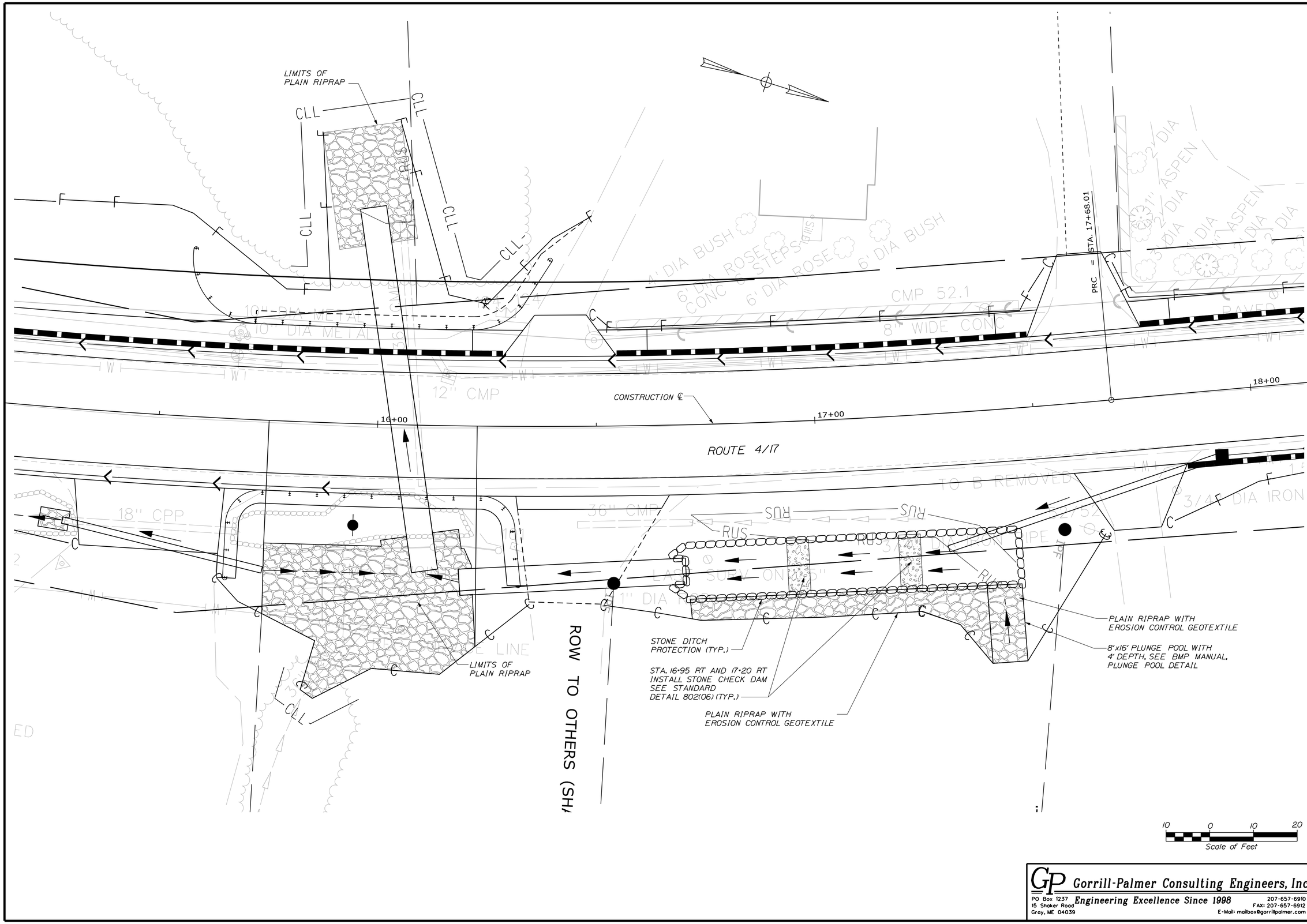
		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

JAY
ROUTE 4\17

SPECIAL DETAILS
RETAINING WALL #2

SHEET NUMBER
15
OF 102

Filename: ...\highway\MSTA\015_RWall_002.dgn Division: HIGHWAY Username: bhovu Date:8/13/2014



Filename: ...\MSTA\016_Special Details.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER	RHOBE MOULTON	BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

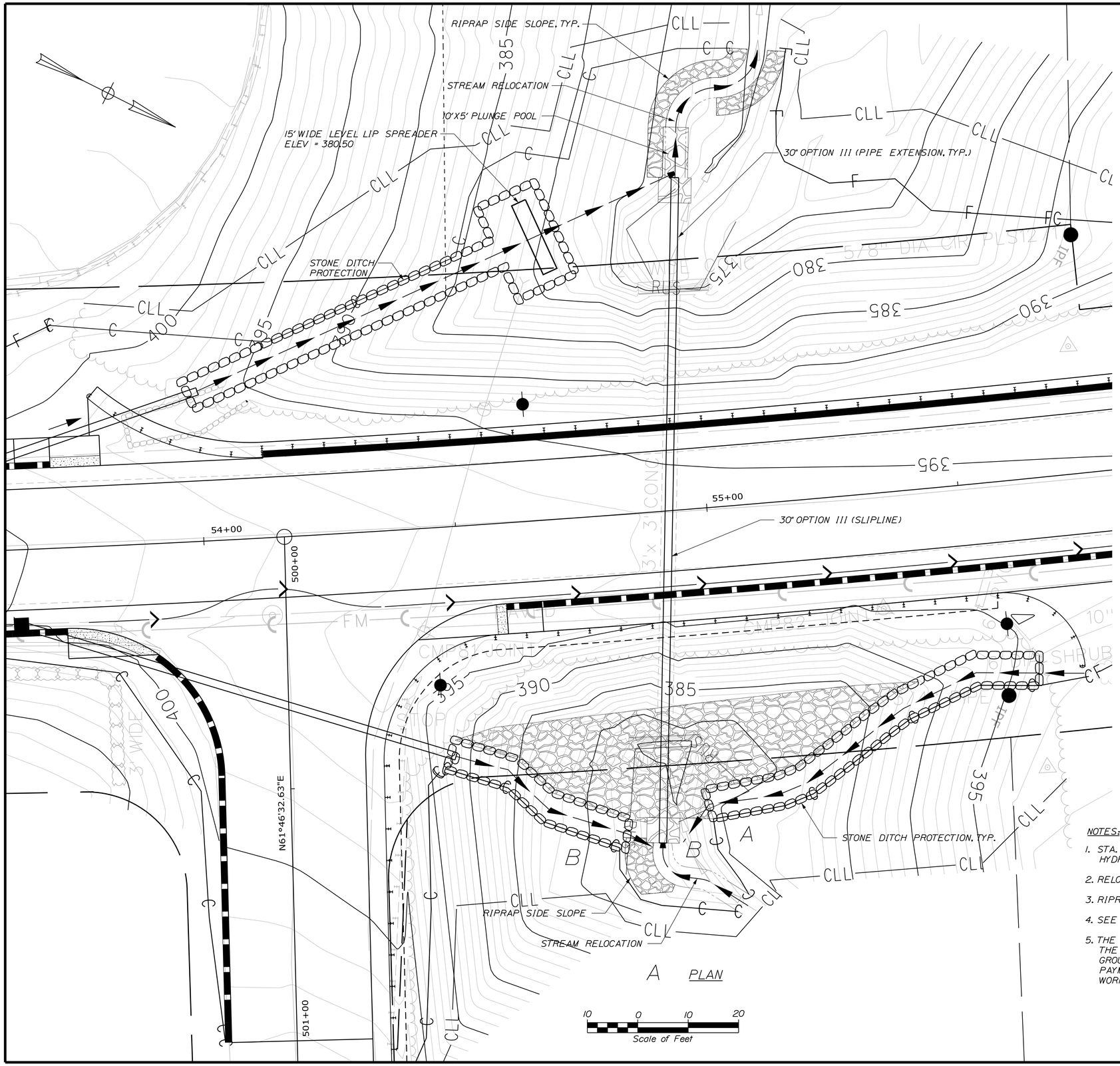
SPECIAL DETAILS
DRAINAGE IMPROVEMENTS #1

Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
15 Shaker Road
Gray, ME 04039
Engineering Excellence Since 1998
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

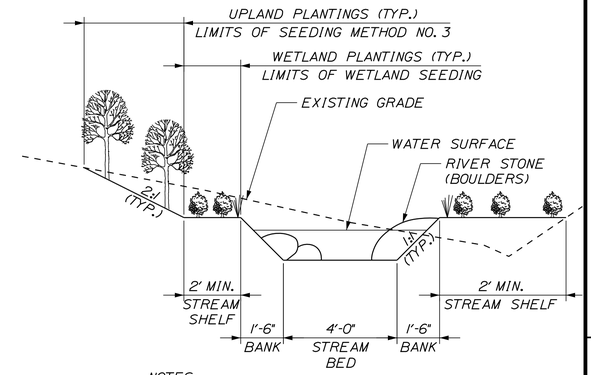
SHEET NUMBER

16

OF 102



A PLAN

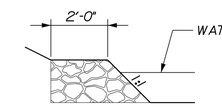


NOTES:

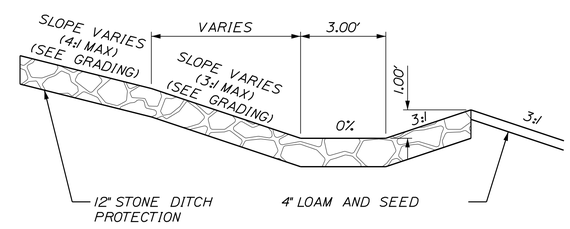
1. RIVER STONE (BOULDERS) SHALL BE PLACED RANDOMLY WITIN THE STREAM BED AND ON BANKS AND STREAM STONES SHALL BE PLACED ALONG STREAM BED AS DIRECTED BY THE RESIDENT (SEE SPECIAL PROVISION 610).

2. EXCAVATION FOR THE STREAM SHALL BE PAID FOR UNDER ITEM 203.20 COMMON EXCAVATION.

STREAM RELOCATION - LOOKING DOWNSTREAM
SECTION A-A



RIPRAP SIDE SLOPE
SECTION B-B



STONE DITCH PROTECTION
LEVEL LIP SPREADER

NOTES:

1. STA. 54+86.21, 65.60' RT. TO STA. 54+98.99, 65.78' LT. INSTALL 132' X 30" OPTION III WITH HYDROBELL INLET. SLIPLINE EXISTING 3'X3' BOX CULVERT.
2. RELOCATE STREAM AT INLET AND OUTLET AS SHOWN ON THE PLAN AND DETAILS.
3. RIPRAP INLET AND CONSTRUCT 10' x 5' RIPRAP PLUNGE POOL AT PIPE OUTLET.
4. SEE CROSS SECTIONS FOR ADDITIONAL INFORMATION.
5. THE CONTRACTOR SHALL FILL THE EXISTING SINK HOLES IN THE SLOPES ABOVE THE EXISTING HEADWALLS AT STA. 55+00. HEADWALLS TO REMAIN SHALL BE GROUTED TO ENSURE NO VOIDS WHEN THE EXTENDED SLOPE IS CONSTRUCTED. PAYMENT FOR GROUTING WORK SHALL BE INCIDENTAL TO THE 509.201 PAY ITEM. WORK SHALL BE COORDINATED AND APPROVED BY THE RESIDENT.

GP Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER RHOBE MOULTON	BY	DATE
DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS: 1		
REVISIONS: 2		
REVISIONS: 3		
REVISIONS: 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

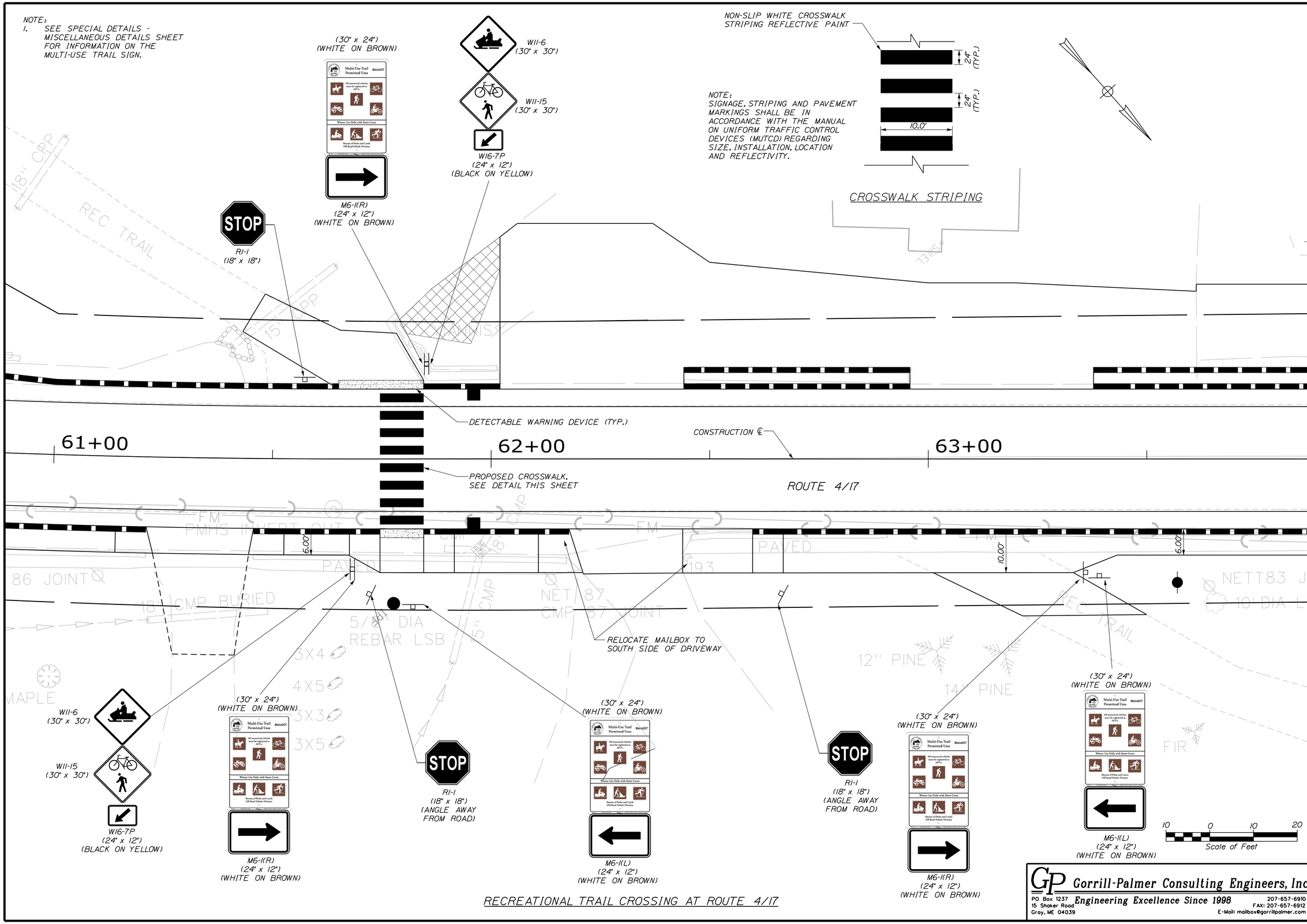
JAY
ROUTE 4\17

SPECIAL DETAILS
DRAINAGE IMPROVMENTS #2

SHEET NUMBER
17
OF 102

Filename: ...\MSTA\017_55+00Culvert.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

NOTE:
1. SEE SPECIAL DETAILS - MISCELLANEOUS DETAILS SHEET FOR INFORMATION ON THE MULTI-USE TRAIL SIGN.



RECREATIONAL TRAIL CROSSING AT ROUTE 4/17

GP Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

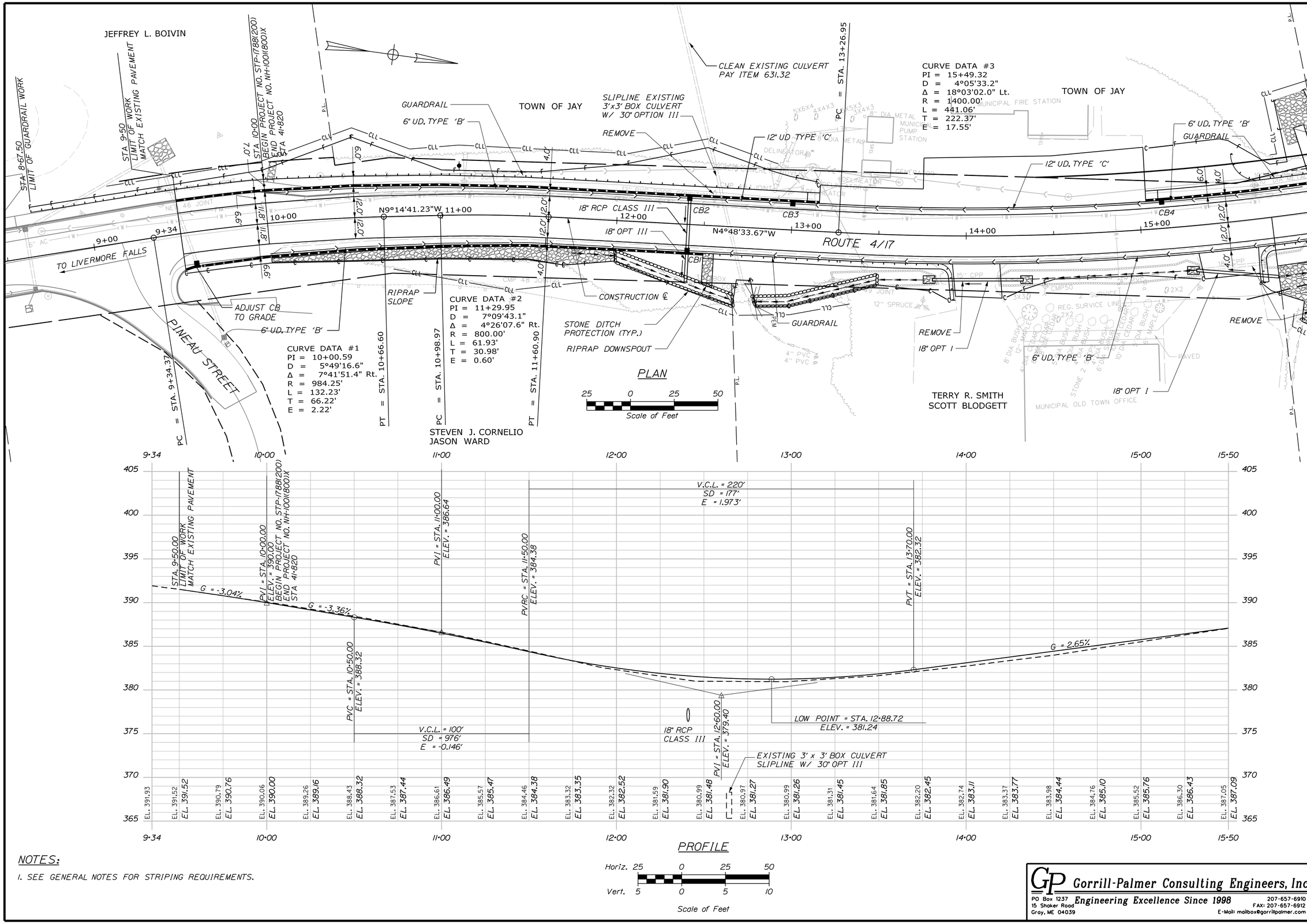
DATE

JAY
ROUTE 4\17

SPECIAL DETAILS
MULTI-USE TRAIL CROSSING

SHEET NUMBER
18
OF 102

Filename: ...\MSTA\018_SpecialDetails.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



NOTES:

1. SEE GENERAL NOTES FOR STRIPING REQUIREMENTS.

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

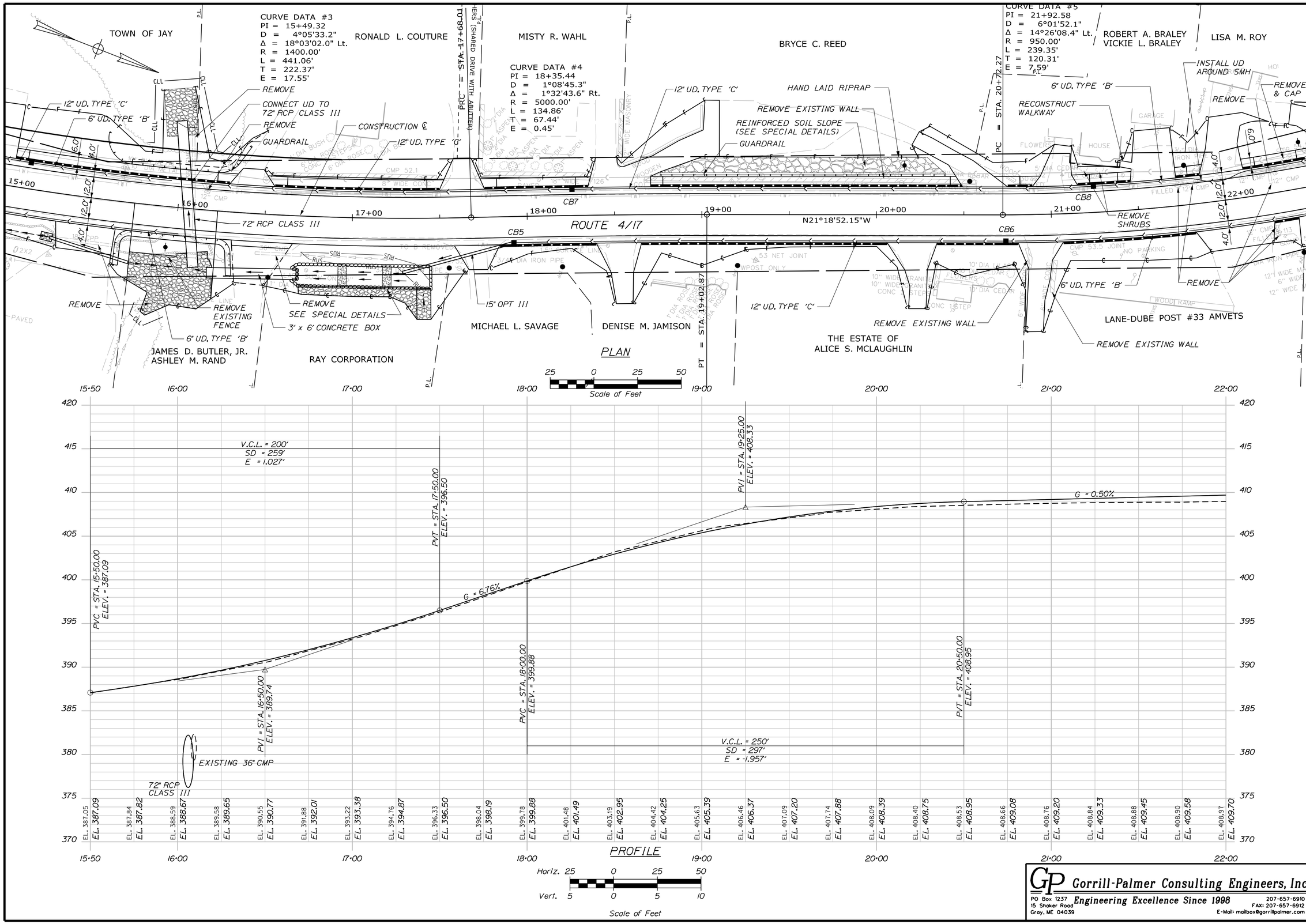
PLAN & PROFILE

SHEET NUMBER

19

OF 102

Filename: ...\highway\MSTA\019_HDPlan001.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

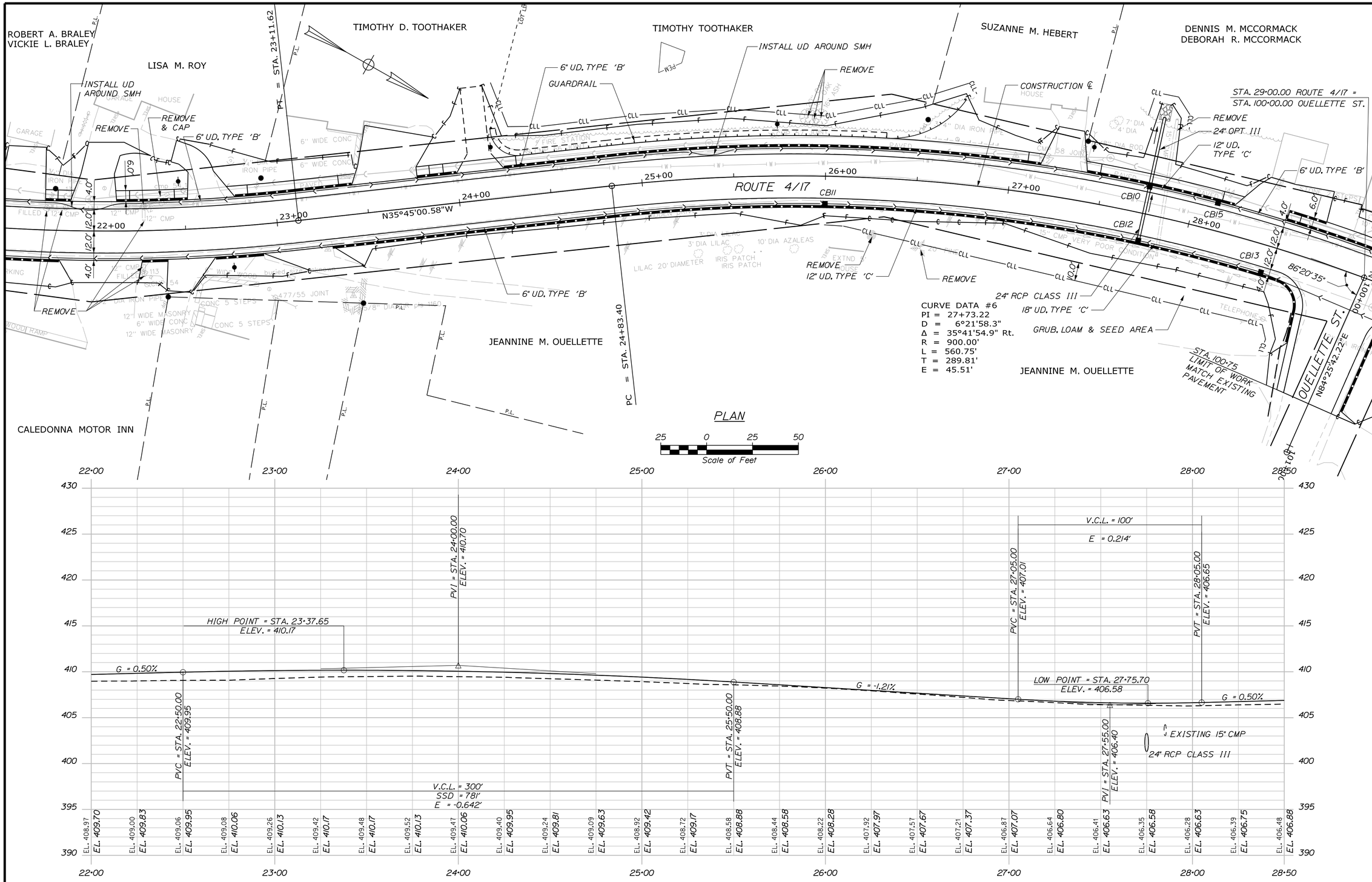
SIGNATURE
P.E. NUMBER
DATE

JAY
ROUTE 4\17

PLAN & PROFILE

SHEET NUMBER
20
OF 102

Filename: ...\highway\MSTA\020_HDPlan002.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

PLAN & PROFILE

SHEET NUMBER

21

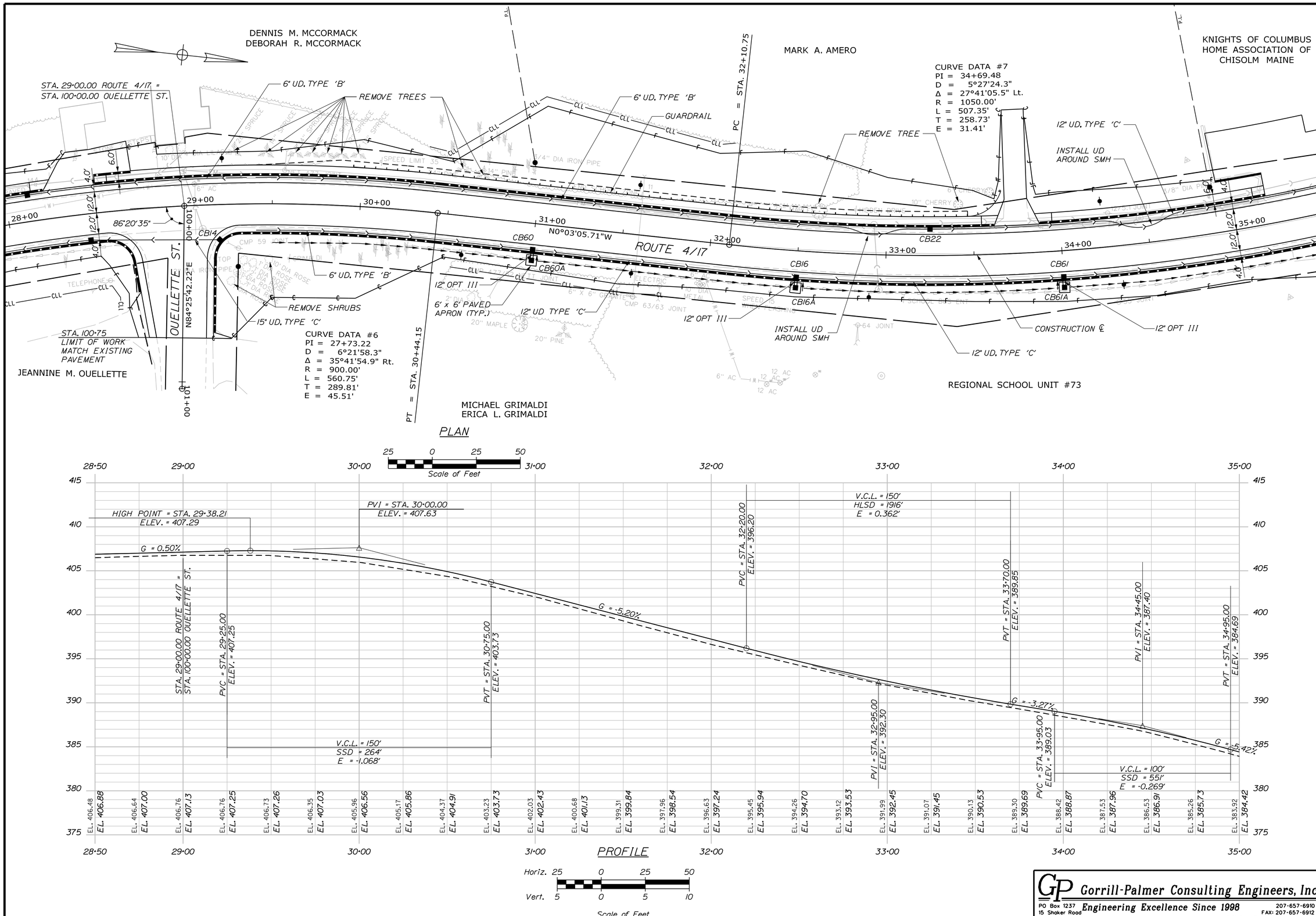
OF 102

Date:8/15/2014

Username: bhavu

Division: HIGHWAY

Filename: ...\highway\MSTA\021_HDPlan003.dgn



Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

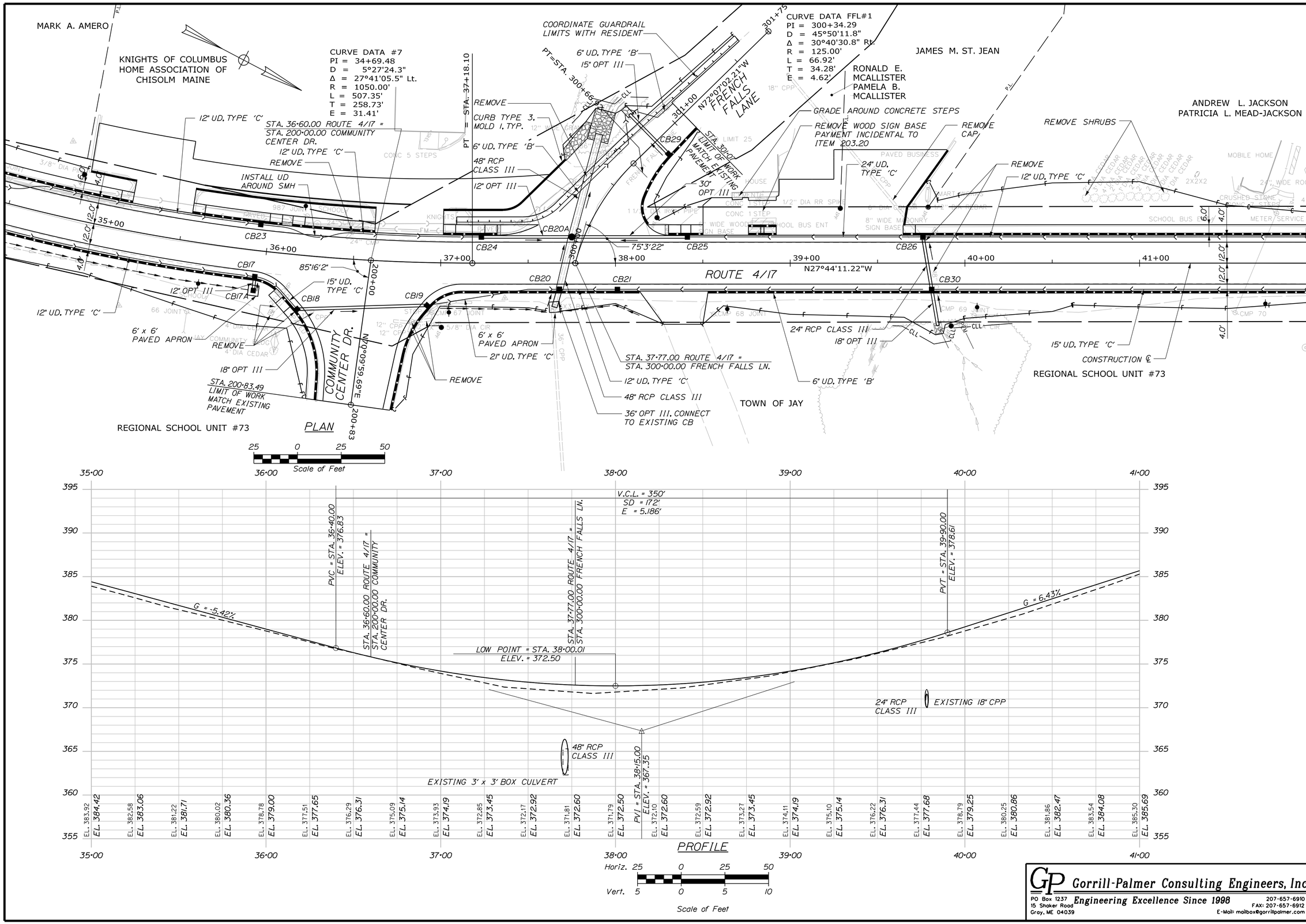
DATE

JAY
ROUTE 4\17

PLAN & PROFILE

SHEET NUMBER
22
OF 102

Filename: ...\highway\MSTA\022_HDPlan004.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

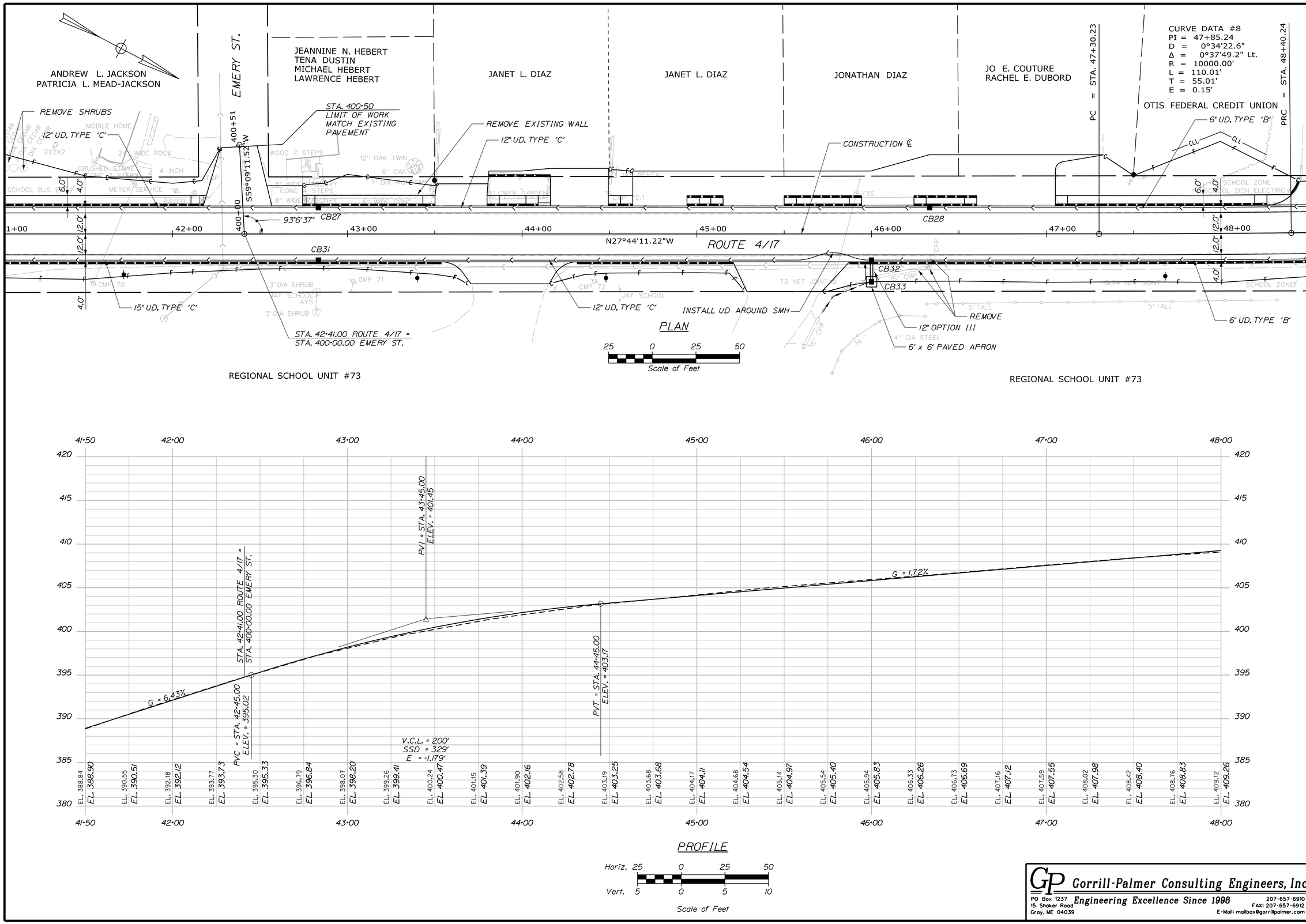
PLAN & PROFILE

SHEET NUMBER

23

OF 102

Filename: ...\highway\MSTA\023_HDPlan005.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER RHOBE MOULTON			
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

PLAN & PROFILE

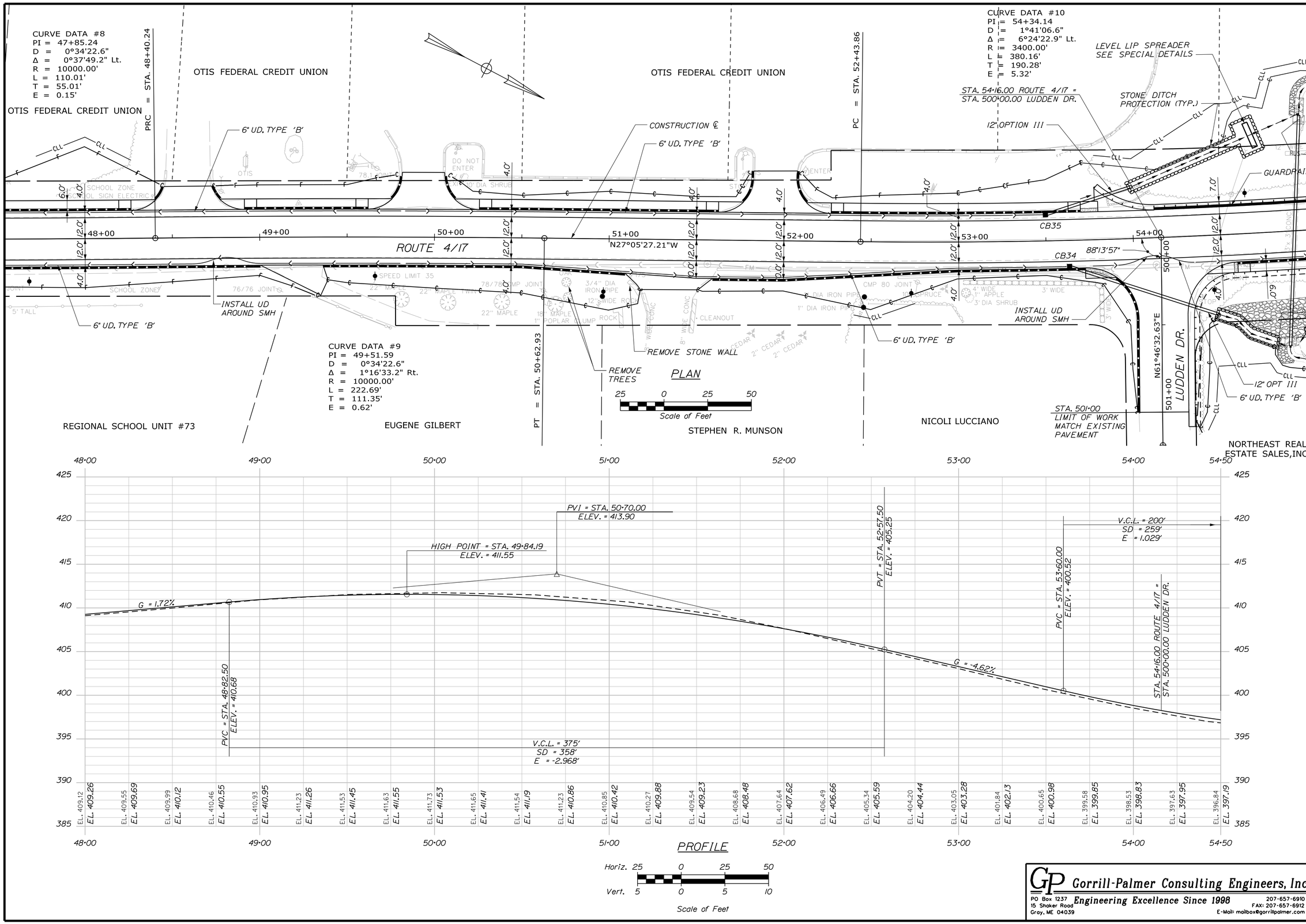
SHEET NUMBER

24

OF 102

GP Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Filename: ...\highway\MSTA\024_HDPlan006.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

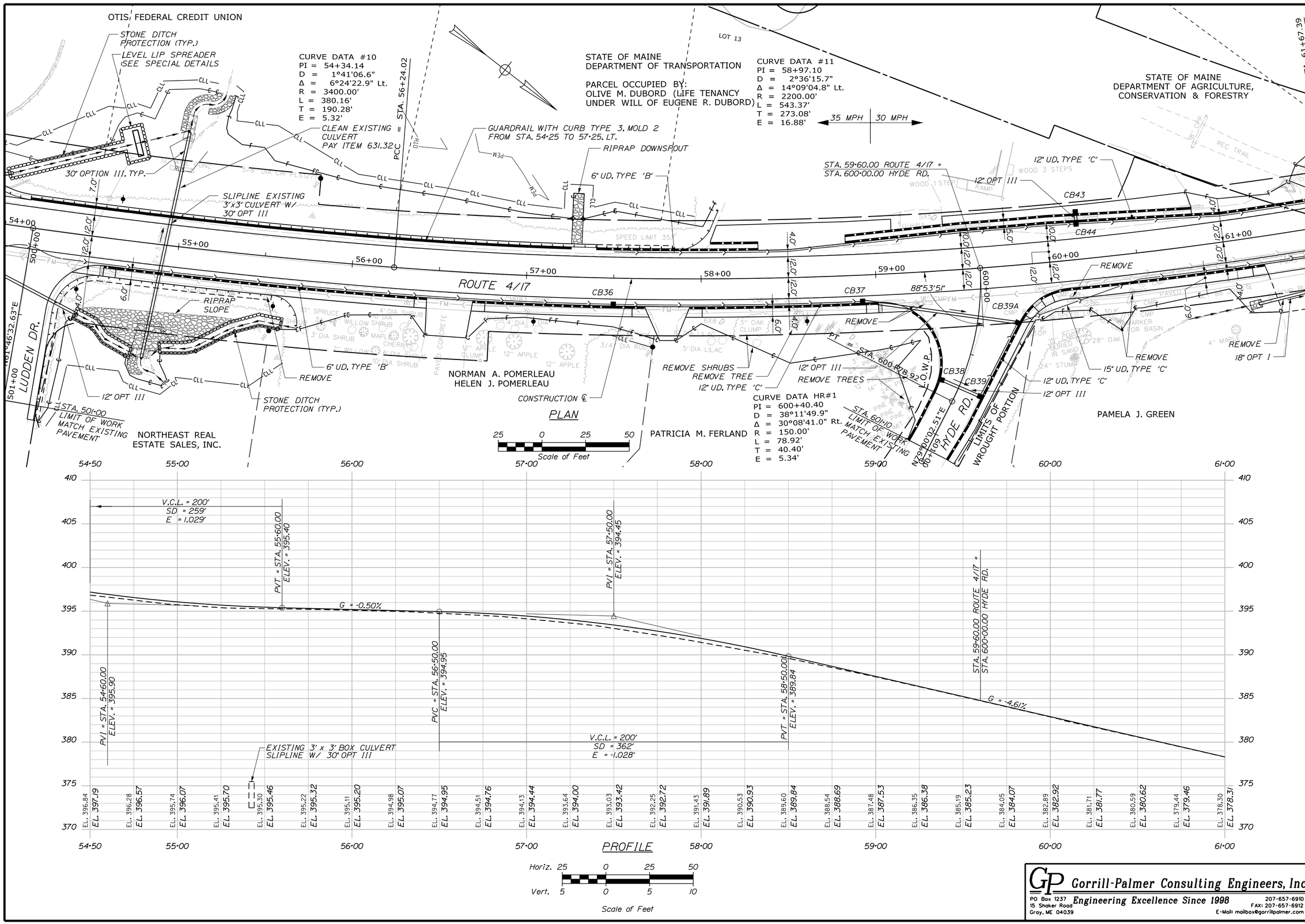
SIGNATURE
P.E. NUMBER
DATE

JAY
ROUTE 4\17

PLAN & PROFILE

SHEET NUMBER
25
OF 102

Filename: ...\highway\MSTA\025_HDPlan007.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



Filename: ...\highway\MSTA\026_HDPlan008.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

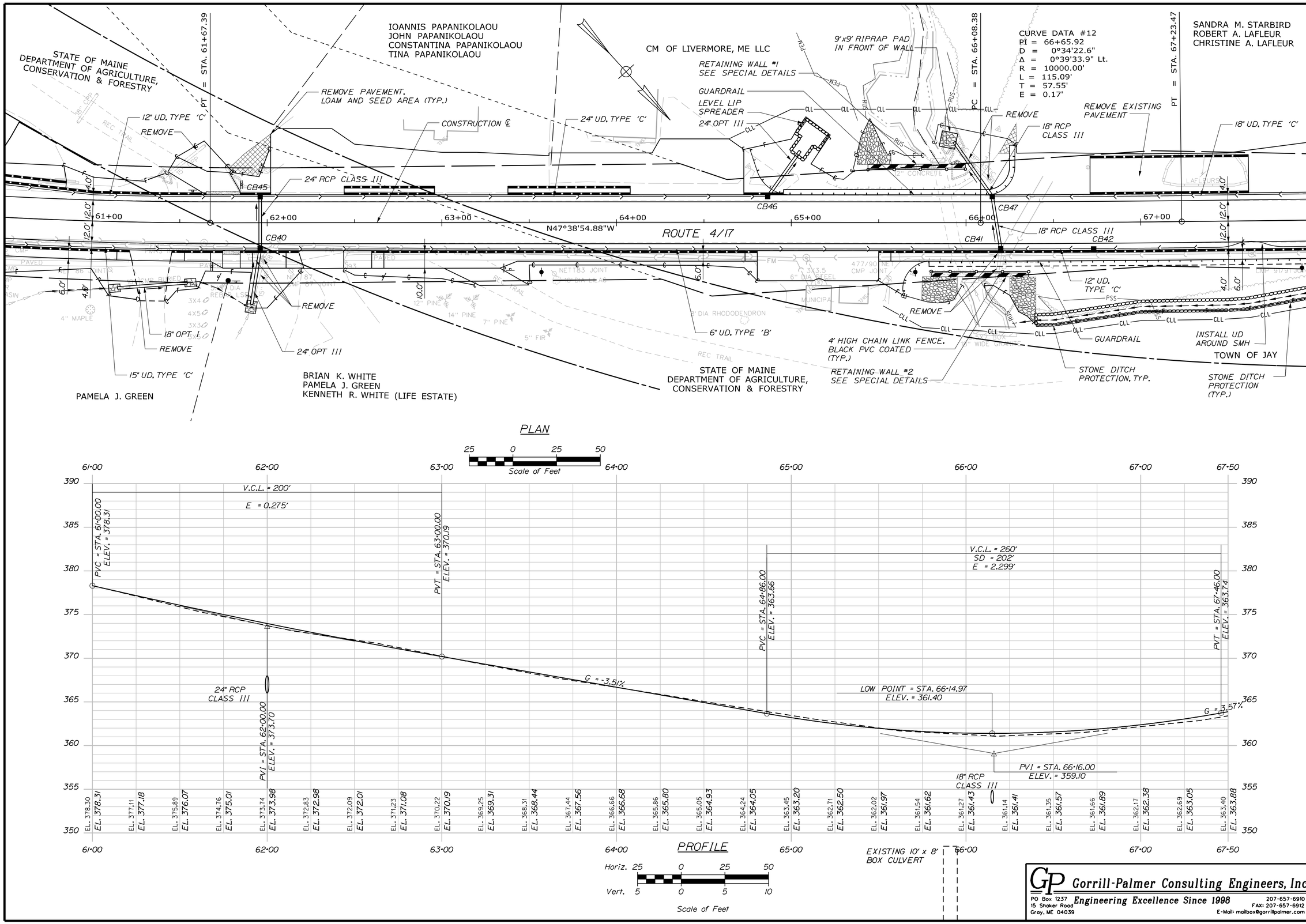
PLAN & PROFILE

SHEET NUMBER

26

OF 102

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com



Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

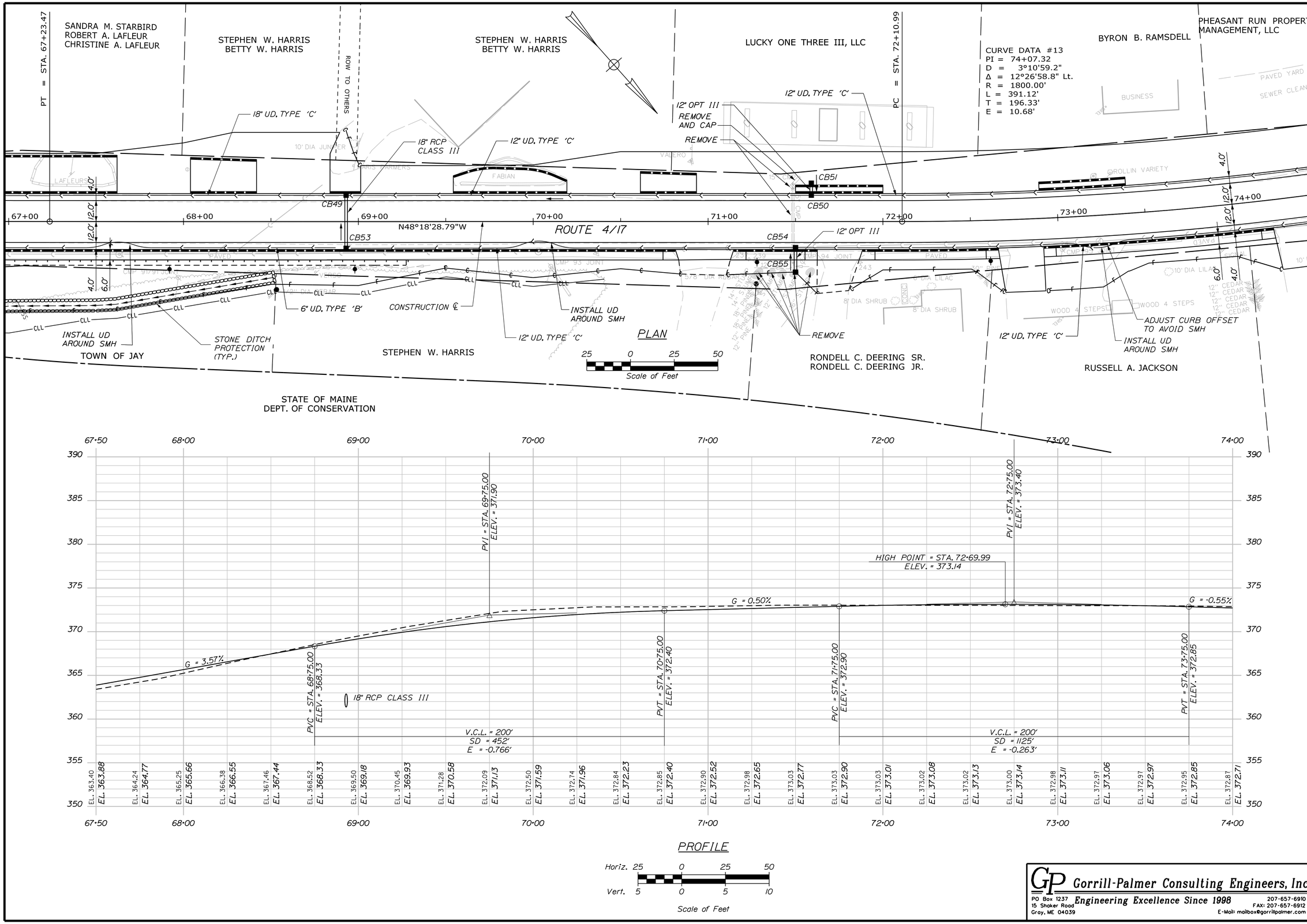
DATE

JAY
ROUTE 4\17

PLAN & PROFILE

SHEET NUMBER
27
OF 102

Filename: ...\highway\MSTA\027_HDPlan009.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

PROJ. MANAGER	RHOBE MOULTON	BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

PLAN & PROFILE

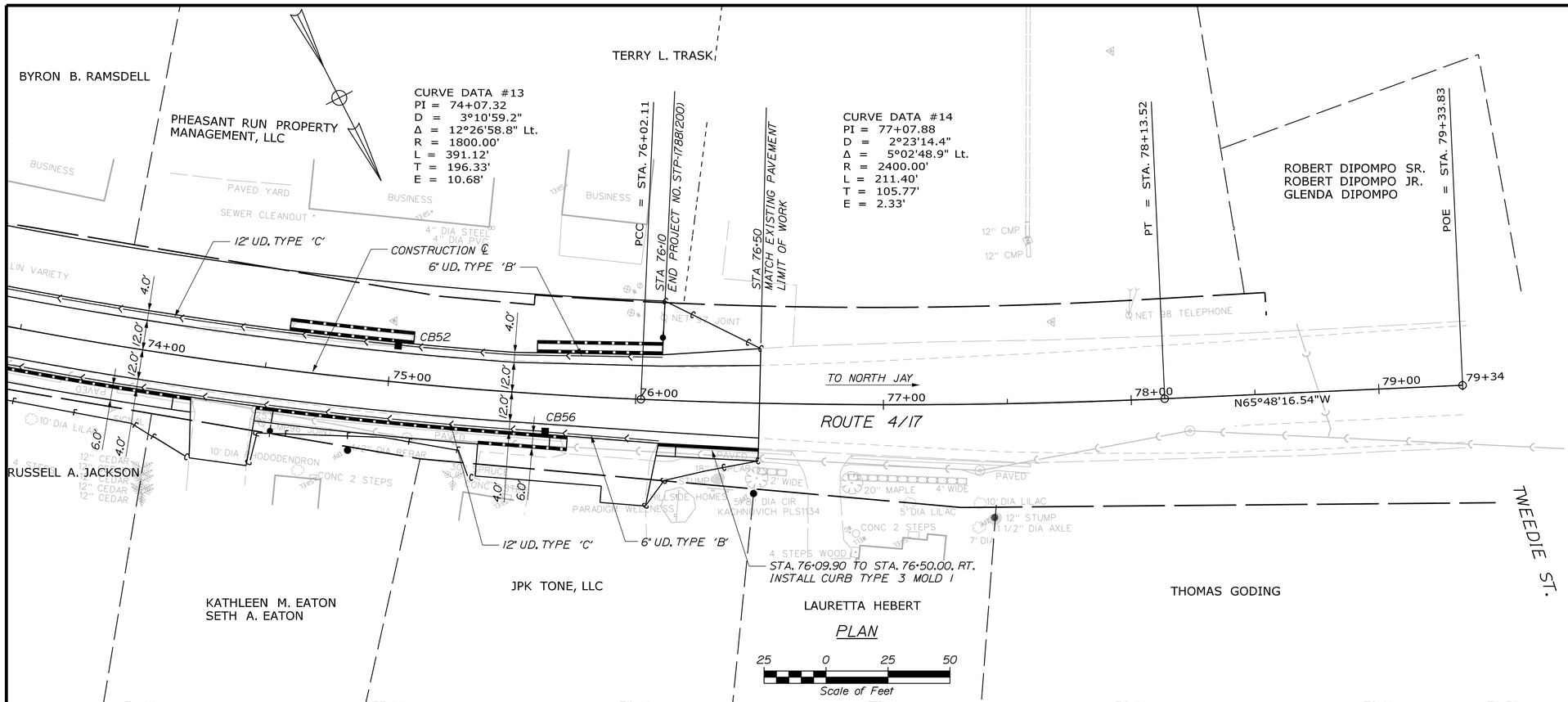
SHEET NUMBER

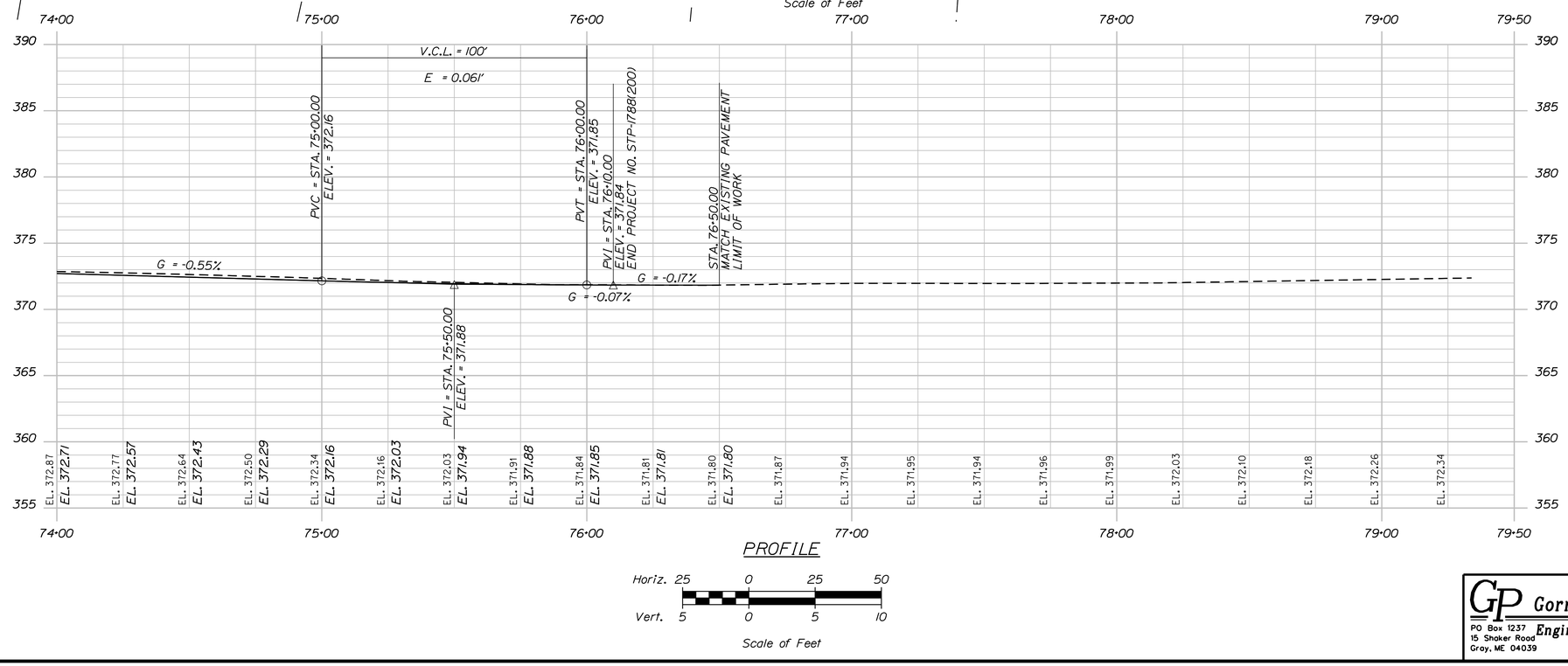
28

OF 102

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

Filename: ...\highway\MSTA\028_HDPlan010.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014





Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

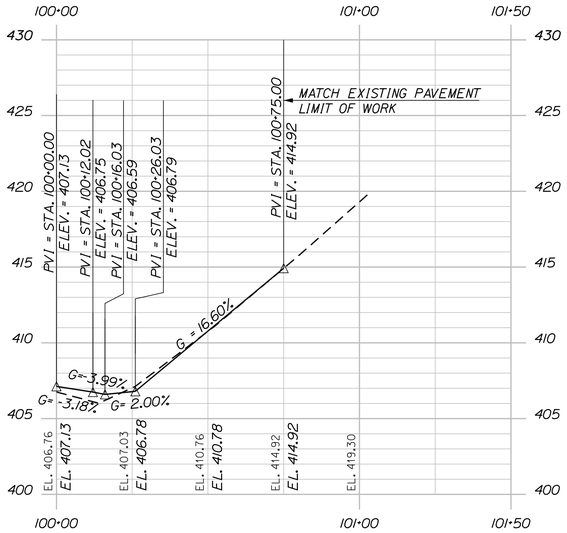
PLAN & PROFILE

SHEET NUMBER

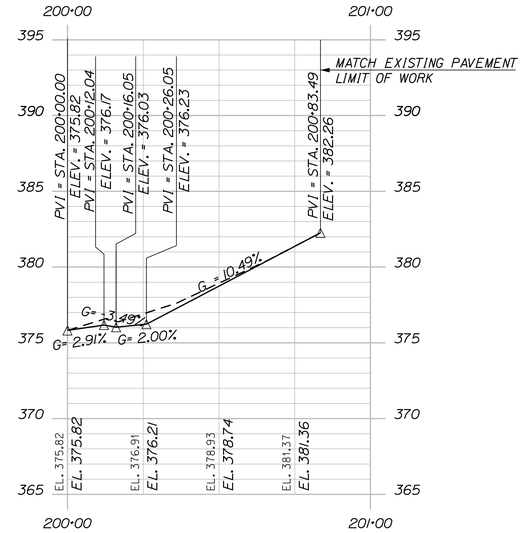
29

OF 102

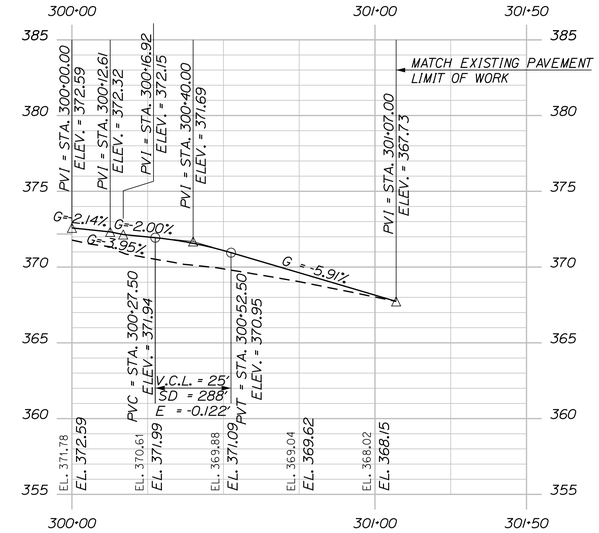
Filename: ...\highway\MSTA\029_HDPlan011.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



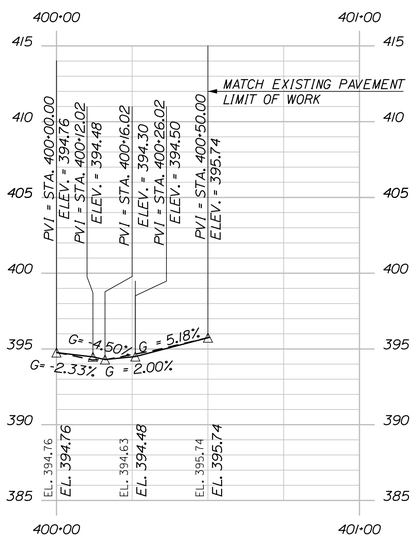
OUELLETTE STREET



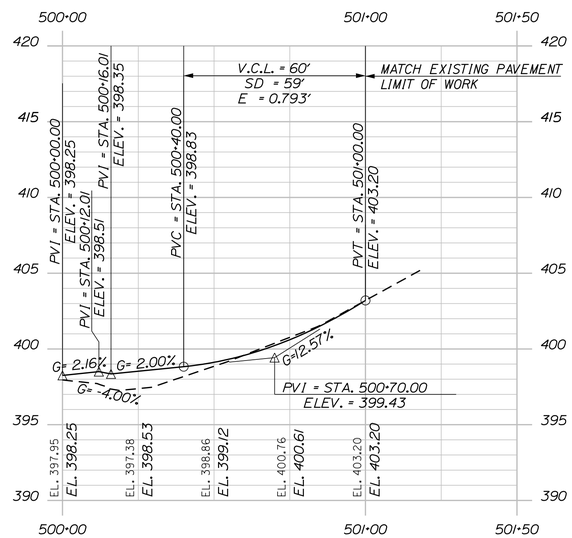
COMMUNITY CENTER DRIVE



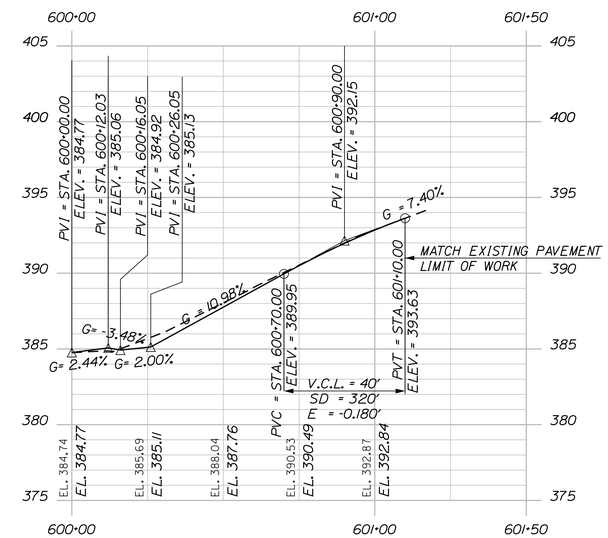
FRENCH FALLS LANE



EMERY STREET



LUDDEN DRIVE



HYDE ROAD

PROFILE

Horiz. 25 0 25 50

Vert. 5 0 5 10

Scale of Feet

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

SIDE ROAD PROFILES

SHEET NUMBER

30

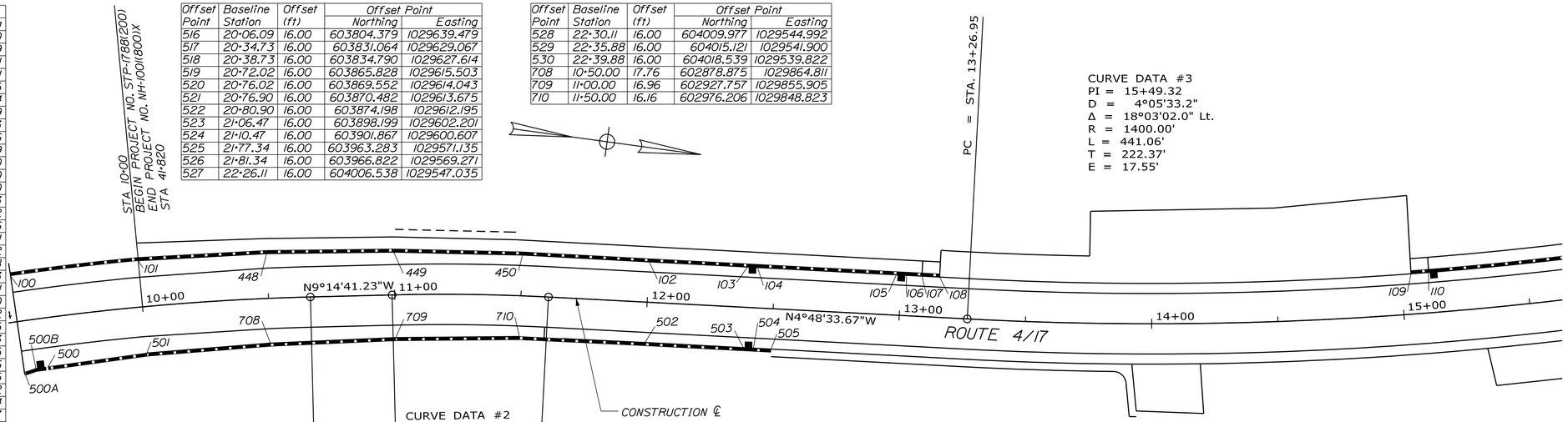
OF 102

Filename: ...\030_Sideroad Profiles_001.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
100	9+50.00	-18.40	602773.299	1029852.340
101	10+00.00	-18.40	602822.591	1029839.529
102	12+00.00	-16.00	603023.108	1029812.531
103	12+39.00	-16.00	603061.972	1029809.261
104	12+43.00	-16.00	603065.958	1029808.925
105	12+98.00	-16.00	603120.763	1029804.314
106	13+02.00	-16.00	603124.749	1029803.979
107	13+08.15	-16.00	603130.881	1029803.463
108	13+15.15	-16.00	603137.857	1029802.876
109	15+04.05	-16.00	603322.581	1029776.249
110	15+11.05	-16.00	603329.423	1029774.770
111	15+15.05	-16.00	603333.326	1029773.910
112	16+21.85	-16.00	603435.049	1029747.250
113	16+28.85	-16.00	603441.743	1029745.203
114	16+54.85	-16.00	603466.513	1029737.302
115	16+61.85	-16.00	603473.156	1029735.096
116	17+42.85	-16.00	603548.157	1029707.541
117	17+49.85	-16.00	603554.649	1029704.922
118	17+76.05	-16.00	603578.670	1029694.928
119	17+83.05	-16.00	603585.126	1029692.223
120	18+23.88	-16.00	603623.001	1029676.571
121	18+27.88	-16.00	603626.705	1029675.060
122	18+34.88	-16.00	603633.189	1029672.422
123	18+70.80	-16.00	603666.661	1029658.975
124	18+77.80	-16.00	603673.168	1029656.393
125	19+02.87	-16.00	603696.594	1029647.185
126	20+42.13	-16.00	603826.378	1029596.546
127	20+49.13	-16.00	603832.821	1029593.945
128	20+75.26	-16.00	603857.030	1029584.582
129	20+82.26	-16.00	603863.533	1029581.994
130	20+89.26	-16.00	603870.018	1029579.357
131	21+16.00	-16.00	603893.926	1029569.137
132	21+23.00	-16.00	603900.313	1029566.273
133	21+27.00	-16.00	603903.953	1029564.614
134	21+39.37	-16.00	603914.961	1029559.484
135	21+46.37	-16.00	603921.276	1029556.462
136	21+72.89	-16.00	603944.641	1029544.765
137	21+79.89	-16.00	603950.586	1029541.657
138	21+86.89	-16.00	603956.508	1029538.507
139	22+12.62	-16.00	603978.686	1029526.216
140	22+19.62	-16.00	603984.749	1029522.718
141	22+44.57	-16.00	604005.785	1029510.101
142	22+51.57	-16.00	604011.726	1029506.400
448	10+50.00	-17.76	602872.578	1029829.854
449	11+00.00	-16.96	602922.351	1029822.419
450	11+50.00	-16.16	602973.058	1029886.047
500	9+59.74	19.37	602972.917	1029889.487
500A	9+50.00	20.25	602783.974	1029887.354
500B	9+54.82	19.38	602788.281	1029881.558
501	10+00.00	18.40	602830.938	1029875.334
502	12+00.00	16.00	603025.791	1029844.418
503	12+39.00	16.00	603064.655	1029841.148
504	12+43.00	16.00	603068.641	1029840.813
505	12+50.00	16.00	603075.617	1029840.226
506	17+84.13	16.00	603598.458	1029721.334
507	17+88.13	16.00	603602.149	1029719.793
508	17+90.13	16.00	603603.990	1029719.026
509	17+94.13	16.00	603607.684	1029717.490
510	18+35.44	16.00	603645.763	1029701.854
511	18+39.44	16.00	603649.470	1029700.351
512	18+65.49	16.00	603673.566	1029690.669
513	18+69.49	16.00	603677.282	1029689.189
514	19+02.87	16.00	603708.225	1029676.996
515	20+02.09	16.00	603800.652	1029640.933

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
516	20+06.09	16.00	603804.379	1029639.479
517	20+34.73	16.00	603831.064	1029629.067
518	20+38.73	16.00	603834.790	1029627.614
519	20+72.02	16.00	603865.828	1029615.503
520	20+76.02	16.00	603869.552	1029614.043
521	20+76.90	16.00	603870.482	1029613.675
522	20+80.90	16.00	603874.198	1029612.195
523	21+06.47	16.00	603898.199	1029602.201
524	21+10.47	16.00	603901.867	1029600.607
525	21+77.34	16.00	603963.283	1029571.135
526	21+81.34	16.00	603966.822	1029569.271
527	22+26.11	16.00	604006.538	1029547.035

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
528	22+30.11	16.00	604009.977	1029544.992
529	22+35.88	16.00	604015.121	1029541.900
530	22+39.88	16.00	604018.539	1029539.822
708	10+50.00	17.76	602878.875	1029864.811
709	11+00.00	16.96	602927.757	1029855.905
710	11+50.00	16.16	602976.206	1029848.823



CURVE DATA #1
PI = 10+00.59
D = 5°49'16.6"
Δ = 7°41'51.4" Rt.
R = 984.25'
L = 132.23'
T = 66.22'
E = 2.22'

PT = STA. 10+66.60

CURVE DATA #2
PI = 11+29.95
D = 7°09'43.1"
Δ = 4°26'07.6" Rt.
R = 800.00'
L = 61.93'
T = 30.98'
E = 0.60'

PC = STA. 10+98.97

PT = STA. 11+60.90

PLAN

25 0 25 50
Scale of Feet

ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
100 to 101	50.93	1002.65
101 to 448	50.92	-
448 to 449	50.32	-
449 to 450	51.03	-
450 to 102	50.22	-
102 to 103	39.00	-
104 to 105	55.00	-
106 to 107	6.15	-
111 to 112	105.18	1384.00
115 to 116	79.91	1384.00
119 to 120	40.98	5016.00
124 to 125	25.17	5016.00
125 to 126	139.31	-
133 to 134	12.15	934.00
140 to 141	24.53	934.00
500 to 501	39.50	-
500A to 500B	4.81	-
501 to 708	49.08	-
708 to 709	49.69	-
709 to 710	48.96	-
710 to 502	49.78	-
502 to 503	39.00	-
507 to 508	1.99	4984.00
509 to 510	41.16	4984.00
513 to 514	33.26	4984.00
514 to 515	99.21	-
518 to 519	33.32	-
520 to 521	1.00	966.00
524 to 525	68.14	966.00
528 to 529	6.00	966.00

ITEM 609.234 TERMINAL CURB TYPE 1, 4 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
506 to 507	4.00	4984.00
510 to 511	4.00	4984.00
512 to 513	4.00	4984.00
515 to 516	4.00	-
517 to 518	4.00	-
521 to 522	4.00	966.00
523 to 524	4.00	966.00
525 to 526	4.00	966.00
527 to 528	4.00	966.00
529 to 530	4.00	966.00

ITEM 609.237 TERMINAL CURB TYPE 1, 7 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
107 to 108	7.00	-
109 to 110	7.00	1384.00
112 to 113	7.00	1384.00
114 to 115	7.00	1384.00
116 to 117	7.00	1384.00
118 to 119	7.00	5016.00
121 to 122	7.00	5016.00
123 to 124	7.00	5016.00
126 to 127	7.00	-
128 to 129	7.00	934.00
129 to 130	7.00	934.00
131 to 132	7.00	934.00
134 to 135	7.00	934.00
136 to 137	7.00	934.00
137 to 138	7.00	934.00
139 to 140	7.00	934.00
141 to 142	7.00	934.00
504 to 505	7.00	-

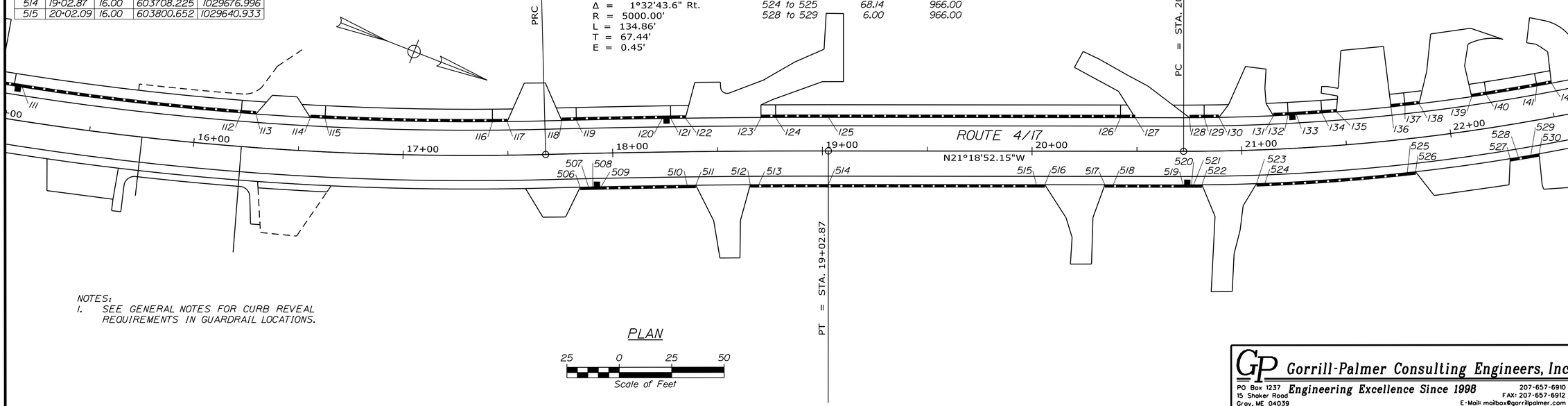
CURVE DATA #3
PI = 15+49.32
D = 4°05'33.2"
Δ = 18°03'02.0" Lt.
R = 1400.00'
L = 441.06'
T = 222.37'
E = 17.55'

PRC = STA. 17+68.01

CURVE DATA #4
PI = 18+35.44
D = 1°08'45.3"
Δ = 1°32'43.6" Rt.
R = 5000.00'
L = 134.86'
T = 67.44'
E = 0.45'

CURVE DATA #5
PI = 21+92.58
D = 6°01'52.1"
Δ = 14°26'08.4" Lt.
R = 950.00'
L = 239.35'
T = 120.31'
E = 7.59'

PC = STA. 20+72.27



NOTES:
1. SEE GENERAL NOTES FOR CURB REVEAL REQUIREMENTS IN GUARDRAIL LOCATIONS.

PLAN

25 0 25 50
Scale of Feet

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	7-18-14
CHECKED-REVIEWED	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

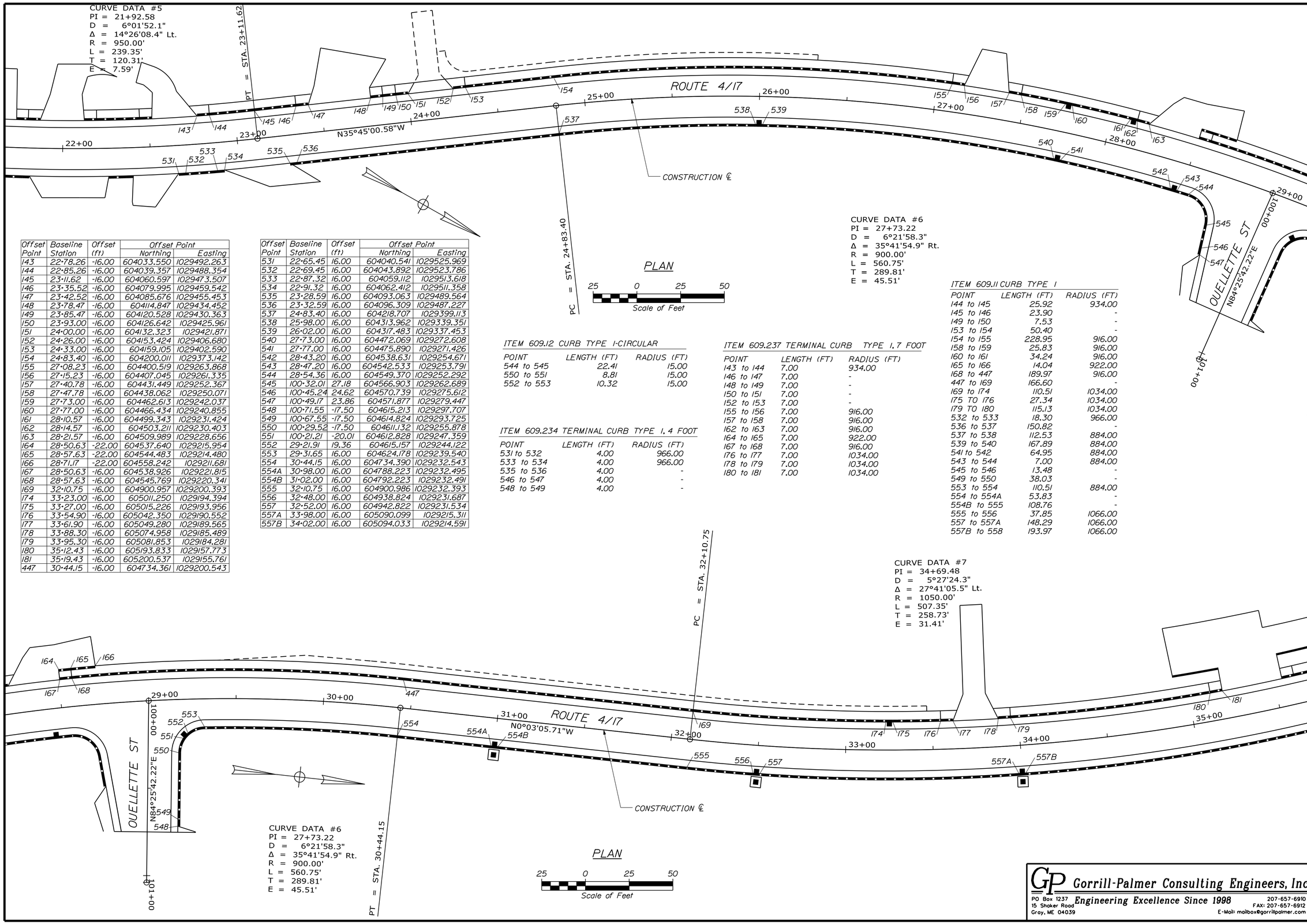
DATE

JAY
ROUTE 4\17

CURB LAYOUT PLAN

SHEET NUMBER
31
OF 102

Filename: ...\MSTA\031_CurbPlan001.dgn Division: HIGHWAY Username: bhovu Date:8/15/2014



Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
143	22+78.26	-16.00	604033.550	1029492.263
144	22+85.26	-16.00	604039.357	1029488.354
145	23+11.62	-16.00	604060.597	1029473.507
146	23+35.52	-16.00	604079.995	1029459.542
147	23+42.52	-16.00	604085.676	1029455.453
148	23+78.47	-16.00	604114.847	1029434.452
149	23+85.47	-16.00	604120.528	1029430.363
150	23+93.00	-16.00	604126.642	1029425.961
151	24+00.00	-16.00	604132.323	1029421.871
152	24+26.00	-16.00	604153.424	1029406.680
153	24+33.00	-16.00	604159.105	1029402.590
154	24+83.40	-16.00	604200.011	1029373.142
155	27+08.23	-16.00	604400.519	1029263.868
156	27+15.23	-16.00	604407.045	1029261.335
157	27+40.78	-16.00	604431.449	1029252.367
158	27+47.78	-16.00	604438.062	1029250.071
159	27+73.00	-16.00	604462.613	1029242.037
160	27+77.00	-16.00	604466.434	1029240.855
161	28+10.57	-16.00	604499.343	1029231.424
162	28+14.57	-16.00	604503.211	1029230.403
163	28+21.57	-16.00	604509.989	1029228.656
164	28+50.63	-22.00	604537.640	1029215.954
165	28+57.63	-22.00	604544.483	1029214.480
166	28+71.17	-22.00	604558.242	1029211.681
167	28+50.63	-16.00	604538.926	1029221.815
168	28+57.63	-16.00	604545.769	1029220.341
169	32+10.75	-16.00	604900.957	1029200.393
174	33+23.00	-16.00	605011.250	1029194.394
175	33+27.00	-16.00	605015.226	1029193.956
176	33+54.90	-16.00	605042.350	1029190.552
177	33+61.90	-16.00	605049.280	1029189.565
178	33+88.30	-16.00	605074.958	1029185.489
179	33+95.30	-16.00	605081.853	1029184.281
180	35+12.43	-16.00	605193.833	1029157.773
181	35+19.43	-16.00	605200.537	1029155.761
447	30+44.15	-16.00	604734.361	1029200.543

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
531	22+65.45	16.00	604040.541	1029525.969
532	22+69.45	16.00	604043.892	1029523.786
533	22+87.32	16.00	604059.112	1029513.618
534	22+91.32	16.00	604062.412	1029511.358
535	23+28.59	16.00	604093.063	1029489.564
536	23+32.59	16.00	604096.309	1029487.227
537	24+83.40	16.00	604218.707	1029399.113
538	25+98.00	16.00	604313.962	1029339.351
539	26+02.00	16.00	604317.483	1029337.453
540	27+73.00	16.00	604472.069	1029272.608
541	27+77.00	16.00	604475.890	1029271.426
542	28+43.20	16.00	604538.631	1029254.671
543	28+47.20	16.00	604542.533	1029253.791
544	28+54.36	16.00	604549.370	1029252.292
545	100+32.01	27.18	604566.903	1029262.689
546	100+45.24	24.62	604570.739	1029275.612
547	100+49.17	23.86	604571.877	1029279.447
548	100+71.55	-17.50	604615.213	1029297.707
549	100+67.55	-17.50	604614.824	1029293.725
550	100+29.52	-17.50	604611.132	1029255.878
551	100+21.21	-20.01	604612.828	1029247.359
552	29+21.91	19.36	604615.157	1029244.122
553	29+31.65	16.00	604624.178	1029239.540
554	30+44.15	16.00	604734.390	1029232.543
554A	30+98.00	16.00	604788.223	1029232.495
554B	31+02.00	16.00	604792.223	1029232.491
555	32+10.75	16.00	604900.986	1029232.393
556	32+48.00	16.00	604938.824	1029231.687
557	32+52.00	16.00	604942.822	1029231.534
557A	33+98.00	16.00	605090.099	1029215.311
557B	34+02.00	16.00	605094.033	1029214.591

ITEM 609.12 CURB TYPE 1-CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
544 to 545	22.41	15.00
550 to 551	8.81	15.00
552 to 553	10.32	15.00

ITEM 609.234 TERMINAL CURB TYPE 1, 4 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
531 to 532	4.00	966.00
533 to 534	4.00	966.00
535 to 536	4.00	-
546 to 547	4.00	-
548 to 549	4.00	-

ITEM 609.237 TERMINAL CURB TYPE 1, 7 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
143 to 144	7.00	934.00
146 to 147	7.00	-
148 to 149	7.00	-
150 to 151	7.00	-
152 to 153	7.00	-
155 to 156	7.00	916.00
157 to 158	7.00	916.00
162 to 163	7.00	916.00
164 to 165	7.00	922.00
167 to 168	7.00	916.00
176 to 177	7.00	1034.00
178 to 179	7.00	1034.00
180 to 181	7.00	1034.00

ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
144 to 145	25.92	934.00
145 to 146	23.90	-
149 to 150	7.53	-
153 to 154	50.40	-
154 to 155	228.95	916.00
158 to 159	25.83	916.00
160 to 161	34.24	916.00
165 to 166	14.04	922.00
168 to 447	189.97	916.00
447 to 169	166.60	-
169 to 174	110.51	1034.00
175 TO 176	27.34	1034.00
179 TO 180	115.13	1034.00
532 to 533	18.30	966.00
536 to 537	150.82	-
537 to 538	112.53	884.00
539 to 540	167.89	884.00
541 to 542	64.95	884.00
543 to 544	7.00	884.00
545 to 546	13.48	-
549 to 550	38.03	-
553 to 554	110.51	884.00
554 to 554A	53.83	-
554B to 555	108.76	-
555 to 556	37.85	1066.00
557 to 557A	148.29	1066.00
557B to 558	193.97	1066.00

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHOBE MOULTON		
DESIGN-DETAILED	L MEEK	L NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

CURB LAYOUT PLAN

SHEET NUMBER
32
OF 102

Division: HIGHWAY
Username: bhovu
Date:8/15/2014
Filename: ...\MSTA\032_CurbPlan002.dgn

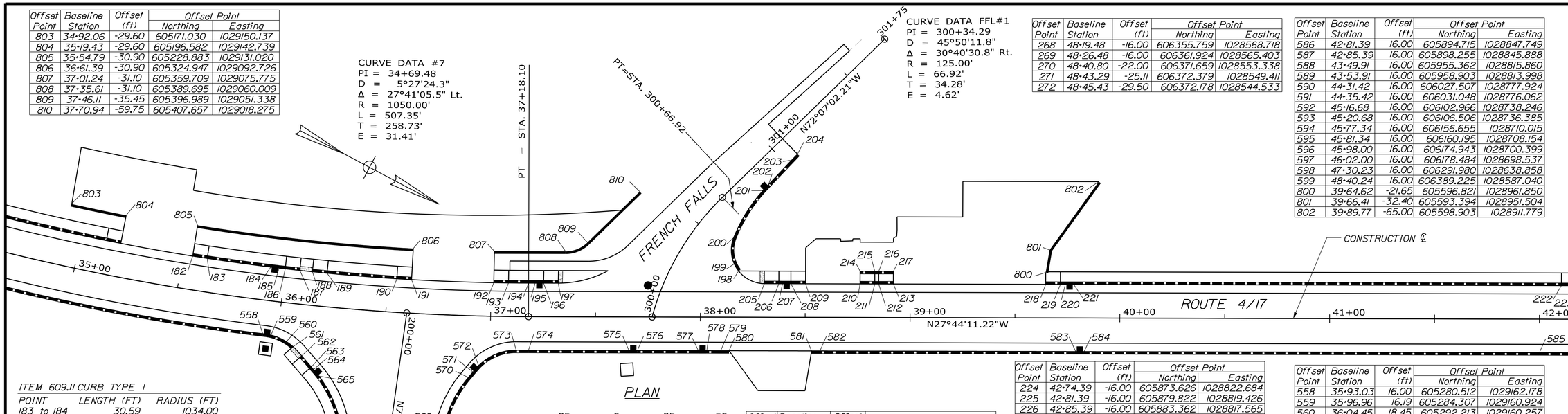
Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
803	34+92.06	-29.60	605171.030	1029150.137
804	35+19.43	-29.60	605196.582	1029142.739
805	35+54.79	-30.90	605228.883	1029131.020
806	36+61.39	-30.90	605324.947	1029092.726
807	37+01.24	-31.10	605359.709	1029075.775
808	37+35.61	-31.10	605389.695	1029060.009
809	37+46.11	-35.45	605396.989	1029051.338
810	37+70.94	-59.75	605407.657	1029018.275

CURVE DATA #7
PI = 34+69.48
D = 5°27'24.3"
Δ = 27°41'05.5" Lt.
R = 1050.00'
L = 507.35'
T = 258.73'
E = 31.41'

CURVE DATA FFL#1
PI = 300+34.29
D = 45°50'11.8"
Δ = 30°40'30.8" Rt.
R = 125.00'
L = 66.92'
T = 34.28'
E = 4.62'

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
268	48+19.48	-16.00	606355.759	1028568.718
269	48+26.48	-16.00	606361.924	1028565.403
270	48+40.80	-22.00	606371.659	1028553.338
271	48+43.29	-25.11	606372.379	1028549.411
272	48+45.43	-29.50	606372.178	1028544.533

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
586	42+81.39	16.00	605894.715	1028847.749
587	42+85.39	16.00	605898.255	1028845.888
588	43+49.91	16.00	605955.362	1028815.860
589	43+53.91	16.00	605958.903	1028813.998
590	44+31.42	16.00	606027.507	1028777.924
591	44+35.42	16.00	606031.048	1028776.062
592	45+16.68	16.00	606102.966	1028738.246
593	45+20.68	16.00	606106.506	1028736.385
594	45+77.34	16.00	606156.655	1028710.015
595	45+81.34	16.00	606160.195	1028708.154
596	45+98.00	16.00	606174.943	1028700.399
597	46+02.00	16.00	606178.484	1028698.537
598	47+30.23	16.00	606291.980	1028638.858
599	48+40.24	16.00	606389.225	1028587.040
800	39+64.62	-21.65	605596.821	1028961.850
801	39+66.41	-32.40	605593.394	1028951.504
802	39+89.77	-65.00	605598.903	1028911.779



ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
183 to 184	30.59	1034.00
185 to 186	2.96	1034.00
189 to 190	33.41	1034.00
193 to 194	9.61	1034.00
194 to 195	3.12	-
200 to 201	26.55	75.00
202 to 203	15.98	-
206 to 207	1.73	-
211 to 212	1.86	-
215 to 216	1.86	-
219 to 220	2.37	-
221 to 222	232.47	-
226 to 227	57.78	-
230 to 231	15.26	-
234 to 235	27.34	-
241 to 242	6.64	-
245 to 246	6.64	-
249 to 250	30.26	-
253 to 254	30.26	-
258 to 259	17.96	-
262 to 263	21.96	-
266 to 267	18.02	-
267 to 268	89.09	9984.00
563 to 564	1.65	-
566 to 567	12.43	-
568 to 569	32.31	-
570 to 571	3.40	-
573 to 574	5.84	1066.00
574 to 575	47.90	-
576 to 577	29.08	-
578 to 579	6.66	-
582 to 583	121.91	-
584 to 585	217.00	-
585 to 586	81.39	-
587 to 588	64.52	-
591 to 592	81.25	-
595 to 596	6.66	-
597 to 598	128.23	-
598 to 599	110.19	10016.00

ITEM 609.234 TERMINAL CURB TYPE 1.4 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
198 to 199	4.00	16.00
203 to 204	4.00	-
233 to 234	4.00	-
235 to 236	4.00	-
270 to 271	4.00	20.00
560 to 561	4.00	25.00
579 to 580	4.00	-
581 to 582	4.00	-
588 to 589	4.00	-
590 to 591	4.00	-
592 to 593	4.00	-
594 to 595	4.00	-

ITEM 609.12 CURB TYPE 1-CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
199 to 200	12.83	16.00
271 to 272	4.89	20.00
559 to 560	7.97	25.00
565 to 566	39.89	55.00
569 to 570	26.61	55.00
572 to 573	19.94	25.00

ITEM 609.237 TERMINAL CURB TYPE 1.7 FOOT

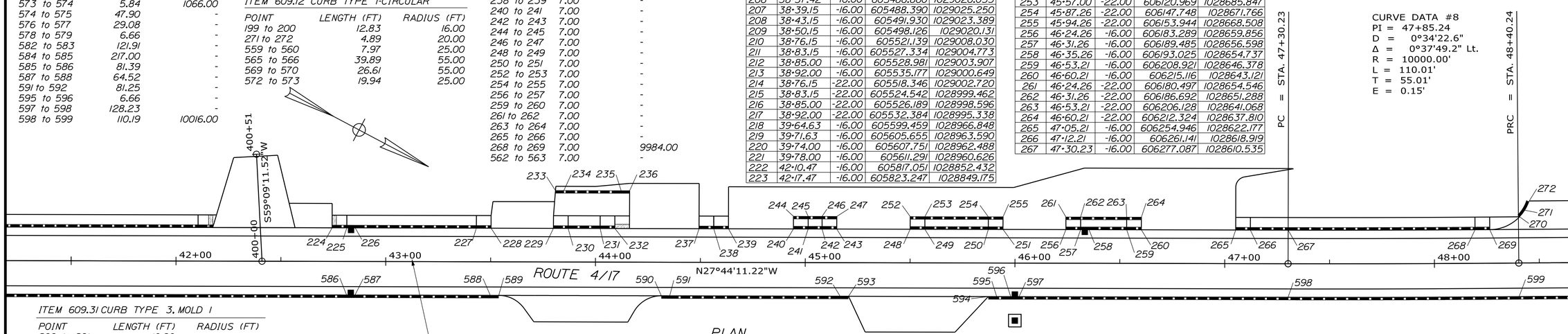
POINT	LENGTH (FT)	RADIUS (FT)
182 to 183	7.00	1034.00
186 to 187	7.00	1034.00
188 to 189	7.00	1034.00
190 to 191	7.00	1034.00
192 to 193	7.00	1034.00
196 to 197	7.00	-
205 to 206	7.00	-
208 to 209	7.00	-
210 to 211	7.00	-
212 to 213	7.00	-
214 to 215	7.00	-
216 to 217	7.00	-
218 to 219	7.00	-
222 to 223	7.00	-
224 to 225	7.00	-
227 to 228	7.00	-
229 to 230	7.00	-
231 to 232	7.00	-
237 to 238	7.00	-
238 to 239	7.00	-
240 to 241	7.00	-
242 to 243	7.00	-
244 to 245	7.00	-
246 to 247	7.00	-
248 to 249	7.00	-
250 to 251	7.00	-
252 to 253	7.00	-
254 to 255	7.00	-
256 to 257	7.00	-
259 to 260	7.00	-
261 to 262	7.00	-
263 to 264	7.00	-
265 to 266	7.00	-
268 to 269	7.00	9984.00
562 to 563	7.00	-

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
182	35+54.90	-16.00	605233.678	1029145.083
183	35+61.90	-16.00	605240.295	1029142.802
184	35+93.00	-16.00	605269.032	1029132.308
185	35+97.00	-16.00	605272.770	1029130.872
186	36+00.15	-16.00	605275.527	1029129.802
187	36+07.15	-16.00	605282.040	1029127.237
188	36+13.15	-16.00	605287.609	1029125.004
189	36+20.15	-16.00	605294.090	1029122.359
190	36+54.39	-16.00	605324.771	1029109.127
191	36+61.39	-16.00	605331.144	1029106.230
192	37+01.24	-16.00	605366.493	1029089.196
193	37+08.24	-16.00	605372.729	1029086.017
194	37+18.10	-16.00	605381.255	1029081.585
195	37+21.22	-16.00	605384.013	1029080.134
196	37+25.22	-16.00	605387.554	1029078.272
197	37+32.22	-16.00	605393.749	1029075.015
198	300+42.17	28.69	605467.048	1029029.694
199	300+44.22	25.04	605463.619	1029027.654
200	300+55.85	17.13	605457.542	1029016.749
201	300+83.02	11.20	605459.373	1028990.396
202	300+87.01	11.02	605460.426	1028986.537
203	301+02.98	10.40	605464.735	1028971.153
204	301+06.98	10.24	605465.813	1028967.301
205	38+30.42	-16.00	605480.664	1029029.313
206	38+37.42	-16.00	605486.860	1029026.055
207	38+39.15	-16.00	605488.390	1029025.250
208	38+43.15	-16.00	605491.930	1029023.389
209	38+50.15	-16.00	605498.126	1029020.131
210	38+76.15	-16.00	605521.139	1029008.030
211	38+83.15	-16.00	605527.334	1029004.773
212	38+85.00	-16.00	605528.981	1029003.907
213	38+92.00	-16.00	605535.177	1029000.649
214	38+76.15	-22.00	605518.346	1029002.720
215	38+83.15	-22.00	605524.542	1028999.462
216	38+85.00	-22.00	605526.189	1028998.596
217	38+92.00	-22.00	605532.384	1028995.338
218	39+64.63	-16.00	605599.459	1028966.848
219	39+71.63	-16.00	605605.655	1028963.590
220	39+74.00	-16.00	605607.751	1028962.488
221	39+78.00	-16.00	605611.291	1028960.626
222	42+10.47	-16.00	605817.051	1028852.432
223	42+17.47	-16.00	605823.247	1028849.175

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
224	42+74.39	-16.00	605873.626	1028822.684
225	42+81.39	-16.00	605879.822	1028819.426
226	42+85.39	-16.00	605883.362	1028817.565
227	43+43.18	-16.00	605934.506	1028790.672
228	43+50.18	-16.00	605940.701	1028787.414
229	43+79.92	-16.00	605967.029	1028773.571
230	43+86.92	-16.00	605973.225	1028770.313
231	44+02.18	-16.00	605986.733	1028763.210
232	44+09.18	-16.00	605992.929	1028759.952
233	43+80.85	-34.00	605959.465	1028757.197
234	43+84.85	-34.00	605963.005	1028755.335
235	44+12.18	-34.00	605987.201	1028742.613
236	44+16.18	-34.00	605990.741	1028740.751
237	44+49.36	-16.00	606028.486	1028741.255
238	44+56.36	-16.00	606034.682	1028737.997
239	44+63.36	-16.00	606040.877	1028734.740
240	44+94.36	-16.00	606068.315	1028720.312
241	45+01.36	-16.00	606074.511	1028717.054
242	45+08.00	-16.00	606080.391	1028713.962
243	45+15.00	-16.00	606086.587	1028710.704
244	44+94.36	-22.00	606065.523	1028715.001
245	45+01.36	-22.00	606071.719	1028711.744
246	45+08.00	-22.00	606077.599	1028708.652
247	45+15.00	-22.00	606083.795	1028705.394
248	45+50.00	-16.00	606117.566	1028694.415
249	45+57.00	-16.00	606123.761	1028691.157
250	45+87.26	-16.00	606150.540	1028677.076
251	45+94.26	-16.00	606156.736	1028673.818
252	45+50.00	-22.00	606114.773	1028689.105
253	45+57.00	-22.00	606120.969	1028685.847
254	45+87.26	-22.00	606147.748	1028671.766
255	45+94.26	-22.00	606153.944	1028668.508
256	46+24.26	-16.00	606183.289	1028659.856
257	46+31.26	-16.00	606189.485	1028656.598
258	46+35.26	-16.00	606193.025	1028654.737
259	46+53.21	-16.00	606208.921	1028646.378
260	46+60.21	-16.00	606215.116	1028643.121
261	46+24.26	-22.00	606180.497	1028654.546
262	46+31.26	-22.00	606186.692	1028651.288
263	46+53.21	-22.00	606206.128	1028641.068
264	46+60.21	-22.00	606212.324	1028637.810
265	47+05.21	-16.00	606254.946	1028622.177
266	47+12.21	-16.00	606261.141	1028618.919
267	47+30.23	-16.00	606277.087	1028610.535

