

GENERAL NOTES

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES DATED 1988, AS AMENDED, THE SUPPLEMENTAL SPECIFICATIONS DATED JULY 1, 2015, THE 2016 CONSTRUCTION STANDARD DETAILS, THE 2015 OVERHEAD SIGNAL STRUCTURE AND FOUNDATION STANDARD DRAWINGS, MASSDOT TRAFFIC MANAGEMENT PLANS AND DETAIL DRAWINGS, THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS WITH MASSACHUSETTS AMENDMENTS, THE 1990 STANDARD DRAWINGS FOR SIGNS AND SUPPORTS, THE 1968 STANDARD DRAWINGS FOR TRAFFIC SIGNALS AND HIGHWAY LIGHTING, AND THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION LAYOUT SURVEYS. THE CONTRACTOR SHALL EMPLOY A REGISTERED PROFESSIONAL SURVEYOR, REGISTERED IN THE COMMONWEALTH OF MASSACHUSETTS, TO COMPLETE ALL CONSTRUCTION LAYOUT IF NECESSARY.
3. THE ACCURACY AND COMPLETENESS OF ALL UNDERGROUND AND OVERHEAD UTILITIES AS SHOWN ON THE PLANS IS NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXACT LOCATION, SIZE, TYPE, DEPTH, ETC. OF ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE WORK. ALL TOWN-OWNED UTILITY STRUCTURES, WITHIN AREAS AFFECTED BY THE WORK, SHALL BE ADJUSTED OR REMODELED TO NEW LINE AND GRADE AS DIRECTED BY THE ENGINEER. ANY UTILITY AND/GUY POLES, WITHIN AREAS AFFECTED BY THE WORK, SHALL BE REMOVED AND RESET BY THE RESPECTIVE UTILITY COMPANY. ALTERATIONS TO UTILITIES AND UTILITY STRUCTURES NOT OWNED BY THE TOWN SHALL BE MADE BY THE RESPECTIVE UTILITY OWNERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE WORK IN ADVANCE WITH THOSE UTILITY OWNERS. THE CONTRACTOR MUST NOTIFY DIG-SAFE AT 1-811-344-7233 OR 1-888-344-7233 PRIOR TO ANY EXCAVATION IN PUBLIC OR PRIVATE WAYS, UTILITY COMPANY RIGHT-OF-WAY OR EASEMENT.
4. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY STRUCTURE SHALL BE ACCURATELY DETERMINED AS SOON AS POSSIBLE BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR THE RESOLUTION OF THE CONFLICT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING, BYPASSING AND SUPPORTING ALL EXISTING UTILITIES FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING OR REPLACING ANY UTILITIES DAMAGED DURING CONSTRUCTION.
6. THE CONTRACTOR SHALL VERIFY EXISTING GRADES. IF ANY ADJUSTMENT IS REQUIRED DUE TO DIFFERENT EXISTING GRADES FOUND IN THE FIELD, THE CONTRACTOR SHALL NOTIFY AND OBTAIN THE APPROVAL OF THE ENGINEER PRIOR TO PERFORMING THE WORK.
7. ALL TOPOGRAPHICAL FEATURES SUCH AS TREES, LIGHT POLES, SIGNS, BOUNDS, LANDSCAPING, FENCES, WALLS, ETC., SHALL BE RETAINED UNLESS NOTED OTHERWISE ON THE PLANS. CASTINGS SHALL BE RESET IN ACCORDANCE WITH NOTE 3.
8. BACK OF PROPOSED SIDEWALK SHALL BE IN SAME LOCATION AS BACK OF EXISTING SIDEWALK OR AT RIGHT OF WAY LIMIT UNLESS OTHERWISE NOTED ON THE PLANS.
9. ALL NEW GRANITE CURB SHALL BE MASSDOT HIGHWAY DIVISION TYPE VB. ANY NEW CURB TO BE USED AT THE BACK OF THE SIDEWALK SHALL BE MASSDOT HIGHWAY DIVISION TYPE VB AS SHOWN ON THE PLANS AND AS DIRECTED BY THE ENGINEER. ALL DRIVEWAY AND WHEELCHAIR RAMP TRANSITION CURB SHALL BE NEW GRANITE CURB. ALL OTHER EXISTING GRANITE CURB AND CURB INLETS SHALL BE REMOVED AND RESET UNLESS EXISTING CURB/INLET IS UNUSABLE. THE EXISTING PAVEMENT SHALL BE SAWCUT BY MEANS OF MECHANICAL SAW TO REMOVE AND RESET OR INSTALL CURBING.
10. CURB SHALL BE INSTALLED IN THE LOCATIONS AS SHOWN ON THE PLANS. ROADWAY SHALL BE SAWCUT PRIOR TO CURB INSTALLATION. SAWCUTTING SHALL BE CONSIDERED INCIDENTAL TO THE GENERAL WORK OF THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE MADE. HOT MIX ASPHALT PAVEMENT FOR PATCHING AFTER CURB INSTALLATION SHALL BE CONSIDERED INCIDENTAL TO THE GENERAL WORK OF THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE MADE.
11. ALL TREES WITHIN THE LIMITS OF WORK SHALL BE RETAINED AND PROTECTED UNLESS OTHERWISE NOTED ON THE PLANS.
12. WHEN WORKING NEXT TO EXISTING TREES, WALLS OR FENCES, THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION NOT TO DISTURB THE EXISTING WALLS, TREES OR FENCES. IF THE CONTRACTOR DOES DAMAGE ANY EXISTING TREES, WALLS OR FENCES AS A RESULT OF THE CONSTRUCTION PROCESS, IT SHALL BE HIS/HER RESPONSIBILITY (THE CONTRACTOR) TO REPAIR ALL DAMAGES AS DIRECTED BY THE ENGINEER. ALL WORK ASSOCIATED WITH THE REPAIR OR REPLACEMENT OF EXISTING TREES, WALLS OR FENCES SHALL BE CONSIDERED AS INCLUDED IN THE BID PRICE AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED THEREFORE.
13. EXISTING SIDEWALK, IN AREAS OF STONE, BRICK OR CONCRETE WALLS TO REMAIN, SHALL BE SAW-CUT 12 INCHES FROM THE EXISTING WALL AND EXCAVATED, BY MACHINE, UP TO THAT SAW-CUT LINE. EXCAVATION OF THE REMAINDER OF THE EXISTING SIDEWALK, FROM THE SAW-CUT LINE TO THE EXISTING WALL, SHALL BE DONE BY "HAND-WORK," AS DIRECTED BY THE ENGINEER. SAWCUTTING SHALL BE CONSIDERED INCIDENTAL TO THE GENERAL WORK OF THE PROJECT AND NO ADDITIONAL COMPENSATION SHALL BE MADE.
14. IN AREAS OF NEW SIDEWALK, NEW EDGE OF PAVEMENT OR CURB WITHOUT SIDEWALK OR ANY WORK ADJACENT TO EXISTING GRASS AREAS, EVEN WHEN NO SLOPE-MATCHING OR GRADING IS NECESSARY AND THE EXISTING GRADE IS MET, LOAM AND SEED SHALL BE PROVIDED AS NECESSARY TO REPAIR ANY DAMAGE TO THE GRADE CAUSED BY THE CONSTRUCTION PROCESS, AS DIRECTED BY THE ENGINEER.
15. ALL AREAS OUTSIDE THE LIMITS OF THE PROPOSED WORK THAT HAVE BEEN DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT THE CONTRACTOR'S EXPENSE, TO THE SATISFACTION OF THE ENGINEER AND THE PROPERTY OWNER.
16. JOINTS BETWEEN EXISTING HOT MIX ASPHALT (HMA) ROADWAY PAVEMENT AND SAW-CUT TO REMOVE AND INSTALL CURB SHALL BE SEALED WITH BITUMEN AND BACKSANDDED.
17. MAILBOXES, FENCES, ETC., THAT NEED TO BE RELOCATED SHALL BE REMOVED AND RESET (R&R) IN THEIR NEW LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER. THE OWNER SHALL BE CONSULTED PRIOR TO THE WORK. ALL FENCES AND LANDSCAPING SHALL BE RETAINED AS NOTED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
18. TRAFFIC CONTROLS FOR CONSTRUCTION OPERATIONS SHALL BE IN ACCORDANCE WITH MASSDOT HIGHWAY DEPARTMENT REQUIREMENTS AND THE 2009 MUTCD WITH LATEST REVISIONS.
19. SURPLUS MATERIALS OBTAINED FROM ANY TYPE OF EXCAVATION, AND ALL EXISTING AND OTHER MATERIALS NOT REQUIRED TO BE REMOVED AND STACKED OR NEEDED FOR USE ON THE PROJECT, AS DETERMINED BY THE ENGINEER, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND DISPOSED OF SUBJECT TO THE REGULATIONS AND REQUIREMENTS OF LOCAL AUTHORITIES GOVERNING THE DISPOSAL OF SUCH MATERIALS, AT NO ADDITIONAL COMPENSATION
20. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN PROPER WATER AND SEWER SERVICE IN THE AREAS UNDER CONSTRUCTION. ALL WORK RELATED TO WATERWORKS AND SEWER IMPROVEMENTS SHALL BE DONE IN ACCORDANCE WITH THE TOWN OF DEDHAM STANDARD DRAWING AND DETAILS. THE CONTRACTOR SHALL COORDINATE WITH THE TOWN TO OBTAIN A COPY OF ALL THE LATEST RELEVANT STANDARDS PRIOR TO CONSTRUCTION. ALL WORK NECESSARY TO LEAVE THE WATER AND SEWER FACILITIES IN A CLEAN AND OPERABLE CONDITION INCLUDING ANY TEMPORARY FACILITIES, TESTING OR DISINFECTION SHALL BE CONSIDERED INCIDENTAL TO THE WORK OF THE VARIOUS WATER AND SEWER PAY ITEMS. NO ADDITIONAL COMPENSATION SHALL BE MADE.
21. ACCESS FOR ABUTTERS SHALL BE MAINTAINED AT ALL TIMES. THE CONTRACTOR SHALL ERECT TEMPORARY FENCING AS REQUIRED TO SECURE THE SITE FOR THE PURPOSE OF PUBLIC SAFETY. THE WORK SHALL INCLUDE FURNISHING, INSTALLING, MAINTAINING, REMOVING, RESETTING, AND FINAL REMOVAL OF CHAIN-LINK FENCE IN A LOCATION DIRECTED BY THE ENGINEER. THE FENCE SHALL BE USED TO CLOSE OFF THE CONSTRUCTION AREA FROM ADJACENT SIDEWALKS AND PUBLIC WAYS WHOSE USE CONFLICTS WITH THE CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL REPLACE AND/OR RESTORE SECTIONS OF FENCE DAMAGED DUE TO THE CONSTRUCTION, AND/OR ACCIDENTS, VANDALISM OR IN ANY OTHER MANNER FOR THE DURATION OF THE PROJECT. ALL WORK TO FURNISH, INSTALL, RELOCATE AND REMOVE TEMPORARY FENCING SHALL BE CONSIDERED INCIDENTAL TO AND NO SEPARATE PAYMENT WILL BE MADE.
22. TRAFFIC CONTROL MEASURES INCLUDING BUT NOT LIMITED TO DRUMS, CONES, SIGNS AND BARRICADES AS REQUIRED TO COMPLETE THE WORK SHALL BE CONSIDERED INCIDENTAL TO THE GENERAL WORK OF THE CONTRACT AND NO SEPARATE PAYMENT SHALL BE MADE.
23. ON-THE-GROUND SURVEY PROVIDED BY LIGHTHOUSE LAND SURVEY. DATED: APRIL, 2017. THE HORIZONTAL DATUM IS REFERENCED TO THE NORTH AMERICAN DATUM OF 1983 (NAD83). THE VERTICAL DATUM IS BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).

WHEELCHAIR RAMP NOTES

1. ALL WHEELCHAIR RAMPS SHALL CONFORM TO THE REQUIREMENTS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (AAB), THE AMERICANS WITH DISABILITIES ACT (ADA) AND THE LATEST MASSDOT HIGHWAY DIVISION WHEELCHAIR RAMP STANDARDS.
2. THE LOCATIONS OF THE PROPOSED WHEELCHAIR RAMPS ARE SHOWN ON THE CONSTRUCTION PLANS. ADDITIONAL TYPICAL DETAILS ARE SHOWN IN THE CONSTRUCTION DETAILS.
3. PROPOSED WHEELCHAIR RAMP SLOPES SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO THE POURING OF CONCRETE, AND ADJUSTED, IF NECESSARY, TO CONFORM TO THE LATEST ADAAG/PROWAG/MAAB STANDARDS, AS DIRECTED BY THE ENGINEER.
4. ALL PROPOSED CURB FOR WHEELCHAIR RAMP TRANSITIONS SHALL BE CUT AND TRANSITIONED AS NECESSARY TO PROVIDE THE CORRECT TRANSITION LENGTHS FOR EACH WHEELCHAIR RAMP, AS SHOWN ON THE WHEELCHAIR RAMP DETAILS OR AS DIRECTED BY THE ENGINEER. ANY EXISTING CURB INLETS IN AREAS OF NEW WHEELCHAIR RAMP TRANSITIONS SHALL BE REMOVED AND REPLACED WITH APPROPRIATE TRANSITION CURB AS DIRECTED BY THE ENGINEER.
5. IN NO CASE, EXCEPT FOR MAXIMUM LENGTH HIGH SIDE TRANSITIONS (SLOPES GREATER THAN 4%) SHALL ANY TRANSITION SLOPE OF ANY WHEELCHAIR RAMP EXCEED 7.5%.
6. WHEN PLACEMENT OF THE PROPOSED WHEELCHAIR RAMP IS SUCH THAT IT IS UNAVOIDABLE FOR EXISTING STRUCTURES, THAT CANNOT BE MOVED OR RESET, TO BE WITHIN THE WHEELCHAIR RAMP, EXTREME CARE SHALL BE TAKEN SUCH THAT THE EXISTING STRUCTURE IS WITHIN THE RAMP TRANSITIONS ONLY, IF POSSIBLE, WHEN THE NEW WHEELCHAIR RAMP IS PLACED AND THAT A FOUR FOOT WIDE (MIN). CLEAR PATH OF TRAVEL EXISTS BETWEEN THE EXISTING STRUCTURE AND EITHER THE CURBLINE OR THE BACK OF SIDEWALK, AS DIRECTED BY THE ENGINEER.
7. IN RARE INSTANCES WHERE AN EXISTING MANHOLE, HANDHOLE OR OTHER EXISTING "SURFACE" TYPE STRUCTURE WHICH CANNOT BE REMOVED AND RESET, IS WITHIN THE ACTUAL WHEELCHAIR RAMP PATH, THE STRUCTURE SHALL BE CAREFULLY ADJUSTED SUCH THAT THE TOPMOST SURFACES OF THE STRUCTURE COVER SHALL BE FLUSH WITH THE NEW RAMP SURFACE AND SHALL MATCH THE SLOPE OF THE NEW WHEELCHAIR RAMP EXACTLY, AS DIRECTED BY THE ENGINEER.
8. ALL WHEELCHAIR RAMPS WITHIN THE PROJECT LIMITS SHALL HAVE DETECTABLE WARNING PANELS INSTALLED IN ACCORDANCE WITH MASSDOT STANDARD DRAWING E 107.6.5.

