STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

TMSI

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
Exposed Bedrock
Buildings
Trees — Conifer — Deciduous
Tree Line
Clearing Limit Line
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
Existing San. Sewer
Existing San. Sewer Manhole
Guardrail-Existing
Guardrail-Proposed
Guardrail-Cable, Other
Centerline-Existing
Centerline-Proposed
Travelway-Existing
Travelway-Proposed

Boring — HB-XXX-###
Pavement Core — PC-#
Test Pit — TP-XXX-###

Probe — P-#.#X
#.# = Depth
X = W (Weathered Rock)
R (Refusal)
NR (No Refusal)

HERMON
PENOBSCOT COUNTY
COLDBROOK RD / ODLIN RD / EMERSON MILL RD
2287700
PROJECT LENGTH : 0.00 MILES

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
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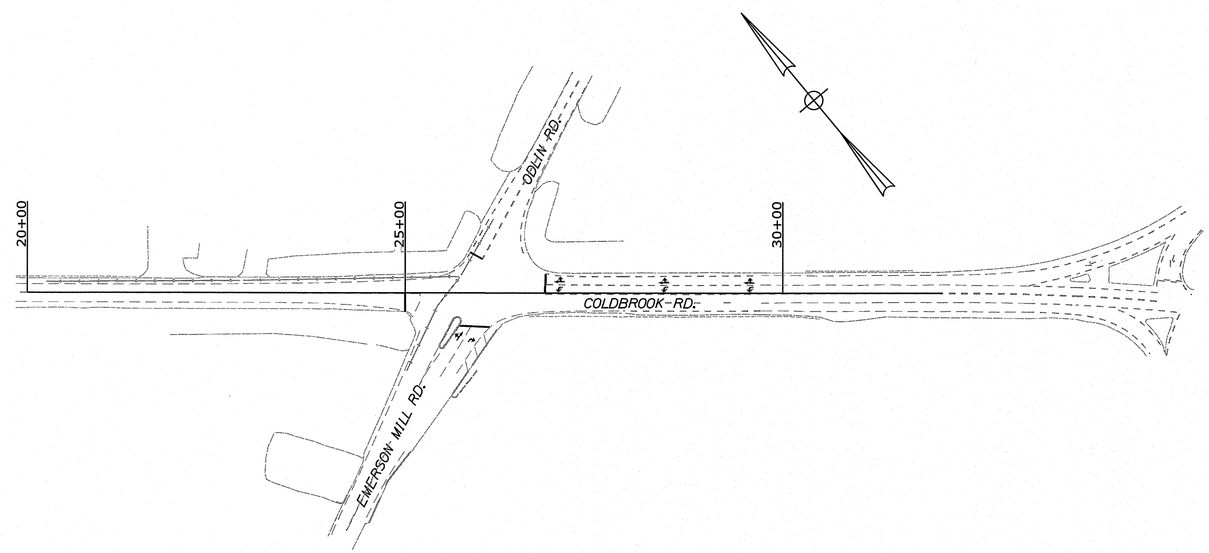
Geoplan	4



LAYOUT SCALE
100 0 100 200
Scale in Feet

PROJECT LOCATION:	INTERSECTION OF COLDBROOK RD/ODLIN RD/EMERSON MILL RD IN HERMON
PROGRAM AREA:	MULTIMODAL
SCOPE OF WORK:	TRAFFIC SAFETY IMPROVEMENTS

WIN 22877.00 2287700

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED — DATE
COMMISSIONER: for — 11-15-18
CHIEF ENGINEER: — 11-15-18

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

PROJECT INFORMATION	
PROGRAM	MULTIMODAL
PROJECT MANAGER	DANIEL LORING
DESIGNER	AL GODFREY, JR.
CONSULTANT	TERRA MAGNA SERVICES, INC.
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

SIGNATURE
4226 P.E. NUMBER
11/12/18 DATE

HERMON
COLDBROOK RD/ODLIN RD/EMERSON MILL RD

TITLE SHEET

SHEET NUMBER
1
OF 4

Filename: ...\001_Title_01.dgn Division: HIGHWAY Username: common Date:11/12/2018

