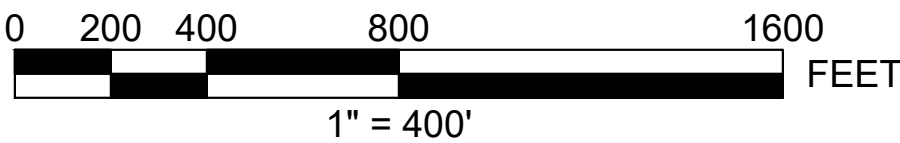
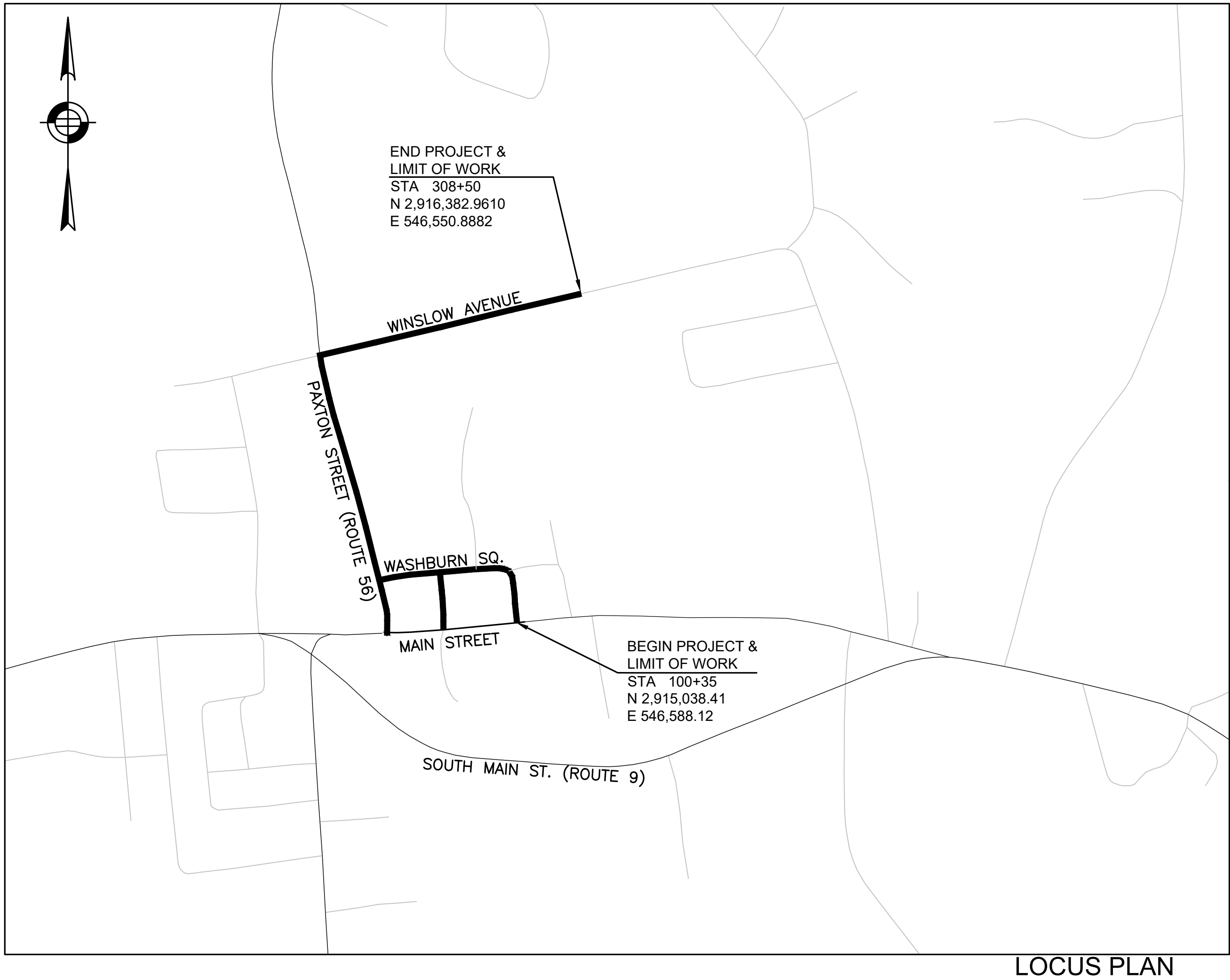



THE TOWN OF LEICESTER, MASSACHUSETTS  
WASHBURN SQUARE, PAXTON STREET, AND WINSLOW AVENUE  
COMPLETE STREETS IMPROVEMENTS  
WORCESTER COUNTY

SHEET NO.	DESCRIPTION
1	TITLE SHEET & INDEX
2-3	GENERAL NOTES & LEGEND
4	KEY PLAN
5-9	BASELINE TIE PLANS
10-14	TYPICAL SECTIONS
15-18	CONSTRUCTION PLANS
19-20	CURB TIE PLANS
21	GRADING PLANS
22-25	PAVEMENT MARKINGS & SIGNAGE PLANS
26	TRAFFIC SIGN SUMMARY SHEET
27-29	CONSTRUCTION DETAILS
30	TEMPORARY TRAFFIC CONTROL PLANS





**HOWARD STEIN HUDSON**  
370 Main Street  
Worcester, MA 01608  
www.hshassoc.com

LEICESTER WASHBURN SQUARE,  
PAXTON ST, AND WINSLOW AVE  
COMPLETE STREETS IMPROVEMENTS  
TITLE SHEET & INDEX

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	1	30

NOT FOR CONSTRUCTION



## GENERAL NOTES

### SURVEY

1. ALL UNDERGROUND UTILITIES AS SHOWN ON THE COMPILED UTILIZING SURVEY INFORMATION AND AVAILABLE RECORD INFORMATION PROVIDED BY A-PLUS CONSTRUCTION ON THE PLAN ENTITLED EXISTING CONDITIONS PLAN MAIN STREET PAXTON STREET, WINSLOW AVENUE LEICESTER, MASS, DATED DECEMBER 2, 2019.
2. THE ACCURACY AND COMPLETENESS OF UNDERGROUND UTILITIES AS SHOWN ON THE PLANS ARE NOT GUARANTEED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE EXACT LOCATION, SIZE, TYPE, ETC. OF ALL UNDERGROUND UTILITIES THAT MAY BE AFFECTED BY THE WORK. AT LEAST 72 HOURS BEFORE DIGGING BEGINS THE CONTRACTOR IS REQUIRED TO CALL DIG SAFE AT (888)344-7233. ALL CITY OWNED UTILITY STRUCTURES WITHIN AREAS AFFECTED BY THE WORK SHALL BE ADJUSTED TO NEW LINE AND GRADE AS DIRECTED BY THE ENGINEER. ANY UTILITY POLES AND/OR GUY POLES WITHIN AREAS AFFECTED BY THE WORK SHALL BE REMOVED AND RESET BY THE RESPECTIVE UTILITY COMPANY. ALTERATIONS TO UTILITIES NOT OWNED BY THE CITY SHALL BE MADE BY THE RESPECTIVE UTILITY OWNERS.
3. THE CONTRACTOR SHALL FIELD VERIFY CONDITIONS AND DIMENSIONS PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR WILL BE REQUIRED TO SET SURVEY CONTROL USING A PROFESSIONAL LAND SURVEYOR (PLS) AND COORDINATE THE SURVEY WORK WITH THE TOWN OF LEICESTER. SURVEY CONTROL SHALL BE APPROVED BY THE TOWN PRIOR TO THE START OF CONSTRUCTION. THE SURVEY LAYOUT FOR THE PROJECT SHALL BE INCLUDED IN THE BID PRICE.
5. BENCHMARK INFORMATION:

MAG ELEV = 848.12'	XCUT HOOD BOLT ELEV = 866.08'
MMAG IN UPL ELEV = 882.87'	MMAG IN UPL 919.23'
MMAG IN UPL ELEV = 931.52'	XCUT HOOD BOLT ELEV = 992.44'
MAG IN UPL ELEV = 998.62'	GAZEBO STAIR ELEV = 1004.63'
XCUT HOOD BOLT ELEV = 997.27'	NE COR TOP STN STEP ELEV = 988.70'
XCUT HOOD BOLT ELEV = 1003.66'	XCUT HYD BOLT ELEV = 993.69'
MAG NAIL IN UPL ELEV = 974.78'	RRSPK UPL 27 ELEV = 973.59'

## UTILITIES

1. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT.
2. THE CONTRACTOR SHALL MAKE ALL ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENT OF ELECTRIC, TELEPHONE, AND ANY OTHER PRIVATE UTILITIES BY THE UTILITY COMPANIES AT NO ADDITIONAL COST TO THE OWNER. IF THE CONTRACTOR ADJUSTS UTILITY COVERS IT SHALL BE DEEMED PART OF THE WORK AND THERE WILL BE NO ADDITIONAL COST.
3. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE NECESSITY OF MAKING HIS/HER OWN INVESTIGATION IN ORDER TO ASSURE THAT NO DAMAGE TO EXISTING STRUCTURES, DRAINAGE LINES, TRAFFIC SIGNAL CONDUITS, ETCETERA, WILL OCCUR.
4. THE CONTRACTOR SHALL NOTIFY MASSACHUSETTS DIG SAFE AND PROCURE A DIG SAFE NUMBER FOR EACH LOCATION PRIOR TO DISTURBING EXISTING GROUND IN ANY WAY. THE TELEPHONE NUMBER OF THE DIG SAFE CALL CENTER IS 1-888-344-7233.
5. THE CONTRACTOR MUST APPLY FOR AND OBTAIN A PERMIT TO OCCUPY THE PUBLIC WAY FROM THE LEICESTER HIGHWAY DEPARTMENT. THE WATER, SANITARY, AND STORM SEWERS WILL BE MARKED WHILE THE PERMIT IS BEING PROCESSED.
6. NO EXISTING PUBLIC UTILITY STRUCTURES SHALL BE ABANDONED AND/OR DISMANTLED WITHOUT AUTHORIZATION FROM THE ENGINEER.
7. DRAINAGE ELEVATIONS ARE PROVIDED FOR DESIGN PURPOSE ONLY. THE CONTRACTOR SHALL VERIFY BY TEST PIT, THE LOCATIONS OF EXISTING UTILITIES WHICH MAY CONFLICT WITH THE PROPOSED DRAINAGE DESIGN. ANY FIELD ADJUSTMENTS REQUIRED WILL BE MADE AS APPROVED OR DIRECTED BY THE ENGINEER. ONLY AFTER THE CONTRACTOR VERIFIES ELEVATIONS FOR THE CONSTRUCTABILITY OF THE DRAINAGE SYSTEM SHALL ANY STRUCTURES BE ORDERED. ANY FIELD ADJUSTMENT TO LINE AND GRADE UP TO A DEPTH OF 5 FEET SHALL BE INCLUDED IN THE COST OF THE PIPE. PIPE EXCAVATION GREATER THAN 5 FEET WILL BE PAID UNDER CLASS B TRENCH EXCAVATION.

# CONSTRUCTION

1. THE CONTRACTOR SHALL OBTAIN A PERMIT TO OPEN ROAD OR SIDEWALK PRIOR TO CONSTRUCTION FROM THE LEICESTER HIGHWAY DEPARTMENT LOCATED AT 59 PETER SALEM ROAD, LEICESTER, MASS. PHONE NUMBER (508)-892-7021
2. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DAMAGED BY THE CONTRACTOR'S OPERATIONS, INCLUDING STAGING AREAS, SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO ADDITIONAL COST.
3. THE CONTRACTOR IS HEREBY NOTIFIED THAT ADDITIONAL WORK WITHIN THE PROJECT LIMITS MAY BE PERFORMED BY OTHERS.
4. JOINTS BETWEEN NEW HOT MIX ASPHALT, ROADWAY PAVEMENT, AND THE LOCATIONS OF SAW CUT FOR EXISTING PAVEMENT SHALL BE SEALED WITH HOT MIX ASPHALT JOINT SEALANT AND BACKSANDED.
5. ALL GRADING SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE MASSACHUSETTS ARCHITECTURAL ACCESS BOARD (MAAB) AND THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES FOR BUILDINGS AND FACILITIES (ADAAG), LATEST EDITION. IN CASE OF CONFLICT BETWEEN REGULATIONS, THE GUIDELINE PROVIDING GREATER ACCESS SHALL APPLY.
6. WHERE THE NEW CONSTRUCTION IS WITHIN THE EXISTING TRAVELED WAY, THE CONTRACTOR SHALL PERFORM WORK SO THAT INTERFERENCE TO BUSINESS CONCERNS AND ABUTTERS, ON 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.
7. THE CONTRACTOR SHALL DISPOSE OF ALL WASTE MATERIAL IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS AT HIS OWN EXPENSE, OUTSIDE OF THE PROJECT LIMITS.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR INVESTIGATING AND CONFIRMING THAT ALL ITEMS TO BE REUSED ARE IN SERVICEABLE CONDITION. IF IT IS DEEMED THAT ANY ITEM IS NOT ABLE TO BE REUSED, THE CONTRACTOR SHALL NOTIFY THE OWNER IN WRITING AND INCLUDE ESTIMATED COSTS TO INSTALL NEW.

## TRAFFIC

1. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR TRAFFIC MANAGEMENT AND TO COMPLY WITH CONDITIONS OUTLINED WITHIN THE SPECIFICATIONS AND PLANS.
2. THE MINIMUM MOUNTING HEIGHT OF POST-MOUNTED SIGNS, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE CURB OR SIDEWALK, OR TO THE ELEVATION OF THE NEAR EDGE OF THE TRAVELED WAY, SHALL BE 7 FEET UNLESS OTHERWISE SPECIFIED ON THE PLANS.

## TEMPORARY TRAFFIC CONTROL PLANS

1. THIS PLAN DEPICTS IN SCHEMATIC FORM, THE ELEMENTS OF AN APPROACH TO THE LAYOUT AND PLANNING OF THE WORK DURING THE PROGRESS OF THE CONSTRUCTION OPERATIONS. THE PREPARER OF THIS PLAN HAS NO ROLE IN THE OVERSIGHT OR OTHERWISE IN THE IMPLEMENTATION OF THIS PLAN.
2. CONTRACTOR SHALL SUBMIT TO THE ENGINEER TRAFFIC MANAGEMENT PLANS FOR REVIEW AND APPROVAL. CONTRACTOR SHALL COORDINATE THE CONSTRUCTION EFFORT WITH OTHER PROJECTS IN THE VICINITY IN ORDER TO MINIMIZE POTENTIAL TRAFFIC AND PARKING IMPACTS.
3. THE TEMPORARY TRAFFIC CONTROL PLANS CONTAINED HEREIN ARE GIVEN AS A GUIDE FOR TYPICAL WORK ZONE TRAFFIC CONTROL APPLICATIONS FOR THE TYPES OF WORK ANTICIPATED FOR THIS PROJECT. THEY ARE NOT INTENDED TO COVER ALL POSSIBLE CONSTRUCTION OPERATIONS WHICH THE CONTRACTOR MAY CHOOSE TO EMPLOY. WORK ZONE TRAFFIC CONTROL FOR OTHER CONSTRUCTION OPERATIONS OR OTHER TRAFFIC SITUATIONS IF APPLICABLE SHALL BE IN ACCORDANCE WITH THE CURRENT M.U.T.C.D. AND AS APPROVED OR DIRECTED BY THE ENGINEER.
4. LANE RESTRICTIONS (OTHER THAN ACTIVE WORK ZONES) MAY NOT REMAIN OVERNIGHT OR DURING NON-WORKING HOURS AND MUST BE REMOVED BY THE END OF EACH WORKING TIME RESTRICTION. AFTER EACH WORKING DAY, TRAFFIC CONTROL DEVICES THAT ARE NOT REQUIRED SHALL BE MOVED OFF THE ROADWAY OR FULL DEPTH CONSTRUCTION AREA AND PLACED SO AS NOT TO IMPEDE PEDESTRIAN AREAS, BUTTER ACCESS OR CAUSE CONFUSION TO ROADWAY USERS. IN CERTAIN CIRCUMSTANCES, AND ONLY WITH APPROVAL, CAN LANE RESTRICTIONS REMAIN OVERNIGHT, REFLECTORIZED DRUMS SHALL BE FITTED WITH STEADY BURN AND/OR FLASHING WARNING LIGHTS AT THE ENGINEER'S DIRECTION.
5. PLACE ALL CONSTRUCTION SIGNING, TRAFFIC CONTROL DEVICES AND TEMPORARY PAVEMENT MARKINGS FOR EACH PHASE PRIOR TO COMMENCEMENT OF CONSTRUCTION.
6. THESE PLANS ARE NOT INTENDED TO LIMIT THE CONTRACTORS RIGHT TO SCHEDULE THE WORK BUT TO OUTLINE ONE WAY OF PROGRESSING. THE CONTRACTOR IS EXPECTED TO USE KNOWLEDGE AND EXPERIENCE TO PERFORM THE WORK IN THE MOST EFFICIENT MANNER IN COMPLIANCE WITH THE DRAWING AND SPECIFICATIONS AND THE REQUIREMENTS OF THE INDIVIDUAL AGENCIES AND BUTTERS.
7. CONTRACTOR SHALL SECURE WORK AREAS ACCORDING TO CURRENT CONDITIONS TO ENSURE PUBLIC SAFETY AND CONVENIENCE. THIS SHALL INCLUDE ENSURING THAT ALL EXCAVATIONS ARE PROTECTED AT ALL TIMES AND WHEN WORK SHIFT IS COMPLETED.
8. THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR REVIEW AND APPROVAL. TEMPORARY TRAFFIC CONTROL PLANS FOR ANY WORK OUTSIDE THE WORK ZONES INDICATED IN THESE DRAWINGS, INCLUDING ALTERNATIVE PHASING OR MODIFICATION OF ANY ASPECT OF THE TEMPORARY TRAFFIC CONTROL PLANS OR CONSTRUCTION STAGING. THE CONTRACTOR SHALL BEAR RESPONSIBILITY FOR THE SUBMISSION AND REVIEW OF ALTERNATIVE PLANS, AT NO ADDITIONAL COST.

## TEMPORARY TRAFFIC CONTROL PLANS (CONT)

9. EXISTING CONDITIONS ARE FOR CONTRACTOR INFORMATION ONLY AND ARE EXISTING CONDITIONS AT THE TIME OF DESIGN. THE CONTRACTOR SHALL VERIFY, AS NECESSARY, ACTUAL FIELD CONDITIONS AT TIME OF CONSTRUCTION.
10. TYPICAL DAYTIME WORK HOURS ARE FROM 9:00 AM TO 3:30 PM ON WEEKDAYS, UNLESS OTHERWISE PERMITTED BY THE CITY. WORK SHALL NOT BE PERFORMED THE DAY BEFORE, OR THE DAY AFTER, A HOLIDAY WEEKEND, UNLESS OTHERWISE PERMITTED BY THE CITY. REFER TO TEMPORARY TRAFFIC CONTROL PLANS, SPECIFICATIONS, AND PERMITS FOR MODIFICATION TO ALLOWABLE WORK PERIODS. ALL WORK SCHEDULES, HOWEVER, SHALL BE PRE-APPROVED BY THE CITY PRIOR TO BEGINNING WORK. WORK NECESSARY OUTSIDE OF THESE NORMAL WORK HOURS BECAUSE OF TRAFFIC CONDITIONS, AS NOTED IN THE PLANS OR SPECIFICATIONS, SHALL BE APPROVED BY THE CITY.
11. CONTRACTOR SHALL PROVIDE DETAILS FOR TRAFFIC CONTROL AS DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH THE SPECIFICATIONS. CONTRACTOR SHALL BE GUIDED BY TEMPORARY TRAFFIC CONTROL LAYOUTS PROVIDED FOR SPECIFIC LOCATIONS, AND BY TYPICAL LAYOUTS AT ALL OTHER LOCATIONS. TYPICAL LAYOUTS SHALL CONFORM TO PART 6 OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
12. WORK ZONES INDICATED ON THE TEMPORARY TRAFFIC CONTROL PLANS ARE INTENDED FOR THE DURATION OF THE WORK WITHIN THE ZONES ONLY AND SHALL BE RESTORED TO CONDITIONS ACCEPTABLE TO THE ENGINEER AND THE CITY AT COMPLETION OF THE WORK INDICATED.
13. CONTRACTOR SHALL COORDINATE WITH THE CITY CONCERNING ALL SCHEDULED SPECIAL EVENTS WITHIN THE LIMITS OF WORK.
14. THE CONTRACTOR SHALL AT ALL TIMES COORDINATE ROAD AND LANE CLOSURE, AND OTHER DISRUPTIONS IN THE PROJECT AREA, WITH PVTA BUS OPERATIONS.

CHANNELIZATION:

1. CHANNELIZATION SHALL BE ACCOMPLISHED THROUGH THE USE OF REFLECTORIZED PLASTIC DRUMS WITH LIGHTS IN ACCORDANCE WITH THE CURRENT M.U.T.C.D. ALL LANE TAPERS SHALL BE IN ACCORDANCE WITH THE CURRENT M.U.T.C.D.
2. ALL DRUMS SHALL BE PLACED AND MOVED AS NECESSARY TO MAINTAIN ADEQUATE BUTTER ACCESS AT ALL TIMES. WORK MAY REQUIRE ADDITIONAL SIGNS, DRUMS, AND OTHER TRAFFIC CONTROL DEVICES.
3. THE MAXIMUM SPACING BETWEEN CHANNELIZATION DEVICES (DRUMS OR CONES) SHALL BE APPROXIMATELY EQUAL IN FEET TO THE POSTED SPEED LIMIT. THE MINIMUM SPACING SHALL BE 20' O.C.
4. METAL DRUMS ARE PROHIBITED AS CHANNELIZATION DEVICES.

GRADE DIFFERENCES:

1. WHERE THERE IS A LONGITUDINAL DIFFERENCE IN ELEVATION BETWEEN EXISTING PAVEMENT AND COLD PLANED OR NEW PAVEMENT, THE CONTRACTOR SHALL PATCH A TEMPORARY HMA WEDGE WITH A 12:1 (OR FLATTER) SLOPE FOR A SMOOTH TRANSITION.
2. CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 2" DURING NON-WORKING HOURS WILL REQUIRE DELINEATION BY USE OF REFLECTORIZED DRUMS, OR CONES AS DIRECTED BY THE ENGINEER.
3. CROSS-SECTIONAL GRADE DIFFERENCES IN EXCESS OF 4" DURING NON-WORKING HOURS SHALL BE PROTECTED BY BACKFILLING WITH A WEDGE OF EARTHWORK TO BE COMPACTED AT 4:1 SLOPE AND WILL ALSO REQUIRE DELINEATION BY USE OF DRUMS.
4. A MAXIMUM SLOPE OF 4:1 MUST BE MAINTAINED AFTER WORKING HOURS DURING SUBBASE AND BASE COURSE INSTALLATION ALONG EDGE OF THE TRAVEL WAY. A MAXIMUM SLOPE OF 8:1 MUST BE MAINTAINED ON ALL ABUTTER ACCESS DRIVES AND A MAXIMUM SLOPE OF 12:1 MUST BE MAINTAINED ON ALL SIDEWALKS.