PAVEMENT NOTES

HMA SIDEWALKS

SURFACE COURSE: 1-1/4" HMA TOP COURSE OVER
1-1/4" HMA BASE COURSE OVER

BASE COURSE: 8" GRAVEL BORROW, TYPE b

CEMENT CONCRETE WHEELCHAIR RAMP

SURFACE COURSE: 4" CEMENT CONCRETE SURFACE
4000 PSI, 3/4", 610 OVER


BASE COURSE: 8" GRAVEL BORROW, TYPE b

HMA DRIVEWAYS

SURFACE COURSE: 1-1/2" HMA TOP COURSE OVER
2" HMA BASE COURSE OVER

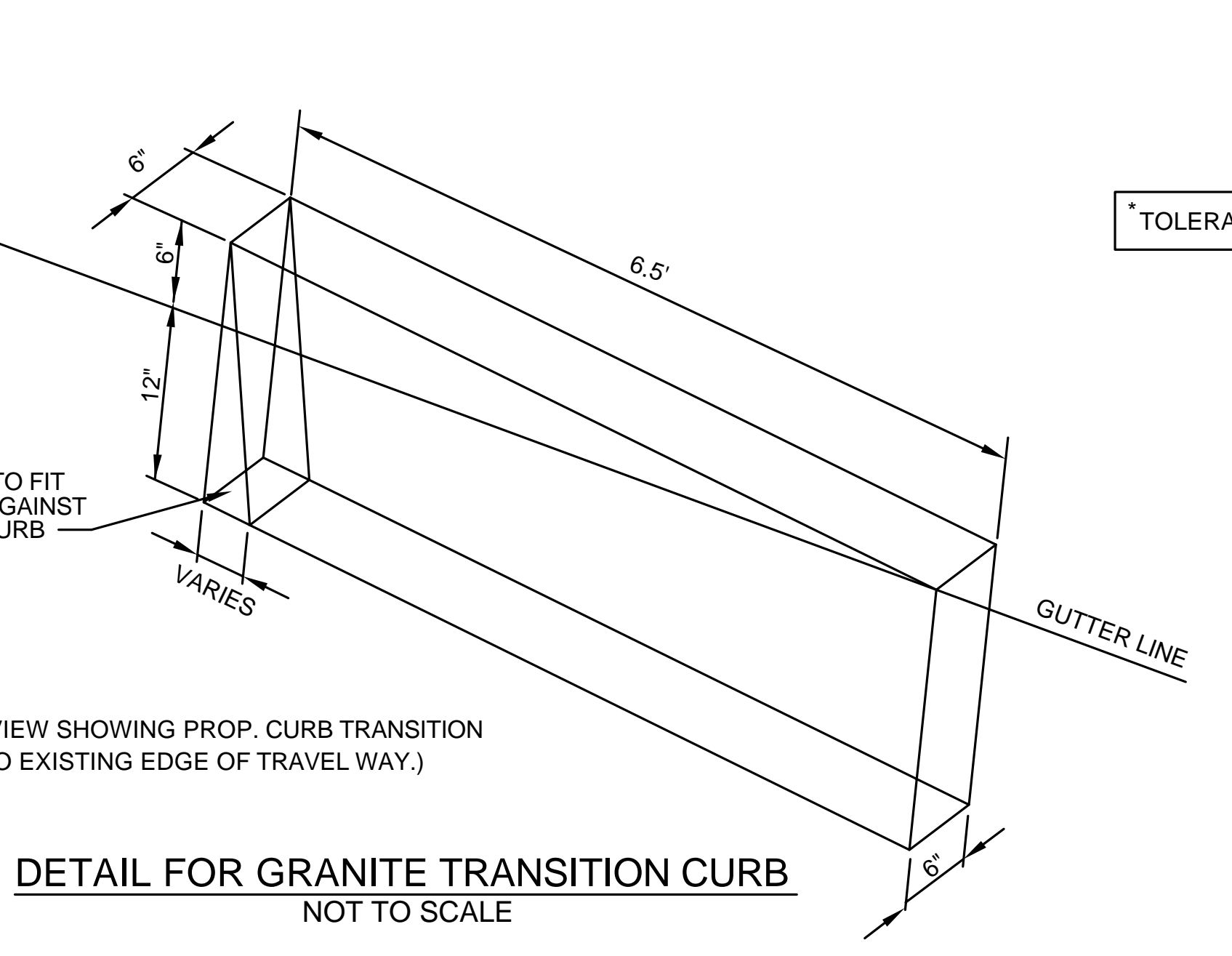
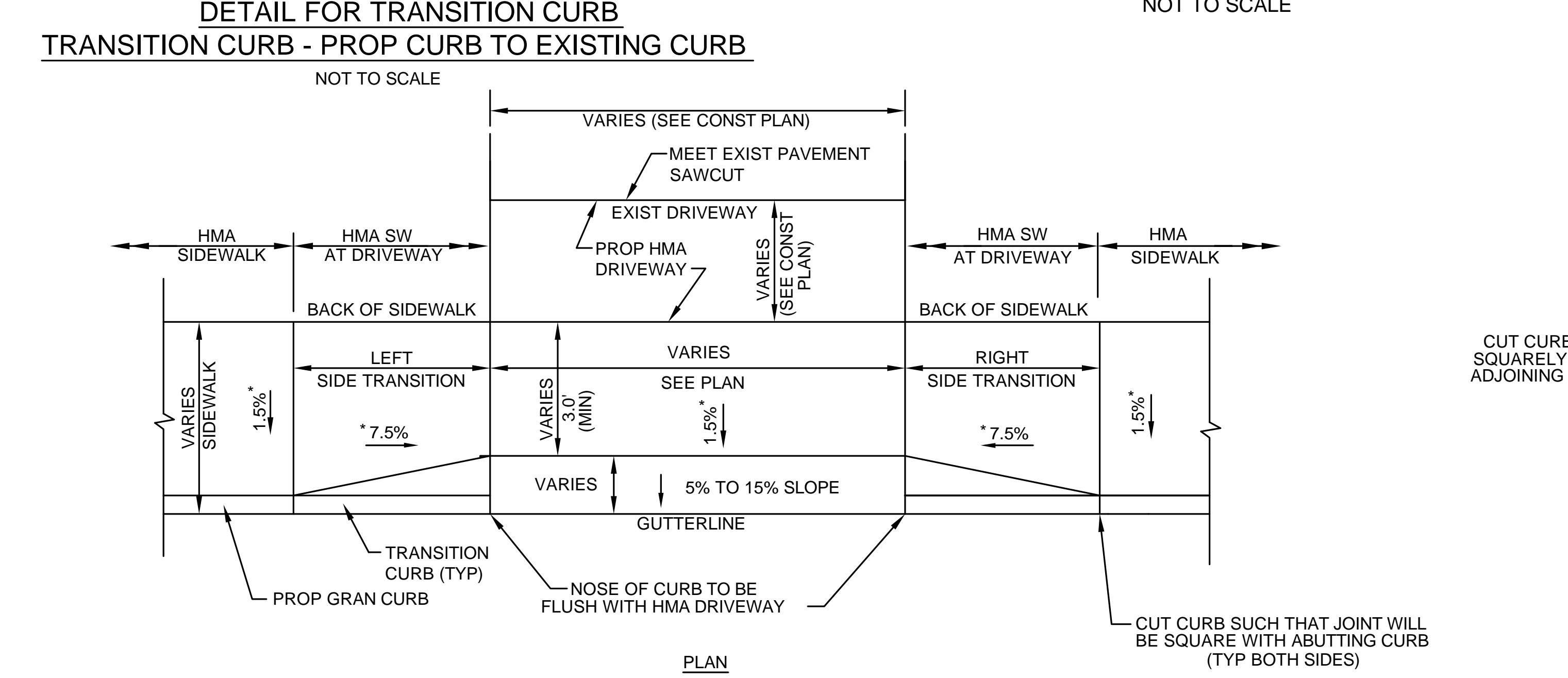
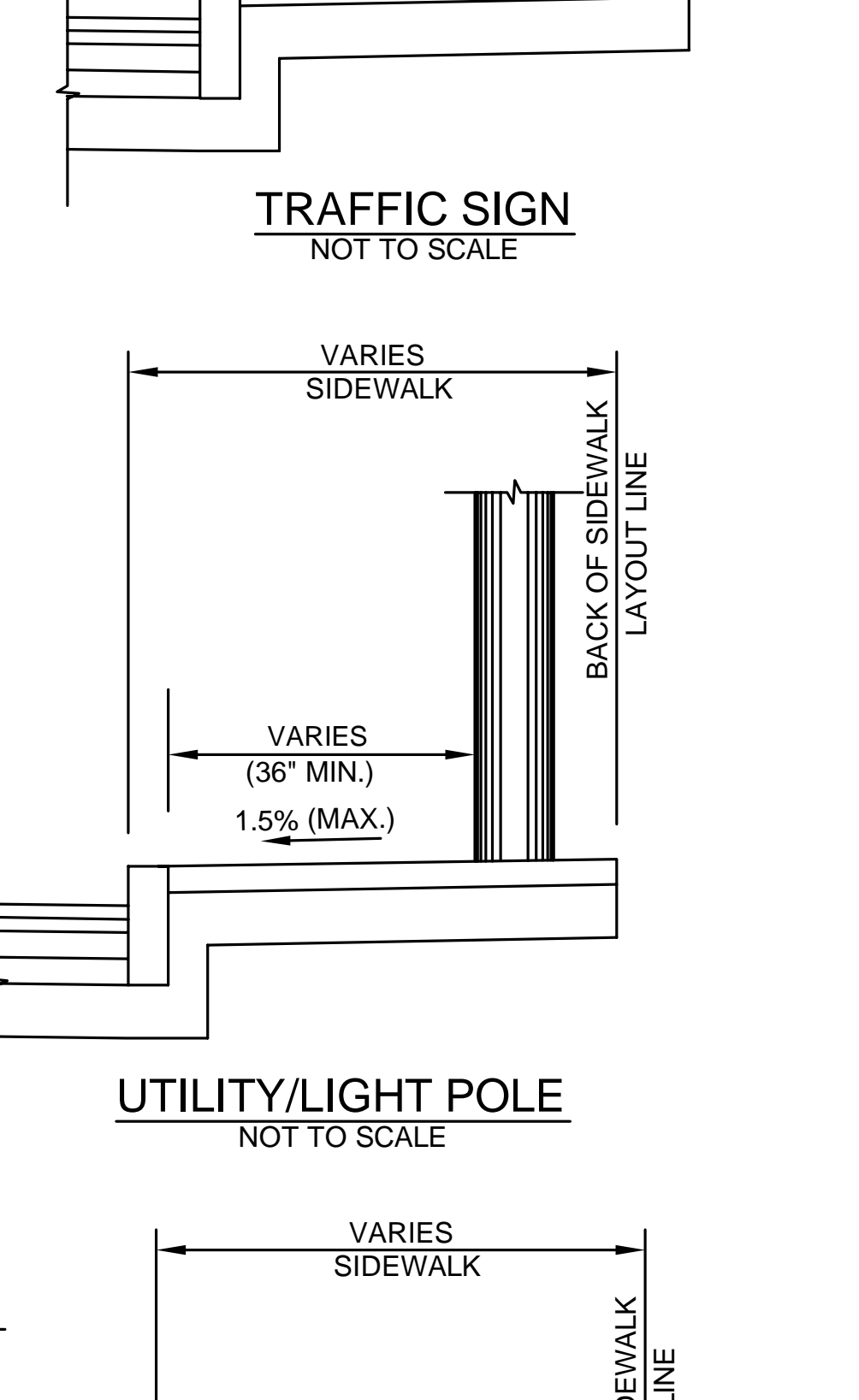
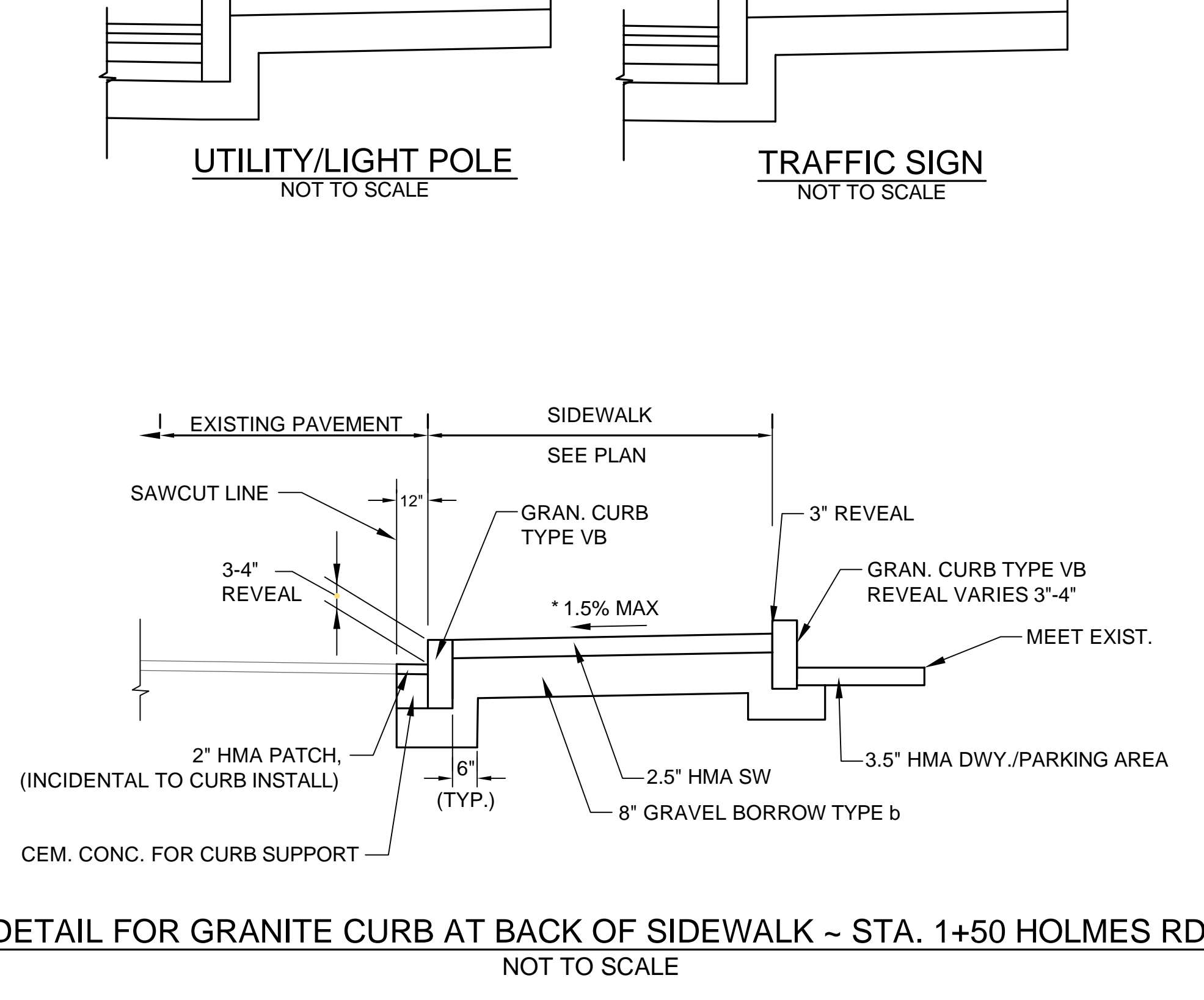
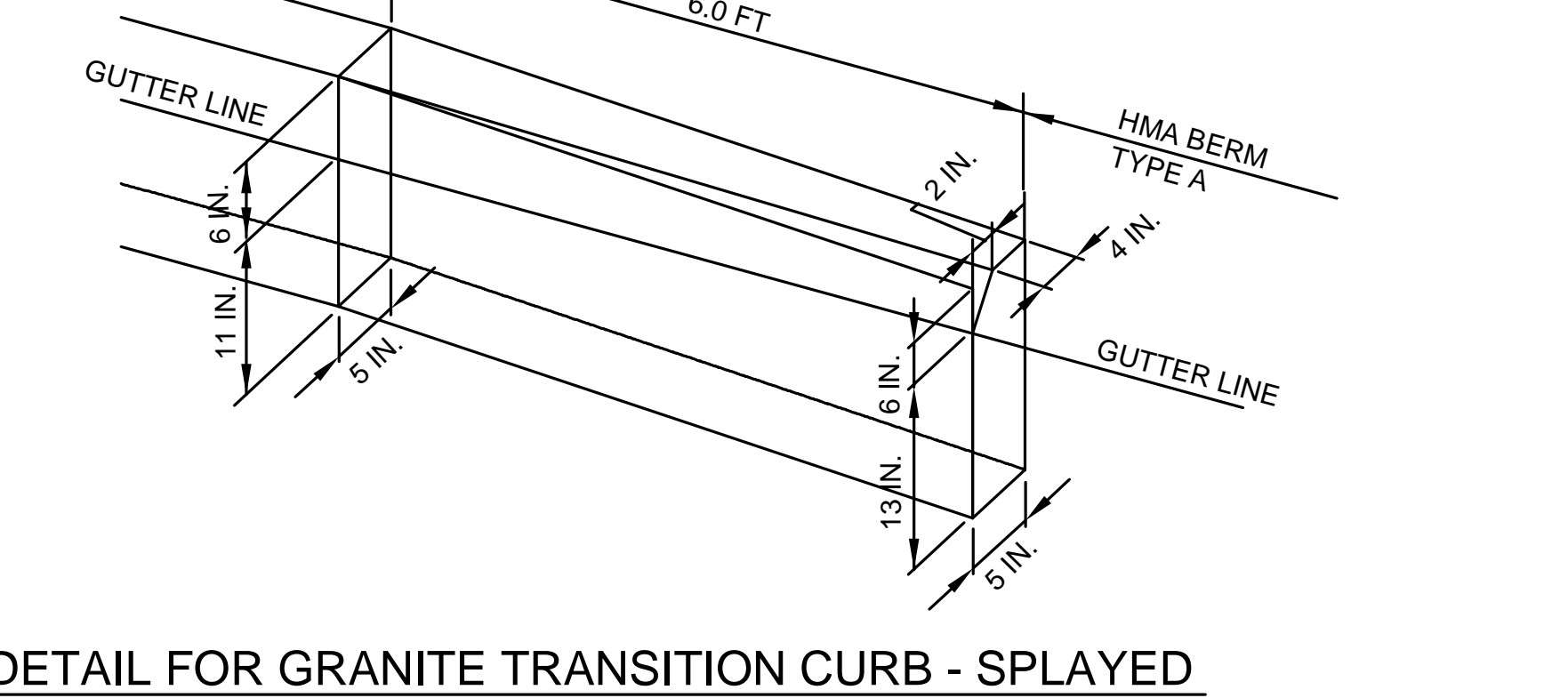
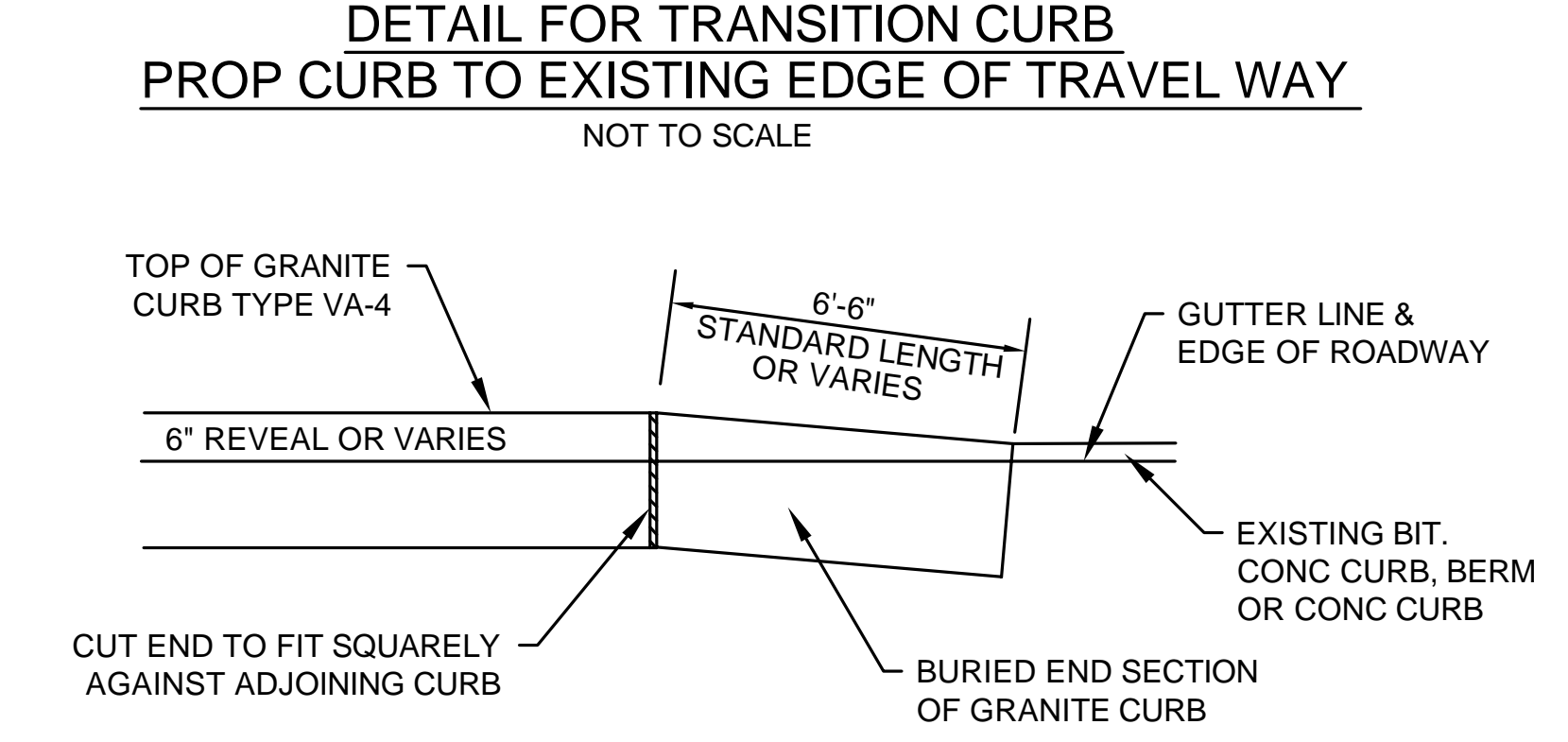
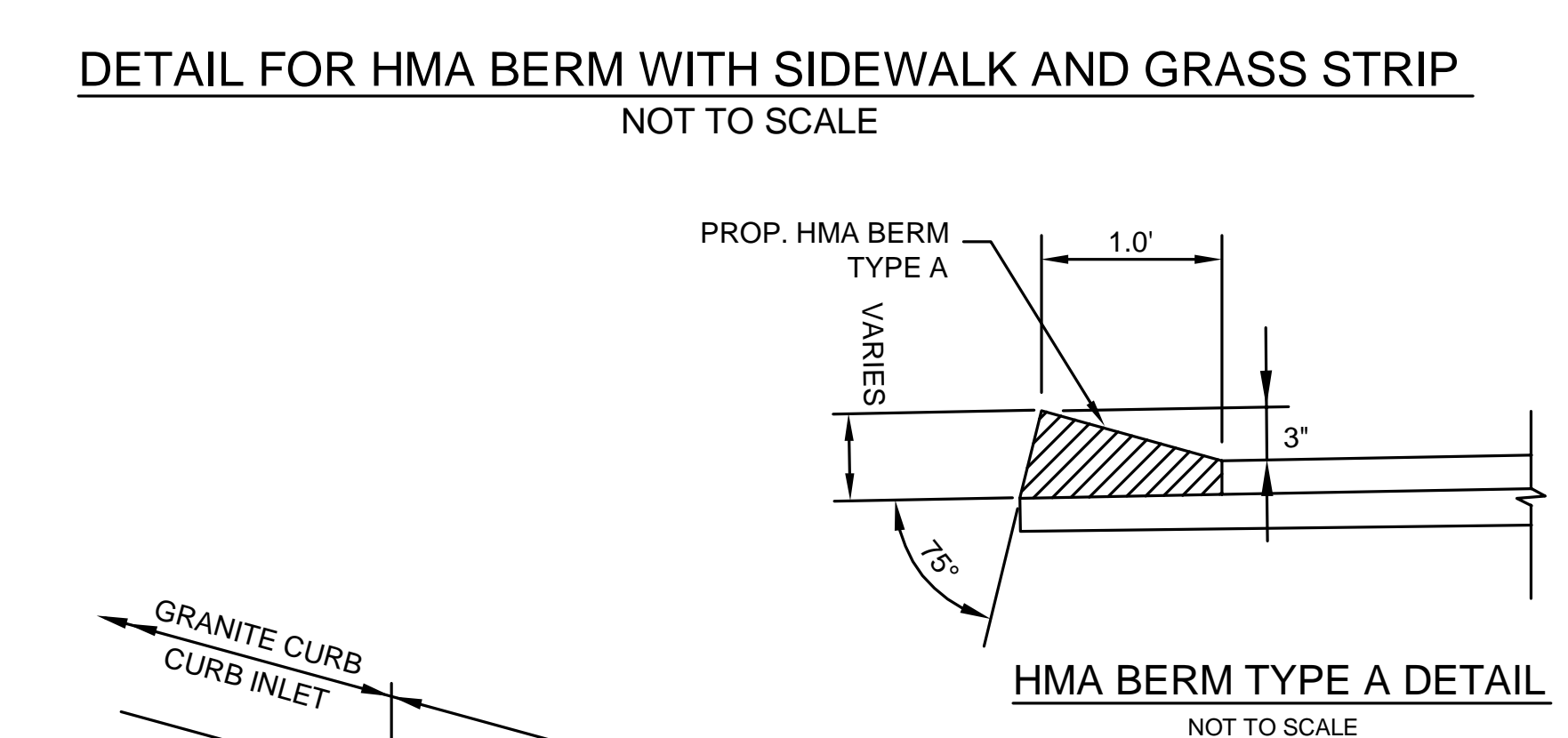
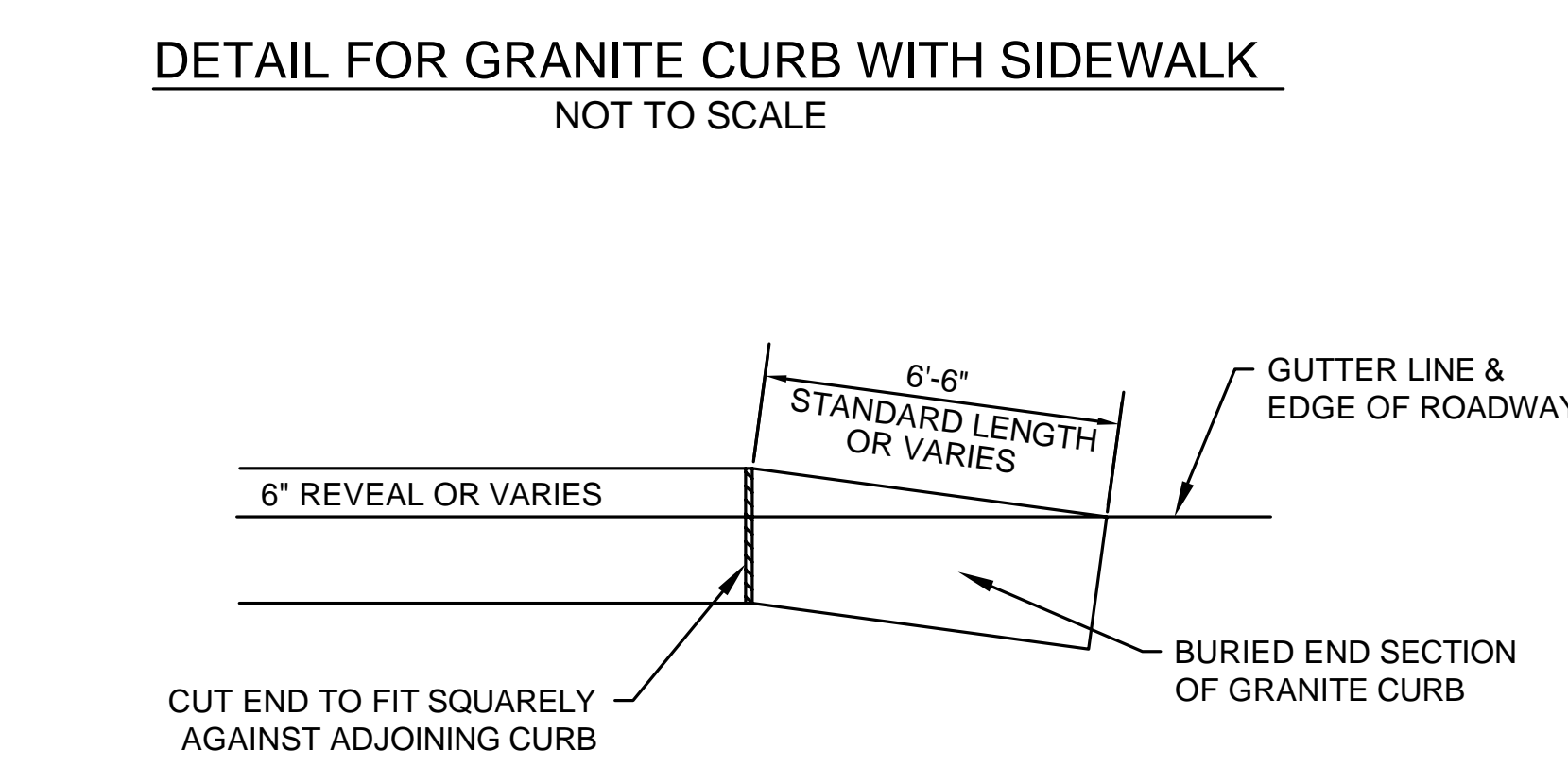
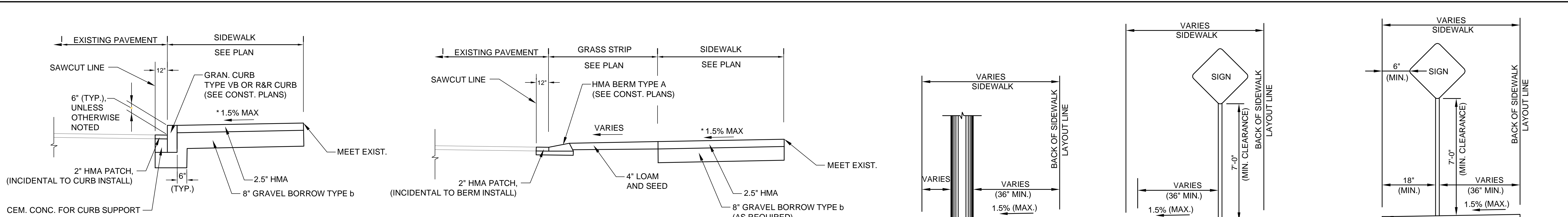
BASE COURSE: 8" GRAVEL BORROW, TYPE b