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
558	35+93.03	16.00	605280.512	1029162.178
559	35+96.96	16.19	605284.307	1029160.924
560	36+04.45	18.45	605292.213	1029160.257
561	36+07.83	20.47	605296.161	1029160.874
562	36+12.27	24.40	605301.837	1029162.832
563	36+17.24	29.20	605308.364	1029165.361
564	36+18.41	30.34	605309.904	1029165.958
565	36+21.15	33.17	605313.594	1029167.503
566	36+34.87	69.44	605340.926	1029195.352
567	36+34.97	81.87	605345.919	1029206.732
568	36+74.33	85.17	605386.007	1029192.273
569	36+79.73	53.37	605377.520	1029161.096
570	36+90.27	29.41	605376.891	1029134.754
571	36+92.34	26.76	605377.626	1029131.435
572	36+94.85	23.69	605378.563	1029127.545
573	37+12.35	16.00	605390.973	1029112.611
574	37+18.10	16.00	605396.148	1029109.908
575	37+66.00	16.00	605438.544	1029087.615
576	37+70.00	16.00	605442.085	1029085.753
577	37+99.08	16.00	605467.823	1029072.219
578	38+03.08	16.00	605471.363	1029070.358
579	38+09.74	16.00	605477.255	1029067.260
580	38+13.74	16.00	605480.795	1029065.398
581	38+53.09	16.00	605515.624	1029047.084
582	38+57.09	16.00	605519.165	1029045.222
583	39+79.00	16.00	605627.070	1028988.483
584	39+83.00	16.00	605630.610	1028986.622
585	42+00.00	16.00	605822.676	1028885.629

CURVE DATA #8
PI = 47+85.24
D = 0°34'22.6"
Δ = 0°37'49.2" Lt.
R = 10000.00'
L = 110.01'
T = 55.01'
E = 0.15'



ITEM 609.31 CURB TYPE 3, MOLD 1

POINT	LENGTH (FT)	RADIUS (FT)
800 to 801	10.90	-
801 to 802	40.10	-
803 to 804	26.60	1020.40
805 to 806	103.46	1019.10
807 to 808	33.88	-
808 to 809	11.62	15.00
809 to 810	34.74	-

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER	RHOBE MOULTON	
DESIGN-DETAILED	L MEEK	L.NEWHOUSE 7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER 7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

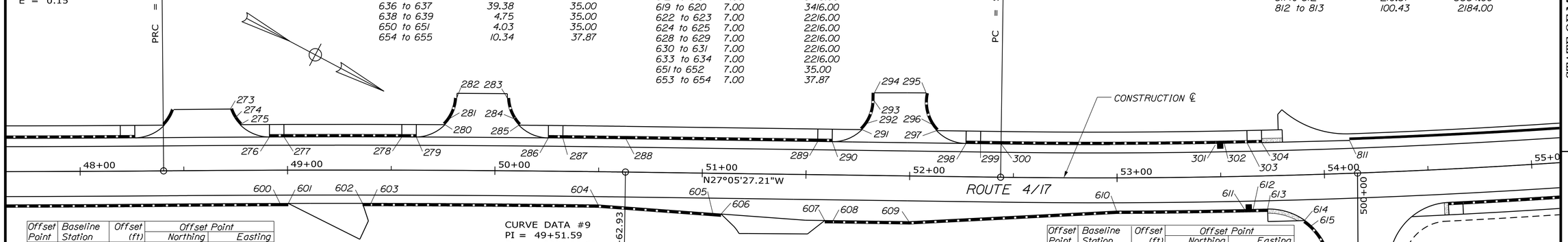
CURB LAYOUT PLAN

SHEET NUMBER
33
OF 102

Filename: ...\MSTA\033_CurbPlan003.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

CURVE DATA #8
PI = 47+85.24
D = 0°34'22.6"
Δ = 0°37'49.2" Lt.
R = 10000.00'
L = 110.01'
T = 55.01'
E = 0.15'

PRC = STA. 48+40.24



ITEM 609.12 CURB TYPE 1-CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
273 to 274	4.90	20.00
281 to 282	10.05	20.00
283 to 284	10.50	20.00
292 to 293	11.35	20.00
295 to 296	15.63	20.00
615 to 616	24.44	30.00
636 to 637	39.38	35.00
638 to 639	4.75	35.00
650 to 651	4.03	35.00
654 to 655	10.34	37.87

ITEM 609.237 TERMINAL CURB TYPE 1.7 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
276 to 277	7.00	10016.00
278 to 279	7.00	10016.00
286 to 287	7.00	10016.00
289 to 290	7.00	-
298 to 299	7.00	-
303 to 304	7.00	3384.00
612 to 613	7.00	3416.00
619 to 620	7.00	3416.00
622 to 623	7.00	2216.00
624 to 625	7.00	2216.00
628 to 629	7.00	2216.00
630 to 631	7.00	2216.00
633 to 634	7.00	2216.00
651 to 652	7.00	35.00
653 to 654	7.00	37.87

CURVE DATA #10
PI = 54+34.14
D = 1°41'06.6"
Δ = 6°24'22.9" Lt.
R = 3400.00'
L = 380.16'
T = 190.28'
E = 5.32'

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
811	54+12.65	-16.00	606880.130	1028292.523
812	56+24.02	-16.00	607059.059	1028181.943
813	57+25.19	-16.00	607141.504	1028124.612

ITEM 609.31 CURB TYPE 3, MOLD 2 (4" REVEAL)

POINT	LENGTH (FT)	RADIUS (FT)
811 to 812	210.37	3384.00
812 to 813	100.43	2184.00

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
273	48+72.58	-29.51	606396.161	1028531.629
274	48+74.70	-25.12	606400.117	1028534.496
275	48+77.19	-22.00	606403.788	1028536.068
276	48+91.33	-16.00	606419.110	1028534.685
277	48+98.33	-16.00	606425.287	1028531.393
278	49+55.03	-16.00	606475.504	1028504.836
279	49+62.03	-16.00	606481.702	1028501.584
280	49+75.80	-22.00	606491.145	1028489.869
281	49+78.28	-25.12	606491.910	1028485.949
282	49+81.46	-35.00	606490.157	1028475.719
283	50+05.70	-35.00	606511.736	1028464.491
284	50+08.87	-25.12	606519.111	1028471.798
285	50+11.36	-22.00	606522.761	1028473.419
286	50+25.60	-16.00	606538.191	1028472.194
287	50+32.60	-16.00	606544.412	1028468.985
288	50+62.93	-16.00	606571.444	1028455.106
289	51+55.43	-16.00	606653.798	1028412.980
290	51+62.43	-16.00	606660.030	1028409.792
291	51+76.71	-22.00	606670.014	1028397.946
292	51+79.21	-25.12	606670.817	1028394.034
293	51+82.43	-35.84	606668.801	1028383.022
294	51+82.46	-39.78	606667.034	1028379.498
295	52+07.38	-40.09	606689.073	1028367.875
296	52+10.17	-25.12	606698.383	1028379.933
297	52+12.67	-22.00	606702.025	1028381.571
298	52+26.95	-16.00	606717.474	1028380.408
299	52+33.95	-16.00	606723.706	1028377.220
300	52+43.86	-16.00	606732.525	1028372.709
301	53+48.00	-16.00	606824.057	1028324.106
302	53+52.00	-16.00	606827.559	1028322.174
303	53+63.15	-16.00	606837.231	1028316.811
304	53+70.15	-16.00	606843.343	1028313.401
305	57+39.93	-16.00	607153.296	1028115.942
306	57+43.93	-16.00	607156.508	1028113.559
307	58+28.86	-16.00	607223.173	1028061.985
308	58+32.86	-16.00	607226.287	1028059.474
309	58+05.22	-21.00	607201.717	1028072.676
310	58+09.22	-21.00	607204.858	1028070.198
311	58+28.84	-21.00	607219.986	1028058.132

ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
277 to 278	56.81	10016.00
287 to 288	30.39	10016.00
288 to 289	92.50	-
293 to 294	3.94	-
299 to 300	9.91	-
300 to 301	103.64	3384.00
302 to 303	11.06	3384.00
306 to 307	84.29	2184.00
310 to 311	19.35	2179.00
314 to 315	62.19	-
315 to 316	49.50	2178.00
316 to 317	15.05	-
318 to 335	80.26	-
322 to 323	61.88	-
323 to 324	49.57	2173.00
324 to 325	15.14	-
326 to 331	60.29	-
599 to 600	55.98	9984.00
603 to 604	109.61	9984.00
604 to 605	55.44	-
608 to 609	36.66	-
609 to 610	100.21	-
610 to 611	61.85	3416.00
616 to 617	48.94	-
620 to 621	158.77	3416.00
621 to 622	12.94	2216.00
625 to 626	71.50	2216.00
627 to 628	8.82	2216.00
631 to 632	89.99	2216.00
639 to 640	1.37	139.00
640 to 641	20.96	-
641 to 642	6.13	-
645 to 646	19.17	-
646 to 647	15.68	-
648 to 649	43.42	-
655 to 656	105.92	2216.00

CURVE DATA #9
PI = 49+51.59
D = 0°34'22.6"
Δ = 1°16'33.2" Rt.
R = 10000.00'
L = 222.69'
T = 111.35'
E = 0.62'

PT = STA. 50+62.93

ITEM 609.234 TERMINAL CURB TYPE 1.4 FOOT

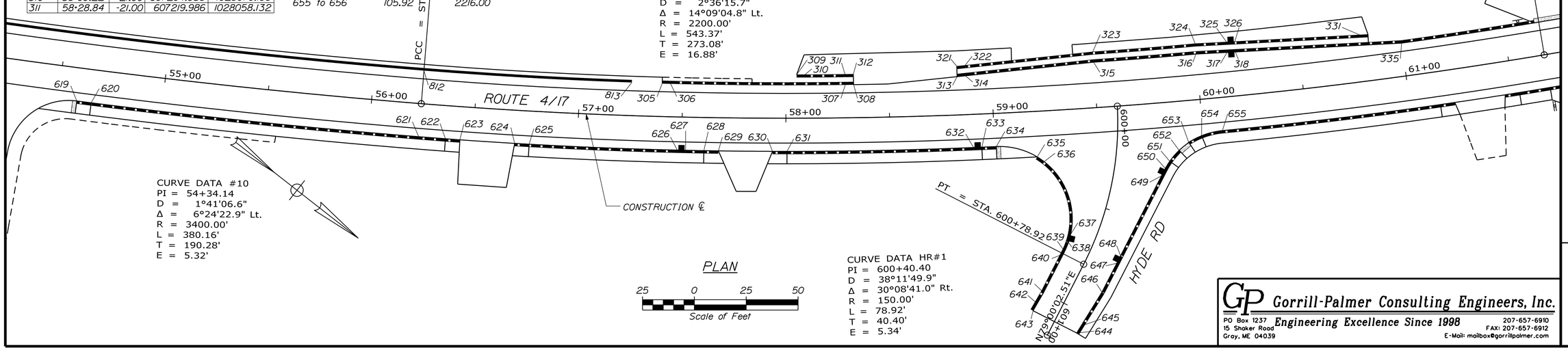
POINT	LENGTH (FT)	RADIUS (FT)
274 to 275	4.00	20.00
280 to 281	4.00	20.00
284 to 285	4.00	20.00
291 to 292	4.00	20.00
296 to 297	4.00	20.00
305 to 306	4.00	2184.00
307 to 308	4.00	2184.00
309 to 310	4.00	2179.00
311 to 312	4.00	2179.00
313 to 314	4.00	-
321 to 322	4.00	-
600 to 601	4.00	9984.00
602 to 603	4.00	9984.00
605 to 606	4.00	-
607 to 608	4.00	-
614 to 615	4.00	30.00
617 to 618	4.00	-
635 to 636	4.00	35.00
642 to 643	4.00	-
644 to 645	4.00	-

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
312	58+32.84	-21.00	607223.100	1028055.621
313	58+83.29	-18.50	607263.222	1028025.680
314	58+87.32	-18.77	607266.092	1028022.893
315	59+50.00	-22.00	607310.713	1027979.580
316	60+00.00	-22.00	607347.126	1027946.053
317	60+15.18	-21.38	607358.461	1027936.155
318	60+19.22	-21.20	607361.473	1027933.524
321	58+83.35	-23.52	607260.025	1028021.814
322	58+87.38	-23.79	607262.895	1028019.028
323	59+49.90	-27.00	607307.298	1027975.927
324	60+00.10	-27.00	607343.767	1027942.347
325	60+15.41	-26.38	607355.172	1027932.389
326	60+19.45	-26.19	607358.185	1027929.758
600	48+96.32	16.00	606438.560	1028560.580
601	49+00.32	16.00	606442.090	1028558.700
602	49+36.18	16.00	606473.727	1028541.935
603	49+40.18	16.00	606477.265	1028540.069
604	50+50.00	16.00	606574.512	1028489.490
605	51+05.34	19.32	606625.288	1028467.241
606	51+09.33	19.56	606628.951	1028465.635
607	51+59.34	22.00	606674.581	1028445.032
608	51+63.34	22.00	606678.142	1028443.210
609	52+00.00	22.00	606710.783	1028426.513
610	53+00.00	16.00	606796.869	1028375.221
611	53+61.20	16.00	606851.194	1028345.662
612	53+65.20	16.00	606854.689	1028343.716
613	53+72.20	16.00	606860.800	1028340.302
614	500+22.70	25.50	606879.285	1028336.771
615	500+25.24	22.41	606883.204	1028337.554
616	500+47.06	13.00	606901.819	1028352.329
617	500+96.00	13.00	606924.963	1028395.448
618	501+00.00	13.00	606926.855	1028398.973
619	54+59.00	16.00	606936.320	1028296.725

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
620	54+66.00	16.00	606942.334	1028293.143
621	56+24.02	16.00	607076.719	1028208.629
622	56+36.81	16.00	607087.488	1028201.457
623	56+43.81	16.00	607093.296	1028197.550
624	56+70.08	16.00	607115.141	1028182.618
625	56+77.08	16.00	607120.890	1028178.624
626	57+48.00	16.00	607178.875	1028136.800
627	57+52.00	16.00	607182.079	1028134.406
628	57+60.69	16.00	607189.127	1028129.106
629	57+67.69	16.00	607194.706	1028124.878
630	57+93.59	16.00	607215.385	1028108.968
631	58+00.59	16.00	607220.900	1028104.658
632	58+89.87	16.00	607290.576	1028047.714
633	58+93.87	16.00	607293.619	1028045.118
634	59+00.87	16.00	607298.932	1028040.561
635	600+30.11	37.61	607317.549	1028032.348
636	600+32.37	34.00	607321.539	1028032.094
637	600+68.04	11.82	607353.245	1028051.811
638	600+72.32	11.24	607354.783	1028055.501
639	600+77.45	11.00	607356.048	1028060.079
640	600+78.92	11.00	607356.315	1028061.418
641	600+99.88	11.00	607360.315	1028081.994
642	601+06.01	11.32	607361.168	1028088.068
643	601+10.00	11.53	607361.725	1028092.029
644	601+10.00	-12.11	607384.932	1028087.518
645	601+06.01	-12.44	607384.492	1028083.543
646	600+86.91	-14.00	607382.380	1028064.490
647	600+71.89	-14.18	607379.388	1028049.094
648	600+68.24	-14.42	607378.625	1028045.167
649	600+30.29	-23.01	607370.340	1028002.543
650	600+27.03	-24.34	607369.584	1027998.615
651	600+23.90	-26.03	607369.130	1027994.617
652	600+19.11	-30.09	607369.439	1027987.635
653	59+92.70	20.05	607370.590	1027981.698
654	59+99.15	17.48	607373.571	1027975.375
655	60+09.27	16.00	607379.969	1027967.292

PCC = STA. 56+24.02

CURVE DATA #11
PI = 58+97.10
D = 2°36'15.7"
Δ = 14°09'04.8" Lt.
R = 2200.00'
L = 543.37'
T = 273.08'
E = 16.88'



CURVE DATA #10
PI = 54+34.14
D = 1°41'06.6"
Δ = 6°24'22.9" Lt.
R = 3400.00'
L = 380.16'
T = 190.28'
E = 5.32'

PLAN

25 0 25 50
Scale of Feet

CURVE DATA HR#1
PI = 600+40.40
D = 38°11'49.9"
Δ = 30°08'41.0" Rt.
R = 150.00'
L = 78.92'
T = 40.40'
E = 5.34'

GP Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER RHOBE MOULTON	L MEEK	L.NEWHOUSE	7-18-14
DESIGN-DETAILED	D.ETTINGER	D.ETTINGER	7-18-14
CHECKED-REVIEWED			
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

CURB LAYOUT PLAN

SHEET NUMBER
34
OF 102

Filename: ...\MSTA\034_CurbPlan004.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
335 to 336	57.66	2184.00
339 to 340	5.45	-
344 to 345	43.74	-
348 to 349	43.74	-
352 to 353	62.00	-
356 to 357	62.00	-
360 to 361	7.66	-
362 to 363	3.00	-
366 to 367	48.29	9984.00
367 to 368	34.53	-

ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
371 to 372	48.04	9962.00
372 to 373	34.53	-
376 to 377	29.78	-
380 to 381	29.80	-
384 to 385	3.22	-
386 to 387	2.35	-
390 to 391	56.99	-
394 to 395	3.63	-
396 to 397	15.64	-
398 to 399	3.08	-
402 to 403	24.10	-

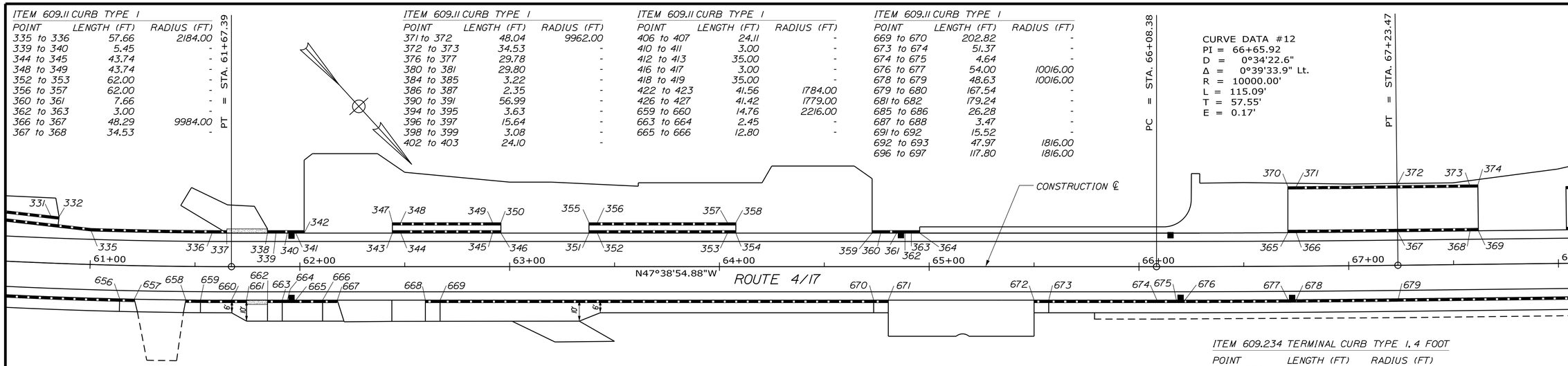
ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
406 to 407	24.11	-
410 to 411	3.00	-
412 to 413	35.00	-
416 to 417	3.00	-
418 to 419	35.00	-
422 to 423	41.56	1784.00
426 to 427	41.42	1779.00
659 to 660	14.76	2216.00
663 to 664	2.45	-
665 to 666	12.80	-

ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
669 to 670	202.82	-
673 to 674	51.37	-
674 to 675	4.64	-
676 to 677	54.00	10016.00
678 to 679	48.63	10016.00
679 to 680	167.54	-
681 to 682	179.24	-
685 to 686	26.28	-
687 to 688	3.47	-
691 to 692	15.52	-
692 to 693	47.97	1816.00
696 to 697	117.80	1816.00

CURVE DATA #12
PI = 66+65.92
D = 0°34'22.6"
Δ = 0°39'33.9" Lt.
R = 10000.00'
L = 115.09'
T = 57.55'
E = 0.17'



Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
331	60+80.31	-22.55	607403.600	1027890.100
332	60+84.34	-22.25	607406.613	1027887.469
335	61+00.00	-16.00	607421.930	1027880.731
336	61+58.10	-16.00	607461.514	1027838.800
337	61+65.10	-16.00	607466.243	1027833.639
338	61+84.58	-16.00	607479.329	1027819.285
339	61+88.58	-16.00	607482.024	1027816.329
340	61+94.03	-16.00	607485.693	1027812.304
341	61+98.03	-16.00	607488.388	1027809.348
342	62+02.03	-16.00	607491.082	1027806.392
343	62+44.09	-16.00	607519.418	1027775.307
344	62+48.09	-16.00	607522.113	1027772.351
345	62+91.82	-16.00	607551.577	1027740.029
346	62+95.82	-16.00	607554.272	1027737.073
347	62+44.09	-21.00	607515.723	1027771.939
348	62+48.09	-21.00	607518.418	1027768.983
349	62+91.82	-21.00	607547.882	1027736.661
350	62+95.82	-21.00	607550.576	1027733.705
351	63+37.82	-16.00	607582.566	1027706.034
352	63+41.82	-16.00	607585.261	1027703.078
353	64+03.82	-16.00	607627.029	1027657.258
354	64+07.82	-16.00	607629.723	1027654.302
355	63+37.82	-21.00	607578.871	1027702.666
356	63+41.82	-21.00	607581.566	1027699.709
357	64+03.82	-21.00	607623.333	1027653.890
358	64+07.82	-21.00	607626.028	1027650.934
359	64+72.82	-16.00	607673.512	1027606.265
360	64+76.82	-16.00	607676.207	1027603.309
361	64+84.49	-16.00	607681.369	1027597.646
362	64+88.49	-16.00	607684.064	1027594.690
363	64+91.49	-16.00	607686.085	1027592.473
364	64+95.49	-16.00	607688.780	1027589.517
365	66+71.10	-16.00	607806.869	1027459.681

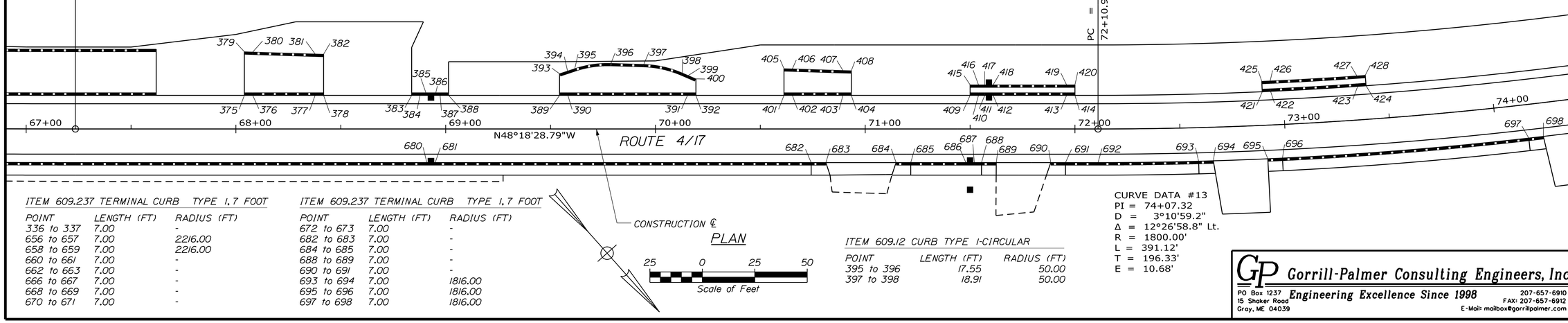
Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
366	66+75.10	-16.00	607809.544	1027456.708
367	67+23.47	-16.00	607841.749	1027420.727
368	67+58.00	-16.00	607864.719	1027394.938
369	67+62.00	-16.00	607867.380	1027391.952
370	66+71.10	-38.00	607790.610	1027444.860
371	66+75.10	-38.00	607793.285	1027441.886
372	67+23.47	-38.00	607825.321	1027406.094
373	67+58.00	-38.00	607848.291	1027380.306
374	67+62.00	-38.00	607850.952	1027377.319
375	68+04.00	-16.00	607895.315	1027360.589
376	68+08.00	-16.00	607897.976	1027357.602
377	68+37.79	-16.00	607917.786	1027335.361
378	68+41.79	-16.00	607920.447	1027332.374
379	68+04.00	-36.76	607879.813	1027346.781
380	68+08.00	-36.64	607882.565	1027343.878
381	68+37.79	-35.71	607903.073	1027322.252
382	68+41.79	-35.58	607905.825	1027319.350
383	68+83.78	-16.00	607948.382	1027301.011
384	68+87.78	-16.00	607951.043	1027298.024
385	68+91.00	-16.00	607953.181	1027295.623
386	68+95.00	-16.00	607955.842	1027292.636
387	68+97.35	-16.00	607957.402	1027290.885
388	69+01.35	-16.00	607960.062	1027287.898
389	69+54.29	-16.00	607995.279	1027248.360
390	69+58.29	-16.00	607997.939	1027245.374
391	70+15.28	-16.00	608035.843	1027202.819
392	70+19.28	-16.00	608038.504	1027199.832
393	69+54.29	-26.33	607987.567	1027241.492
394	69+58.09	-27.59	607989.153	1027237.819
395	69+61.54	-28.73	607990.591	1027234.487
396	69+78.81	-31.25	608000.201	1027219.913
397	69+94.44	-30.76	608010.956	1027208.562
398	70+12.79	-26.66	608026.222	1027197.588
399	70+15.61	-25.44	608029.014	1027196.294
400	70+19.28	-23.85	608032.643	1027194.612
401	70+61.28	-16.00	608066.439	1027168.469

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
402	70+65.28	-16.00	608069.100	1027165.482
403	70+89.38	-16.00	608085.128	1027147.488
404	70+93.38	-16.00	608087.789	1027144.501
405	70+61.28	-28.73	608056.932	1027160.002
406	70+65.28	-28.61	608059.685	1027157.099
407	70+89.38	-27.85	608076.277	1027139.601
408	70+93.38	-27.73	608079.030	1027136.699
409	71+50.00	-16.00	608125.449	1027102.220
410	71+54.00	-16.00	608128.110	1027099.233
411	71+57.00	-16.00	608130.105	1027096.992
412	71+61.00	-16.00	608132.766	1027094.005
413	71+96.00	-16.00	608156.045	1027067.870
414	72+00.00	-16.00	608158.705	1027064.883
415	71+50.00	-21.00	608121.714	1027098.895
416	71+54.00	-21.00	608124.375	1027095.909
417	71+57.00	-21.00	608126.372	1027093.667
418	71+61.00	-21.00	608129.032	1027090.680
419	71+96.00	-21.00	608152.310	1027064.546
420	72+00.00	-21.00	608154.970	1027061.559
421	72+90.00	-16.00	608216.798	1026997.079
422	72+94.00	-16.00	608219.322	1026993.975
423	73+36.00	-16.00	608245.123	1026961.401
424	73+40.00	-16.00	608247.566	1026958.234
425	72+90.00	-21.00	608212.922	1026993.920
426	72+94.00	-21.00	608215.446	1026990.817
427	73+36.00	-21.00	608241.161	1026958.351
428	73+40.00	-21.00	608243.604	1026955.184
656	61+14.38	16.00	607454.992	1027892.531
657	61+21.38	16.00	607459.823	1027887.465
658	61+45.79	16.00	607476.661	1027869.554
659	61+52.79	16.00	607481.419	1027864.420
660	61+67.58	16.00	607491.399	1027853.545
661	61+74.58	16.00	607496.241	1027848.233
662	61+84.58	16.00	607502.978	1027840.843
663	61+91.58	16.00	607507.694	1027835.670

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
664	61+94.03	16.00	607509.342	1027833.862
665	61+98.03	16.00	607512.037	1027830.906
666	62+10.83	16.00	607520.662	1027821.444
667	62+17.83	16.00	607525.378	1027816.270
668	62+59.83	16.00	607526.402	1027736.096
669	62+66.83	16.00	607531.118	1027730.923
670	64+73.52	16.00	607697.632	1027627.306
671	64+80.52	16.00	607702.348	1027622.133
672	65+50.00	16.00	607749.154	1027570.787
673	65+57.00	16.00	607753.869	1027565.614
674	66+08.38	16.00	607788.479	1027527.647
675	66+18.00	16.00	607794.867	1027520.632
676	66+22.00	16.00	607797.559	1027517.674
677	66+70.92	16.00	607830.535	1027481.220
678	66+74.92	16.00	607833.211	1027478.246
679	67+23.47	16.00	607865.645	1027442.011
680	68+91.00	16.00	607977.077	1027316.907
681	68+95.00	16.00	607979.737	1027313.920
682	70+74.24	16.00	608098.954	1027180.077
683	70+81.24	16.00	608103.610	1027174.850
684	71+14.72	16.00	608125.876	1027149.852
685	71+21.72	16.00	608130.531	1027144.625
686	71+48.00	16.00	608148.014	1027124.997
687	71+52.00	16.00	608150.675	1027122.010
688	71+55.47	16.00	608152.980	1027119.422
689	71+62.47	16.00	608157.636	1027114.195
690	71+88.47	16.00	608174.929	1027094.780
691	71+95.47	16.00	608179.585	1027089.552
692	72+10.99	16.00	608189.911	1027077.960
693	72+58.48	16.00	608221.339	1027041.723
694	72+65.48	16.00	608225.845	1027036.367
695	72+91.25	16.00	608242.400	1027016.318
696	72+98.25	16.00	608246.807	1027010.880
697	74+14.89	16.00	608317.787	1026916.886
698	74+21.89	16.00	608321.811	1026911.158

ITEM 609.234 TERMINAL CURB TYPE 1, 4 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
331 to 332	4.00	-
338 to 339	4.00	-
341 to 342	4.00	-
343 to 344	4.00	-
345 to 346	4.00	-
347 to 348	4.00	-
349 to 350	4.00	-
351 to 352	4.00	-
353 to 354	4.00	-
355 to 356	4.00	-
357 to 358	4.00	-
359 to 360	4.00	-
363 to 364	4.00	-
365 to 366	4.00	-
368 to 369	4.00	-
370 to 371	4.00	-
373 to 374	4.00	-
375 to 376	4.00	-
377 to 378	4.00	-
379 to 380	4.00	-
381 to 382	4.00	-
383 to 384	4.00	-
387 to 388	4.00	-
389 to 390	4.00	-
391 to 392	4.00	-
393 to 394	4.00	-
399 to 400	4.00	-
401 to 402	4.00	-
403 to 404	4.00	-
405 to 406	4.00	-
407 to 408	4.00	-
409 to 410	4.00	-
413 to 414	4.00	-
415 to 416	4.00	-
419 to 420	4.00	-
421 to 422	4.00	1784.00
423 to 424	4.00	1784.00
425 to 426	4.00	1779.00
427 to 428	4.00	1779.00



ITEM 609.237 TERMINAL CURB TYPE 1, 7 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
336 to 337	7.00	-
656 to 657	7.00	2216.00
658 to 659	7.00	2216.00
660 to 661	7.00	-
662 to 663	7.00	-
666 to 667	7.00	-
668 to 669	7.00	-
670 to 671	7.00	-

ITEM 609.237 TERMINAL CURB TYPE 1, 7 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
672 to 673	7.00	-
682 to 683	7.00	-
684 to 685	7.00	-
688 to 689	7.00	-
690 to 691	7.00	-
693 to 694	7.00	1816.00
695 to 696	7.00	1816.00
697 to 698	7.00	1816.00

PLAN

25 0 25 50
Scale of Feet

ITEM 609.12 CURB TYPE 1-CIRCULAR

POINT	LENGTH (FT)	RADIUS (FT)
395 to 396	17.55	50.00
397 to 398	18.91	50.00

CURVE DATA #13
PI = 74+07.32
D = 3°10'59.2"
Δ = 12°26'58.8" Lt.
R = 1800.00'
L = 391.12'
T = 196.33'
E = 10.68'

Gorrill-Palmer Consulting Engineers, Inc.
Engineering Excellence Since 1998
PO Box 1237
15 Shaker Road
Gray, ME 04039
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

	BY	DATE
PROJ. MANAGER RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	7-18-14
CHECKED-REVIEWED	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

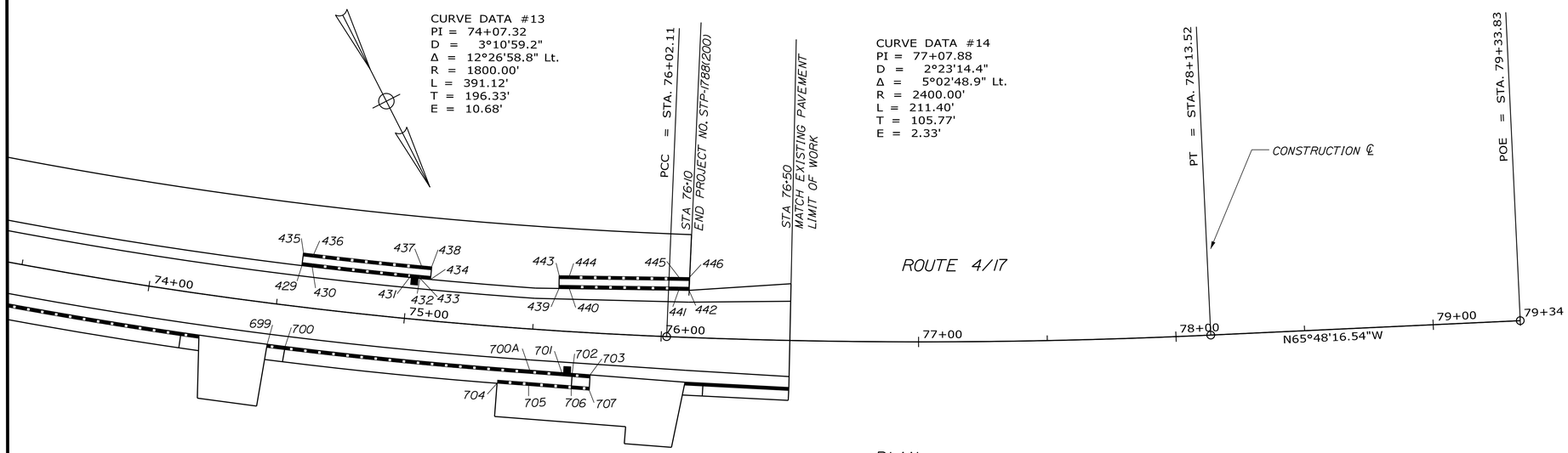
SIGNATURE
P.E. NUMBER
DATE

JAY
ROUTE 4\17

CURB LAYOUT PLAN

SHEET NUMBER
35
OF 102

Filename: ...\MSTA\035_CurbPlan005.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



PLAN

25 0 25 50
Scale of Feet

Offset Point	Baseline Station	Offset (ft)	Offset Point Northing	Offset Point Easting
429	74+58.02	-16.00	608315.826	1026863.265
430	74+62.02	-16.00	608318.048	1026859.939
431	75+00.50	-16.00	608338.835	1026828.039
432	75+04.50	-16.00	608340.979	1026824.663
433	75+04.68	-16.00	608341.052	1026824.549
434	75+08.68	-16.00	608343.189	1026821.168
435	74+58.02	-21.00	608311.681	1026860.468
436	74+62.02	-21.00	608313.905	1026857.143
437	75+04.68	-21.00	608336.834	1026821.864
438	75+08.68	-21.00	608338.970	1026818.482
439	75+59.17	-16.48	608368.851	1026778.221
440	75+63.20	-16.68	608370.711	1026774.680
441	76+06.10	-18.22	608390.490	1026737.036
442	76+10.13	-18.32	608392.350	1026733.495
443	75+58.91	-21.48	608364.424	1026775.896
444	75+62.96	-21.67	608366.285	1026772.355
445	76+05.98	-23.22	608386.063	1026734.710
446	76+10.02	-23.32	608387.924	1026731.169
699	74+48.42	16.00	608336.991	1026889.118
700	74+55.42	16.00	608340.908	1026883.316
700A	75+50.00	16.00	608392.076	1026802.711
701	75+62.37	16.13	608398.576	1026792.026
702	75+66.37	16.19	608400.655	1026788.609
703	75+73.37	16.32	608404.293	1026782.629
704	75+37.84	22.00	608390.868	1026816.330
705	75+50.00	22.00	608397.202	1026805.829
706	75+66.37	22.20	608405.830	1026791.684
707	75+73.37	22.32	608409.468	1026785.668

ITEM 609.11 CURB TYPE 1

POINT	LENGTH (FT)	RADIUS (FT)
430 to 431	38.08	1822.52
432 to 433	0.13	1822.52
436 to 437	42.08	1817.52
440 to 441	42.52	-
444 to 445	42.52	-
700 to 700A	95.49	1816.00
700A to 701	12.51	-
704 to 705	12.26	1815.57
705 to 706	16.60	-

ITEM 609.234 TERMINAL CURB TYPE 1, 4 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
429 to 430	4.00	1784.00
433 to 434	4.00	1822.52
435 to 436	4.00	1779.00
437 to 438	4.00	1779.00
439 to 440	4.00	-
441 to 442	4.00	-
443 to 444	4.00	-
445 to 446	4.00	-

ITEM 609.237 TERMINAL CURB TYPE 1, 7 FOOT

POINT	LENGTH (FT)	RADIUS (FT)
699 to 700	7.00	1816.00
702 to 703	7.00	-
706 to 707	7.00	-

Gorrill-Palmer Consulting Engineers, Inc.
PO Box 1237
15 Shaker Road
Gray, ME 04039
Engineering Excellence Since 1998
207-657-6910
FAX: 207-657-6912
E-Mail: mailbox@gorrillpalmer.com

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

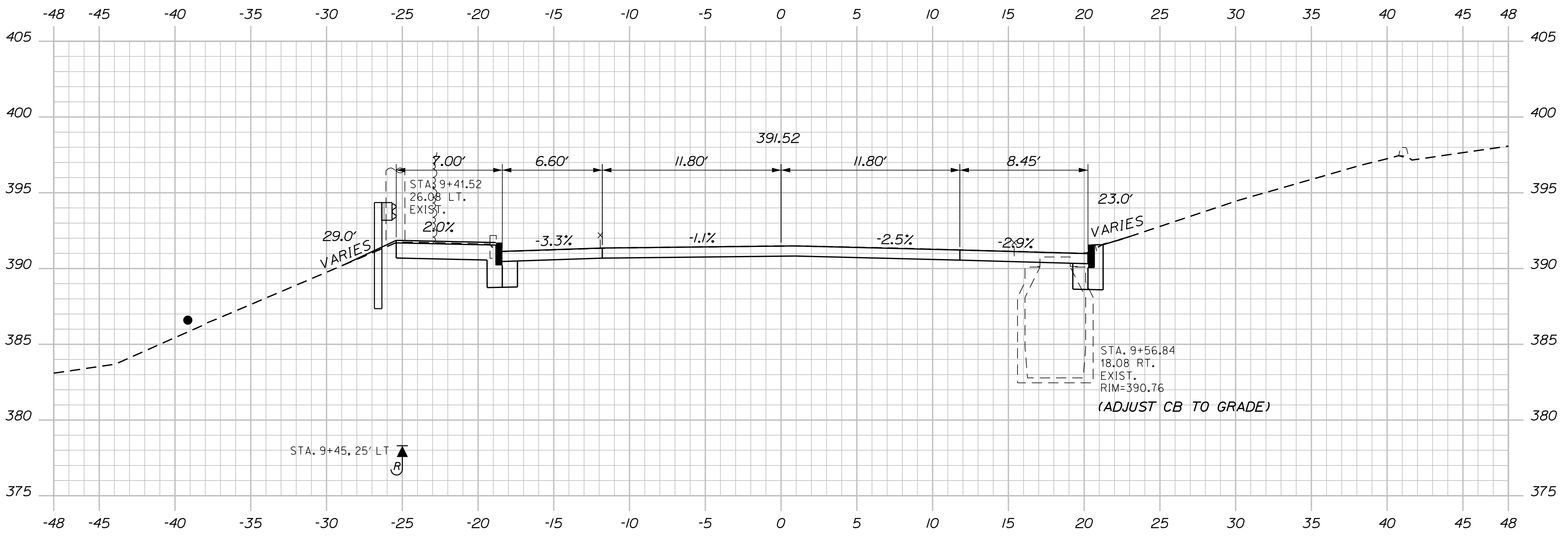
JAY
ROUTE 4\17

CURB LAYOUT PLAN

SHEET NUMBER
36
OF 102

Filename: ...\MSTA\036_CurbPlan006.dgn Division: HIGHWAY Username: bhovu Date:8/15/2014

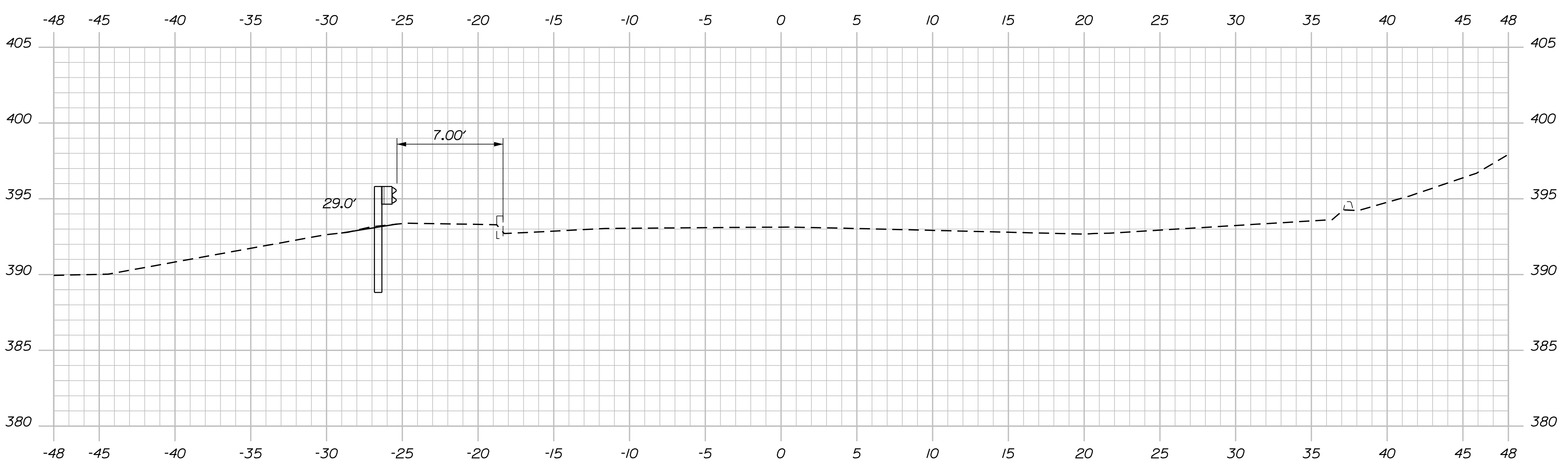
C = 36 CY
F = 0 CY
G = 0 CY



STA. 9+05.00 TO STA. 12+37.40 LT
INSTALL GUARDRAIL TYPE 3C -
SINGLE RAIL WITH 4'-5" POST EMBEDMENT

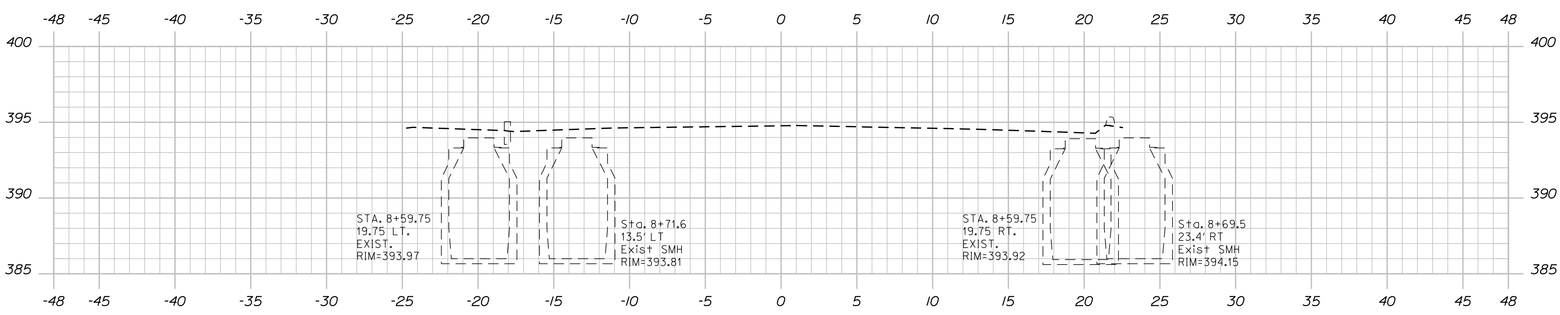
9+50.00

STA 9+50
LIMIT OF WORK
MATCH EXISTING PAVEMENT



STA. 8+67.50 TO STA. 9+05.00 LT
INSTALL GUARDRAIL ET-PLUS

9+00.00



8+50.00

Sta. 10+00.00 to Sta. 11+00.00

SHEET NUMBER 37 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE
P.E. NUMBER
DATE

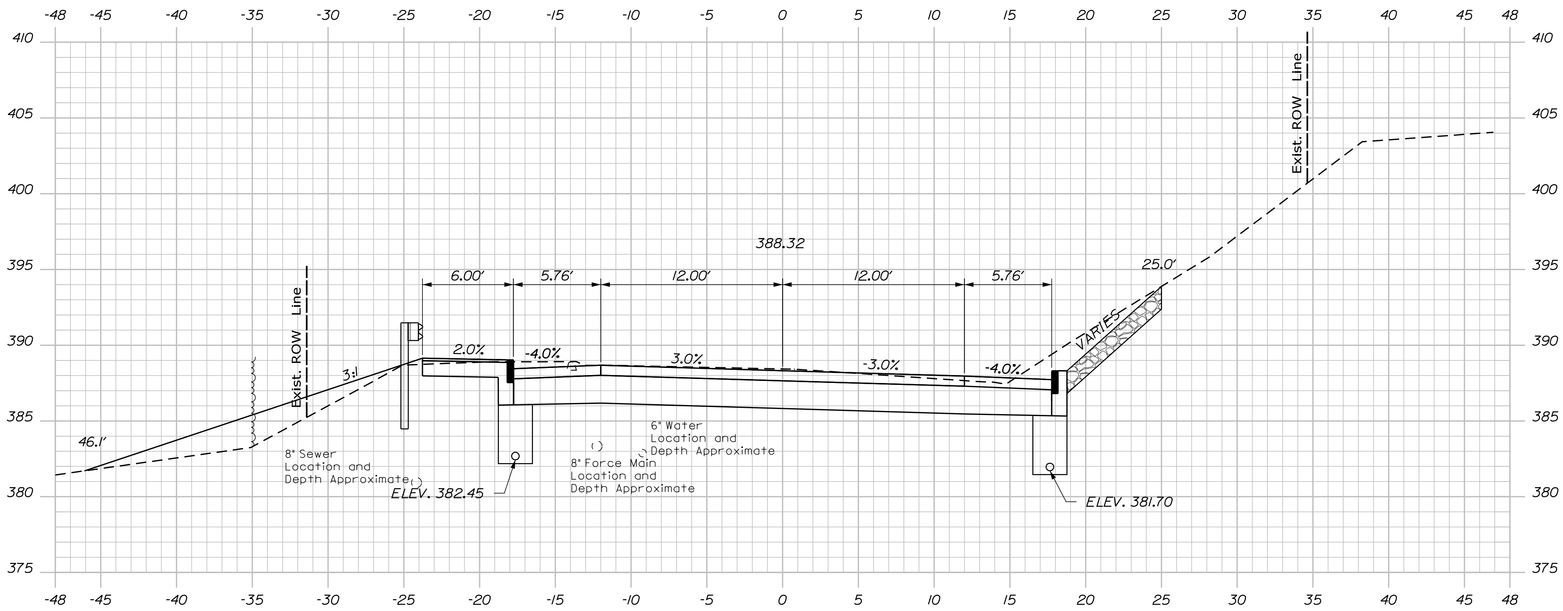
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN
17882.00

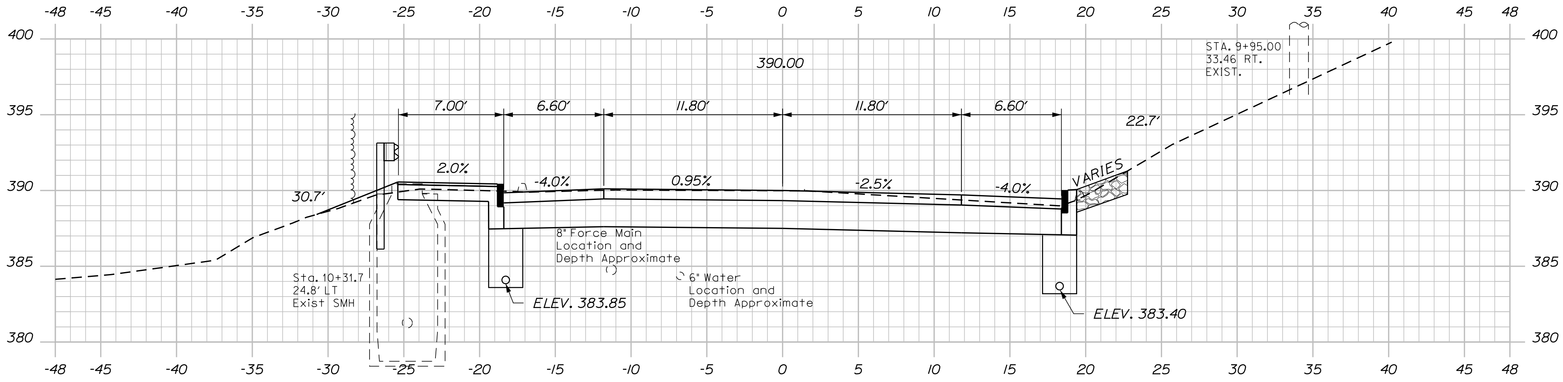
HIGHWAY PLANS

C = 213 CY
F = 15 CY
G = 0 CY



10+50.00

C = 199 CY
F = 15 CY
G = 0 CY



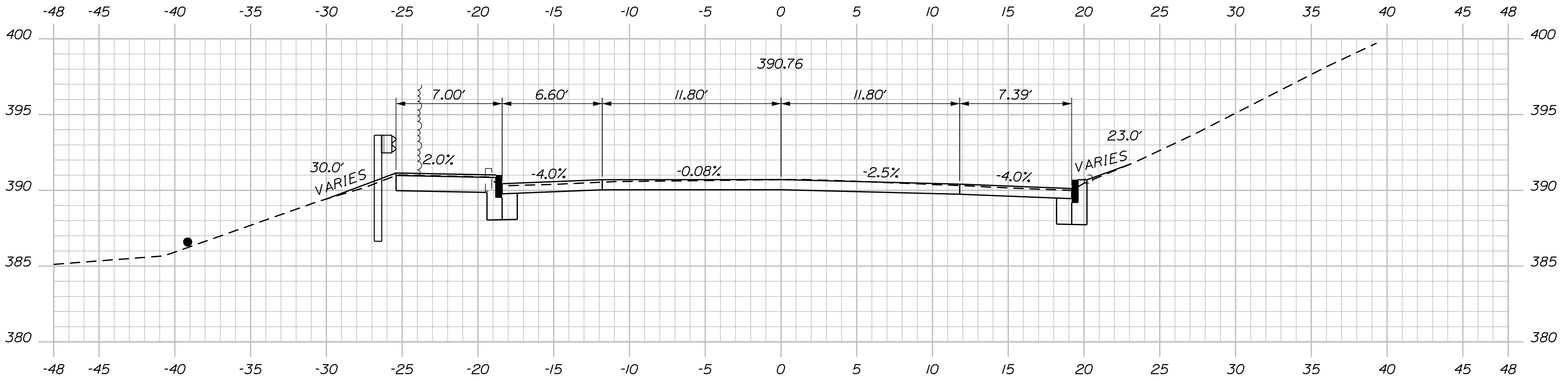
STA. 10+00.00 LT TO STA 12+41.00 LT
INSTALL 239.0' x 6" UD. TYPE 'B'

10+00.00

STA. 10+00.00 RT TO STA 12+41.00 RT
INSTALL 239.0' x 6" UD. TYPE 'B'

STA 10+00
BEGIN PROJECT NO. STP-1788(200)
END PROJECT NO. NH-1001(800)X

C = 63 CY
F = 0 CY
G = 0 CY



9+75.00

Sta. 10+00.00 to Sta. 11+00.00

SHEET NUMBER 38 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14
		DESIGN2-DETAILED2		
		DESIGN3-DETAILED3		
		REVISIONS 1		
		REVISIONS 2		
		REVISIONS 3		
		REVISIONS 4		
		FIELD CHANGES		

SIGNATURE
P.E. NUMBER
DATE

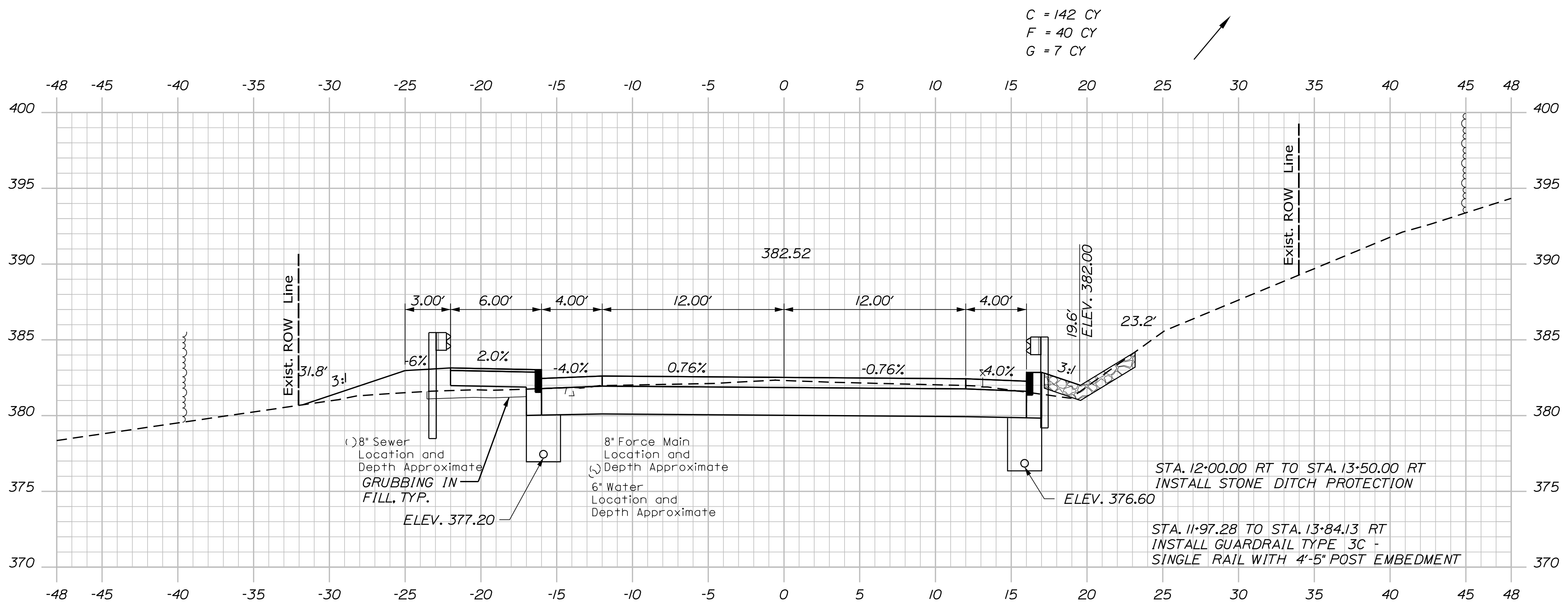
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

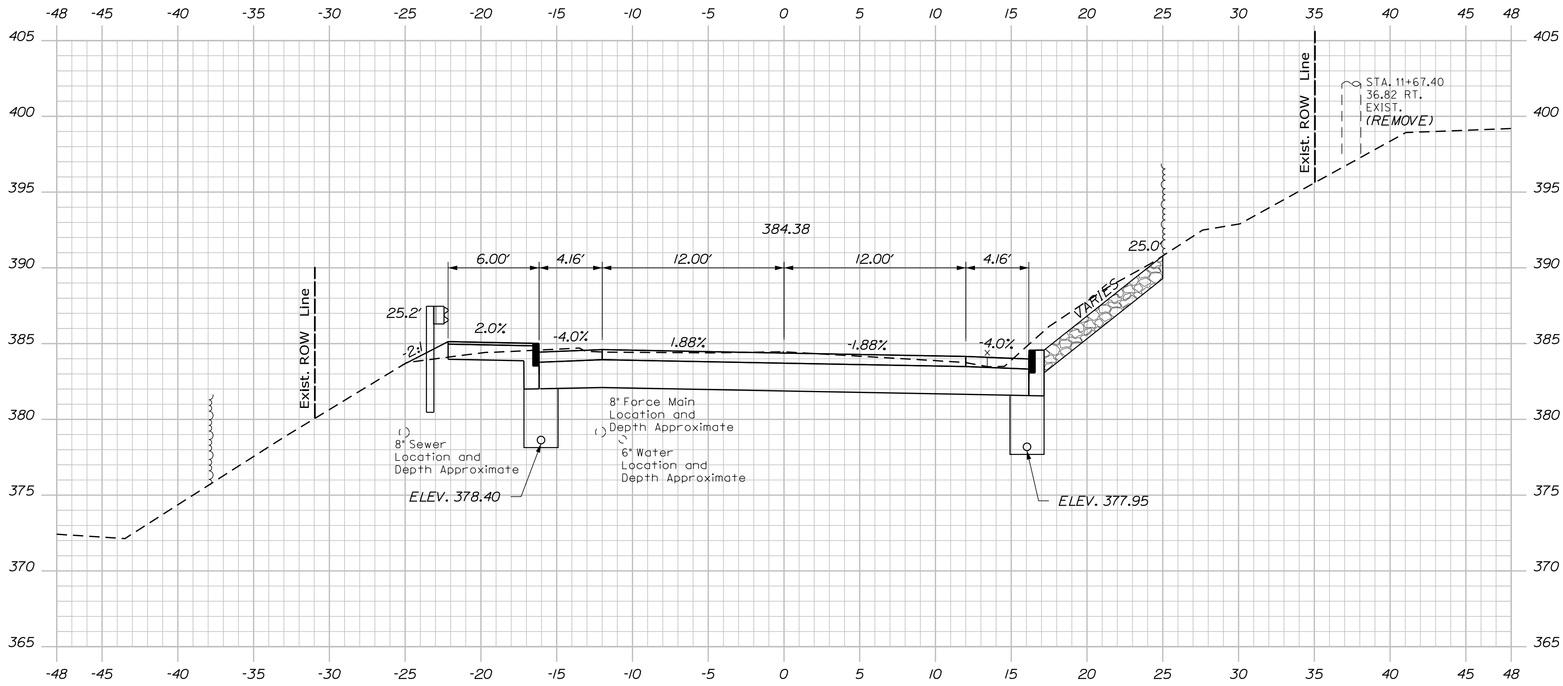
CROSS SECTIONS



12+00.00

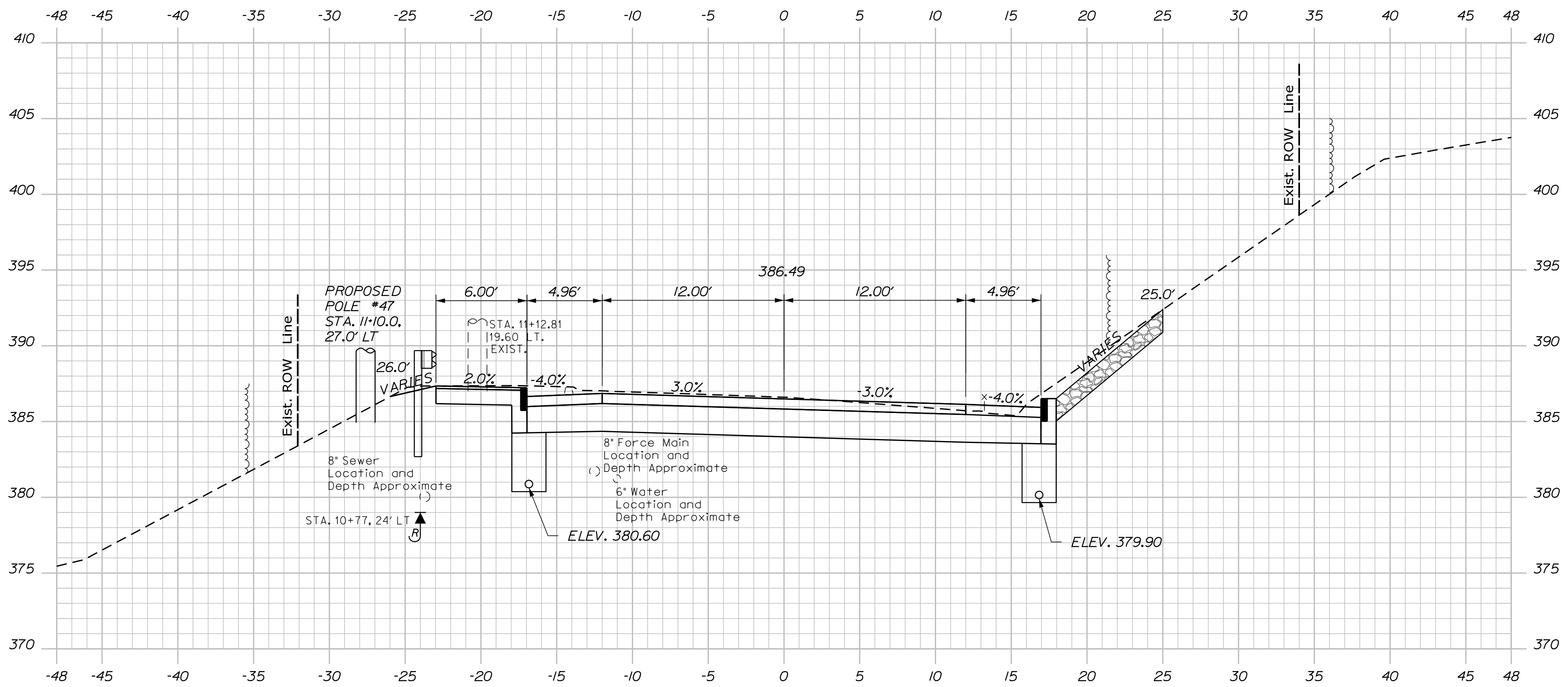
C = 162 CY
F = 8 CY
G = 3 CY

STA. 11+59.76 TO STA. 11+97.28 RT
INSTALL GUARDRAIL ET-PLUS



11+50.00

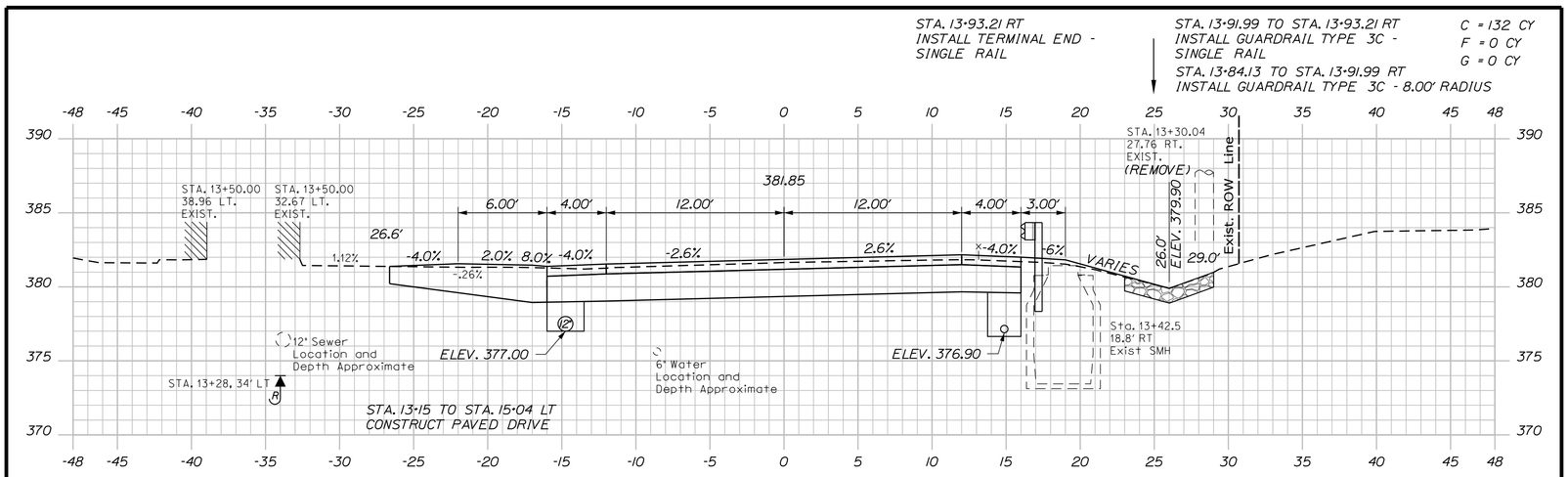
C = 201 CY
F = 1 CY
G = 0 CY

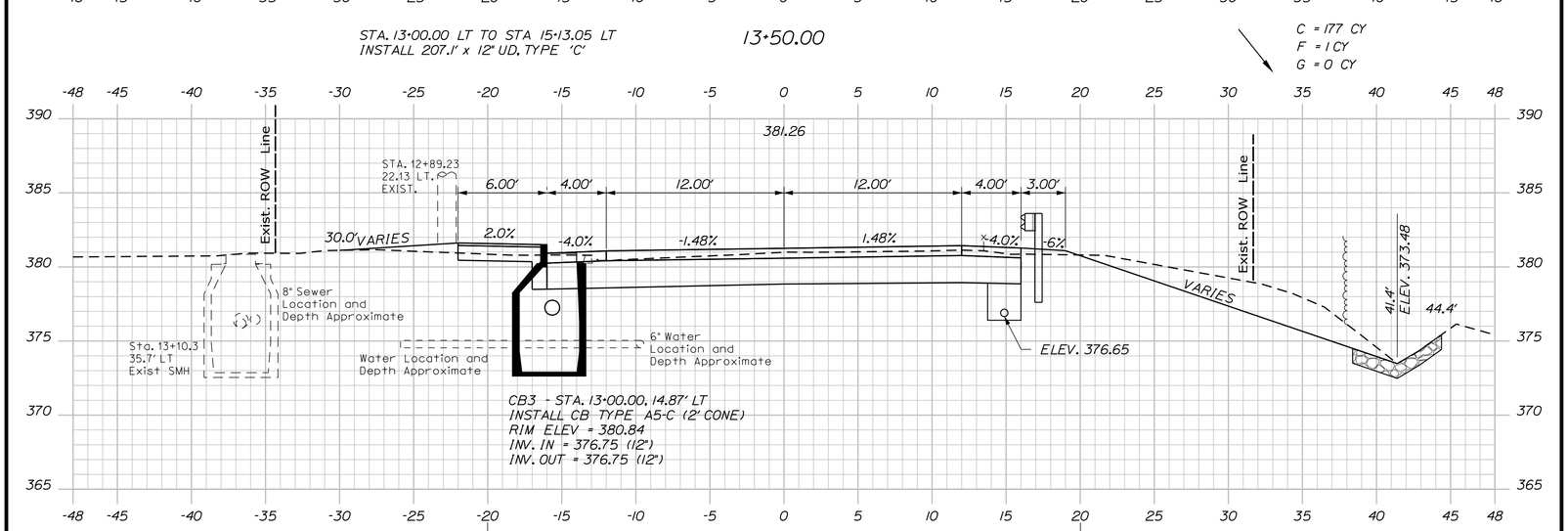


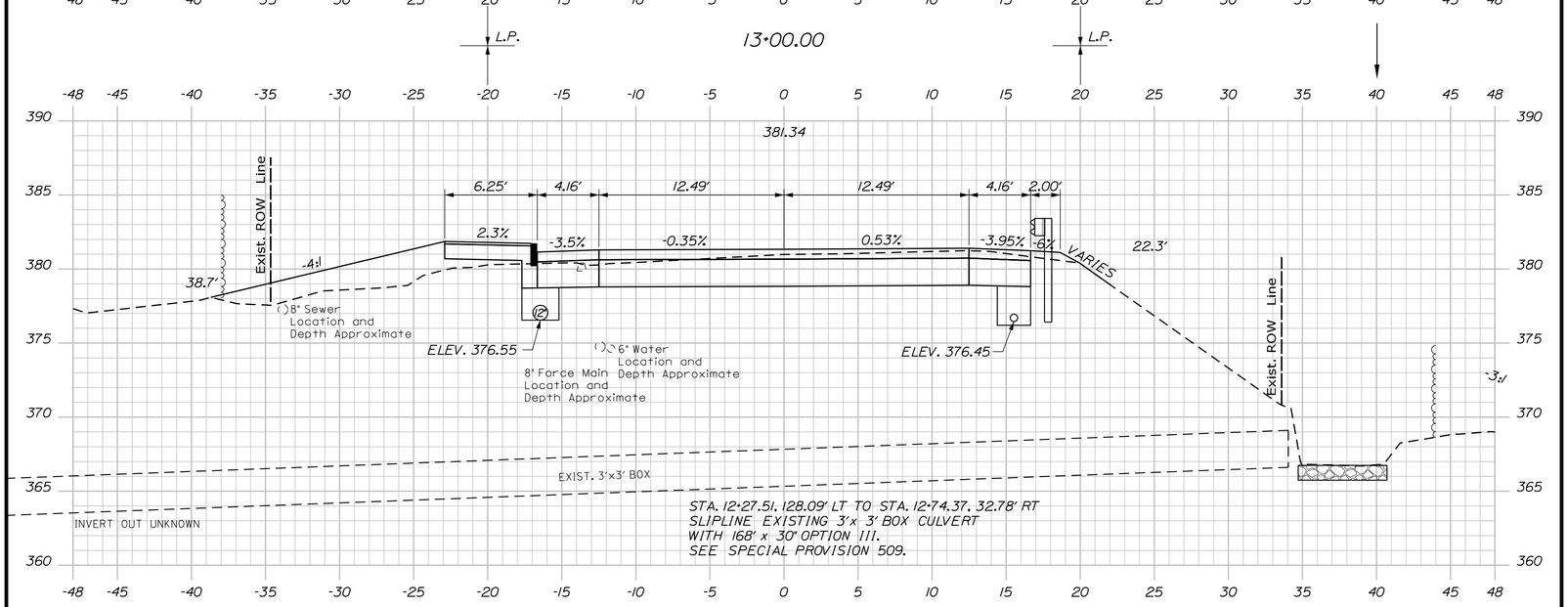
11+00.00

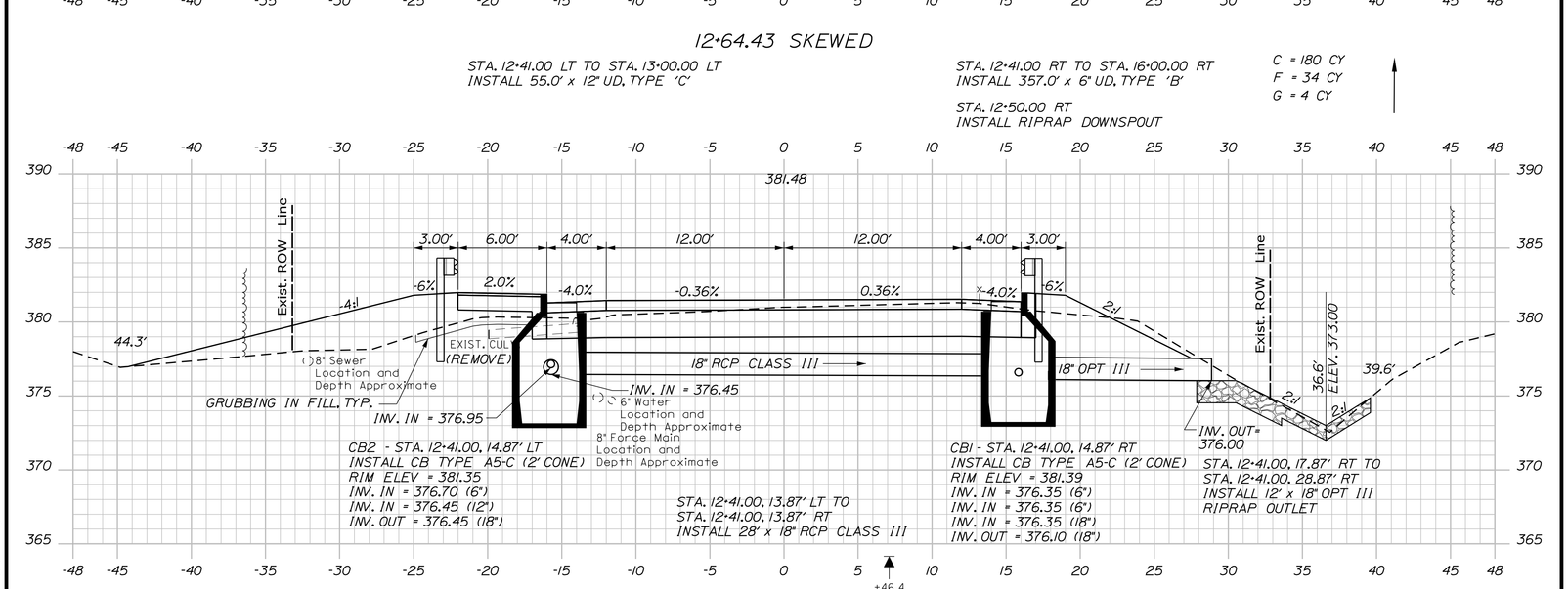
Sta. 11+50.00 to Sta. 12+50.00

SHEET NUMBER 39 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	STP-1788(200)
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			P.E. NUMBER
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			
	CROSS SECTIONS	FIELD CHANGES			WIN 17882.00 HIGHWAY PLANS









Sta. 12+64.43 to Sta. 14+00.00

SHEET NUMBER 40 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

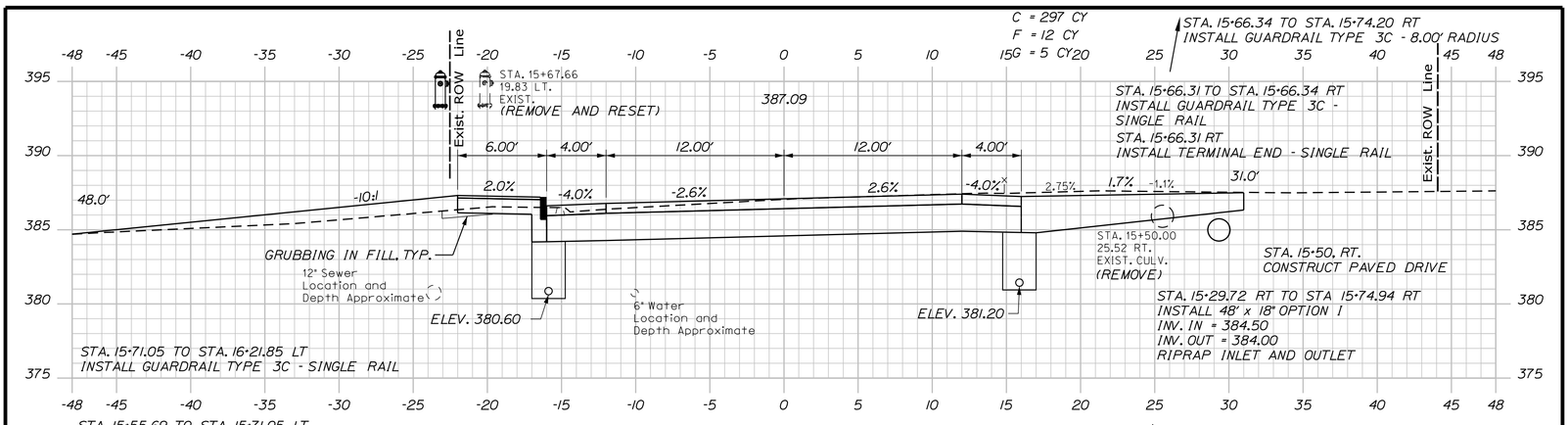
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

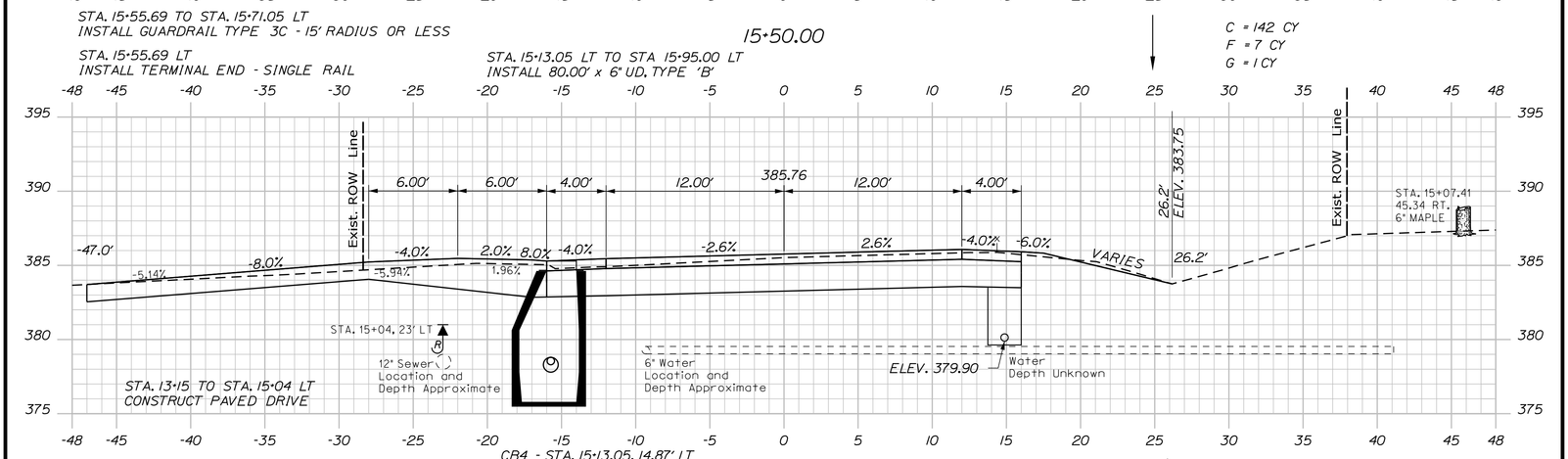
STP-1788(200)

WIN 17882.00

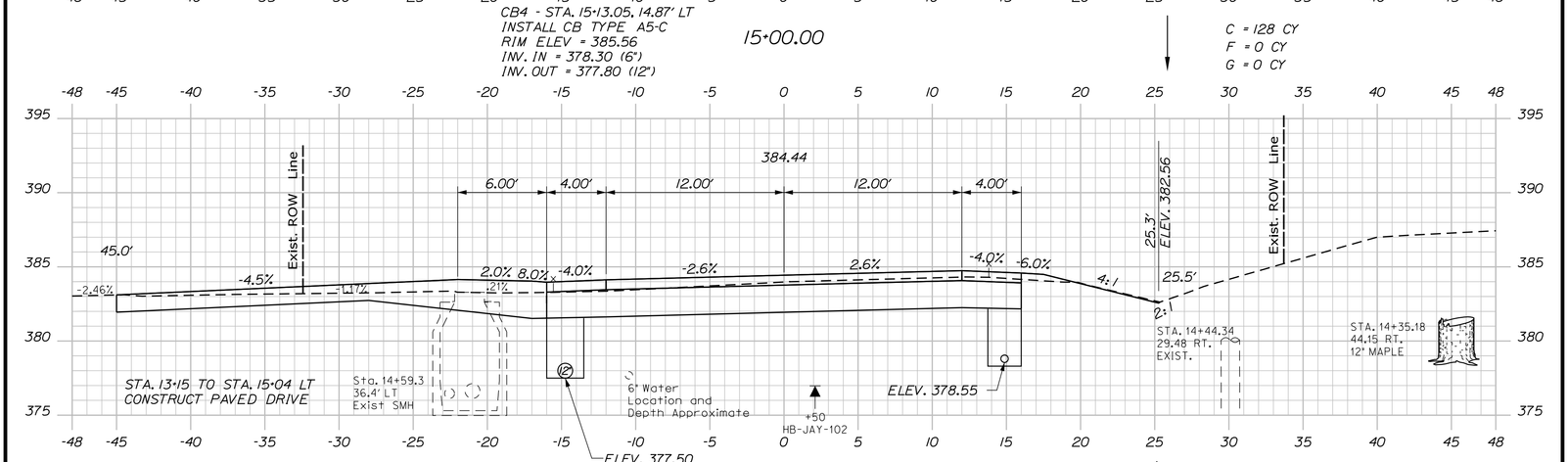
HIGHWAY PLANS



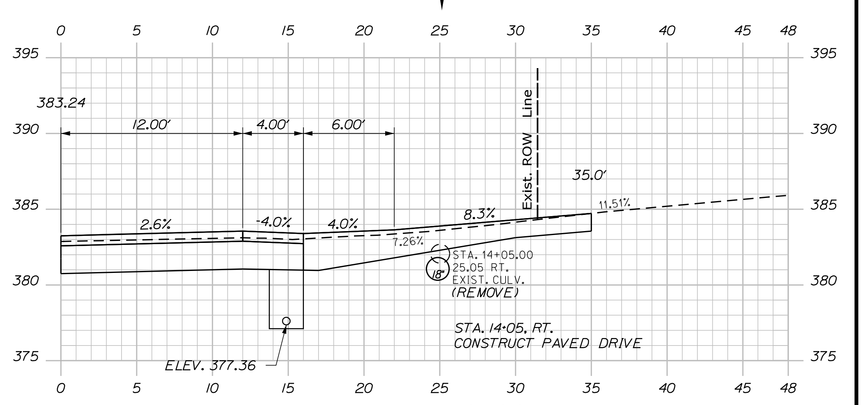
15+50.00



15+00.00

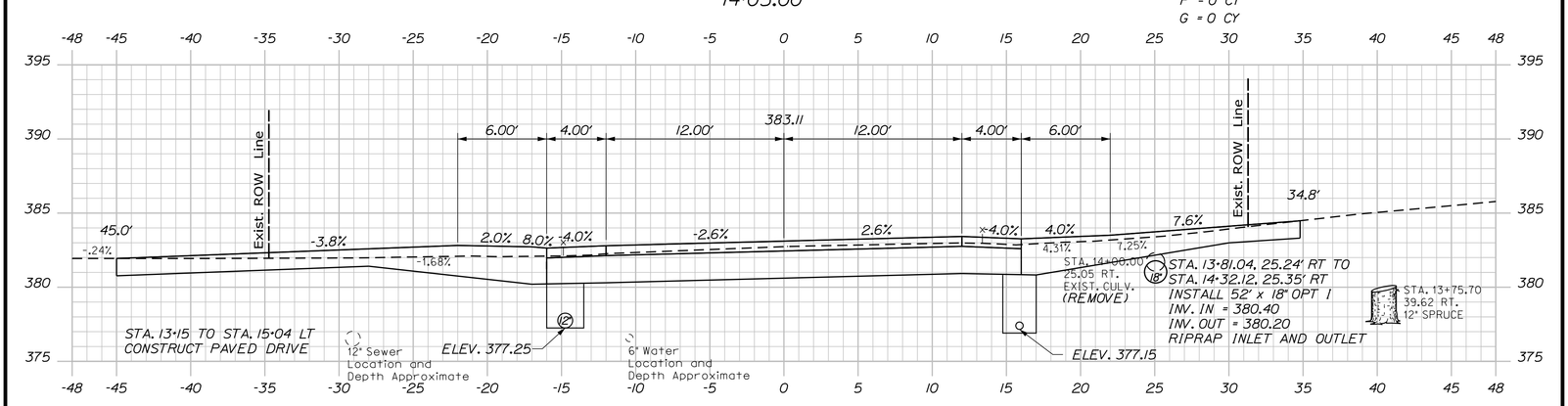


14+50.00



14+05.00

C = 121 CY
F = 0 CY
G = 0 CY



14+00.00

Sta. 14+05.00 to Sta. 15+50.00

SHEET NUMBER 41 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
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

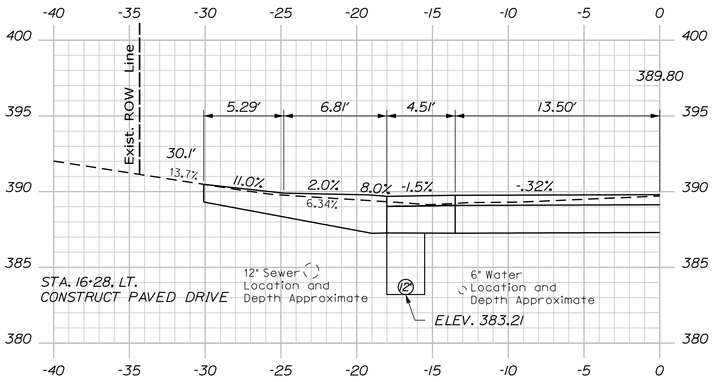
STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

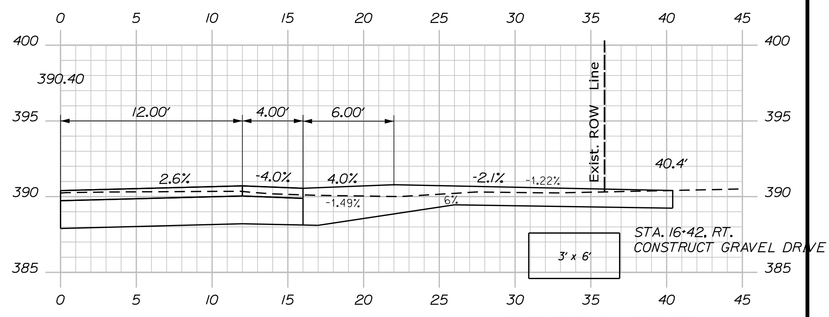
STA. 16+39.93 LT
INSTALL TERMINAL END - SINGLE RAIL

STA. 16+32.73 TO STA. 16+39.93 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL



STA. 16+21.85 TO STA. 16+32.73 LT
INSTALL GUARDRAIL TYPE 3C - 15.00' RADIUS

16+28.47 SKEWED



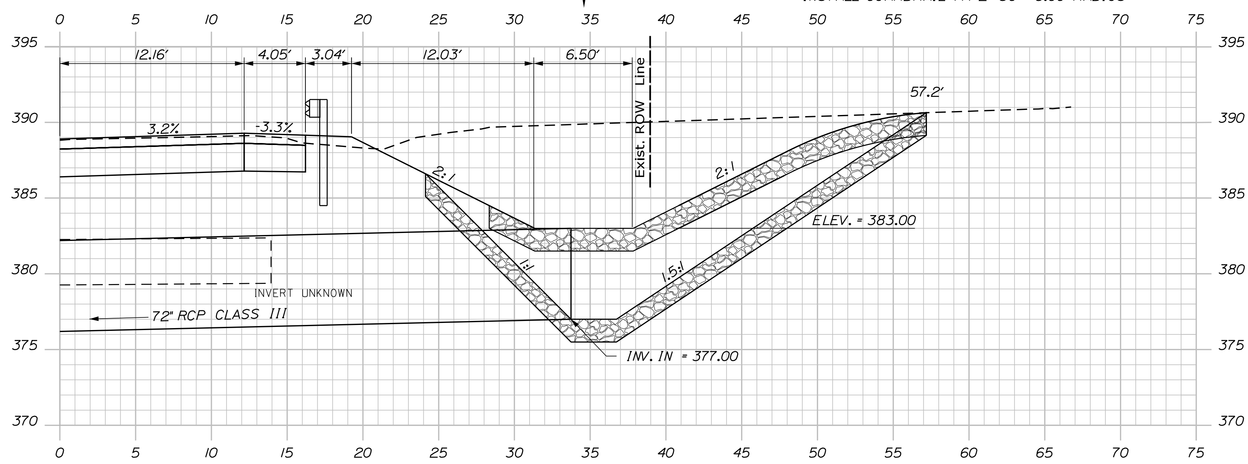
STA. 16+32.73 RT
INSTALL TERMINAL END - SINGLE RAIL

STA. 16+31.50 TO STA. 16+32.73 RT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL

STA. 16+19.06, 35.80' RT TO
STA. 16+69.74, 33.50' RT
INSTALL 52' x 3' x 6'
CONCRETE BOX CULVERT
INV. IN = 386.00
INV. OUT = 383.25

16+42.00

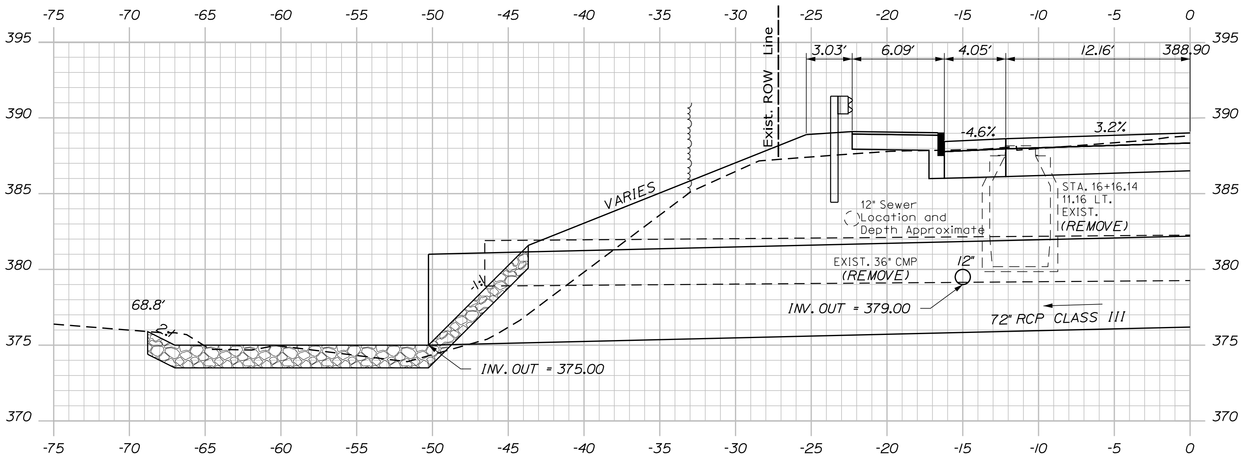
STA. 16+23.64 TO STA. 16+31.50 RT
INSTALL GUARDRAIL TYPE 3C - 8.00' RADIUS



STA. 15+97.63, 49.58' LT TO
STA. 16+11.34, 33.30' RT
INSTALL 84' x 72" RCP CLASS III
RIPRAP INLET AND OUTLET
INSTALL PIPE TIES AT INLET AND OUTLET

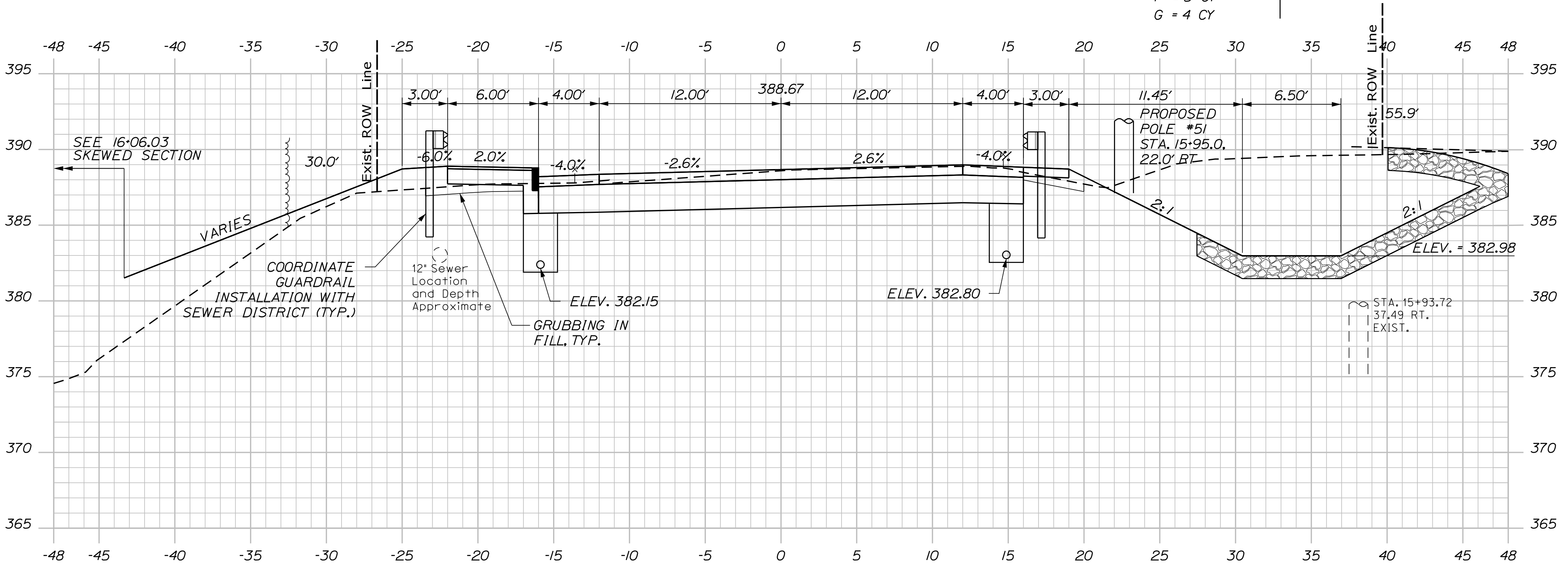
16+06.03 SKEWED RT

STA. 16+06.62 LT TO STA. 18+25.88 LT
INSTALL 217.3' x 12" UD, TYPE 'C'



16+06.03 SKEWED LT

C = 286 CY
F = 5 CY
G = 4 CY



STA. 15+74.20 TO STA. 16+23.64 RT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL

16+00.00

Sta. 16+00.00 to Sta. 16+42.00

SHEET NUMBER 42 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

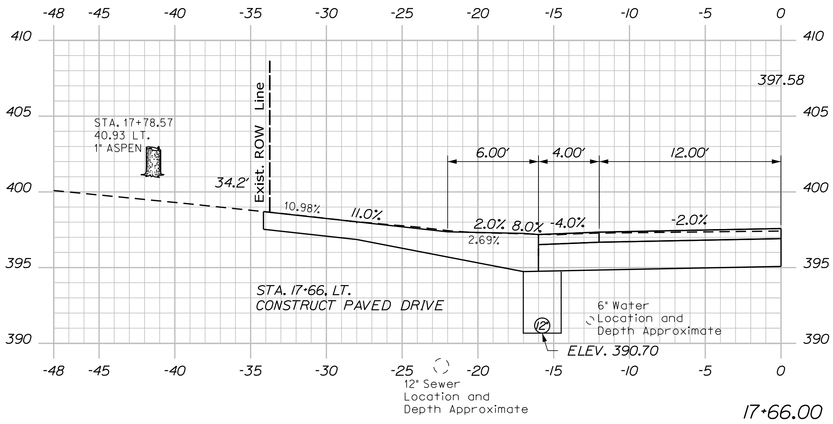
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

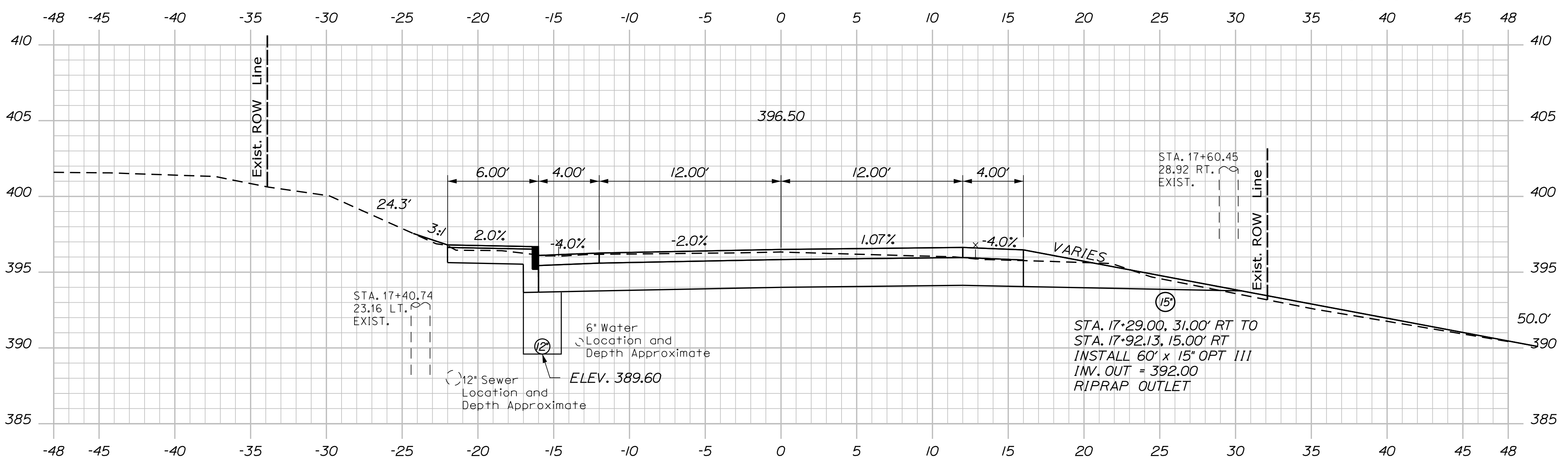
WIN 17882.00

HIGHWAY PLANS



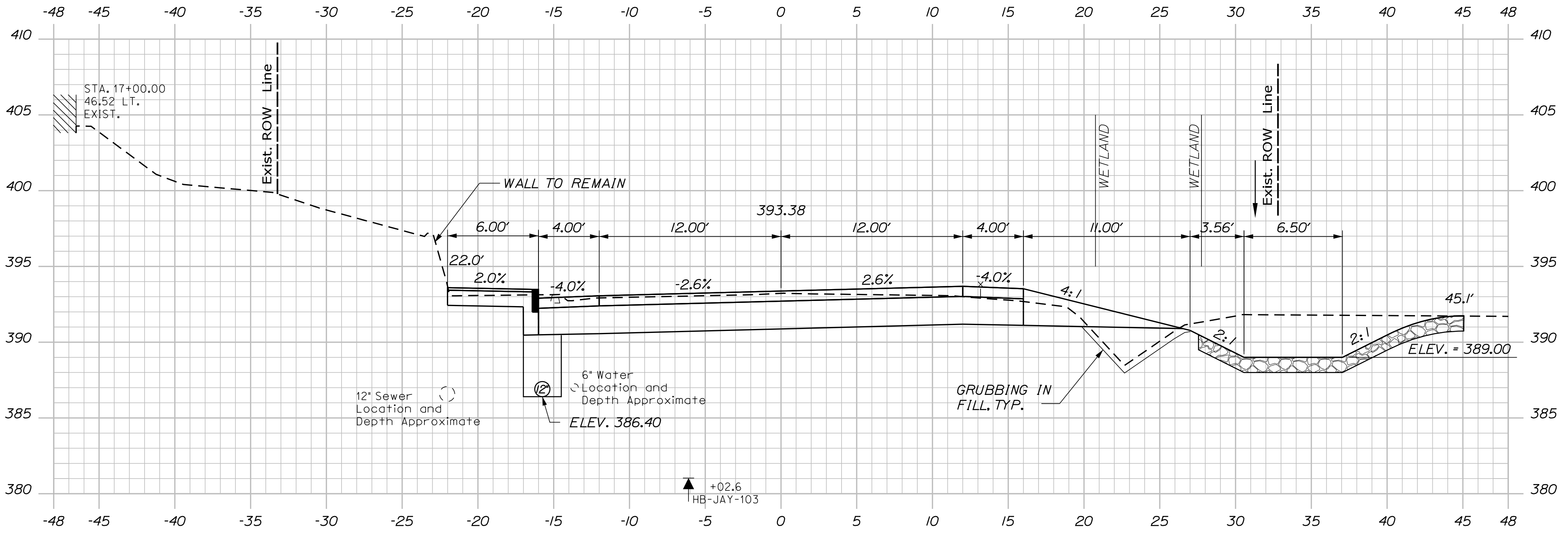
17+66.00

C = 169 CY
F = 0 CY
G = 0 CY



17+50.00

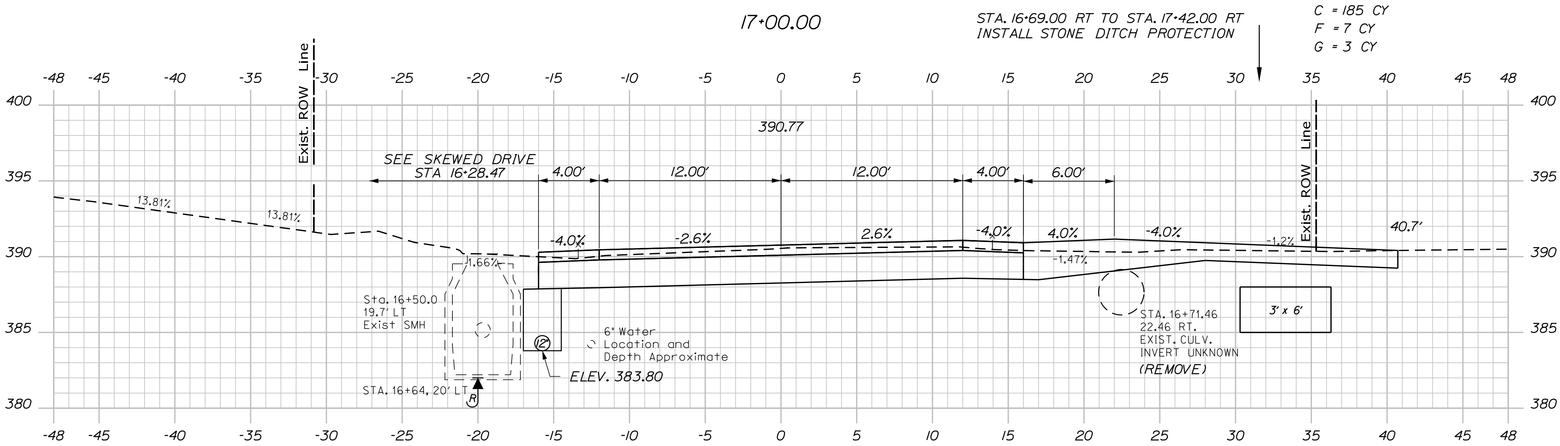
C = 206 CY
F = 7 CY
G = 3 CY



17+00.00

STA. 16+69.00 RT TO STA. 17+42.00 RT
INSTALL STONE DITCH PROTECTION

C = 185 CY
F = 7 CY
G = 3 CY



16+50.00

Sta. 16+50.00 to Sta. 17+66.00

SHEET NUMBER 43 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

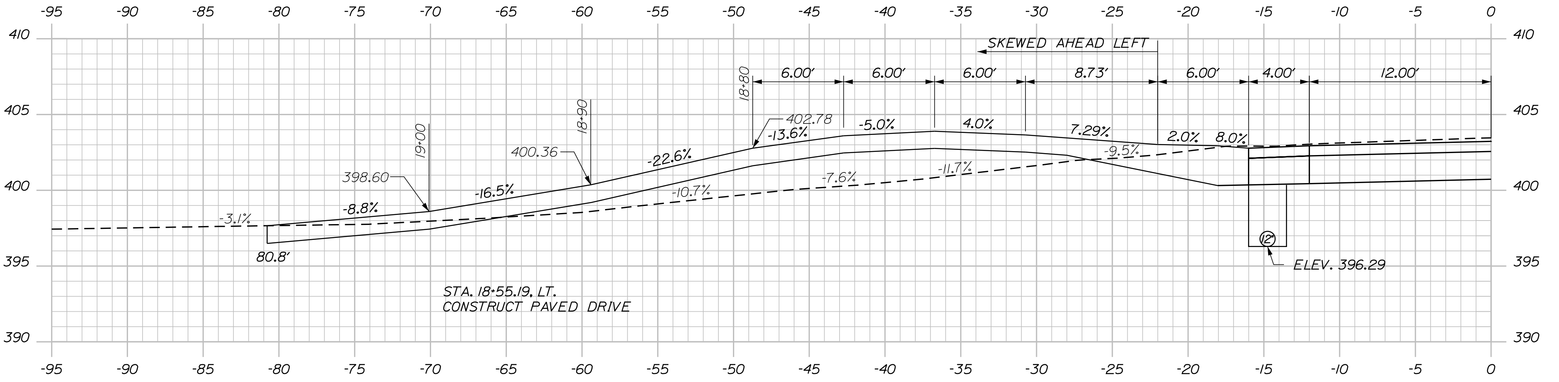
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