CONSTRUCTION SIGNING:

1. LOCATIONS OF SIGNS SHOWN ARE APPROXIMATE. EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR IN THE FIELD. THE CONTRACTOR SHALL ENSURE THAT SIGNS ARE PLACED IN ACCORDANCE WITH THE CURRENT M.U.T.C.D.
2. EXISTING SIGNING WHICH CONFLICTS WITH PROPOSED CONSTRUCTION TRAFFIC MANAGEMENT SIGNING SHALL BE REMOVED AND STACKED OR COVERED AND RESTORED AT THE END OF THE WORK.
3. ALL SIGNS SHALL BE COVERED OR REMOVED WHEN CONDITION IS NOT IN EFFECT.
4. THE MINIMUM MOUNTING HEIGHT OF POST-MOUNTED SIGNS, MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE TOP OF THE CURB OR SIDEWALK, OR TO THE ELEVATION OF THE NEAR EDGE OF THE TRAVELED WAY, SHALL BE 7 FEET UNLESS OTHERWISE SPECIFIED ON THE PLANS.

PAVEMENT MARKINGS:

1. UNLESS OTHERWISE NOTED, ALL PAVEMENT MARKINGS, SIGNS AND OTHER TRAFFIC EQUIPMENT REMOVED OR DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS SHALL BE REPLACED IN COORDINATION WITH AND THE CITY.
2. CONTRACTOR SHALL INSTALL, RENEW AND MAINTAIN ALL TRAFFIC CONTROL DEVICES INCLUDING PAVEMENT MARKINGS AS SHOWN ON THE DRAWINGS, IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND AS REQUIRED BY ENGINEER.
3. CONTRACTOR SHALL REMOVE ALL PAVEMENT MARKINGS WHICH CONFLICT WITH PROPOSED PAVEMENT MARKINGS. THE METHOD OF REMOVAL SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY.
4. ALL TEMPORARY PAVEMENT MARKINGS SHALL BE MAINTAINED THROUGHOUT THE ENTIRE SEQUENCE. ALL EXISTING MARKING WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND REPLACED AS INDICATED ON THE PAVEMENT MARKING PLANS.













































































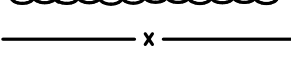

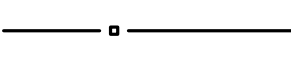

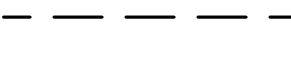

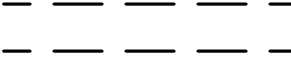
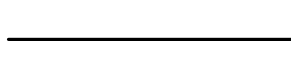
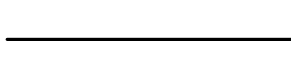
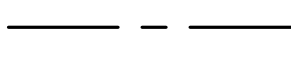
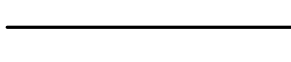

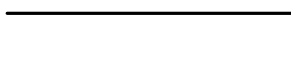
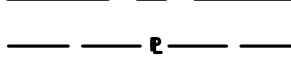


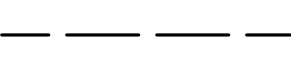






















## HOWARD STEIN HUDSON

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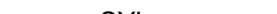
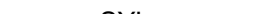
















LEICESTER WASHBURN SQUARE, PAXTON ST, AND WINSLOW AVE COMPLETE STREETS IMPROVEMENTS GENERAL NOTES						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	2	30















GENERAL SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		CB
		CATCH BASIN
		CATCH BASIN CURB INLET
		GUTTER INLET
		FP
		MB
		POST SQUARE
		POST CIRCULAR
		WELL
		EHH
		GG
		BHL #
		MW #
		TP #
		HYDRANT
		*
		CO.BD.
		GPS POINT
		CM
		DM
		EM
		GM
		MM
		SM
		TM
		WM
		MHB
		MON
		SB
		TB
		Δ
		TPL or GUY
		HTP
		OWH
		ULT
		UPL
		BUSH
		TREE
		STUMP
		WG
		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
		CHAIN LINK OR METAL FENCE
		WOOD FENCE
		SAWCUT LINE
		TOP OR BOTTOM OF SLOPE
		LIMIT OF EDGE OF PAVEMENT OR COLD PLANE AND OVERLAY
		STATE HIGHWAY LAYOUT
		TOWN OR CITY LAYOUT
		COUNTY LAYOUT
		TOWN OR CITY BOUNDARY LINE
		PROPERTY LINE OR APPROXIMATE PROPERTY LINE
		EASEMENT

PAVEMENT MARKINGS SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		SL STOP LINE (12" UNLESS OTHERWISE SPECIFIED)
		CW CROSSWALK (12" LINES, 8' O.C., 12" LONGITUDINAL LINES @ 45°, 4' O.C.)
		YL YIELD LINE ( TRIANGLE SHALL HAVE A 2' BASE & 3' HEIGHT)
		BWL 6" BROKEN WHITE LINE, 10' MARK - 20' SKIP
		SWL 6" SOLID WHITE LINE
		WSWL 12" WIDE SOLID WHITE LINE
		SYL 6" SOLID YELLOW LINE
		DBYL 2-6" DOUBLE YELLOW LINE
		SWCHL 12" SOLID WHITE CHANNELIZING LINE (45° AT 10' O.C.)
		SYCHL 12" SOLID YELLOW CHANNELIZING LINE (45° AT 10' O.C.)
		DWL 6" DOTTED WHITE LINE, 3' MARK - 9' SKIP
		DYL 6" DOTTED YELLOW LINE, 3' MARK - 9' SKIP
		DWLEx 6" DOTTED WHITE LINE EXTENSION, 2' MARK - 6' SKIP
		SHARED LANE MARKING
		BIKE LANE SYMBOL

TRAFFIC SYMBOLS

EXISTING	PROPOSED	DESCRIPTION
		SIGNAL POST
		MAST ARM
		ELECTRIC HANDHOLE (12"x24")
		CONDUIT
		TRAFFIC SIGN
		APS PEDESTRIAN PUSHBUTTON

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
BX	BICYCLE CROSSING
CB	CATCH BASIN
CBICI	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	CONTINUED
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DW	STEADY DON'T 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
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

ABBREVIATIONS (cont.)

GENERAL	
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
SGE	SLOPED GRANITE EDGING
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



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LEICESTER WASHBURN SQUARE,  
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COMPLETE STREETS IMPROVEMENTS  
LEGEND

HSH	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	3	30





(X) CONSTRUCTION PLANS



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KEY PLAN**

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	4	30







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Christopher Lyman

MAIN STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L11	18+67.04	2914997.150	546539.680		N84°10'23"E 188.68'	20+55.73	2915016.306	546727.389
L12	16+37.65	2914974.559	546311.403		N84°20'54"E 228.78'	18+66.43	2914997.089	546539.071
L13	12+55.09	2914943.213	545930.131		N85°16'19"E 150.12'	14+05.21	2914955.587	546079.744

PAXTON STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L29	200+00.00	2914952.723	546045.108		N14°15'18"W 619.72'	206+19.72	2915553.361	545892.509

WASHBURN SQUARE WALKWAY 2 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L17	500+00.00	2915089.461	546270.078		S79°00'33"W 19.37'	500+19.37	2915085.768	546251.059
C11	500+19.37	2915085.768	546251.059	R=40.00' Δ=23°35'47" L=16.47' T=8.36'		500+35.85	2915079.432	546235.979
L18	500+35.85	2915079.432	546235.979		S55°24'46"W 8.40'	500+44.25	2915074.665	546229.065
C12	500+44.25	2915074.665	546229.065	R=40.00' Δ=18°56'09" L=13.22' T=6.67'		500+57.46	2915069.079	546217.150
L19	500+57.46	2915069.079	546217.150		S74°20'55"W 51.56'	501+09.03	2915055.168	546167.499
C13	501+09.03	2915055.168	546167.499	R=40.00' Δ=10°21'19" L=7.23' T=3.62'		501+16.26	2915052.600	546160.751
L20	501+16.26	2915052.600	546160.751		S63°59'36"W 8.31'	501+24.57	2915048.958	546153.285
C14	501+24.57	2915048.958	546153.285	R=40.00' Δ=28°57'49" L=20.22' T=10.33'		501+44.79	2915044.961	546133.682
L21	501+44.79	2915044.961	546133.682		N87°02'35"W 12.09'	501+56.88	2915045.584	546121.605
C15	501+56.88	2915045.584	546121.605	R=10.00' Δ=44°24'00" L=7.75' T=4.08'		501+64.63	2915048.797	546114.765
L22	501+64.63	2915048.797	546114.765		N42°38'35"W 25.08'	501+89.71	2915067.243	546097.777
C16	501+89.71	2915067.243	546097.777	R=35.00' Δ=27°37'31" L=16.88' T=8.61'		502+06.58	2915081.884	546089.718

WASHBURN SQUARE CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L14	100+00.00	2915002.406	546591.181		N4°51'36"W 203.81'	102+03.81	2915205.485	546573.914
C10	102+03.81	2915205.485	546573.914	R=45.00' Δ=90°26'16" L=71.03' T=45.35'		102+74.84	2915246.481	546524.921
L15	102+74.84	2915246.481	546524.921		S84°42'08"W 544.01'	108+18.85	2915196.251	545983.237

WASHBURN SQUARE WALKWAY CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L16	400+00.00	2914972.067	546281.284		N5°27'11"W 250.75'	402+50.75	2915221.679	546257.456

WASHBURN SQUARE WALKWAY 2 CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L24	502+06.58	2915081.884	546089.718		N15°01'04"W 17.81'	502+24.39	2915099.087	546085.103
C17	502+24.39	2915099.087	546085.103	R=20.00' Δ=56°21'30" L=19.67' T=10.71'		502+44.06	2915117.480	546089.404
L25	502+44.06	2915117.480	546089.404		N41°20'26"E 28.68'	502+72.74	2915139.010	546108.345
L26	502+86.59	2915146.967	546119.525		N67°46'55"E 3.47'	502+90.06	2915148.281	546122.742
C18	502+90.06	2915148.281	546122.742	R=90.00' Δ=21°21'01" L=33.54' T=16.97'		503+23.60	2915154.953	546155.411
C19	503+32.20	2915155.083	546164.016	R=50.00' Δ=9°06'39" L=7.95' T=3.98'		503+40.15	2915155.834	546171.923
L27	503+40.15	2915155.834	546171.923		N80°01'17"E 18.38'	503+58.54	2915159.019	546190.028
C20	503+58.54	2915159.019	546190.028	R=50.00' Δ=18°19'58" L=16.00' T=8.07'		503+74.54	2915164.244	546205.078
L28	503+74.54	2915164.244	546205.078		N61°41'19"E 62.51'	504+37.05	2915193.889	546260.109
C31	502+72.74	2915139.010	546108.345	R=30.00' Δ=26°26'29" L=13.84' T=7.05'		502+86.59	2915146.967	546119.525
L40	503+23.60	2915154.953	546155.411		N89°07'56"E 8.61'	503+32.20	2915155.083	546164.016

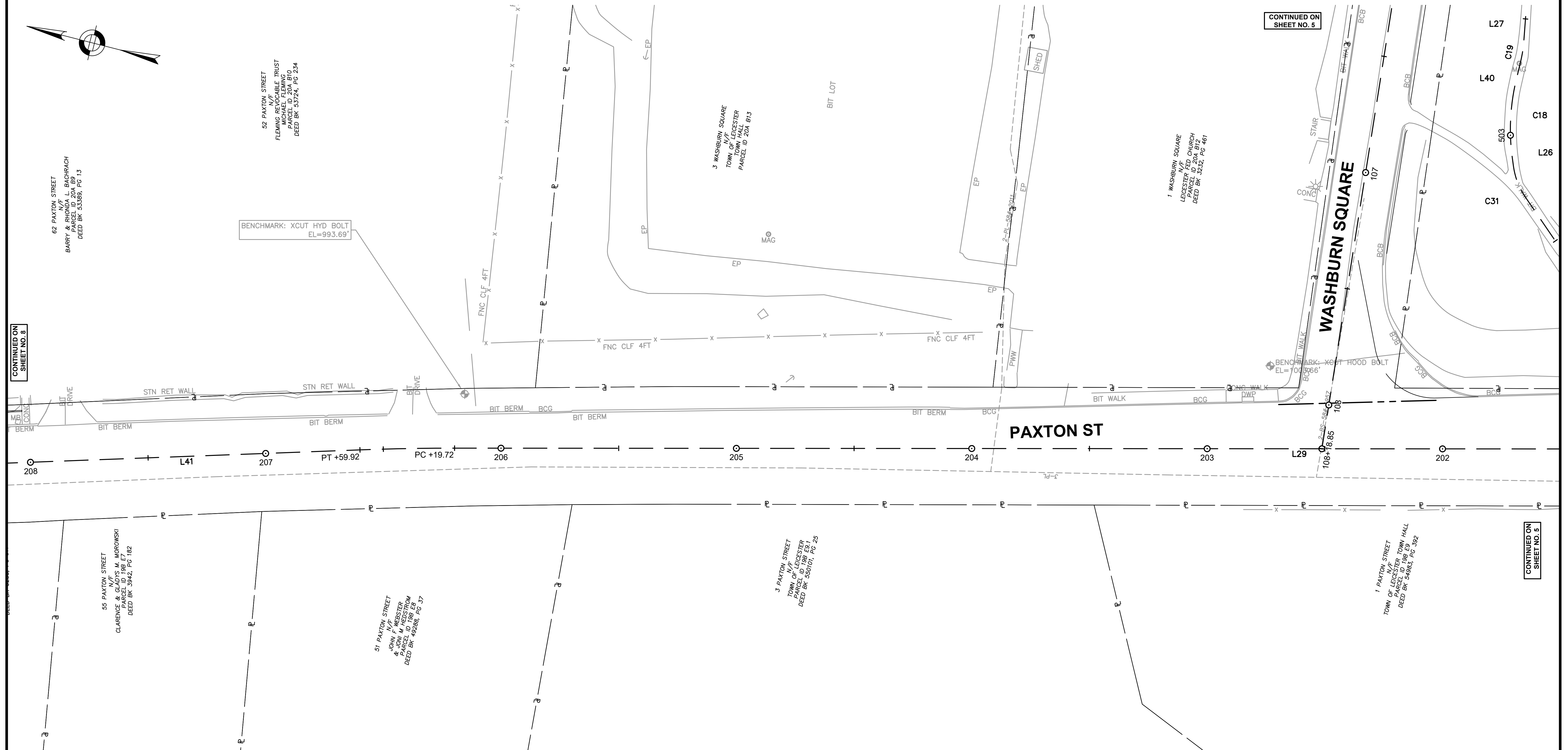


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LEICESTER WASHBURN SQUARE, PAXTON ST, AND WINSLOW AVE COMPLETE STREETS IMPROVEMENTS BASELINE TIE PLANS							
HSH	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	6	30





PAXTON STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L29	200+00.00	2914952.723	546045.108		N14°15'18"W 619.72'	206+19.72	2915553.361	545892.509
L41	206+59.92	2915592.123	545881.868		N16°26'55"W 355.79'	210+15.71	2915933.353	545781.124



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BASELINE TIE PLANS


HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	7	30



PAXTON STREET CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L29	200+00.00	2914952.723	546045.108		N14°15'18"W 619.72'	206+19.72	2915553.361	545892.509
L41	206+59.92	2915592.123	545881.868		N16°26'55"W 355.79'	210+15.71	2915933.353	545781.124

WINSLOW AVENUE CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L45	300+00.00	2916186.002	545724.022		N76°40'09"E 930.00'	309+30.00	2916400.434	546628.963

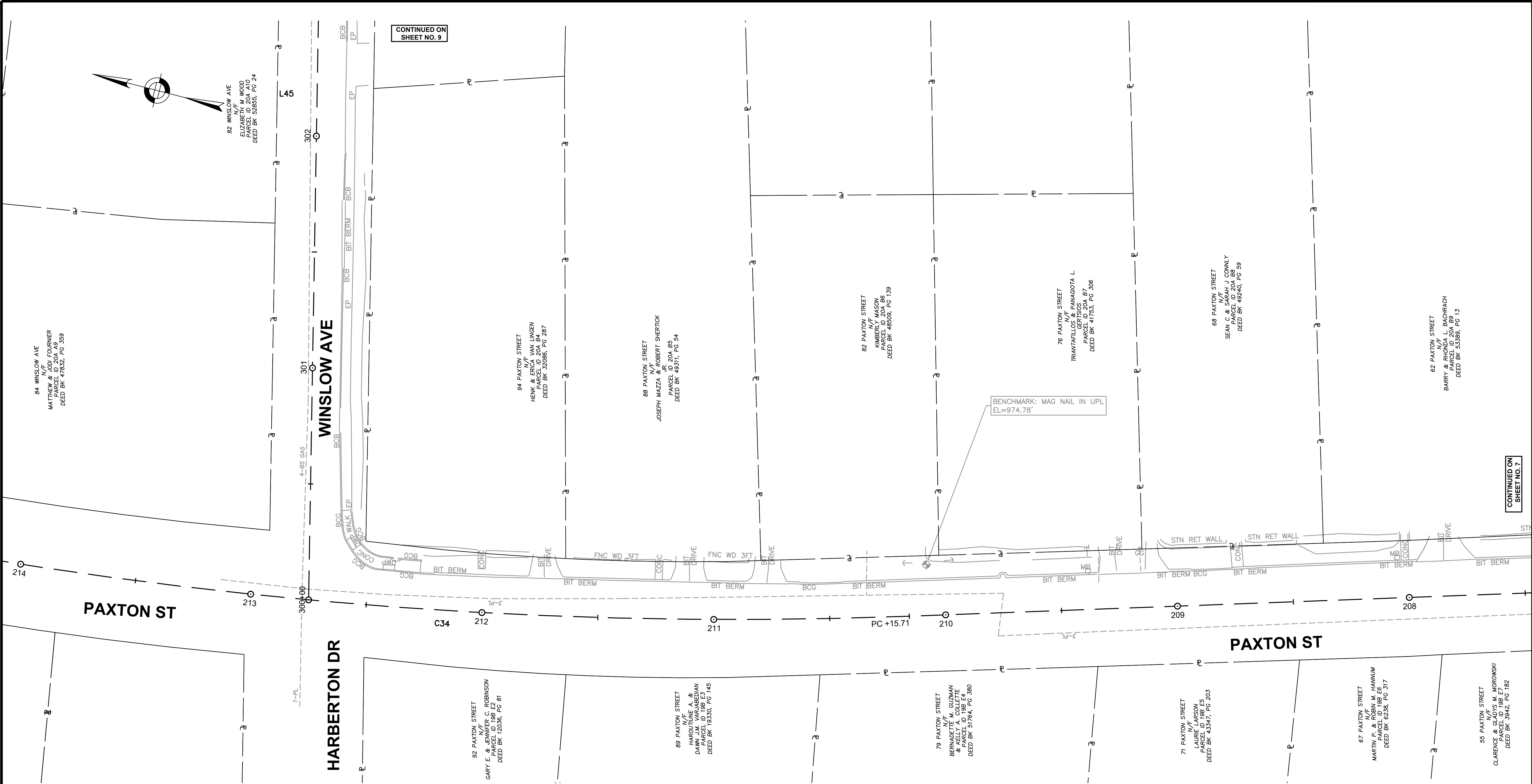




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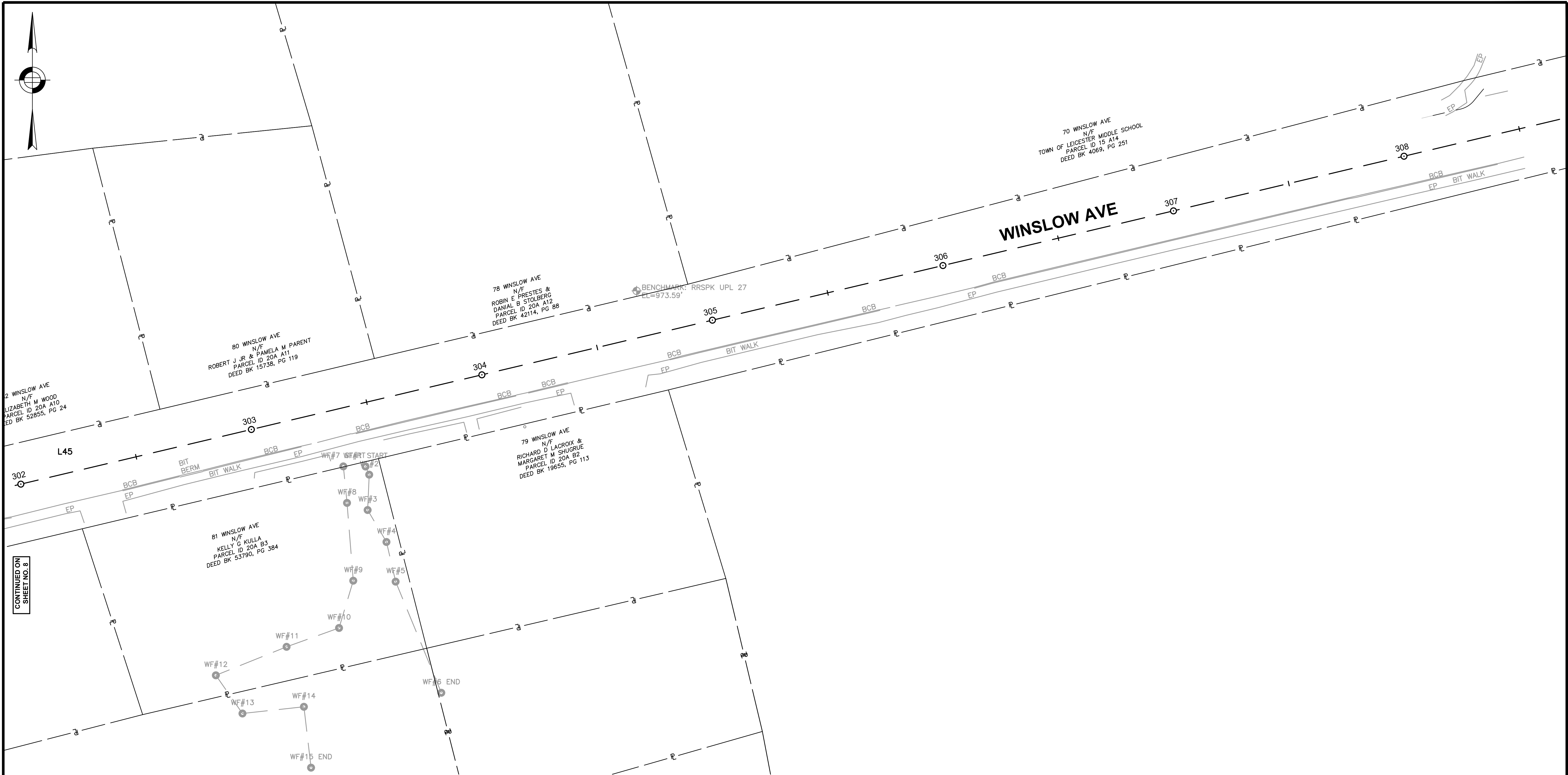
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PAXTON ST, AND WINSLOW AVE  
COMPLETE STREETS IMPROVEMENTS  
BASELINE TIE PLANS**

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	8	30






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WINSLOW AVENUE CONSTRUCTION BASELINE DATA								
NUMBER	STARTING STATION	NORTHING	EASTING	CURVE DATA	LINE DATA	ENDING STATION	NORTHING	EASTING
L45	300+00.00	2916186.002	545724.022		N76°40'09"E 930.00'	309+30.00	2916400.434	546628.963





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BASELINE TIE PLANS**

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2019060.00	6/19/20	CRL	SJT	RL	9	30



PAVEMENT NOTES:

CEMENT CONCRETE WHEELCHAIR RAMPS:

SURFACE COURSE: 4" CEMENT CONCRETE SURFACE COURSE OVER  
SUB-BASE: 8" GRAVEL BORROW TYPE B

HOT MIX ASPHALT SIDEWALKS:

SURFACE COURSE: 1.5" HOT MIX ASPHALT (HMA)  
INTERMEDIATE COURSE: 1.5" HOT MIX ASPHALT (HMA) DENSE BINDER  
SUB-BASE: 8" GRAVEL BORROW TYPE B

HOT MIX ASPHALT SIDEWALK AT DRIVEWAYS:

SURFACE COURSE: 1.5" HOT MIX ASPHALT (HMA)  
INTERMEDIATE COURSE: 3.5" HOT MIX ASPHALT (HMA) DENSE BINDER  
SUB-BASE: 8" GRAVEL BORROW TYPE B

HOT MIX ASPHALT DRIVEWAYS:

SURFACE COURSE: 1.5" HOT MIX ASPHALT (HMA)  
ASPHALT EMULSION FOR TACK COAT (RS - 1h)  
INTERMEDIATE COURSE: 3.5" HOT MIX ASPHALT (HMA) DENSE BINDER  
SUB-BASE: 8" GRAVEL BORROW TYPE B

PAVEMENT MILL AND OVERLAY:

PAVEMENT MILLING: MICROMILL EXISTING SURFACE 1.5" DEPTH  
SURFACE COURSE: 1.5" HOT MIX ASPHALT (HMA)  
ASPHALT EMULSION FOR TACK COAT (RS-1h)

FULL DEPTH CONSTRUCTION:

SURFACE COURSE: 1.5" HOT MIX ASPHALT (HMA)  
ASPHALT EMULSION FOR TACK COAT (RS - 1h)  
INTERMEDIATE COURSE: 3.5" MIN OR MATCH EXIST THICKNESS  
WHICHEVER IS GREATER HOT MIX ASPHALT (HMA) DENSE BINDER  
BASE COURSE: 8" GRAVEL BORROW TYPE B

FULL DEPTH CONSTRUCTION LESS THAN 4' WIDE:

SURFACE COURSE: 1.5" HOT MIX ASPHALT (HMA)  
ASPHALT EMULSION FOR TACK COAT (RS - 1h)  
INTERMEDIATE COURSE: 3.5" MIN OR MATCH EXIST THICKNESS  
WHICHEVER IS GREATER HOT MIX ASPHALT (HMA) DENSE BINDER  
BASE COURSE: 6" HIGH EARLY STRENGTH CEMENT CONCRETE BASE COURSE

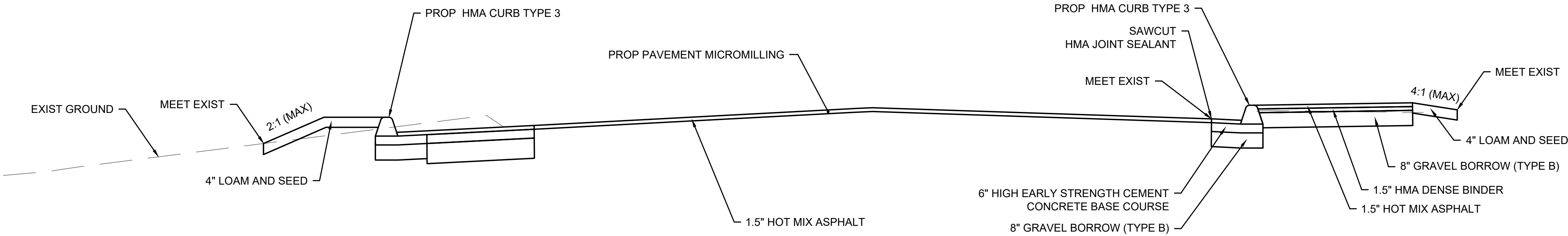
\* = TOLERANCE FOR CONSTRUCTION ± 0.5% ON SIDEWALK SLOPES, DRIVEWAY SLOPES, AND WHEELCHAIR RAMPS.



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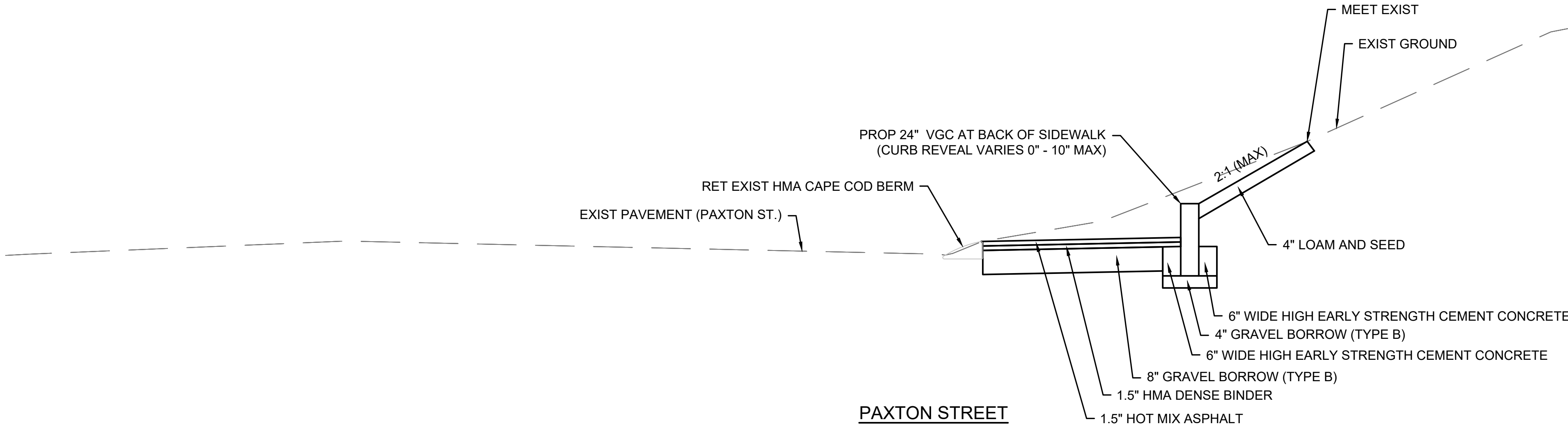
LEICESTER WASHBURN SQUARE,  
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COMPLETE STREETS IMPROVEMENTS  
TYPICAL SECTIONS

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	10	30



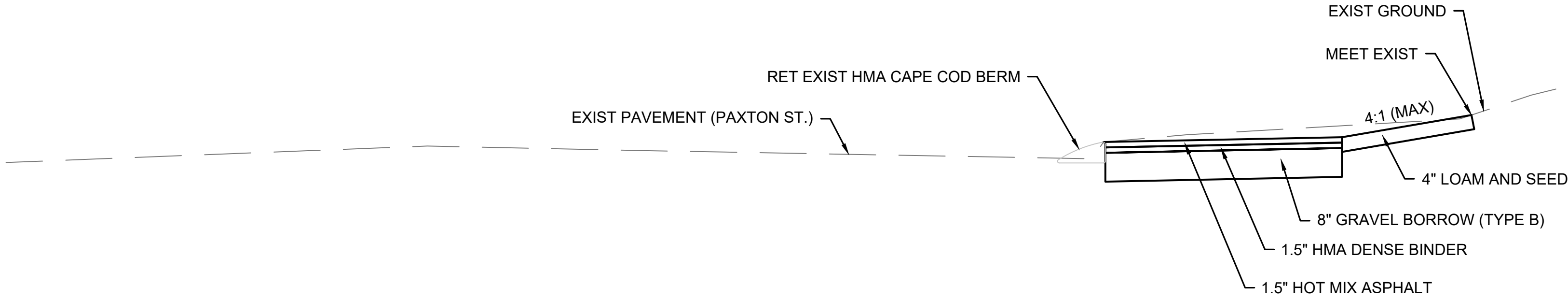
WASHBURN SQUARE

STA. 100+36 TO STA. 107+50  
NOT TO SCALE



PAXTON STREET

STA. 208+00 TO STA. 208+50  
NOT TO SCALE

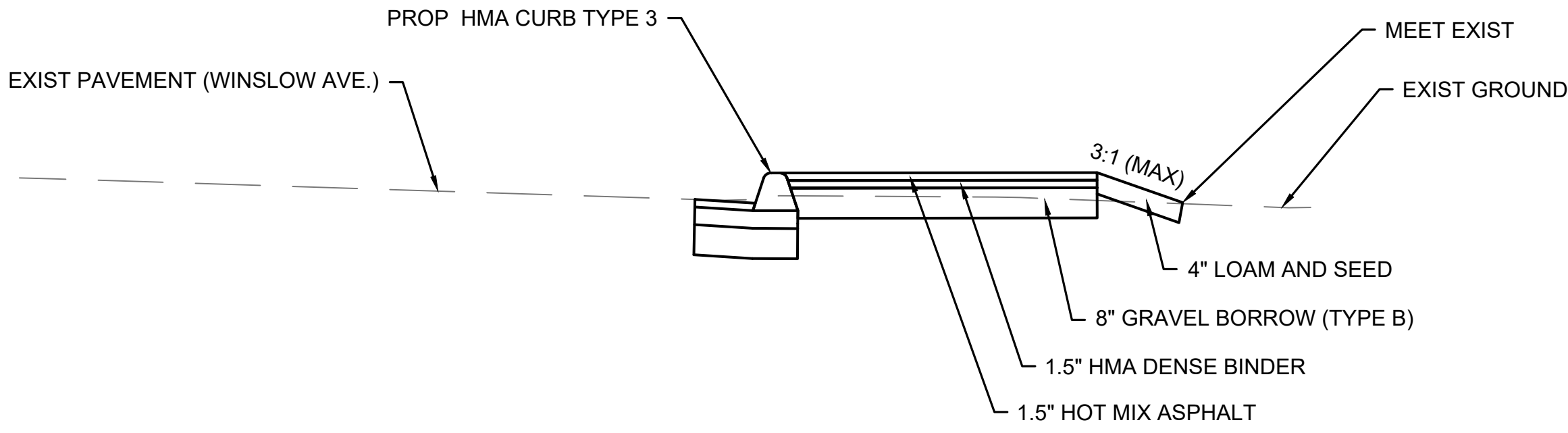


PAXTON STREET

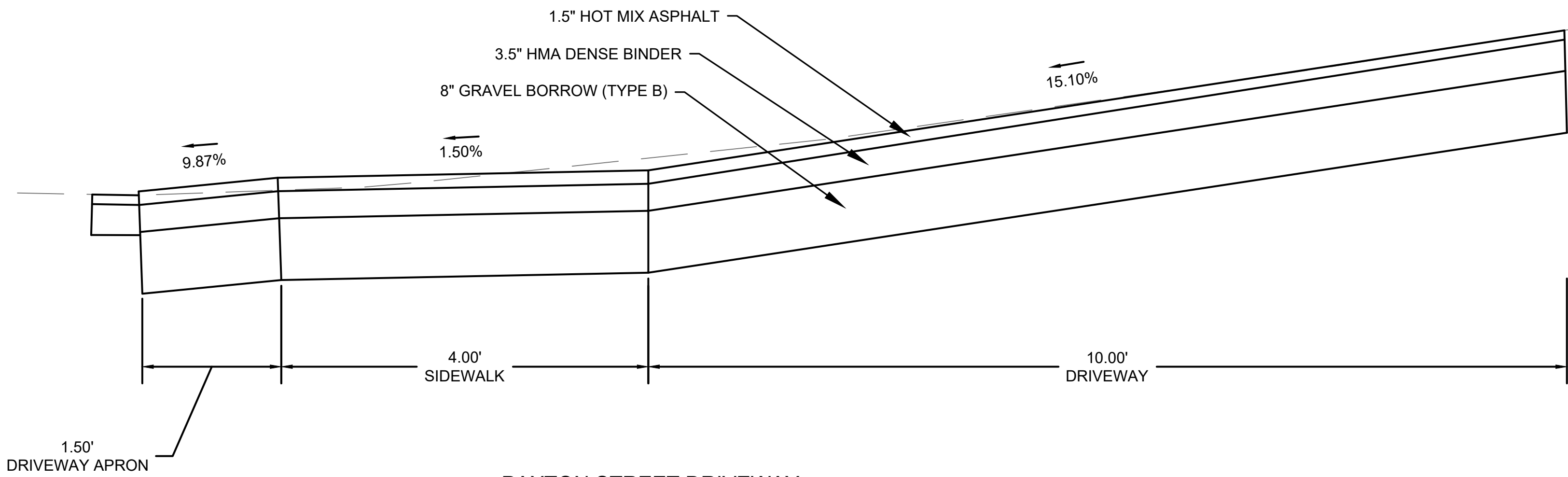
STA. 203+60 TO STA. 206+27, STA. 206+47 TO STA. 207+72,  
STA. 208+48 TO STA. 209+03, STA. 210+08 TO STA. 210+68,  
STA. 210+86 TO STA. 211+03, STA. 211+18 TO STA. 211+66 AND  
STA. 211+80 TO STA. 212+28  
NOT TO SCALE



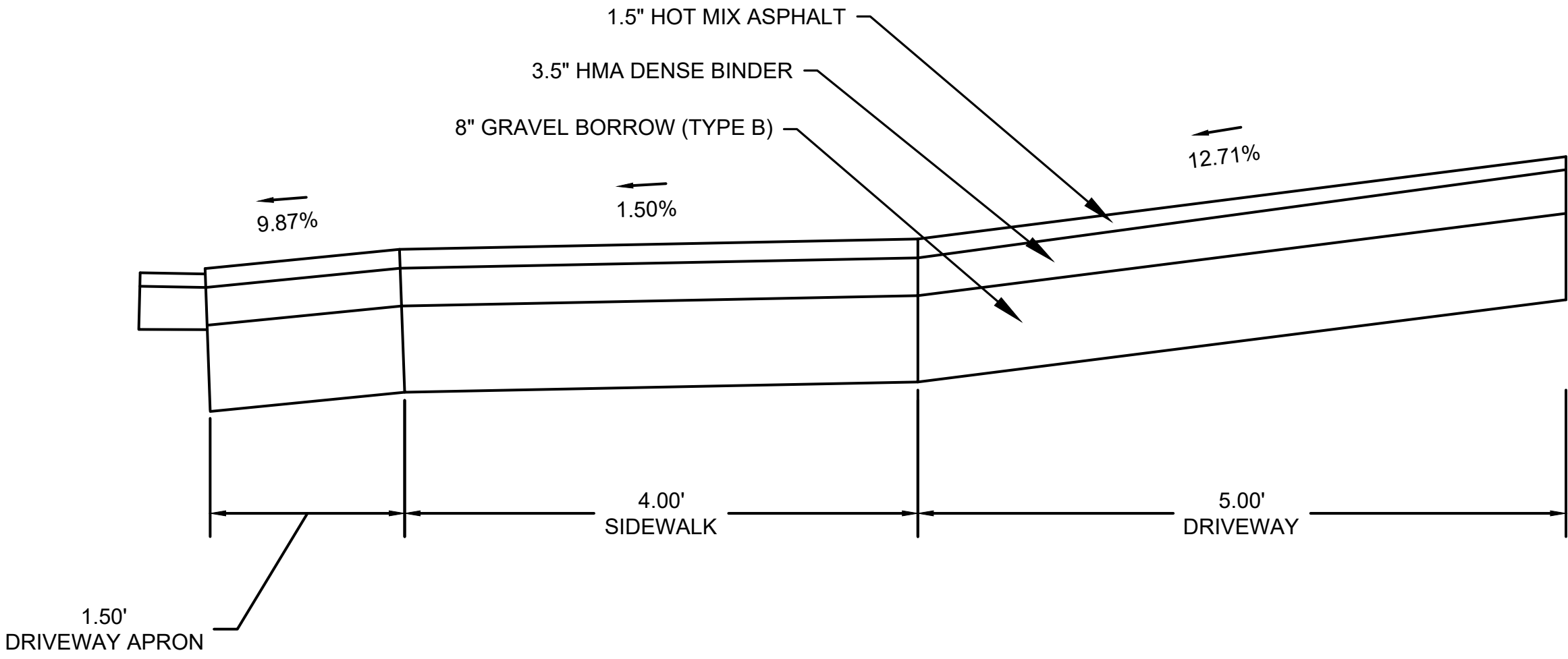
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WINSLOW AVENUE  
NOT TO SCALE



PAXTON STREET DRIVEWAY  
STA. 207+84  
NOT TO SCALE



PAXTON STREET DRIVEWAY  
STA. 206+37  
NOT TO SCALE



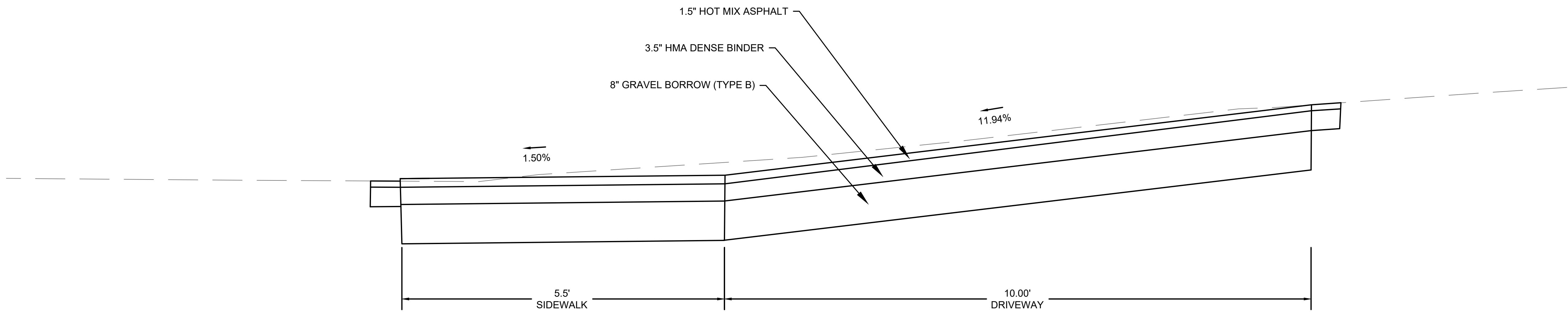
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**LEICESTER WASHBURN SQUARE,  
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COMPLETE STREETS IMPROVEMENTS  
TYPICAL SECTIONS DRIVEWAYS**

HSH	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	11	30

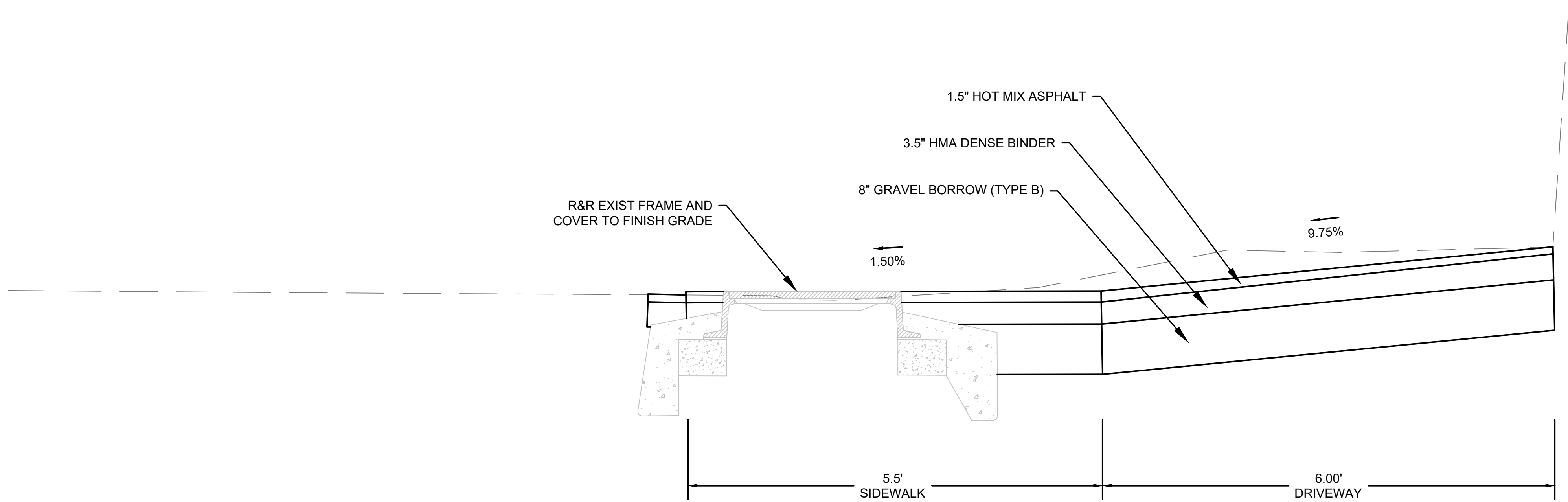


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PAXTON STREET DRIVEWAY

STA. 209+11  
NOT TO SCALE



PAXTON STREET DRIVEWAY

STA. 209+05  
NOT TO SCALE



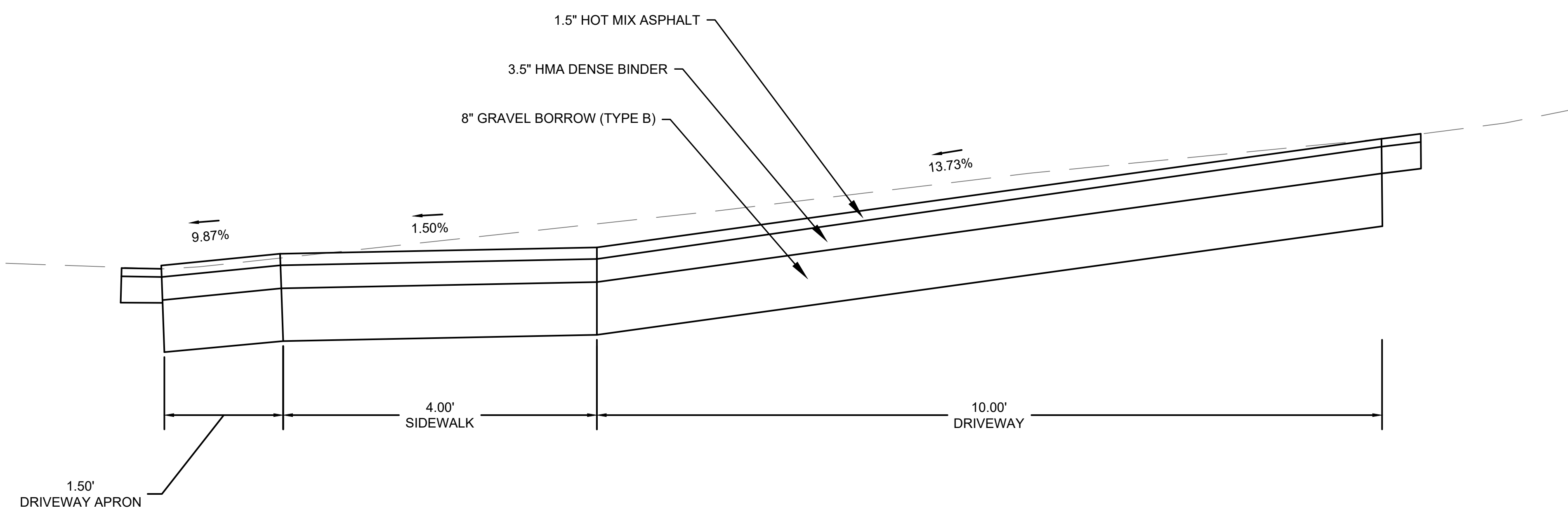
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COMPLETE STREETS IMPROVEMENTS  
TYPICAL SECTIONS DRIVEWAYS**

