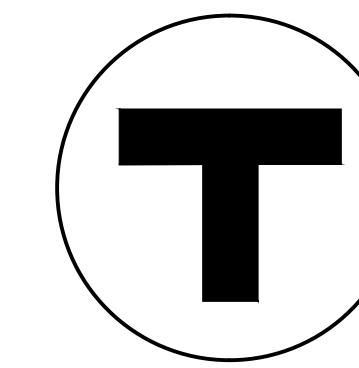




LOCATION MAP

SCALE = 1" = 5000'



**Massachusetts Bay
Transportation Authority**

**BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL
PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK
100% SUBMISSION - PACKAGE 2**

STOP IDS:

LOCATION - MEDFORD, STOP ID NO. #2408 & ID NO. #2378

PLAN INDEX

SHEET #	DRAWING TITLE
A-1	COVER
A-2	GENERAL NOTES
A-3	LEGEND
A-4	ABBREVIATIONS
A-5	CONSTRUCTION DETAILS
A-6	TEMPORARY TRAFFIC CONTROL PLAN - 1
A-7	TEMPORARY TRAFFIC CONTROL PLAN - 2
B-1	BOSTON AVE AT TUFTS GARAGE - STOP ID 2408, 2378 - AERIAL CONCEPT PLAN
G-1	BOSTON AVE AT TUFTS GARAGE - STOP ID 2408, 2378 - GENERAL IMPROVEMENTS PLAN
C-1	BOSTON AVE AT TUFTS GARAGE - STOP ID 2408, 2378 - CONSTRUCTION & GRADING PLAN
E-1	BOSTON AVE AT TUFTS GARAGE - STOP ID 2408, 2378 - EXISTING STOPS TO BE ELIMINATED

SHEET LABEL LEGEND	
B	AERIAL PLAN
G	GENERAL IMPROVEMENT PLAN
C	CONSTRUCTION & GRADING PLAN

MBTA CONTRACT NO. N50CN02

APPROVALS:

CHIEF OF CAPITAL PROGRAMS
DELIVERY:
JAMES NEIDER

DEPUTY ASSISTANT GENERAL MANAGER FOR CAPITAL DELIVERY TRANSIT
PROGRAMS:

DATE

DATE

PREPARED BY:



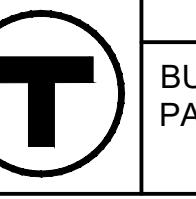
WSP USA Inc.
100 SUMMER STREET
BOSTON, MASSACHUSETTS
02110
617.426.7330
WWW.WSP.COM

JUNE 20, 2025

PLAN NO. 338618
SHEET NO. A-1

GENERAL NOTES:

1. BEFORE EXCAVATING, BLASTING, BACKFILLING, GRADING, PAVEMENT RESTORATION, OR REPAIRING, ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED BY THE CONTRACTOR, INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THESE PLANS.
2. THE CONTRACTOR SHALL NOTIFY DIG SAFE 72 HOURS PRIOR TO THE START OF WORK AND ANY UTILITIES WHO ARE NOT MEMBERS OF DIG SAFE PRIOR TO ANY EXCAVATION.
3. WHERE THE NEW CONSTRUCTION COINCIDES WITH THE PRESENT TRAVELED WAYS, THE CONTRACTOR SHALL PERFORM WORK IN A MANNER ACCEPTABLE TO THE ENGINEER SO THE INTERFERENCE TO BUSINESS CONCERN AND ABUTTERS, ON THE ACCOUNT OF THE CONSTRUCTION WORK, IS KEPT TO A MINIMUM. THE CONTRACTOR WILL NOT BE ALLOWED TO PARK EQUIPMENT OR STOCKPILE MATERIAL ON THE TRAVELED WAYS OVERNIGHT OR WHEN NOT IN USE. THE CONTRACTOR SHALL MAINTAIN SAFE AND REASONABLE ACCESS TO AND FROM ABUTTING PROPERTIES AT ALL TIMES AT NO ADDITIONAL COST.
4. THE CONTRACTOR SHALL EXCAVATE TEST PITS TO VERIFY LOCATIONS OF EXISTING UTILITIES AS INDICATED OR AS REQUESTED BY THE ENGINEER.
5. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE UTILITY COMPANIES DOING WORK IN THE SAME AREA. THE CONTRACTOR SHALL ALLOW THE UTILITY COMPANIES AND THEIR REPRESENTATIVES TO INSTALL THEIR SYSTEMS WITHIN PUBLICLY OWNED STREETS AND EASEMENTS.
6. THE CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES FOR THE ALTERATION AND ADJUSTMENT OF GAS, ELECTRIC, TELEPHONE, CABLE TV, FIRE ALARM AND OTHER PRIVATELY OWNED UTILITIES. ALL UTILITY CASTINGS AND FIRE ALARM BOXES SHALL BE ADJUSTED TO FINISH GRADE BY THEIR RESPECTIVE OWNERS.
7. ALL EXISTING UTILITY MANHOLES, HANDHOLES OF OTHER "SURFACE" TYPE STRUCTURES THAT CANNOT BE REMOVED & RESET AND ARE WITHIN WHEEL CHAIR RAMP PATH, SHALL BE ADJUSTED SUCH THAT THE TOP MOST SURFACES OF THE STRUCTURE COVER SHALL BE FLUSH WITH THE RAMP SURFACE AND SHALL MATCH THE RAMP SLOPE.
8. POSTAL MAILBOXES SHALL BE REMOVED, RELOCATED AND RESET BY THE CONTRACTOR.
9. NO EXISTING PUBLIC UTILITY STRUCTURES SHALL BE ABANDONED AND/OR DISMANTLED WITHOUT WRITTEN AUTHORIZATION FROM THE ENGINEER.
10. DAMAGE OF PROPERTY BEYOND THE WORK LIMITS CAUSED BY THE CONTRACTOR'S OPERATIONS SHALL BE REPAIRED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE, SUBJECT TO APPROVAL BY THE ENGINEER.
11. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AT THEIR OWN EXPENSE IF NOT OTHERWISE SPECIFIED, OUTSIDE OF THE PROJECT LIMITS.
12. THE CONTRACTOR SHALL PROVIDE ACCESS TO ALL UTILITIES THROUGHOUT THE PROJECT SO THAT THE VARIOUS UTILITY OWNERS HAVE ACCESS TO VAULTS AND MANHOLES TO OPERATE VALVES AND OTHER CONTROLS.
13. IF THE CONTRACTOR DAMAGES UTILITY SERVICES, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE RESPECTIVE UTILITY COMPANY AND SHALL IMMEDIATELY REPLACE OR REPAIR IN KIND AT NO ADDITIONAL COST TO THE MBTA.
14. ALL WHEEL CHAIR RAMPS SHALL CONFORM TO THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (AAB) RULES AND REGULATIONS AND THE AMERICANS WITH DISABILITIES ACT (ADA) GUIDELINES. REFER TO THE MOST RECENT MASSDOT CONSTRUCTION STANDARD DETAILS.
15. AN UNOBSTRUCTED PATH OF TRAVEL WITH A MINIMUM WIDTH OF 4'-0" SHALL BE MAINTAINED PAST ALL OBSTRUCTIONS (UTILITY POLES, SIGNS, SIGNAL FOUNDATIONS AND MASTS, MAILBOXES, ALONG DRIVE OPENINGS, ETC.)
16. AN ACCESSIBLE PATH OF TRAVEL IS TO BE PROVIDED BETWEEN THE LANDING AREA AND ALL PROPOSED BENCHES AND SHELTERS. SIDEWALK RECONSTRUCTION IS INCLUDED TO PROVIDE AN ACCESSIBLE PATH, WHERE NECESSARY.
17. THE CONTRACTOR SHALL INSTALL TREE PROTECTION DEVICES ON ALL EXISTING TREES WITHIN THE IMMEDIATE VICINITY OF PROPOSED CURB RESETTING/INSTALLATION, SIDEWALK RECONSTRUCTION, PROPOSED BUS SHELTER INSTALLATION, OR AS REQUESTED BY THE ENGINEER.
18. ALL TEMPORARY AND RELOCATED BUS STOPS MUST BE FULLY FUNCTIONAL AND APPROVED BY MBTA BUS OPERATIONS PRIOR TO CLOSING ANY EXISTING BUS STOPS.
19. ALL PROPOSED GRANITE CURB SHALL BE MASSDOT TYPE VB.
20. THE PROPOSED SIDEWALK GRADE SHALL MEET EXISTING GRADES AT ALL STORES/BUSINESSES AND HOUSE DOOR ENTRANCE ELEVATIONS UNLESS OTHERWISE NOTED ON THE PLANS.
21. THE LIMITS OF WORK FOR THE PROPOSED SIDEWALK AND WHEEL CHAIR RAMPS SHOWN ON THE CONSTRUCTION PLANS SHALL BE CONSTRUCTED TO THE NEAREST SCORE LINE OR EXPANSION JOINT IN THE ADJACENT EXISTING SIDEWALK.
22. CONTRACTOR SHALL PLACE 4" OF LOAM AND SEED AT ALL DISTURBED GRASS AREAS ADJACENT TO THE PROPOSED SIDEWALK WORK.
23. THE CONTRACTOR SHALL PROTECT ALL CATCH BASINS WITHIN 150 FT OF THE LIMIT OF WORK.
24. THE HORIZONTAL DATUM IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983, MASSACHUSETTS STATE PLAN COORDINATE SYSTEM. THE VERTICAL DATUM REFERENCES NAVD88.
25. NEW SIGNS SHALL BE FULLY INSTALLED AT THE SAME TIME OR PRIOR TO THE INSTALLATION OF NEW PAVEMENT MARKINGS. SIGNS CONFLICTING WITH THE EXISTING PAVEMENT MARKINGS SHALL BE COVERED UNTIL THE FINAL PAVEMENT MARKINGS ARE INSTALLED. ONCE THE PAVEMENT MARKINGS ARE INSTALLED, THE SIGNS SHALL BE PROMPTLY UNCOVERED.
26. ALL PARKING REGULATION SIGNS (EXISTING OR PROPOSED) SHALL BE INSTALLED AT A 45 DEGREE ANGLE RELATIVE TO THE CURB LINE UNLESS OTHERWISE NOTED IN THE PLANS. ALL OTHER TRAFFIC RELATED SIGNS (EXISTING OR PROPOSED) SHALL BE INSTALLED AT A 90 DEGREE ANGLE TO THE CURB, UNLESS OTHERWISE NOTED IN THE PLANS.
27. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SEQUENCE THE WORK SUCH THAT THERE WILL BE NO CONFLICTS AT ANY TIME BETWEEN TRAFFIC PATTERNS AND TRAFFIC CONTROL DEVICES (NEW OR TEMPORARY) WITHIN THE LIMITS OF CONSTRUCTION.
28. EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH THE PROPOSED SHALL BE ERADICATED BY GRINDING.
29. EXISTING SIGNS THAT ARE IN CONFLICT WITH THE PROPOSED SHALL BE REMOVED AND RESET.
30. PROPOSED SIGNS SHALL BE PLACED OUTSIDE OF THE ADA REQUIRED PEDESTRIAN RIGHT-OF-WAY.
31. THE CONTRACTOR SHALL MAINTAIN ADA-COMPLIANT PEDESTRIAN ACCESS AT ALL TIMES, SPECIFICALLY INCLUDING PEDESTRIAN GUIDANCE SYSTEMS AT WORK ZONES. ACCESS SHALL BE MAINTAINED ALONG ALL SIDEWALKS AND CROSSWALKS, TO ALL ABUTTERS, AND TO ALL MBTA BUS STOPS OR TRAIN STATIONS. ANY PEDESTRIAN DETOURS SHALL INCLUDE A FULLY ADA-COMPLIANT PEDESTRIAN DETOUR ROUTE WITH PROPER BARRICADES, RAILINGS, RAMPS, AND SIGNAGE.