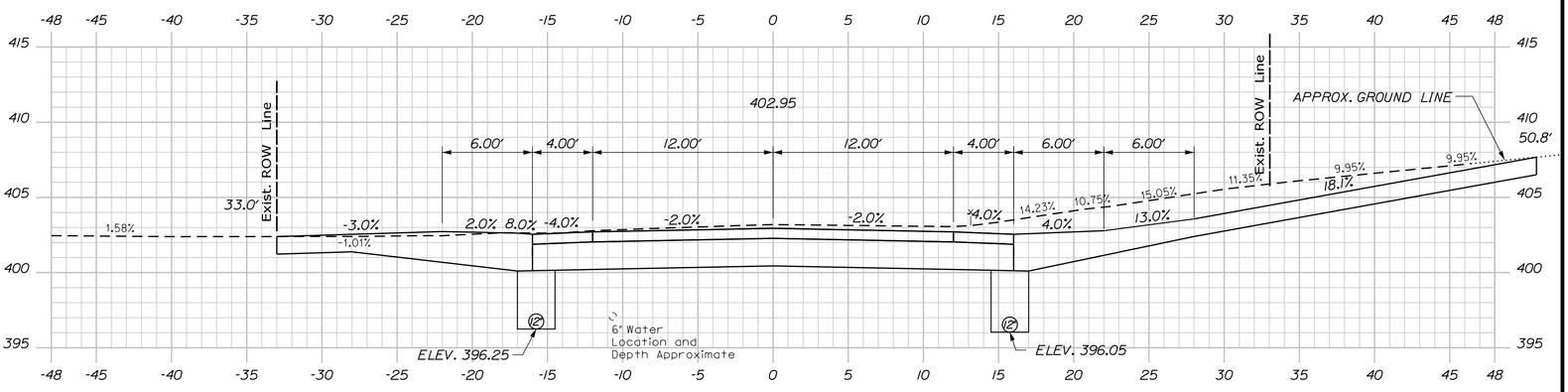
WIN
17882.00

HIGHWAY PLANS

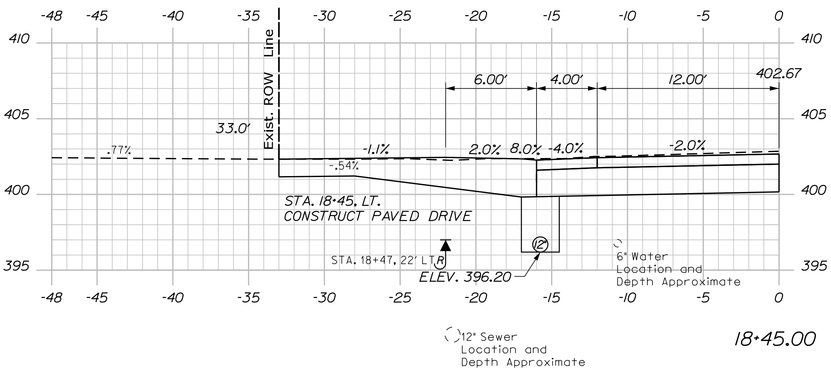


C = 188 CY
F = 5 CY
G = 3 CY

18+55.19 (SKEWED)

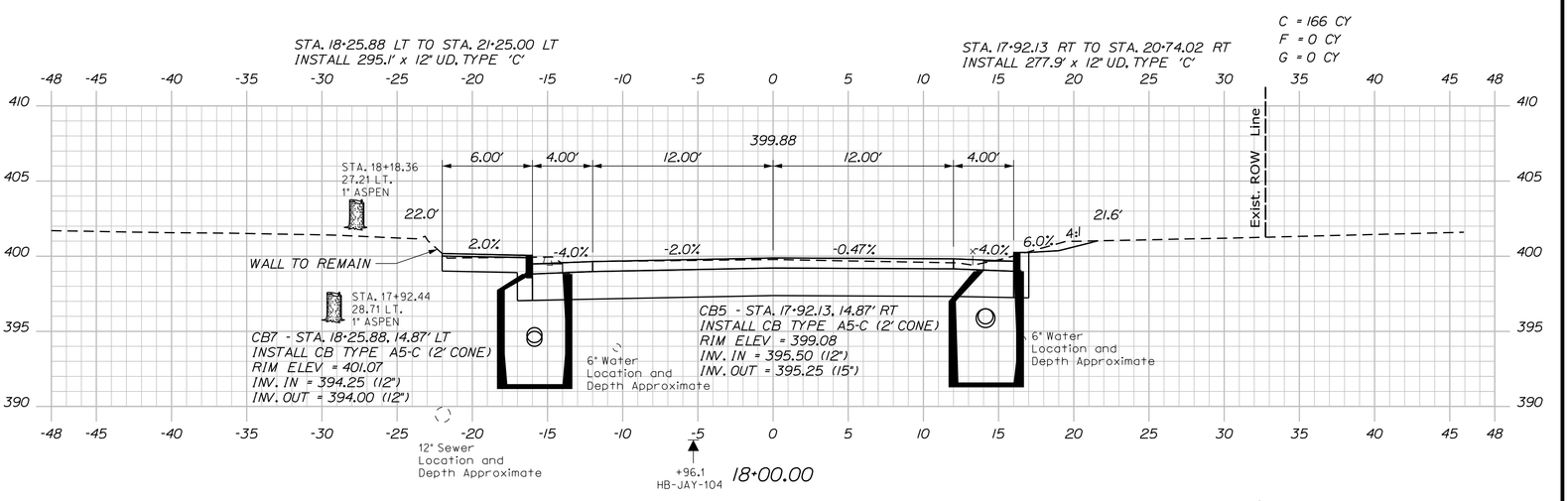


18+50.00

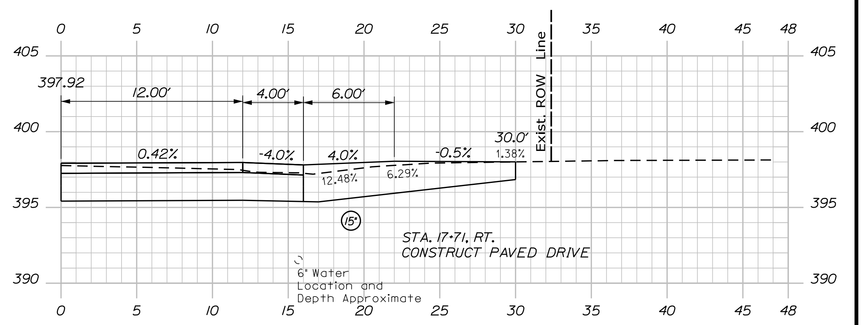


18+45.00

C = 166 CY
F = 0 CY
G = 0 CY



18+00.00



17+71.00

Sta. 17+71.00 to Sta. 18+50.00

SHEET NUMBER 44 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

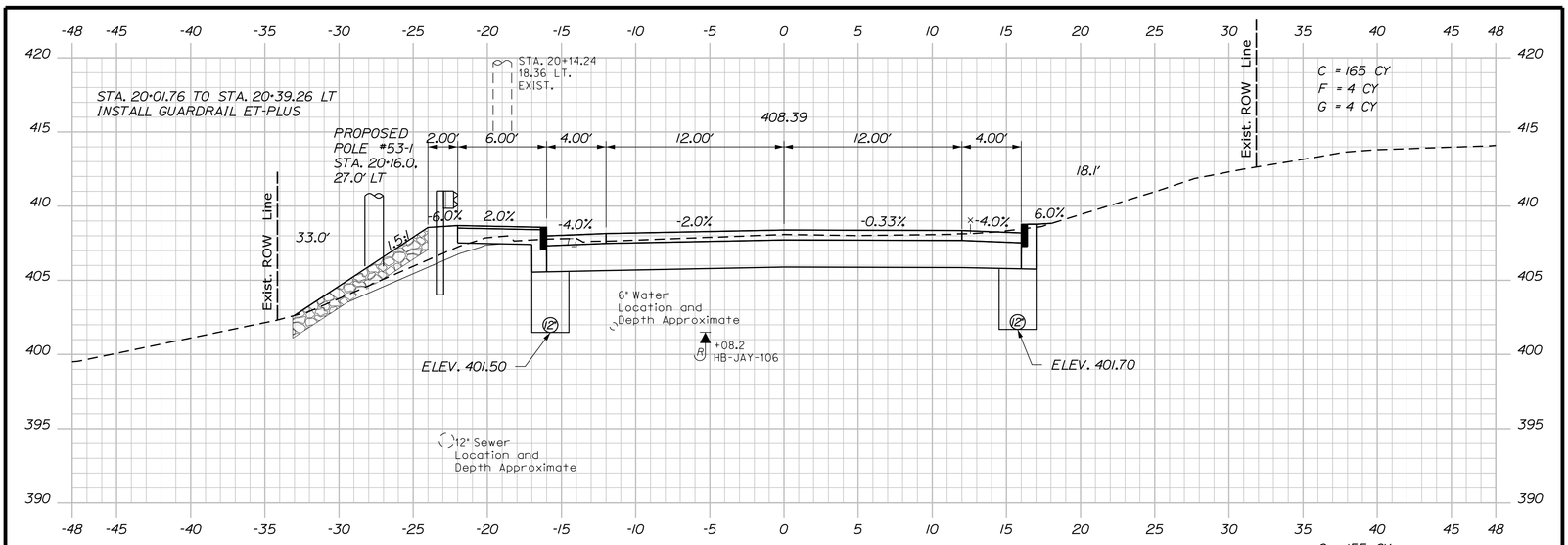
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

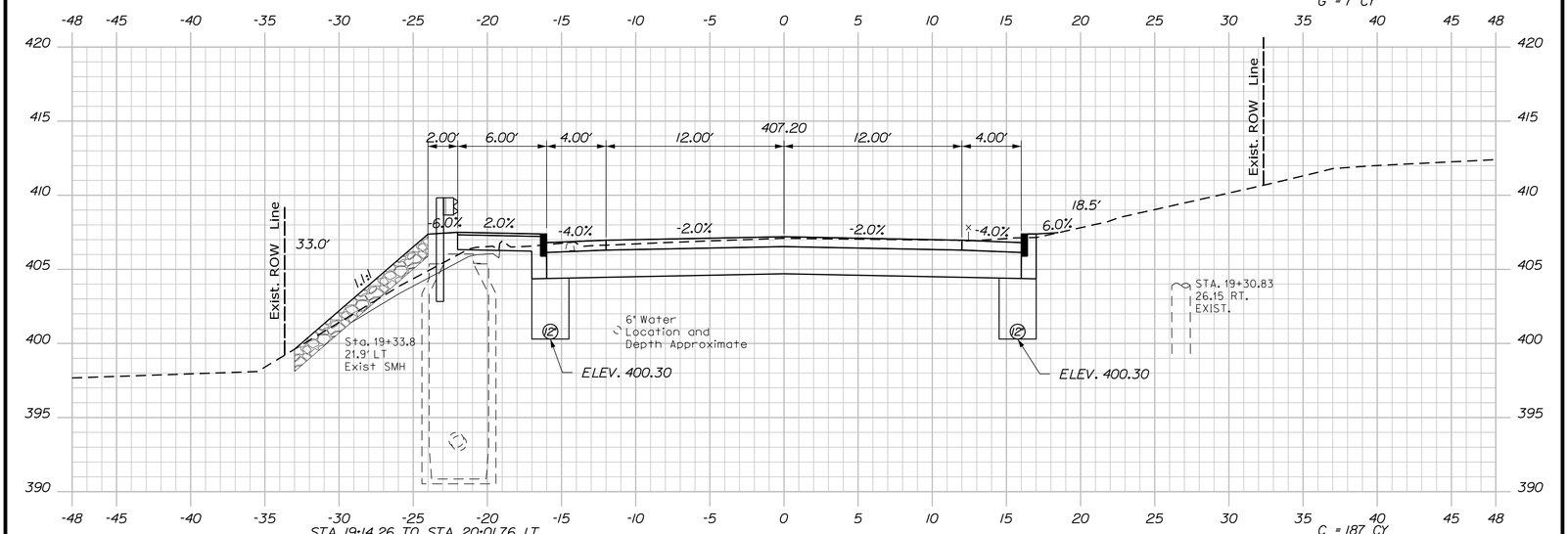
STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

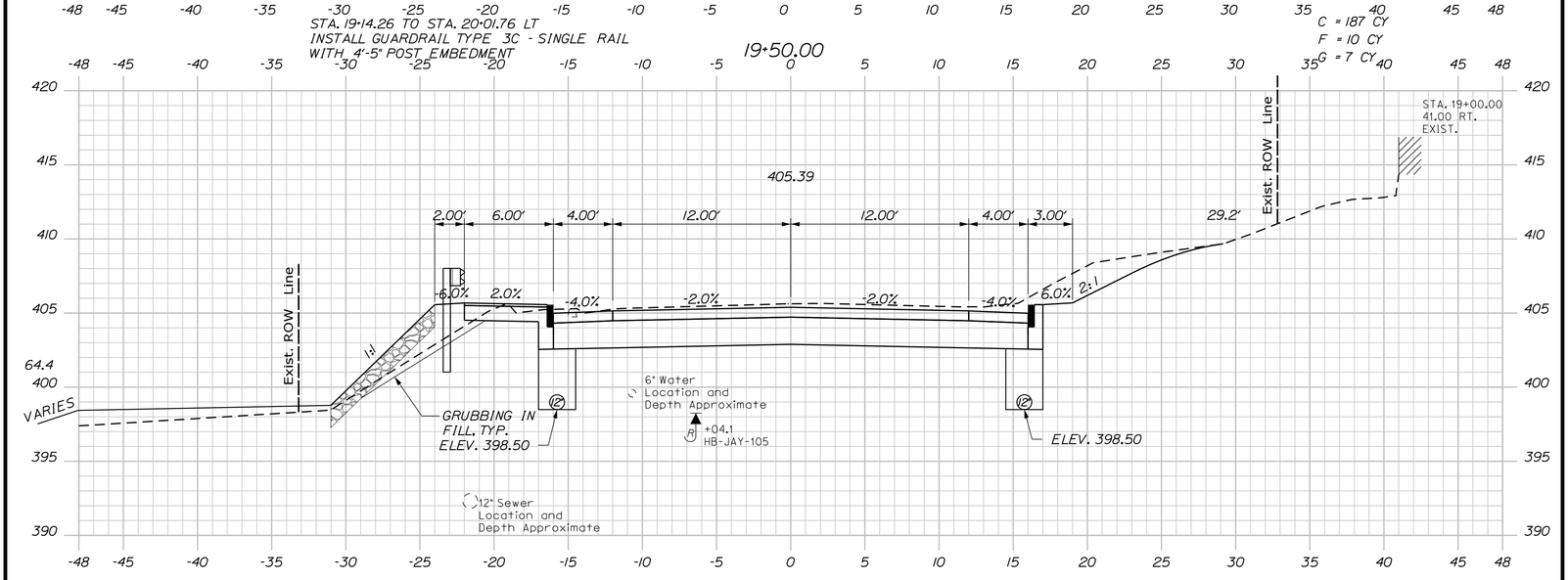


20+00.00



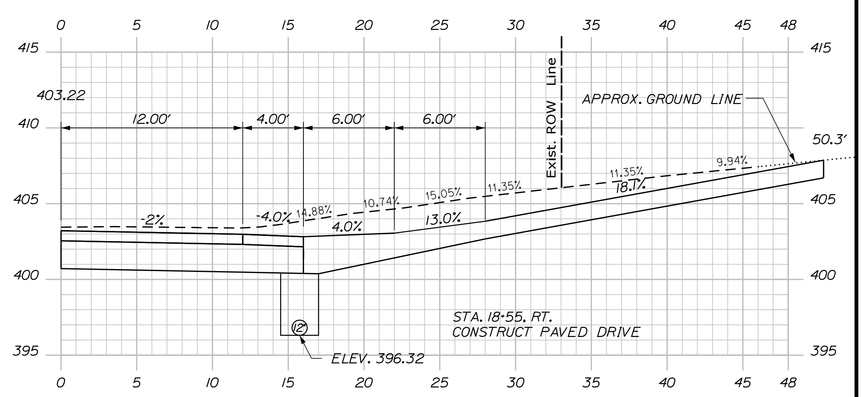
STA. 19+14.26 TO STA. 20+01.76 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL
WITH 4'-5" POST EMBEDMENT

19+50.00



19+00.00

STA. 18+76.87 TO STA. 19+14.26 LT
INSTALL GUARDRAIL ET-PLUS



18+55.00

Sta. 18+55.00 to Sta. 20+00.00

SHEET NUMBER 45 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON	BY	DATE
DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

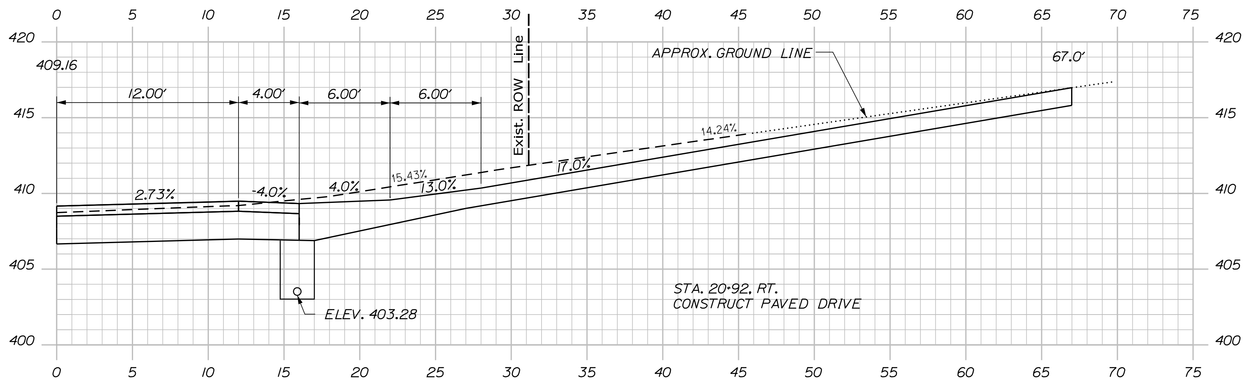
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

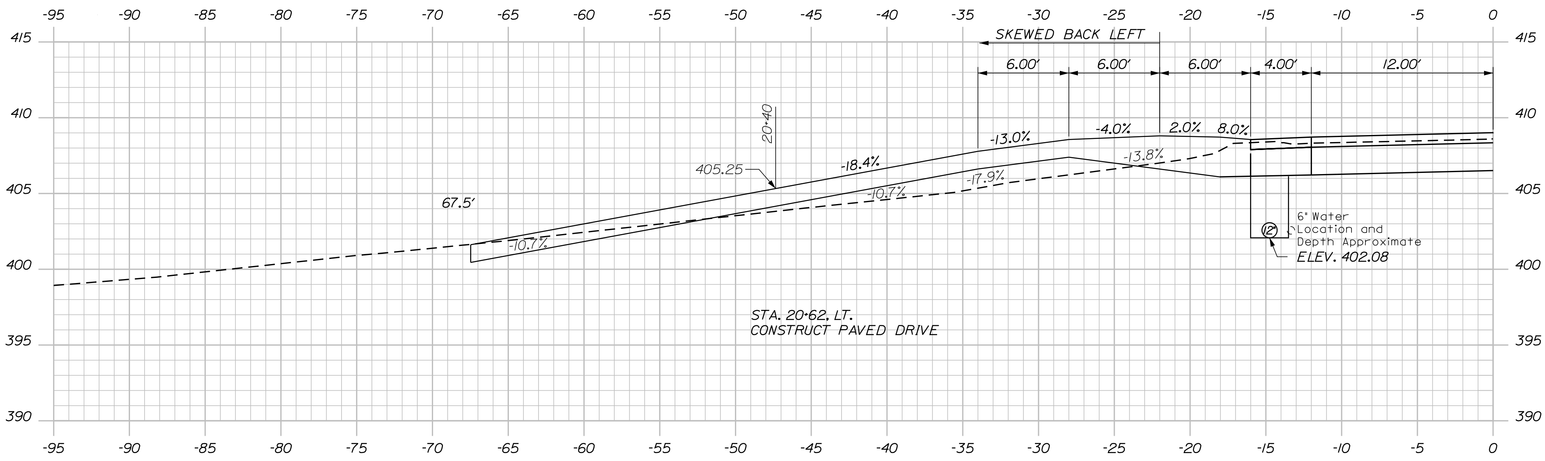
STP-1788(200)

WIN
17882.00

HIGHWAY PLANS



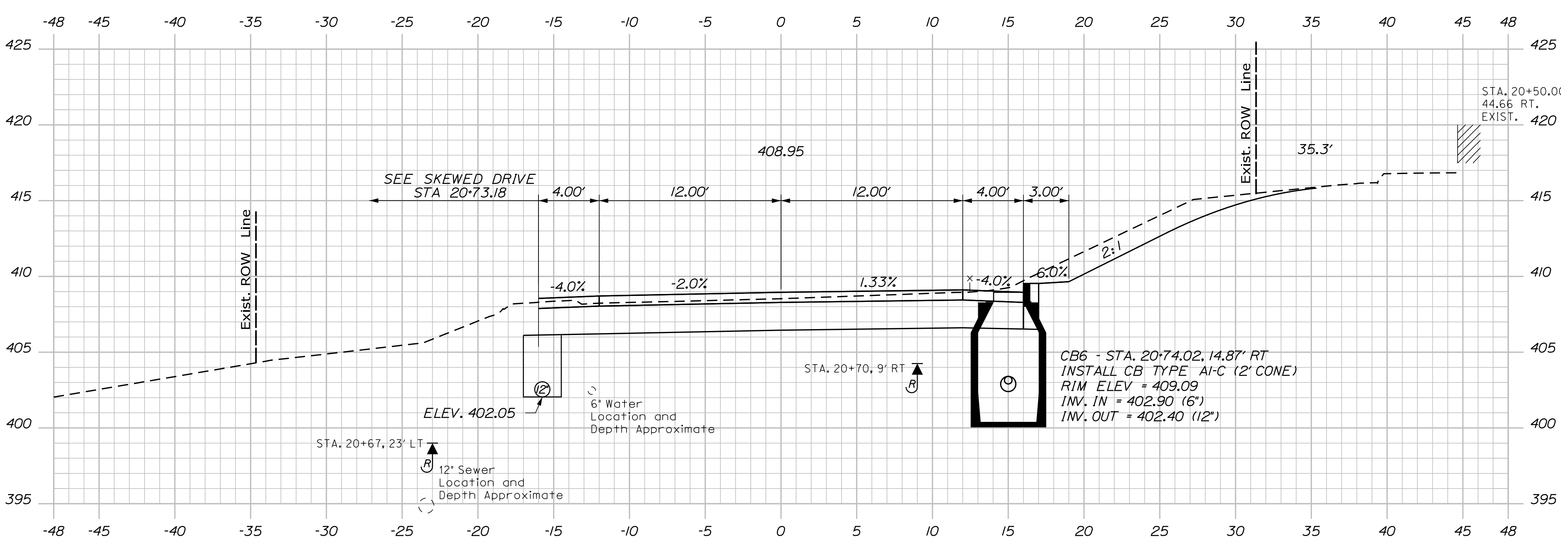
20+92.00



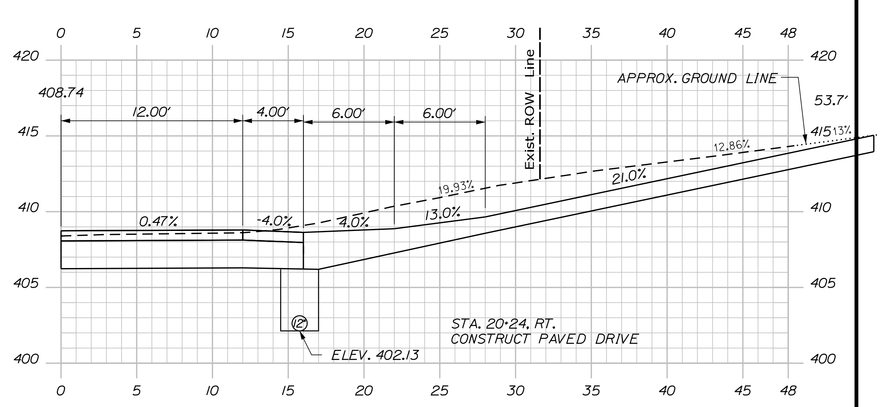
20+62.24 (SKEWED)

STA. 20+74.02 RT TO STA. 23+35.00 RT
INSTALL 259.0' x 6" UD, TYPE 'B'

C = 193 CY
F = 0 CY
G = 0 CY



20+50.00



20+24.00

Sta. 20+24.00 to Sta. 20+92.00

SHEET NUMBER 46 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

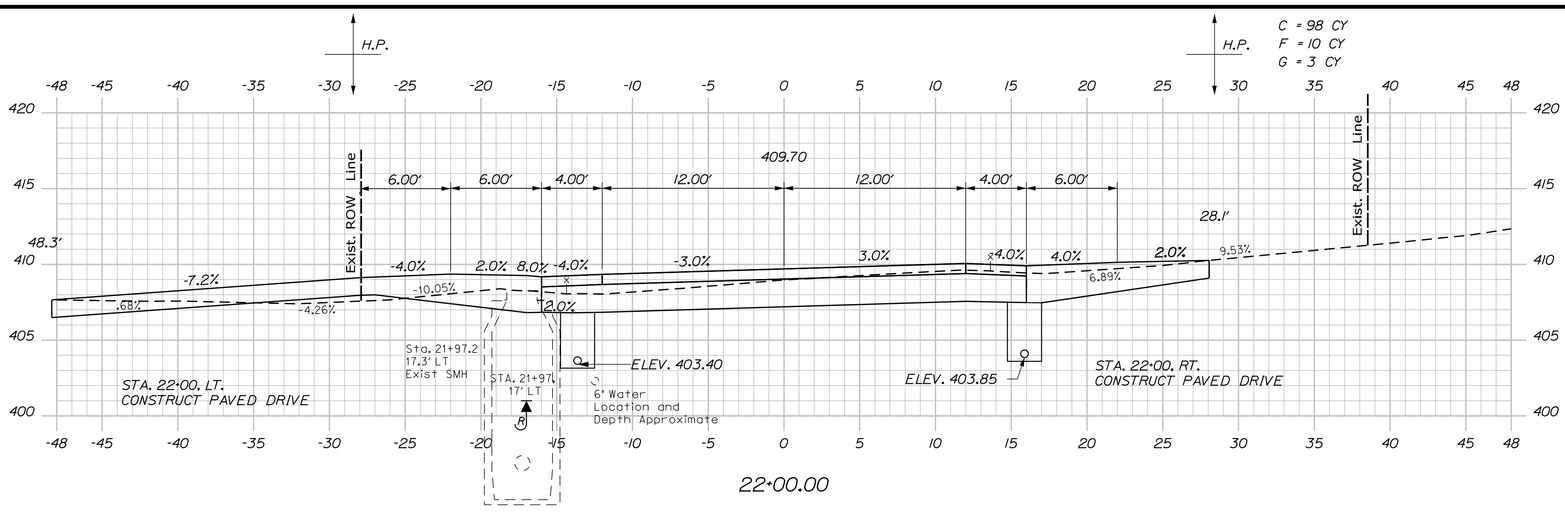
SIGNATURE
P.E. NUMBER
DATE

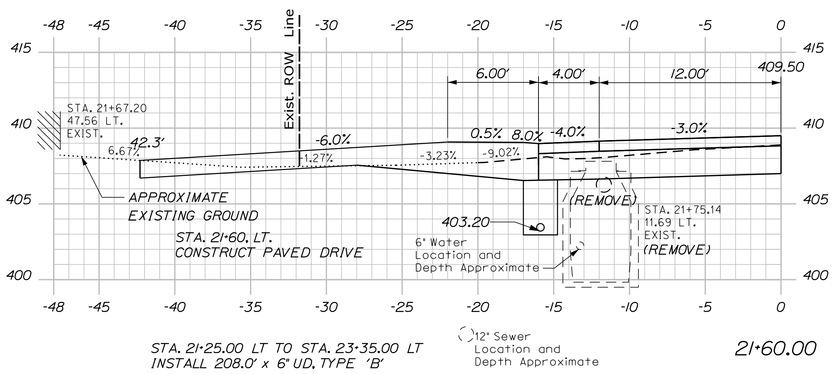
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

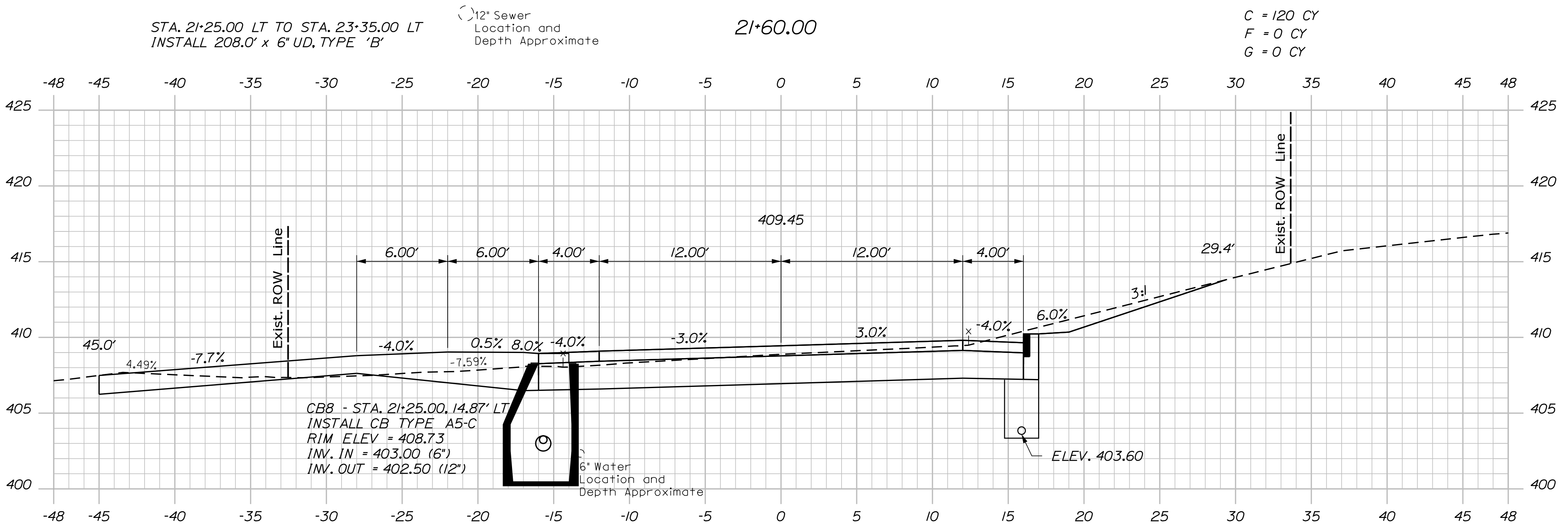
STP-1788(200)

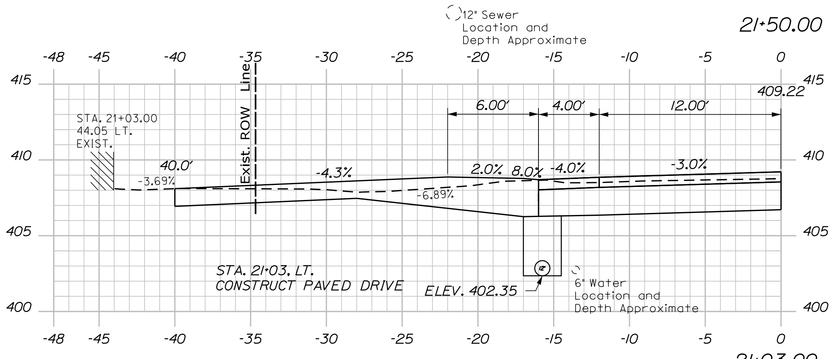
WIN 17882.00

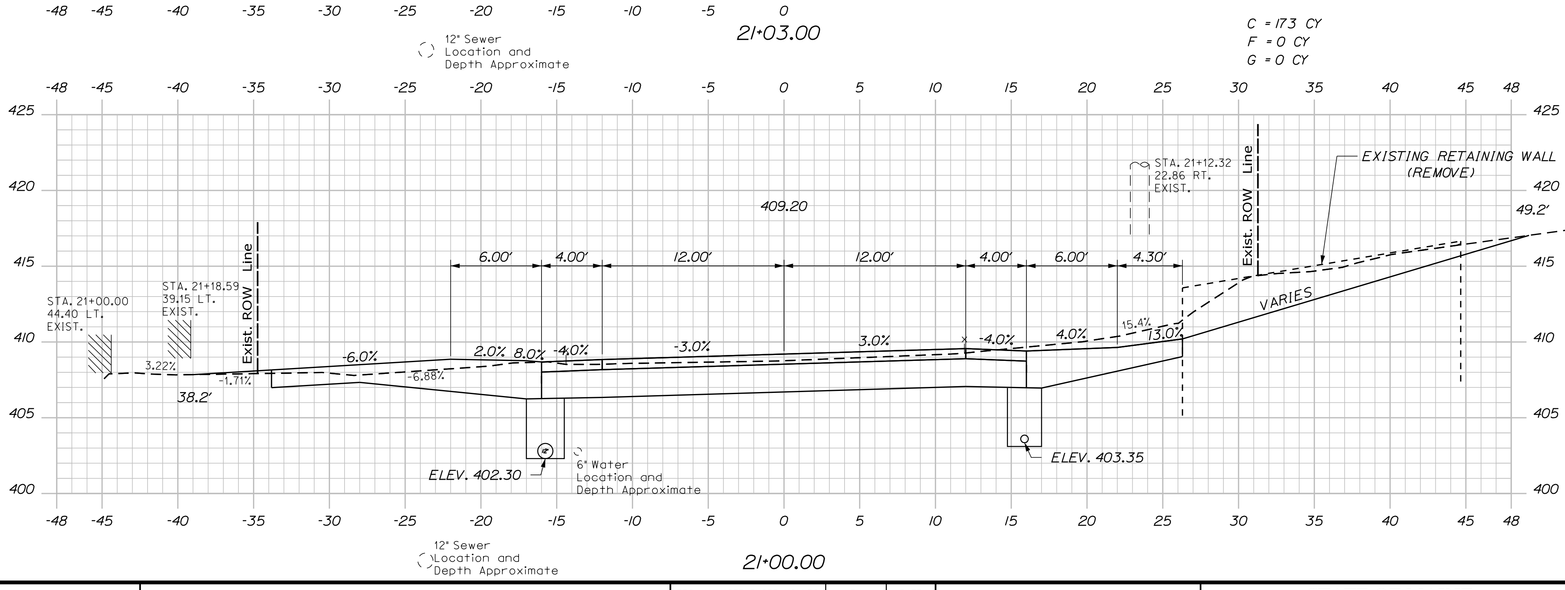
HIGHWAY PLANS











Sta. 21+00.00 to Sta. 22+00.00

SHEET NUMBER 47 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

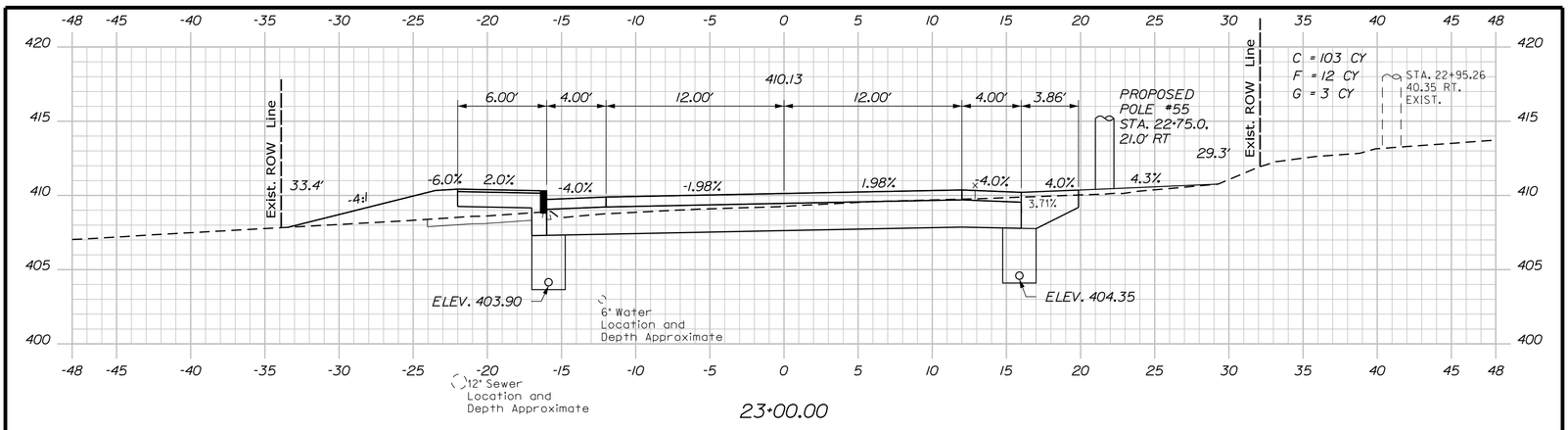
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

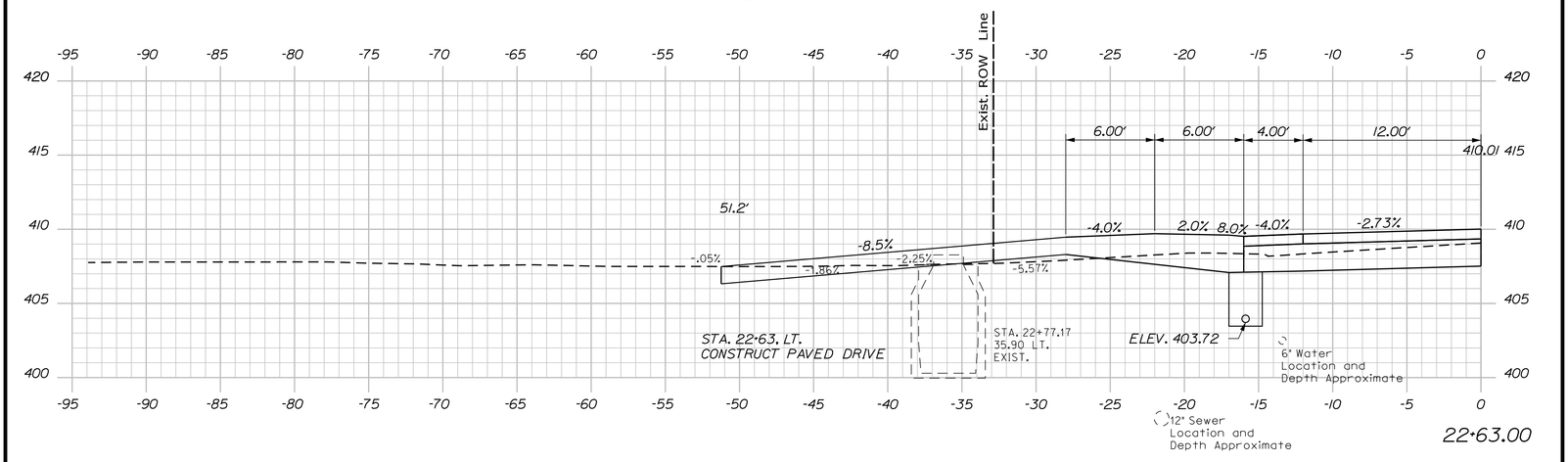
STP-1788(200)

WIN
17882.00

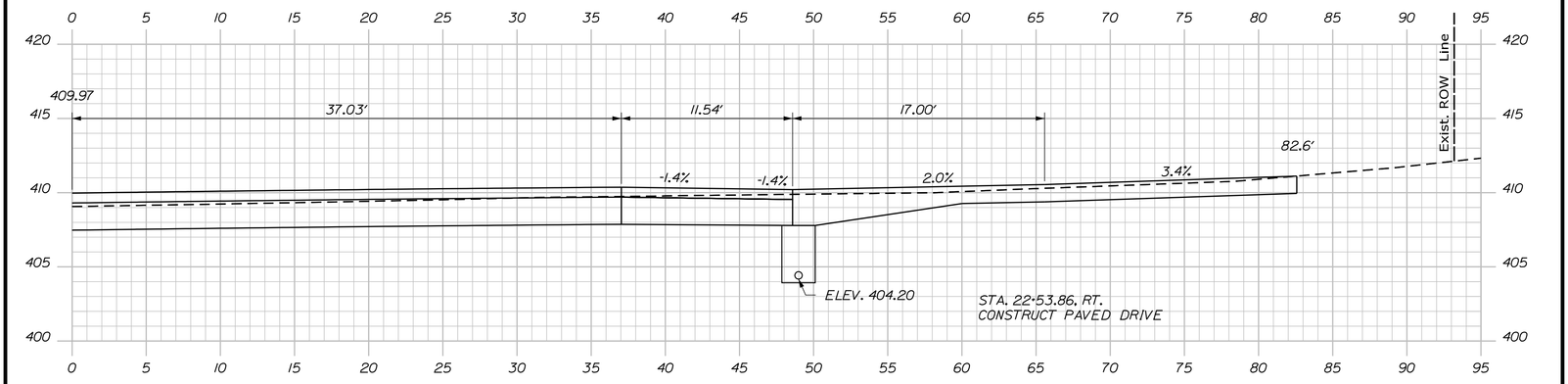
HIGHWAY PLANS



23+00.00

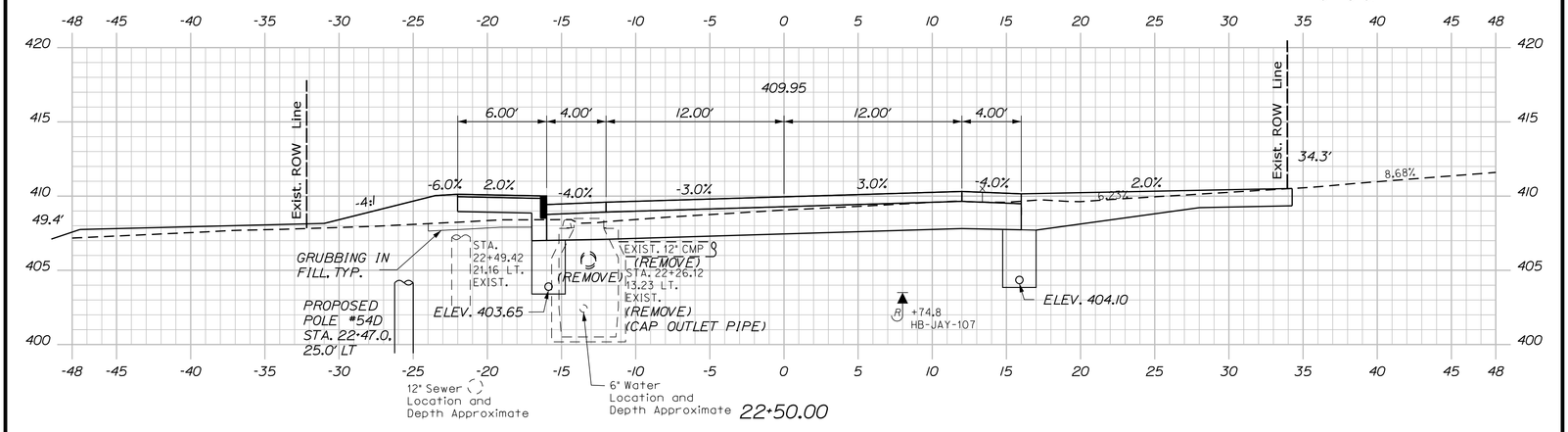


22+63.00

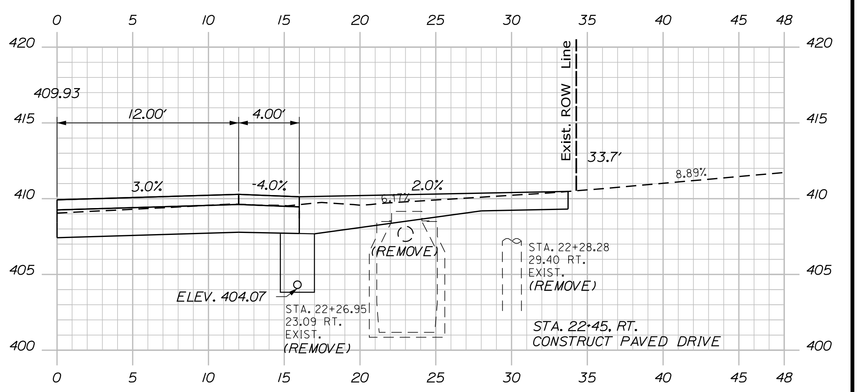


22+53.86 SKEWED

C = 98 CY
F = 21 CY
G = 6 CY



22+50.00



22+45.00

Sta. 22+45.00 to Sta. 23+00.00

SHEET NUMBER 48 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

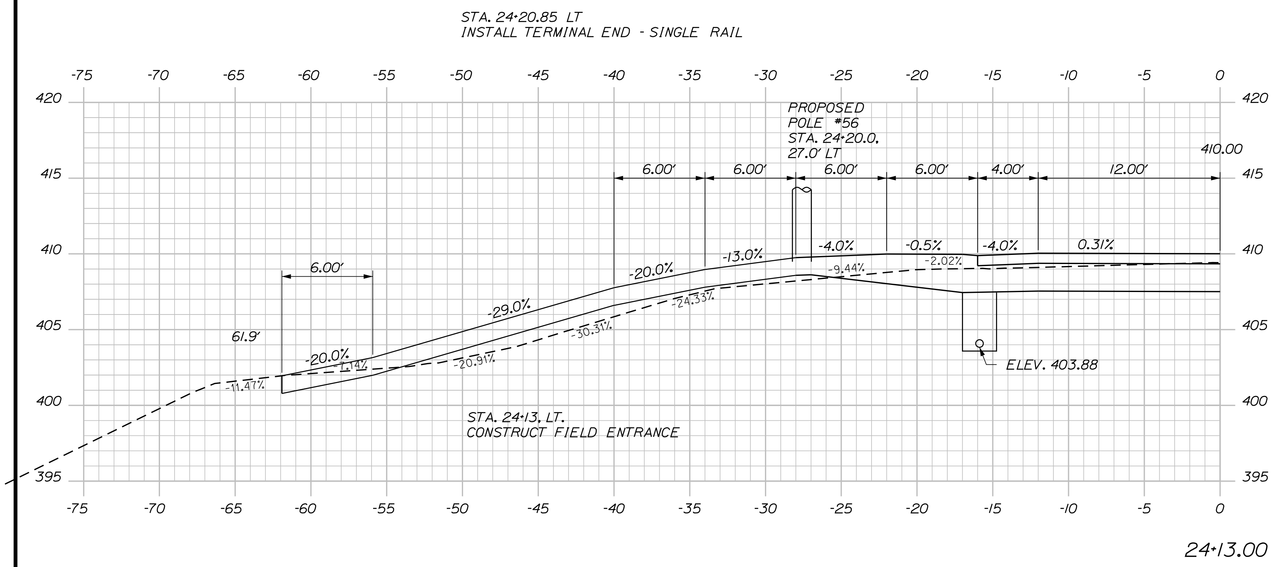
SIGNATURE
P.E. NUMBER
DATE

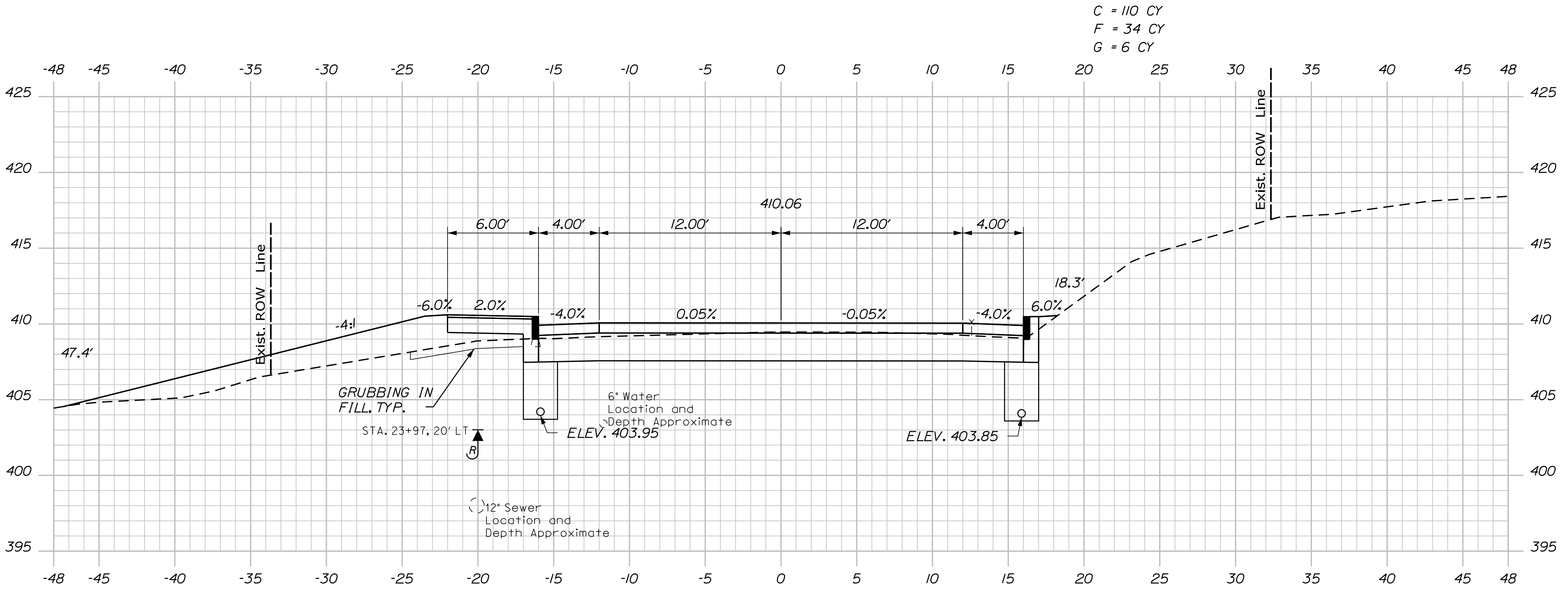
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

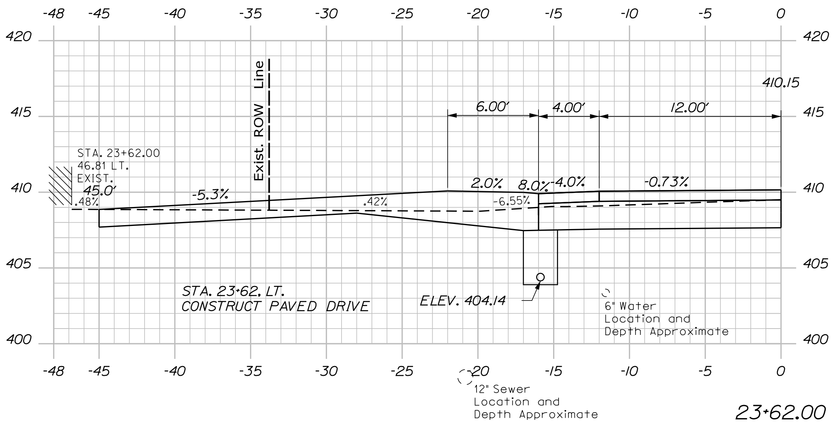
STP-1788(200)

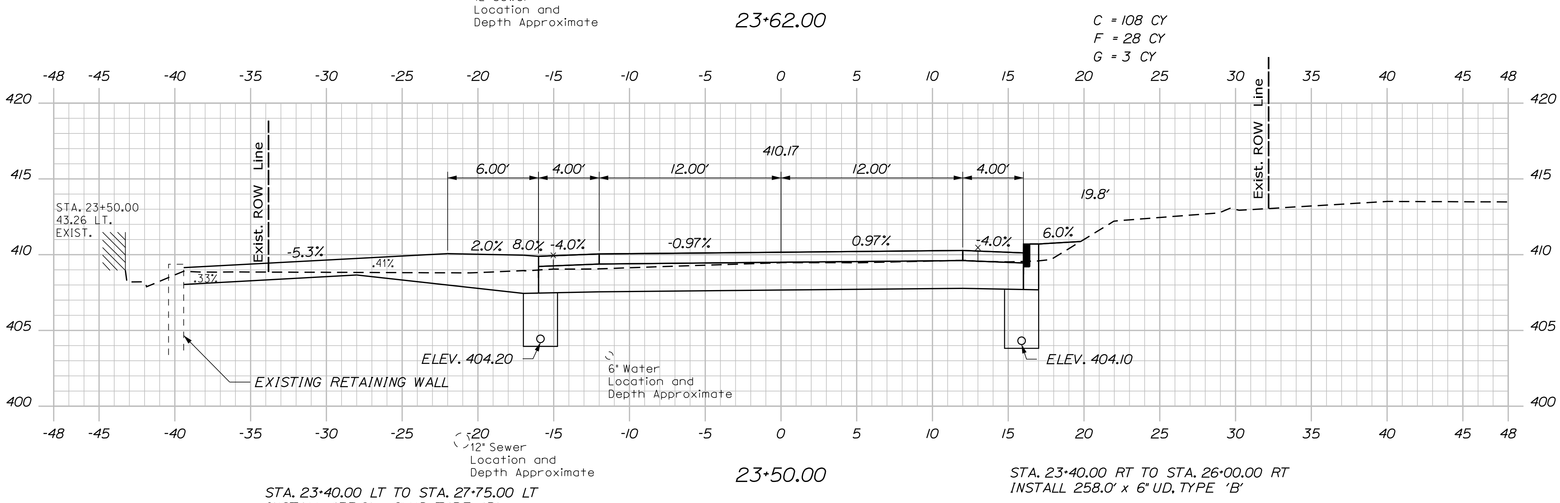
WIN 17882.00

HIGHWAY PLANS









Sta. 23+50.00 to Sta. 24+13.00

SHEET NUMBER 49 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

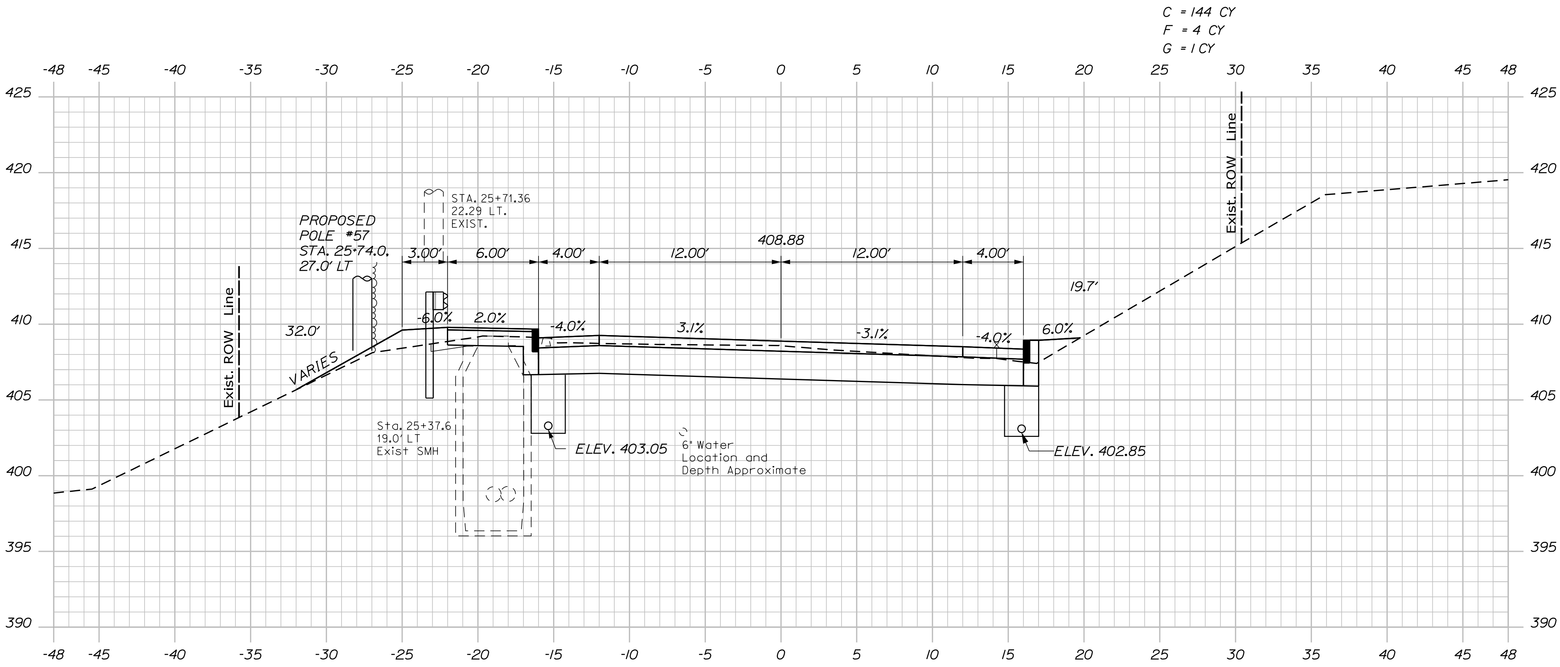
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

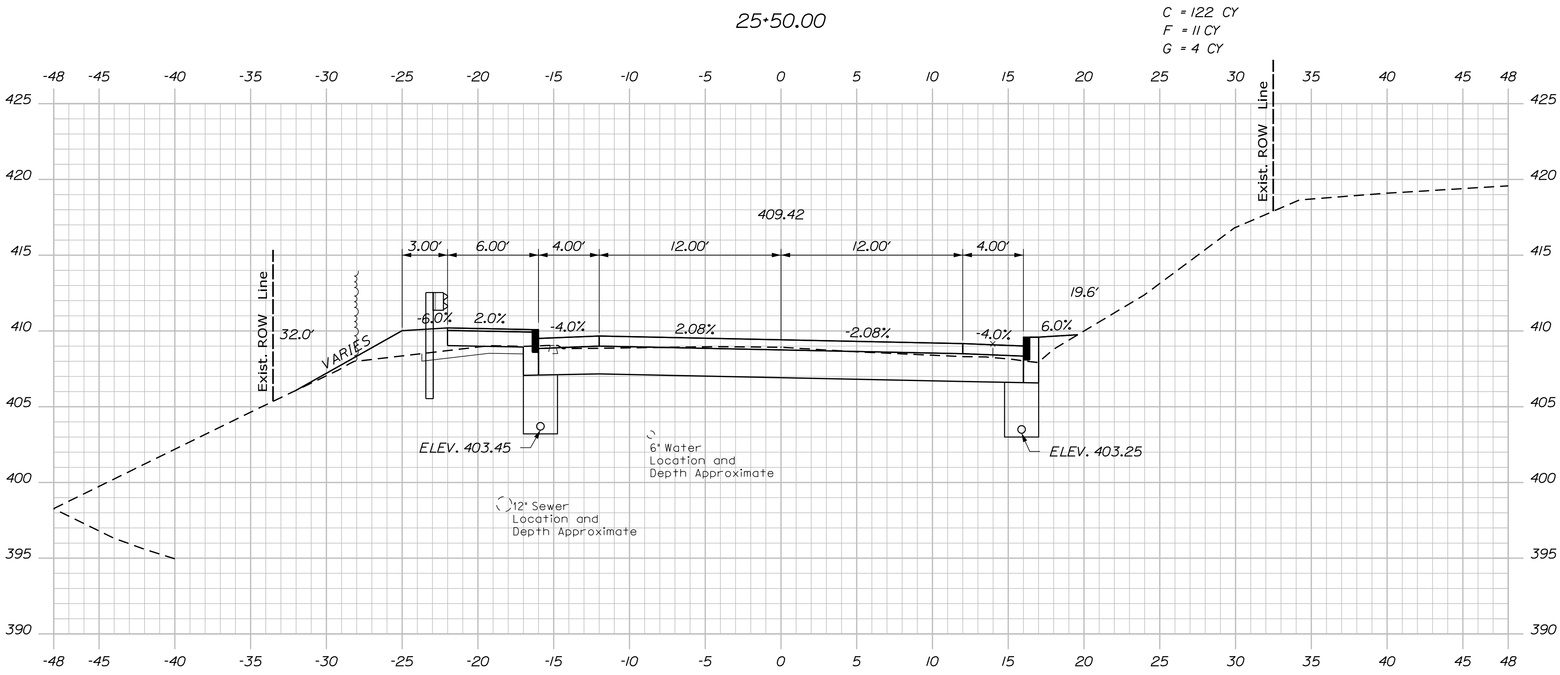
STP-1788(200)

WIN
17882.00

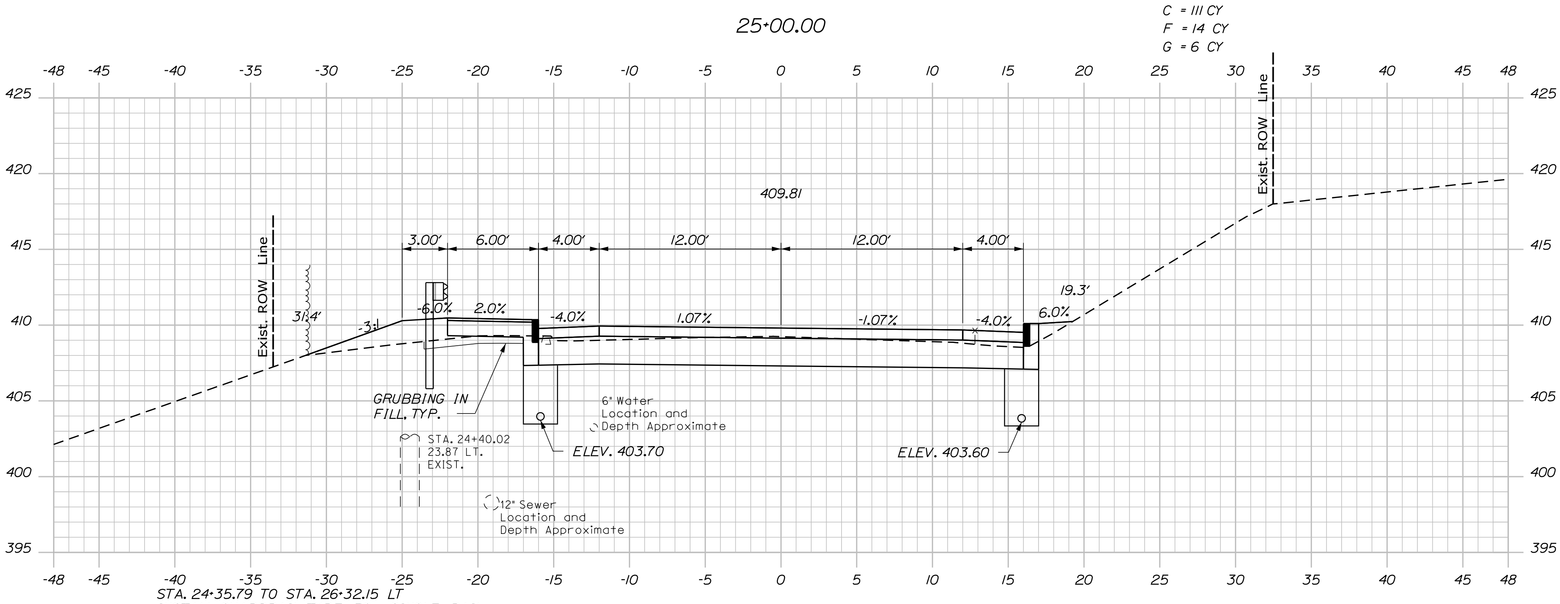
HIGHWAY PLANS



25+50.00



25+00.00



STA. 24+35.79 TO STA. 26+32.15 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL

STA. 24+20.85 TO STA. 24+35.79 LT
INSTALL GUARDRAIL TYPE 3C - 15' RADIUS OR LESS

24+50.00

Sta. 24+50.00 to Sta. 25+50.00

SHEET NUMBER 50 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

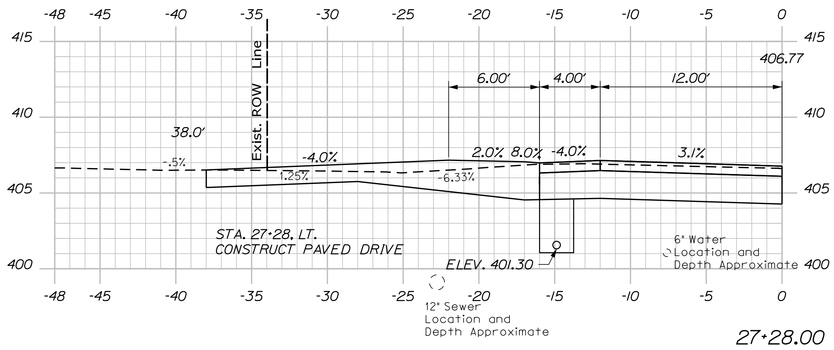
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

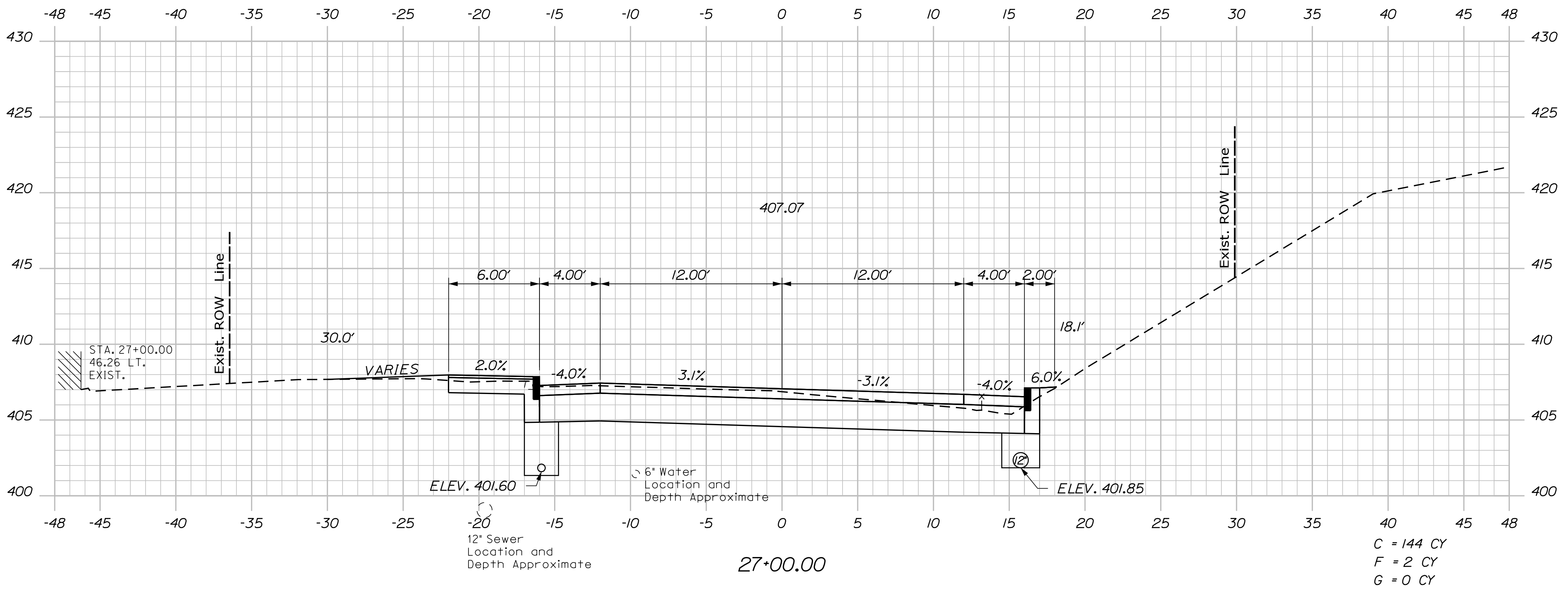
WIN 17882.00

HIGHWAY PLANS



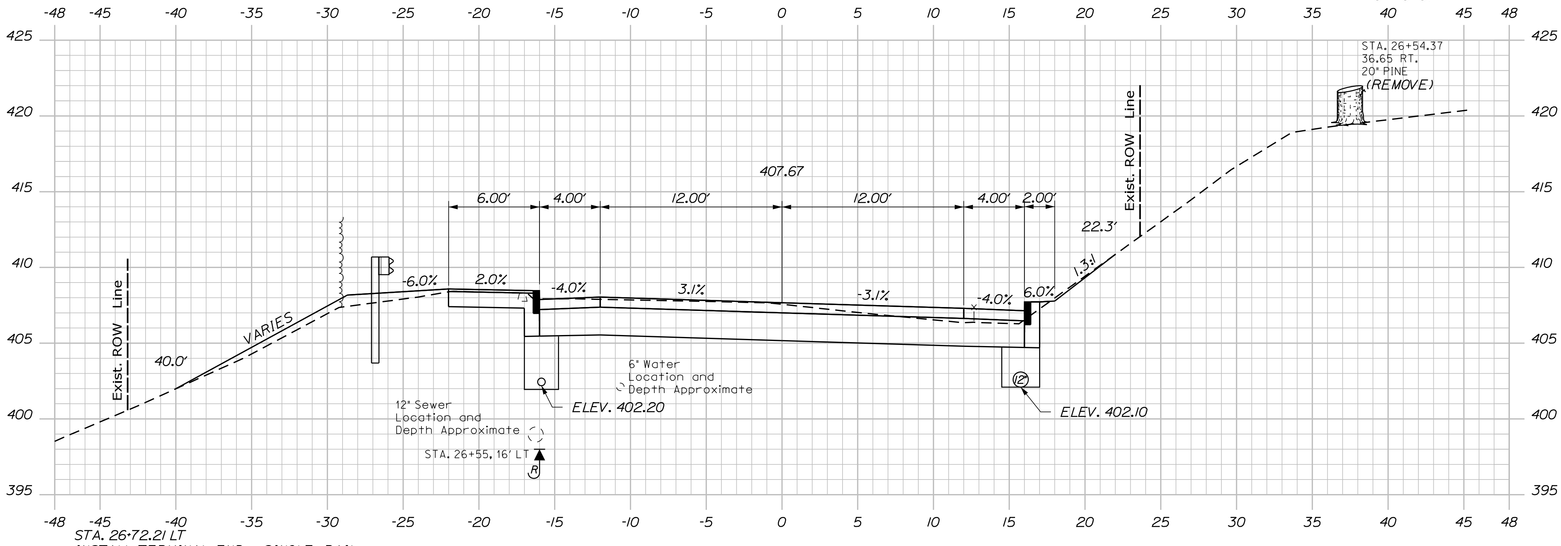
27+28.00

C = 139 CY
F = 8 CY
G = 0 CY



27+00.00

C = 144 CY
F = 2 CY
G = 0 CY



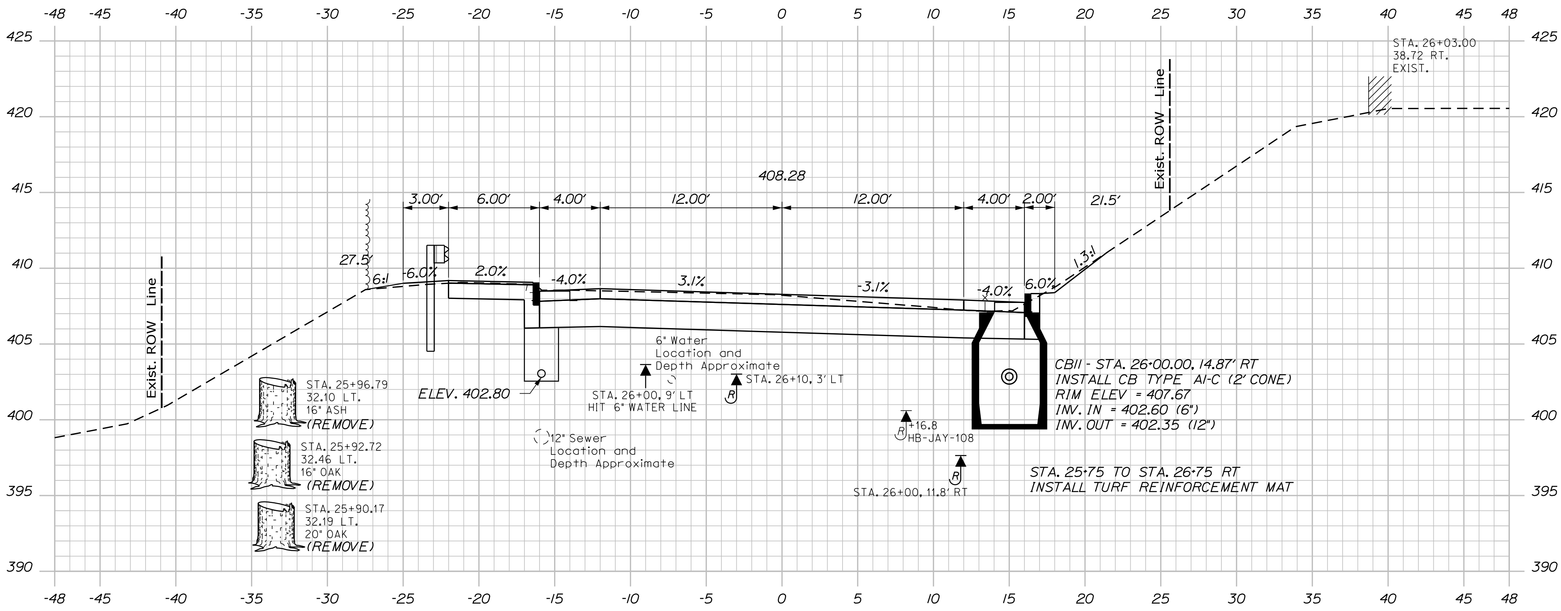
STA. 26+72.21 LT
INSTALL TERMINAL END - SINGLE RAIL

STA. 26+32.15 TO STA. 26+72.21 LT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS

26+50.00

STA. 26+00.00 RT TO STA. 27+75.00 RT
INSTALL 171.0' x 12" UD. TYPE 'C'

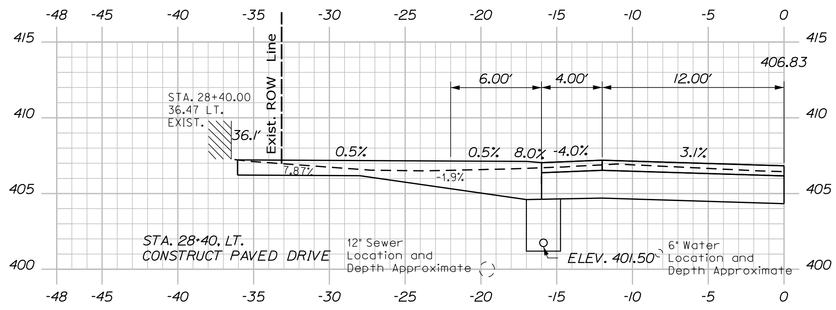
C = 153 CY
F = 2 CY
G = 0 CY



26+00.00

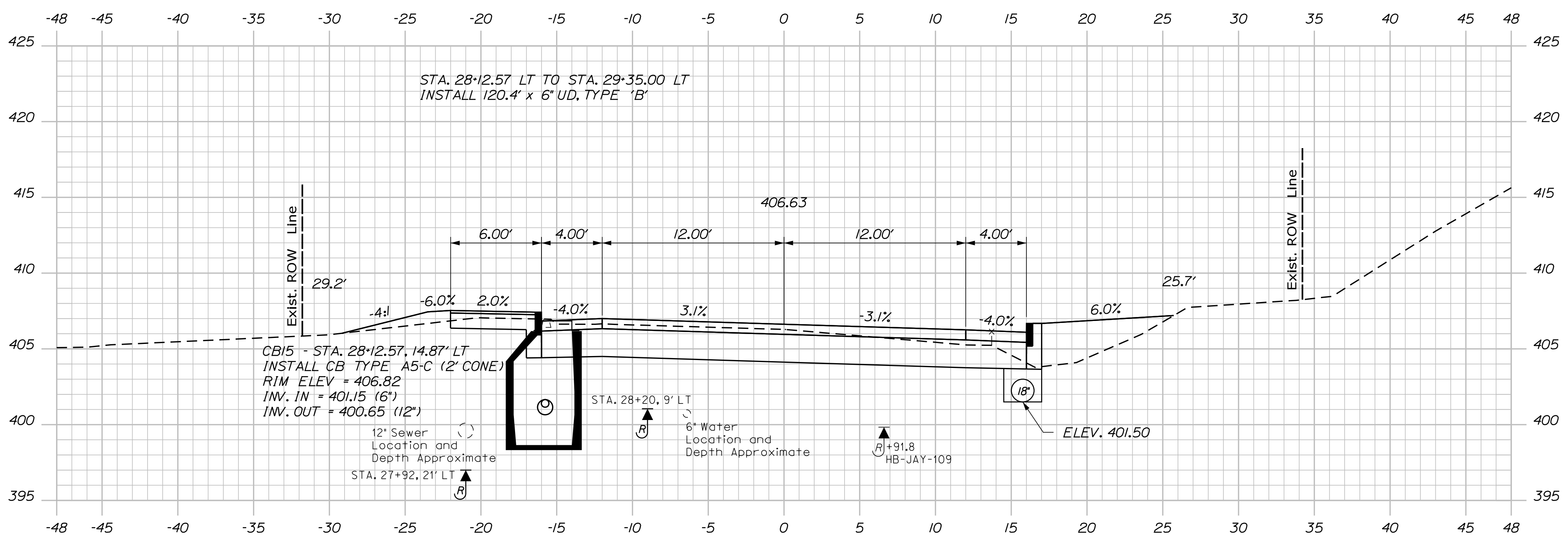
Sta. 26+00.00 to Sta. 27+28.00

SHEET NUMBER 51 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			STP-1788(200)
		DESIGN3-DETAILED3			P.E. NUMBER
	CROSS SECTIONS	REVISIONS 1			WIN 17882.00
		REVISIONS 2			DATE
		REVISIONS 3			HIGHWAY PLANS
		REVISIONS 4			
		FIELD CHANGES			



28+40.00

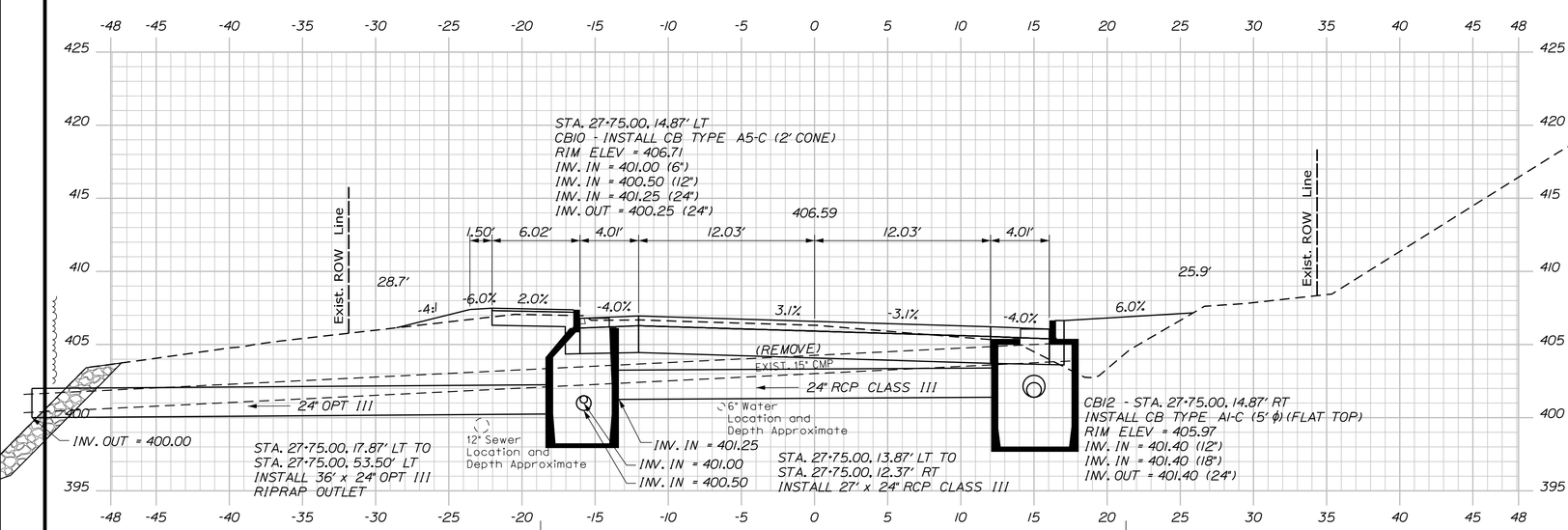
C = 123 CY
F = 21 CY
G = 0 CY



STA. 27+75.00 LT TO STA. 28+12.57 LT
INSTALL 33.6' x 12" UD. TYPE 'C'

28+00.00

STA. 27+75.00 RT TO STA. 28+45.20 RT
INSTALL 66.2' x 18" UD. TYPE 'C'

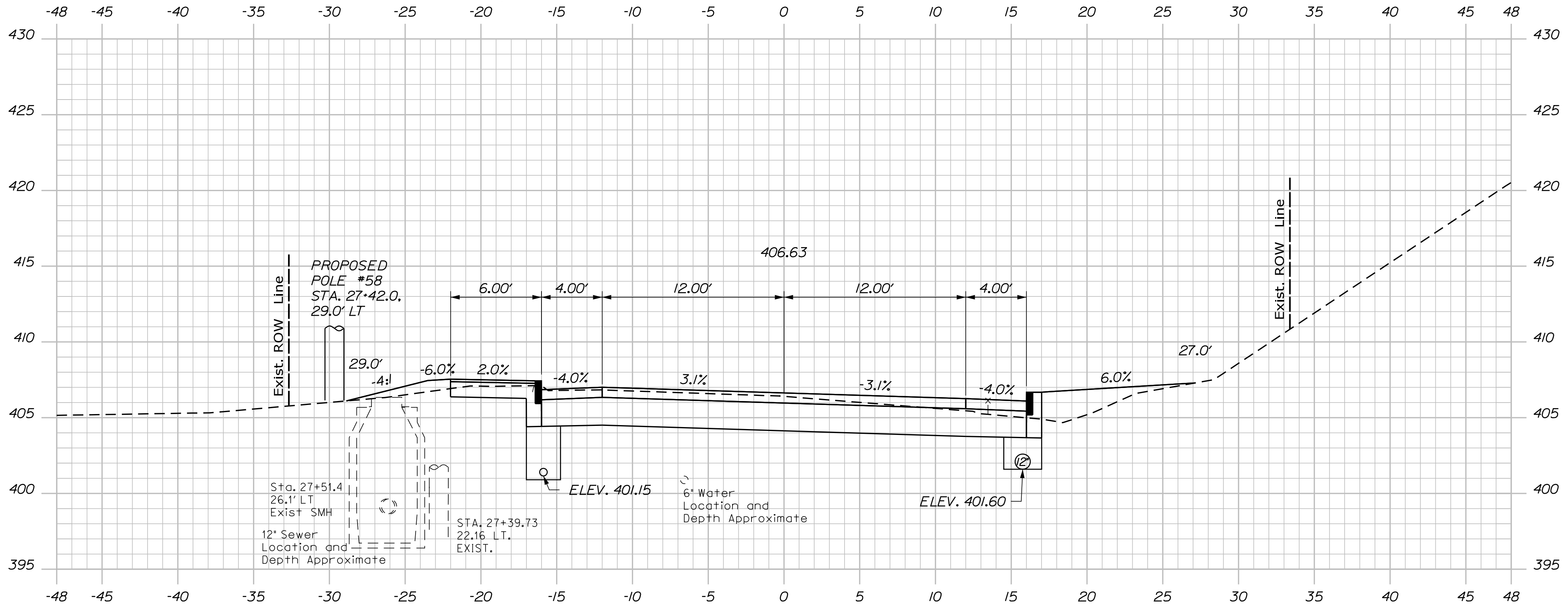


L.P.

27+85.11 SKEWED

L.P.

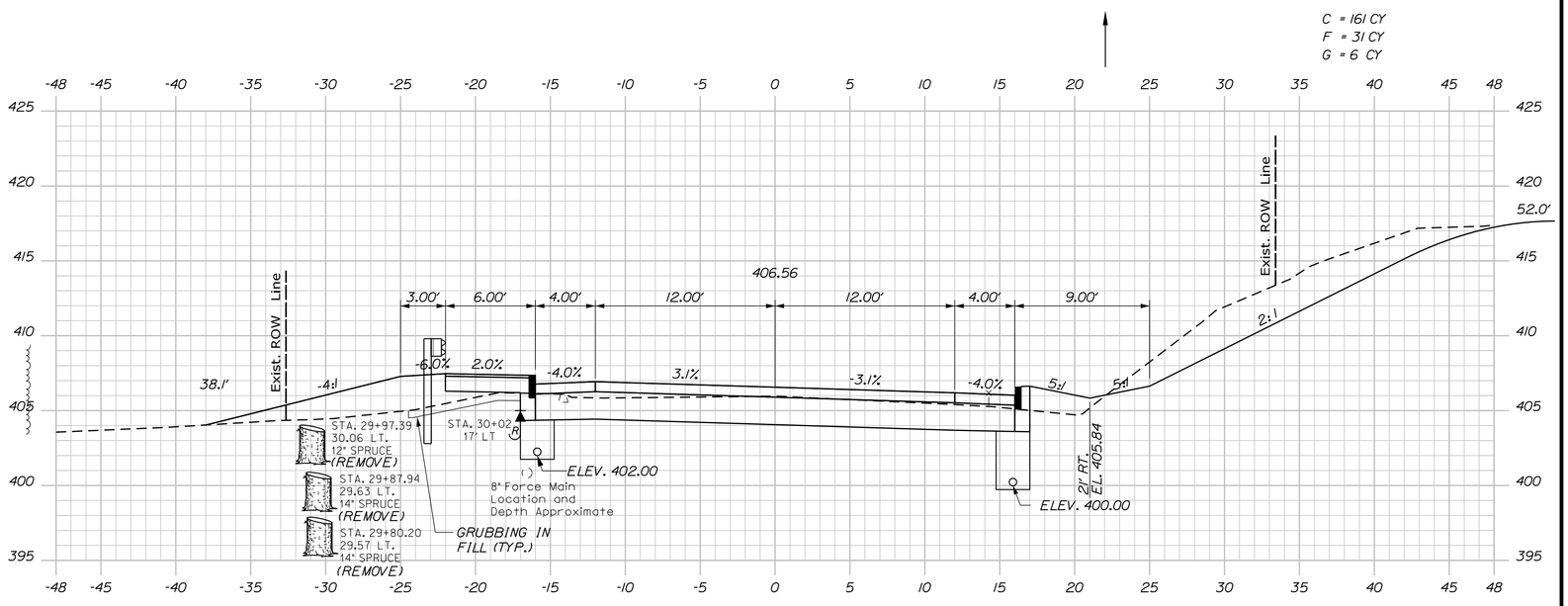
C = 131 CY
F = 21 CY
G = 0 CY



27+50.00

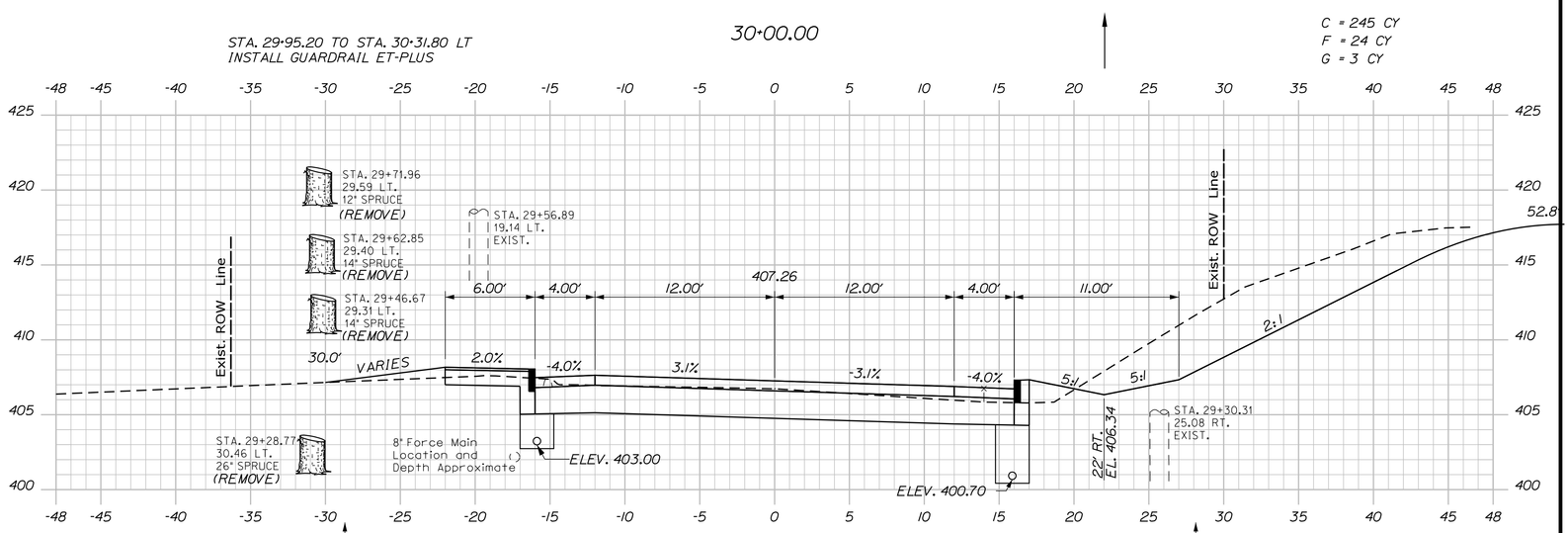
Sta. 27+50.00 to Sta. 28+40.00

SHEET NUMBER 52 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			STP-1788(200)
		DESIGN3-DETAILED3			P.E. NUMBER
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			WIN 17882.00
	CROSS SECTIONS	FIELD CHANGES			HIGHWAY PLANS

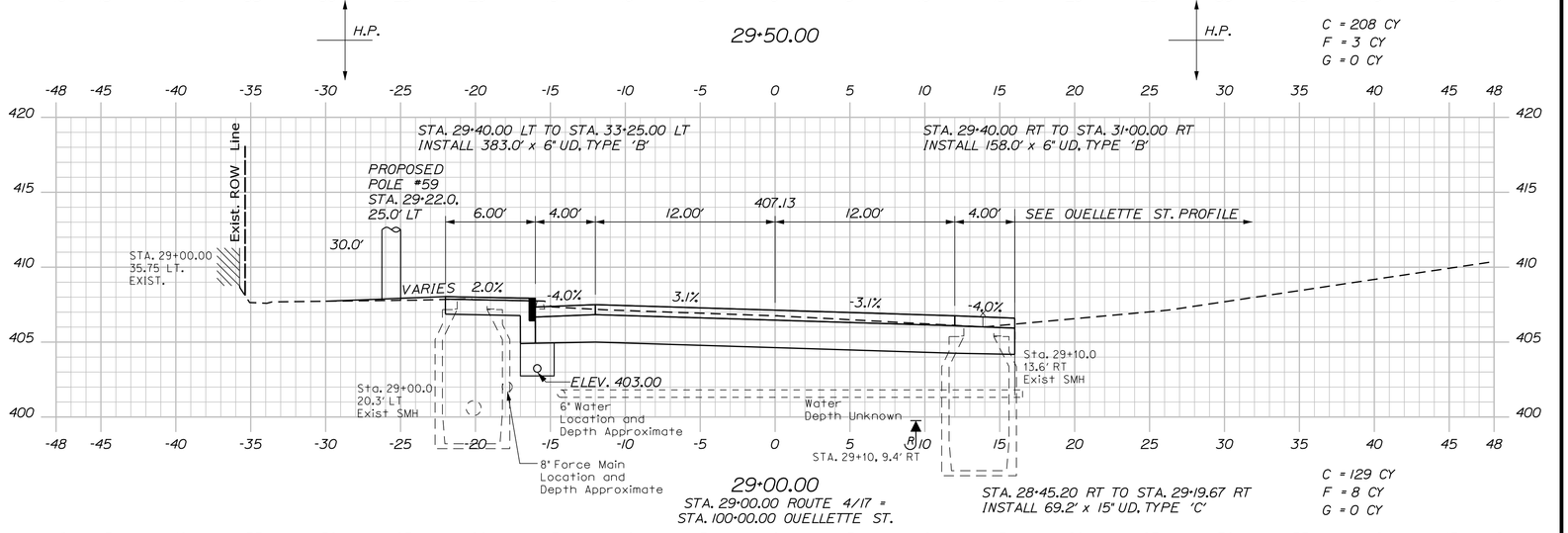


30+00.00

STA. 29+95.20 TO STA. 30+31.80 LT
INSTALL GUARDRAIL ET-PLUS

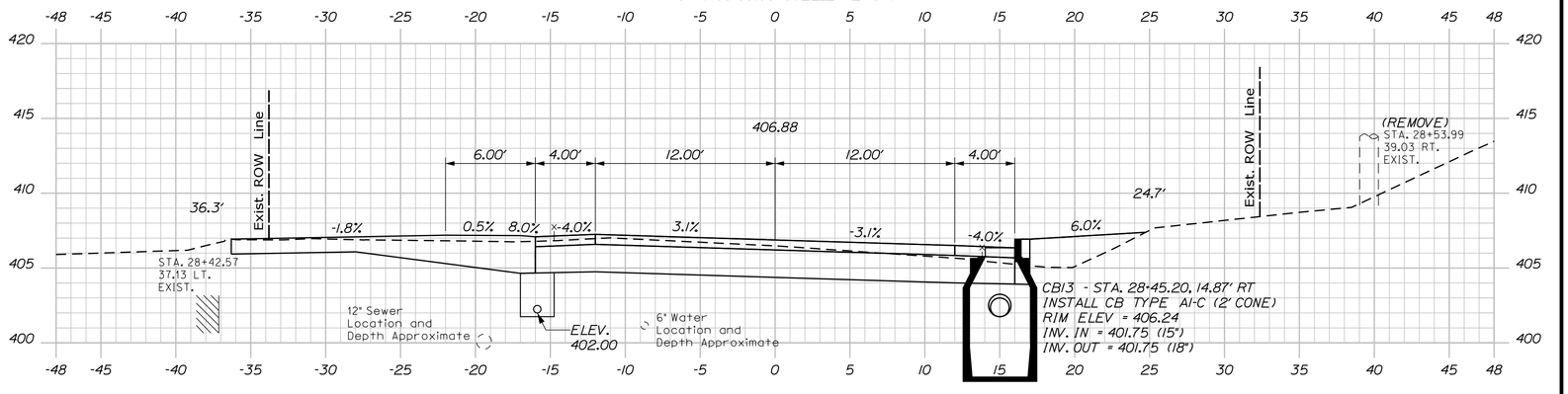


29+50.00



29+00.00
STA. 29+00.00 ROUTE 4/17 =
STA. 100+00.00 OUELLETTE ST.

