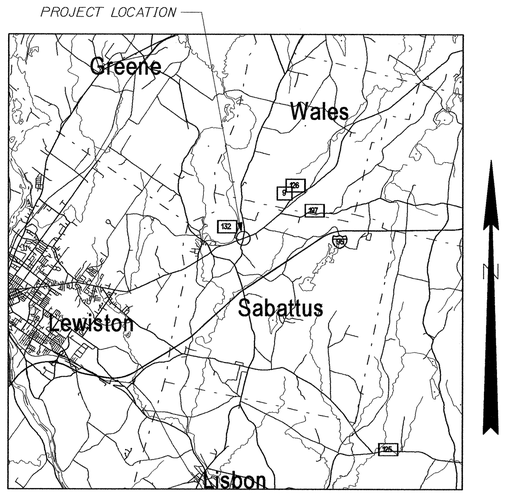
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



A PORTION OF ANDROSCOGGIN COUNTY

LOCATION MAP

2 0 2 4

Scale in Miles

SABATTUS

ANDROSCOGGIN

ROUTE 9 & 126

STP-1724(600)X

PROJECT LENGTH : 0.000 MILES

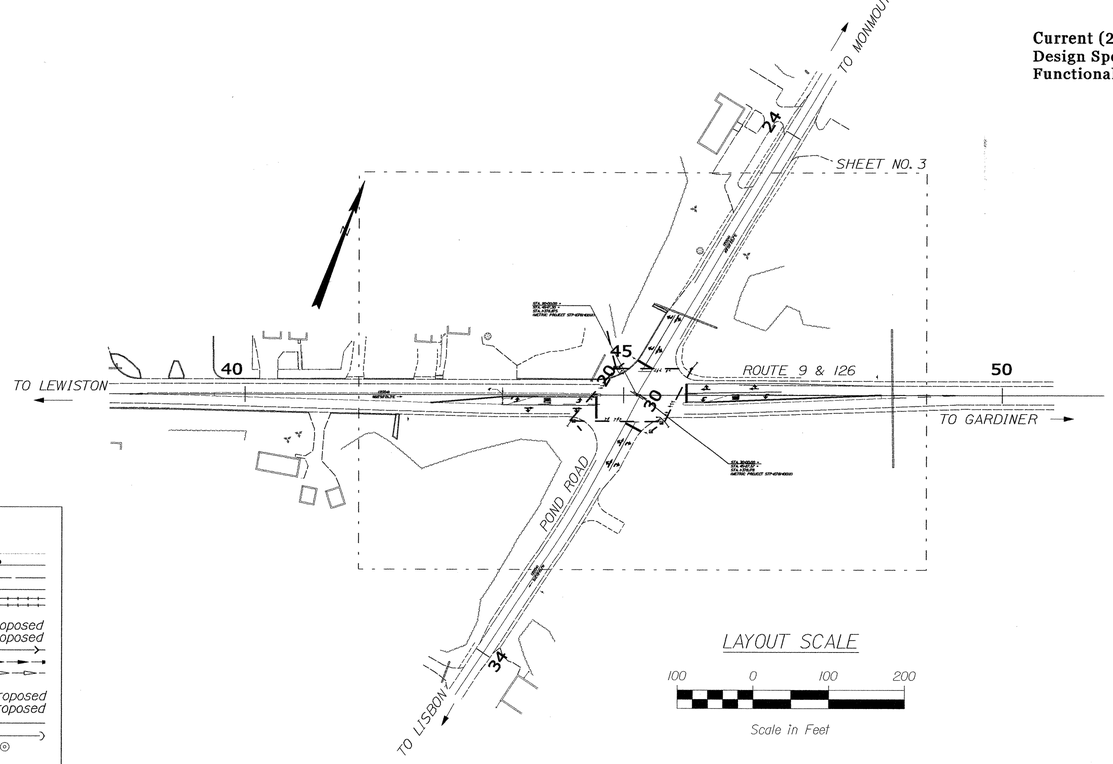
INTERSECTION SIGNALIZATION

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
Estimated Quantities & General Notes	2
Plan	3

TRAFFIC DATA

	RTE 9/126	POND RD.	PLEASANT HILL RD.
Current (2008) AADT	7,310	4,110	3,810
Design Speed (mph)	45	45	35
Functional Class:	MINOR ART.	MAJ. COLL.	MAJ. COLL.