		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY			
		BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 T07			
		BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 GENERAL NOTES			
		100 SUMMER ST, SUITE 1300 BOSTON, MA 02110 617.426.7330 www.wsp.com			
APPROVED BY: KATIE MOULTON PROJECT MANAGER:		06/20/2025 DATE			
APPROVED BY: PROJECT MANAGER:		DATE			
HORIZ. NA SCALE: VERT. NA DATE: 06/20/2025		DESIGN BY:	DRAWN BY:	CHKD BY:	ISSUE SHEET
CS GS KM		338619	A-2		

GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
JB	JB	JERSEY BARRIER
CB	CB	CATCH BASIN
		CATCH BASIN CURB INLET
FP	FP	FLAG POLE
GP	GP	GAS PUMP
MB	MB	MAIL BOX
		POST SQUARE
	O	POST CIRCULAR
WELL	WELL	WELL
EHH	EHH	ELECTRIC HANDHOLE
	O	FENCE GATE POST
GG	GG	GAS GATE
BHL #	BHL #	BORING HOLE
MW #	MW #	MONITORING WELL
TP #	TP #	TEST PIT
		HYDRANT
	*	LIGHT POLE
CO.BD.		COUNTY BOUND
		GPS POINT
	C	CABLE MANHOLE
	D	DRAINAGE MANHOLE
	E	ELECTRIC MANHOLE
	G	GAS MANHOLE
	H	MISC MANHOLE
	I	SEWER MANHOLE
	J	TELEPHONE MANHOLE
	K	WATER MANHOLE
MHB	MHB	MASSACHUSETTS HIGHWAY BOUND
MON		MONUMENT
SB		STONE BOUND
TB		TOWN OR CITY BOUND
		TRAVERSE OR TRIANGULATION STATION
TPL or GUY	TPL or GUY	TROLLEY POLE OR GUY POLE
		TRANSMISSION POLE
UFB	UFB	UTILITY POLE W/ FIREBOX
UPDL	UPDL	UTILITY POLE WITH DOUBLE LIGHT
ULT	ULT	UTILITY POLE W/ 1 LIGHT
UPL	UPL	UTILITY POLE
		BUSH
		TREE
		STUMP
		SWAMP / MARSH
WG	WG	WATER GATE
PM	PM	PARKING METER
		OVERHEAD CABLE/WIRE
		CURBING
		CONTOURS (ON-THE-GROUND SURVEY DATA)
		CONTOURS (PHOTOGRAMMETRIC DATA)
		UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER)
		UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER)
		BALANCED STONE WALL
		GUARD RAIL - STEEL POSTS
		GUARD RAIL - WOOD POSTS
		GUARD RAIL - DOUBLE FACE - STEEL POSTS
		GUARD RAIL - DOUBLE FACE - WOOD POSTS
	x	CHAIN LINK OR METAL FENCE
		WOOD FENCE
		SEDIMENT BARRIER
		COIR LOG SEDIMENT BARRIER
		TREE LINE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		BANK OF RIVER OR STREAM
		BORDER OF WETLAND
		100 FT WETLAND BUFFER
		200 FT RIVERFRONT BUFFER
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		RAILROAD SIDELINE
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
1	1	CONTROLLER PHASE ACTUATED
		TRAFFIC SIGNAL HEAD (SIZE AS NOTED)
		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)
		VIDEO DETECTION CAMERA
		MICROWAVE DETECTOR
		PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE
	*	EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT
	←	VEHICULAR SIGNAL HEAD
	→	VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED
	—	FLASHING BEACON
		PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)
	RRSG	RAILROAD SIGNAL
	OR O	SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)
	20°	MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)
		HIGH MAST POLE OR TOWER
		SIGN AND POST
		SIGN AND POST (2 POSTS)
	20°	MAST ARM WITH LUMINAIRE
		OPTICAL PRE-EMPTION DETECTOR
		CONTROL CABINET, GROUND MOUNTED
		CONTROL CABINET, POLE MOUNTED
		FLASHING BEACON CONTROL AND METER PEDESTAL
		LOAD CENTER ASSEMBLY
		PULL BOX 12"x12" (OR AS NOTED)
		ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)
		TRAFFIC SIGNAL CONDUIT

PROJECT SPECIFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
LA		BUS STOP ADA LANDING AREA
CZ		BUS STOP REAR DOOR CLEAR ZONE
		DETECTABLE WARNING PANEL
		BENCH
		SIGN ON LIGHT POLE OR UTILITY POLE
		MBTA BUS SHELTER

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
ONLY	ONLY	PAVEMENT ARROW - WHITE
	SL	LEGEND "ONLY" - WHITE
	CW	STOP LINE
	SWL	CROSSWALK
	SYL	SOLID WHITE LINE
	BWL	SOLID YELLOW LINE
	BYL	BROKEN WHITE LINE
	DWL	BROKEN YELLOW LINE
	DYL	DOTTED WHITE LINE
	DWLEX	DOTTED YELLOW LINE
	DYLEX	DOTTED WHITE LINE EXTENSION
	DBWL	DOTTED YELLOW LINE EXTENSION
	DBYL	DOUBLE WHITE LINE
	DBYL	DOUBLE YELLOW LINE

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL
PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK
MBTA CONTRACT NO. N50PS03 TO7

BOSTON AVE @ TUFTS GARAGE
PAIRED STOPS ID NO. 2408 & ID NO. 2378
LEGEND

WSP				MASSACHUSETTS BAY TRANSPORTATION AUTHORITY		
				100 SUMMER ST, SUITE 1300 BOSTON, MA 02110 617.426.7330 www.wsp.com		
APPROVED BY: KATIE MOULTON 06/20/2025				APPROVED BY: PROJECT MANAGER: DATE:		
ISSUE	DATE	DESCRIPTION	BY	CHK	APP	
HORIZ. NA SCALE: VERT. NA DATE: 06/20/2025				DESIGN BY:	DRAWN BY:	CHKD BY:
				CS	GS	KM
				PLAN NO. 338620 SHEET A-3		

ABBREVIATIONS

GENERAL	
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL PIPE
BIT.	BITUMINOUS
BC	BOTTOM OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CSP	CORRUGATED STEEL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DONT WALK - PORTLAND ORANGE
DWY	DRIVEWAY
ELEV (or EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EXIST (or EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDN.	FOUNDATION
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GG	GAS GATE
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MH	MANHOLE
MHB	MASSACHUSETTS HIGHWAY BOUND
MIN	MINIMUM
NIC	NOT IN CONTRACT
NO.	NUMBER
PC	POINT OF CURVATURE
PCC	POINT OF COMPOUND CURVATURE
P.G.L.	PROFILE GRADE LINE
PI	POINT OF INTERSECTION
POC	POINT ON CURVE
POT	POINT ON TANGENT

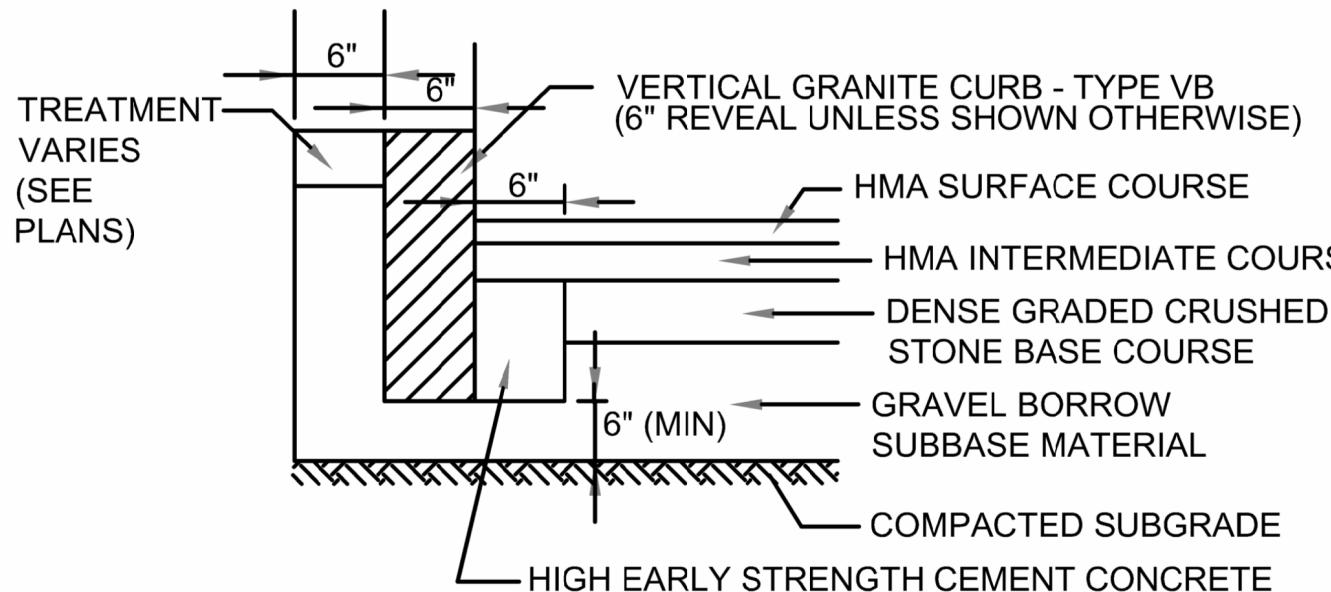
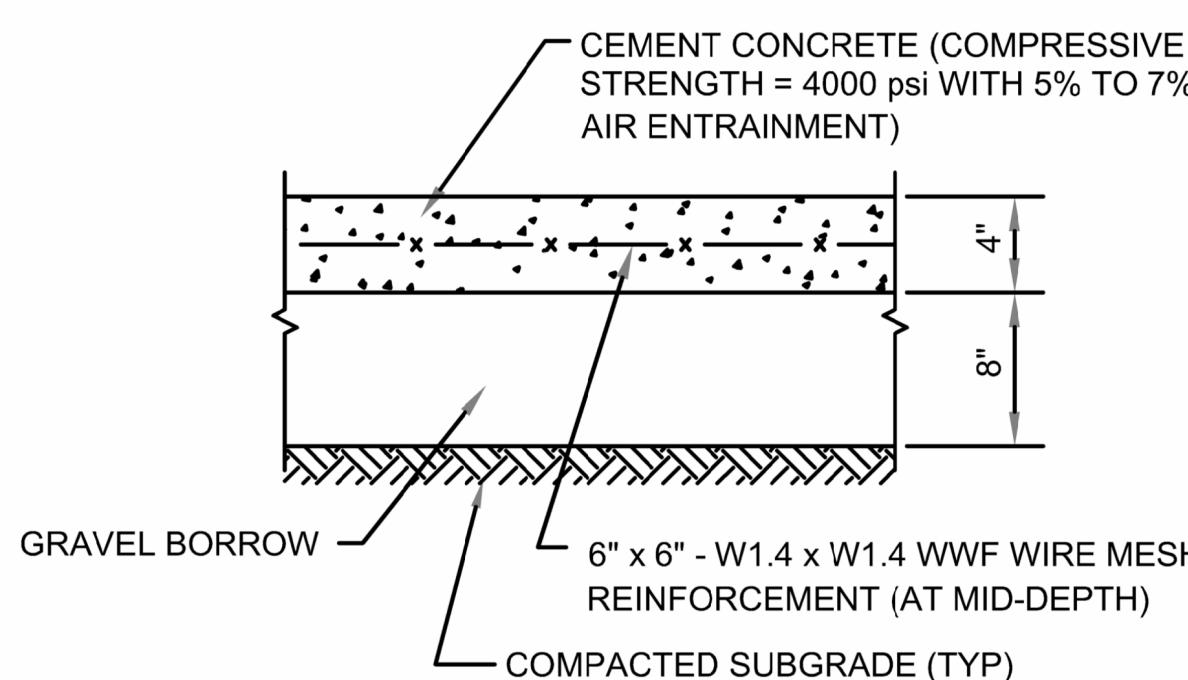
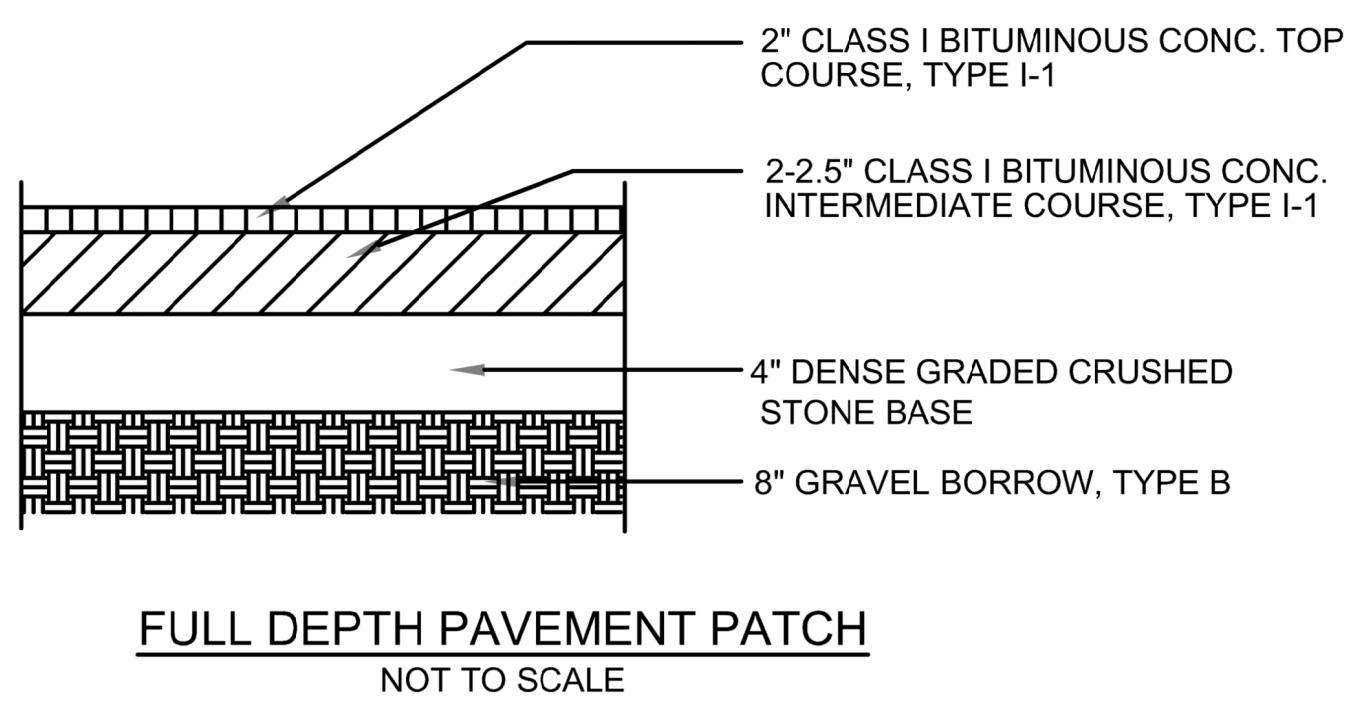
ABBREVIATIONS (cont.)

