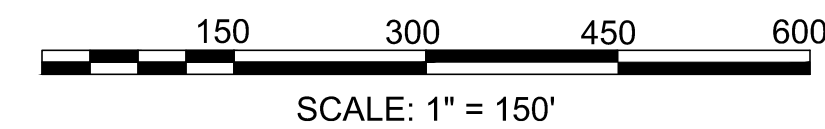
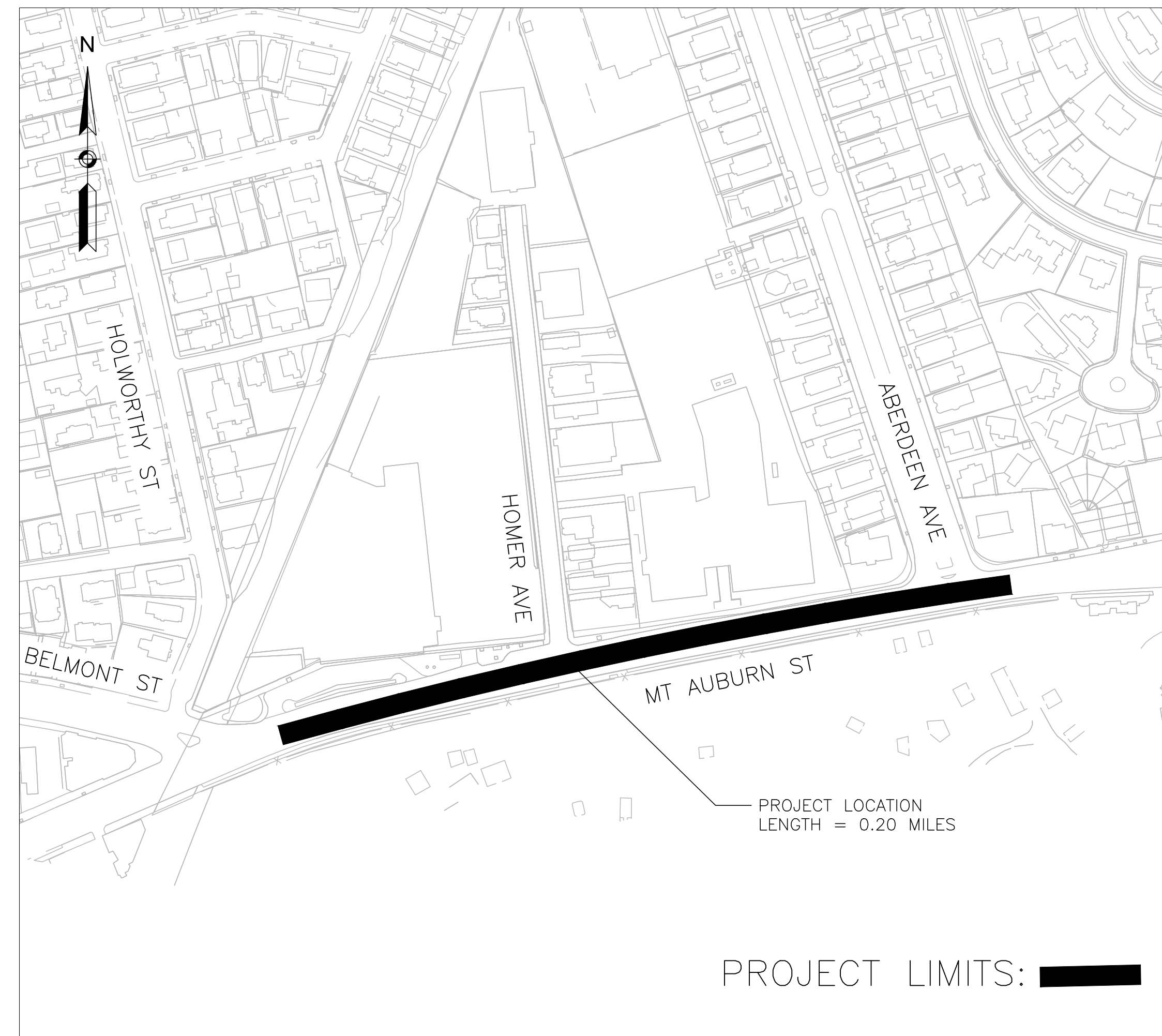


# ABERDEEN SIGNAL IMPROVEMENTS

CITY OF CAMBRIDGE  
MIDDLESEX COUNTY

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## STANDARDS

STANDARD	RELEASE DATE
MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES	2023
MASSDOT SUPPLEMENTAL SPECIFICATIONS	JUNE 2023
MASSDOT CONSTRUCTION STANDARD DETAILS	OCTOBER 2017
MASSDOT CONSTRUCTION AND TRAFFIC STANDARD DETAILS (AS RELATES TO TRAFFIC STANDARD DETAILS ONLY)	1996
MASSDOT OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS	2015
MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS	LATEST EDITION
MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS	LATEST EDITION
MASSDOT STANDARD DRAWINGS FOR SIGNS AND SUPPORTS	1990
MASSDOT STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING	1968
AMERICAN STANDARD FOR NURSERY STOCK	LATEST EDITION
CITY OF CAMBRIDGE PUBLIC WORKS DEPARTMENT CONSTRUCTION STANDARDS	LATEST EDITION

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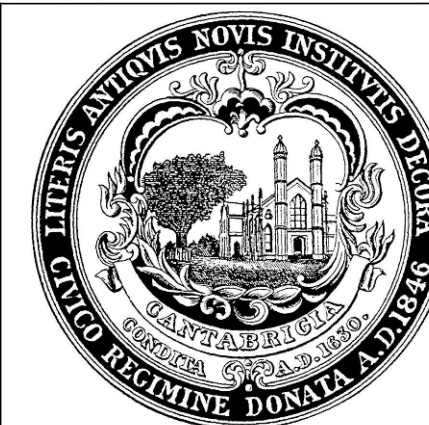
350 MYLES STANDISH BLVD  
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**DRAFT**  
NOT FOR CONSTRUCTION



PROJECT #: 312638-01-001  
DATE: 10/2023  
DESIGNER: C. MURPHY  
DRAFTER: J. VERESPEJ  
REVIEWER: C. MURPHY

### REVISIONS

TITLE SHEET & INDEX  
ABERDEEN SIGNAL IMPROVEMENTS  
MOUNT AUBURN STREET  
CAMBRIDGE, MA

REV #	DATE	TOTAL SHEETS
01		16

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		CB CATCH BASIN
		CB CATCH BASIN CURB INLET
		MB MAIL BOX
		POST SQUARE
		POST CIRCULAR
		HYDRANT
		LIGHT POLE
		FLEX POST
		CABLE MANHOLE
		TELEPHONE MANHOLE
		TRANSMISSION POLE
		UTILITY POLE W/ FIREBOX
		UTILITY POLE WITH DOUBLE LIGHT
		UTILITY POLE W / 1 LIGHT
		UTILITY POLE
<b>CURBING</b>		
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		TREE LINE
		EDGE OF PAVEMENT
		LIMIT OF MICROMILLING AND OVERLAY
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		VEHICLE DETECTION LOOP
		BIKE DETECTION LOOP
		VIDEO DETECTION LOOP
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
		EMERGENCY PREEMPTION BEACON
		VEHICLE AND BIKE SIGNAL HEAD
		VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
		FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
		TRAFFIC SIGNAL POST (ALPHA-NUMERIC DESIGNATION NOTED)
		SIGN AND POST
		SIGN AND POST (2 POSTS)
		TRAFFIC SIGNAL MAST ARM
		EMERGENCY OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT
		FLEXPOST

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		PAVEMENT ARROW - WHITE
		LEGEND "ONLY" - WHITE
		BIKE LANE WHITE PAVEMENT ARROW AND LEGEND
		VEHICLE STOP LINE - 24"
		BICYCLE STOP LINE - 12"
		CROSSWALK - 24" WHITE
		SOLID WHITE LINE (BUS LANE) - 12"
		SOLID WHITE LINE - 6"
		SOLID YELLOW LINE - 6"
		BROKEN WHITE LINE - 6" 10' MARK - 30' SKIP
		BROKEN YELLOW LINE - 6" 10' MARK - 30' SKIP
		DOTTED WHITE LINE - 6" 2' MARK - 4' SKIP
		DOTTED WHITE LINE EXTENSION - 6" 2' MARK - 4' SKIP
		DOTTED YELLOW LINE EXTENSION - 6" 2' MARK - 4' SKIP
		DOTTED YELLOW CENTER LINE EXTENSION - 4" 2' MARK - 4' SKIP
		DOUBLE YELLOW CENTER LINE - 4"
		SOLID WHITE CHANNELIZATION (15' SPACING @ 45°) - 8"
		SOLID YELLOW CHANNELIZATION (15' SPACING @ 45°) - 8"
		SOLID YELLOW CHANNELIZATION (20' SPACING @ 45°) - 8"

TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
DW	STEADY UPRaised HAND
FDW	FLASHING UPRaised HAND
FR	FLASHING CIRCULAR RED
FRL	FLASHING RED LEFT ARROW
FRR	FLASHING RED RIGHT ARROW
FY	FLASHING CIRCULAR YELLOW
FYL	FLASHING YELLOW LEFT ARROW
FYR	FLASHING YELLOW RIGHT ARROW
G	STEADY CIRCULAR GREEN
GL	STEADY GREEN LEFT ARROW
GR	STEADY GREEN RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
R	STEADY CIRCULAR RED
RL	STEADY RED LEFT ARROW
RR	STEADY RED RIGHT ARROW
TR SIG	TRAFFIC SIGNAL
TSC	TRAFFIC SIGNAL CONDUIT
W	STEADY WALKING PERSON
Y	STEADY CIRCULAR YELLOW
YL	STEADY YELLOW LEFT ARROW

ABBREVIATIONS

GENERAL		GENERAL
AADT	ANNUAL AVERAGE DAILY TRAFFIC	LT LEFT
ABAN	ABANDON	MAX MAXIMUM
ADJ	ADJUST	MB MAILBOX
APPROX.	APPROXIMATE	MH MANHOLE
A.C.	ASPHALT CONCRETE	MHB MASSACHUSETTS HIGHWAY BOUND
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE	MIN MINIMUM
BIT.	BITUMINOUS	NIC NOT IN CONTRACT
BC	BOTTOM OF CURB	NO. NUMBER
BCC	BITUMINOUS CONCRETE CURB	PC POINT OF CURVATURE
BD.	BOUND	PCC POINT OF COMPOUND CURVATURE
BL	BASELINE	P.G.L. PROFILE GRADE LINE
BLDG	BUILDING	PI POINT OF INTERSECTION
BM	BENCHMARK	POC POINT ON CURVE
BO	BY OTHERS	POT POINT ON TANGENT
BOS	BOTTOM OF SLOPE	PRC POINT OF REVERSE CURVATURE
BR.	BRIDGE	PROJ PROJECT
CB	CATCH BASIN	PROP PROPOSED
CBCI	CATCH BASIN WITH CURB INLET	PSB PLANTABLE SOIL BORROW
CC	CEMENT CONCRETE	PT POINT OF TANGENCY
CCM	CEMENT CONCRETE MASONRY	PVC POINT OF VERTICAL CURVATURE
CEM	CEMENT	PVI POINT OF VERTICAL INTERSECTION
CI	CURB INLET	PVT POINT OF VERTICAL TANGENCY
CIP	CAST IRON PIPE	PVMT PAVEMENT
CLF	CHAIN LINK FENCE	PWW PAVED WATER WAY
CL	CENTERLINE	R RADIUS OF CURVATURE
CMP	CORRUGATED METAL PIPE	R&D REMOVE AND DISPOSE
CSP	CORRUGATED STEEL PIPE	RCP REINFORCED CONCRETE PIPE
CO.	COUNTY	RD ROAD
CONC	CONCRETE	RDWY ROADWAY
CONT	CONTINUOUS	REM REMOVE
CONST	CONSTRUCTION	RET RETAIN
CR	CURB RAMP	RET WALL RETAINING WALL
DHV	DESIGN HOURLY VOLUME	ROW RIGHT OF WAY
DI	DROP INLET	RR RAILROAD
DIA	DIAMETER	R&R REMOVE AND RESET
DIP	DUCTILE IRON PIPE	R&S REMOVE AND STACK
DW	STEADY DON'T WALK - PORTLAND ORANGE	RT RIGHT
DWY	DRIVEWAY	SB STONE BOUND
ELEV (or EL.)	ELEVATION	SHLD SHOULDER
EMB	EMBANKMENT	SMH SEWER MANHOLE
EOP	EDGE OF PAVEMENT	ST STREET
EXIST (or EX)	EXISTING	STA STATION
EXC	EXCAVATION	SSD STOPPING SIGHT DISTANCE
F&C	FRAME AND COVER	SHLO STATE HIGHWAY LAYOUT LINE
F&G	FRAME AND GRATE	SW SIDEWALK
FDN.	FOUNDATION	T TANGENT DISTANCE OF CURVE/TRUCK %
FLDSTN	FIELDSTONE	TAN TANGENT
GAR	GARAGE	TEMP TEMPORARY
GD	GROUND	TC TOP OF CURB
GG	GAS GATE	TOS TOP OF SLOPE
GI	GUTTER INLET	TYP TYPICAL
GIP	GALVANIZED IRON PIPE	UP UTILITY POLE
GRAN	GRANITE	VAR VARIES
GRAV	GRAVEL	VERT VERTICAL
GRD	GUARD	VC VERTICAL CURVE
GRDL	GUARDRAIL	VGC VERTICAL GRANITE CURB
HDW	HEADWALL	WG WATER GATE
HMA	HOT MIX ASPHALT	WIP WROUGHT IRON PIPE
HOR	HORIZONTAL	WM WATER METER/WATER MAIN
HYD	HYDRANT	X-SECT CROSS SECTION
INV	INVERT	
JCT	JUNCTION	
L	LENGTH OF CURVE	
LB	LEACH BASIN	
LP	LIGHT POLE	

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PROJECT #:	312638-01-001
DATE:	10/2023
DESIGNER:	C. MURPHY
DRAFTER:	J. VERESPEJ
REVIEWER:	C. MURPHY

REVISIONS		REV #	DATE
<b>LEGEND &amp; ABBREVIATIONS</b>			
<b>ABERDEEN SIGNAL IMPROVEMENTS</b>			
<b>MOUNT AUBURN STREET</b>			
<b>CAMBRIDGE, MA</b>			
SHEET #	02	TOTAL SHEETS	16

**GENERAL NOTES:**

1. THE LOCATION OF EXISTING UNDERGROUND PIPES, CABLES, CONDUITS, AND STRUCTURES AS SHOWN HAS BEEN COLLECTED FROM THE BEST AVAILABLE SOURCES. AND THE OWNER TOGETHER WITH ITS AGENTS DOES NOT IMPLY OR GUARANTEE THE DATA AND INFORMATION IN CONNECTION WITH THE UNDERGROUND PIPES, CABLES, CONDUITS, STRUCTURES, AND SUCH OTHER PARTS AS TO THEIR COMPLETENESS NOR THEIR LOCATIONS AS INDICATED. THE CONTRACTOR SHALL CONTACT UTILITY OWNERS AND REQUEST MARKING LOCATION OF ALL THEIR LINES IN THE WORK AREAS. PRIOR TO EXCAVATION, THE CONTRACTOR SHALL ASSUME THAT THERE ARE EXISTING WATER, GAS, AND OTHER UTILITY CONNECTIONS TO EACH AND EVERY BUILDING EN ROUTE, WHETHER THEY APPEAR ON THE PLANS OR NOT. ANY EXPENSE AND/OR DELAY OCCASIONED BY THESE UTILITIES AND STRUCTURES OR DAMAGE THERETO, INCLUDING THOSE NOT SHOWN, SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND AT NO ADDITIONAL EXPENSE TO THE OWNER (SEE SPECIAL CONDITIONS).
2. FOUNDATIONS AND LINES FOR SERVICES, POLICE AND FIRE ALARM BOXES, STREET LIGHTS, AND TRAFFIC SIGNALS ARE NOT SHOWN ON THE PLANS. THE APPROPRIATE UTILITY COMPANIES OR AUTHORITIES SHOULD BE CONTACTED AND CONSULTED FOR LOCATIONS OF THE ABOVE PRIOR TO EXCAVATION.
3. THE CONTRACTOR SHALL PREMARK THE EXCAVATION AREA IN WHITE AND NOTIFY THE DIG SAFE CENTER (TEL. NO. 1-888-DIG-SAFE) AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK. IN ADDITION, NOTIFICATION SHALL ALSO BE GIVEN TO ALL AFFECTED PRIVATE AND/OR PUBLIC UTILITIES TO PERMIT STREET MARKING OF THEIR LINES.
4. WHERE TEMPORARY OR PERMANENT UTILITY RELOCATION IS REQUIRED, THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANY 120 DAYS IN ADVANCE OF CONSTRUCTION AND SHALL COORDINATE THE NEW WORK WITH THE UTILITY RELOCATION.
5. INTERRUPTIONS OF SERVICES SHALL NOT BE PERMITTED. THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITIES AND PROVIDE ALL TEMPORARY UTILITIES AND CONNECTIONS TO AVOID INTERRUPTIONS OF WATER, SANITARY, DRAINAGE, ELECTRIC, PHONE, GAS, FIBEROPTICS, AND CABLE SERVICES.
6. PRIOR TO BEGINNING WORK, THE CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS INFORMATION AND REPORT ANY DISCREPANCIES BETWEEN THE PLANS AND THE ACTUAL CONDITIONS TO THE ENGINEER.
7. THE CONTRACTOR SHALL PROTECT ALL TRAVELED WAYS FROM DUST AND CONSTRUCTION DEBRIS AT ALL TIMES. NO PROPOSED WORK SHALL IMPACT PROPERTY OUTSIDE OF THE EXISTING LIMITS OF WORK.
8. UNLESS OTHERWISE INDICATED ON THE DRAWINGS, ALL AREAS ADJACENT TO THE LIMITS OF CONSTRUCTION WHICH ARE DISTURBED DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
9. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL DEMOLISHED MATERIALS, RUBBISH, EXCAVATED MATERIAL AND DEBRIS, UNLESS OTHERWISE NOTE, AND IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS HAVING JURISDICTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PAYING FOR ALL DISPOSAL PERMITS AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR MAY BE ASKED BY THE OWNER TO SUSPEND CONSTRUCTION OPERATIONS TEMPORARILY TO AVOID CONFLICTS WITH LARGE PUBLIC EVENTS OR LARGE STORM EVENTS. THE CONTRACTOR SHALL NOT BE COMPENSATED FOR COSTS RELATED TO SHUTDOWNS FOR THESE REASONS.
11. THE CONTRACTOR SHALL NOT BLOCK ACCESS TO STREET AND PRIVATE PARKING IN THE VICINITY OF THE LIMITS OF CONSTRUCTION AFTER WORK HOURS AND ON WEEKENDS.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SNOW PLOWING AND SNOW REMOVAL FROM ALL AREAS WHERE PRESENCE IS MAINTAINED, INCLUDING BUT NOT LIMITED TO, UNPAVED SURFACES, PARKED EQUIPMENT AREAS, OR ANY AREAS OF CONSTRUCTION ACTIVITY. THE CONTRACTOR SHALL ALSO BE RESPONSIBLE FOR STREET SWEEPING, SNOW REMOVAL FROM SIDEWALKS, TRASH REMOVAL, AND RECYCLABLE MATERIAL REMOVAL FROM ALL AREAS WHERE CONSTRUCTION RESTRICTS VEHICULAR OR PEDESTRIAN ACCESS TO STREETS OR SIDEWALKS, AND WHERE THE CONTRACTOR'S PRESENCE INTERFERES WITH MUNICIPAL TRASH REMOVAL, STREET SWEEPING, OR SNOW PLOWING AND REMOVAL.
13. AREAS WITHIN THIS CONTRACT ARE SUBJECT TO THE UTILITY RELATED ABATEMENT MEASURE REGULATIONS OF THE MASSACHUSETTS CONTINGENCY PLAN 310 CMR 40.00 AND SECTIONS 02010, 02080, AND 02095 OF THE SPECIFICATIONS. THE CONTRACTOR'S ATTENTION IS SPECIFICALLY DIRECTED TO ENVIRONMENTAL DATA (SOIL AND GROUNDWATER) FROM BORINGS AND MONITORING WELLS AS REPRESENTATIVE OF SUBSURFACE CONDITIONS IN URBAN AREAS. THE ENVIRONMENTAL DATA ARE APPENDED TO THE SPECIFICATIONS.
14. THE CONTRACTOR SHALL NOT BE PERMITTED TO STARTUP OR OPERATE EQUIPMENT BEFORE OR AFTER ESTABLISHED WORKING HOURS OF 7:00 AM TO 4:00 PM MONDAY THROUGH FRIDAY WITHOUT WRITTEN APPROVAL OF THE OWNER, UNLESS NOTED OTHERWISE. TO BE CONFIRMED WITH THE CITY OF CAMBRIDGE PRIOR TO THE START OF CONSTRUCTION.
15. EXISTING CONDITIONS ARE SHOWN SCREENED.
16. ALL STREET EXCAVATIONS SHALL BE COMPLETELY CLOSED AT THE END OF EACH WORKING DAY BY BACKFILLING AND TEMPORARY PAVING OR BY COVERING WITH STEEL PLATES WHEN APPROVED BY THE OWNER.
17. EXISTING UTILITY POLES THAT FALL WITHIN 5 FEET OF THE PROPOSED EDGE OF TRENCH SHALL BE SUPPORTED BY THE UTILITY OWNER DURING EXCAVATION OF THE TRENCH. THE CONTRACTOR SHALL COORDINATE SUPPORT AND BE RESPONSIBLE FOR COSTS AND FEES. WHERE EXISTING GAS, ELECTRIC, AND TELECOM UTILITIES CROSS THE PROPOSED TRENCH LIMITS, THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY OWNER TO SUPPORT AND BE RESPONSIBLE FOR COSTS AND FEES. CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORTING THE EXISTING UTILITY IN ACCORDANCE WITH THE UTILITY OWNER'S REQUIREMENTS.
18. ALL PAVEMENT MARKING LINES SHALL BE THERMOPLASTIC (UNLESS OTHERWISE NOTED) EXCEPT AS FOLLOWS: ALL GREEN PAVEMENT MARKINGS SHALL BE GREEN COLORED SURFACE TREATMENT AND ALL RED PAVEMENT MARKINGS SHALL BE RED COLORED SURFACE TREATMENT.