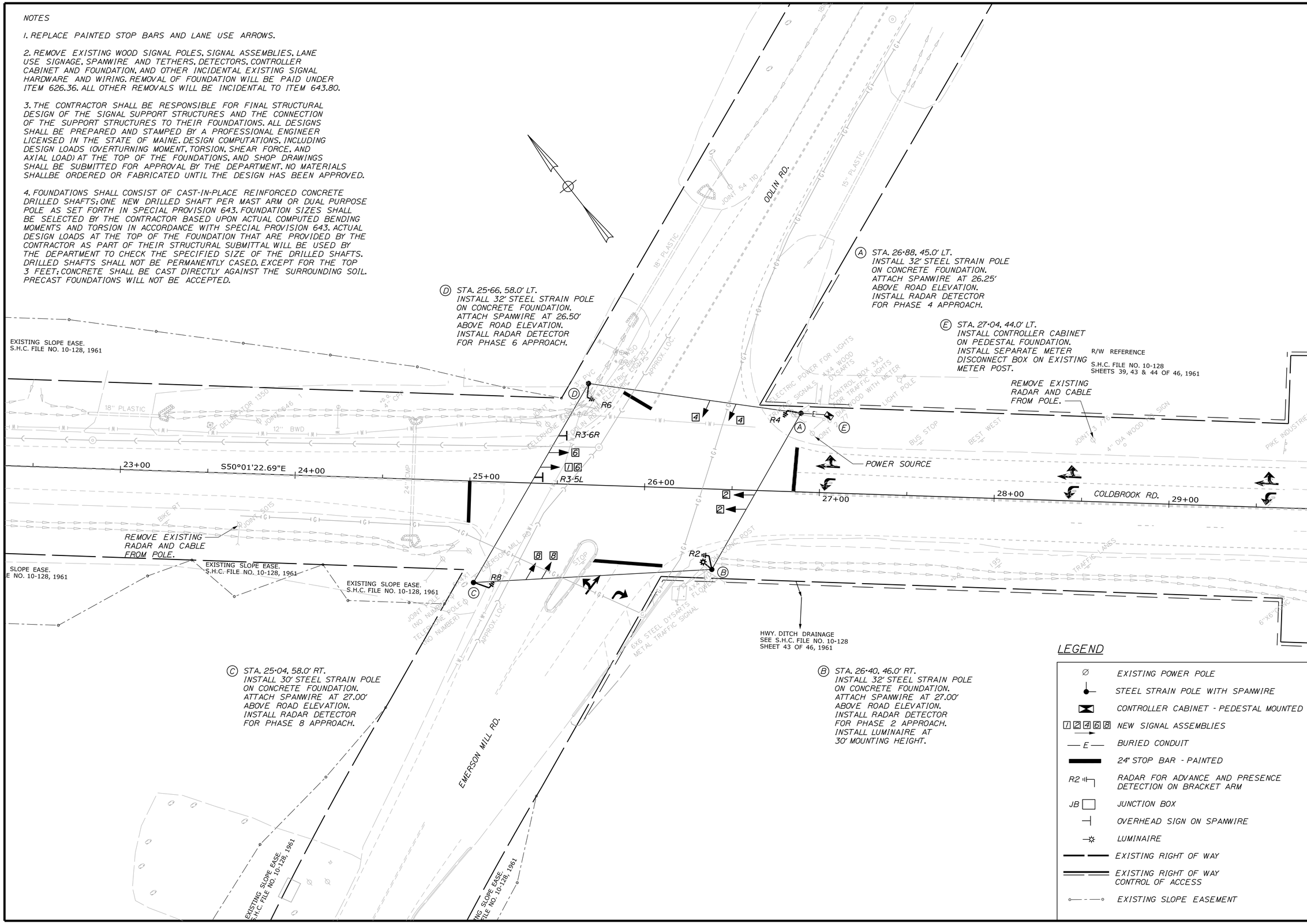
NOTES

1. REPLACE PAINTED STOP BARS AND LANE USE ARROWS.

2. REMOVE EXISTING WOOD SIGNAL POLES, SIGNAL ASSEMBLIES, LANE USE SIGNAGE, SPANWIRE AND TETHERS, DETECTORS, CONTROLLER CABINET AND FOUNDATION, AND OTHER INCIDENTAL EXISTING SIGNAL HARDWARE AND WIRING. REMOVAL OF FOUNDATION WILL BE PAID UNDER ITEM 626.36. ALL OTHER REMOVALS WILL BE INCIDENTAL TO ITEM 643.80.