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				DRAWN BY: CJT	REGISTERED PROFESSIONAL	PREPARED BY	SUBCONSULTANT	SCALE	TITLE MCDONALD SQUARE SIDEWALK IMPROVEMENTS DEDHAM, MASSACHUSETTS	BETA JOB NO. 5613
				DESIGNED BY: CJT	FINAL 10/06/2017					ISSUE DATE 10/6/17
				CHECKED BY: DJ						
NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS						

UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

GENERAL NOTES



NOTES:

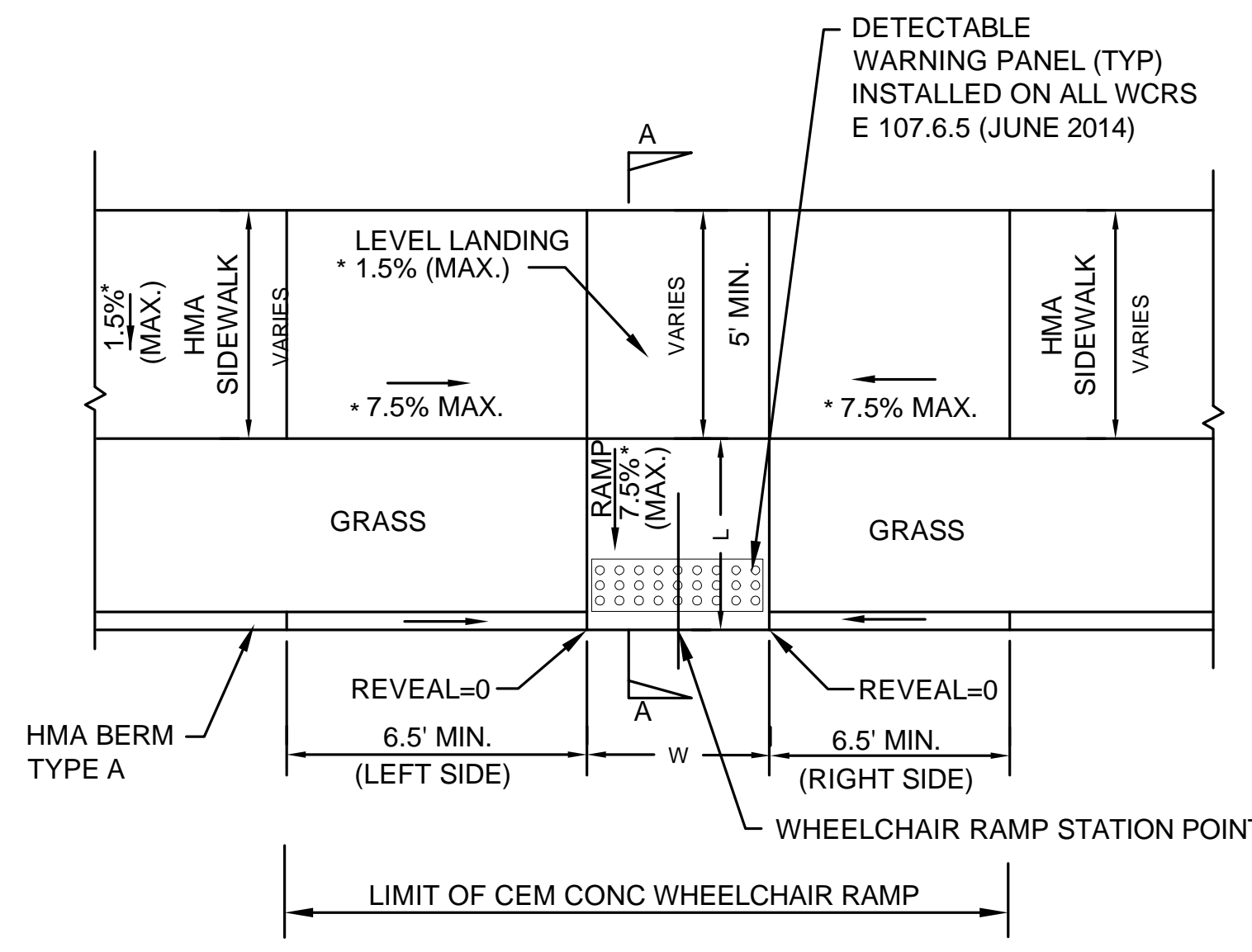
1. MINIMUM CLEAR PATH ON ALL SIDEWALKS SHALL BE 36 INCHES, EXCLUDING THE CURB.
2. CONTRACTOR SHALL VERIFY LOCATION OF ALL OBJECTS (SIGNS, POLES ETC.) TO BE SET WITHIN SIDEWALK PRIOR TO FINAL PLACEMENT TO PROVIDE A MINIMUM CLEAR PATH OF 36 INCHES. CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY LOCATION WHICH CANNOT MEET THE CLEARANCE REQUIREMENTS.

* TOLERANCE FOR CONSTRUCTION ±0.5%

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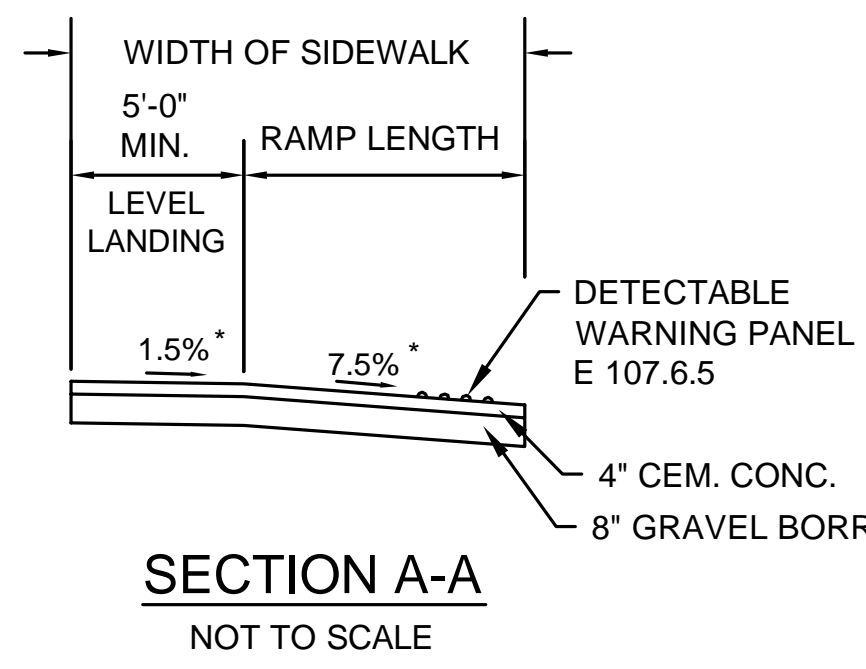
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				DESIGNED BY: CJT	FINAL 10/06/2017	BETA www.BETA-inc.com				ISSUE DATE 10/6/17
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WHEELCHAIR RAMP DETAIL TYPE "B"
NOT TO SCALE

*TOLERANCE FOR CONSTRUCTION ±0.5%
** POSITIVE GUTTER SLOPE INDICATES GUTTER RISING TO THE RIGHT WHEN FACING DRIVEWAY/WCR



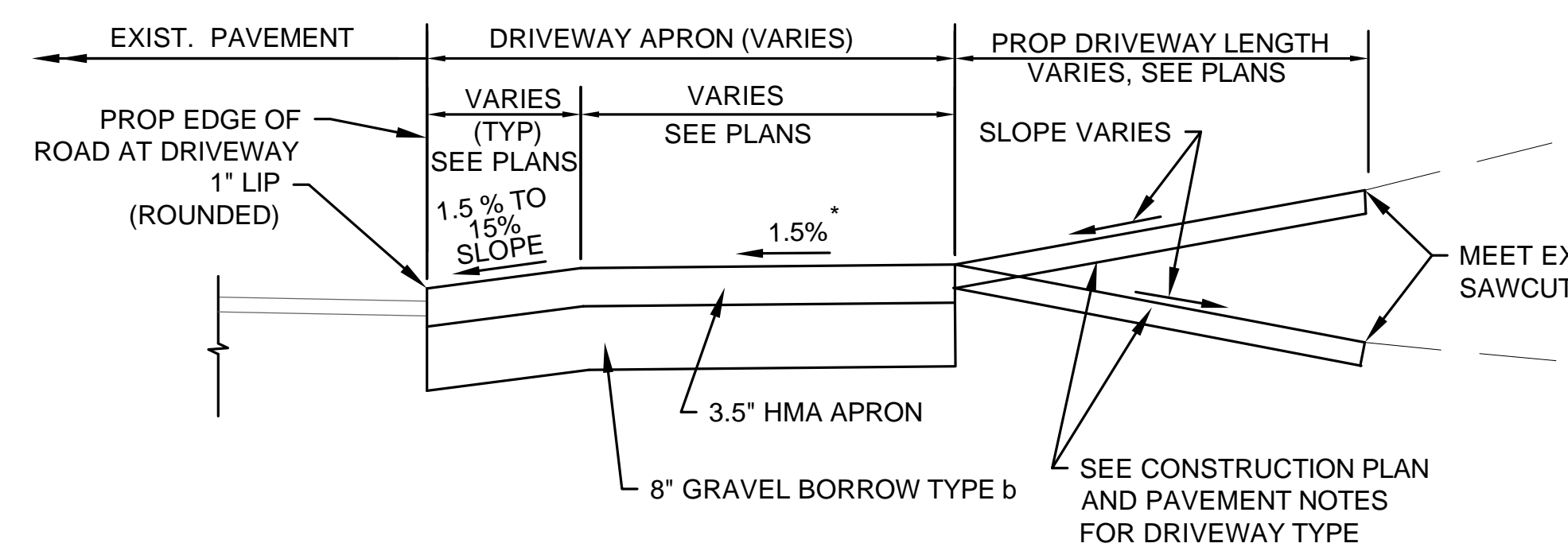
SECTION A-A
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TABLE 1	
PROFILE GRADE	HIGH SIDE TRANSITION LENGTH FOR 7.5% DESIGN SLOPE (FEET)
0	6'-6"
>0-1	7'-8"
>1-2	9'-0"
>2-3	11'-0"
>3-4	14'-0"
>4	15'-0" MAX.

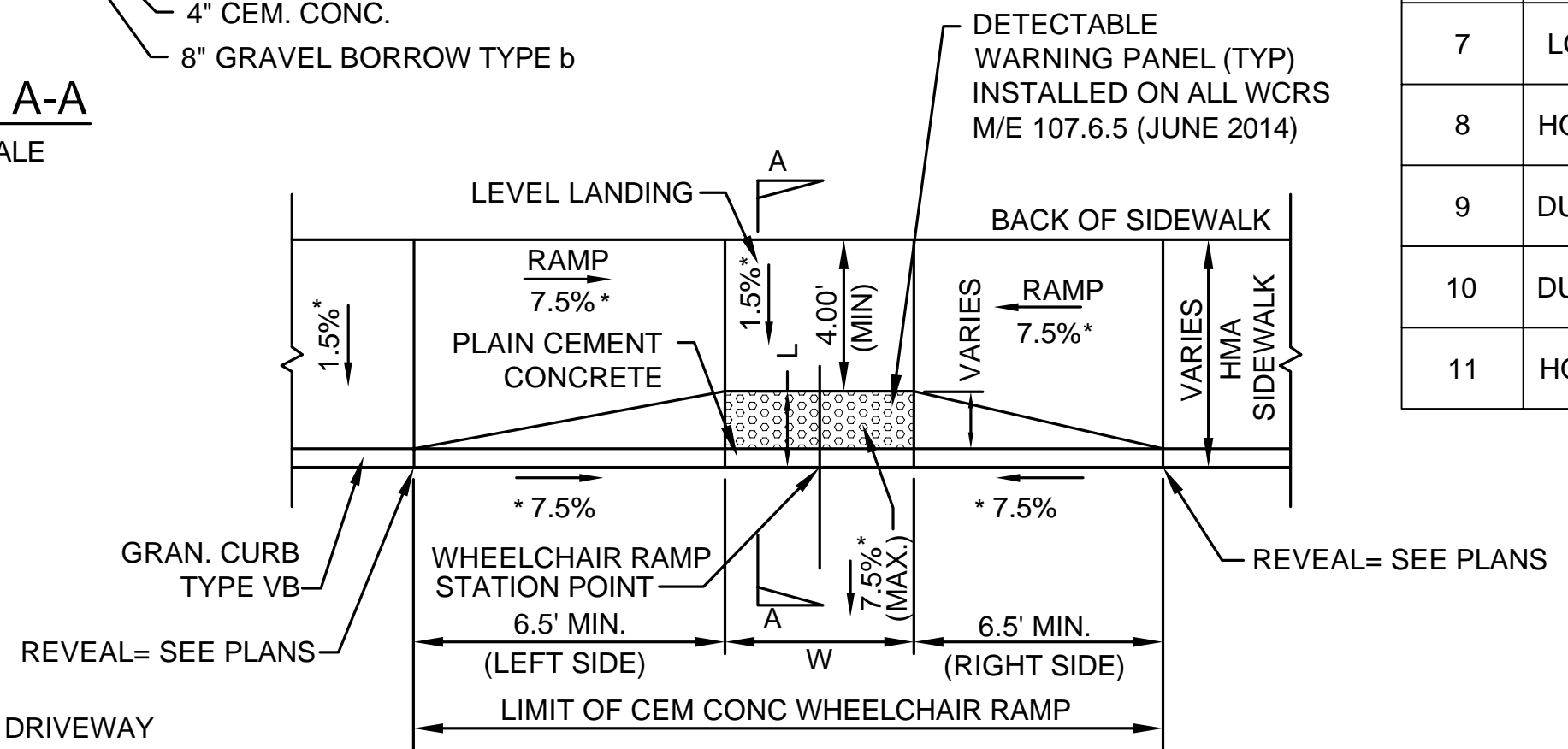
WHEELCHAIR RAMP HIGH SIDE TRANSITION LENGTHS

FIGURES ARE BASED ON A DESIGN SLOPE OF 7.5% AND A REVEAL OF 6".

