

JUN 1 9 2018

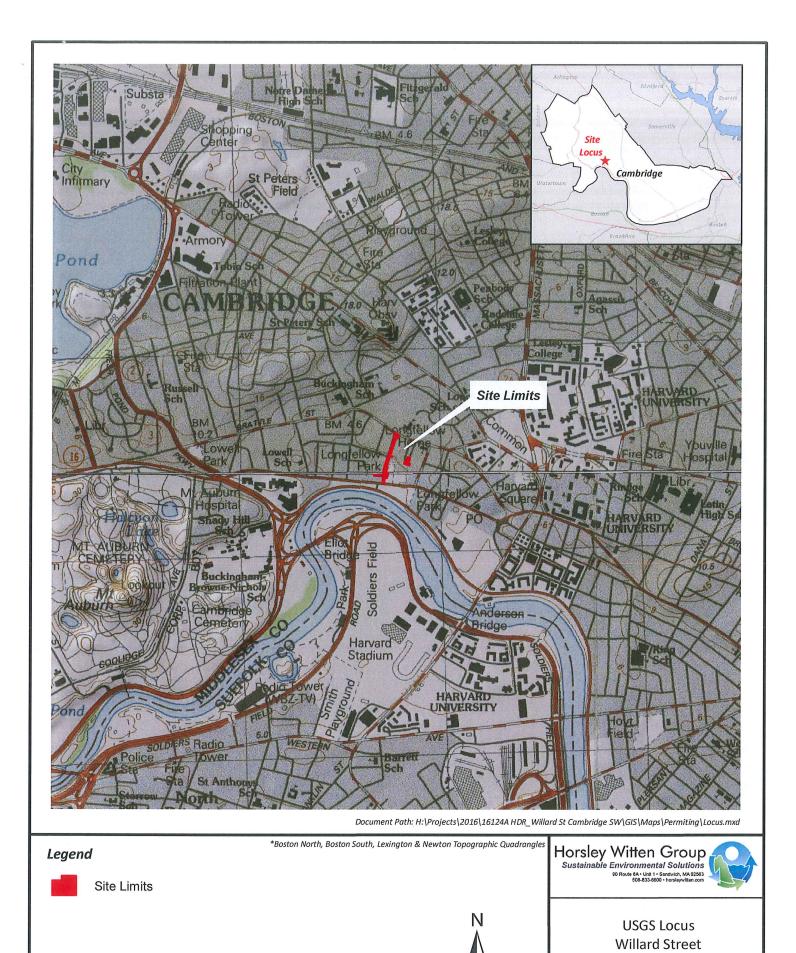


CAMBRIDGE HISTORICAL COMMISSION AMBRIDGE HISTORICAL COMMISSION

831 Massachusetts Avenue, 2nd Fl., Cambridge, Massachusetts 02139
Telephone: 617 349 4683 Fax: 617 349 3116 TTY: 617 349 6112
E-mail: histcomm@cambridgema.gov URL: http://www.cambridgema.gov/Historic

APPLICATION FOR CERTIFICATE

1. The undersigned hereby applies to the Cambridge Historical Commission for a Certificate of						
(check one box): Appropriateness, Nonapplicability, or Hardship, in accordance with						
Chapter 40C of the Massachusetts General Laws and/or Chapter 2.78 of the Municipal Code.						
2. Address of property: Willard Street, Cambridge, Massachusetts						
3. Describe the proposed alteration(s), construction or demolition in the space provided below: (An additional page can be attached, if necessary).						
The Willard Street Drainage Improvements Project has a primary goal of reducing incidences of surface flooding along the street and adjacent properties, and of improving the quality of stormwater discharged to the Charles River. The significant underground infrastructure construction which is required, also provides an opportunity to provide surface improvements, including accessible sidewalks, traffic calming, landscaping, and "Green Infrastructure" features.						
The surface restoration will be largely accomplished using the City's standard construction materials, including granite curb, cast-in-place concrete sidewalks, pre-cast concrete pavers at raised intersections, and new street trees. Additionally, for added stormwater benefit, pervious materials are being considered for portions of the sidewalk edge on the west side of the street.						
• .						
I certify that the information contained herein is true and accurate to the best of my knowledge and belief. The undersigned also attests that he/she has read the statements printed on the reverse.						
Name of Property Owner of Record: City of Cambridge						
Mailing Address: 795 Massachusetts Avenue, Cambridge, MA 02139						
Telephone/Fax: (617) 349-4000						
Signature of Property Owner of Record: De Correction (Required field; the application will not be considered complete without the property owner's signature)						
Name of proponent, if not record owner: City of Cambridge, Dept. of Public Works						
Mailing Address: 147 Hampshire Street. Cambridge, MA 02139 (Att: Jerry Friedman)						
Telephone/Fax: (617) 349-9720 E-mail: _jfriedman@cambridgema.gov						
(for office use only): Date Application Received: 498 Case Number: 397 Hearing Date: 7/12/18 Type of Certificate Issued: Date Issued:						
Type of Certificate Issued: Date Issued:						