3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL STRUCTURAL DESIGN OF THE SIGNAL SUPPORT STRUCTURES AND THE CONNECTION OF THE SUPPORT STRUCTURES TO THEIR FOUNDATIONS. ALL DESIGNS SHALL BE PREPARED AND STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MAINE. DESIGN COMPUTATIONS, INCLUDING DESIGN LOADS (OVERTURNING MOMENT, TORSION, SHEAR FORCE, AND AXIAL LOAD) AT THE TOP OF THE FOUNDATIONS, AND SHOP DRAWINGS SHALL BE SUBMITTED FOR APPROVAL BY THE DEPARTMENT. NO MATERIALS SHALLBE ORDERED OR FABRICATED UNTIL THE DESIGN HAS BEEN APPROVED.

4. FOUNDATIONS SHALL CONSIST OF CAST-IN-PLACE REINFORCED CONCRETE DRILLED SHAFTS; ONE NEW DRILLED SHAFT PER MAST ARM OR DUAL PURPOSE POLE AS SET FORTH IN SPECIAL PROVISION 643. FOUNDATION SIZES SHALL BE SELECTED BY THE CONTRACTOR BASED UPON ACTUAL COMPUTED BENDING MOMENTS AND TORSION IN ACCORDANCE WITH SPECIAL PROVISION 643. ACTUAL DESIGN LOADS AT THE TOP OF THE FOUNDATION THAT ARE PROVIDED BY THE CONTRACTOR AS PART OF THEIR STRUCTURAL SUBMITTAL WILL BE USED BY THE DEPARTMENT TO CHECK THE SPECIFIED SIZE OF THE DRILLED SHAFTS. DRILLED SHAFTS SHALL NOT BE PERMANENTLY CASED, EXCEPT FOR THE TOP 3 FEET; CONCRETE SHALL BE CAST DIRECTLY AGAINST THE SURROUNDING SOIL. PRECAST FOUNDATIONS WILL NOT BE ACCEPTED.



(D) STA. 25+66, 58.0' LT.
INSTALL 32' STEEL STRAIN POLE
ON CONCRETE FOUNDATION.
ATTACH SPANWIRE AT 26.50'
ABOVE ROAD ELEVATION.
INSTALL RADAR DETECTOR
FOR PHASE 6 APPROACH.

(A) STA. 26+88, 45.0' LT.
INSTALL 32' STEEL STRAIN POLE
ON CONCRETE FOUNDATION.
ATTACH SPANWIRE AT 26.25'
ABOVE ROAD ELEVATION.
INSTALL RADAR DETECTOR
FOR PHASE 4 APPROACH.

(E) STA. 27+04, 44.0' LT.
INSTALL CONTROLLER CABINET
ON PEDESTAL FOUNDATION.
INSTALL SEPARATE METER
DISCONNECT BOX ON EXISTING
METER POST.

(C) STA. 25+04, 58.0' RT.
INSTALL 30' STEEL STRAIN POLE
ON CONCRETE FOUNDATION.
ATTACH SPANWIRE AT 27.00'
ABOVE ROAD ELEVATION.
INSTALL RADAR DETECTOR
FOR PHASE 8 APPROACH.

(B) STA. 26+40, 46.0' RT.
INSTALL 32' STEEL STRAIN POLE
ON CONCRETE FOUNDATION.
ATTACH SPANWIRE AT 27.00'
ABOVE ROAD ELEVATION.
INSTALL RADAR DETECTOR
FOR PHASE 2 APPROACH.
INSTALL LUMINAIRE AT
30' MOUNTING HEIGHT.

LEGEND

∅	EXISTING POWER POLE
	STEEL STRAIN POLE WITH SPANWIRE
	CONTROLLER CABINET - PEDESTAL MOUNTED
1 2 4 6 8	NEW SIGNAL ASSEMBLIES
— E —	BURIED CONDUIT
	24" STOP BAR - PAINTED
R2	RADAR FOR ADVANCE AND PRESENCE DETECTION ON BRACKET ARM
JB	JUNCTION BOX
	OVERHEAD SIGN ON SPANWIRE
	LUMINAIRE
	EXISTING RIGHT OF WAY
	EXISTING RIGHT OF WAY CONTROL OF ACCESS
	EXISTING SLOPE EASEMENT

