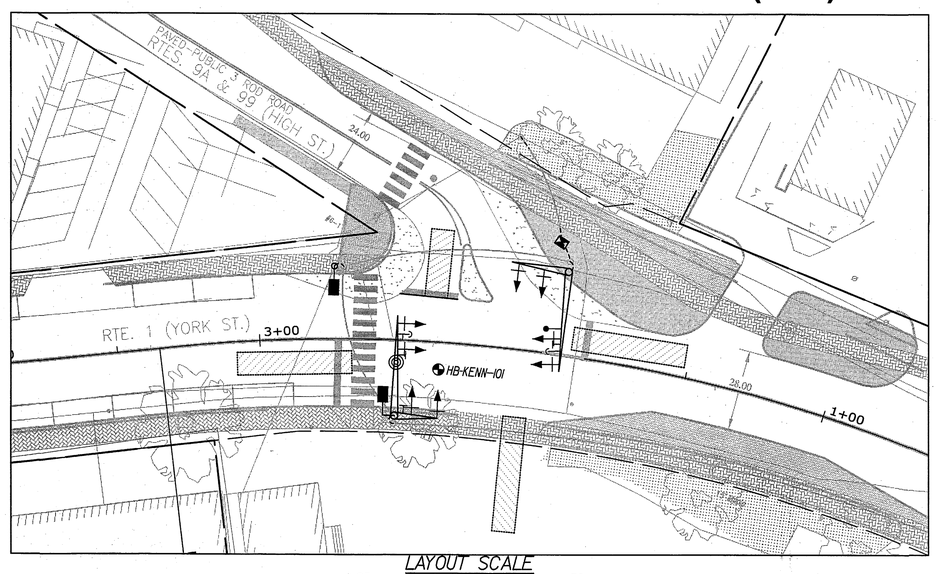
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

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
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

KENNEBUNK
YORK COUNTY
RTE. 1 (YORK ST.) @ RTES. 9A & 99 (HIGH ST.)
FEDERAL AID PROJECT NO. CM-2056(300)



LAYOUT SCALE
25 0 25 50
Scale in Feet

INDEX OF SHEETS

Description	Sheet No.
Title Sheet	1
General Notes	2
Traffic Signal Plan	3

TRAFFIC DATA

Current (2012) AADT	13,190
AM DHV - % of AADT	8.9%
PM DHV - % of AADT	10.6%
AM Design Hourly Volume	1,178
PM Design Hourly Volume	1,404
AM Directional Distribution (DHV)	40% NB / 60% SB
PM Directional Distribution (DHV)	38% NB / 62% SB
Design Speed (mph)	25
Functional Class:	Minor Arterial

PROJECT LOCATION:	In the Town of Kennebunk @ the intersection of York Street and High Street
PROGRAM AREA:	Multimodal
SCOPE OF WORK:	Installation of a new traffic signal at the intersection of York Street and High Street with communications installed to the intersection of York Street and Water Street (to the north). Coordination programming to be implemented between the two intersections.

WIN 20563.00 CM-2056(300) STI# 13162

SEBAGO TECHNICS
WWW.SEBAGOTECHNICS.COM

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
APPROVED
COMMISSIONER: DATE 2/4/14
CHIEF ENGINEER: DATE 2-4-14

STATE OF MAINE — STEPHEN S. SAWYER, JR. — No. 3736 — LICENSED PROFESSIONAL ENGINEER

SIGNATURE	
P.E. NUMBER	3736
DATE	1/29/14

PROJECT INFORMATION

PROGRAM	MULTIMODAL
PROJECT MANAGER	BRIAN KEEZER
DESIGNER	STEPHEN S. SAWYER
CONSULTANT	SEBAGO TECHNICS, INC.
PROJECT RESIDENT	
CONTRACTOR	
PROJECT COMPLETION DATE	

KENNEBUNK
YORK ST. @ HIGH ST.
TITLE SHEET

SHEET NUMBER
1
OF 3

Filename: ...\00\TRAFFIC\MSTA\001_COVER.dgn Division: HIGHWAY Username: common Date:1/29/2014

GENERAL NOTES

1. THIS PROJECT IS TO BE UNDERTAKEN IN CONJUNCTION WITH A SEPARATE INTERSECTION IMPROVEMENT PROJECT BEING FUNDED AND ADMINISTERED BY THE TOWN OF KENNEBUNK. COORDINATION WILL BE REQUIRED WITH THE TOWN AND ITS CONTRACTOR. THE TOWN'S CONTACT IS CHRISOPHER OSTERRIEDER, TOWN ENGINEER.