LAYOUT SCALE

100 0 100 200

Scale in Feet

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
Centerline-Existing
Centerline-Proposed 10+00
Travelway-Existing
Travelway-Proposed
Railroad
Catch Basins Existing Proposed
Manholes Existing Proposed
Proposed Underdrain
Proposed Ditch
Existing Ditch
Utility Poles Existing Proposed
Fire Hydrants Existing Proposed
Existing Water Line W
Existing San. Sewer
Existing San. Sewer Manhole
Guardrail-Existing
Guardrail-Proposed
Guardrail-Cable, Other

PROGRAM AREA: TRAFFIC PROGRAM
SCOPE OF WORK: INTERSECTION SIGNALIZATION

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

APPROVED

COMMISSIONER: [signature] DATE 3/30/10

CHIEF ENGINEER: [signature] DATE 3/23/10

ALBERT L. GODFREY No. 4226 LICENSED PROFESSIONAL ENGINEER STATE OF MAINE

SIGNATURE [signature]
4226
P.E. NUMBER
MARCH 23, 2010
DATE

PROJECT INFORMATION

PROGRAM	TRAFFIC
PROJECT MANAGER	JIM MANSIR
DESIGNER	AL GODFREY
CONSULTANT	TERRA MAGNA SERVICES, INC.
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

PIN 17246.00

STP-1724(600)X

SABATTUS
ROUTE 9 & 126
TITLE SHEET

SHEET NUMBER
1
OF x

Filename: ...\HIGHWAY\MSTA\001_Title_01.dgn Division: HIGHWAY Username: jeason Date:3/24/2010

ESTIMATED QUANTITIES

ITEM NO.	DESCRIPTION	QUANTITY	UNIT
202.11	REMOVING PORTLAND CEMENT CONCRETE PAVEMENT	205	SY
403.208	HOT MIX ASPHALT, 12.5 mm SURFACE	21	TON
403.213	HOT MIX ASPHALT, 12.5 mm BASE	75	TON
409.15	BITUMINOUS TACK COAT - APPLIED	5	GAL
626.11	PRECAST JUNCTION BOX	4	EA
626.22	NON-METALLIC CONDUIT	60	LF
627.733	WHITE OR YELLOW PVMT MARKING LINE	1,200	LF
627.75	WHITE OR YELLOW PAVEMENT AND CURB MARKING	600	SF
627.76	TEMP PVMT MARK LINE, WHITE OR YELLOW	1	LS
627.77	REMOVING PAVEMENT MARKINGS	500	SF
631.211	PAVEMENT SWEEPER	10	HR
631.212	SMALL PAVEMENT GRINDER	10	HR
643.80	TRAFFIC SIGNAL AT: RTE 9/126, POND RD. & PLEASANT HILL RD.	1	LS
645.106	DEMOUNT REG, WARN, CONF, & RTE SIGN	2	EA
645.271	REG WARN CONF RTE SIGNS, TYPE I	80	SF
645.292	REG WARN CONF RTE SIGNS, TYPE II	120	SF
652.33	DRUM	15	EA
652.34	CONE	25	EA
652.35	CONSTRUCTION SIGNS	300	SF
652.361	MAINTENANCE OF TRAFFIC CONTROL DEVICES	1	LS
652.38	FLAGGER	300	HR
659.10	MOBILIZATION	1	LS