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2287700

WIN 22877.00

HIGHWAY PLANS

STATE OF MAINE ALBERT L. GUDFREY No. 4226 PROFESSIONAL ENGINEER

SIGNATURE 4226 — P.E. NUMBER

11/12/18 — DATE

PROJ. MANAGER: DANIEL LORING		BY	DATE
DESIGN-DETAILED	ALG	MSM	8/2018
CHECKED-REVIEWED	ALG		11/2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

HERMON
COLDBROOK RD\ODLIN RD\EMERSON MILL RD

PLAN SHEET

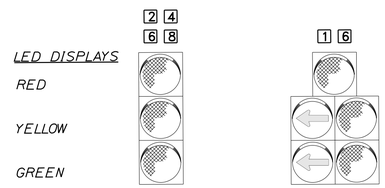
SHEET NUMBER
2
OF 4

Filename: ...\002_HDPlan1.dgn Division: HIGHWAY Username: common Date:11/12/2018

OVERHEAD SIGNS DETAIL

R3-5L	R3-6R (THRU/RIGHT)
30"X36"	30"X36"
1 REQUIRED	1 REQUIRED
(OVERHEAD)	(OVERHEAD)

SIGNAL HEAD DETAIL



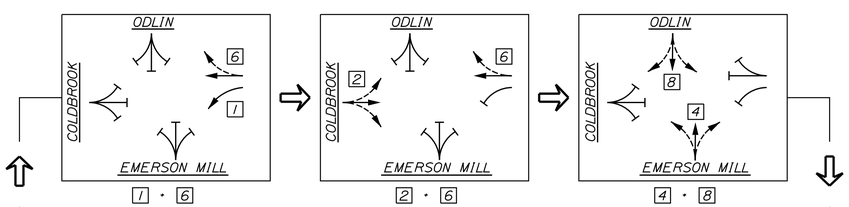
NO.REQUIRED	7	1

1. ALL SIGNAL FACE DISPLAYS SHALL BE 12" LED.
2. ALL SIGNAL FACE DISPLAYS SHALL HAVE TUNNEL VISORS.
3. ALL SIGNAL DISPLAYS SHALL HAVE BACKPLATES WITH 2" MINIMUM WIDTH YELLOW RETROREFLECTIVE TAPE AROUND DISPLAY FACE.

INITIAL SIGNAL TIMING

PHASE	1	2	3	4	5	6	7	8
MIN. INITIAL	5.0	10.0	-	10.0	-	10.0	-	10.0
VEH. EXT.	3.0	5.0	-	3.0	-	5.0	-	3.0
MAX. GREEN	17	22	-	23.5	-	45	-	23.5
YELLOW	3.5	3.5	-	3.5	-	3.5	-	3.5
ALL RED	2.5	2.5	-	2.0	-	2.5	-	2.0
FLASH	R	Y	-	R	-	Y	-	R
RECALL	-	SOFT	-	-	-	SOFT	-	-

PHASE DIAGRAM



TRAFFIC SIGNAL NOTES

1. TRAFFIC SIGNAL WORK FOR THIS PROJECT WILL INCLUDE, BUT NOT BE LIMITED TO, FURNISHING AND INSTALLING A COMPLETE NEW NEMA TS-2 TYPE 2 PEDESTAL-MOUNTED TRAFFIC SIGNAL CABINET AND FOUNDATION, CONTROLLER, MMU, FLASHER UNIT, DETECTOR RACK, AND OTHER NECESSARY COMPONENTS; TRAFFIC SIGNAL ASSEMBLIES; RADAR FOR ADVANCE DETECTION FOR DILEMMA ZONE PROTECTION AND SECONDARY STOP LINE PRESENCE DETECTION; INTERSECTION LIGHTING; AND RELATED INCIDENTAL WORK AND MATERIALS.

2. ALL WORK SHALL BE COMPLETED IN CONFORMANCE WITH THE LATEST REVISIONS OF THE STATE OF MAINE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, THE NATIONAL ELECTRICAL CODE, AND ANY REQUIREMENTS OF THE POWER COMPANY.

3. AN EXTERNAL, STANDALONE BREAKER TO DISCONNECT POWER TO THE NEW CONTROL CABINETS SHALL BE INSTALLED IN A LOCKABLE NEMA 3R ENCLOSURE BETWEEN THE METER AND THE CABINET.

4. THE CONTROL CABINETS AND THE POWER DISCONNECT ENCLOSURE EACH SHALL BE MARKED WITH ARC HAZARD TYPE 2, 3 OR 4 AND THE APPROPRIATE PPE REQUIRED. SEE SECTION 643.09 FOR OTHER REQUIREMENTS.