2. IT IS THE INTENT OF THIS CONTRACT TO INCORPORATE THE NEW YORK/HIGH STREET TRAFFIC SIGNAL INTO THE TOWN'S EXISTING CENTRAL SYSTEM, WHICH IS ETHENET BASED AND OPERATED BY STREETWISE SOFTWARE, LICENSED BY NAZTEC. THEREFORE, ALL EQUIPMENT SUPPLIED UNDER THIS CONTRACT MUST HAVE THE ABILITY TO SEAMLESSLY INTEGRATE WITH THE EXISTING STREETWISE SYSTEM. THIS WILL INCLUDE CONNECTING THE NEW FIBER TO THE EXISTING SWITCH IN THE WATER STREET CABINET, THE SET UP OF THE STREETWISE SCAN SCREENS FOR THE NEW INTERSECTION, AS WELL AS THE INSTALLATION OF THE INITIAL SIGNAL PROGRAMMING.

3. PRIOR TO ANY CONSTRUCTION, DIG SAFE MUST BE NOTIFIED AND A SITE INDENTIFICATION NUMBER ALONG WITH A SAFE TO DIG DATE OBTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFYING THE LOCATION, DEPTH, AND MATERIAL OF ALL SUBSURFANCE UTILTY LINES LOCATED WITHIN THE CONSTRUCTION AREA.

4. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH MAINEDOT'S STANDARD SPECIFICATIONS DATED 2002, WITH THE LATEST UPDATES, AND THE CURRENT VERSION OF THE MUTCD.

5. THE CONTRACTOR SHALL MEET ALL UTILITY REQUIREMENTS FOR NEW SERVICE CONNECTIONS. THE TRAFFIC SIGNAL ELECTICAL METER SHALL BE EQUIPPED WITH A GENERLINK METER COLLAR MODEL MA 23/24-N/S, OR APPROVED EQUAL TO ENABLE CONNECTION TO A PORTABLE GENERATOR.

6. ONE COPY OF AS-BUILT PLANS, WIRING DIAGRAMS, BOX PRINTS AND EQUIPMENT MANUALS SHALL BE LEFT IN THE CONTROLLER CABINET.

7. THE STOP SIGNS SHALL BE REMOVED FROM THE INTERSECTION AS SOON AS THE TRAFFIC SIGNAL IS OPERATIONAL.

8. FINAL SURFACE TREATMENTS WILL BE PROVIDED BY THE TOWN'S CONTRACTOR. THE SIGNAL CONTRACTOR IS ONLY REQUIRED TO BRING THE AREAS WITHIN HIS/HER WORK AREA UP TO FINISHED GRADE.

DETECTION

1. INSTALL ONE 360-DEGREE ALDIS GRIDSMART CAMERA TO BE MOUNTED RIGIDLY ON ASTRO-BRACKETS AND PIPE ON AN OPTIMAL MAST ARM LOCATION TO BE DETERMINED BY THE CONTRACTOR. GRIDSMART REPORTS SOFTWARE MODULE TO BE PROVIDED AND INSTALLED FOR REMOTE DATA COLLECTION OF DETECTION, VEHICLE COUNTS, VEHICLE CLASSIFICATION, AND VEHICLE SPEEDS.

2. VIDEO DETECTION ZONES ARE SHOWN ON THE PLANS.

3. CONTRACTOR TO SET UP ACCESS TO THE GRIDSMART CAMERA AND DATA FOR REMOTE VIEWING BY THE TOWN AND ITS ENGINEER.

PRE-EMPTION

1. INSTALL OPTICOM'S LATEST INFRARED SERIES OF EMERGENCY VEHICLE PRE-EMPTION HARDWARE TO MATCH THE TOWN'S OTHER INSTALLATIONS. THIS WILL INCLUDE A PHASE SELECTOR IN THE CABINET, ONE WHELEN RED CONFIRMATION STROBE, AND TWO OPTICAL DETECTORS FOR THE TWO ROUTE 1 APPROACHES.