**SURVEYING NOTES:**

1. SURVEY BASEMAP HAS BEEN PREPARED BY COMBINING A TOPOGRAPHIC SURVEY PREPARED BY BRENNAN CONSULTING DATED SEPTEMBER 22, 2022 AND PROVIDED BY CITY OF CAMBRIDGE WITH SUPPLEMENTAL GIS LINEWORK FROM THE CITY OF CAMBRIDGE DATABASE DATED 2023. LINEWORK REPRESENTING EXISTING UNDERGROUND STRUCTURES AND PIPES HAS BEEN SHOWN HEREON IN ITS APPROXIMATE LOCATION BASED ON AVAILABLE RECORD PLANS. THERE ARE NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER, THE PRESENCE OF UTILITY LINEWORK ON THE PLANS DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED.
2. RECORD UTILITY INFORMATION FROM THE VARIOUS UTILITY COMPANIES AND PUBLIC AGENCIES ARE APPROXIMATE ONLY AND ACTUAL LOCATIONS SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO STARTING.
3. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE NOTIFIED, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THIS PLAN (SEE CHAPTER 370, ACTS OF 1963, MASSACHUSETTS), PRIOR TO EXCAVATING, INSTALLING, BACKFILLING, GRADING, PAVEMENT RESTORING, OR REPAVING.
4. THE OWNER AND ENGINEER ASSUME NO RESPONSIBILITY FOR DAMAGES INCURRED AS A RESULT OF UTILITIES OMITTED OR INACCURATELY SHOWN.
5. PROPERTY LINES AS SHOWN ARE TAKEN FROM GIS INFORMATION AND ARE APPROXIMATE ONLY.

**SPECIAL NOTES FOR TREE PROTECTION:**

1. REFER TO "CITY OF CAMBRIDGE DEPARTMENT OF PUBLIC WORKS-DIVISION OF URBAN FORESTRY, TREE PROTECTION DURING CONSTRUCTION" IN THE CONTRACT DOCUMENTS. ALL WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH MASSACHUSETTS STATE LAW CHAPTER 87, SECTION 12.
2. A MASSACHUSETTS OR INTERNATIONAL CERTIFIED ARBORIST SHALL BE SUB-CONTRACTED BY THE CONTRACTOR TO PROVIDE A TREE-PROTECTION PLAN AND PERFORM SPECIFIED WORK.
3. ALL TREES SHALL BE PRUNED PRIOR TO CONSTRUCTION IN ACCORDANCE WITH SPECIFICATION 02100.
4. ALL TREES NOT IDENTIFIED FOR REMOVAL SHALL BE PROTECTED AGAINST CONSTRUCTION AND TRUCKING RELATED DAMAGE TO THEIR TRUNKS, ROOTS, AND LIMBS. TREE TRUNKS SHALL BE WRAPPED AND/OR BARRICADED FOR PROTECTION IF NECESSARY. TREE LIMBS SHALL BE TEMPORARILY SUPPORTED TO AVOID DAMAGE AND/OR PROFESSIONALLY PRUNED IF THEY CANNOT BE AVOIDED. BREAKAGE OF THE LIMBS SHALL NOT BE PERMITTED. IN ADDITION TO THE "CONSTRUCTION PRUNING" SPECIFICALLY IDENTIFIED, ALL TREES WITHIN THE PROJECT AREA AND ALONG TRUCK ROUTE SHALL BE PROTECTED FROM DAMAGE OR PROFESSIONALLY PRUNED. "CONSTRUCTION PRUNING" SHALL CONSIST OF SQUARELY CUTTING LIMBS ONLY WHERE THEY CANNOT BE AVOIDED BY TRUCKS OR EQUIPMENT. (RAISE PRUNING).
5. ALL TREE PROTECTION MEASURES AND OPERATIONS AND ALL ROOT PRUNING, TREE REMOVAL, AND TREE PRUNING SHALL BE SUBJECT TO REVIEW, APPROVAL, OR CHANGE BY THE CITY ARBORIST.
6. AT THE OWNER'S DISCRETION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REMOVAL OF ANY TREE DAMAGED BY CONSTRUCTION OR TRUCKING OPERATIONS, REMOVAL OF THE STUMP, AND REPLACEMENT OF THE TREE IN KIND AT NO ADDITIONAL COST TO THE OWNER. ADDITIONAL FINES MAY ALSO BE IMPOSED FOR DAMAGE AS PER CONTRACT SPECIFICATIONS.
7. BREAKAGE OF TREE ROOTS SHALL NOT BE PERMITTED AND ROOT PRUNING SHALL BE MINIMIZED. TREE ROOTS THAT CANNOT BE AVOIDED DURING CONSTRUCTION SHALL BE PRUNED IN ACCORDANCE WITH THE SPECIFICATIONS AND UNDER SUPERVISION OF THE CITY ARBORIST, INCLUDING ROOT TREATMENT IF REQUIRED.
8. THE CONTRACTOR SHALL COORDINATE WITH DIG SAFE PRIOR TO REMOVING ANY STUMPS. DAMAGE TO EXISTING SIDEWALKS AND UTILITIES SHALL BE REPAIRED AS SPECIFIED AFTER REMOVING STUMPS.
9. TREES AND STUMPS REMOVED DURING CONSTRUCTION SHALL BE REPLACED WITH NEW TREES AS DIRECTED. STUMP REMOVAL SHALL BE SUFFICIENT TO ALLOW PLANTING OF A NEW TREE.

**PS&E SUBMISSION**

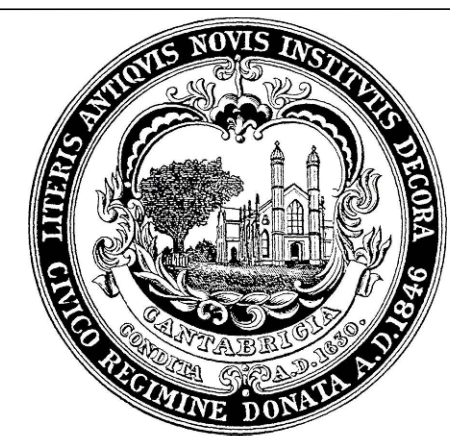
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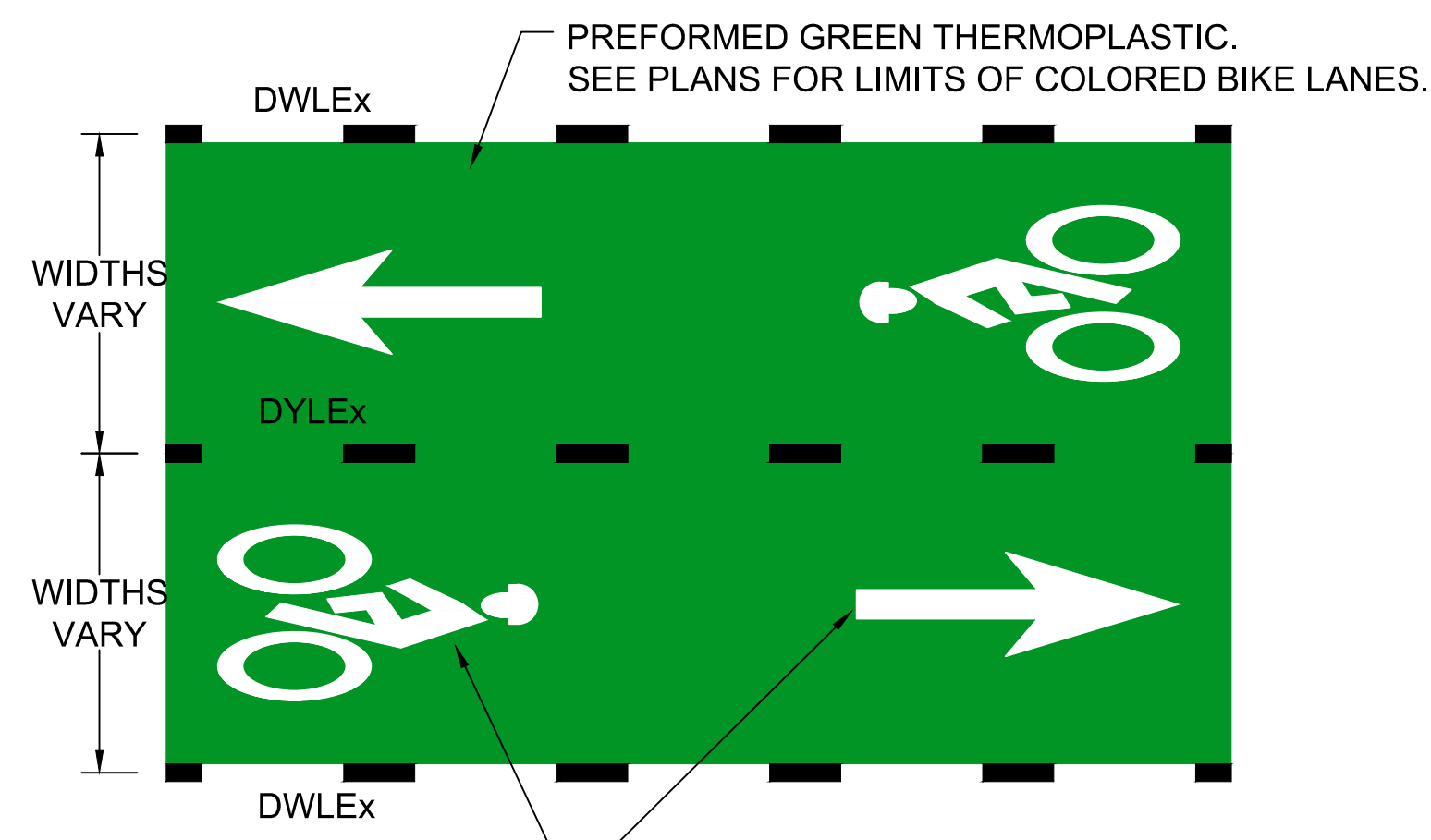
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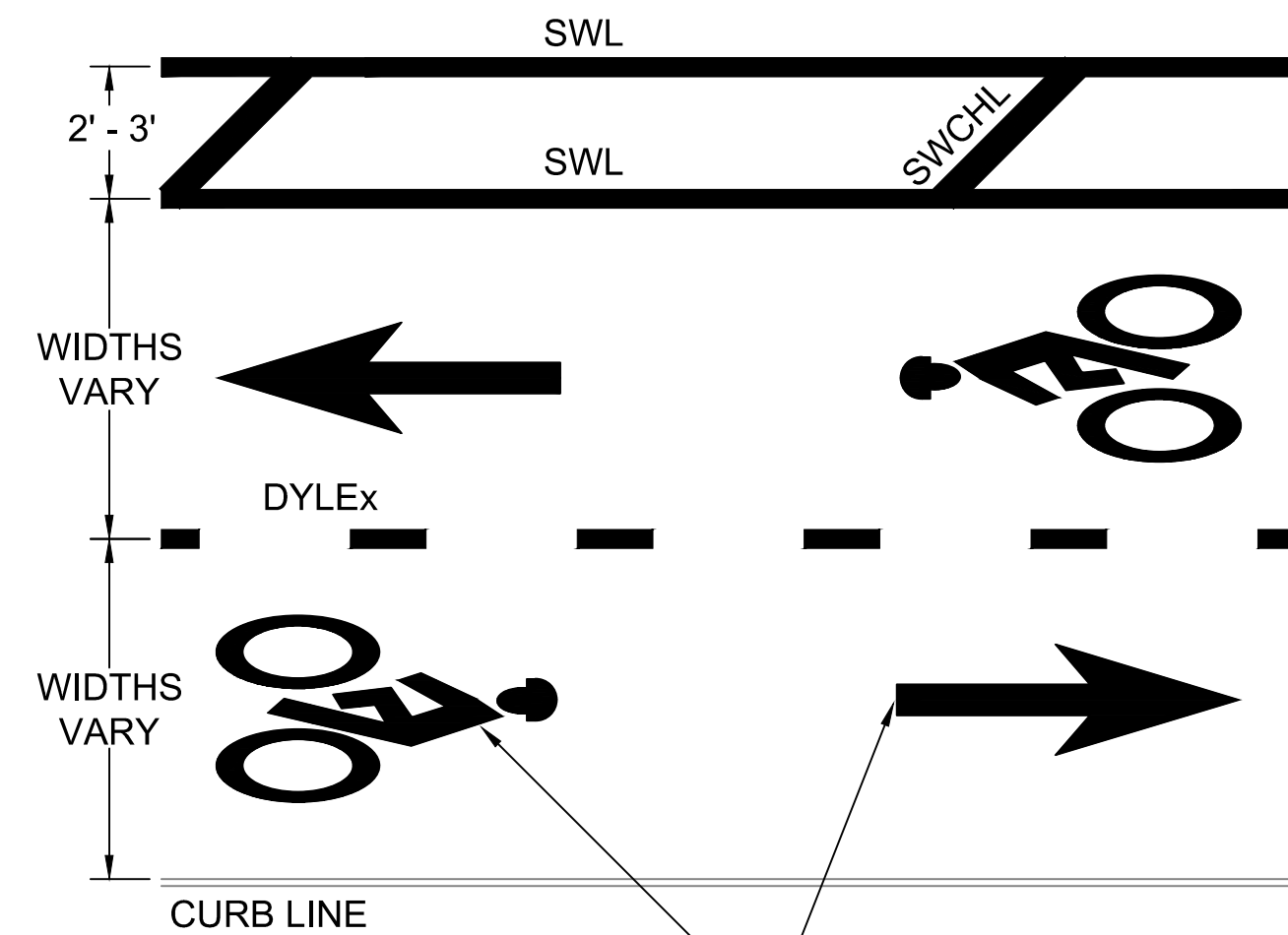
PROJECT #: 312638-01-001  
DATE: 10/2023  
DESIGNER: C. MURPHY  
DRAFTER: J. VERESPEJ  
REVIEWER: C. MURPHY

REVISIONS		REV #	DATE
GENERAL NOTES ABERDEEN SIGNAL IMPROVEMENTS MOUNT AUBURN STREET CAMBRIDGE, MA		SHEET #	TOTAL SHEETS
		03	16



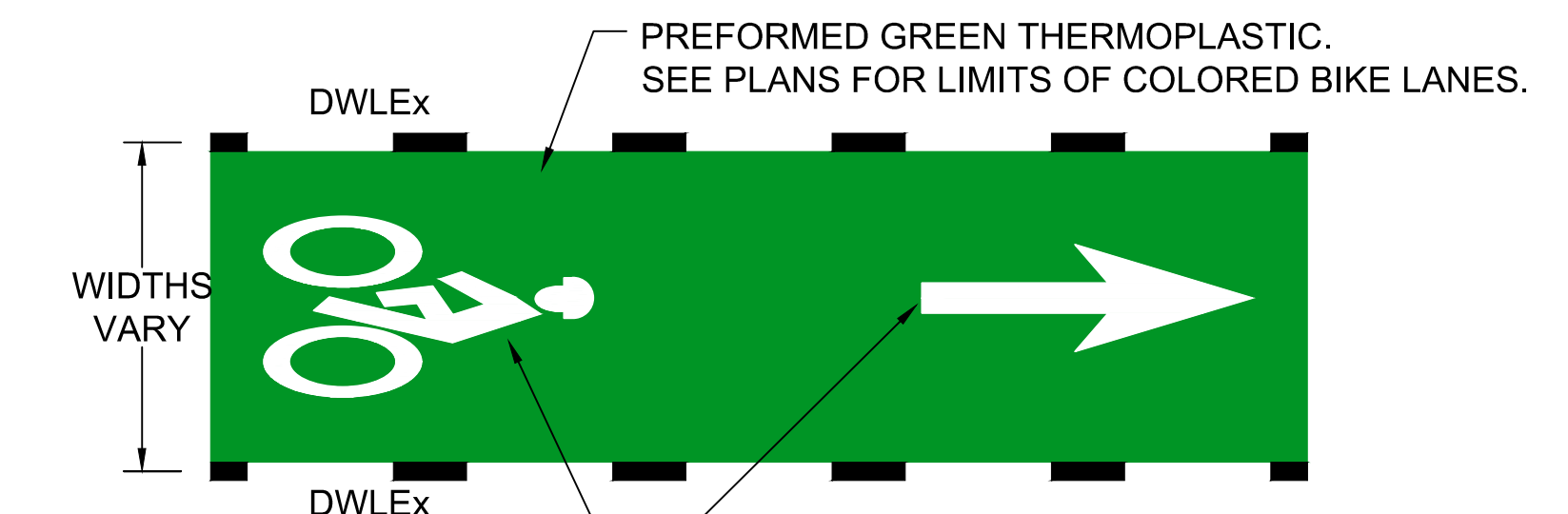
NOTES:  
1. CENTER BICYCLE LANE SYMBOLS BETWEEN DWLEx AND DYLEx.

**TWO-WAY BIKE LANE CROSSING PVMT. MARKING**  
SCALE: N.T.S.

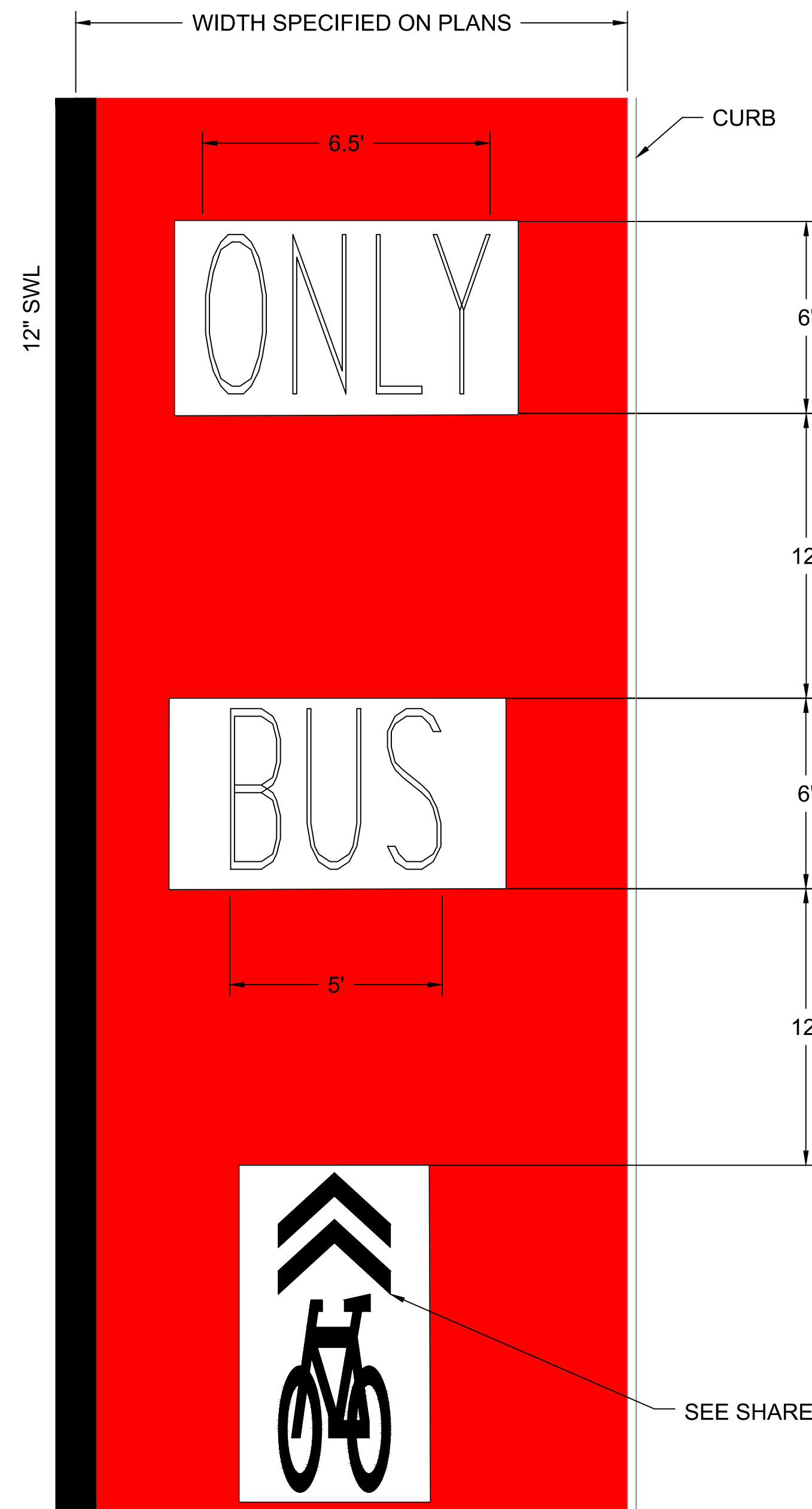


NOTES:  
1. REFER TO SIGN AND PAVEMENT MARKING PLAN FOR WIDTH OF BUFFER EXTENTS.  
2. CENTER BICYCLE LANE SYMBOLS BETWEEN SWL/CURB AND DYLEx

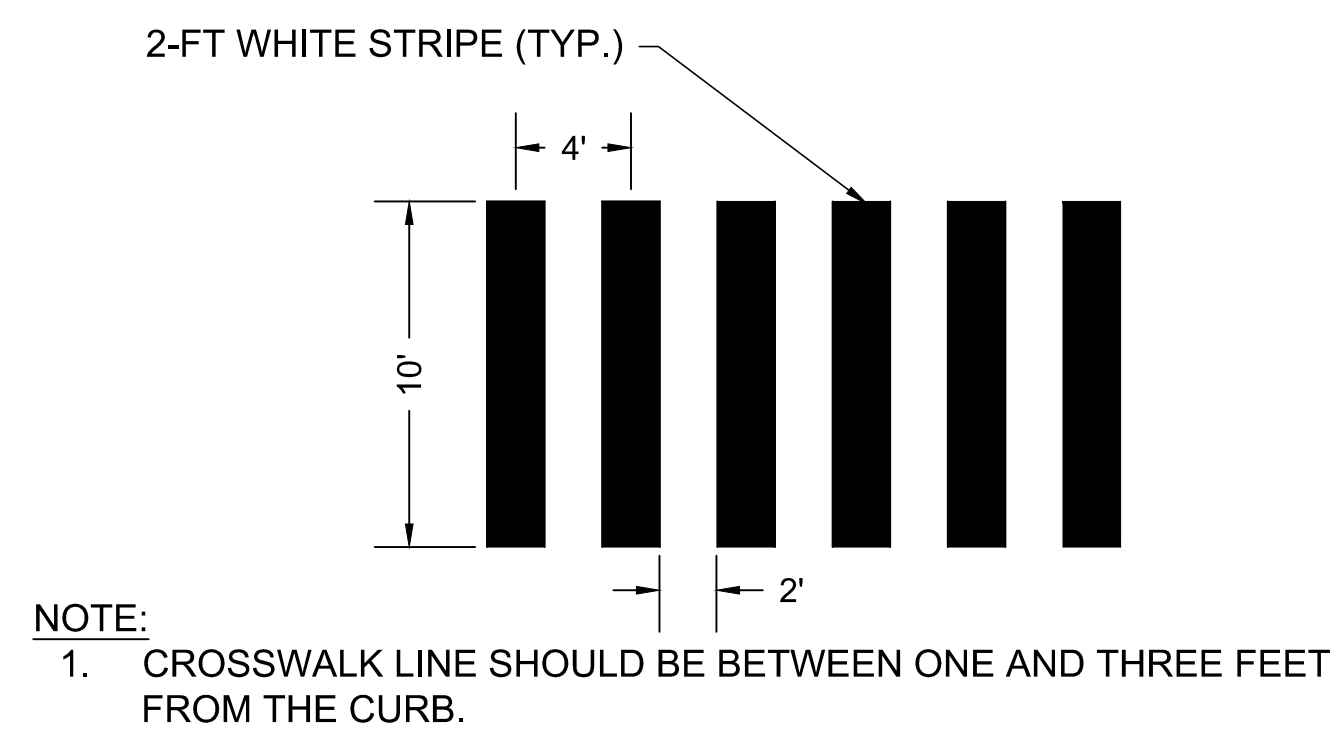
**TWO-WAY BUFFERED BIKE LANE PVMT. MARKING**  
SCALE: N.T.S.