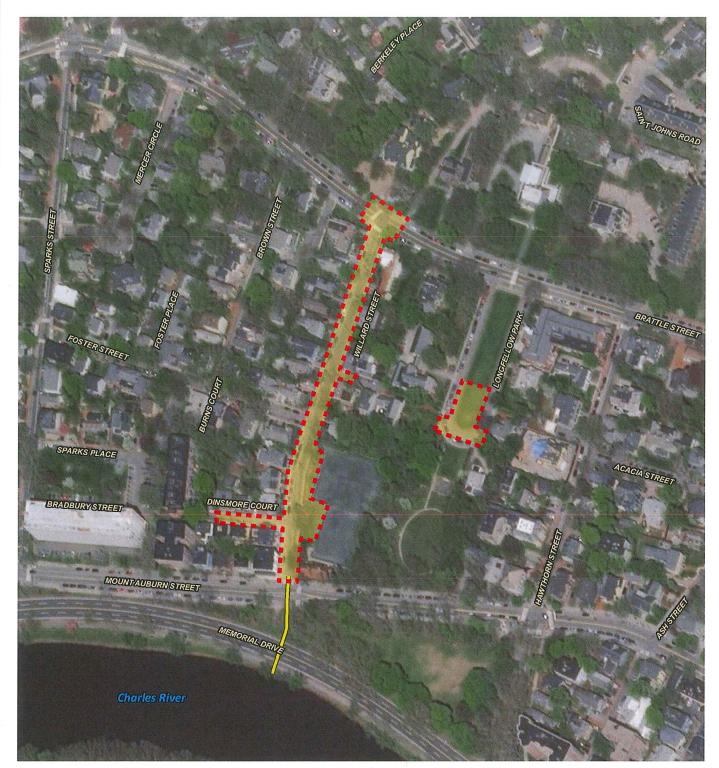
Cambridge, MA

Figure 1

1,500

Date: 3/20/2018

1" = 1,500 feet



 $Document\ Path:\ H:\ Projects\ 2016\ 16124A\ HDR_Willard\ St\ Cambridge\ SW\ GIS\ Maps\ Permiting\ Aerial.mxd$

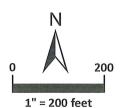




Site Limits

Restored Outfall

*Aerial Imagery - ESRI 2017









Aerial Photo Willard Street Cambridge, MA

Date: 3/20/2018

Figure 2

Willard Street, Cambridge

PHOTOGRAPHIC LOG

Client Name: Cambridge DPW

Site Location: Willard Street, Cambridge

Photo No.: 1

Date: 12/06/16

Description:

From Brattle Street looking south to Willard Street.



Willard Street, Cambridge

PHOTOGRAPHIC LOG

Client Name: Cambridge DPW

Site Location: Willard Street, Cambridge

Photo No.: 2

Date: 12/06/16

Description:

Willard Street looking south towards Memprial Drive.



Willard Street, Cambridge

PHOTOGRAPHIC LOG

Client Name: Cambridge DPW

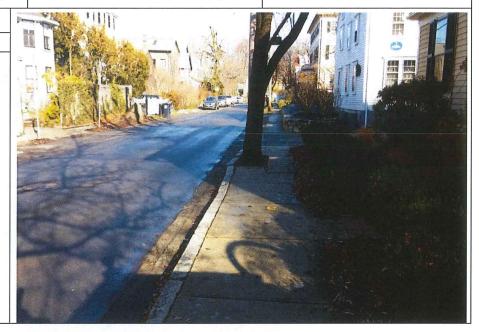
Site Location: Willard Street, Cambridge

Photo No.: 3

Date: 12/06/16

Description:

Willard Street looking north.



Willard Street, Cambridge

PHOTOGRAPHIC LOG

Client Name: Cambridge DPW

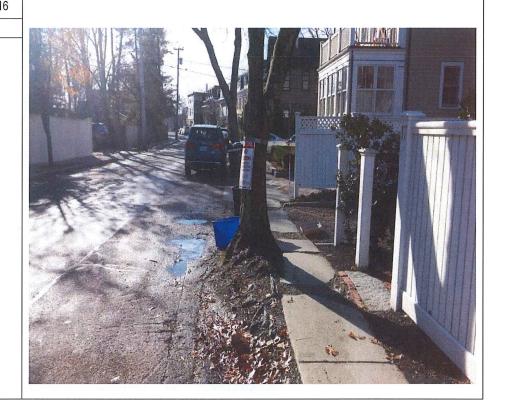
Site Location: Willard Street, Cambridge

Photo No.: 4

Date: 12/06/16

Description:

Willard Street looking south.



WILLARD STREET DRAINAGE IMPROVEMENTS

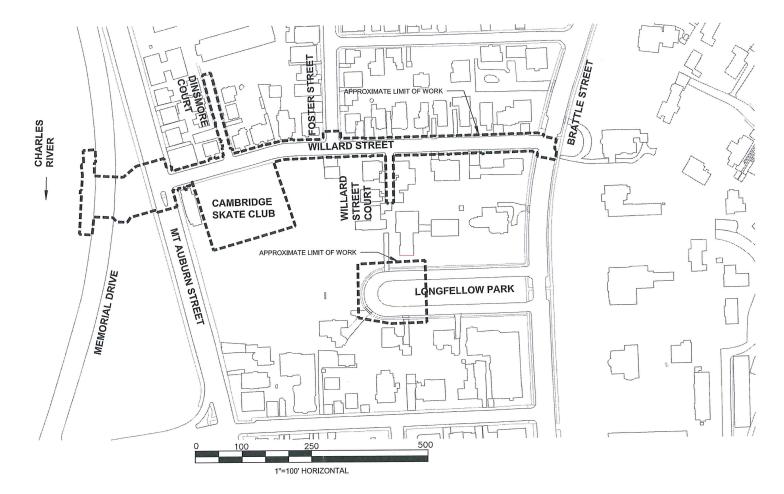
WILLARD STREET

50% DRAFT SUBMISSION

INDEX OF DRAWINGS

L-5,6 ----- LANDSCAPE PLANS

SHEET	NO.	DESCRIPTION
G-1		TITLE SHEET & INDEX OF DRAWINGS
G-2		LEGEND AND ABBREVIATIONS
G-3		GENERAL NOTES
G-4		KEY PLAN
ES-1,2		EROSION AND SEDIMENT CONTROL PLAN
CD-1,3		CIVIL CONSTRUCTION DETAILS
CO-1,2		CIVIL OUTFALL PLAN, PROFILE AND SECTIONS
E-1,2		EXISTING CONDITIONS PLAN
C-1,3		CIVIL CONSTRUCTION PLAN
UC-1,2		CIVIL UTILITY CONSTRUCTION PLAN
GI-1		GREEN INFRASTRUCTURE WILLARD STREET AND SKATE CLUB
GI-2		GREEN INFRASTRUCTURE LONGFELLOW PARK
GI-3		GREEN INFRASTRUCTURE DETAILS
RG-1		ROADWAY TYPICAL SECTIONS
RG-2,3		ROADWAY CONSTRUCTION DETAILS
RC-1,2		ROADWAY CONSTRUCTION PLAN
G-1,2		GRADING PLAN
L-1,3		LANDSCAPE OUTFALL PLANS
L-4,4.2		LANDSCAPE OUTFALL DETAILS



