

STATE OF MAINE DEPARTMENT OF TRANSPORTATION



LIST OF DRAWINGS

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Estimated Quantities & Notes	2
General Plan	3
Bridge Details	4
Right of Way Map	5

TRAFFIC DATA

Current (2010) AADT	3770
Future (2030) AADT	4900
DHV - % of AADT	12%
Design Hour Volume	588
Heavy Trucks (% of AADT)	6%
Heavy Trucks (% of DHV)	5%
Directional Distribution (% of DHV)	55%
18 kip Equivalent P 2.0	109
18 kip Equivalent P 2.5	104
Design Speed (mph)	40

HYDROLOGIC DATA

Drainage Area	21.0 sq mi
Design Discharge (Q50)	2389 cfs
Check Discharge (Q100)	2776 cfs
Headwater Elevation (Q1.1)	23.0 ft
Headwater Elevation (Q25)	30.3 ft
Headwater Elevation (Q50)	31.4 ft
Headwater Elevation (Q100)	32.6 ft
Discharge Velocity (Q1.1)	8.3 fps
Discharge Velocity (Q50)	14.0 fps
Discharge Velocity (Q100)	14.8 fps

MATERIALS

Concrete:	Class "A"
Reinforcing Steel	ASTM A 615/A 615M, Grade 60

BASIC DESIGN STRESSES

Concrete	f 'c = 4,350 psi
Reinforcing Steel	f y = 60,000 psi

UTILITIES

Town of Falmouth Sewer	Time Warner Cable
Central Maine Power Company	Portland Water District
Fairpoint Communications	

MAINTENANCE OF TRAFFIC

Maintain a minimum of one 11 foot wide lane of alternating traffic.

FALMOUTH CUMBERLAND COUNTY UNDERWITTED ROAD BRIDGE OVER PISCATAQUA RIVER LEIGHTON ROAD FEDERAL PROJECT NO. AC-BR-1709(203)X CULVERT REHABILITATION BRIDGE NO. 0214



LOCATION MAP



SIGNATURE
Nathaniel D. Benoit
P.E. NUMBER
10651
DATE
12/7/10

PROJECT INFORMATION	
PROGRAM	BRIDGE
PROJECT MANAGER	M. PARLIN / N. BENOIT
DESIGNER	M. PARLIN
CONSULTANT	
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

AC-BR-1709(203)X PIN 17092.03

FALMOUTH
UNDERWITTED RD. BR.