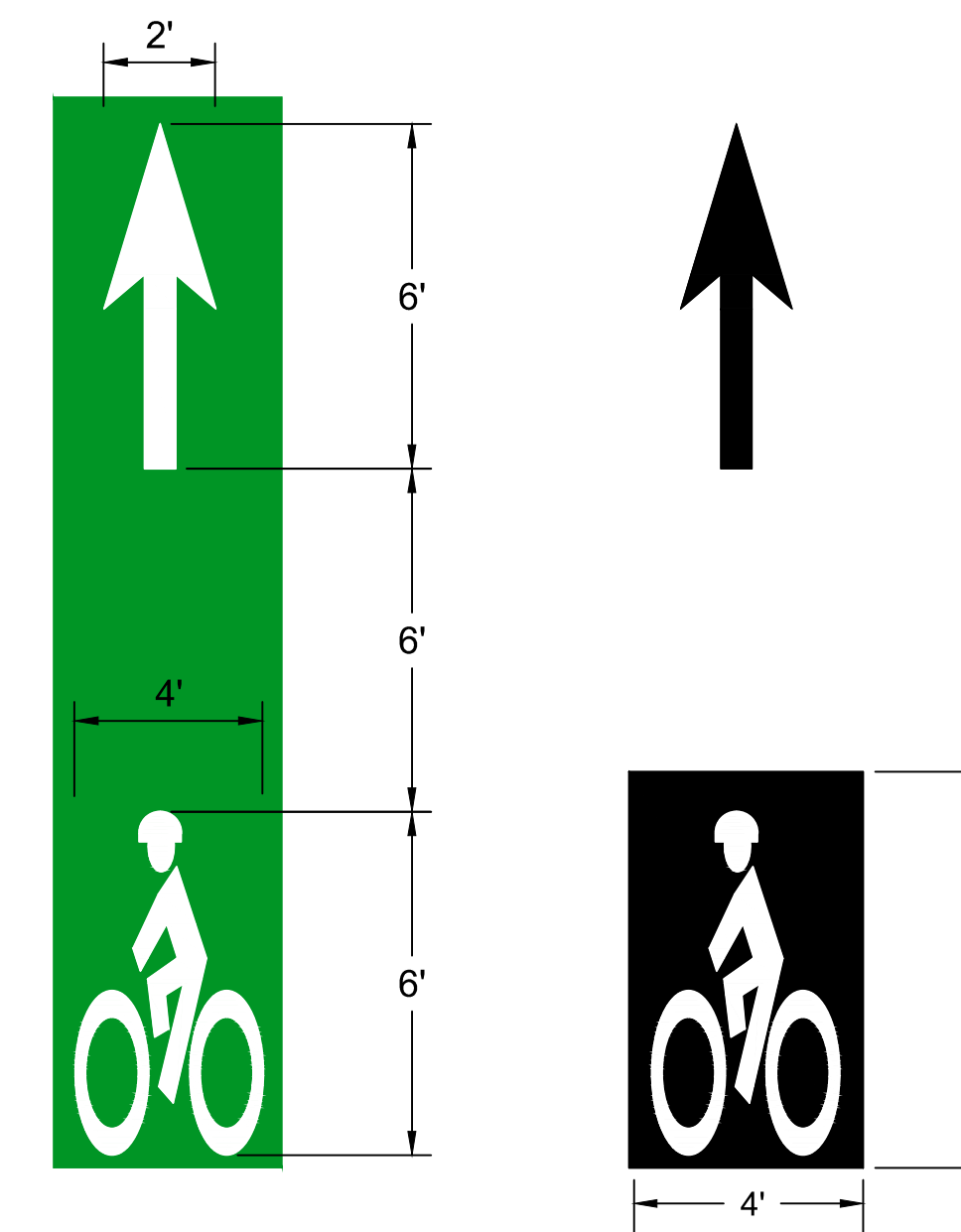
NOTES:  
1. CENTER BICYCLE LANE SYMBOLS BETWEEN DWLEx  
**ONE-WAY BIKE LANE CROSSING PVMT. MARKING**  
SCALE: N.T.S.



**BUS BIKE LANE PAVMENT MARKING DETAIL**  
SCALE: N.T.S.

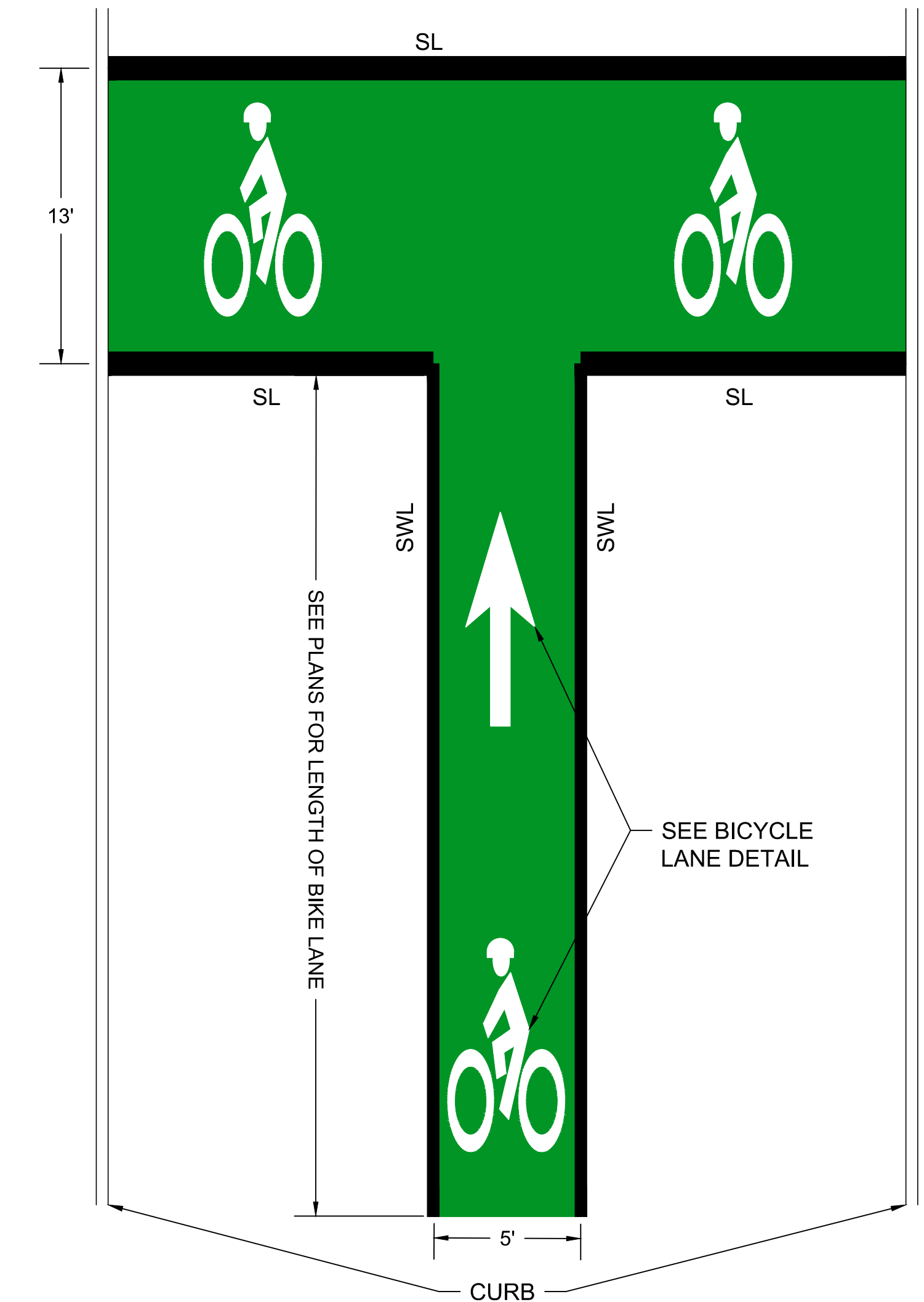


**CAMBRIDGE STANDARD CROSSWALK**  
SCALE: N.T.S.



NOTES:  
1. REFER TO FIGURE 9C-6 IN THE 2009 MUTCD FOR MORE DETAIL.  
2. BICYCLE LANE MARKINGS PLACED ON GREEN CROSSING PAVEMENT MARKINGS SHALL BE PREFORMED THERMOPLASTIC.  
3. BICYCLE LANE MARKING "BICYCLE RIDER" PLACED ON ROADWAY ASPHALT SHALL BE ENNIS-FLINT PREMARK BIKE CONTRAST PANEL WHITE W/ BLACK ITEM NUMBER PM600847L-BK (FIGURE N - BICYCLE RIDER) OR APPROVED EQUAL.

**BICYCLE LANE PVMT. MARKING**  
SCALE: N.T.S.



NOTES:  
1. CENTER BICYCLE LANE SYMBOLS BETWEEN BIKE LANE SWLS  
2. PLACE VEHICLE STOP LINE 13' IN ADVANCE OF THE BICYCLE STOP LINE.  
3. SEE PLAN SHEETS FOR BICYCLE BOX LOCATIONS AND SYMBOL LOCATIONS.  
4. DO NOT PLACE SYMBOLS ON LANE LINES, CROSSWALK LINES, OR STOP LINES.  
5. CENTER SYMBOLS BETWEEN VEHICLE STOP LINE AND BICYCLE STOP LINE.  
6. INSTALL GREEN PAVEMENT SO THAT CROSSWALK MARKINGS ARE NOT DISTURBED.

**BIKE BOX**  
SCALE: N.T.S.

PS&E SUBMISSION



PROJECT #: 312638-01-001  
DATE: 10/2023  
DESIGNER: J. VERESPEJ  
DRAFTER: J. VERESPEJ  
REVIEWER: C. MURPHY

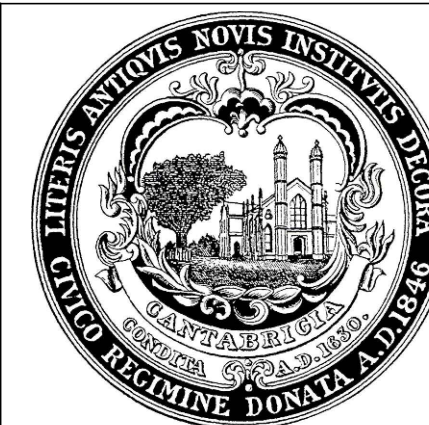
350 MYLES STANDISH BLVD  
SUITE 103  
TAUNTON, MA  
TELE: (508) 823 - 2245

120 WATER ST  
4TH FLOOR  
BOSTON, MA 02109  
TELE: (617) 556 - 0020  
FAX: (617) 556 - 0025

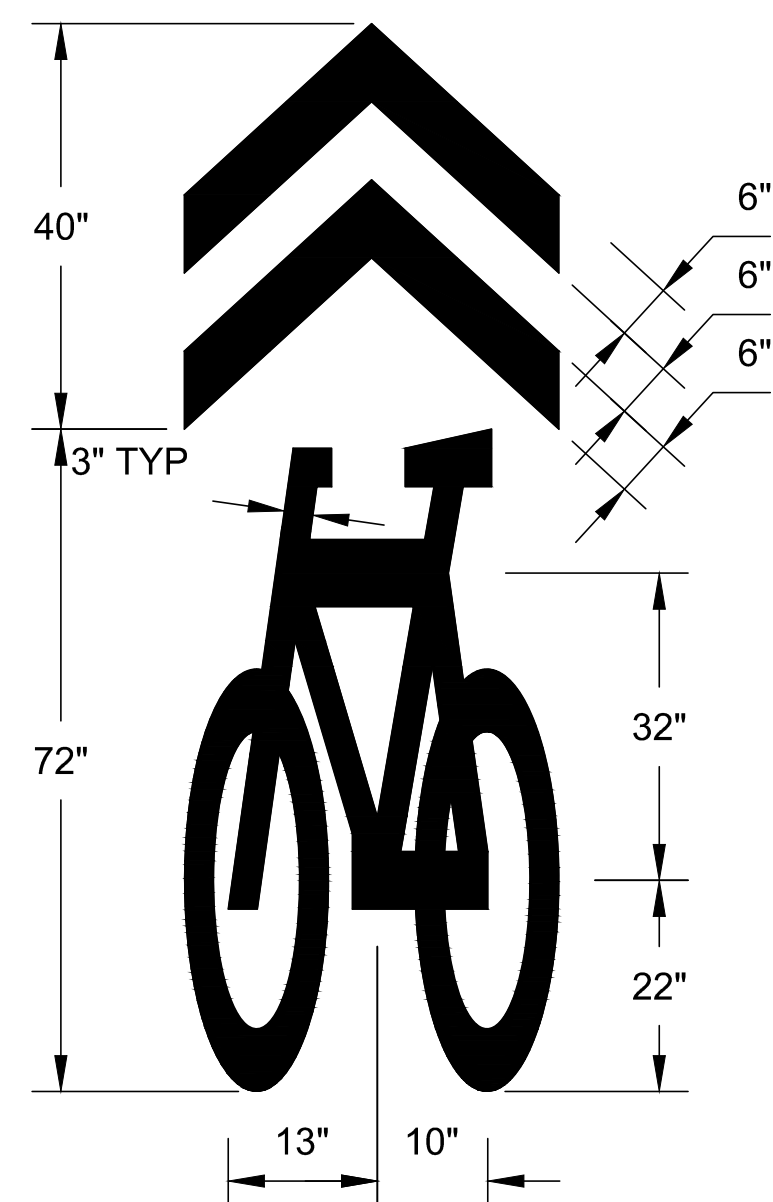
14 BREAKNECK HILL RD  
SUITE 201  
LINCOLN, RI 02865  
TELE: (401) 648 - 7200

94 NORTH ELM STREET  
SUITE 210  
WESTFIELD, MA  
TELE: (413) 875 - 8855

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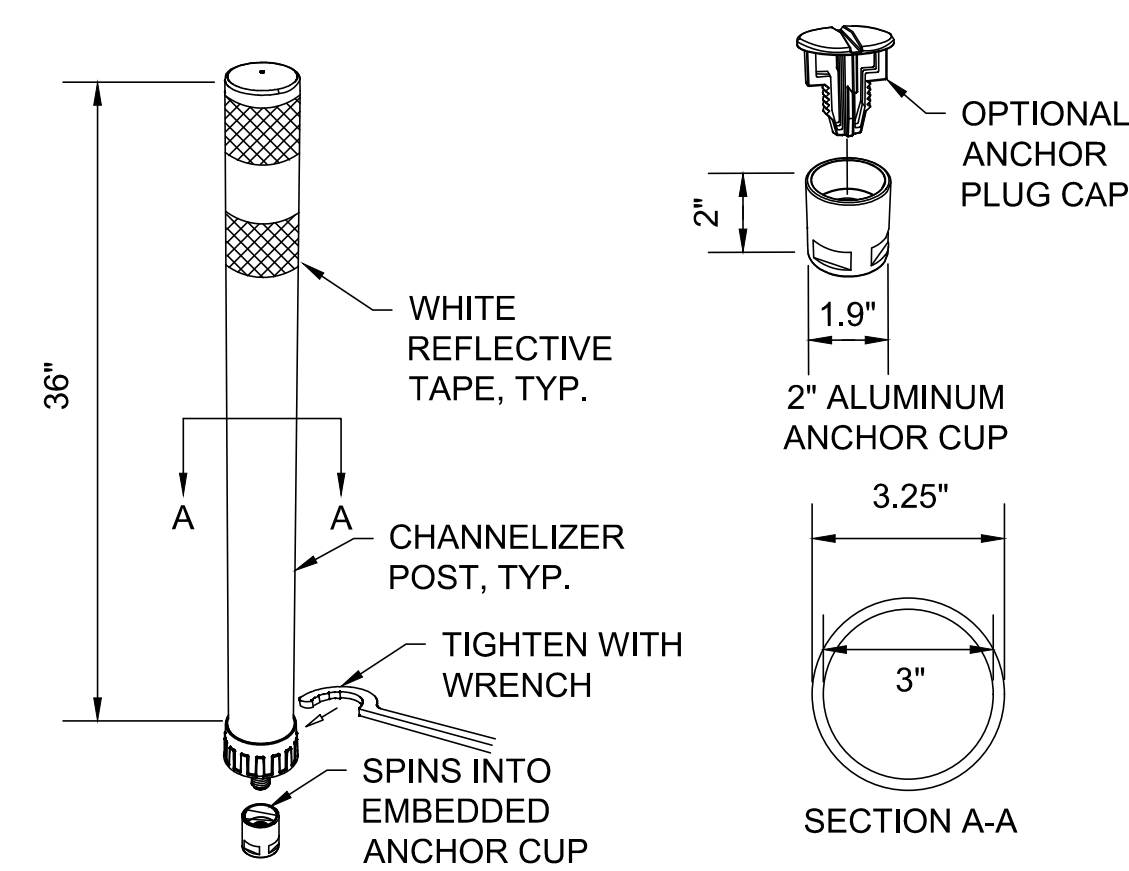
REVISIONS		REV #	DATE
CONSTRUCTION DETAILS 01 ABERDEEN SIGNAL IMPROVEMENTS MOUNT AUBURN STREET CAMBRIDGE, MA		04	16



- NOTES:
1. REFER TO FIGURE 9C-9 IN THE MUTCD FOR MORE DETAIL.
  2. SHARED LANE MARKINGS SHALL BE PERFORMED THERMOPLASTIC.

**SHARED LANE PVMT. MARKING**

SCALE: N.T.S.

