

CITY OF PORTLAND PUBLIC WORKS DEPARTMENT

CONTRACT DRAWINGS

MOTLEY STREET STORM DRAIN AND SEWER REPLACEMENT PROJECT

BID NO.: 20019

BID PLANS
OCTOBER 2019

INDEX OF PLANS

SHEET NO. SHEET TITLE

G-1.....	COVER SHEET
G-2.....	GENERAL NOTES AND LEGEND
EC-1.....	EXISTING CONDITIONS PLAN
C-1.....	UTILITY PLAN AND PROFILE
C-2.....	STREET GRADING AND RECONSTRUCTION PLAN
C-3.....	ROADWAY CROSS SECTIONS
C-4.....	ROADWAY CROSS SECTIONS
C-5.....	ROADWAY CROSS SECTIONS
D-1.....	CONSTRUCTION DETAILS
D-2.....	CONSTRUCTION DETAILS
D-3.....	CONSTRUCTION DETAILS
D-4.....	CONSTRUCTION DETAILS

YEAR APPROVED
2019



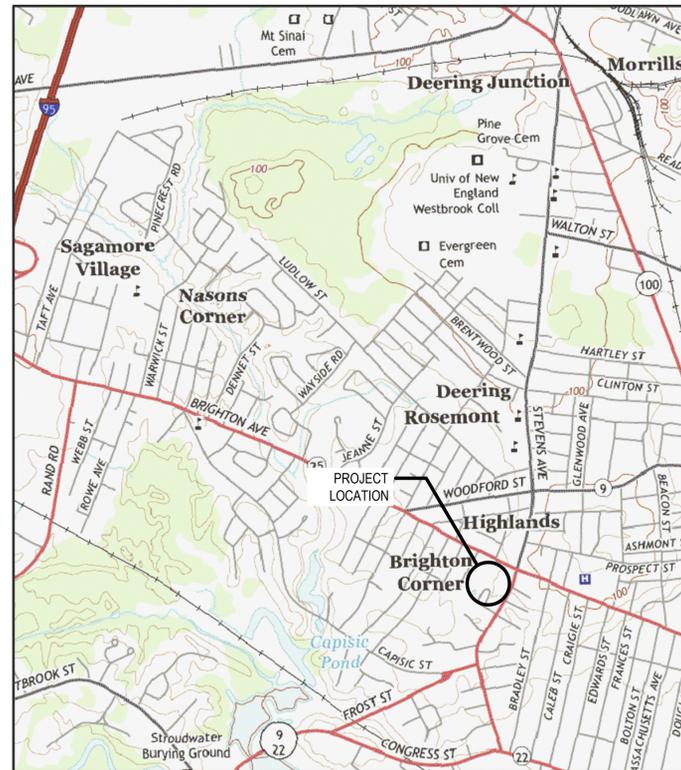
JUSTIN PELLERIN, P.E.
PROJECT ENGINEER

10-15-2019
DATE



KEITH GRAY, P.E.
CITY ENGINEER

10-15-2019
DATE



PROJECT LOCATION



AREA MAP

EXISTING CONDITIONS

CONIFEROUS/DECIDUOUS TREE	
TREE STUMP/ BUSH	
CATCH BASIN	
DRAIN/SEWER MANHOLE	
FIRE HYDRANT	
GAS/WATER VALVE	
WATER SHUT OFF	
SIGN	
LIGHT POLE/ UTILITY POLE	
MONUMENT	
IRON PIPE/ REBAR	
MAGNETIC NAIL SET	
SIDEWALK ACCESSIBILITY	
BORING LOCATION/ TEST PIT	
PARCEL LINE	
CITY RIGHT OF WAY	
CENTER LINE	
COMBINED SEWER LINE	
STORM DRAIN LINE	
SANITARY SEWER LINE	
SANITARY SEWER LATERAL	
GAS LINE	
ELECTRIC LINE	
WATER LINE	
TELECOMMUNICATIONS	
CHAIN LINK FENCE	
FENCE LINE	
EDGE OF CURB	
EDGE OF SIDEWALK	
EDGE OF PAVEMENT	
RAILWAY TRACKS	
EDGE OF TREES	

LEGEND

PROPOSED

CONIFEROUS/DECIDUOUS TREE	
TREE STUMP/ BUSH	
CATCH BASIN	
DRAIN/SEWER MANHOLE	
SIGN	
LIGHT POLE/ UTILITY POLE	
MONUMENT	
IRON PIPE/ REBAR	
MAGNETIC NAIL SET	
SIDEWALK ACCESSIBILITY	
BORING LOCATION/ TEST PIT	
PARCEL LINE	
CITY RIGHT OF WAY	
CENTER LINE	
STORM DRAIN LINE	
SANITARY SEWER LINE	
SANITARY SEWER LATERAL	
CHAIN LINK FENCE	
FENCE LINE	
EDGE OF CURB	
EDGE OF SIDEWALK	
EDGE OF PAVEMENT	
ROADWAY RECONSTRUCTION	
REINFORCED CONCRETE SIDEWALK	

ABBREVIATIONS:

&	AND	NTS	NOT TO SCALE
ADA	AMERICANS WITH DISABILITIES ACT	OB	ORANGEBERG
AG	ABOVE GROUND	OFF	OFFSET
ALT	ALTERNATE	OHE	OVERHEAD ELECTRIC
AVE	AVENUE	OH	OVERHEAD
AVE	AVENUE	±	PLUS OR MINUS
BIT	BITUMINOUS	PLS	PROFESSIONAL LAND SURVEYOR
BW	BETWEEN	PT	POINT
CB	CATCH BASIN	PVC	POLYVINYL CHLORIDE
CMP	CENTRAL MAINE POWER	RD	ROAD
CONC	CONCRETE	RCP	REINFORCED CONCRETE PIPE
DI	DUCTILE IRON	REINF	REINFORCED
DIA	DIAMETER	REQD	REQUIRED
DMH	DRAIN MANHOLE	ROW	RIGHT-OF-WAY
DTL	DETAIL	RT	RIGHT
DYCL	DOUBLE YELLOW CENTERLINE	S	SLOPE
DWLL	DASHED WHITE LANE LINE	SF	SILT FENCE
EG	EXISTING GRADE	SS	SANITARY SEWER
ELELEV	ELEVATION	SD	STORM DRAIN
EOP	EDGE OF PAVEMENT	SMH	SEWER MANHOLE
EXIST	EXISTING	SCH	SCHEDULE
FF	FINISH FLOOR	SL	STREET LINE
FT	FOOT/FEET	STOPBAR	STOP LINE
GS	GAS SERVICE	STA	STATION
GALV	GALVANIZED	SWLL	SOLID WHITE LANE LINE
GRAN	GRANITE	TBM	TEMPORARY BENCHMARK
GV	GATE VALVE	TP	TEST PIT
HDPE	HIGH DENSITY POLYETHYLENE	TRM	TURF REINFORCING MAT
HORIZ	HORIZONTAL	TWC	TIME WARNER CABLE
HYD	HYDRANT	TYP	TYPICAL
INV	INVERT	UD	UNDERDRAIN
IP	IRON PIPE	UG	UNDERGROUND
LF	LINEAR FEET	UGC	UNDERGROUND CABLE
LT	LEFT	UGE	UNDERGROUND ELECTRIC
MAX	MAXIMUM	UGT	UNDERGROUND TELEPHONE
MIN	MINIMUM	VCP	VITRIFIED CLAY PIPE
MON	MONUMENT	VERT	VERTICAL
NO	NUMBER	VIT	VITRIFIED CLAY
NR	NO REFUSAL	VZ	VERIZON
NSBB	NUTRIENT SEPARATING BAFFLE BOX	W	WITH
		WS	WATER SERVICE

GENERAL NOTES:

- EXISTING CONDITIONS BASED ON SURVEY COMPLETED BY SEBGABO TECHNICS, INC SURVEY CREW, PORTLAND, MAINE IN 2017.
- VERTICAL DATUM IS REFERENCED TO CITY DATUM WITH ONE-FOOT CONTOUR INTERVALS. CITY DATUM IS +0.02 FEET OF NGVD 1929. HORIZONTAL DATUM IS REFERENCED TO STATE PLANE NAD 1983 (FEET), MAINE WEST ZONE.
- EXISTING PROFILE GRADE IS CENTERED ON EXISTING ROADWAY OR RIGHT-OF-WAY CENTERLINE
- PROTECT EXISTING FEATURES/STRUCTURES NOT CALLED OUT FOR REPLACEMENT/ALTERATION.
- THE CITY OF PORTLAND SHALL HAVE THE RIGHT AND AUTHORITY TO DETERMINE THE ACCEPTABILITY OF WORK AND MATERIALS IN PROGRESS OR COMPLETED. THE CITY OF PORTLAND SHALL HAVE THE RIGHT TO REJECT ANY WORK OR MATERIALS WHICH DO NOT CONFORM, IN ITS SOLE OPINION, TO THE PLANS OR SPECIFICATIONS.
- PRIOR TO THE BEGINNING OF CONSTRUCTION, THE CONTRACTOR SHALL SECURE A STREET OPENING PERMIT FROM THE PORTLAND DEPARTMENT OF PUBLIC WORKS. NO FEE WILL BE CHARGED FOR THIS PERMIT
- ALL MATERIAL SCHEDULES SHOWN ON THE PLANS ARE FOR GENERAL INFORMATION ONLY. THE CONTRACTOR SHALL PREPARE HIS OWN MATERIAL SCHEDULES BASED UPON HIS PLAN REVIEW. ALL SCHEDULES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO ORDERING MATERIALS OR PERFORMING WORK.
- ELECTRICAL AND TELECOMMUNICATIONS SERVICE PROVIDED VIA OVERHEAD LINES, UNLESS OTHERWISE SHOWN. CONTRACTOR SHALL USE CAUTION WHEN WORKING NEAR EXISTING OVERHEAD LINES.
- TEST PITS SHALL BE COMPLETED AT LEAST TWO WEEKS PRIOR TO THE START OF CONSTRUCTION OR ORDERING OF MATERIALS AT THE TEST PIT LOCATION. THE CONTRACTOR SHALL PROMPTLY PROVIDE TEST PIT INFORMATION TO THE ENGINEER FOR REVIEW, AND SHALL NOTIFY THE ENGINEER OF ANY POTENTIAL UTILITY CROSSING CONFLICTS.
- RESIDENTIAL SANITARY SEWER SERVICE INFORMATION (LOCATION, SIZE, PIPE MATERIALS, ETC.) OBTAINED FROM HISTORIC SEWER CARDS AND SEWER VIDEOS. RECORD INFORMATION NOT FOUND FOR ALL RESIDENCES WITHIN THE PROJECT ZONE.
- DISPOSITION OF SURPLUS MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. SURPLUS MATERIAL SHALL NOT BE DISPOSED OF ON THE PROJECT SITE. DISPOSITION SHALL BE MADE ONLY AT WASTE AREAS WHICH ARE LICENSED TO ACCEPT SUCH MATERIALS, UNLESS THE MATERIALS CAN BE INCORPORATED IN FILLS IN OTHER PROJECTS OF THE CONTRACTOR.
- IF CONTRACTOR PROPOSES TO TEMPORARILY STOCKPILE ANY SURPLUS SOIL AND ROCK IN THE CITY OF PORTLAND, THE CONTRACTOR SHALL OBTAIN APPROVAL FOR EACH STOCKPILE LOCATION FROM THE CITY. IF CONTRACTOR PROPOSES TO PERMANENTLY STOCKPILE ANY SURPLUS SOIL AND ROCK ON PROPERTY IN THE CITY OF PORTLAND, THE CONTRACTOR MUST OBTAIN ANY SITE PLAN AND FILL PERMITS REQUIRED FROM CITY PLANNING AUTHORITY OR ANY FILL PERMITS REQUIRED FROM MAINE DEP OR US ARMY CORP OF ENGINEERS. BOTH TEMPORARY AND PERMANENT STOCKPILE LOCATIONS SHALL MEET THE APPLICABLE SETBACK REQUIREMENTS IN THE CITY LAND USE CODE.
- MAINTENANCE OF TRAFFIC SHALL BE PER THE MOST CURRENT EDITION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" AND THE MOST CURRENT MAINE DOT SPECIFICATIONS AND STANDARD PLANS.
- PROPERTY LINE AND R.O.W. MONUMENTS SHALL NOT BE DISTURBED BY CONSTRUCTION. IF DISTURBED, THEY SHALL BE RESET TO THEIR ORIGINAL LOCATIONS AT THE CONTRACTOR'S EXPENSE, BY A MAINE LICENSED LAND SURVEYOR.
- THE CONTRACTOR SHALL CALL THE APPROPRIATE UTILITY COMPANY AND DIG SAFE (888-344-7233) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR THE ELEVATION OF THE EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. UNDERGROUND FACILITIES INDICATED ON THE CROSS SECTIONS HAVE BEEN CARRIED OVER FROM THE PLAN VIEW DATA AND MAY ALSO INCLUDE FURTHER APPROXIMATIONS OF THE ELEVATIONS (DEPTHS) BASED UPON STRAIGHT LINE INTERPOLATION FROM THE NEAREST MANHOLES, GATE VALVES, OR TEST PITS. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE ENGINEER HAS COORDINATED THE PROPOSED WORK WITH THE AFFECTED UTILITY COMPANIES TO ARRANGE FOR REQUIRED RELOCATION OF THEIR KNOWN FACILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK AND SCHEDULE WITH THE UTILITY RELOCATION WORK AND THE PROPER UTILITY COMPANY. THE FOLLOWING UTILITIES MAY HAVE FACILITIES WITHIN THE PROJECT LIMITS: · CENTRAL MAINE POWER COMPANY · UNTIL · PORTLAND FIRE DEPARTMENT · PORTLAND WATER DISTRICT · CITY OF PORTLAND · SPECTRUM · CONSOLIDATED COMMUNICATIONS · AT&T · ANY ADDITIONAL UTILITY WORK NOT SPECIFIED ON THE PLANS SHALL BE COMPLETED BY THE RESPECTIVE UTILITY COMPANY.
- CONTRACTOR SHALL COORDINATE DISRUPTION OF PRIVATE UTILITY SERVICES WITH LAND OWNER AT LEAST 2 DAYS (48 HOURS) PRIOR TO SCHEDULED DISRUPTION.
- EXCAVATIONS ACCOMPLISHED AS PART OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH OSHA REGULATIONS SUBPART P OF 29 CFR PART 1926.650-.652 (CONSTRUCTION STANDARD FOR EXCAVATIONS).