PREPARED FOR:





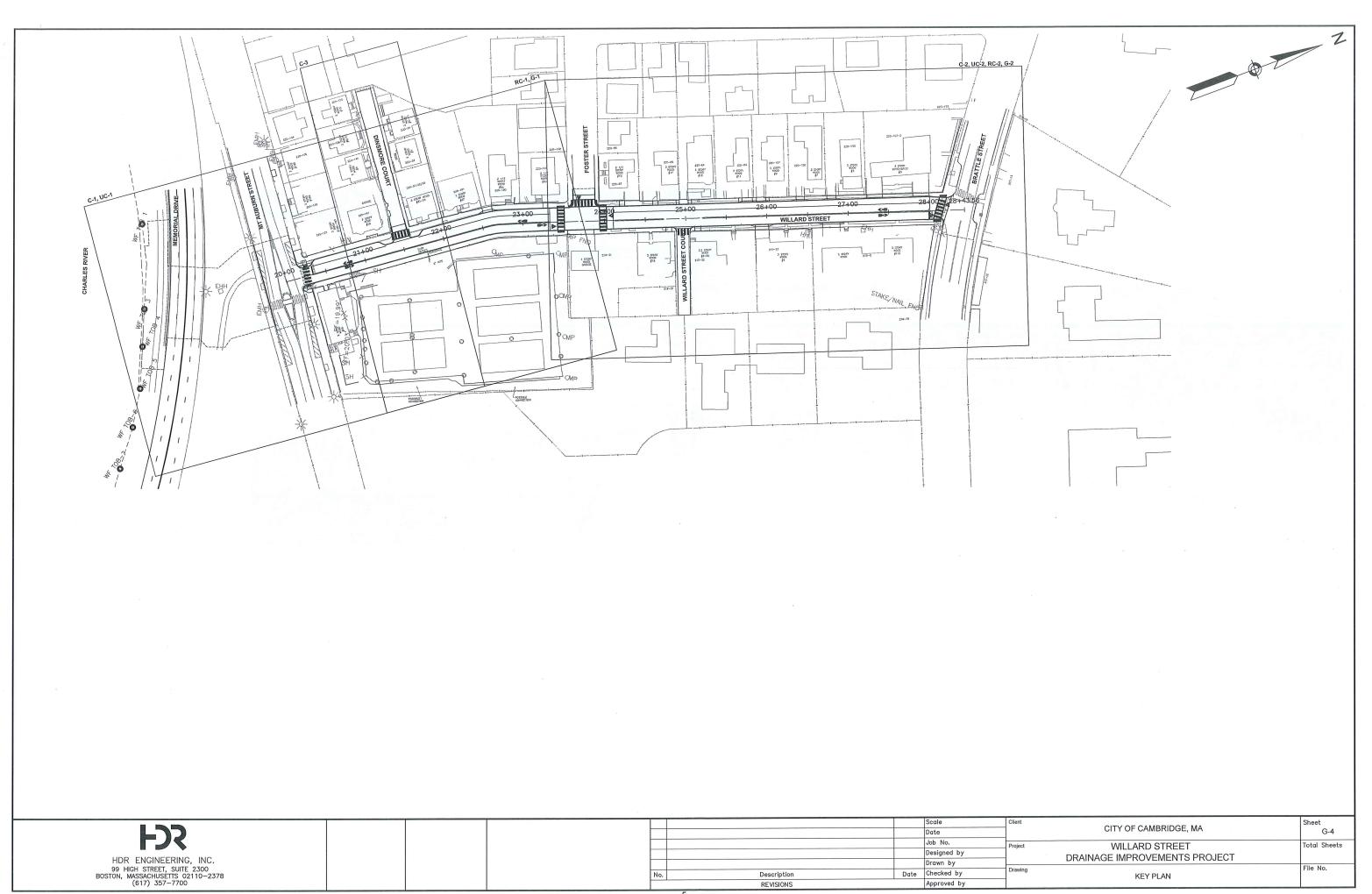
CITY OF CAMBRIDGE
DEPARTMENT OF PUBLIC WORKS

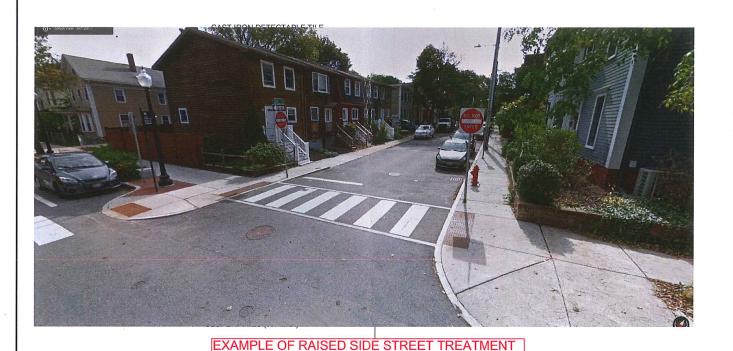
PREPARED BY:

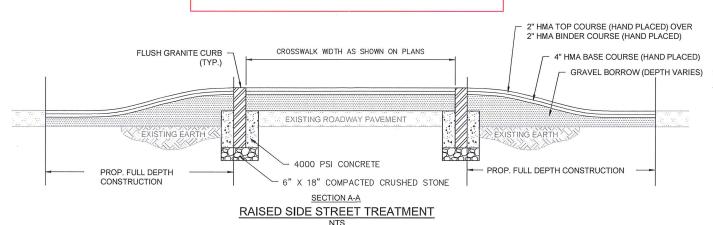
HDR, INC.
99 HIGH STREET
SUITE 2300
POSTON MA 02410