TITLE SHEET

SHEET NUMBER

1

OF 5

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

COMMISSIONER: *[Signature]*
CHIEF ENGINEER: *[Signature]*

DATE
12/10/10
12/13/10

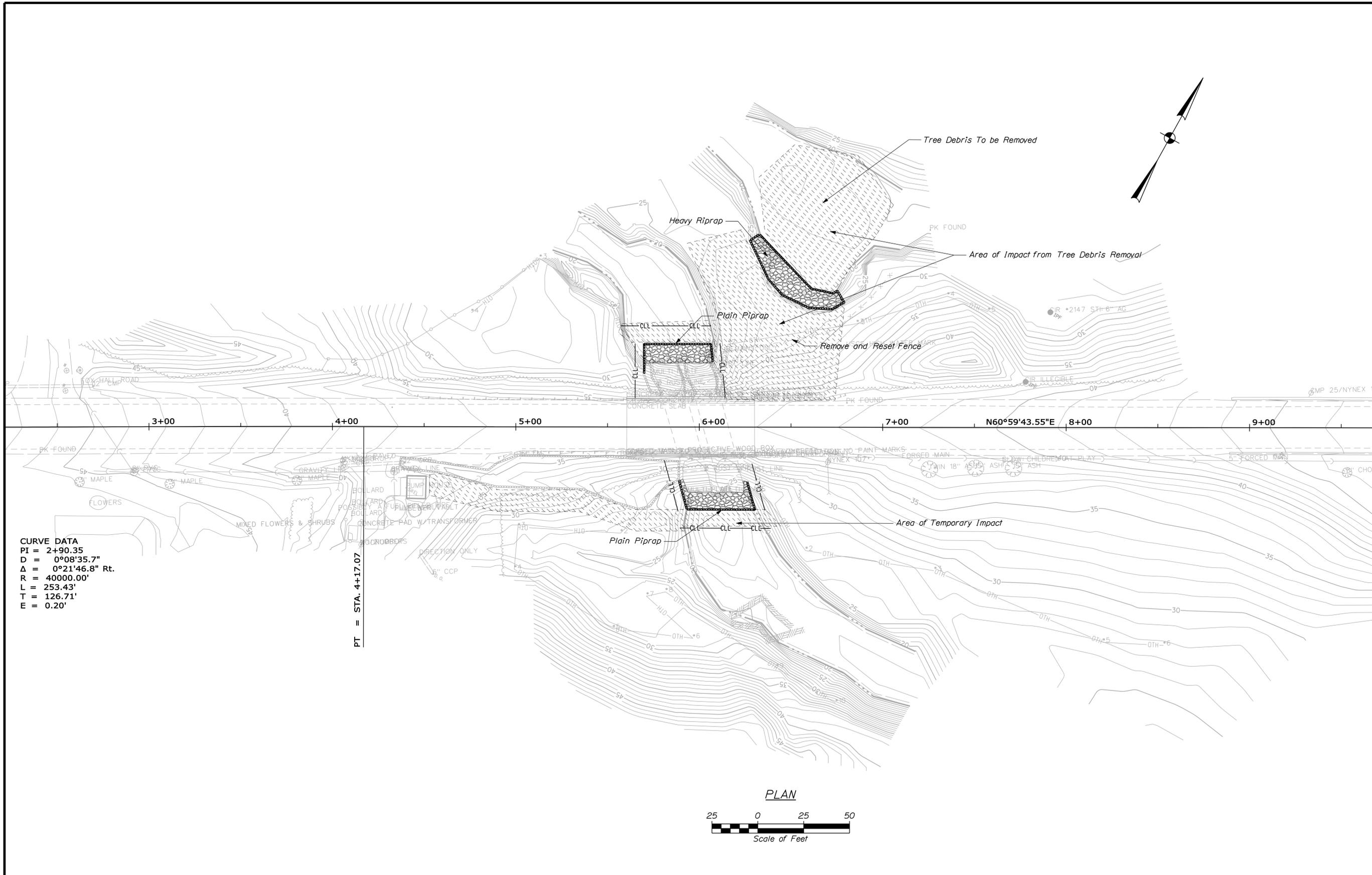
Filename: \03\BRIDGE\MST\A\001_Title.dgn Division: BRIDGE Username: mark.parlin Date: 12/7/2010

Date: 12/7/2010

Username: mark.parlin

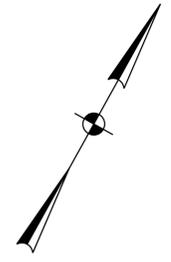
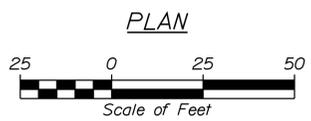
Division: BRIDGE

Filename: ... \03\bridge\msta\003_Plan.dgn



CURVE DATA
 PI = 2+90.35
 D = 0°08'35.7"
 Δ = 0°21'46.8" Rt.
 R = 40000.00'
 L = 253.43'
 T = 126.71'
 E = 0.20'