- LOCATIONS OF RIGHT-OF-WAY SHOWN ON PLANS ARE APPROXIMATE ONLY.
- THE CONTRACTOR SHALL COMPLETE THE WORK WITHIN THE RIGHT-OF-WAY, AND SHALL BE RESPONSIBLE IF TRESPASSING ON PRIVATE PROPERTY OCCURS.
- CONTRACTOR SHALL NOT PARK, IMPEDE ACCESS OR STORE EQUIPMENT/MATERIAL ON ADJACENT CITY OR PRIVATELY OWNED LAND WITHOUT WRITTEN CONSENT FROM THE CITY OR LAND OWNER.
- THE CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED OR DAMAGED BY CONSTRUCTION ACTIVITIES, TO ORIGINAL FINISH SURFACE (LAWN, PAVEMENT, GRAVEL, ETC.) UNLESS NOTED OTHERWISE ON PLANS. RESTORATION OF PAVED SURFACES, GRAVEL SURFACES, DRIVEWAYS, WALKWAYS, LAWNS AND OTHER AREAS SHALL BE AT THE CONTRACTORS EXPENSE. ALL CURB DAMAGED BY CONSTRUCTION ACTIVITIES SHALL BE REPLACED IN KIND, AT THE CONTRACTORS EXPENSE, AND SHALL CONFORM TO CITY OF PORTLAND STANDARDS.
- ALL SIGNING, SIGNAL AND STRIPING MATERIALS AND PLACEMENT SHALL CONFORM TO THE MAINE DOT STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND STANDARD DETAILS AND WITH THE MOST CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES".
- BUTT JOINTS SHALL BE USED AT ALL LOCATIONS WHERE THE PROPOSED PAVEMENT MEETS EXISTING PAVEMENT. NO FEATHERING OF PAVEMENT WILL BE PERMITTED. COST OF BUTT JOINTS SHALL BE INCIDENTAL TO PAY ITEMS IN SECTION 403 - HOT BITUMINOUS PAVEMENT AND SECTION 608 - SIDEWALKS AND DRIVEWAYS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING ANY TRENCH PAVEMENT THAT HAS EXPERIENCED EXCESSIVE SETTLEMENT, CRACKING, OR OPENING OF JOINTS. REPAIRS MAY INCLUDE OVERLAY, REMOVAL OF UNACCEPTABLE MATERIALS, COMPLETE REPLACEMENT, JOINT SEALING, OR RECONSTRUCTING PAVEMENT JOINTS AS REQUIRED. THIS WORK MAY BE NECESSARY AFTER THE FINAL ACCEPTANCE OF WORK OR PRIOR TO THE ONE YEAR GUARANTEE. THIS WORK SHALL BE DONE AT THE CONTRACTOR'S EXPENSE.
- ALL WORK COMPLETED UNDER THIS CONTRACT SHALL BE GOVERNED BY AND SHALL CONFORM WITH CITY OF PORTLAND TECHNICAL AND DESIGN STANDARDS AND GUIDELINES.
- THE CONTRACTOR SHALL ANTICIPATE THAT GROUNDWATER WILL BE ENCOUNTERED DURING CONSTRUCTION AND SHALL INCLUDE SUFFICIENT COSTS WITHIN THEIR BID TO PROVIDE DEWATERING AS NECESSARY. NO SEPARATE PAYMENT SHALL BE MADE TO THE CONTRACTOR FOR DEWATERING.
- EXISTING FACILITIES/STRUCTURES (I.E. TREES, POLES, LIGHT POLES) SHALL BE REMOVED AND PROTECTED DURING CONSTRUCTION. CITY RETAINS THE RIGHT TO KEEP ANY AND ALL REMOVED FACILITIES/STRUCTURES. CONTRACTOR SHALL DISPOSE OF UNWANTED/UNUSED FACILITIES/STRUCTURES OFF SITE IN CONFORMANCE WITH APPLICABLE FEDERAL, STATE, AND LOCATION REGULATIONS.
- ALL MATERIALS AND CONSTRUCTION METHODS SHALL CONFORM WITH APPLICABLE FEDERAL, STATE, AND CITY OF PORTLAND CODES AND SPECIFICATIONS.
- COMPACTION REQUIREMENTS: LOCATION MINIMUM COMPACTION* BELOW PAVED AREAS 95% BELOW SEEDED AREAS 90%
*ALL PERCENTAGES OF COMPACTION SHALL BE OF MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEANING AND/OR FLUSH SEDIMENT AND DEBRIS FROM ALL MANHOLES, CATCH BASINS AND ASSOCIATED PIPING AFTER THE WORK HAS BEEN COMPLETED. ACCUMULATED SEDIMENT SHALL BE REMOVED AND PROPERLY DISPOSED OF.
- STATIONING, PIPE LENGTHS, PIPE SLOPES AND PIPE INVERT CALCULATIONS ARE MEASURED ALONG THE PIPE CENTERLINE TO THE INSIDE WALL OF MANHOLE AND CATCH BASIN STRUCTURES.
- PROPOSED CATCH BASIN, SEWER MANHOLE (SMH), AND DRAIN MANHOLE (DMH) SYMBOLS REPRESENT LOCATION OF NEW STRUCTURES. REFER TO DETAILS AND SPECIFICATIONS FOR INFORMATION ON FRAMES AND GRATES, COVERS, SHAPE, STYLE AND DIMENSIONS.
- ALL WORK WITHIN CITY STREET RIGHTS-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH REQUIREMENTS OF THE CITY TRAFFIC ENGINEER. THE CONTRACTOR SHALL SUBMIT A PROPOSED TRAFFIC CONTROL PLAN TO THE TRAFFIC ENGINEER AT LEAST 7 DAYS BEFORE STARTING CONSTRUCTION IN ANY STREET. THE TRAFFIC CONTROL PLAN SHALL BE SUBJECT TO APPROVAL BY THE TRAFFIC ENGINEER, WHO MAY ATTACH SPECIAL CONDITIONS TO, OR REQUIRE MODIFICATIONS OF, THE TRAFFIC CONTROL PLAN. CONSTRUCTION SHALL NOT BEGIN UNTIL THE PLAN IS APPROVED BY THE CITY TRAFFIC ENGINEER.
- THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL NECESSARY BARRIERS, FENCES, LIGHTS, WARNING SIGNS AND OTHER DEVICES NECESSARY TO SAFEGUARD TRAFFIC AND THE PUBLIC DURING WORKING AND NON-WORKING HOURS FOR THE DURATION OF THE PROJECT. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
- IT IS THE CONTRACTORS RESPONSIBILITY TO FAMILIARIZE THEMSELVES WITH THE EXISTING CONDITIONS PRIOR TO BIDDING.
- ON ALL "ALTER", "MODIFY" AND "REMOVE" STRUCTURES, THE CONTRACTOR SHALL REMOVE

- ABANDONED PIPES OR PLUG AND FILL WITH FLOWABLE FILL.
- THE COST OF REMOVING EXISTING STRUCTURES AND/OR PIPES SHALL BE INCIDENTAL TO THE COST OF THE REPLACEMENT STRUCTURE AND/OR PIPE WHEN REPLACED IN THE SAME VICINITY. REFER TO SPECIFICATION SECTION 202.08.
- RESTRICT ACCESS TO SITE THROUGH THE USE OF APPROPRIATE SIGNAGE, BARRIERS, FENCES, ETC. SITE SHALL BE LEFT WITH APPROPRIATE SAFETY MEASURES IN PLACE DURING NON-WORKING HOURS. NO TRENCH SHALL BE LEFT OPEN DURING NON-WORKING HOURS. SITE SAFETY IS THE RESPONSIBILITY OF THE CONTRACTOR, DURING BOTH WORKING AND NON-WORKING HOURS.
- CAPPED PIPE STUB LOCATIONS SHALL BE MARKED WITH EMBEDDED STAKE AND A MINIMUM OF THREE TIES SHOULD BE RECORDED. EMBEDDED STAKE SHALL BE 2X4 WITH PK NAIL DRIVEN IN TOP. LENGTH AS REQUIRED TO SPAN FROM TOP OF PIPE TO 6" BELOW GRADE. LOCATION AND ELEVATION OF PIPE STUB SHALL BE PROVIDED TO THE CITY OF PORTLAND ENGINEERING OFFICE. WARNING TAPE AND WIRE SHALL BE INSTALLED OVER PIPE STUBS IN ACCORDANCE WITH SPECIFICATIONS.
- THE FOLLOWING SHALL BE INCIDENTAL TO THE 603 & 604 PAY ITEMS: - CUTTING OF PIPE AND/OR CONNECTIONS NECESSARY TO CONSTRUCT NEW STORM DRAIN & SEWER PIPE AND APPURTENANCES - WORK & MATERIALS NECESSARY TO CONNECT NEW OR EXISTING PIPES TO CATCH BASINS OR MANHOLES - CHANGES TO FLOW LINES/PROFILE GRADES/PIPE INVERTS.
- AT LOCATIONS WHERE EXISTING CATCH BASINS ARE BEING REMOVED AND NEW CATCH BASINS ADDED IN A DIFFERENT LOCATION, CONTRACTOR SHALL REGRADE THE AREA WHERE THE OLD BASIN IS BEING REMOVED TO BLEND IN SMOOTHLY WITH ADJACENT STREET GRADES. AT THE LOCATION OF THE NEW CATCH BASIN, CONTRACTOR SHALL CONSTRUCT APPROPRIATE DEPRESSION PER THE CITY OF PORTLAND DETAILS AND STANDARDS.

TEMPORARY EROSION CONTROL MEASURES

- MAINTENANCE OF EROSION CONTROL MEASURES IS OF PARAMOUNT IMPORTANCE TO THE CITY. THE CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH ALL EROSION CONTROL MEASURES SHOWN ON THE PLANS. ADDITIONAL EROSION CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTIONS OF THE CITY OR THEIR REPRESENTATIVES AT NO ADDITIONAL COST TO THE CITY.
- LAND DISTURBING ACTIVITIES SHALL BE ACCOMPLISHED IN A MANNER AND SEQUENCE THAT CAUSES THE LEAST PRACTICAL DISTURBANCE OF THE SITE.
- PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL EROSION CONTROL BMPs AS SHOWN OR NOTED ON THE PLANS.
- SILTATION FENCE SHALL BE INSTALLED DOWN GRADIENT OF ANY DISTURBED AREAS TO TRAP RUNOFF-BORNE SEDIMENTS UNTIL GRASS AREAS ARE REVEGETATED. THE SILT FENCE SHALL BE INSTALLED PER THE DETAILS PROVIDED ON THIS PLAN AND INSPECTED BEFORE AND IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. REPAIRS SHALL BE MADE IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THE FENCE LINE. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR THE EDGES, OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THE FENCE, THE BARRIER SHALL BE REPLACED WITH A STONE CHECK DAM.
- FOR WORK WHICH IS CONDUCTED BETWEEN SEPTEMBER 15TH AND APRIL 15TH OF ANY CALENDAR YEAR, ALL DISTURBED AREAS, SHALL BE COVERED WITH HAY MULCH OR EROSION CONTROL MIX, APPLIED AT TWICE THE NORMAL APPLICATION RATE AND ANCHORED WITH A FABRIC NETTING. THE TIME PERIOD FOR APPLYING MULCH SHALL BE LIMITED TO 7 DAYS FOR ALL AREAS.
- PUBLIC WAYS SHALL BE SWEEPED, AS NECESSARY, TO CONTROL MUD AND DUST.
- SILT FENCING WITH A MINIMUM STAKE SPACING OF 6 FEET SHOULD BE USED, UNLESS THE FENCE IS SUPPORTED BY WIRE FENCE REINFORCEMENT OF MINIMUM 14 GAUGE AND WITH A MAXIMUM MESH SPACING OF 6 INCHES, IN WHICH CASE STAKES MAY BE SPACED A MAXIMUM OF 10 FEET APART. THE BOTTOM OF THE FENCE SHALL BE EMBEDDED IN A SOIL TRENCH.
- WATER AND/OR CALCIUM CHLORIDE SHALL BE FURNISHED AND APPLIED IN ACCORDANCE WITH MAINE DOT SPECIFICATIONS - SECTION 637 - DUST CONTROL.
- LOAM AND SEED IS INTENDED TO SERVE AS THE PRIMARY PERMANENT REVEGETATIVE MEASURE FOR ALL DISTURBED AREAS NOT PROVIDED WITH OTHER EROSION CONTROL MEASURES, SUCH AS RIPRAP.



NO.	DESCRIPTION	DATE
3	PLANS ISSUED FOR BIDDING	10-15-19
2	CITY ENGINEER REVIEW SET	09-16-19
1	FINAL REVIEW SET	09-05-19
	SUBMISSION	
	REV	

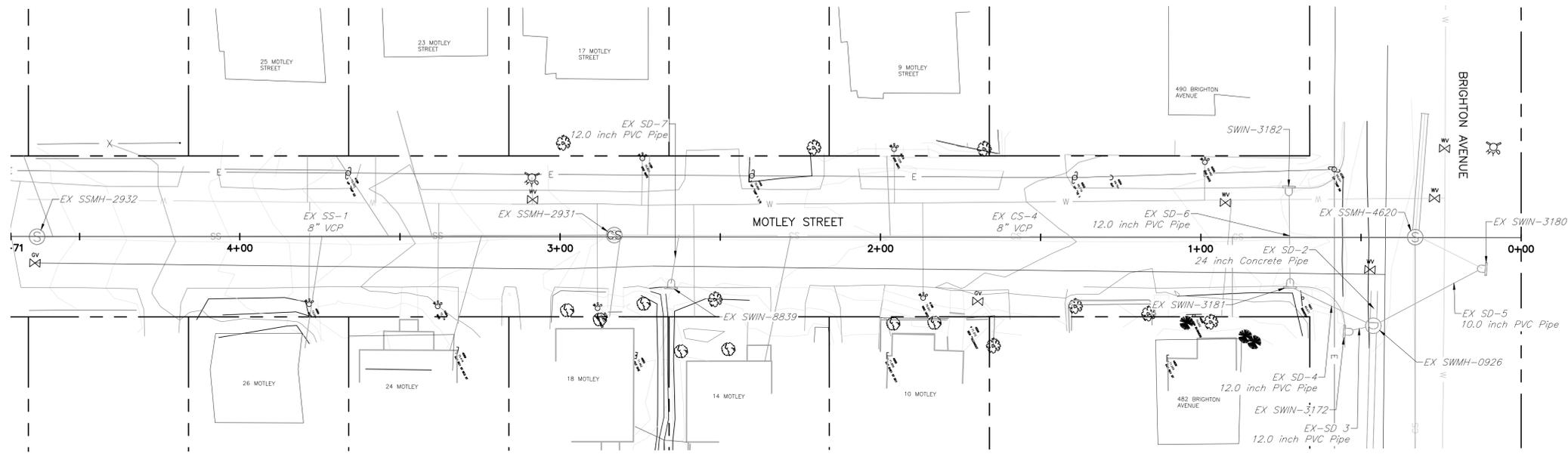
PROJECT NAME:
MOTLEY STREET STORM DRAIN AND SEWER REPLACEMENT PROJECT

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
WATER RESOURCES
217 CANICO ROAD, SUITE B, PORTLAND, MAINE 04103
PHONE (207) 974-8846 FAX (207) 974-8852