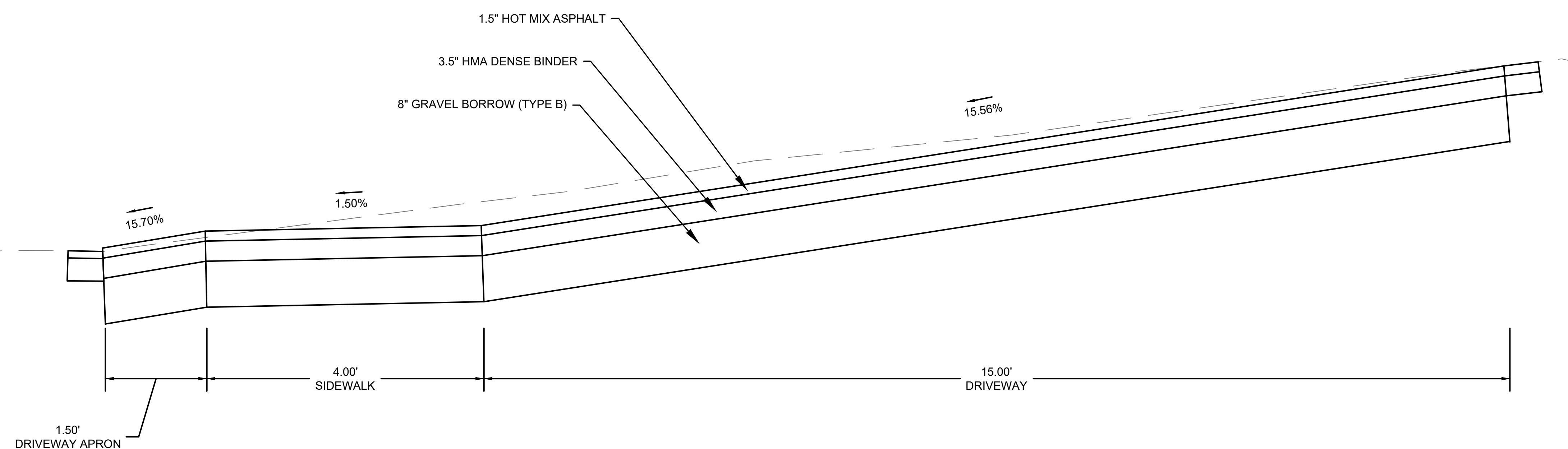
HSH	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	12	30





PAXTON STREET DRIVEWAY

STA. 211+10  
NOT TO SCALE



PAXTON STREET DRIVEWAY

STA. 210+76  
NOT TO SCALE



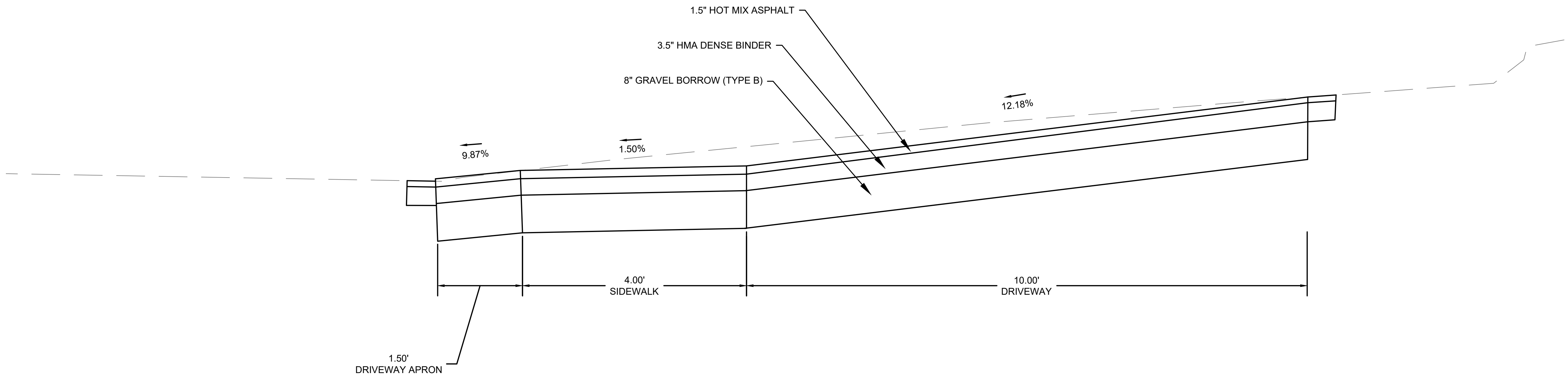
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LEICESTER WASHBURN SQUARE, PAXTON ST, AND WINSLOW AVE COMPLETE STREETS IMPROVEMENTS TYPICAL SECTIONS DRIVEWAYS							
HS#	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	13	30



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PAXTON STREET DRIVEWAY

STA. 211+75  
NOT TO SCALE



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HSH	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	14	30



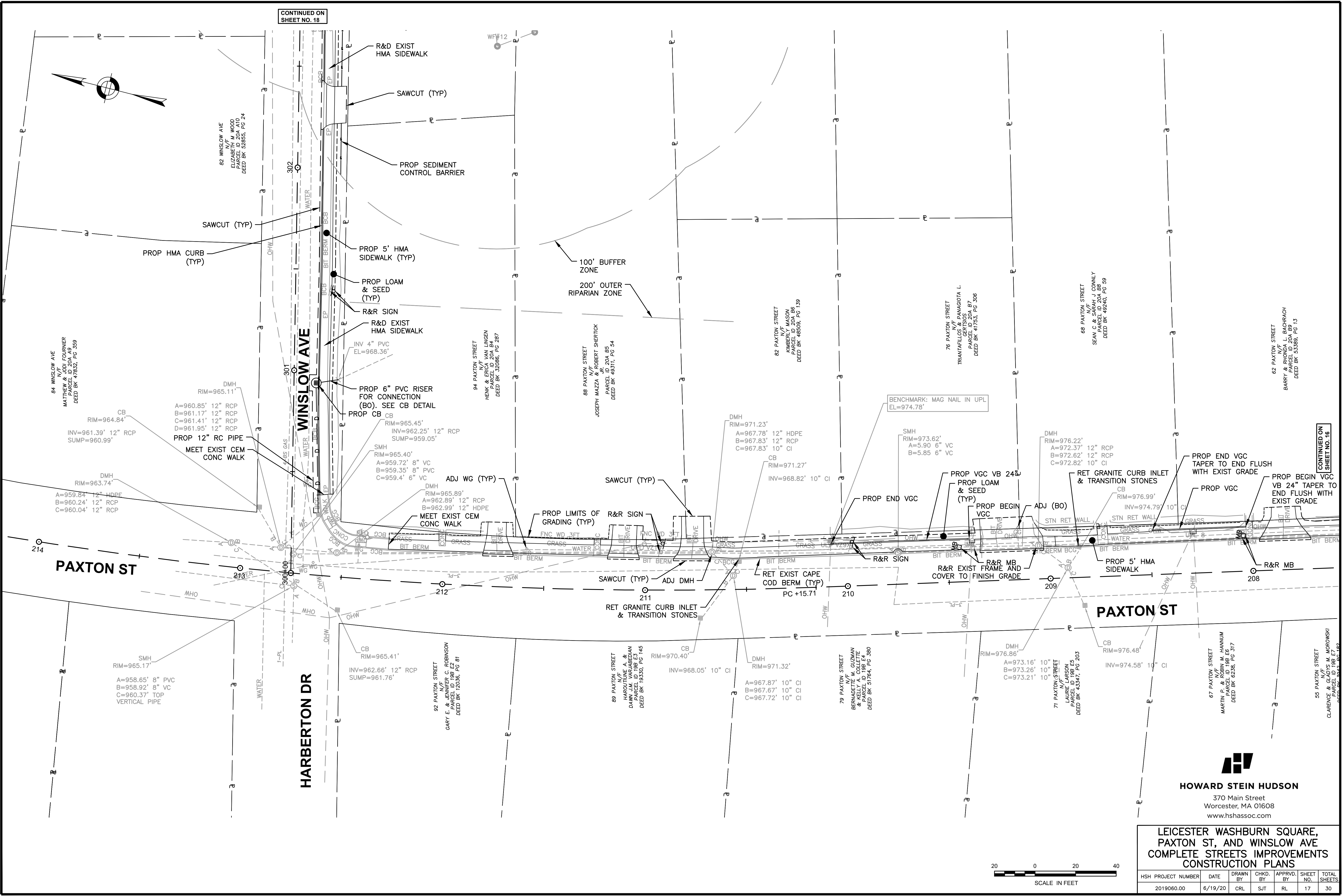








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LEICESTER WASHBURN SQUARE, PAXTON ST, AND WINSLOW AVE COMPLETE STREETS IMPROVEMENTS CONSTRUCTION PLANS						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	17	30

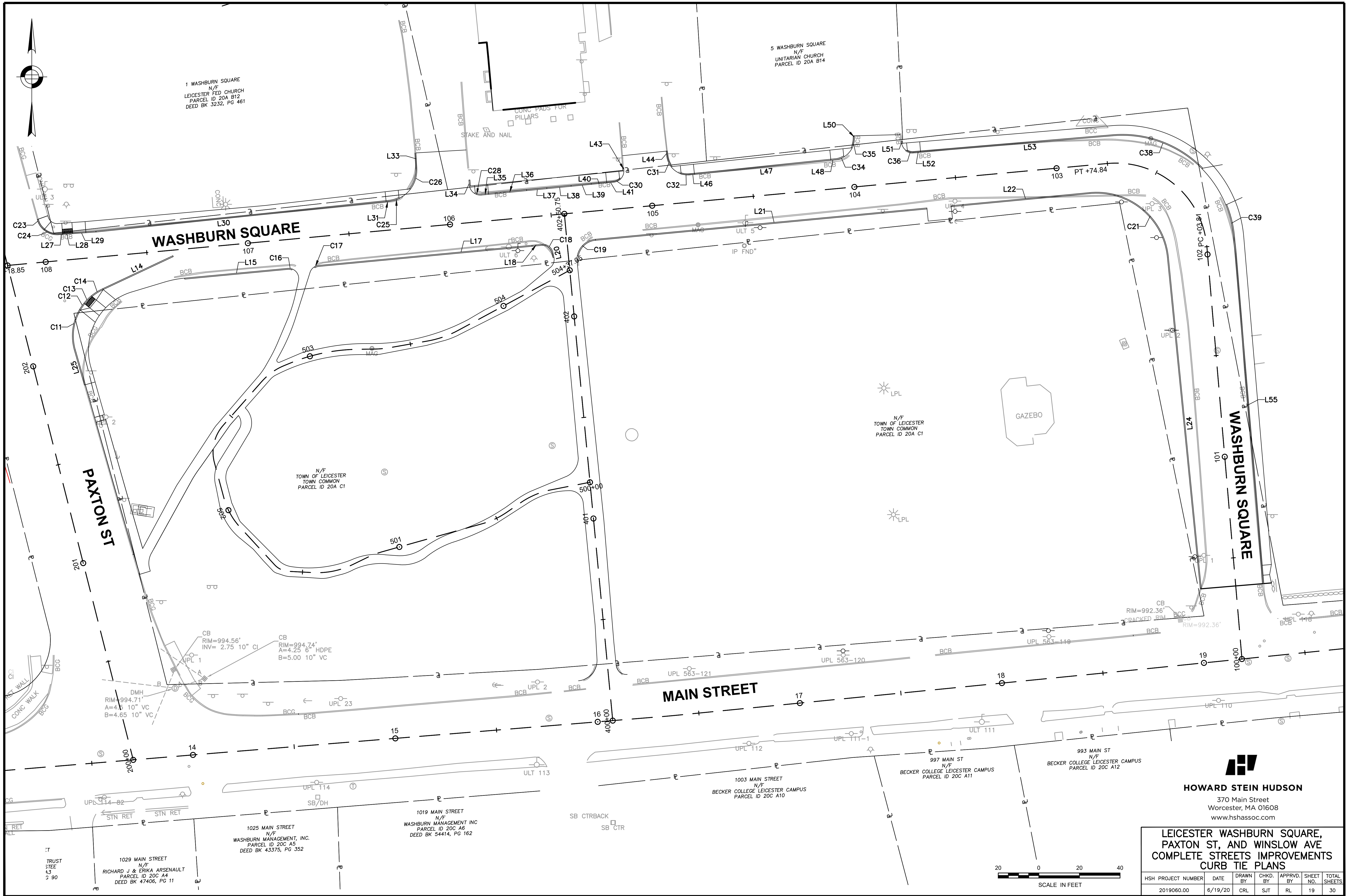








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Parcel Line and Curve Table			
Line #/Curve #	Length	Bearing/Delta	Radius
L50	1.42	S2° 11' 02.22"E	
C11	20.60	46.29	25.50
C17	2.26	25.84	5.00
L17	94.03	S84° 36' 03.44"W	
L37	10.00	N84° 25' 36.46"E	
L38	12.00	N84° 25' 36.46"E	
L39	10.00	N84° 25' 36.46"E	
L40	7.60	N84° 25' 36.46"E	
C30	3.54	36.87	5.50
L41	3.53	N84° 25' 36.46"E	
L36	18.84	N84° 25' 36.46"E	
C25	5.54	20.48	15.50
L31	1.25	N84° 00' 33.59"E	
L34	2.43	S5° 21' 42.74"E	
L35	3.47	N84° 25' 36.46"E	
C28	3.54	36.87	5.50
C31	5.78	31.53	10.50
L44	2.35	S5° 59' 24.92"E	
L46	2.14	N84° 04' 00.59"E	
C32	4.74	25.84	10.50

Parcel Line and Curve Table			
Line #/Curve #	Length	Bearing/Delta	Radius
C35	4.98	27.16	10.50
L15	50.95	S84° 36' 03.44"W	
C16	2.26	25.84	5.00
L51	0.98	S10° 41' 27.05"E	
L52	3.43	N85° 11' 20.13"E	
C36	3.54	36.88	5.50
L55	129.02	S4° 50' 11.96"E	
C39	16.64	17.33	55.00
C14	6.74	15.09	25.60
C13	5.04	11.33	25.50
C12	3.89	8.74	25.50
L14	38.12	N64° 48' 39.33"E	
C19	12.86	73.70	10.00
L21	164.00	N84° 36' 03.44"E	
L18	4.92	S84° 36' 03.44"W	
C18	7.22	82.77	5.00
L20	2.55	N12° 37' 47.70"W	
L29	6.50	S86° 04' 48.97"W	
L28	5.00	S85° 50' 59.85"W	
L27	2.03	S85° 51' 25.13"W	

Parcel Line and Curve Table			
Line #/Curve #	Length	Bearing/Delta	Radius
C24	7.74	44.33	10.00
L30	143.40	N84° 00' 33.59"E	
C26	10.83	40.03	15.50
L33	7.53	N3° 24' 40.37"W	
L43	1.21	S4° 32' 06.62"E	
C23	6.20	35.52	10.00
L47	67.54	N84° 04' 00.59"E	
C34	4.74	25.85	10.50
L48	2.14	N84° 04' 00.59"E	
C38	48.38	50.40	55.00
L53	95.10	N85° 11' 20.13"E	
L22	68.64	S84° 36' 03.44"W	
C21	55.60	89.73	35.50
L24	164.14	N5° 40' 03.93"W	



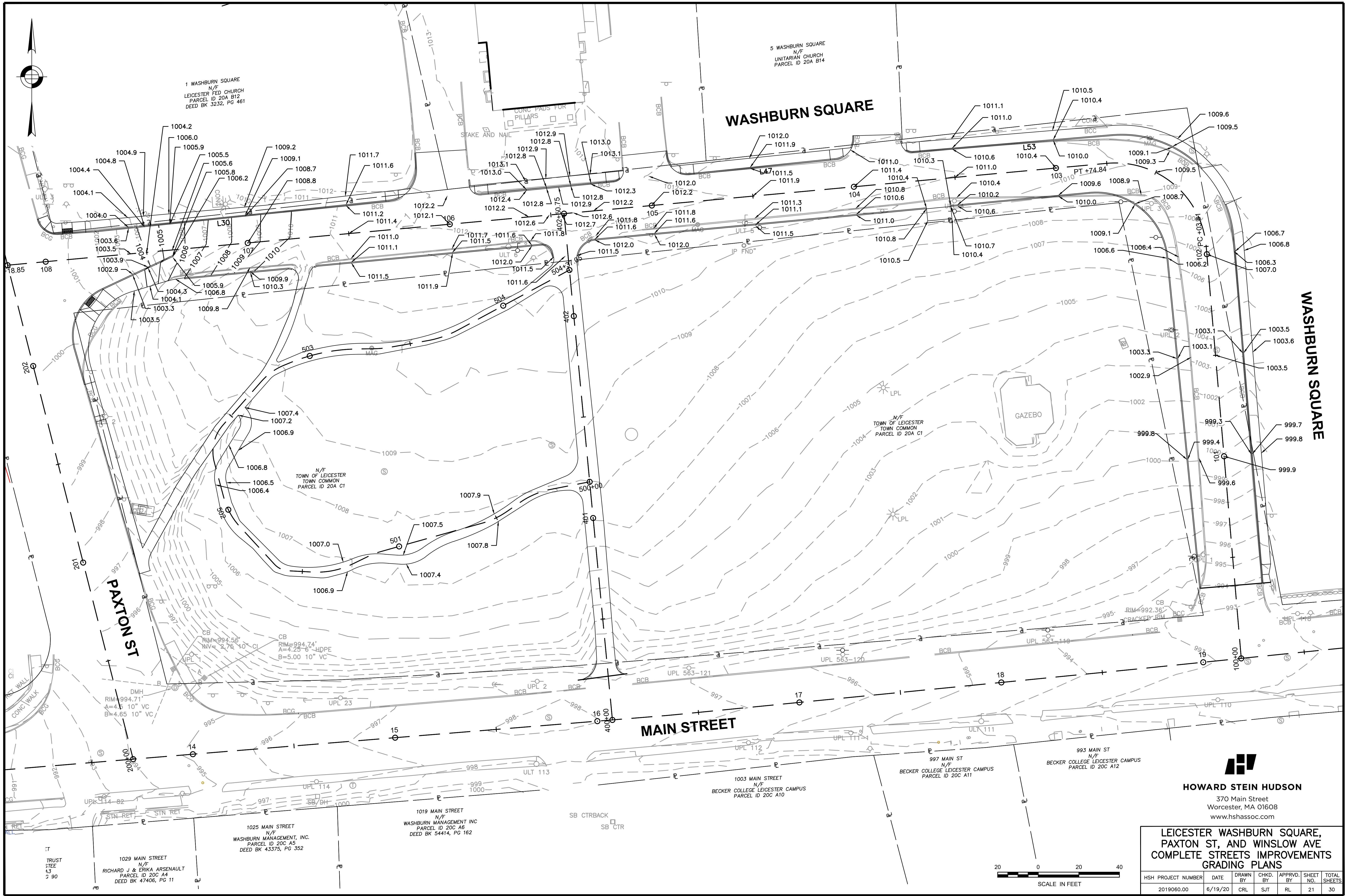
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LEICESTER WASHBURN SQUARE,  
PAXTON ST, AND WINSLOW AVE  
COMPLETE STREETS IMPROVEMENTS  
CURB TIE PLANS

HSH	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	20	30



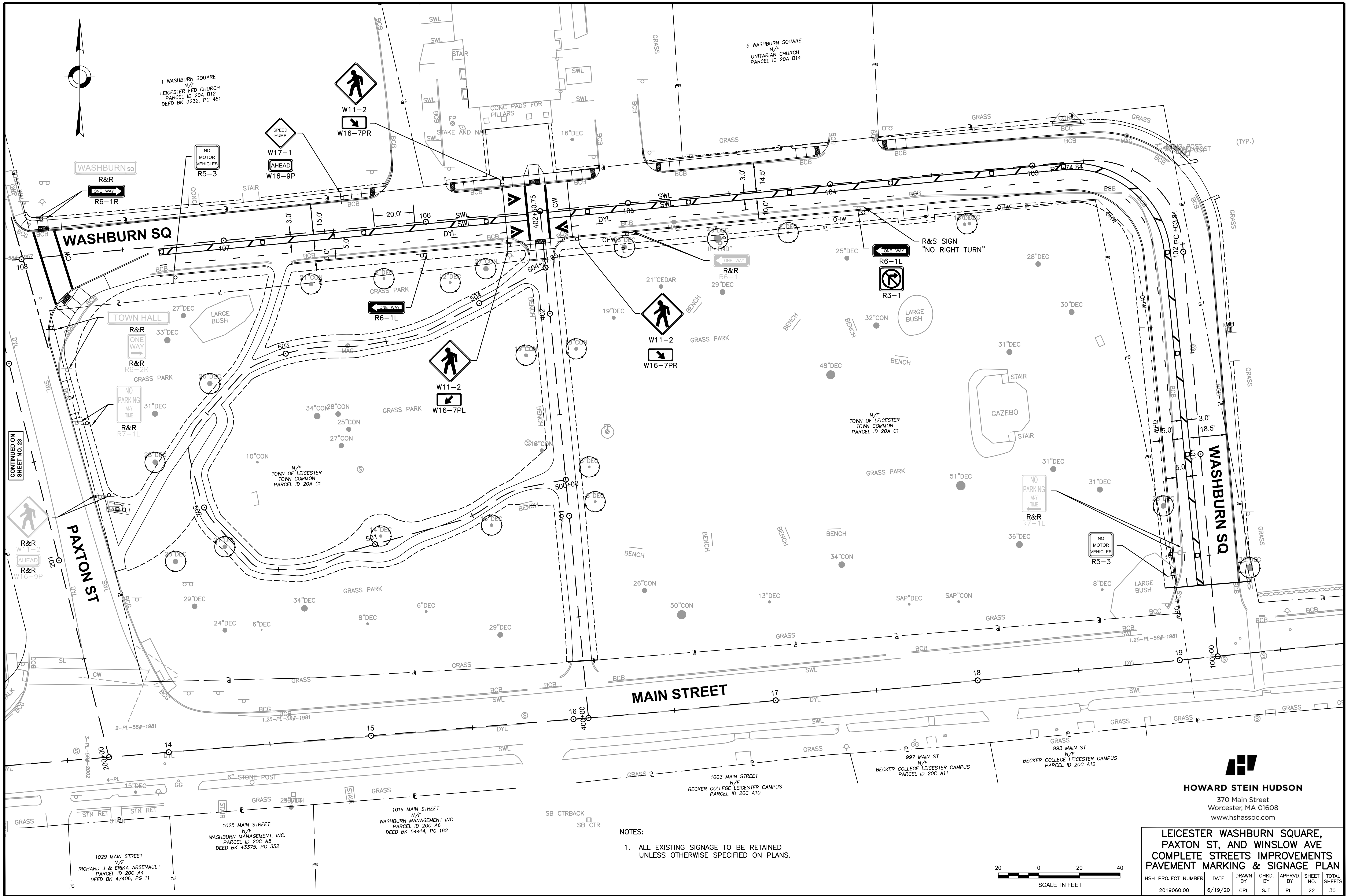
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Christopher Lyman




LEICESTER WASHBURN SQUARE, PAXTON ST, AND WINSLOW AVE COMPLETE STREETS IMPROVEMENTS GRADING PLANS						
HSN PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	21	30



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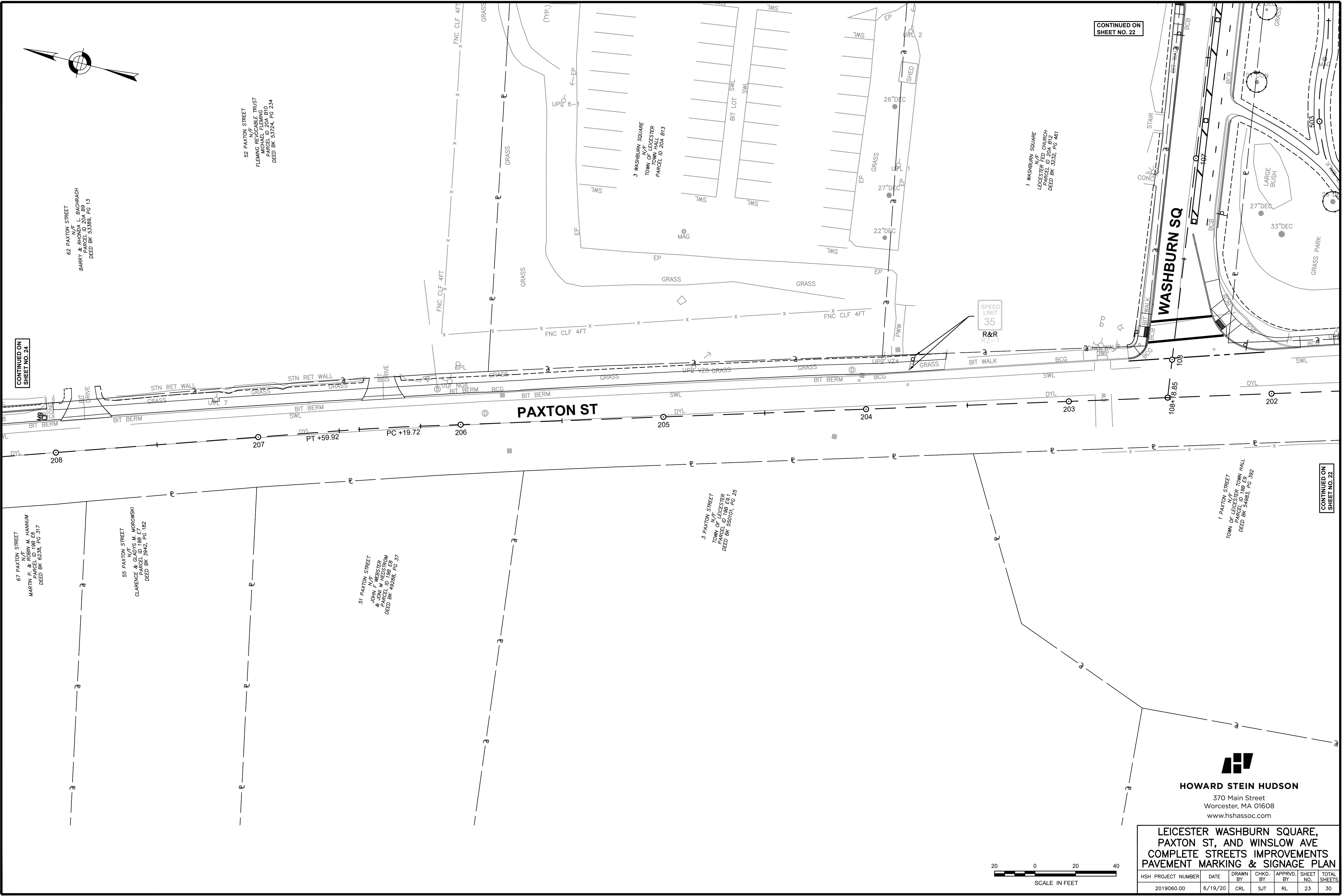
NOTES:  
1. ALL EXISTING SIGNAGE TO BE RETAINED UNLESS OTHERWISE SPECIFIED ON PLANS.