GENERAL	
PRC	POINT OF REVERSE CURVATURE
PROJ	PROJECT
PROP	PROPOSED
PSB	PLANTABLE SOIL BORROW
PT	POINT OF TANGENCY
PVC	POINT OF VERTICAL CURVATURE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
PVMT	PAVEMENT
PWW	PAVED WATER WAY
R	RADIUS OF CURVATURE
R&D	REMOVE AND DISPOSE
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
RDWY	ROADWAY
REM	REMOVE
RET	RETAIN
RET WALL	RETAINING WALL
ROW	RIGHT OF WAY
RR	RAILROAD
R&R	REMOVE AND RESET
R&S	REMOVE AND STACK
RT	RIGHT
SB	STONE BOUND
SHLD	SHOULDER
SMH	SEWER MANHOLE
ST	STREET
STA	STATION
SSD	STOPPING SIGHT DISTANCE
SHLO	STATE HIGHWAY LAYOUT LINE
SW	SIDEWALK
T	TANGENT DISTANCE OF CURVE/TRUCK %
TAN	TANGENT
TEMP	TEMPORARY
TC	TOP OF CURB
TOS	TOP OF SLOPE
TYP	TYPICAL
UP	UTILITY POLE
VAR	VARIES
VERT	VERTICAL
VC	VERTICAL CURVE
WCR	WHEEL CHAIR RAMP
WG	WATER GATE
WIP	WROUGHT IRON PIPE
WM	WATER METER/WATER MAIN
X-SECT	CROSS SECTION

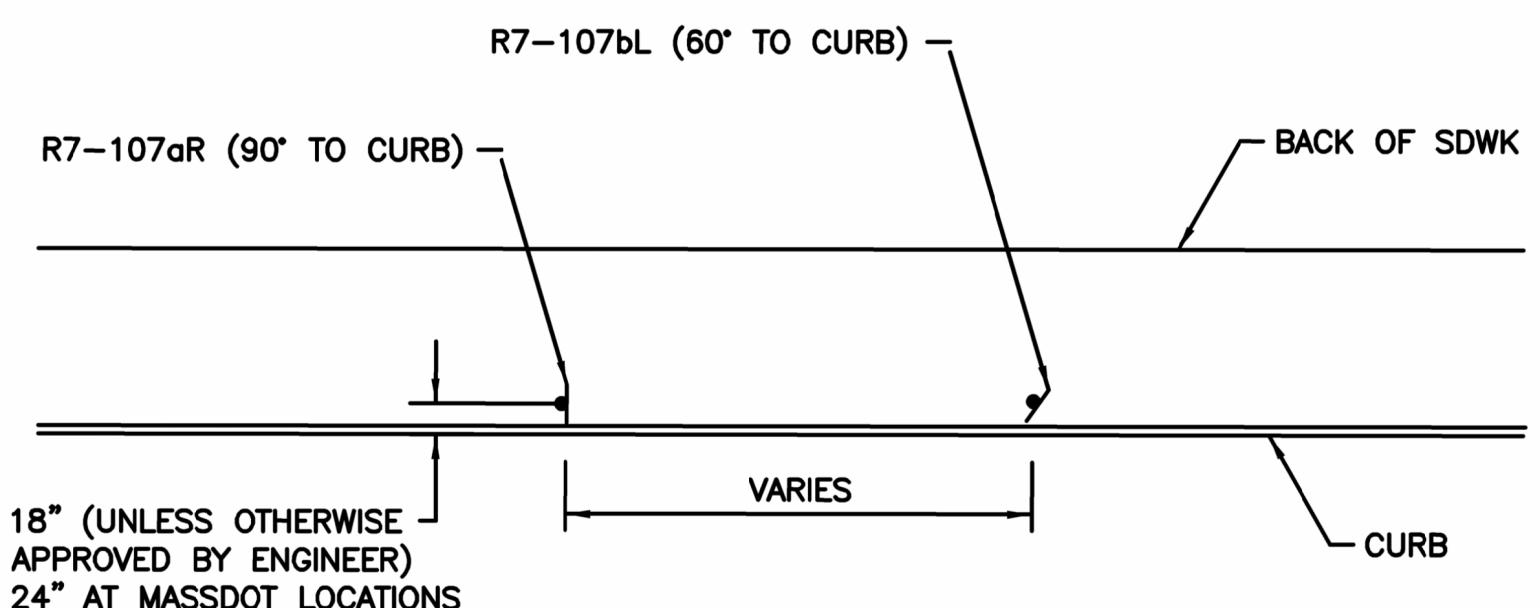
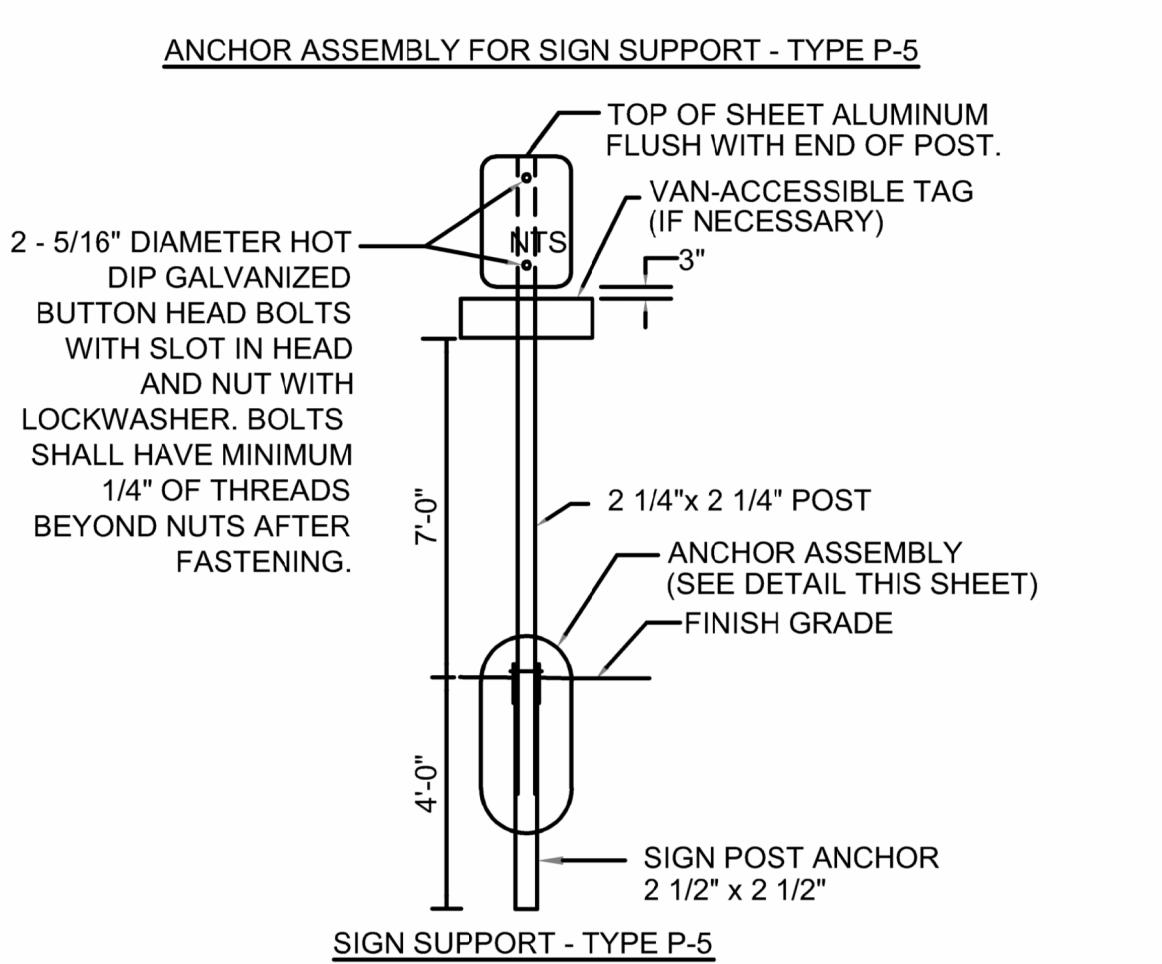
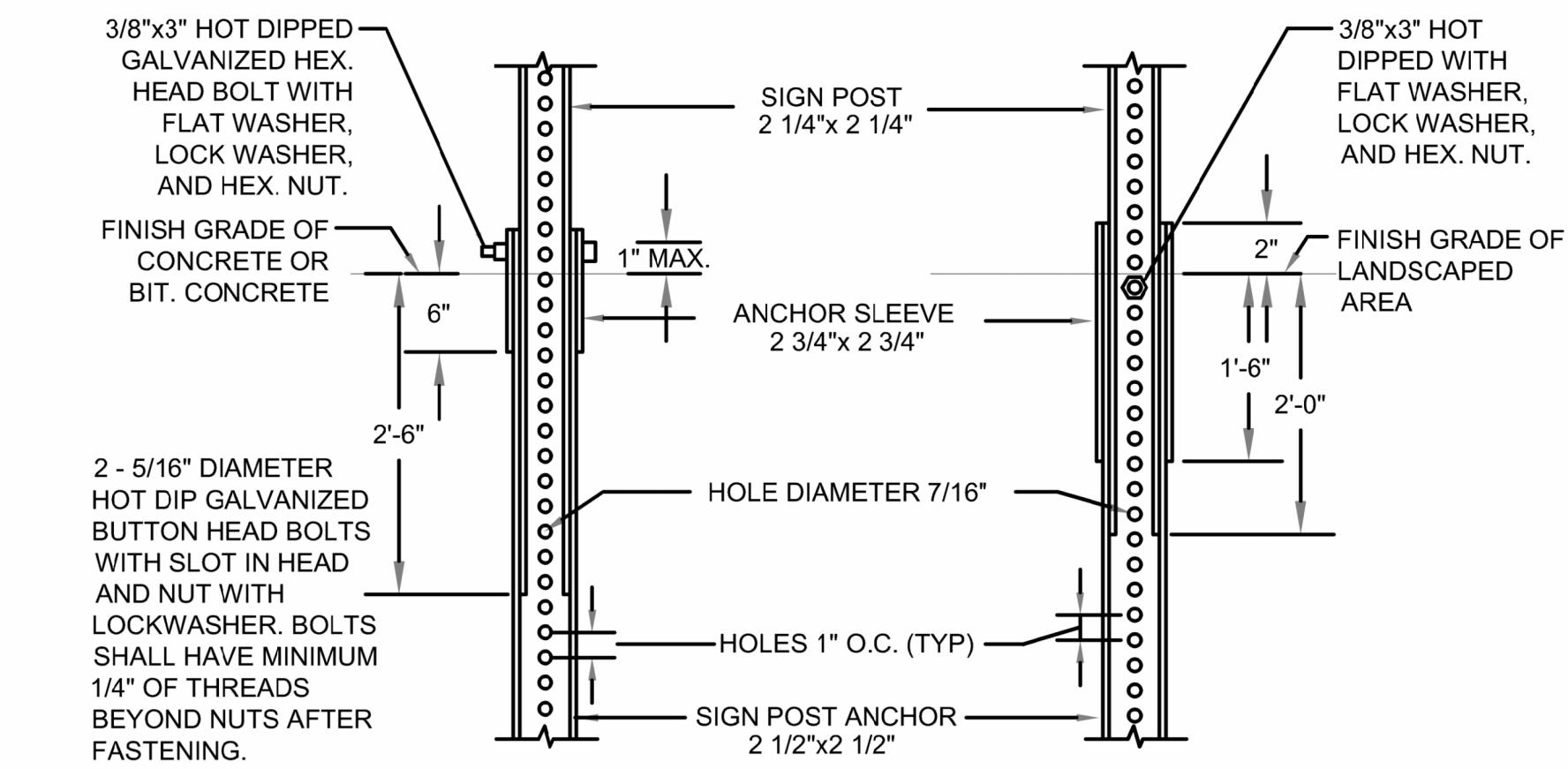
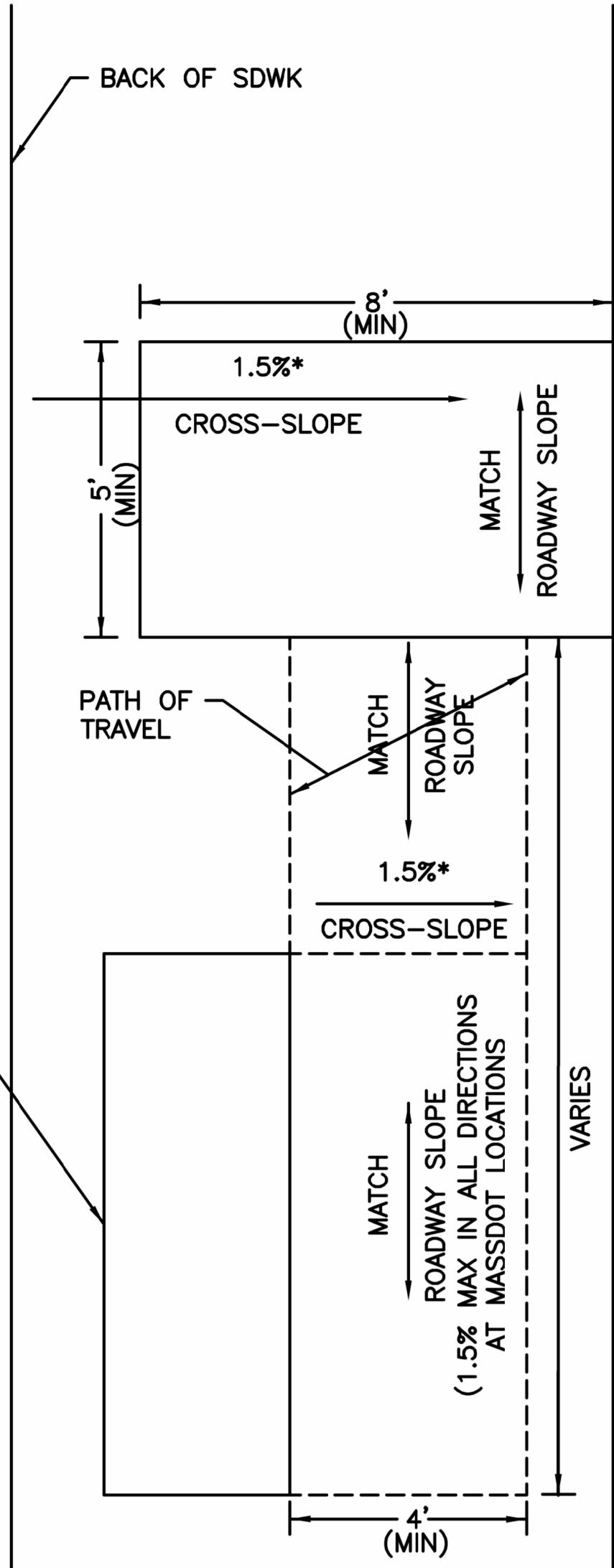
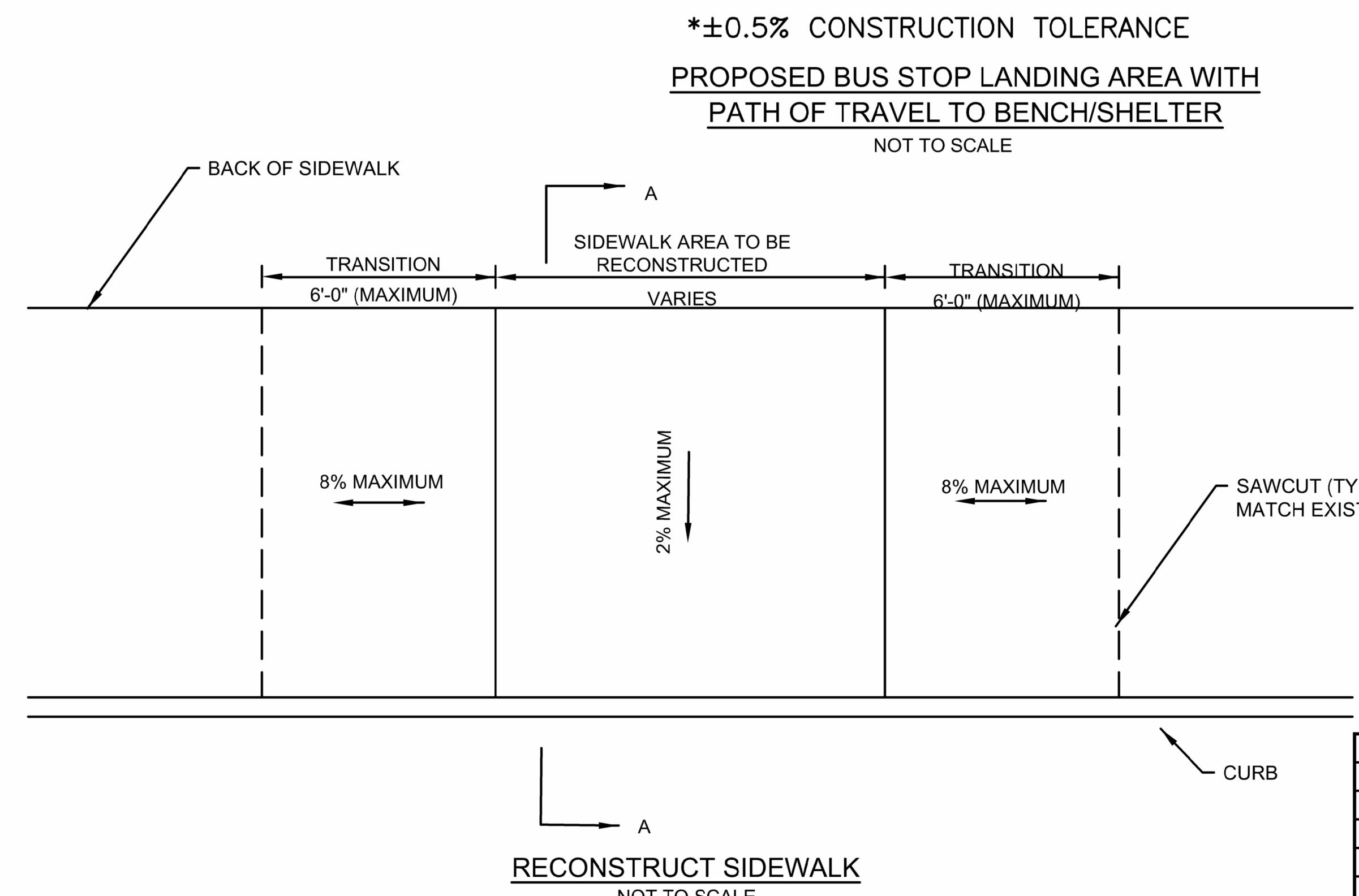
TRAFFIC SIGNAL ABBREVIATIONS