MARCH 22, 2018

GENERAL SYMBOL	S								·
EXISTING	PROPOSED	DESCRIPTION				ABBREVIATI	ONS	ABBREVIATI	ONS (cont.)
JB	JB	JERSEY BARRIER	TRAFFIC SYMBOLS			<u>GENERAL</u>		GENERAL	
⊞ ⊕ ⊞ CB	~ ~		EVICTING -	PROPOSED	DESCRIPTION	_ ABAN	ABANDON	R	RADIUS OF CURVATURE
		CATCH BASIN CURB INLET	EXISTING	PROPOSED	DESCRIPTION	ADJ APPROX.	ADJUST APPROXIMATE	R&D RCP	REMOVE AND DISPOSE REINFORCED CONCRETE PIPE
⊚ FP		FLAG POLE	Ø1	Ø1	CONTROLLER PHASE ACTUATED	BIT.	BITUMINOUS	RD	ROAD
G GP	☐ GP □ MB	GAS PUMP MAIL BOX		000	TRAFFIC SIGNAL HEAD (SIZE AS NOTED)	BC	BOTTOM OF CURB	RDWY	ROADWAY
□ MB		POST SQUARE		Ö	THAT TO SIGNAL TIEAD (SIZE AS NOTED)	BD.	BOUND	REM	REMOVE
0	0	POST CIRCULAR	[]		WIRE LOOP DETECTOR (6' x 6' TYP UNLESS OTHERWISE SPECIFIED)	BL BLDG	BASELINE BUILDING	RET RET WALL	RETAIN RETAINING WALL
⊕ WELL	⊕ WELL	WELL	75	7	VIDEO DETECTION CAMERA	BM	BENCHMARK	ROW	RIGHT OF WAY
□ EHH O	□ EHH O	ELECTRIC HANDHOLE FENCE GATE POST)D	—	MICROWAVE DETECTOR	во	BY OTHERS	RR	RAILROAD
o GG	o GG	GAS GATE	⊕	•	PEDESTRIAN PUSH BUTTON, SIGN (DIRECTIONAL ARROW AS SHOWN) AND SADDLE	BOS CB	BOTTOM OF SLOPE CATCH BASIN	R&R R&S	REMOVE AND RESET REMOVE AND STACK
⊕ BHL #	→ BHL#	BORING HOLE	4			CBCI	CATCH BASIN WITH CURB INLET	RT	RIGHT
◆ MW #	→ MW#	MONITORING WELL	4	*	EMERGENCY PREEMPTION CONFIRMATION STROBE LIGHT	CC	CEMENT CONCRETE	SB	STONE BOUND
■ TP #	■ TP#	TEST PIT HYDRANT	<	-	VEHICULAR SIGNAL HEAD	CCM	CEMENT CONCRETE MASONRY	SHLD SMH	SHOULDER SEWER MANHOLE
*	*	LIGHT POLE	*	-	VEHICULAR SIGNAL HEAD, OPTICALLY PROGRAMMED	CEM CI	CEMENT CURB INLET	SI	STREET
□ CO.BD.	-0	COUNTY BOUND	←	■	FLASHING BEACON	CIP	CAST IRON PIPE	STA	STATION
0 0		GPS POINT			PEDESTRIAN SIGNAL HEAD, (TYPE AS NOTED OR AS SPECIFIED)	CLF	CHAIN LINK FENCE	SSD	STOPPING SIGHT DISTANCE
© ©	© (0)	CABLE MANHOLE DRAINAGE MANHOLE	☑ RRSG	☑ RRSG	RAILROAD SIGNAL	CL CO.	CENTERLINE	SHLO SW	STATE HIGHWAY LAYOUT LINE SIDEWALK
(E)	© ©	ELECTRIC MANHOLE		•	SIGNAL POST AND BASE (ALPHA-NUMERIC DESIGNATION NOTED)	CO. CONC	COUNTY CONCRETE	T	TANGENT DISTANCE OF CURVE/TRUCK %
0	0	GAS MANHOLE	oO	20'	MAST ARM, SHAFT AND BASE (ARM LENGTH AS NOTED)	CONT	CONTINUOUS	TAN	TANGENT
(N)	W	MISC MANHOLE			,	CONST	CONSTRUCTION	TEMP	TEMPORARY
⑤ ①	(S)	SEWER MANHOLE TELEPHONE MANHOLE			HIGH MAST POLE OR TOWER	DI DIA	DROP INLET DIAMETER	TC TOS	TOP OF CURB TOP OF SLOPE
(g)	w	WATER MANHOLE	0	-0	SIGN AND POST	DIP	DUCTILE IRON PIPE	TYP	TYPICAL
■ MHB	■ MHB	MASSACHUSETTS HIGHWAY BOUND	00	00	SIGN AND POST (2 POSTS)	DWY	DRIVEWAY	UP	UTILITY POLE
□ MON		MONUMENT OTTOWE ROUND		★ 20′	MAST ARM WITH LUMINAIRE	ELEV (or EL.)		VAR VERT	VARIES VERTICAL
□ SB ■ TB		STONE BOUND TOWN OR CITY BOUND			OPTICAL PRE-EMPTION DETECTOR	EMB EOP	EMBANKMENT EDGE OF PAVEMENT	VC	VERTICAL CURVE
Δ		TRAVERSE OR TRIANGULATION STATION	\boxtimes	\bowtie	CONTROL CABINET, GROUND MOUNTED	EXIST (or EX)		WCR	WHEEL CHAIR RAMP
⊸ TPL or GUY	→ TPL or GUY	TROLLEY POLE OR GUY POLE	É	☆	CONTROL CABINET, POLE MOUNTED	EXC	EXCAVATION	WG WIP	WATER GATE
• HTP	LUED	TRANSMISSION POLE		XIII	FLASHING BEACON CONTROL AND METER PEDESTAL	F&C F&G	FRAME AND COVER	WM	WROUGHT IRON PIPE WATER METER/WATER MAIN
-\$- UFB -\$- UPDL	-⊱ UFB -⊱ UPDL	UTILITY POLE W/ FIREBOX UTILITY POLE WITH DOUBLE LIGHT	<u>5</u> —	₩-	LOAD CENTER ASSEMBLY	F&G FDN.	FRAME AND GRATE FOUNDATION	X-SECT	CROSS SECTION
-&- ULT	-&- ULT	UTILITY POLE W/1 LIGHT				FLDSTN	FIELDSTONE		
-∽ UPL	→ UPL	UTILITY POLE			PULL BOX 12"x12" (OR AS NOTED)	GD	GROUND		
•SIZE & TYPE		BUSH TREE			ELECTRIC HANDHOLE 12"x24" (OR AS NOTED)	GG GI	GAS GATE GUTTER INLET		