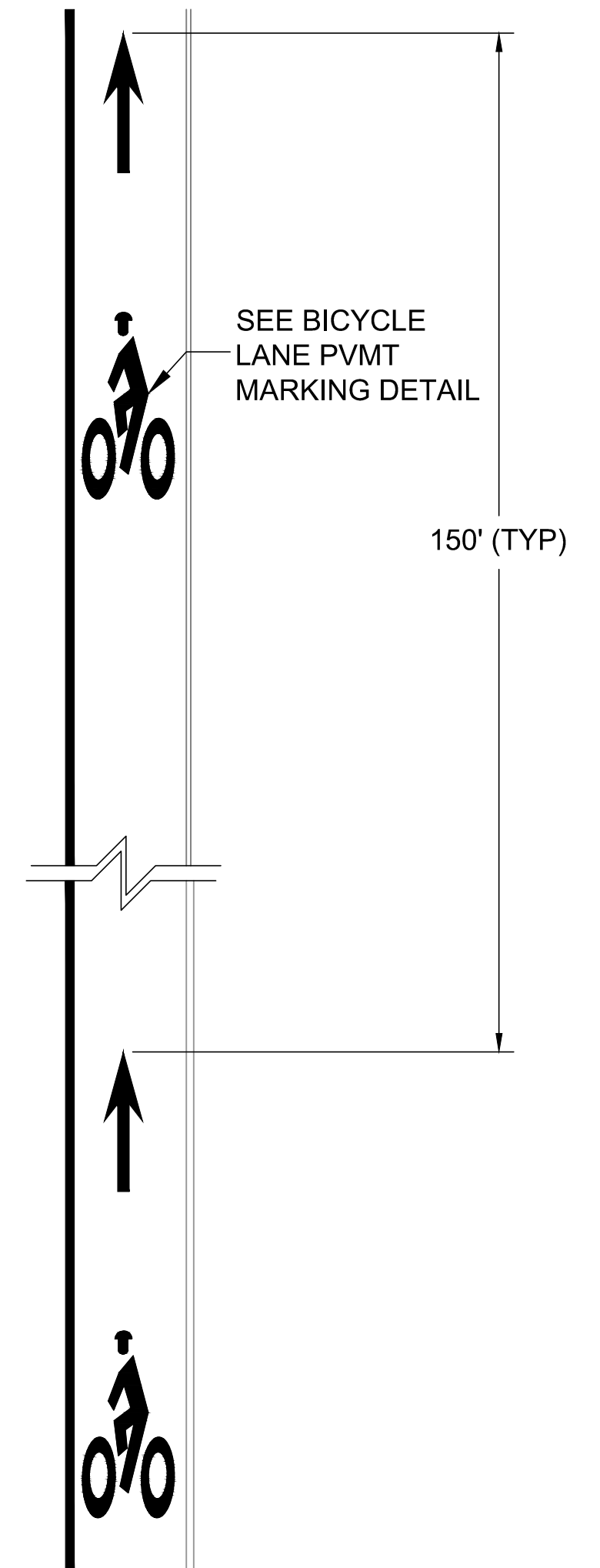


NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DIMENSIONS, MATERIALS, AND ATTACHMENTS MAY VARY BETWEEN MANUFACTURERS.
3. COLOR OF POST SHALL MATCH COLOR OF APPLICABLE EDGE LINE.
4. MANUFACTURER TO BE ON CURRENT APPROVED LIST OF MASSDOT QUALIFIED TRAFFIC SAFETY EQUIPMENT VENDORS.

**36" CORED BASE FLEXPOST DETAIL**

SCALE: N.T.S.

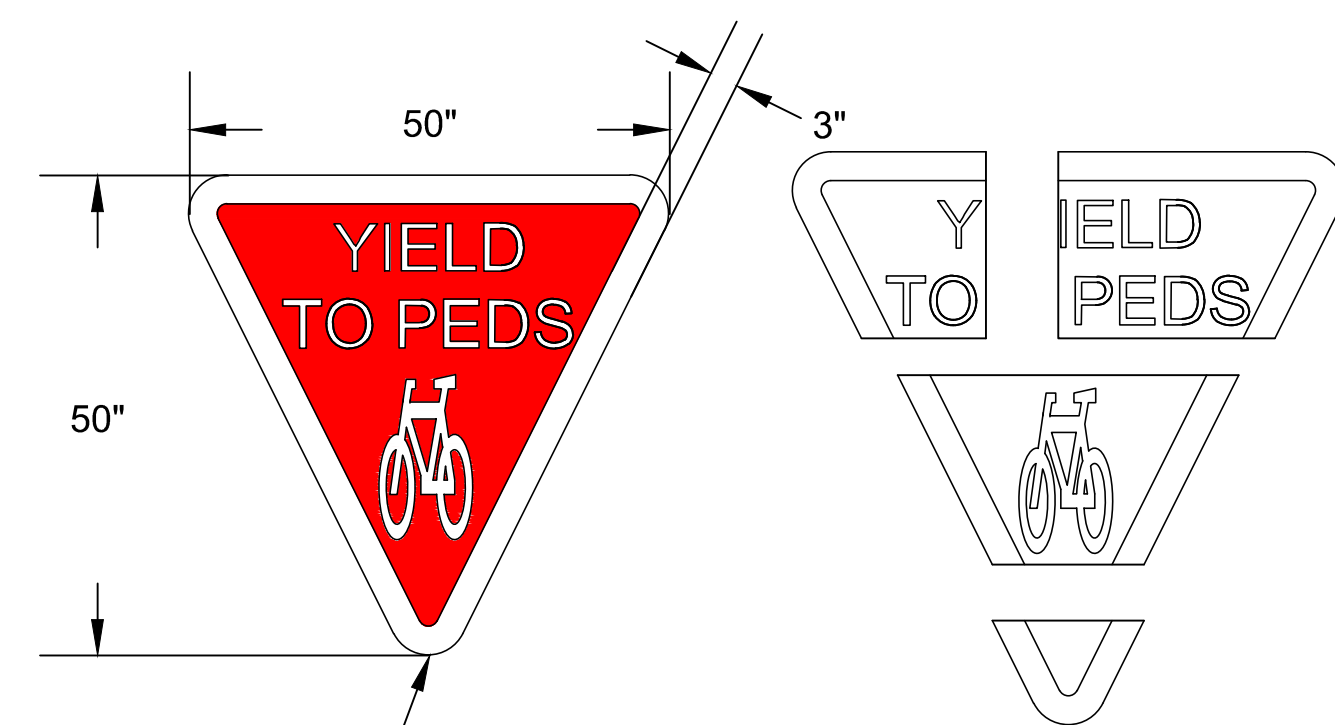


NOTES:

1. DESIGN PLANS SHOULD BE CONSULTED FOR VARIATIONS

**BICYCLE LANE SYMBOL SPACING DETAIL**

SCALE: N.T.S.



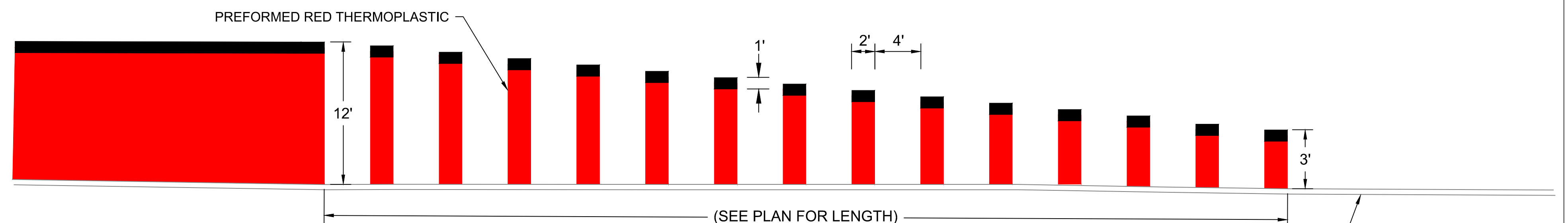
RADIUS = 4"

NOTES:

1. BIKES YIELD TO PEDS PAVEMENT MARKING DETAIL SHALL BE MADE BY ENNIS-FLINT OR APPROVED EQUAL.
2. ENNIS-FLINT DETAIL 50" X 50" "YIELD TO PEDS" W/BIKE SYMBOL, DESIGN #21-658-01.

**BIKES YIELD TO PEDS PAVEMENT MARKING DETAIL**

SCALE: N.T.S.



NOTES:

1. INSTALL HIGH FRICTION RED COLORED PAVEMENT BETWEEN 2' DOTTED WHITE LINES AND THE CURB AS SHOWN ON PLANS.
2. INSTALL HIGH FRICTION RED COLORED PAVEMENT SO THAT CROSSWALK MARKINGS ARE NOT DISTURBED.

**BUS BIKE LANE END TREATMENT**

SCALE: N.T.S.

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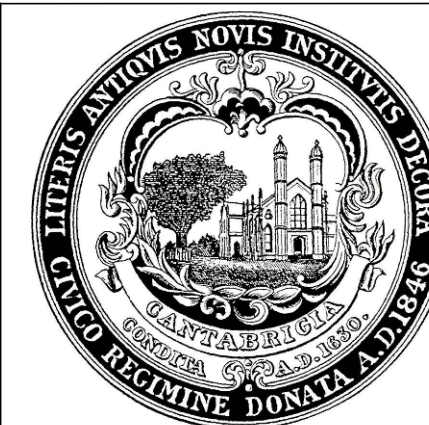
120 WATER ST  
4TH FLOOR  
BOSTON, MA 02109  
TELE: (617) 556 - 0020  
FAX: (617) 556 - 0025

350 MYLES STANDISH BLVD  
SUITE 103  
TAUNTON, MA  
TELE: (508) 823 - 2245

14 BREAKNECK HILL RD  
SUITE 201  
LINCOLN, RI 02865  
TELE: (401) 648 - 7200

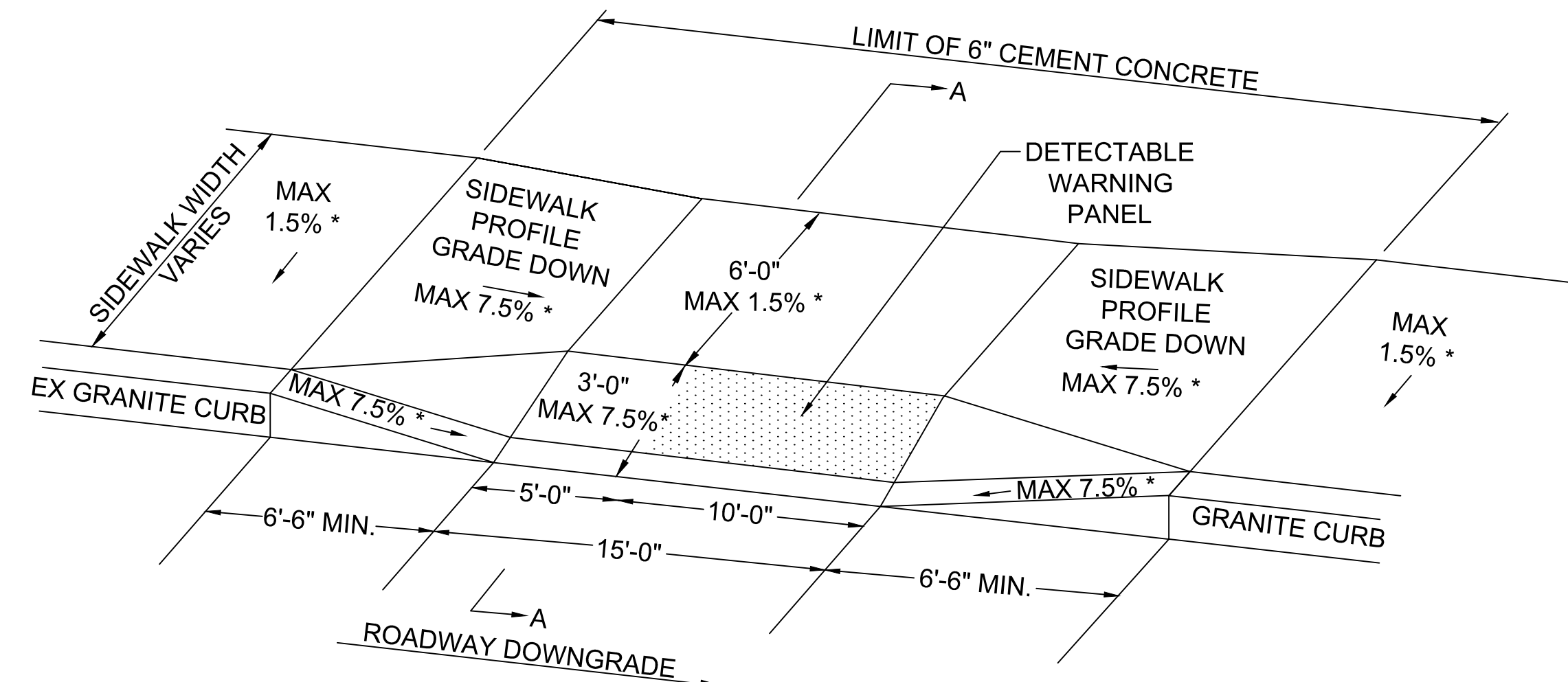
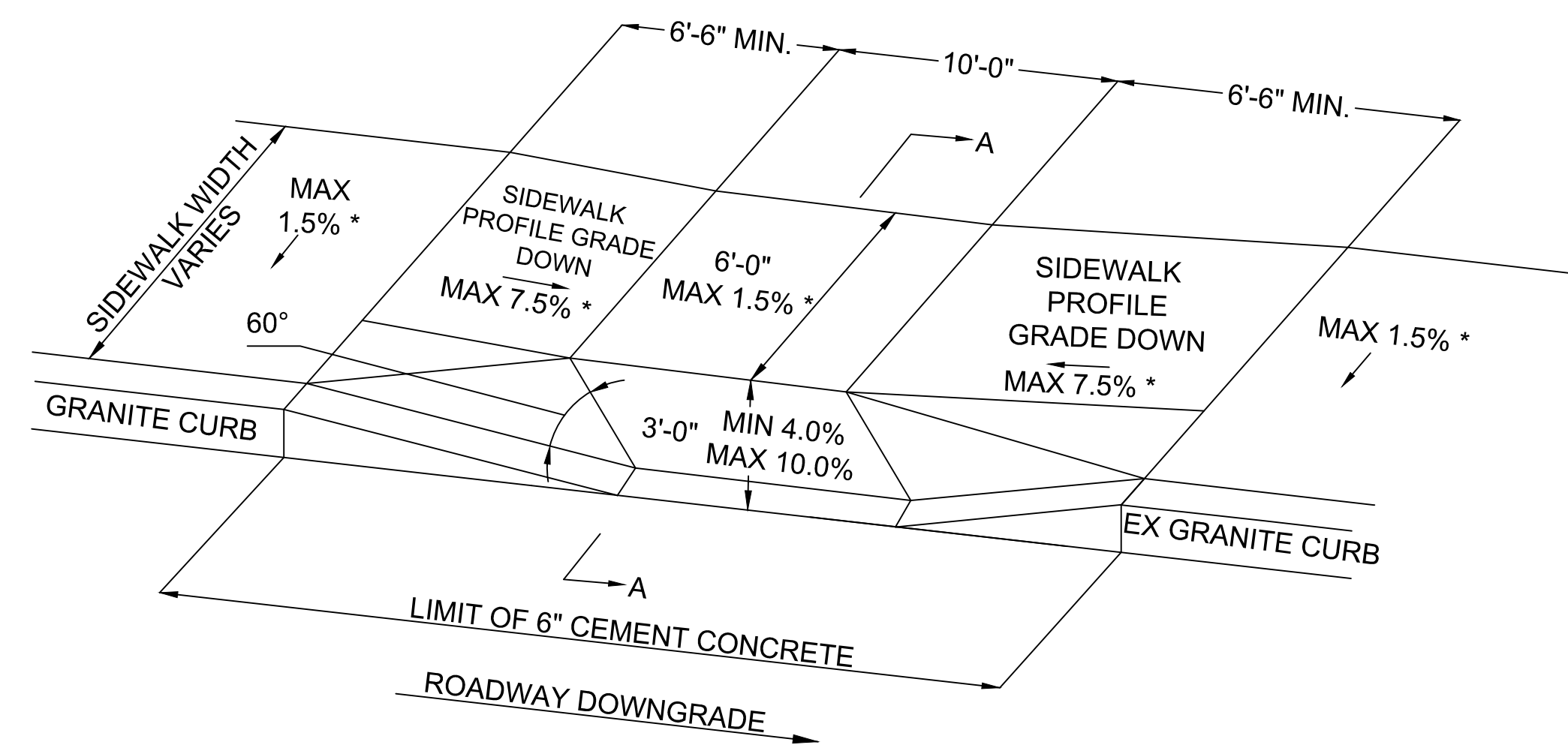
94 NORTH ELM STREET  
SUITE 210  
WESTFIELD, MA  
TELE: (413) 875 - 8855

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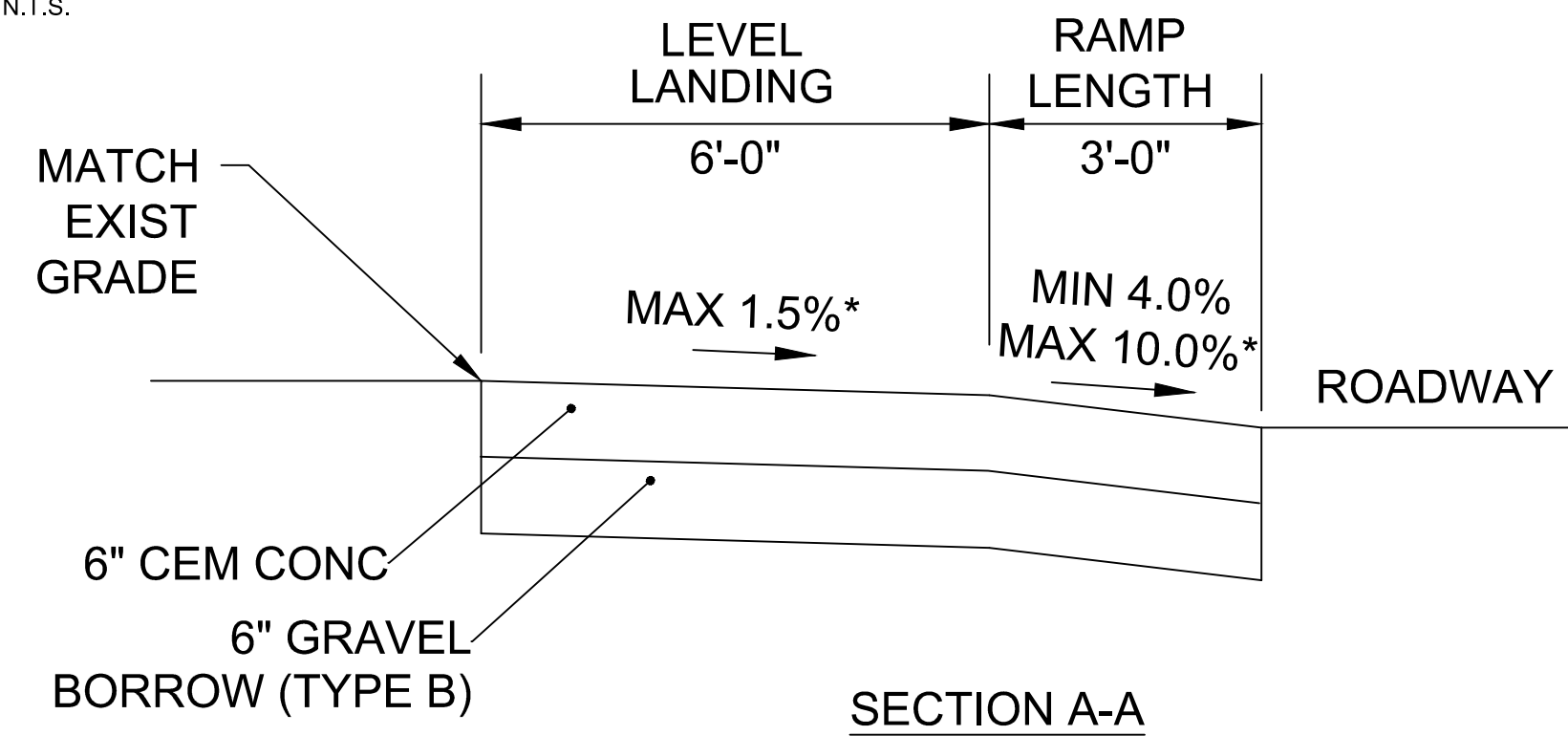


PROJECT #: 312638-01-001  
DATE: 10/2023  
DESIGNER: J. VERESPEJ  
DRAFTER: J. VERESPEJ  
REVIEWER: C. MURPHY

REVISIONS		REV #	DATE
CONSTRUCTION DETAILS 02 ABERDEEN SIGNAL IMPROVEMENTS MOUNT AUBURN STREET CAMBRIDGE, MA		SHEET #	TOTAL SHEETS
		05	16



**BICYCLE RAMP**  
SCALE: N.T.S.



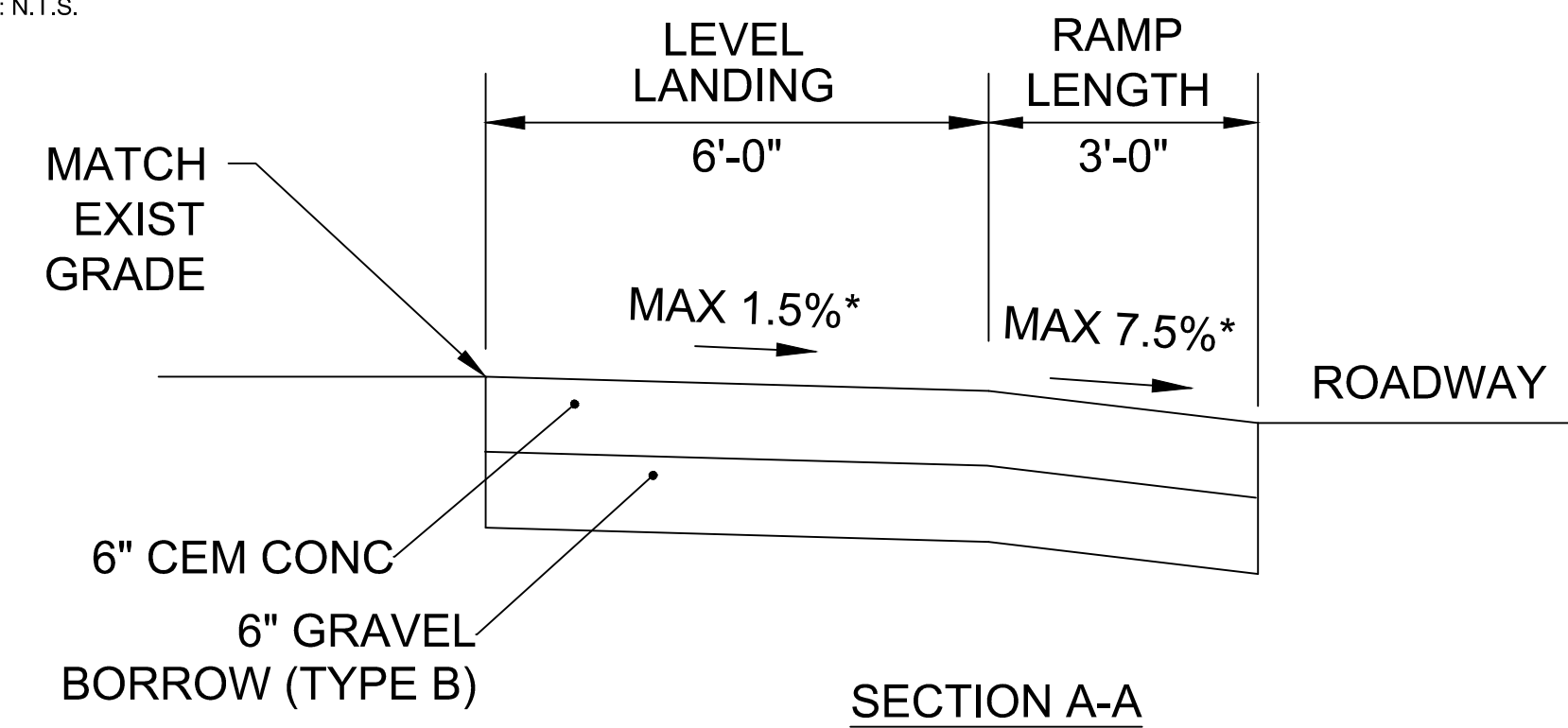
\* TOLERANCE FOR CONSTRUCTION = ±0.5%

**PEDESTRIAN & BICYCLE RAMP**  
SCALE: N.T.S.

TRANSITION CHART \*

ROADWAY PROFILE GRADE	LENGTH OF CURB
0.00	6'-6"
>0.00 TO 0.01	7'-8"
>0.01 TO 0.02	9'-0"
>0.02 TO 0.03	11'-0"
>0.03 TO 0.04	14'-0"
>0.04	15'-0" MAX.