2. PRE-EMPTION SIGNALS SHALL BE SERVICED ON A FIRST DETECTED, FIRST SERVED BASIS.

3. IN RESPONSE TO A PRE-EMPTION SIGNAL RECEIVED AT THE INTERSECTION BY OPTICAL DETECTORS 1 OR 2, THE CONTROLLER SHALL HOLD OR ADVANCE TO AND HOLD IN EMERGENCY PRE-EMPTION PHASE #1 OR #2 GREEN FOR A MINIMUM OF FIVE (5) SECONDS OR UNTIL THE PRE-EMPTION SIGNAL CEASES. THE CONTROLLER SHALL THEN TIME THE PRE-EMPTION PHASE CLEARANCE (3 SECONDS: YELLOW AND 2 SECONDS: ALL RED), SERVICE SUBSEQUENT PRE-EMPTION PHASES AS NECESSARY, THEN TIME THE PRE-EMPTION PHASE CLEARANCE, AND FINALLY RESUME NORMAL OPERATIONS.

4. MINIMUM GREEN AND NORMAL VEHICLE CLEARANCE INTERVAL TIMES SHALL BE MAINTAINED ON PHASES THAT ARE TO BE TERMINATED BY PRE-EMPTION DEMAND.

5. THE CONFIRMATION STROBE SHALL BE ILLUMINATED WHENEVER ANY EMERGENCY PRE-EMPTION GREEN IS ON.

6. FINAL PLACEMENT OF OPTICAL DETECTORS SHALL BE COORDINATED WITH THE LOCAL FIRE DEPARTMENT.

SIGNAL HEADS / MOUNTING

1. SHALL BE ONE-WAY, 12-INCH DIAMETER, WITH LED LENSES.

2. SHALL 5-INCH BLACK LOUVERED BACKPLATES.

3. SHALL BE EQUIPPED WITH CAP (CUT AWAY) VISORS.

4. SHALL BE BLACK POLYCARBONATE WITH BLACK FACES.

5. SHALL BE FIX MOUNTED TO MAST ARMS WITH ASTRO-BRACKETS PAINETED BLACK, INCLUDING ANY BANDS.

6. THE BOTTOM OF ALL SIGNAL HEAD HOUSINGS SHALL BE A MINIMUM OF 16 FEET ABOVE THE ROADWAY.

7. SIGNALS TO OPERATE WITH COLORS AT ALL TIMES.

8. SIGNALS TO OPERATE IN FLASH MODE FOR EMERGENCIES ONLY.

MAST ARMS / TRAFFIC STRUCTURES

1. MAST ARMS AND PEDESTAL POLES SHALL BE HOT DIPPED GALVANIZED STEEL.

2. ALL POLES (INCLUDING COMBINATION POLES), MOUNTING HARDWARE, VEHICULAR AND PEDESTRIAN SIGNAL HOUSINGS, P-44 CABINET WITH EXTENSION BASE, PUSH BUTTON ASSEMBLIES, AND OTHER EXTERNAL ITEMS SHALL BE POWDER COATED GLOSS BLACK (FEDERAL COLOR 17038). THIS TWO-LAYER COATING SHALL HAVE A ZINC PRIMER AND A PREMIUM TOP COAT.

CABINET / CONTROLLER

1. INSTALL TS-2 TYPE 1 NAZTEC CONTROLLER IN A NEMA P-44 GROUND MOUNTED CABINET WITH 15" EXTENSION.

2. ALL SPLICES WILL BE MADE IN THE CABINET AND MEET MAINEDOT'S SPECIFICATIONS.

3. ALL MAJOR COMPONENTS OF THE CONTROLLER CABINET ASSEMBLY SHALL BE FROM NAZTEC. THIS INCLUDES THE CABINET, CONTROLLER, MMU, BIU'S, AND CABINET POWER SUPPLY.