STA. 28+45.20 RT TO STA. 29+19.67 RT
INSTALL 69.2' x 15" UD. TYPE 'C'



28+50.00

Sta. 28+50.00 to Sta. 30+00.00

SHEET NUMBER 53 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

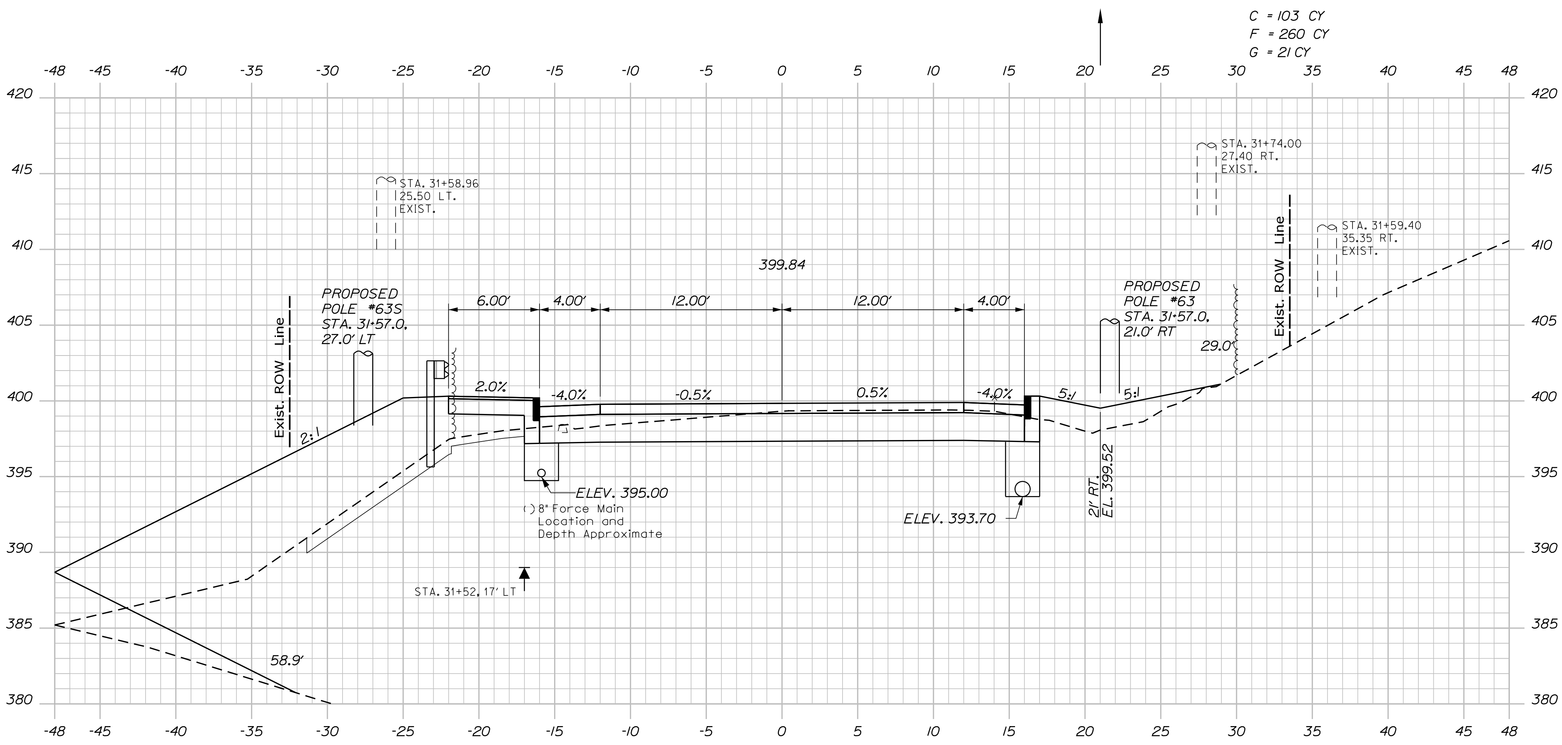
SIGNATURE
P.E. NUMBER
DATE

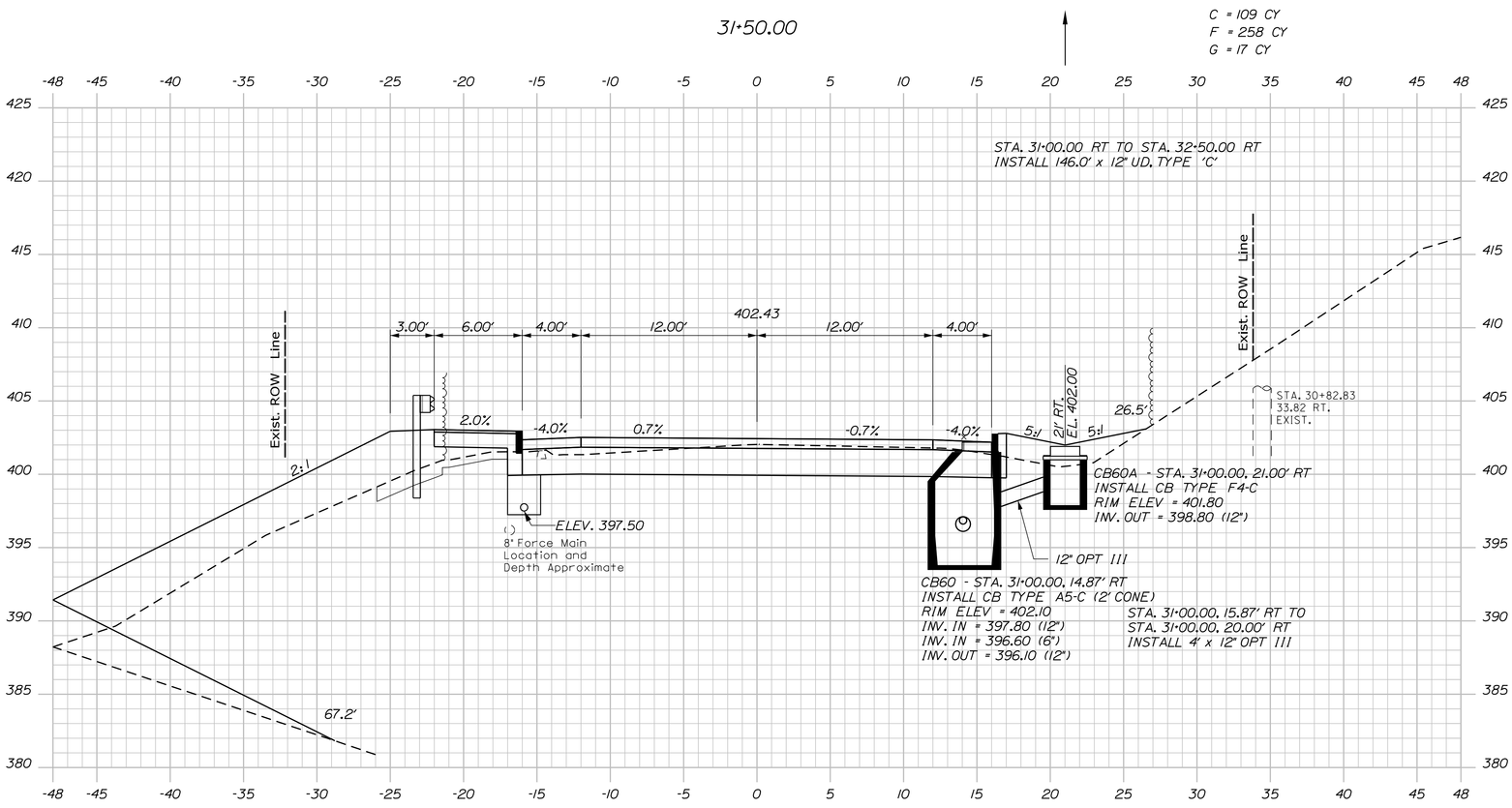
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

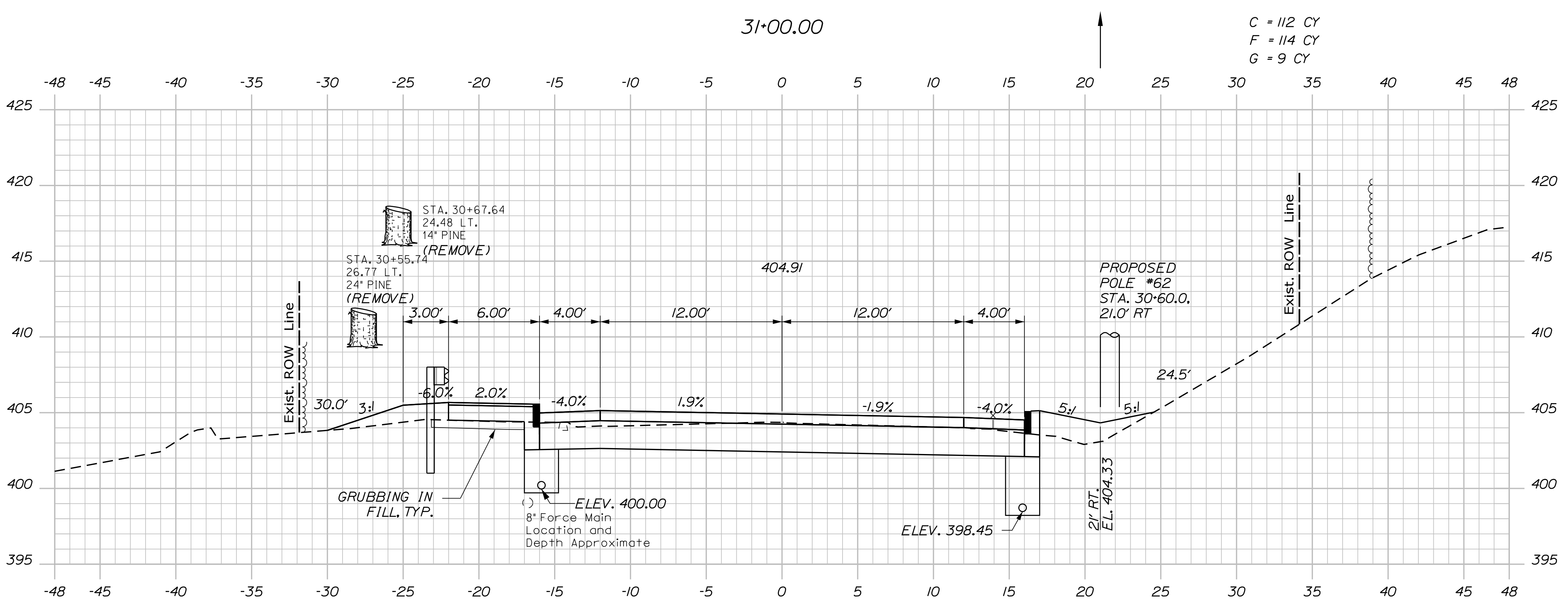
STP-1788(200)

WIN
17882.00

HIGHWAY PLANS







Sta. 30+50.00 to Sta. 31+50.00

SHEET NUMBER 54 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

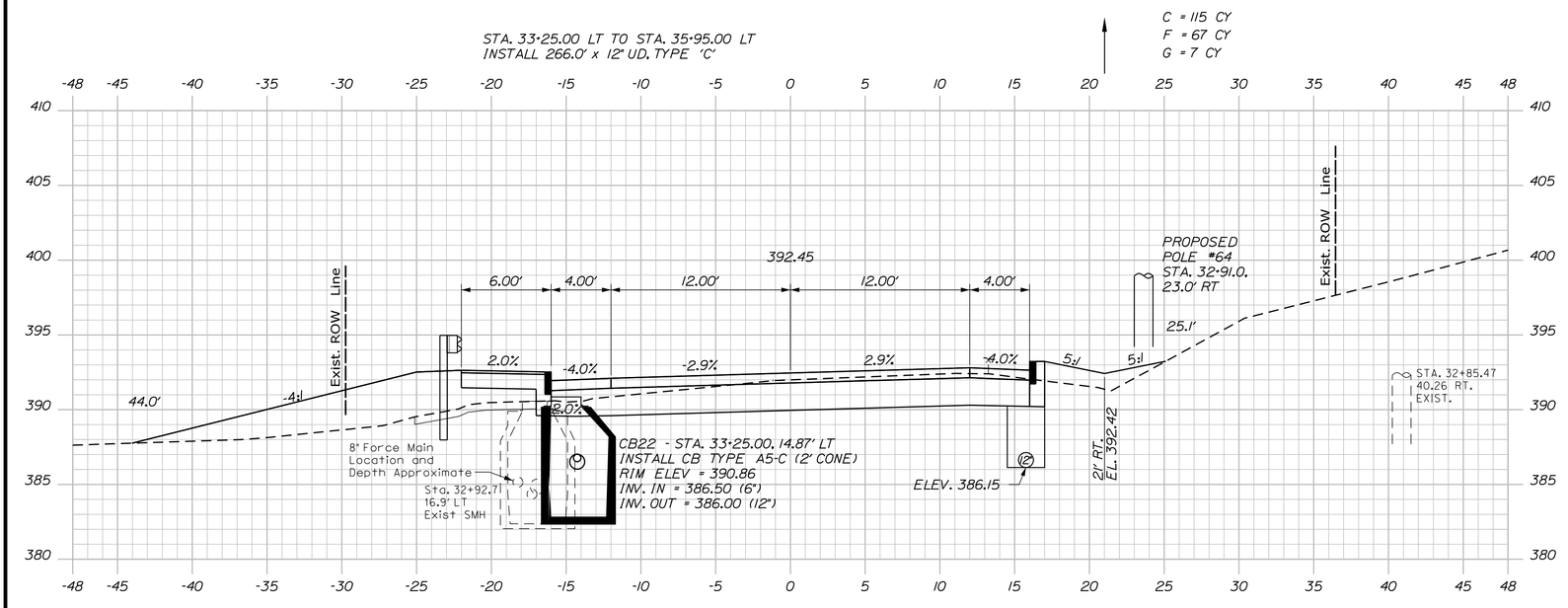
DATE

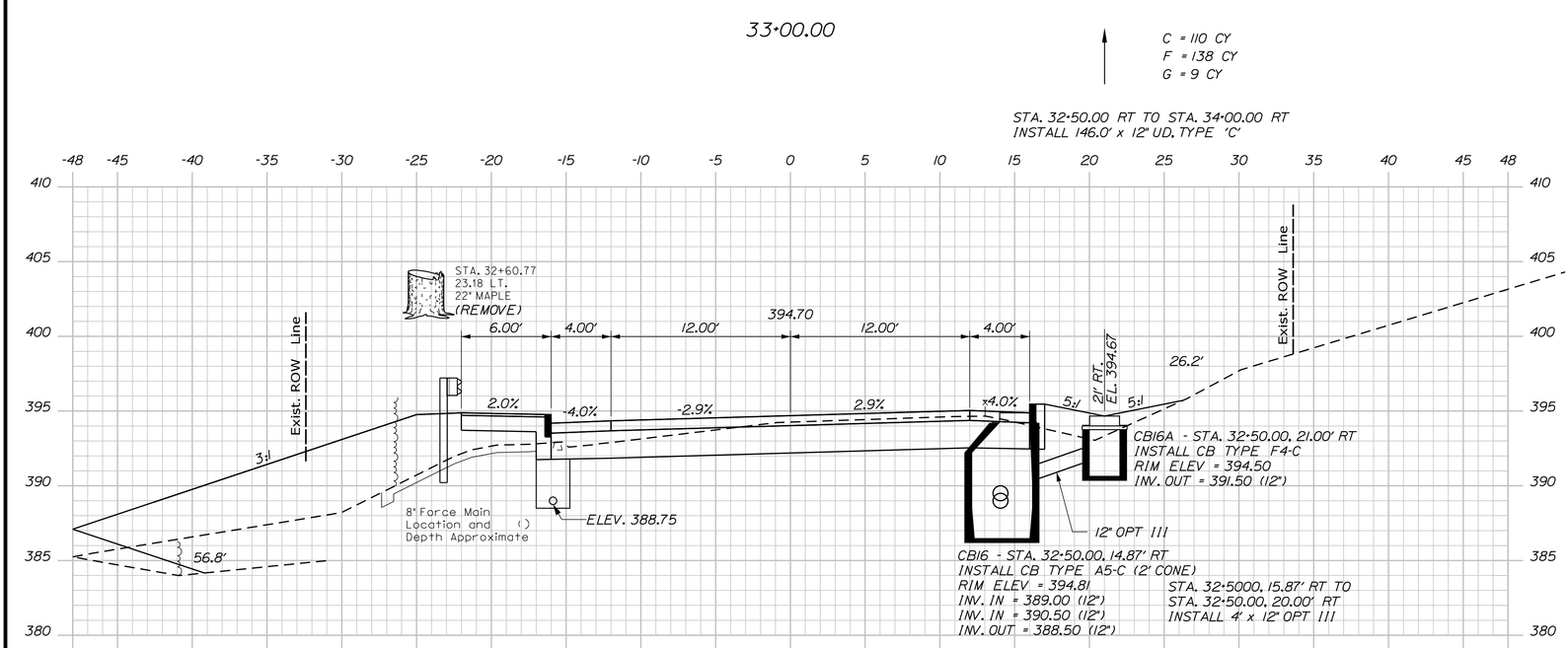
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

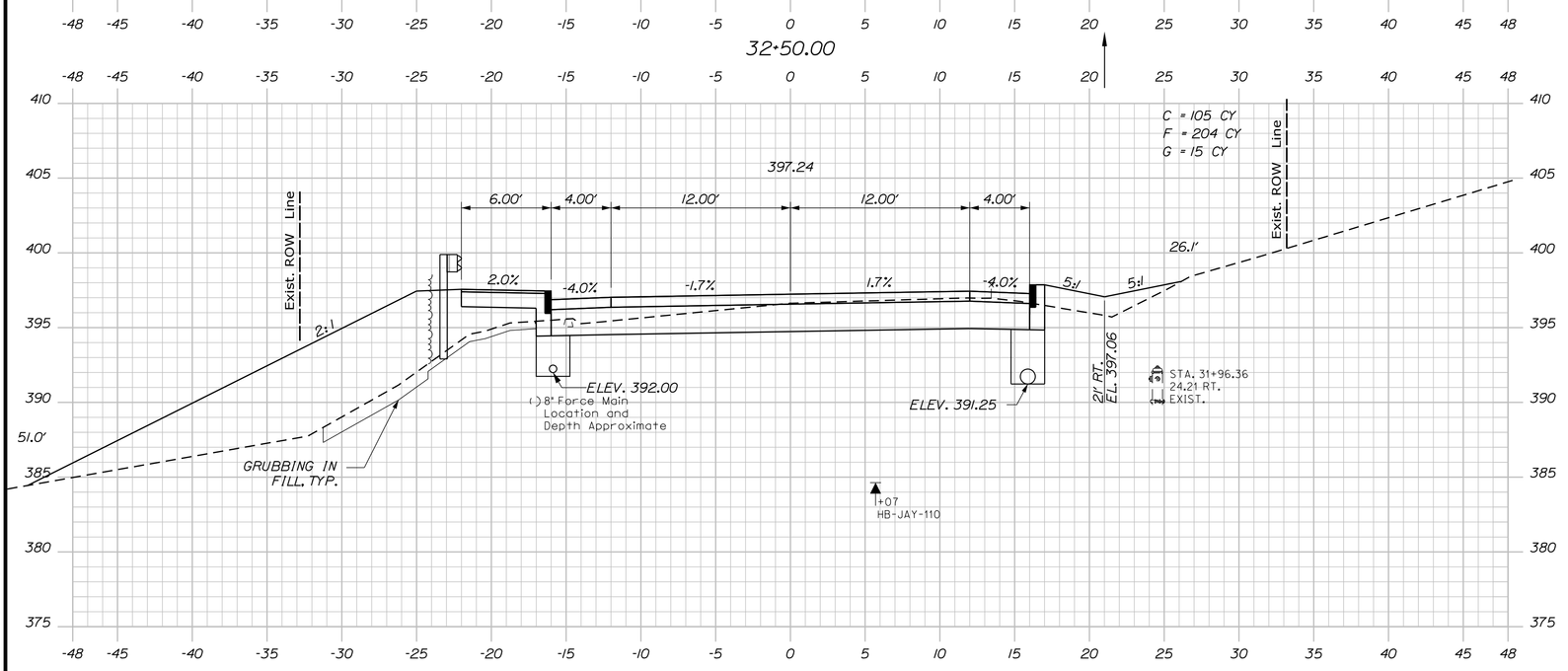
STP-1788(200)

WIN
17882.00

HIGHWAY PLANS



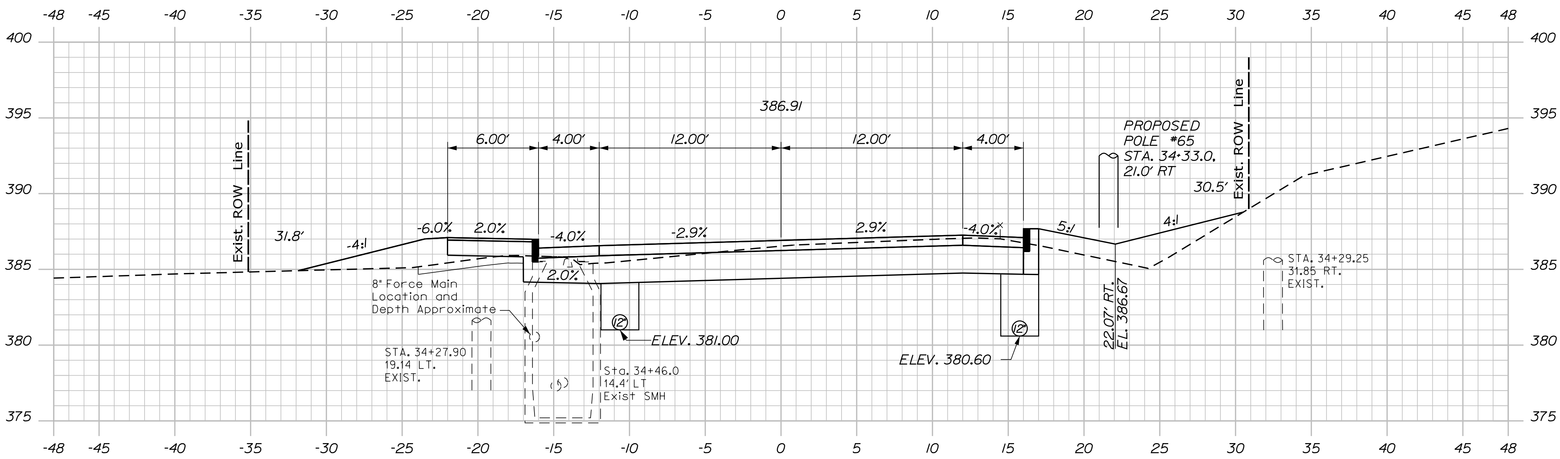




Sta. 32+00.00 to Sta. 33+00.00

SHEET NUMBER 55 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	STP-1788(200)
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			P.E. NUMBER
		REVISIONS 1			
		REVISIONS 2			DATE
		REVISIONS 3			
		REVISIONS 4			WIN 17882.00 HIGHWAY PLANS
	CROSS SECTIONS	FIELD CHANGES			

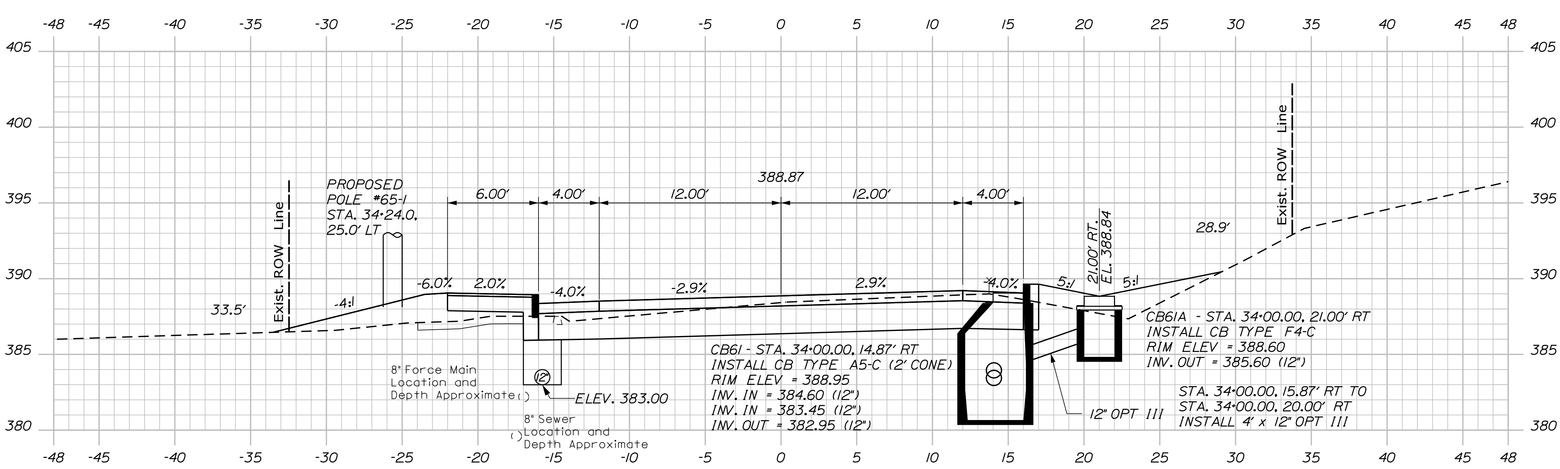
C = 119 CY
F = 39 CY
G = 9 CY



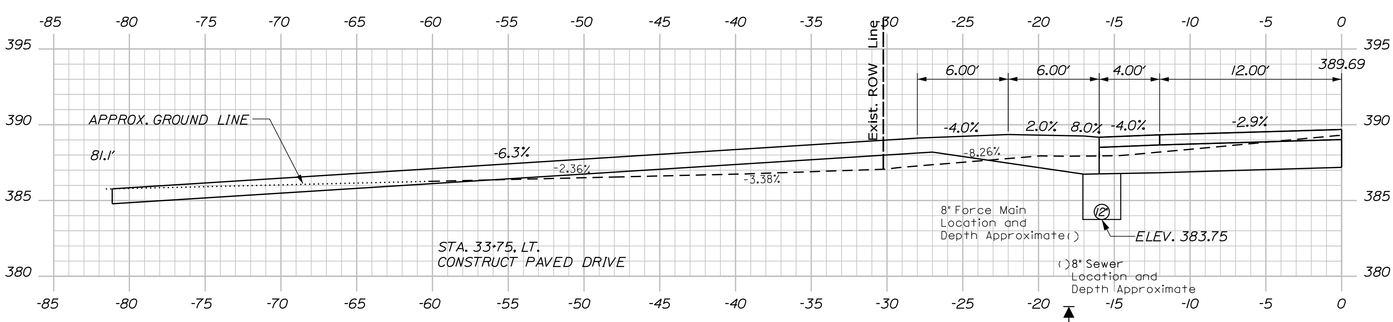
34+50.00

STA. 34+00.00 RT TO STA. 35+95.00 RT
INSTALL 191.0' x 12" UD, TYPE 'C'

C = 121 CY
F = 38 CY
G = 6 CY



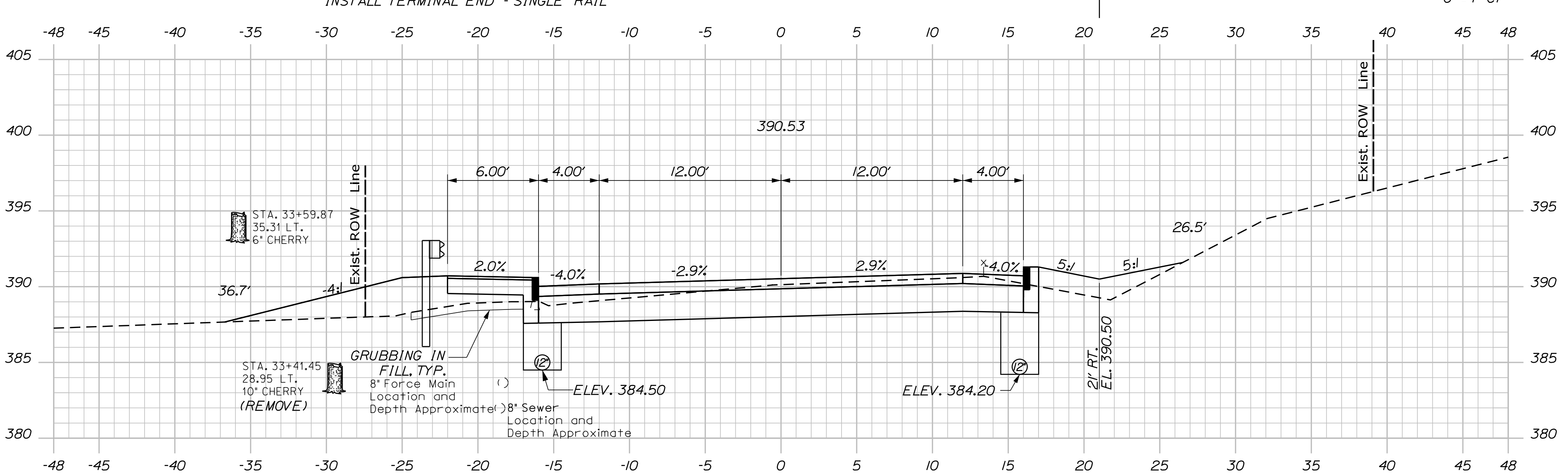
34+00.00



33+75.00

C = 119 CY
F = 44 CY
G = 7 CY

STA. 33+66.49 LT
INSTALL TERMINAL END - SINGLE RAIL



STA. 33+46.85 TO STA. 33+66.49 LT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS

33+50.00

Sta. 33+50.00 to Sta. 34+50.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

SHEET NUMBER 56 OF 102

JAY
ROUTE 4\17

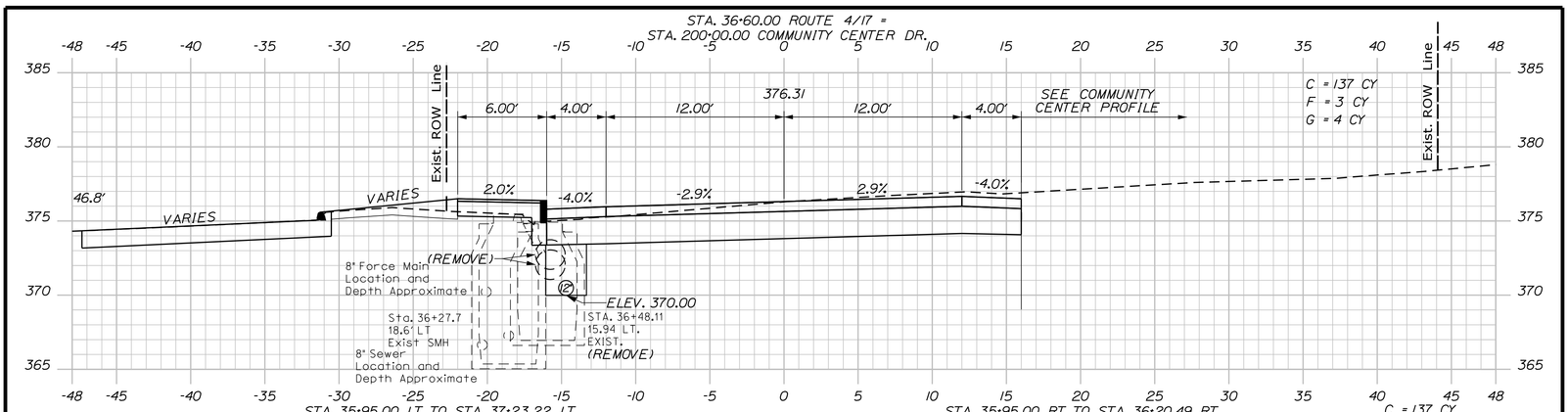
CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

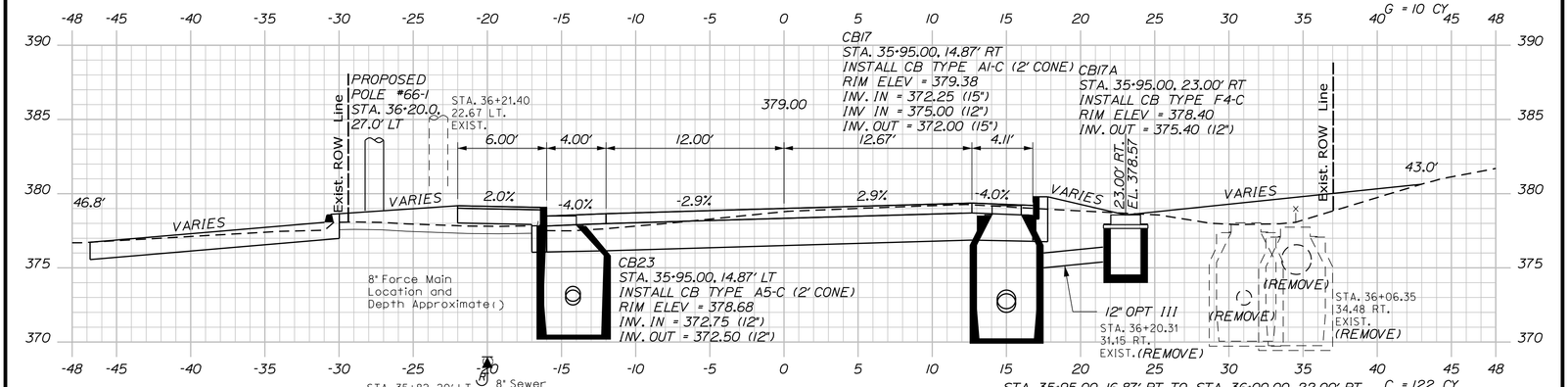


STA. 35+95.00 LT TO STA. 37+23.22 LT
INSTALL 124.2' x 12" UD. TYPE 'C'

36+50.00

STA. 35+95.00 RT TO STA. 36+20.49 RT
INSTALL 27.4' x 15" UD. TYPE 'C'

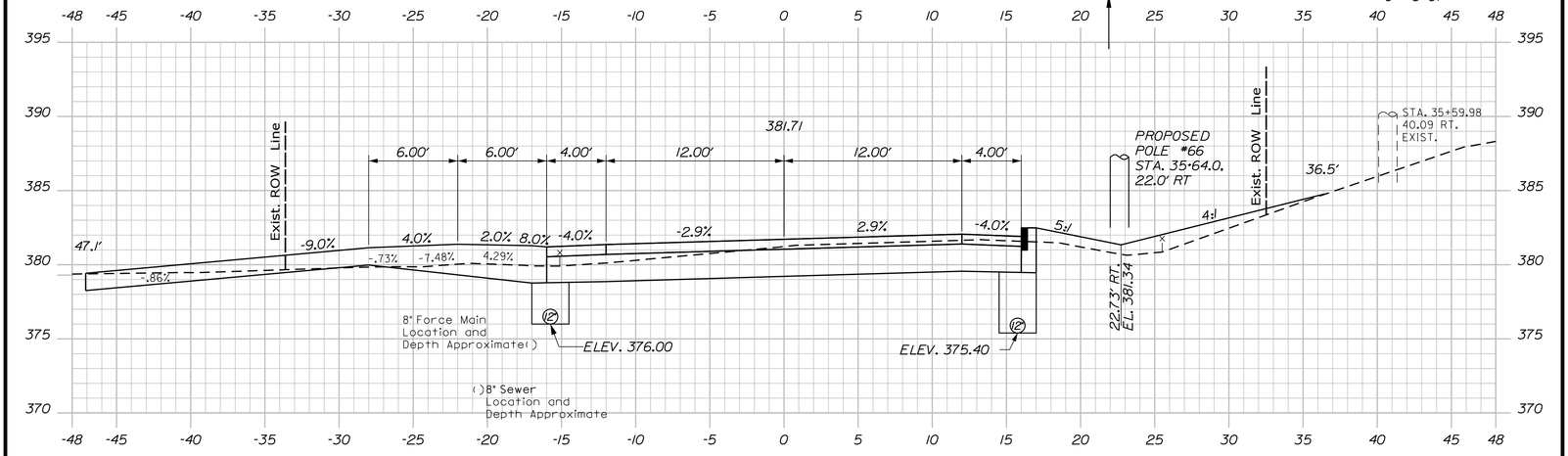
C = 137 CY
F = 22 CY
G = 10 CY



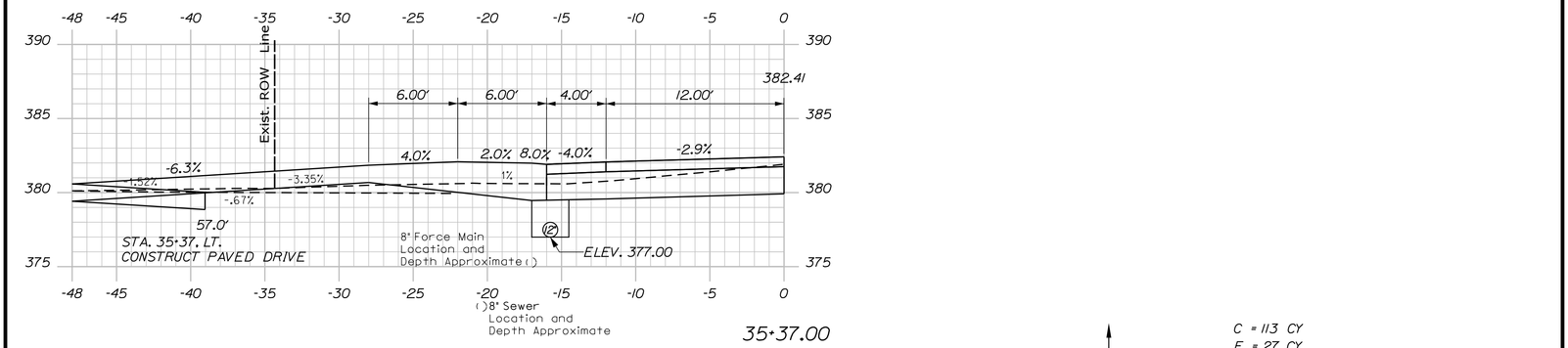
36+00.00

STA. 35+95.00, 16.87' RT TO STA. 36+00.00, 22.00' RT
INSTALL 6' x 12" OPTION III

C = 122 CY
F = 28 CY
G = 6 CY

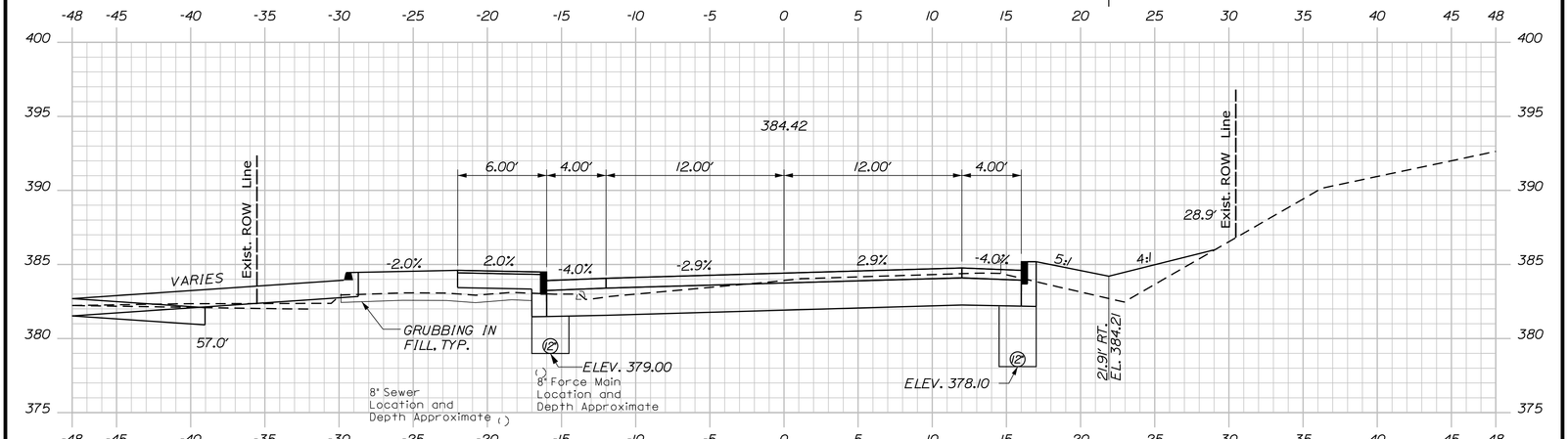


35+50.00



35+37.00

C = 113 CY
F = 27 CY
G = 6 CY



+99.7
HB-JAY-111

35+00.00

Sta. 35+00.00 to Sta. 36+50.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 57 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

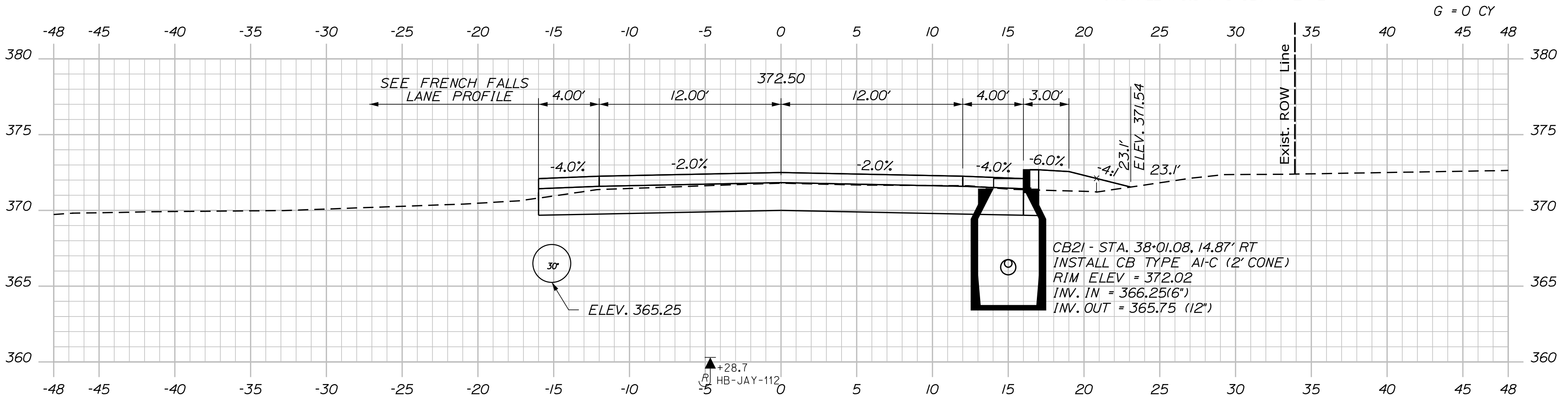
STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

STA. 38+01.08 RT TO STA. 39+76.00 RT
INSTALL 170.9' x 6" UD. TYPE 'B'

C = 118 CY
F = 3 CY
G = 0 CY



STA. 37+75.00 LT TO STA 38+41.15 LT
INSTALL 62' x 30" OPT III

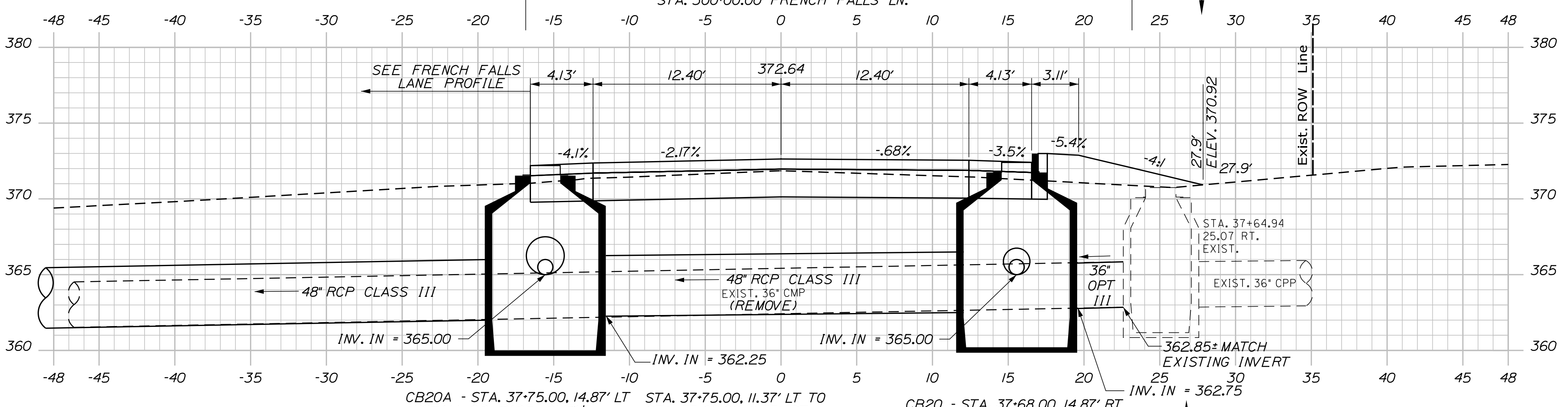
L.P.

38+00.00

STA. 37+77.00 ROUTE 4/17 =
STA. 300+00.00 FRENCH FALLS LN.

L.P.

STA. 37+68.00 RT TO STA. 38+01.08 RT
INSTALL 27.6' x 12" UD. TYPE 'C'



STA. 37+75.00, 18.37' LT TO STA. 37+90.75, 73.80' LT
INSTALL 60' x 48" RCP CLASS III
INV. OUT = 360.95
RIPRAP OUTLET
INSTALL PIPE TIES AT OUTLET

CB20A - STA. 37+75.00, 14.87' LT
INSTALL CB TYPE B1 (7'ϕ)
(2' CONE) (SOLID COVER)
RIM ELEV = 372.26
INV. IN = 365.00 (12")
INV. IN = 365.00 (30")
INV. IN = 362.25 (48")
INV. OUT = 362.00 (48")

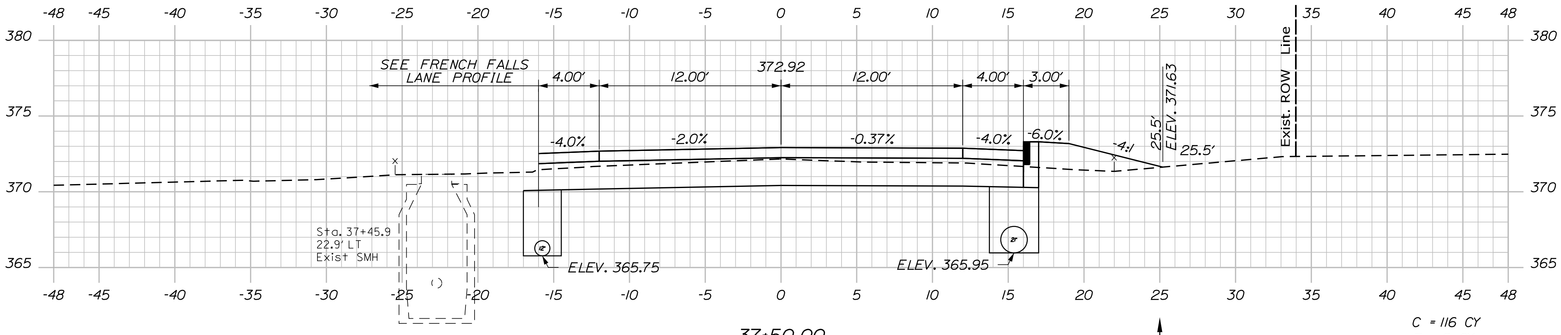
STA. 37+75.00, 11.37' LT TO
STA. 37+68.00, 11.37' RT
INSTALL 24' x 48" RCP CLASS III

37+71.44 SKEWED

CB20 - STA. 37+68.00, 14.87' RT
INSTALL CB TYPE A1-C (7'ϕ) (2' CONE)
RIM ELEV = 372.32
INV. IN = 365.00 (21")
INV. IN = 365.00 (12")
INV. IN = 362.75 (36")
INV. OUT = 362.50 (48")

STA. 37+68.00, 17.87' RT TO
STA. 37+65.07, 23.13' RT
INSTALL 5' x 36" OPT III
CONNECT TO EXISTING CB

C = 100 CY
F = 10 CY
G = 0 CY

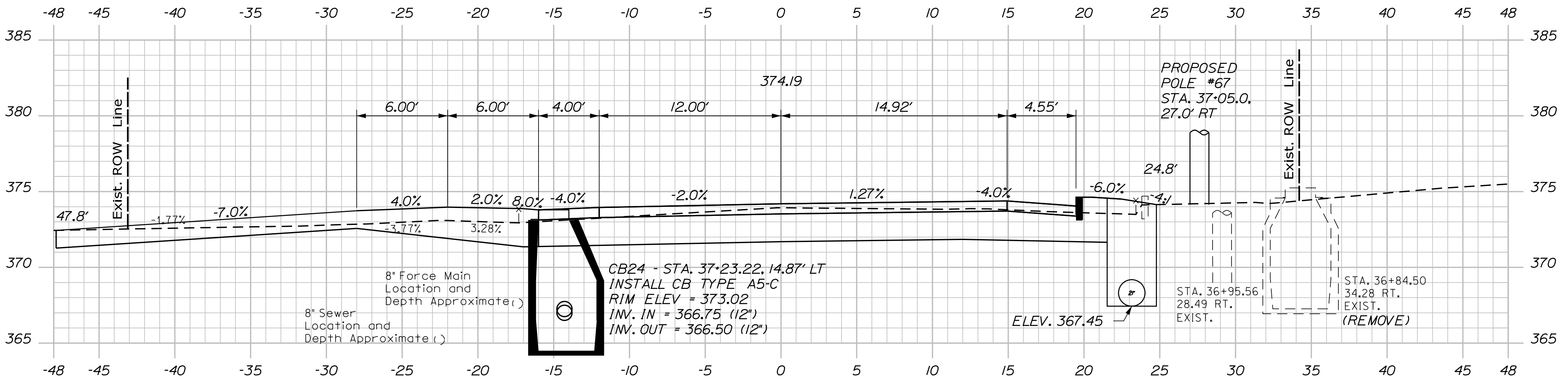


STA. 37+08.94 TO STA. 37+46.65, LT.
INSTALL ENERGY ABSORBING SYSTEM (ET-PLUS)

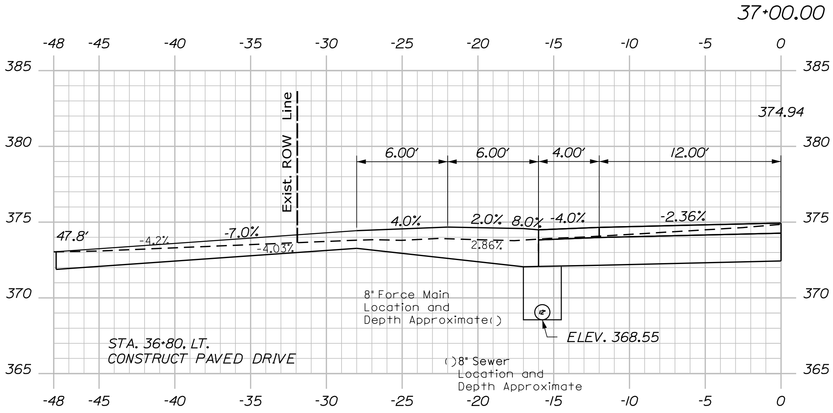
STA. 37+23.22 LT TO STA. 37+75.00 LT
INSTALL 47' x 12" OPT III

37+50.00

C = 116 CY
F = 8 CY
G = 0 CY



37+00.00



STA. 36+80, LT.
CONSTRUCT PAVED DRIVE

36+80.00

Sta. 36+80.00 to Sta. 38+00.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

JAY
ROUTE 4\17

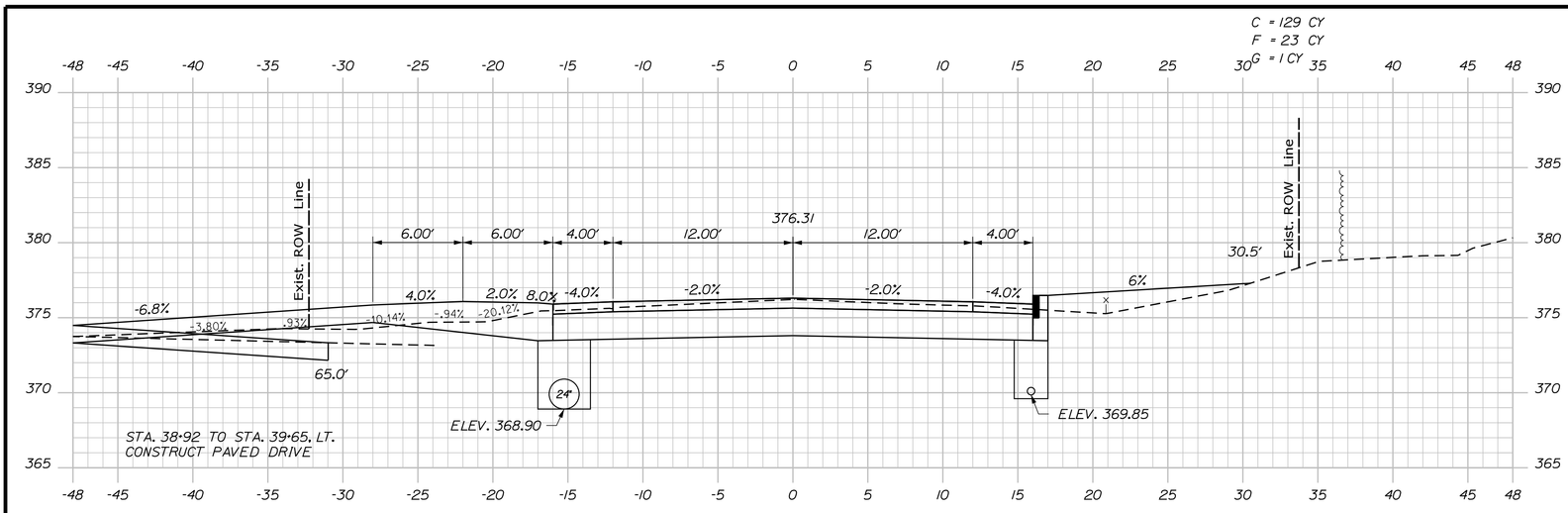
CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

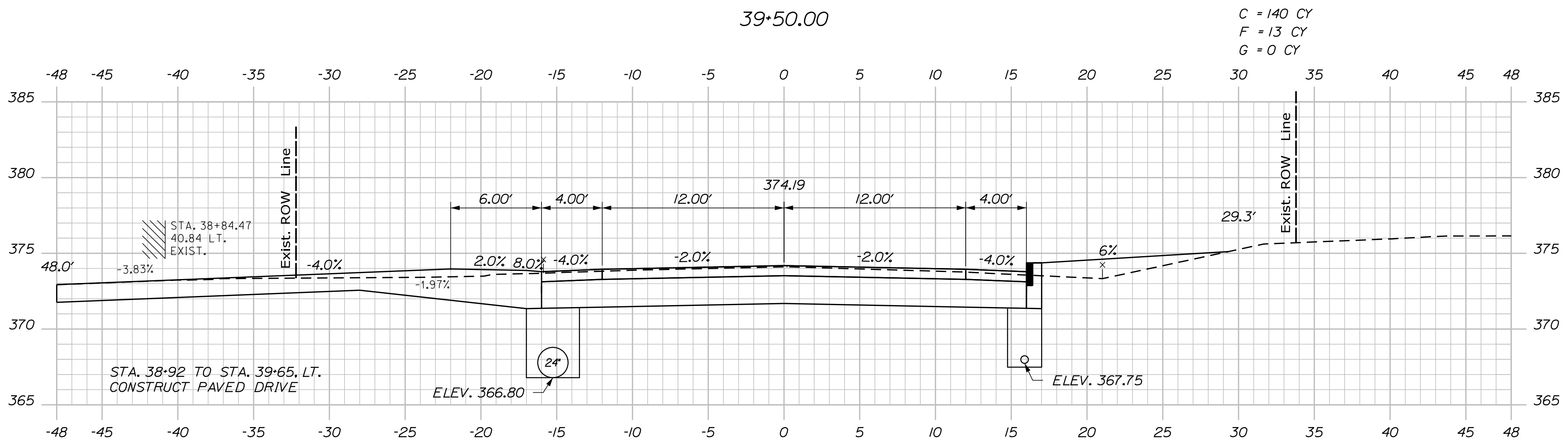
STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

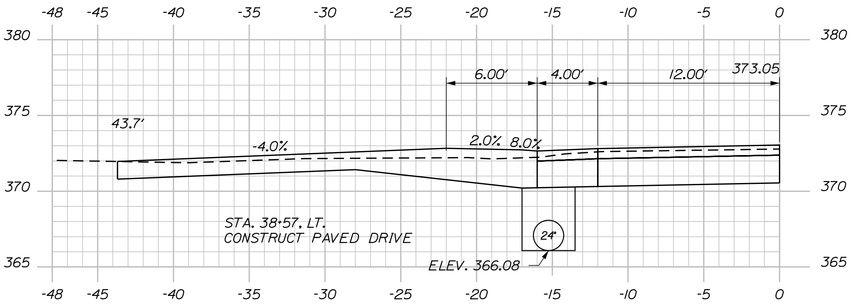


39+50.00

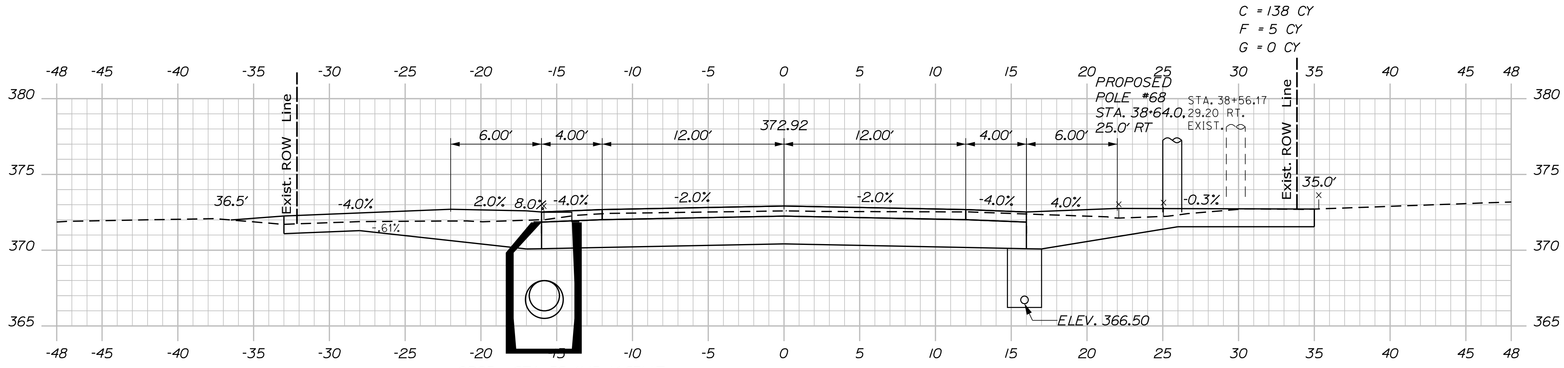


STA. 38+41.15 LT TO STA. 39+76.00 LT
INSTALL 130.9' x 24" UD, TYPE 'C'

39+00.00

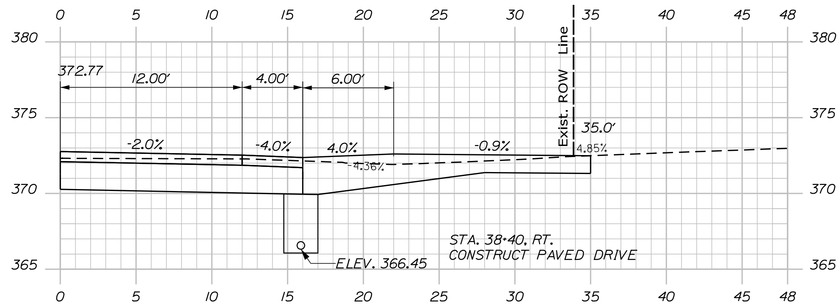


38+57.00



CB25 - STA. 38+41.15, 14.87' LT
INSTALL CB TYPE A5-C (2' CONE)
RIM ELEV = 372.31
INV. IN = 366.00 (24")
INV. OUT = 365.50 (30")

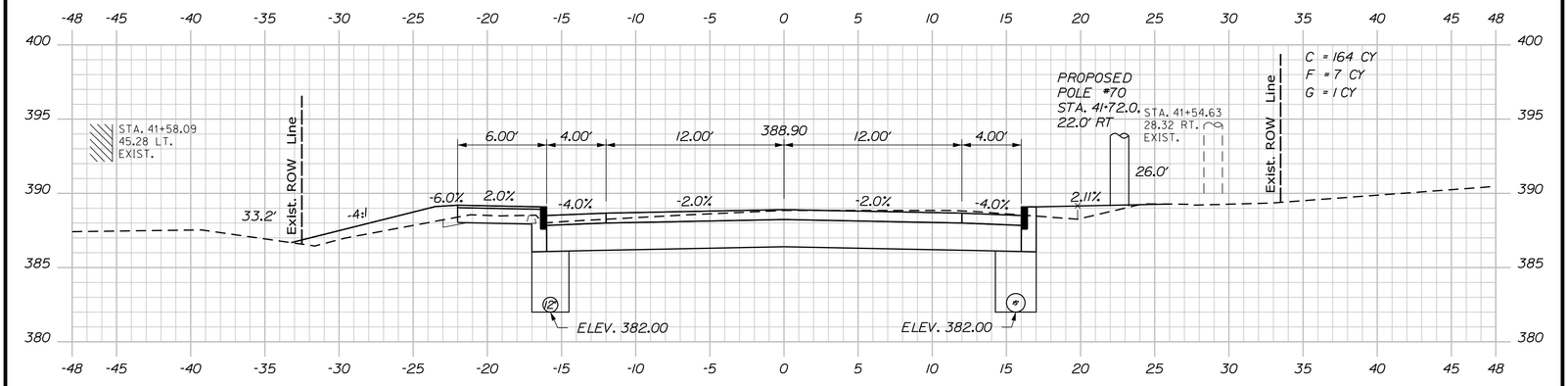
38+50.00



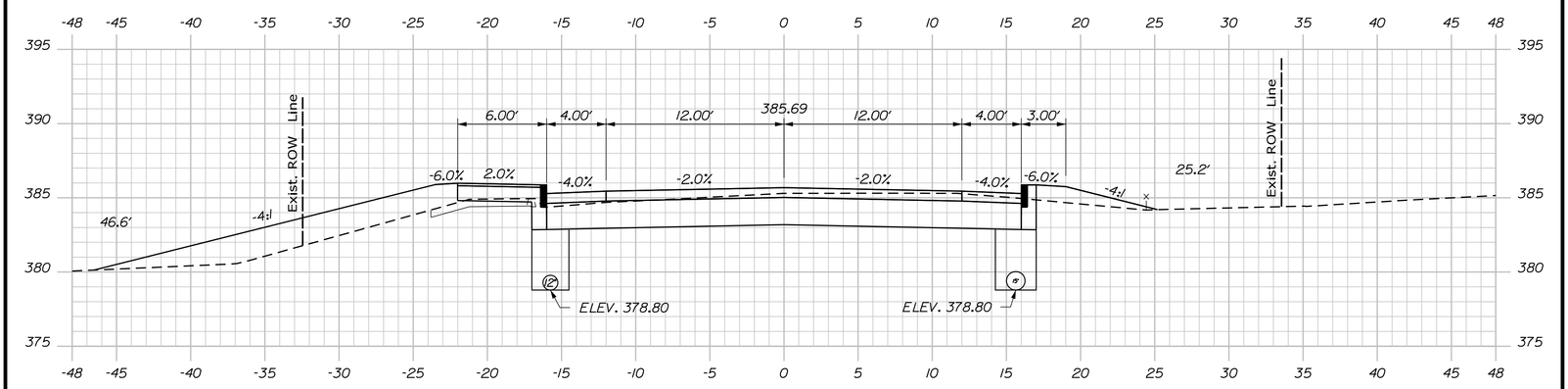
38+40.00

Sta. 38+40.00 to Sta. 39+50.00

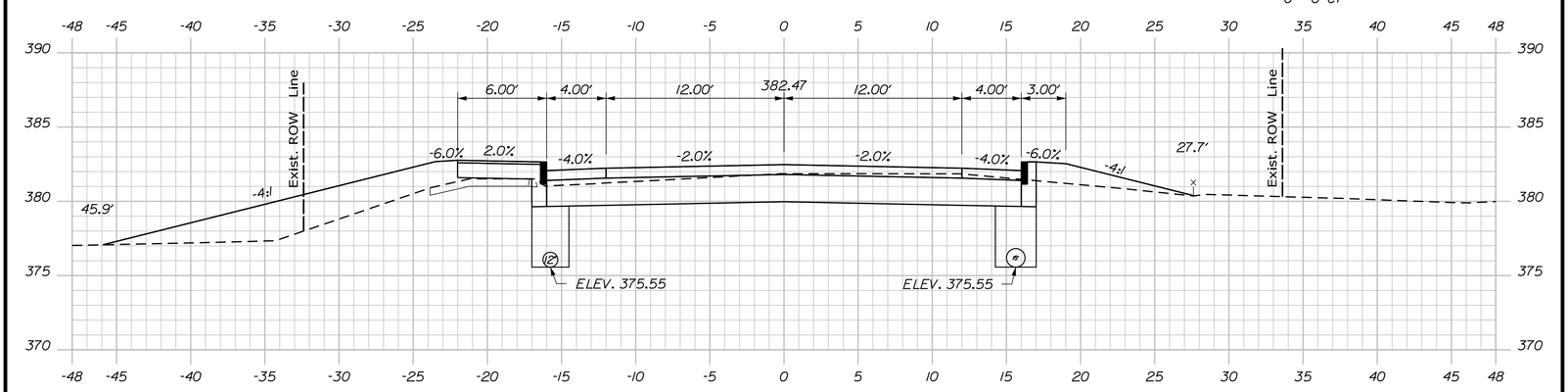
SHEET NUMBER 59 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	STP-1788(200)
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			P.E. NUMBER
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			
	CROSS SECTIONS	FIELD CHANGES			WIN 17882.00 HIGHWAY PLANS



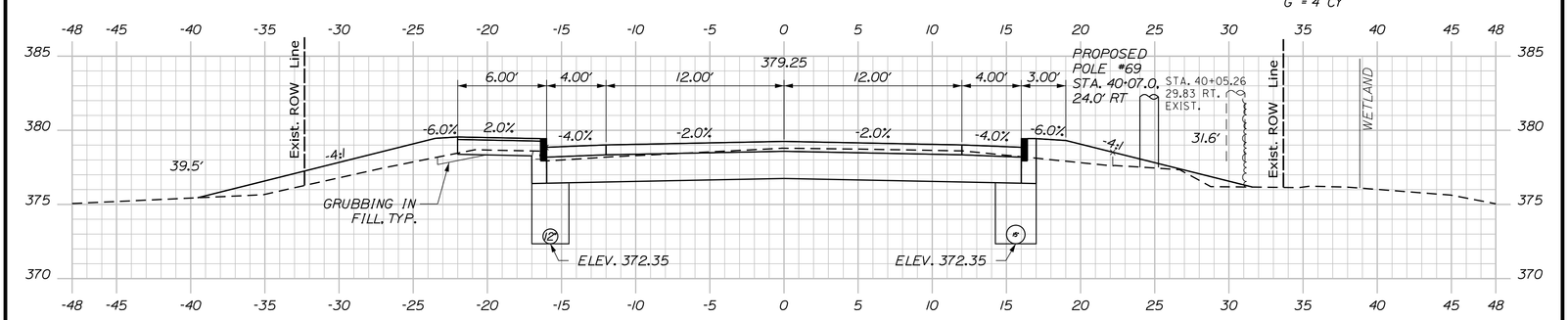
41+50.00



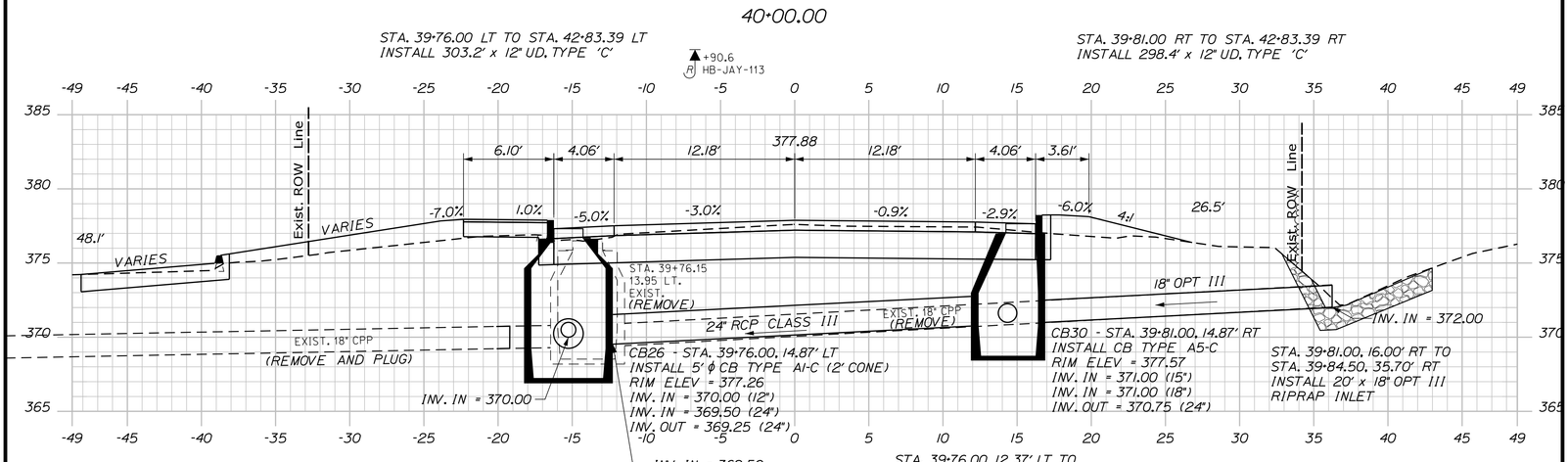
41+00.00



40+50.00



40+00.00



39+78.28 SKEWED

Sta. 39+78.28 to Sta. 41+50.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 60 OF 102

JAY
ROUTE 4\17

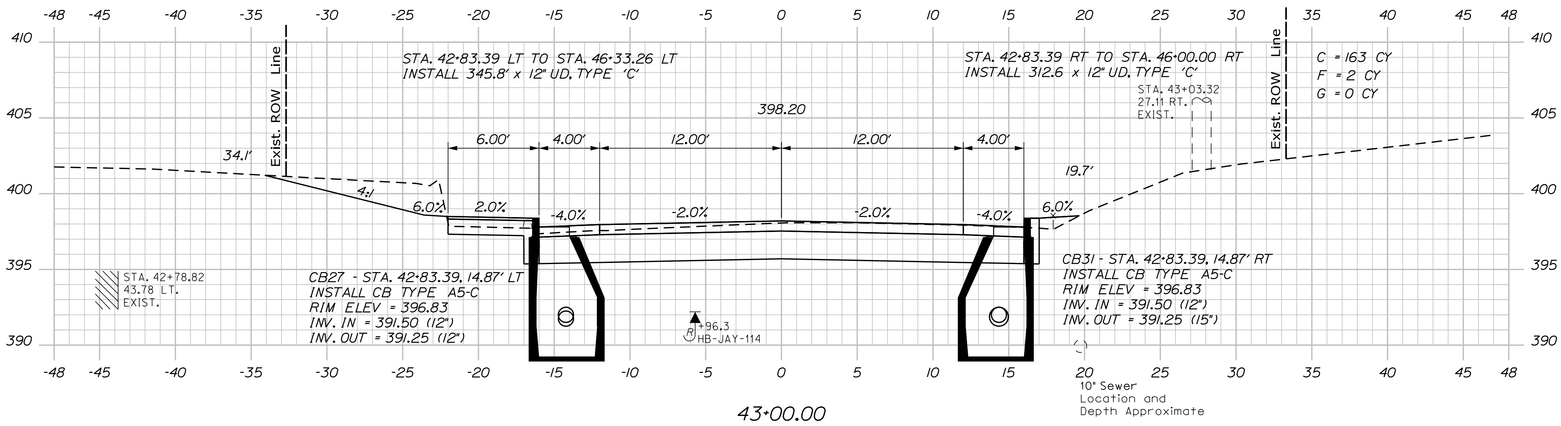
CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

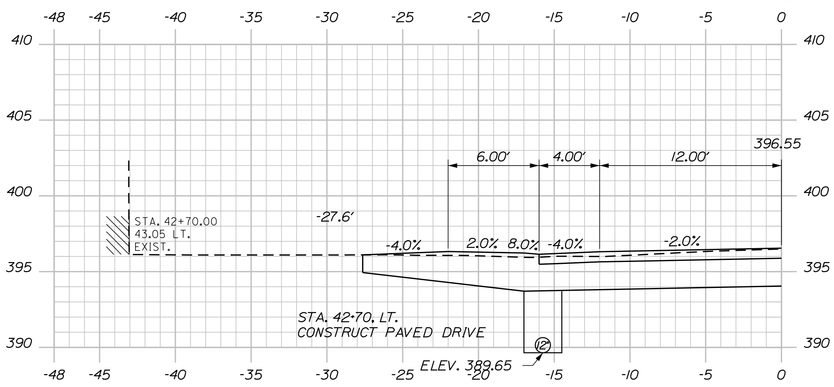
STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

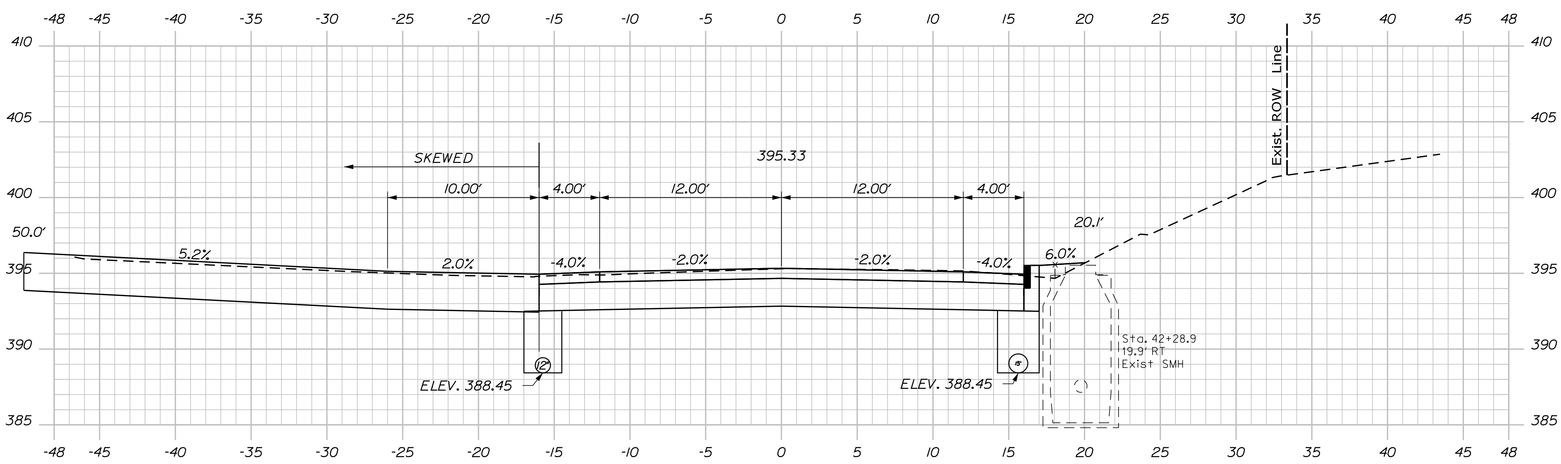


43+00.00

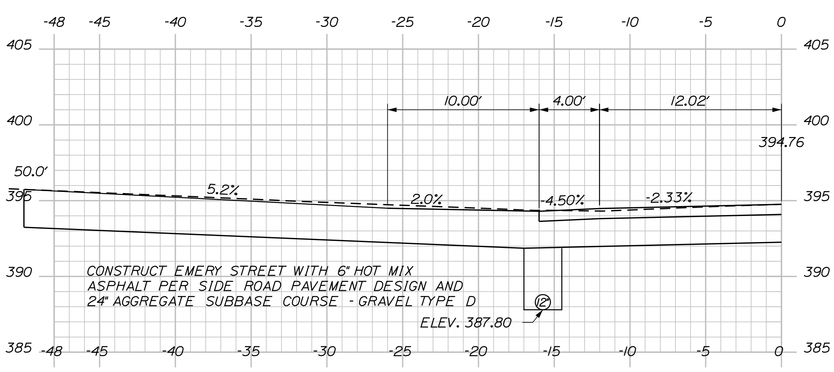


42+70.00

C = 165 CY
F = 1 CY
G = 0 CY



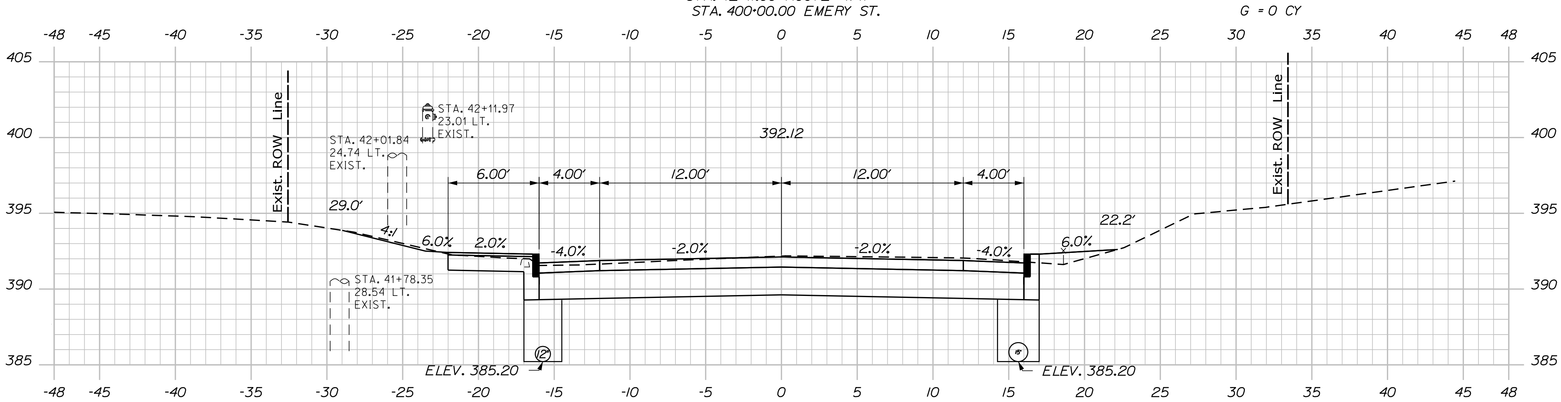
42+50.00



42+41.00 (SKEWED)

STA. 42+41.00 ROUTE 4/17 =
STA. 400+00.00 EMERY ST.

C = 160 CY
F = 2 CY
G = 0 CY



42+00.00

Sta. 42+00.00 to Sta. 43+00.00

SHEET NUMBER 61 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

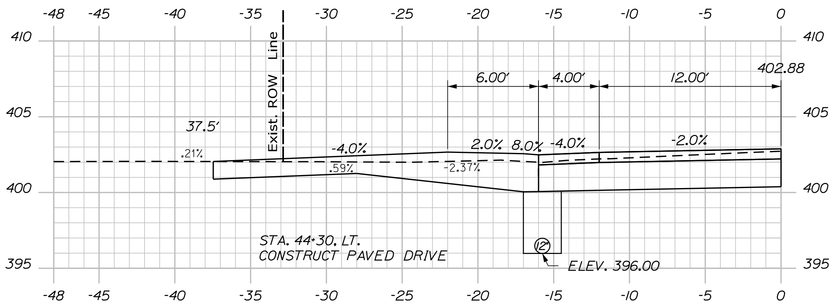
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

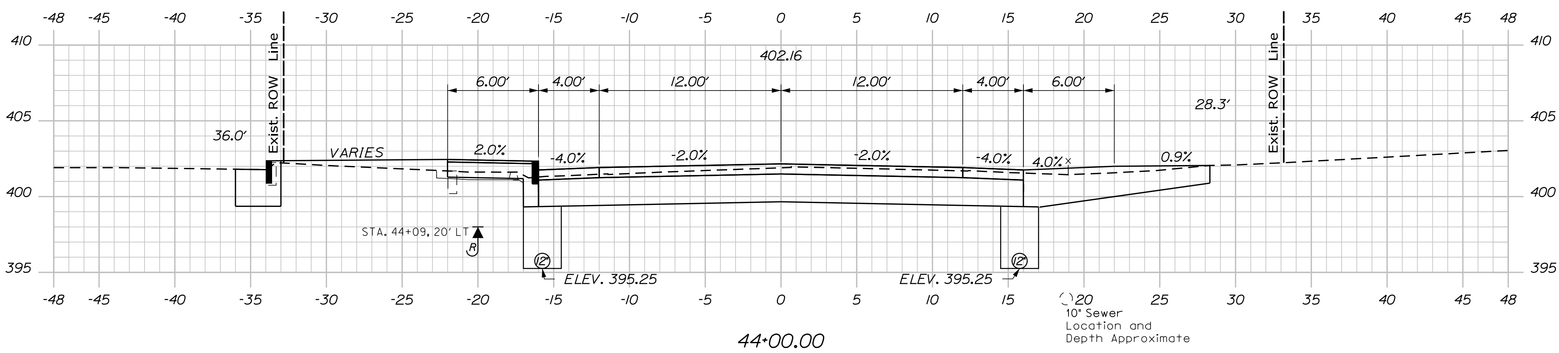
WIN 17882.00

HIGHWAY PLANS

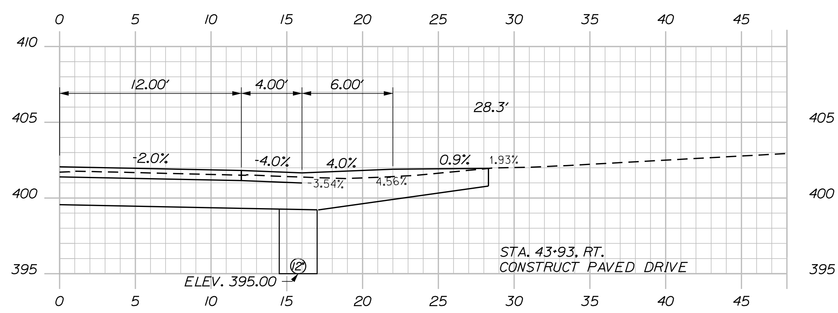


44+30.00

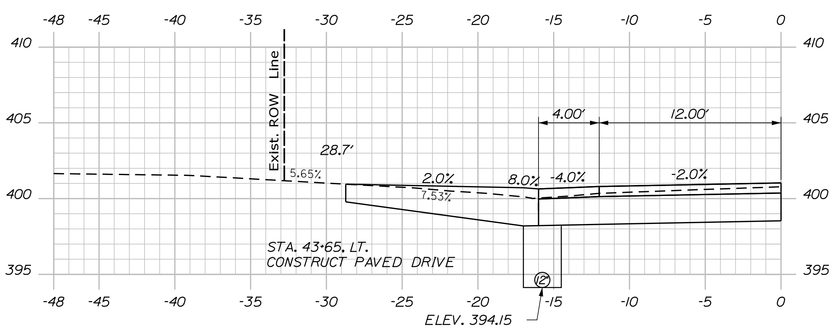
C = 142 CY
F = 12 CY
G = 4 CY



44+00.00



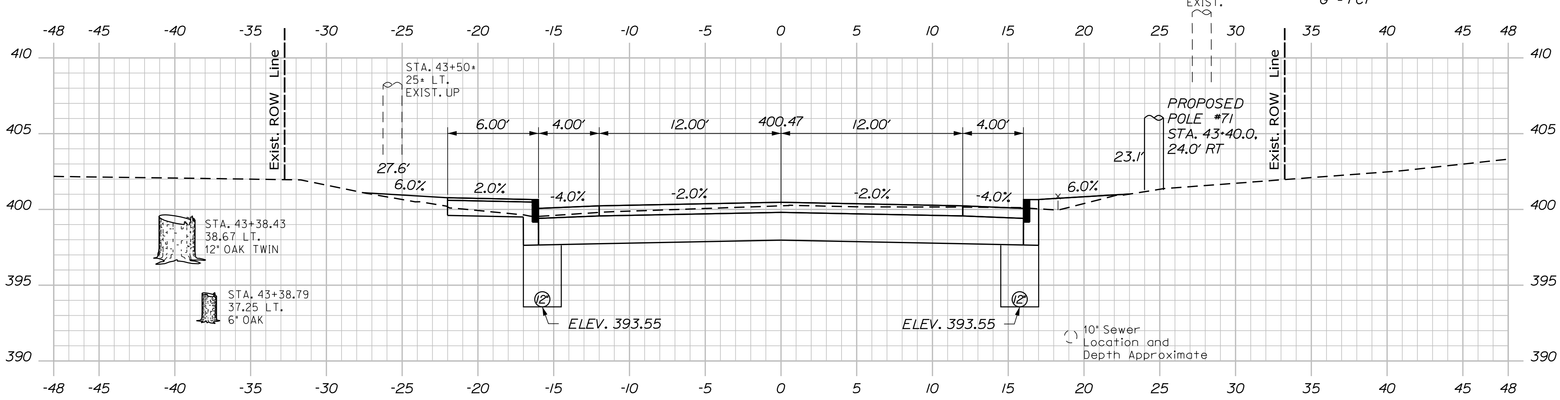
43+93.00



43+65.00

(REMOVE)
STA. 43+53.33
27.11 RT.
EXIST.

C = 141 CY
F = 3 CY
G = 1 CY



43+50.00

Sta. 43+50.00 to Sta. 44+30.00

SHEET NUMBER 62 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

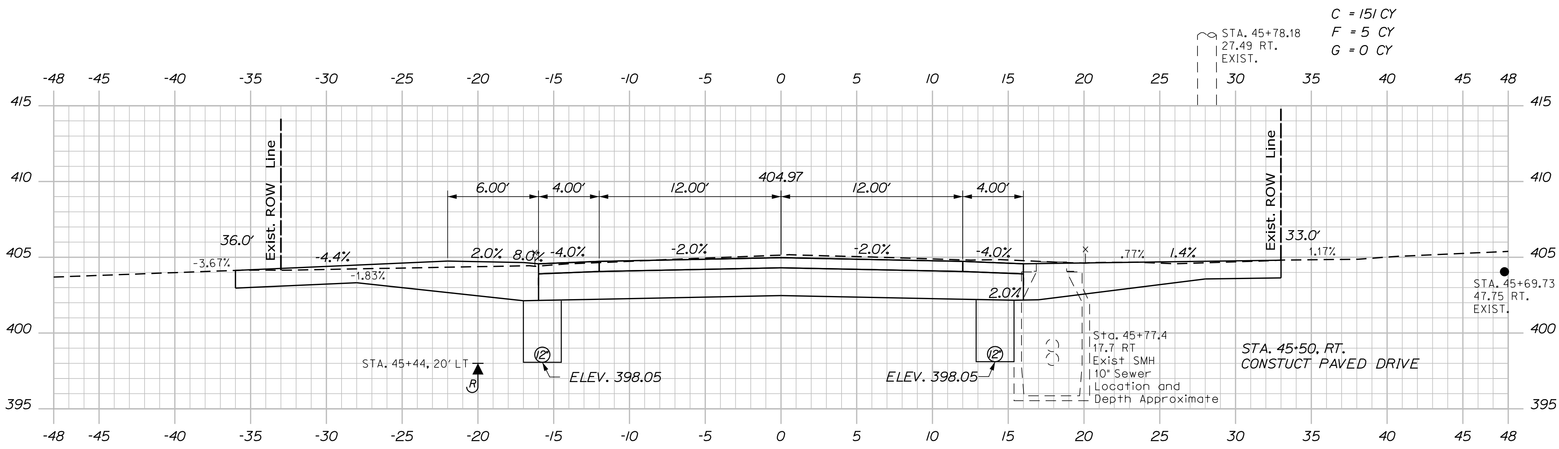
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

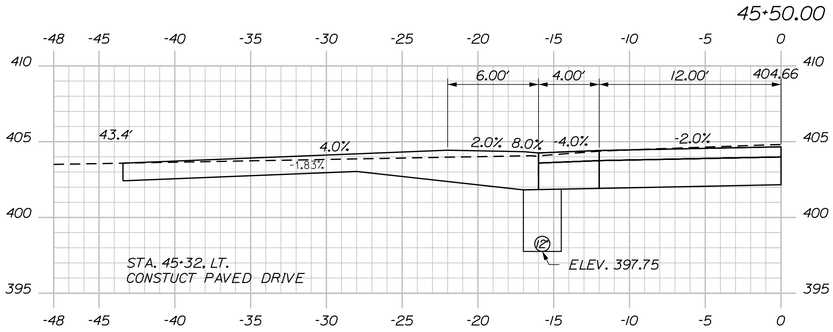
STP-1788(200)

WIN
17882.00

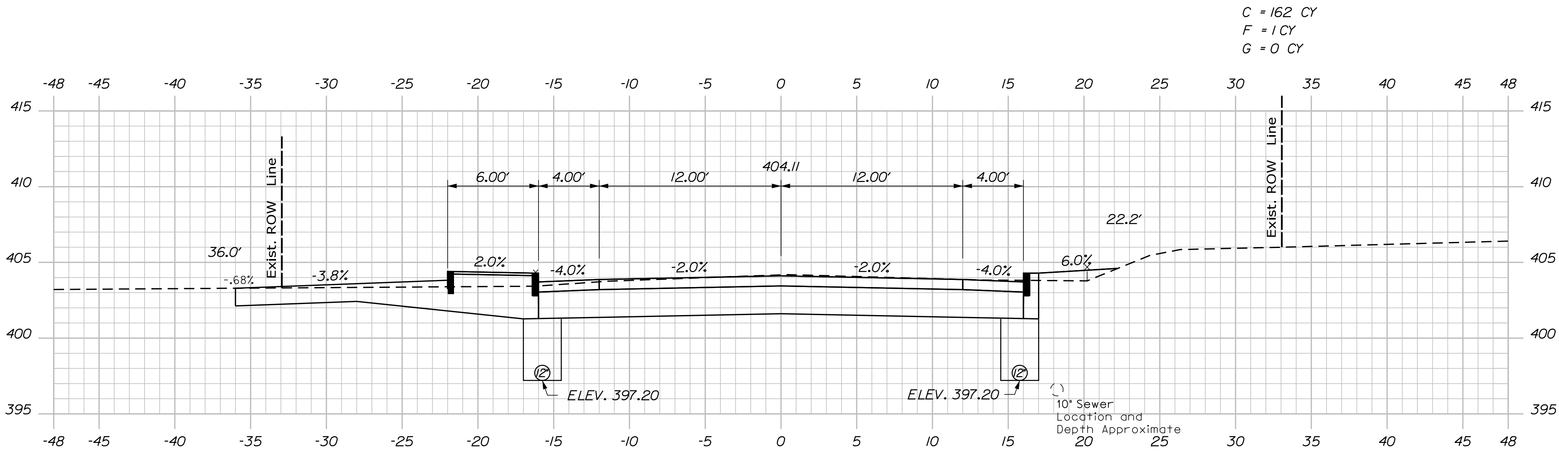
HIGHWAY PLANS



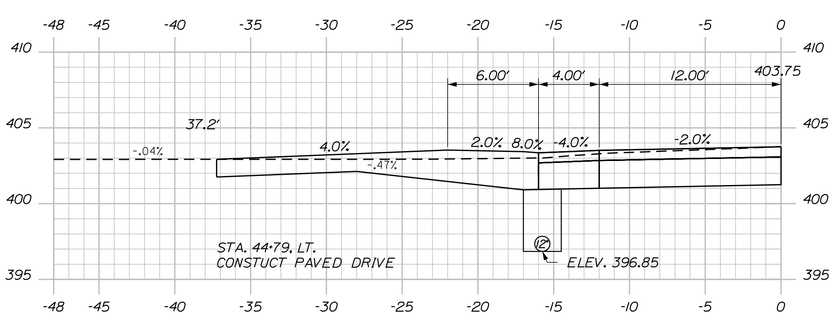
45+50.00



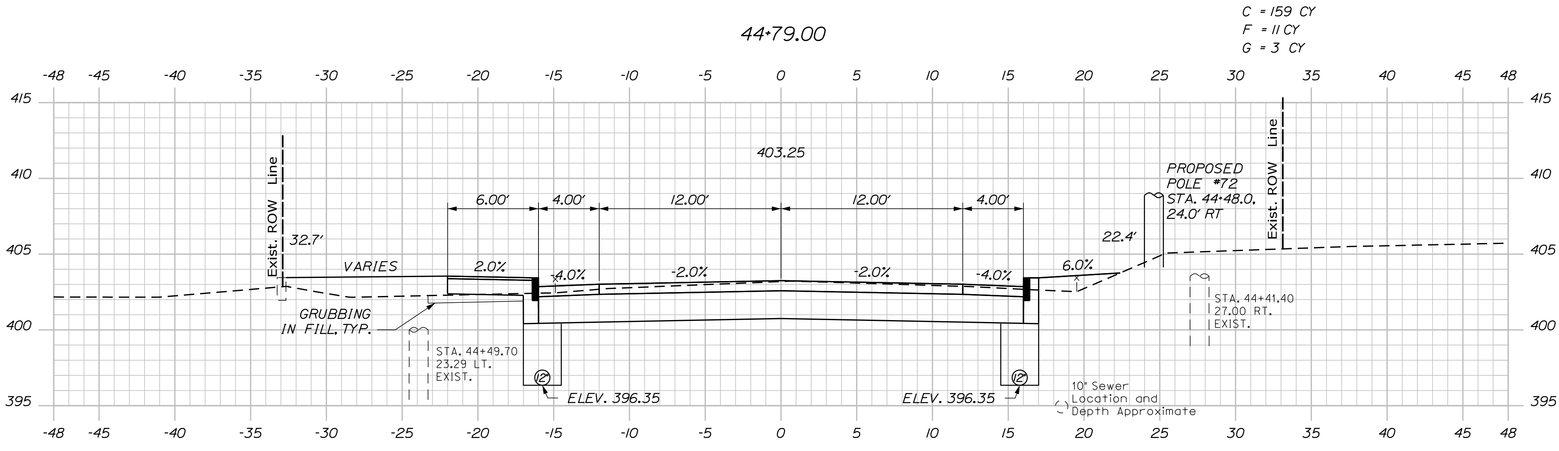
45+32.00



45+00.00



44+79.00



44+50.00

Sta. 44+50.00 to Sta. 45+50.00

SHEET NUMBER 63 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

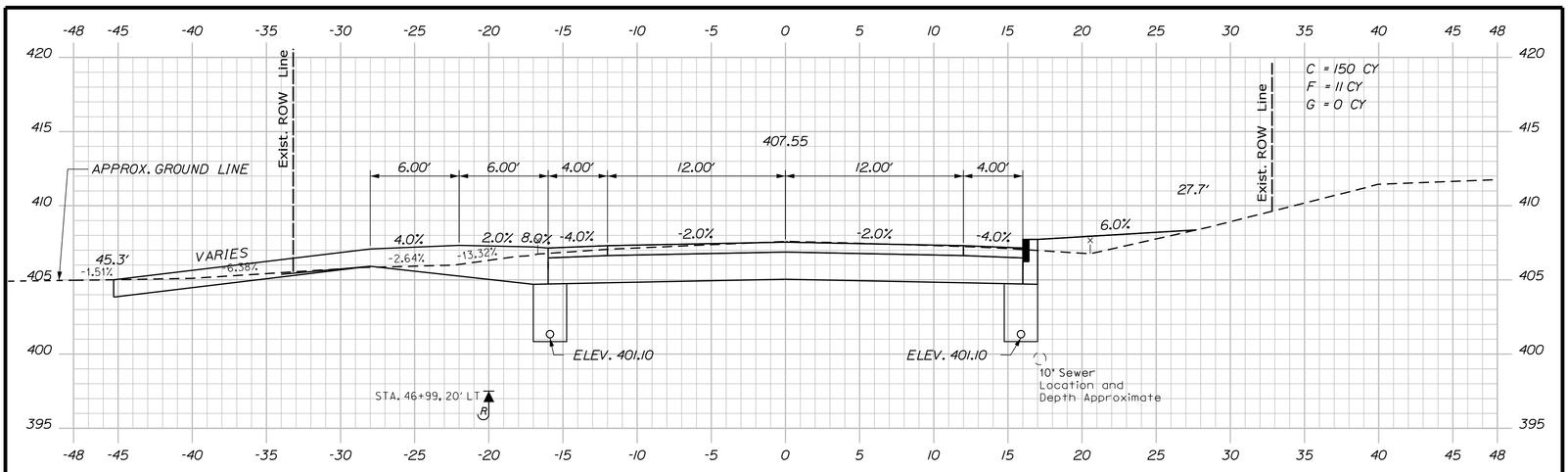
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

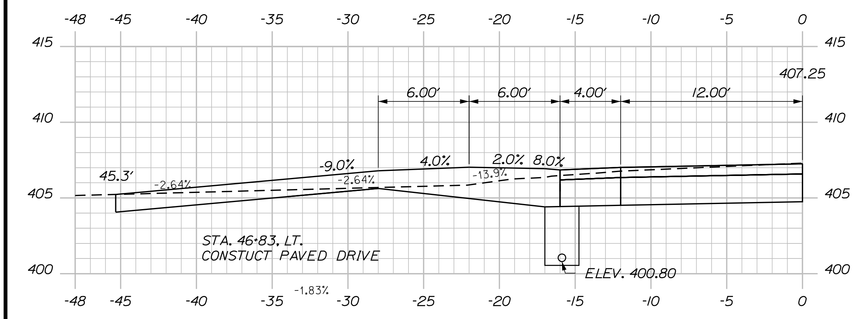
WIN
17882.00

HIGHWAY PLANS



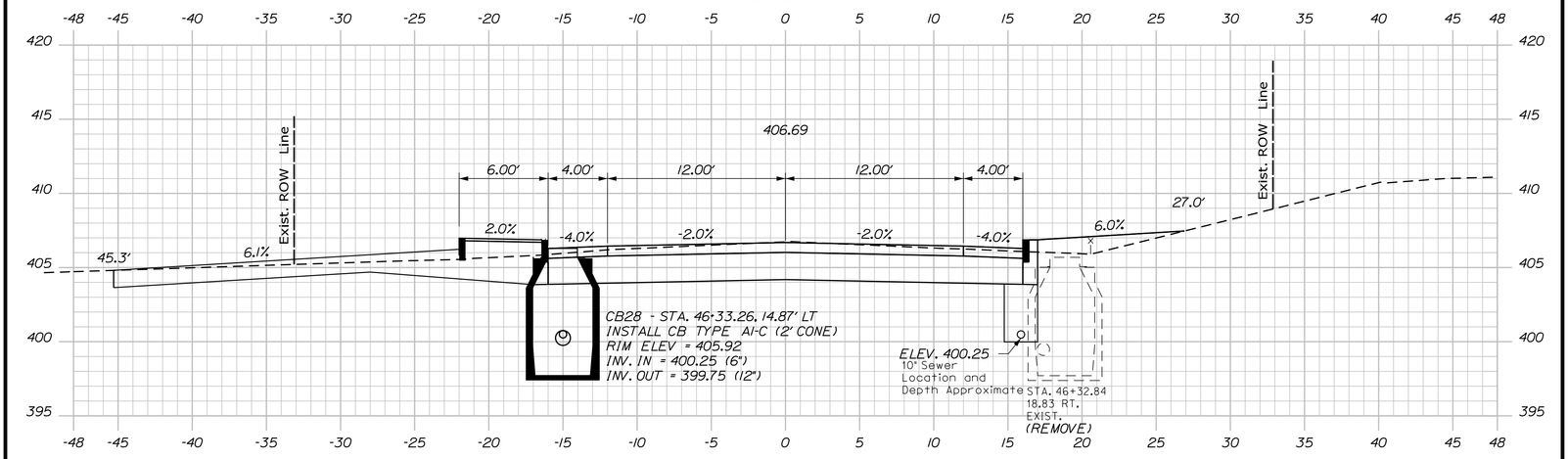
STA. 46+33.26 LT TO STA. 49+82.00 LT
INSTALL 346.7' x 6" UD. TYPE 'B'

47+00.00

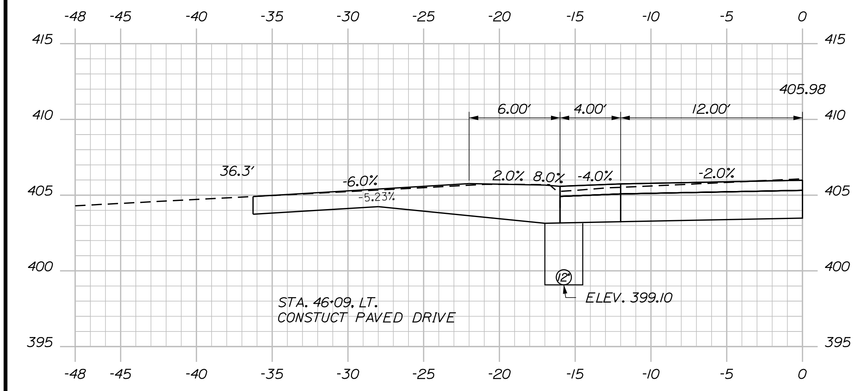


46+83.00

C = 147 CY
F = 8 CY
G = 0 CY



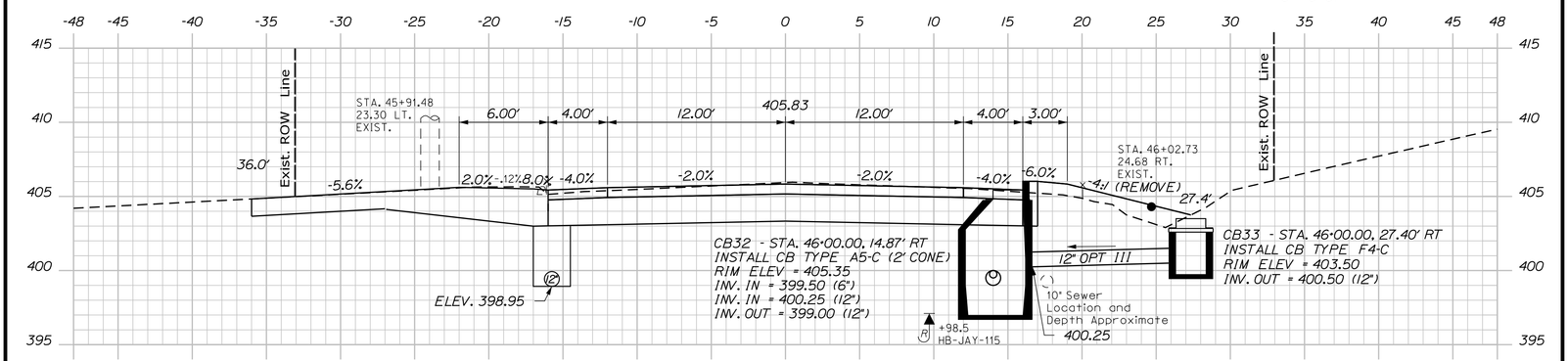
46+50.00



46+09.00

STA. 46+00.00 RT TO STA. 49+82.00 RT
INSTALL 380.0' x 6" UD. TYPE 'B'

C = 148 CY
F = 9 CY
G = 0 CY



STA. 46+00.00, 15.87' RT TO
STA. 46+00.00, 26.40' RT
INSTALL 11' x 12" OPT III

46+00.00

STA. 46+00, 10' RT

Sta. 46+00.00 to Sta. 47+00.00

SHEET NUMBER 64 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

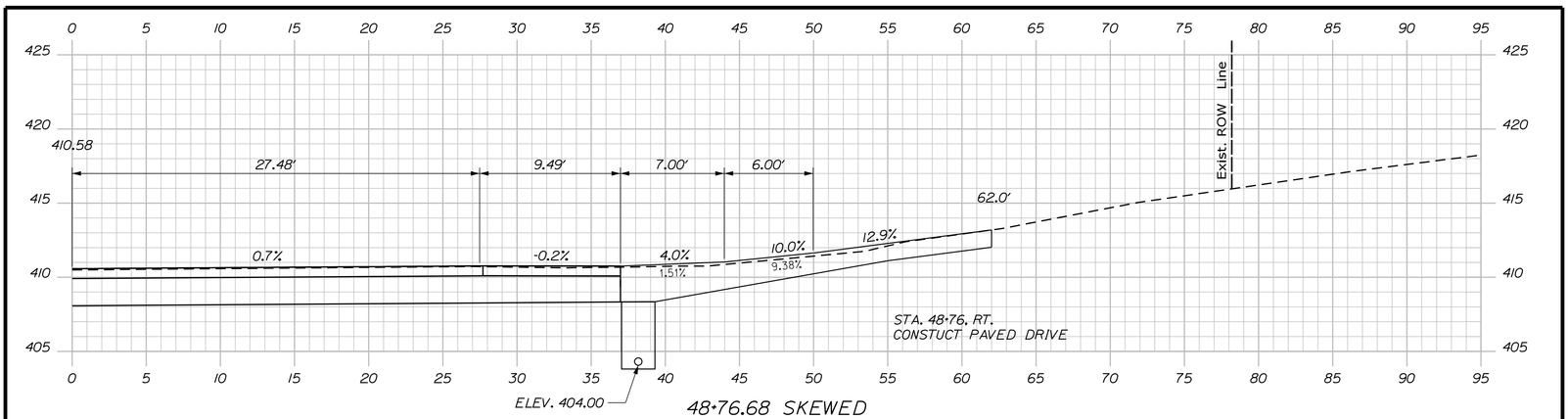
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

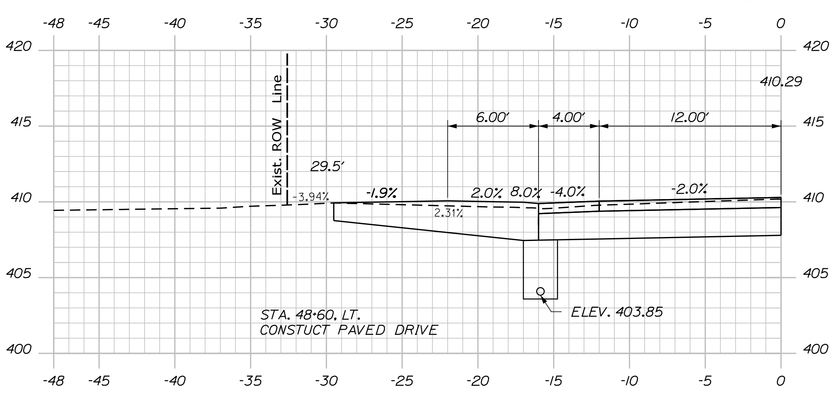
STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