CAB	CABINET
CCVE	CLOSED CIRCUIT VIDEO EQUIPMENT
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
GSL	STEADY GREEN SLASH LEFT ARROW
GSR	STEADY GREEN SLASH RIGHT ARROW
GV	STEADY GREEN VERTICAL ARROW
OL	OVERLAP
PED	PEDESTRIAN
PTZ	PAN, TILT, ZOOM
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

		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY																																
		BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 TO7																																
		BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 ABBREVIATIONS																																
		<table border="1"> <tr><td>ISSUE</td><td>DATE</td><td>DESCRIPTION</td><td>BY</td><td>CHK</td><td>APP</td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>			ISSUE	DATE	DESCRIPTION	BY	CHK	APP																								
ISSUE	DATE	DESCRIPTION	BY	CHK	APP																													
 APPROVED BY: KATIE MOULTON 06/20/2025		APPROVED BY: PROJECT MANAGER: DATE: DATE: PLAN NO. 338621 DESIGN BY: DRAWN BY: CHKD BY: HORIZ. NA VERT. NA SCALE: CS GS KM DATE: 06/20/2025 SHEET A-4																																



NOTES:
1. FOR CURBS INSTALLED IN CITY OF BOSTON
USE GRANITE CURB TYPE VA4.

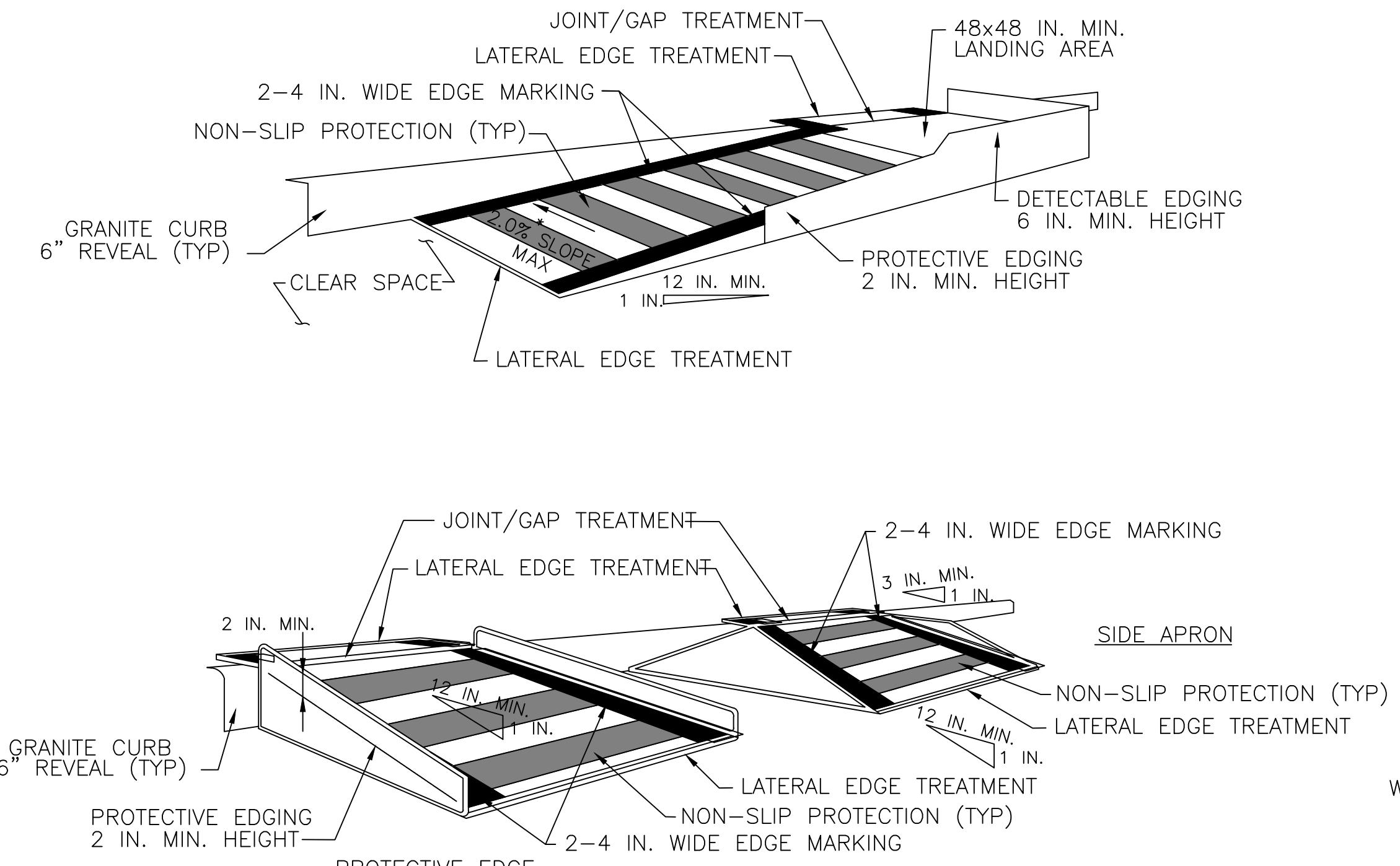


BUS STOP SIGN PLACEMENT
NOT TO SCALE

SIGN PLACEMENT NOTES:	
1. ALL SIGNS WITHIN THE STATE HIGHWAY LAYOUT SHALL HAVE A MOUNTING HEIGHT OF 7' TO BOTTOM OF SIGN.	
<p>MASSACHUSETTS BAY TRANSPORTATION AUTHORITY BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 T07</p> <p>BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 CONSTRUCTION DETAILS</p> <p>WSP 100 SUMMER ST, SUITE 1300 BOSTON, MA 02110 617 426 7330 www.wsp.com</p> <p>APPROVED BY: KATIE MOULTON 06/20/2025</p> <p>PROJECT MANAGER: DATE:</p> <p>HORIZ. NA DESIGN BY: DRAWN BY: CHKD BY: SCALE: VERT. NA BY: CS GS KM</p> <p>ISSUE DATE DESCRIPTION BY CHK APP</p> <p>DATE: 06/20/2025</p> <p>APPROVED BY: MASSACHUSETTS BAY TRANSPORTATION AUTHORITY</p> <p>PROJECT MANAGER: DATE: PLAN NO. 338622 ISSUE SHEET A-5</p>	

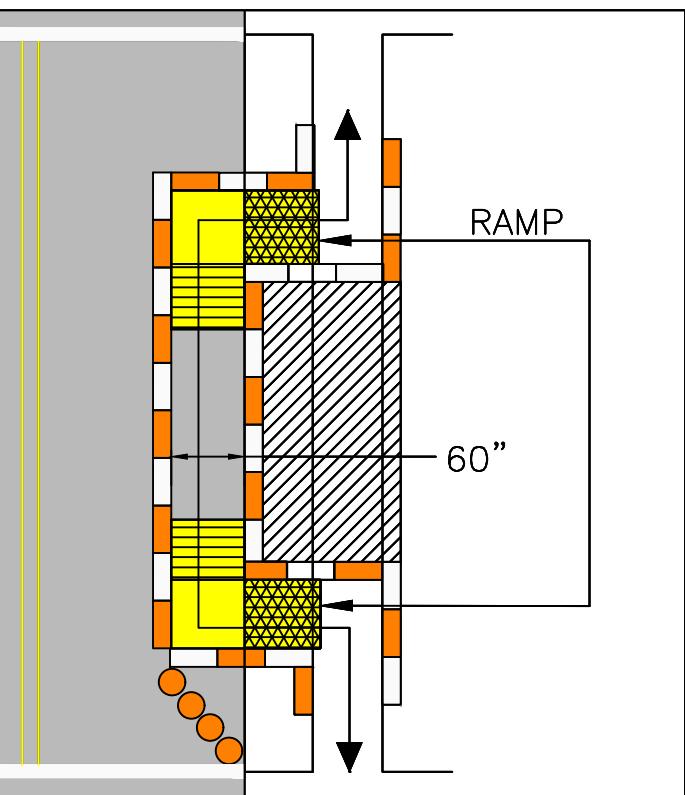
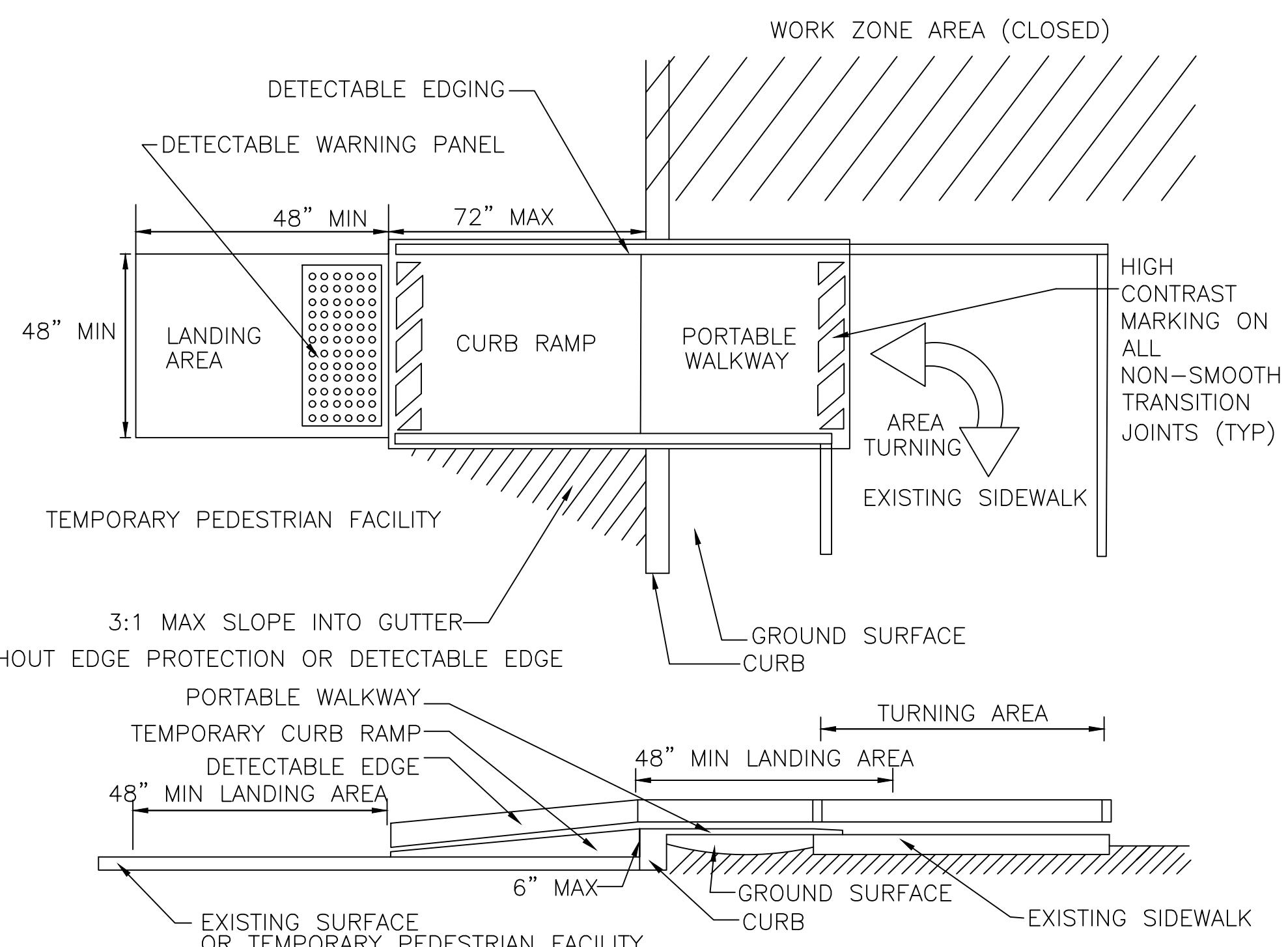
NOTES:

- CURB RAMPS SHALL BE 60 IN. MINIMUM WIDTH WITH A FIRM, STABLE AND NON-SLIP SURFACE.
- PROTECTIVE EDGING WITH A 2 IN. MINIMUM HEIGHT SHALL BE INSTALLED WHEN THE CURB RAMP OR LANDING PLATFORM HAS A VERTICAL DROP OF 6 IN. OR GREATER OR HAS A SIDE APRON SLOP STEEPER THAN 1:3 (3%). PROTECTIVE EDGING SHOULD BE CONSIDERED WHEN THE CURB RAMPS OR LANDING PLATFORMS HAVE A VERTICAL DROP OF 3 IN. OR MORE.
- DETECTABLE EDGING WITH 6 IN. MINIMUM HEIGHT AND CONTRASTING COLOR SHALL BE INSTALLED ON ALL CURB RAMP LANDINGS WHERE THE WALKWAY CHANGES DIRECTION (TURNS).
- CURB RAMPS AND LANDINGS SHOULD HAVE A 1:50 (2%) MAX CROSS-SLOPE.
- CLEAR SPACE OF 48x48 IN. MINIMUM SHALL BE PROVIDED ABOVE AND BELOW THE CURB RAMP.
- THE CURB RAMP WALKWAY EDGE SHALL BE MARKED WITH A CONTRASTING COLOR 2 TO 4 IN. WIDE MARKING. THE MARKING IS OPTIONAL WHERE COLOR CONTRASTING EDGING IS USED.
- WATER FLOW IN THE GUTTER SYSTEM SHALL HAVE MINIMAL RESTRICTION.
- LATERAL JOINTS OR GAPS BETWEEN SURFACES SHALL BE LESS THAN 0.5 IN. WIDTH.
- CHANGES BETWEEN SURFACE HEIGHTS SHOULD NOT EXCEED 0.5 IN. LATERAL EDGES SHOULD BE VERTICAL UP TO 0.25 IN. HIGH, AND BEVELED AT 1:2 BETWEEN 0.25 IN. AND 0.5 IN. HEIGHT.



PEDESTRIAN DETAILS - 1

NOT TO SCALE



- WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED IN A TTC ZONE, TEMPORARY FACILITIES SHALL BE PROVIDED AND THEY SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.
- A PEDESTRIAN CHANNELIZING DEVICE THAT IS DETECTABLE BY A PERSON WITH A VISUAL DISABILITY TRAVELING WITH THE AID OF A LONG CANE SHALL BE PLACED ACROSS THE FULL WIDTH OF THE CLOSED SIDEWALK.
- WHEN USED, TEMPORARY RAMPS SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT (SEE FIGURES PED-1 & PED-2).
- THE ALTERNATE PATHWAY SHOULD HAVE A SMOOTH CONTINUOUS HARD SURFACE FOR THE ENTIRE LENGTH OF THE TEMPORARY PEDESTRIAN FACILITY.
- THE PROTECTIVE REQUIREMENTS OF A TTC SITUATION HAVE PRIORITY IN DETERMINING THE NEED FOR TEMPORARY TRAFFIC BARRIERS AND THEIR USE IN THIS SITUATION SHOULD BE BASED ON ENGINEERING JUDGMENT.
- AUDIBLE INFORMATION DEVICES SHOULD BE CONSIDERED WHERE MIDBLOCK CLOSINGS AND CHANGED CROSSWALK AREAS CAUSE INADEQUATE COMMUNICATION TO BE PROVIDED TO PEDESTRIANS WHO HAVE VISUAL DISABILITIES.

AUDIBLE DEVICES

FOR LONG TERM SIDEWALK CLOSURES (AT A MINIMUM OVERNIGHT) A FORM OF SPEECH MESSAGING FOR PEDESTRIANS WITH VISUAL DISABILITIES SHALL BE PROVIDED. AUDIBLE INFORMATION DEVICES SUCH AS DETECTABLE BARRIERS OR BARRICADES AND OTHER PASSIVE PEDESTRIAN ACTIVATION (MOTION ACTIVATED) DEVICES SHOULD BE CONSIDERED FOR THESE CASES. THESE AUDIBLE DEVICES CAN BE MOUNTABLE OR STAND ALONE.