PEDESTRIAN SIGNALS AND PUSH BUTTONS

1. HEADS SHALL BE ONE-WAY, ONE-SECTION, 16" X 18" HAND/MAN WITH COUNTDOWN MODULE BY GE LUMINATION GTI SERIES, MCCAIN MODEL 1000 SERIES, OR APPROVED EQUAL. HAND/MAN SYMBOL SHALL BE FILLED AND NOT OUTLINED.

2. HEADS SHALL BE EQUIPPED WITH CAP (CUT AWAY) VISORS.

3. HEADS SHALL BE CONSTRUCTED OF BLACK POLYCARBONATE MATERIAL WITH BLACK FACES.

4. INSTALL 2 ACCESSIBLE PEDESTRIAN SIGNAL (APS) PUSH BUTTONS - CAMPBELL COMPANY ADVISOR MODEL (A-57), OR APPROVED EQUAL, WITH RIO-3e PUSH BUTTON SIGNS. SIGNS SHALL BE POSTED AT EACH AUDIBLE SIGNAL PUSH BUTTON. THE AUDIBLE MESSAGE USED SHALL BE AS FOLLOWS:

*"YORK STREET IS ON TO CROSS YORK STREET"

THE AUDIBLE PUSH BUTTON IDENTIFICATION INFORMATION MESSAGE USED DURING THE NON-WALK PHASES SHALL BE AS FOLLOWS:

*"WAIT TO CROSS YORK STREET"

PAYMENT FOR RIO-3e SIGNS AND PUSH BUTTONS SHALL BE INCLUDED ITEM 643.98. COUNTDOWN PEDESTRIAN HEADS WITH AUDIBLE PUSH BUTTONS.

5. PEDESTRIAN SIGNALS SHALL BE BLANK DURING FLASHING OPERATION.

6. LOCATOR TONES FOR ALL PUSH BUTTONS ARE REQUIRED. THEIR VOLUME IS TO BE AUTOMATICALLY ADJUSTED TO AMBIENT NOISE LEVELS.

TRAFFIC SIGNAL INTERCONNECTION

1. INSTALL A 12 COUNT SINGLE MODE FIBER INTERCONNECT CABLE WITH TERMINATIONS BETWEEN THE YORK/HIGH STREET CABINET AND THE YORK/WATER STREET CABINET USING UNDERGROUND CONDUIT INSTALLED UNDER THIS CONTRACT AND CONDUIT INSTALLED BY THE TOWN UNDER A SEPARATE CONTRACT.

2. FUSION SPLICES SHALL BE USED IN ALL LOCATIONS. NO MECHANICAL SPLICES SHALL BE ALLOWED. FUSION SPLICER SHALL HAVE AUTOMATIC CORE ALIGNMENT IN THE HORIZONTAL AND VERTICAL PLANES. IT SHALL BE CAPABLE OF SPLICES WITH A TYPICAL LOSS OF 0.02DB FOR SINGLE-MODE FIBER AND IT SHALL BE CAPABLE OF ESTIMATING THE SPLICE LOSS.

3. FIBER OPTIC CABLE SHALL BE FULLY COMPATABLE WITH THE EXISTING SERVICE PROVIDER'S INFRASTRUCTURE.

4. FIBER OPTIC CABLE SHALL HAVE THE FOLLOWING FEATURES:

*ALL DIALECTRIC (NON-ARMORED)
*DIALECTRIC CENTRAL AND OUTER STRENGTH MEMBERS
*RIPCORD FOR EASY STRIPPING
*COLOR-CODED FIBERS AND BUFFER TUBES FOR EASY IDENTIFICATION
*RATED FOR OUTDOOR USE
*DRY CABLE WITH WATER-BLOCKING DESIGN. GEL-FILLED CABLE SHALL NOT BE ALLOWED.
*STORAGE AND OPERATING TEMPERATURE OF -40 DEGREES TO +70 DEGREES C (-40 DEGREES TO +158 DEGREES F)
*9/125 TYPE SINGLE-MODE CABLE WITH 9UM CORE, 125UM CLAD, AND 245UM COATING
*MAXIMUM ATTENTUATION OF 0.35DB PER KM FOR 1310NM, 0.35DB PER KM FOR 1383NM AND 0.25 DB PER KM FOR 1550NM
*SERIAL GIGABIT ETHERNET DISTANCE OF 5000M FOR 1310 NM
*SERIAL 10 GIGABIT ETHERNET DISTANCE OF 10000M FOR 1310 NM AND 40000 FOR 550 NM
*SINGLE-MODE FIBERS SHALL COMPLY WITH EIA/TIA-492CAAA AND ITU RECOMMENDATION G.652