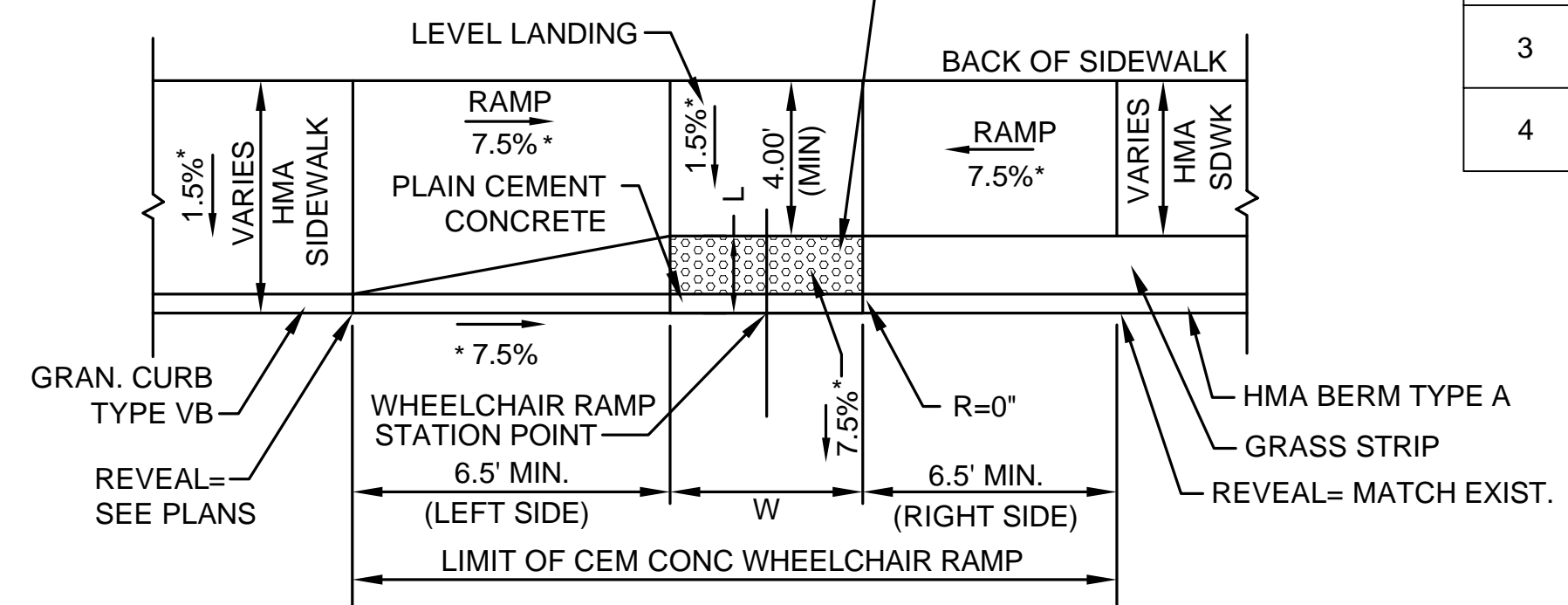
WHEEL CHAIR RAMP DATA											
WCR NO.	LOCATION	RAMP REFERENCE POINT		GUTTER PROFILE SLOPE	LENGTH OF PRIMARY RAMP L	WIDTH OF RAMP OPENING W	DEPTH OF LEVEL LANDING (MIN. 4.0')	TRANSITION LENGTH		SIDEWALK WIDTH	WCR TYPE
		STATION	OFFSET					LEFT	RIGHT		
1	HOLMES RD.	1+48.5	17.3' RT	1.30%	7'	8.5'	4.0'	N/A	7.67' (3" R)	5.0'	C
2	SHERMAN RD.	0+64.6	12.4' RT	0.84%	4.0'	5.0'	4.5'	6.50' (4" R)	N/A	4'-8.5'	D
3	BONHAM RD.	1+61	12' RT	0.84%	4.0'	5.0'	4.0'	3.50' (3" R)	3.50' (3" R)	4.0'	B
4	BONHAM RD.	1+63.4	12.3' LT	0.65%	3.0'	5.0'	4.0'	N/A	6.50' (4" R)	7.0'	E
5	LOUISE RD.	2+87.9	17.5' RT	0.50%	0'	5.0'	5.5'	6.50' (4" R)	3.25' (3" R)	5.5'	A
6	HOOPER RD.	0+73.8	21.4 LT	2.50%	N/A	5.0'	5.7'	N/A	6.50' (3" R)	6.9'	E
7	LOUISE RD.	2+87.7	11.4' LT	0.69%	0'	5.0'	5.8'	6.50' (5" R)	6.50' (4" R)	5.2'-6.2'	A
8	HOOPER RD.	0+75	12.2' RT	0.61%	3.5'	5.0'	4.0'	6.50' (4" R)	N/A	7.5'	E
9	DURHAM RD.	0+95.5	13.69' LT	1.20%	2.5'	5.0'	4.0'	7.50' (5" R)	9.00' (7" R)	7.2'	A
10	DURHAM RD.	0+93.4	14.89' RT	2.01%	4.1'	5.0'	4.0'	6.50' (6" R)	11.0' (6" R)	5.0'-7.1'	A
11	HOLMES RD.	1+48.7	15.72' LT	0.65%	0'	5.0'	5.3'	6.50' (3" R)	6.50' (4" R)	5.1'-5.9'	A



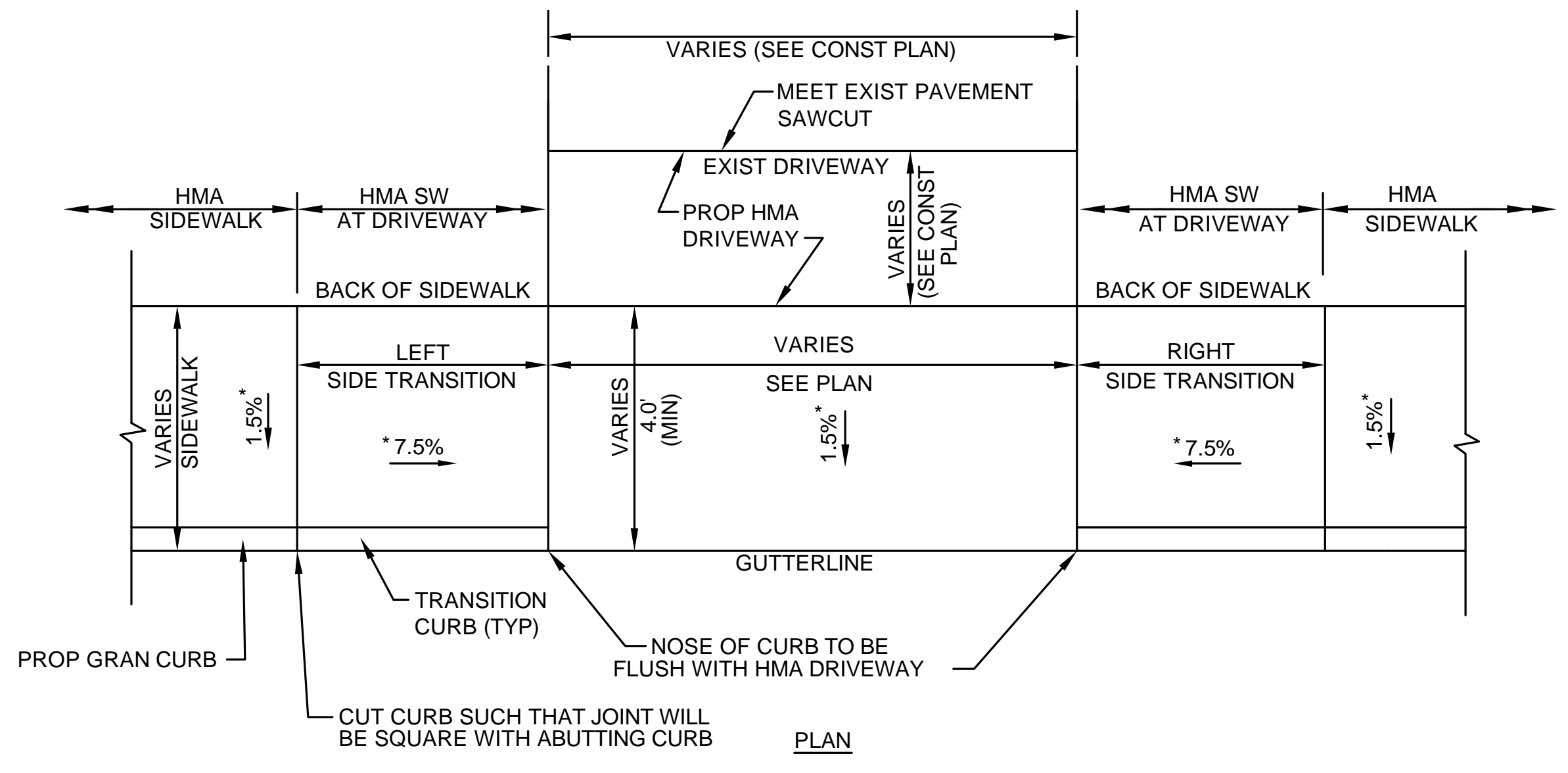
SECTION FOR TYPICAL HMA DRIVEWAY WITH SIDEWALK
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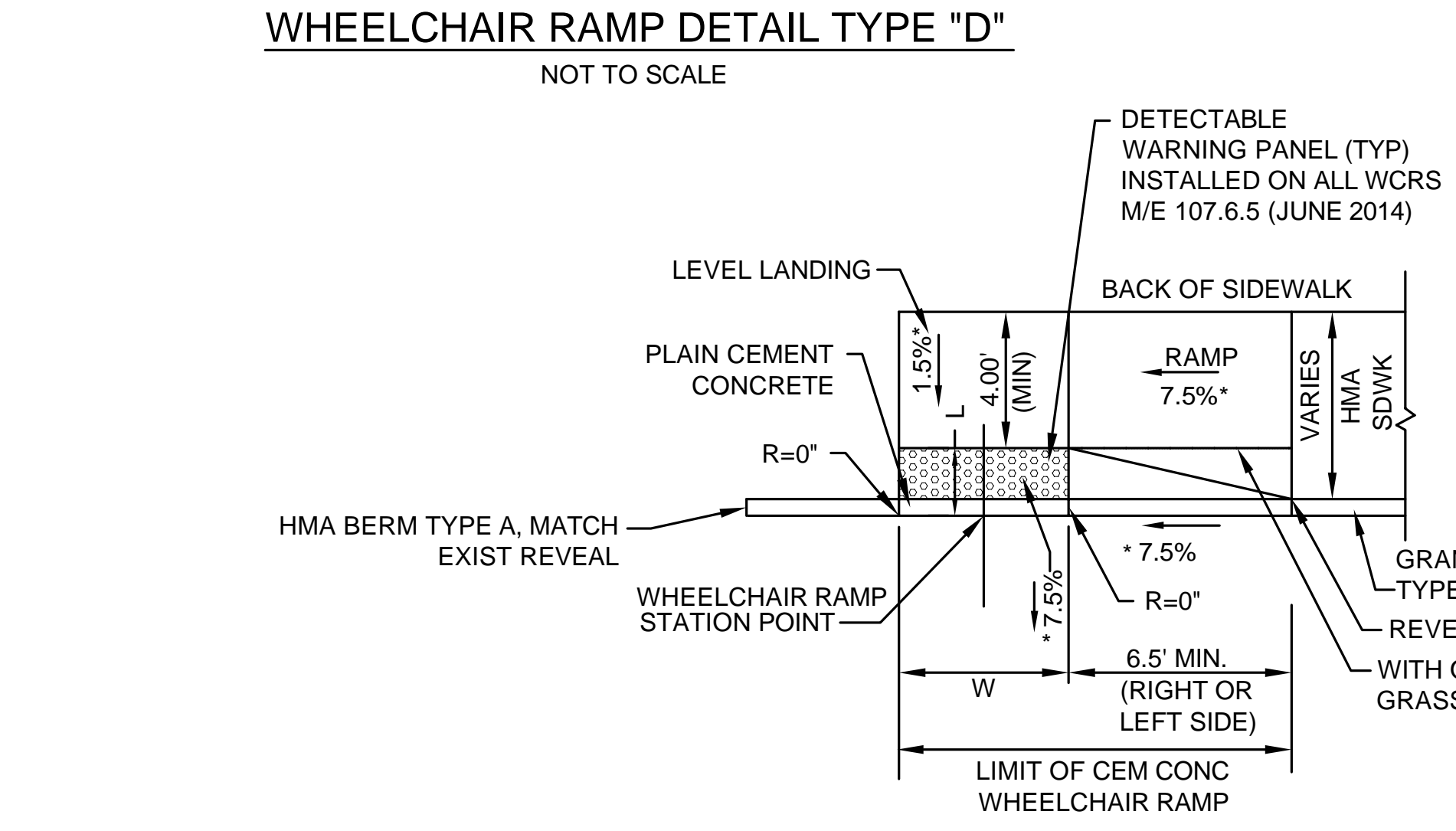
WHEELCHAIR RAMP DETAIL TYPE "A"
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WHEELCHAIR RAMP DETAIL TYPE "D"
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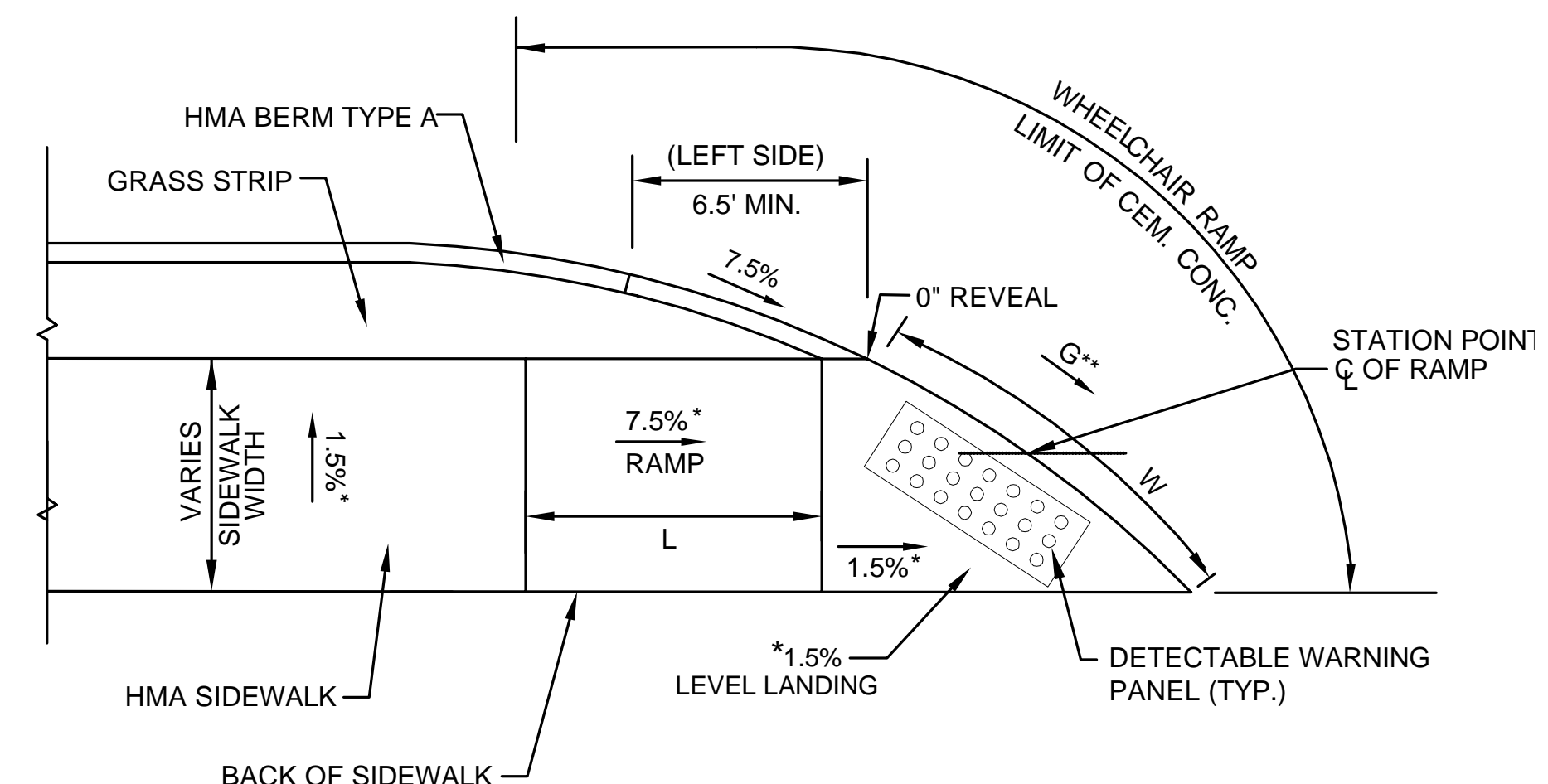