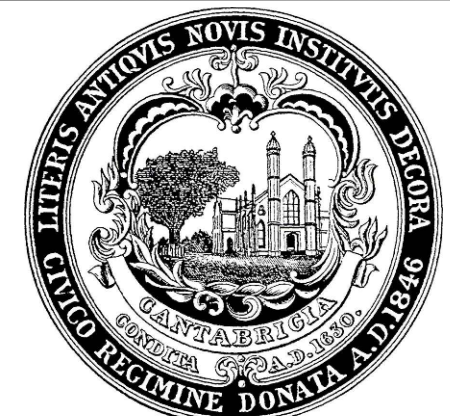
\* BASED ON A DESIGN SLOPE OF 7.5% AND 6" CURB REVEAL.



\* TOLERANCE FOR CONSTRUCTION = ±0.5%

NOTE:  
1. SIDEWALK CURB RAMPS AND BICYCLE RAMPS TO BE CONSTRUCTED BY OTHERS.

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PROJECT #: 312638-01-001  
DATE: 10/2023  
DESIGNER: J. VERESPEJ  
DRAFTER: J. VERESPEJ  
REVIEWER: C. MURPHY

PS&E SUBMISSION

**MCMAHON**  
a Bowman company

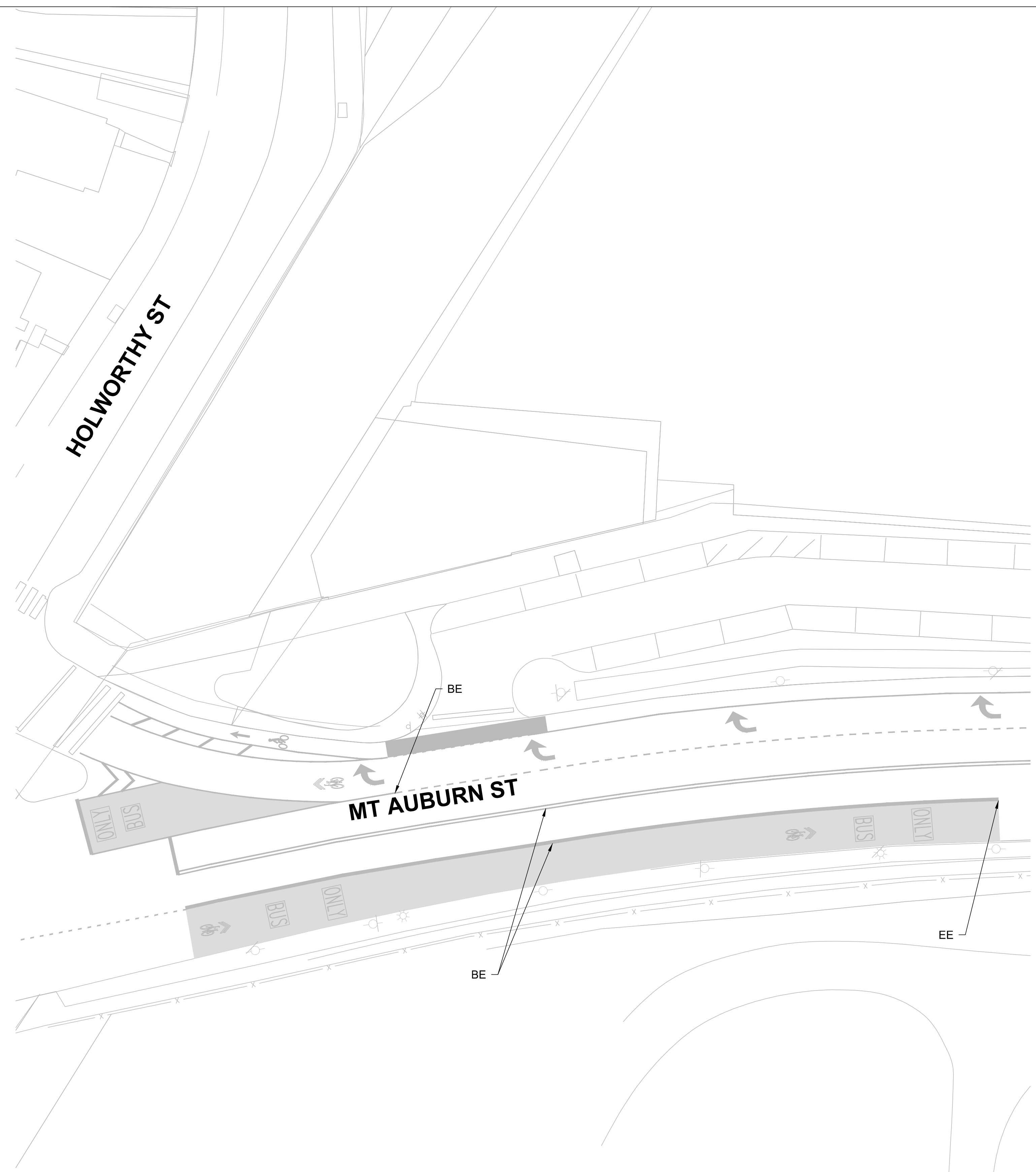
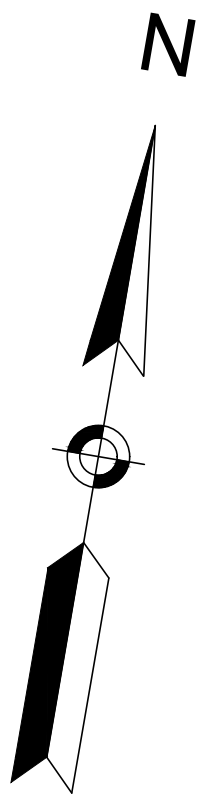
120 WATER ST  
4TH FLOOR  
BOSTON, MA 02109  
TELE: (617) 556 - 0020  
FAX: (617) 556 - 0025

350 MYLES STANDISH BLVD  
SUITE 103  
TAUNTON, MA  
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14 BREAKNECK HILL RD  
SUITE 201  
LINCOLN, RI 02865  
TELE: (401) 648 - 7200

94 NORTH ELM STREET  
SUITE 210  
WESTFIELD, MA  
TELE: (413) 875 - 8855

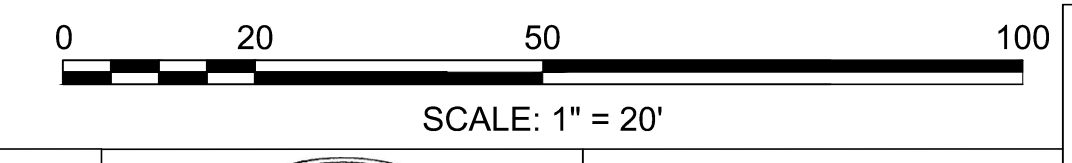
REVISIONS		REV #	DATE
CONSTRUCTION DETAILS 03 ABERDEEN SIGNAL IMPROVEMENTS ABERDEEN AVENUE CAMBRIDGE, MA		06	16



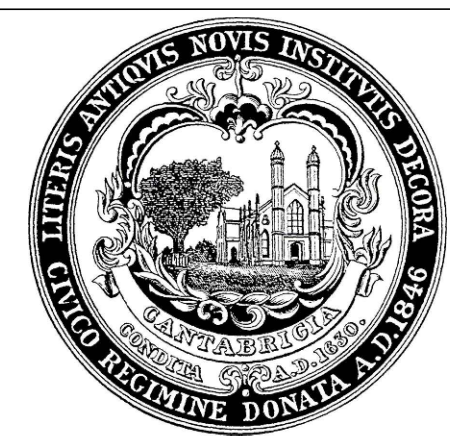
ABERDEEN\_ERAD.DWG Plotted on 11/15/23

- NOTES:
- EXISTING PAVEMENT MARKINGS SHALL BE REMOVED TO THE FULLEST EXTENT POSSIBLE BY AN APPROVED METHOD AS DEFINED IN MASSDOT SUPPLEMENTAL SPECIFICATIONS OR AS APPROVED BY THE ENGINEER. PAVEMENT MARKING REMOVAL METHODS SHALL NOT CAUSE DAMAGE TO THE PAVEMENT OR CAUSE A DRASTIC CHANGE IN TEXTURE, WHICH COULD BE CONSTRUED AS DELINEATION AT NIGHT, AND SHALL BE APPROVED BY THE ENGINEER. IT IS NOT PERMISSIBLE TO PAINT OVER EXISTING MARKINGS WITH BLACK PAINT IN LIEU OF REMOVAL.
  - ALL EXISTING PAVEMENT MARKING LINES AND SYMBOLS SHALL BE RETAINED UNLESS OTHERWISE NOTED.

ERADICATION PLAN ABBREVIATIONS  
 BE BEGIN ERADICATION  
 EE END ERADICATION  
 ES ERADICATE SYMBOL



**DRAFT**  
 NOT FOR CONSTRUCTION



PROJECT #: 312638-01-001  
 DATE: 10/2023  
 DESIGNER: J. VERESPEJ  
 DRAFTER: J. VERESPEJ  
 REVIEWER: C. MURPHY

PS&E SUBMISSION



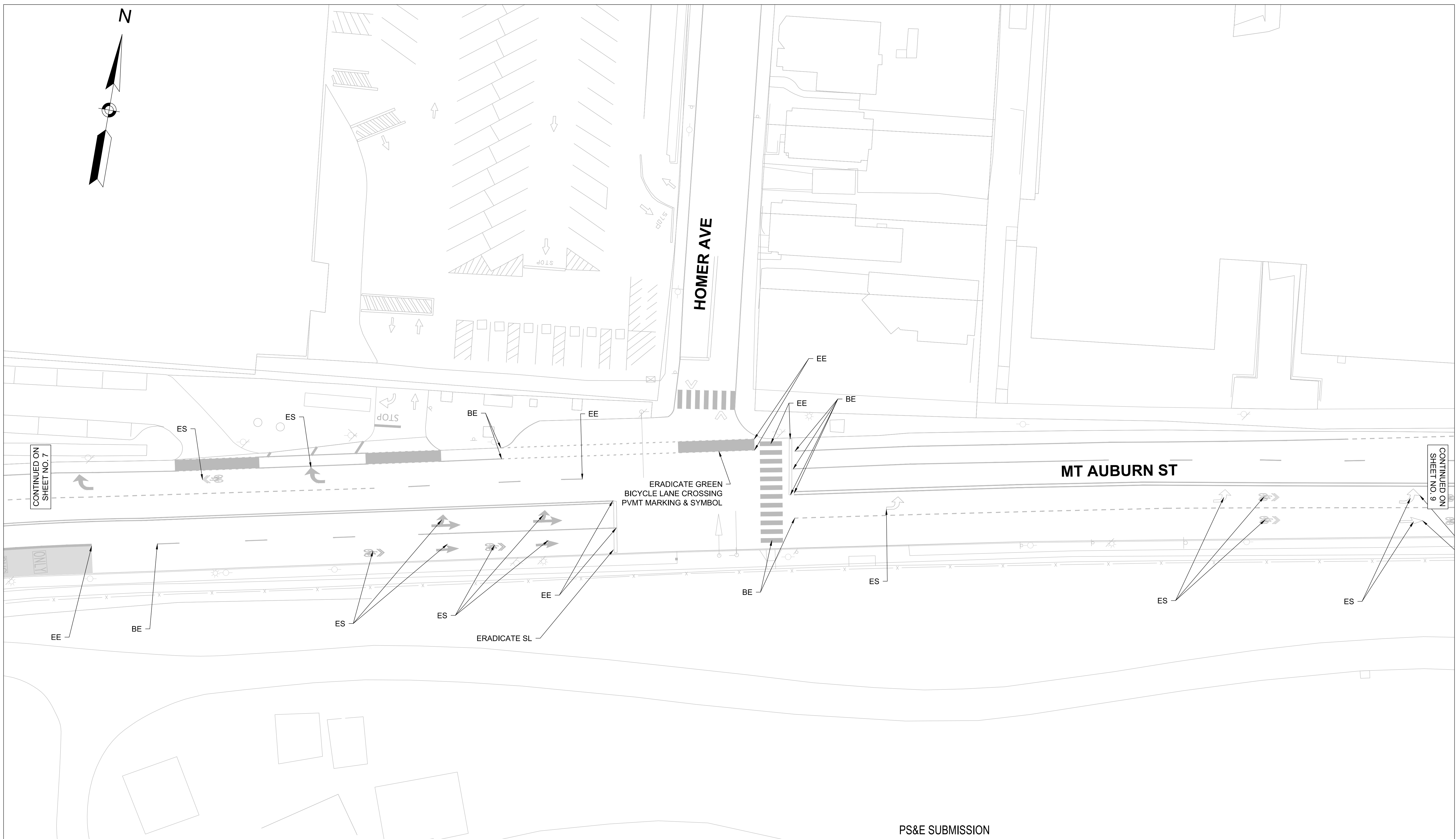
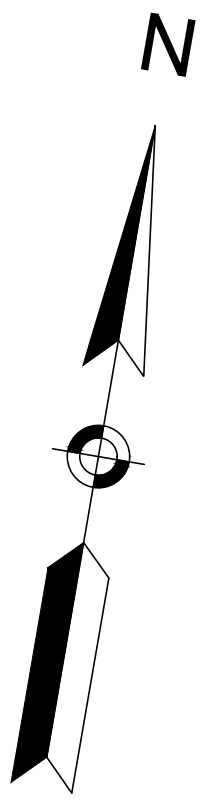
350 MYLES STANDISH BLVD  
 SUITE 103  
 TAUNTON, MA  
 TELE: (508) 823 - 2245

120 WATER ST  
 4TH FLOOR  
 BOSTON, MA 02109  
 TELE: (617) 556 - 0020  
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14 BREAKNECK HILL RD  
 SUITE 201  
 LINCOLN, RI 02865  
 TELE: (401) 648 - 7200

94 NORTH ELM STREET  
 SUITE 210  
 WESTFIELD, MA  
 TELE: (413) 875 - 8855

REVISIONS		REV #	DATE
ERADICATION PLANS NO. 1 ABERDEEN SIGNAL IMPROVEMENTS MOUNT AUBURN STREET CAMBRIDGE, MA		07	16

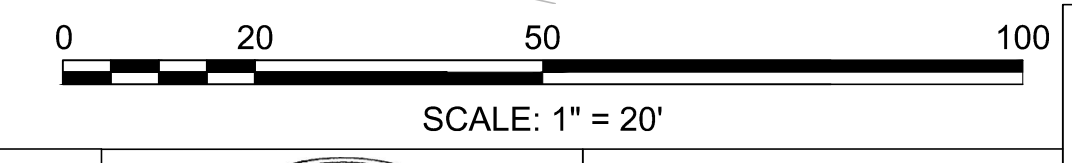


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CONTINUED ON SHEET NO. 9

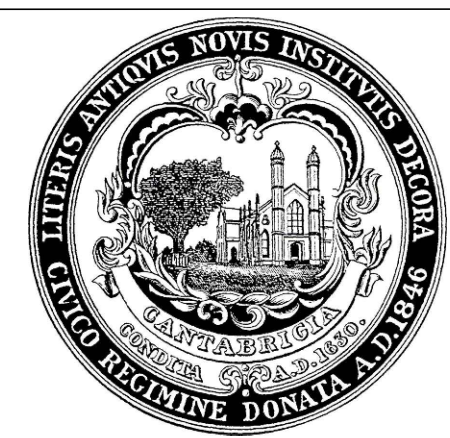
- NOTES:
- EXISTING PAVEMENT MARKINGS SHALL BE REMOVED TO THE FULLEST EXTENT POSSIBLE BY AN APPROVED METHOD AS DEFINED IN MASSDOT SUPPLEMENTAL SPECIFICATIONS OR AS APPROVED BY THE ENGINEER. PAVEMENT MARKING REMOVAL METHODS SHALL NOT CAUSE DAMAGE TO THE PAVEMENT OR CAUSE A DRASTIC CHANGE IN TEXTURE, WHICH COULD BE CONSTRUED AS DELINEATION AT NIGHT, AND SHALL BE APPROVED BY THE ENGINEER. IT IS NOT PERMISSIBLE TO PAINT OVER EXISTING MARKINGS WITH BLACK PAINT IN LIEU OF REMOVAL.
  - ALL EXISTING PAVEMENT MARKING LINES AND SYMBOLS SHALL BE RETAINED UNLESS OTHERWISE NOTED.

ERADICATION PLAN ABBREVIATIONS  
 BE BEGIN ERADICATION  
 EE END ERADICATION  
 ES ERADICATE SYMBOL



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PROJECT #: 312638-01-001  
 DATE: 10/2023  
 DESIGNER: J. VERESPEJ  
 DRAFTER: J. VERESPEJ  
 REVIEWER: C. MURPHY

PS&E SUBMISSION



350 MYLES STANDISH BLVD  
 SUITE 103  
 TAUNTON, MA  
 TELE: (508) 823 - 2245

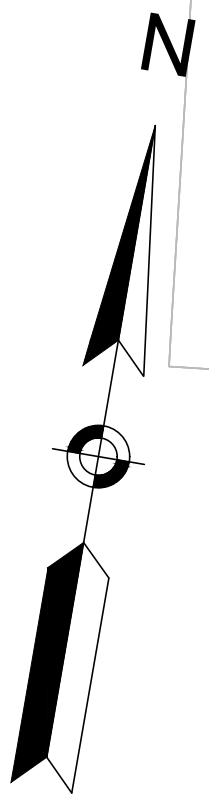
120 WATER ST  
 4TH FLOOR  
 BOSTON, MA 02109  
 TELE: (617) 556 - 0020  
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14 BREAKNECK HILL RD  
 SUITE 201  
 LINCOLN, RI 02865  
 TELE: (401) 648 - 7200

94 NORTH ELM STREET  
 SUITE 210  
 WESTFIELD, MA  
 TELE: (413) 875 - 8855

REVISIONS		REV #	DATE
ERADICATION PLANS NO. 2 ABERDEEN SIGNAL IMPROVEMENTS MOUNT AUBURN STREET CAMBRIDGE, MA		08	16



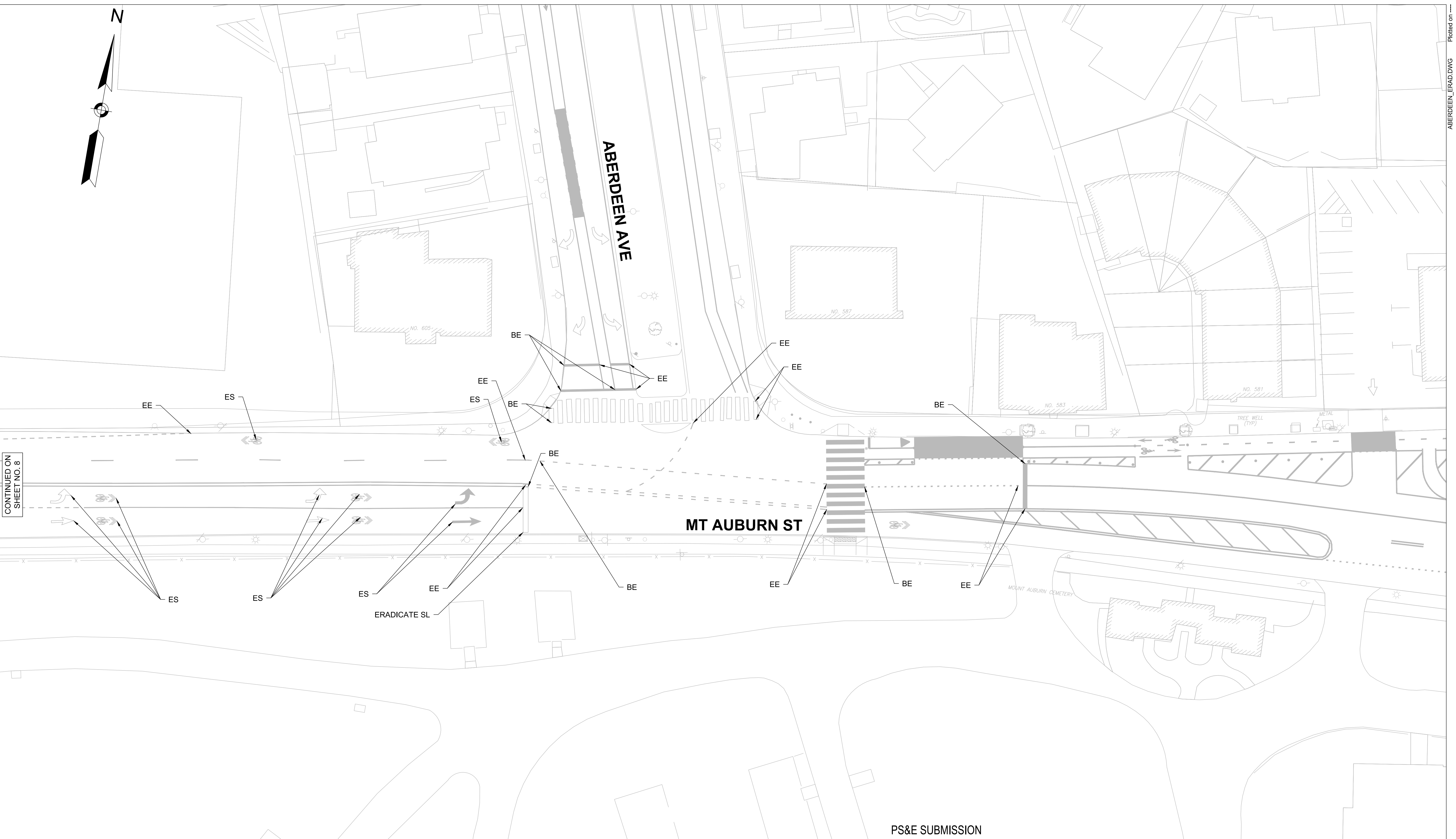


ABERDEEN AVE

MT AUBURN ST

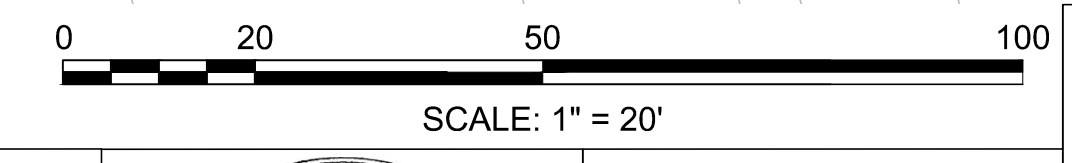
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Plotted on ABERDEEN\_ERAD.DWG