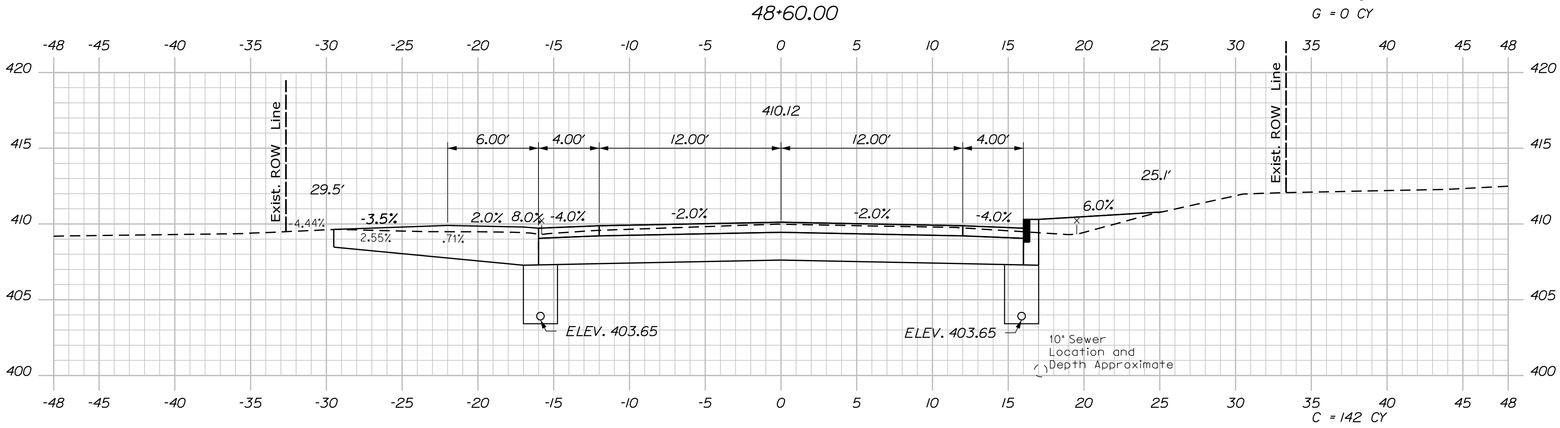


48+76.68 SKEWED



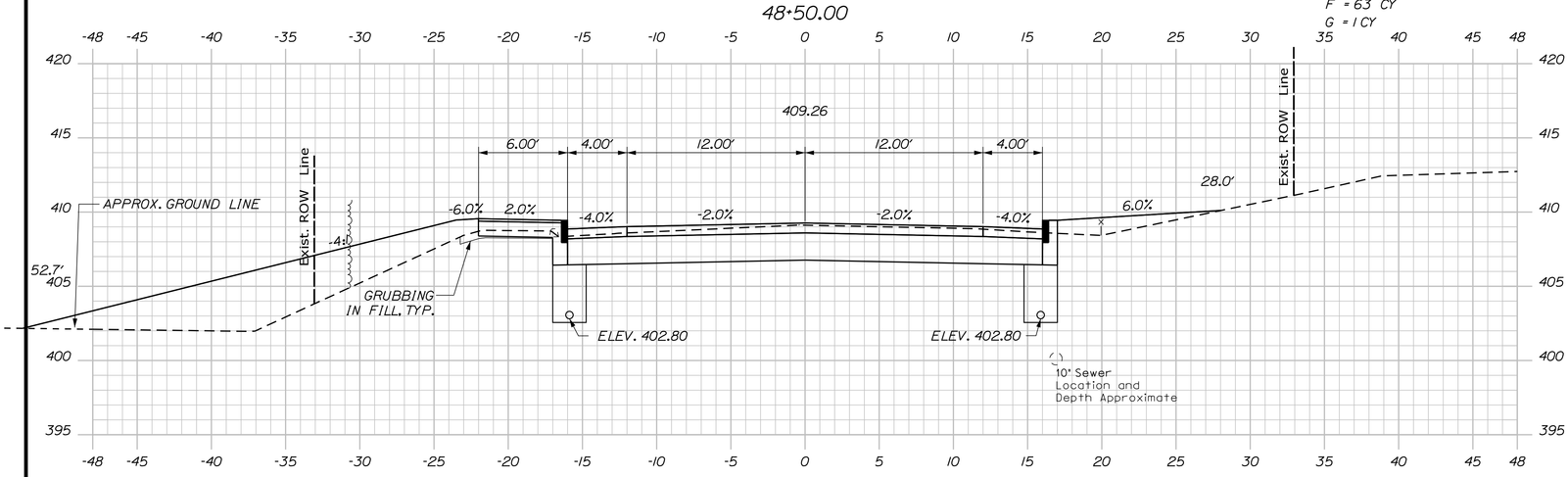
48+60.00

C = 149 CY
F = 4 CY
G = 0 CY



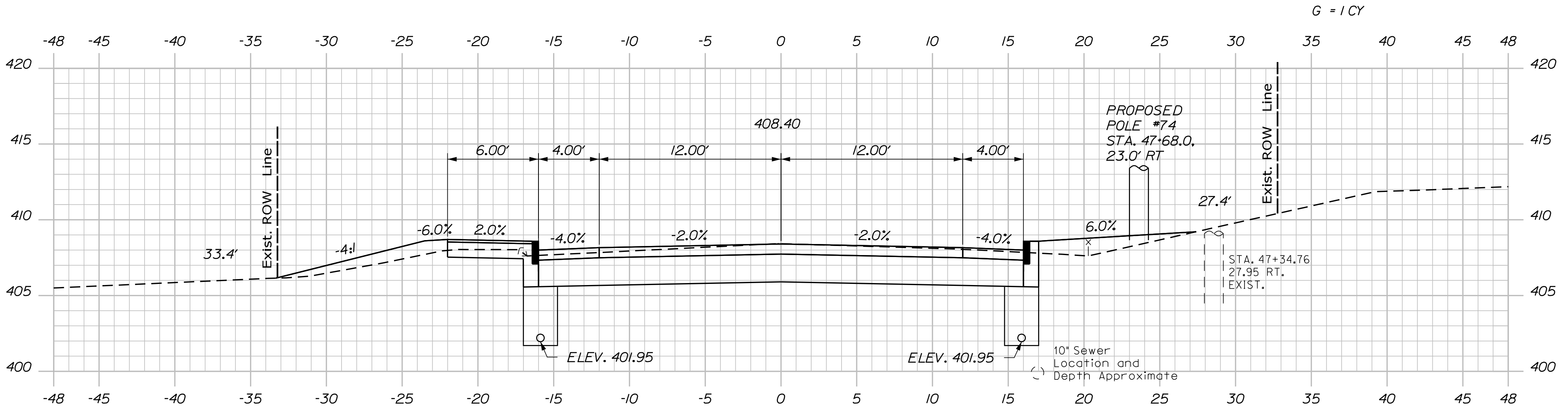
48+50.00

C = 142 CY
F = 63 CY
G = 1 CY



48+00.00

C = 149 CY
F = 67 CY
G = 1 CY



47+50.00

Sta. 47+50.00 to Sta. 48+76.68

SHEET NUMBER 65 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

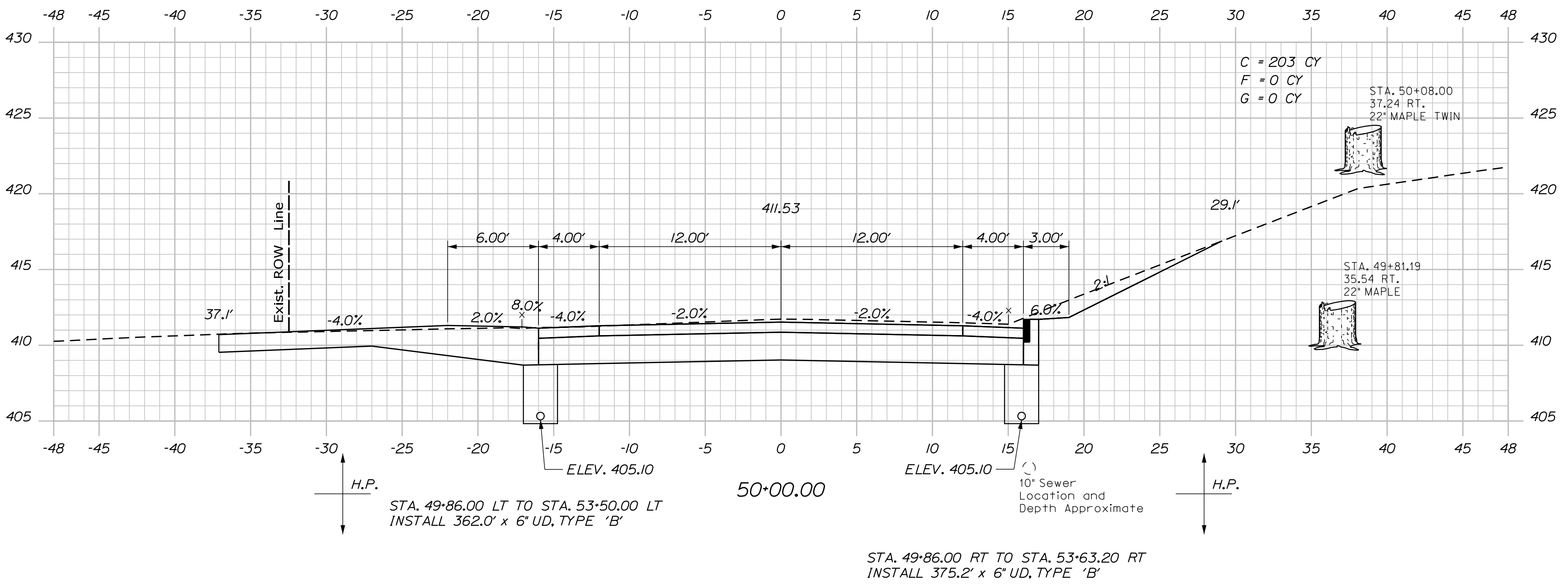
SIGNATURE
P.E. NUMBER
DATE

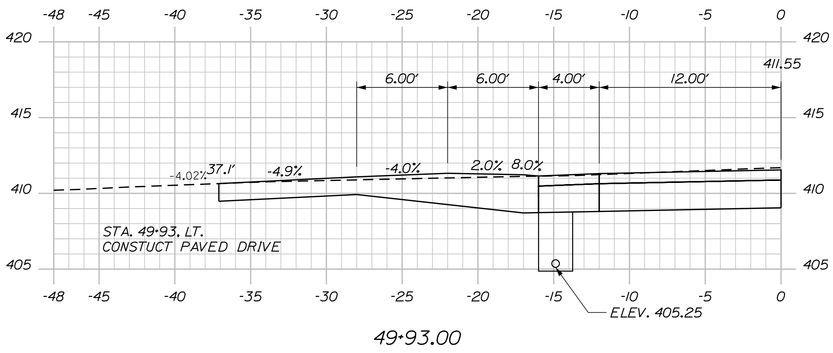
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

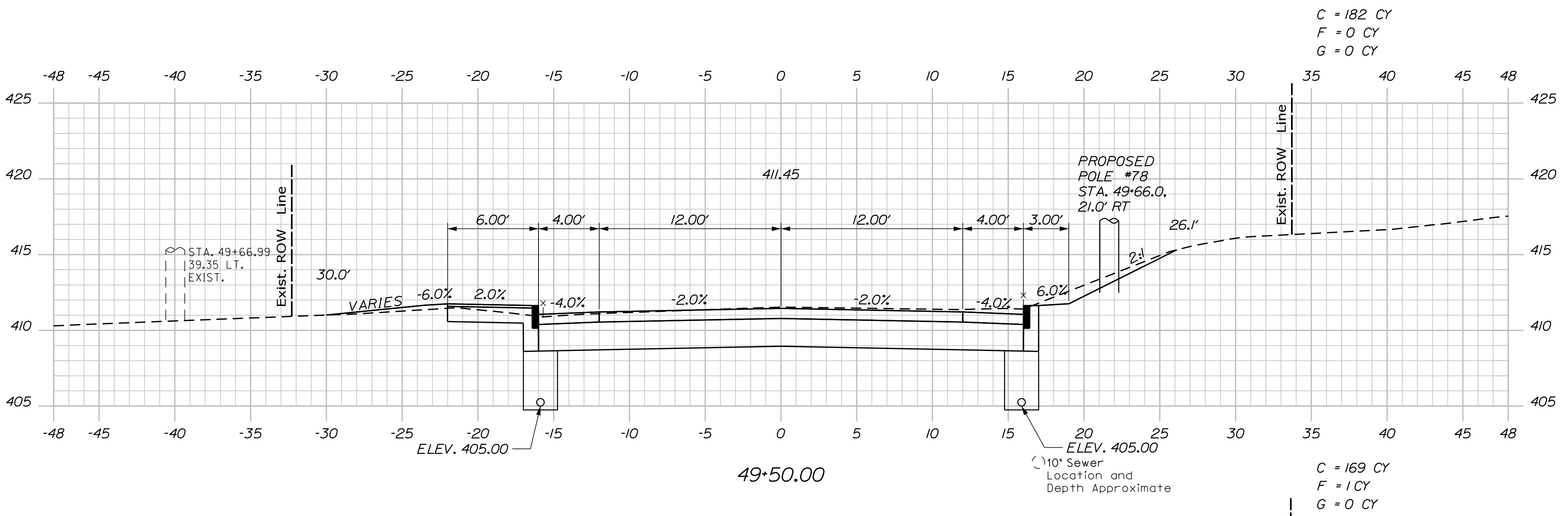
STP-1788(200)

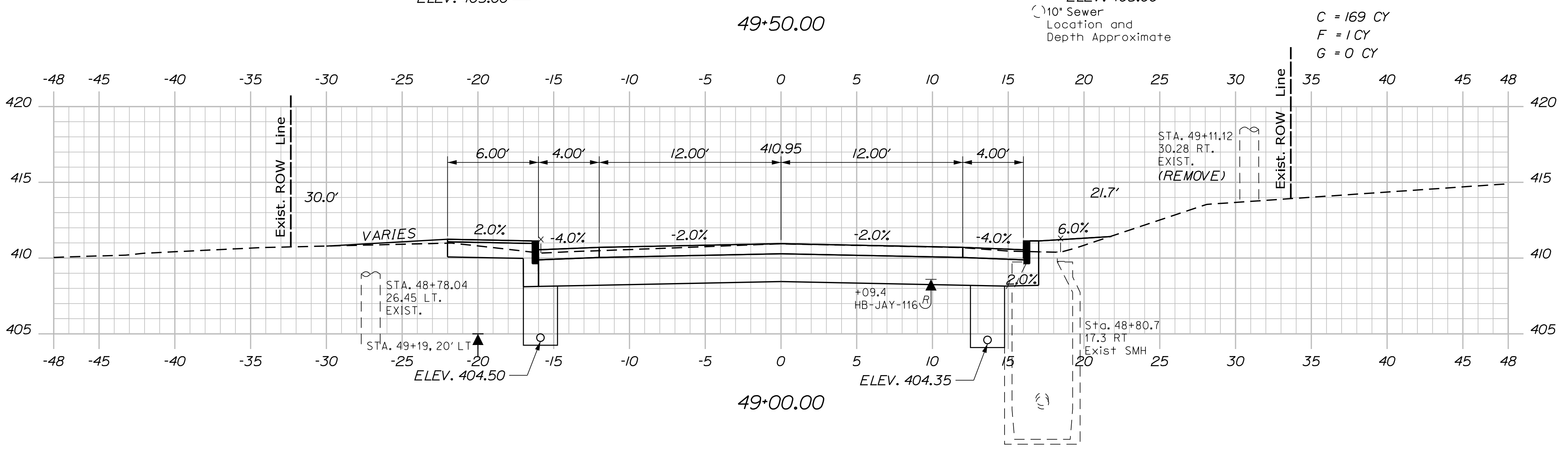
WIN 17882.00

HIGHWAY PLANS





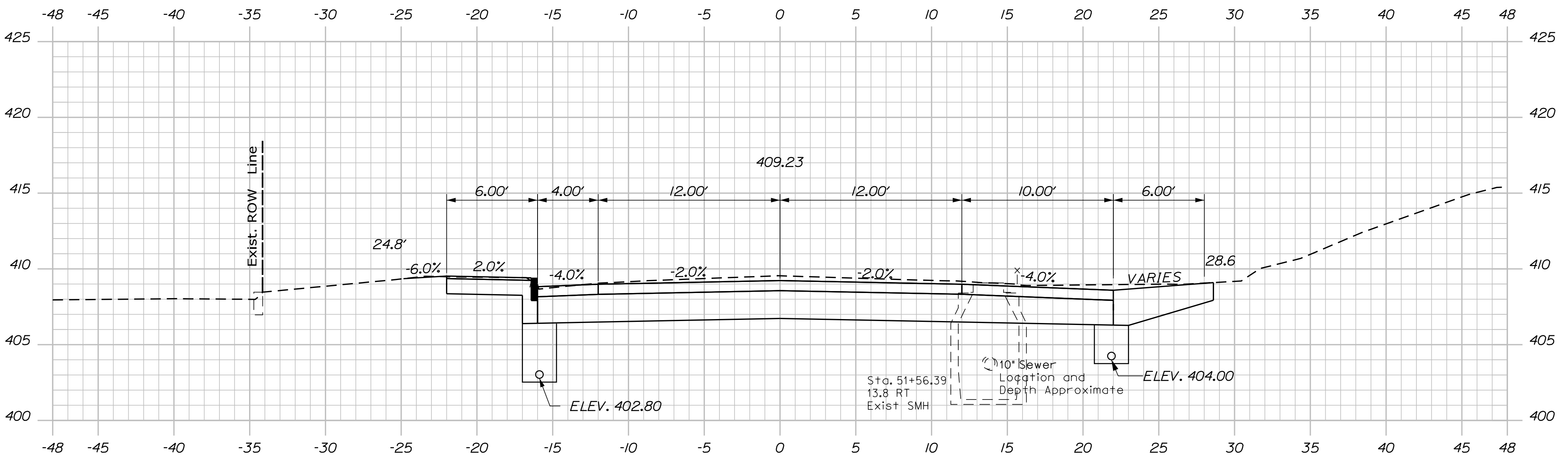




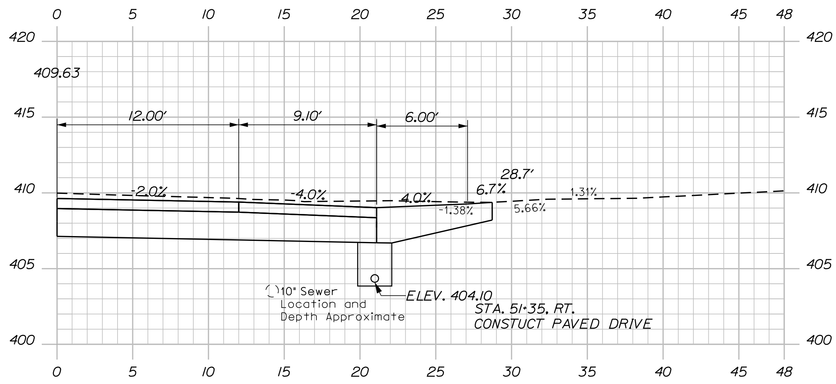
Sta. 49+00.00 to Sta. 50+00.00

SHEET NUMBER 66 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	STP-1788(200)
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			
		REVISIONS 1			P.E. NUMBER
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			
	CROSS SECTIONS	FIELD CHANGES			WIN 17882.00 HIGHWAY PLANS

C = 193 CY
F = 0 CY
G = 0 CY

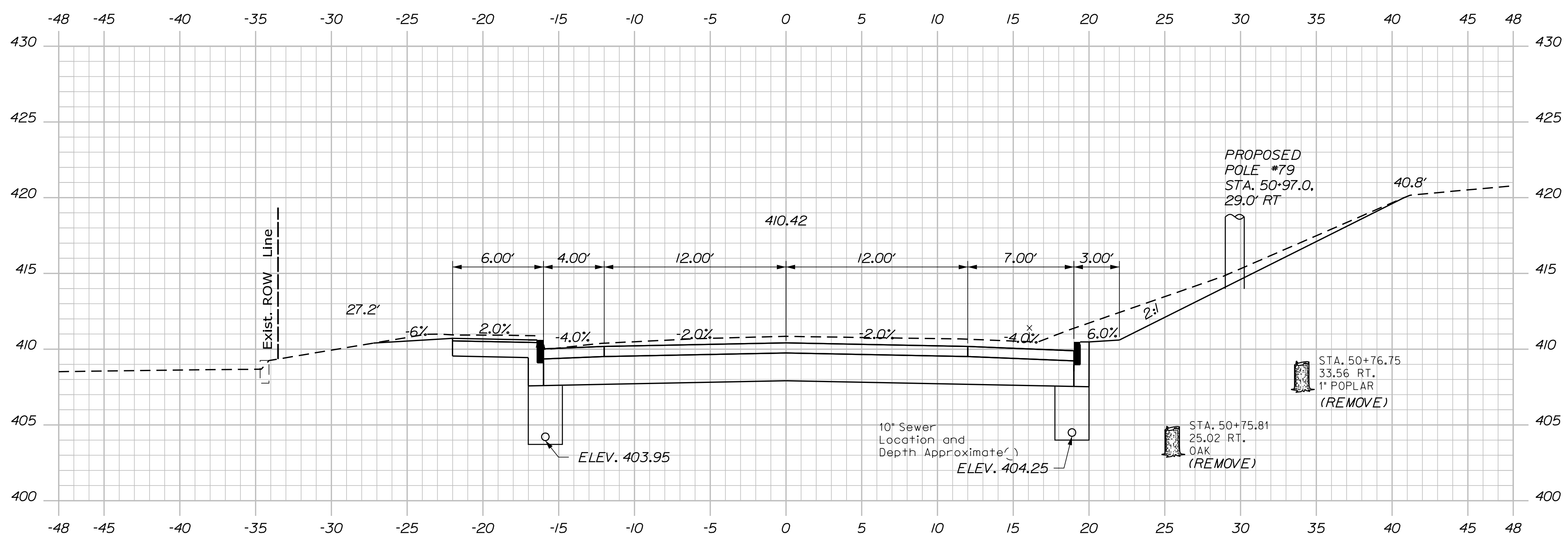


51+50.00



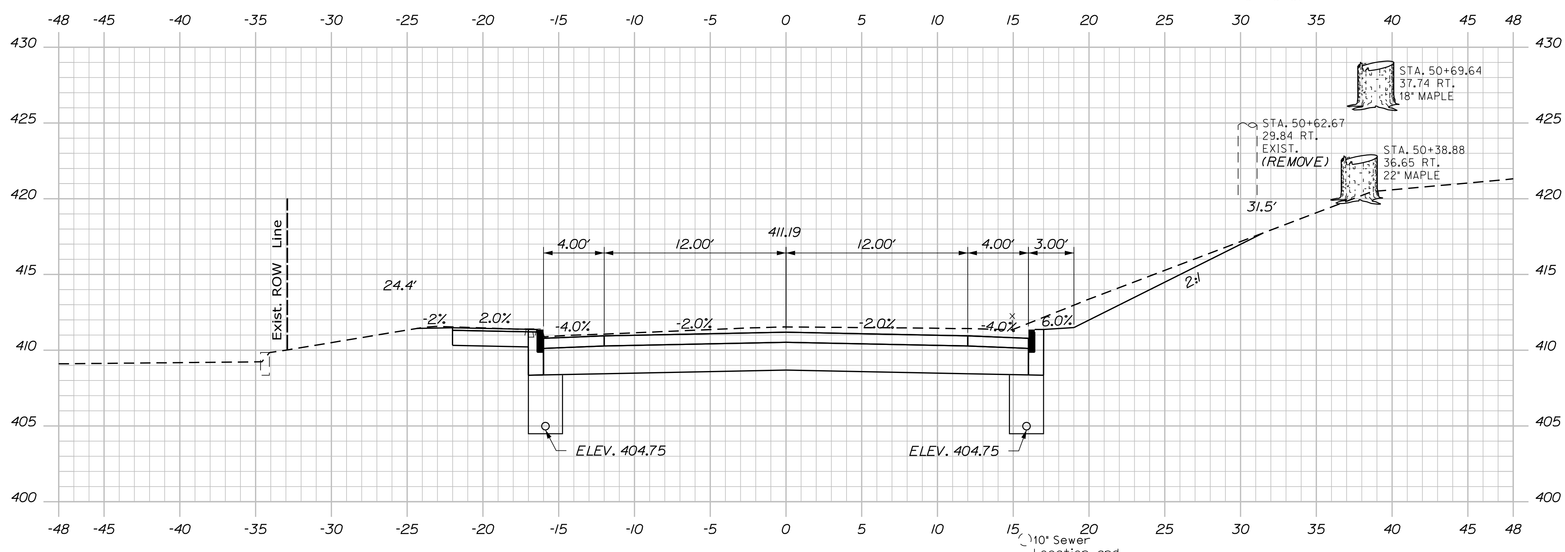
51+35.00

C = 235 CY
F = 0 CY
G = 0 CY



51+00.00

C = 244 CY
F = 0 CY
G = 0 CY



50+50.00

Sta. 50+50.00 to Sta. 51+50.00

SHEET NUMBER 67 OF 102

JAY
ROUTE 4/17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

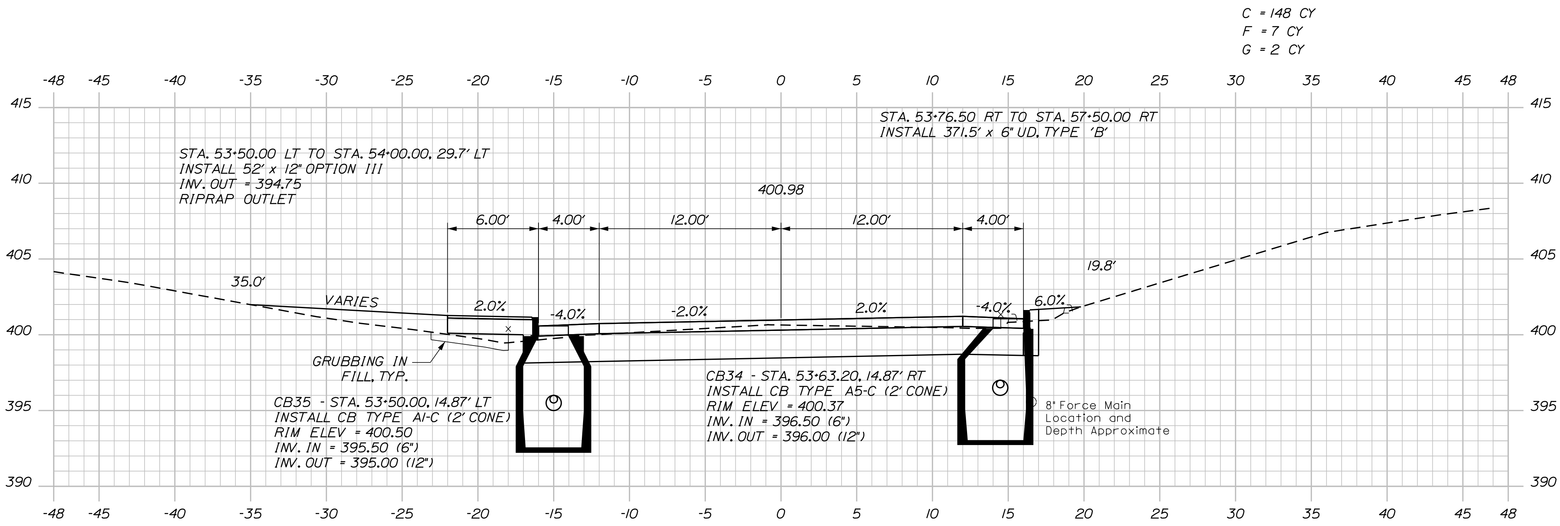
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

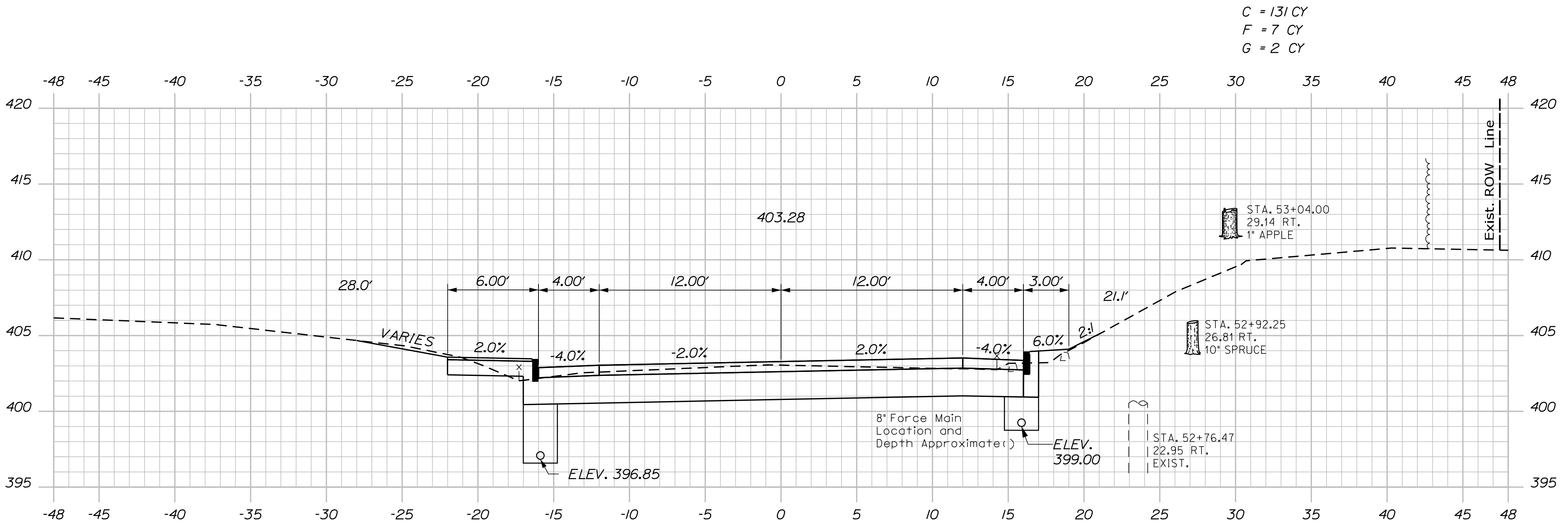
STP-1788(200)

WIN 17882.00

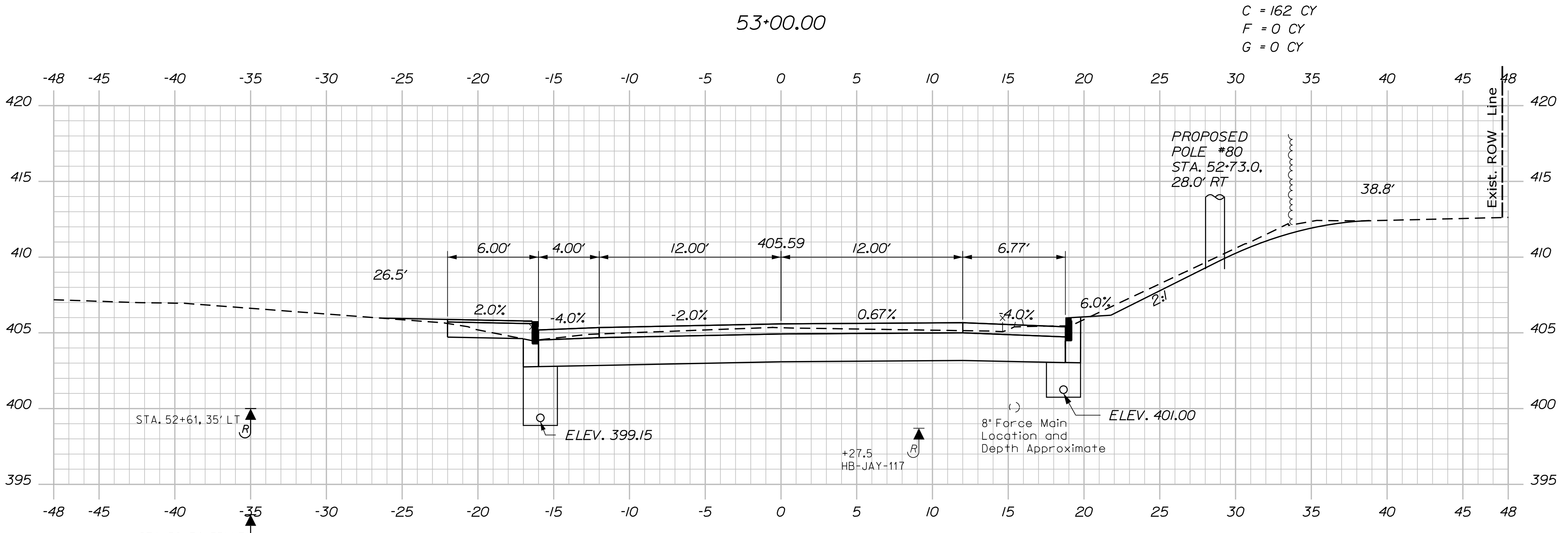
HIGHWAY PLANS



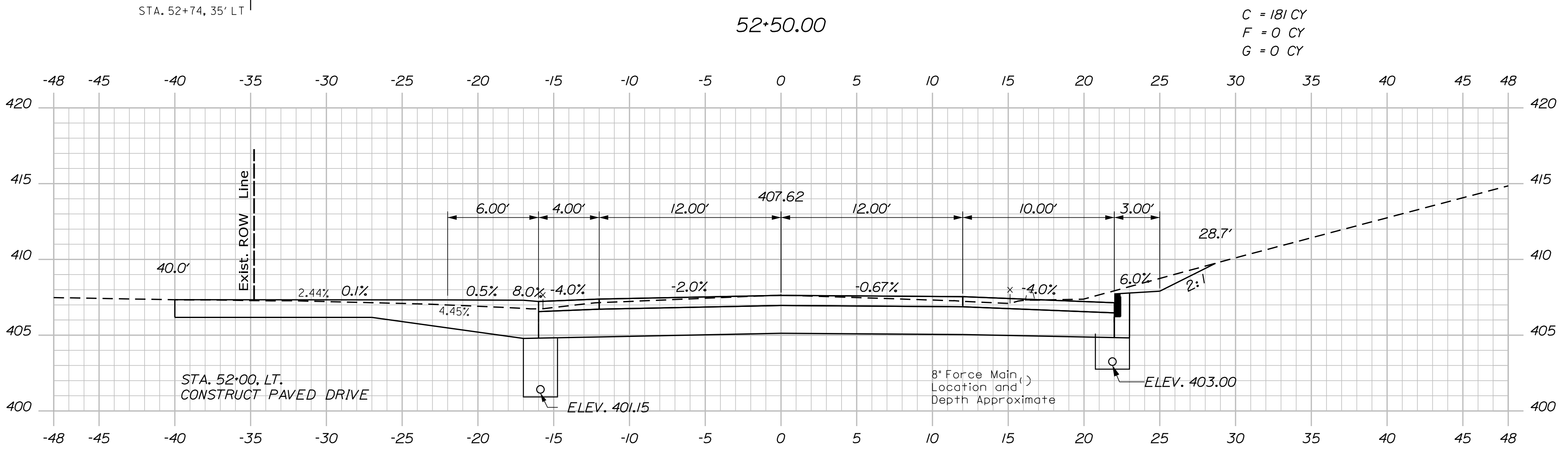
53+50.00



53+00.00



52+50.00



52+00.00

Sta. 52+000.00 to Sta. 53+50.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 68 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

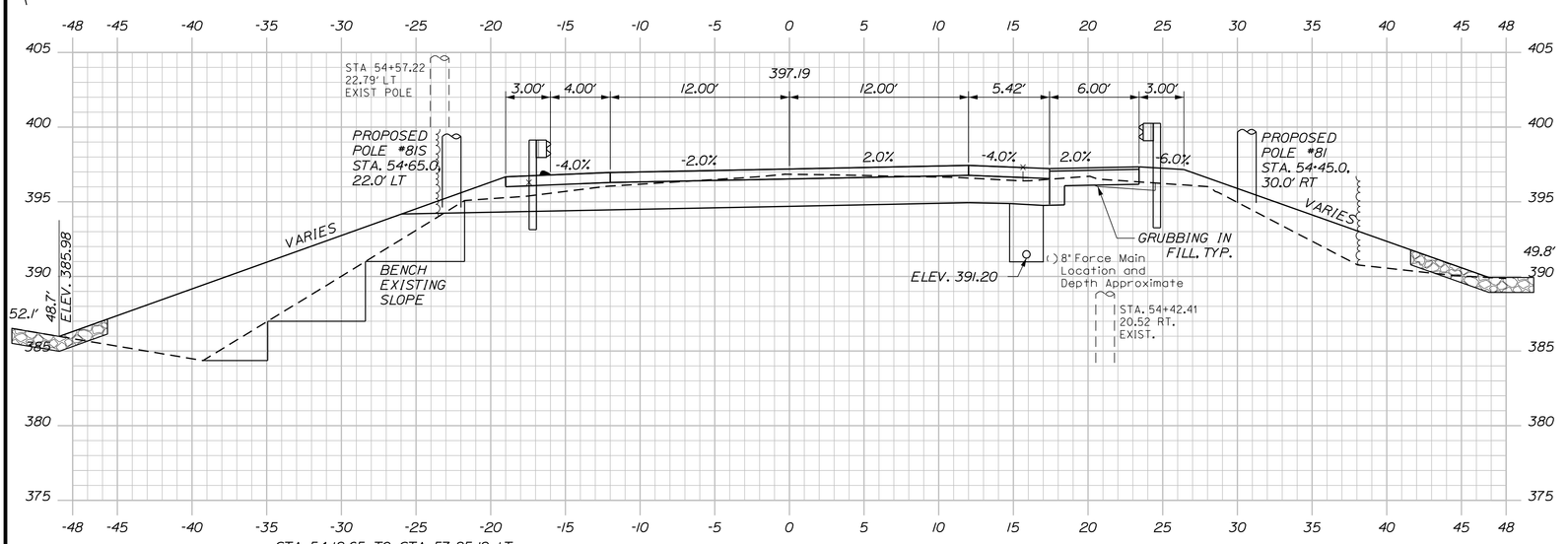
STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

C = 407 CY
F = 588 CY
G = 3 CY

STA. 54+56.28 TO STA. 55+55.64 RT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL



STA. 54+12.65 TO STA. 57+25.19 LT
INSTALL CURB TYPE 3. MOLD 2 (4" REVEAL) UNDER GUARDRAIL

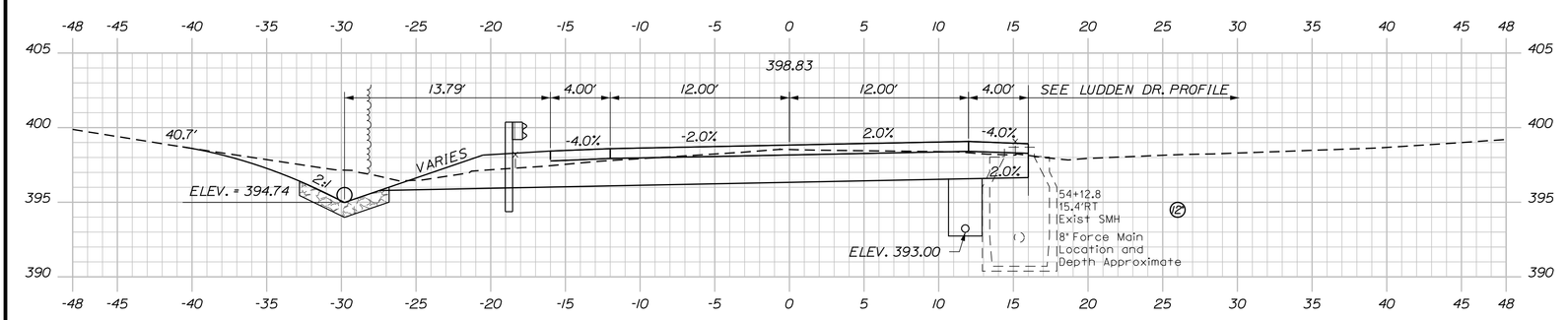
STA. 54+12.65 TO STA. 57+83.56 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL

54+50.00

STA. 54+16.00 ROUTE 4/17 =
STA. 500+00.00 LUDDEN DR.

STA. 54+46.00 RT TO STA. 54+80.00 RT
INSTALL STONE DITCH PROTECTION

C = 190 CY
F = 95 CY
G = 0 CY



STA. 54+00.00 LT TO STA. 54+60.00 LT
INSTALL STONE DITCH PROTECTION

STA. 53+78.32 TO STA. 54+12.65 LT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS

STA. 53+78.32 LT
INSTALL TERMINAL END - SINGLE RAIL

54+00.00

STA. 53+63.20 RT TO STA. 54+47.13, 45.5' RT
INSTALL 88' x 12" OPT III
INV. OUT = 390.00
RIPRAP OUTLET

Sta. 54+00.00 to Sta. 54+50.00

SHEET NUMBER 69 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

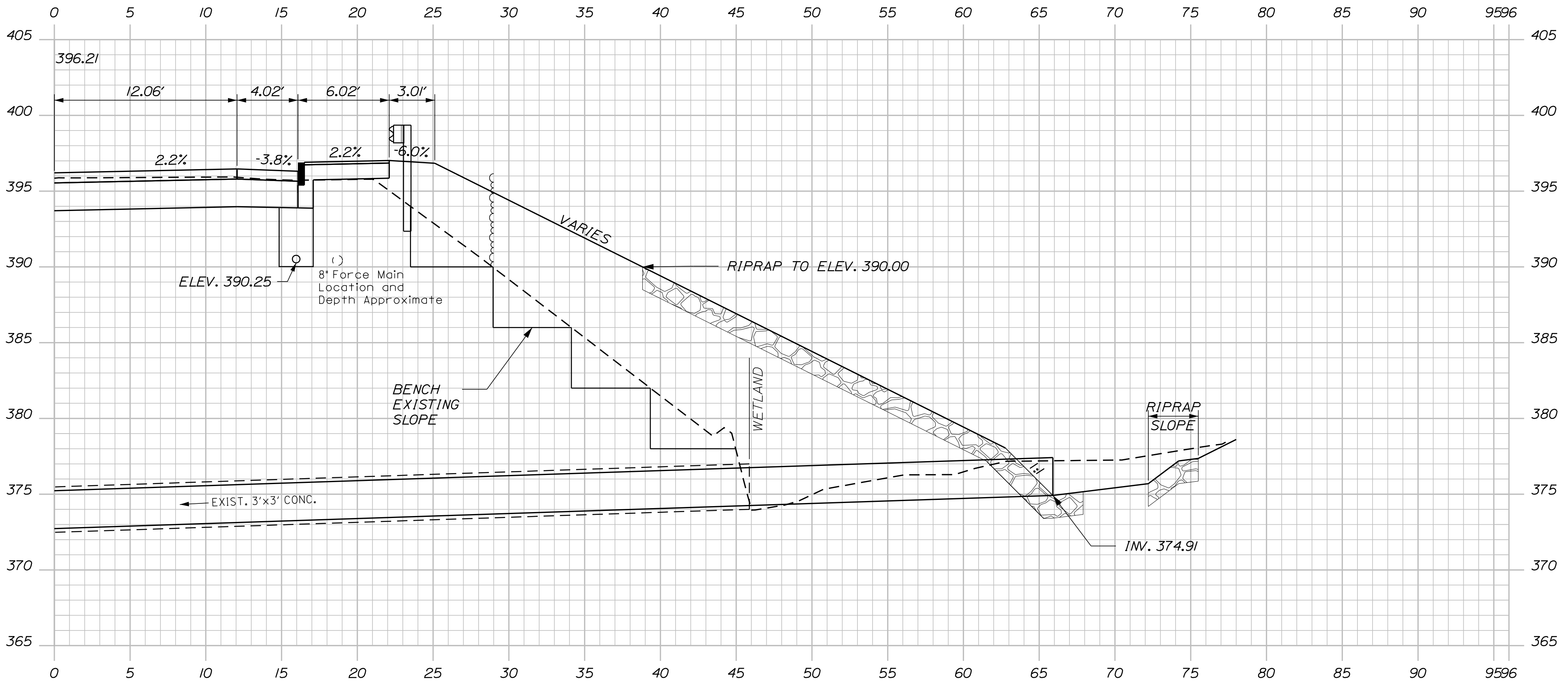
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

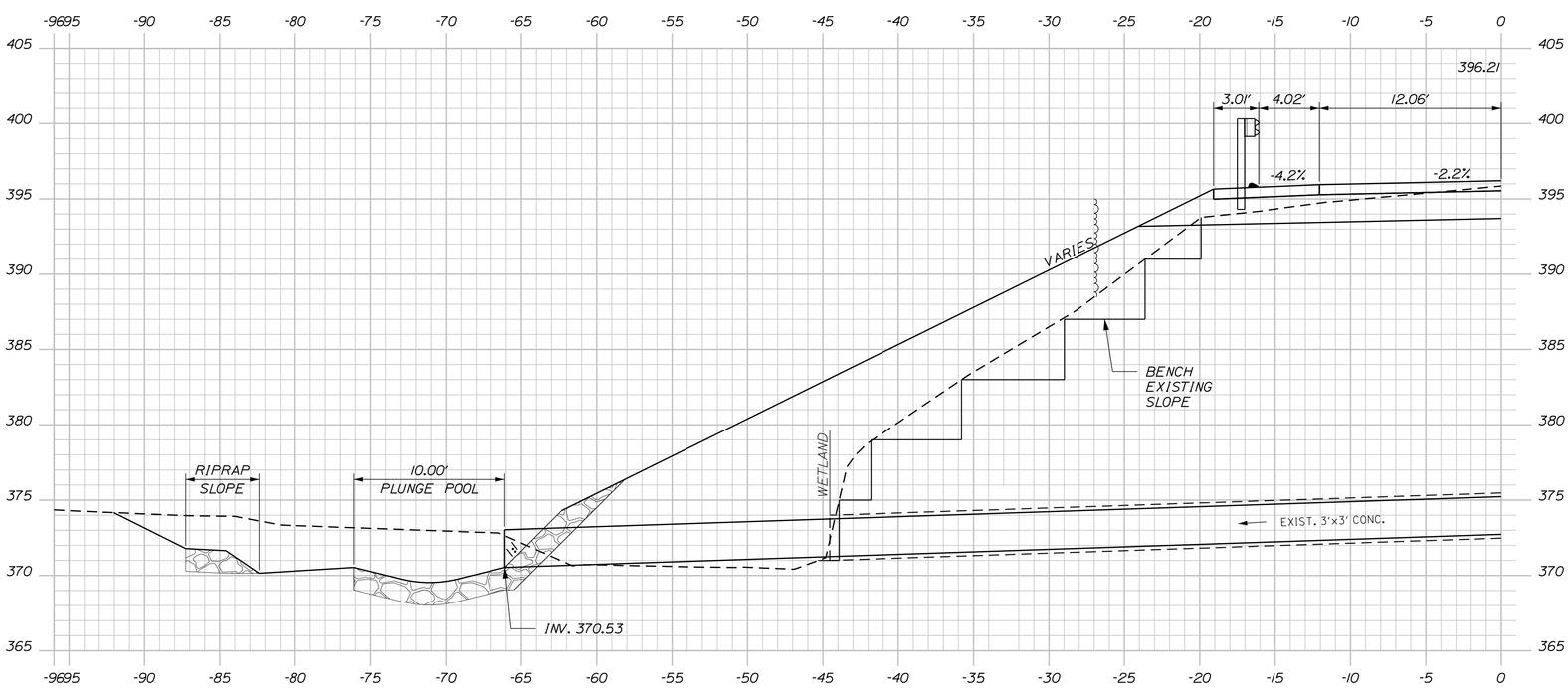
WIN
17882.00

HIGHWAY PLANS



STA. 54+86.21, 65.60' RT TO STA. 54+98.99, 65.78' LT.
SLIPLINE EXISTING 3'X3' BOX CULVERT WITH
132' x 30" OPTION III. INSTALL HYDROBELL INLET.
RIPRAP INLET.
CONSTRUCT 10' x 5' RIPRAP PLUNGE POOL AT PIPE OUTLET.
SEE SPECIAL DETAILS.

54+92.46 RT. SKEWED



54+92.46 LT. SKEWED

Sta. 54+92.46 to Sta. 54+92.46

SHEET NUMBER 70 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

DATE

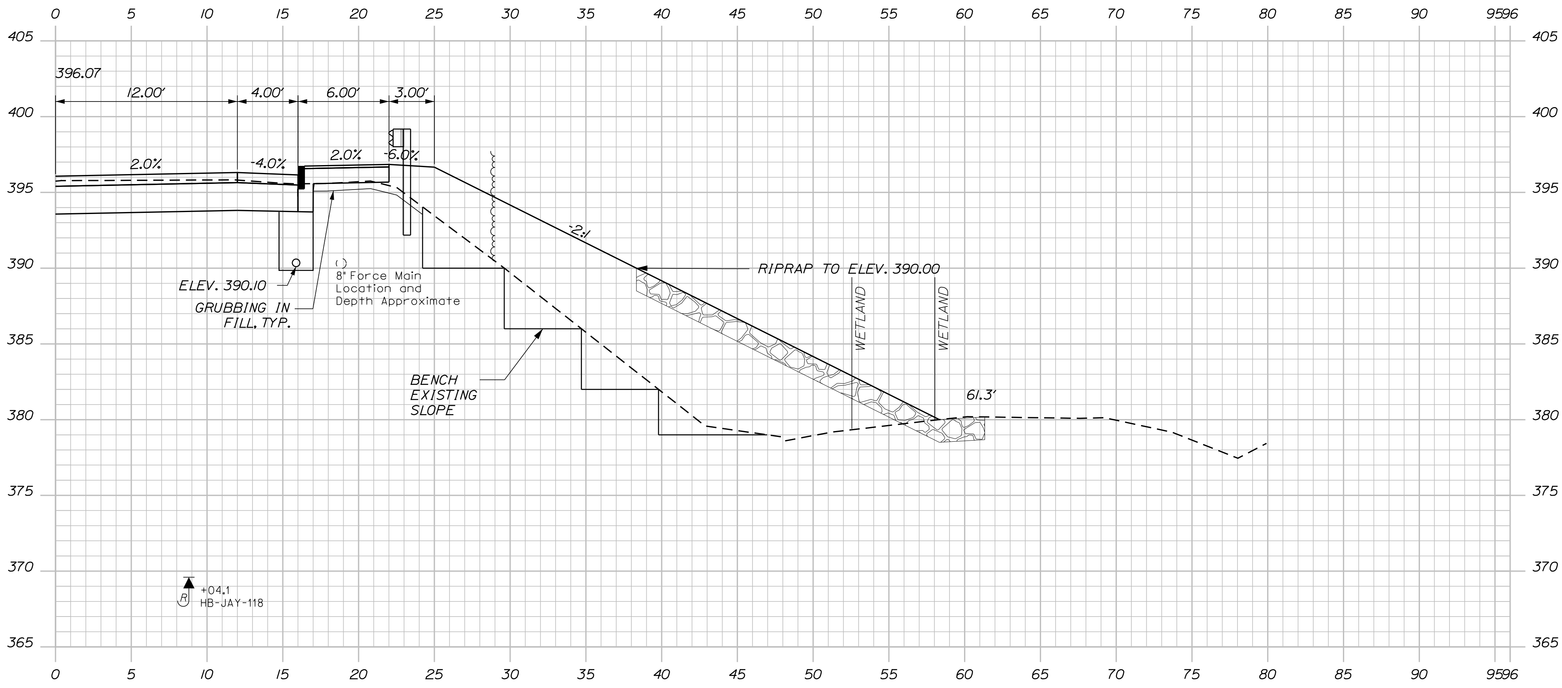
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN
17882.00

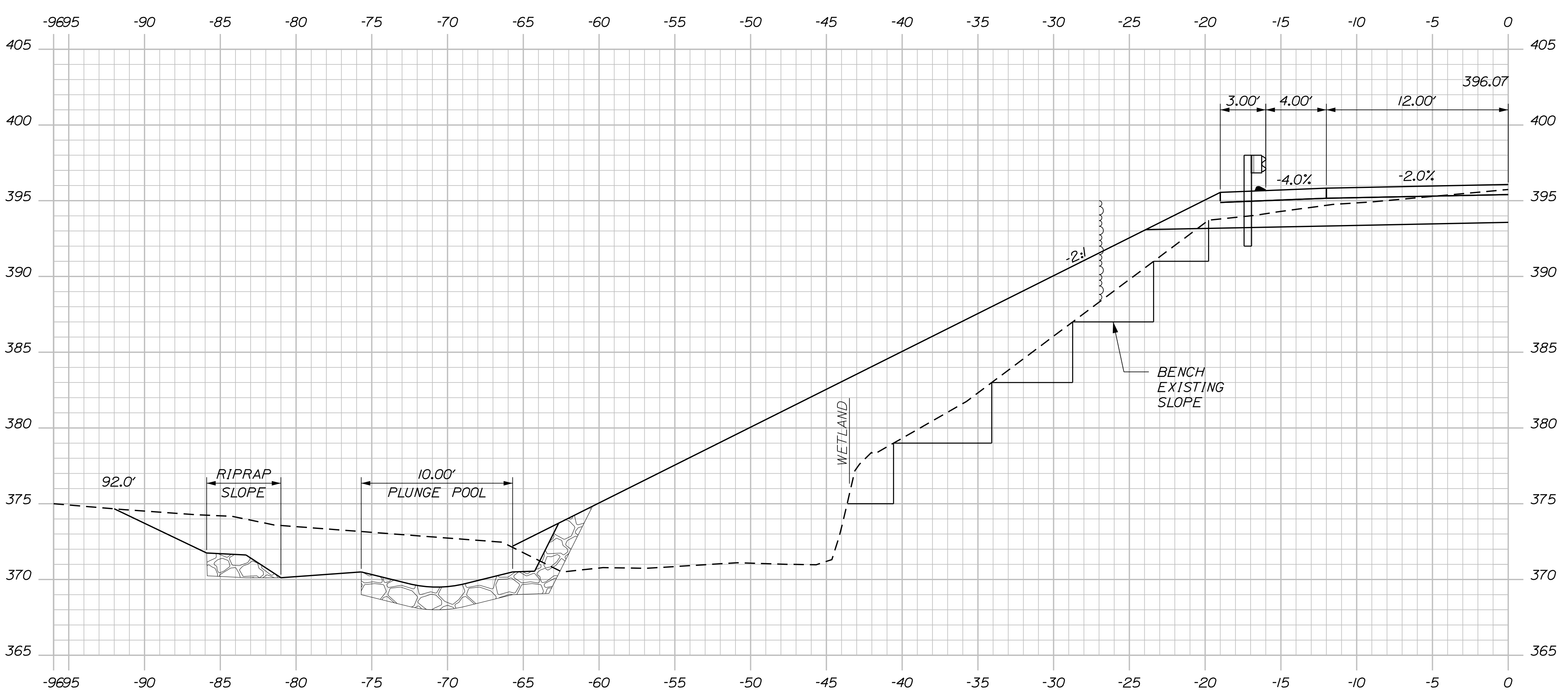
HIGHWAY PLANS

C = 442 CY
F = 580 CY
G = 3 CY



STA. 54+96.00 RT TO STA. 55+62.00 RT
INSTALL STONE DITCH PROTECTION

55+00.00 RT.



55+00.00 LT.

Sta. 55+00.00 to Sta. 55+00.00

SHEET NUMBER 71 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE
P.E. NUMBER
DATE

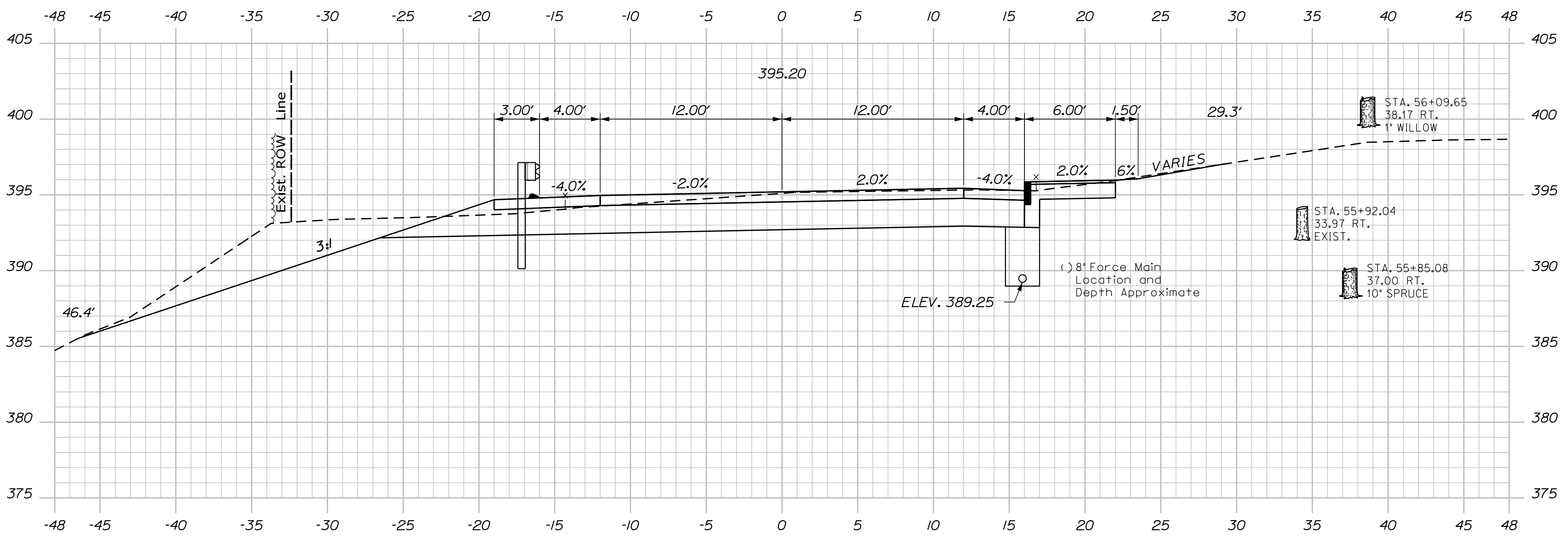
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

C = 215 CY
F = 0 CY
G = 0 CY

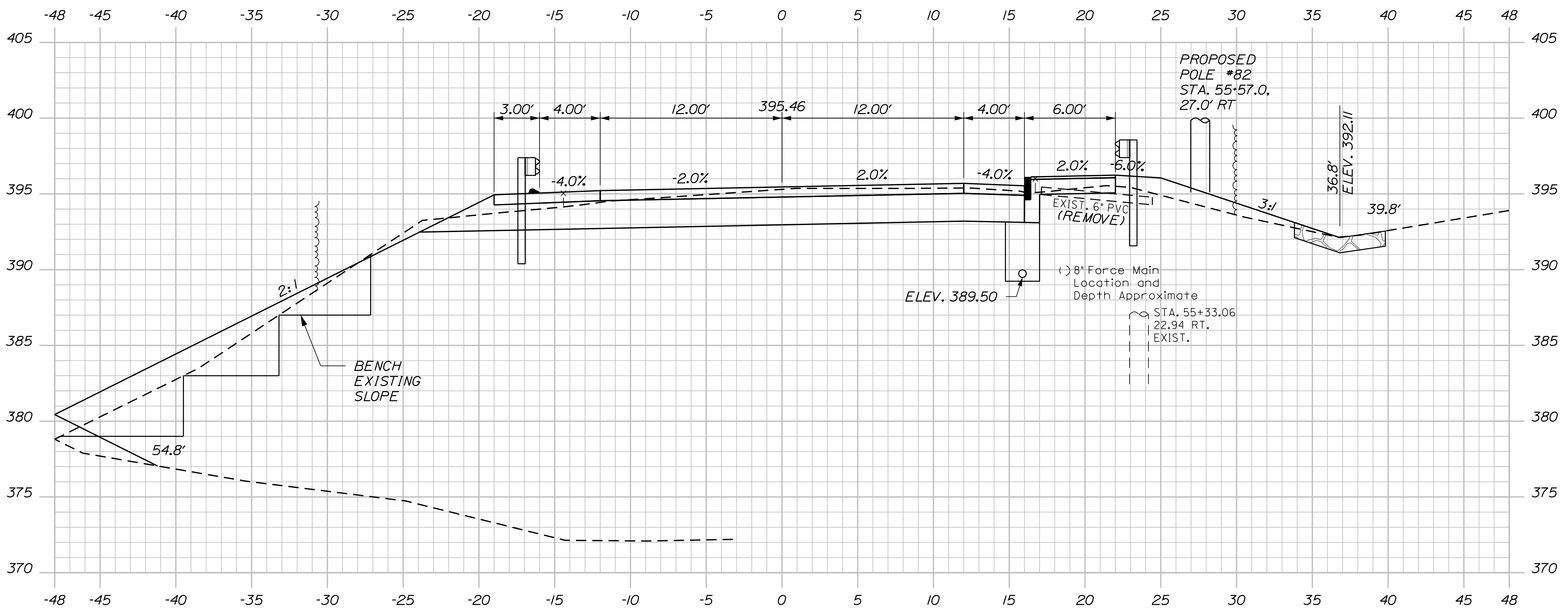


56+00.00

C = 254 CY
F = 86 CY
G = 0 CY

STA. 55+71.34 RT
INSTALL TERMINAL END - SINGLE RAIL

STA. 55+55.64 TO STA. 55+71.34 RT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS

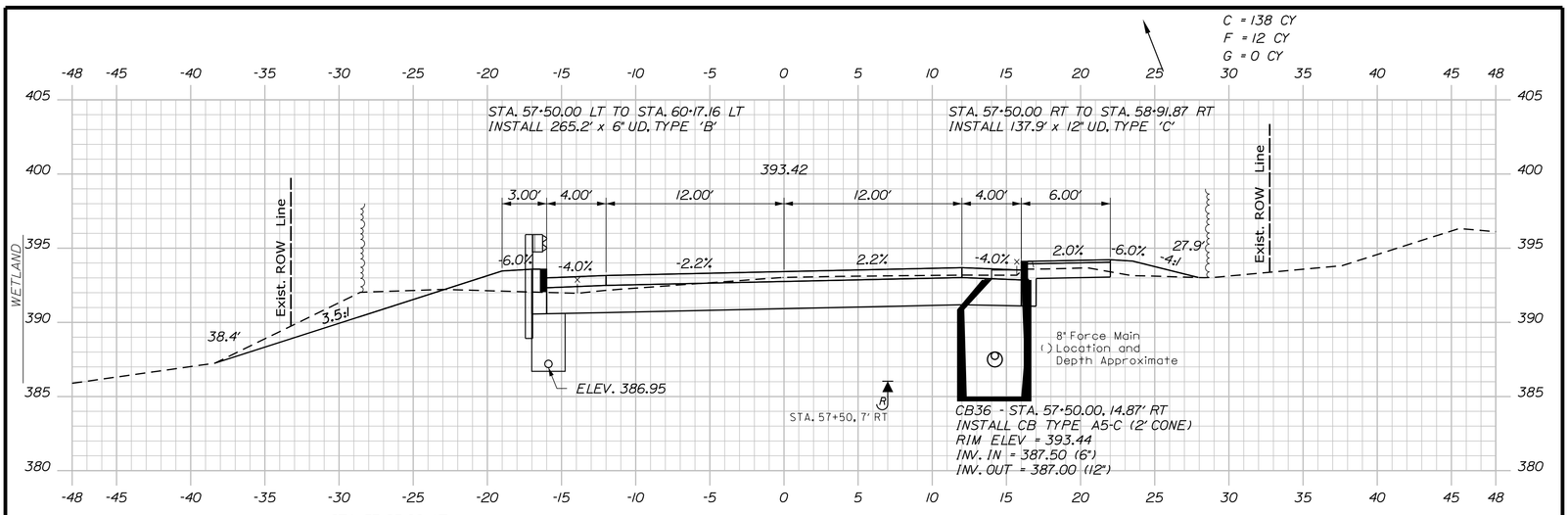


55+50.00

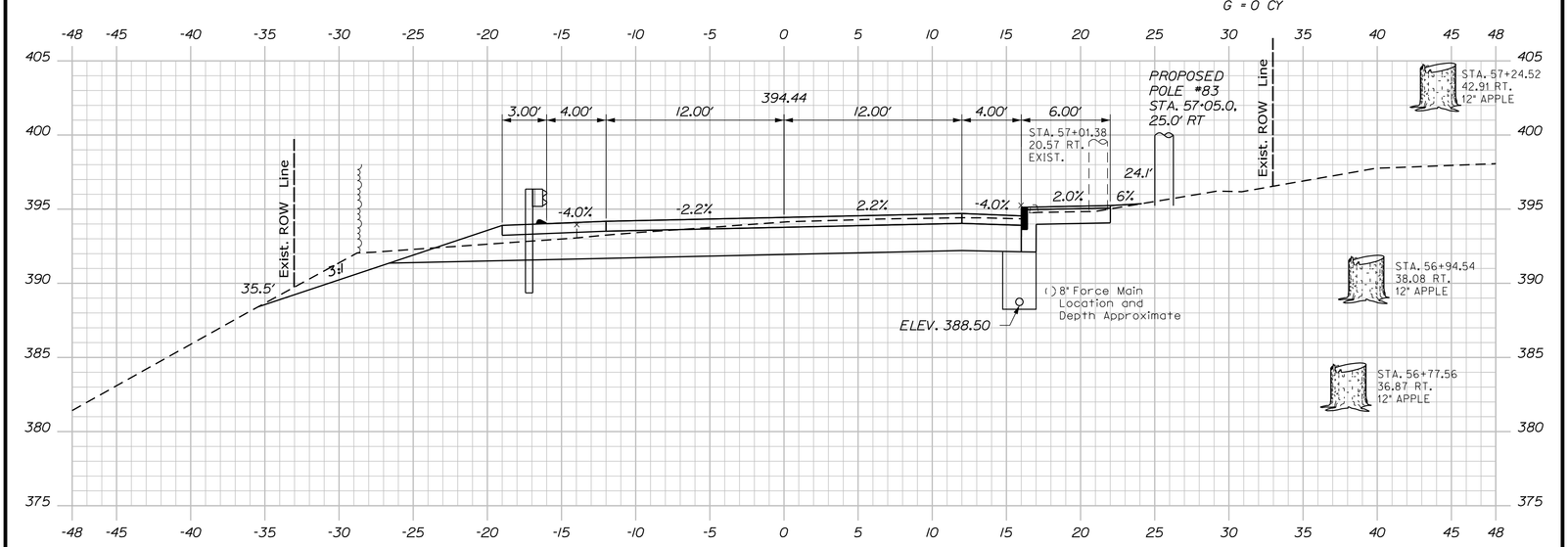
Sta. 55+50.00 to Sta. 56+00.00

SHEET NUMBER 72 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14	STP-1788(200)
		CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2				
		DESIGN3-DETAILED3				P.E. NUMBER
	CROSS SECTIONS	REVISIONS 1				
		REVISIONS 2				
		REVISIONS 3				DATE
		REVISIONS 4				
		FIELD CHANGES				

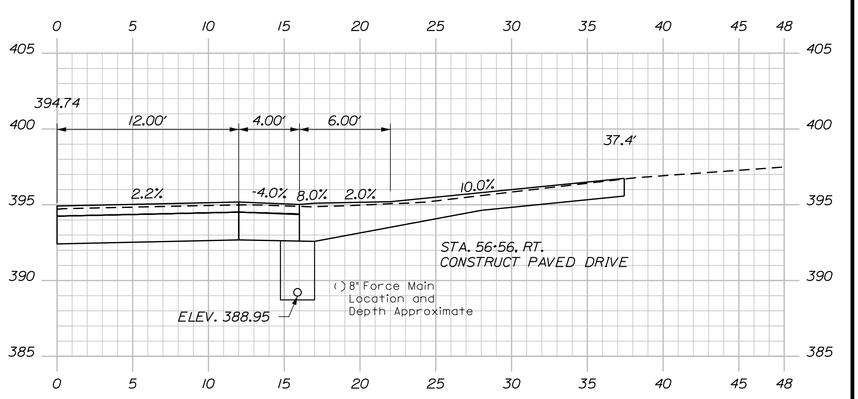
WIN 17882.00 HIGHWAY PLANS



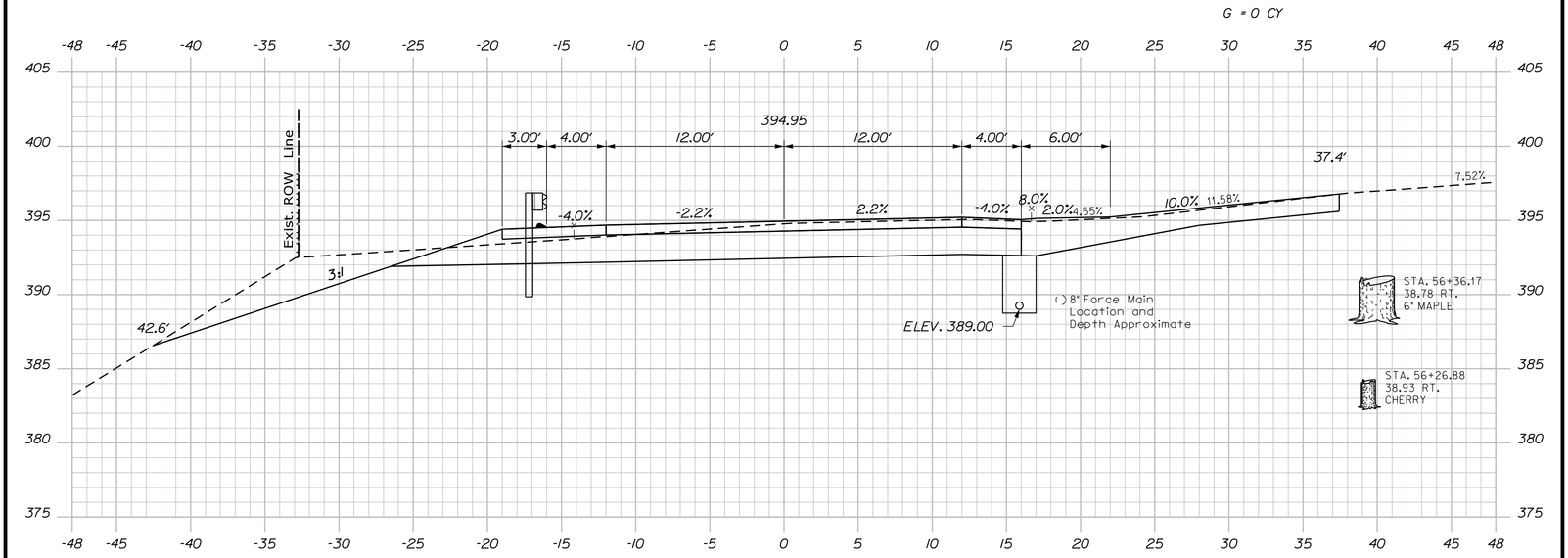
57+50.00



57+00.00



56+56.00



56+50.00

Sta. 56+50.00 to Sta. 57+50.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

CROSS SECTIONS

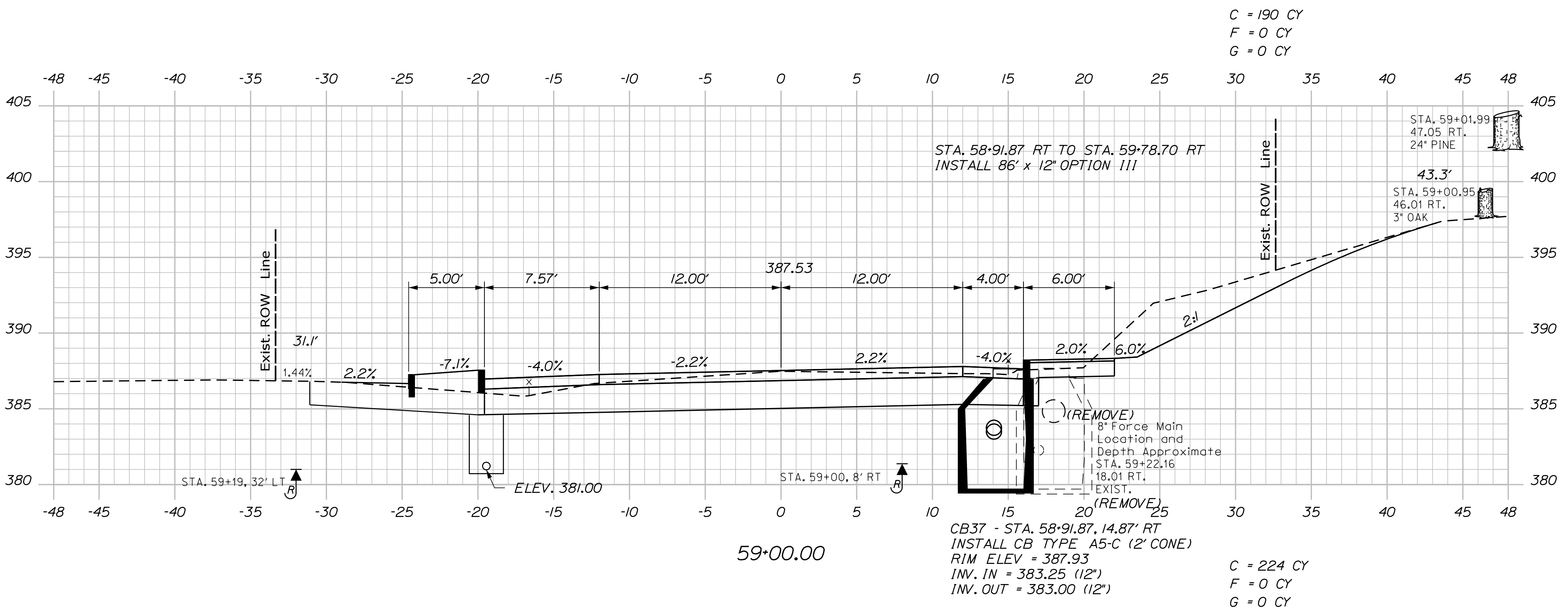
SHEET NUMBER 73 OF 102

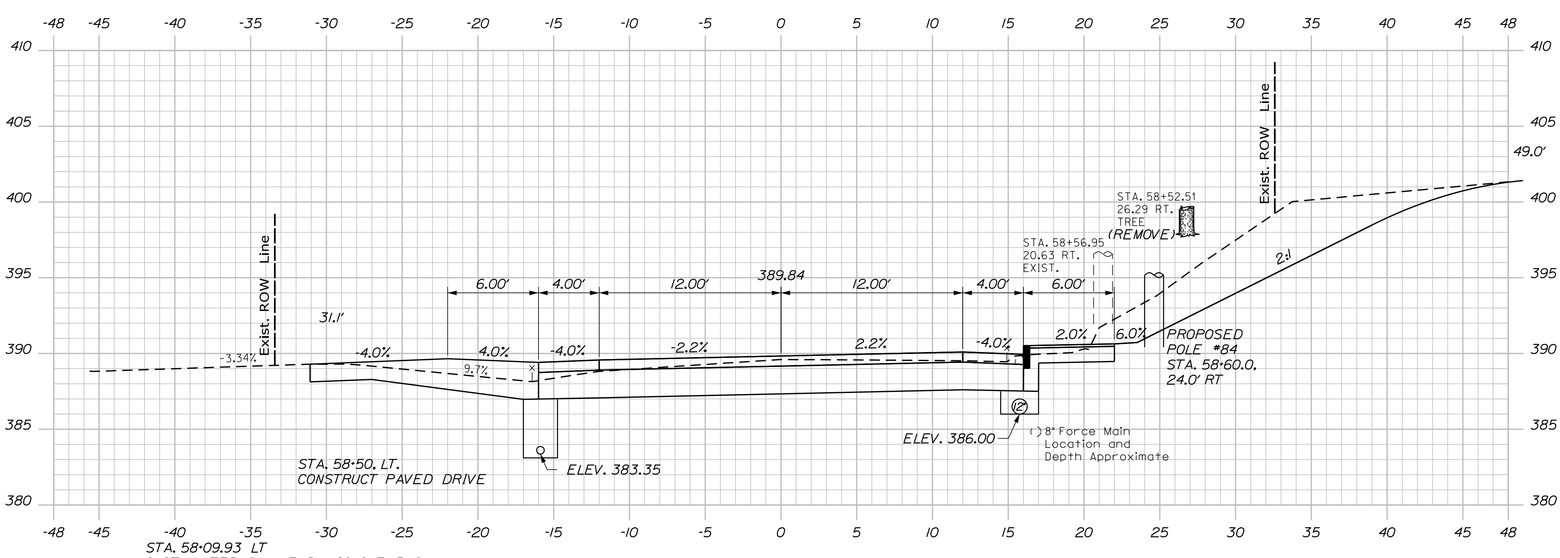
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

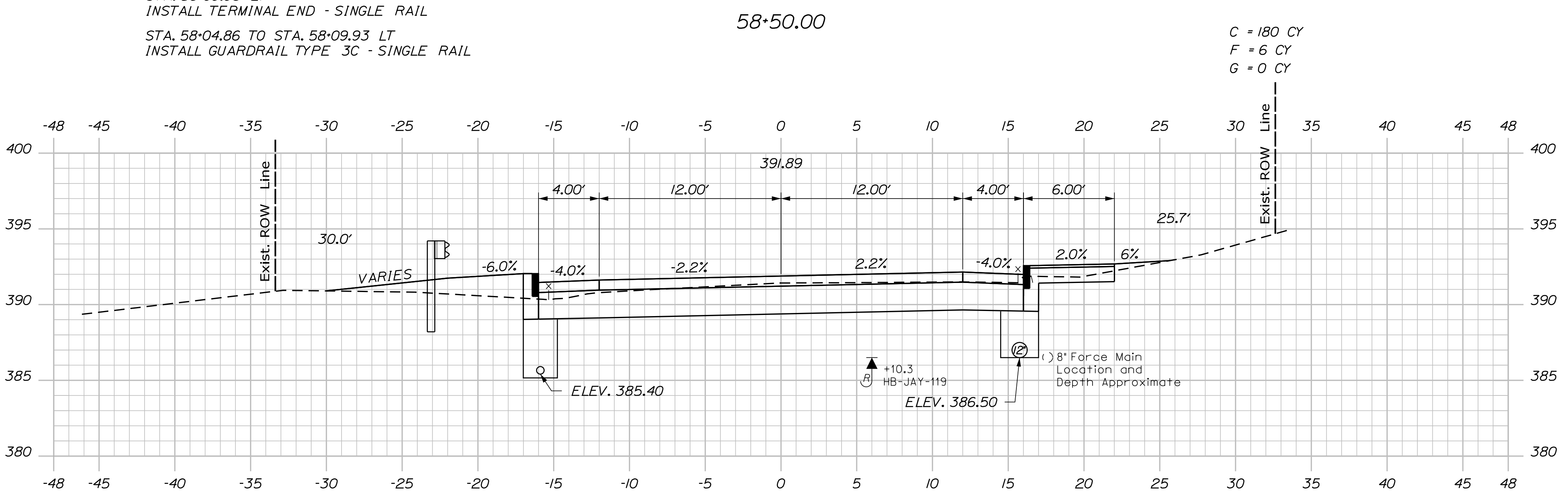
HIGHWAY PLANS



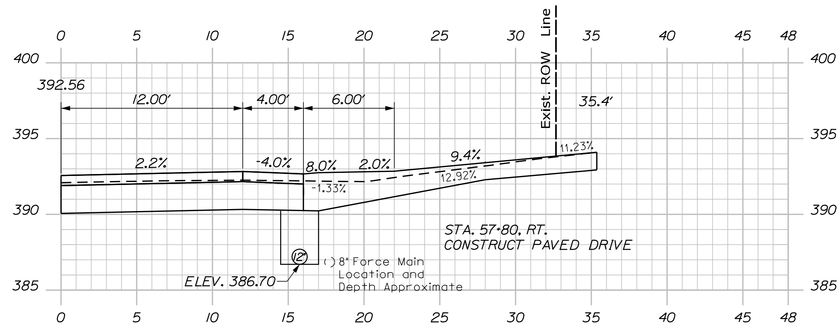


STA. 58+09.93 LT
INSTALL TERMINAL END - SINGLE RAIL

STA. 58+04.86 TO STA. 58+09.93 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL



STA. 57+83.56 TO STA. 58+04.86 LT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS



Sta. 57+80.00 to Sta. 59+00.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

CROSS SECTIONS

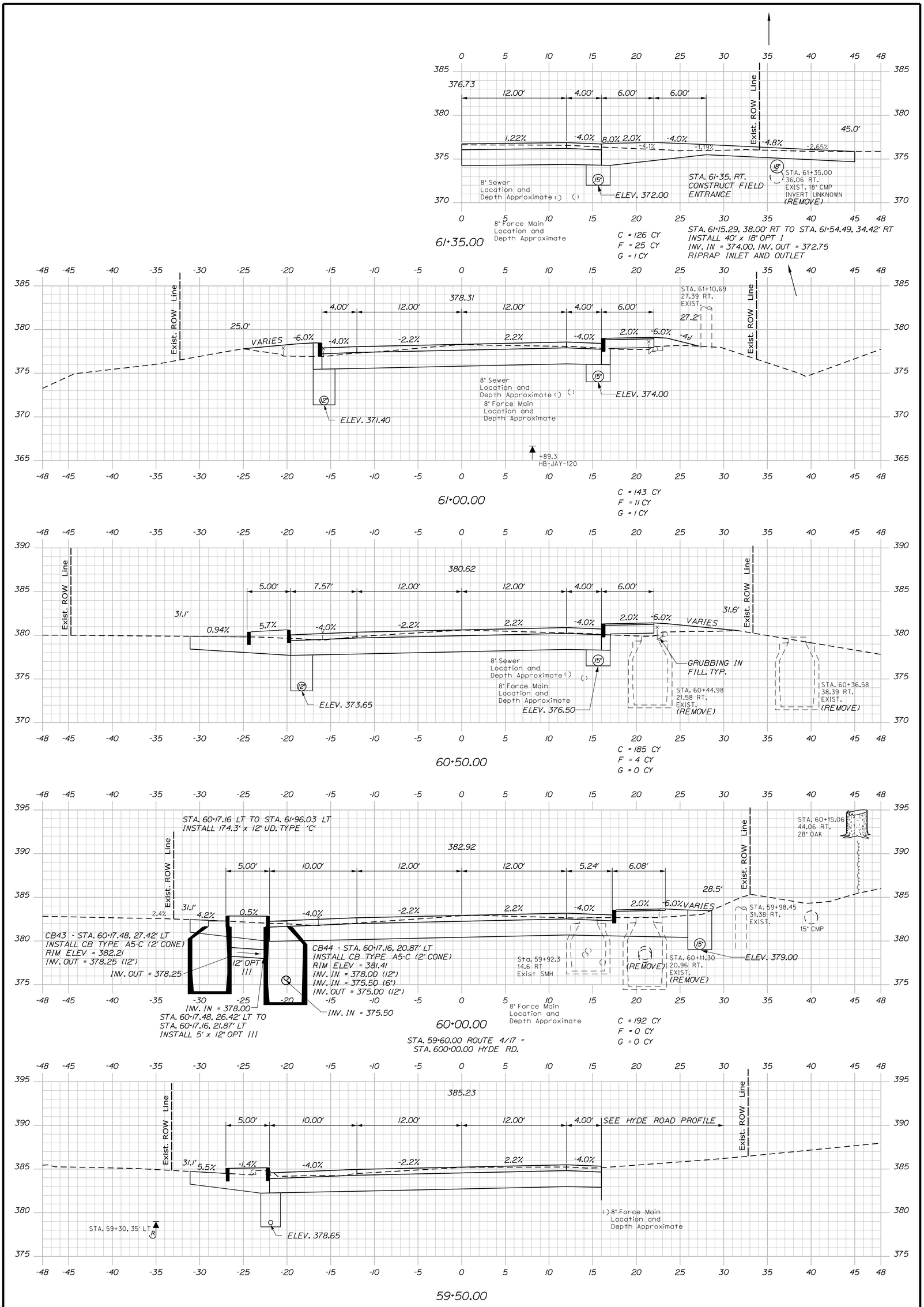
SHEET NUMBER 74 OF 102

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS



Sta. 59+50.00 to Sta. 61+35.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

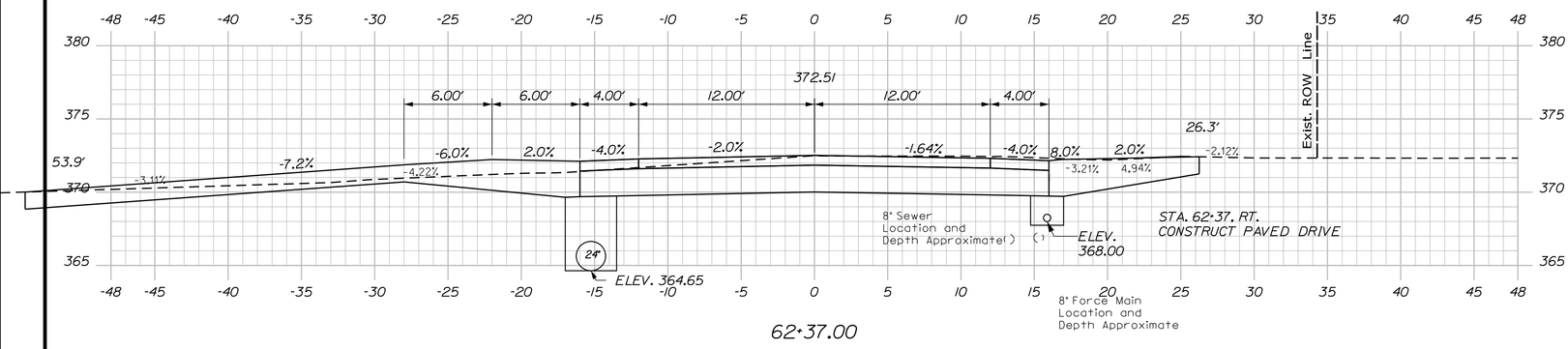
CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

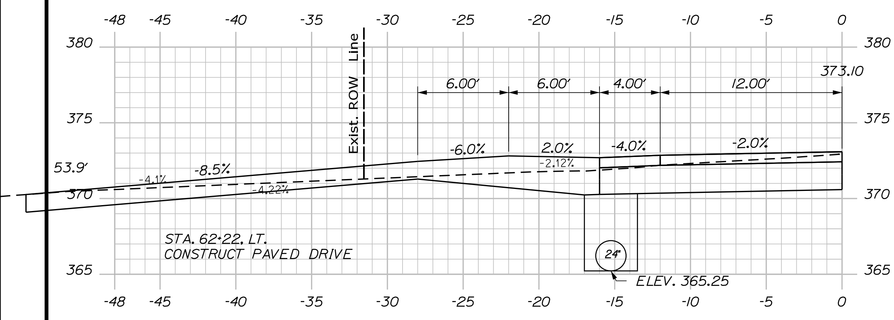
STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

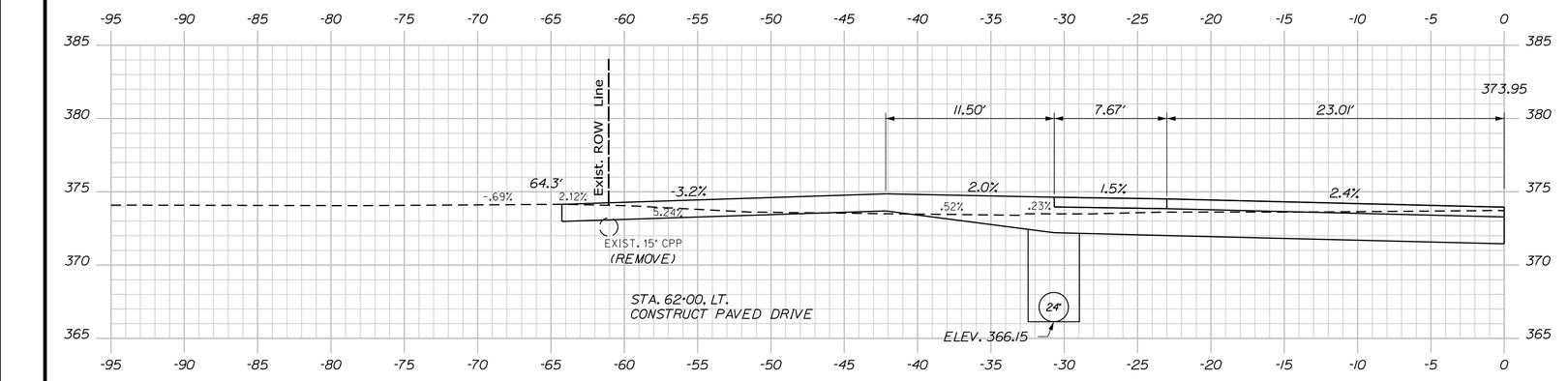


62+37.00



62+22.00

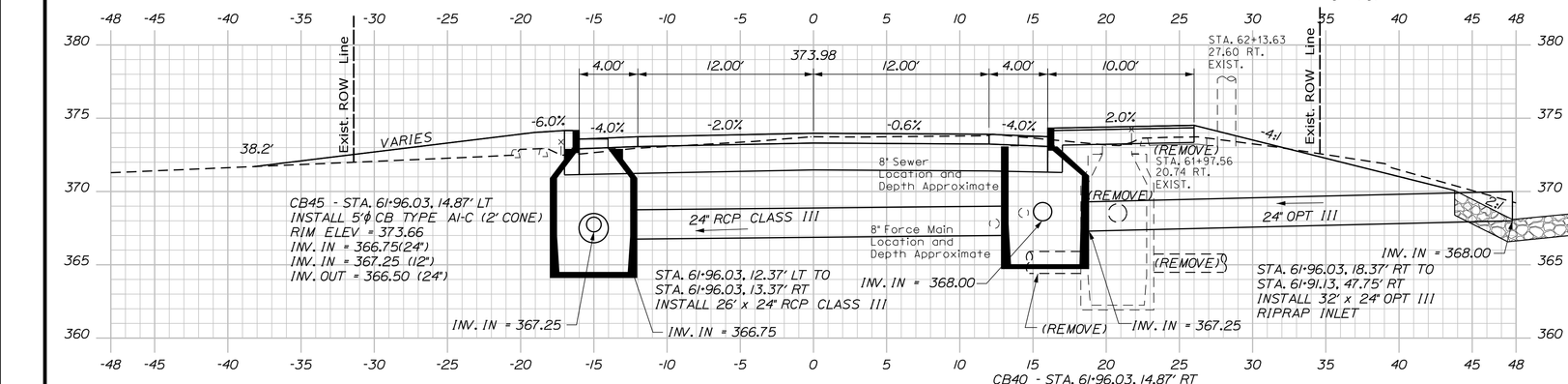
STA. 62+06.00 RT TO STA. 66+20.00 RT
INSTALL 410.0' x 6" UD. TYPE 'B'



STA. 61+96.03 LT TO STA. 64+86.49 LT
INSTALL 285.5' x 24" UD. TYPE 'C'

62+00.67 SKEWED

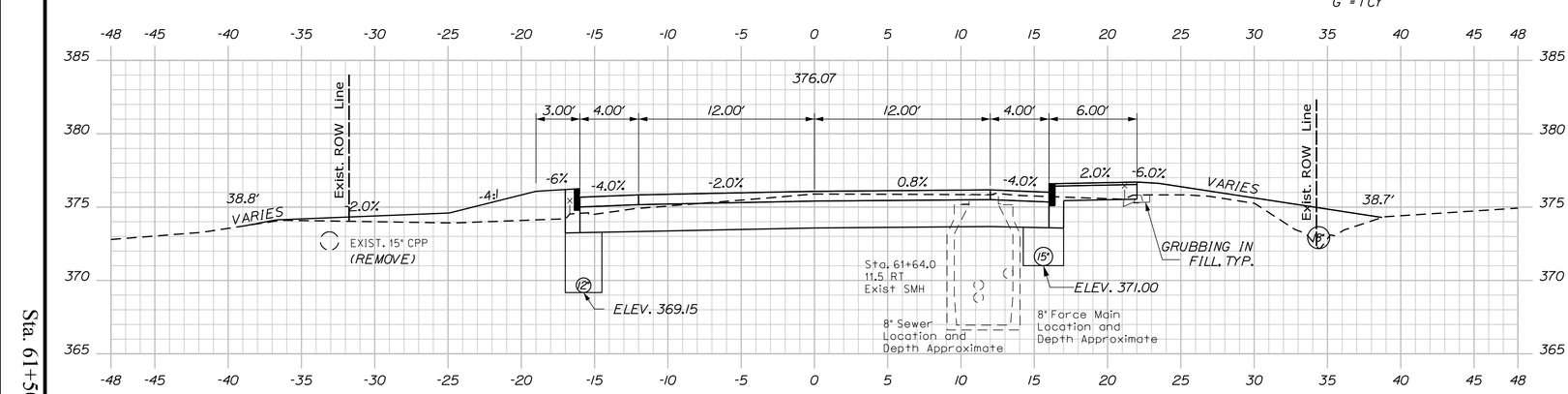
C = 160 CY
F = 5 CY
G = 1 CY



62+00.00

CB40 - STA. 61+96.03, 14.87' RT
INSTALL 5'ϕ CB TYPE A5-C (2' CONE)
RIM ELEV = 373.84
INV. IN = 368.00 (15")
INV. IN = 367.25 (24")
INV. OUT = 367.00 (24")

C = 128 CY
F = 23 CY
G = 1 CY



61+50.00

Sta. 61+50.00 to Sta. 62+37.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

JAY
ROUTE 4\17

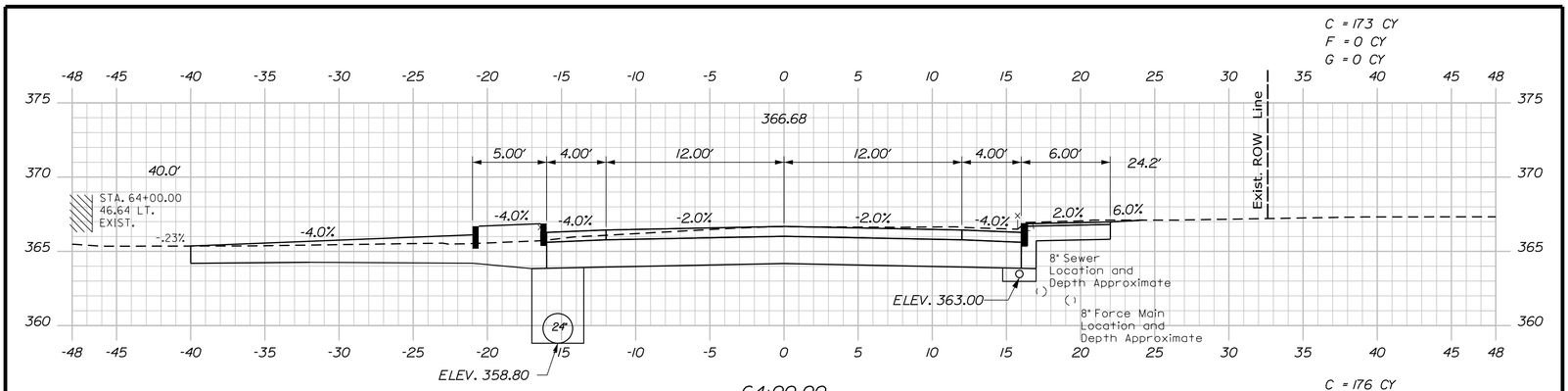
CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

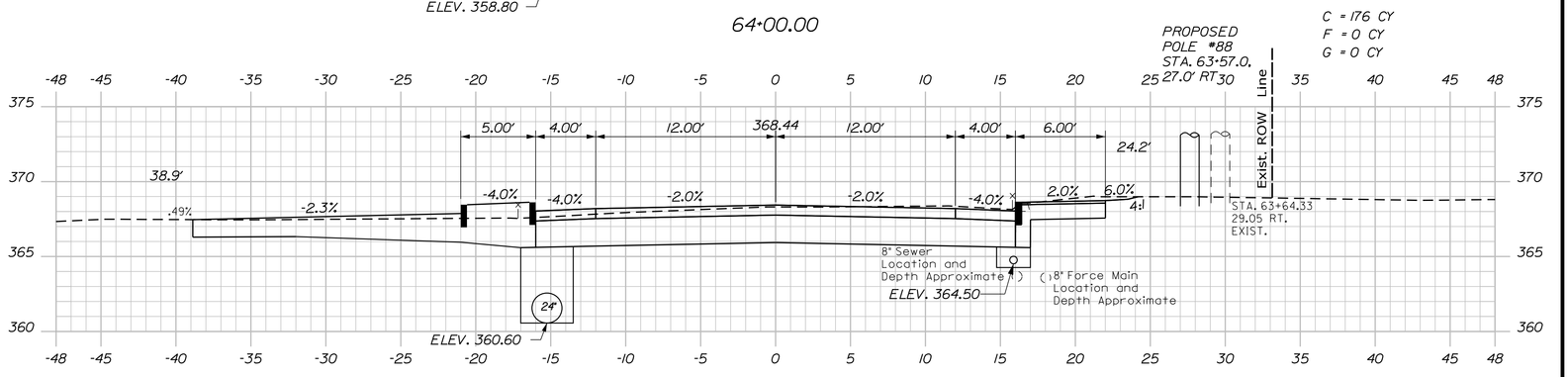
STP-1788(200)

WIN 17882.00

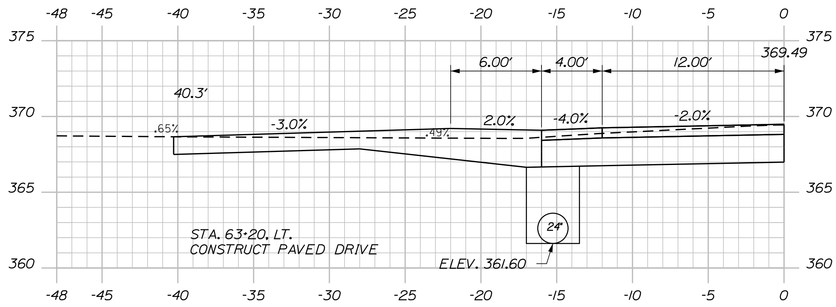
HIGHWAY PLANS



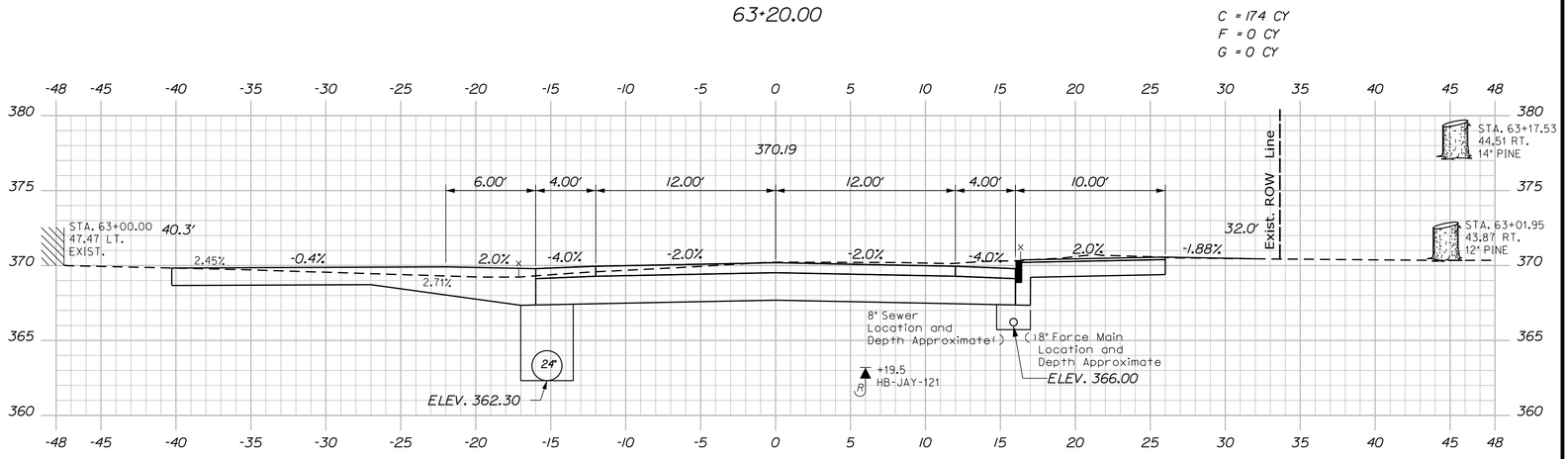
64+00.00



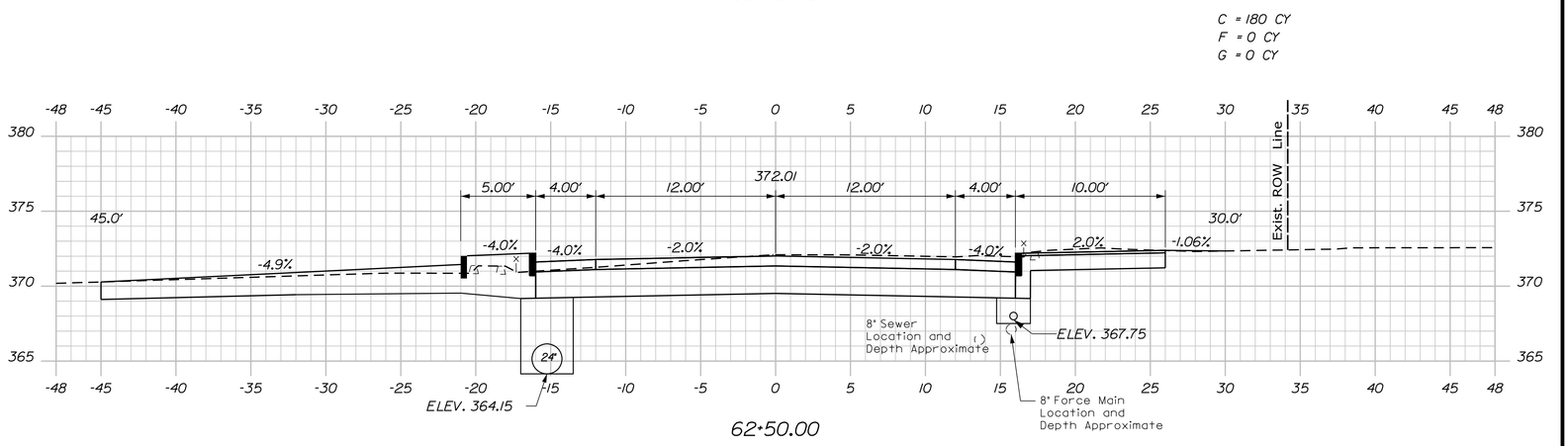
63+50.00



63+20.00



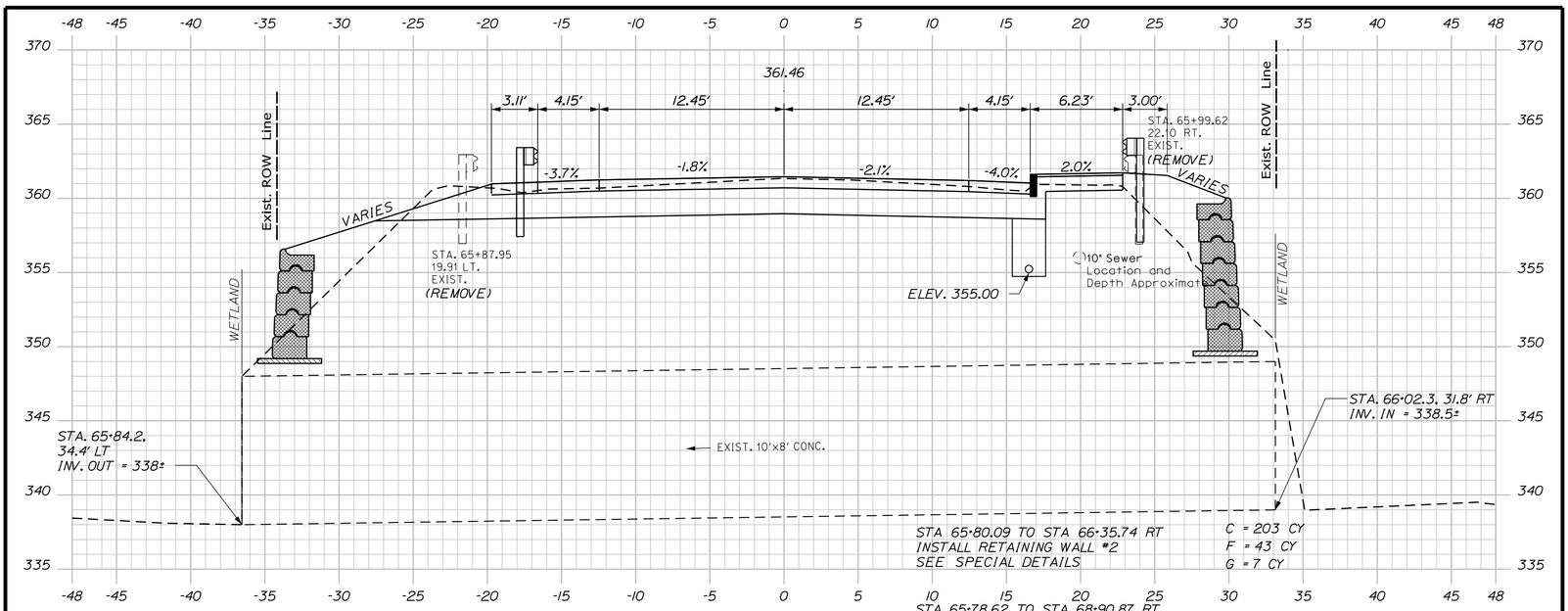
63+00.00



62+50.00

Sta. 62+50.00 to Sta. 64+00.00

SHEET NUMBER 77 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	STP-1788(200)
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			P.E. NUMBER
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			
	CROSS SECTIONS	FIELD CHANGES			WIN 17882.00 HIGHWAY PLANS