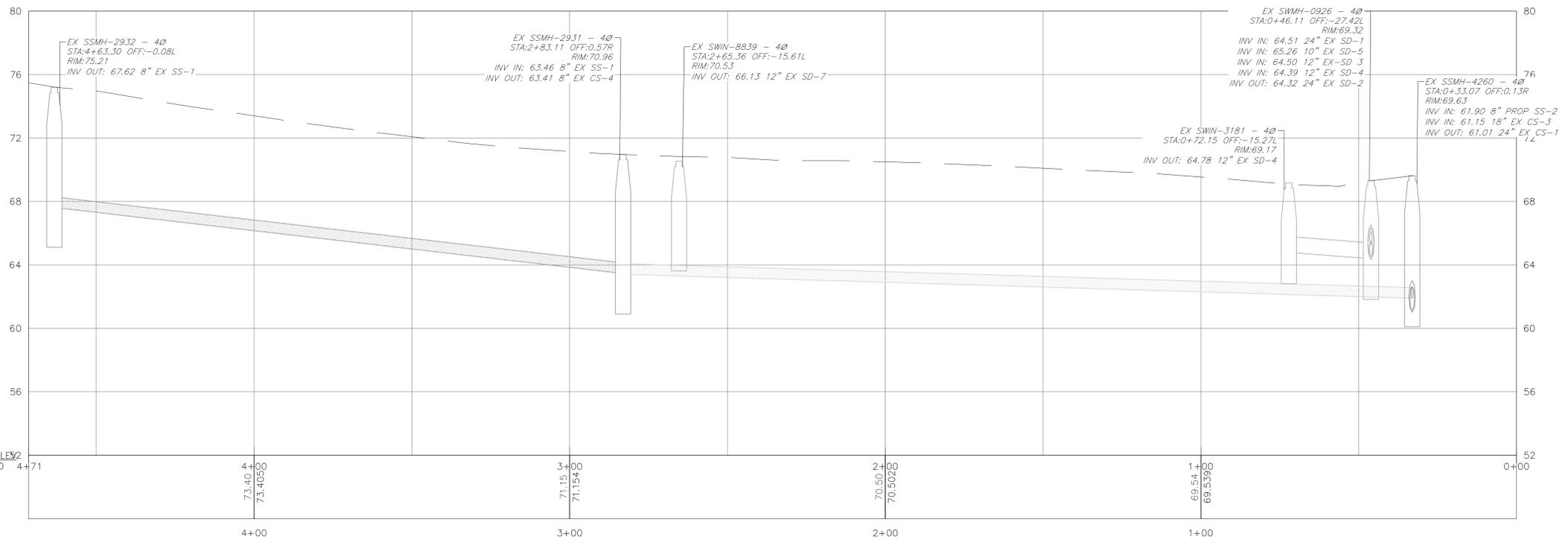


DESIGN BY:	JRP
DRAWN BY:	JRP
CHECKED BY:	BR
SHEET NAME:	GENERAL NOTES AND LEGEND
DATE:	OCTOBER 2019
	PAGE 2 OF 12
SHEET NO.:	G-2
VAULT #:	

S:\WATER RESOURCES - ENGINEERING\MOTLEY STREET DESIGN\DWG\MOTLEY_EC_53.2018



MOTLEY STREET EC PLAN
SCALE IN FEET
1" = 20'



PROFILE
1" = 20' HORIZONTAL
1" = 4' VERTICAL
SCALE IN FEET
1" = 20'

EC PIPE TABLE						
PIPE NAME	SIZE	LENGTH	SLOPE	FROM	TO	MATERIAL
EX SD 3	12	5.058	0.276	EX SWIN-3172	EX SWMH-0926	PVC
EX CS-1	24	36.486	0.010	EX SSMH-4620	OUTSIDE SURVEY LIMIT	REINFORCED CONCRETE PIPE
EX CS-4	8	246.034	0.006	EX SSMH-2931	EX SSMH-4620	VIT CLAY
EX SD-1	24	243.135	0.008	SWMH-2060	EX SWMH-0926	REINFORCED CONCRETE PIPE
EX SD-2	24	8.806	0.011	EX SWMH-0926	OUTSIDE SURVEY LIMIT	REINFORCED CONCRETE PIPE
EX SD-4	12	24.732	0.014	EX SWIN-3181	EX SWMH-0926	PVC
EX SD-6	12	27.706	0.019	SWIN-3182	EX SWIN-3181	VIT CLAY
EX SD-7	12	13.904	0.216	EX SWIN-8839	EX CS-4	PVC
EX SS-1	8	176.194	0.023	EX SSMH-2932	EX SSMH-2931	VIT CLAY

EC PIPE STRUCTURE TABLE				
STRUCTURE NAME	ALIGNMENT REF	STA.	OFFSET	DETAILS:
EX SSMH-2931	MOTLEY	2+83.11	0.57 R	48" Ø RIM = 70.96 INV IN = 63.46 8" EX SS-1 FROM EX SSMH-2932 INV OUT = 63.41 8" EX CS-4 TO EX SSMH-4620
EX SWMH-0926	MOTLEY	0+46.11	27.42 L	48" Ø RIM = 69.32 INV IN = 64.51 24" EX SD-1 FROM SWMH-2060 INV IN = 65.28 10" EX SD-5 FROM EX SWIN-3180 INV IN = 64.50 12" EX SD-3 FROM EX SWIN-3172 INV IN = 64.39 12" EX SD-4 FROM EX SWIN-3181 INV OUT = 64.32 24" EX SD-2 TO OFFSITE
EX SWIN-3172	MOTLEY	0+54.92	29.24 L	48" Ø RIM = 69.03 INV OUT = 66.98 12" EX SD-3 TO EX SWMH-0926
EX SWIN-3180	MOTLEY	0+11.21	9.75 L	48" Ø RIM = 69.59 INV OUT = 65.90 10" EX SD-5 TO EX SWMH-0926
EX SSMH-2932	MOTLEY	4+63.30	0.08 L	48" Ø RIM = 75.21 INV OUT = 67.62 8" EX SS-1 TO EX SSMH-2931
EX SWIN-8839	MOTLEY	2+65.36	15.61 L	48" Ø RIM = 70.53 INV OUT = 66.13 12" EX SD-7 TO EX CS-4
PROP CB-4	MOTLEY	0+72.52	15.48 R	48" Ø RIM = 68.61 INV IN = 65.40 12" PROP SD-3 FROM PROP CB-3 INV OUT = 65.30 12" PROP SD-5 TO PROP CB-1
EX SSMH-4620	MOTLEY	0+33.07	0.13 R	48" Ø RIM = 69.63 INV IN = 61.90 8" EX CS-4 FROM EX SSMH-2931 INV IN = 61.15 18" EX CS-3 FROM SSMH-5308 INV OUT = 61.01 24" EX CS-1 TO OFFSITE



NO.	DATE	DESCRIPTION
1	08-05-19	SUBMISSION
2	09-16-19	CITY ENGINEER REVIEW
3	10-15-19	PLANS ISSUED FOR BIDDING

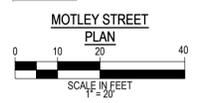
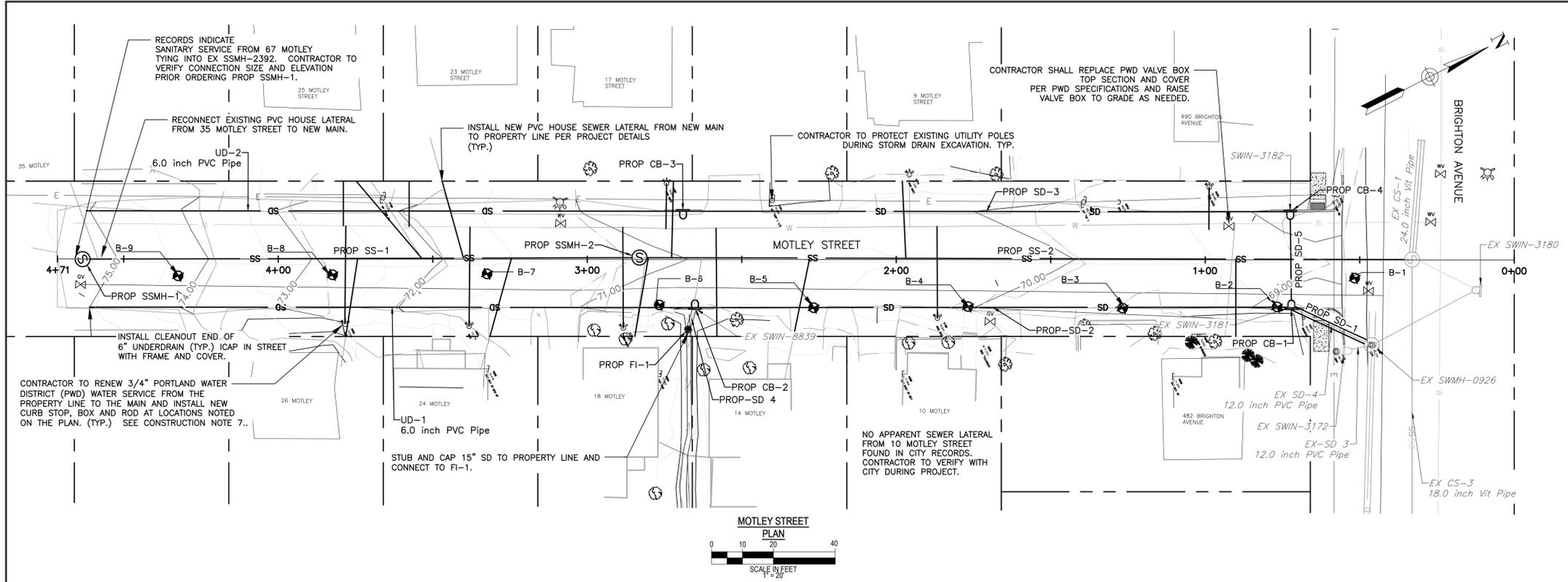
**MOTLEY STREET
STORM DRAIN AND
SEWER REPLACEMENT PROJECT**

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
WATER RESOURCE DIVISION
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DESIGN BY: JP
DRAWN BY: KET/JP
CHECKED BY: BAR
SHEET NAME: MOTLEY STREET EXISTING CONDITIONS

DATE: OCTOBER 2019
PAGE 3 OF 12
SHEET NO.: EC-1
VAULT #:

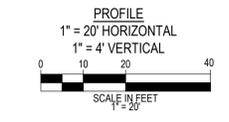
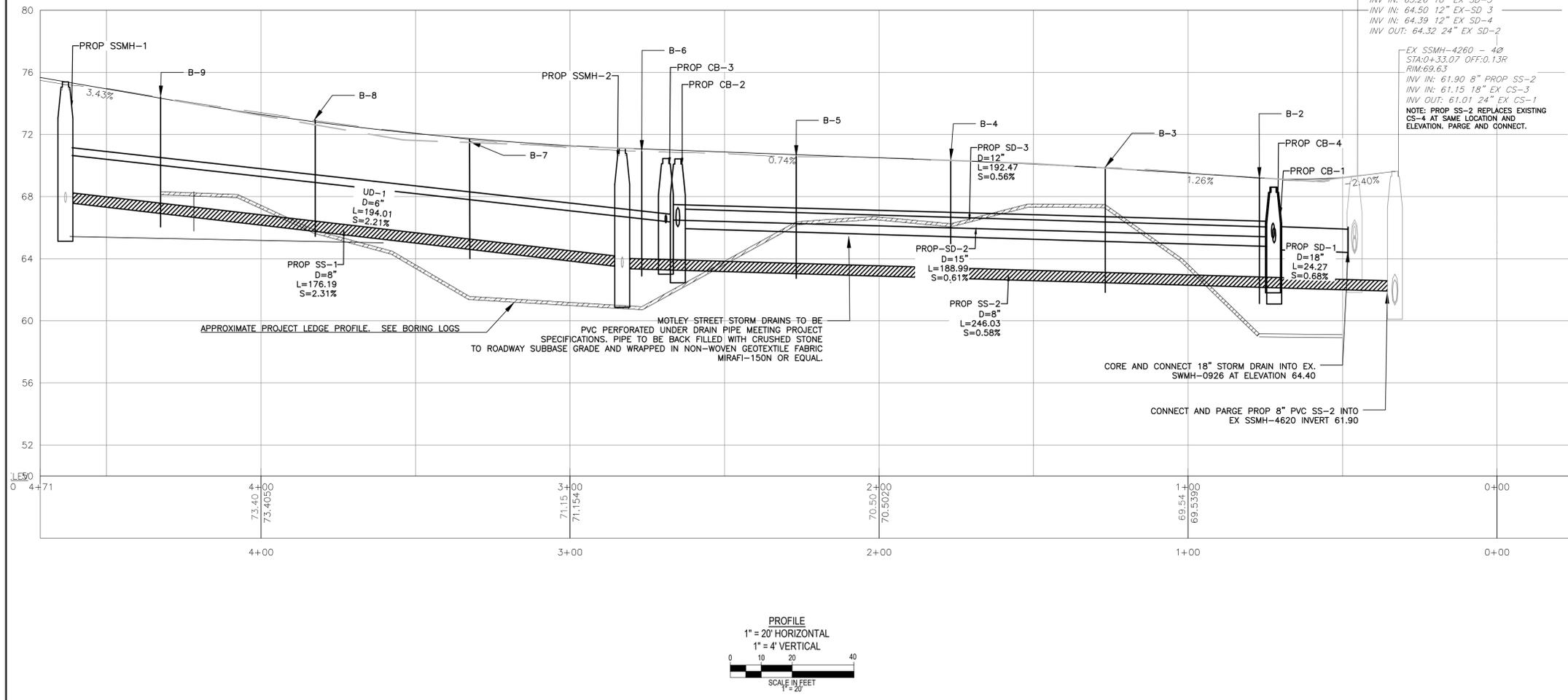


PROPOSED STORM DRAIN PIPE TABLE					
PIPE NAME	SIZE	LENGTH	SLOPE	FROM	TO
PROP-SD-2	15	188.992	0.006	PROP CB-2	PROP CB-1
PROP-SD-4	15	3.859	0.007	PROP FI-1	PROP CB-2
PROP SD-1	18	24.270	0.007	PROP CB-1	EX SWMH-0962
PROP SD-3	12	192.475	0.006	PROP CB-3	PROP CB-4
PROP SD-5	12	26.986	0.009	PROP CB-4	PROP CB-1
PROP SD-6	15	1.080	0.044	PIPE STUB	PROP FI-1
UD-1	6	194.009	0.022	PROP CB-2	CLEAN OUT
UD-2	6	191.115	0.022	PROP CB-3	CLEAN OUT