PT = STA. 4+17.07



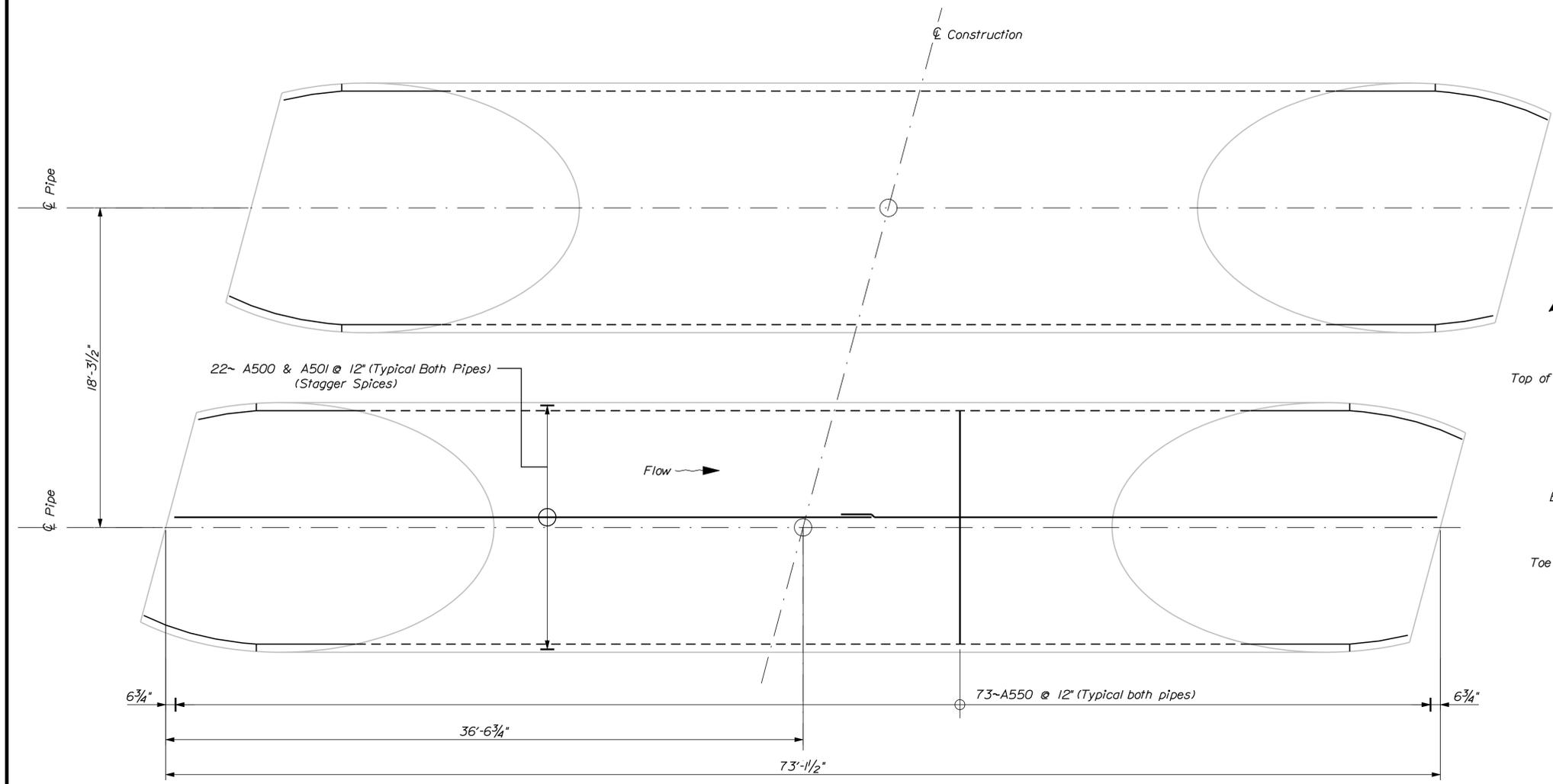
STATE OF MAINE DEPARTMENT OF TRANSPORTATION		AC-BR-1709(203)X	
UNDERWITTED RD. BR. PISCATAQUA RIVER CUMBERLAND COUNTY		PLAN	
SHEET NUMBER		3	
OF 5		BRIDGE NO. 0214 PIN 17092.03 BRIDGE PLANS	
PROJ. MGR.	M. PARLIN	DATE	OCT 2009
DESIGN DETAILED	M. PARLIN	BY	M. PARLIN
CHECKED-REVIEWED		DATE	
DESIGN DETAILED		SIGNATURE	
REVISIONS 1		P.E. NUMBER	
REVISIONS 2		DATE	
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