GENERAL NOTES

1. THE UTILITIES IN THE PROJECT AREA ARE AS FOLLOWS:
   CENTRAL MAINE POWER COMPANY
   MID-MAINE TELECOM
   NORTHERN NEW ENGLAND TELEPHONE OPERATIONS, LLC
   TIME WARNER CABLE
   SABATTUS SANITARY DISTRICT
2. NO UTILITY INVOLVEMENT IS ANTICIPATED.
3. ALL WASTE MATERIAL NOT USED ON THE PROJECT SHALL BE DISPOSED OF OFF THE PROJECT IN WASTE AREAS APPROVED BY THE RESIDENT.
4. SLOPES DISTURBED BY THE CONTRACTOR'S EQUIPMENT, PERSONNEL, OR OPERATION SHALL BE REGRADED TO THE SATISFACTION OF THE RESIDENT, SEEDED WITH SEEDING METHOD NO. 2 AND MULCHED. PAYMENT WILL BE INCIDENTAL TO OTHER CONTRACT ITEMS.
5. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MAINE DEPARTMENT OF TRANSPORTATION'S BEST MANAGEMENT PRACTICES FOR EROSION CONTROL & SEDIMENT CONTROL, FEBRUARY, 2008.
6. NO SEPARATE PAYMENT FOR SUPERINTENDENT OR FOREMAN WILL BE MADE FOR THE SUPERVISION OF EQUIPMENT BEING PAID FOR UNDER THE EQUIPMENT RENTAL ITEMS.
7. PLANS HAVE BEEN DEVELOPED FROM PLANS AND RIGHT OF WAY MAPPING OF PREVIOUS PROJECTS AND FROM GENERAL FIELD REVIEW. NO GROUND SURVEY HAS BEEN DONE FOR THIS PROJECT. STATIONS REFERENCED ARE APPROXIMATE.
8. TANGENT BEARINGS SHOWN ON THE PLANS ARE FROM D.O.T. FILE NO. I-271, DECEMBER 2004.
9. METALLIC AND NON-METALLIC CONDUIT FOR POLE RISERS WILL BE INCIDENTAL TO PAY ITEM 643.80.
10. MEDIAN BEVEL GRINDING WILL BE PAID UNDER PAY ITEM 631.212. ANY LABOR, MATERIALS OR OTHER EQUIPMENT NECESSARY TO GRIND THE CONCRETE MEDIAN EDGE AT THE SPECIFIED ANGLE WILL BE CONSIDERED INCIDENTAL TO PAYMENT UNDER PAY ITEM 631.212.
11. JOINTS BETWEEN NEW AND EXISTING PAVEMENT SHALL BE SAWCUT VERTICAL AND TACK COATED. PAYMENT FOR MILLING OF ADJACENT PAVEMENT SURFACE FOR PLACEMENT OF HMA SURFACE COURSE OVER THE JOINT SHALL BE PAID UNDER ITEM 631.212.
12. ADVANCE RADAR DETECTION SHALL BE INCIDENTAL TO PAY ITEM 643.80.
13. ALL SIGNAL FACES SHALL HAVE BACKPLATES.
14. ALL PAYMENT FOR TRAFFIC SIGNAL SYSTEM ITEMS SHALL BE INCLUDED WITHIN THE BID ITEMS LISTED IN THE CONTRACT. ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO PROVIDE A COMPLETE, SAFE AND OPERABLE TRAFFIC SIGNAL SYSTEM WILL BE CONSIDERED SUBSIDIARY TO THESE ITEMS.
15. MINIMUM CLEARANCE TO THE BOTTOM OF OVERHEAD SIGNAL HOUSING SHALL BE 16' ABOVE PAVEMENT.
16. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITIES TO ASSURE ADEQUATE CLEARANCES FROM CONDUCTORS.
17. RADAR DETECTION SHALL BE INDIVIDUALLY SURGE PROTECTED AND FUSED.
18. AT THE TIME OF FINAL PROJECT INSPECTION, THE CONTRACTOR SHALL FURNISH TO THE RESIDENT THREE COMPLETE SETS OF AS-BUILT PLANS. ONE SET SHALL REMAIN IN THE CABINET.
19. ALL JUNCTION BOX COVERS TO BE FURNISHED AND INSTALLED SHALL BE LABELED "TRAFFIC SIGNAL".
20. THE CONTRACTOR SHALL INSTALL A SELF-CONTAINED METER SOCKET BYPASS (SINGLE PHASE 100 OR 150 AMP) WITH A SINGLE HANDLE LEVER OPERATED BYPASS FOR POWER SHUTOFF TO THE METER WITHOUT INTERRUPTING THE SIGNAL DISPLAYS.
21. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT LEGIBLE, WEATHERPROOF TAGS THAT ARE SECURELY ATTACHED TO EACH CABLE.
22. THE CONTRACTOR SHALL NOTIFY THE APPROPRIATE UTILITIES AT LEAST 48 HOURS IN ADVANCE OF POLE SETTING OPERATIONS WHERE ANY POTENTIAL CONFLICT WITH OVERHEAD WIRES MAY OCCUR.
23. THE MAINTENANCE OF SIGNALS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY MAINEDOT.
24. EXISTING DETECTOR LOOPS AND ASSOCIATED JUNCTION BOXES ARE INTENDED TO BE USED FOR THIS SIGNAL PROJECT.
25. MODIFICATION, ADJUSTMENT OR REPLACEMENT OF EXISTING JUNCTION BOXES TO ACCOMMODATE CONNECTION OF NEW CONDUIT SHALL BE INCIDENTAL TO THE CONTRACT.
26. APPROXIMATE AERIAL UTILITY CONDUCTOR HEIGHTS:

STA. 44+85, 22' LT	CATV 23.2'
STA. 45+70, 40' LT	TEL 24.7' (NO CATV), SECONDARY ELEC. 31'±
STA. 45+ 25, 45' RT	TEL 24.0', LIGHTING 27.0' SECONDARY ELEC. 27.3' (NO CATV)

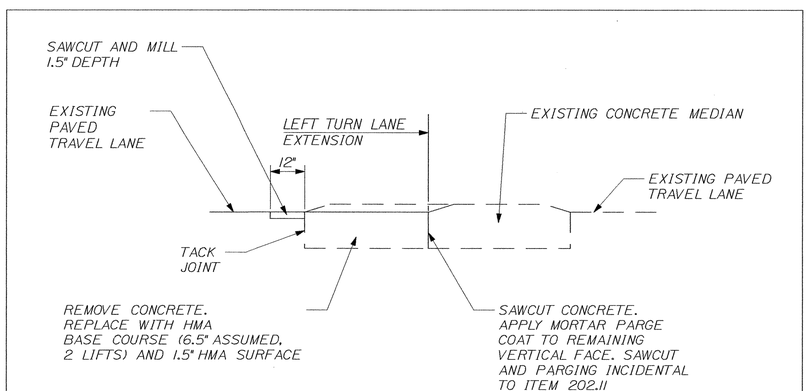
27. SIGNAL HEADS AND OVERHEAD SIGNS SHALL BE SECURED WITH A BOTTOM TETHER WIRE.

JUNCTION BOX SCHEDULE

(1) 44+34±, 34' RT (NEW)
(2) 44+46±, 47'± RT (EXISTING)
(3) 44+93±, 35' LT (NEW)
(4) 45+10±, 50'± LT (EXISTING)
(5) 45+36±, 47' RT (NEW)
(6) 45+44±, 52'± RT (ABANDON)
(7) 45+50±, 37' RT (NEW)
(8) 45+88±, 31'± LT (EXISTING)

BURIED CONDUIT SCHEDULE

(1) - (2) 2" SCHEDULE 80 16 L.F.
(3) - (4) 2" SCHEDULE 80 21 L.F.
(5) - (7) 2" SCHEDULE 80 16 L.F.