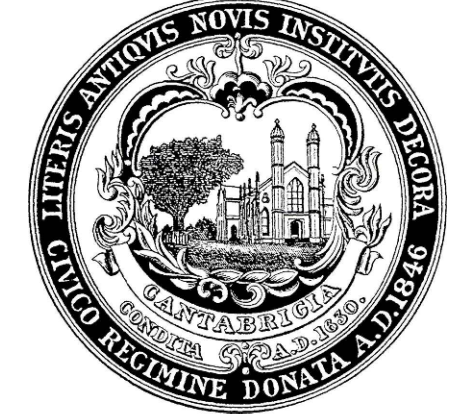


- NOTES:
- EXISTING PAVEMENT MARKINGS SHALL BE REMOVED TO THE FULLEST EXTENT POSSIBLE BY AN APPROVED METHOD AS DEFINED IN MASSDOT SUPPLEMENTAL SPECIFICATIONS OR AS APPROVED BY THE ENGINEER. PAVEMENT MARKING REMOVAL METHODS SHALL NOT CAUSE DAMAGE TO THE PAVEMENT OR CAUSE A DRASTIC CHANGE IN TEXTURE, WHICH COULD BE CONSTRUED AS DELINEATION AT NIGHT, AND SHALL BE APPROVED BY THE ENGINEER. IT IS NOT PERMISSIBLE TO PAINT OVER EXISTING MARKINGS WITH BLACK PAINT IN LIEU OF REMOVAL.
  - ALL EXISTING PAVEMENT MARKING LINES AND SYMBOLS SHALL BE RETAINED UNLESS OTHERWISE NOTED.

ERADICATION PLAN ABBREVIATIONS  
 BE BEGIN ERADICATION  
 EE END ERADICATION  
 ES ERADICATE SYMBOL



**DRAFT**  
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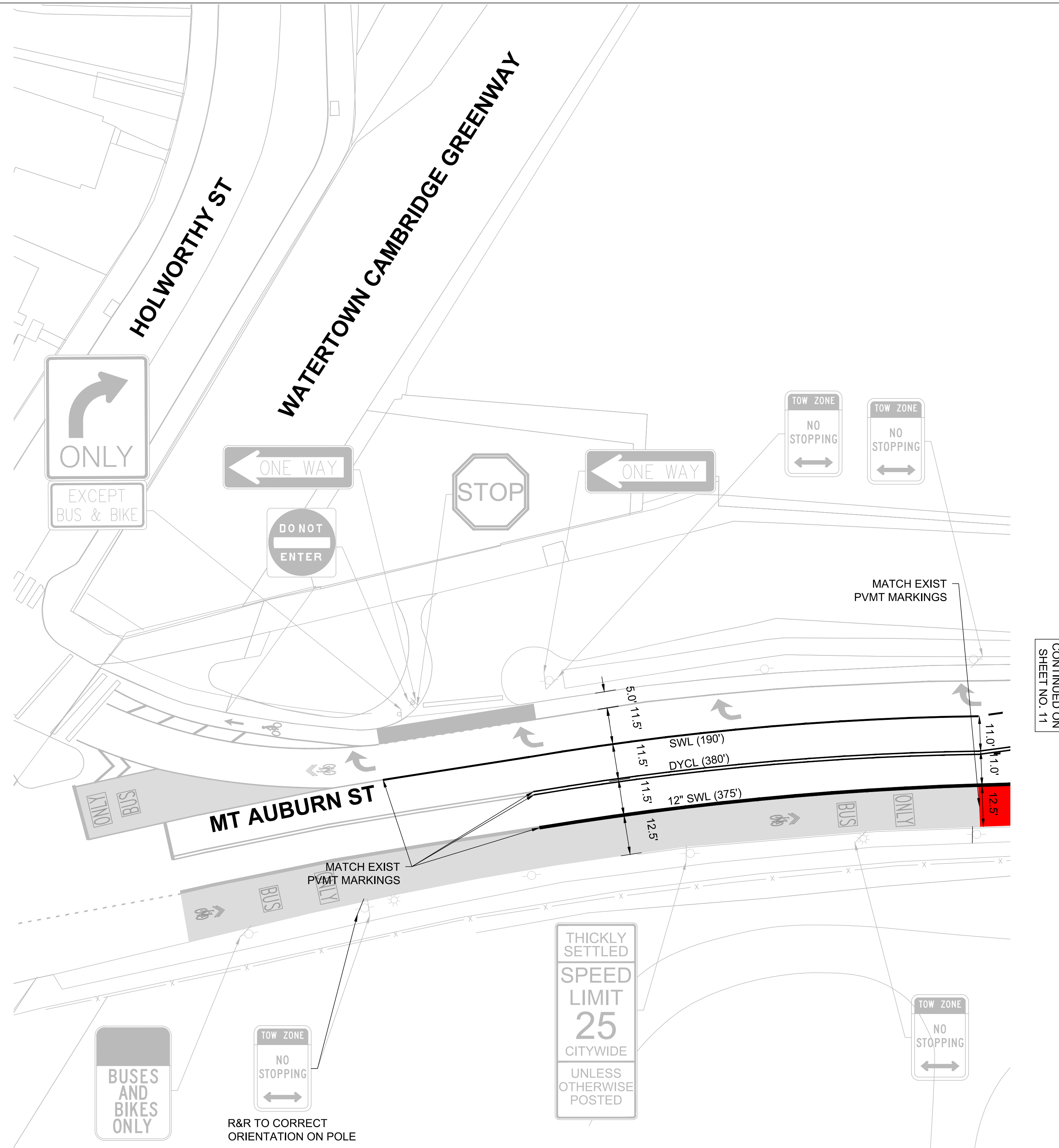
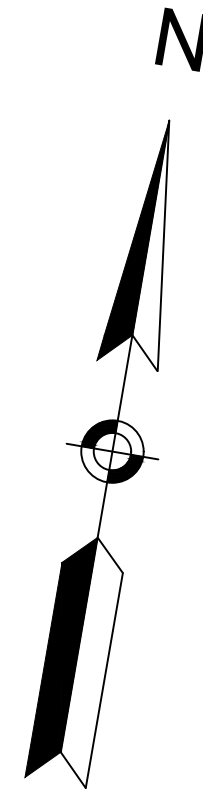
PROJECT #: 312638-01-001  
 DATE: 10/2023  
 DESIGNER: J. VERESPEJ  
 DRAFTER: J. VERESPEJ  
 REVIEWER: C. MURPHY

PS&E SUBMISSION



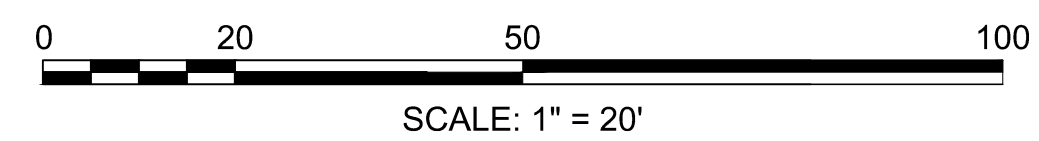
350 MYLES STANDISH BLVD SUITE 103 TAUNTON, MA TELE: (508) 823 - 2245  
 14 BREAKNECK HILL RD SUITE 201 LINCOLN, RI 02865 TELE: (401) 648 - 7200  
 120 WATER ST 4TH FLOOR BOSTON, MA 02109 TELE: (617) 556 - 0020 FAX: (617) 556 - 0025  
 94 NORTH ELM STREET SUITE 210 WESTFIELD, MA TELE: (413) 875 - 8855

REVISIONS		REV #	DATE
<b>ERADICATION PLANS NO. 3 ABERDEEN SIGNAL IMPROVEMENTS MOUNT AUBURN STREET CAMBRIDGE, MA</b>		09	16



CONTINUED ON SHEET NO. 11

R&R TO CORRECT ORIENTATION ON POLE



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350 MYLES STANDISH BLVD  
SUITE 103  
TAUNTON, MA  
TELE: (508) 823 - 2245

120 WATER ST  
4TH FLOOR  
BOSTON, MA 02109  
TELE: (617) 556 - 0020  
FAX: (617) 556 - 0025

14 BREAKNECK HILL RD  
SUITE 201  
LINCOLN, RI 02865  
TELE: (401) 648 - 7200

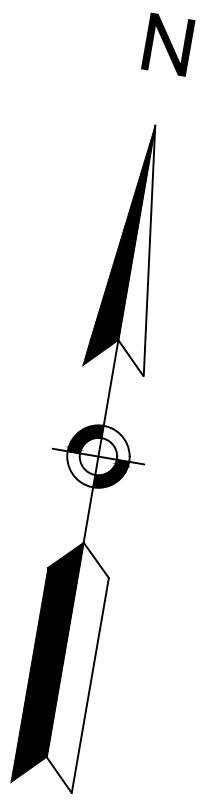
94 NORTH ELM STREET  
SUITE 210  
WESTFIELD, MA  
TELE: (413) 875 - 8855

	PROJECT #:	312638-01-001
	DATE:	10/2023
	DESIGNER:	J. VERESPEJ
	DRAFTER:	J. VERESPEJ
	REVIEWER:	C. MURPHY

**DRAFT**  
NOT FOR CONSTRUCTION

NOTE:  
1. ALL EXISTING SIGNS TO BE RETAINED UNLESS OTHERWISE NOTED.

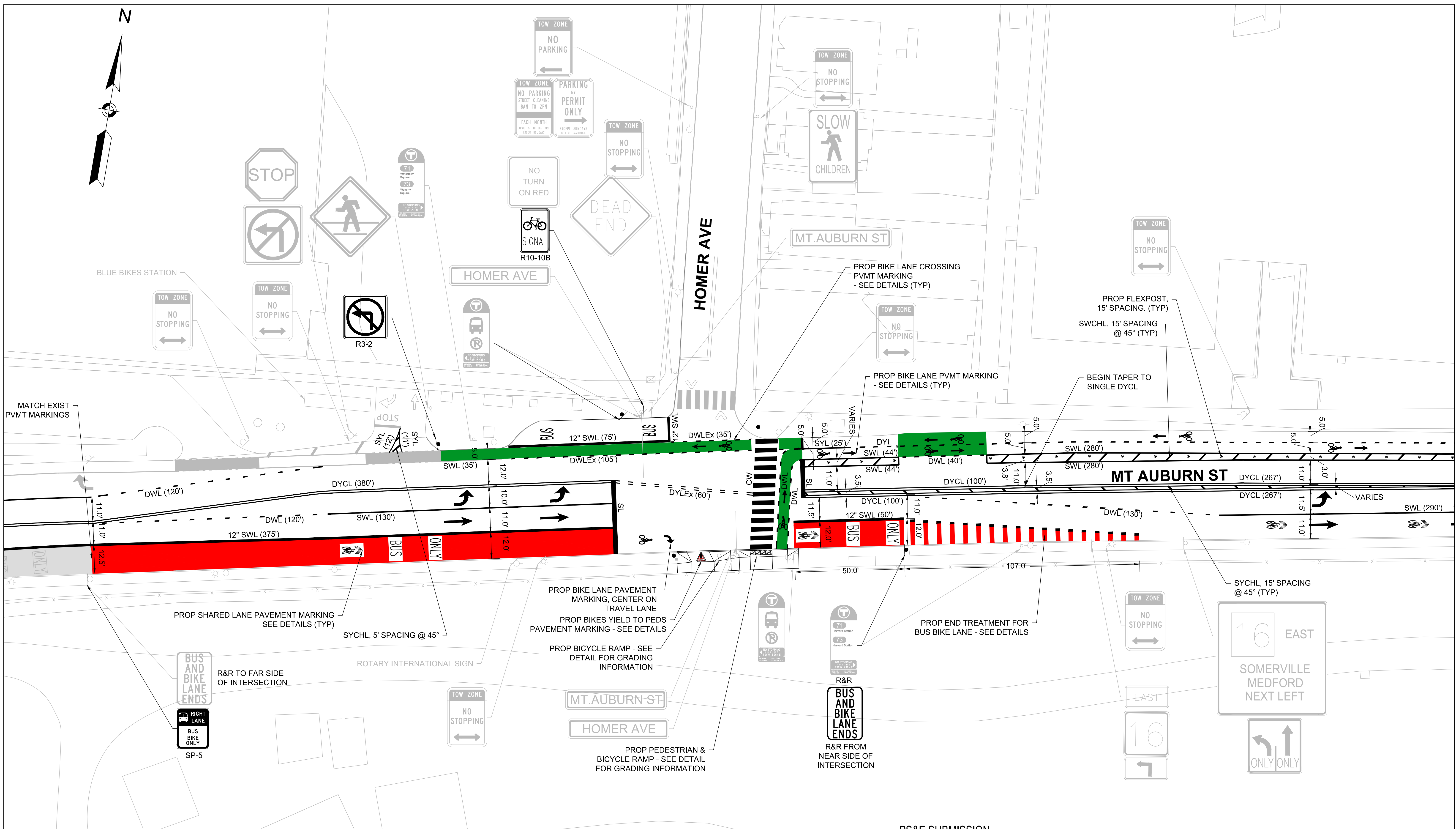
REVISIONS		REV #	DATE
SIGNAGE & PAVEMENT MARKING PLANS NO. 1			
ABERDEEN SIGNAL IMPROVEMENTS			
MOUNT AUBURN STREET			
CAMBRIDGE, MA			
SHEET #	TOTAL SHEETS		
10	16		



Plotted on 11/11/2023 4:08 PM

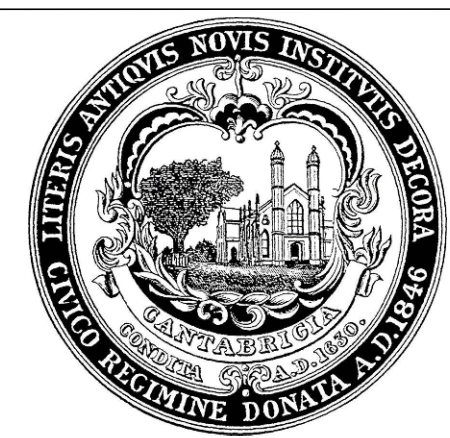
CONTINUED ON SHEET NO. 12

CONTINUED ON SHEET NO. 10



- NOTE:**
1. ALL EXISTING SIGNS TO BE RETAINED UNLESS OTHERWISE NOTED.
  2. SIDEWALK CURB RAMPS AND BICYCLE RAMPS TO BE CONSTRUCTED BY OTHERS.

**DRAFT**  
NOT FOR CONSTRUCTION



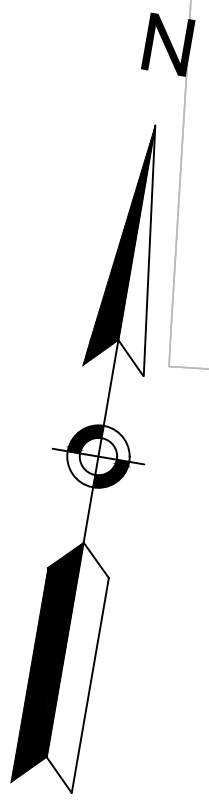
PROJECT #: 312638-01-001  
 DATE: 10/2023  
 DESIGNER: J. VERESPEJ  
 DRAFTER: J. VERESPEJ  
 REVIEWER: C. MURPHY

PS&E SUBMISSION

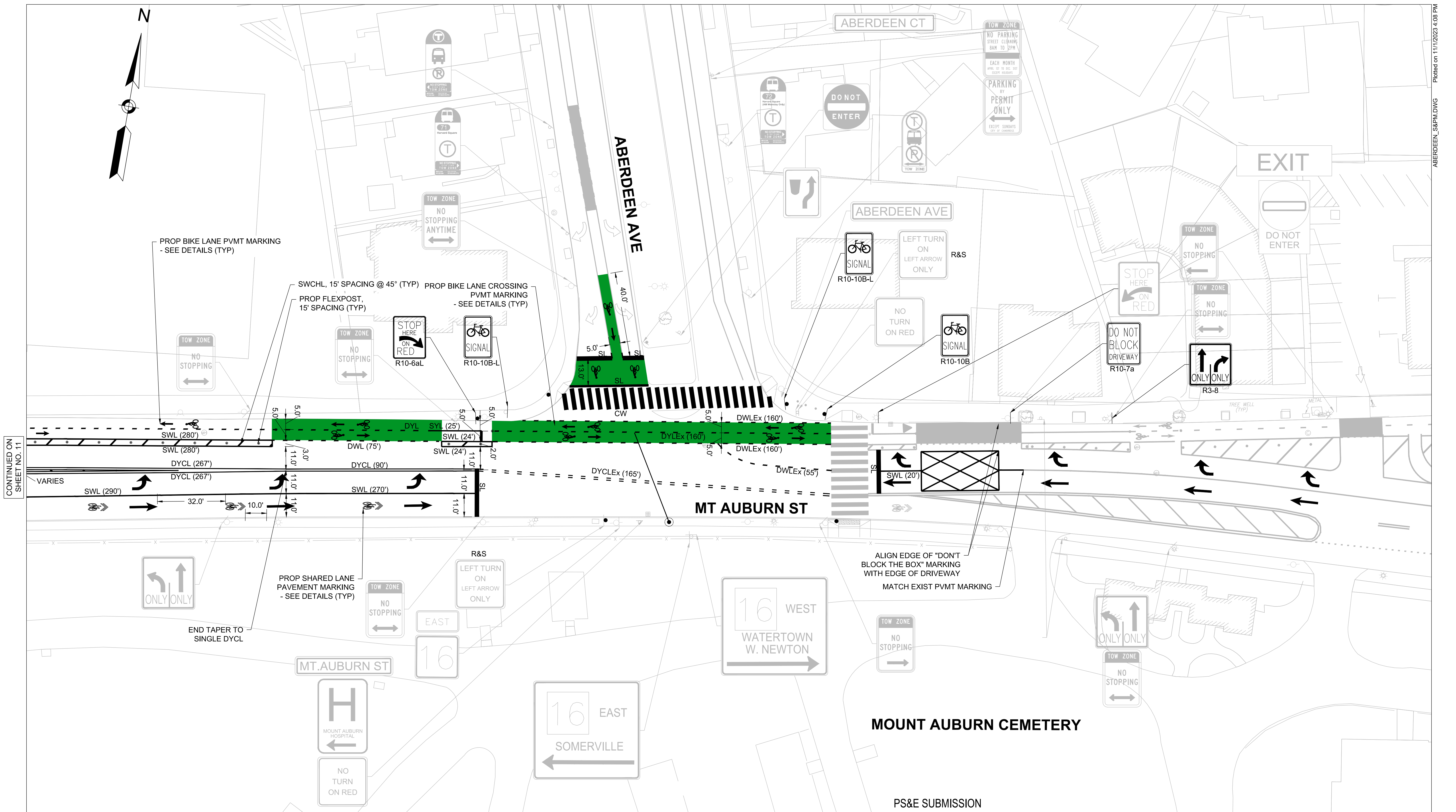


350 MYLES STANDISH BLVD SUITE 103 TAUNTON, MA TELE: (508) 823 - 2245  
 14 BREAKNECK HILL RD SUITE 201 LINCOLN, RI 02865 TELE: (401) 648 - 7200  
 120 WATER ST 4TH FLOOR BOSTON, MA 02109 TELE: (617) 556 - 0020 FAX: (617) 556 - 0025  
 94 NORTH ELM STREET SUITE 210 WESTFIELD, MA TELE: (413) 875 - 8855

REVISIONS		REV #	DATE
SIGNAGE & PAVEMENT MARKING PLANS NO. 2			
ABERDEEN SIGNAL IMPROVEMENTS			
MOUNT AUBURN STREET			
CAMBRIDGE, MA			
		11	16



Plotted on 11/11/2023 4:08 PM  
ABERDEEN\_S&PM.DWG



CONTINUED ON SHEET NO. 11

PROP BIKE LANE PVMT MARKING - SEE DETAILS (TYP)

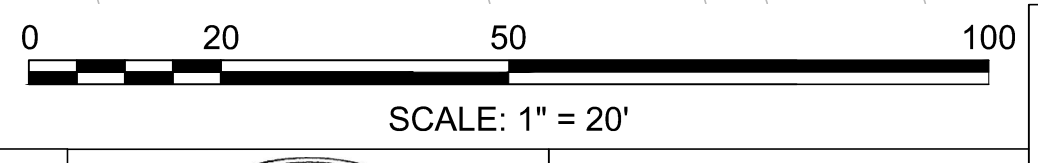
SWCHL, 15' SPACING @ 45° (TYP) PROP BIKE LANE CROSSING PVMT MARKING - SEE DETAILS (TYP)  
PROP FLEXPOST, 15' SPACING (TYP)

ONLY ONLY

END TAPER TO SINGLE DYCL

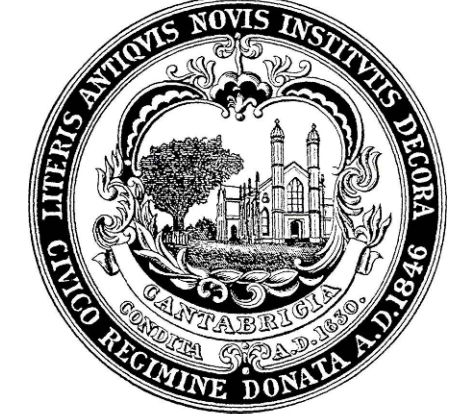
PROP SHARED LANE PAVEMENT MARKING - SEE DETAILS (TYP)

ALIGN EDGE OF "DON'T BLOCK THE BOX" MARKING WITH EDGE OF DRIVEWAY  
MATCH EXIST PVMT MARKING



- NOTE:**
1. ALL EXISTING SIGNS TO BE RETAINED UNLESS OTHERWISE NOTED.
  2. SIDEWALK CURB RAMPS AND BICYCLE RAMPS TO BE CONSTRUCTED BY OTHERS.