PROPOSED SANITARY PIPE TABLE					
PIPE NAME	SIZE	LENGTH	SLOPE	FROM	TO
PROP SS-1	8	176.194	0.023	PROP SSMH-1	PROP SSMH-2
PROP SS-2	8	246.034	0.006	PROP SSMH-2	EX SSMH-4260

PROPOSED STRUCTURE TABLE-STORM DRAIN					
STRUCTURE NAME	ALIGNMENT REF	STA.	OFFSET	DETAILS:	
PROP CB-2	MOTLEY	2+65.12	15.50 L	48" Ø RIM = 70.42 INV IN = 66.31 6" UD-1 FROM CLEAN OUT INV IN = 66.05 15" PROP-SD 4 FROM PROP FI-1 INV OUT = 65.95 15" PROP-SD-2 TO PROP CB-1	
PROP CB-1	MOTLEY	0+72.14	15.50 L	48" Ø RIM = 68.80 INV IN = 64.78 15" PROP-SD-2 FROM PROP CB-2 INV IN = 65.01 12" PROP SD-5 FROM PROP CB-4 INV OUT = 64.58 18" PROP SD-1 TO SWMH-0962	
PROP CB-3	MOTLEY	2+68.99	15.50 R	48" Ø RIM = 70.45 INV IN = 66.31 6" UD-2 FROM CLEAN OUT INV OUT = 66.50 12" PROP SD-3 TO PROP CB-4	
PROP CB-4	MOTLEY	0+72.52	15.48 R	48" Ø RIM = 68.61 INV IN = 65.40 12" PROP SD-3 FROM PROP CB-3 INV OUT = 65.30 12" PROP SD-5 TO PROP CB-1	
PROP FI-1	MOTLEY	2+67.33	22.55 L	F-BASIN RIM = 70.90 INV IN = 66.20 15" PROP SD-6 FROM STUB INV OUT = 66.10 15" PROP-SD 4 TO PROP CB-2	

PROPOSED STRUCTURE TABLE-SANITARY SEWER					
STRUCTURE NAME	ALIGNMENT REF	STA.	OFFSET	DETAILS:	
PROP SSMH-1	MOTLEY	4+63.30	0.08 L	48" Ø RIM = 75.39 INV OUT = 67.62 8" PROP SS-1 TO PROP SSMH-2	
PROP SSMH-2	MOTLEY	2+63.11	0.57 R	48" Ø RIM = 71.11 INV IN = 63.46 8" PROP SS-1 FROM PROP SSMH-1 INV OUT = 63.36 8" PROP SS-2 TO EX SSMH-4260	



EX SWMH-0926 - 40
STA:0+46.11 OFF: -27.42L
RIM:69.32
INV IN: 64.51 24" EX SD-1
INV IN: 65.26 10" EX SD-5
INV IN: 64.50 12" EX SD-3
INV IN: 64.39 12" EX SD-4
INV OUT: 64.32 24" EX SD-2

EX SSMH-4260 - 40
STA:0+33.07 OFF:0.13R
RIM:69.63
INV IN: 61.90 8" PROP SS-2
INV IN: 61.15 18" EX CS-3
INV OUT: 61.01 24" EX CS-1

NOTE: PROP SS-2 REPLACES EXISTING CS-4 AT SAME LOCATION AND ELEVATION. PARGE AND CONNECT.

CONSTRUCTION NOTES:

- CONTRACTOR TO RENEW EACH SANITARY SEWER LATERAL FROM THE NEW MAIN TO THE CITY'S RIGHT OF WAY LINE. EXISTING LATERAL INFORMATION IS LIMITED. NEW SERVICES ARE TO BE PVC AND MATCH THE EXISTING DIAMETER, LINE AND GRADE OF THE EXISTING LATERAL. EXISTING LATERAL LOCATION INFORMATION BASED ON CITY OF PORTLAND SEWER LATERAL CARDS AND VERIFIED BY TED BERRY CCTV INSPECTION COMPLETED IN MAY 2019. THE CCTV INSPECTION REPORTS OF THE EXISTING MOTLEY STREET SEWER CAN BE FOUND IN THE PROJECT SPECIFICATION APPENDICES.
- ANY EXISTING GAS SERVICE THAT REQUIRES RELOCATION TO FACILITATE THE INSTALLATION OF THE NEW STORM DRAIN SHALL BE COORDINATED WITH THE PROPER UTILITY. NO ADDITIONAL PAYMENT WILL BE MADE.
- CONTRACTOR TO RESTORE DISTURBED LAWN AREAS WITH 4 INCHES OF LOAM AND PROJECT SPECIFIED SEED MIX TO THE SATISFACTION OF THE PROJECT ENGINEER.
- STORM DRAINS INSTALLED IN MOTLEY STREET GUTTER LINE SHALL BE PERFORATED PVC UNDER-DRAIN PIPE INSTALLED PER THE PROJECT DETAIL.
- PROJECT BORINGS WERE COMPLETED BY NORTHERN TEST BORING IN JUNE OF 2019. BORING LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE. THE LEDGE PROFILE ON THIS PLAN IS TO BE CONSIDERED AN APPROXIMATION TO INDICATE THE PRESENCE OF LEDGE WITHIN PROJECT LIMITS. CONTRACTOR CAN REFER TO BORING LOGS LOCATED WITHIN THE PROJECT SPECIFICATION APPENDICES.
- CONTRACTOR TO INSTALL 4' TIP DOWNS ON EITHER SIDE OF PROP CB-2 AND PROP CB-3. EACH CB SHALL BE INSTALLED WITH GRANITE HEADSTONE CONFORMING TO CITY SPECIFICATIONS. ANY GRADING WORK ASSOCIATED WITH INSTALLATION OF TIP DOWN OR HEADSTONE SHALL BE INCIDENTAL TO THE CB INSTALLATION.
- PRIOR TO ANY PORTLAND WATER DISTRICT (PWD) WORK, THE CONTRACTOR SHALL NOTIFY THE DISTRICT AT LEAST 5 BUSINESS DAYS BEFORE ANY WORK COMMENCES. THE DISTRICT WILL PROVIDE AN INSPECTOR WHO MUST BE PRESENT DURING ANY PWD PROJECT WORK. ALL SERVICE LOCATIONS ON THE PLANS SHALL BE CONSIDERED APPROXIMATE. FINAL LOCATIONS OF ALL NEW SERVICES SHALL BE COORDINATED WITH PWD AND THE CITY OF PORTLAND. THE CURB STOP, BOX AND ROD SHALL BE INCIDENTAL TO THE WATER SERVICE ITEM.



REV	DATE	DESCRIPTION
1	08-05-19	FINAL REVIEW SET
2	09-16-19	CITY ENGINEER REVIEW SET
3	10-15-19	PLANS ISSUED FOR BIDDING

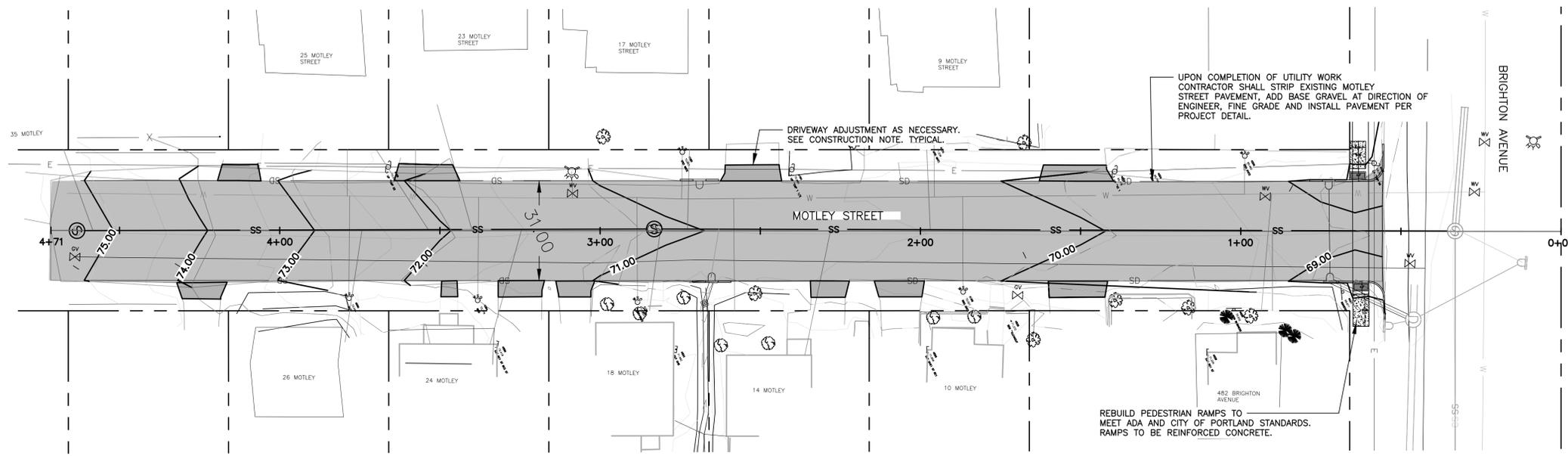
MOTLEY STREET STORM DRAIN AND SEWER REPLACEMENT PROJECT

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
WATER RESOURCE DIVISION
55 PORTLAND ST., PORTLAND, MAINE 04101
PHONE (207) 574-8846 FAX (207) 574-8852

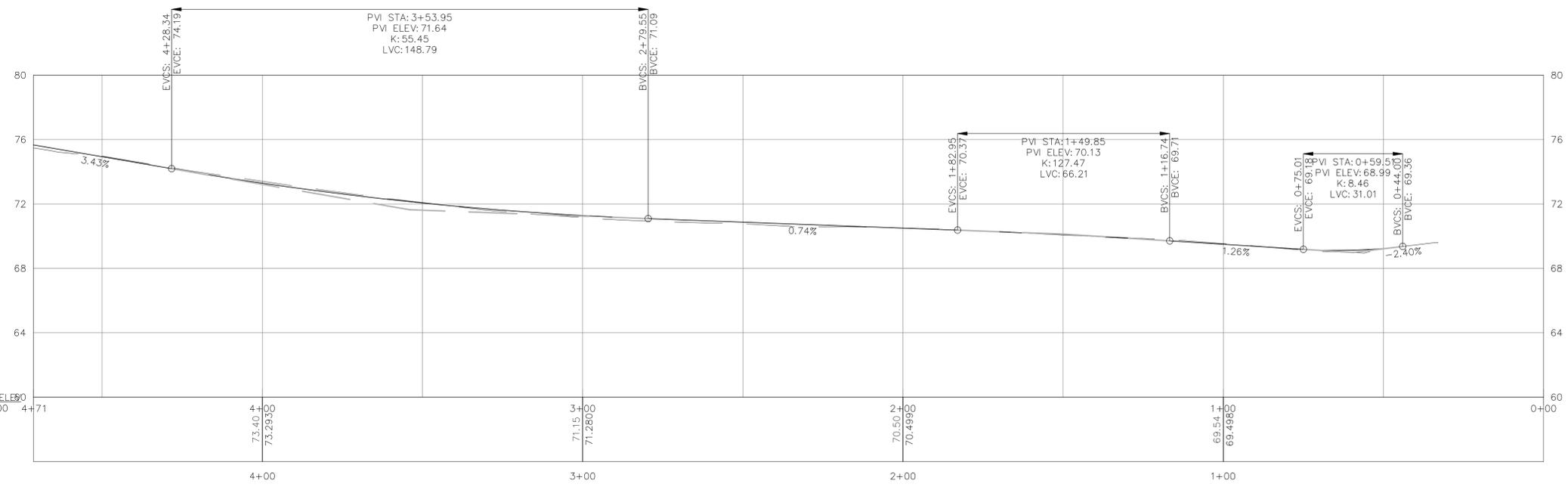
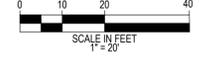


DESIGN BY:	JP
DRAWN BY:	JP
CHECKED BY:	BR
SHEET NAME:	MOTLEY STREET DESIGN PLAN AND PROFILE
DATE:	OCTOBER 2019
SHEET NO.:	C-1
VAULT #:	

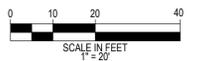
S:\WATER RESOURCES - ENGINEERING\MOTLEY STREET DESIGN\DWG\MOTLEY PLAN AND PROFILE 03.2018



MOTLEY STREET STREET GRADING PLAN AND RECONSTRUCTION PLAN

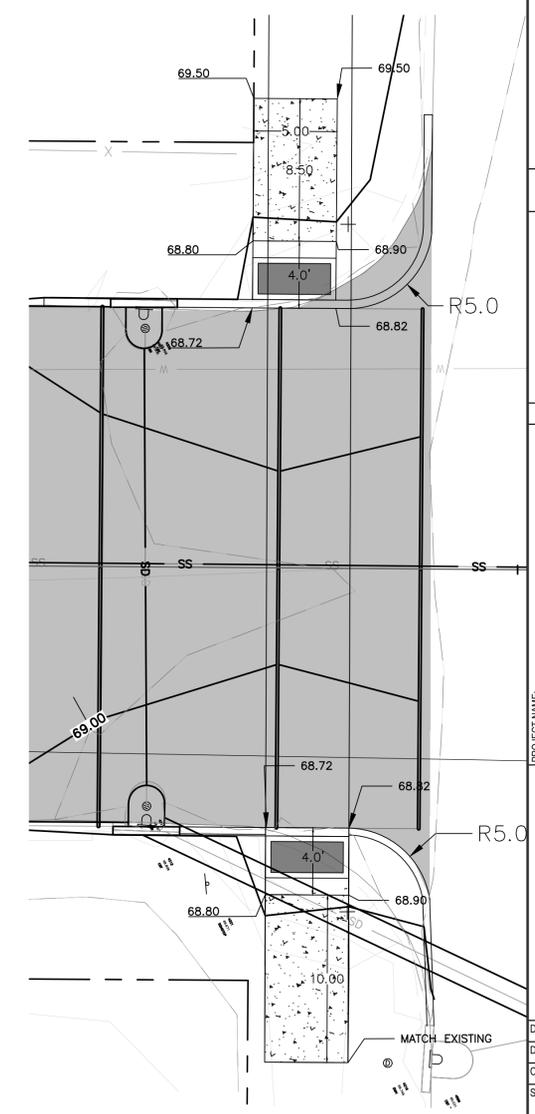


MOTLEY STREET ROADWAY PROFILE
1" = 20' HORIZONTAL
1" = 4' VERTICAL

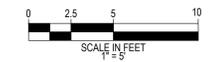


CONSTRUCTION NOTES:

- 1.) PEDESTRIAN RAMPS AT THE BRIGHTON AVENUE/MOTLEY INTERSECTION SHALL BE RECONSTRUCTED AND MUST MEET ALL APPLICABLE ADA STANDARDS. SEE PROJECT DETAILS.
- 2.) CONTRACTOR TO RESTORE DISTURBED LAWN AREAS WITH 4 INCHES OF LOAM AND PROJECT SPECIFIED SEED MIX TO THE SATISFACTION OF THE PROJECT ENGINEER.
- 4.) CONTRACTOR SHALL INSTALL DRIVEWAY APRONS TO A MAXIMUM OF 5' BEYOND THE STREET LINE. CONTRACTOR TO REVIEW DRIVEWAY ADJUSTMENT EXTENT WITH THE PROJECT ENGINEER PRIOR TO ANY WORK.
- 5.) CONTRACTOR TO INSTALL UNDERDRAIN ON EACH SIDE OF ROAD PER PROJECT DETAIL. UNDER DRAIN SHALL BE 6" PERFORATED PVC MEETING PROJECT SPECIFICATIONS.
- 6.) CONTRACTOR TO INSTALL 4' TIP DOWNS ON EITHER SIDE OF PROP CB-2 AND PROP CB-3. EACH CB SHALL BE INSTALLED WITH GRANITE HEADSTONE CONFORMING TO CITY SPECIFICATIONS. ANY GRADING WORK ASSOCIATED WITH INSTALLATION OF TIP DOWN OR HEADSTONE SHALL BE INCIDENTAL TO THE CB INSTALLATION.
- 7.) CONTRACTOR SHALL PROTECT ALL STREET TREES UNLESS OTHERWISE DIRECTED BY THE CITY.
- 8.) SAW CUTTING OF BUTT JOINTS IS INCIDENTAL TO THE CONTRACT.
- 9.) REMOVAL OF EXISTING CURB AND SIDEWALK SHALL BE INCIDENTAL TO THE INSTALLATION OF NEW CURB AND SIDEWALK.