DETAIL FOR TYPICAL DRIVEWAY WITH SIDEWALK (TYPE B)
NOT TO SCALE



WHEELCHAIR RAMP DETAIL TYPE "E"
NOT TO SCALE

DRIVEWAY OPENING										
DWY NO.	LOCATION	DRIVEWAY OPENING AT GUTTER		GUTTER PROFILE SLOPE	DEPTH OF GUTTER TO BACK OF SIDEWALK	PATH OF TRAVEL WIDTH ACROSS DRIVEWAY		TRANSITION LENGTH		DW TYPE
		STATION	OFFSET			LEFT	RIGHT	LEFT	RIGHT	
1	LOUISE RD.	2+48.7	27.8' LT	0.85%	7.1'	4.5'	6.50' (4" R)	6.50' (5" R)	A	
2	LOUISE RD.	2+62.9	18.5' RT	0.23%	5.9'	5.9'	3.83' (3" R)	6.50' (3" R)	B	
3	LOUISE RD.	4+96.9	24.5' RT	2.5%	7.5'	4.0'	7.60' (7" R)	11.0' (4" R)	A	
4	BONHAM RD.	2+00.0	23.8' RT	0.75%	5.3'-8.0'	3.0'	4.00' (3" R)	3.50' (3" R)	A	



WHEELCHAIR RAMP DETAIL TYPE "C"
NOT TO SCALE

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NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

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CJT
DESIGNED BY:
CJT
CHECKED BY:
DJ

REGISTERED PROFESSIONAL
FINAL
10/06/2017



PREPARED BY
SUBCONSULTANT
SCALE

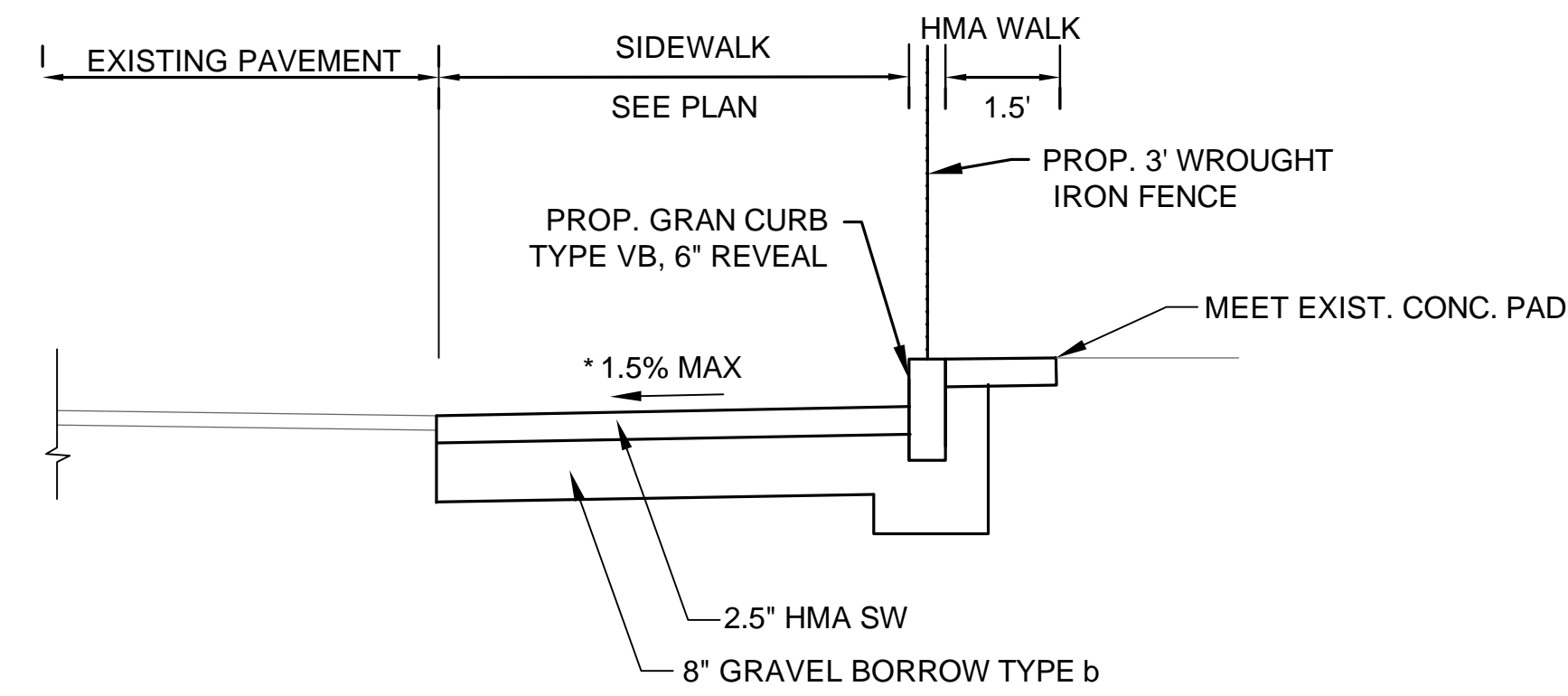
TITLE
MCDONALD SQUARE SIDEWALK IMPROVEMENTS
DEDHAM, MASSACHUSETTS

CONSTRUCTION
DETAILS

BETA JOB NO. 5613
ISSUE DATE 10/6/17
SHEET NO. 3-6

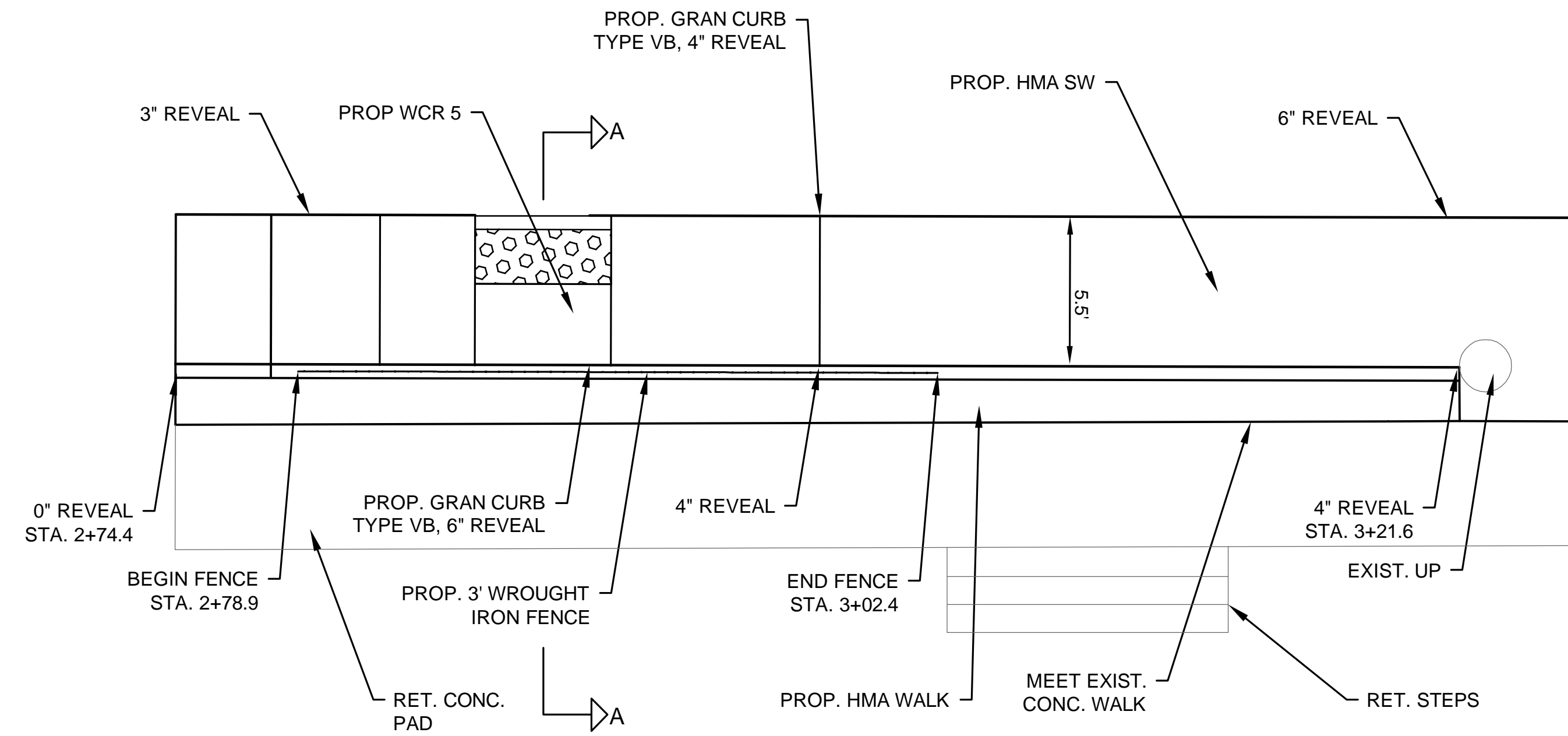
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SECTION A-A
NOT TO SCALE

* TOLERANCE FOR CONSTRUCTION $\pm 0.5\%$



DETAIL FOR FOR SIDEWALK AND WHEELCHAI RAMP AT ~ STA. 2+88
NOT TO SCALE

NUMBER	DATE	MADE BY	CHECKED BY	REVISIONS

DRAWN BY:
CJT
DESIGNED BY:
CJT
CHECKED BY:
DJ

REGISTERED PROFESSIONAL
FINAL
10/06/2017



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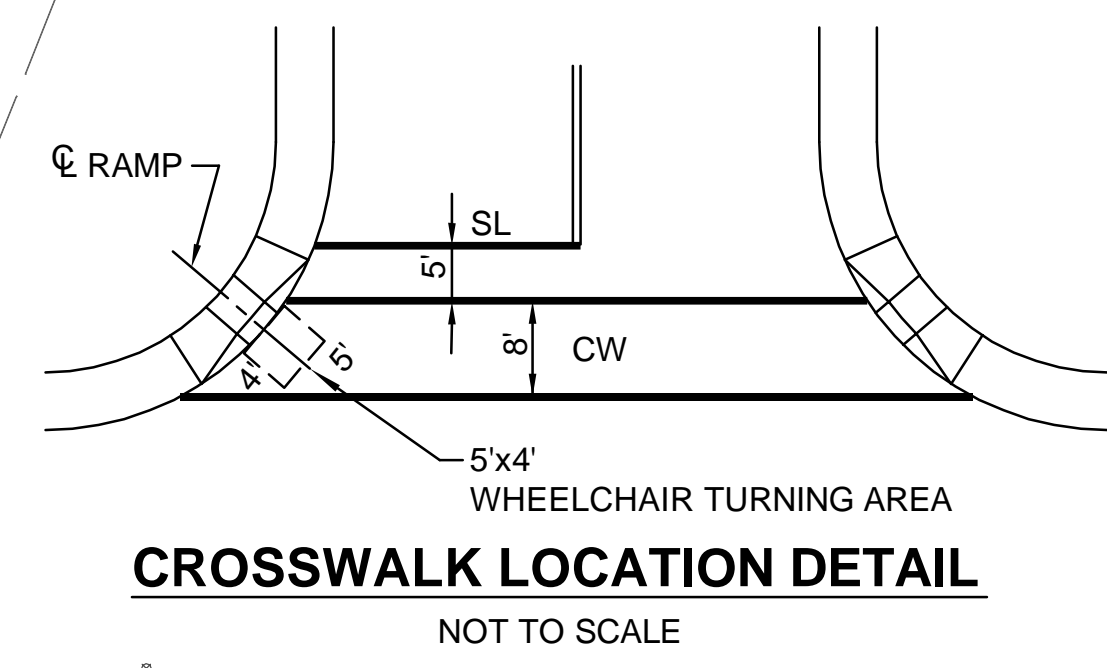
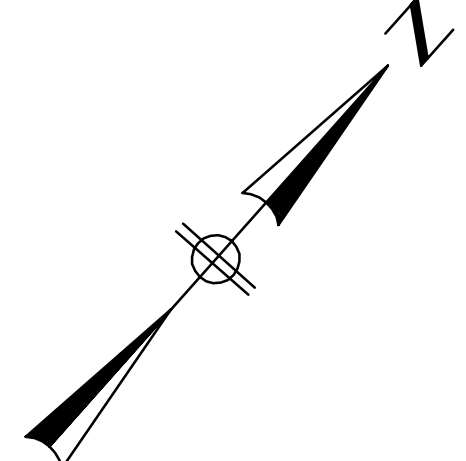
SCALE