O SIZE & TIPE		STUMP			= TRAFFIC SIGNAL CONDUIT	GIP	GALVANIZED IRON PIPE		
216		SWAMP / MARSH				GRAN	GRANITE	TRAFFIC SIG	NAL
• WG	• WG	WATER GATE				GRAV	GRAVEL	CAB.	CABINET
• PM	- PM	PARKING METER — OVERHEAD CABLE/WIRE				GRD HDW	GUARD HEADWALL	CCVE DW	CLOSED CIRCUIT VIDEO EQUIPMENT STEADY DON'T WALK
		= CURBING				HMA	HOT MIX ASPHALT	FDW	FLASHING DON'T WALK
=100-= -99-= .		- CONTOURS (ON-THE-GROUND SURVEY DATA)				HOR	HORIZONTAL	FR	FLASHING CIRCULAR RED
		— CONTOURS (PHOTOGRAMMETRIC DATA)				HYD INV	HYDRANT INVERT	FRL FRR	FLASHING RED LEFT ARROW FLASHING RED RIGHT ARROW
		 UNDERGROUND DRAIN PIPE (DOUBLE LINE 24 INCH AND OVER) UNDERGROUND ELECTRIC DUCT (DOUBLE LINE 24 INCH AND OVER) 				JCT	JUNCTION	FY	FLASHING CIRCULAR AMBER
		- UNDERGROUND GAS MAIN (DOUBLE LINE 24 INCH AND OVER)	PAVEMENT MARKING	S SYMBOLS		L	LENGTH OF CURVE	FYL	FLASHING AMBER LEFT ARROW
		- UNDERGROUND SEWER MAIN (DOUBLE LINE 24 INCH AND OVER)	- EVICTING	PROPOSED	PEROPRETION	_ LB LP	LEACH BASIN LIGHT POLE	FYR G	FLASHING AMBER RIGHT ARROW STEADY CIRCULAR GREEN
		 UNDERGROUND TELEPHONE DUCT (DOUBLE LINE 24 INCH AND OVER) UNDERGROUND WATER MAIN (DOUBLE LINE 24 INCH AND OVER) 	EXISTING	PROPOSED	DESCRIPTION	LT	LEFT	GL	STEADY GREEN LEFT ARROW
0000000000		BALANCED STONE WALL	4	₹]	PAVEMENT ARROW - WHITE	MAX	MAXIMUM	GR	STEADY GREEN RIGHT ARROW
1		GUARD RAIL - STEEL POSTS	CNLY	ONLY	LEGEND "ONLY" - WHITE	MB	MAILBOX	GSL	STEADY GREEN SLASH LEFT ARROW
<u> </u>		GUARD RAIL - WOOD POSTS	Mark the second	SL	STOP LINE	MH MIN	MANHOLE MINIMUM	GSR GV	STEADY GREEN SLASH RIGHT ARROW STEADY GREEN VERTICAL ARROW
λ		— CHAIN LINK OR METAL FENCE — WOOD FENCE		cw	CROSSWALK	NO.	NUMBER	OL	OVERLAP
		· HAY BALES/SILT FENCE		SWL	SOLID WHITE LINE	PC	POINT OF CURVATURE	PED	PEDESTRIAN PAN THE ZOOM
ccccccccc v				SYL	SOLID YELLOW LINE	PCC P.G.L.	POINT OF COMPOUND CURVATURE PROFILE GRADE LINE	PTZ R	PAN, TILE, ZOOM STEADY CIRCULAR RED
		— SAWCUT LINE — TOP OR BOTTOM OF SLOPE		BWL	BROKEN WHITE LINE	P.G.L. PI	POINT OF INTERSECTION	RL	STEADY RED LEFT ARROW
-		— TOP OR BOTTOM OF SLOPE — LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY		RVI	BROKEN YELLOW LINE	POC	POINT ON CURVE	RR	STEADY RED RIGHT ARROW
		BANK OF RIVER OR STREAM		DWI.		POT	POINT OF DEVENSE CHRYATURE	TR SIG TSC	TRAFFIC SIGNAL TRAFFIC SIGNAL CONDUIT
		BORDER OF WETLAND		<u>DWL</u>		PRC PROJ	POINT OF REVERSE CURVATURE PROJECT	W	STEADY WALK
		100 FT WETLAND BUFFER 200 FT RIVERFRONT BUFFER		<u>DYL</u>		PROP	PROPOSED	Υ	STEADY CIRCULAR AMBER
		200 FT RIVERFRONT BUFFER — STATE HIGHWAY LAYOUT		DWLEx	DOTTED WHITE LINE EXTENSION	PSB	PLANTABLE SOIL BORROW	YL	STEADY AMBER LEFT ARROW
-		TOWN OR CITY LAYOUT		DYLEx	DOTTED YELLOW LINE EXTENSION	PT PVC	POINT OF TANGENCY POINT OF VERTICAL CURVATURE		
		- COUNTY LAYOUT		DBWL	DOUBLE WHITE LINE	PVI	POINT OF VERTICAL CORVATORE POINT OF VERTICAL INTERSECTION		
		— RAILROAD SIDELINE TOWN OR CITY BOUNDARY LINE		DBYL	DOUBLE YELLOW LINE	PVT	POINT OF VERTICAL TANGENCY		
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE				PVMT	PAVEMENT		
						PWW	PAVED WATER WAY		
			T			Scale	Client		Chast
		-77				Date		CITY OF CAMBRIDGE, M	IA Sheet G-2
						Job No.	Project	WILLARD STREET	Total Sheets
		IGINEERING, INC.				Designed by Drawn by	DRAINAC	GE IMPROVEMENTS F	0 22 00
	BOSTON, MASSA	STREET, SUITE 2300 ACHUSETTS 02110–2378			No. Description	Date Checked by	Drawing	ECEND AND ADDDE #ATTO	File No.
	(617	7) 357–7700			REVISIONS	Approved by	,	EGEND AND ABBREVIATIO	ONIN
					4				