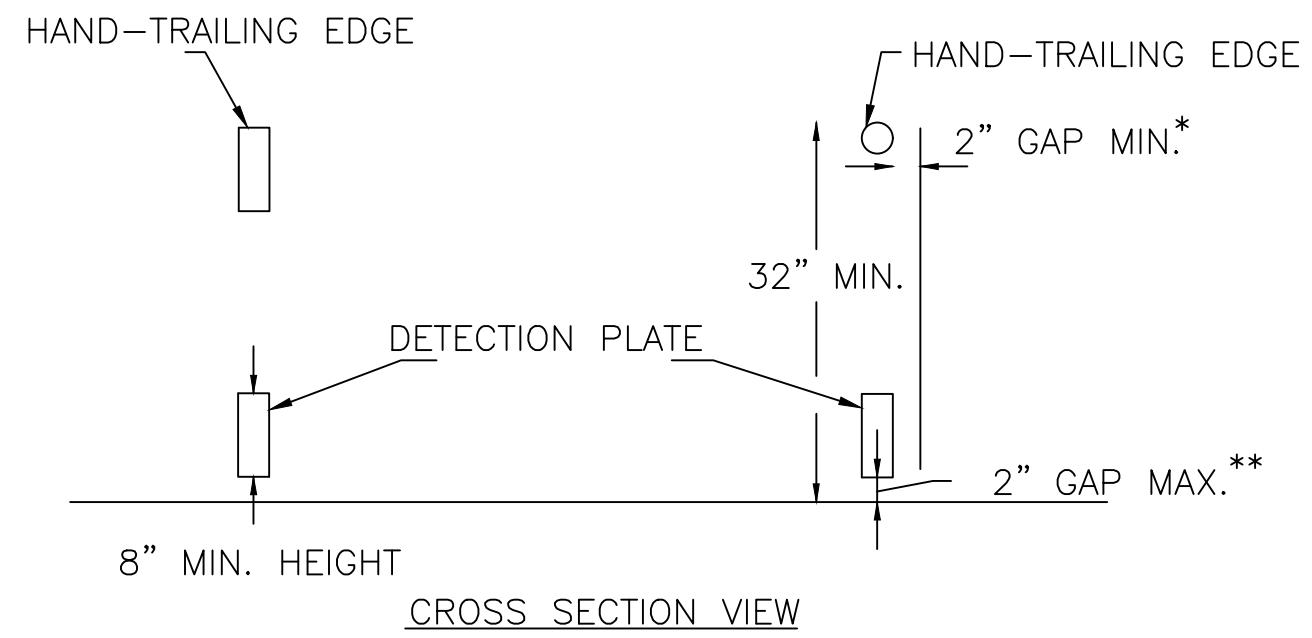
PEDESTRIAN DETAILS - 2

NOT TO SCALE

PEDESTRIAN DETAILS - 3

NOT TO SCALE

		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY									
		BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 T07									
		BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 TEMPORARY TRAFFIC CONTROL PLAN - 1									
		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY									
APPROVED BY: KATIE MOULTON		100 SUMMER ST, SUITE 1300 BOSTON, MA 02110 617.426.7330 www.wsp.com									
PROJECT MANAGER: KATIE MOULTON		06/20/2025									
PROJECT MANAGER: KATIE MOULTON		DATE:									
HORIZ. SCALE: NTS		DESIGN BY:		DRAWN BY:		CHKD BY:		ISSUE DATE			
VERT. SCALE: NA											
DATE: 06/20/2025		CS		GS		KM		A-6			



NOTES:

- * THERE SHALL BE A 2 INCH GAP BETWEEN THE HAND-TRAILING EDGE AND ITS SUPPORT.
- ** A MAXIMUM 2 INCH GAP BETWEEN THE BOTTOM OF THE BOTTOM RAIL AND THE SURFACE MAY BE USED TO PROVIDE DRAINAGE.

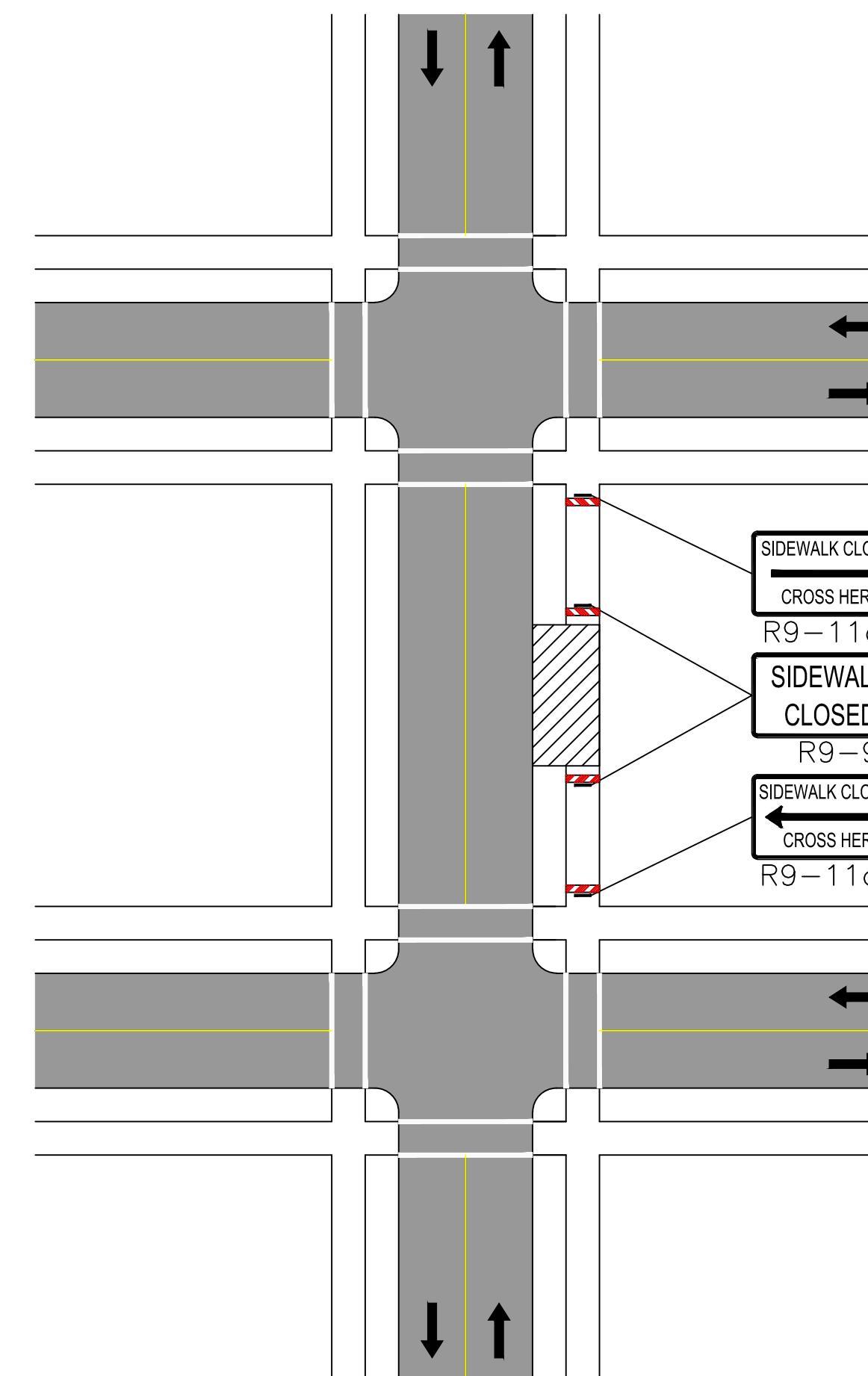
PEDESTRIAN DETAILS - 4

NOT TO SCALE

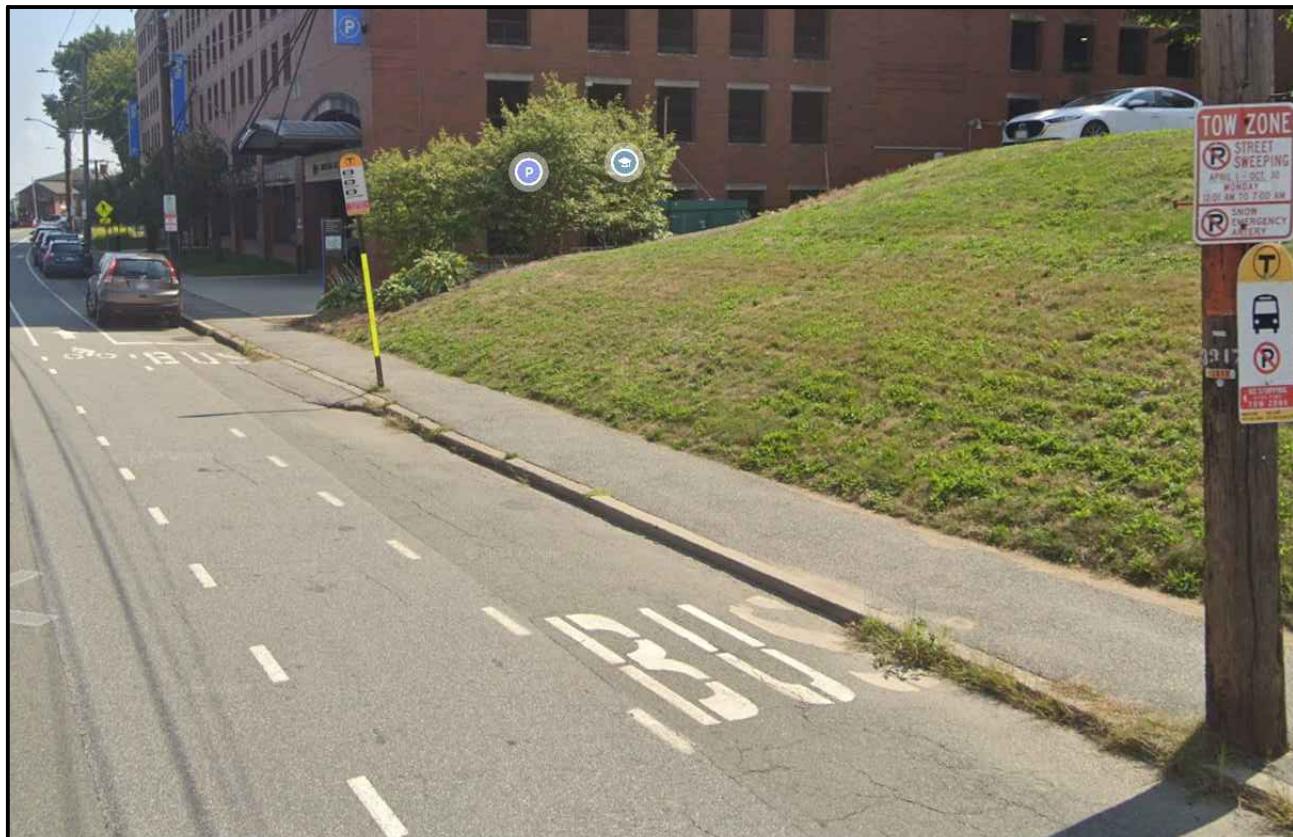
NOTE: IF A MINIMUM WIDTH OF 48" OF SOLID SMOOTH UNOBSTRUCTED SURFACE REMAINS ALONG THE WORK AREA THEN THE DETAIL CAN BE DISREGARDED. DELINEATION OF THE WORK AREA WILL STILL BE REQUIRED. ALL PEDESTRIAN DETOUR ROUTES SHALL BE ADA/MAAB COMPLIANT IN THEIR ENTIRETY.