PEDESTRIAN RAMP GRADING AND LAYOUT PLAN



REV	SUBMISSION	DATE
3	ISSUED FOR BIDDING	10-15-19
2	CITY ENGINEER REVIEW	09-16-19
1	FINAL REVIEW SET	08-05-19

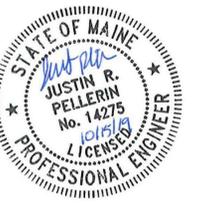
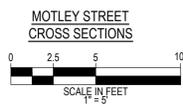
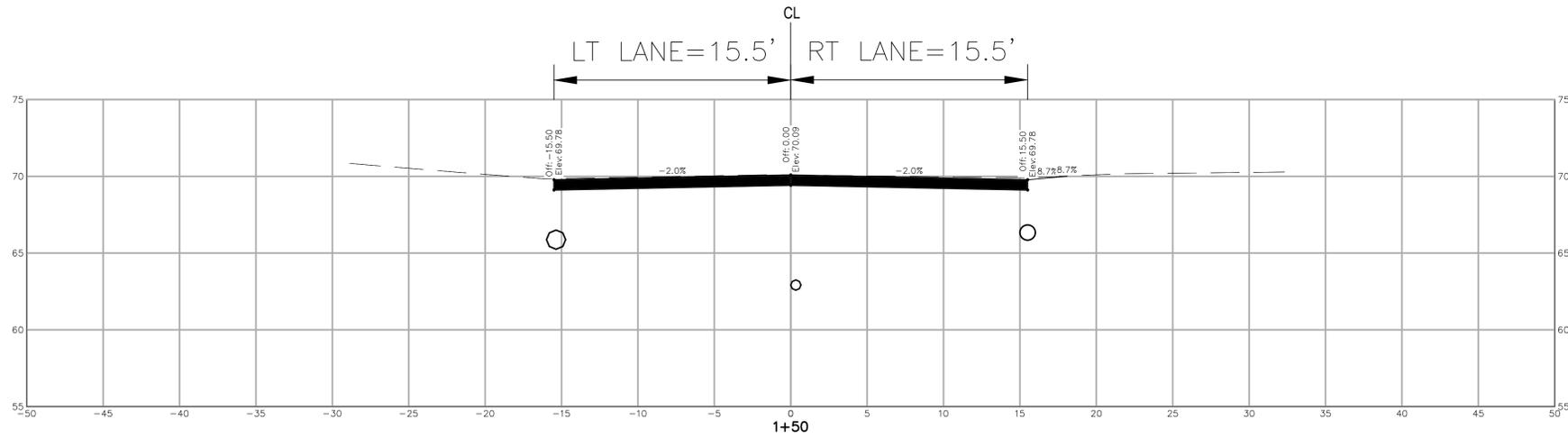
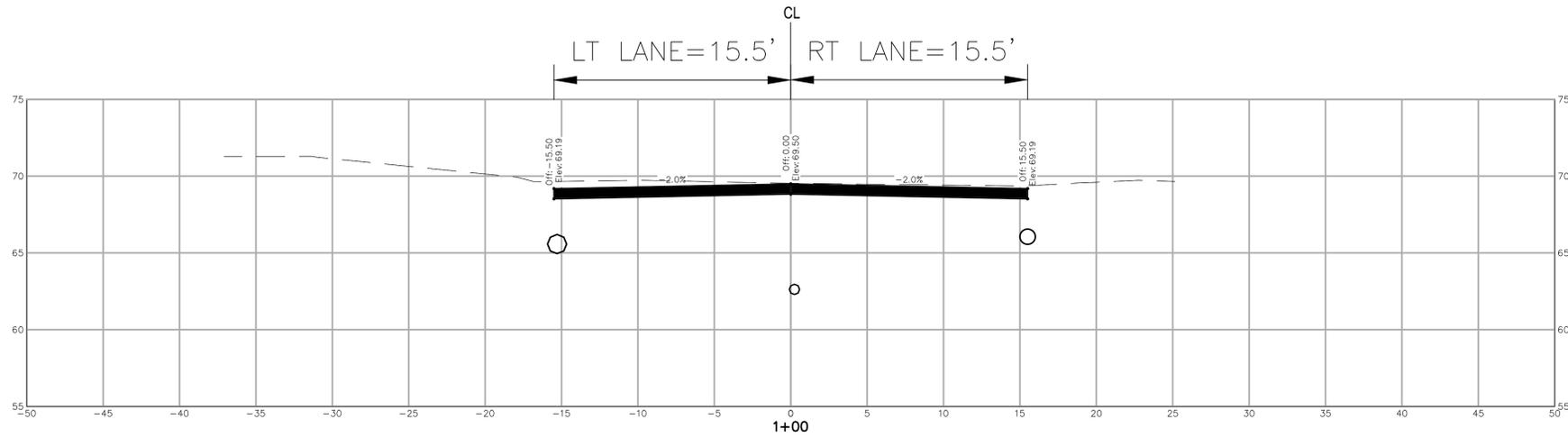
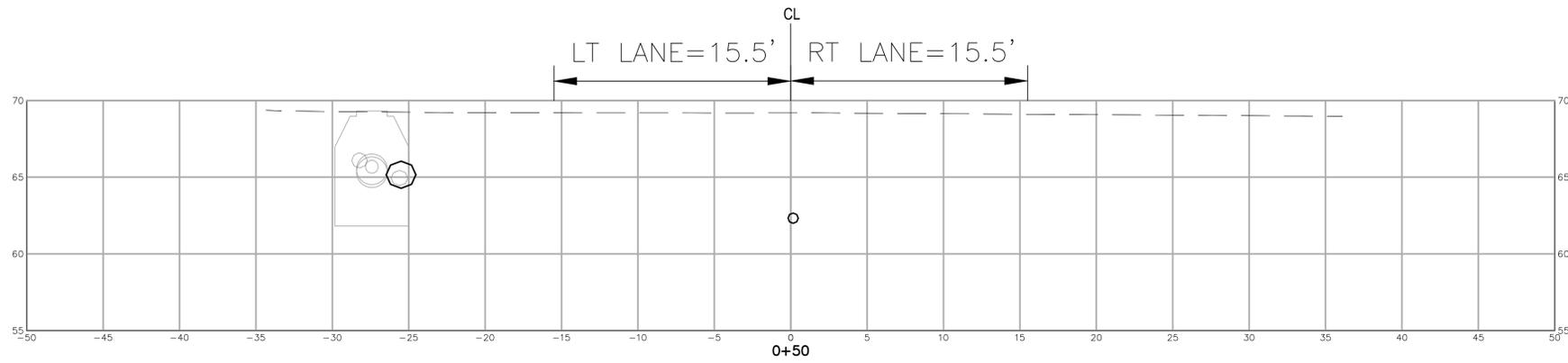
PROJECT NAME:
**MOTLEY STREET
STORM DRAIN AND
SEWER REPLACEMENT PROJECT**

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
WATER RESOURCE DIVISION
55 PORTLAND ST., PORTLAND, MAINE 04101
PHONE (207) 874-8806 FAX (207) 874-8802



DESIGN BY:	JP
DRAWN BY:	KET/JP
CHECKED BY:	BAR
SHEET NAME:	MOTLEY STREET GRADING AND RECONSTRUCTION PLAN
DATE:	OCTOBER 2019
SHEET NO.:	C-2
VAULT #:	

S:\WATER RESOURCES - ENGINEERING\MOTLEY STREET\DESIGN\MOTLEY DESIGN_08202019.DWG GRADING PLAN 5/3/2018



REV	SUBMISSION	DATE
3	PLANS ISSUED FOR BIDDING	10-15-19
2	CITY ENGINEER REVIEW	09-16-19
1	FINAL REVIEW SET	08-05-19

PROJECT NAME:
**MOTLEY STREET
STORM DRAIN AND
SEWER REPLACEMENT PROJECT**

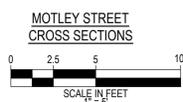
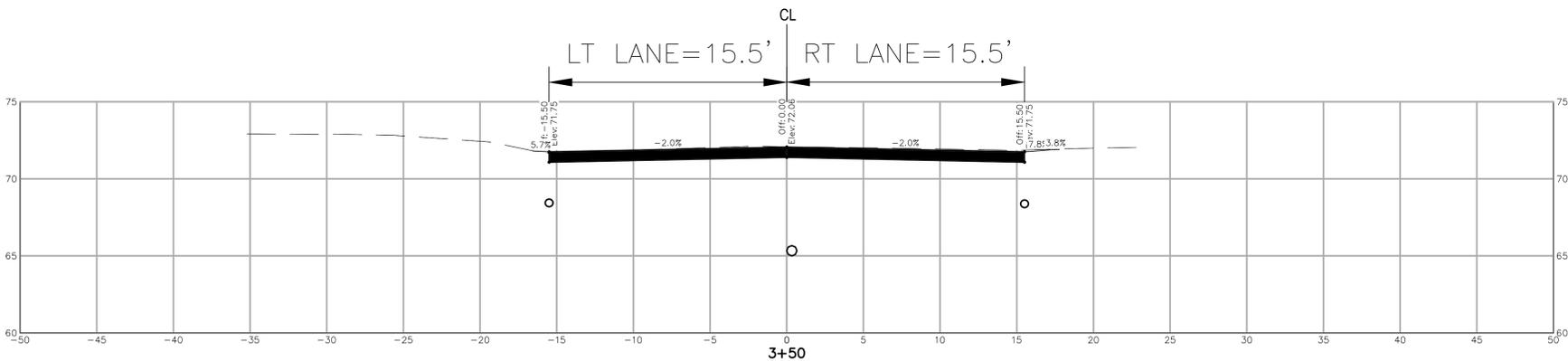
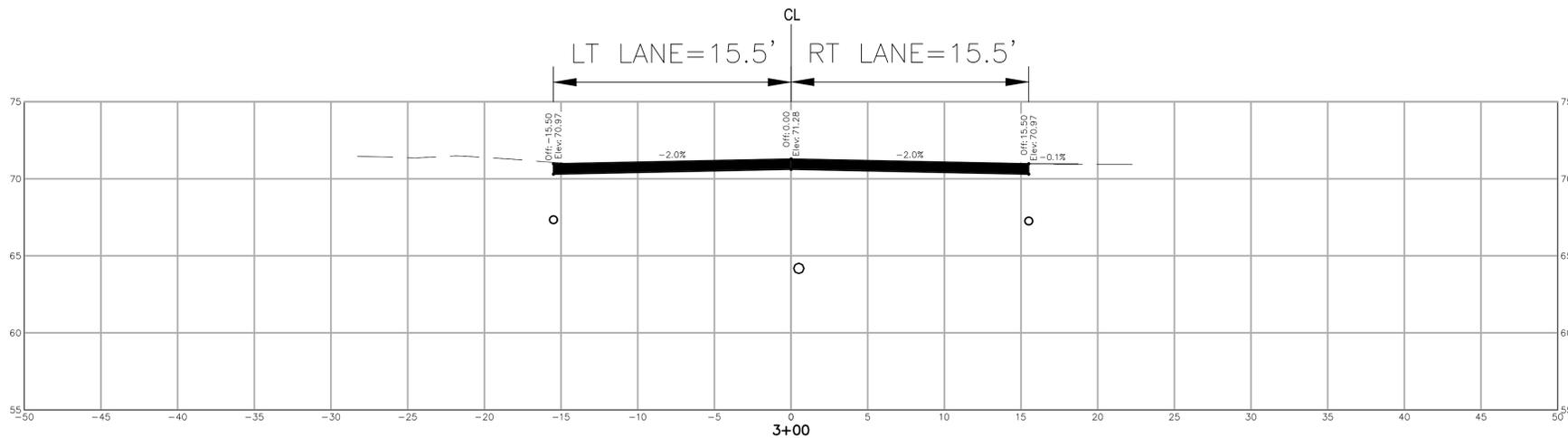
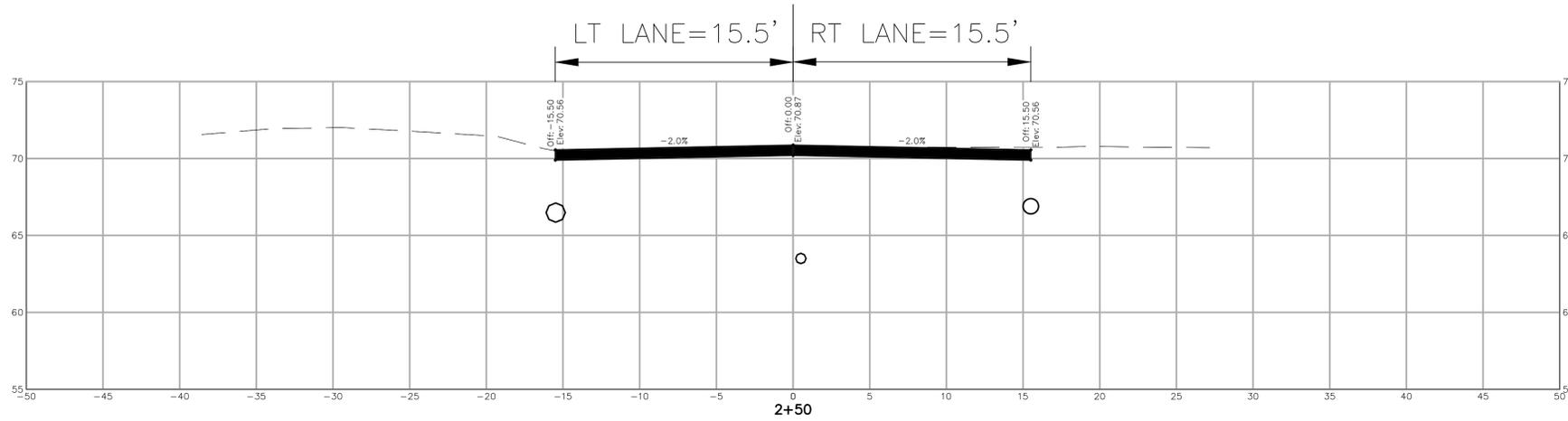
CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
WATER RESOURCE DIVISION
55 PORTLAND ST., PORTLAND, MAINE 04101
PHONE (207) 874-8866 FAX (207) 874-8862