Date: 12/17/2010

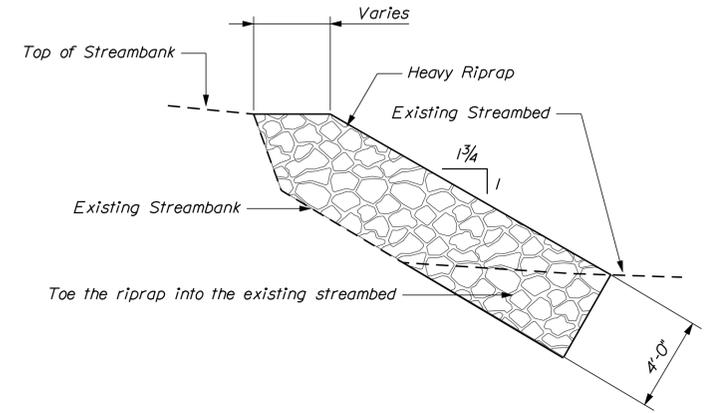
Username: mark.parlin

Division: BRIDGE

Filename: ... \msta\004_Bridge_Details.dgn



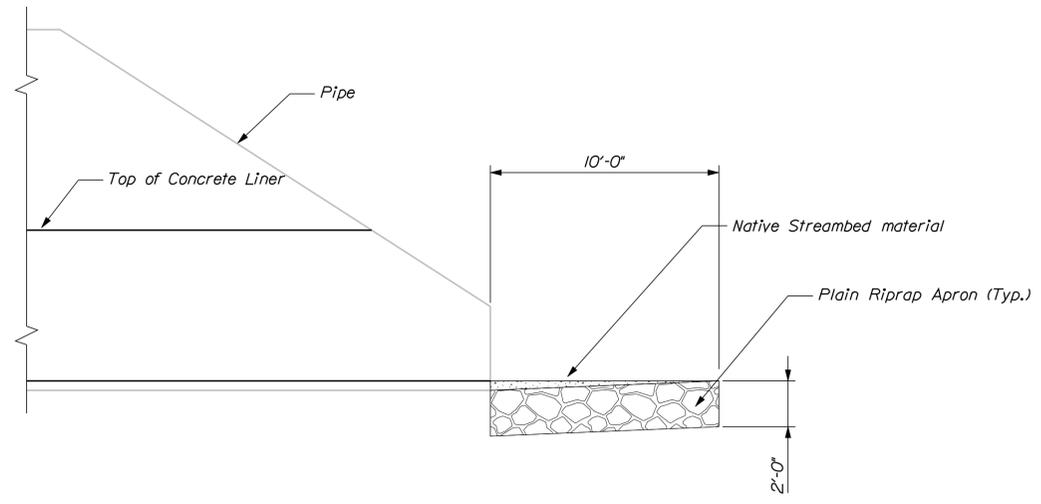
REINFORCING STEEL SCHEDULE			
Mark	Quantity	Length	Description
A500	44	40'-0"	Longitudinal
A501	44	34'-3"	Longitudinal
A550	146	20'-8"	Transverse