CONCRETE MEDIAN REMOVAL DETAIL
NOT TO SCALE

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1724(600)X

PIN 17246.00

HIGHWAY PLANS

STATE OF MAINE — ALBERT L. GODFREY No. 4226 — LICENSED PROFESSIONAL ENGINEER

ALBERT L. GODFREY
SIGNATURE

4226
P.E. NUMBER

MARCH 23, 2010
DATE

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

DATE
3-10
3-10

SABATTUS
ROUTE 9 & 126
ESTIMATED QUANTITIES,
NOTES AND DETAILS

SHEET NUMBER
2
OF 3

Filename: ...\MSTA\002_Estimate_01.dgn Division: HIGHWAY Username: jeason Date:4/5/2010

Filename: ...\HIGHWAY\MSTA\003_HDPlan1.dgn Username: jeason Division: HIGHWAY Date:3/24/2010

LEGEND

- POLE MOUNTED CONTROLLER
- NEW WOOD SIGNAL POLE WITH GUY
- SPAN WIRE MOUNTED TRAFFIC SIGN
- SIGNAL HEAD ASSEMBLY
- ADVANCE RADAR DETECTION
- JNCT — JUNCTION BOX (EXISTING)
- JB — JUNCTION BOX (NEW)
- CONDUIT
- LOOP DETECTOR
- LUMINAIRE ON BRACKET ARM
- OU — AERIAL UTILITIES
- W — WATER MAIN
- T — TELEPHONE DUCT
- OE — AERIAL LIGHTING CONDUCTOR
- CATV — AERIAL CATV CONDUCTOR
- SSWL — SINGLE SOLID WHITE LINE
- SSYL — SINGLE SOLID YELLOW LINE

ROW REFERENCES

ANDROSCOGGIN COUNTY VOL. 4 PG. 493
OCT. 6, 1903 4 RODS
SHC FILE NO. 1-51
DOT FILE NO. 1-271

PLEASANT HILL RD. AND POND RD.
ANDROSCOGGIN COUNTY VOL. 5 PG. 71
1817 4 RODS

N/F
GEORGE M. GOWELL
CINDY LOU GOWELL
ARTHUR FONTAINE
(LIFE ESTATE)

N/F
ALTERNATIVE PAYROLL
SERVICES, INC.

N/F
LEO R. LABERGE
OLENE M. LABERGE

N/F
MICHAEL GERVAIS
CHRISTINE M. GERVAIS
MARCEL A. GAGNE, SR.
(LIFE ESTATE)

N/F
ROLAND G. POIRIER
HENRIETTE L. POIRIER

STA. 20+00.00 =
STA. 45+17.30 =
STA. 1+376.875
(METRIC PROJECT STP-1076(400)X)

STA. 30+00.00 =
STA. 45+27.57 =
STA. 1+378.178
(METRIC PROJECT STP-1076(400)X)

STA. 42+45 TO STA. 43+84
SAWCUT CONCRETE MEDIAN AS SHOWN AND REMOVE CONCRETE ON RIGHT OF SAWCUT. NO BEVEL GRINDING REQUIRED. REPLACE CONCRETE MEDIAN WITH EQUIVALENT DEPTH OF HMA.

STA. 46+06 TO STA. 48+40
SAWCUT CONCRETE MEDIAN AS SHOWN AND REMOVE CONCRETE ON LEFT OF SAWCUT. GRIND 3:1 BEVEL ON EXPOSED CONCRETE EDGE AT SAWCUT LINE. REPLACE CONCRETE MEDIAN WITH EQUIVALENT DEPTH OF HMA.