**DRAFT**  
NOT FOR CONSTRUCTION



PROJECT #: 312638-01-001  
 DATE: 10/2023  
 DESIGNER: J. VERESPEJ  
 DRAFTER: J. VERESPEJ  
 REVIEWER: C. MURPHY

PS&E SUBMISSION










350 MYLES STANDISH BLVD  
 SUITE 103  
 TAUNTON, MA  
 TELE: (508) 823 - 2245

120 WATER ST  
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 BOSTON, MA 02109  
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REVISIONS		REV #	DATE
SIGNAGE & PAVEMENT MARKING PLANS NO. 3			
ABERDEEN SIGNAL IMPROVEMENTS			
MOUNT AUBURN STREET			
CAMBRIDGE, MA			
SHEET #	TOTAL SHEETS		
12	16		

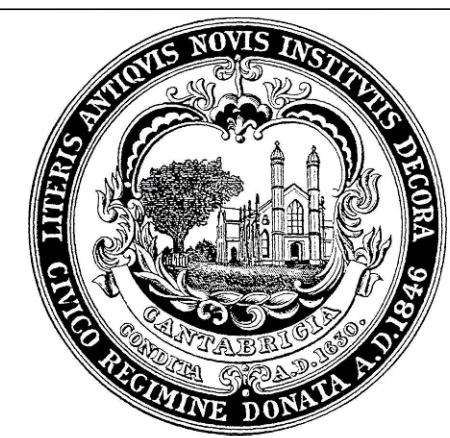
TRAFFIC SIGN SUMMARY (CONSTRUCTION)													
IDENTIFICATION NUMBER	SIZE OF SIGN (IN)		TEXT	TEXT DIMENSIONS (IN)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (SF)	AREA (SF)
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE MKR		BACKGROUND	LEGEND	BORDER			
R10-10B	12	18		SEE MUTCD STANDARDS			2	SEE MUTCD STANDARDS			TR SIG POST (1) MA POST (1)	1.50	3.00
R10-10B-L	18	24		SEE MUTCD STANDARDS			2	SEE MUTCD STANDARDS			TR SIG POST (2)	3.00	6.00
R10-6aR	24	30		SEE MUTCD STANDARDS			1	SEE MUTCD STANDARDS			P5-1	5.00	5.00
R3-2	30	30		SEE MUTCD STANDARDS			1	SEE MUTCD STANDARDS			P5-1	6.25	6.25
R3-8	30	30		SEE MUTCD STANDARDS			1	SEE MUTCD STANDARDS			LIGHT POST	6.25	6.25
R10-7a	24	30		SEE MUTCD STANDARDS			1	SEE MUTCD STANDARDS			LIGHT POST	5.00	5.00
SP-5	24	30		3D	1.3		1	BLACK/WHITE	WHITE/BLACK	BLACK	UTIL POLE	5.00	5.00
				3D	2.2								
				3D	4.5								
				3D	2								
				3D	2								
				3D	3								
TOTAL:												36.50	

PS&E SUBMISSION



DRAFT

NOT FOR CONSTRUCTION



PROJECT #: 312638-01-001  
 DATE: 10/2023  
 DESIGNER: J. VERESPEJ  
 DRAFTER: J. VERESPEJ  
 REVIEWER: C. MURPHY

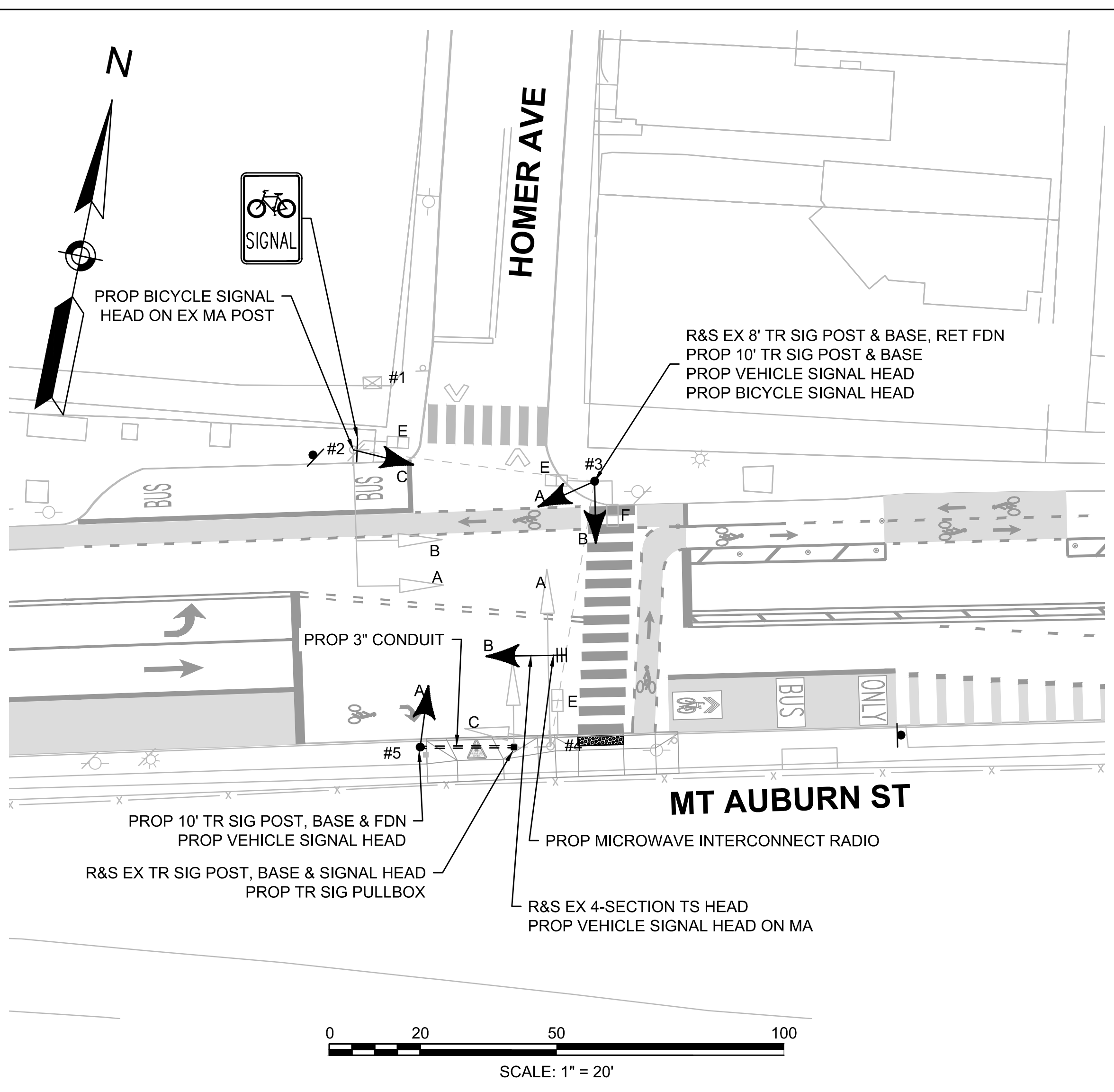
120 WATER ST  
 4TH FLOOR  
 BOSTON, MA 02109  
 TELE: (617) 556-0020  
 FAX: (617) 556-0025

350 MYLES STANDISH BLVD  
 SUITE 103  
 TAUNTON, MA  
 TELE: (508) 823-2245

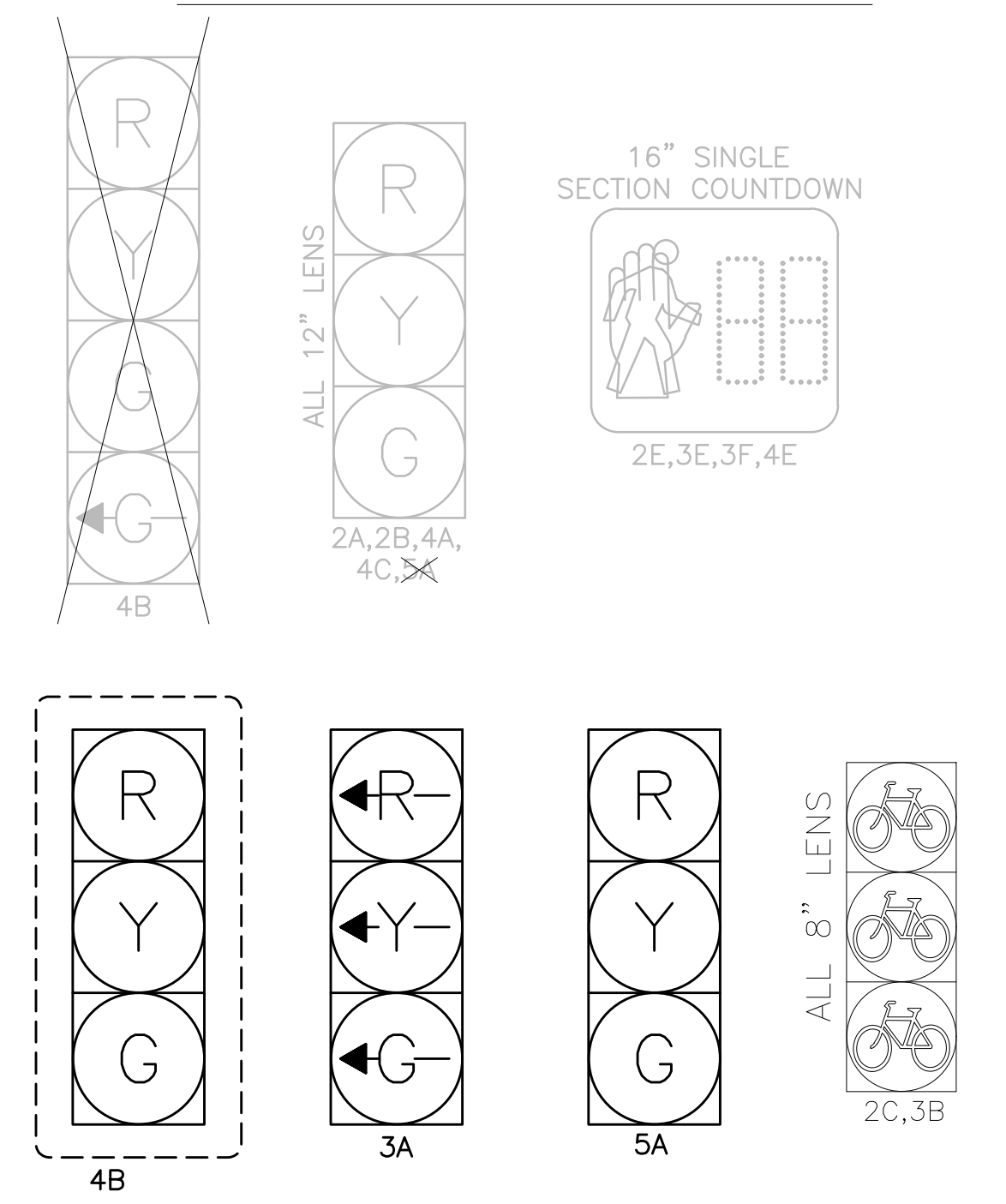
14 BREAKNECK HILL RD  
 SUITE 201  
 LINCOLN, RI 02865  
 TELE: (401) 648-7200

94 NORTH ELM STREET  
 SUITE 210  
 WESTFIELD, MA  
 TELE: (413) 875-8855

REVISIONS		REV #	DATE
TRAFFIC SIGN SUMMARY NO. 1 ABERDEEN SIGNAL IMPROVEMENTS MOUNT AUBURN STREET CAMBRIDGE, MA		13	16



**TRAFFIC SIGNAL FACES**

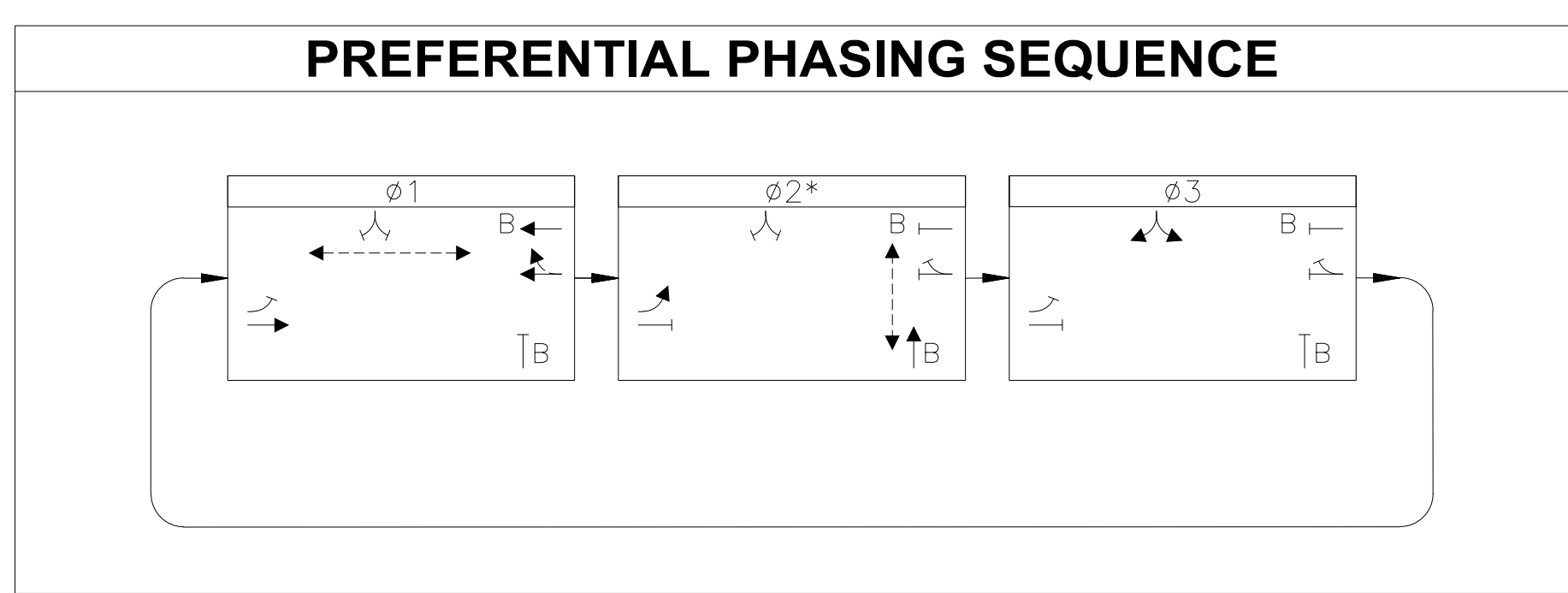


TIMING AND SEQUENCE CHART												
STREET/DIRECTION/DISPLAY		LPI	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	COORDINATED PHASE
MT AUBURN/EB/4B,4C		R	G	Y	R	R	R	R	R	R	R	FY
MT AUBURN/EB LT/3A		RL	RL	RL	RL	GL	YL	RL	RL	RL	RL	FRL
MT AUBURN/WB/2A,2B		R	G	Y	R	R	R	R	R	R	R	FY
HOMER AVE/SB/4A,5A		R	R	R	R	R	R	R	G	Y	R	FR
MT AUBURN/WB BIKE/2C		G	G	Y	R	R	R	R	R	R	R	FY
MT AUBURN/NB BIKE/3B		R	R	R	R	G	Y	R	R	R	R	FR
CROSSWALK/E-W/2E-3E		W	W	FDW	DW	DW	DW	DW	DW	DW	DW	OFF
CROSSWALK/N-S/3F-4E		DW	DW	DW	DW	W	FDW	DW	DW	DW	DW	OFF
I N T E R V A L	MINIMUM GREEN	-	41			12			5			
	VEHICLE EXTENSION	-	3			3			3			
	MAXIMUM 1 GREEN	-	47			17			8			
	MAXIMUM 2 GREEN	-	59			17			9			
	YELLOW CLEARANCE			3.5			3			3		
	RED CLEARANCE				1			1.5				2.5
WALK INTERVAL	4	7			5							
PED. CLEARANCE			8	3		14	3					
MEMORY			NON-LOCK			NON-LOCK			NON-LOCK			
RECALL (VEH./PED.)			MAX/PED			PED			MIN			
PROGRAM/COORDINATION												
CYCLE NO.	CYCLE LENGTH	OFFSET (SEC.)	PHASE SPLITS IN SECONDS			PHASE SPLITS IN SECONDS			PHASE SPLITS IN SECONDS			HOURS OF OPERATION
1	90	89	52			22			16			ALL OTHER TIMES
2	100	94	64			22			14			6:00 AM - 10:30 AM
3	105	85	68			22			15			2:30 PM - 7:30 PM
COORDINATED OPERATION												EVERYDAY
PROGRAMMED FLASH												EMERGENCY ONLY

- TECHNICAL NOTES**
- PEDESTRIAN PHASES REST IN WALK.
  - IF THE ASSIGNED RIGHT OF WAY FOR ANY MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT MOVEMENT WILL NOT CHANGE DURING THE CLEARANCE INTERVAL.

MAJOR ITEMS REQUIRED	
QUANTITY	ITEM
1	3 SECTION - 12" LENS (RL,YL,GL) SIGNAL HEAD
2	3 SECTION - 12" LENS (R,Y,G) SIGNAL HEAD
2	3-SECTION - 8" LENS (R,Y,G) BIKE SIGNAL HEAD
1	TRAFFIC SIGNAL BACKPLATE
1	10' TRAFFIC SIGNAL POST, BASE, & FOUNDATION (STEEL) WITH BLACK POWDER COAT
1	10' TRAFFIC SIGNAL POST & BASE (STEEL) WITH BLACK POWDER COAT
1	MICROWAVE WIRELESS INTERCONNECT
30 LF	3" ELECTRICAL CONDUIT TYPE NM - PLASTIC (UL)
1	PULL BOX 12" X 12"

PLUS ALL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION.