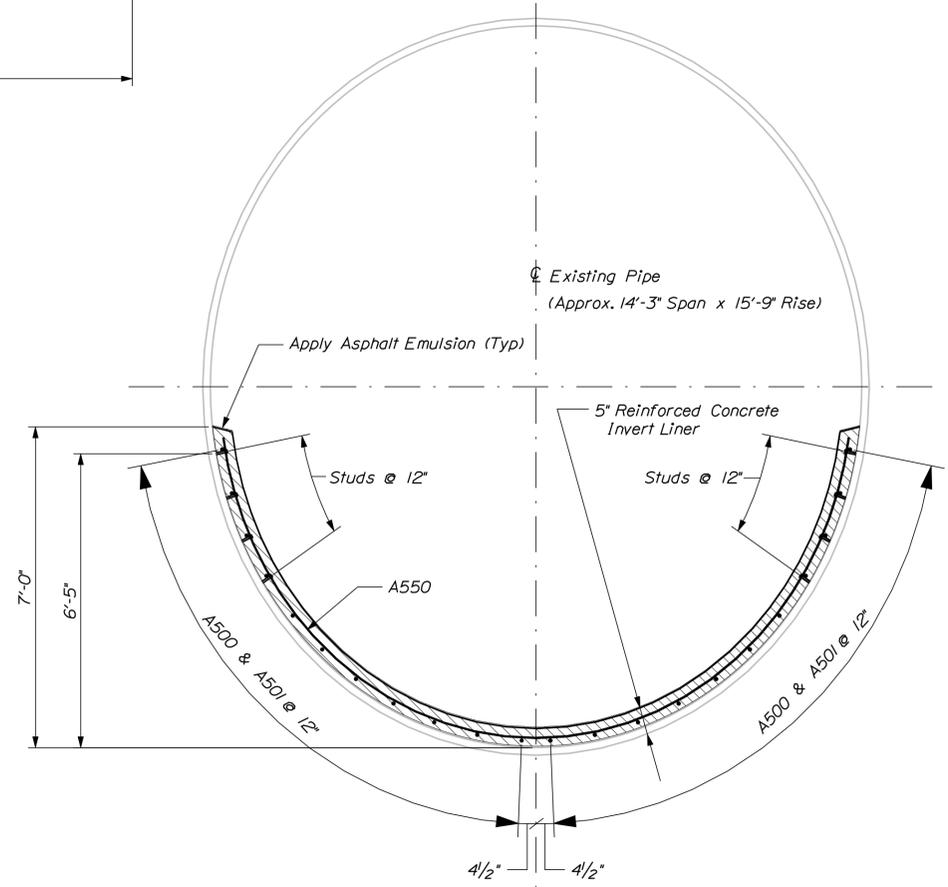
PIPE PLAN

PIPE INVERT NOTES

1. The surfaces of the pipe against which concrete is to be placed shall be thoroughly cleaned so as to remove all loose corrosion. In areas where the metal is non-existent, a preliminary concrete placement shall be made, using forms where required, to fill voids and to establish the original lines of the pipe. The final placement shall then be made as shown. Payment for this work will be considered incidental to Item No. 502.325, Structural Concrete Invert Lining.
2. Four rows of shear connectors shall be staggered longitudinally at 12 inch spacing along each side of the barrel. Shear connectors shall be 1/2 x 3 inch studs or machine bolts welded to the crests of the corrugations. Approximately 1170 shear connectors are required. Payment shall be incidental to Contract items.
3. Reinforcing steel shall have a minimum concrete cover of 2 inches unless otherwise shown. Any cutting and bending to field fit the reinforcing steel shall be considered incidental to related Contract items.
4. The existing structural plate pipe may have a slight deformation requiring field bending and/or cutting of the reinforcing steel.
5. The concrete shall have a broom or gun finish along the entire length of the pipe invert.
6. Payment for the asphalt emulsion applied to the top of the concrete shall be incidental to related Contract items.



PLAIN RIPRAP APRON



TYPICAL PIPE INVERT SECTION

STATE OF MAINE		DEPARTMENT OF TRANSPORTATION	
AC-BR-1709(203)X		PIN 17092.03	
BRIDGE NO. 0214		BRIDGE PLANS	
PROJ. MGR. M. PARLIN, BENJOT	BY M. PARLIN	DATE OCT 2009	SIGNATURE
CHECKED-REVIEWED	DESIGNED-DETAILED		P.E. NUMBER
REVISIONS 1	REVISIONS 2		DATE
REVISIONS 3	REVISIONS 4		
FIELD CHANGES			
UNDERWITTED RD. BR.		CUMBERLAND COUNTY	
PISCATAQUA RIVER		FALMOUTH	
SHEET NUMBER		PLANS	
4		OF 5	

Date: 12/17/2010

Username: mark.parlin

Division: BRIDGE

Filename: ... \03\ROW\MSTA005_RWPLAN1.dgn

CONTROL INFORMATION
 HORIZONTAL DATUM - US STATE PLANE NAD83 (1996)
 ZONE - MAINE 2000 WEST
 VERTICAL DATUM - NAVD 88
 COMBINED SCALE FACTOR - 0.9999784