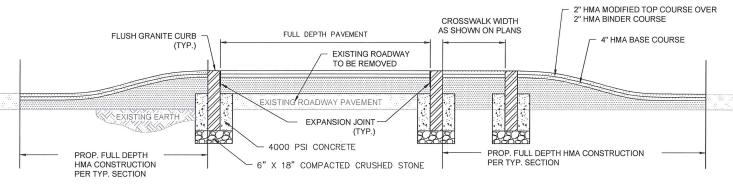




EXAMPLE OF RAISED INTERSECTION WITH CROSSWALK

CENTERLINE OF TRAVEL LANE (TYP.)

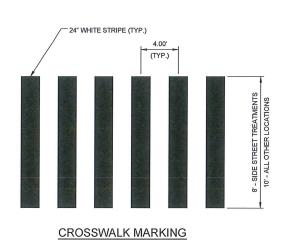


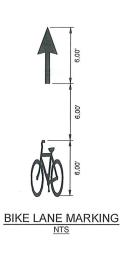


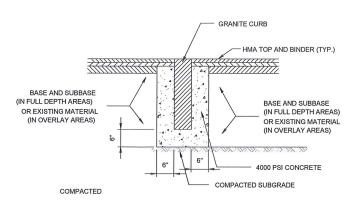
SECTION A-A

RAISED INTERSECTION WITH CROSSWALK DETAILS (ONE CROSSWALK SHOWN - TWO CROSSWALKS SIMILAR) NTS

	AS NOTED	Scale	Client	Sheet
L 12	AUGUST 2017	Date	CITY OF CAMBRIDGE, MA	RG-3
		Job No.	Project WILLARD STREET	Total Sheets
LIDD ENGINEEDING INC		Designed by		Total Sileets
HDR ENGINEERING, INC.		Drawn by	DRAINAGE IMPROVEMENTS PROJECT	
99 HIGH STREET, SUITE 2300 BOSTON, MASSACHUSETTS 02110–2378 (617) 357–7700	No. Description	Date Checked by	Drawing CONSTRUCTION DETAILS - 2	File No.
(617) 357-7/00	REVISIONS	Approved by		1



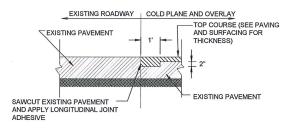




NOTE:

1. EXISTING MATERIAL SHALL BE USED IF DEEMED SUITABLE BY THE ENGINEER.

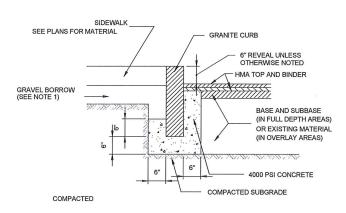
FLUSH GRANITE CURB INSTALLATION



NOTES:

1. CLEAN ALL COLD PLANED SURFACES BEFORE APPLYING JOINT ADHESIVE AND FINAL PAYEMENT.

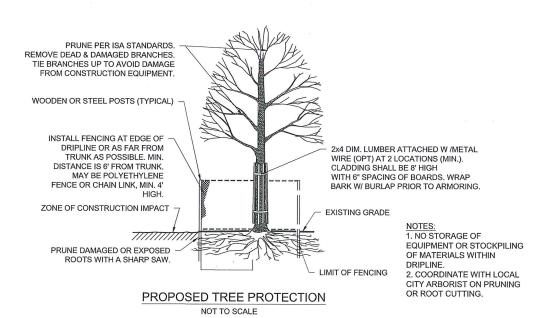
MATCH EXISTING PAVEMENT - OVERLAY

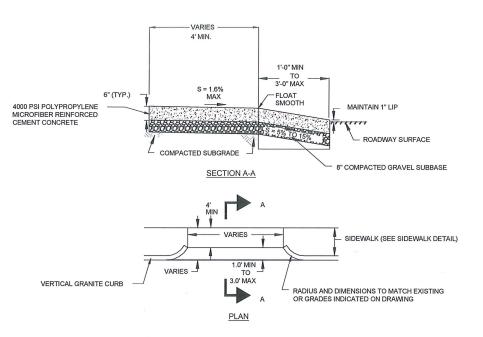


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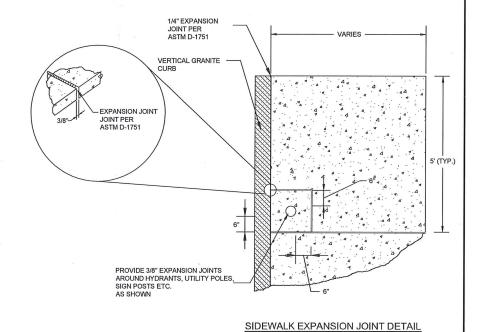
1. EXISTING MATERIAL SHALL BE USED IF DEEMED SUITABLE BY THE ENGINEER.