**PS&E SUBMISSION**

**MCMAHON**  
a Bowman company

PROJECT #: 312638-01-001  
DATE: 10/2023  
DESIGNER: C. MURPHY  
DRAFTER: J. VERESPEJ  
REVIEWER: C. MURPHY

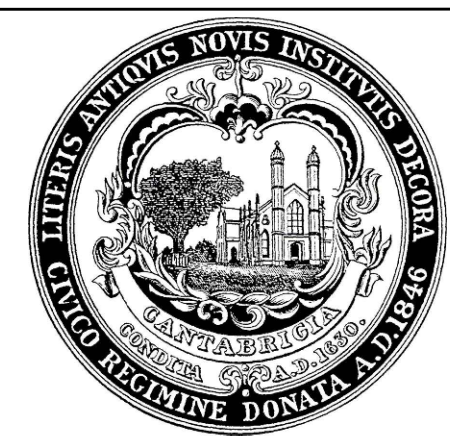
120 WATER ST  
4TH FLOOR  
BOSTON, MA 02109  
TELE: (617) 556-0020  
FAX: (617) 556-0025

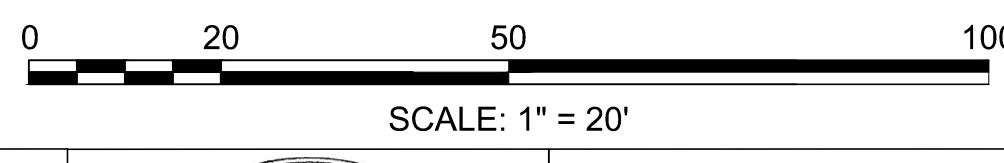
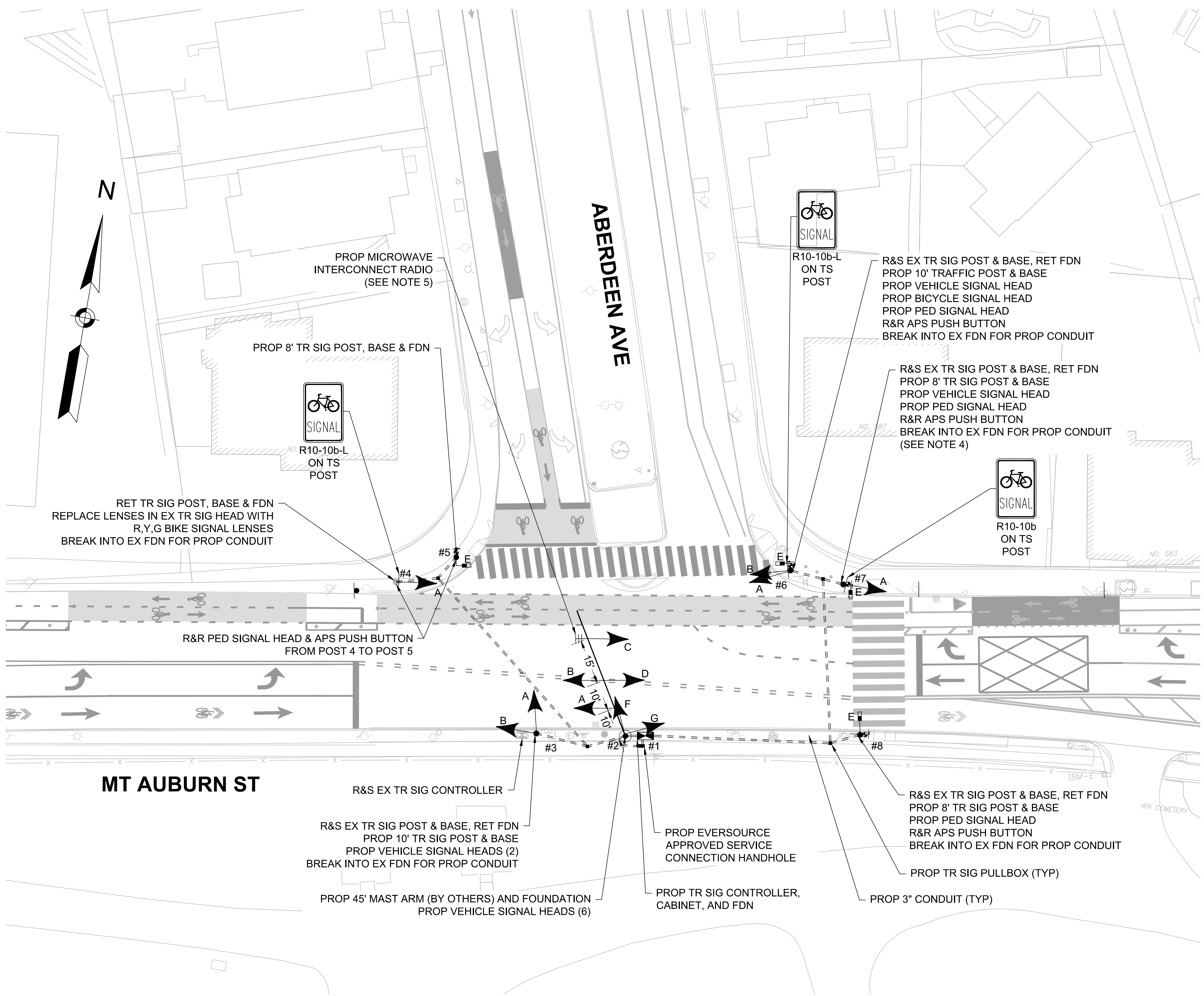
350 MYLES STANDISH BLVD  
SUITE 103  
TAUNTON, MA  
TELE: (508) 823-2245

14 BREAKNECK HILL RD  
SUITE 201  
LINCOLN, RI 02865  
TELE: (401) 648-7200

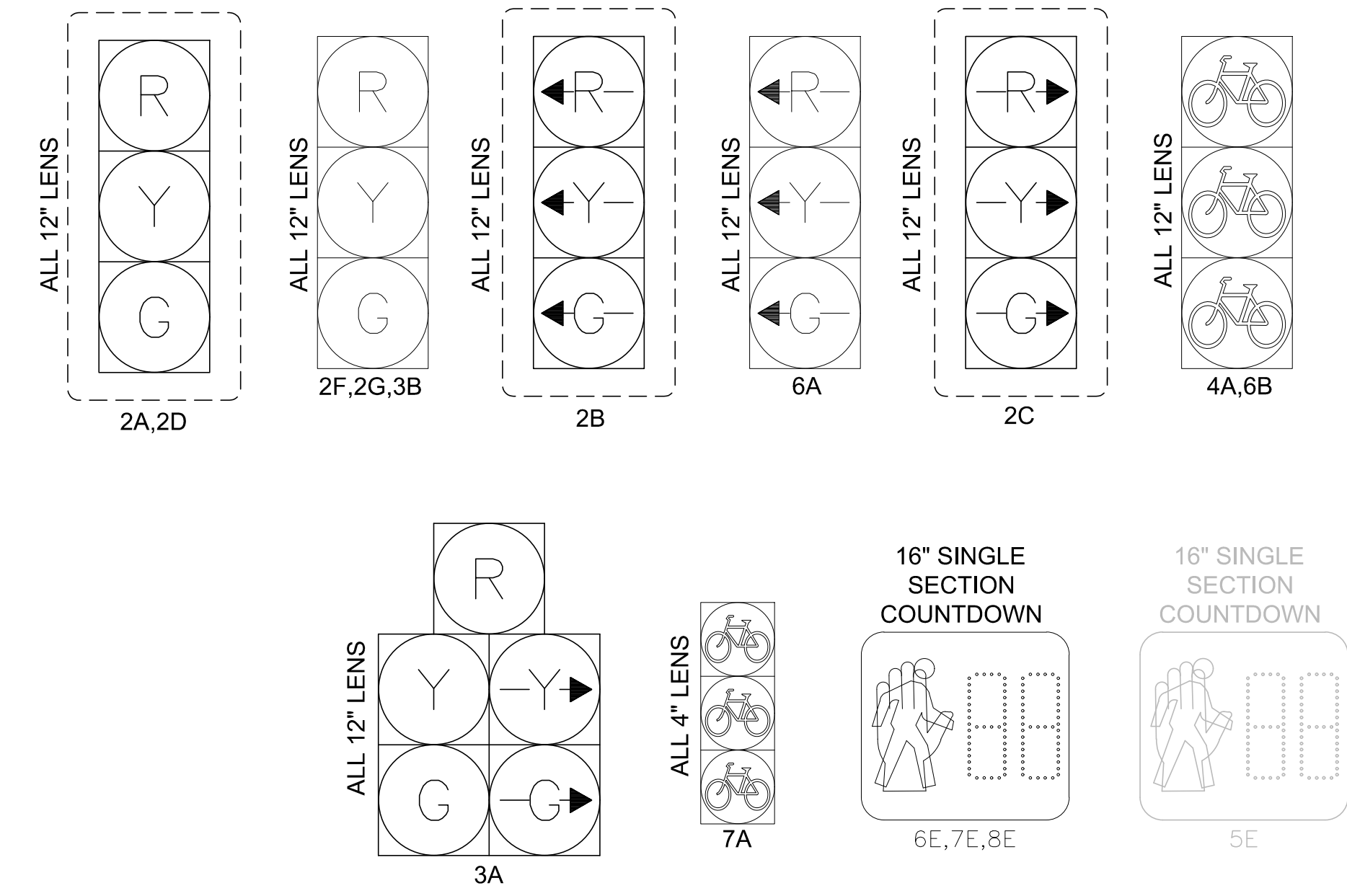
94 NORTH ELM STREET  
SUITE 210  
WESTFIELD, MA  
TELE: (413) 875-8855

REVISIONS		REV #	DATE
TRAFFIC SIGNAL PLANS NO. 1 ABERDEEN SIGNAL IMPROVEMENTS HOMER AVE @ MT AUBURN ST CAMBRIDGE, MA		14	16

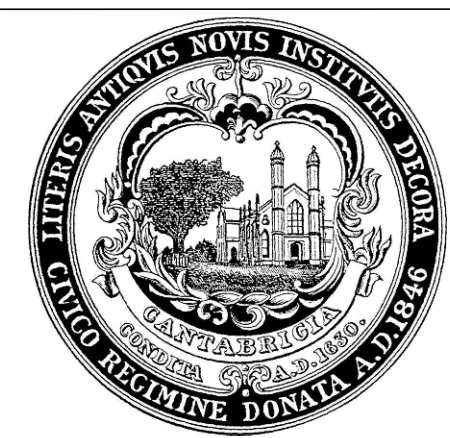




**PROPOSED SIGNAL FACES**



**DRAFT**  
NOT FOR CONSTRUCTION



PROJECT #: 312638-01-001  
 DATE: 10/2023  
 DESIGNER: C. MURPHY  
 DRAFTER: J. VERESPEJ  
 REVIEWER: C. MURPHY

PS&E SUBMISSION



350 MYLES STANDISH BLVD SUITE 103 TAUNTON, MA TELE: (508) 823 - 2245  
 14 BREAKNECK HILL RD SUITE 201 LINCOLN, RI 02865 TELE: (401) 648 - 7200  
 120 WATER ST 4TH FLOOR BOSTON, MA 02109 TELE: (617) 556 - 0020 FAX: (617) 556 - 0025  
 94 NORTH ELM STREET SUITE 210 WESTFIELD, MA TELE: (413) 875 - 8855

REVISIONS		REV #	DATE
TRAFFIC SIGNAL PLANS NO. 2 ABERDEEN SIGNAL IMPROVEMENTS ABERDEEN AVE @ MT AUBURN ST CAMBRIDGE, MA		15	16

TIMING AND SEQUENCE CHART																								
STREET/DIRECTION/DISPLAY		Ø1			Ø2			Ø3			Ø4			Ø5			Ø6			Ø9			OPERATION	
GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL	CL	GRN	CL		CL
MT AUBURN/EB/2A,3B		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FY
MT AUBURN/EB LT/2B,6A		GL	YL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	RL	FRL
MT AUBURN/WB/2D,2G		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FY
MT AUBURN/WB RT/2C		RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	RR	FRR
ABERDEEN/SB/2F		R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FR
ABERDEEN/SB RT/3A		GR	YR	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FR
MT AUBURN/WB BIKE/4A,7A		R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FR
MT AUBURN/EB BIKE/6B		R	R	R	G	Y	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	R	FR
CROSSWALK/E-W/5E-6E		DW	DW	DW	W/FDW	FDW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	OFF
CROSSWALK/N-S/7E-8E		DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	DW	OFF
I N T E R V A L S	MINIMUM GREEN	14			5			5			5			-			5			5				
	VEHICLE EXTENSION	3			3			3			3			-			3			3				
	MAXIMUM 1 GREEN	14			28			13			11			-			48			48				
	MAXIMUM 2 GREEN	14			28			26			17			-			61			61				
	YELLOW CLEARANCE		3			3.5			3			3						3.5			3.5			
	RED CLEARANCE			3			2.5			2			4			3			2.5			2.5		
	WALK INTERVAL				5								5											
	PED. CLEARANCE					26	3								12	3								
MEMORY		NON-LOCK		NON-LOCK		NON-LOCK		NON-LOCK		-		NON-LOCK		NON-LOCK										
RECALL (VEH./PED.)		MIN		MIN		MIN		MIN		NONE		MIN		MIN										

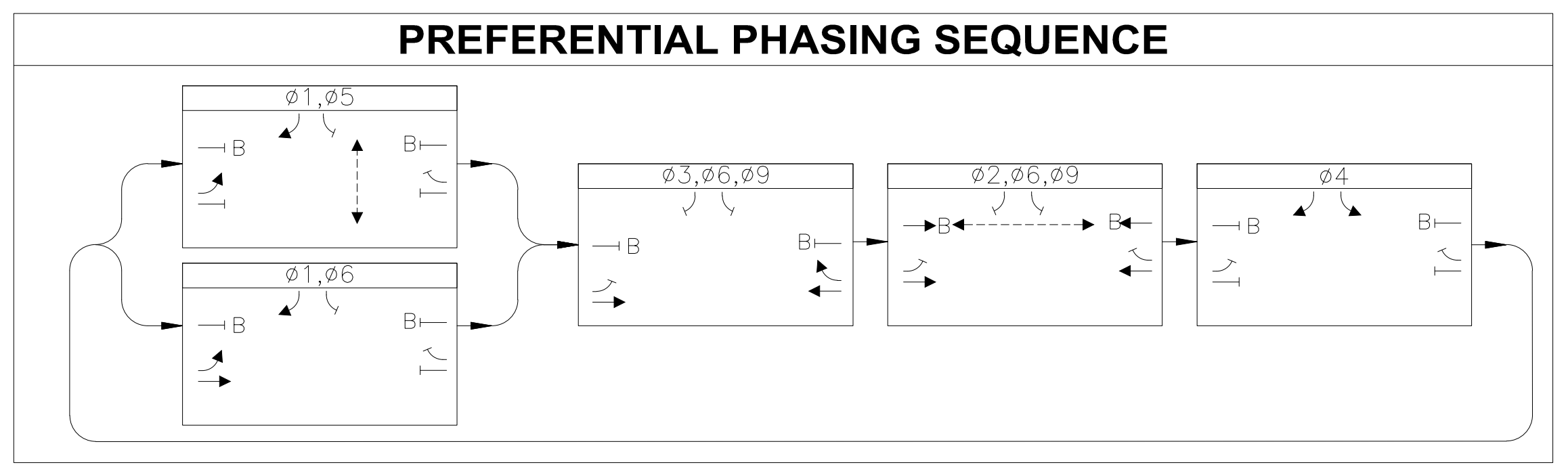
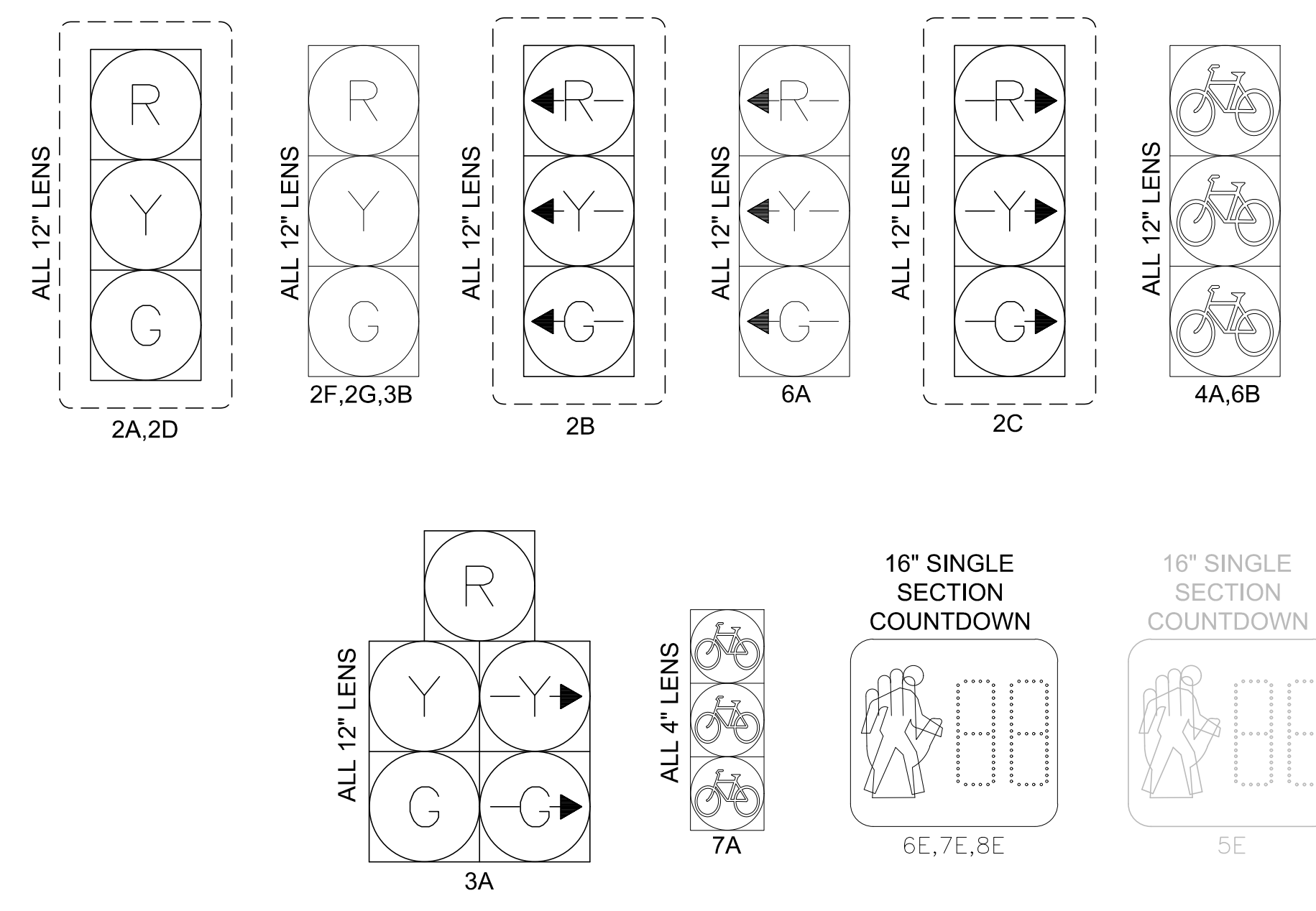
PROGRAM/COORDINATION										
PHASE SPLITS IN SECONDS										
CYCLE NO.	CYCLE LENGTH	OFFSET (SEC.)	Ø1	Ø2	Ø3	Ø4	Ø5	Ø6	Ø9	HOURS OF OPERATION
1	90	0	20	34	18	18	20	52	52	ALL OTHER TIMES
2	100	0	20	34	22	24	20	56	56	6:00 AM - 10:30 AM
3	105	0	20	34	33	18	20	67	67	2:30 PM - 7:30 PM
COORDINATED OPERATION										
PROGRAMMED FLASH										

MAJOR ITEMS REQUIRED	
QUANTITY	ITEM
1	45' MAST ARM ASSEMBLY, BASE, & FOUNDATION (STEEL) WITH BLACK POWDER COAT (BY OTHERS)
1	8' TRAFFIC SIGNAL POST, BASE, & FOUNDATION (STEEL) WITH BLACK POWDER COAT
2	8' TRAFFIC SIGNAL POST & BASE (STEEL) WITH BLACK POWDER COAT
2	10' TRAFFIC SIGNAL POST & BASE (STEEL) WITH BLACK POWDER COAT
1	TS-2 TYPE 1 SIGNAL CONTROLLER (EAGLE SIEMENS M60), CABINET (TYPE M), AND FOUNDATION
1	3 SECTION - 4" LENS (R,Y,G) BIKE SIGNAL HEAD
2	3 SECTION - 12" LENS (R,Y,G) BIKE SIGNAL HEAD
1	3 SECTION - 12" LENS (RR,YR,GR) SIGNAL HEAD
2	3 SECTION - 12" LENS (RL,YL,GL) SIGNAL HEAD
5	3 SECTION - 12" LENS (R,Y,G) SIGNAL HEAD
1	5 SECTION - 12" LENS (R,Y,G,YR,GR) SIGNAL HEAD
4	TRAFFIC SIGNAL BACKPLATE
3	16" - PEDESTRIAN L.E.D SIGNAL COUNTDOWN INDICATION
1	MICROWAVE WIRELESS INTERCONNECT
300 LF	3" ELECTRICAL CONDUIT TYPE NM - PLASTIC (UL)
4	PULL BOX 12" X 12"
1	SERVICE CONNECTION EVERSOURCE APPROVED HANDHOLE

PLUS ALL NECESSARY DUCT, CABLE, LABOR, MISCELLANEOUS MATERIAL AND EQUIPMENT TO COMPLETE THE INSTALLATION.

- TECHNICAL NOTES
1. PEDESTRIAN PHASES REST IN WALK.
  2. IF THE ASSIGNED RIGHT OF WAY FOR ANY MOVEMENT IS TO REMAIN IN EFFECT DURING THE NEXT CALLED PHASE, THE SIGNAL INDICATIONS FOR THAT MOVEMENT WILL NOT CHANGE DURING THE CLEARANCE INTERVAL.
  3. PEDESTRIAN TIMES PROVIDED UPON PEDESTRIAN ACTUATION.

**PROPOSED SIGNAL FACES**



PS&E SUBMISSION

**MCMAHON**  
a Bowman company

PROJECT #: 312638-01-001  
DATE: 10/2023  
DESIGNER: C. MURPHY  
DRAFTER: J. VERESPEJ  
REVIEWER: C. MURPHY

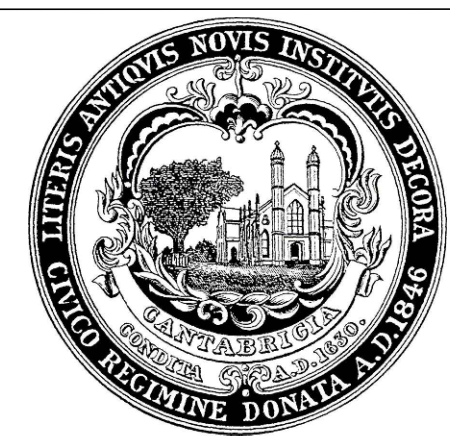
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94 NORTH ELM STREET  
SUITE 210  
WESTFIELD, MA  
TELE: (413) 875 - 8855

**DRAFT**  
NOT FOR CONSTRUCTION



REVISIONS		REV #	DATE
<p>TRAFFIC SIGNAL PLANS NO. 3 ABERDEEN SIGNAL IMPROVEMENTS ABERDEEN AVE @ MT AUBURN ST CAMBRIDGE, MA</p>		SHEET #	TOTAL SHEETS
		16	16