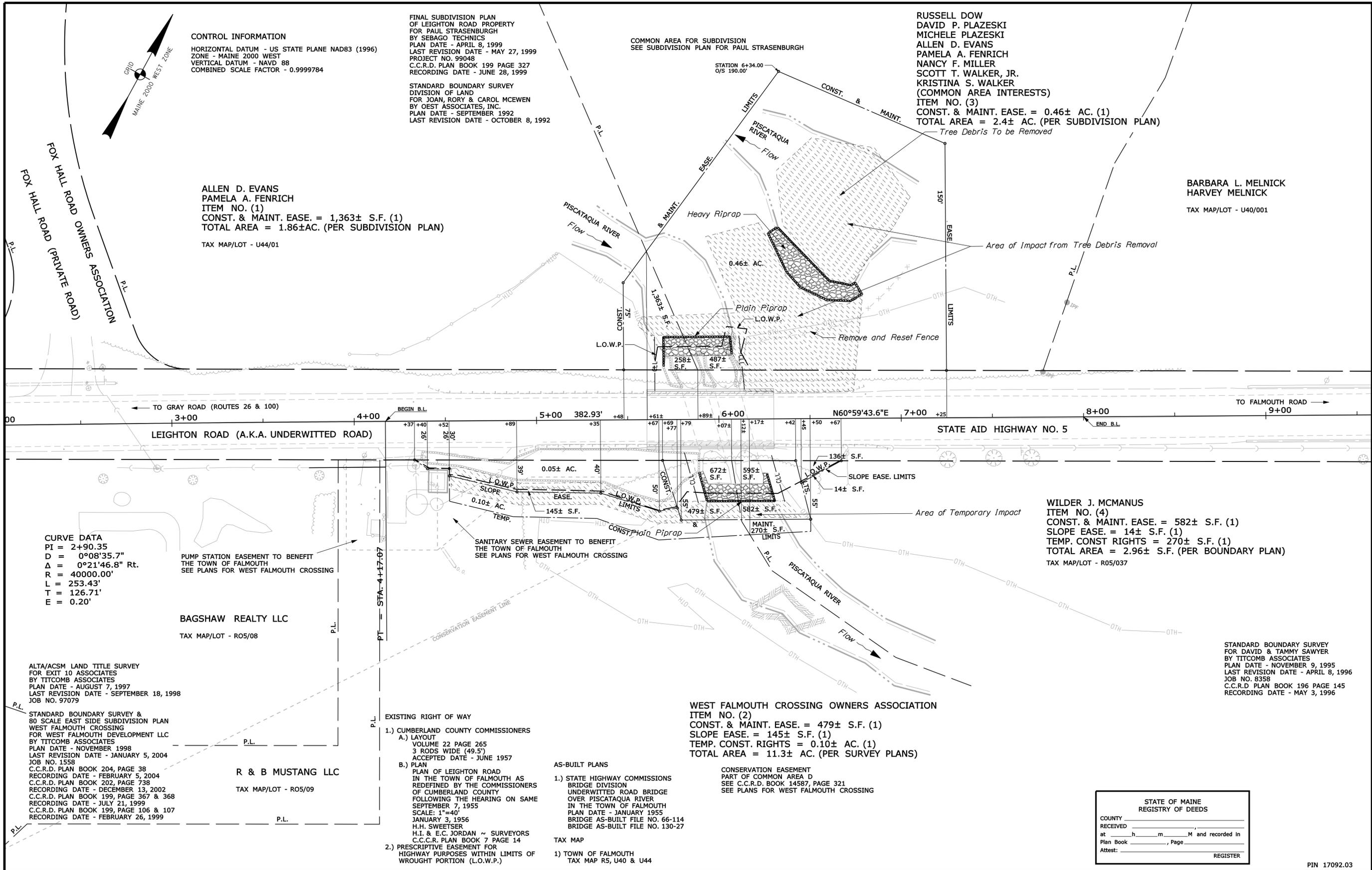
FINAL SUBDIVISION PLAN
 OF LEIGHTON ROAD PROPERTY
 FOR PAUL STRASENBURGH
 BY SEBAGO TECHNICS
 PLAN DATE - APRIL 8, 1999
 LAST REVISION DATE - MAY 27, 1999
 PROJECT NO. 99048
 C.C.R.D. PLAN BOOK 199 PAGE 327
 RECORDING DATE - JUNE 28, 1999