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LEICESTER WASHBURN SQUARE, PAXTON ST, AND WINSLOW AVE COMPLETE STREETS IMPROVEMENTS PAVEMENT MARKING & SIGNAGE PLAN						
HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	22	30






CONTINUED ON  
SHEET NO. 22

CONTINUED ON  
SHEET NO. 24

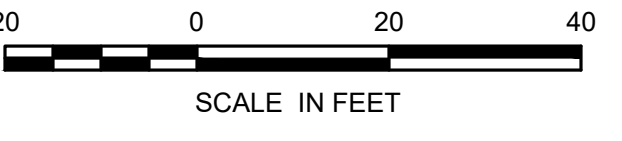
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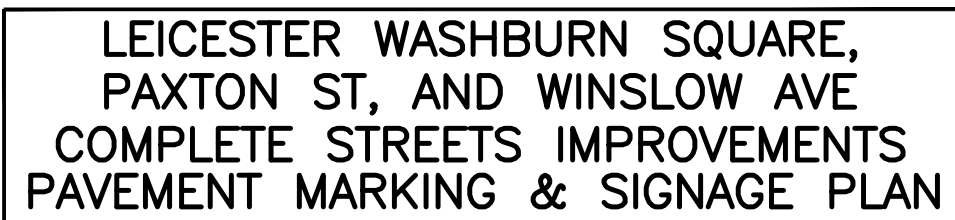
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COMPLETE STREETS IMPROVEMENTS  
PAVEMENT MARKING & SIGNAGE PLAN**

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	23	30



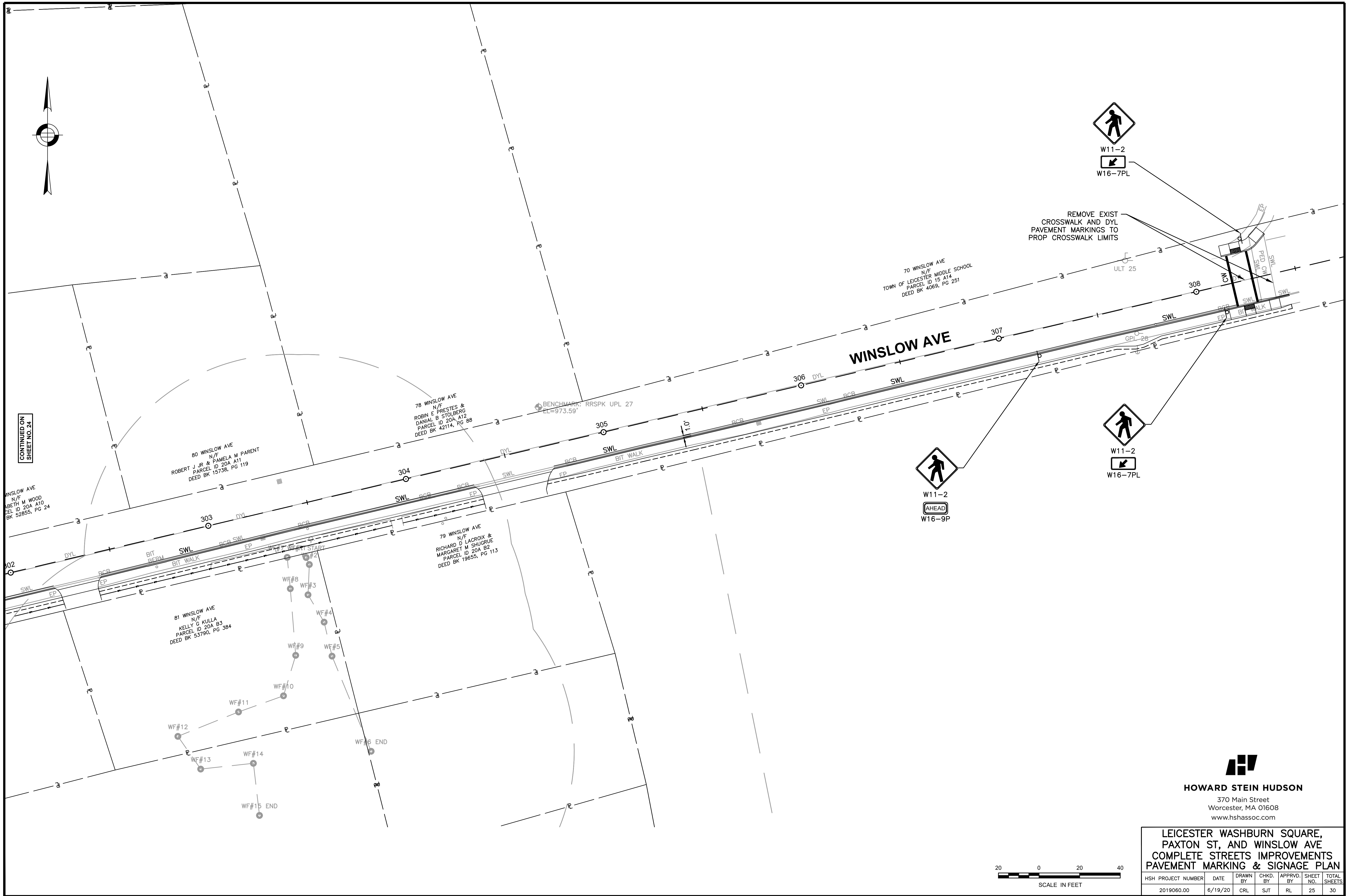













HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	24	30




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Christopher Lyman





IDENTI- FICATION NUMBER	SIZE OF SIGN (INCHES)		UNIT AREA SF	TEXT	TEXT DIMENSIONS		NUMBER OF SIGNS REQUIRED	COLOR		POST SIZE AND NUMBER REQUIRED PER SIGN	TOTAL AREA IN SQ. FEET
	WIDTH	HEIGHT									
R3-1	24	24	4.00		SEE MUTCD STANDARD DETAIL		1	SEE MUTCD STANDARD DETAIL		MOUNT W/ R6-1L (1)	4.00
R5-3	24	24	4.00				2			P5 (2)	8.00
R6-1L	12	36	3.00				2			P5 (2)	6.00
R6-1R	12	36	3.00				1			MOUNT TO EXISTING STREET SIGN POST	3.00
W11-2	36	36	9.00				6			P5 (6)	54.00
W16-7PL	24	12	2.00				3			MOUNT W/ W11-2 (3)	6.00
W16-7PR	24	12	2.00				2			MOUNT W/ W11-2 (2)	4.00
W16-9P	24	12	2.00				2			MOUNT W/ W11-2 (1) AND W17-1 (1)	4.00
W17-1	36	36	9.00				1			P5 (1)	9.00



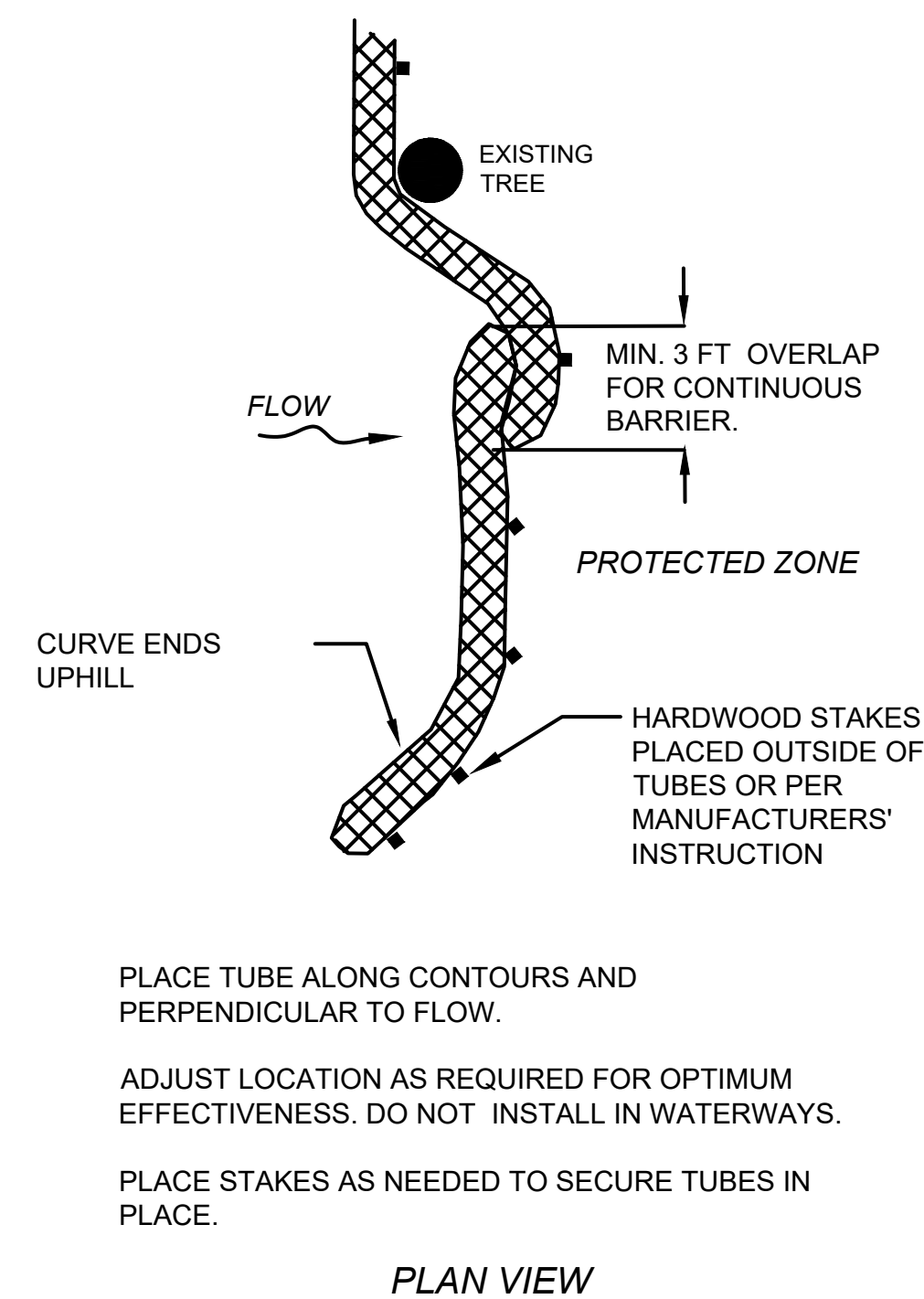
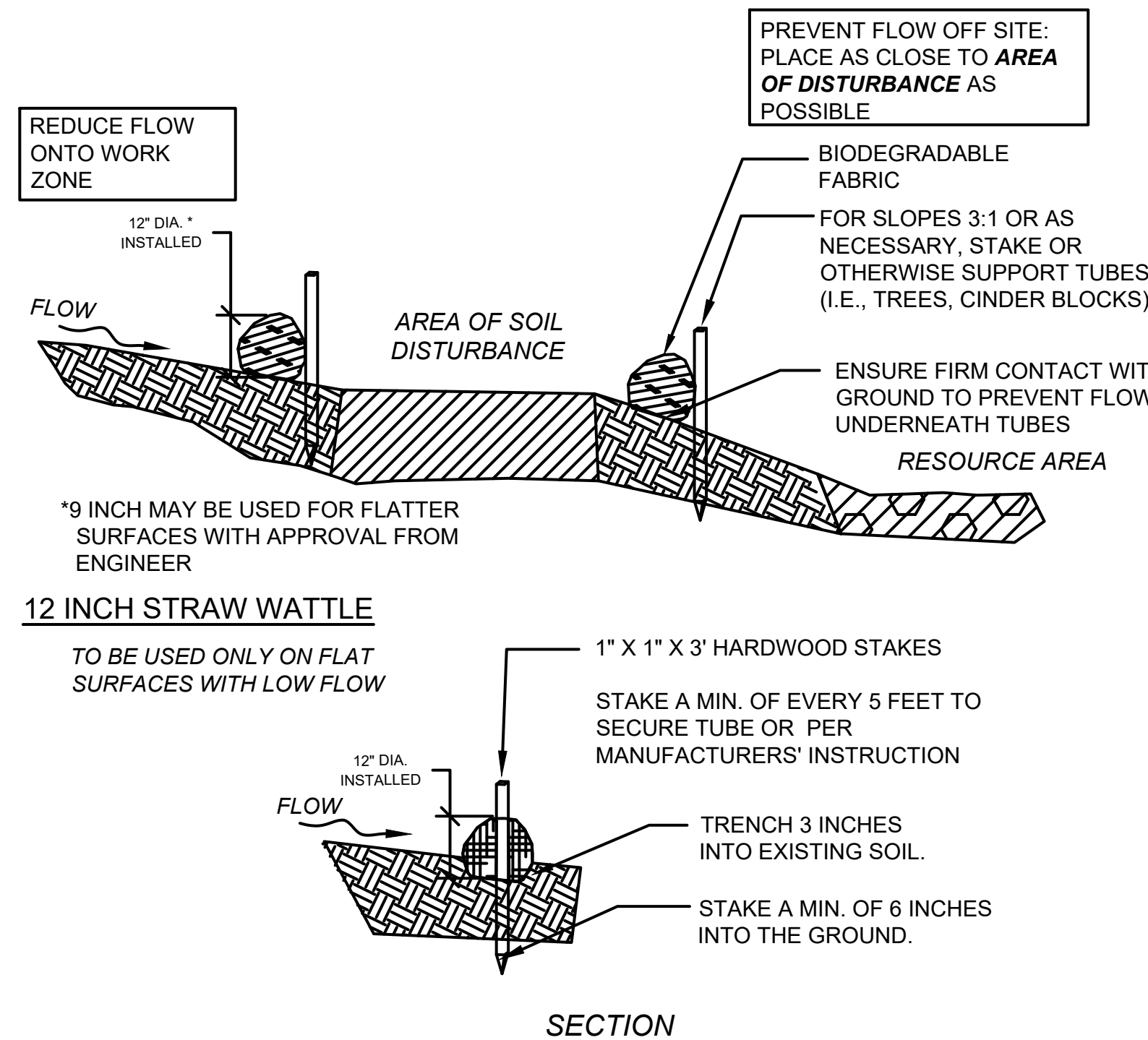
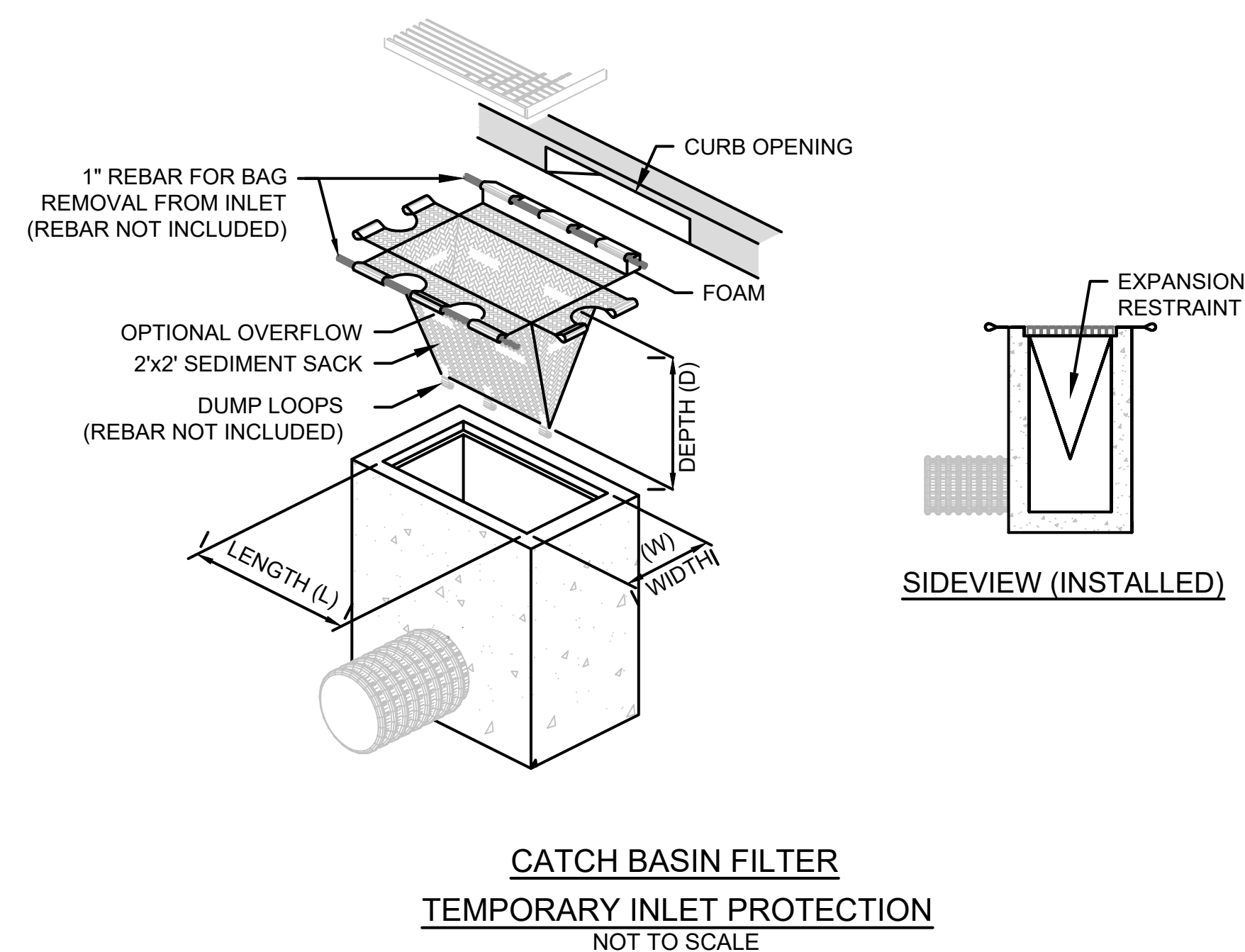
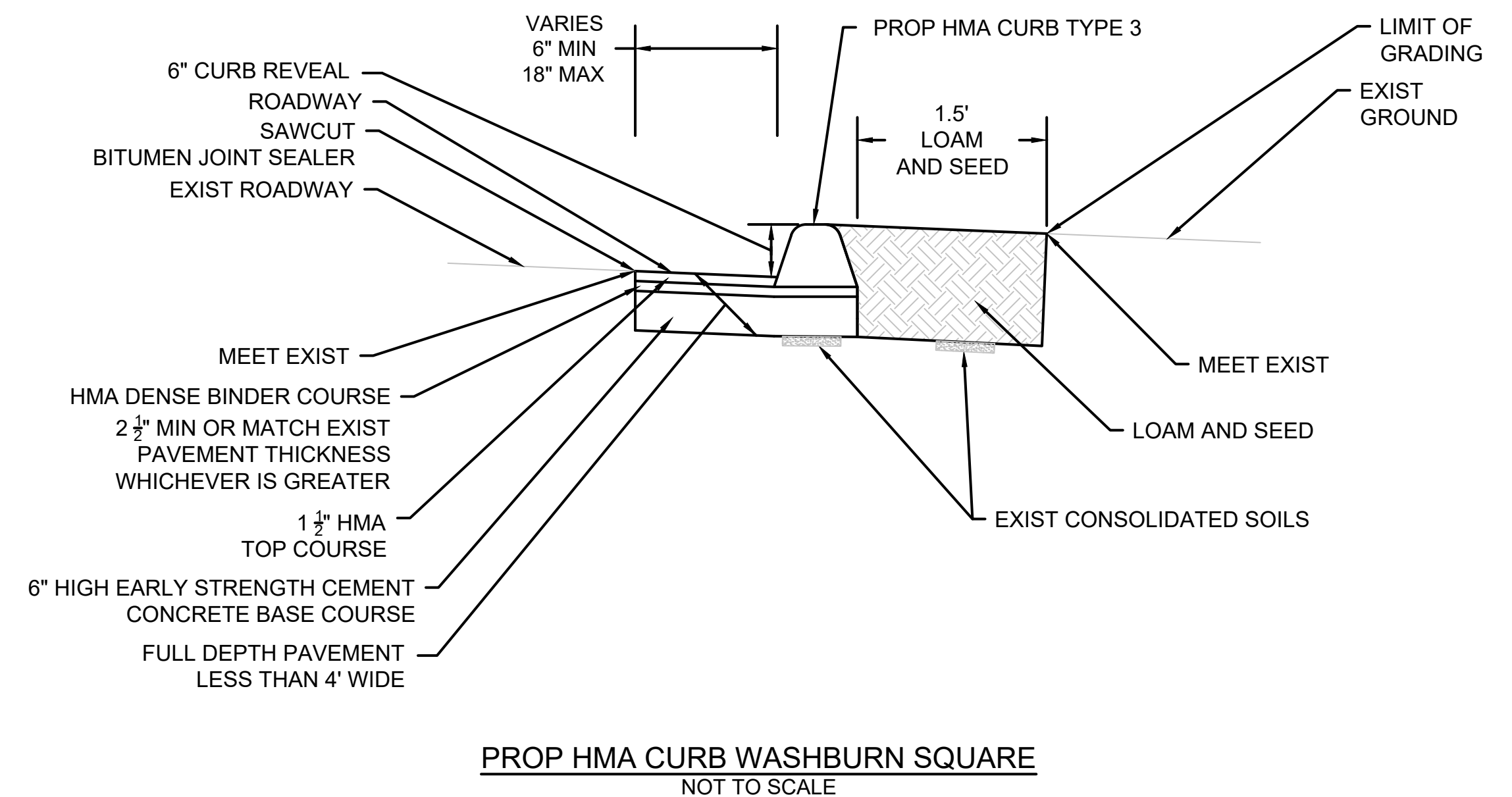
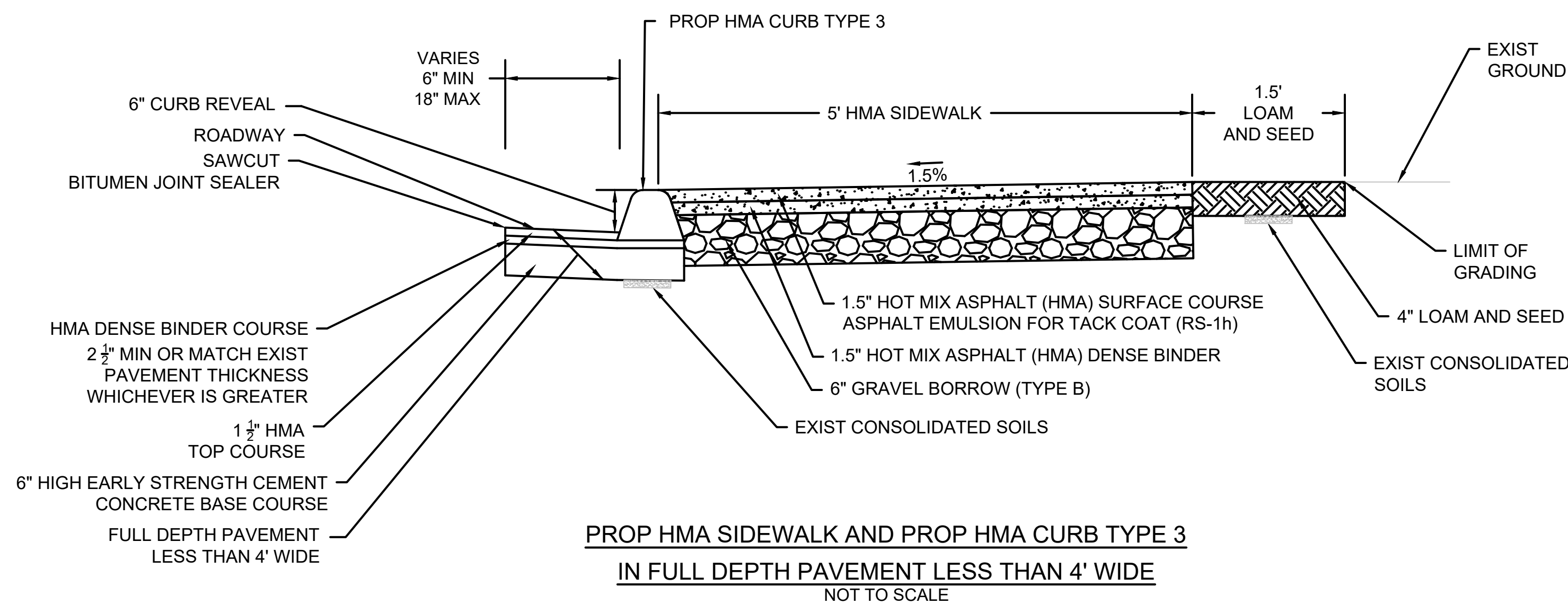
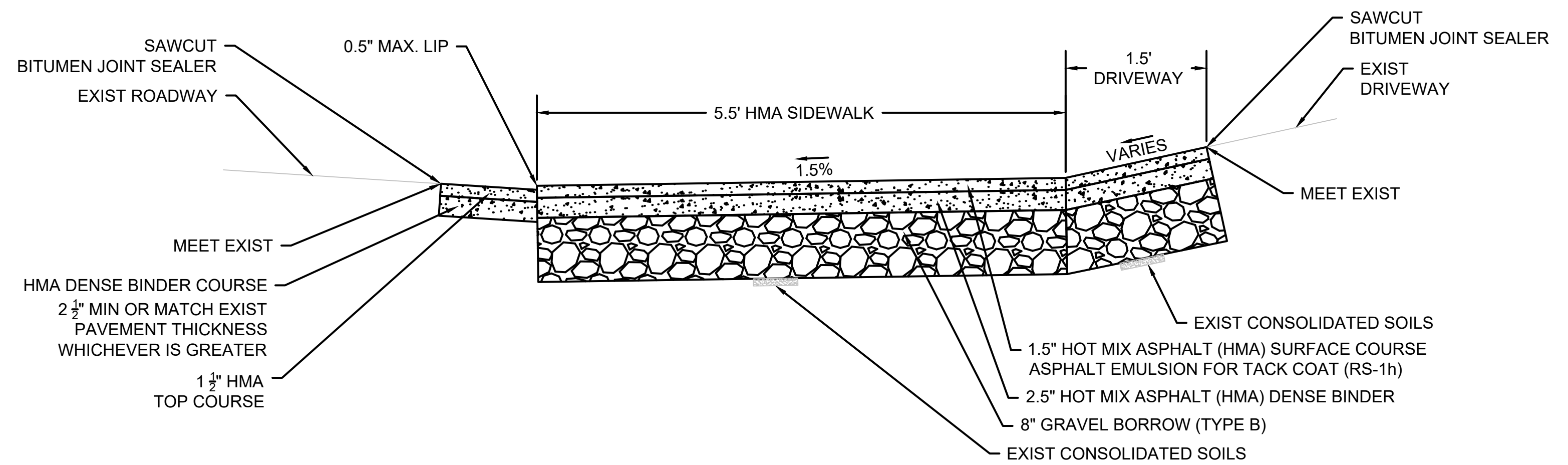
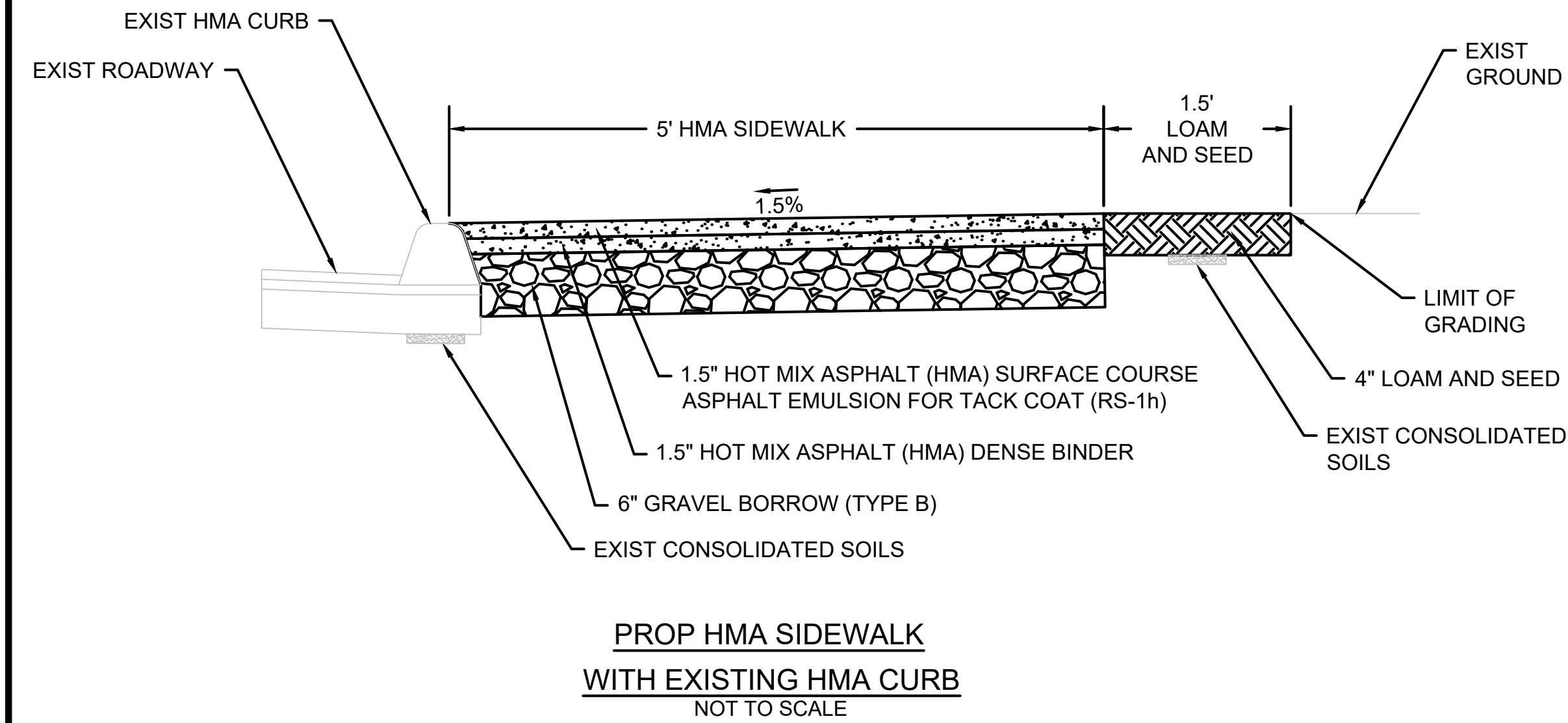
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LEICESTER WASHBURN SQUARE,  
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COMPLETE STREETS IMPROVEMENTS  
TRAFFIC SIGN SUMMARY SHEET