5. WIRING AND CONTROL HARDWARE FOR INTERSECTION LIGHTING SHALL BE INSTALLED IN A LOCKABLE NEMA 3R ENCLOSURE SEPARATE FROM THE TRAFFIC SIGNAL CABINET.

6. SIGNAL ASSEMBLIES SHALL BE POLYCARBONATE WITH DOUBLE SPANWIRE SUPPORT. ALL SIGNAL ASSEMBLIES AND OVERHEAD SIGNAGE ATTACHED TO SPANWIRES SHALL BE STABILIZED WITH A BOTTOM TETHER.

7. RADAR DETECTION SHALL PROVIDE BOTH DILEMMA ZONE PROTECTION AND SECONDARY STOP BAR PRESENCE DETECTION. DETECTORS SHALL BE INDIVIDUALLY SURGE PROTECTED AND FUSED. MOUNT DETECTORS AT 20' TO 26' ABOVE ROADWAY ELEVATION.

8. LOCATIONS OF ANY EXISTING UNDERGROUND UTILITIES SHOWN ARE APPROXIMATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING THE PRESENCE OF UNDERGROUND UTILITY FACILITIES PRIOR TO COMMENCING ANY EXCAVATION WORK OR INSTALLATION OF POLES, FOUNDATIONS, JUNCTION BOXES, CONDUIT OR GROUND-MOUNTED SIGNAGE AND SHALL NOTIFY UTILITIES OF PROPOSED WORK IN ACCORDANCE WITH MRSA TITLE 23 SECTION 3360-A, MAINE "DIG SAFE" SYSTEM. CONTRACTOR SHALL CONTACT DIG SAFE AT LEAST THREE WORKING DAYS PRIOR TO THE BEGINNING OF EXCAVATION. ALL UTILITIES SHALL BE LOCATED BEFORE BEGINNING EXCAVATION.

9. THE CONTRACTOR SHALL NOTIFY UTILITY COMPANIES AT LEAST 48 HOURS BEFORE ANY OPERATIONS ARE CONDUCTED THAT POTENTIALLY COULD CONFLICT WITH AERIAL UTILITIES.

10. NEW CONDUIT NOT UNDER PAVEMENT SHALL BE 3 INCH MINIMUM, PVC SCHEDULE 40. MINIMUM BURIAL DEPTH FOR CONDUIT SHALL BE 36". TOP 3 INCHES OF CONDUIT SHALL BE SEALED TO PREVENT ENTRY BY RODENTS. CONDUIT BETWEEN THE POWER SOURCE AND THE CABINET SHALL BE CONCRETE ENCASED.

11. THERE SHALL BE NO SPLICES OR JUNCTION BOXES EXCEPT AS NOTED ON THE PROJECT PLANS OR APPROVED BY THE RESIDENT.

12. JUNCTION BOX COVERS SHALL BE LABELED "TRAFFIC".

13. SPECIFIED TRAFFIC SIGNAL POLE LOCATIONS ARE MEASURED TO THE CENTER OF THE POLES. SPECIFIED LOCATION FOR THE CONTROLLER IS MEASURED TO THE CENTER OF THE CONTROLLER FOUNDATION.

14. ALL FIELD WIRING SHALL BE NEATLY BUNDLED AND CLEARLY IDENTIFIED WITH PERMANENT, LEGIBLE, WEATHERPROOF TAGS SECURELY ATTACHED TO EACH CABLE.

15. AT THE TIME OF FINAL PROJECT INSPECTION, THE CONTRACTOR SHALL FURNISH TO THE RESIDENT THREE COMPLETE SETS OF AS-BUILT TRAFFIC SIGNAL PLANS. ONE ADDITIONAL SET SHALL REMAIN IN EACH CABINET.

16. THE MAINTENANCE OF TRAFFIC SIGNALS SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR UNTIL FINAL ACCEPTANCE BY MAINEDOT.