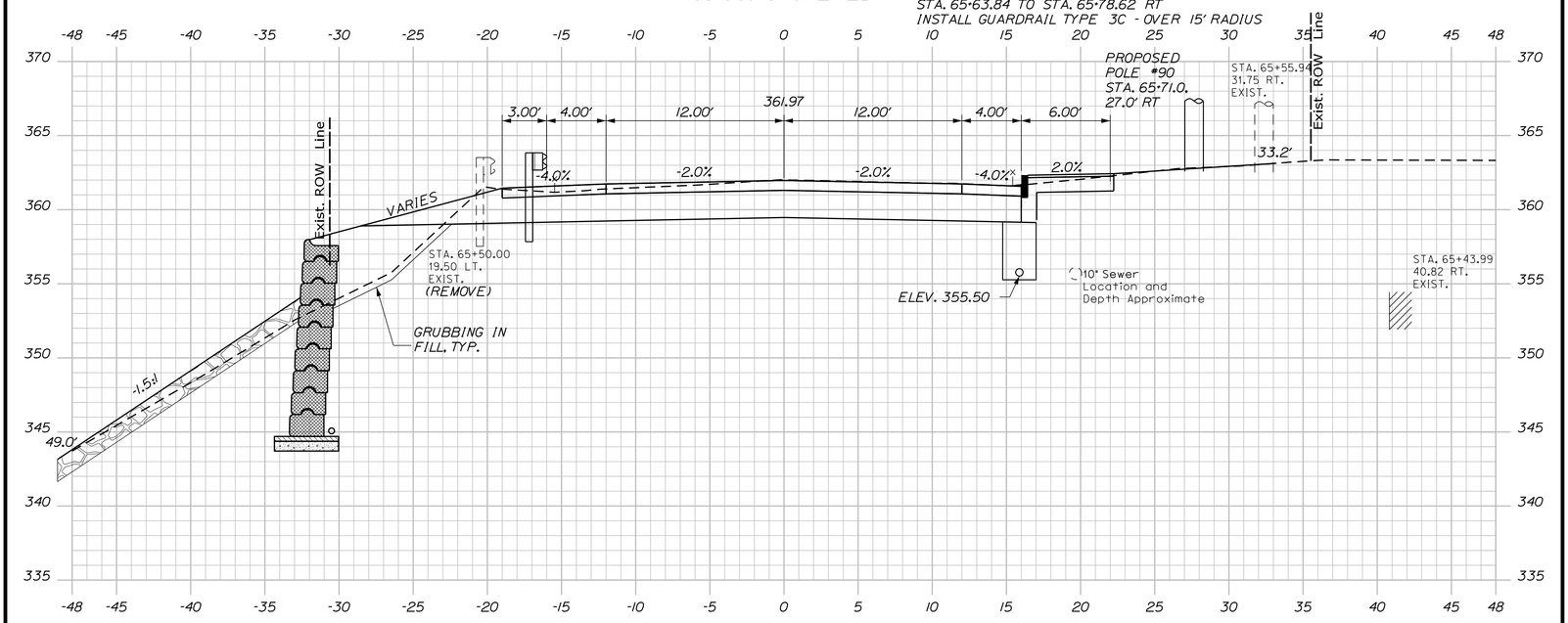


65+93.48 SKEWED

STA. 65+78.62 TO STA. 68+90.87 RT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL

STA. 65+63.84 TO STA. 65+78.62 RT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS

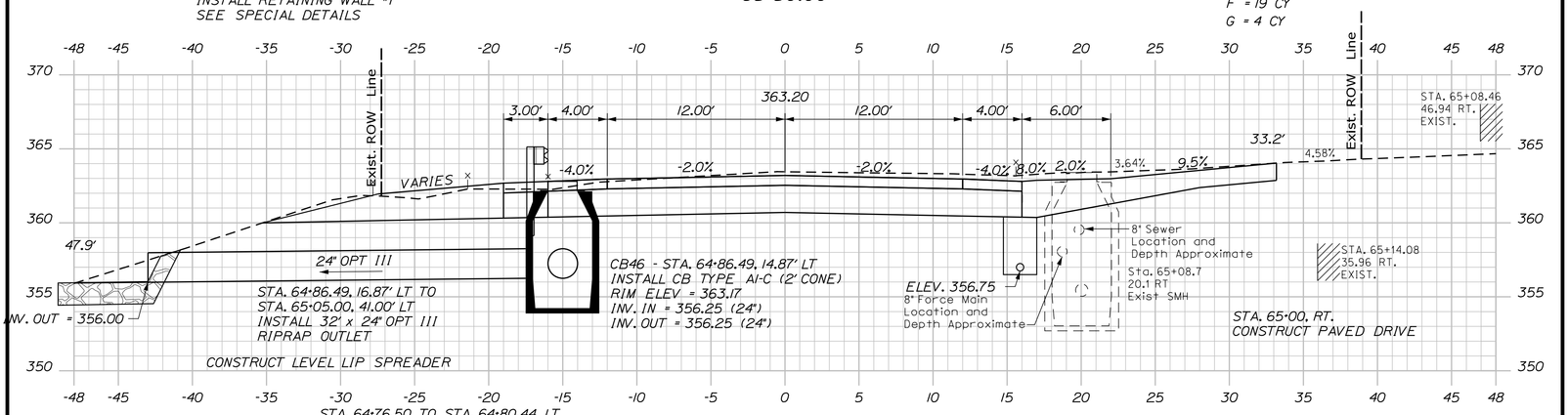
STA. 65+63.84 RT
INSTALL TERMINAL END - SINGLE RAIL



STA 65+43.87 TO STA 65+99.61 LT
INSTALL RETAINING WALL #1
SEE SPECIAL DETAILS

65+50.00

C = 221 CY
F = 19 CY
G = 4 CY

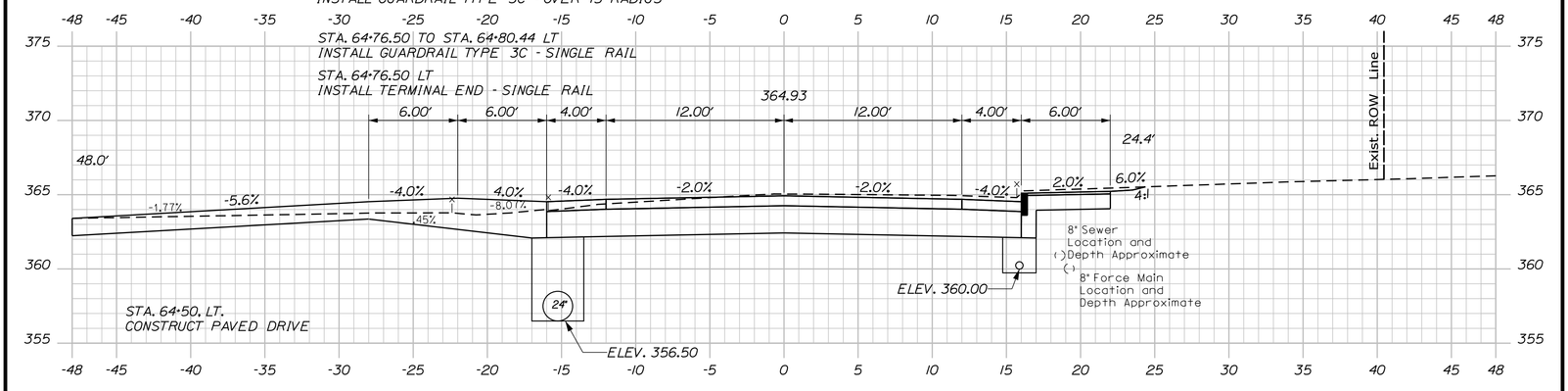


STA. 64+76.50 TO STA. 64+80.44 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL

STA. 64+80.44 TO STA. 64+99.42 LT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS

65+00.00

C = 204 CY
F = 0 CY
G = 0 CY



64+50.00

Sta. 64+50.00 to Sta. 65+93.48

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

SHEET NUMBER 78 OF 102

JAY
ROUTE 4\17

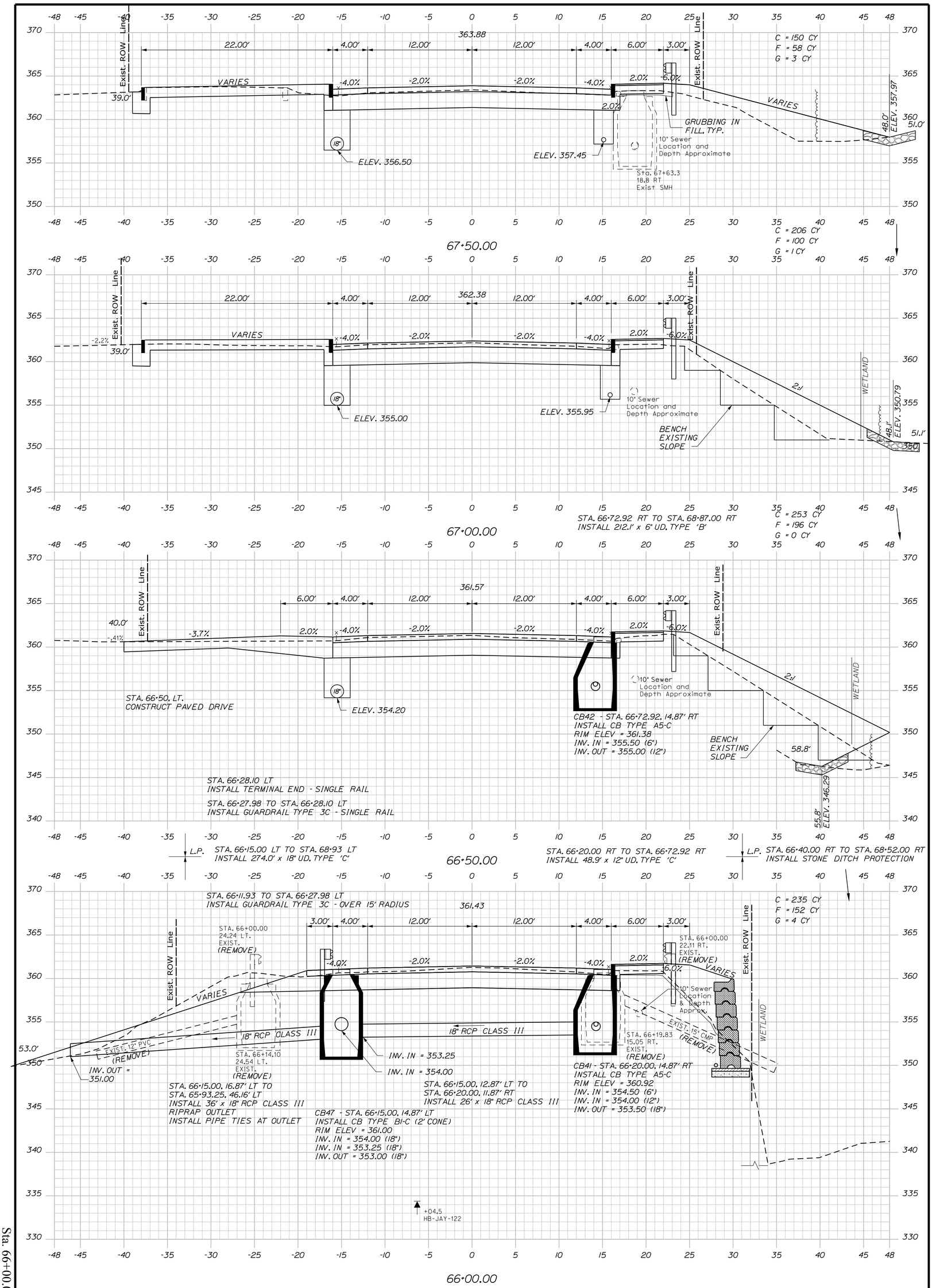
CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS



Sta. 66+00.00 to Sta. 67+50.00

SHEET NUMBER 79 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

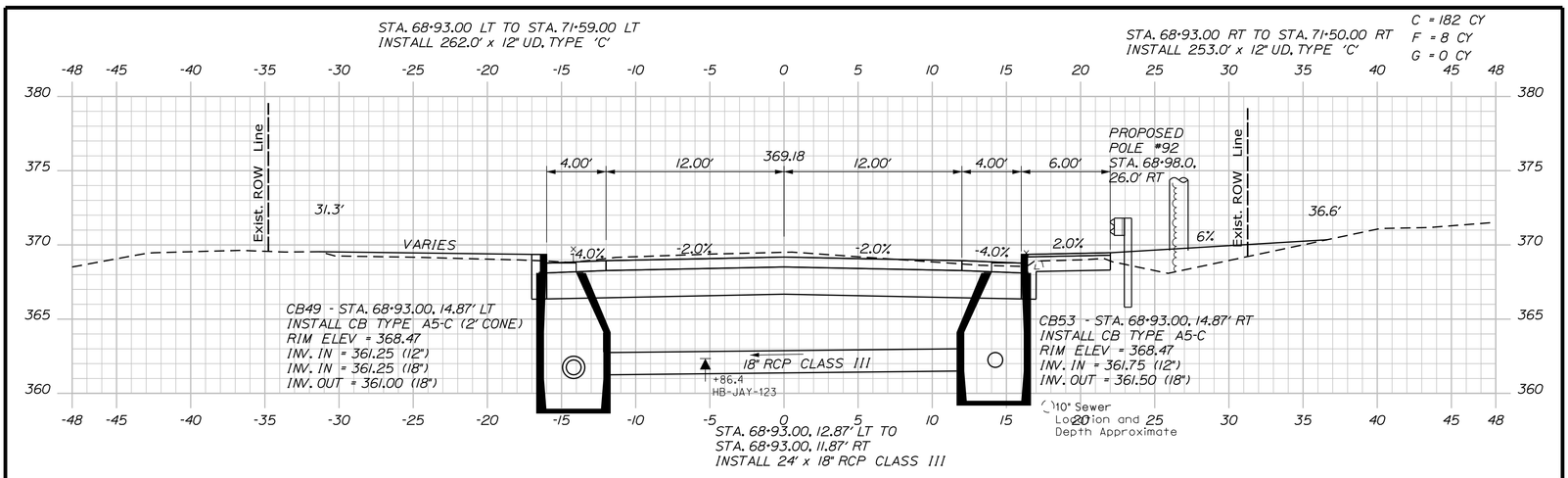
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

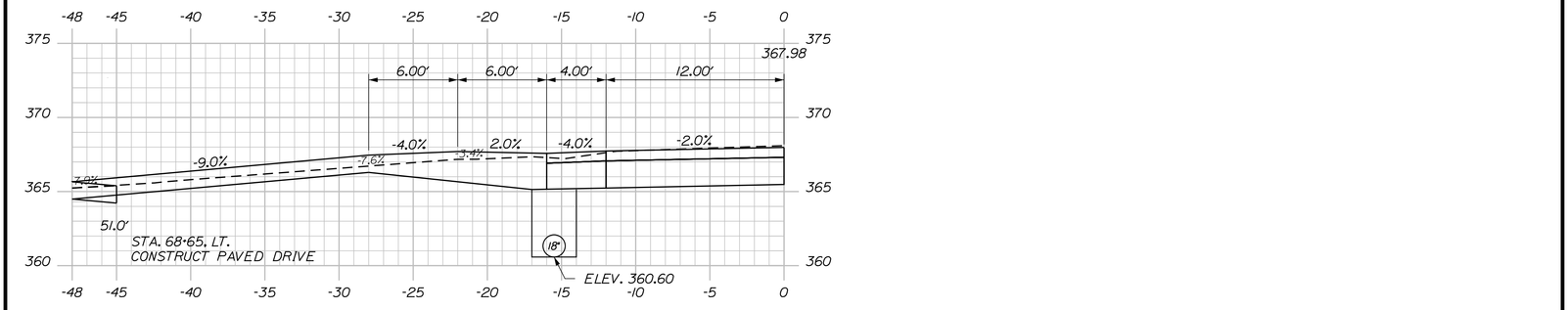
STP-1788(200)

WIN 17882.00

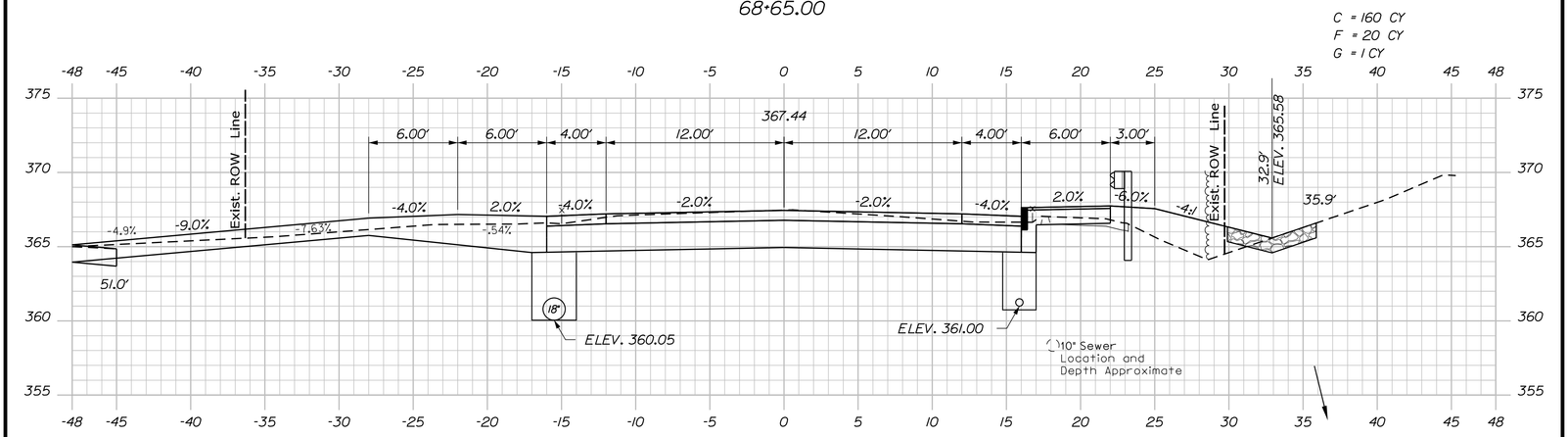
HIGHWAY PLANS



69+00.00

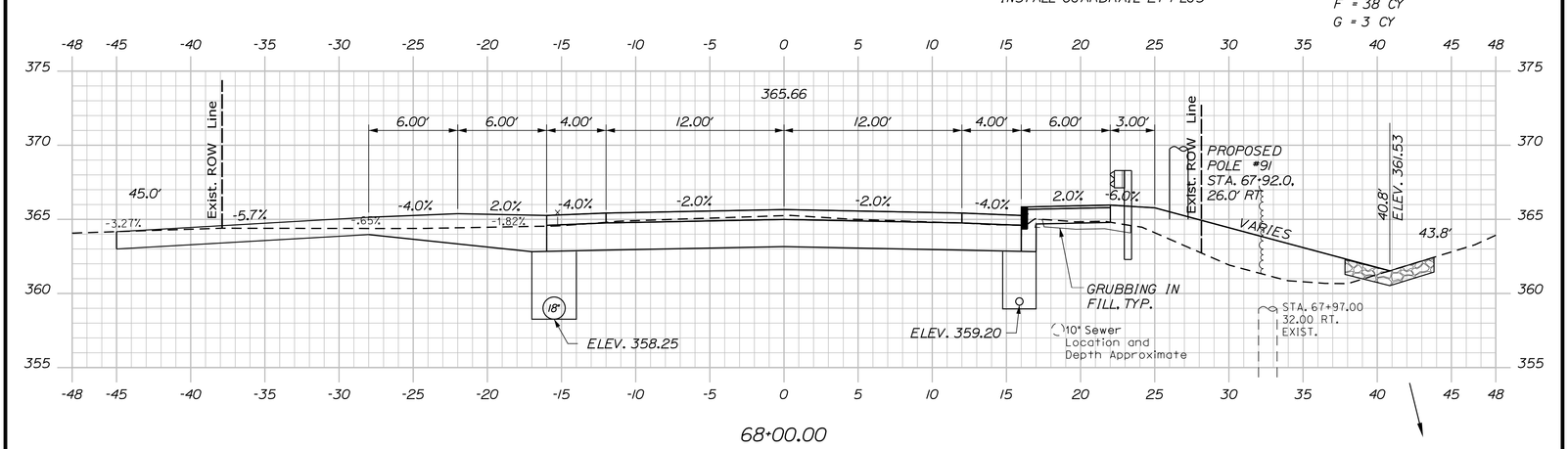


68+65.00

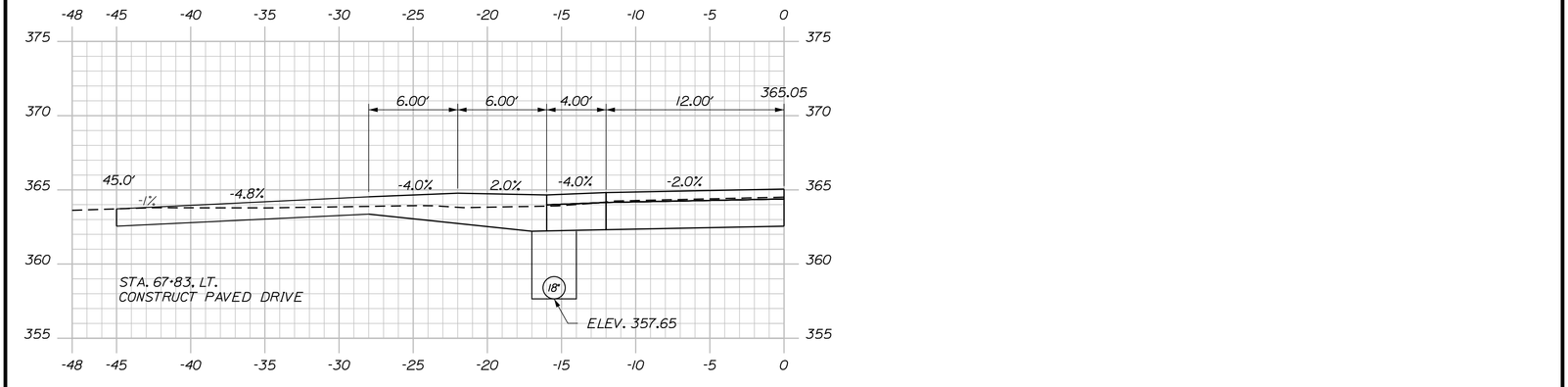


68+50.00

STA. 68+90.87 TO STA. 69+28.37 RT
INSTALL GUARDRAIL ET-PLUS



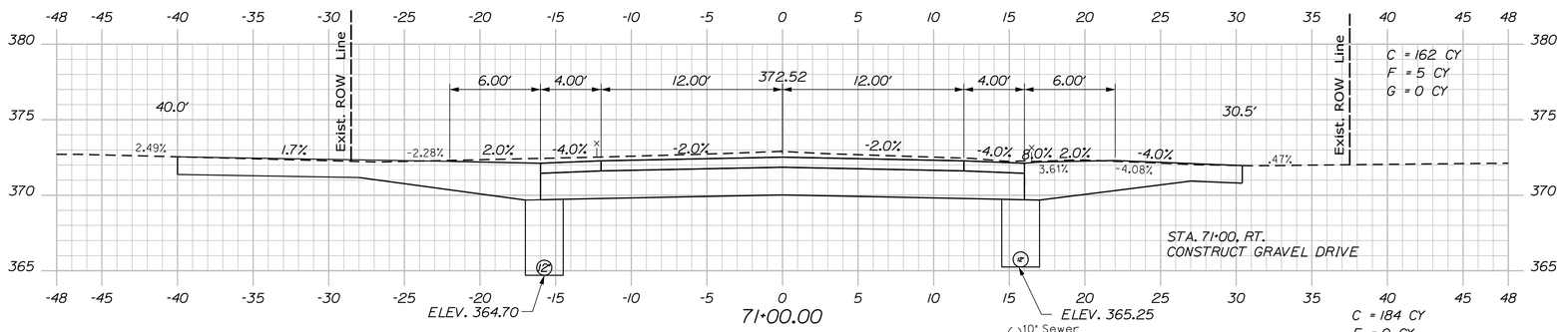
68+00.00



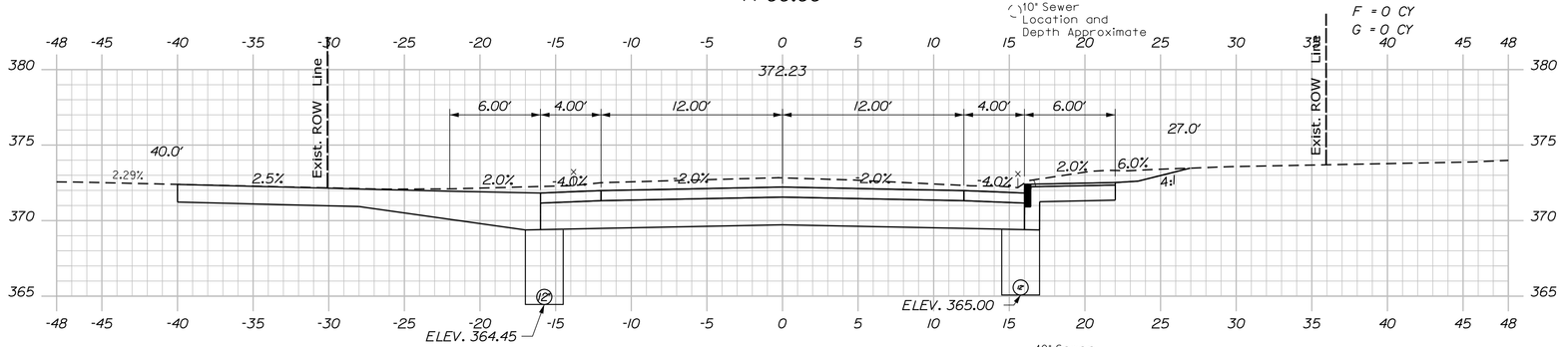
67+83.00

Sta. 67+83.00 to Sta. 69+00.00

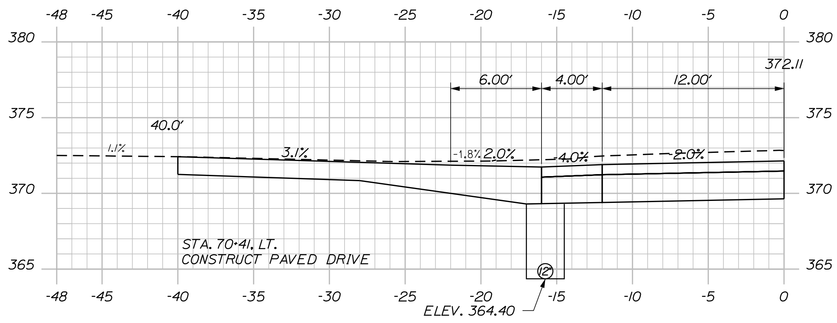
SHEET NUMBER 80 OF 102	JAY ROUTE 4\17	PROJ. MANAGER RHOBE MOULTON	BY	DATE	STATE OF MAINE DEPARTMENT OF TRANSPORTATION
		DESIGN-DETAILED L. MEEK	L.NEWHOUSE	7-18-14	STP-1788(200)
		CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14	SIGNATURE
		DESIGN2-DETAILED2			
		DESIGN3-DETAILED3			P.E. NUMBER
		REVISIONS 1			
		REVISIONS 2			
		REVISIONS 3			DATE
		REVISIONS 4			
	CROSS SECTIONS	FIELD CHANGES			WIN 17882.00 HIGHWAY PLANS



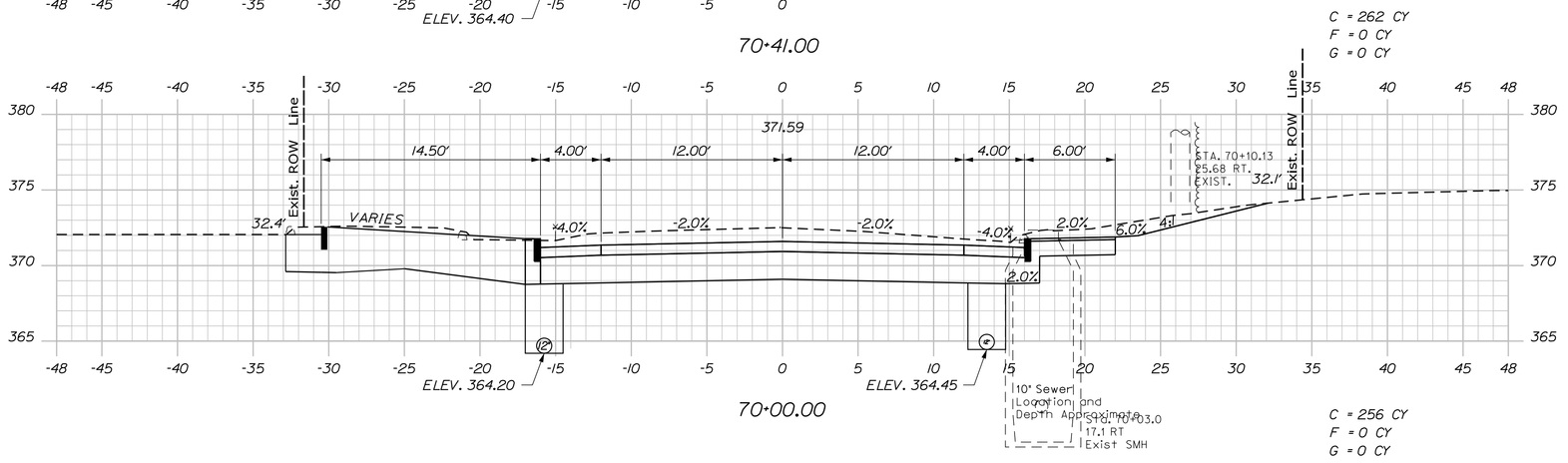
71+00.00



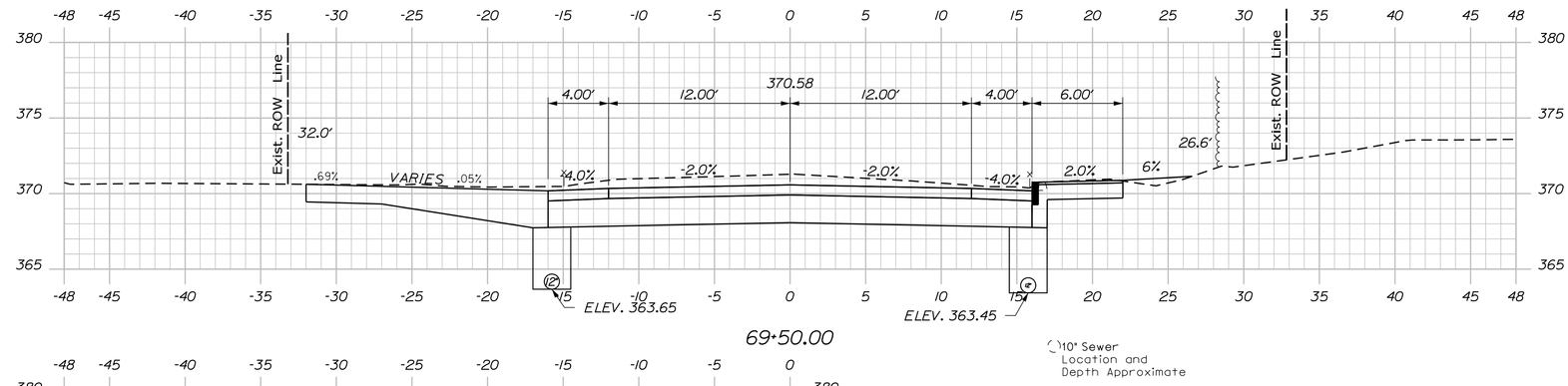
70+50.00



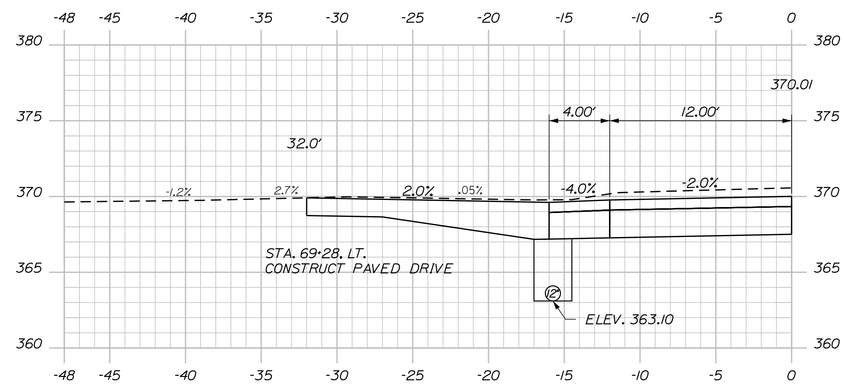
70+41.00



70+00.00



69+50.00



69+28.00

Sta. 69+28.00 to Sta. 71+000.00

SHEET NUMBER 81 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	_____	_____	_____
DESIGN3-DETAILED3	_____	_____	_____
REVISIONS 1	_____		_____
REVISIONS 2	_____		_____
REVISIONS 3	_____		_____
REVISIONS 4	_____		_____
FIELD CHANGES	_____		_____

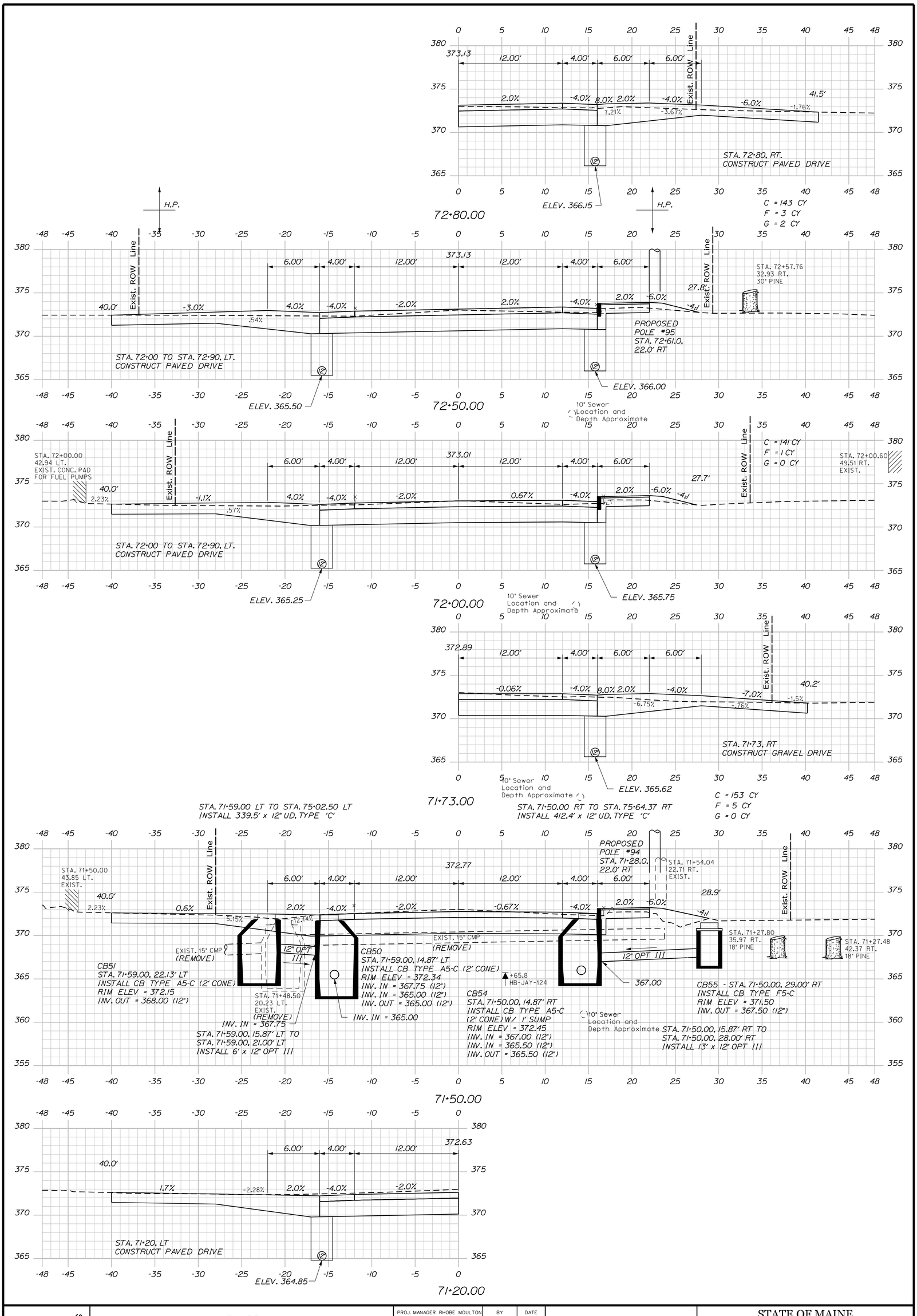
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

HIGHWAY PLANS



Sta. 71+20.00 to Sta. 72+80.00

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

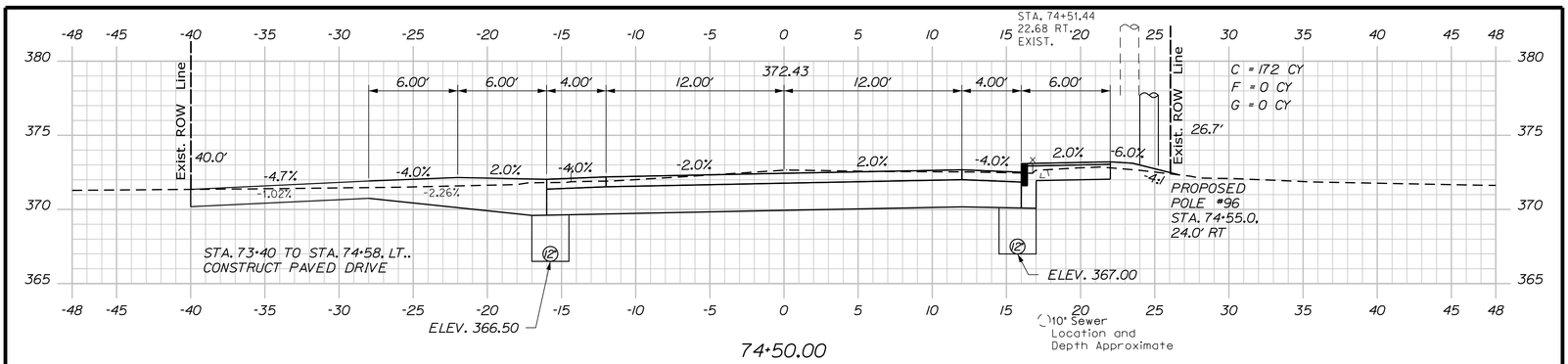
CROSS SECTIONS

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

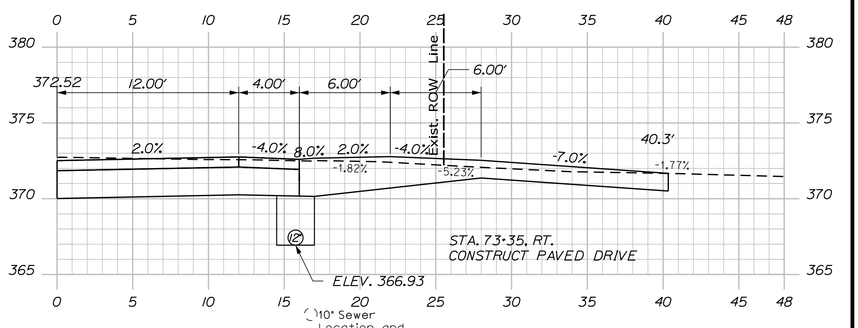
STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

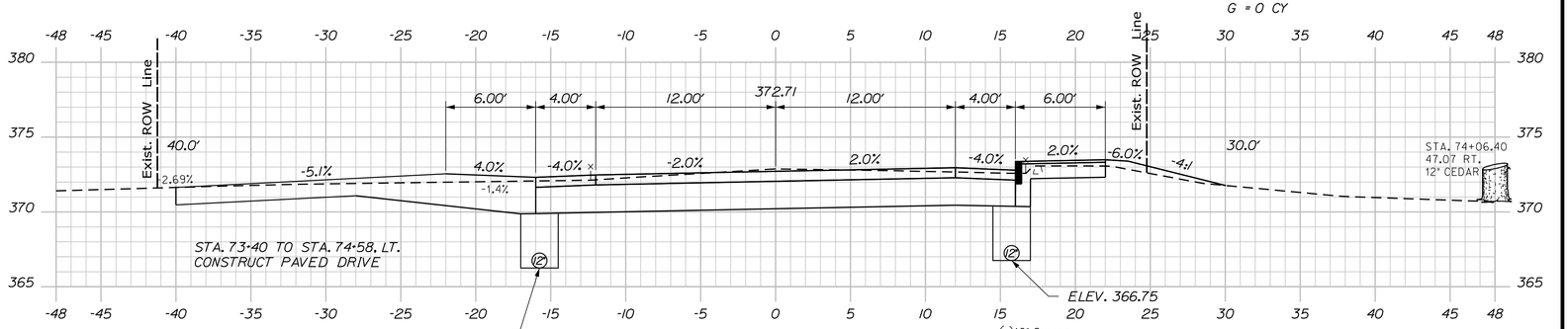


74+50.00



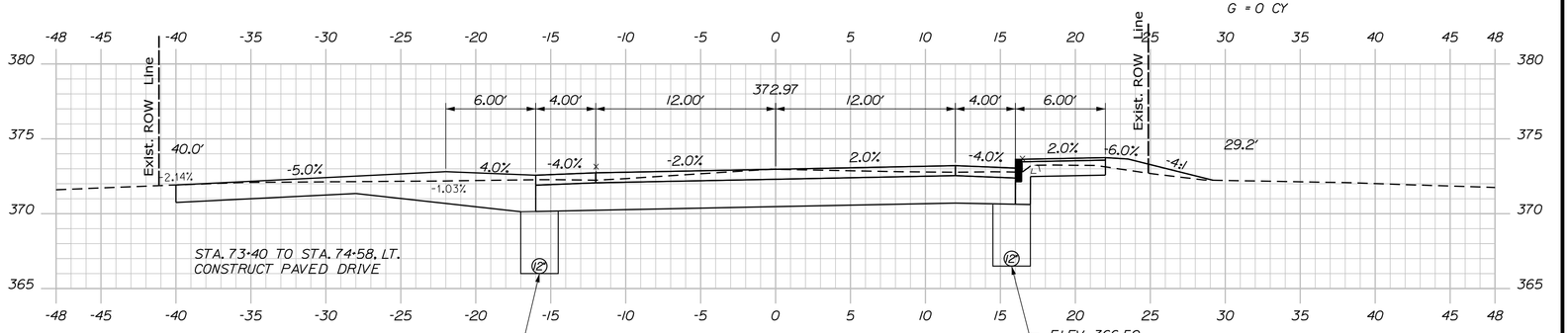
74+35.00

C = 154 CY
F = 1 CY
G = 0 CY

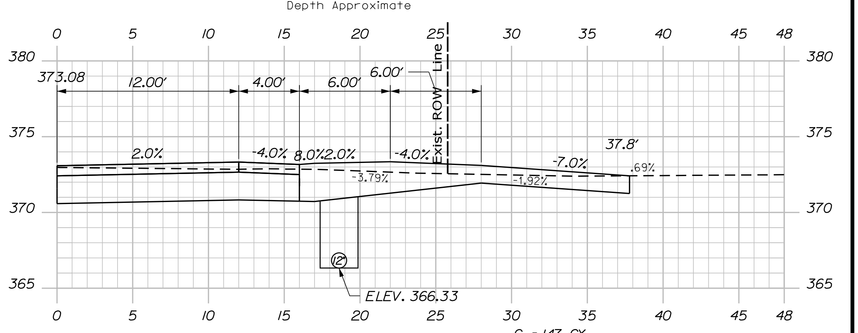


74+00.00

C = 147 CY
F = 2 CY
G = 0 CY

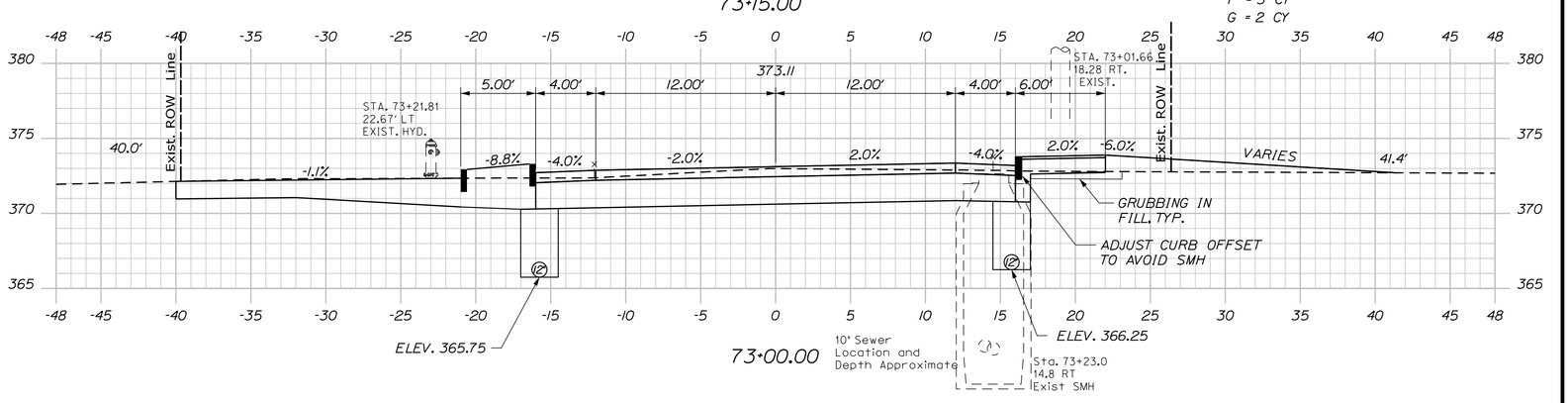


73+50.00



73+15.00

C = 147 CY
F = 3 CY
G = 2 CY



73+00.00

Sta. 73+00.00 to Sta. 74+50.00

SHEET NUMBER 83 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

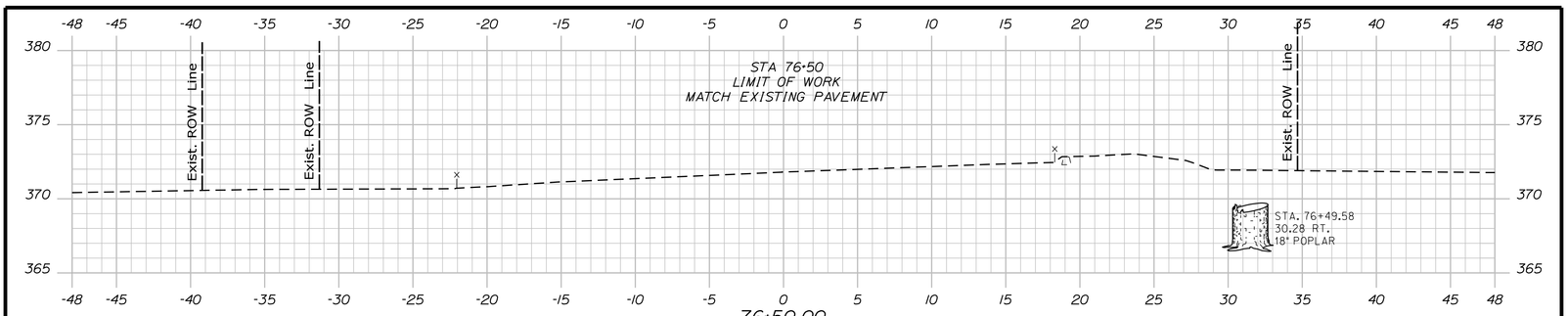
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

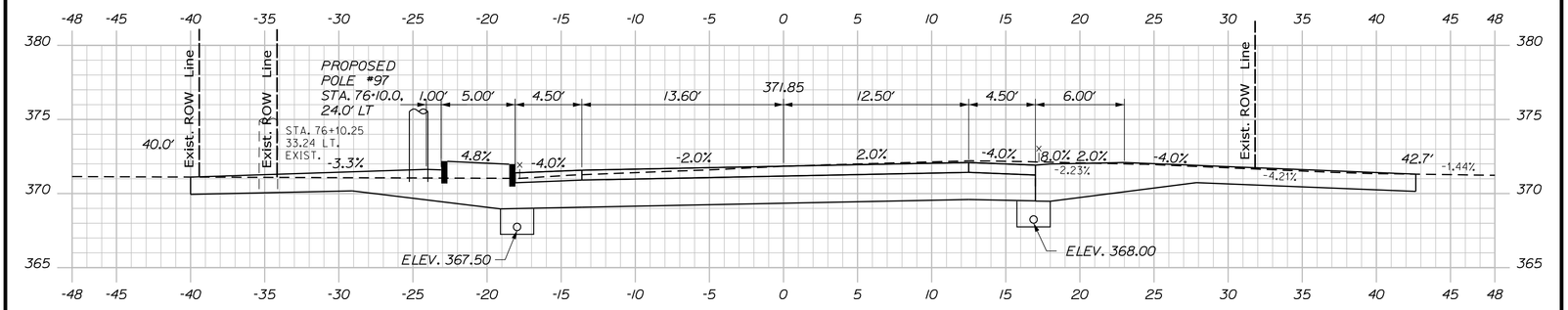
WIN
17882.00

HIGHWAY PLANS

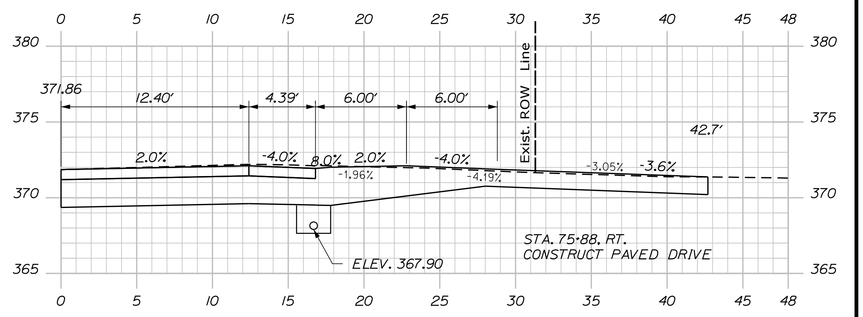


76+50.00
STA 76+10
END PROJECT NO. STP-1788(200)

C = 174 CY
F = 0 CY
G = 0 CY



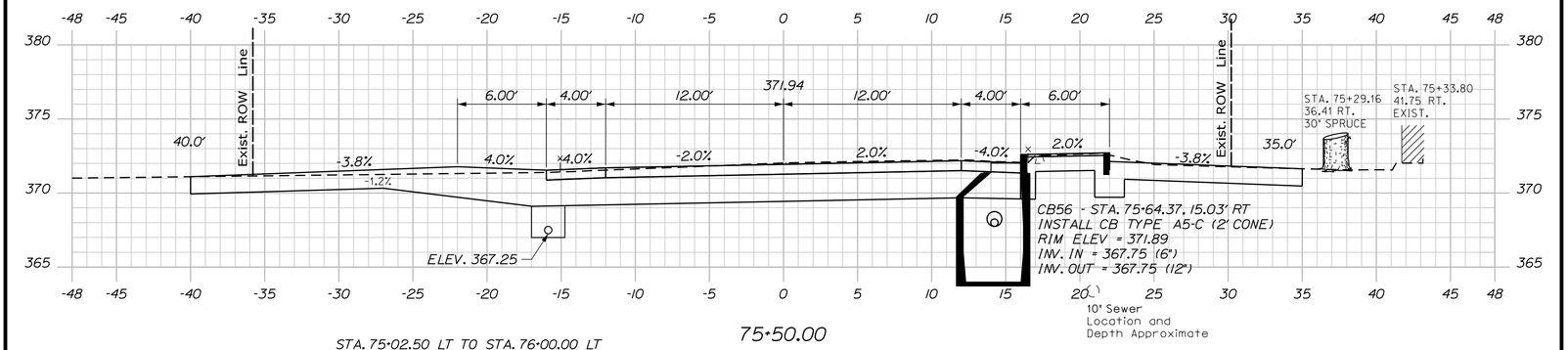
76+00.00



75+88.00

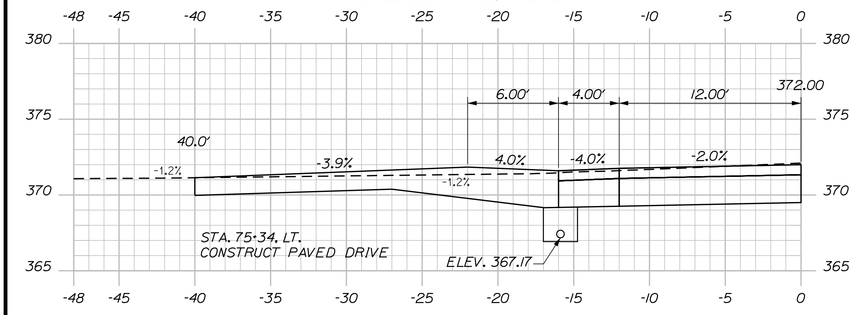
STA. 75+64.37 RT TO STA. 76+00.00 RT
INSTALL 33.6' x 6" UD. TYPE 'B'

C = 174 CY
F = 0 CY
G = 0 CY



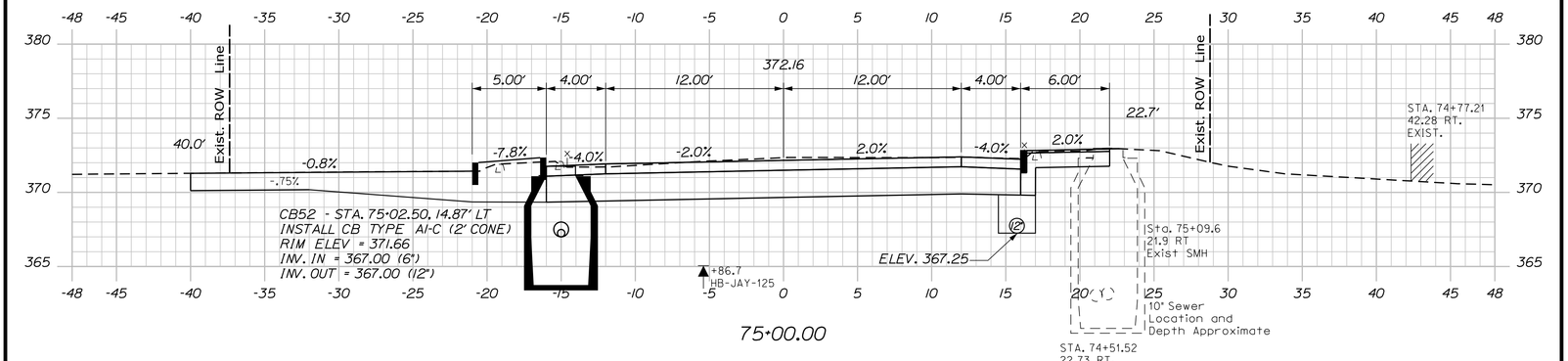
75+50.00

STA. 75+02.50 LT TO STA. 76+00.00 LT
INSTALL 95.5' x 6" UD. TYPE 'B'



75+34.00

C = 180 CY
F = 0 CY
G = 0 CY



75+00.00

Sta. 75+00.00 to Sta. 76+50.00

SHEET NUMBER 84 OF 102

JAY
ROUTE 4\17

CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

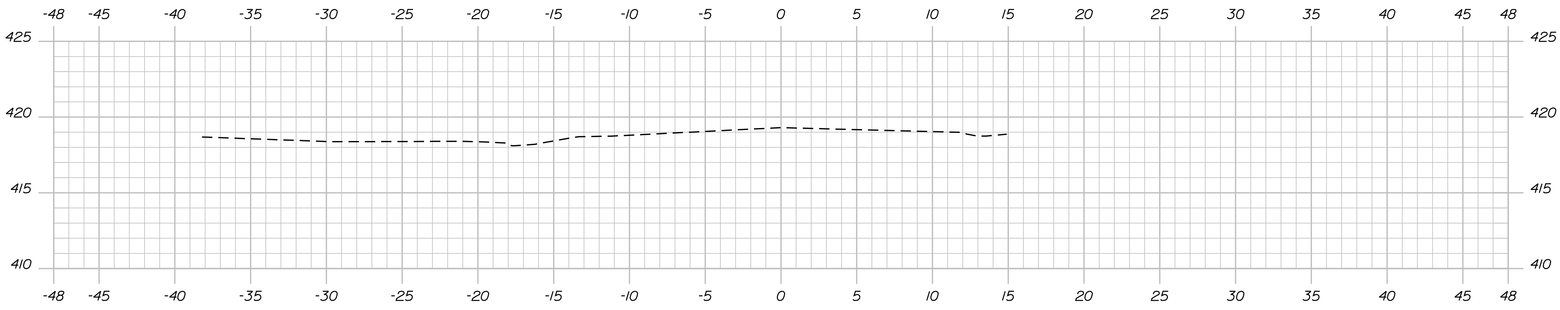
SIGNATURE
P.E. NUMBER
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

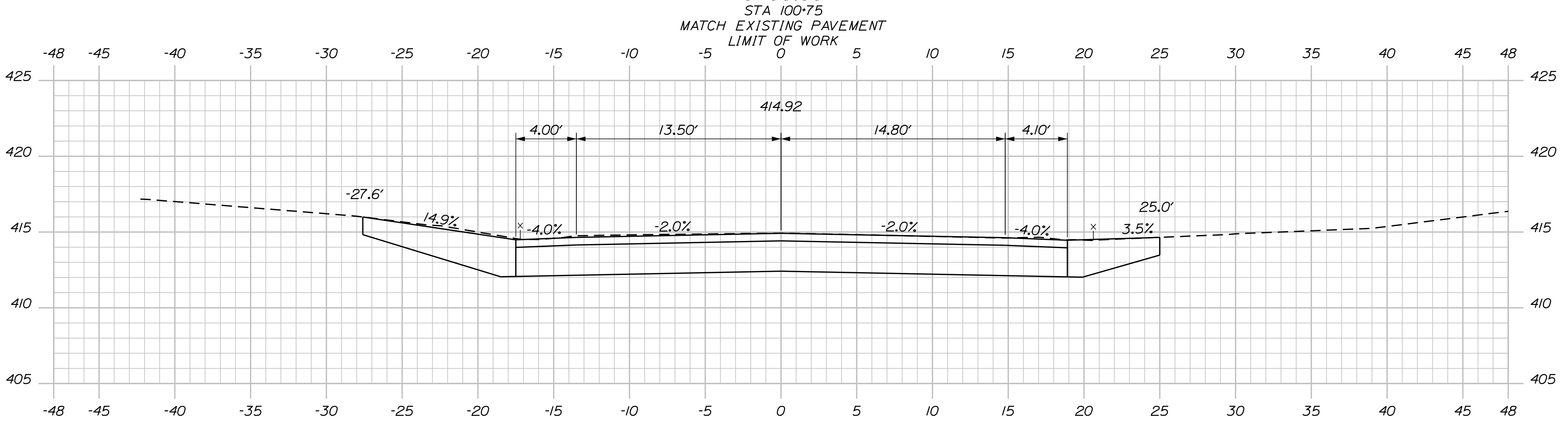
STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

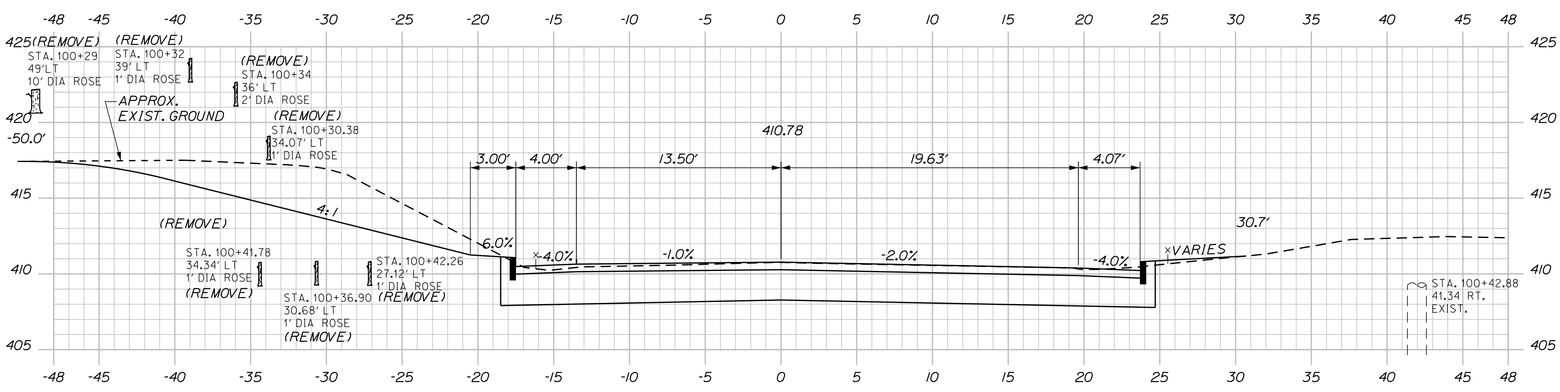


101+00.00
STA 100+75
MATCH EXISTING PAVEMENT
LIMIT OF WORK



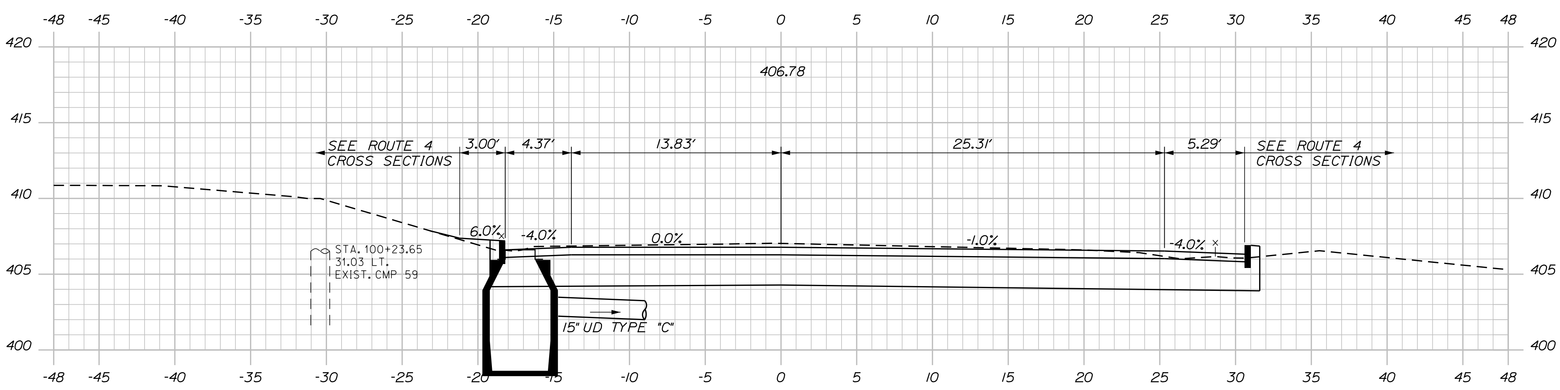
100+75.00
(BACK)

C = 120 CY
F = 0 CY
G = 0 CY



100+50.00

C = 138 CY
F = 0 CY
G = 0 CY



CB14 - STA. 100+18.97, 20.30' LT
INSTALL CB TYPE AI-C (2' CONE)
RIM ELEV = 406.45
INV. OUT = 402.25 (15")

100+25.00

C = 43 CY
F = 0 CY
G = 0 CY

OUELLETTE ST

OUELLETTE ST Sta. 100+25.00 to Sta. 101+00.00

SHEET NUMBER 85 OF 102

JAY
ROUTE 4\17

SIDE ROAD CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

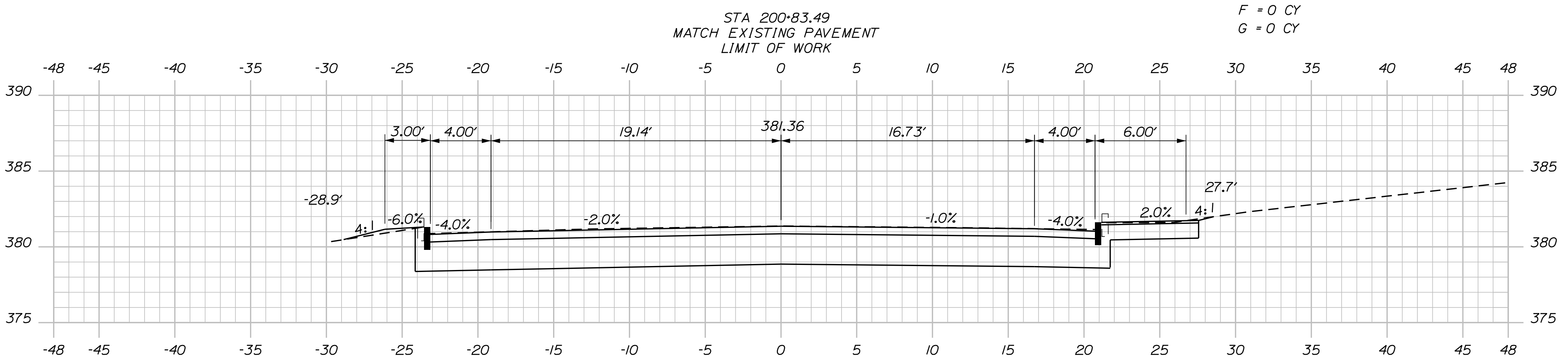
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN
17882.00

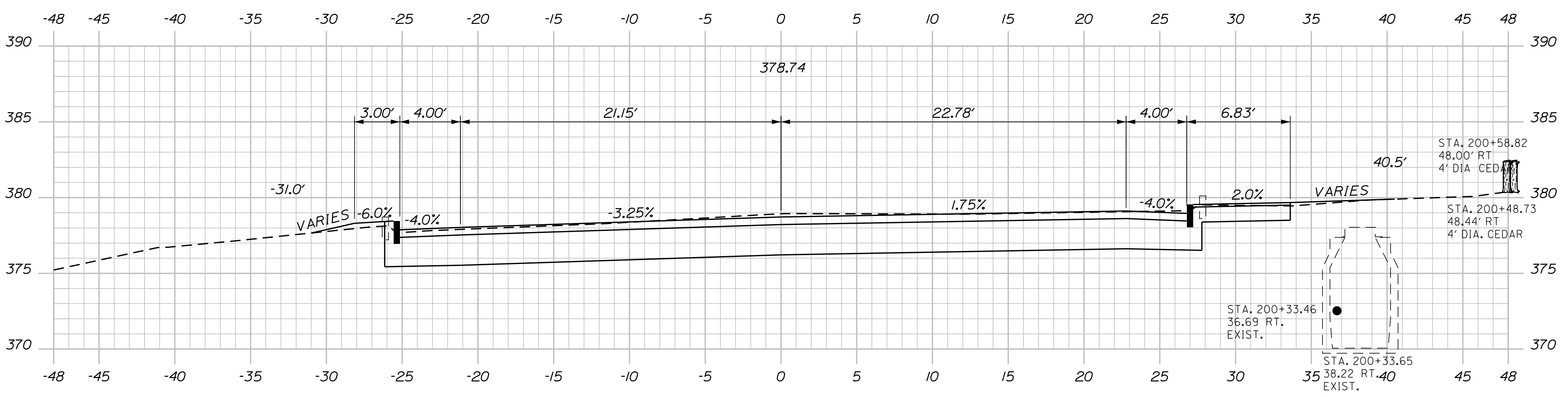
HIGHWAY PLANS

C = 36 CY
F = 0 CY
G = 0 CY



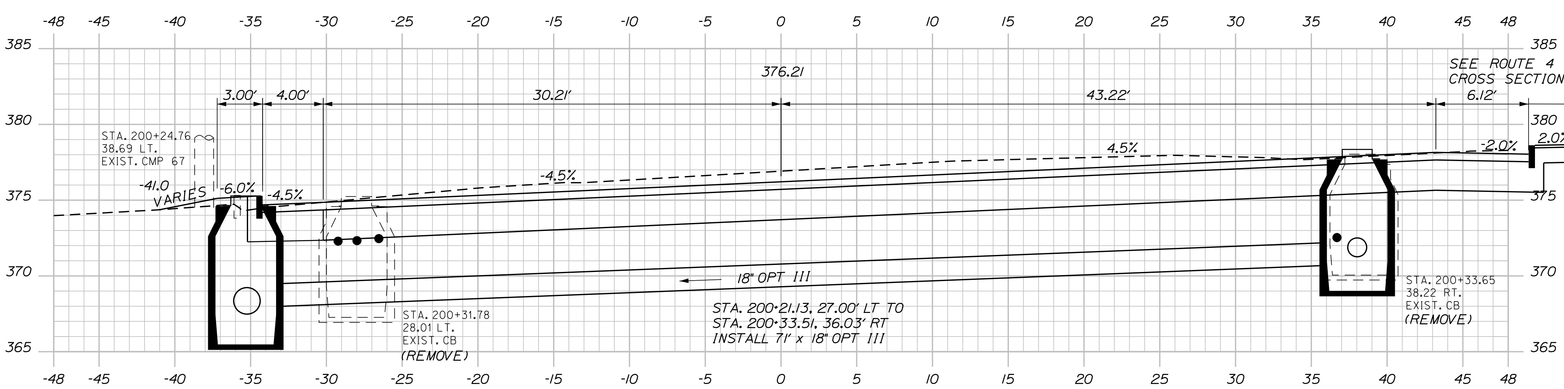
200+75.00

C = 123 CY
F = 0 CY
G = 0 CY



200+50.00

C = 182 CY
F = 0 CY
G = 0 CY



STA. 200+21.13 LT TO STA. 37+68.00 RT
INSTALL 73.9' x 21' UD. TYPE 'C'

CBI9 - STA. 200+21.13, 35.33' LT
INSTALL CB TYPE AI-C (2' CONE)
RIM ELEV = 374.92
INV. IN 368.00 (18")
INV. OUT = 367.75 (21")

200+25.00
COMMUNITY CENTER DR.

C = 83 CY
F = 0 CY
G = 0 CY

CBI8 - STA. 200+33.51, 38.03' RT
INSTALL CB TYPE AI-C (2' CONE)
RIM ELEV = 378.18
INV. IN 371.00 (15")
INV. OUT = 370.75 (18")

COMMUNITY CENTER DR. Sta. 200+25.00 to Sta. 200+75.00

SHEET NUMBER 86 OF 102

JAY
ROUTE 4\17

SIDE ROAD CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
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

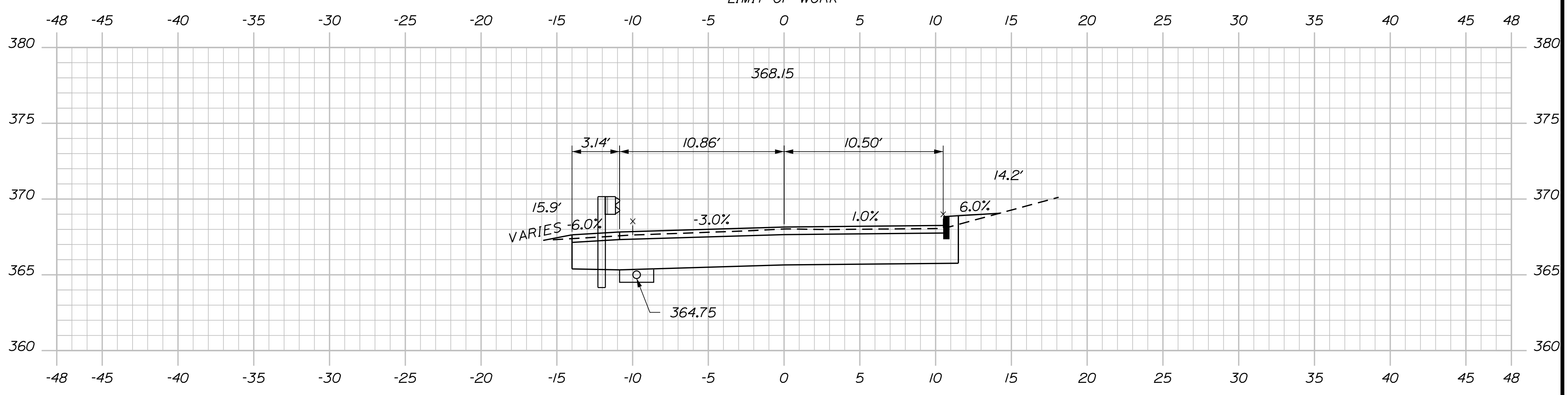
STP-1788(200)

WIN 17882.00

HIGHWAY PLANS

C = 15 CY
F = 0 CY
G = 0 CY

STA 301+07
MATCH EXISTING PAVEMENT
LIMIT OF WORK



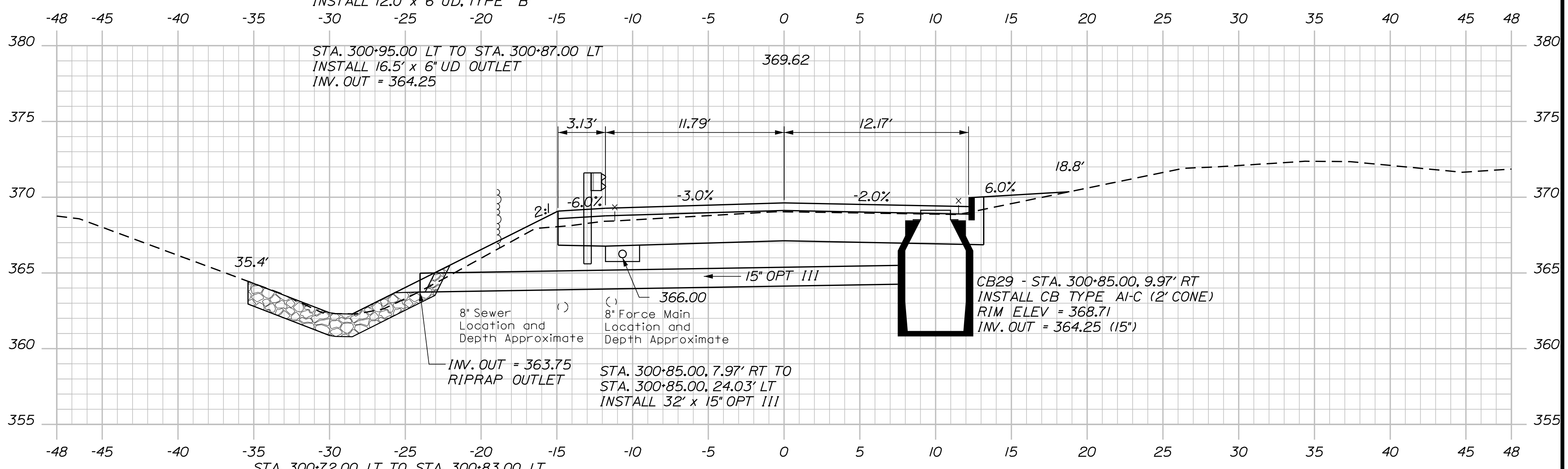
STA. 301+21.70 TO STA. 301+59.18 LT
INSTALL GUARDRAIL ET PLUS

STA. 300+95.00 LT TO STA. 301+07.17 LT
INSTALL 12.0' x 6" UD, TYPE 'B'

301+00.00

C = 50 CY
F = 1 CY
G = 0 CY

STA. 300+95.00 LT TO STA. 300+87.00 LT
INSTALL 16.5' x 6" UD OUTLET
INV. OUT = 364.25

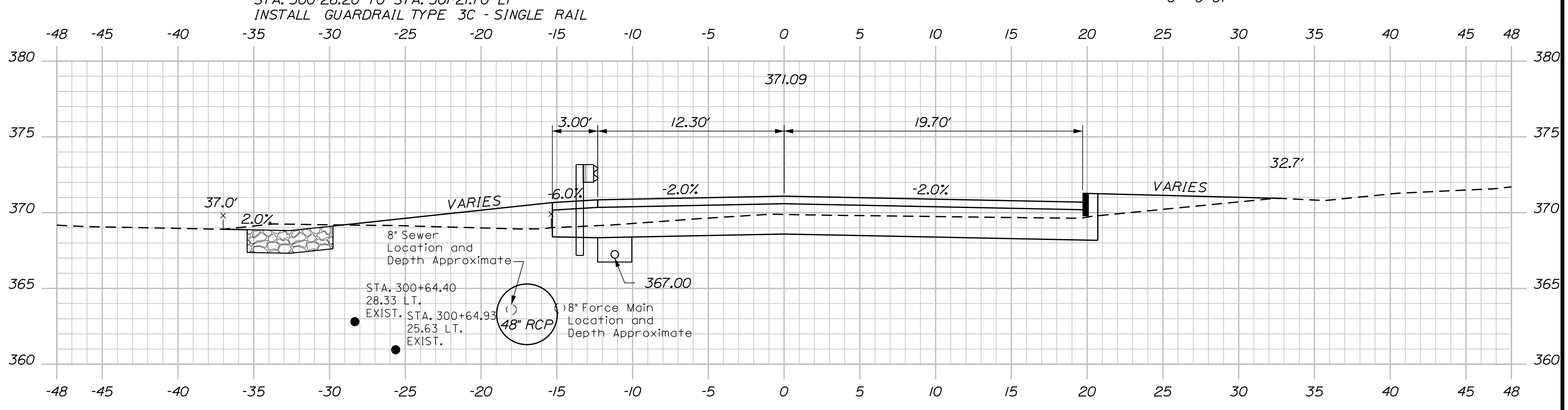


STA. 300+72.00 LT TO STA. 300+83.00 LT
INSTALL 17.1' x 6" UD OUTLET
INV. OUT = 365.00

STA. 300+26.20 TO STA. 301+21.70 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL

300+75.00

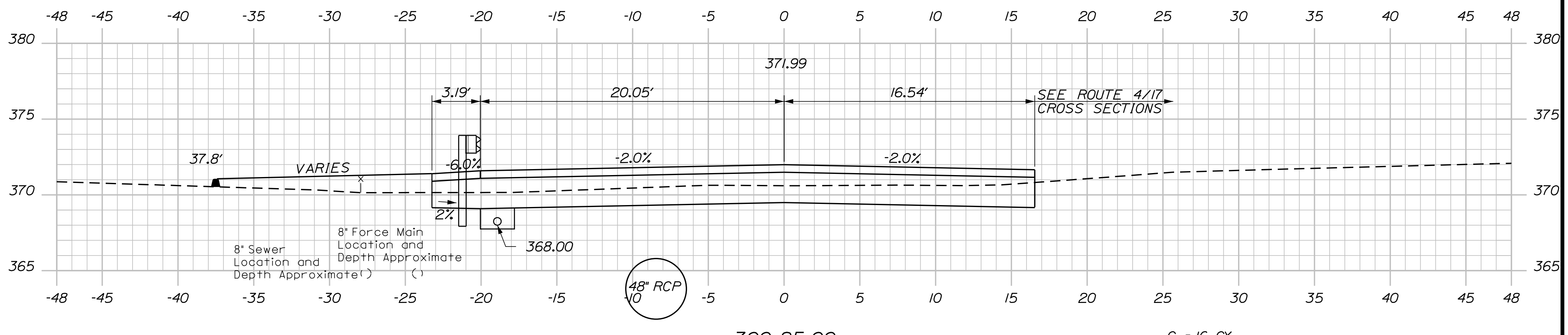
C = 43 CY
F = 7 CY
G = 0 CY



STA. 300+11.56 TO STA. 300+26.20 LT
INSTALL GUARDRAIL TYPE 3C - OVER 15' RADIUS

300+50.00

C = 42 CY
F = 11 CY
G = 0 CY



300+25.00

FRENCH FALLS LANE

C = 16 CY
F = 3 CY
G = 0 CY

STA. 300+23.00 LT TO STA. 300+72.00 LT
INSTALL 55.4' x 6" UD, TYPE 'B'

FRENCH FALLS LANE Sta. 300+25.00 to Sta. 301+00.00

SHEET NUMBER 87 OF 102

JAY
ROUTE 4\17

SIDE ROAD CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L. MEEK	L. NEWHOUSE	7-18-14
CHECKED-REVIEWED	D. ETTINGER	D. ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE
P.E. NUMBER
DATE

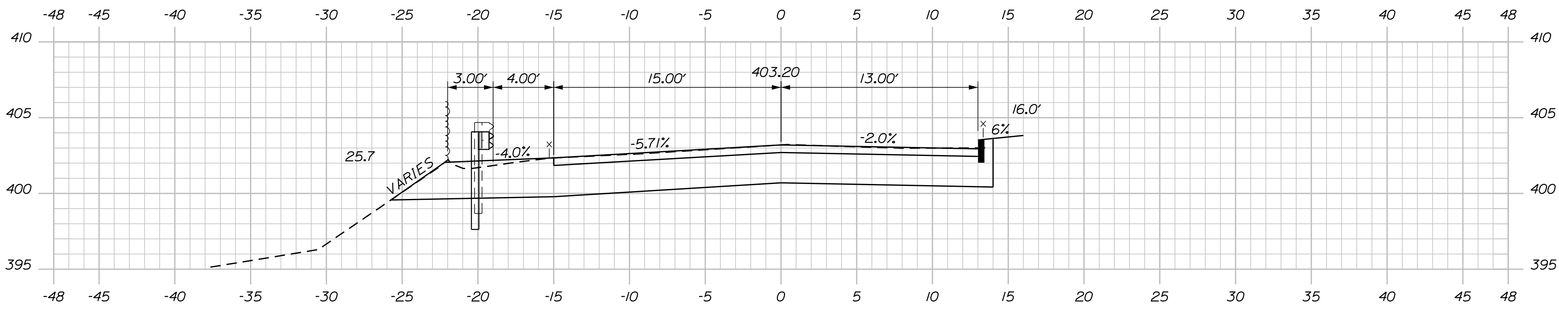
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN 17882.00

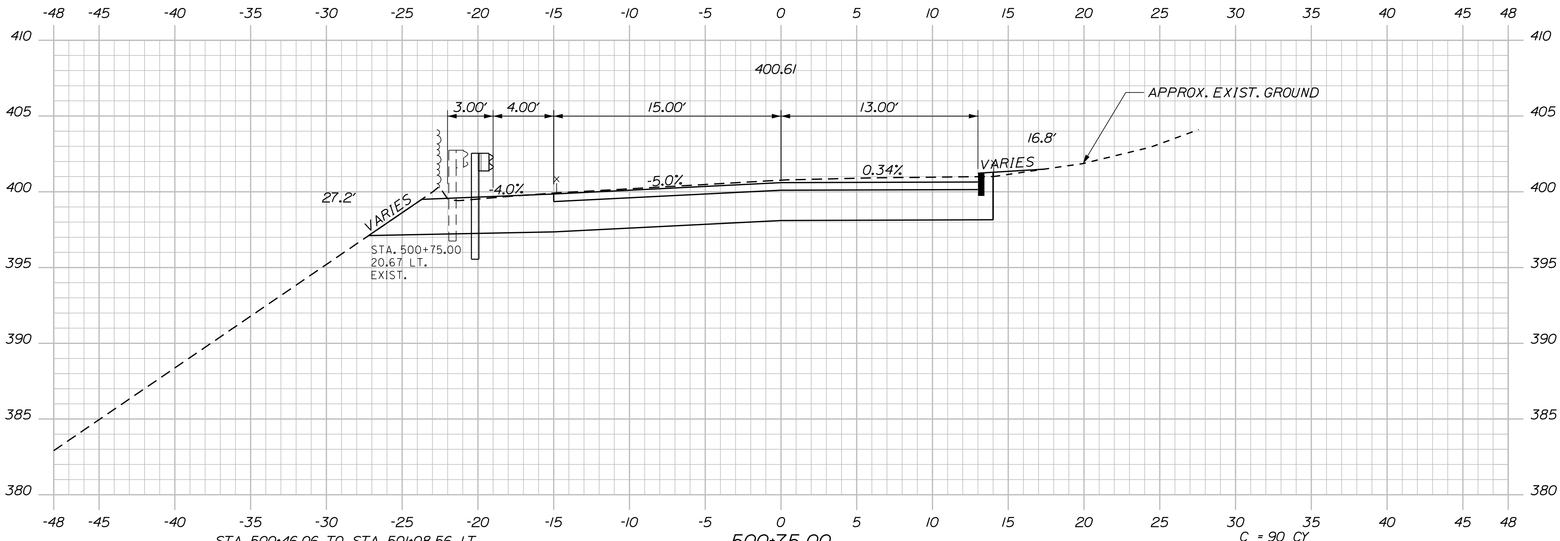
HIGHWAY PLANS

STA 501+00
MATCH EXISTING PAVEMENT
LIMIT OF WORK



501+00.00
(BACK)

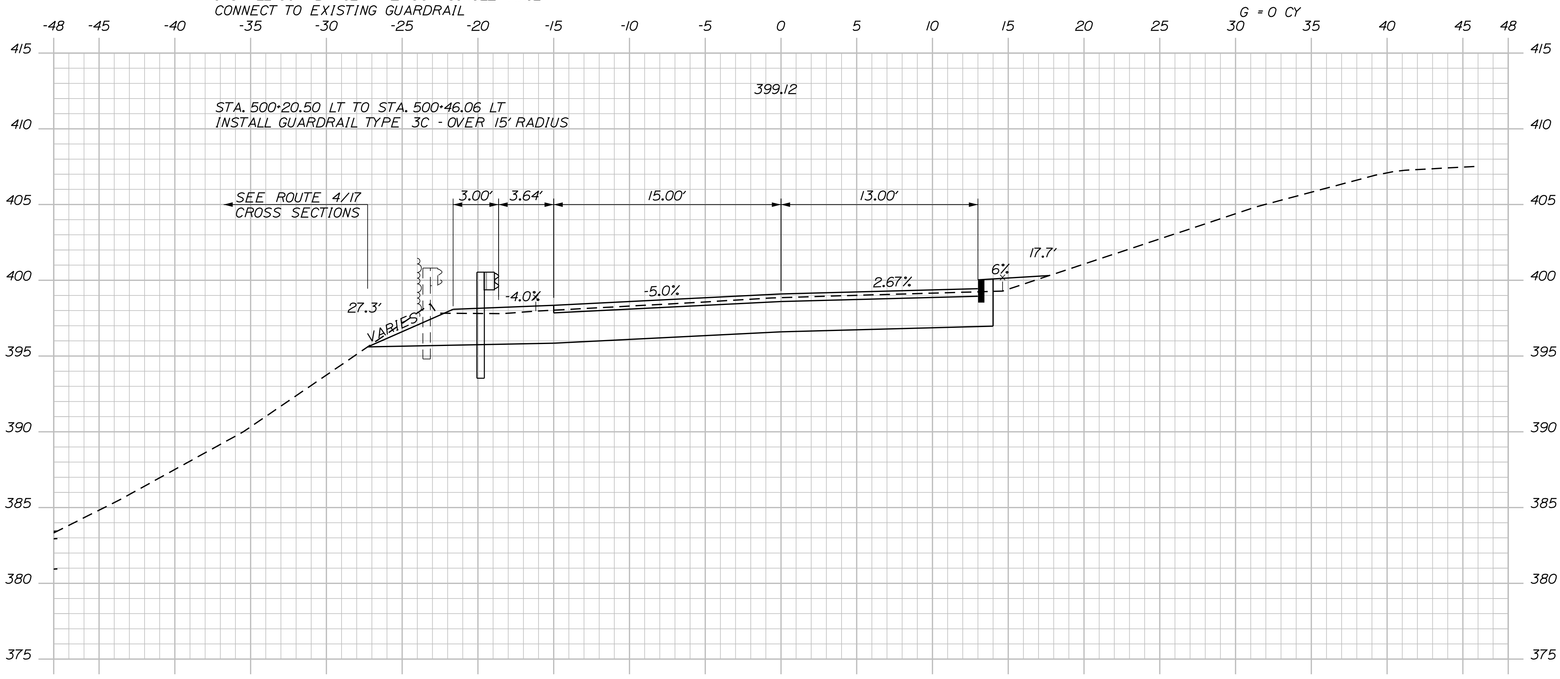
C = 94 CY
F = 0 CY
G = 0 CY



STA. 500+46.06 TO STA. 501+08.56 LT
INSTALL GUARDRAIL TYPE 3C - SINGLE RAIL
CONNECT TO EXISTING GUARDRAIL

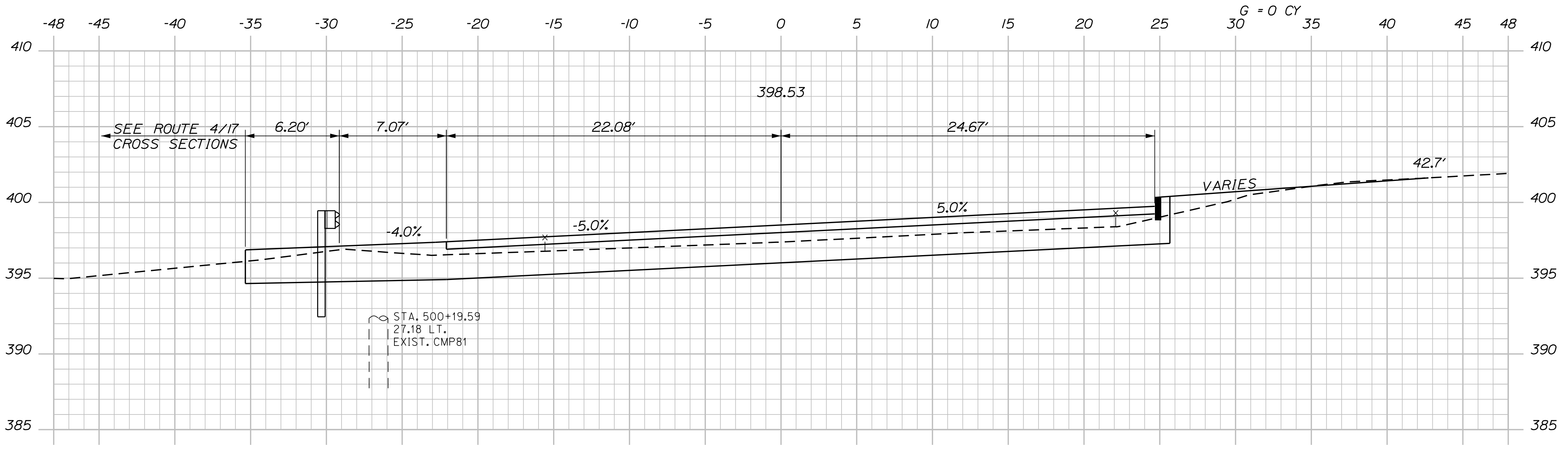
500+75.00

C = 90 CY
F = 0 CY
G = 0 CY



500+50.00

C = 84 CY
F = 1 CY
G = 0 CY



500+25.00
LUDDEN DR.