HSH	PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
	2019060.00	6/19/20	CRL	SJT	RL	26	30



6/22/2020 L:\190601\19060.00\CURRENT\CUTS\SHEETS\COMPLETE STREETS IMPROVEMENT PROJECT\19060\_1\HDCONST DETAILS.dwg  
Christopher Lyman

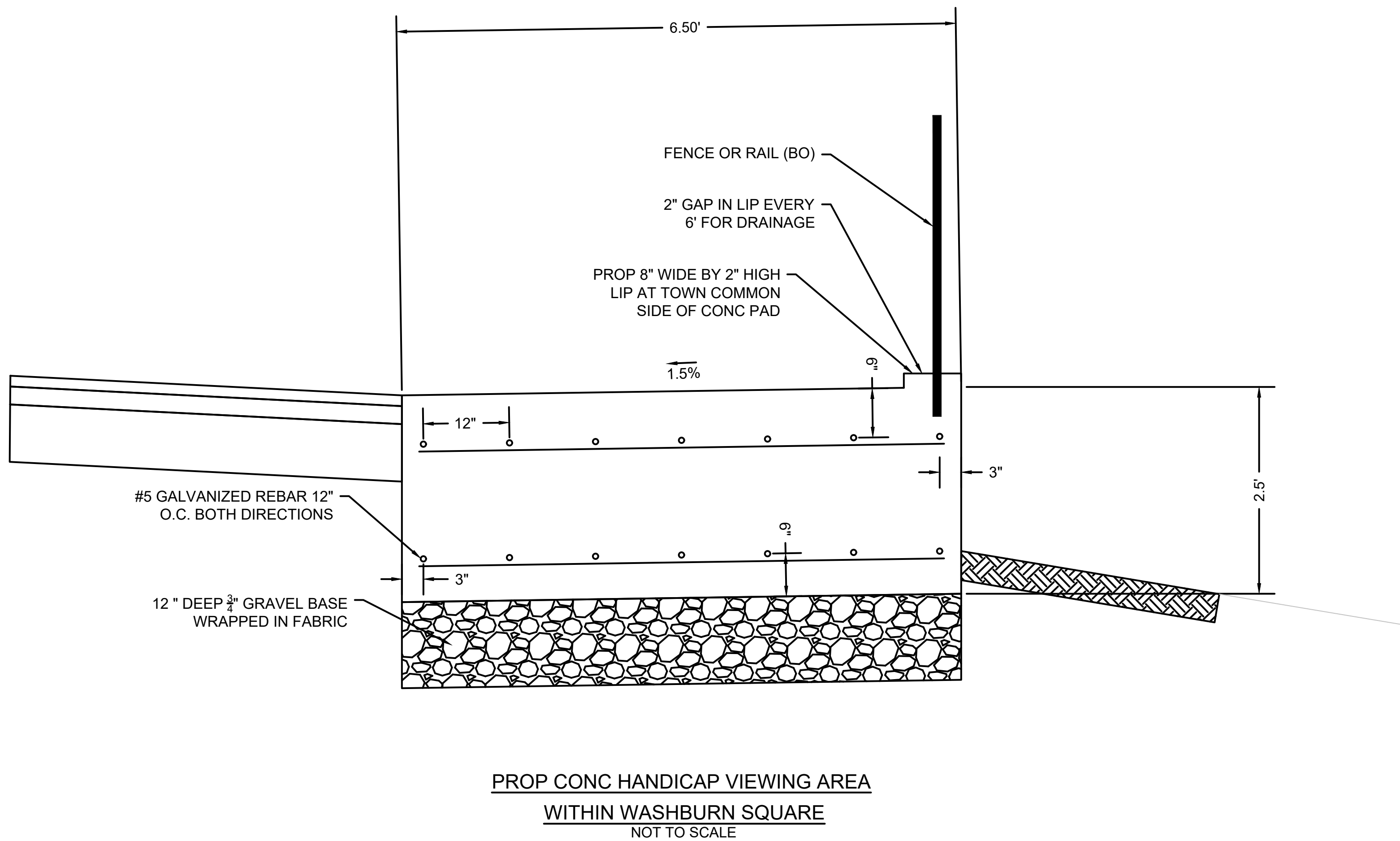
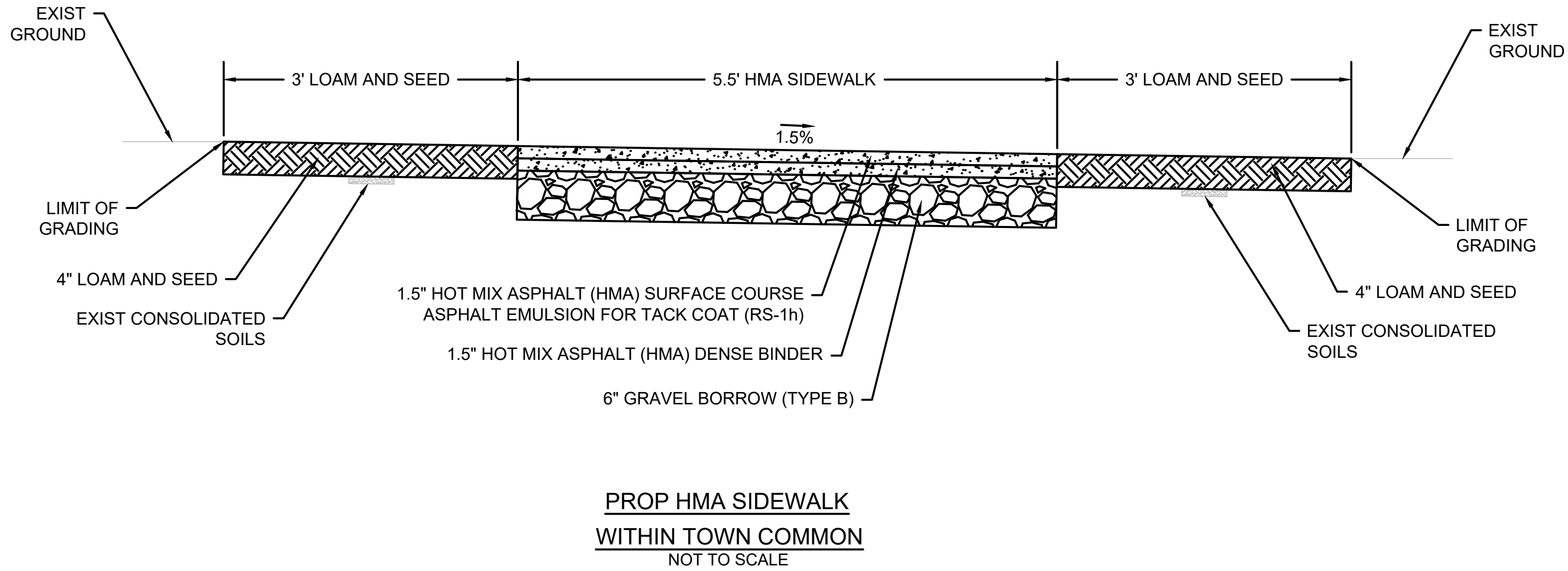
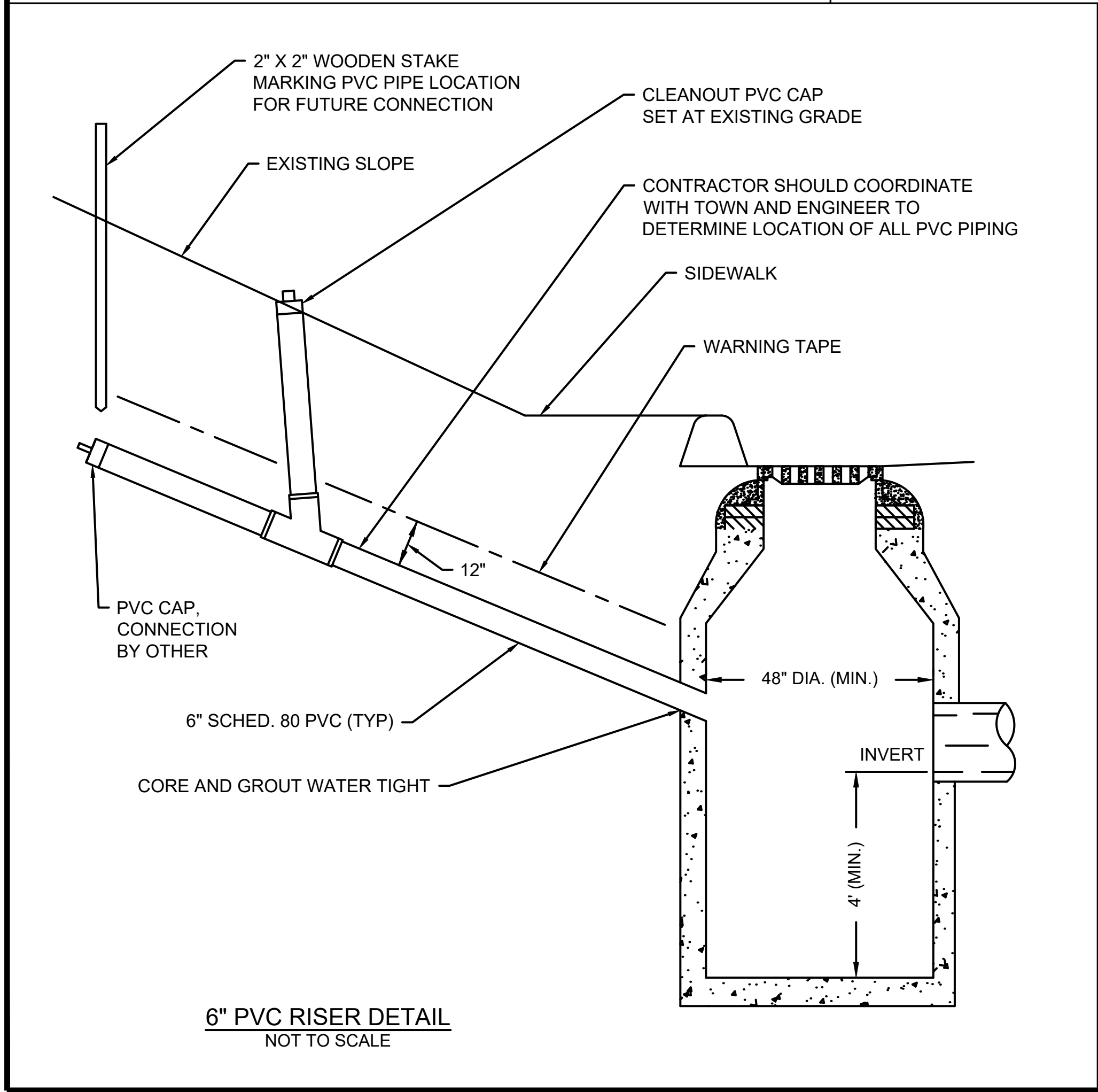
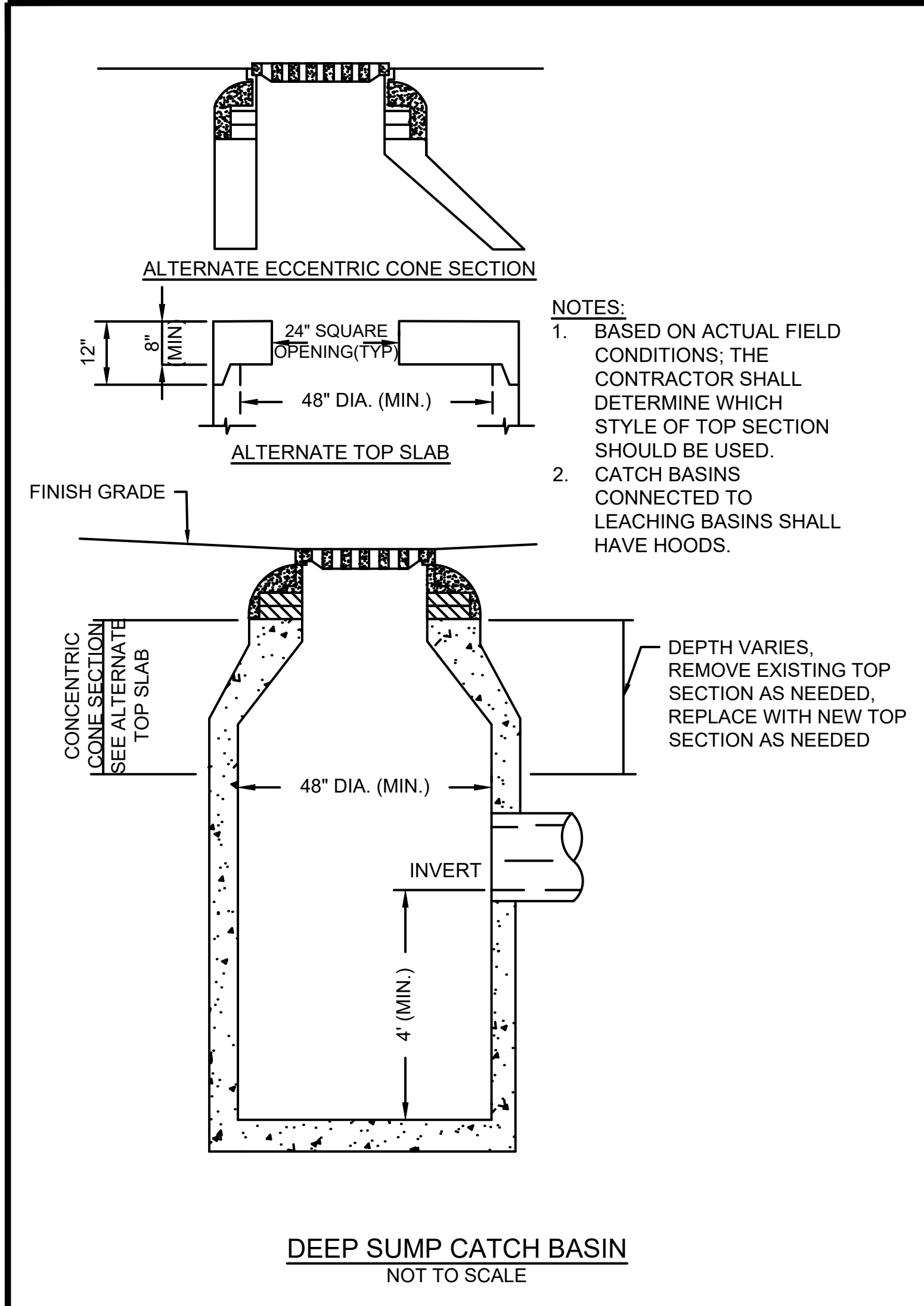