STANDARD BOUNDARY SURVEY
 DIVISION OF LAND
 FOR JOAN, RORY & CAROL MCEWEN
 BY OEST ASSOCIATES, INC.
 PLAN DATE - SEPTEMBER 1992
 LAST REVISION DATE - OCTOBER 8, 1992

RUSSELL DOW
 DAVID P. PLAZESKI
 MICHELE PLAZESKI
 ALLEN D. EVANS
 PAMELA A. FENRICH
 NANCY F. MILLER
 SCOTT T. WALKER, JR.
 KRISTINA S. WALKER
 (COMMON AREA INTERESTS)
 ITEM NO. (3)
 CONST. & MAINT. EASE. = 0.46± AC. (1)
 TOTAL AREA = 2.4± AC. (PER SUBDIVISION PLAN)
 Tree Debris To be Removed

ALLEN D. EVANS
 PAMELA A. FENRICH
 ITEM NO. (1)
 CONST. & MAINT. EASE. = 1,363± S.F. (1)
 TOTAL AREA = 1.86± AC. (PER SUBDIVISION PLAN)
 TAX MAP/LOT - U44/01

BARBARA L. MELNICK
 HARVEY MELNICK
 TAX MAP/LOT - U40/001



CURVE DATA
 PI = 2+90.35
 D = 0°08'35.7"
 Δ = 0°21'46.8" Rt.
 R = 40000.00'
 L = 253.43'
 T = 126.71'
 E = 0.20'

PUMP STATION EASEMENT TO BENEFIT
 THE TOWN OF FALMOUTH
 SEE PLANS FOR WEST FALMOUTH CROSSING

BAGSHAW REALTY LLC
 TAX MAP/LOT - R05/08

ALTA/ACSM LAND TITLE SURVEY
 FOR EXIT 10 ASSOCIATES
 BY TITCOMB ASSOCIATES
 PLAN DATE - AUGUST 7, 1997
 LAST REVISION DATE - SEPTEMBER 18, 1998
 JOB NO. 97079

STANDARD BOUNDARY SURVEY &
 80 SCALE EAST SIDE SUBDIVISION PLAN
 WEST FALMOUTH CROSSING
 FOR WEST FALMOUTH DEVELOPMENT LLC
 BY TITCOMB ASSOCIATES
 PLAN DATE - NOVEMBER 1998
 LAST REVISION DATE - JANUARY 5, 2004
 JOB NO. 1558
 C.C.R.D. PLAN BOOK 204, PAGE 38
 RECORDING DATE - FEBRUARY 5, 2004
 C.C.R.D. PLAN BOOK 202, PAGE 738
 RECORDING DATE - DECEMBER 13, 2002
 C.C.R.D. PLAN BOOK 199, PAGE 367 & 368
 RECORDING DATE - JULY 21, 1999
 C.C.R.D. PLAN BOOK 199, PAGE 106 & 107
 RECORDING DATE - FEBRUARY 26, 1999

R & B MUSTANG LLC
 TAX MAP/LOT - R05/09

- EXISTING RIGHT OF WAY
- CUMBERLAND COUNTY COMMISSIONERS
 A.) LAYOUT
 VOLUME 22 PAGE 265
 3 RODS WIDE (49.5')
 ACCEPTED DATE - JUNE 1957
 - PLAN
 PLAN OF LEIGHTON ROAD
 IN THE TOWN OF FALMOUTH AS
 REDEFINED BY THE COMMISSIONERS
 OF CUMBERLAND COUNTY
 FOLLOWING THE HEARING ON SAME
 SEPTEMBER 7, 1955
 SCALE: 1"=40'
 JANUARY 3, 1956
 H.H. SWEETSER
 H.I. & E.C. JORDAN ~ SURVEYORS
 C.C.R. PLAN BOOK 7 PAGE 14
- 2.) PRESCRIPTIVE EASEMENT FOR
 HIGHWAY PURPOSES WITHIN LIMITS OF
 WROUGHT PORTION (L.O.W.P.)