17. PAYMENT UNDER ITEM 643.80 SHALL INCLUDE, BUT NOT BE LIMITED TO, POWER SERVICE AND METER, METER DISCONNECT AND ENCLOSURE, BRACKET ARMS, SPANWIRES, TETHER WIRES, SIGNAL ASSEMBLIES AND LED LAMPS, BACKPLATES, VISORS, GUY LEADS AND ANCHORS, CONTROLLER AND CABINETS, LUMINAIRES, RADAR TRAFFIC DETECTORS, WIRING, CABLE, POLE RISERS, AND ALL APPURTENANCES AND INCIDENTALS NECESSARY FOR A COMPLETELY FUNCTIONING TRAFFIC SIGNAL INSTALLATION, OTHER THAN RELATED LABOR, MATERIALS AND EQUIPMENT INCLUDED IN OTHER PAY ITEMS OF THE CONTRACT.

LUMINAIRE NOTES

1. PROPOSED LIGHTING SHALL BE PHOTOCELL ACTIVATED BY A PHOTOCELL ON THE CONTROL CABINET.

2. LIGHTING FIXTURE VOLTAGE SHALL BE 240 VOLTS.

3. LIGHTING FIXTURE SHALL BE AN IES FULL CUTOFF LIGHT EMITTING DIODE (LED) FIXTURE, IES DISTRIBUTION TYPE 3. LED COLOR TEMPERATURE SHALL BE 4000K.

4. FIXTURE SHALL BE GASKETED AND HAVE SURGE PROTECTION AND A DOUBLE FUSE KIT. FIXTURE SHALL BE GRAY.

5. LUMINAIRE ON POLE 'B' SHALL BE AN AMERICAN ELECTRIC LIGHTING 'AUTOBAHN' ATB2 SERIES, 91 WATT 700 MA LED FIXTURE. CATALOG NUMBER ATB2 40BLEDE70 R3 4K.

6. LUMINAIRE SHALL BE ATTACHED TO SIGNAL STRAIN POLE 'B' WITH A 2-INCH DIAMETER MINIMUM LENGTH GALVANIZED STEEL HORIZONTAL PIPE TENON MOUNT. MOUNT AT 30' ABOVE ROADWAY ELEVATION.

7. LUMINAIRE SHALL OPERATE ON THE SAME METER AS THE TRAFFIC SIGNALS.

GENERAL NOTE

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 26+40 RIGHT OF CENTER. SUBSEQUENT ON-SITE ENVIRONMENTAL BORING WORK FAILED TO UNEARTH ANY ISSUES WITHIN THIS AREA. 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 SENIOR GEOLOGIST IN MAINEDOT'S ENVIRONMENTAL OFFICE AT 207-624-3100 AND THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION (MDEP) AT 800-482-0777. WORK MAY ONLY CONTINUE WITH AUTHORIZATION FROM THE RESIDENT.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