GRANITE CURB INSTALLATION





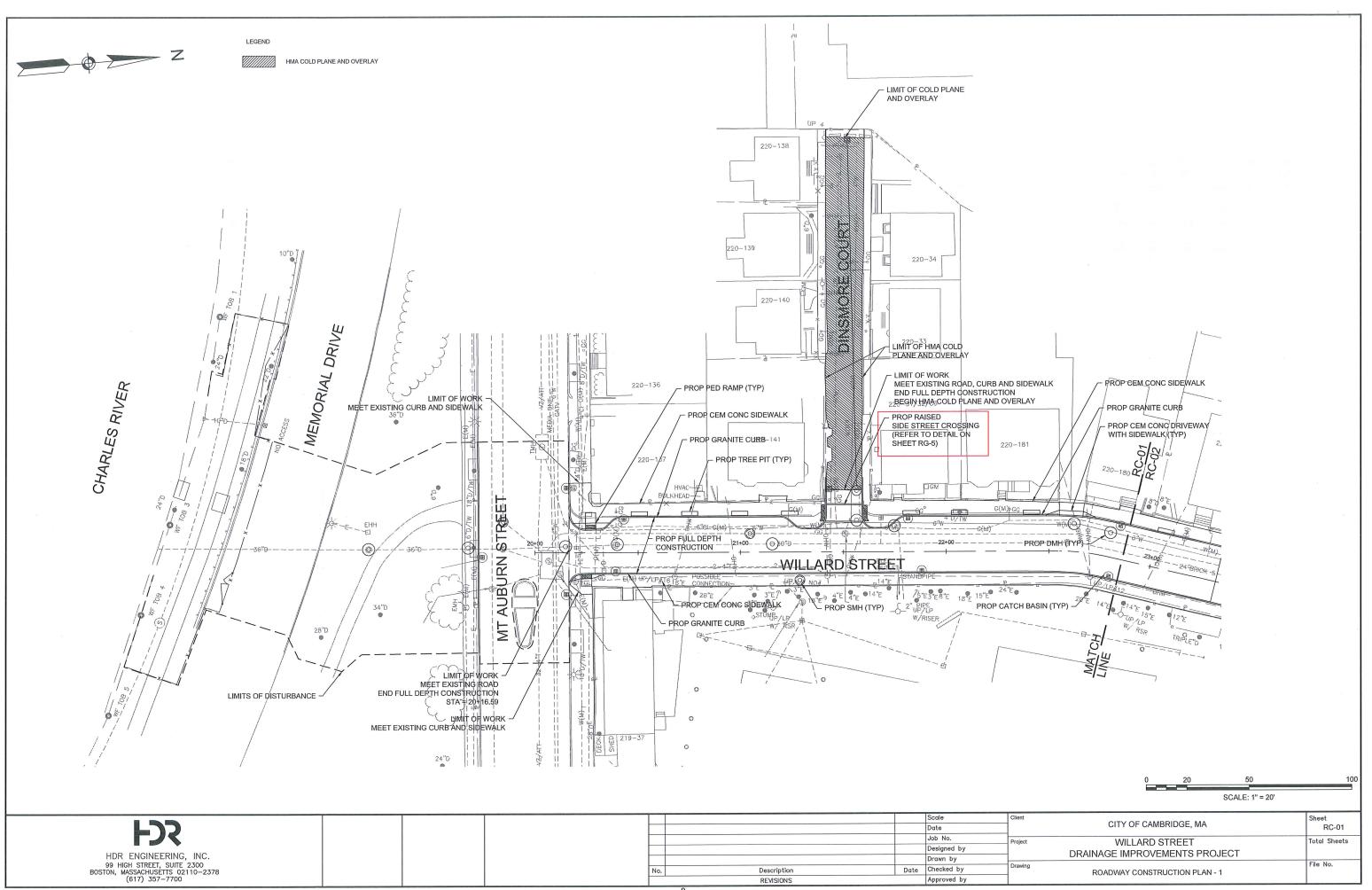
CONCRETE DRIVEWAY APRON

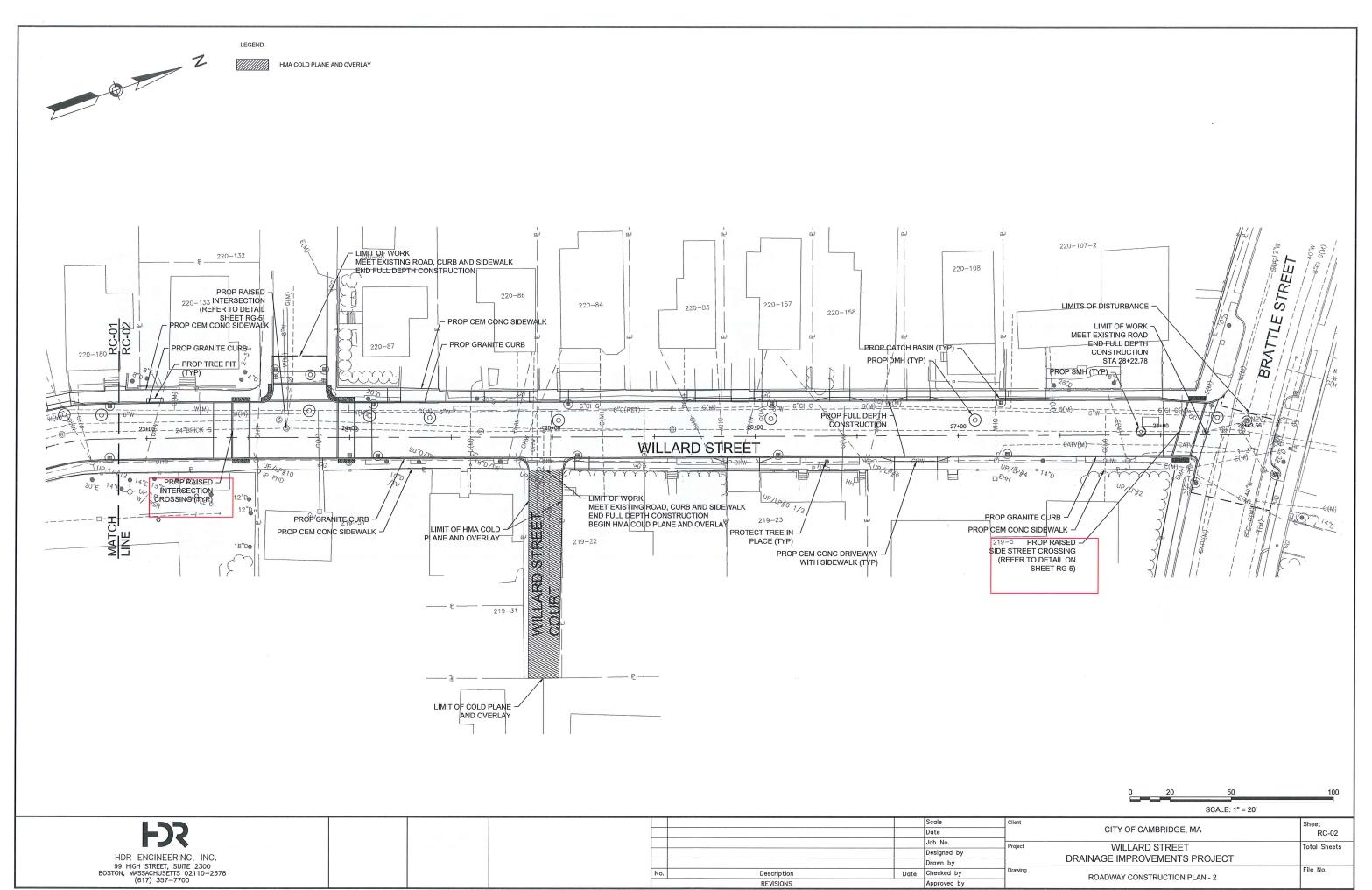


FD3

HDR ENGINEERING, INC. 99 HIGH STREET, SUITE 2300 BOSTON, MASSACHUSETTS 02110-2378 (617) 357-7700 AS NOTED
Scale
Date
Job No.
Designed by