AS-BUILT PLANS

- STATE HIGHWAY COMMISSIONS
 BRIDGE DIVISION
 UNDERWITTED ROAD BRIDGE
 OVER PISCATAQUA RIVER
 IN THE TOWN OF FALMOUTH
 PLAN DATE - JANUARY 1955
 SCALE: 1"=40'
 BRIDGE AS-BUILT FILE NO. 66-114
 BRIDGE AS-BUILT FILE NO. 130-27

TAX MAP
 1) TOWN OF FALMOUTH
 TAX MAP R5, U40 & U44

WEST FALMOUTH CROSSING OWNERS ASSOCIATION
 ITEM NO. (2)
 CONST. & MAINT. EASE. = 479± S.F. (1)
 SLOPE EASE. = 145± S.F. (1)
 TEMP. CONST. RIGHTS = 0.10± AC. (1)
 TOTAL AREA = 11.3± AC. (PER SURVEY PLANS)

CONSERVATION EASEMENT
 PART OF COMMON AREA D
 SEE C.C.R.D. BOOK 14587 PAGE 321
 SEE PLANS FOR WEST FALMOUTH CROSSING

WILDER J. MCMANUS
 ITEM NO. (4)
 CONST. & MAINT. EASE. = 582± S.F. (1)
 SLOPE EASE. = 14± S.F. (1)
 TEMP. CONST. RIGHTS = 270± S.F. (1)
 TOTAL AREA = 2.96± S.F. (PER BOUNDARY PLAN)
 TAX MAP/LOT - R05/037

STANDARD BOUNDARY SURVEY
 FOR DAVID & TAMMY SAWYER
 BY TITCOMB ASSOCIATES
 PLAN DATE - NOVEMBER 9, 1995
 LAST REVISION DATE - APRIL 8, 1996
 JOB NO. 8358
 C.C.R.D. PLAN BOOK 196 PAGE 145
 RECORDING DATE - MAY 3, 1996

STATE OF MAINE
 REGISTRY OF DEEDS

COUNTY _____
 RECEIVED _____,
 at _____ h _____ m _____ M and recorded in
 Plan Book _____, Page _____
 Attest: _____ REGISTER

PIN 17092.03

SYMBOLS

PI or PIPE (IRON PIPE OR PIN FOUND)	WELL (WELL)
SEPTIC TANK	CONSTRUCTION LIMIT LINE
ABM (TRAVERSE POINT)	PROPERTY LINE PL
WATER LINE	LIMITS OF WROUGHT PORTION (L.O.W.P.)
GAS LINE	EXISTING RIGHT OF WAY
ELECTRIC LINE	NEW RIGHT OF WAY
TELEPHONE LINE	NEW/ROW WITHIN EXIST. ROW
SEWER LINE	CONTROL OF ACCESS

ITEM	TECH	CHECKED
BASE MAP		
EXIST. R/W	G.L.L.	C.W.K.
PROP. LINES	G.L.L.	
AREAS	G.L.L.	

STATE OF MAINE
 DEPARTMENT OF TRANSPORTATION
 16 STATE HOUSE STATION - AUGUSTA, ME. 04333-0016
 FALMOUTH
 RIGHT OF WAY MAP

NO.	DATE	REVISIONS DESCRIPTION	BY

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

DAVID A. COLE
 COMMISSIONER
 KENNETH L. SWEENEY
 CHIEF ENGINEER

DATE _____

STATE OF MAINE
 CHRISTOPHER W. KNIGHT
 2257
 PROFESSIONAL
 LAND SURVEYOR

To the best of my knowledge and belief the Highway Right of Way lines depicted herein are based upon a survey conforming to the Standards of Practice promulgated by the Maine Board of Licensure for Professional Land Surveyors 02-360 CMR, Chapter 90; Exceptions: (1) No separate survey report, (2) Monumentation only as shown on plan. See sheet X of this plan set for coordinates. (3) Other boundary lines, including lines between abutters are approximate and for general reference purposes only.

STATE AID HIGHWAY NO. 5
 LEIGHTON ROAD
 FALMOUTH CUMBERLAND COUNTY
 FEDERAL PROJECT NO. BR-1709(203)X

SEPTEMBER 2010 RIGHT-OF-WAY MAP
 SCALE 1" = 25' SHEET 1 OF 1

D.O.T. FILE NO. 3-559

SHEET NUMBER
 5
 OF 5