C = 31 CY
F = 1 CY
G = 0 CY

LUDDEN DR. Sta. 500+25.00 to Sta. 501+00.00

SHEET NUMBER 88 OF 102

JAY
ROUTE 4\17

SIDE ROAD CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

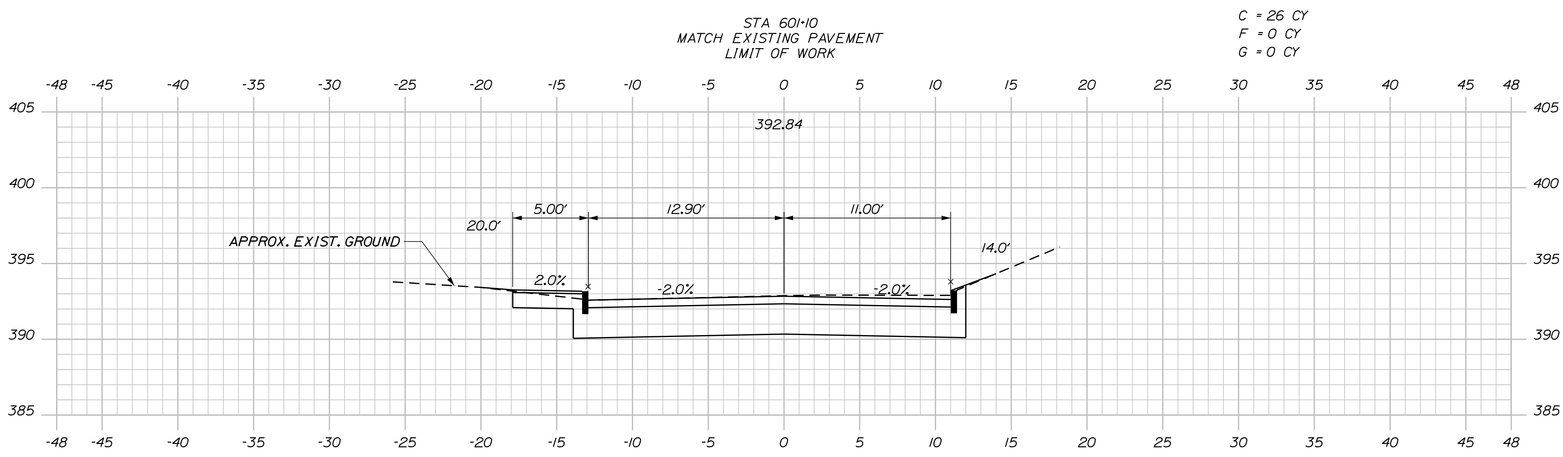
SIGNATURE
P.E. NUMBER
DATE

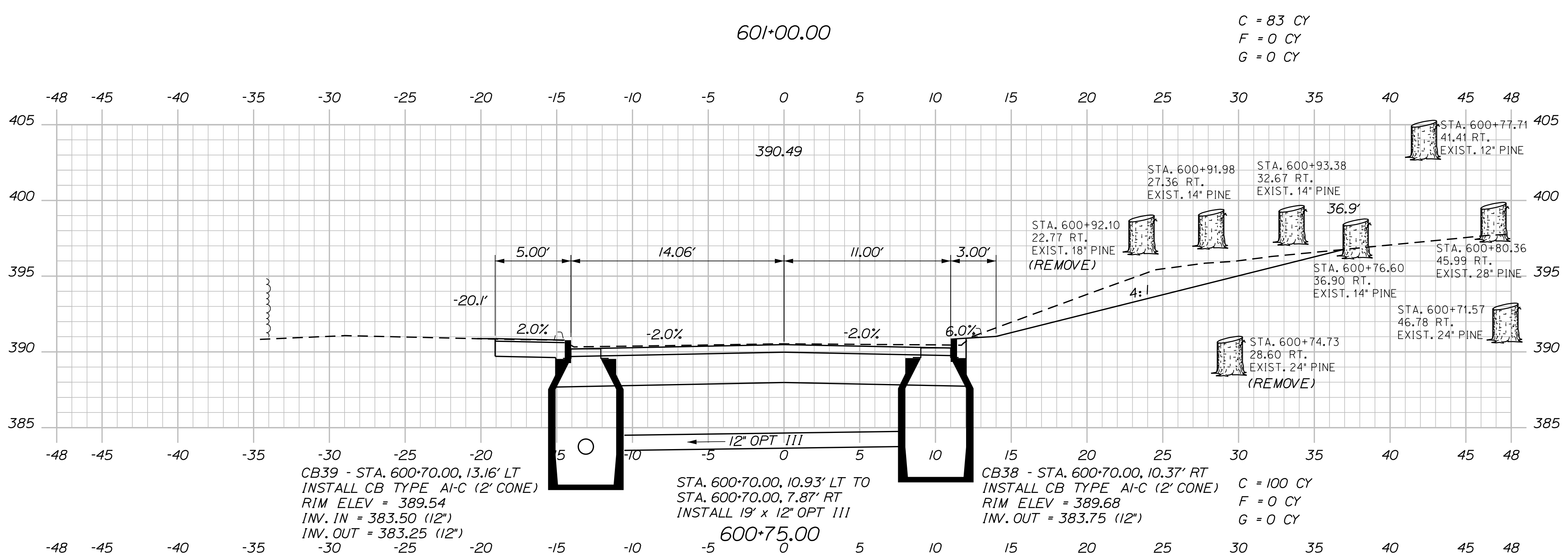
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

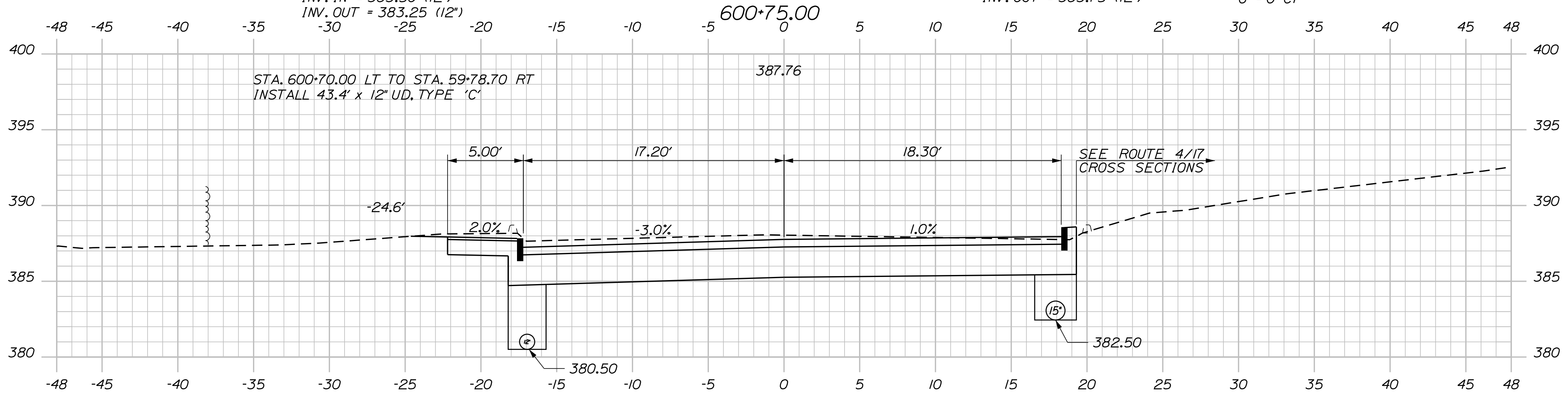
STP-1788(200)

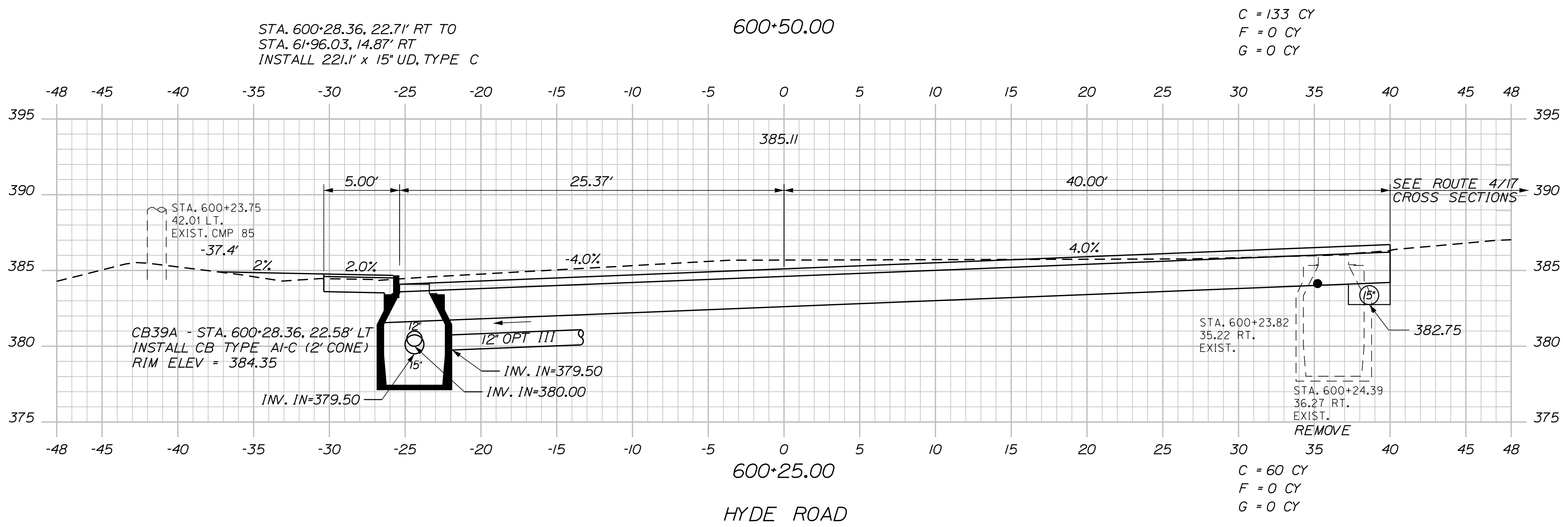
WIN
17882.00

HIGHWAY PLANS









HYDE RD. Sta. 600+25.00 to Sta. 601+00.00

SHEET NUMBER 89 OF 102

JAY
ROUTE 4\17

SIDE ROAD CROSS SECTIONS

PROJ. MANAGER RHOBE MOULTON		BY	DATE
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

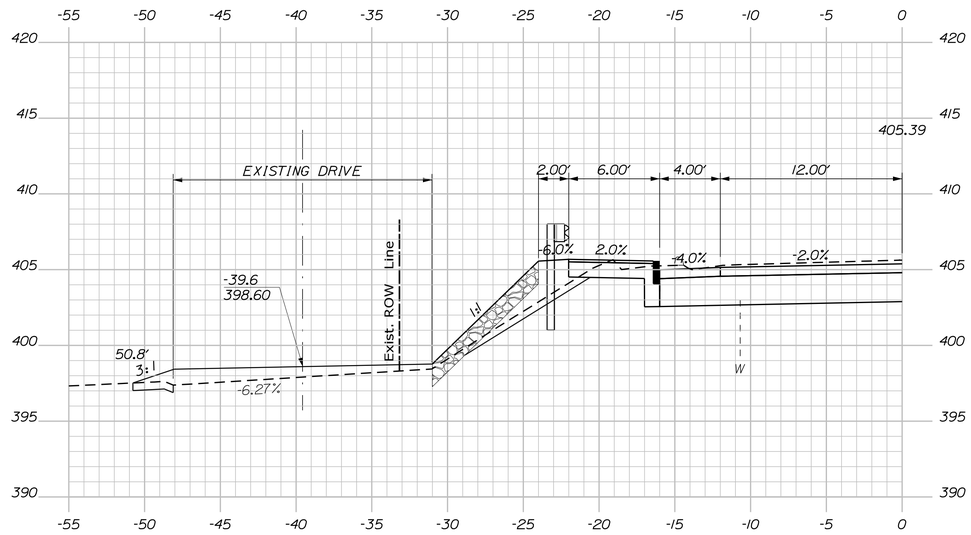
DATE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

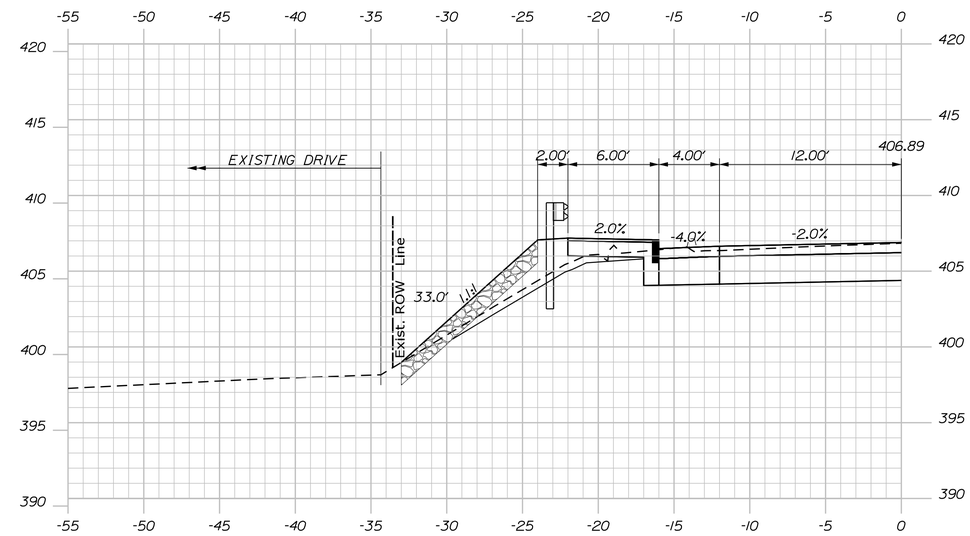
STP-1788(200)

WIN
17882.00

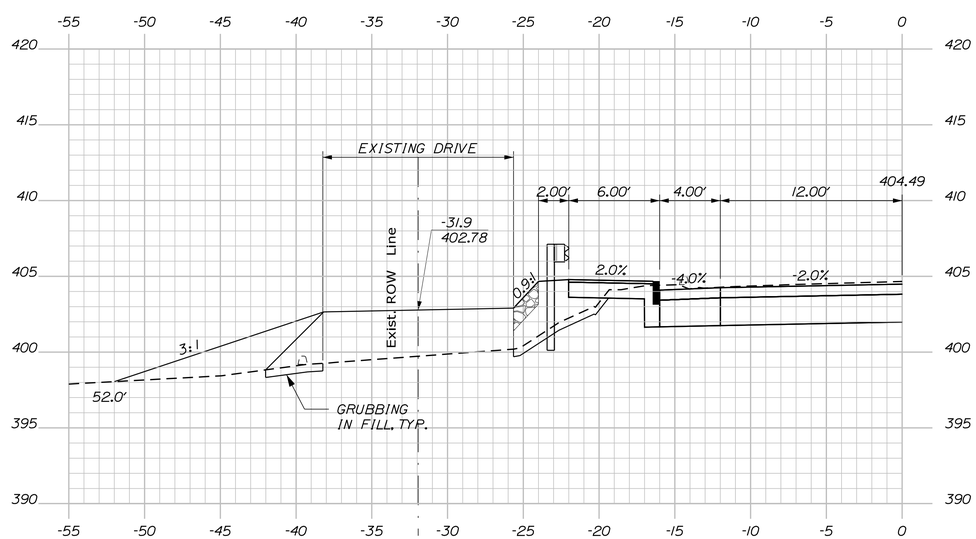
HIGHWAY PLANS



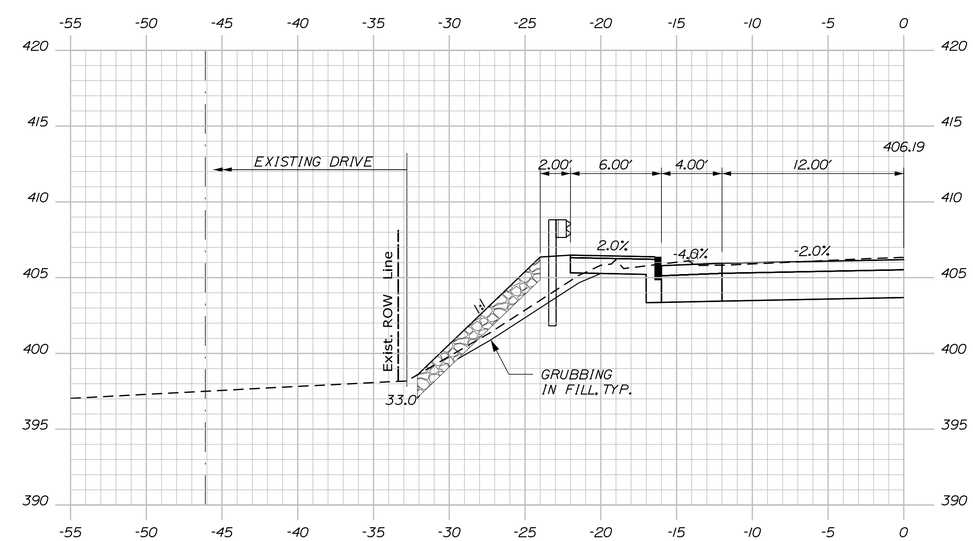
19+00.00



19+40.00



18+80.00



19+20.00

Reinforced Soil Slope Sta. 18+80.00 to Sta. 19+40.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

PROJ. MANAGER RHOBE MOULTON	BY	DATE	
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2	------	------	------
DESIGN3-DETAILED3	------	------	------
REVISIONS 1	------	------	------
REVISIONS 2	------	------	------
REVISIONS 3	------	------	------
REVISIONS 4	------	------	------
FIELD CHANGES	------	------	------

SIGNATURE

P.E. NUMBER

DATE

JAY
ROUTE 4\17

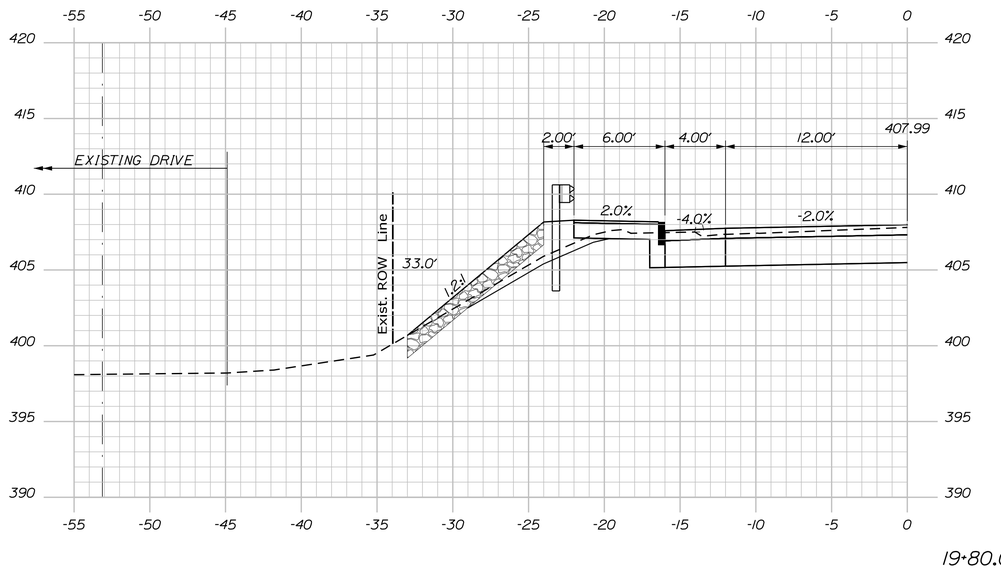
SPECIAL CROSS SECTIONS

SHEET NUMBER

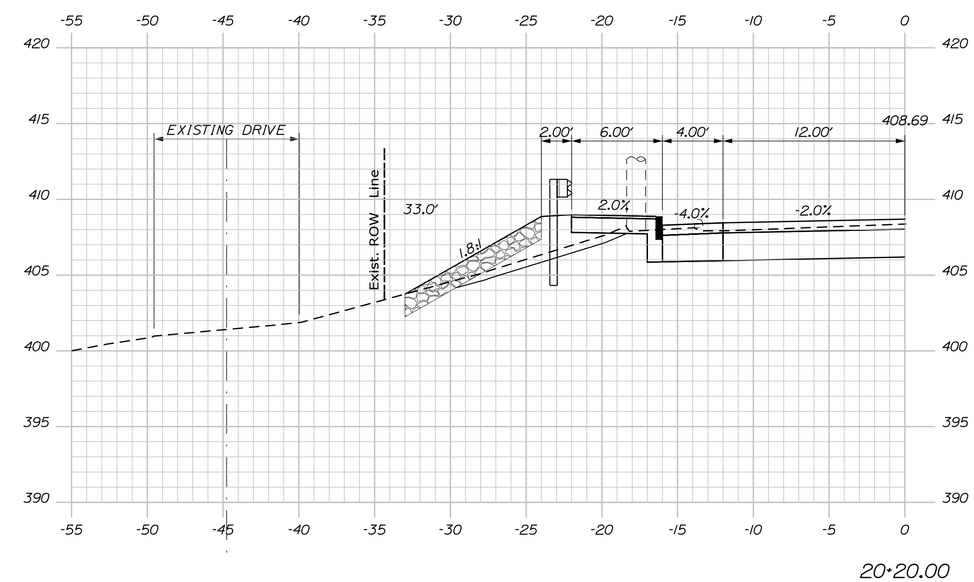
90

OF 102

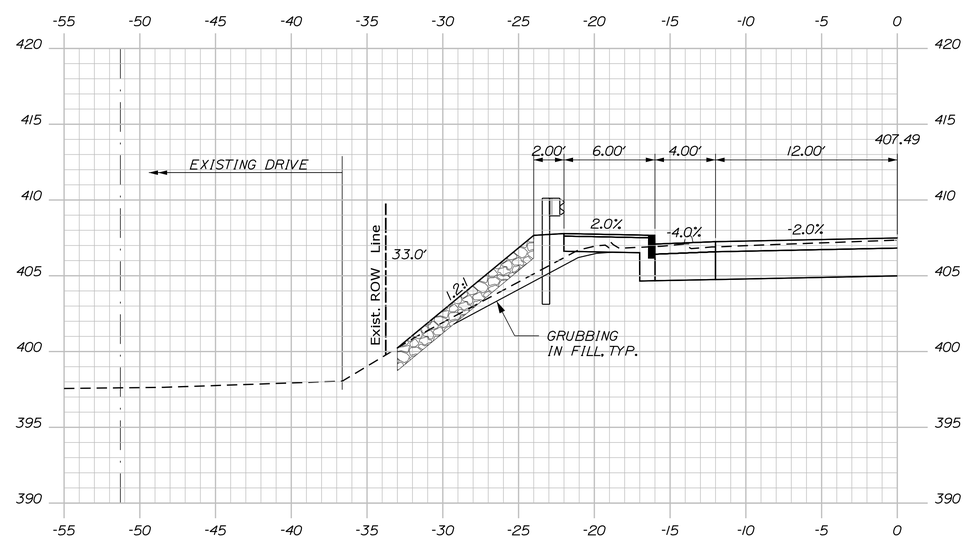
Filename: ...\00\highway\MSTA\090_Xsec.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



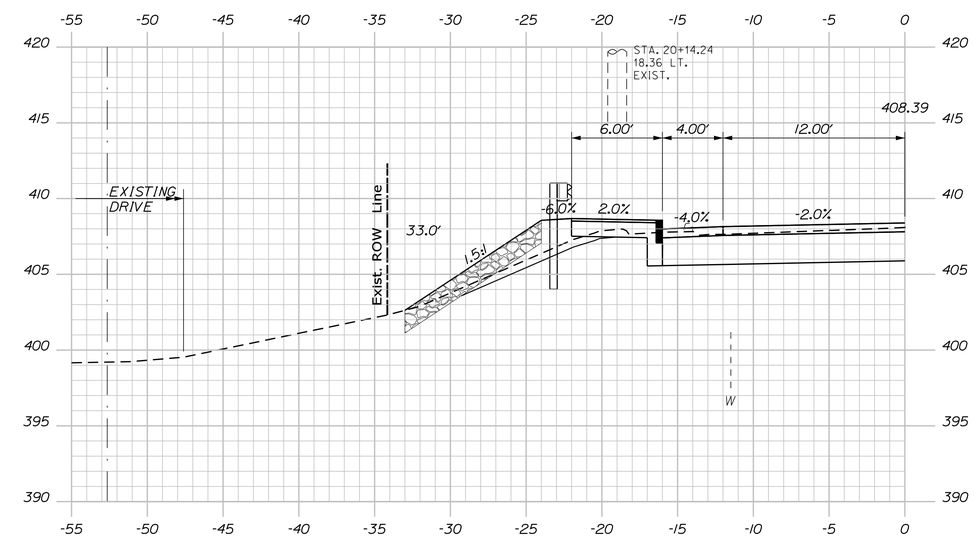
19+80.00



20+20.00



19+60.00



20+00.00

Reinforced Soil Slope Sta. 19+60.00 to Sta. 20+20.00

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

		BY	DATE
PROJ. MANAGER	RHOBE MOULTON		
DESIGN-DETAILED	L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED	D.ETTINGER	D.ETTINGER	7-18-14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

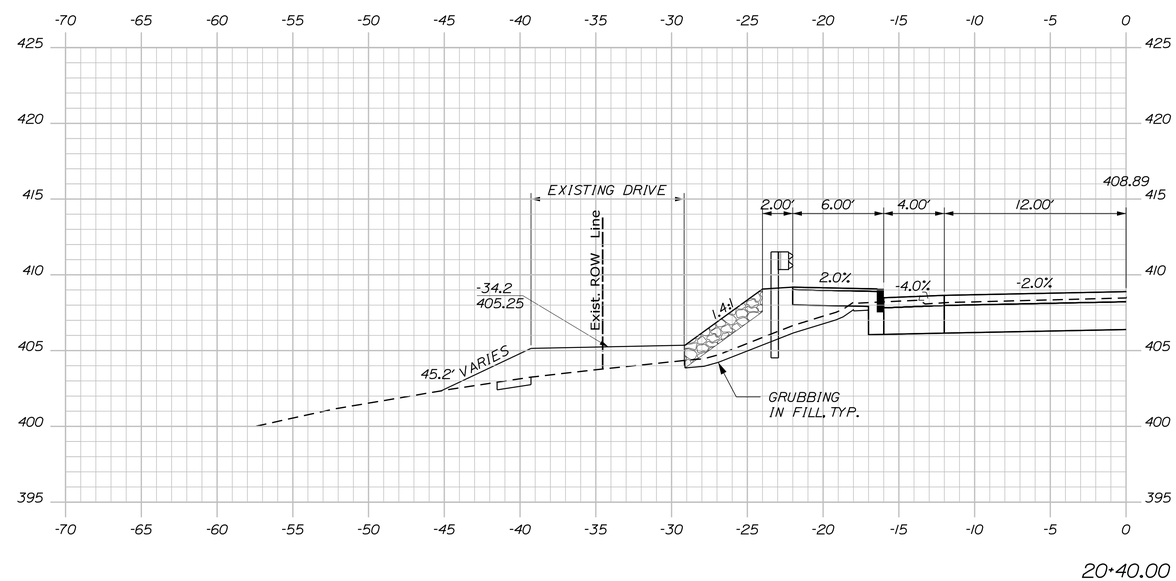
JAY
ROUTE 4\17

SPECIAL CROSS SECTIONS

SHEET NUMBER
91
OF 102

Filename: ...\00\highway\MSTA\090_Xsec.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014

Filename: ...\00\highway\MSTA\090_Xsec.dgn Division: HIGHWAY Username: bhavu Date:8/15/2014



PROJ. MANAGER RHOBE MOULTON	BY	DATE
DESIGN-DETAILED L.MEEK	L.NEWHOUSE	7-18-14
CHECKED-REVIEWED D.ETTINGER	D.ETTINGER	7-18-14
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

STP-1788(200)

WIN
17882.00

HIGHWAY PLANS

JAY
ROUTE 4\17

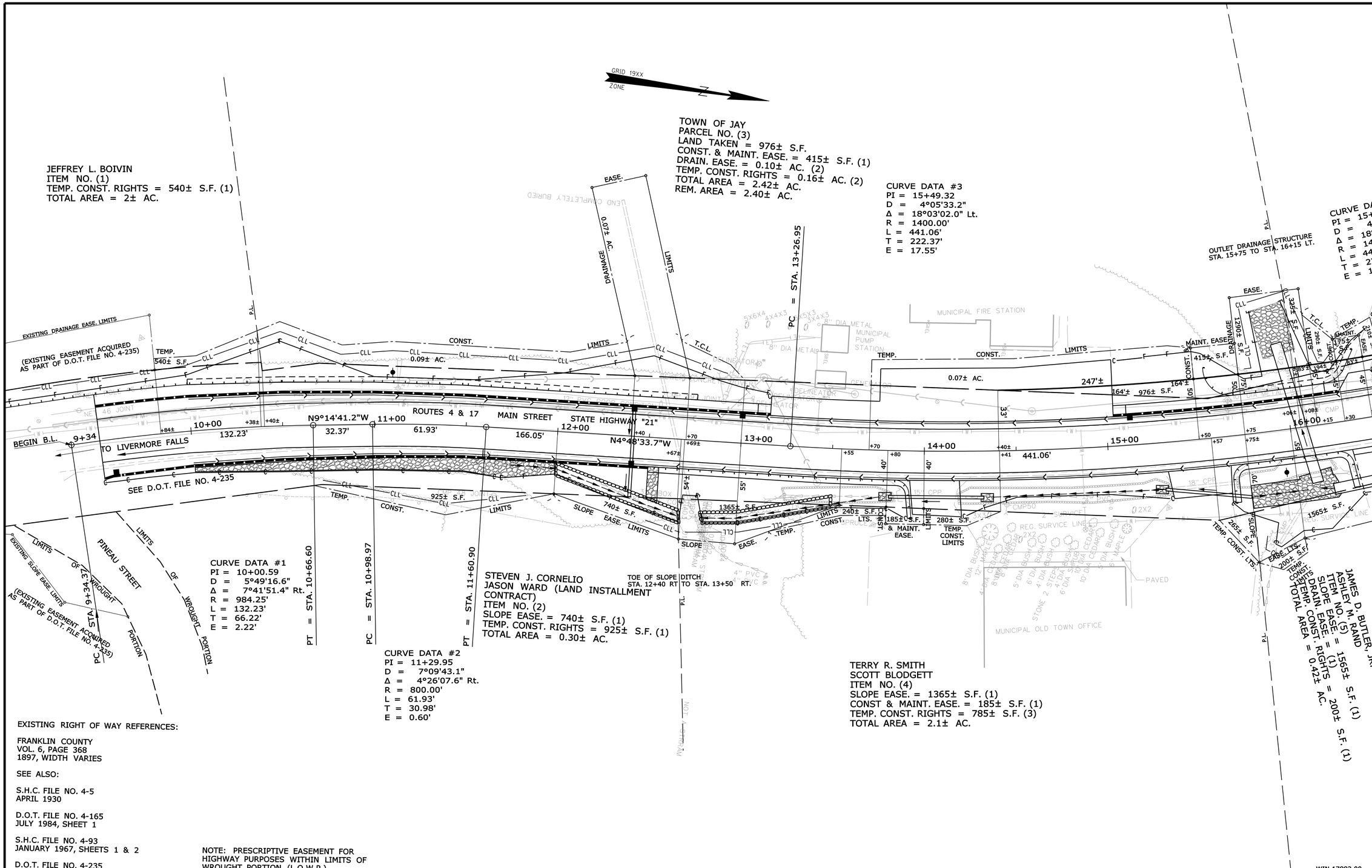
SPECIAL CROSS SECTIONS

SHEET NUMBER

92

OF 102

Reinforced Soil Slope Sta. 20+40.00 to Sta. 20+40.00



EXISTING RIGHT OF WAY REFERENCES:

FRANKLIN COUNTY
VOL. 6, PAGE 368
1897, WIDTH VARIES

SEE ALSO:

S.H.C. FILE NO. 4-5
APRIL 1930

D.O.T. FILE NO. 4-165
JULY 1984, SHEET 1

S.H.C. FILE NO. 4-93
JANUARY 1967, SHEETS 1 & 2

D.O.T. FILE NO. 4-235

NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)

SYMBOLS

- IP or IPF (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- BM (TRAVERSE POINT)
- (ROW MONUMENT)
- (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- P.L.
- LIMITS OF WROUGHT 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	PNS	
PROP. LINES	PNS	PNS
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

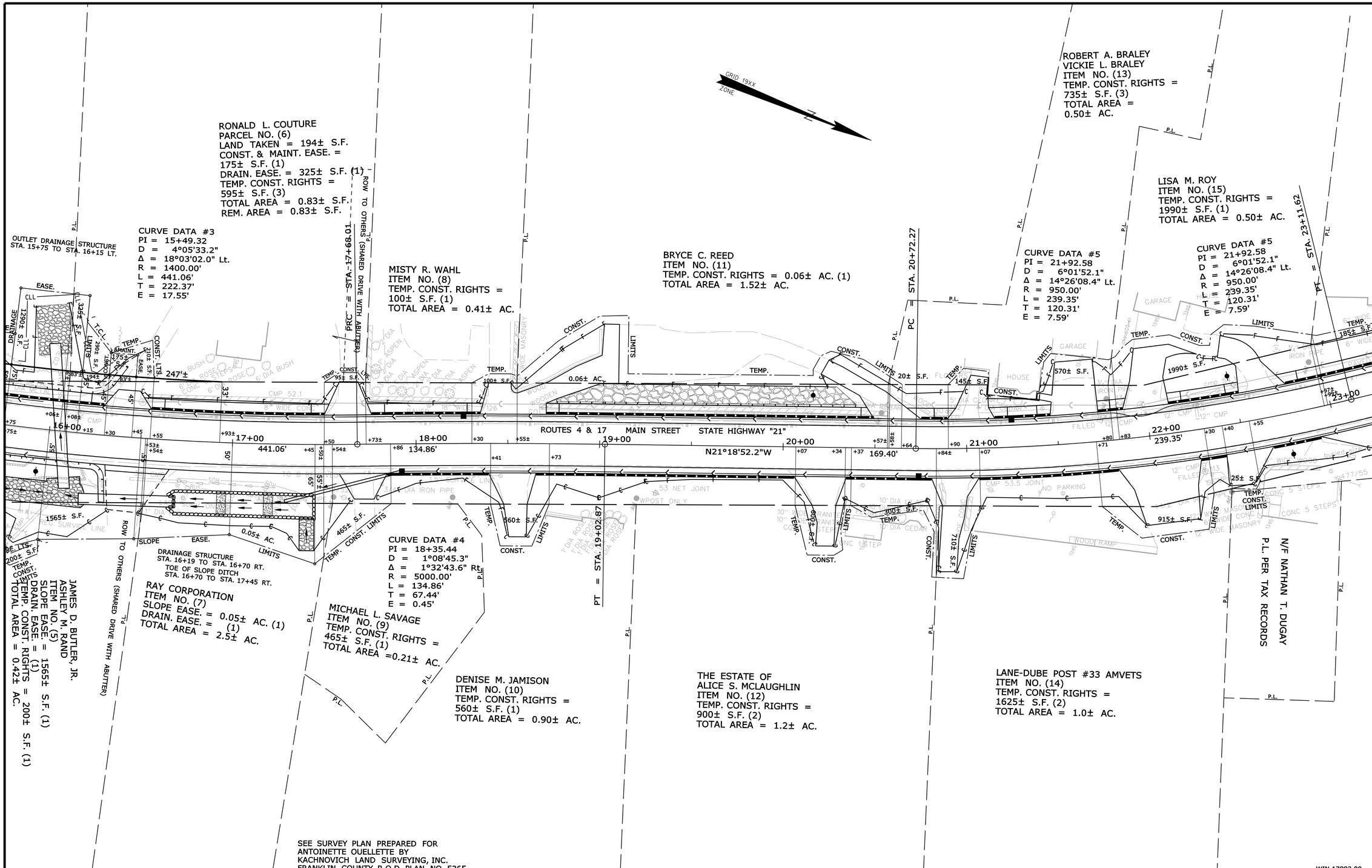
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 4-257
SCALE 1" = 25' | SHEET 1 OF 10

SHEET NUMBER
93
OF 102

Filename: ...\00\ROW\MSTA\001_RWPLAN1.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SYMBOLS

- ● IP or ● PIP (IRON PIPE or PIN FOUND)
- ☐ ST. (SEPTIC TANK)
- ☒ (ROW MONUMENT)
- ☒BM (TRAVERSE POINT)
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE - PL -
- LIMITS OF "ROW" (RIGHT-OF-WAY 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	PNS	
PROP. LINES	PNS	
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE	

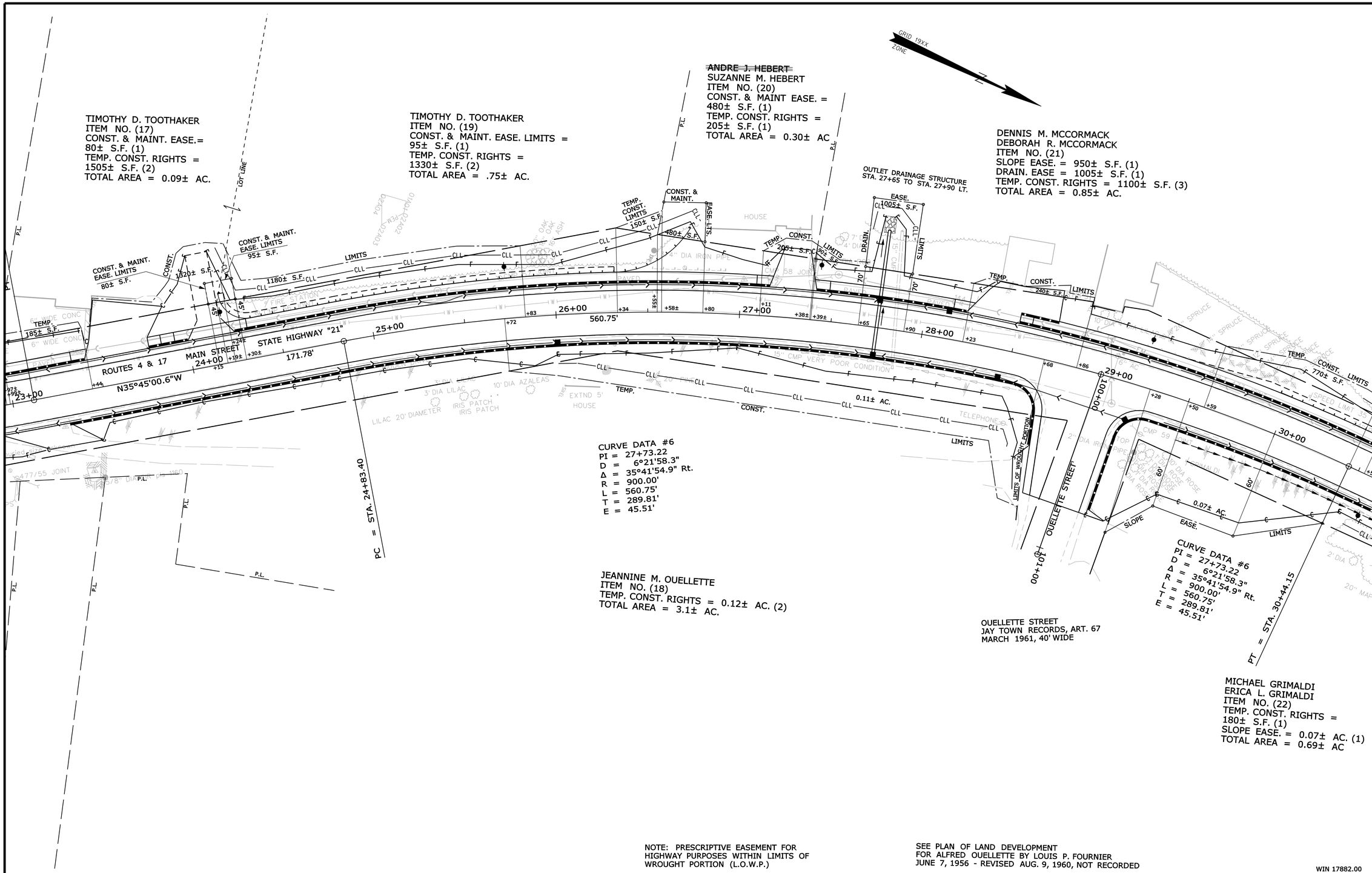
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 4-257
SCALE 1" = 25'	SHEET 2 OF 10	

SHEET NUMBER
94
OF 102

Filename: ...\00\ROW\MSTA\002_RWPLAN2.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



NOTE: PRESCRIPTIVE EASEMENT FOR HIGHWAY PURPOSES WITHIN LIMITS OF WROUGHT PORTION (L.O.W.P.)

SEE PLAN OF LAND DEVELOPMENT FOR ALFRED OUELLETTE BY LOUIS P. FOURNIER JUNE 7, 1956 - REVISED AUG. 9, 1960, NOT RECORDED

WIN 17882.00

SYMBOLS

- ● IP or ● P/P (IRON PIPE or PIN FOUND)
- ☐ S.T. (SEPTIC TANK)
- ▣ (ROW MONUMENT)
- ⚓BM (TRAVERSE POINT)
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF WROUGHT PORTION (L.O.W.P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- W WATER LINE
- G GAS LINE
- E ELECTRIC LINE
- T TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	PNS	
PROP. LINES	PNS	
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE	

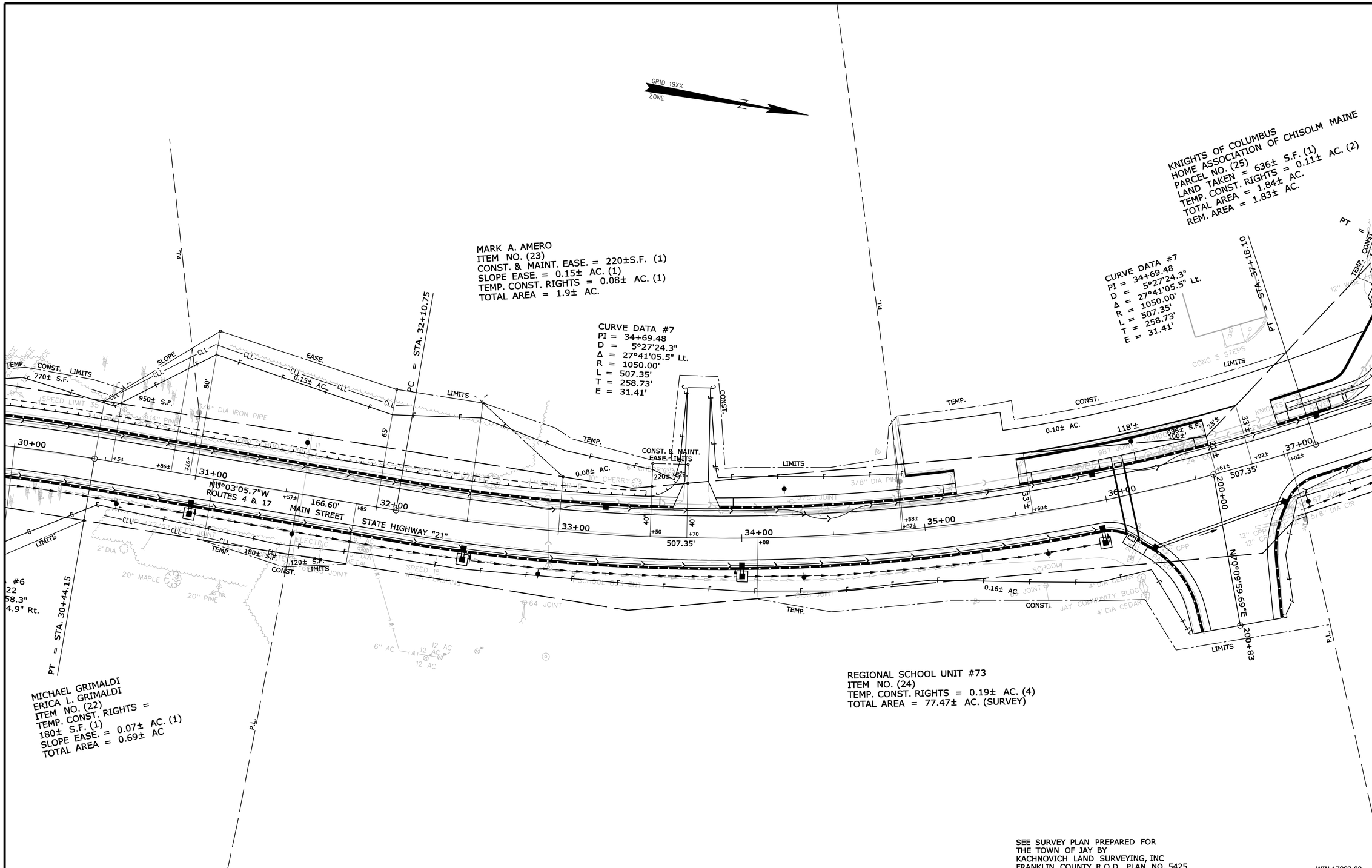
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 4-257
SCALE 1" = 25' | SHEET 3 OF 10

SHEET NUMBER
95
OF 102

Filename: ...\00\ROW\MSTA\003_RWPLAN3.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SEE SURVEY PLAN PREPARED FOR
THE TOWN OF JAY BY
KACHNOVICH LAND SURVEYING, INC
FRANKLIN COUNTY R.O.D. PLAN NO. 5425

WIN 17882.00

SYMBOLS

- ○WELL (WELL)
- GROUNDING UNIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- LIMITS OF "MRO" RIGHT TO PORTION (L.O.M.P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- IP or ●IPF (IRON PIPE or PIN FOUND)
- S.T. (SEPTIC TANK)
- (ROW MONUMENT)
- ⊕BM (TRAVERSE POINT)
- WATER LINE
- GAS LINE
- ELECTRIC LINE
- TELEPHONE LINE
- SEWER LINE

ITEM	CHECKED	TECH	
BASE MAP			
EXIST. R/W		PNS	
PROP. LINES		PNS	
AREAS		T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD		
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER

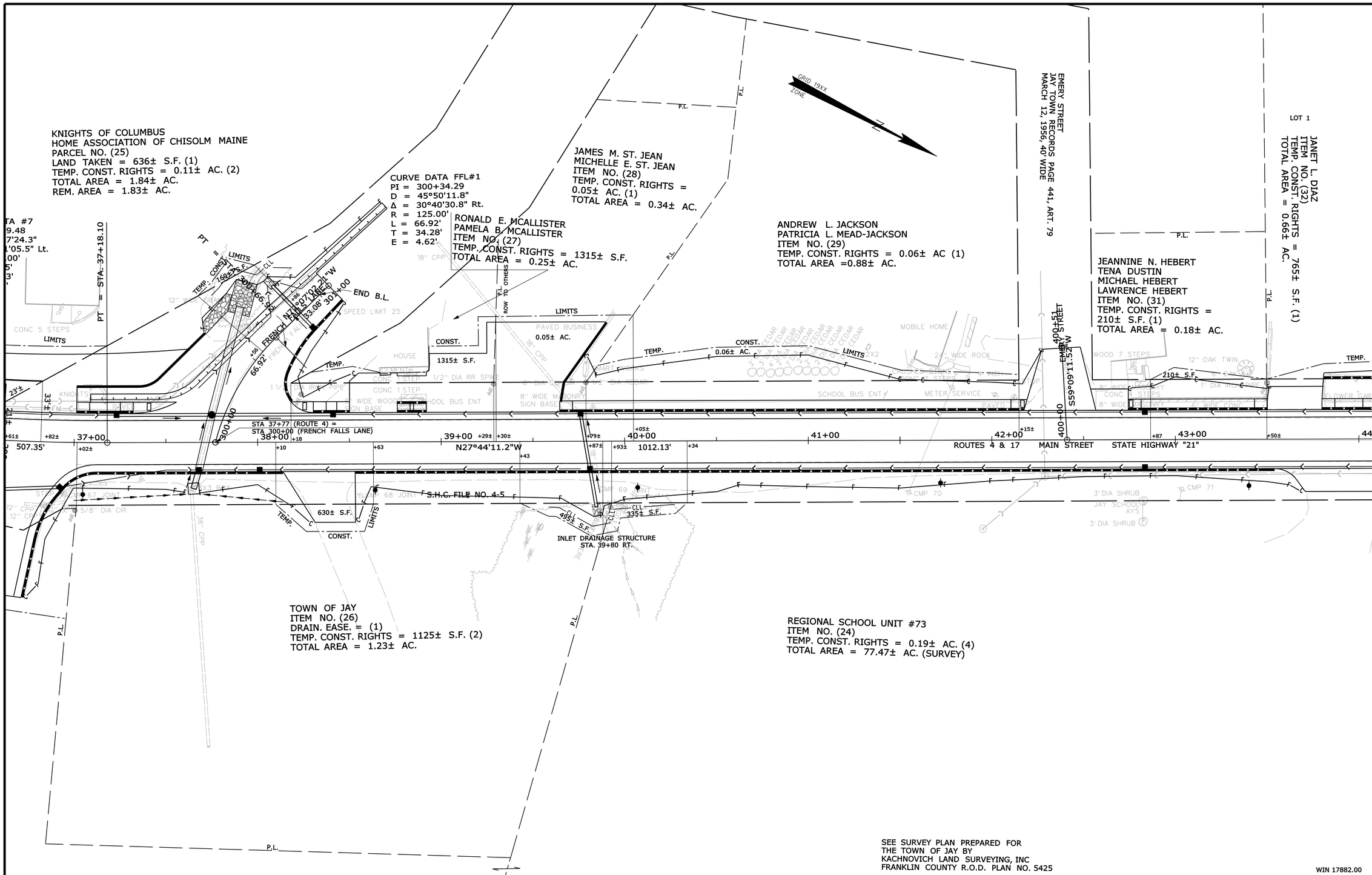
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 4-257
SCALE 1" = 25'	SHEET 4 OF 10	

SHEET NUMBER
96
OF 102

Filename: ...\00\ROW\MSTA\004_RWPLAN4.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SYMBOLS

- ● IP or ● IPF (IRON PIPE or PIN FOUND)
- ☐ S.T. (SEPTIC TANK)
- ⊠ &M (TRAVERSE POINT) (ROW MONUMENT)
- (WELL)
- GRADING LIMIT LINE
- CONST. PROPERTY LIMIT LINE
- PROPERTY LINE P.L.
- LIMITS OF "ARROUND" 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	PNS	
PROP. LINES	PNS	
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE		COUNTY RECORD			
NO.	GRANTOR		INSTRUMENT	DATE	BOOK	PAGE	

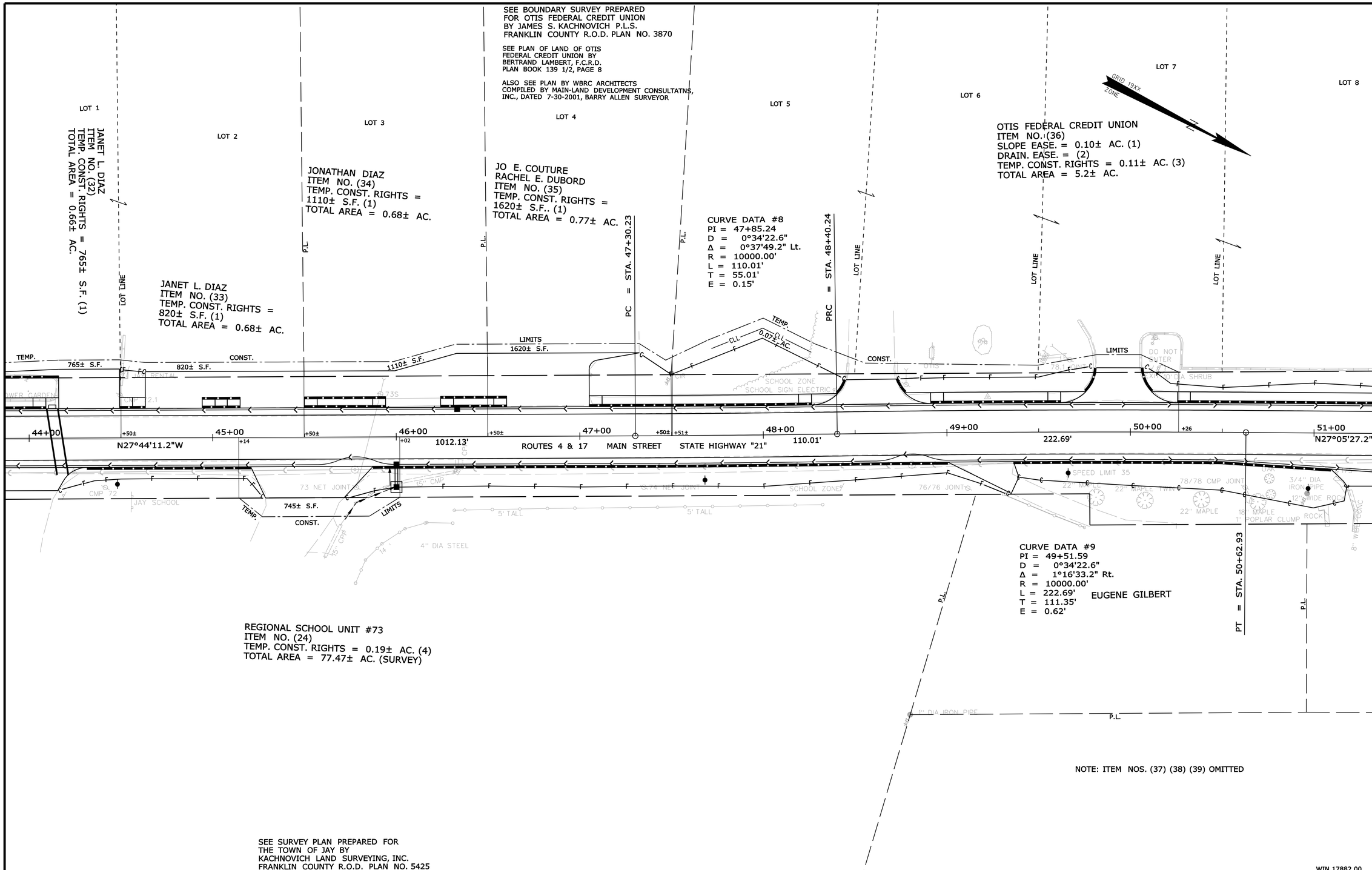
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 4-257
SCALE 1" = 25' | SHEET 5 OF 10

SHEET NUMBER
97
OF 102

Filename: ...\00\ROW\MSTA\005_RWPLAN5.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SYMBOLS

- ● IP or ● IPF (IRON PIPE or PIN FOUND)
- ☐ S.T. (SEPTIC TANK)
- ⊠ (ROW MONUMENT)
- ⊠BM (TRAVERSE POINT)
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE
- PL
- LIMITS OF "ARROUGHT" PORTION (L.O.W.P.)
- EXISTING RIGHT OF WAY
- NEW RIGHT OF WAY
- NEW ROW WITHIN EXIST. ROW
- CONTROL OF ACCESS
- W WATER LINE
- G GAS LINE
- E ELECTRIC LINE
- T TELEPHONE LINE
- SEWER LINE

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	PNS	
PROP. LINES	PNS	
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE	

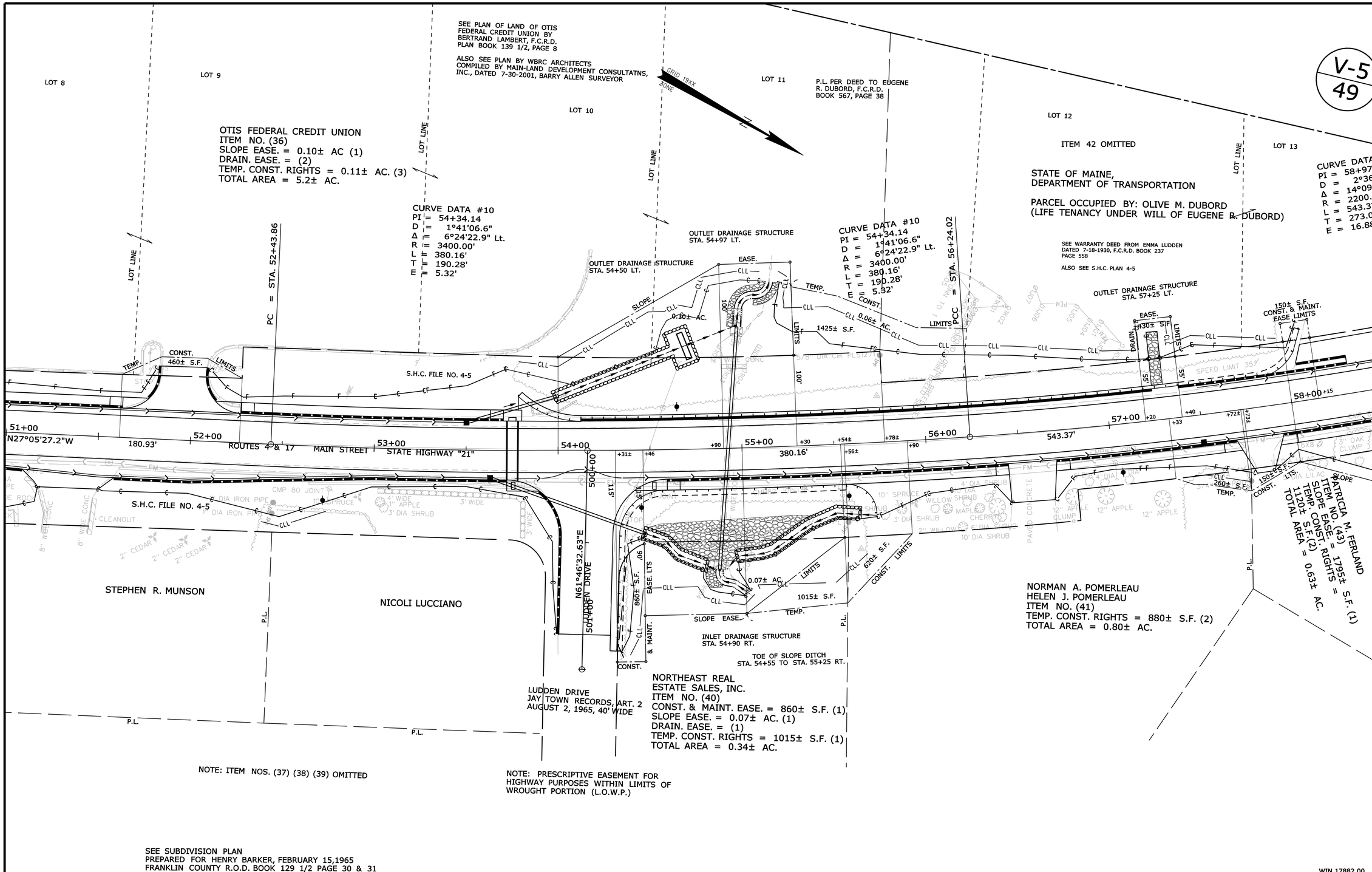
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 4-257
SCALE 1" = 25' | SHEET 6 OF 10

SHEET NUMBER
98
OF 102

Filename: ...\00\ROW\MSTA\006_RWPLAN6.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SYMBOLS

- IP or PIPE (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- BM (TRAVERSE POINT)
- WELL
- BEGINNING LIMIT LINE
- CONST. PROPERTY LIMIT LINE
- LIMITS OF WROUGHT 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	CHECKED	TECH	
BASE MAP			
EXIST. R/W		PNS	
PROP. LINES		PNS	T.L.B.
AREAS		T.L.J.	

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

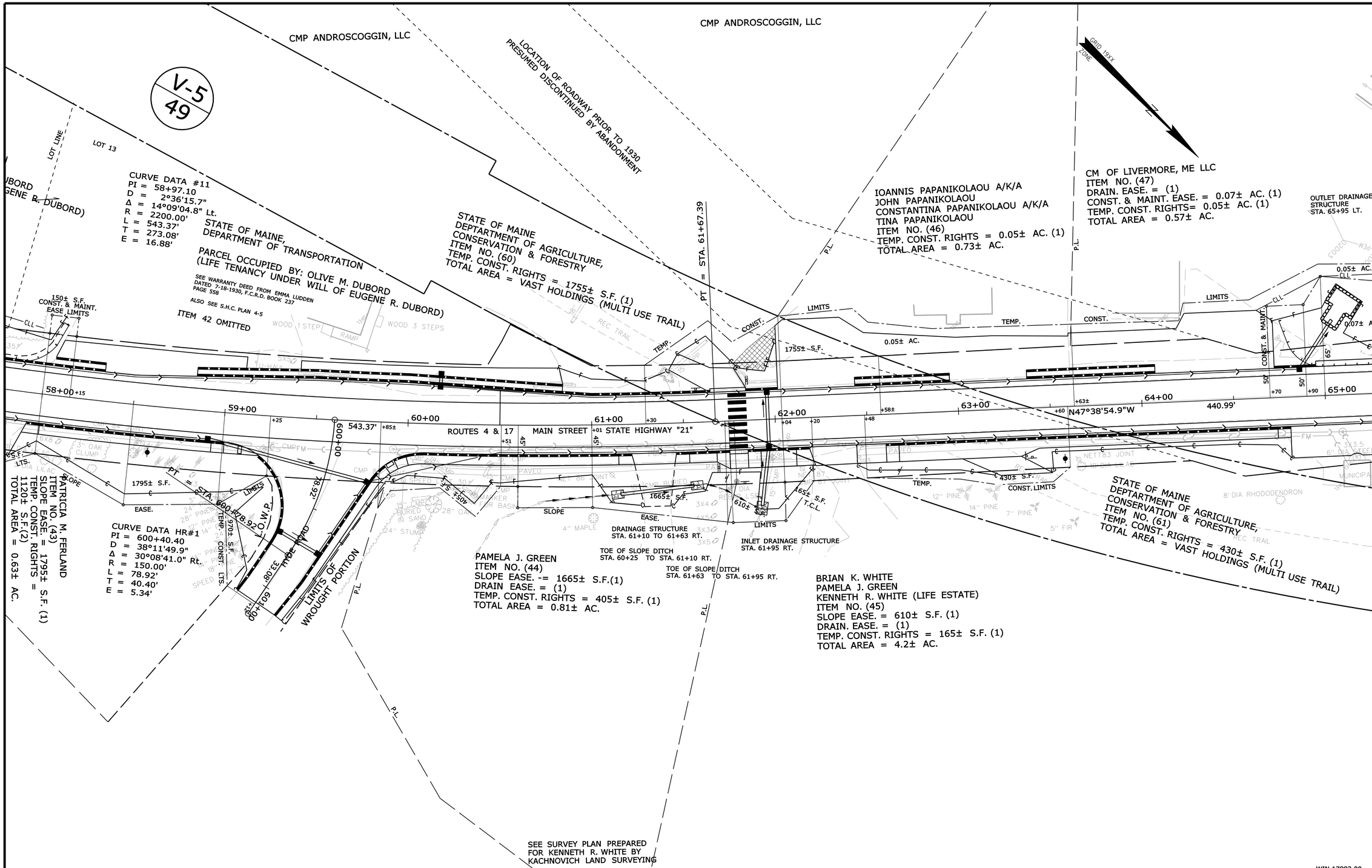
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 4-257
SCALE 1" = 25' | SHEET 7 OF 10

SHEET NUMBER
99
OF 102

Filename: ...\00\ROW\MSTA\007_RWPLAN7.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SYMBOLS

- ● IP or ● P/F (IRON PIPE or PIN FOUND)
- ○ ST. (SEPTIC TANK)
- ▣ (ROW MONUMENT)
- &BM (TRAVERSE POINT)
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE - P.L.
- LIMITS OF WROUGHT 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	PNS	
PROP. LINES	PNS	PNS
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE	

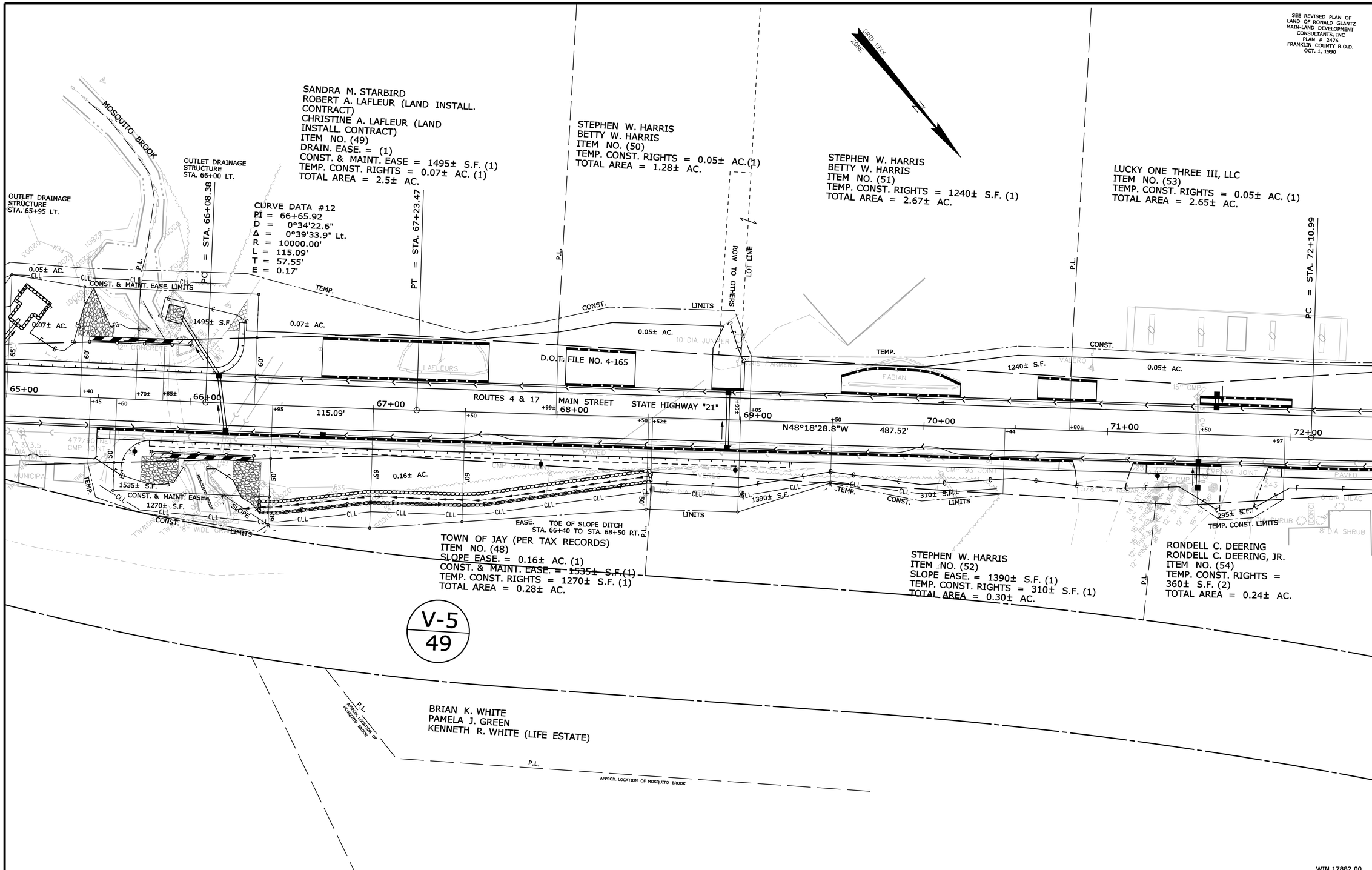
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 4-257
SCALE 1" = 25'	SHEET 8 OF 10	

SHEET NUMBER
100
OF 102

Filename: ...\00\ROW\MSTA\008_RWPLAN8.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SYMBOLS

- ● IP or ● P/P (IRON PIPE or PIN FOUND)
- ☐ S.T. (SEPTIC TANK)
- ⊠ (ROW MONUMENT)
- &BM (TRAVERSE POINT)
- ○WELL (WELL)
- GRADING LIMIT LINE
- CONSTRUCTION LIMIT LINE
- PROPERTY LINE - P.L. -
- LIMITS OF "ROW RIGHT TO PATION (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	PNS	
PROP. LINES	PNS	
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS			
NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK		PAGE	COUNTY RECORD			
NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

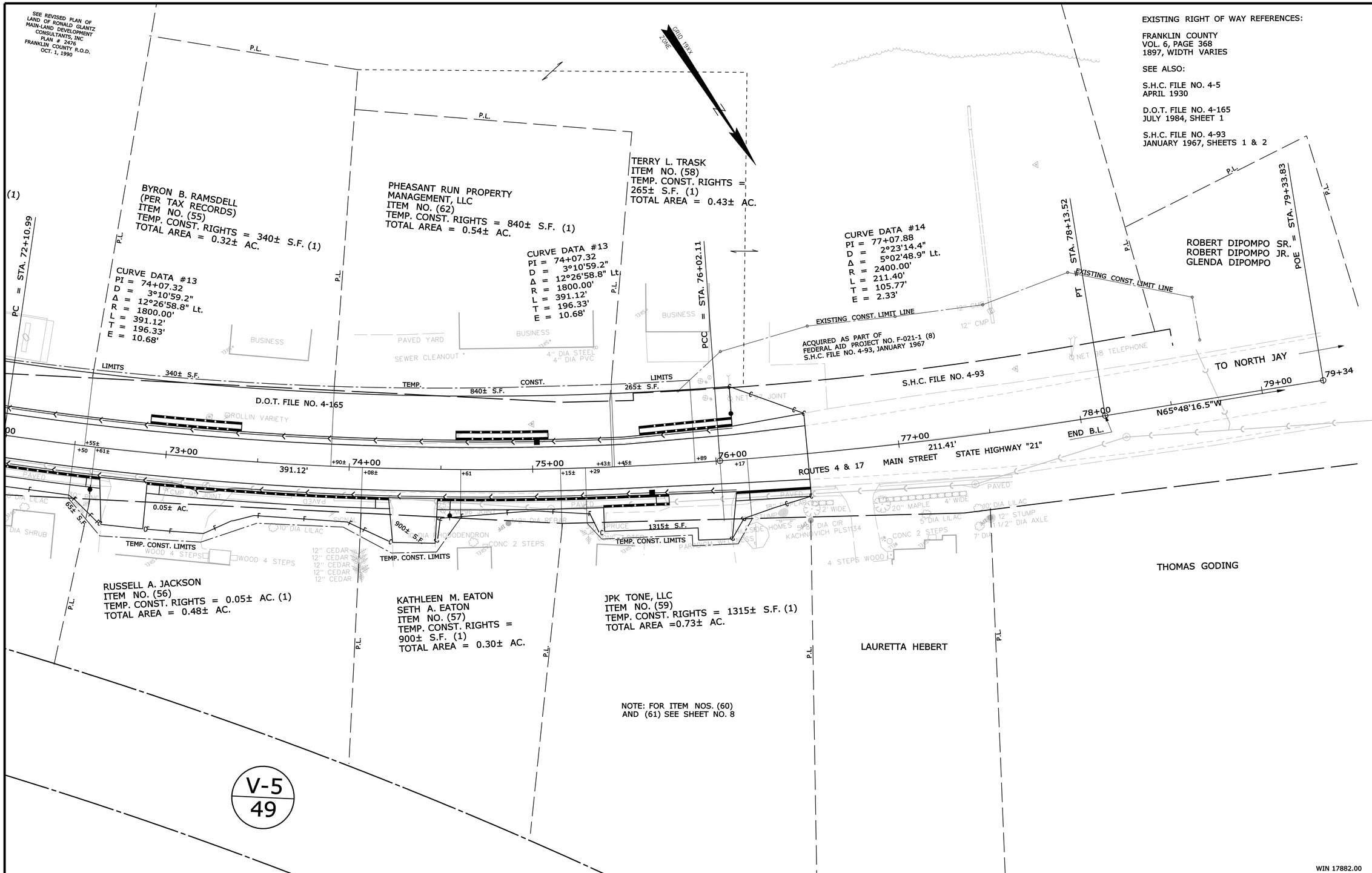
DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER
DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014 | RIGHT-OF-WAY MAP | D.O.T. FILE NO. 4-257
SCALE 1" = 25' | SHEET 9 OF 10

SHEET NUMBER
101
OF 102

Filename: ...\00\ROW\MSTA\009_RWPLAN9.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014



SYMBOLS

- IP or IPF (IRON PIPE or PIN FOUND)
- ST. (SEPTIC TANK)
- (ROW MONUMENT)
- BM (TRAVERSE POINT)
- WELL
- GROUNDING UNIT LINE
- CONTROLLED ACCESS LINE
- PROPERTY LINE
- LIMITS OF "VARIOUS" RIGHT OF WAY PORTION (L.O.V.R.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	PNS	
PROP. LINES	PNS	
AREAS	T.L.J.	T.L.B.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
16 STATE HOUSE STATION - AUGUSTA, ME 04333-0016

JAY
RIGHT OF WAY MAP

REVISIONS

NO.	DATE	DESCRIPTION	BY

PLAN FILED IN PLAN BOOK PAGE COUNTY RECORD

NO.	GRANTOR	INSTRUMENT	DATE	BOOK	PAGE

DAVID BERNHARDT
COMMISSIONER
JOYCE NOEL TAYLOR
CHIEF ENGINEER

DATE

STATE HIGHWAY "21"
MAIN STREET\ROUTES 4 & 17
JAY FRANKLIN COUNTY
FEDERAL AID PROJECT NO. STP-1788(200)

JUNE 2014	RIGHT-OF-WAY MAP	D.O.T. FILE NO. 4-257
SCALE 1" = 25'	SHEET 10 OF 10	

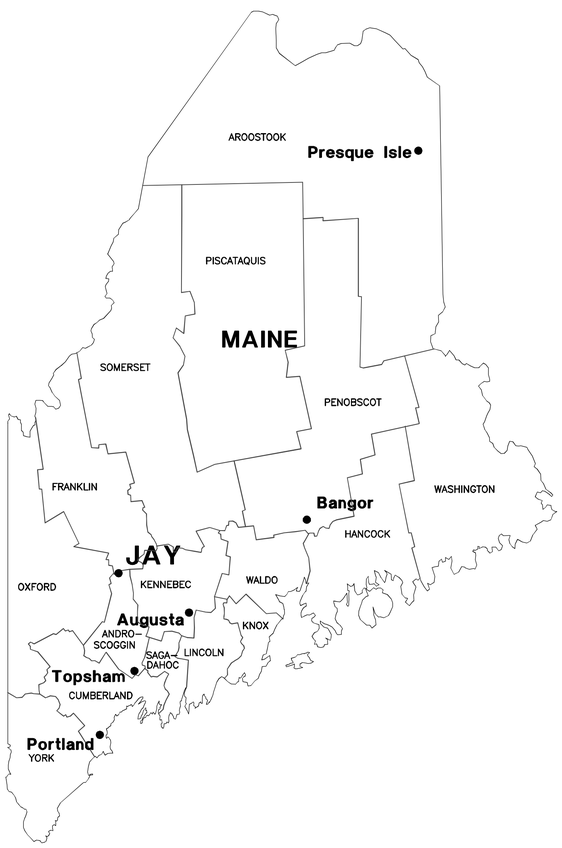
SHEET NUMBER
102
OF 102

Filename: ...\00\ROW\MSTA\010_RWPLAN10.dgn Division: HIGHWAY Username: Rhobe.Moulton Date:8/7/2014

JAY, MAINE

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
TOWN OF JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT PROJECT
WIN 17882.00

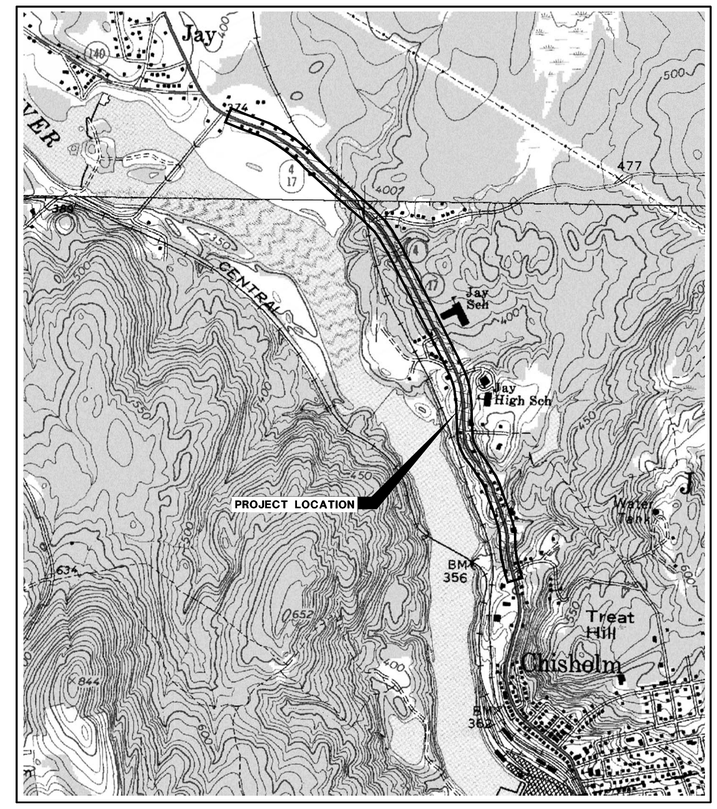
JULY 2014



STATE OF MAINE
JEFFREY D. PREBLE
NO. 6390
PROFESSIONAL ENGINEER
7-31-14

DRAWING INDEX

SHEET NO.	DRAWING	TITLE
1	–	COVER SHEET
2	C–1	GENERAL NOTES, LEGEND & ABBREVIATIONS
3	C–2	DRAWING INDEX PLAN
4	C–3	PLAN AND PROFILE: MAIN STREET STA. 9+00 TO STA. 13+50
5	C–4	PLAN AND PROFILE: MAIN STREET STA. 13+50 TO STA. 18+50
6	C–5	PLAN AND PROFILE: MAIN STREET STA. 18+50 TO STA. 23+50
7	C–6	PLAN AND PROFILE: MAIN STREET STA. 23+50 TO STA. 28+50
8	C–7	PLAN AND PROFILE: MAIN STREET STA. 28+50 TO STA. 33+50
9	C–8	PLAN AND PROFILE: MAIN STREET STA. 33+50 TO STA. 38+50
10	C–9	PLAN AND PROFILE: FRENCH FALLS LANE STA. 300+00 TO STA. 303+56
11	C–10	PLAN AND PROFILE: MAIN STREET STA. 38+50 TO STA. 43+50
12	C–11	PLAN AND PROFILE: MAIN STREET STA. 43+50 TO STA. 48+50
13	C–12	PLAN AND PROFILE: MAIN STREET STA. 48+50 TO STA. 53+50
14	C–13	PLAN AND PROFILE: MAIN STREET STA. 53+50 TO STA. 58+50
15	C–14	PLAN AND PROFILE: MAIN STREET STA. 58+50 TO STA. 63+50
16	C–15	PLAN AND PROFILE: MAIN STREET STA. 63+50 TO STA. 68+50
17	C–16	PLAN AND PROFILE: MAIN STREET STA. 68+50 TO STA. 73+50
18	C–17	PLAN AND PROFILE: MAIN STREET STA. 73+50 TO STA. 78+50
19	C–18	WATER MAIN PHASING AND CONNECTION DETAILS
20	C–19	CIVIL DETAILS I
21	C–20	CIVIL DETAILS II



LOCATION PLAN

SCALE: 1" = 750'

WRIGHT-PIERCE
Engineering a Better Environment

Offices Throughout New England
888.621.8156 | www.wright-pierce.com

FOR REVIEW 12523B
FOR BIDDING 08/1/14
WP PROJECT NO. 12524B/12535B

LAST SAVED BY: RXB 7/31/2014 8:39 AM

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-1.DWG | general notes | 1:4.56 | ---- | 8/19/2014 11:36:25 AM | RXB

GENERAL NOTES

1. THE CONTRACTOR IS REFERRED TO THE SPECIFICATIONS REGARDING COORDINATION WITH OTHERS, INCLUDING RESPONSIBILITIES AND RELATED COSTS.
2. REFER TO THE MDOT SPECIFICATIONS FOR UTILITY CONTRACT INFORMATION. THE CONTRACTOR SHALL ASCERTAIN THE LOCATION AND SIZE OF EXISTING WATER AND SEWER UTILITIES IN THE FIELD WITH THE RESPECTIVE UTILITY COMPANY REPRESENTATIVE.
3. WATER AND SEWER IMPROVEMENTS ARE SLATED TO BE CONSTRUCTED IN CONJUNCTION WITH THE ROUTE 4 IMPROVEMENTS PROJECT BY THE MAINE DEPARTMENT OF TRANSPORTATION.
4. ALL EXISTING SEWER AND WATER LINES ENCOUNTERED DURING CONSTRUCTION ARE TO REMAIN IN SERVICE. ANY EXISTING SEWERS OR WATER LINES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO AND TO THE SATIFACTION OF THE OWNER.
5. ALL STRUCTURES AND PIPELINES LOCATED ADJACENT TO THE TRENCH EXCAVATION SHALL BE PROTECTED AND FIRMLY SUPPORTED BY THE CONTRACTOR UNTIL THE TRENCH IS BACKFILLED. INJURY TO ANY SUCH STRUCTURES CAUSED BY, OR RESULTING FROM, THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE. ALL UTILITIES REQUIRING REPAIR, RELOCATION OR ADJUSTMENT AS A RESULT OF THE PROJECT SHALL BE COORDINATED THROUGH THE RESPECTIVE UTILITY.
6. IN THOSE INSTANCES WHERE POWER OR TELEPHONE POLE SUPPORT IS REQUIRED, THE CONTRACTOR SHALL PROVIDE A MINIMUM 48–HOUR NOTIFICATION TO THE RESPECTIVE UTILITY COMPANY. NO ADDITIONAL PAYMENT WILL BE PROVIDED FOR TEMPORARY BRACING OF UTILITIES.
7. DO NOT SCALE DRAWINGS UNLESS OTHERWISE NOTED. WRITTEN DIMENSIONS AND STATIONING SHALL PREVAIL. REPORT ANY DISCREPANCIES TO THE ENGINEER IMMEDIATELY.
8. REFER TO THE MAINE DEPARTMENT OF TRANSPORTATION REQUIREMENTS CONTAINED IN THE MDOT PROJECT MANUAL FOR MAINTAINING TRAFFIC FLOW SECTION 652.
9. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY RIGHTS OF WAY AND EASEMENTS. THE CONTRACTOR SHALL VERIFY THAT THE NECESSARY EASEMENTS HAVE BEEN SECURED BY THE OWNER. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO BE FAMILIAR WITH THE APPLICABLE PROVISIONS OF EACH EASEMENT AS THEY APPLY TO THE WORK PRIOR TO BIDDING AND ABIDE BY THOSE PROVISIONS DURING CONSTRUCTION.
10. COMPACTION TESTS SHALL BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 02200.
11. ALL ROAD, PARKING, AND PATH AREA SURFACES OUTSIDE OF THE MDOT WORK AREA SHALL PITCH 1/4 INCH PER FOOT MINIMUM UNLESS OTHERWISE NOTED.
12. THE CONTRACTOR SHALL NOTIFY RESIDENTS IN PERSON OR IN WRITING 24 HOURS IN ADVANCE OF WORKING ON WATER OR SEWER UTILITIES IN AN AREA.
13. ANY PAVEMENT TO BE REMOVED OUTSIDE OF MDOT WORK AREA SHALL BE SAWCUT PRIOR TO REMOVAL.
14. THE CONTRACTOR SHALL REGRADE ALL DISTURBED AREAS OUTSIDE OF THE MDOT WORK AREA AS NECESSARY FOR POSITIVE DRAINAGE.
15. ALL TEST PITS SHALL BE EXCAVATED PRIOR TO CONSTRUCTION LAYOUT AND RESULTS REPORTED TO ENGINEER FOR REVIEW FOR CONFORMANCE WITH PLANS. TEST PITS ARE REQUIRED AS NEEDED TO DETERMINE EXISTING UTILITY LOCATION AND AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF ALL PROPOSED LINES AND STRUCTURES AS SHOWN ON THE DRAWINGS. THE LAYOUT PLAN SHALL BE REVIEWED BY THE ENGINEER PRIOR TO CONSTRUCTION. TEST PITS SHALL NOT BE UTILIZED FOR SEWER SERVICE LOCATES.
16. CONTRACTOR SHALL REMOVE AND REPLACE, OR REPAIR, ALL CURBS, SIDEWALKS, PAVEMENT AND OTHER ITEMS DAMAGED BY HIS CONSTRUCTION ACTIVITIES TO AT LEAST THEIR ORIGINAL CONDITION, AND TO THE SATISFACTION OF THE OWNER AND ENGINEER FOR WORK OUTSIDE OF THE MDOT PROJECT AREA.
17. WHERE EXISTING PAVEMENT IS REMOVED AND REPLACED OUTSIDE OF MDOT PROJECT AREA, MATCH EXISTING GRADES TO THE EXTENT POSSIBLE. COORDINATE FINAL GRADING WITH THE ENGINEER, MDOT, AND TOWN OF JAY.
18. THE CONTRACTOR SHALL COORDINATE THE PAVING OF THE ROADS WITH THE OWNER AND MDOT. THE CONTRACTOR SHALL ADJUST EXISTING MANHOLES AND VALVE BOXES (WATER) TO GRADE PRIOR TO PLACEMENT OF FINAL PAVEMENT.
19. AREAS DISTURBED BY THE CONTRACTOR OUTSIDE OF THE MDOT WORK LIMITS SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL EXPENSE TO THE OWNER.
20. EXISTING AND PROPOSED STORM DRAINS SHOWN FOR REFERENCE ONLY, REFER TO MDOT ROADWAY PLANS FOR FURTHER INFORMATION.
21. MINIMUM SEWER SERVICE SIZE WITHIN MDOT RIGHT–OF–WAY SHALL BE 4". PROVIDE FITTINGS AS REQUIRED TO CONNECT TO EXISTING SERVICE.
22. ALL SEWER MANHOLE FRAMES AND COVERS REMOVED FROM THE PROJECT SHALL REMAIN THE TOWN OF JAY PROPERTY AND BE STOCKPILED AT THE JAY HIGHWAY DEPARTMENT. CONTRACTOR SHALL COORDINATE WITH THE TOWN TO DETERMINE THE STOCKPILE LOCATION AT THE HIGHWAY GARAGE PROPERTY.
23. BYPASS PUMPING ARRANGEMENTS SHALL BE COORDINATED WITH THE JAY SEWER DEPARTMENT. REFER TO SPECIFICATION 02751 FOR FURTHER INFORMATION.
24. ALL SEWER SERVICES SHALL BE FIELD LOCATED BY THE CONTRACTOR. KNOWN SEWER SERVICE LOCATIONS ARE INDICATED ON THE PLANS FROM A CCTV INSPECTION COMPLETED BY THE OWNER. NOT ALL SEWER SERVICE LOCATIONS ARE SHOWN ON THE DRAWINGS. ALL SEWER SERVICES SHALL BE CONNECTED TO THE WEST SIDE SEWER MAIN. SEWER MAINS OF EAST SIDE OF ROUTE 4 SHALL BE ABANDONED FROM APPROXIMATE STATION 13+50 TO STATION 33+00.
25. INSERTA TEE CONNECTIONS SHALL BE USED TO CONNECT NEW SEWER SERVICES TO EXISTING SEWER MAINS.
26. ALL FRAMES AND COVERS ON EXISTING SEWER MANHOLES SCHEDULED TO REMAIN SHALL BE REPLACED WITH NEW FRAMES AND COVERS AND ADJUSTED TO MEET PROPOSED FINAL GRADES.
27. SEWER SERVICES SHALL BE REPLACED WITHIN THE MDOT ROW IN AREAS WHERE NEW GRAVITY SEWERS ARE INSTALLED AND AS NOTED IN NOTE 24 ABOVE.
28. IN AREAS WHERE EXISTING GRAVITY SEWERS WILL REMAIN, EXISTING SEWER SERVICES WILL REMAIN UNLESS OTHERWISE DIRECTED BY THE OWNER OR ENGINEER, OR OTHERWISE SHOWN ON THE PLANS.

LAYOUT NOTES

1. PLAN AND PROFILE INFORMATION SHOWN ON THE UTILITY DRAWINGS ARE BASED ON INFORMATION PROVIDED BY MDOT AND GORRILL–PALMER CONSULTING ENGINEERS.
2. FOR HORIZONTAL AND VERTICAL CONTROL REFER TO THE MDOT ROADWAY PROJECT PLANS.

WATER MAIN PIPELINE GENERAL NOTES

1. WHERE NEW PIPING IS TO BE CONNECTED TO EXISTING PIPING, THE CONTRACTOR SHALL FURNISH AND INSTALL ALL ADAPTERS, FITTINGS, AND ADDITIONAL PIPE AS REQUIRED TO COMPLETE THE CONNECTION. CONTRACTOR SHALL VERIFY LOCATION, ELEVATION, ORIENTATION AND MATERIAL OF CONSTRUCTION. TEST PITS SHALL BE USED AS REQUIRED.
2. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHERS. REFER TO SPECIFICATIONS, SECTION 01050.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LAYOUT OF THE NEW WATER MAIN. LAYOUT SHALL BE REVIEWED AND ACCEPTED BY OWNER AND ENGINEER. THE NEW WATER MAIN MUST BE LOCATED WITHIN THE RIGHTS–OF–WAY SHOWN ON THE DRAWINGS. THE EXISTING MAIN SHALL REMAIN OPERATIONAL WHILE THE NEW MAIN IS CONSTRUCTED.
4. MINIMUM DEPTH OF COVER SHALL BE 5'–0" AND MAXIMUM DEPTH OF COVER SHALL BE 7'–0" UNLESS SHOWN OTHERWISE ON THE DRAWINGS. THE NEW MAIN SHALL GENERALLY FOLLOW THE GROUND CONTOUR, HOWEVER, ABRUPT CHANGES IN GRADE SHALL BE AVOIDED. AT LOCAL HIGH POINTS OR WHERE AIR RELEASE VALVES ARE SHOWN, THE CONTRACTOR SHALL SLOPE NEW MAIN AS NEEDED TO MAINTAIN HIGH POINT AT AIR RELEASE VALVE. IF LEDGE IS ENCOUNTERED THE MINIMUM DEPTH OF COVER WILL BE 5'–0". DUE TO UTILITY CONFLICTS THE DEPTH OF COVER SHALL NOT BE LESS THAN 4'–0" AND 2" RIGID BOARD INSULATION SHALL BE USED AS DETAILED. RIGID BOARD INSULATION SHALL BE 40 PSI COMPRESSIVE STRENGTH, DOW STYROFOAM HIGHLOAD 40, CERTIFOAM 40 OR EQUAL.
5. NEW HYDRANTS SHALL BE FIELD LOCATED AND INSPECTED BY THE LIVERMORE FALLS WATER DISTRICT AND JAY VILLAGE WATER DISTRICT.
6. ALL BENDS, TEES, REDUCERS, HYDRANTS AND PLUGS SHALL BE RESTRAINED BY USING CONCRETE THRUST BLOCKS AND GRIP–RINGS OR OTHER METHOD AS SHOWN ON THE DRAWINGS. ANCHOR TEES SHALL BE USED FOR ALL HYDRANT BRANCHES.
7. TEST PRESSURES FOR THE COMBINATION PRESSURE AND LEAKAGE TESTS SHALL BE 150 PSI. TEST DURATION SHALL BE TWO HOURS.
8. TRENCHES SHALL NOT BE LEFT OPEN DURING NON–WORKING HOURS. ALL OPEN PIPES SHALL BE SECURED WITH A WATER–TIGHT PLUG WHEN THE PIPE IS TEMPORARILY BACKFILLED AND WHEN PIPE LAYING IS NOT IN PROGRESS.
9. CONNECTIONS TO EXISTING WATER MAIN SHALL BE COORDINATED WITH THE LIVERMORE FALLS WATER DISTRICT AND/OR JAY VILLAGE WATER DISTRICT.
10. ALL WATER MAINS THAT ARE TO BE LEFT IN PLACE SHALL BE CAPPED WITH A M.J. CAP OR PLUG.
11. CONTINUOUS WATER SERVICE MUST BE MAINTAINED DURING CONSTRUCTION. TEMPORARY PIPING WILL NOT BE ALLOWED.
12. ALL EXISTING WATER SERVICES ARE TO BE CONNECTED TO THE NEW MAIN. SERVICES, AS SHOWN ON THE DRAWINGS, ARE FOR THE CONTRACTOR'S CONVENIENCE. THE CONTRACTOR SHALL VERIFY LOCATION, SIZE AND TYPE OF ALL SERVICES. IF NOT LABELED ON THE PLAN, THE SERVICE SHALL BE ASSUMED TO BE THE DISTRICTS MINIMUM SERVICE SIZE OF 3/4–INCH FOR LFWD AND 1" FOR JVWD, UNLESS OTHERWISE NOTED.
13. EXISTING HYDRANTS TO BE STACKED AT AN OWNER APPROVED LOCATION AND REMAIN PROPERTY OF THE DISTRICT.
14. CONTRACTOR SHALL COORDINATE TIE–IN WORK AT TWEEDIE STREET END OF THE PROJECT WITH THE CONTRACTOR CONDUCTING WORK FOR THE JAY VILLAGE WATER DISTRICT TO THE NORTH OF THE PROJECT AREA. (TWEEDIE STREET TO INTERVALE ROAD AND SMITH AVENUE).

ABBREVIATIONS

AC	ASBESTOS CEMENT
CB	CATCH BASIN
CI	CAST IRON PIPE
CMP	CORRUGATED METAL PIPE
CTS	COPPER TUBE SIZE
DI	DUCTILE IRON PIPE
FM	FORCE MAIN
CPE	CORRUGATED POLYETHYLENE
HDPE	HIGH–DENSITY POLYETHYLENE
INV	INVERT ELEVATION
JVWD	JAY VILLAGE WATER DISTRICT
LF	LIVERMORE FALLS
LFWD	LIVERMORE FALLS WATER DISTRICT
MDOT	MAINE DEPARTMENT OF TRANSPORTATION
OHE	OVERHEAD ELECTRICAL
P.C.	POINT OF CURVATURE
PVC	POLYVINYLCHLORIDE
RCP	REINFORCED CONCRETE PIPE
ROW	RIGHT OF WAY
S	SEWER
SD	STORM DRAIN
SMH	SEWER MANHOLE
TYP	TYPICAL
UGE	UNDERGROUND ELECTRIC
W	WATER
UD	UNDERDRAIN

LEGEND

EXISTING		PROPOSED
	PROPERTY/ROW LINE	
	SETBACK LINE	
	EASEMENT LINE	
	CENTERLINE	
	EDGE OF PAVEMENT	
	CURBING	
	EDGE OF GRAVEL	
	EDGE OF CONCRETE	
122	CONTOUR	124
	BUILDING	
	STONEWALL	
	TREELINE	
	CHAIN LINK FENCE	
	STOCKADE FENCE	
	BARB WIRE FENCE	
	RETAINING WALL	
	GUARDRAIL	
8"S	SEWER	8"S
4"FM	SEWER FORCE MAIN	4"FM
4"G	GAS	4"G
8"W	WATER	8"W
15"SD	STORM DRAIN	15"SD
6"UD	UNDERDRAIN	6"UD
12" CMP	CULVERT	12" CMP
UGE	UNDERGROUND ELECTRIC	UGE
OHE	OVERHEAD ELECTRIC	OHE
	IRON PIPE/REBAR	
	DRILLHOLE	
	MONUMENT	
	SURVEY CONTROL POINT	
124.6	SPOT ELEVATION	132.5
SMH	SEWER MANHOLE	SMH
DMH	DRAINAGE MANHOLE	DMH
CB CB	CATCH BASIN	CB CB
EMH	ELECTRIC MANHOLE	EMH
TMH	TELEPHONE MANHOLE	TMH
	SHUTOFF VALVE	
	WATER SERVICE SHUTOFF	
	HYDRANT	
	UTILITY POLE	
	UTILITY POLE W/ GUY	
	UTILITY POLE W/ LIGHT	
	LIGHT POLE	
	BOLLARD	
	CONIFEROUS TREE	
	DECIDUOUS TREE	
	SHRUB	
	EDGE OF WATER	
	STREAM	
	EDGE OF WETLANDS	
	WETLANDS	
	DRAINAGE FLOW	
	DRAINAGE SWALE	
	PAVEMENT MARKINGS	
	SIGN	
MB	MAILBOX	
	TEMPORARY BENCH MARK	
TP–2	TEST PIT	
B–3	TEST BORING	
P–4	TEST PROBE	
MW–5	MONITORING WELL	
	LIMIT OF WORK	
	SILT FENCE	
	RIPRAP	
	RAILROAD	
	MATCHLINE	
	ROCK OUTCROP	
BOTTOM OF EXPLORATION / LEDGE	BORING	

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY RJB
CHECKED BY DDL
DATE 4–29–14
APPROVED BY JDP
DATE 8–1–14
BOOK NO.
PROJECT NO. 12524A
SCALE AS SHOWN

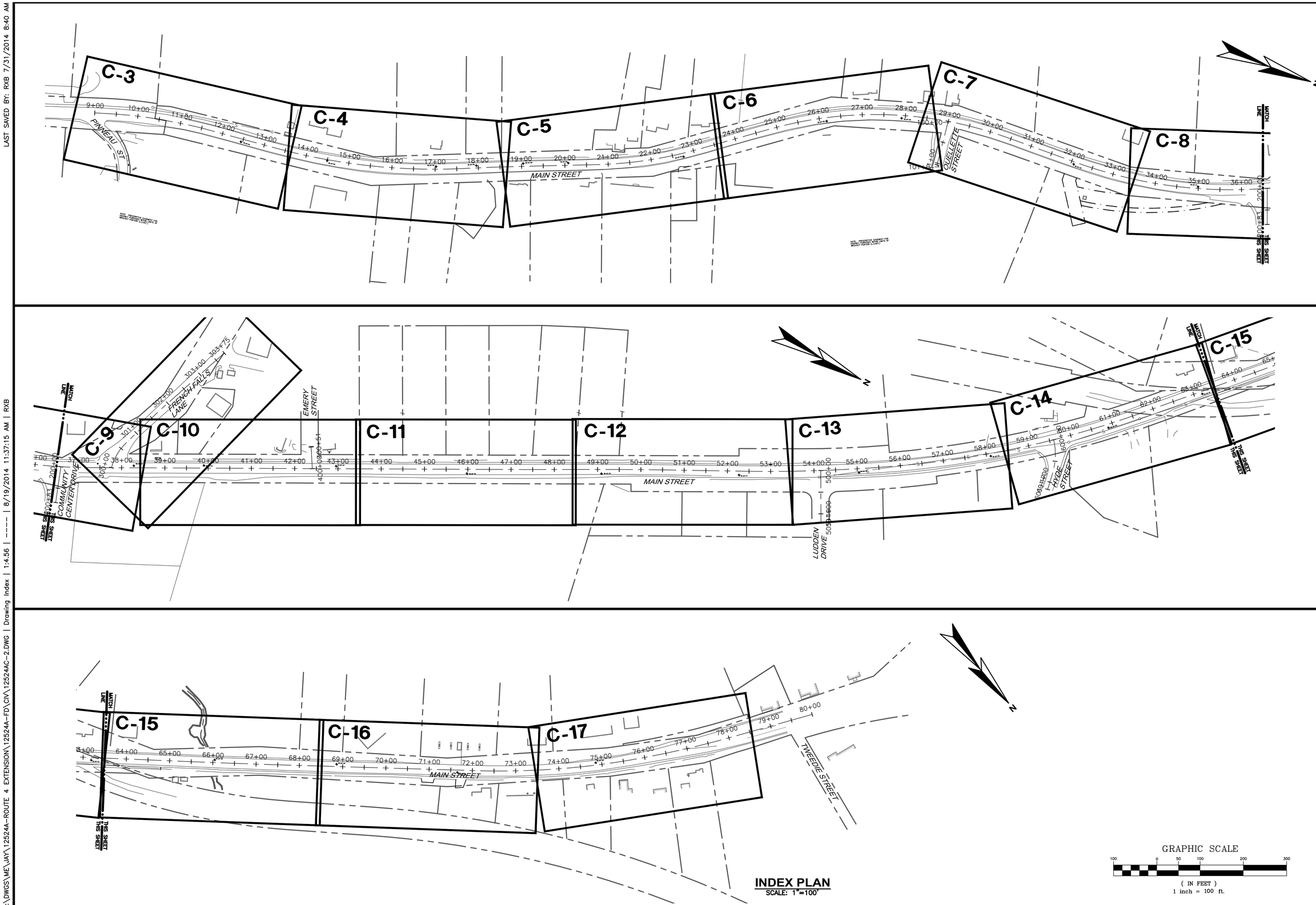
STATE OF MAINE JEFFREY D. FREELS NO 6380 LICENSED PROFESSIONAL ENGINEER 8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

GENERAL NOTES, ABBREVIATIONS, & LEGEND

DRAWING
C–1



INDEX PLAN
SCALE: 1"=100'

GRAPHIC SCALE
100 0 50 100 200 300
(IN FEET)
1 inch = 100 ft.

NO.	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY RJB
CHECKED BY DDL
DATE 4-29-14
APPROVED BY JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS SHOWN

STATE OF MAINE
JEFFREY D. FREELS
NO. 6380
PROFESSIONAL ENGINEER
8-1-14

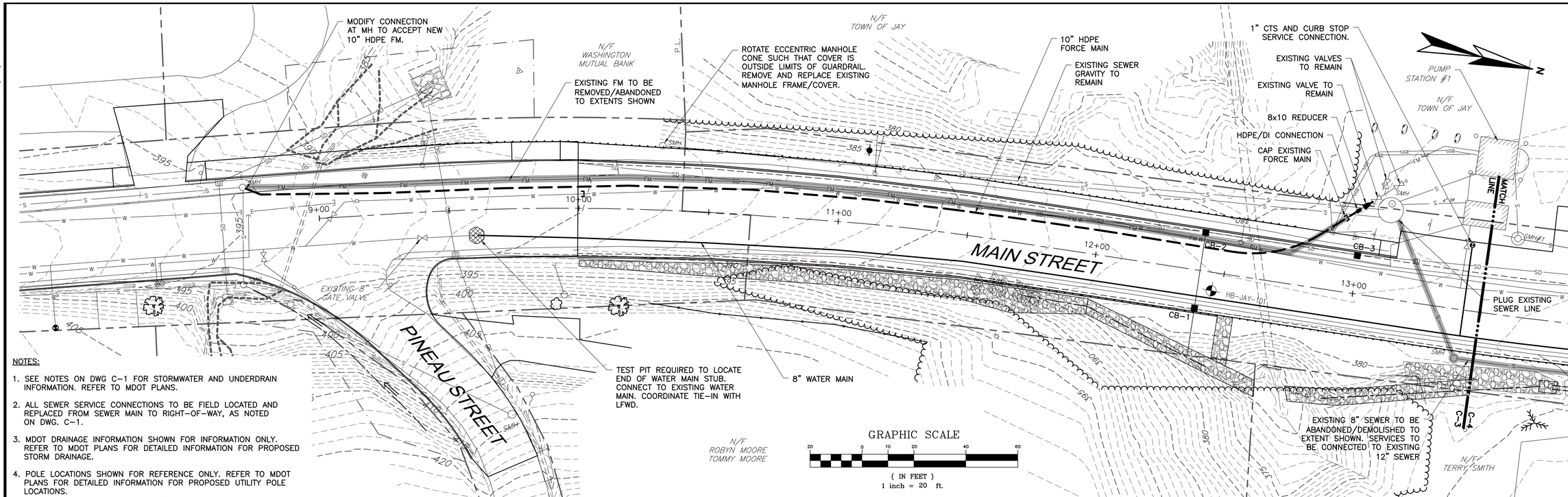
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

DRAWING INDEX

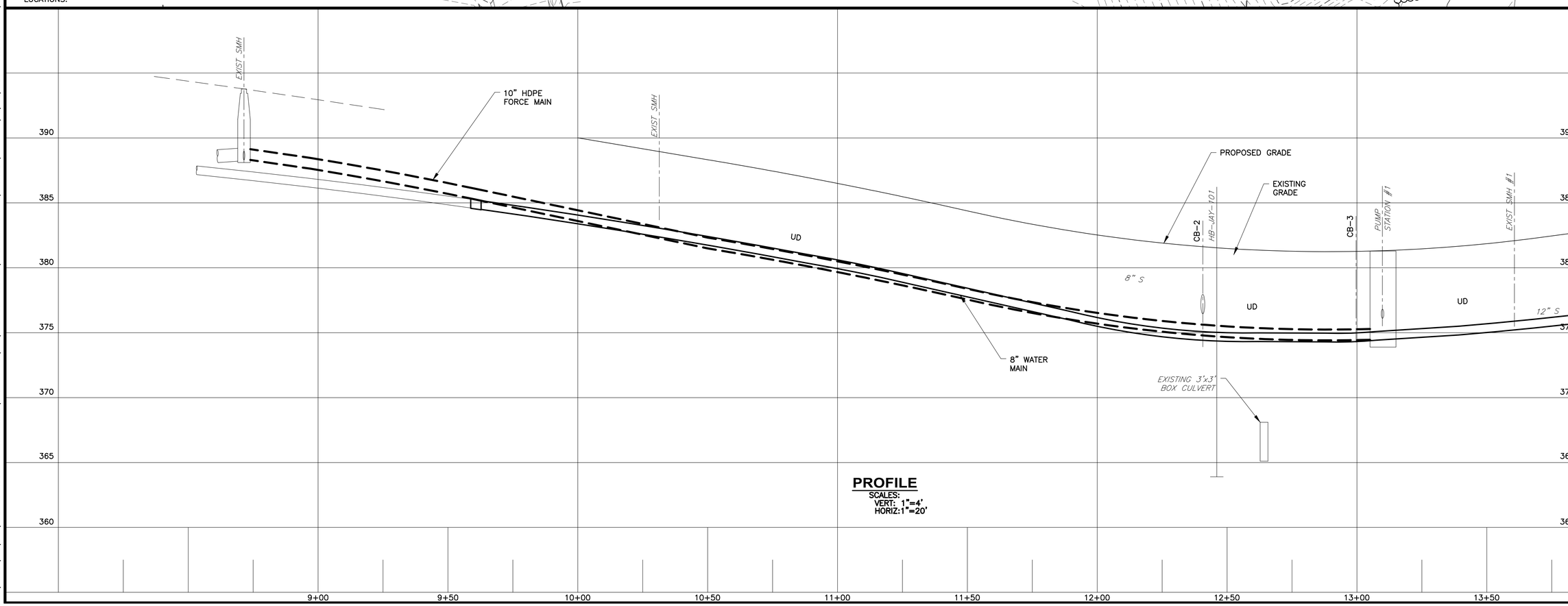
DRAWING
C-2

LAST SAVED BY: SJM 8/18/2014 4:04 PM



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE
SCALES:
VERT: 1"=4'
HORIZ:1"=20'

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-3.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:37:57 AM | RXB

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

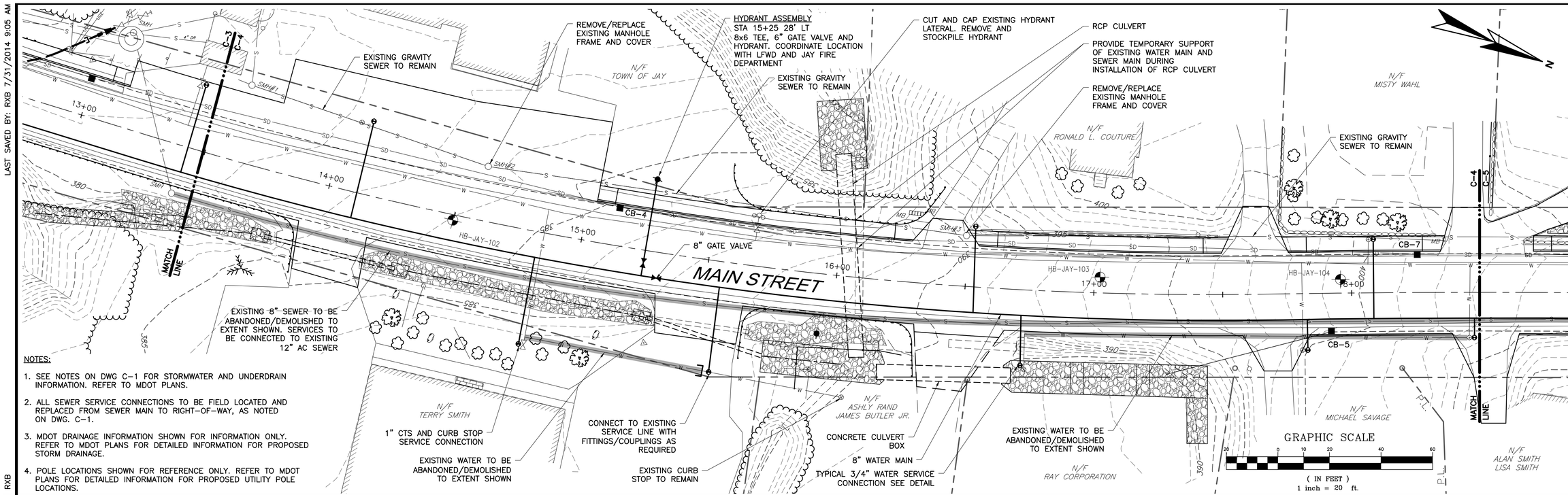
STATE OF MAINE
JEFFREY D. FREELS
NO. 6380
PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

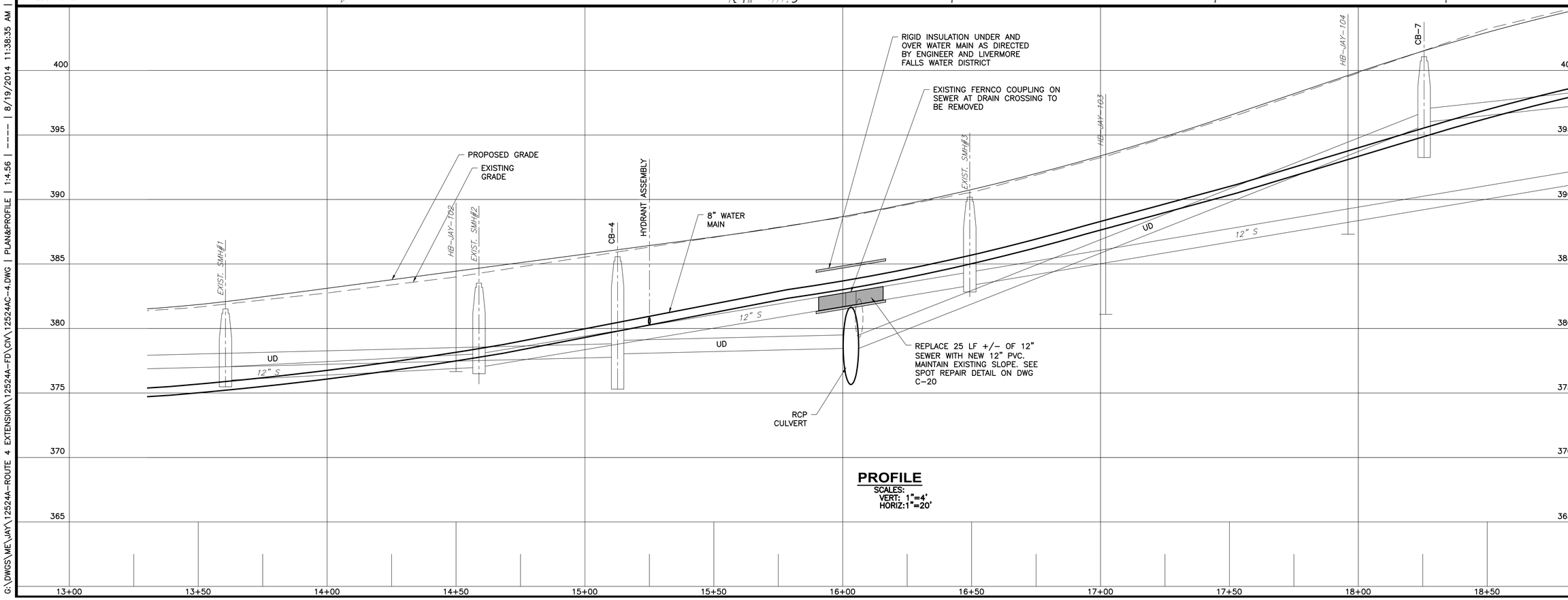
MAIN STREET PLAN & PROFILE
STA. 9+00 TO STA 13+50

DRAWING
C-3



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE: 4-29-14
APPROVED BY: JDP
DATE: 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. FREELAND
NO. 6380
LICENSED PROFESSIONAL ENGINEER
8-1-14

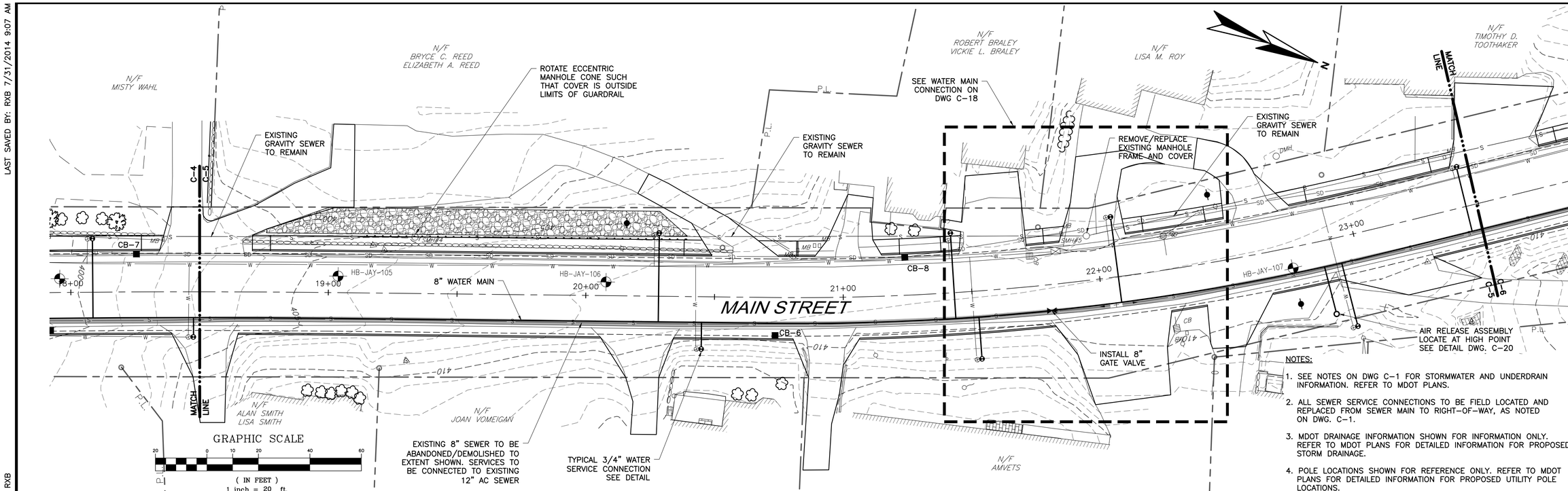
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

MAIN STREET PLAN & PROFILE
STA. 13+50 TO STA. 18+50

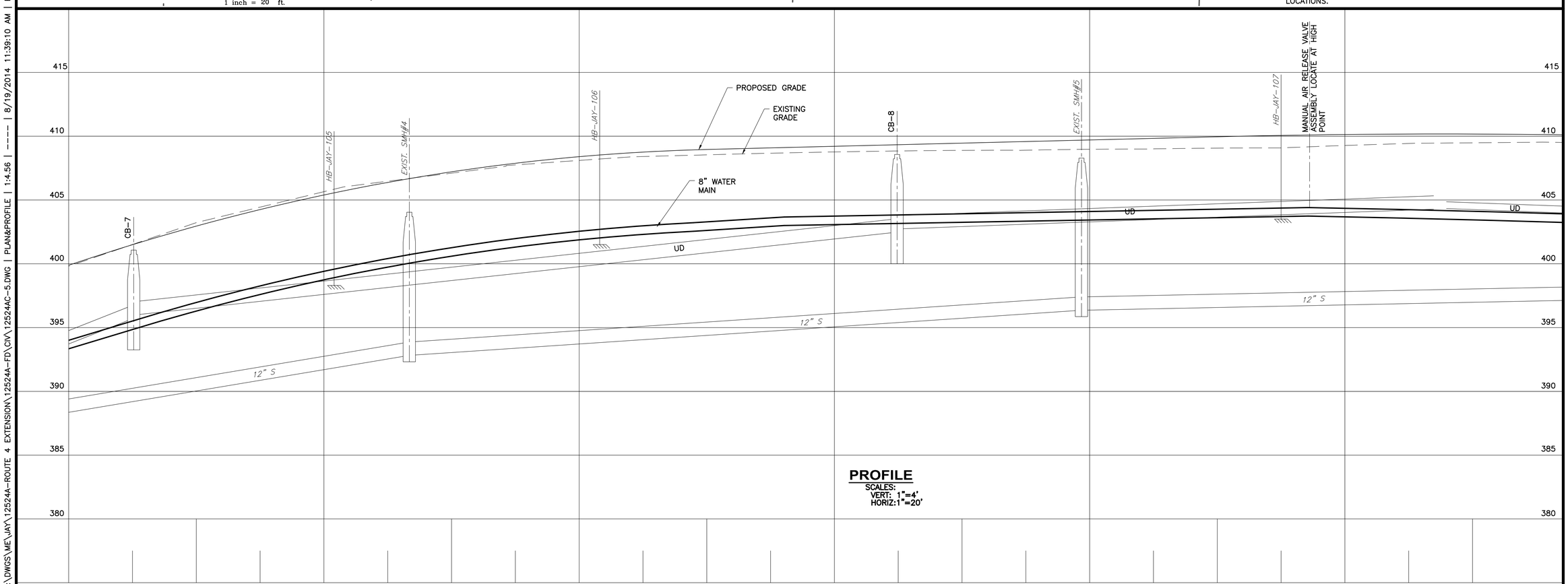
DRAWING
C-4

LAST SAVED BY: RXB 7/31/2014 9:07 AM



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE

SCALES:
VERT: 1"=4'
HORIZ:1"=20'