DESIGN BY: JP
DRAWN BY: JP
CHECKED BY: BAR
SHEET NAME:
**MOTLEY STREET
CROSS SECTIONS**

DATE: OCTOBER 2019
PAGE 6 OF 12
SHEET NO.: C-3
VALT.#:

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REV	SUBMISSION	DATE
3	PLANS ISSUED FOR BIDDING	10-15-19
2	CITY ENGINEER REVIEW	09-16-19
1	FINAL REVIEW SET	08-05-19

PROJECT NAME:
**MOTLEY STREET
 STORM DRAIN AND
 SEWER REPLACEMENT PROJECT**

CITY OF PORTLAND, MAINE
 DEPARTMENT OF PUBLIC WORKS
 WATER RESOURCE DIVISION
 55 PORTLAND ST., PORTLAND, MAINE 04101
 PHONE (207) 874-8866 FAX (207) 874-8862

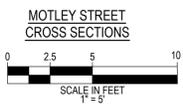
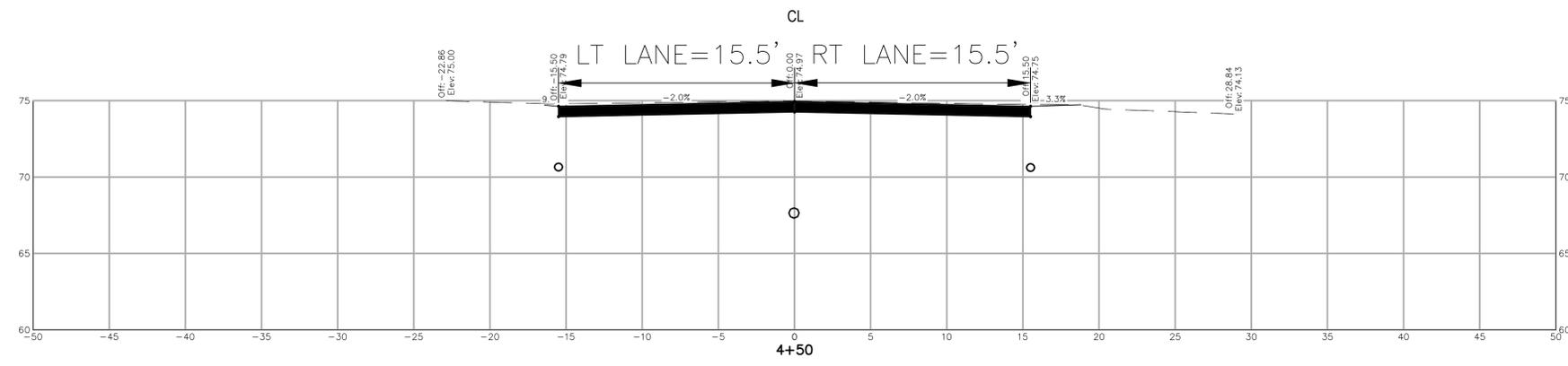
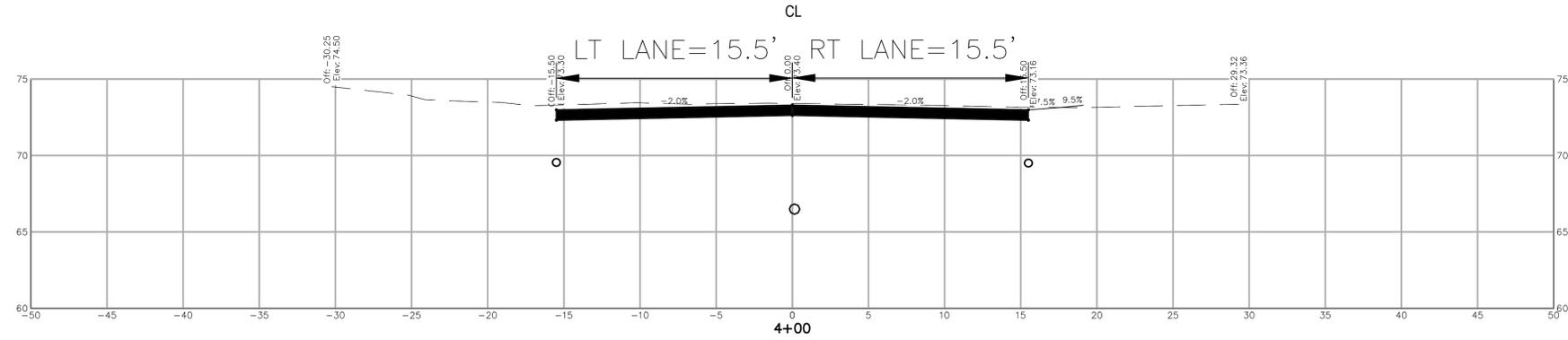


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 CHECKED BY: BAR
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**MOTLEY STREET
 CROSS SECTIONS**

DATE: OCTOBER 2019
 PAGE 7 OF 12
 SHEET NO.: C-4
 VALU.T.#:

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5/20/18



REV	DESCRIPTION	DATE
3	PLANS ISSUED FOR BIDDING	10-15-19
2	CITY ENGINEER REVIEW	09-16-19
1	FINAL REVIEW SET	09-05-19

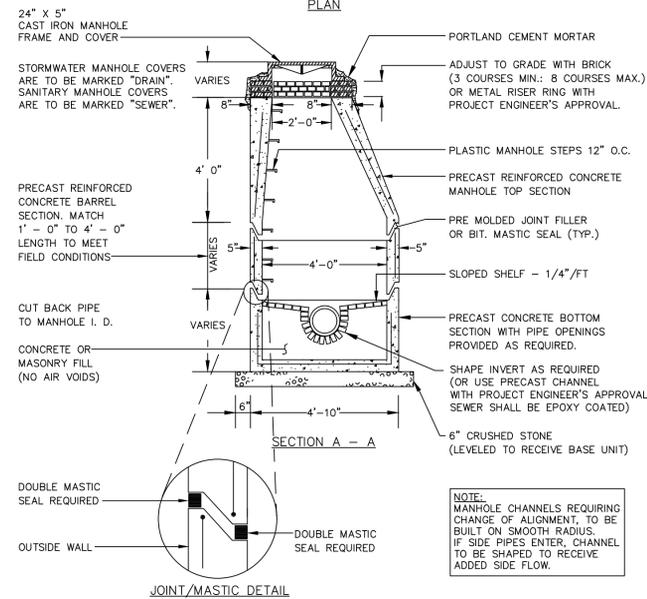
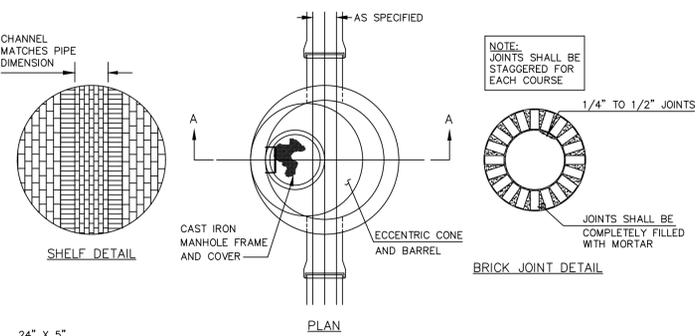
PROJECT NAME:
**MOTLEY STREET
 STORM DRAIN AND
 SEWER REPLACEMENT PROJECT**

CITY OF PORTLAND, MAINE
 DEPARTMENT OF PUBLIC WORKS
 WATER RESOURCE DIVISION
 55 PORTLAND ST., PORTLAND, MAINE 04101
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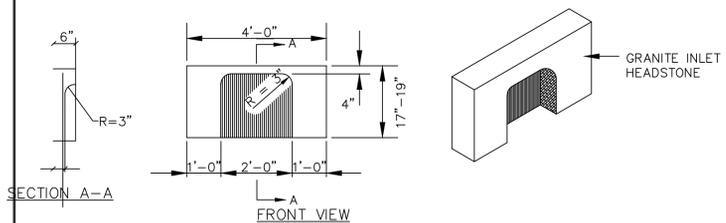
DESIGN BY: JP
 DRAWN BY: JP
 CHECKED BY: BAR
 SHEET NAME:
CROSS SECTIONS

DATE: OCTOBER 2019
 PAGE 8 of 12
 SHEET NO.: C-5
 VALT.#:



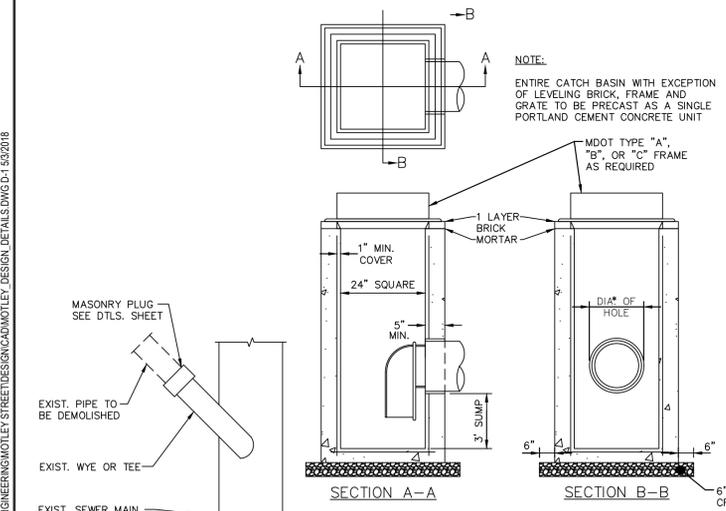
PRECAST CONCRETE MANHOLE

NOT TO SCALE



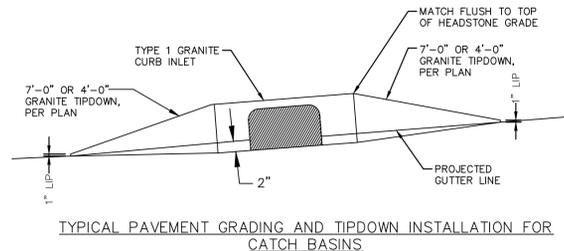
4' GRANITE HEADSTONE FOR CATCH BASIN INLET

NOT TO SCALE



CATCH BASIN TYPE "F"

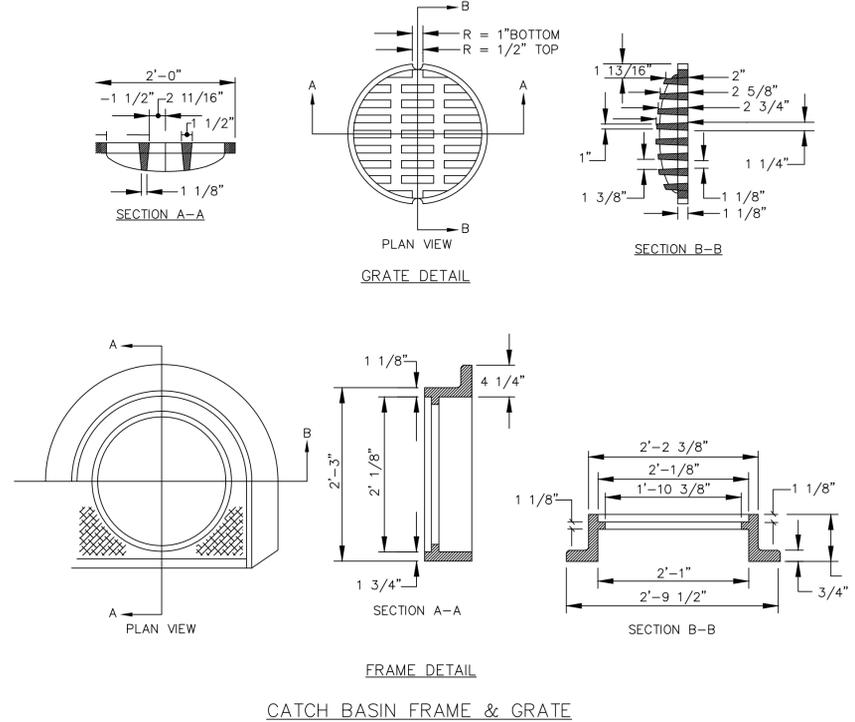
N.T.S.



N.T.S.