TITLE
MCDONALD SQUARE SIDEWALK IMPROVEMENTS
DEDHAM, MASSACHUSETTS
CONSTRUCTION
DETAILS

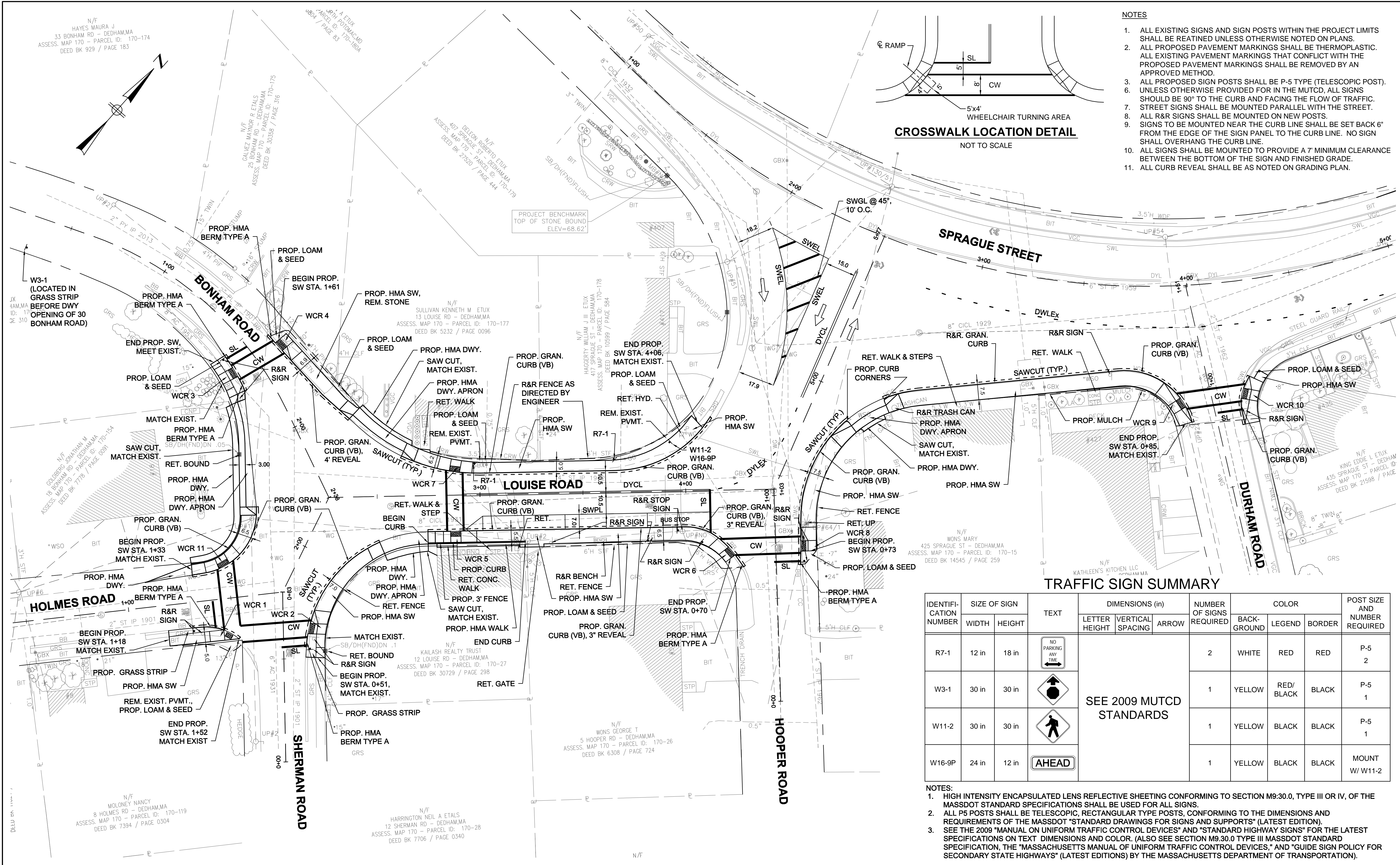
BETA JOB NO. 5613
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UNLESS OTHERWISE NOTED OR CHANGED BY REPRODUCTION

N/F
HAYES MAURA J
33 BONHAM RD - DEDHAM, MA
ASSESS. MAP 170 - PARCEL ID: 170-174
DEED BK 929 / PAGE 183



- NOTES**
1. ALL EXISTING SIGNS AND SIGN POSTS WITHIN THE PROJECT LIMITS SHALL BE RE-TAINED UNLESS OTHERWISE NOTED ON PLANS.
 2. ALL PROPOSED PAVEMENT MARKINGS SHALL BE THERMOPLASTIC. ALL EXISTING PAVEMENT MARKINGS THAT CONFLICT WITH THE PROPOSED PAVEMENT MARKINGS SHALL BE REMOVED BY AN APPROVED METHOD.
 3. ALL PROPOSED SIGN POSTS SHALL BE P-5 TYPE (TELESCOPIC POST). UNLESS OTHERWISE PROVIDED FOR IN THE MUTCD, ALL SIGNS SHOULD BE 90° TO THE CURB AND FACING THE FLOW OF TRAFFIC.
 4. STREET SIGNS SHALL BE MOUNTED PARALLEL WITH THE STREET.
 5. ALL R&R SIGNS SHALL BE MOUNTED ON NEW POSTS.
 6. SIGNS TO BE MOUNTED NEAR THE CURB LINE SHALL BE SET BACK 6" FROM THE EDGE OF THE SIGN PANEL TO THE CURB LINE. NO SIGN SHALL OVERHANG THE CURB LINE.
 7. ALL SIGNS SHALL BE MOUNTED TO PROVIDE A 7" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE SIGN AND FINISHED GRADE.
 8. ALL CURB REVEAL SHALL BE AS NOTED ON GRADING PLAN.



TRAFFIC SIGN SUMMARY

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK-GROUND	LEGEND	BORDER	
R7-1	12 in	18 in	NO PARKING ANY TIME				2	WHITE	RED	RED	P-5 2
W3-1	30 in	30 in	SEE 2009 MUTCD STANDARDS				1	YELLOW	RED/BLACK	BLACK	P-5 1
W11-2	30 in	30 in	SEE 2009 MUTCD STANDARDS				1	YELLOW	BLACK	BLACK	P-5 1
W16-9P	24 in	12 in	AHEAD				1	YELLOW	BLACK	BLACK	MOUNT W/ W11-2

- NOTES:**
1. HIGH INTENSITY ENCAPSULATED LENS REFLECTIVE SHEETING CONFORMING TO SECTION M9:30.0, TYPE III OR IV, OF THE MASSDOT STANDARD SPECIFICATIONS SHALL BE USED FOR ALL SIGNS.
 2. ALL P5 POSTS SHALL BE TELESCOPIC, RECTANGULAR TYPE POSTS, CONFORMING TO THE DIMENSIONS AND REQUIREMENTS OF THE MASSDOT "STANDARD DRAWINGS FOR SIGNS AND SUPPORTS" (LATEST EDITION).
 3. SEE THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" FOR THE LATEST SPECIFICATIONS ON TEXT DIMENSIONS AND COLOR. (ALSO SEE SECTION M9:30.0 TYPE III MASSDOT STANDARD SPECIFICATION, THE "MASSACHUSETTS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES," AND "GUIDE SIGN POLICY FOR SECONDARY STATE HIGHWAYS" (LATEST EDITIONS) BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION).

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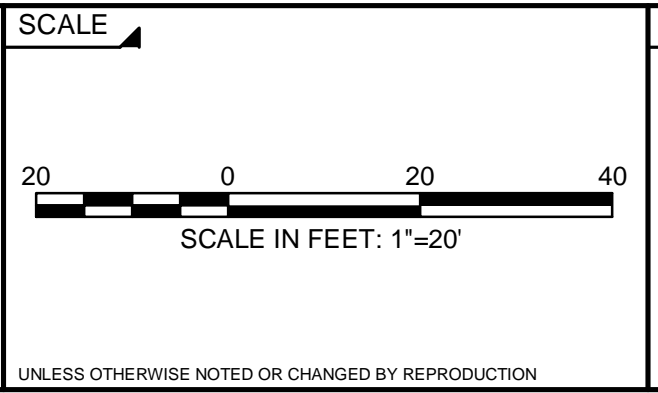
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TITLE
**MCDONALD SQUARE SIDEWALK IMPROVEMENTS
DEDHAM, MASSACHUSETTS**

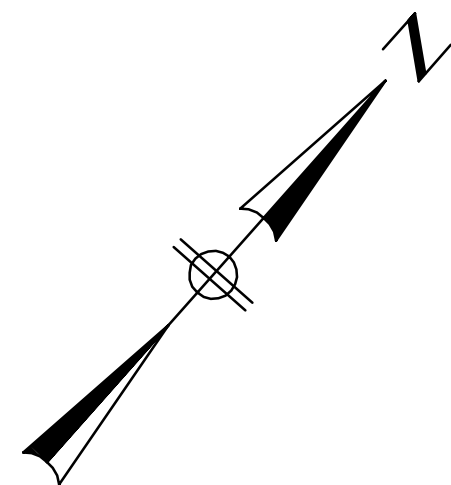
CONSTRUCTION PLAN

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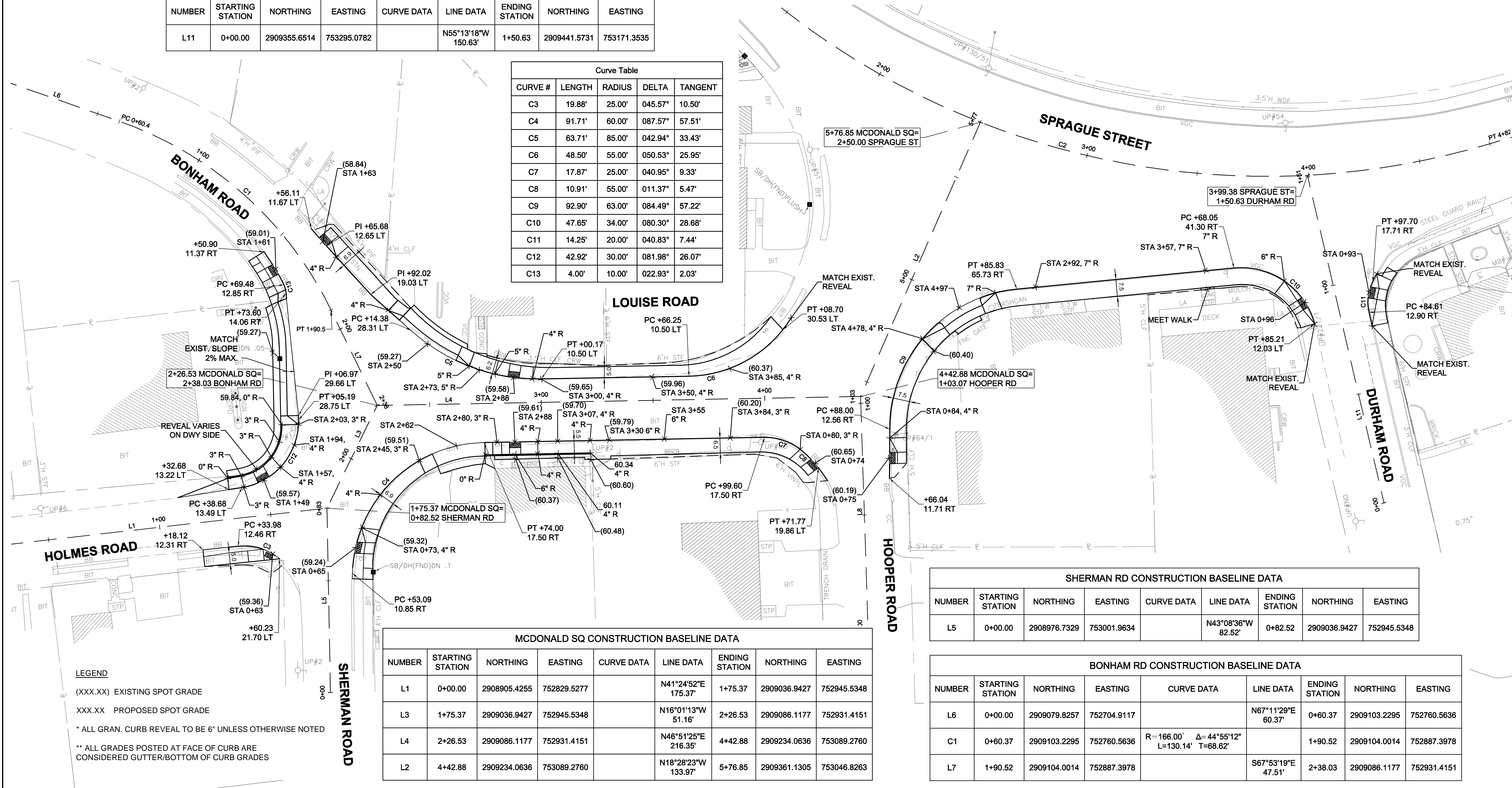


HOOPER RD CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L8	0+00.00	2909159.8124	753160.7592		N43°54'43"W 103.07'	1+03.07	2909234.0636	753089.2760

DURHAM RD CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L11	0+00.00	2909355.6514	753295.0782		N55°13'18"W 150.63'	1+50.63	2909441.5731	753171.3535

SPRAGUE ST CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L9	0+00.00	2909342.6547	752799.5995		S88°04'08"E 112.15'	1+12.15	2909338.8752	752911.6877
C2	1+12.15	2909338.8752	752911.6877	R=350.00' L=370.24' Δ=60°36'31" T=204.56'		4+82.39	2909506.7272	753222.4718
L10	4+82.39	2909506.7272	753222.4718		N31°19'21"E 46.56'	5+28.95	2909546.5023	753246.6768

Curve Table				
CURVE #	LENGTH	RADIUS	DELTA	TANGENT
C3	19.88'	25.00'	045.57°	10.50'
C4	91.71'	60.00'	087.57°	57.51'
C5	63.71'	85.00'	042.94°	33.43'
C6	48.50'	55.00'	050.53°	25.95'
C7	17.87'	25.00'	040.95°	9.33'
C8	10.91'	55.00'	011.37°	5.47'
C9	92.90'	63.00'	084.49°	57.22'
C10	47.65'	34.00'	080.30°	28.68'
C11	14.25'	20.00'	040.83°	7.44'
C12	42.92'	30.00'	081.98°	26.07'
C13	4.00'	10.00'	022.93°	2.03'



SHERMAN RD CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L5	0+00.00	2908976.7329	753001.9634		N43°08'36"W 82.52'	0+82.52	2909036.9427	752945.5348

BONHAM RD CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L6	0+00.00	2909079.8257	752704.9117		N67°11'29"E 60.37'	0+60.37	2909103.2295	752760.5636
C1	0+60.37	2909103.2295	752760.5636	R=166.00' L=130.14' Δ=44°55'12" T=68.62'		1+90.52	2909104.0014	752887.3978
L7	1+90.52	2909104.0014	752887.3978		S67°53'19"E 47.51'	2+38.03	2909086.1177	752931.4151

MCDONALD SQ CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L1	0+00.00	2908905.4255	752829.5277		N41°24'52"E 175.37'	1+75.37	2909036.9427	752945.5348
L3	1+75.37	2909036.9427	752945.5348		N16°01'13"W 51.16'	2+26.53	2909086.1177	752931.4151
L4	2+26.53	2909086.1177	752931.4151		N46°51'25"E 216.35'	4+42.88	2909234.0636	753089.2760
L2	4+42.88	2909234.0636	753089.2760		N18°28'23"W 133.97'	5+76.85	2909361.1305	753046.8263