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-5.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:39:10 AM | RXB

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

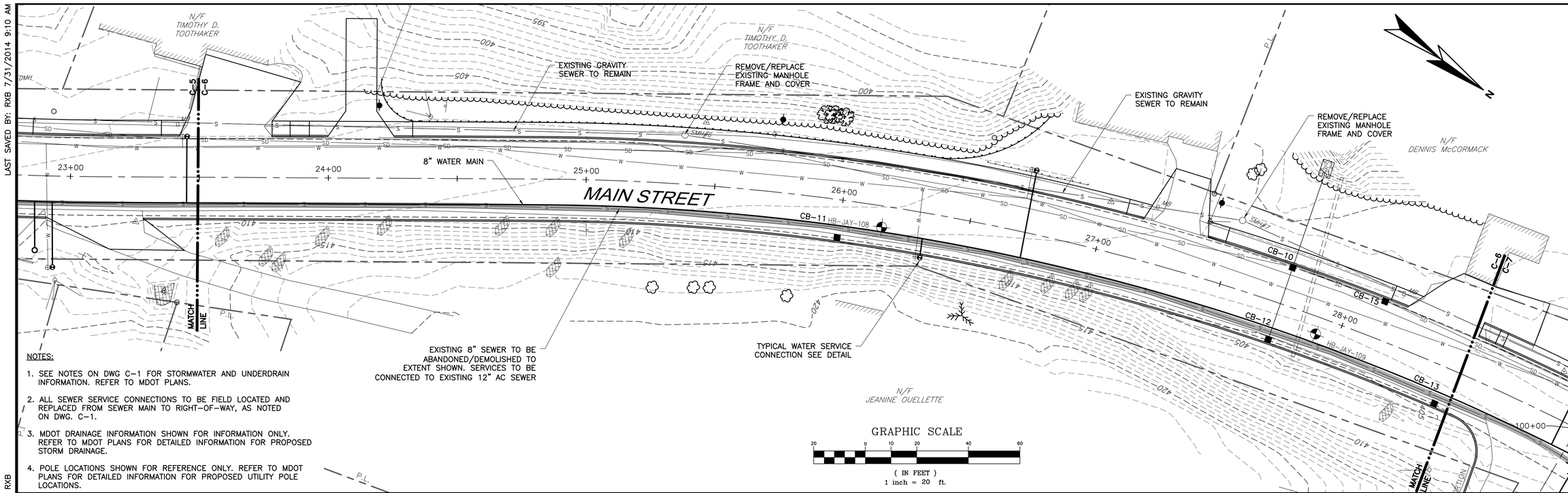
STATE OF MAINE
JEFFREY D. FREEDY
NO 6380
LICENSED PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

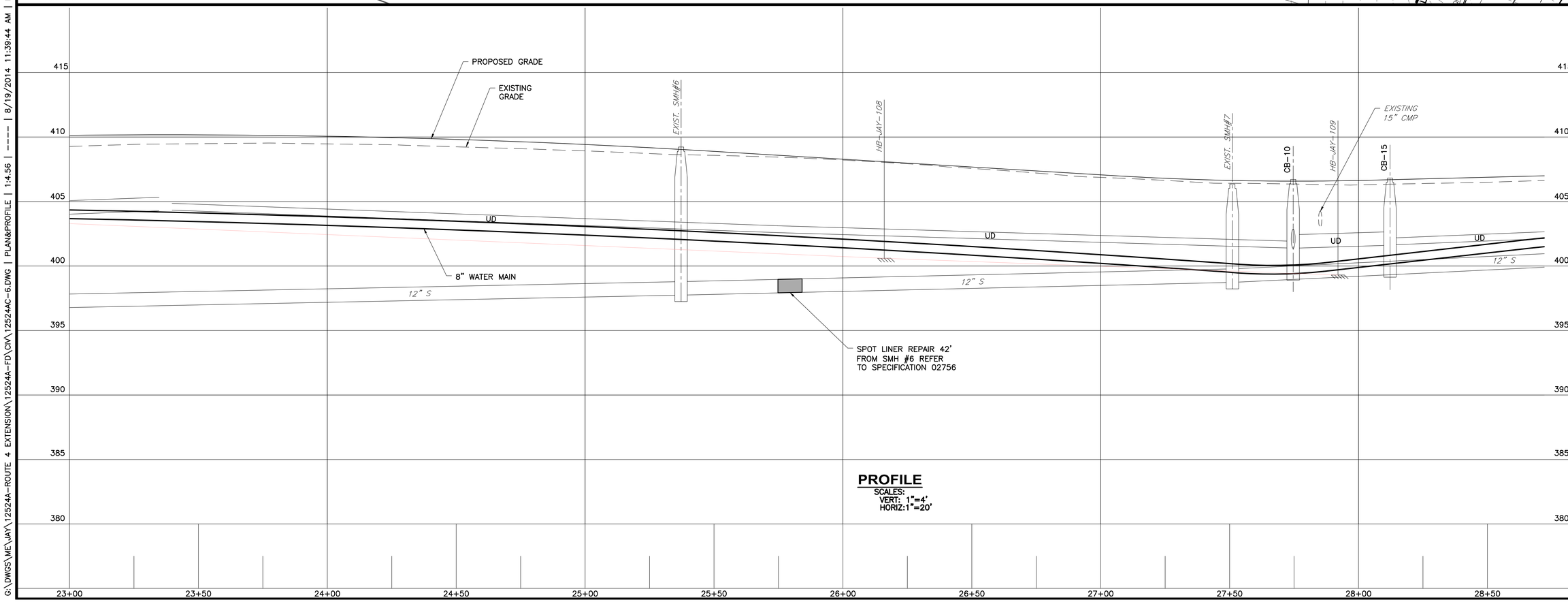
MAIN STREET PLAN & PROFILE
STA. 18+50 TO STA. 23+50

DRAWING
C-5



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE

SCALES:
VERT: 1"=4'
HORIZ:1"=20'

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			
6			
7			
8			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

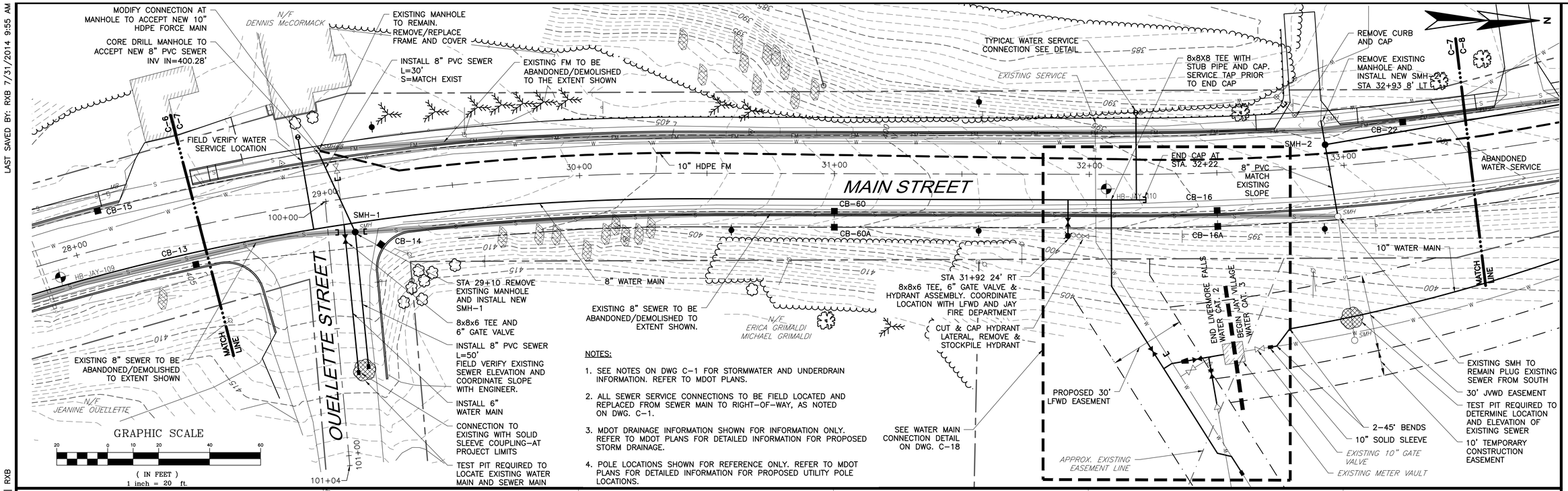
STATE OF MAINE
JEFFREY D. FREELS
NO. 6380
PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

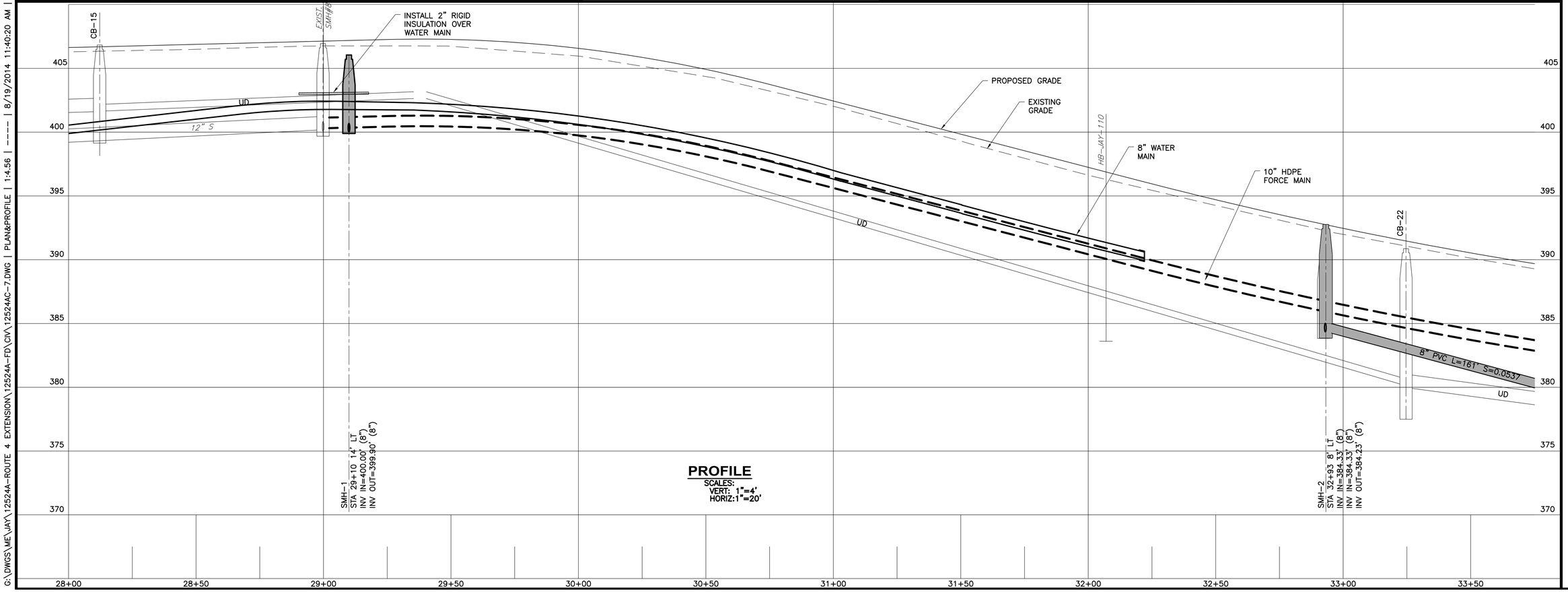
MAIN STREET PLAN & PROFILE
STA. 23+50 TO STA. 28+50

DRAWING
C-6



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE
SCALES:
VERT: 1"=4'
HORIZ:1"=20'

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. PRIEBE
NO 6380
LICENSED PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

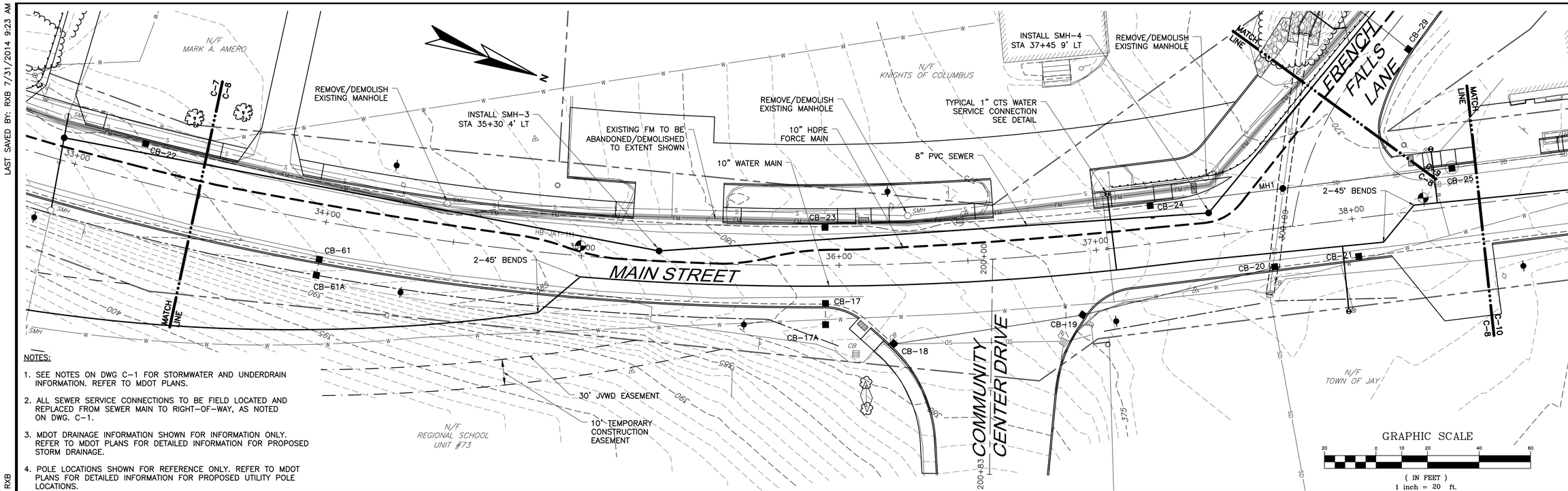
MAIN STREET PLAN & PROFILE
STA. 28+50 TO STA. 33+50

DRAWING
C-7

LAST SAVED BY: RXB 7/31/2014 9:55 AM

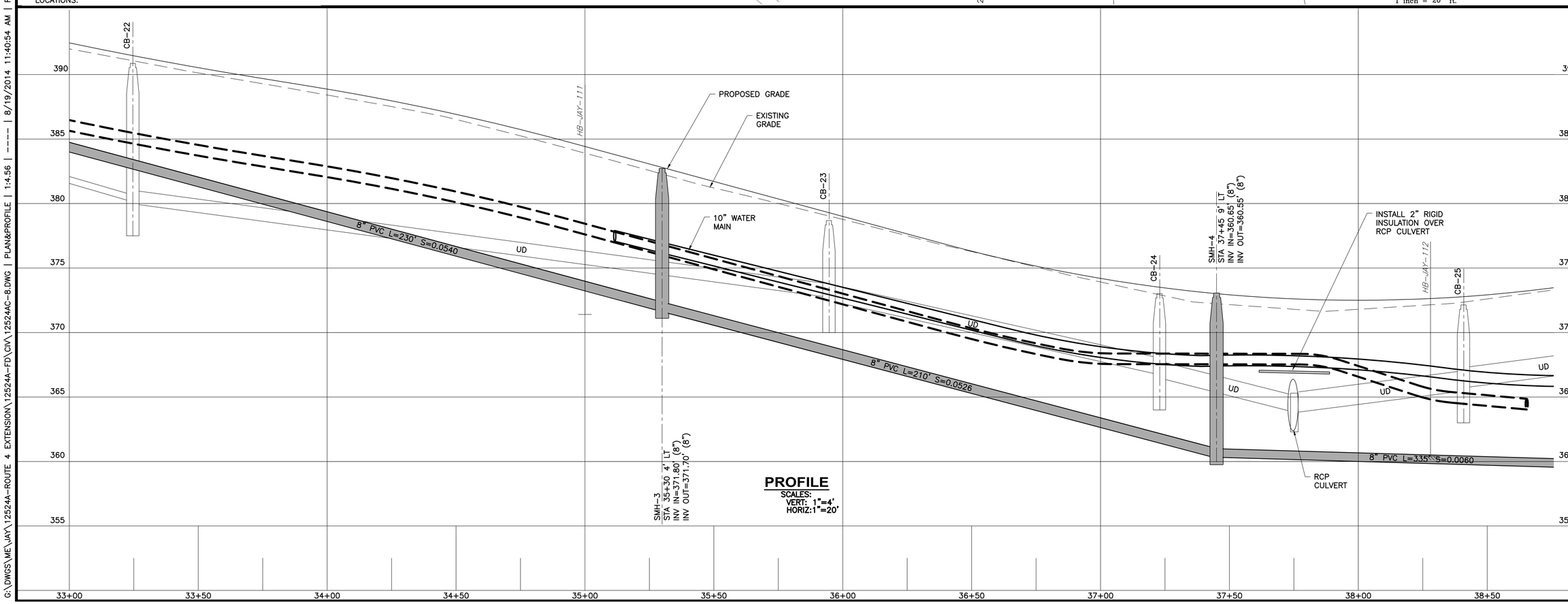
G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-7.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:40:20 AM | RXB

LAST SAVED BY: RXB 7/31/2014 9:23 AM



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE

SCALES:
VERT: 1"=4'
HORIZ: 1"=20'

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-8.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:40:54 AM | RXB

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY: RJB
CHECKED BY: DDL
DATE: 4-29-14
APPROVED BY: JDP
DATE: 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE: AS NOTED

STATE OF MAINE
JEFFREY D. FREELS
NO. 6380
LICENSED PROFESSIONAL ENGINEER
8-1-14

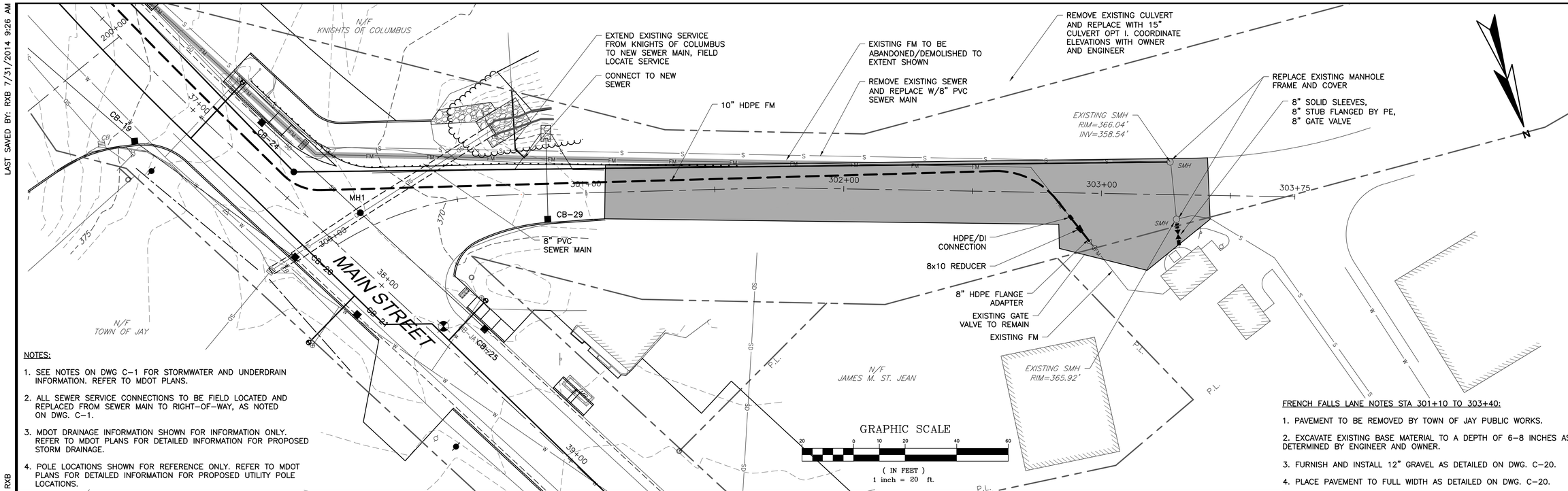
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

MAIN STREET PLAN & PROFILE
STA. 33+50 TO STA. 38+50

DRAWING
C-8

LAST SAVED BY: RXB 7/31/2014 9:26 AM

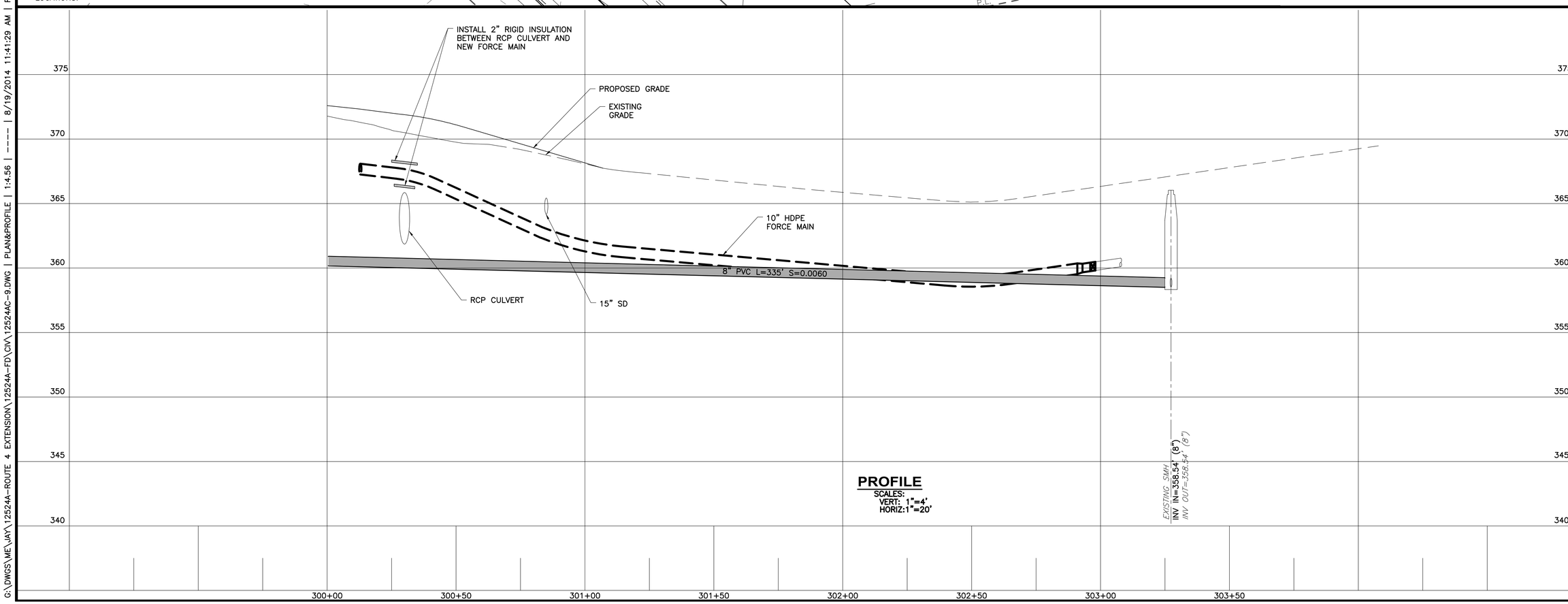


NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.

FRENCH FALLS LANE NOTES STA 301+10 TO 303+40:

1. PAVEMENT TO BE REMOVED BY TOWN OF JAY PUBLIC WORKS.
2. EXCAVATE EXISTING BASE MATERIAL TO A DEPTH OF 6-8 INCHES AS DETERMINED BY ENGINEER AND OWNER.
3. FURNISH AND INSTALL 12" GRAVEL AS DETAILED ON DWG. C-20.
4. PLACE PAVEMENT TO FULL WIDTH AS DETAILED ON DWG. C-20.



PROFILE
SCALES:
VERT: 1"=4'
HORIZ:1"=20'

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-9.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:41:29 AM | RXB

NO.	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY: RJB
CHECKED BY: DDL
DATE: 4-29-14
APPROVED BY: JDP
DATE: 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE: AS NOTED

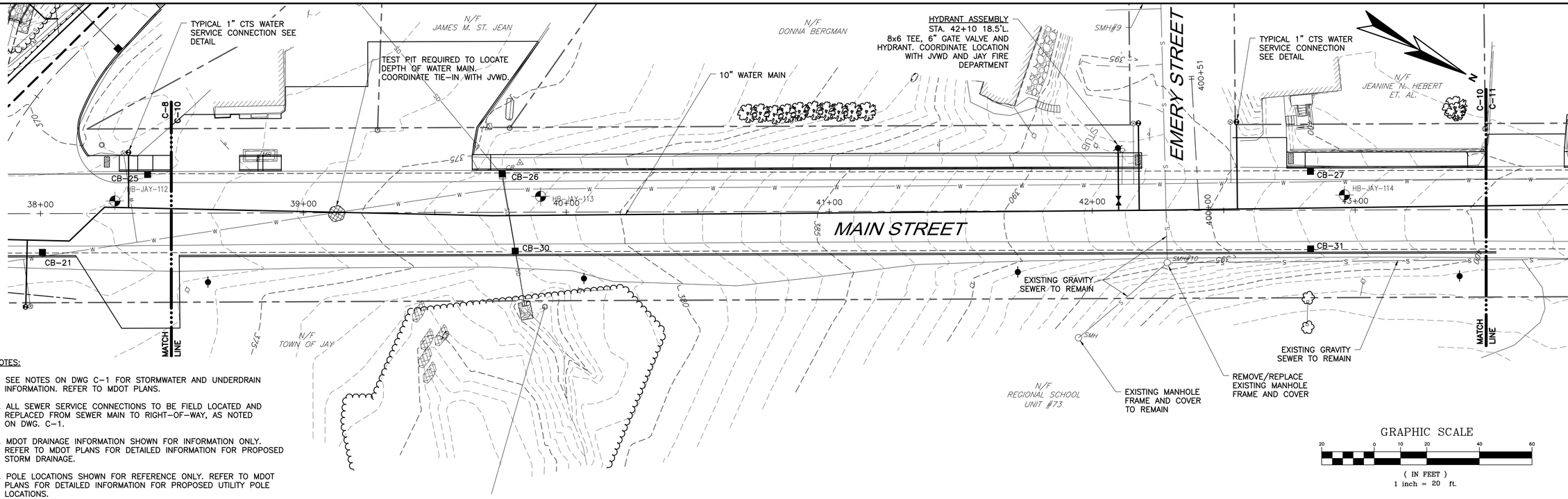
STATE OF MAINE
JEFFREY D. FREED
NO. 6380
PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

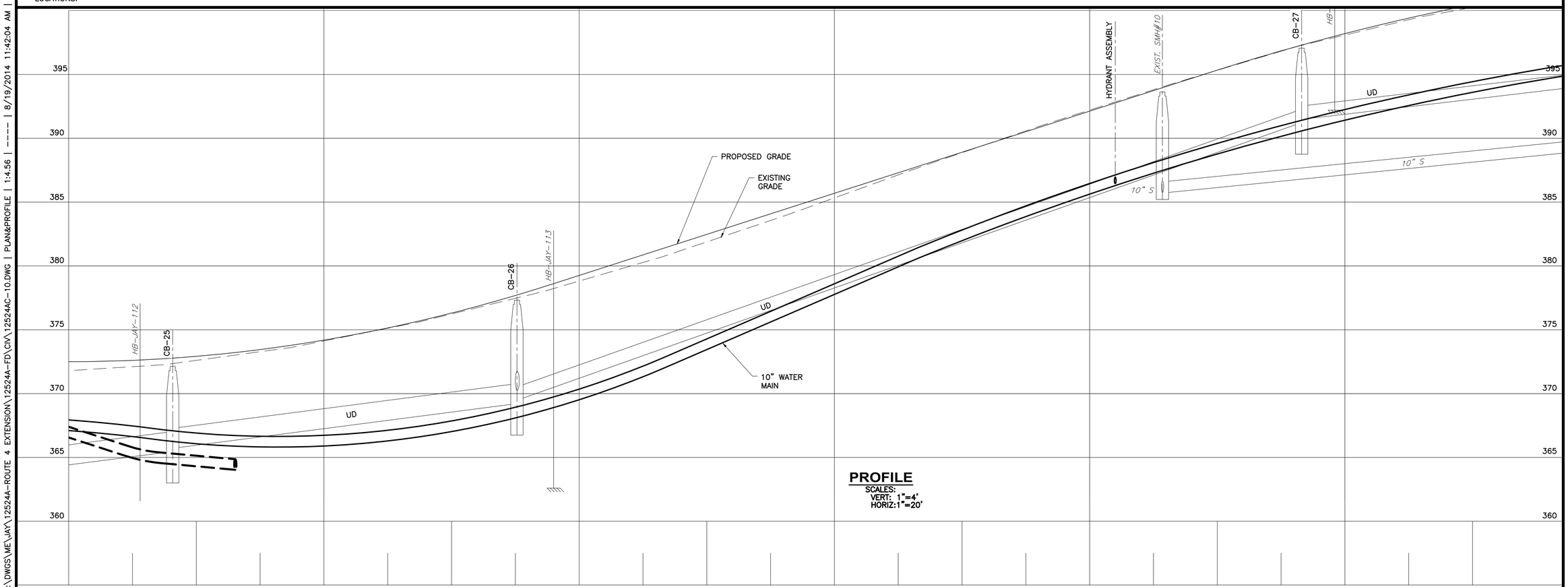
FRENCH FALLS LANE PLAN & PROFILE
STA. 300+00 TO STA. 303+56

DRAWING
C-9



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE

SCALES:
VERT: 1"=4'
HORIZ:1"=20'

NO.	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE: 4-29-14
APPROVED BY: JDP
DATE: 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE: AS NOTED

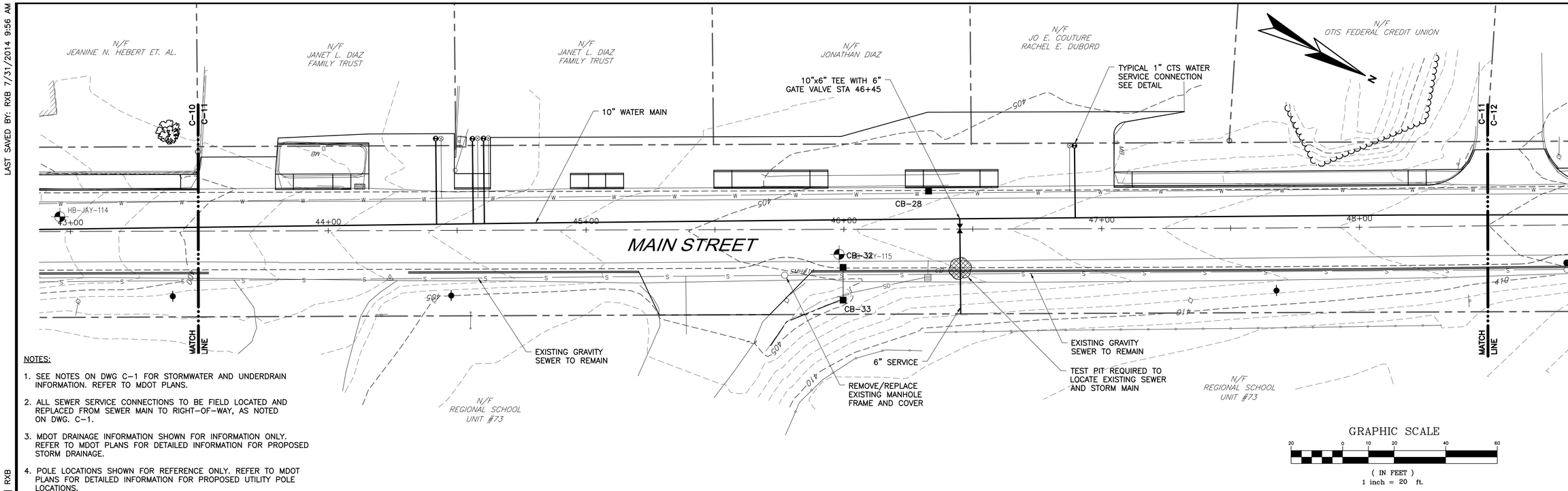
STATE OF MAINE
JEFFREY D. FREELAND
NO 6380
PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

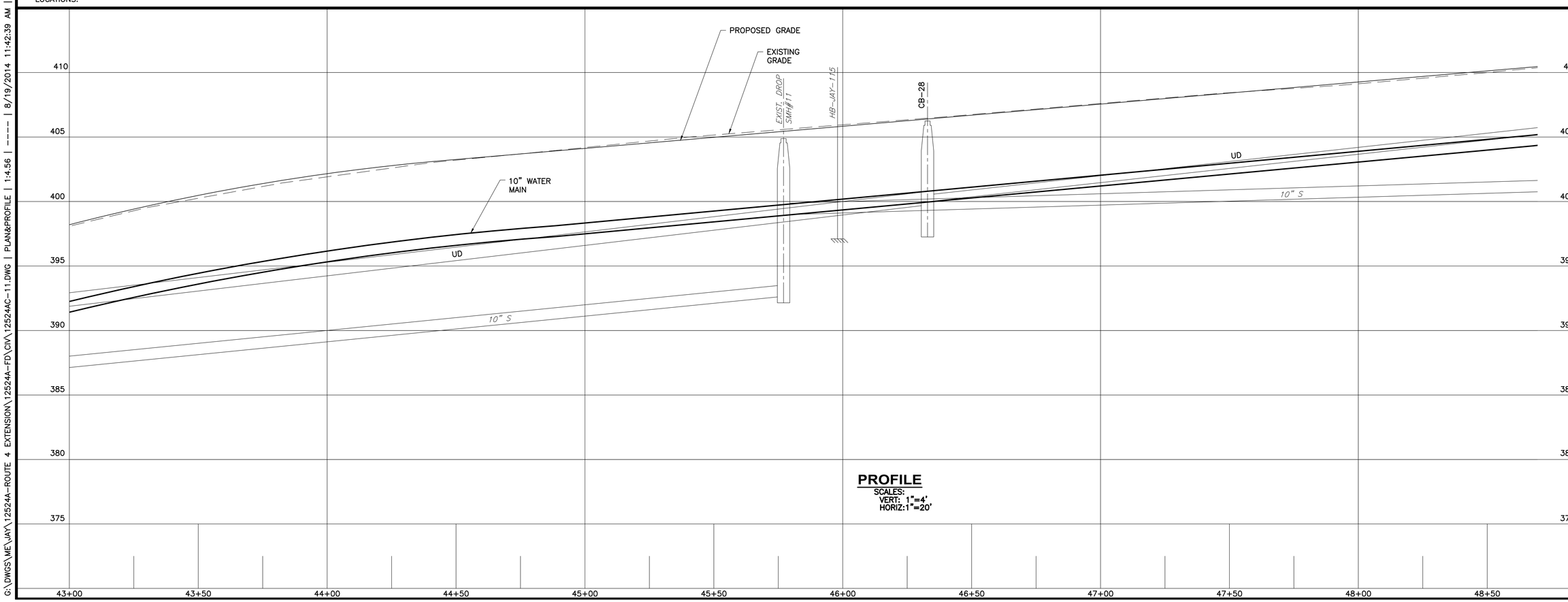
MAIN STREET PLAN & PROFILE
STA. 38+50 TO STA. 43+50

DRAWING
C-10



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY RJB
CHECKED BY DDL
DATE 4-29-14
APPROVED BY JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. FREELS
NO 6380
PROFESSIONAL ENGINEER
8-1-14

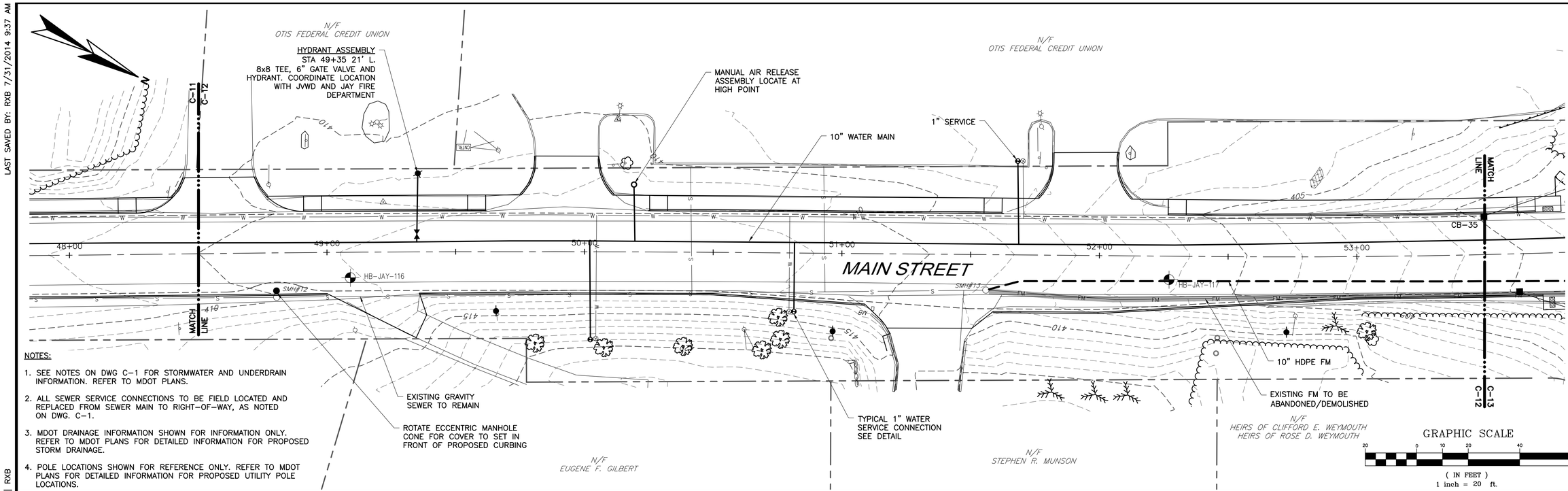
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

MAIN STREET PLAN & PROFILE
STA. 43+50 TO STA. 48+50

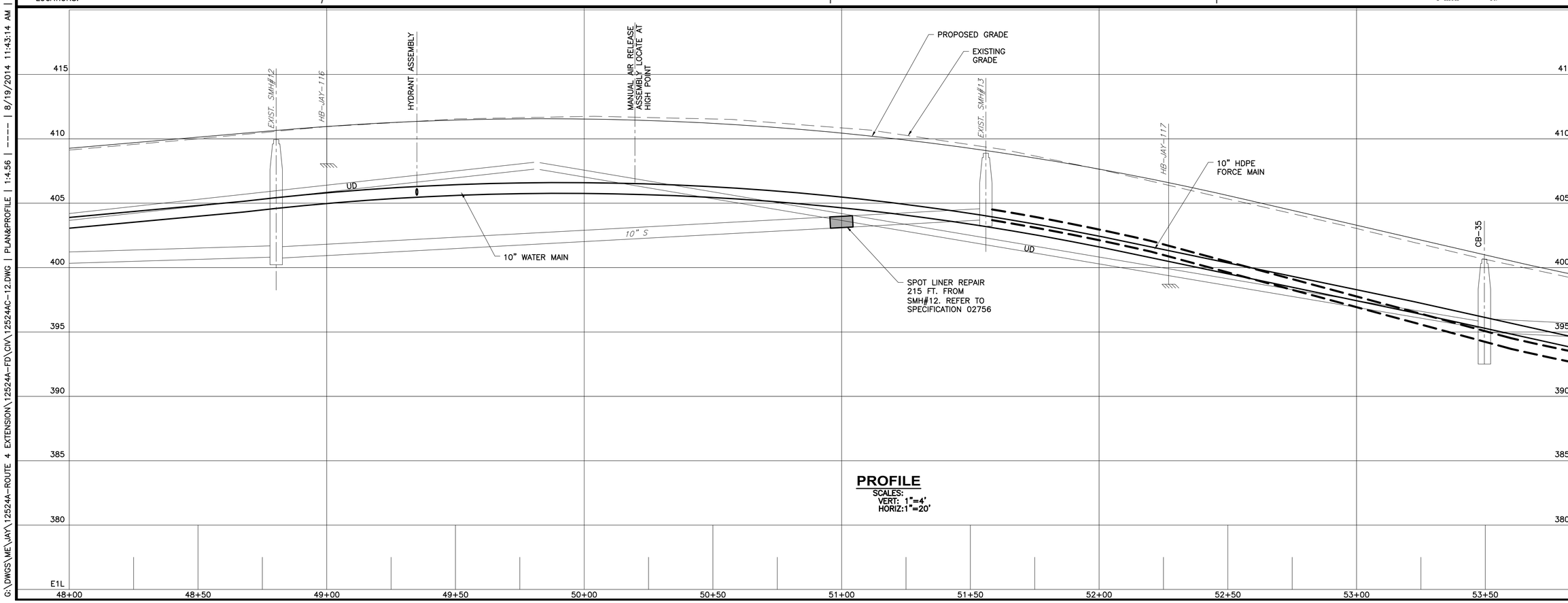
DRAWING
C-11

LAST SAVED BY: RXB 7/31/2014 9:37 AM



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE

SCALES:
VERT: 1"=4'
HORIZ:1"=20'

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-12.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:43:14 AM | RXB

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. FREELS
NO. 6380
PROFESSIONAL ENGINEER
8-1-14

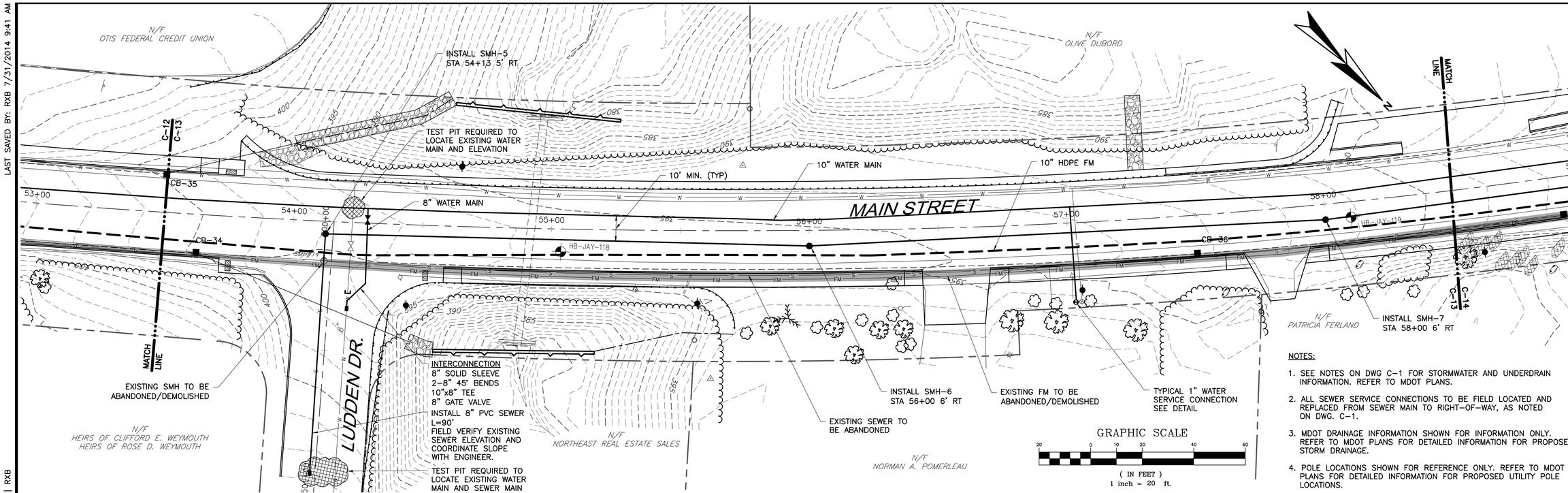
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

MAIN STREET PLAN & PROFILE
STA. 48+50 TO STA. 53+50

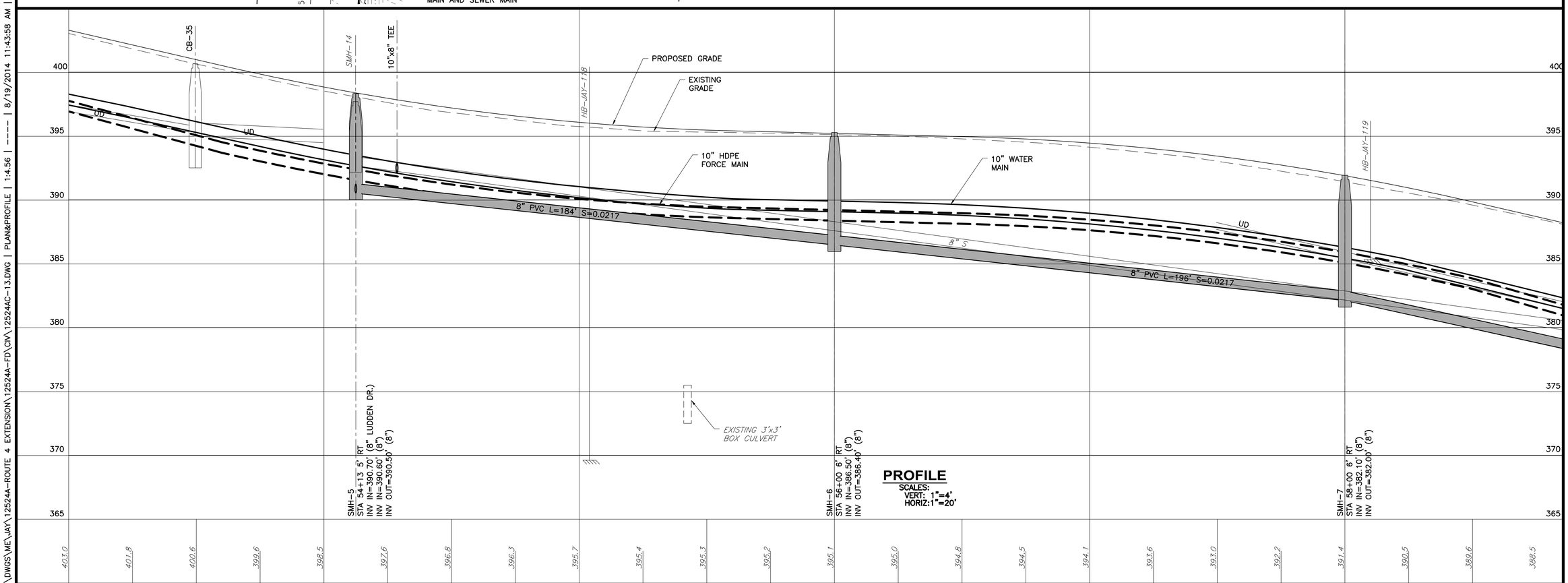
DRAWING
C-12

LAST SAVED BY: RXB 7/31/2014 9:41 AM



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-13.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:43:58 AM | RXB

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. PRIEBE
NO 6380
LICENSED PROFESSIONAL ENGINEER
8-1-14

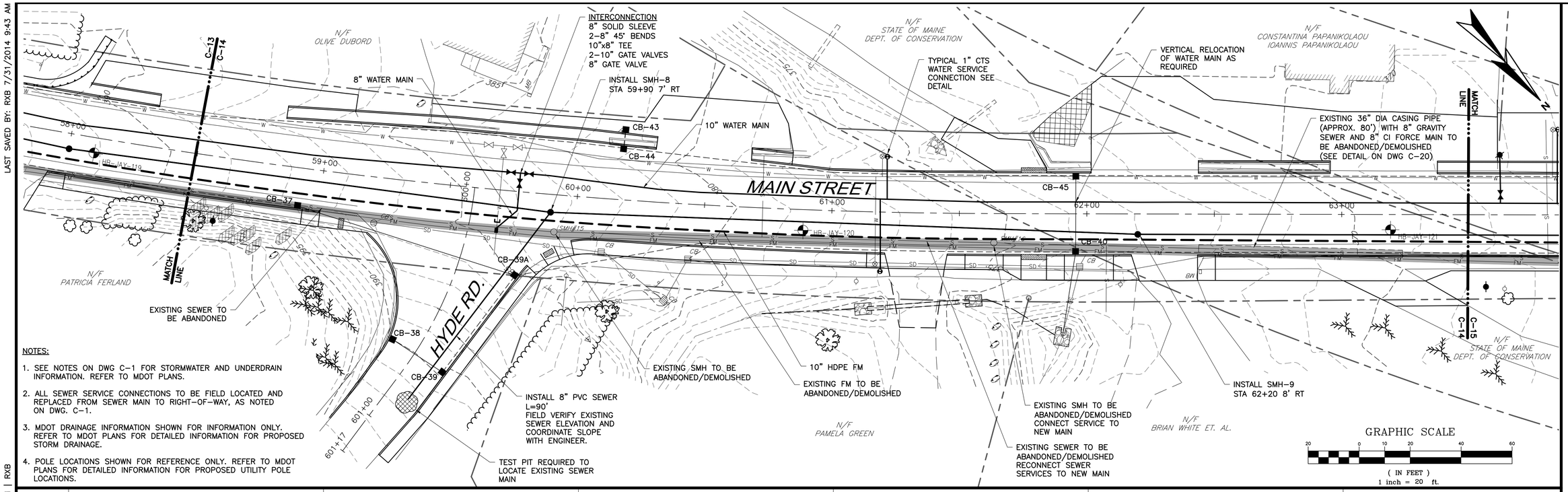
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

MAIN STREET PLAN & PROFILE
STA. 53+50 TO STA. 58+50

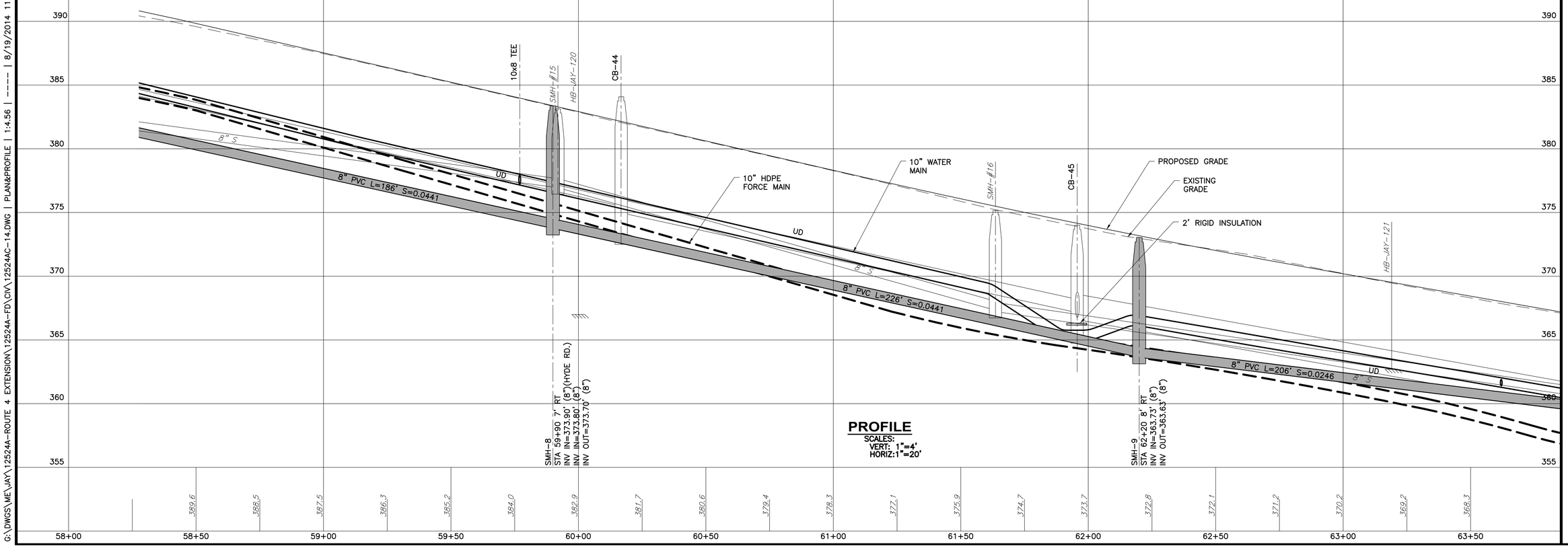
DRAWING
C-13

LAST SAVED BY: RXB 7/31/2014 9:43 AM



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

STATE OF MAINE
JEFFREY D. FREEL
NO. 6380
PROFESSIONAL ENGINEER
8-1-14

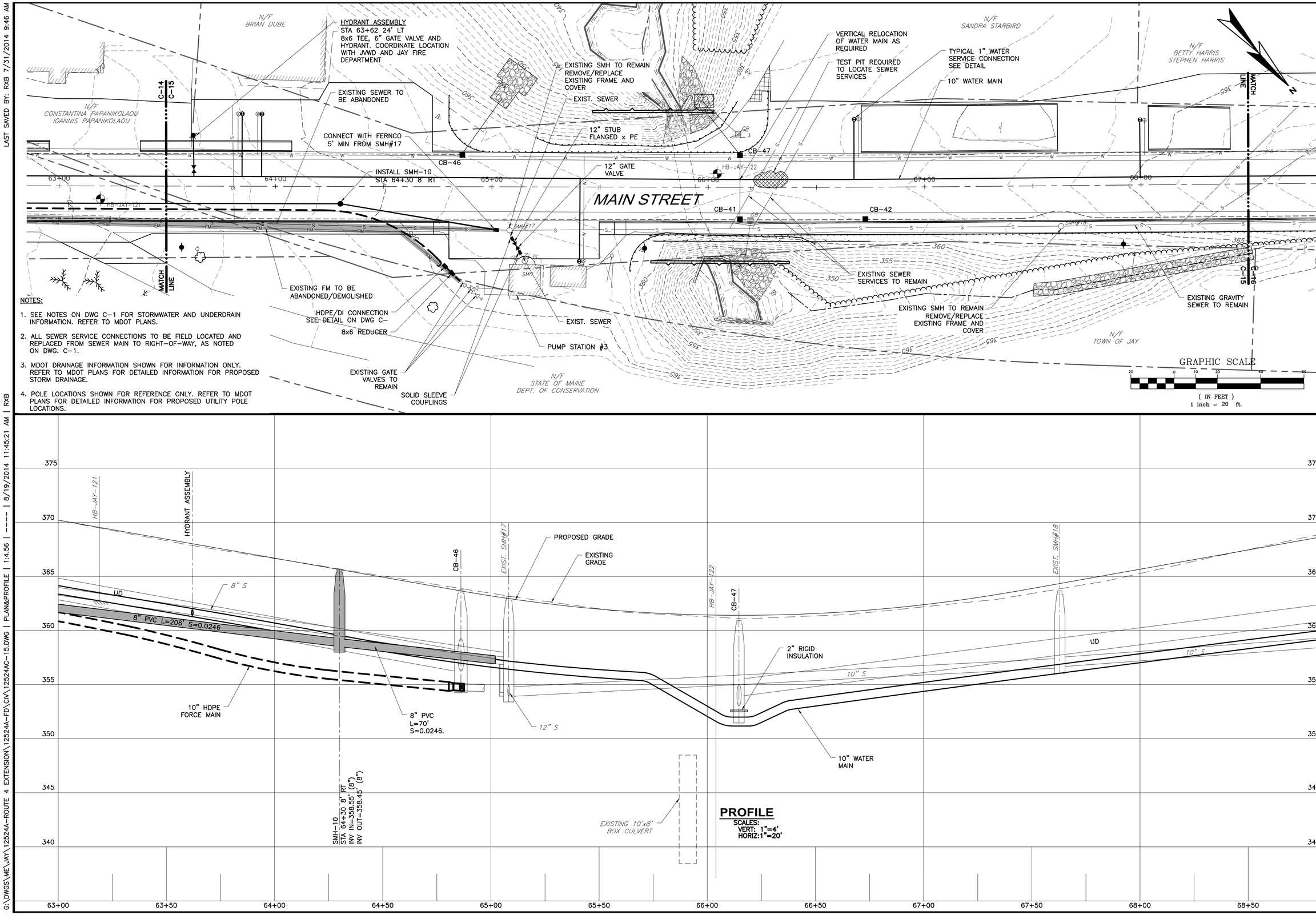
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

MAIN STREET PLAN & PROFILE
STA. 58+50 TO STA. 63+50

DRAWING
C-14

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-14.DWG | PLAN&PROFILE | 1:4.56 | ---- | 8/19/2014 11:44:44 AM | RXB



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY: RXB
CHECKED BY: DDL
DATE: 4-29-14
APPROVED BY: JDP
DATE: 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE: AS NOTED

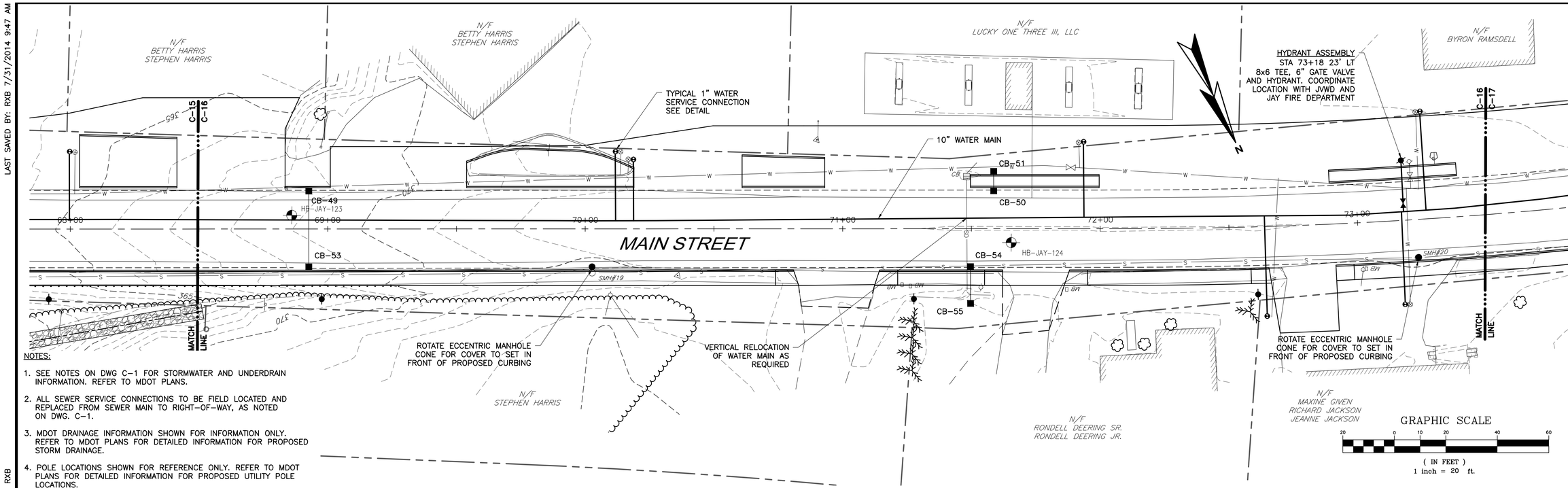
STATE OF MAINE JEFFREY D. FREELAND NO. 6380 PROFESSIONAL ENGINEER 8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

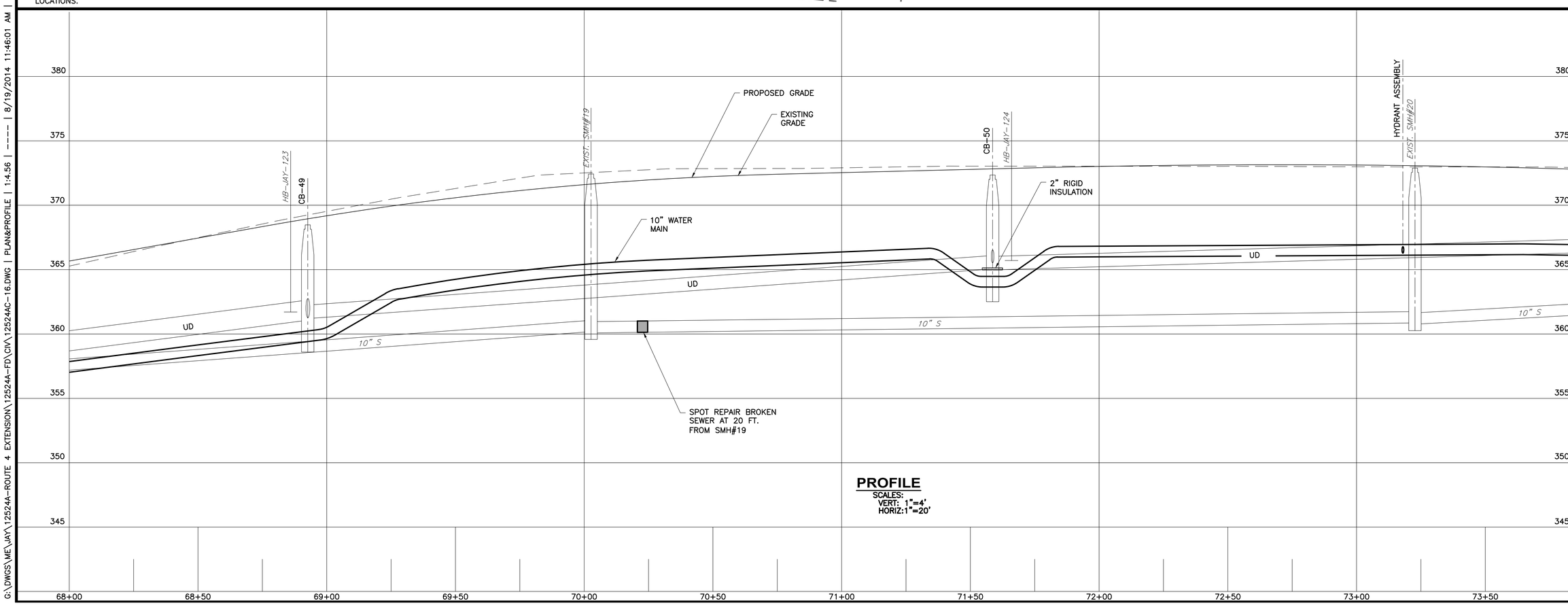
MAIN STREET PLAN & PROFILE
STA. 63+50 TO STA. 68+50

DRAWING
C-15



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE
SCALES:
VERT: 1"=4'
HORIZ:1"=20'

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

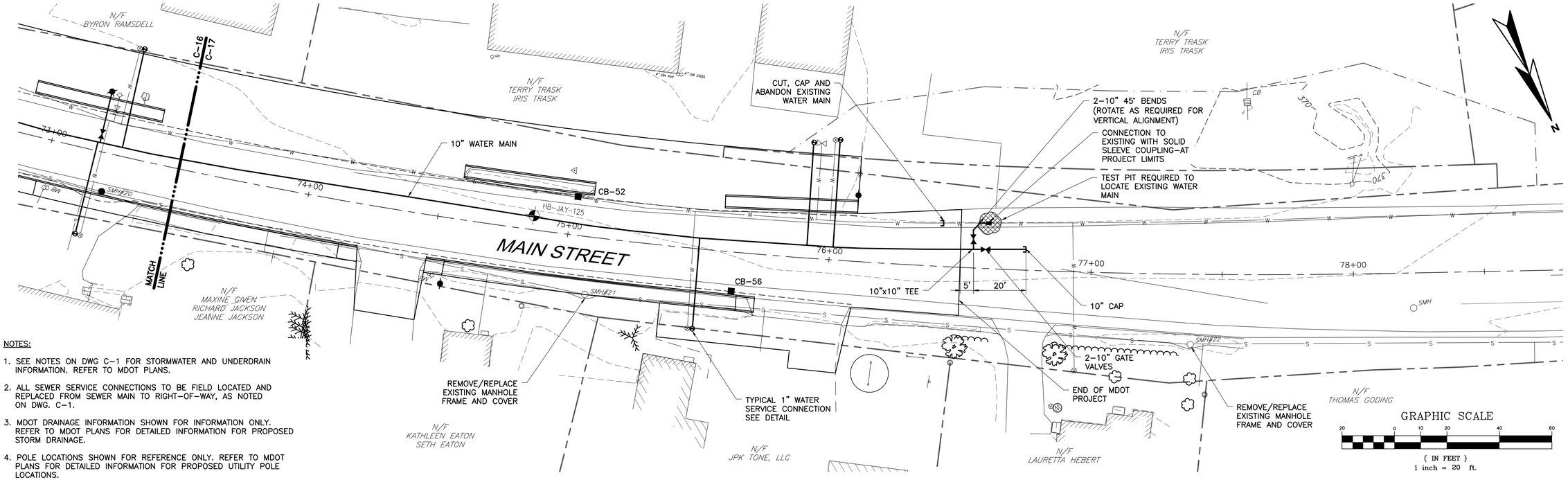
STATE OF MAINE
JEFFREY D. FREELY
NO 6380
LICENSED
PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

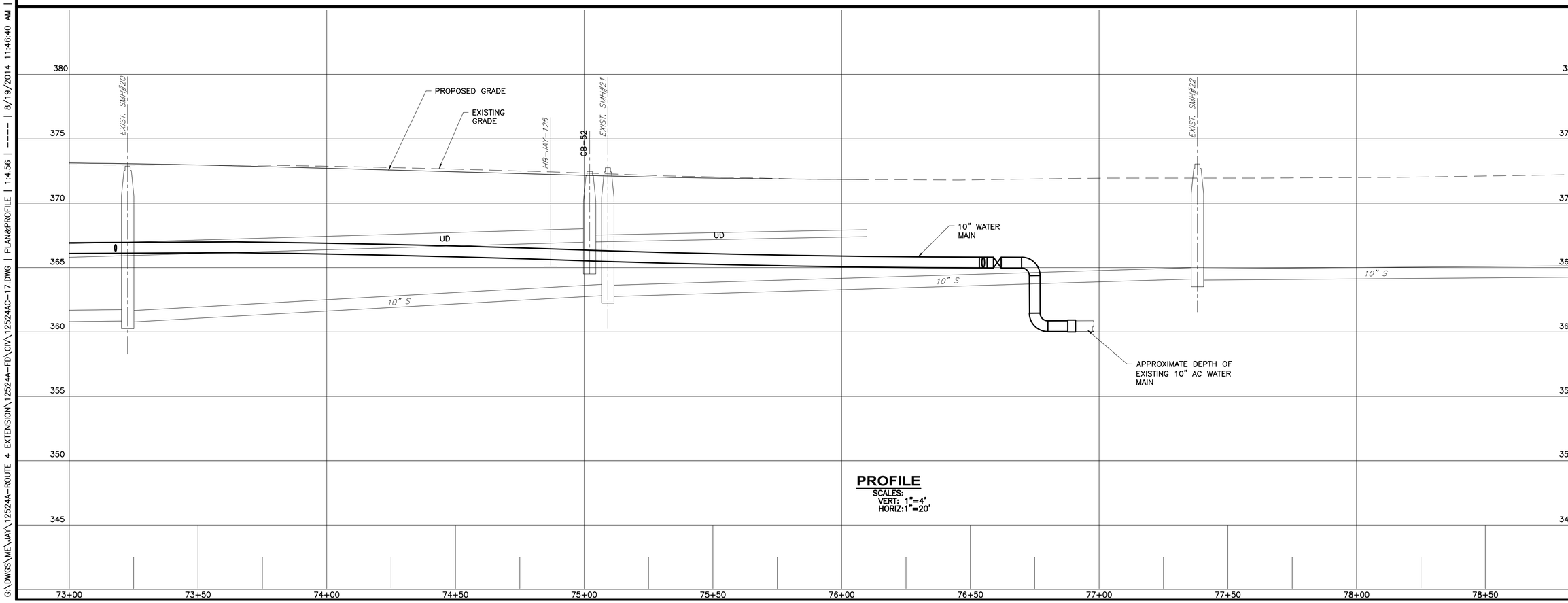
MAIN STREET PLAN & PROFILE
STA. 68+50 TO STA. 73+50

DRAWING
C-16



NOTES:

1. SEE NOTES ON DWG C-1 FOR STORMWATER AND UNDERDRAIN INFORMATION. REFER TO MDOT PLANS.
2. ALL SEWER SERVICE CONNECTIONS TO BE FIELD LOCATED AND REPLACED FROM SEWER MAIN TO RIGHT-OF-WAY, AS NOTED ON DWG. C-1.
3. MDOT DRAINAGE INFORMATION SHOWN FOR INFORMATION ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED STORM DRAINAGE.
4. POLE LOCATIONS SHOWN FOR REFERENCE ONLY. REFER TO MDOT PLANS FOR DETAILED INFORMATION FOR PROPOSED UTILITY POLE LOCATIONS.



PROFILE
SCALES:
VERT: 1"=4'
HORIZ:1"=20'

NO.	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			

DRAWN BY: RJB
CHECKED BY: DDL
DATE: 4-29-14
APPROVED BY: JDP
DATE: 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE: AS NOTED

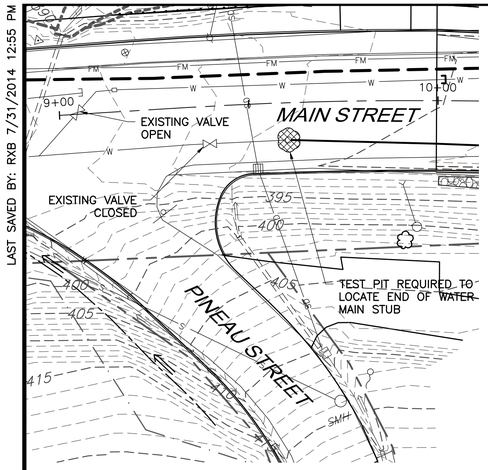
STATE OF MAINE
JEFFREY D. FREELAND
NO. 6380
PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

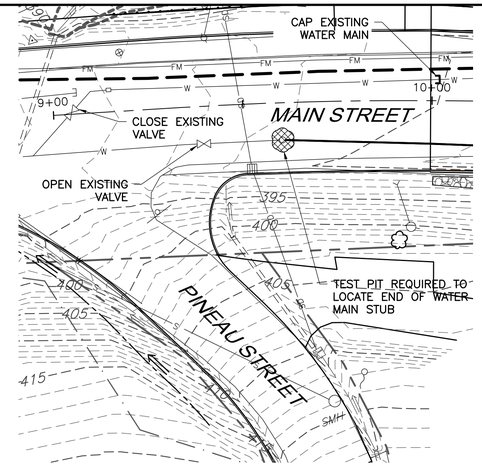
MAIN STREET PLAN & PROFILE
STA. 73+50 TO STA. 78+50

DRAWING
C-17



STEP 1

1. CONSTRUCT NEW 8 WATER MAIN TO GREEN STREET.
2. COORDINATE TIE–IN TO EXISTING EXISTING WATER MAIN WITH LIVERMORE FALLS WATER DISTRICT.
3. FILL, TEST AND DISINFECT NEW MAIN.
4. EXISTING WATER MAIN TO REMAIN IN SERVICE.
5. AFTER TESTING AND DISINFECTION ARE SATISFACTORILY COMPLETED BEGIN TIE–OVER OF SERVICES TO NEW 8" WATER MAIN.

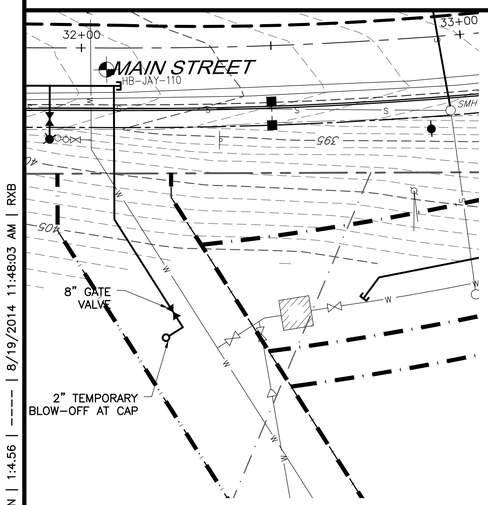


STEP 2

1. FOLLOWING COMPLETION OF SERVICE TIE–OVERS TO NEW 8" WATER MAIN. CLOSE EXISTING VALVE AT STA. 9+05 AND CAP EXISTING AC WATER AT PROJECT LIMITS.
2. NEW 8" WATER IS NOW ACTIVE TO STA. 21+90.
3. ABANDON/DEMOLISH EXISTING WATER TO EXISTING TO EXISTING IN LINE GATE AT STA. 21+95.

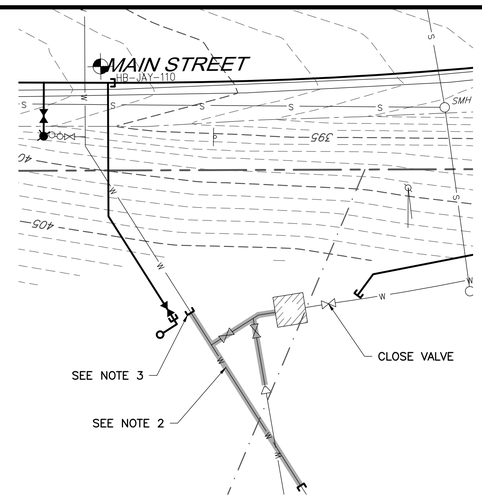
STA 10+00 WATER MAIN CONNECTION DETAIL

SCALE: 1"=20'



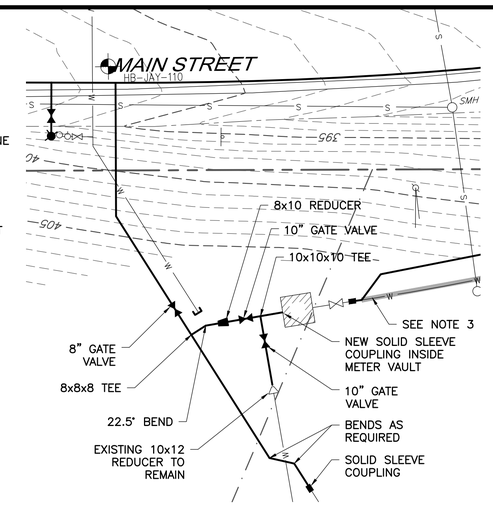
STEP 1

1. CONSTRUCT NEW 8" WATER MAIN TO IN–LINE GATE ADJACENT TO METER PIT.
2. CONSTRUCT NEW 10" WATER MAIN FROM STA 32+50 TO STA 76+50.
3. FILL, TEST, AND DISINFECT NEW WATER MAINS TO IN–LINE VALVES. PROVIDE TEMPORARY CAPS AS REQUIRED.
4. AFTER TESTING AND DISINFECTION ARE SATISFACTORILY COMPLETED TIE OVER SERVICES TO NEW 8" MAIN.



STEP 2

1. COORDINATE WITH LFWD AND JVWD TO\ CLOSE VALVE AFTER METER PIT ON 12" LINE FROM TANK.
2. DEMOLISH EXISTING PIPING TO EXTENTS SHOWN AND REMOVE/REPAIR COUPLING INSIDE METER VAULT.
3. CAP EXISTING WATER MAIN TO MAIN STREET AND ABANDONED.
4. EXISTING 10x12 REDUCER TO REMAIN.

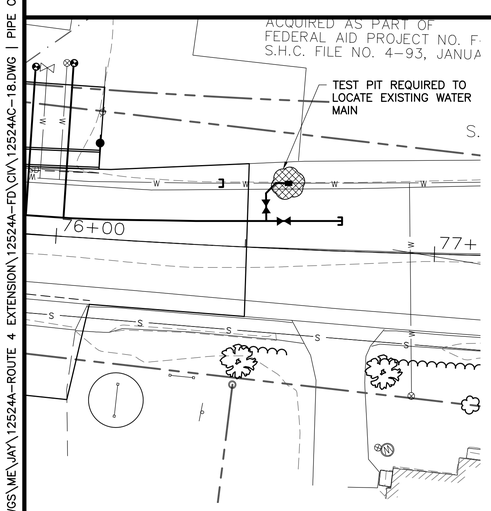


STEP 3

1. COORDINATE ALL NEW CONNECTIONS WITH LFWD AND JVWD.
2. CONNECT 10" MAIN NORTH OF EXISTING GATE VALVE WITH 10" SOLID SLEEVE AND 2–45° BENDS.
3. ABANDONE/DEMOLISH EXISTING WATER MAINS.

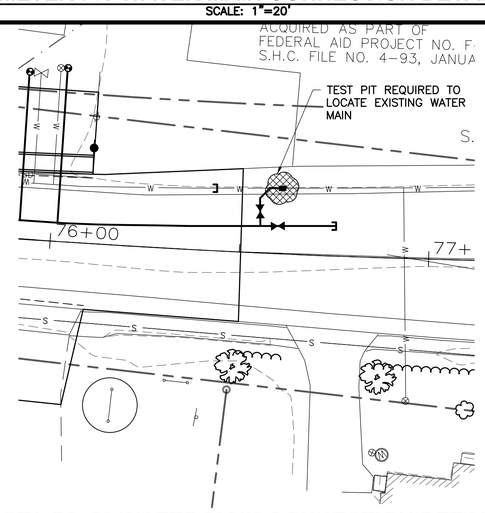
METER PIT WATER MAIN CONNECTION DETAIL

SCALE: 1"=20'



STEP 1

1. PROVIDE TEST PIT TO LOCATE EXISTING 10" AC MAIN.
2. CONSTRUCT NEW 10" WATER MAIN FROM STA 32+50 TO STA 76+50.
3. FILL, TEST, AND DISINFECT NEW WATER MAINS TO IN–LINE VALVES. PROVIDE TEMPORARY CAPS AS REQUIRED.
4. PROVIDE TEMPORARY CAP AS REQUIRED.



STEP 2

1. AFTER SUCCESSFUL TEST, CONSTRUCT BENDS AND ADAPT TO EXISTING 10" AC WATER MAIN.

STA 76+50 WATER MAIN CONNECTION DETAIL

SCALE: 1"=20'

NO.	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE: 4–29–14
APPROVED BY: JDP
DATE: 8–1–14
BOOK NO.
PROJECT NO. 12524A
SCALE: AS NOTED

STATE OF MAINE
JEFFREY D. FREELS
NO. 6380
LICENSED PROFESSIONAL ENGINEER
8-1-14

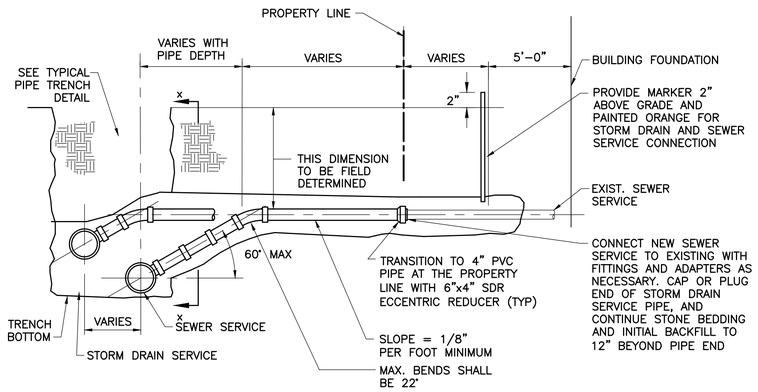
WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

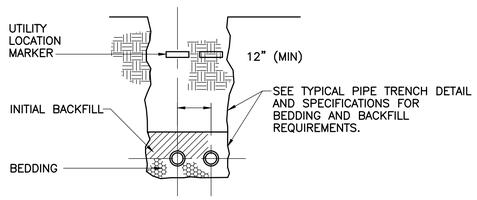
LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

WATER MAIN PHASING AND CONNECTION DETAILS

DRAWING
C–18

LAST SAVED BY: RXB 7/31/2014 12:55 PM
G:\DWGS\ME\JAY\12524A–ROUTE 4 EXTENSION\12524A–FD\CIV\12524AC–18.DWG | PIPE CONN | 1:4.56 | ---- | 8/19/2014 11:48:03 AM | RXB





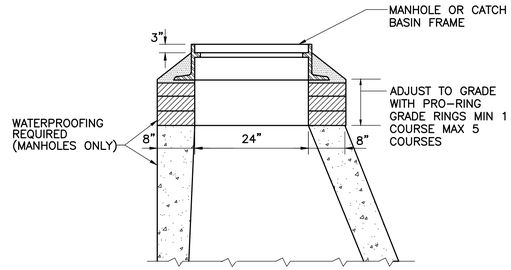
SECTION X-X

NOTES:

1. ALL SEWER SERVICES SHALL BE INSTALLED TO THE RIGHT-OF-WAY AND CONNECT TO EXISTING SERVICE.
2. FOUNDATION, STORM, OR CELLAR DRAINS NOT PERMITTED IN THE SEWER SYSTEMS.
3. CONTRACTOR TO NOTE THE ELEVATIONS OF THE EXISTING SEWER SERVICE DIFFER FROM HOUSE TO HOUSE. EXISTING SEWERS ENTER THROUGH FOUNDATION WALL OR BENEATH/THRU FOUNDATION SLAB. WHERE POSSIBLE, STORM DRAIN SERVICE ELEVATIONS SHALL MATCH EXISTING SEWER SERVICE ELEVATIONS, COORDINATE WITH ENGINEER.

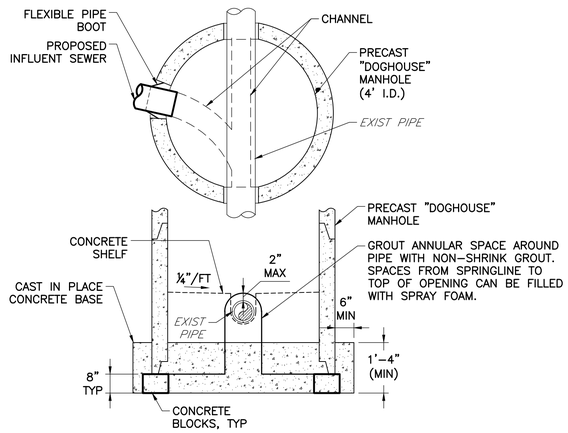
SEWER SERVICE CONNECTION DETAIL

SCALE: NTS



MANHOLE OR CATCH BASIN FRAME INSTALLATION

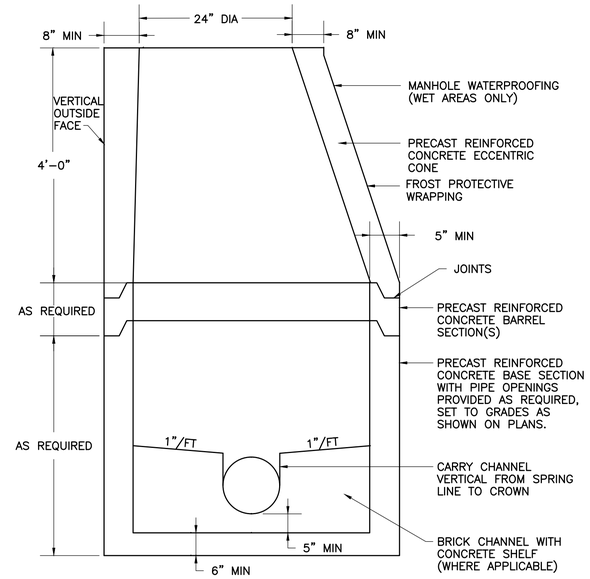
SCALE: NTS



NOTE: CUT TO REMOVE TOP HALF OF EXISTING PIPE FOLLOWING INSTALLATION OF "DOGHOUSE" AND PRIOR TO CONSTRUCTION OF BRICK INVERT. NOTCH SIDE OF PIPE TO RECEIVE SIDE FLOWS.

DOGHOUSE TYPE MANHOLE

SCALE: NTS

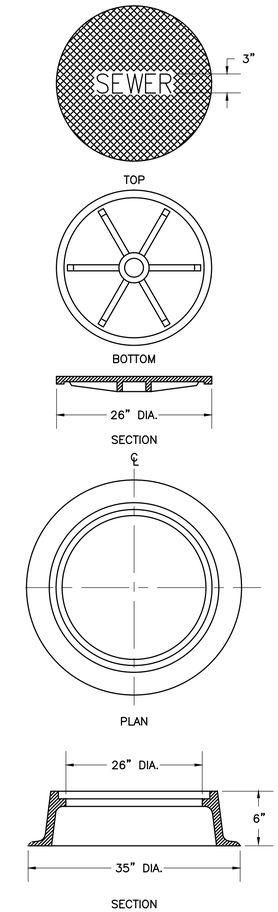


NOTES:

1. MANHOLE CHANNELS REQUIRING CHANGE IN ALIGNMENT ARE TO BE BUILT ON A SMOOTH RADIUS. IF SIDE PIPES ENTER CHANNEL, SHAPE TO RECEIVE ADDED SIDE FLOW.
2. USE FLAT SLAB TOP MANHOLE WHEN THE DIFFERENCE BETWEEN INVERT AND RIM IS LESS THAN 6' AND WHEN MANHOLE DIAMETER IS GREATER THAN 4'.
3. WHERE APPROVED BY OWNER AND ENGINEER INVERT CHANNEL MAY BE CONSTRUCTED WITH PVC PIPE WITH TOP CUT OFF AND CAST IN PLACE CONCRETE SHELF (MIN. 3" THICK).

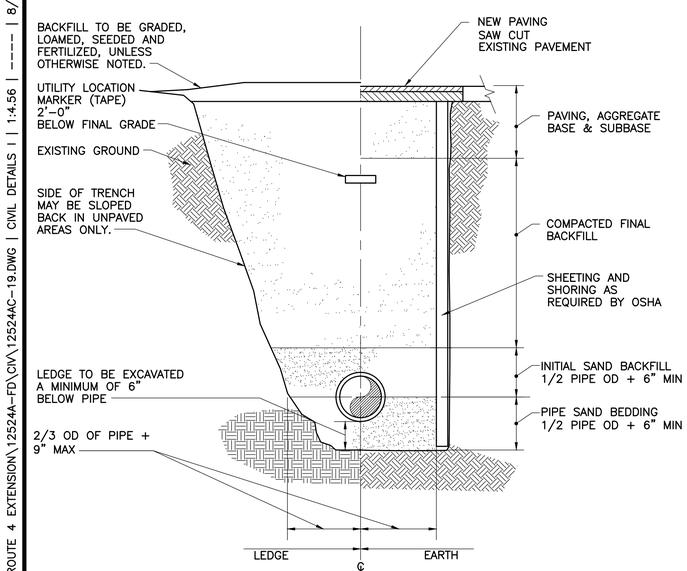
TYPICAL 4' SEWER MANHOLE

SCALE: NTS



MANHOLE COVER & FRAME

SCALE: NTS

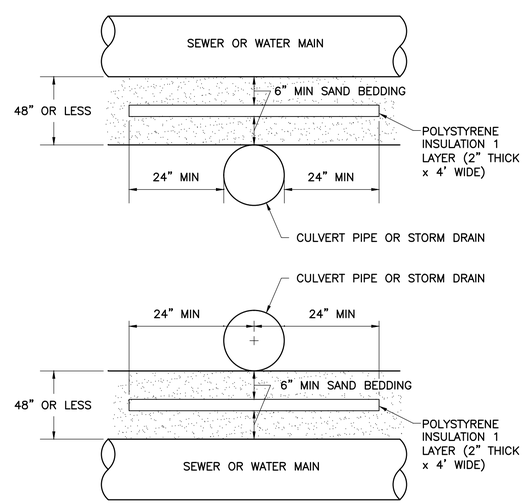


NOTES:

1. ALL EXCAVATION MUST MEET OSHA STANDARDS
2. INSTALL 3 FOOT LONG IMPERVIOUS MATERIAL DAM IN BEDDING/INITIAL BACKFILL MATERIAL EVERY 100' TO PREVENT TRENCH GROUND WATER FROM BEING CHANNELED ALONG BEDDING/INITIAL BACKFILL.
3. SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.
4. STONE BEDDING AND INITIAL BACKFILL MAY BE USED IN WET AREAS AS APPROVED BY THE OWNER AND ENGINEER.

TRENCH DETAIL

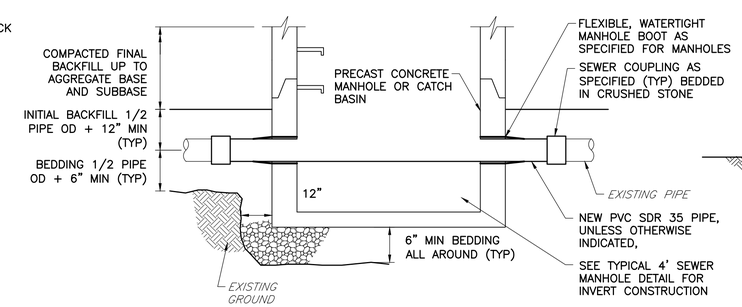
SCALE: NTS



NOTE: INSULATION TO BE USED WHERE PIPE SEPARATION IS 4' OR LESS.

STORM DRAIN CROSSING DETAIL

SCALE: NTS

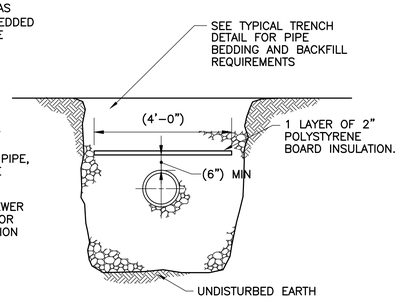


NOTES:

1. ALL EXCAVATION MUST MEET OSHA STANDARDS.
2. SEE SPECIFICATIONS FOR BEDDING AND BACKFILL REQUIREMENTS.
3. ADDITIONAL PIPE EXTENSIONS AND APPURTENANCES MAY BE REQUIRED TO ACCOMMODATE OTHER PIPELINES AND/ OR SERVICES ENTERING MANHOLES.

TYPICAL SEWER MANHOLE REPLACEMENT INSTALLATION

SCALE: NTS



NOTE: TRENCH PIPE INSULATION TO BE USED WHERE DEPTH OF COVER IS LESS THAN (5 FT.) OR AS DIRECTED BY THE ENGINEER.

TRENCH PIPE INSULATION DETAIL

SCALE: NTS

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE 4-29-14
APPROVED BY: JDP
DATE 8-1-14
BOOK NO.
PROJECT NO. 12524A
SCALE AS NOTED

STATE OF MAINE JEFFREY D. FREELE NO 6380 LICENSED PROFESSIONAL ENGINEER 8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

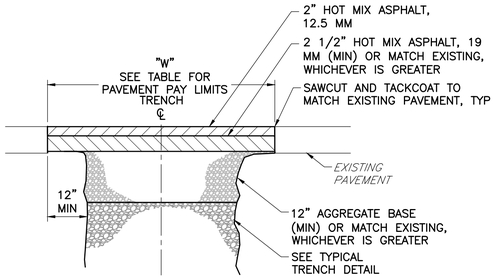
LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

CIVIL DETAILS I

DRAWING
C-19

LAST SAVED BY: RXB 7/31/2014 9:52 AM

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-19.DWG | CIVIL DETAILS I | 1:4.56 | ---- | 8/19/2014 11:48:12 AM | RXB

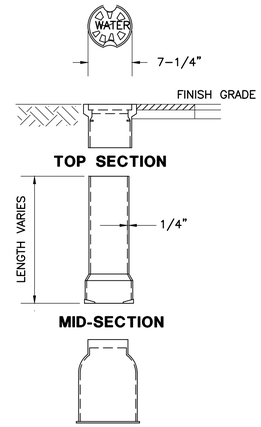


NOTE: FOR AREAS OUTSIDE OF MDOT WORK LIMITS

PAVEMENT PAY LIMITS	
PIPE I.D.	"W" (FOR 0' – 10' DEEP)
6" – 15"	7'–0"
16" – 21"	8'–0"
"W" SHALL BE INCREASED BY 1'–0" FOR TRENCHES 10' – 15', AND BY 2'–0" FOR TRENCHES 15' – 20' DEEP.	

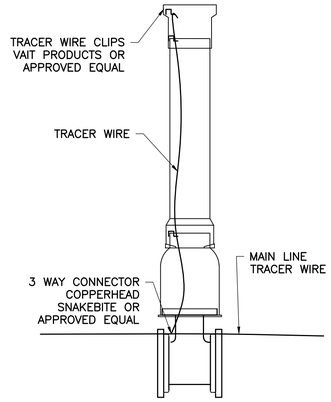
FINAL TRENCH PAVING (WITHOUT OVERLAY)

SCALE: NTS



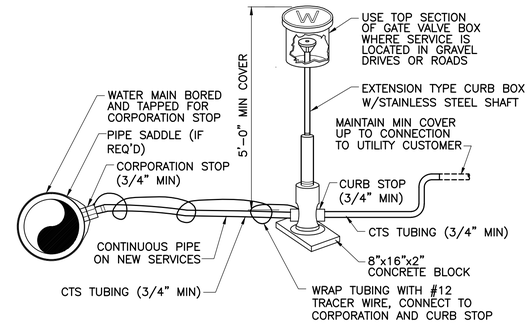
VALVE BOX DETAIL

SCALE: NTS



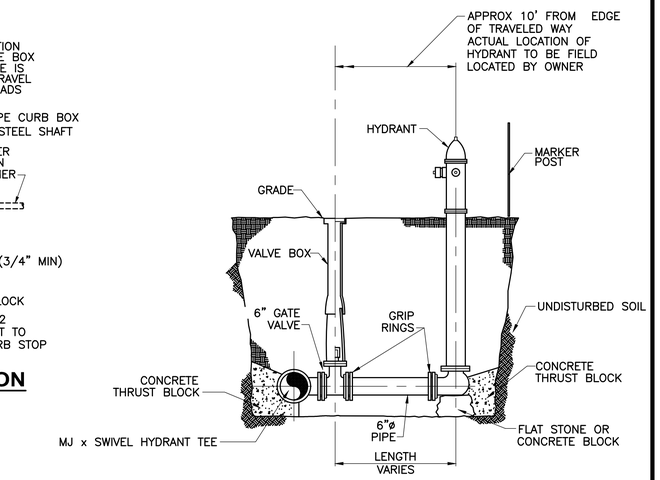
VALVE BOX TRACER WIRE DETAIL

NTS



WATER SERVICE CONNECTION

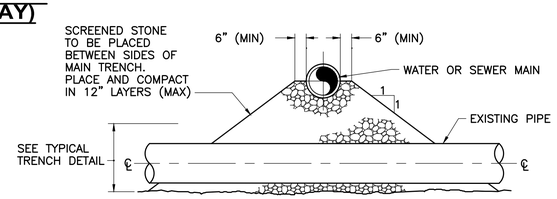
SCALE: NTS



TYPICAL HYDRANT CONNECTION

SCALE: NTS

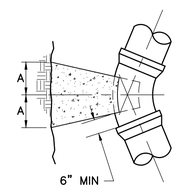
NOTE: HYDRANTS SHALL OPEN IN A CLOCKWISE DIRECTION.



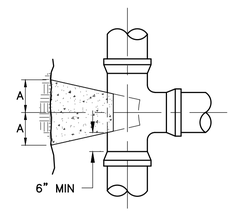
NOTE:
JOINTS ON EACH PIPE TO BE AS FAR FROM INTERSECTION AS POSSIBLE

PIPE CROSSING DETAIL

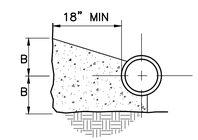
SCALE: NTS



ALL BENDS



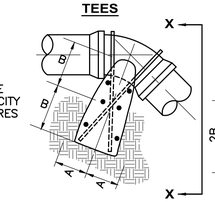
TEES



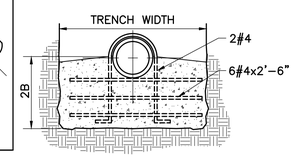
ELEVATION

NOTES

1. THRUST BLOCK SIZES SHOWN ARE BASED ON A SOIL BEARING CAPACITY OF 2000 PSF AND TEST PRESSURES OF 180 PSI.
2. POLYETHYLENE (6 mil) SHALL BE PLACED AROUND FITTINGS PRIOR TO CONCRETE PLACEMENT



VERTICAL BENDS

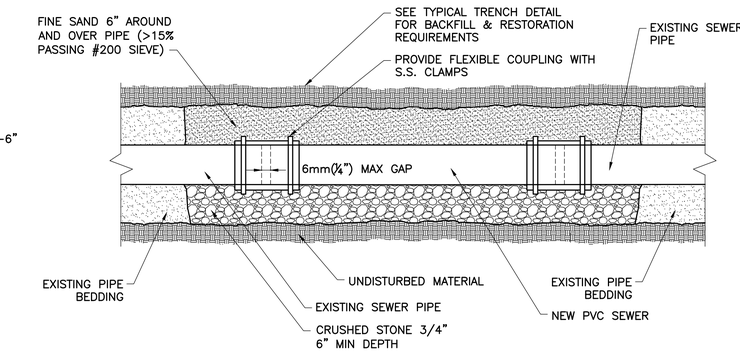


SECTION X-X

PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		VERTICAL BEND (DOWN)	
	A	B	A	B	A	B	A	B	A	B	A	B
6"	15"	12"	12"	9"	9"	6"	6"	6"	12"	12"	24"	21"
8"	20"	15"	14"	12"	9"	9"	9"	6"	18"	12"	33"	24"
10"	21"	21"	18"	15"	15"	9"	9"	9"	20"	18"	40"	27"
12"	27"	24"	23"	15"	15"	12"	12"	9"	25"	18"	48"	30"

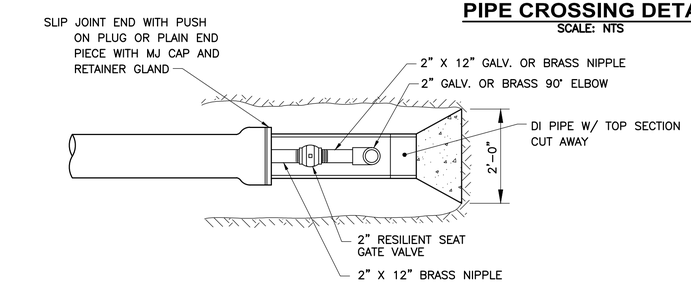
WATER MAIN THRUST BLOCK

SCALE: NTS

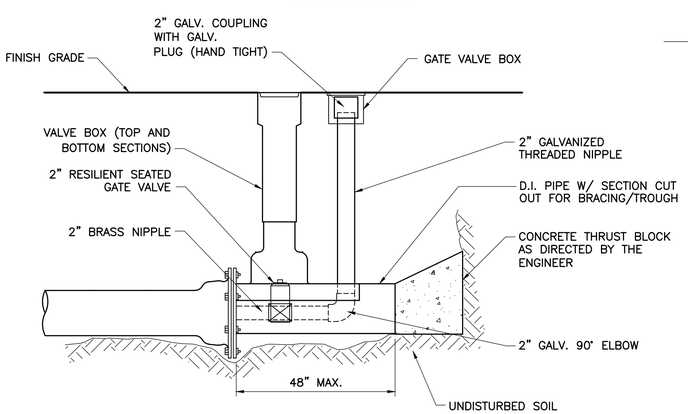


SPOT REPAIR

SCALE: NTS

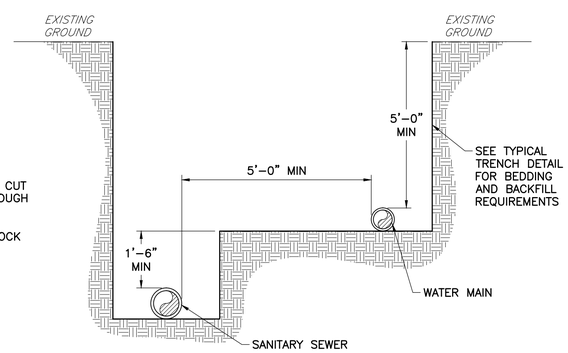


TOP VIEW



STANDARD 2" BLOW OFF

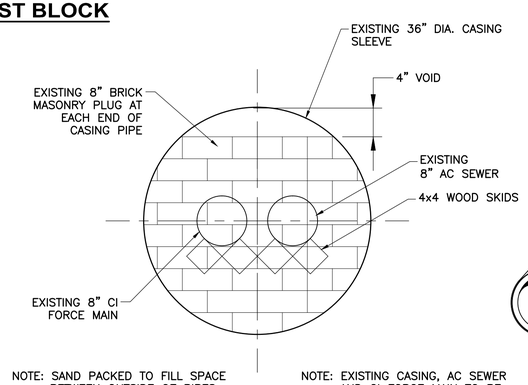
SCALE: NTS



NOTE: INSTALL WATER AND SEWER MAINS WITH 10–FOOT SPACING WHERE POSSIBLE.

MINIMUM WATER/SEWER PIPE SPACING

SCALE: NTS

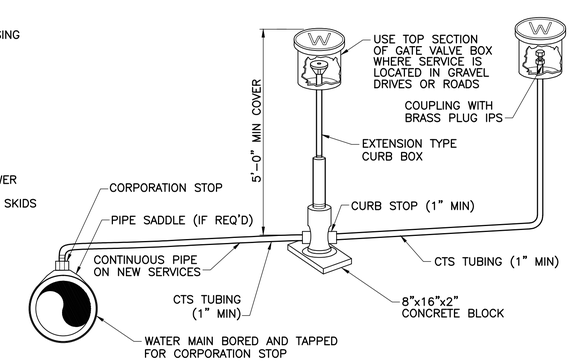


NOTE: SAND PACKED TO FILL SPACE BETWEEN OUTSIDE OF PIPES AND INSIDE OF CASING SLEEVE

NOTE: EXISTING CASING, AC SEWER AND CI FORCE MAIN TO BE ABANDONED

EXISTING 36" CASING SLEEVE AT RAILROAD CROSSING

SCALE: NTS



NOTE: TO BE PLACED AT HIGH SPOTS IN WATER MAIN. FIELD LOCATE AS SHOWN ON DRAWINGS AND AS REQUIRED TO PREVENT AIR BINDING.

MANUAL AIR RELEASE ASSEMBLY

SCALE: NTS

NO	SUBMISSIONS/REVISIONS	APP'D	DATE
1			
2			
3			
4			
5			

DRAWN BY: RJB
CHECKED BY: DDL
DATE: 4–29–14
APPROVED BY: JDP
DATE: 8–1–14
BOOK NO.
PROJECT NO. 12524A
SCALE: AS NOTED

STATE OF MAINE
JEFFREY D. FREELS
NO. 6380
LICENSED
PROFESSIONAL ENGINEER
8-1-14

WRIGHT-PIERCE
Engineering a Better Environment
Offices Throughout New England
888.621.8156 | www.wright-pierce.com

LIVERMORE FALLS WATER DISTRICT
JAY VILLAGE WATER DISTRICT
JAY SEWER DEPARTMENT
ROUTE 4 UTILITIES IMPROVEMENT

CIVIL DETAILS II

DRAWING
C–20

LAST SAVED BY: RXB 7/31/2014 2:25 PM

G:\DWGS\ME\JAY\12524A-ROUTE 4 EXTENSION\12524A-FD\CIV\12524AC-20.DWG | CIVIL DETAILS II | 1:4.56 | ---- | 8/19/2014 11:48:23 AM | RXB