TTCP-1 SIDEWALK CLOSURE WITH PEDESTRIAN DETOUR

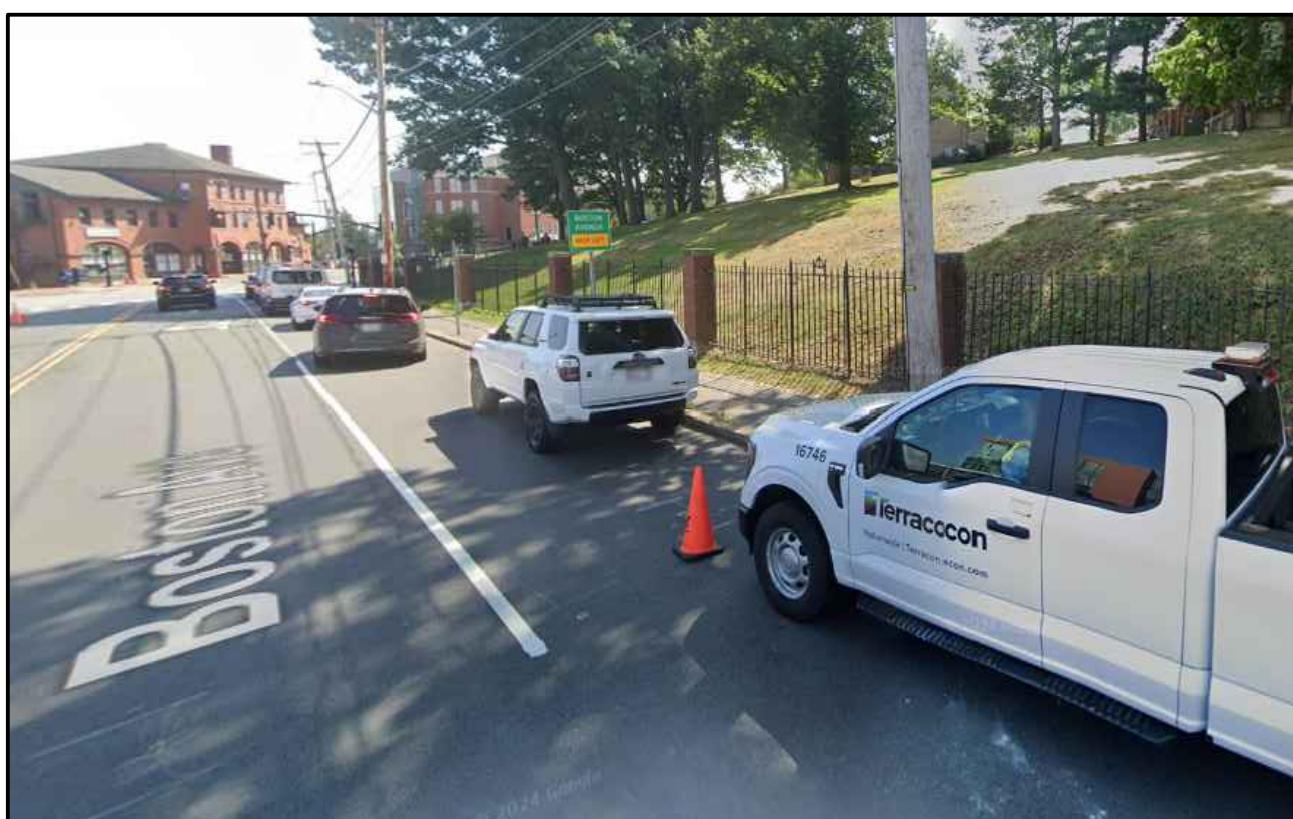
NOT TO SCALE



	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY																																													
BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 T07																																														
BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 TEMPORARY TRAFFIC CONTROL PLAN - 2																																														
	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY																																													
APPROVED BY: KATIE MOULTON 06/20/2025																																														
APPROVED BY: PROJECT MANAGER: DATE:																																														
<table border="1"> <thead> <tr> <th>ISSUE</th> <th>DATE</th> <th>DESCRIPTION</th> <th>BY</th> <th>CHK</th> <th>APP</th> </tr> </thead> <tbody> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td></tr> </tbody> </table>											ISSUE	DATE	DESCRIPTION	BY	CHK	APP																														
ISSUE	DATE	DESCRIPTION	BY	CHK	APP																																									
<table border="1"> <thead> <tr> <th>HORIZ. SCALE:</th> <th>NTS</th> <th>DESIGN BY:</th> <th>DRAWN BY:</th> <th>CHKD BY:</th> </tr> </thead> <tbody> <tr> <td>VERT. SCALE:</td> <td>NA</td> <td></td> <td></td> <td></td> </tr> <tr> <td>DATE:</td> <td>06/20/2025</td> <td>CS</td> <td>GS</td> <td>KM</td> </tr> <tr> <td>SHEET</td> <td>A-7</td> <td colspan="3"></td> </tr> </tbody> </table>											HORIZ. SCALE:	NTS	DESIGN BY:	DRAWN BY:	CHKD BY:	VERT. SCALE:	NA				DATE:	06/20/2025	CS	GS	KM	SHEET	A-7																			
HORIZ. SCALE:	NTS	DESIGN BY:	DRAWN BY:	CHKD BY:																																										
VERT. SCALE:	NA																																													
DATE:	06/20/2025	CS	GS	KM																																										
SHEET	A-7																																													



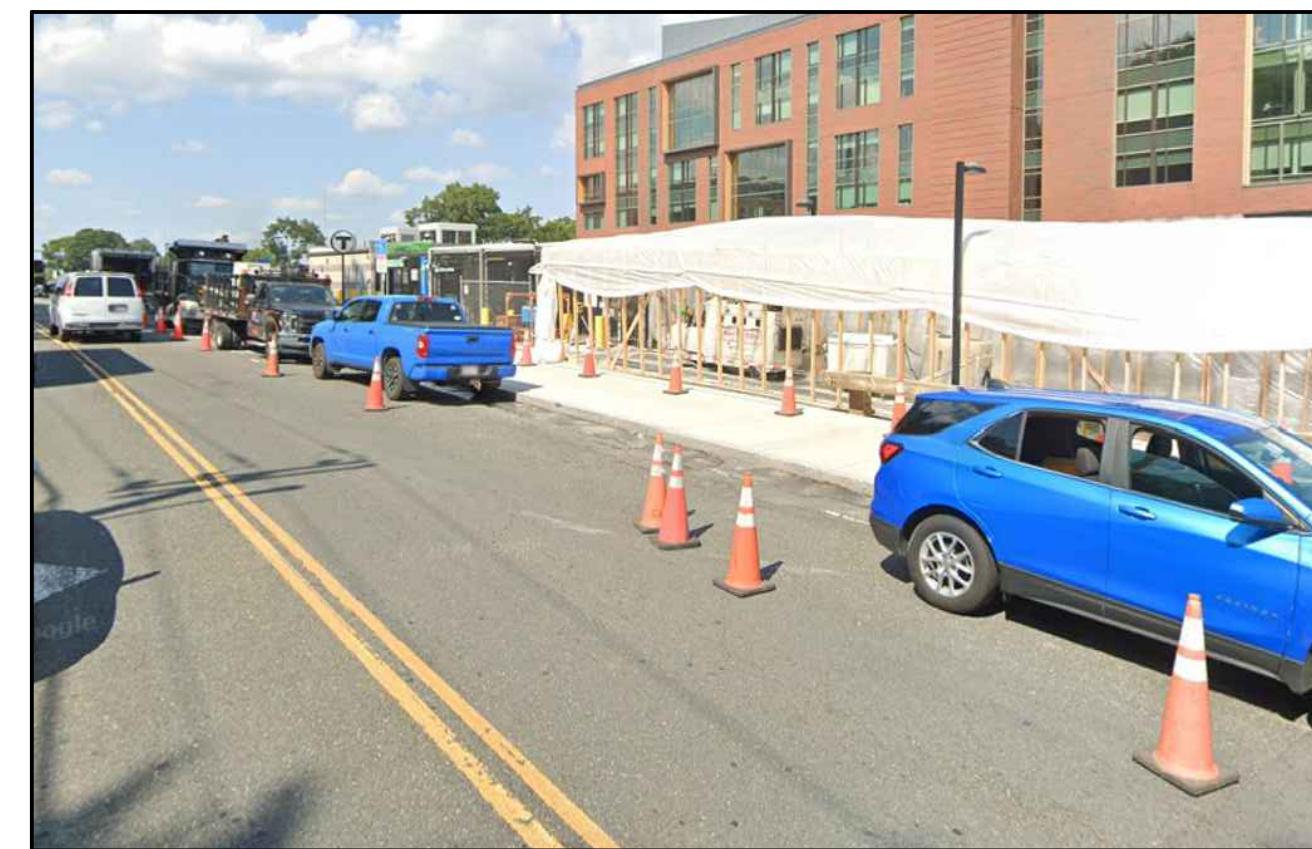
EX. STOP ID NO. 2378



PROP. STOP ID NO. 2378

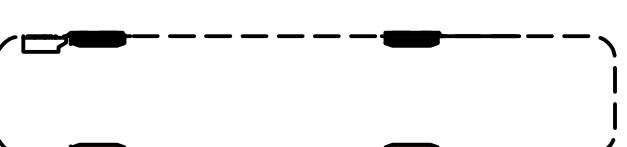


EX. STOP ID NO. 2408

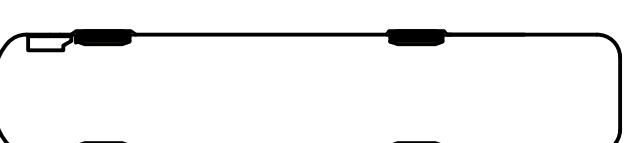


PROP. STOP ID NO. 2408

LEGEND:

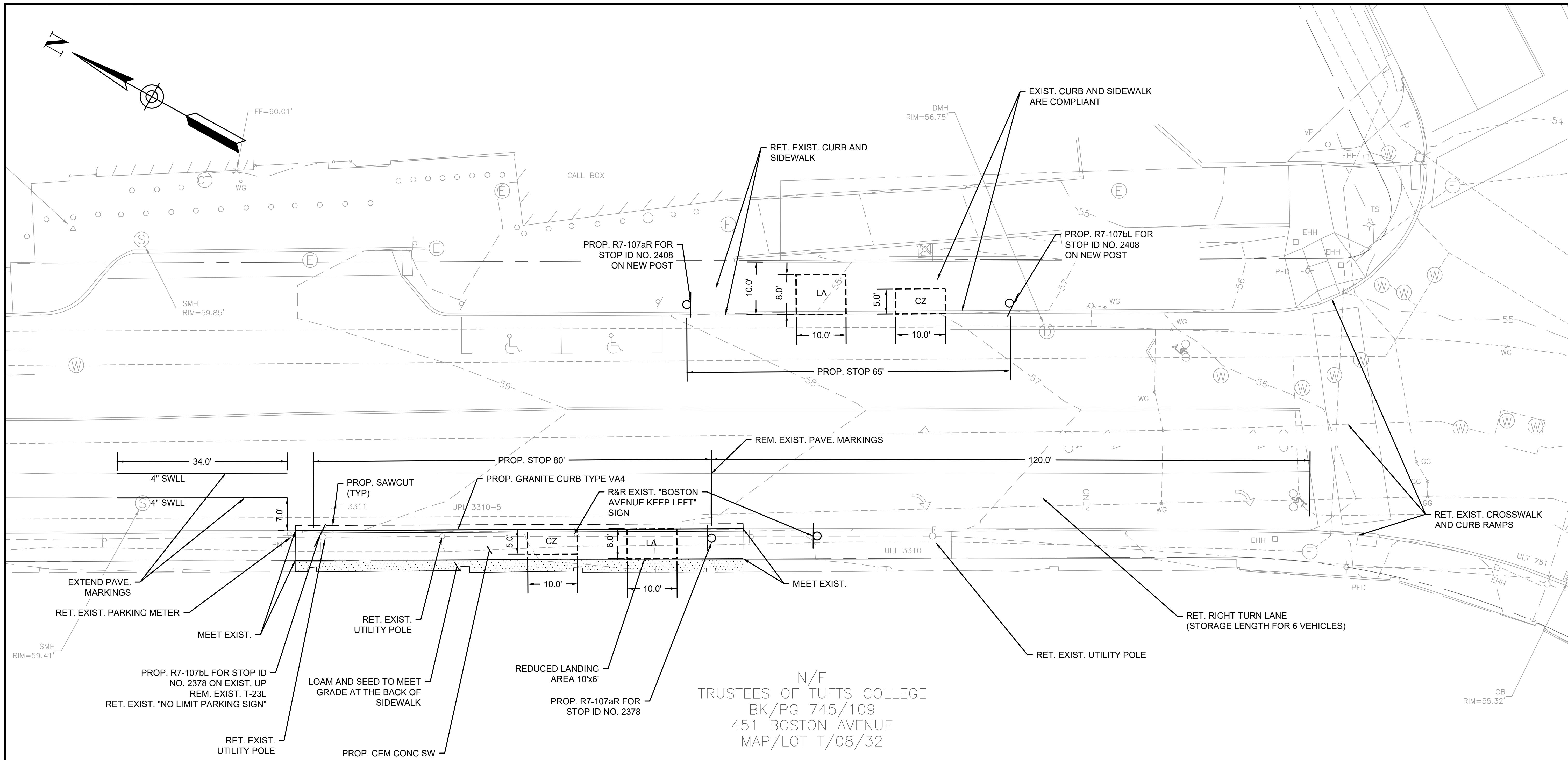


EXISTING BUS STOPPING ZONE



PROPOSED BUS STOPPING ZONE

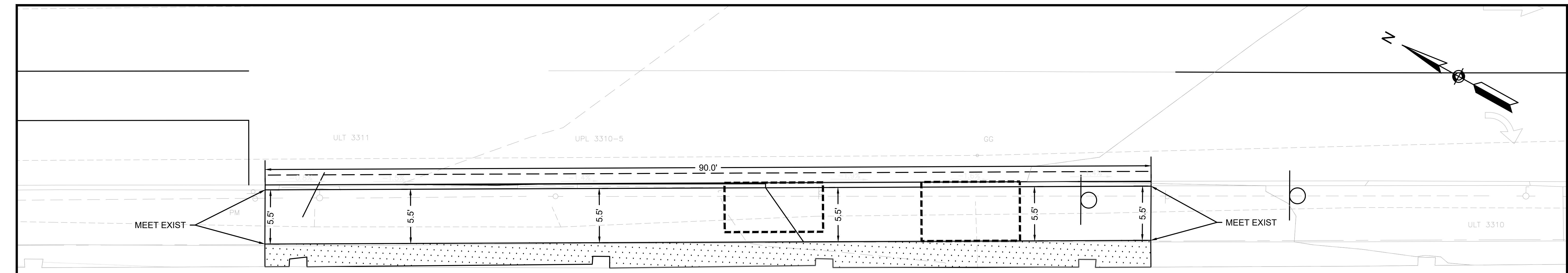
CITY OF MEDFORD					
	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY				
	BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 TO7				
BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 AERIAL CONCEPT PLAN					
	100 SUMMER ST, SUITE 1300 BOSTON, MA 02110 617.426.7330 www.wsp.com				
	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY				
APPROVED BY: KATIE MOULTON 06/20/2025					
APPROVED BY: PROJECT MANAGER: DATE: HORIZ. SCALE DESIGN DRAWN CHKD SCALE: BY BY BY VERT. NA CS GS KM DATE: 06/20/2025 SHEET B-1					
PLAN NO. 338625 ISSUE SHEET B-1					