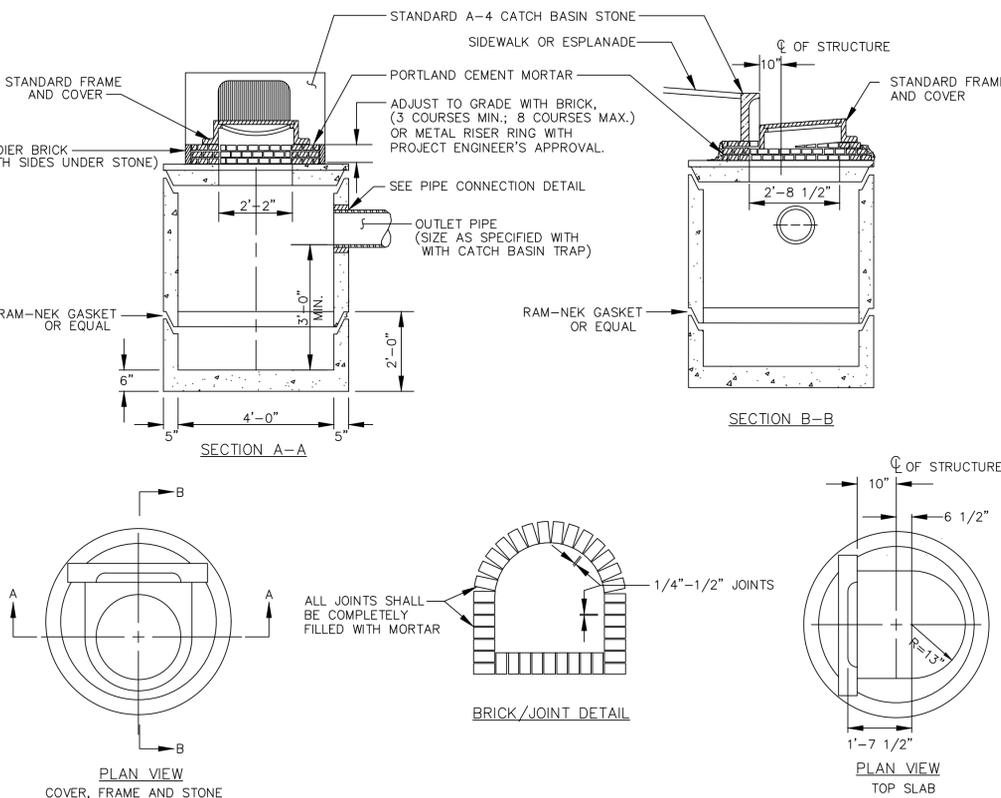
GENERAL NOTES FOR MANHOLES AND CATCH BASINS

- ALL CONCRETE SHALL HAVE A MINIMUM ULTIMATE COMPRESSIVE STRENGTH OF 4000 lbs. PER SQ. INCH AT THE END OF 28 DAYS, UNLESS OTHERWISE NOTED.
- MANHOLES MAY BE CONSTRUCTED OF PRECAST REINFORCED CONCRETE, OR CAST IN PLACE.
- PRECAST REINFORCED CONE BARREL MANUFACTURED PER ASTM SPEC. C-478.
- ALL STORM AND SEWER MANHOLE COVERS SHALL BE SOLID AND SHALL HAVE ONE 7/8" DIAMETER DRILLED PICK HOLE LOCATED 8" FROM THE CENTER OF THE COVER.
- ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/RAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
- ALL MANHOLE RISERS SHALL BE ETHERIDGE 24" OR APPROVED EQUAL.
- SEWER BRICK SHALL CONFORM TO ASTM SPEC. DESIGNATE ON C-32-63, GRADE MA AND SA.
- ALL SANITARY MANHOLES SHALL HAVE A WATERPROOFING COATING APPLIED TO THE EXTERIOR SURFACE.
- CATCH BASIN FRAMES FOR TYPE A4 CATCH BASIN CURB INLETS SHALL BE ETHERIDGE DR5A OR APPROVED EQUAL.
- CASTINGS SHALL CONFORM TO ASTM DESIGNATION A48-CLASS 35.
- EXISTING MANHOLES, CATCH BASINS, FRAMES, AND COVERS SHALL BE SALVAGED BY THE CONTRACTOR, AND SHALL REMAIN THE PROPERTY OF THE CITY OF PORTLAND.
- ALL CATCH BASIN OUTLETS SHALL BE INSTALLED WITH A CASCO TRAP. SEE FIGURE II-09.



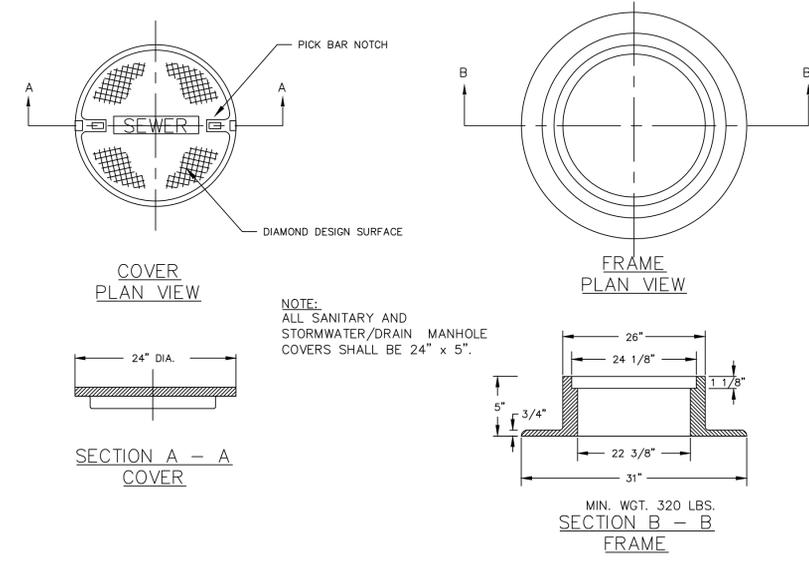
NOTES:

- ALL SANITARY MANHOLE COVERS SHALL HAVE "SEWER" CAST INTO THE COVER. ALL STORMWATER/RAIN MANHOLE COVERS SHALL HAVE "DRAIN" CAST INTO THE COVER.
- APPROVED MANHOLE FRAMES:
 - EAST JORDAN = 1690Z
 - NEENAH = R-1496
 - OR APPROVED EQUAL
- APPROVED MANHOLE COVERS
 - EAST JORDAN = 2160A
 - NEENAH = R-1496
 - OR APPROVED EQUAL



PRECAST CONCRETE CATCH BASIN - TYPE "E"

NOT TO SCALE



CAST IRON MANHOLE COVER AND FRAME

NOT TO SCALE



NO.	DESCRIPTION	DATE
3	PLANS ISSUED FOR BIDDING	10-15-19
	CITY ENGINEER REVIEW SET	09-16-19
	FINAL REVIEW SET	05-19
	SUBMISSION	
	REV	

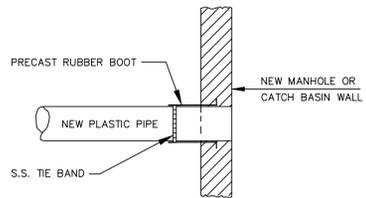
PROJECT NAME: MOTLEY STREET STORM DRAIN AND SEWER REPLACEMENT PROJECT

CITY OF PORTLAND, MAINE
 DEPARTMENT OF PUBLIC WORKS
 WATER RESOURCES DIVISION
 212 CANAL ROAD, PORTLAND, MAINE 04103
 PHONE (207) 574-8806 FAX (207) 574-8802

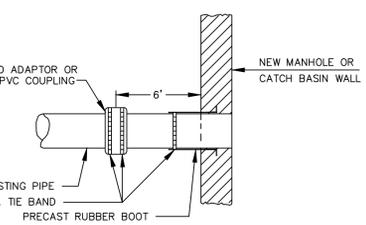


DESIGN BY:	JRP
DRAWN BY:	JRP
CHECKED BY:	BAR
SHEET NAME:	CONSTRUCTION DETAILS
DATE:	OCTOBER 2019
SHEET NO.:	D-1
VAULT #:	

SWWATER RESOURCES - ENGINEERING/MOTLEY STREET DESIGN/MOTLEY DESIGN DETAILS/DWG D-1 10/20/18



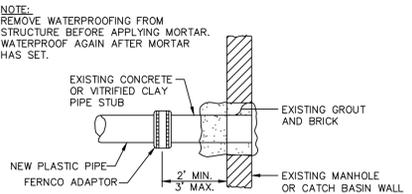
METHOD 2 - NEW CONSTRUCTION



METHOD 1 - EXISTING PIPE INTO NEW STRUCTURE

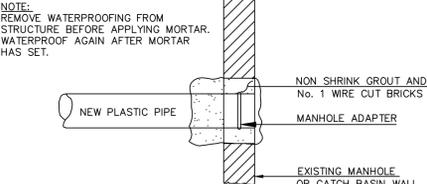
PLASTIC PIPE CONNECTIONS

NOT TO SCALE



METHOD 4 - NEW PIPE TO EXISTING STRUCTURE STUB

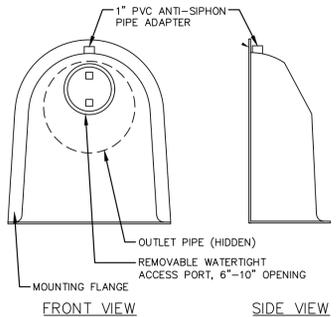
NOTE: EXISTING MANHOLE OR CATCH BASIN SHALL BE CORE DRILLED FOR PIPE INSTALLATION. IF PIPE DIAMETER IS SO LARGE THAT CORE DRILLING IS PROHIBITED, THE CONTRACTOR MAY SAW CUT THE STRUCTURE TO CREATE PIPE OPENING. THE NEW OPENING MUST THEN BE SEALED AND WATERTIGHT BOTH INSIDE AND OUTSIDE THE STRUCTURE.



METHOD 3 - NEW PIPE INTO EXISTING STRUCTURE

PLASTIC PIPE CONNECTIONS

NOT TO SCALE

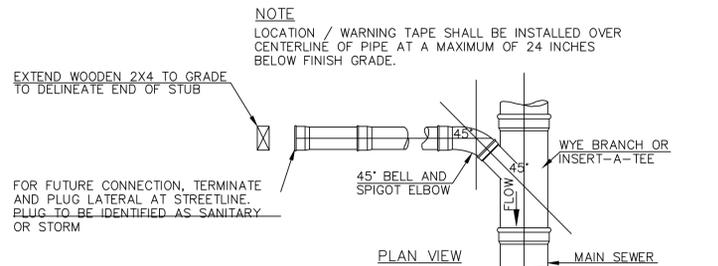


NOTES:

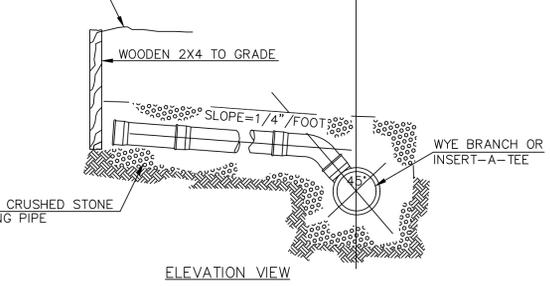
- ALL HOODS AND TRAPS FOR CATCH BASINS AND WATER QUALITY STRUCTURES SHALL BE AS MANUFACTURED BY BEST MANAGEMENT PRODUCTS, INC. OR PRE-APPROVED EQUAL.
- ALL HOODS SHALL BE CONSTRUCTED OF A GLASS REINFORCED RESIN COMPOSITE WITH ISO GEL COAT EXTERIOR FINISH WITH A MINIMUM 0.125" LAMINATE THICKNESS.
- ALL HOODS SHALL BE EQUIPPED WITH A WATERTIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT PIPE AND ELBOW.
-
- THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION (SNOOT SIZE ALWAYS LARGER THAN PIPE SIZE).
- THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A MINIMUM DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6" FOR PIPES <12" I.D.
- THE ANTI-SIPHON VENT SHALL EXTEND ABOVE HOOD BY MINIMUM OF 3" AND A MAXIMUM OF 12" ACCORDING TO STRUCTURE CONFIGURATION.
- THE SURFACE OF THE STRUCTURE WHERE THE HOOD IS MOUNTED SHALL BE FINISHED SMOOTH AND FREE OF LOOSE MATERIAL AND PIPE SHALL BE FINISHED FLUSH TO WALL.
- THE HOOD SHALL BE SECURELY ATTACHED TO STRUCTURE WALL WITH 3/8" STAINLESS STEEL BOLTS AND OIL-RESISTANT GASKET AS SUPPLIED BY MANUFACTURER.
- INSTALLATION INSTRUCTIONS SHALL BE FURNISHED WITH MANUFACTURER SUPPLIED INSTALLATION KIT. INSTALLATION KIT SHALL INCLUDE: INSTALLATION INSTRUCTIONS, PVC ANTI-SIPHON VENT PIPE AND ADAPTER, OIL-RESISTANT CRUSHED CELL FOAM GASKET WITH PSA BACKING, 3/8" STAINLESS STEEL BOLTS, AND ANCHOR SHIELDS.

SNOOT OIL-WATER-DEBRIS SEPARATOR DETAIL

N.T.S.



TYPICAL EXISTING STORM DRAIN LATERAL CONNECTION DETAILS

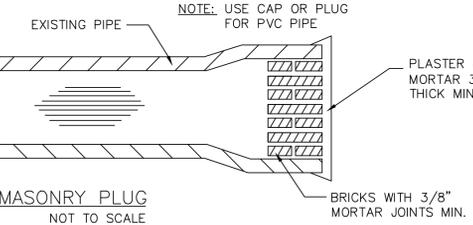


NOTES:

- LOCATIONS AND ELEVATIONS OF STUBS SHOWN ON THE PLANS ARE TO BE CONSIDERED AS APPROXIMATE AND MAY BE ADJUSTED AS DIRECTED TO SUIT FIELD CONDITIONS.
- HOUSE CONNECTIONS AND CATCH BASINS CONNECTIONS TO THE MAIN LINE OF THE STORM DRAIN, SHALL CONSIST OF AN APPROPRIATE "Y" BRANCH OR INSERT-A-TEE CONNECTION AS SHOWN ON THE PLANS, OR AS DIRECTED. ACTUAL CONNECTION LOCATIONS FOR HOUSE SERVICES AND CATCH BASIN CONNECTIONS SHALL BE DETERMINED DURING CONSTRUCTION. THE CONTRACTOR SHALL KEEP A COMPLETE RECORD OF THESE LOCATIONS WHICH SHALL BE GIVEN TO THE CITY OF PORTLAND UPON COMPLETION OF THE CONTRACT.

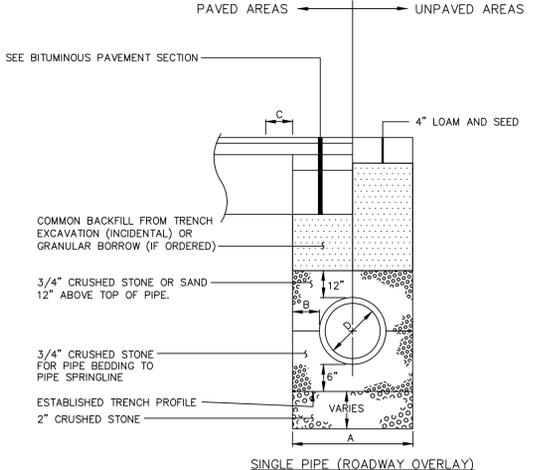
NOTES: DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.

ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.



MASONRY PLUG

NOT TO SCALE



SINGLE PIPE (ROADWAY OVERLAY)

NOTES: DEPTH OF BITUMINOUS PAVEMENT AND AGGREGATE COURSES SHALL BE DETERMINED BY STREET CLASSIFICATION.

ANY ALTERNATE TRENCHING OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY OF PORTLAND, DEPARTMENT OF PUBLIC SERVICES.