ITEM 643.80 YORK STREET @ HIGH STREET LUMP SUM ITEMS

*CONTROLLER & P CABINET W/ CONTENTS
*SIGNAL HEADS
*WIRING
*SERVICE CONNECTION
*GENERLINK COLLAR
*SIGNAL PROGRAMMING
*CONTROL SYSTEM SCAN SCREEN
*START-UP AND ACCEPTANCE TESTING

ITEM 643.90 INTERCONNECT WIRE

*INSTALL FIBER OPTIC INTERCONNECT CABLE IN EXISTING CONDUIT INSTALLED BY OTHERS BETWEEN YORK/HIGH AND YORK/WATER STREET CABINETS
*CONNECT NEW FIBER INTERCONNECT TO EXISTING SWITCH AT WATER STREET
*INSURE WORKABLE COMMUNICATIONS BETWEEN THE TWO INTERSECTIONS.

START UP AND ACCEPTANCE TESTING

1. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL INITIATE COMMUNICATIONS FROM THE CENTRAL SERVER TO THE NEW INTERSECTION. THE CONTRACTOR SHALL TEST THE ABILITY TO UPLOAD AND DOWNLOAD THE ENTIRE TRAFFIC SIGNAL CONTROLLER DATABASE, REMOTELY ACCESS LOCAL REPORTS, AND PROVIDE REAL TIME INTERSECTION STATUS REPORTS, INCLUDING EVENT AND ALARM LOGS. THE CONTRACTOR SHALL ALSO DEMONSTRATE THE ABILITY TO REMOTELY VIEW AND DOWNLOAD DATA FROM THE GRIDSMART DETECTION CAMERA, INCLUDING THE ABILITY TO REVISE VIDEO DETECTION ZONES. THE SYSTEM MUST BE FULLY FUNCTIONAL AND FREE OF COMMUNICATIONS OR EQUIPMENT FAILURES FOR A PERIOD OF SEVEN (7) DAYS. IF PROBLEMS OCCUR, THEY SHALL BE RECTIFIED BY THE CONTRACTOR AND THE START UP PERIOD RESTARTED FOR ANOTHER SEVEN (7) DAYS.

2. UPON SUCCESSFULLY DEMONSTRATING A SUCCESSFUL 7 DAY START UP TEST, THE TOWN AND IT'S ENGINEER SHALL EVALUATE THE SYSTEM'S OPERATION FOR A PERIOD OF 30 DAYS. SHOULD THE SYSTEM MALFUNCTION DURING THIS PERIOD, THE CONTRACTOR SHALL MAKE ANY REPAIRS OR CORRECTIONS AND THE ACCEPTANCE TEST PERIOD WILL START OVER AGAIN. ACCEPTANCE TESTING MUST DEMONSTRATE TO THE TOWN AND IT'S ENGINEER THAT THE COMMUNICATIONS CONNECTION AND ALL HARDWARE AND EQUIPMENT FUNCTION IN ACCORDANCE WITH THESE SPECIFICATIONS, RERQUIREMENTS, THROUGH-PUTS, AND FUNCTIONALITIES.