2287700

WIN 22877.00

HIGHWAY PLANS

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

SIGNATURE		
4226		
P.E. NUMBER		
11/12/18		
DATE		

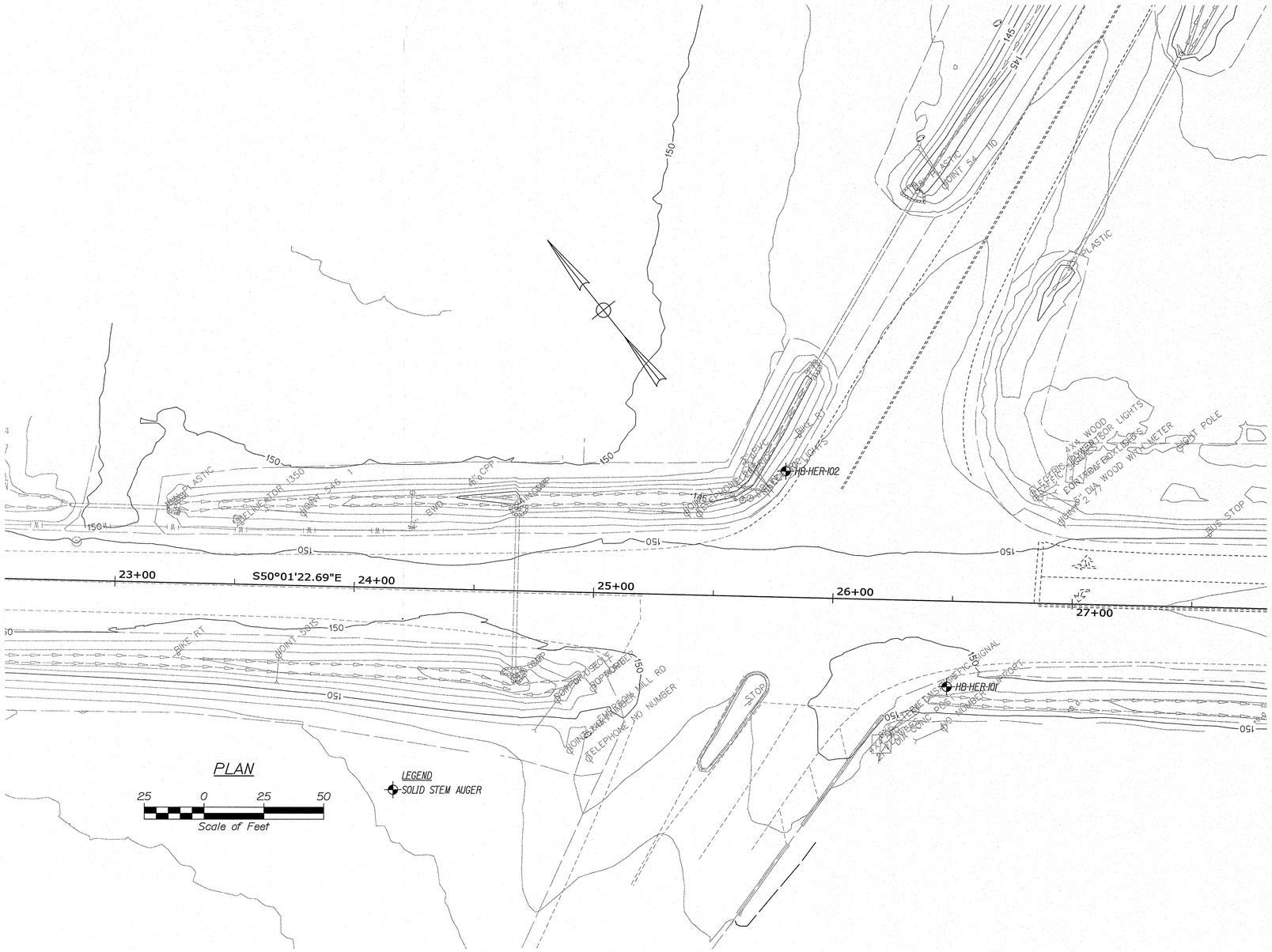
PROJ. MANAGER: DANIEL LORING			
DESIGN-DETAILED	ALG	MSM	8/2018
CHECKED-REVIEWED			11/2018
DESIGN2-DETAILED2			
DESIGN3-DETAILED3			
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

HERMON
COLDBROOK RD\ODLIN RD\EMERSON MILL RD

SIGNAL DETAILS

SHEET NUMBER
3
OF 4

Filename: ...\003_SIGNAL_DETAIL_01.dgn Division: HIGHWAY Username: common Date:11/12/2018



Design of the foundations for project strain poles shall be based on Standard Details 626(03) and 626(04) using Charts S800-1, S800-2, and S800-3 (Soils with Su= 800 psf).

Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Intersection Improvements at Colebrook and Odlin Road.
Location: Hermon, Maine

Boring No.: HB-HER-101
WIN: 22877.00

Driller:	MaineDOT	Elevation (ft.) 149.4	Auger ID/OD: 5" Dia.
Operator:	Doggett/Niles	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: CME 45C	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	9/23/2018; 14:00-15:00	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	26+48.4, 35.8 ft RT.	Casing ID/OD: N/A	Water Level*: 8.5 ft bgs.
Hammer Efficiency Factor: 0.928		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
S = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight Of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WO1P = Weight Of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1D	24/17	0.00 - 2.00	2/5/8/10	13	20	SSA			Brown, damp, medium dense, fine to coarse SAND, some silt, little gravel. (Fill).	
								145.4		4.0	
5	2D	24/24	5.00 - 7.00	2/3/4/4	7	11				Grey brown, moist, stiff, fine Sandy SILT, trace clay.	
10	3D	24/24	10.00 - 12.00	2/3/3/2	6	9				Grey brown, wet, stiff, fine Sandy SILT, trace clay.	
15	4D	24/24	15.00 - 17.00	1/2/3/2	5	8				Grey, wet, medium stiff, fine Sandy SILT, little clay.	
								132.4		17.0	
20										Bottom of Exploration at 17.0 feet below ground surface. NO REFUSAL	
25											

Remarks:

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

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

Page 1 of 1

Boring No.: HB-HER-101

Maine Department of Transportation
Soil/Rock Exploration Log
US CUSTOMARY UNITS

Project: Intersection Improvements at Colebrook and Odlin Road.
Location: Hermon, Maine

Boring No.: HB-HER-102
WIN: 22877.00

Driller:	MaineDOT	Elevation (ft.) 148.1	Auger ID/OD: 5" Dia.
Operator:	Doggett/Niles	Datum: NAVD88	Sampler: Standard Split Spoon
Logged By:	B. Wilder	Rig Type: CME 45C	Hammer Wt./Fall: 140#/30"
Date Start/Finish:	9/23/2018; 15:00-16:00	Drilling Method: Solid Stem Auger	Core Barrel: N/A
Boring Location:	25+79.1, 52.6 ft Lt.	Casing ID/OD: N/A	Water Level*: 6.4 ft bgs.
Hammer Efficiency Factor: 0.928		Hammer Type: Automatic ☒ Hydraulic ☐ Rope & Cathead ☐	

Definitions:
S = Split Spoon Sample
MD = Unsuccessful Split Spoon Sample Attempt
U = Thin Wall Tube Sample
MU = Unsuccessful Thin Wall Tube Sample Attempt
V = Field Vane Shear Test, PP = Pocket Penetrometer
MV = Unsuccessful Field Vane Shear Test Attempt
R = Rock Core Sample
SSA = Solid Stem Auger
HSA = Hollow Stem Auger
RC = Roller Cone
WOH = Weight Of 140lb. Hammer
WOR/C = Weight of Rods or Casing
WO1P = Weight Of One Person
S_u = Peak/Remolded Field Vane Undrained Shear Strength (psf)
$S_{u(lab)}$ = Lab Vane Undrained Shear Strength (psf)
q_p = Unconfined Compressive Strength (ksf)
N-uncorrected = Raw Field SPT N-value
Hammer Efficiency Factor = Rig Specific Annual Calibration Value
N_{60} = SPT N-uncorrected Corrected for Hammer Efficiency
N_{60} = (Hammer Efficiency Factor/60%)*N-uncorrected
T_v = Pocket Torvane Shear Strength (psf)
WC = Water Content, percent
LL = Liquid Limit
PL = Plastic Limit
PI = Plasticity Index
G = Grain Size Analysis
C = Consolidation Test

Depth (ft.)	Sample No.	Pen./Rec. (in.)	Sample Depth (ft.)	Blows (/6 in.) Shear Strength (psf) or RQD (%)	N-uncorrected	N_{60}	Casing Blows	Elevation (ft.)	Graphic Log	Visual Description and Remarks	Laboratory Testing Results/ AASHTO and Unified Class.
0	1d	24/16	0.00 - 2.00	14/12/7/7	19	29	SSA			Brown, damp, medium dense, fine to coarse SAND, some gravel, little silt. (Fill).	
								143.6		4.5	
5	2D	24/24	5.00 - 7.00	2/2/4/2	6	9				Grey brown, moist, stiff, fine Sandy SILT, trace clay.	
10	3D	24/24	10.00 - 12.00	2/2/3/3	5	8				Grey brown, wet, medium stiff, fine Sandy SILT, trace clay.	
								136.1		12.0	
15										Bottom of Exploration at 12.0 feet below ground surface. NO REFUSAL	
20											
25											

Remarks:

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

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

Page 1 of 1

Boring No.: HB-HER-102

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

022877.00

WIN
22877.00

HIGHWAY PLANS

STATE OF MAINE
Kathleen Maguire
7120
LICENSED
PROFESSIONAL ENGINEER

	BY	DATE
PROJ. MANAGER		
DESIGN-DETAILED		
CHECKED-REVIEWED		
DESIGN2-DETAILED2	K.MAGUIRE	NOV 2018
DESIGN3-DETAILED3	T.WHITE	NOV 2018
REVISIONS 1		
REVISIONS 2		
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE
7120
P.E. NUMBER
11/13/2018
DATE

HERMON
ODLIN ROAD

BORING LOCATION PLAN &
BORING LOGS WITH
FOUNDATION DESIGN REQUIREMENTS

SHEET NUMBER
4
OF 4

Filename: ...\MSTA\001_BLP ABL WFDR1.dgn Division: GEOTECH Username: kate.maguire Date:11/13/2018