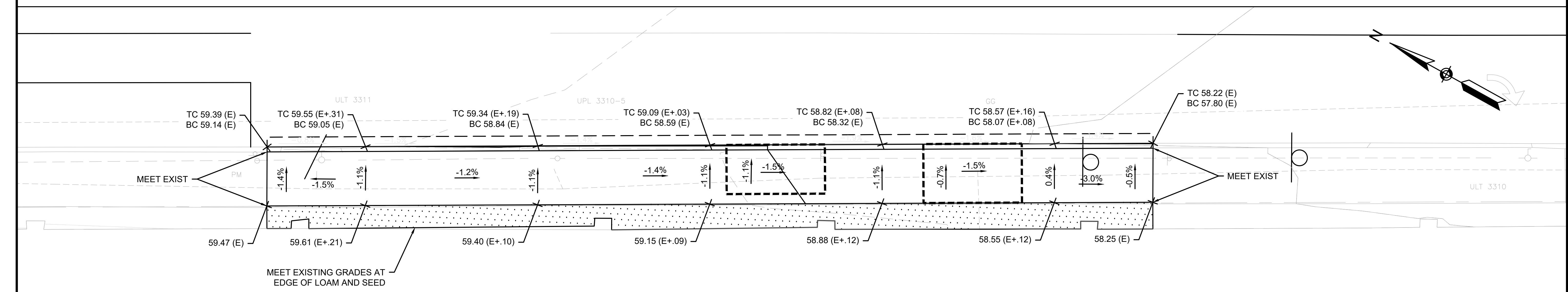
SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	TEXT DIMENSIONS (INCHES)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA (SF)	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW RTE MKR		BACKG-ROUND	LEGEND	BORDER			
R7-107aR	12"	32" OR 40"					2				P5 (2)	2.5000	5.0000
R7-107bL	12"	32"					2				P5 (1)	2.5000	5.0000

CITY OF MEDFORD											
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY											
BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 T07											
BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 GENERAL IMPROVEMENTS PLAN											
WSP 100 SUMMER ST, SUITE 1300 BOSTON, MA 02110 617.426.7330 www.wsp.com											
MASSACHUSETTS BAY TRANSPORTATION AUTHORITY											
APPROVED BY: KATIE MOULTON 06/20/2025 PROJECT MANAGER: DATE: APPROVED BY: PROJECT MANAGER: DATE: HORIZ. SCALE: 1" = 10' VERT. SCALE: NA DATE: 06/20/2025											
PLAN NO. 338626 DRAWN BY: CS GS KM ISSUED BY: G-1											



CONSTRUCTION PLAN



NOTES:

- THE LOCATION OF ALL THE UTILITIES AS SHOWN HEREON HAVE BEEN COMPILED FROM VISIBLE STRUCTURES AND INFORMATION OBTAINED FROM VARIOUS SOURCES. THE ACTUAL LOCATION OF ALL UTILITIES AND UNDERGROUND STRUCTURES SHALL BE CONSIDERED APPROXIMATE AND SHALL BE VERIFIED BY THE OWNER PRIOR TO ANY CONSTRUCTION. THE SURVEYOR MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES SHOWN COMPRIZE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED.
- THE PROPERTY LINES SHOWN HEREON ARE COMPILED FROM RECORD PLANS AND DEEDS.
- FOR CURB RAMP DETAILS, SEE SHEET xx.
- FOR GENERAL IMPROVEMENTS PLAN, SEE SHEET xx

LEGEND	
XX.XX	PROP ELEVATION
XX.XX	EXIST ELEVATION
X.XX%	PROP GRADE
X.XX%	EXIST GRADE
(E+0.00)	ELEVATION DIFFERENCE FROM EXIST

GRADING PLAN

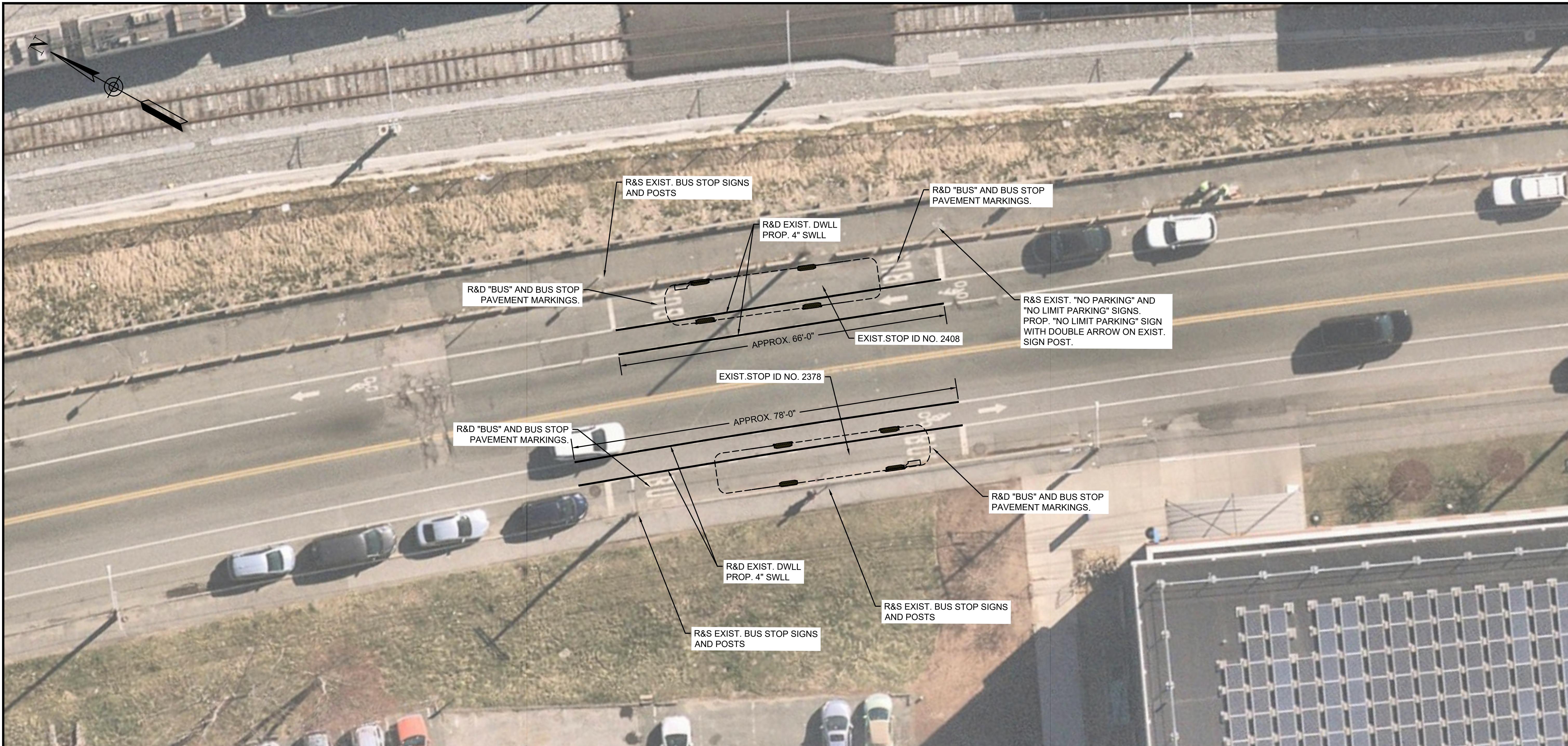


CITY OF MEDFORD

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL
PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK
MBTA CONTRACT NO. N50PS03 T07

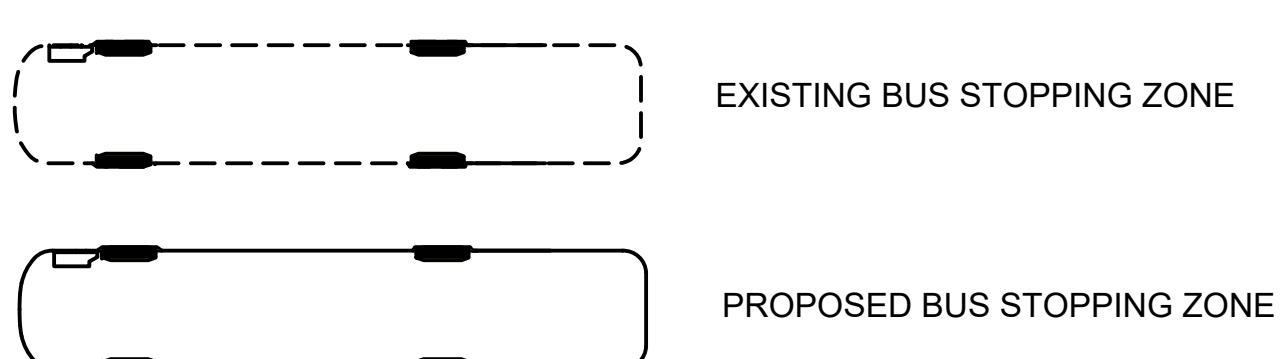
BOSTON AVE @ TUFTS GARAGE
PAIRED STOPS ID NO. 2408 & ID NO. 2378
CONSTRUCTION & GRADING PLAN

WSP		100 SUMMER ST, SUITE 1300 BOSTON, MA 02110 617.426.7330 www.wsp.com	MASSACHUSETTS BAY TRANSPORTATION AUTHORITY
APPROVED BY: KATIE MOULTON 06/20/2025		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
PROJECT MANAGER:	DATE:	PROJECT MANAGER:	DATE:
HORIZ. SCALE: 1" = 5'	DESIGN BY:	DRAWN BY:	CHKD BY:
VERT. SCALE: NA	CS	GS	KM
DATE: 06/20/2025	SHEET	C-1	ISSUE



0 10 20 30 40
SCALE: 1" = 10'

LEGEND:



		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
BUS SYSTEM INFRASTRUCTURE IMPROVEMENTS ON-CALL PATI BUS STOP ACCESSIBILITY IMPROVEMENTS SUB-TASK MBTA CONTRACT NO. N50PS03 TO7			
BOSTON AVE @ TUFTS GARAGE PAIRED STOPS ID NO. 2408 & ID NO. 2378 EXISTING STOPS TO BE ELIMINATED			
		MASSACHUSETTS BAY TRANSPORTATION AUTHORITY	
APPROVED BY: KATIE MOULTON 06/20/2025		APPROVED BY: PROJECT MANAGER: DATE:	
HORIZ. SCALE: 1" = 10' VERT. SCALE: NA DATE: 06/20/2025		DESIGN BY: _____ DRAWN BY: _____ CHKD BY: _____ CS GS KM	PLAN NO. 338628 ISSUE E-1