NOTES

(A) POWER SOURCE: VER 32

(B) INSTALL 35' CLASS 4 WOOD POLE, SERVICE METER AND CONTROLLER, STA. 44+90, 35' LT., WITH RISER FROM JUNCTION BOX TO CONTROLLER FOR DETECTOR CONDUCTOR. INSTALL RISERS FROM CONTROLLER FOR AERIAL CONDUCTORS. INSTALL TWO ADVANCE RADAR DETECTORS ON 8' BRACKET ARM FOR SB AND WB APPROACHES. SET RADAR DETECTION ZONES TO 400'.

(C) EXISTING MDOT LIGHT POLE. ATTACH SIGNAL SPANWIRES AND CONDUCTORS. INSTALL GUY ANCHOR. INSTALL RISER FROM NEW JUNCTION BOX FOR DETECTOR CONDUCTOR.

(D) EXISTING MDOT LIGHT POLE. ATTACH SIGNAL SPANWIRES AND CONDUCTORS. INSTALL GUY ANCHOR. INSTALL RISERS FOR DETECTOR CONDUCTORS. INSTALL TWO ADVANCE RADAR DETECTORS ON 8' BRACKET ARM FOR EB AND WB APPROACHES. SET EB DETECTION ZONE TO 400'. SET NB DETECTION ZONE TO 300'

(E) INSTALL 35' CLASS 4 WOOD POLE, STA. 45+90, 35' LT. INSTALL RISER FOR DETECTOR CONDUCTOR. INSTALL GUY ANCHOR.

CURVE DATA

PI = 31+63.46
D = 3° - 29' - 33.9"
Δ = 5° - 32' - 08.3" Rt.
R = 1,640.42'
L = 158.49'
T = 79.31'
E = 1.92'

PC = STA. 30+84.15
PT = STA. 32+42.64

ADVANCE SIGNING (GROUNDMOUNT)

W23-2	36" X 36"	36+65± RT.
		53+85± LT.
		28+40± LT.
		38+40± LT.
W3-3	36" X 36"	39+65± RT.
		50+85± LT.
		25+40± LT.
		35+40± LT.
W3-4	36" X 36"	42+15± RT.
		48+35± LT.
		22+90± LT.
		32+90± LT.
R10-6	24" X 36"	20+40± LT.
		30+40± LT.

8 PHASE NEMA CONTROLLER

PHASE 1 — NOT USED	PHASE 2	PHASE 3 — NOT USED	PHASE 4
PHASE 5 — NOT USED	PHASE 6	PHASE 7 — NOT USED	PHASE 8

CONTROLLER PROGRAMMING (INITIAL)

INTERVAL	PHASE 2	PHASE 4	PHASE 6	PHASE 8	FLASH
PHASE					
TIMING IN SECONDS					
INITIAL INTERVAL	10	8	10	8	
VEHICLE EXTENSION	2.5	1.5	2.5	1.5	
*MAX. GREEN 1	36	26	36	26	
MAX. GREEN 2					
YELLOW	4.3	4.3	4.3	4.3	
ALL RED	2.1	1.5	2.1	1.5	
PEDESTRIAN WALK					
PEDESTRIAN CLEAR					
RECALL	SOFT		SOFT		

SIGNAL HEAD DETAIL

LED DISPLAYS
RED
YELLOW
GREEN
NO.REQUIRED 8

PHASE SEQUENCE

Ø2 · Ø6 Ø4 · Ø8
Ø4 AND Ø8 REST ON RED

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

STP-1724(600)X

PIN
17246.00

HIGHWAY PLANS

STATE OF MAINE — ALBERT L. GODFREY No. 4226 — REGISTERED PROFESSIONAL ENGINEER

ALBERT L. GODFREY
SIGNATURE
4226
P.E. NUMBER
MARCH 23, 2010
DATE

PROJ. MANAGER	BY
DESIGN-DETAILED	JLE
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REVISIONS 3	
REVISIONS 4	
FIELD CHANGES	

JIM MANSIR

DATE
3-10
3-10

SABATTUS
ROUTE 9 & 126
PLANS

SHEET NUMBER
3
OF 3