3. FINAL PAYMENT SHALL BE CONTINGENT OF THE SUCCESSFUL START UP AND ACCEPTANCE TESTING OF THE INSTALLATION.

4. THE CONTRACTOR SHALL WARRANTY ALL WORK AND EQUIPMENT FOR A PERIOD OF ONE YEAR AFTER INSTALLATION AND ACCEPTANCE.

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CM-2056(300)

WIN 20563.00

MULTIMODAL PLANS

		BY	DATE
PROJ. MANAGER	BRIAN KELZER		
DESIGN-DETAILED	B. LYON	B. LYON	1/8/14
CHECKED-REVIEWED	S. SAWYER	S. SAWYER	1/8/14
DESIGN2-DETAILED2			
DESIGN3-DETAILED3	S. SAWYER	S. SAWYER	1/29/14
REVISIONS 1			
REVISIONS 2			
REVISIONS 3			
REVISIONS 4			
FIELD CHANGES			

SIGNATURE

P.E. NUMBER

DATE

KENNEBUNK
YORK ST. @ HIGH ST.

GENERAL NOTES

SHEET NUMBER
2
OF 3

Filename: ...\00\TRAFFIC\MSTA\002_NOTES.dgn Division: HIGHWAY Username: common Date:1/31/2014

GENERAL NOTES:

1. ALL CONDUIT SHALL BE 3" PVC SCH. 80.
2. THE BASELINE SHOWN ON THESE PLANS HAS BEEN ESTABLISHED BY THE TOWN CONTRACTOR TO COORDINATE THE USE OF THIS FOR STRUCTURE LAYOUT.
3. CONDUIT SHALL BE INSTALLED PER MAINEDOT'S STANDARD DETAIL 626(07).
4. COORDINATION SHALL OPERATE UNDER A FIXED FORCE OFF MODE.

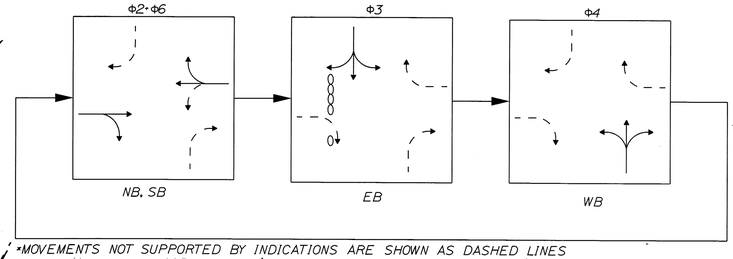
PROPOSED SIGNAL INDICATIONS

LED DISPLAYS: Φ3,Φ4 Φ2,Φ3,Φ4,Φ6 Φ3

ID: B1, D1 — A1, A2, B2, C1, C2, D2 — P1,P2

NOTE - ALL INDICATIONS SHALL BE 12 INCH LIGHT EMITTING DIODES WITH BACKPLATES.

PREFERENTIAL PHASE SEQUENCE



*MOVEMENTS NOT SUPPORTED BY INDICATIONS ARE SHOWN AS DASHED LINES

SIGNAL LAYOUT

STRUCTURE	LOCATION	DESCRIPTION	FOUNDATION
A	STA. 2+52.1, O/S: 26.6' LT.	35' MAST ARM 15' MAST ARM	AS MAINEDOT SPECIAL PROVISION. SEE NOTES
B	STA. 2+73.8, O/S: 25.5' RT.	PEDESTAL POLE	24" DIA. FOUNDATION
C	STA. 1+95.6, O/S: 29.2' RT.	35' MAST ARM 20' MAST ARM (COMB. POLE W/ LUMINAIRE)	AS MAINEDOT SPECIAL PROVISION. SEE NOTES
D	STA. 1+99.3 O/S: 39.0' RT.	CONTROLLER CABINET	4' X 6' FOUNDATION

SIGNAL TIMINGS FOR HIGH ST. @ YORK ST.