Drawn by
Description
Date
Client
CITY OF CAMBRIDGE, MA
Sheet
RG-2

WILLARD STREET
DRAINAGE IMPROVEMENTS PROJECT
Drawing
CONSTRUCTION DETAILS -1
File No.





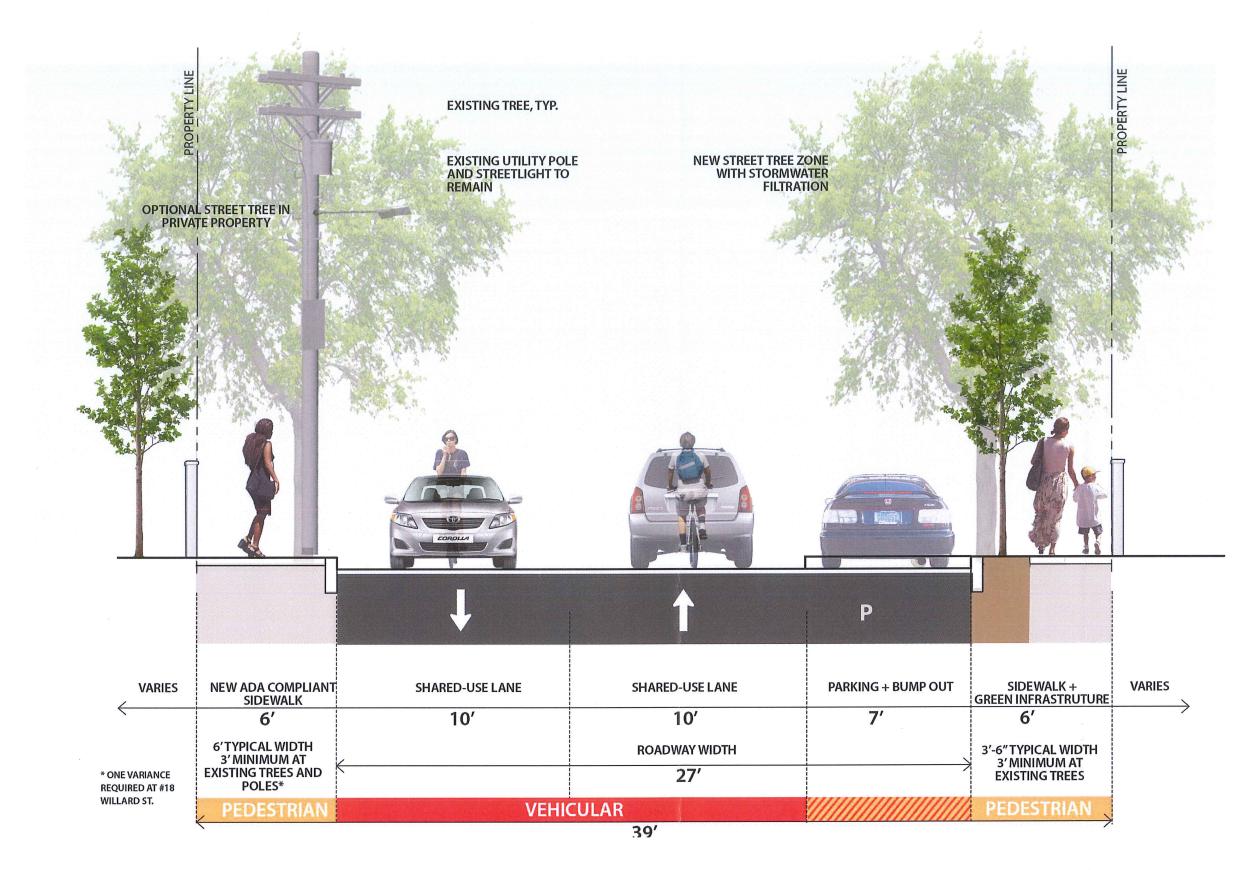


WILLARD STREET
CITY OF CAMBRIDGE, MA









PROPOSED STREET SECTION