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**LEICESTER WASHBURN SQUARE,  
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COMPLETE STREETS IMPROVEMENTS  
CONSTRUCTION DETAILS**

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	27	30





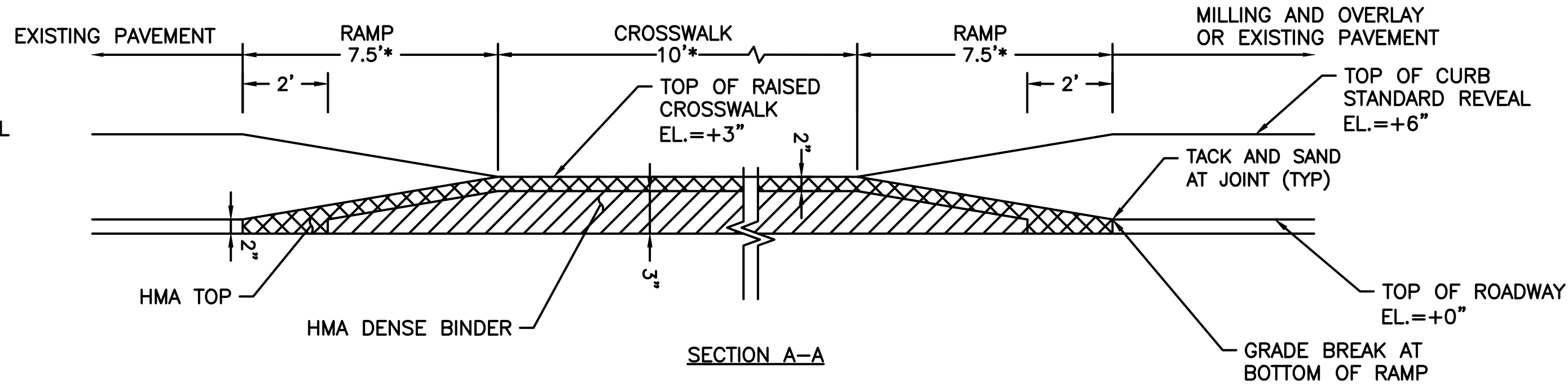
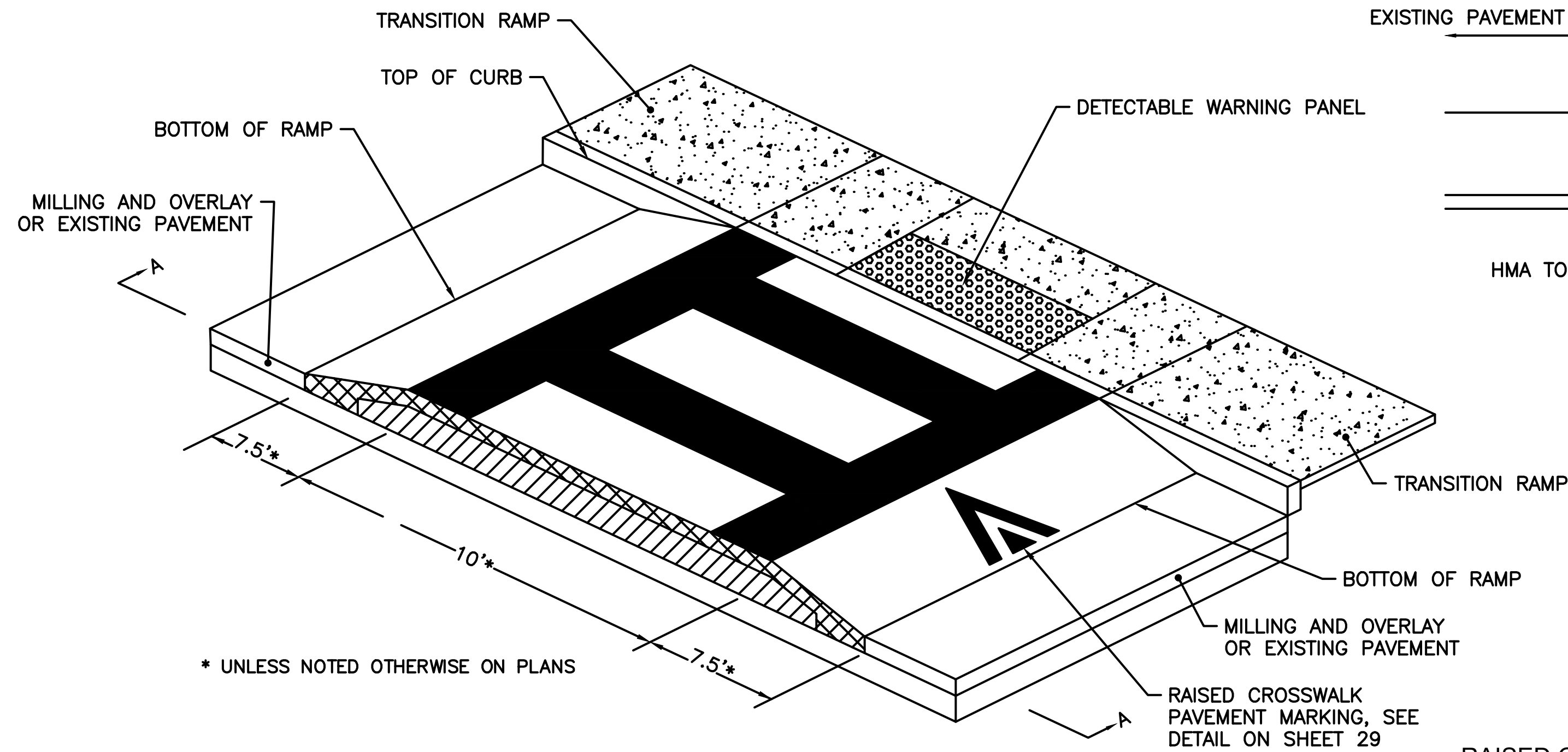
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**LEICESTER WASHBURN SQUARE,  
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COMPLETE STREETS IMPROVEMENTS  
CONSTRUCTION DETAILS**

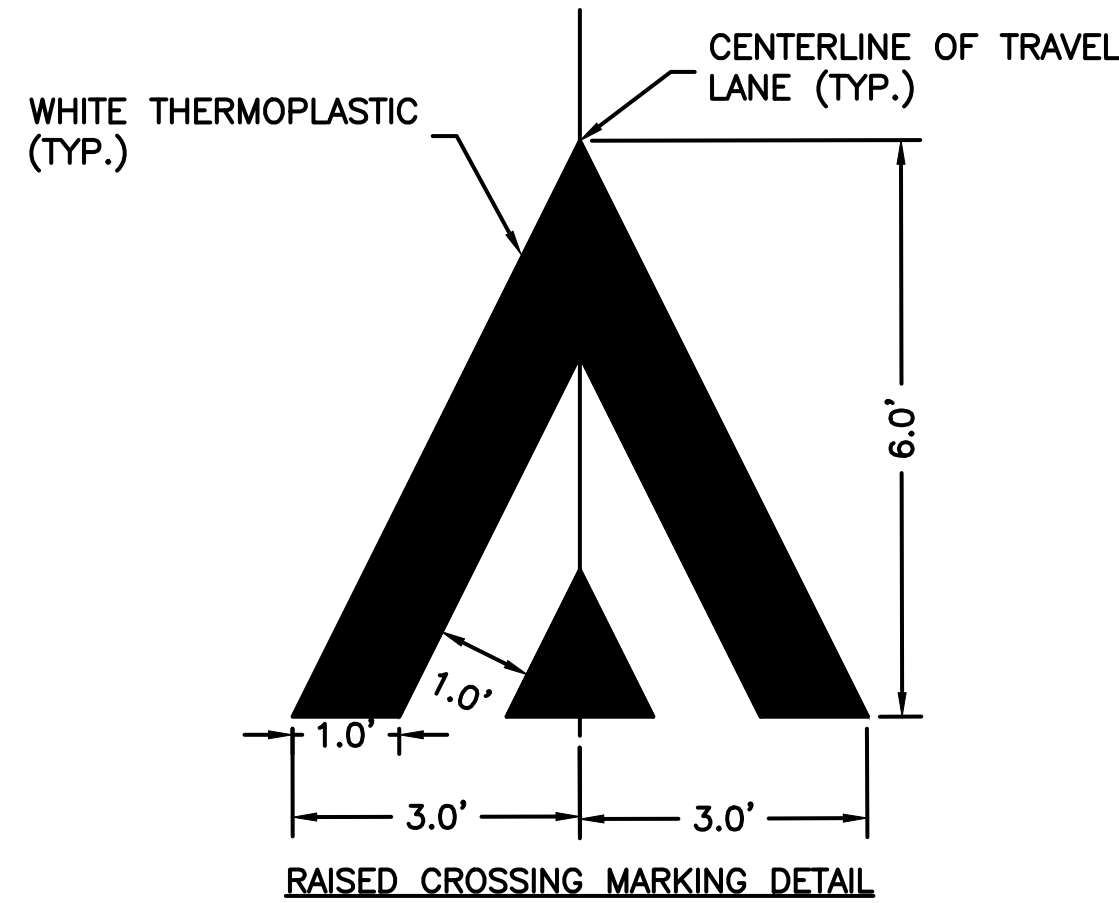
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2019060.00	6/19/20	CRL	SJT	RL	28	30



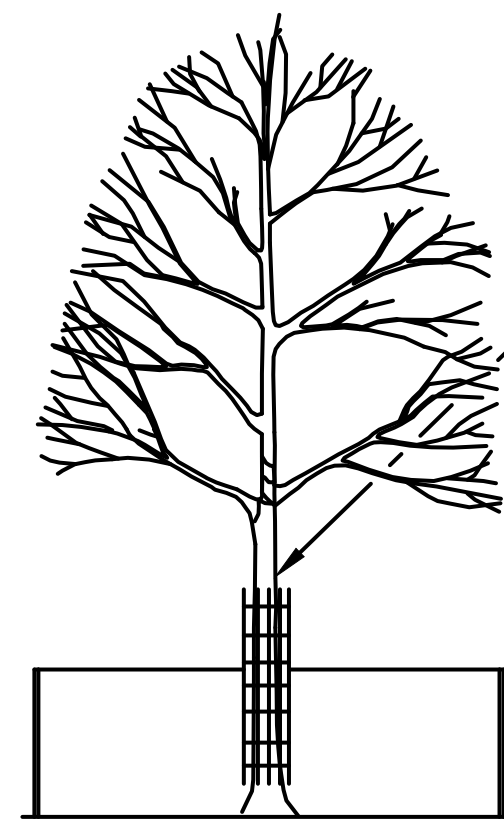


- NOTES:**
1. RAISED CROSSINGS SHOULD BE PAVED IN 2" MAXIMUM LIFTS.
  2. THE RAMP SLOPE SHOULD NOT EXCEED A DIFFERENTIAL OF 7% RELATIVE TO THE EXISTING SLOPE OF THE STREET THE CROSSING IS TO BE INSTALLED ON.
  3. DETECTABLE WARNING PANELS SHALL BE PLACE PERPENDICULAR TO THE PEDESTRIAN PATH OF TRAVEL.

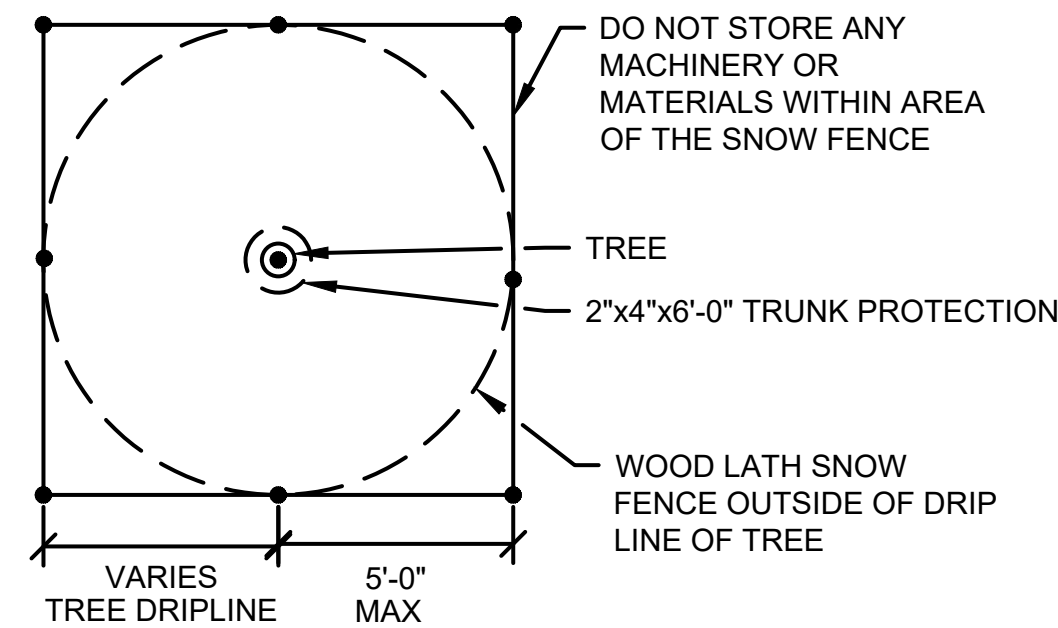
**RAISED CROSSWALK DETAIL**  
NOT TO SCALE



**RASIED CROSSING MARKING DETAILS**  
NOT TO SCALE

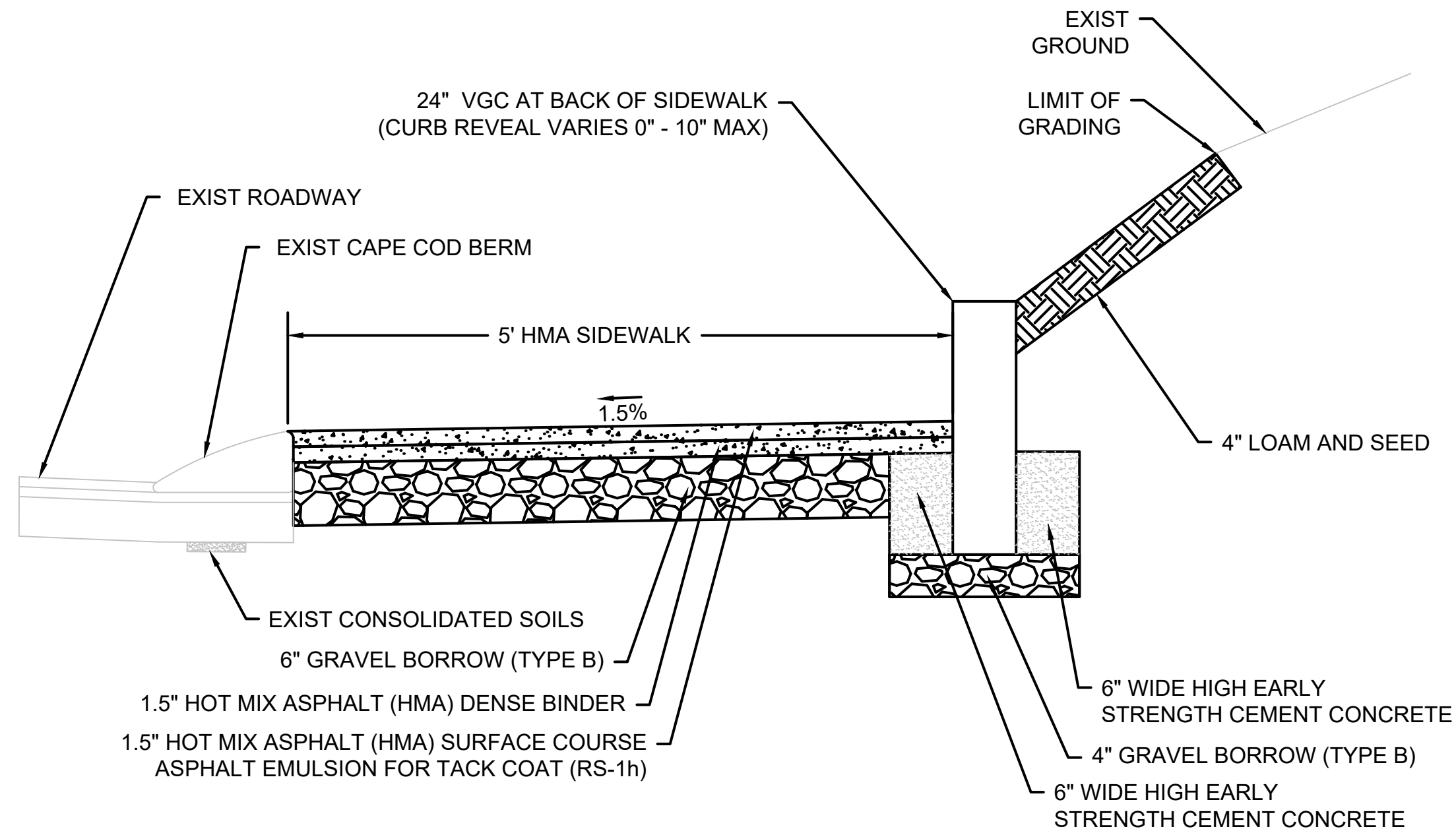


**X SECTION**

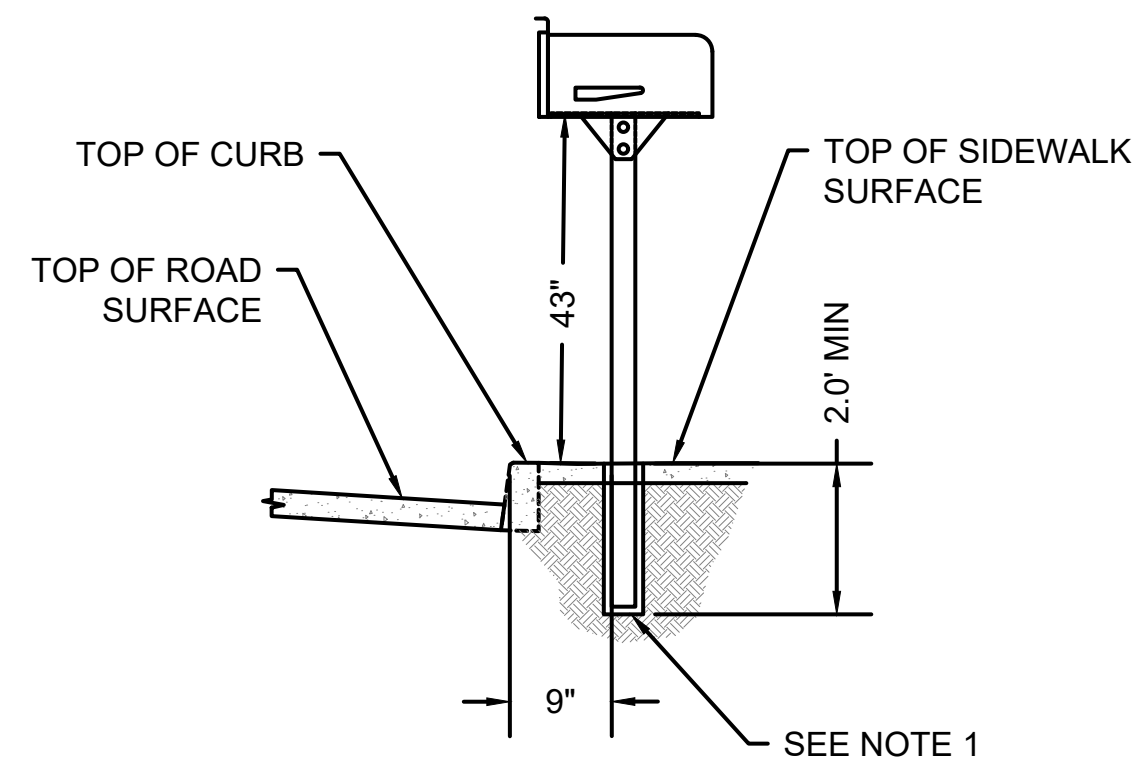


**PLAN VIEW**

**TREE PROTECTION**  
NOT TO SCALE



**24" VGC AT BACK OF SIDEWALK DETAIL**  
NOT TO SCALE



**SETTING RURAL MAILBOXES DETAIL**  
NOT TO SCALE

- NOTES:**
1. INSTALL 8" DIAMETER PVC SLEEVE CENTERED ON POST OR FILL VOID AROUND POST WITH NON-SHRINK GROUT WHEN SET IN SIDEWALK



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COMPLETE STREETS IMPROVEMENTS  
CONSTRUCTION DETAILS**

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	29	30



NOTES:

- ALL TEMPORARY TRAFFIC CONTROL WORK SHALL CONFORM TO THE LATEST EDITION OF THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD) AND ALL REVISIONS, UNLESS SUPERCEDED BY THESE PLANS.
- ALL SIGN LEGENDS, BORDERS, AND MOUNTING SHALL BE IN ACCORDANCE WITH THE MUTCD.
- TEMPORARY CONSTRUCTION SIGNING AND ALL OTHER TRAFFIC CONTROL DEVICES SHALL BE IN PLACE PRIOR TO THE START OF ANY WORK.
- TEMPORARY CONSTRUCTION SIGNING, BARRICADES, AND ALL OTHER NECESSARY WORK ZONE TRAFFIC CONTROL DEVICES SHALL BE REMOVED FROM THE HIGHWAY OR COVERED WHEN THEY ARE NOT REQUIRED FOR CONTROL OF TRAFFIC.
- SIGNS AND SIGN SUPPORTS LOCATED ON OR NEAR THE TRAVELED WAY, CHANNELIZING DEVICES, BARRIERS, AND CRASH ATTENUATORS MUST PASS THE CRITERIA SET FORTH IN "MANUAL FOR ASSESSING SAFETY HARDWARE" (MASH).
- CONTRACTORS SHALL NOTIFY EACH ABUTTER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ACCESS, SUCH AS CONDUIT INSTALLATION, EXISTING PAVEMENT EXCAVATION, TEMPORARY DRIVEWAY PAVEMENT PLACEMENT, AND SIMILAR OPERATIONS.
- THE FIRST FIVE PLASTIC DRUMS OF A TAPER SHALL BE MOUNTED WITH TYPE A LIGHTS.
- THE ADVISORY SPEED LIMIT, IF REQUIRED, SHALL BE DETERMINED BY THE ENGINEER.
- DISTANCES ARE A GUIDE AND MAY BE ADJUSTED IN THE FIELD BY THE ENGINEER.
- MAXIMUM SPACING OF TRAFFIC DEVICES IN A TAPER (DRUMS OR CONES) IS EQUAL IN FEET TO THE SPEED LIMIT IN MPH.
- MINIMUM LANE WIDTH IS TO BE 11 FEET UNLESS OTHERWISE SHOWN. MINIMUM LANE WIDTH TO BE MEASURED FROM THE EDGE OF DRUMS OR MEDIAN BARRIER.
- ALL SIGNS SHALL BE MOUNTED ON THEIR OWN STANDARD SIGN SUPPORTS.