	Phase 2	Phase 3	Phase 4	Phase 6	Cycle	Offset
Min Green	5.0	5.0	5.0	5.0	--	--
Extension	4.0	3.0	3.0	4.0	--	--
Max I	50.0	20.0	10.0	50.0	--	--
Max II	50.0	20.0	10.0	50.0	--	--
Veh. Clear	3.0	3.0	3.0	3.0	--	--
Red Clear	3.0	2.0	2.0	3.0	--	--
Walk	--	4.0	--	--	--	--
Ped Clear	--	13.0	--	--	--	--
Recall	Soft	None	None	Soft	--	--
Detector Memory	Off	Off	Off	Off	--	--
Flash*	Yellow	Red	Red	Yellow	--	--
Dual Entry	On	Off	Off	On	--	--
Pattern 1	43.0 (C)	22.0	15.0	43.0	80	28**
Pattern 2	53.0	22.0	15.0	53.0 (C)	90	28**

* EMERGENCY FLASH ONLY
SIGNAL TO OPERATE ON COLORS AT ALL TIMES
**OFFSET IS REFERENCED TO END OF GREEN
(C) = COORDINATED PHASE

SIGNAL TIMINGS FOR WATER ST. @ YORK ST.

	Phase 2	Phase 4	Phase 5	Phase 6	Phase 8	Cycle	Offset
Pattern 1	54.0 (C)	26.0	15.0	39.0	26.0	80	0**
Pattern 2	64.0	26.0	15.0	49.0 (C)	26.0	90	0**

*PHASE ASSIGNMENTS AND SEQUENCES ARE NOT INTENDED TO BE CHANGED FROM WHAT EXISTS TODAY
**OFFSET IS REFERENCED TO END OF GREEN
(C) = COORDINATED PHASE