LEGEND

(XXX.XX) EXISTING SPOT GRADE
 XXX.XX PROPOSED SPOT GRADE

* ALL GRAN. CURB REVEAL TO BE 6" UNLESS OTHERWISE NOTED

** ALL GRADES POSTED AT FACE OF CURB ARE CONSIDERED GUTTER/BOTTOM OF CURB GRADES

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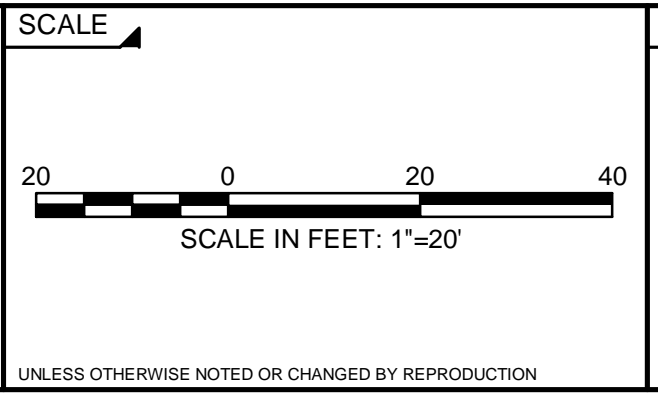
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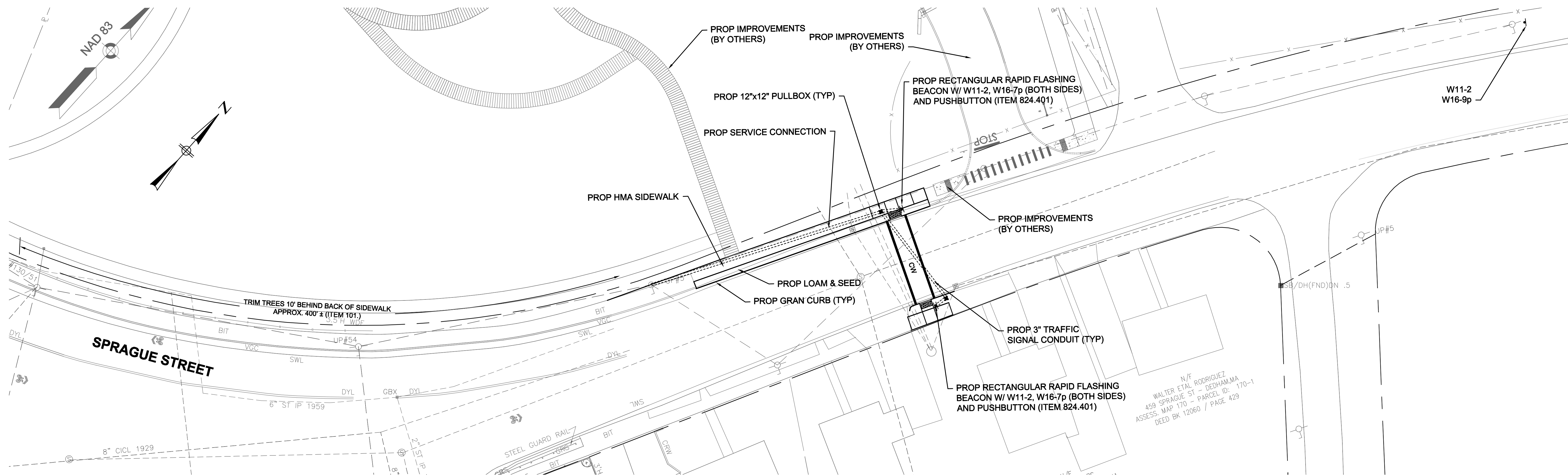
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DEDHAM, MASSACHUSETTS

CURB-TIE & GRADING PLAN

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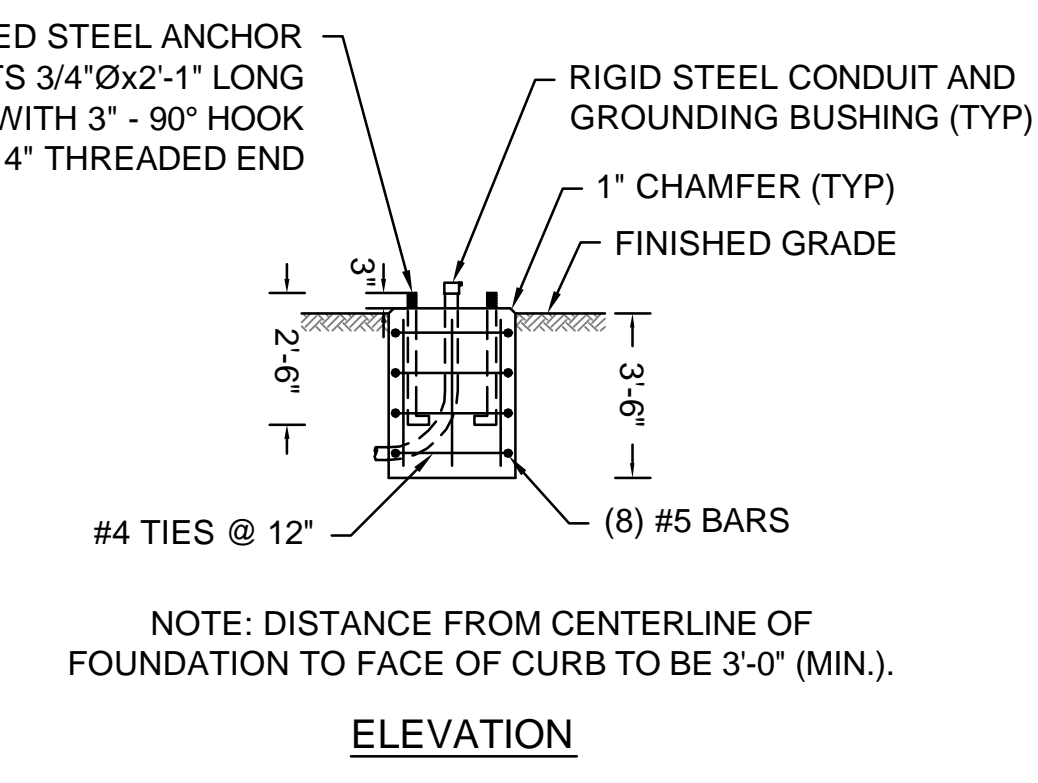
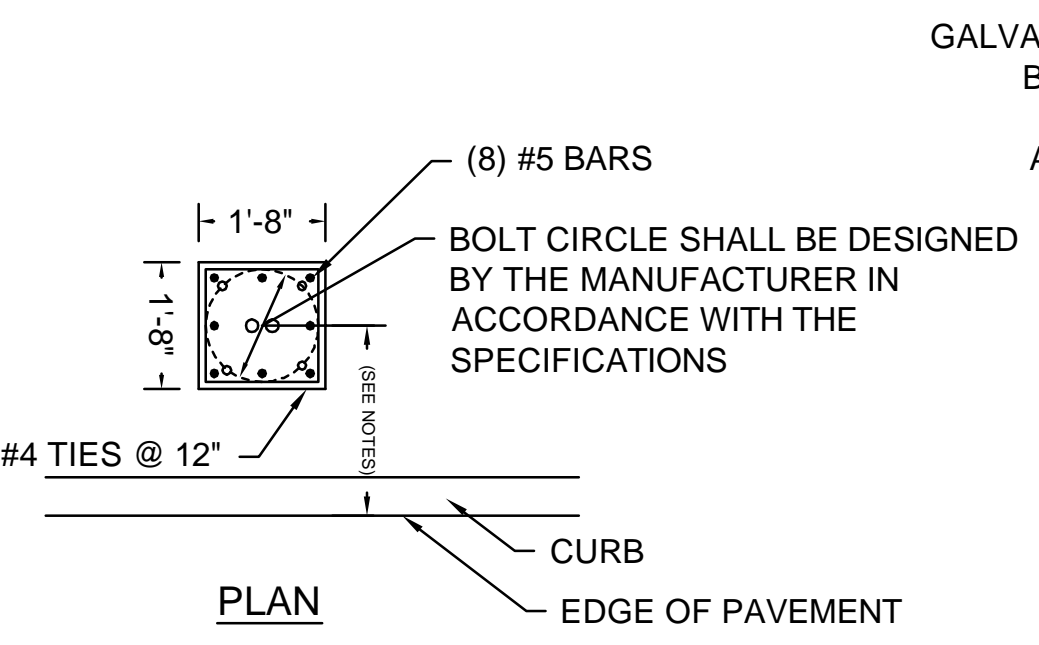
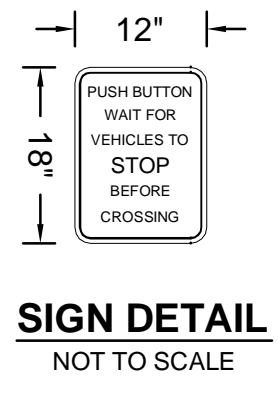
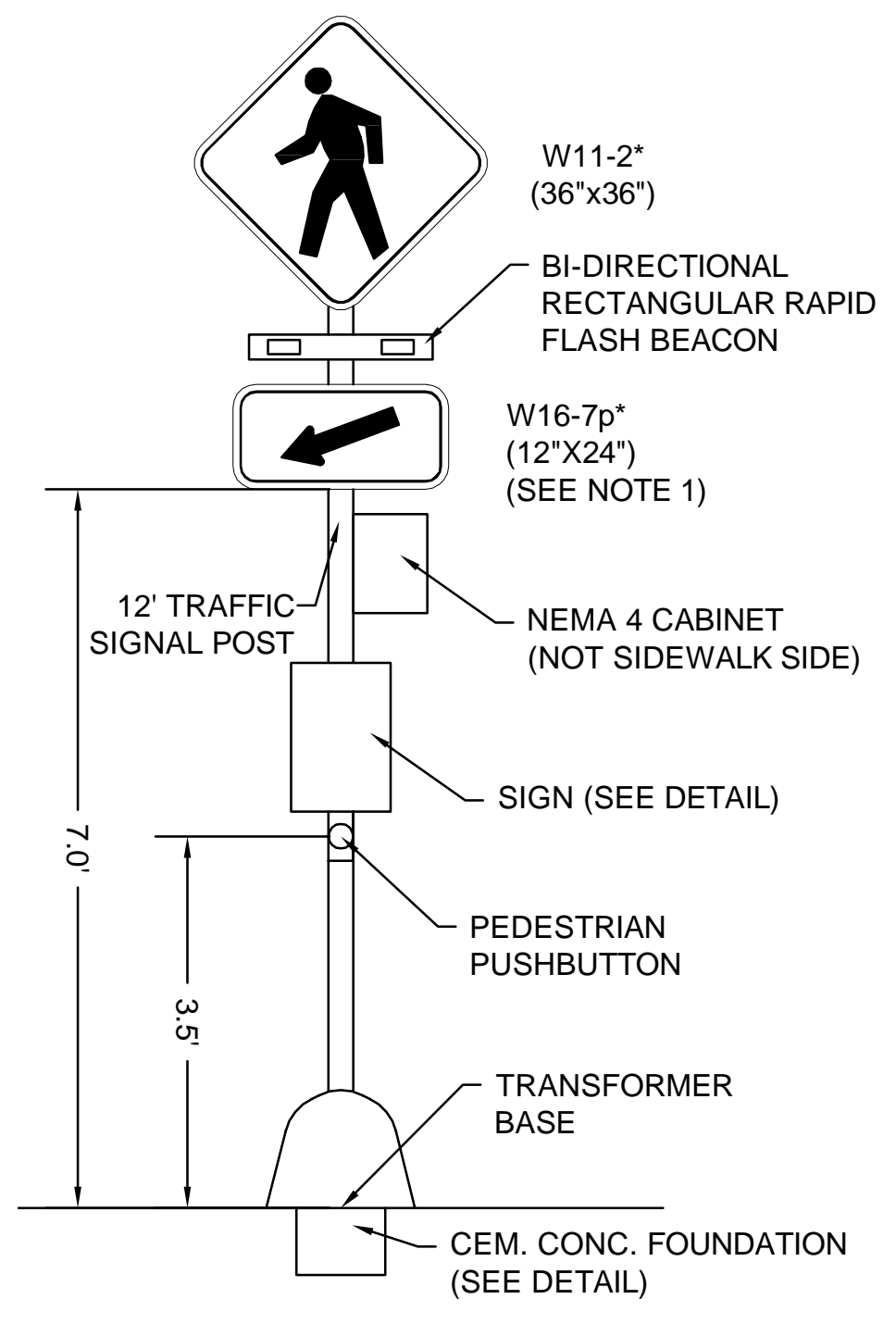
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SHEET NO. 6-6



MAJOR ITEMS (SPRAGUE STREET)	
QUANTITY	DESCRIPTION
1	FLASHING BEACON CONTROLLER
2	5-LIGHT RECTANGULAR RAPID FLASHING BEACON
2	TRAFFIC SIGNAL POST AND BASE STANDARD - 12" STEEL
2	PEDESTRIAN PUSHBUTTON, SIGN AND SADDLE
2	SERVICE CONNECTION (UNDERGROUND)
4	W11-2 SIGNS (36" x 36", SEE 2009 MUTCD STANDARDS)
1	W11-2 SIGN (30" x 30", SEE 2009 MUTCD STANDARDS)
2	W16-7pL (12" x 24", SEE 2009 MUTCD STANDARDS)
2	W16-7pR (12" x 24", SEE 2009 MUTCD STANDARDS)
1	W16-9p (12" x 24", SEE 2009 MUTCD STANDARDS)
1	P-5 TYPE (TELESCOPIC POST)
2	PULLBOX, 12" X 12" (ITEM 811.31)
PLUS ALL MISCELLANEOUS EQUIPMENT AND MATERIAL NECESSARY TO PROVIDE A COMPLETE OPERATING FLASHING BEACON SIGNAL.	

IDENTIFICATION NUMBER	SIZE OF SIGN		TEXT	DIMENSIONS (in)			NUMBER OF SIGNS REQUIRED	COLOR			POST SIZE AND NUMBER REQUIRED	UNIT AREA IN SQUARE FEET	AREA IN SQUARE FEET
	WIDTH	HEIGHT		LETTER HEIGHT	VERTICAL SPACING	ARROW		BACK-GROUND	LEGEND	BORDER			
W11-2	30 in	30 in		SEE 2009 MUTCD STANDARDS	↑ STANDARDS ↓	↑ STANDARDS ↓	1	FYG	BLACK	BLACK	P-5 1	6.25	6.25
W11-2	36 in	36 in					4	FYG	BLACK	BLACK	MOUNT ON RRFB	-	-
W16-7pL	24 in	12 in					2	FYG	BLACK	BLACK	MOUNT ON RRFB	-	-
W16-7pR	24 in	12 in					2	FYG	BLACK	BLACK	MOUNT ON RRFB	-	-
W16-9p	24 in	12 in	AHEAD				1	FYG	BLACK	BLACK	MOUNT W/ W11-2	2.0	2.0



- NOTES:
- HIGH INTENSITY ENCAPSULATED LENS REFLECTIVE SHEETING CONFORMING TO SECTION M9:30.0, TYPE III OR IV, OF THE MASSDOT STANDARD SPECIFICATIONS SHALL BE USED FOR ALL SIGNS.
 - SEE THE 2009 "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND "STANDARD HIGHWAY SIGNS" FOR THE LATEST SPECIFICATIONS ON TEXT DIMENSIONS AND COLOR. (ALSO SEE SECTION M9.30.0 TYPE III MASSDOT STANDARD SPECIFICATION, THE "MASSACHUSETTS MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES," AND "GUIDE SIGN POLICY FOR SECONDARY STATE HIGHWAYS" (LATEST EDITIONS) BY THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION).
 - FYG = FLUORESCENT YELLOW GREEN

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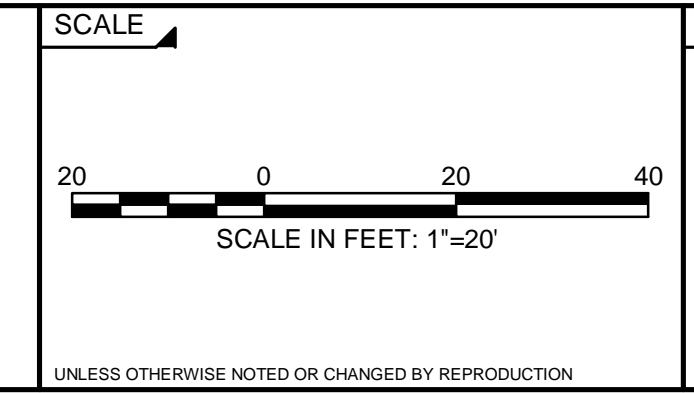
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TITLE

**MCDONALD SQUARE SIDEWALK IMPROVEMENTS
DEDHAM, MASSACHUSETTS**

FLASHING WARNING CROSSWALK BEACON SYSTEM

BETA JOB NO. 5613

ISSUE DATE 10/6/17

SHEET NO. 1-1