LEGEND:

- REFLECTORIZED PLASTIC DRUM OR 36" CONE

➡ DIRECTION OF TRAFFIC

🚚 WORK VEHICLE
- P/F POLICE/FLAGGER DETAIL

➡ IMPACT ATTENUATOR

🚚 TRUCK MOUNTED ATTENUATOR
- 🚧 TYPE III BARRICADE

🚧 MEDIAN BARRIER

🚧 TRAFFIC OR PEDESTRIAN SIGNAL
- 📄 CHANGEABLE MESSAGE SIGN

🚧 MEDIAN BARRIER WITH WARNING LIGHTS

🚧 SIGN
- 📄 ARROW BOARD

SUGGESTED WORK ZONE WARNING SIGN SPACING

ROAD TYPE	DISTANCE BETWEEN SIGNS *		
	A	B	C
LOCAL OR LOW VOLUME ROADWAYS	350	350	350
MOST OTHER ROADWAYS	500	500	500
FREEWAYS AND EXPRESSWAYS	1,000	1,500	2,640

\* DISTANCES ARE SHOWN IN FEET. THE COLUMN HEADINGS A, B, AND C ARE THE DIMENSIONS SHOWN IN THE DETAIL/ TYPICAL SETUP FIGURES. THE A DIMENSION IS THE DISTANCE FROM THE TRANSITION OR POINT OF RESTRICTION TO THE FIRST SIGN. THE B DIMENSION IS THE DISTANCE BETWEEN THE FIRST AND SECOND SIGNS. THE C DIMENSION IS THE DISTANCE BETWEEN THE SECOND AND THIRD SIGNS. (THE "THIRD" SIGN IS THE FIRST ONE TYPICALLY ENCOUNTERED BY A DRIVER APPROACHING A TEMPORARY TRAFFIC CONTROL (TTC) ZONE.)

THE "THIRD" SIGN ABOVE IS TYPICALLY REFERRED TO AS AN "ADVANCE WARNING" SIGN ON THE TTCP SETUPS. THESE ADVANCE WARNING SIGNS ARE LOCATED PRIOR TO THE PROJECT LIMITS ON ALL APPROACHES (i.e. THE W20-1 SERIES (ROAD WORK XX FT) SIGNS), AND USUALLY REMAIN FOR THE DURATION OF THE PROJECT. ADDITIONAL SIGNS (i.e. "RIGHT LANE CLOSED 1 MILE" AND "LEFT LANE CLOSED 1 MILE") HAVE BEEN SHOWN IN SOME FIGURES AS EXAMPLES OF REINFORCEMENT SIGN PLACEMENT BUT ARE USED IN RARE OCCASIONS.

THE FIRST AND SECOND WARNING SIGNS ABOVE ARE REFERRED TO AS THE OPERATIONAL (DAY-TO-DAY) WORK ZONE SIGNS AND MAY BE MOVED DEPENDING ON WHERE THE SPECIFIC ROADWAY WORK FOR THAT DAY IS LOCATED.

MA-R2-10a SIGNS SHALL BE PLACED BETWEEN THE SECOND AND THIRD SIGNS AS DESCRIBED ABOVE.

MA-R2-10a, MA-R2-10e, AND W20-1 SERIES SIGNS ARE TO BE INCLUDED ON ALL DETAILS/TYPICAL SETUPS.

Based on: Table 6C-1 MUTCD LATEST EDITION

STOPPING SIGHT DISTANCE AS A FUNCTION OF SPEED

SPEED* (mph)	DISTANCE (ft)
20	115
25	155
30	200
35	250
40	305
45	360
50	425
55	495
60	570
65	645
70	730
75	820

\*POSTED SPEED, OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED

THESE VALUES MAY BE USED TO DETERMINE THE LENGTH OF LONGITUDINAL BUFFER SPACES.

THE DISTANCES IN THE ABOVE CHART REPRESENT THE MINIMAL VALUES FOR BUFFER SPACING.

Source: Table 6C-2 MUTCD LATEST EDITION

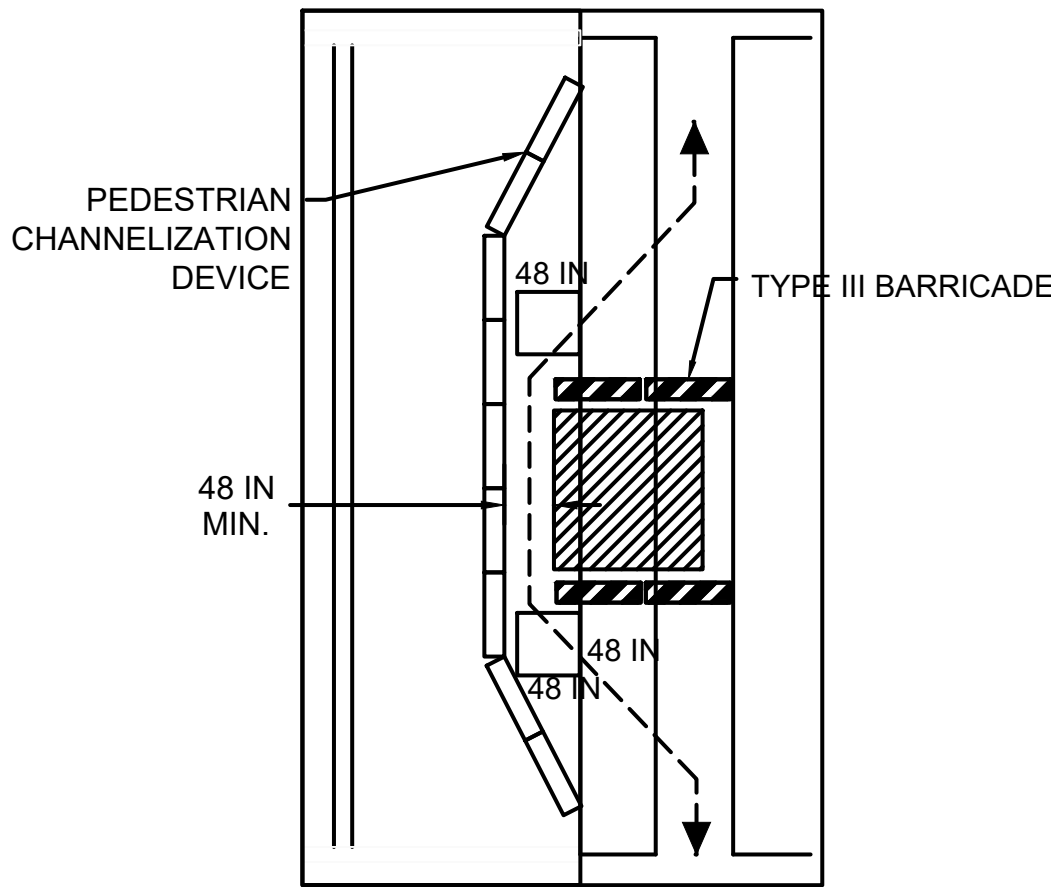
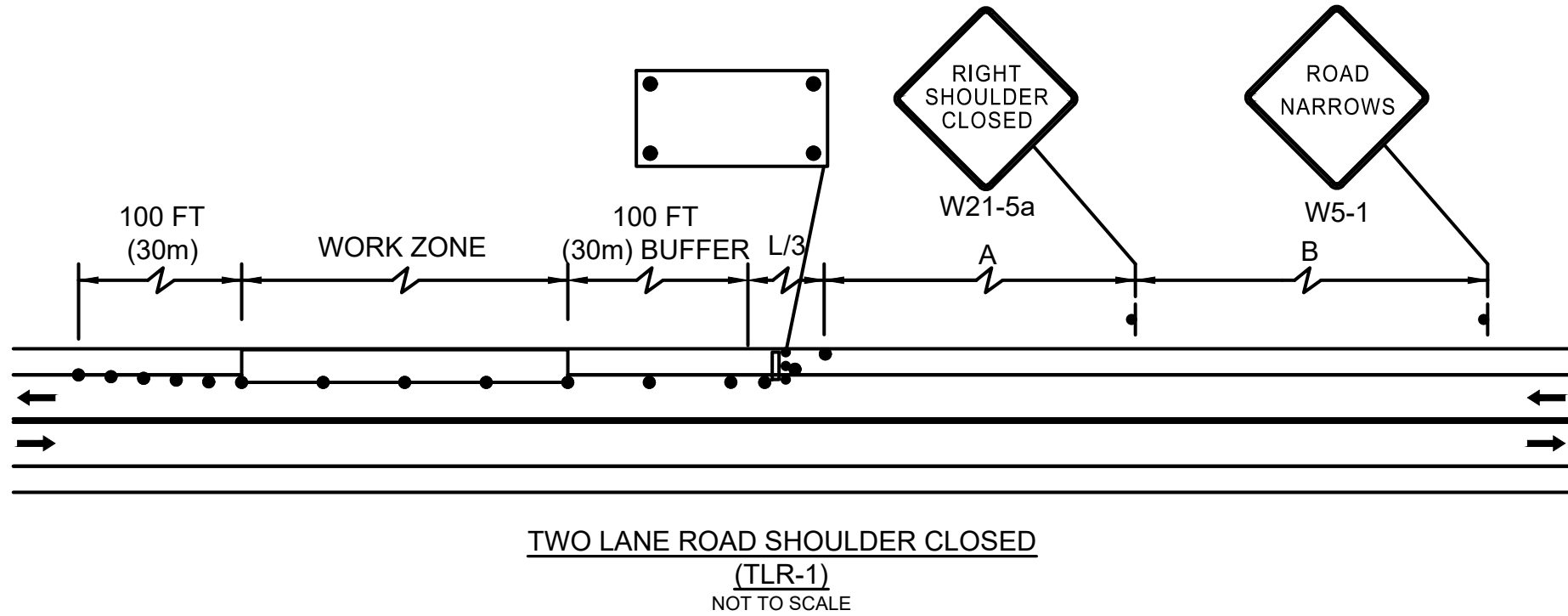
FORMULAS FOR DETERMINING TAPER LENGTHS

SPEED LIMIT (S)	TAPER LENGTH (L) FEET
40 MPH OR LESS	$L = \frac{WS^2}{60}$
45 MPH OR MORE	$L = WS$

WHERE: L = TAPER LENGTH IN FEET

W = WIDTH OF OFFSET IN FEET

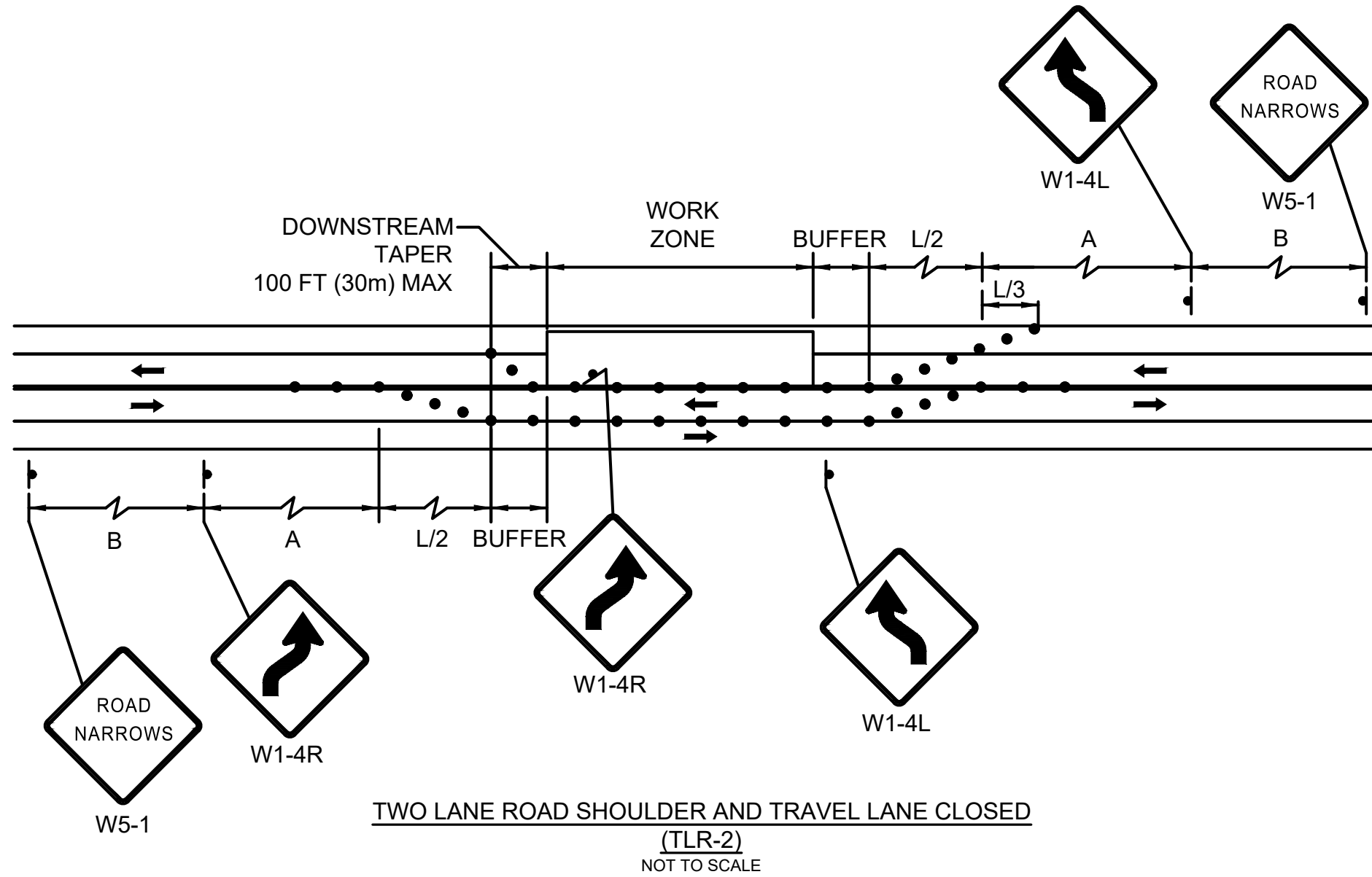
S = POSTED SPEED LIMIT, OR OFF-PEAK 85TH-PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH



NOTES:

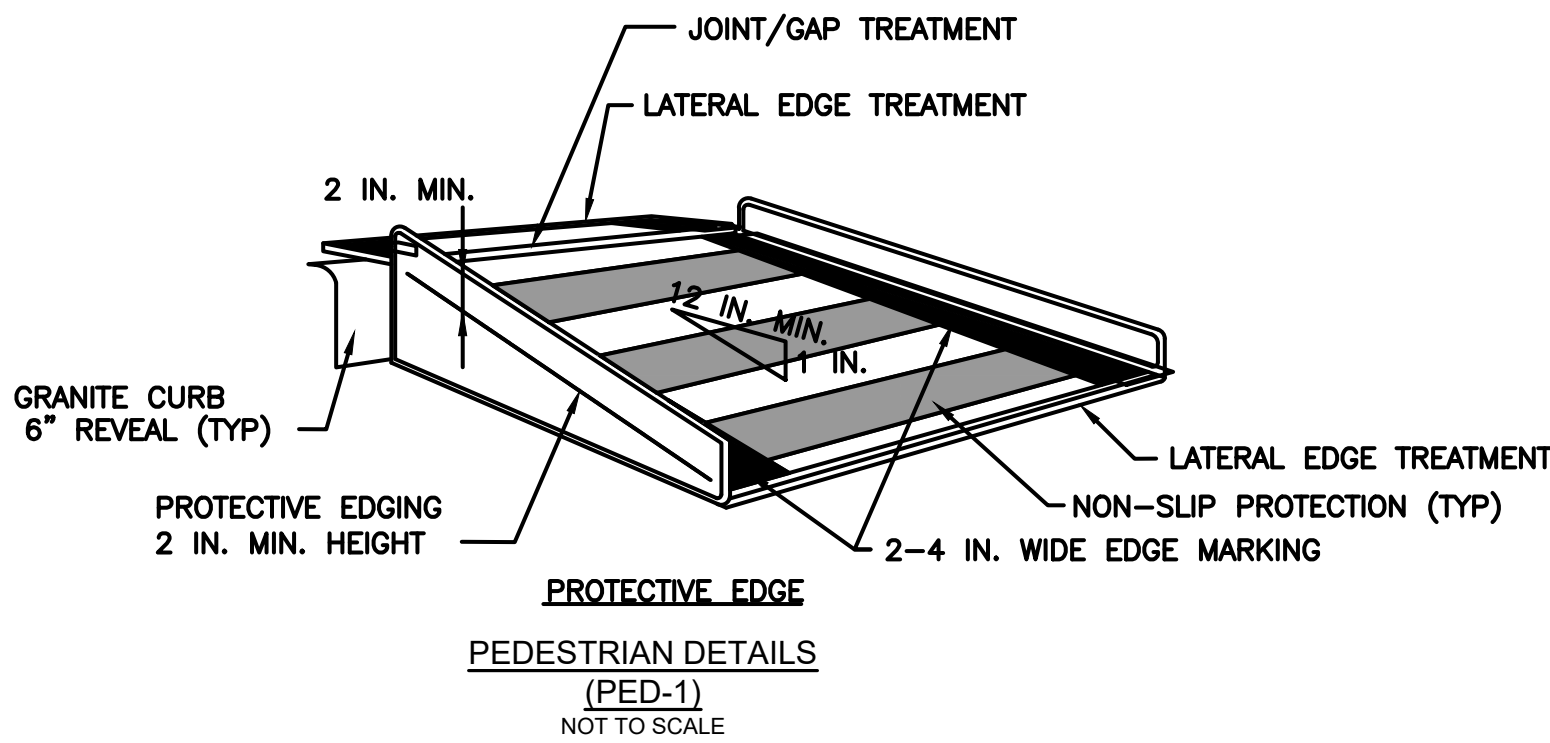
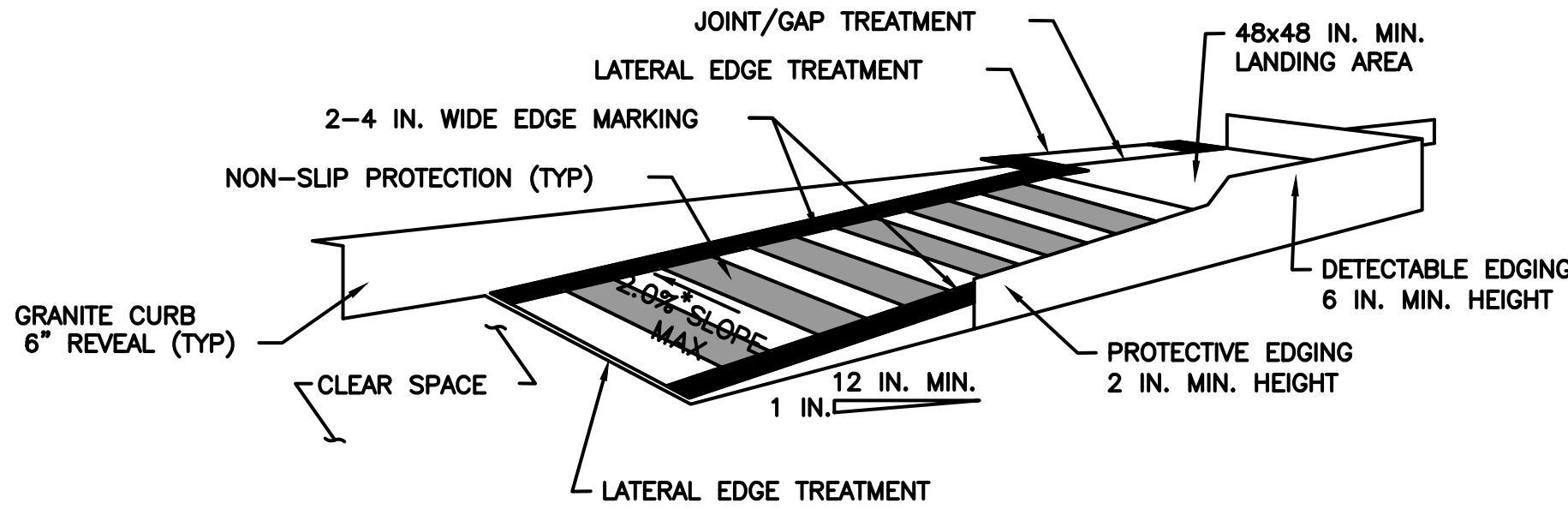
- WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED IN A TTC ZONE, TEMPORARY FACILITIES SHALL BE PROVIDED AND THEY SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY.
- A PEDESTRIAN CHANNELIZATION DEVICE THAT IS DETECTABLE BY A PERSON WITH A VISUAL DISABILITY TRAVELING WITH THE AID OF A LONG CANE SHALL BE PLACED ALONG THE FULL LENGTH OF THE TEMPORARY PEDESTRIAN ROUTE.
- WHEN USED, TEMPORARY RAMPS SHALL COMPLY WITH AMERICANS WITH DISABILITIES ACT.
- THE ALTERNATE PATHWAY SHOULD HAVE A SMOOTH CONTINUOUS HARD SURFACE FOR THE ENTIRE LENGTH OF THE TEMPORARY PEDESTRIAN FACILITY.
- THE TEMPORARY SIDEWALK SHOULD BE A MINIMUM OF 4 FEET WIDE. IF THE SIDEWALK EXCEEDS 200 FEET THEN A 5 FOOT BY 5 FOOT PASSING ZONE SHALL BE PROVIDED NEAR THE MID-POINT OF THE CLOSURE.
- THE PROTECTIVE REQUIREMENTS OF A TTC WORK ZONE MAY HAVE AN IMPACT IN DETERMINING THE NEED FOR TEMPORARY TRAFFIC BARRIERS AND THEIR USE IN PROVIDING PEDESTRIAN DELINEATION SHOULD BE BASED ON ENGINEERING JUDGMENT.
- ON-DEMAND PEDESTRIAN ASSISTANCE PERSONNEL TO ASSIST WITH NAVIGATION AROUND THE CLOSURE/WORK AREA MAY BE CONSIDERED AS AN OPTION IN PLACE OF PROVIDING ADA/AAB DEVICES FOR WORK FOR CLOSURES LASTING 4 HOURS OR LESS.
- CONTROLS ONLY FOR PEDESTRIAN TRAFFIC ARE SHOWN; VEHICULAR TRAFFIC SHOULD BE HANDLED AS SHOWN ELSEWHERE. THESE DETAILS ARE USED IN CONJUNCTION WITH THE PROPOSED LANE CLOSURE DETAILS AND DURING CONSTRUCTION STAGING, AS DETERMINED BY THE ENGINEER.

PEDESTRIAN DETAILS (PED-3) NOT TO SCALE



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 (33%). 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.



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COMPLETE STREETS IMPROVEMENTS  
TEMPORARY TRAFFIC CONTROL PLANS

HSH PROJECT NUMBER	DATE	DRAWN BY	CHKD. BY	APPRVD. BY	SHEET NO.	TOTAL SHEETS
2019060.00	6/19/20	CRL	SJT	RL	30	30