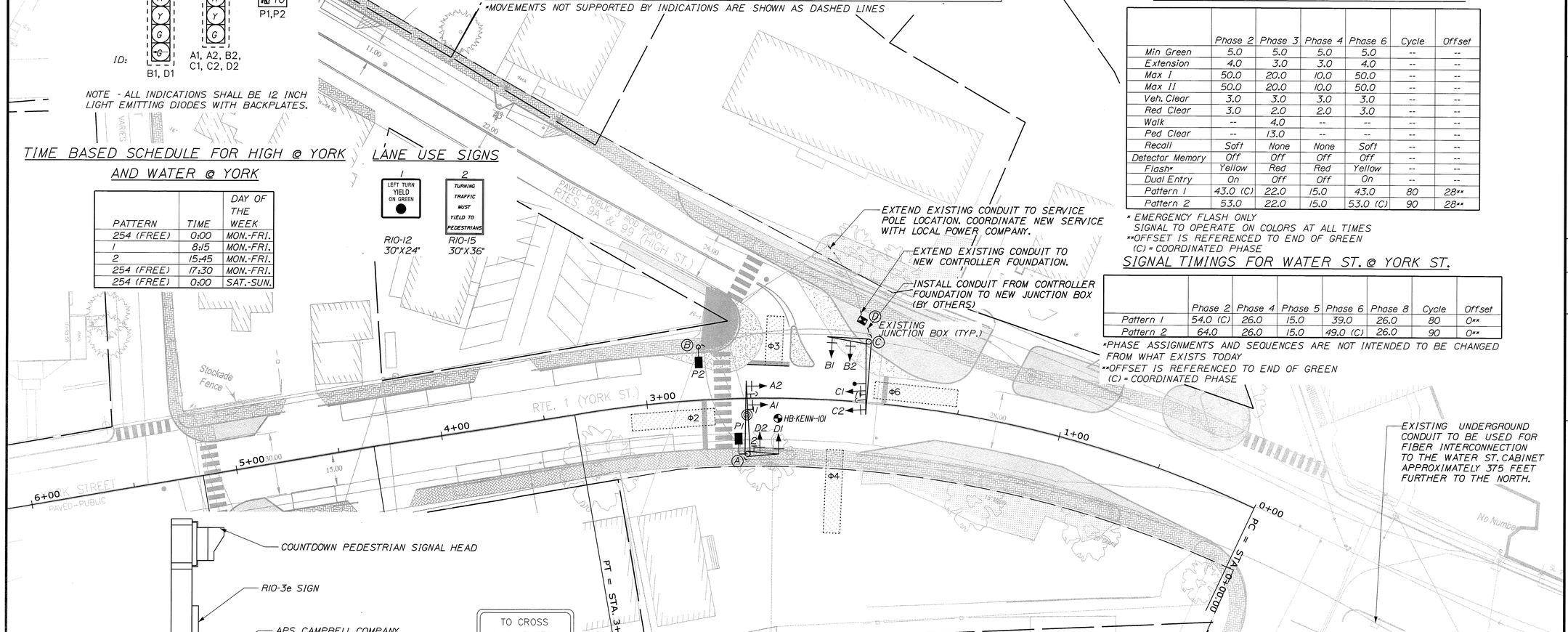
TIME BASED SCHEDULE FOR HIGH @ YORK AND WATER @ YORK

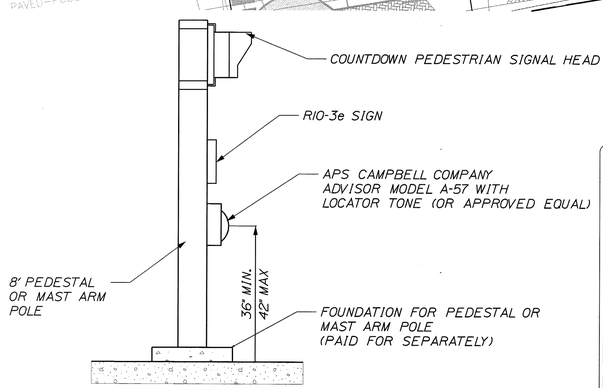
PATTERN	TIME	DAY OF THE WEEK
254 (FREE)	0:00	MON.-FRI.
1	8:15	MON.-FRI.
2	15:45	MON.-FRI.
254 (FREE)	17:30	MON.-FRI.
254 (FREE)	0:00	SAT.-SUN.

LANE USE SIGNS

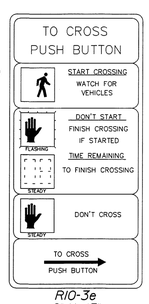
1 — LEFT TURN YIELD ON GREEN — R10-12 30"X24"

2 — TURNING TRAFFIC MUST YIELD TO PEDESTRIANS — R10-15 30"X36"





APS PUSH BUTTON ASSEMBLY SINGLE MOUNTED DETAIL



R10-3e 9" X 15"

PLAN

25 0 25 50
Scale of Feet

NOTES FOR MAST ARMS AND CONCRETE FOUNDATIONS FOR SIGNALS

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL STRUCTURAL DESIGN OF THE MAST ARMS AND THE CONNECTION OF THE MAST ARMS 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 SHALL BE ORDERED OR FABRICATED UNTIL THE DESIGN HAS BEEN APPROVED.

2. 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 COMPUTATED 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. A BORING WAS TAKEN AS PART OF THIS PROJECT FOR THE FOUNDATION DESIGN. THE BORING LOCATION IS SHOWN ON THE PLANS AND THE LOG CAN BE FOUND IN THE PROJECT SPECIFICATIONS.

LEGEND

—●= VIDEO DETECTION ■= SIGNAL CONTROLLER ●■= PEDESTRIAN COUNTDOWN HEAD +►= SIGNAL HEAD - - - - = TRAFFIC SIGNAL CONDUIT ◎= CONFIRMATION STROBE —>= OPTICAL DETECTOR ⊣= LANE USE GUIDE SIGN = VIDEO DETECTION ZONE ○= JUNCTION BOX = MAST ARM

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

CM-2056(300)

WIN 20563.00

MULTIMODAL PLANS

	BY	DATE
PROJ. MANAGER	BRIAN KELZER	
DESIGN-DETAILED	B. LYON	1/8/14
CHECKED-REVIEWED	S. SAWYER	1/8/14
DESIGN2-DETAILED2		
DESIGN3-DETAILED3		
REVISIONS 1	S. SAWYER	1/29/14
REVISIONS 2	S. SAWYER	1/31/14
REVISIONS 3		
REVISIONS 4		
FIELD CHANGES		

SIGNATURE

P.E. NUMBER

DATE

KENNEBUNK
YORK ST. @ HIGH ST.

TRAFFIC SIGNAL PLAN

SHEET NUMBER
3
OF 3

Filename: ...\TRAFFIC\MSTA\003_TRAFFIC.dgn Division: HIGHWAY Username: common Date:1/31/2014