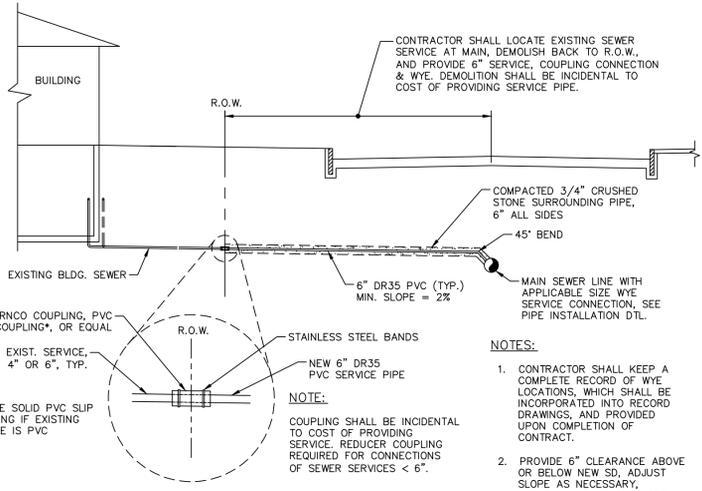
NOTES:

- ALTERNATIVE CONSTRUCTION METHODS OR PAYMENT METHODS SHALL BE APPROVED IN ADVANCE BY THE CITY.
- IN PAVED AREAS, REFER TO BITUMINOUS PAVEMENT SECTION FOR DEPTHS OF GRAVEL AND HOT MIX ASPHALT PAVEMENT.
- DIMENSION "B" SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HAUNCHES OF THE PIPE; BUT IN ALL CASES "B" SHALL BE AT LEAST 9".
- DIMENSION "A" IS THE MAXIMUM WIDTH ALLOWED FOR CALCULATING PAY QUANTITIES UNDER GRANULAR BORROW, CRUSHED STONE, STRUCTURAL EARTH EXCAVATION, AND STRUCTURAL ROCK EXCAVATION. DIMENSION "A" SHALL BE BASED ON PIPE DIAMETER "D", AS SET FORTH IN THE FOLLOWING TABLE.
- EXCAVATION BELOW ESTABLISHED TRENCH PROFILE (IF ORDERED), PAY ITEM 205.061.
- EXCAVATION INCIDENTAL TO PIPE PAY ITEMS (PAVED AND SEEDED AREAS)

PIPE DIAMETER, "D" (INCHES)	MAX. TRENCH WIDTH, "A" (FEET)	PAVEMENT WIDTH OUTSIDE TRENCH, "C" (FEET)
4	4.0	2.5
6	4.0	2.5
8	4.0	2.5
10	4.0	2.5
12	4.0	2.5
15	4.0	2.5
18	5.0	2.0
21	5.0	2.0
24	5.5	1.75
27	6.0	1.5
30	6.0	1.5
36	7.0	1.0
42	8.0	1.0
48	8.0	1.0

TYPICAL PIPE TRENCH INSTALLATION

NOT TO SCALE

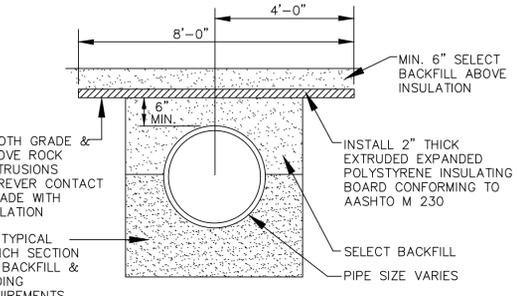


SEWER SERVICE DETAIL

N.T.S.

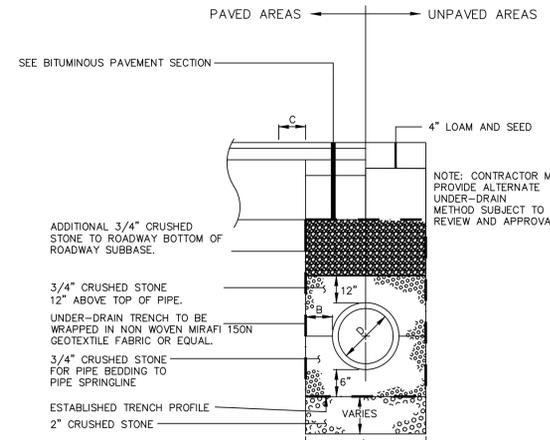
NOTES:

- CONTRACTOR SHALL KEEP A COMPLETE RECORD OF WYE LOCATIONS, WHICH SHALL BE INCORPORATED INTO RECORD DRAWINGS, AND PROVIDED UPON COMPLETION OF CONTRACT.
- PROVIDE 6" CLEARANCE ABOVE OR BELOW NEW SD, ADJUST SLOPE AS NECESSARY, MAINTAINING MIN. 2% SLOPE.

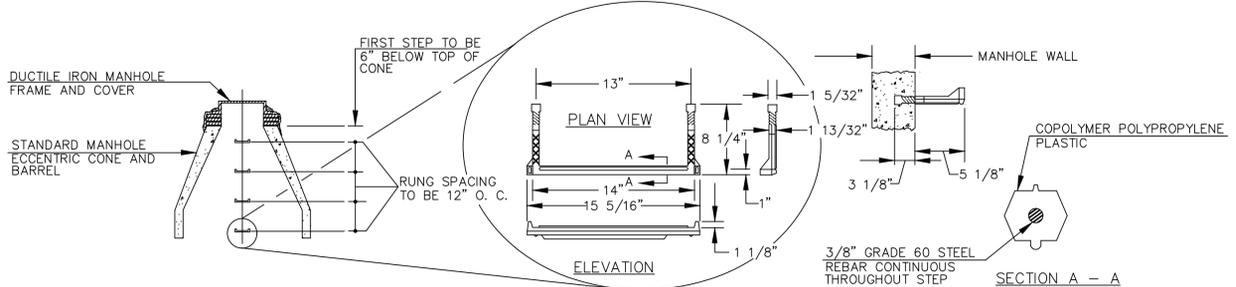


PIPE INSULATION DETAIL

NOT TO SCALE



STORM DRAIN PERFORATED UNDERDRAIN DETAIL



PLASTIC MANHOLE STEPS

NOT TO SCALE



NO.	DESCRIPTION	DATE
1	FINAL REVIEW SET	09-05-19
2	CITY ENGINEER REVIEW	09-06-19
3	PLANS ISSUED FOR BIDDING	10-15-19

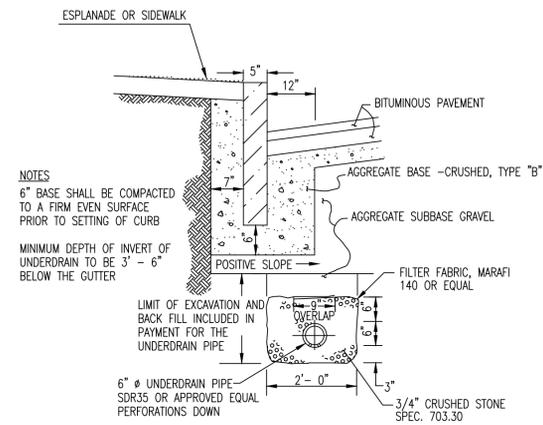
PROJECT NAME: MOTLEY STREET STORM DRAIN AND SEWER REPLACEMENT

CITY OF PORTLAND, MAINE
 DEPARTMENT OF PUBLIC WORKS
 WATER RESOURCES DIVISION
 215 CANAL ROAD, PORTLAND, MAINE 04103
 PHONE (207) 574-8866 FAX (207) 574-8862

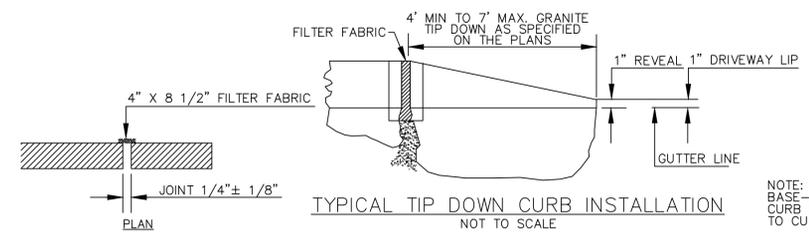


DESIGN BY:	JRP
DRAWN BY:	JRP
CHECKED BY:	BAR
SHEET NAME:	CONSTRUCTION DETAILS
DATE:	OCTOBER 2019
SHEET NO.:	D-2
VAULT #:	
REV.:	1

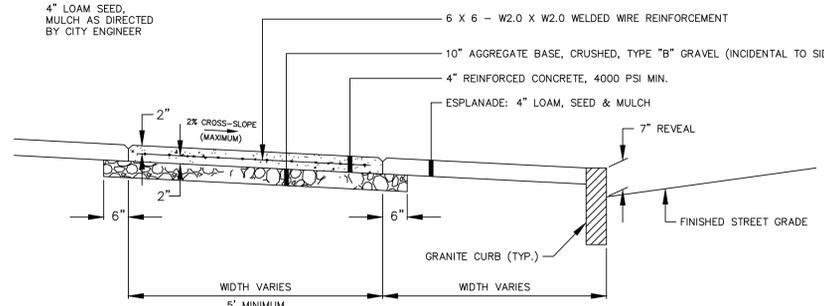
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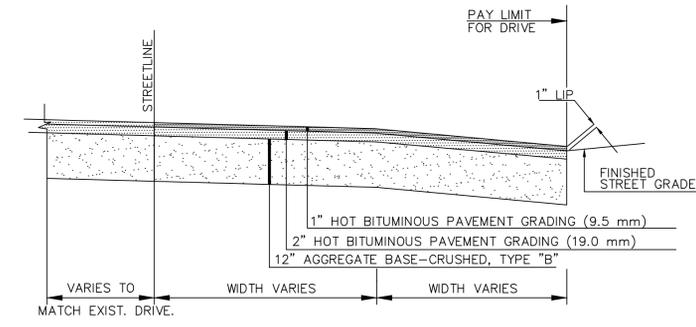
TYPE "B" UNDERDRAIN-OPTION "1"
N.T.S.



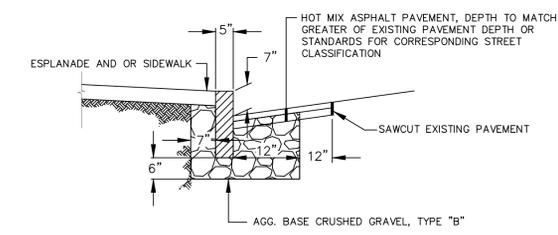
NOTE: CONCRETE SIDEWALKS TO BE TREATED WITH CONSOLIDECK SALTGUARD WB OR APPROVED EQUAL. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION.



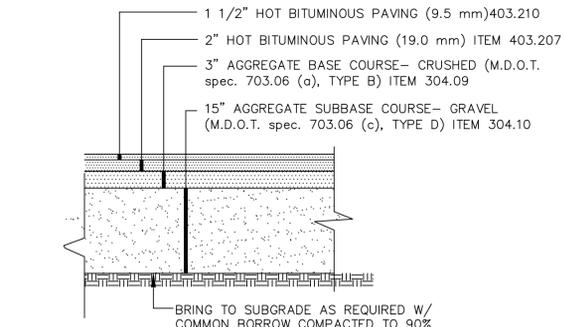
REINFORCED CONCRETE SIDEWALK
NOT TO SCALE



BITUMINOUS DRIVEWAY SECTION
NOT TO SCALE

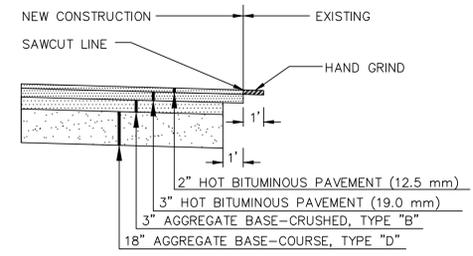


VERTICAL GRANITE CURB INSTALLATION IN EXISTING STREETS



NOTES:
1. COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
2. CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
3. CONTRACTOR TO INSTALL 15" OF TYPE D GRAVEL (ITEM 304.10) IN ALL UTILITY TRENCHES. TYPE B GRAVEL SHALL BE INSTALLED DURING FINAL RECONSTRUCTION OF ROAD. NO ADDITIONAL PAYMENT WILL BE MADE FOR TEMPORARY GRAVEL PLACED TO BRING TRENCHES UP TO EXISTING STREET GRADE PRIOR TO RECONSTRUCTION.

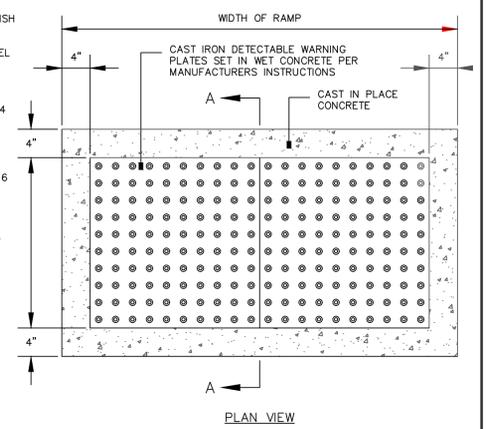
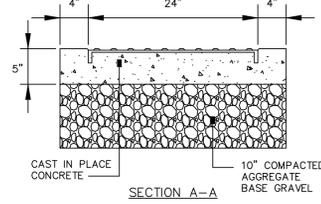
TYPICAL ROADWAY AREA SECTION (LOCAL STREET-TRENCH)
NOT TO SCALE



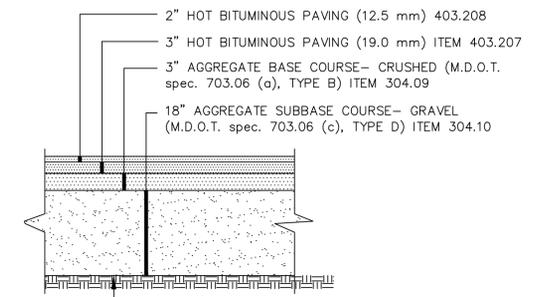
PAVEMENT BUTT JOINT (ARTERIAL STREET)
NOT TO SCALE

NOTES:

- ALL DETECTABLE WARNING PLATES SHALL BE UNCOATED CAST IRON. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR INSTALLATION.
- CAST IN PLACE CONCRETE SHALL MEET SPECIFICATIONS FOR MDOT CLASS A STRUCTURAL CONCRETE, MINIMUM COMPRESSIVE STRENGTH 4,000 PSI. THE EXPOSED CONCRETE BORDER SHALL RECEIVE A UNIFORM BROOM FINISH PERPENDICULAR TO THE FLOW OF PEDESTRIAN TRAFFIC.
- TRUNCATED DOMES SHALL BE ALIGNED IN ROWS, PARALLEL AND PERPENDICULAR TO THE PREDOMINANT DIRECTION OF TRAVEL. TRUNCATED DOME BRICKS AND GRANITE PAVERS ARE NOT ALLOWED.
- SIZE: THE DETECTABLE WARNING PLATES SHALL EXTEND 24 INCHES MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION TO THE STREET.
- ORIENTATION: THE DETECTABLE WARNING PANEL SHALL BE LOCATED SO THAT THE EDGE NEAREST THE CURB LINE IS 6 INCHES MINIMUM AND 8 INCHES MAXIMUM FROM THE CURB LINE. THE PANEL SHALL BE ORIENTED TO THE DIRECTION OF TRAVEL AS IDENTIFIED BY THE POINT OF EGRESS.



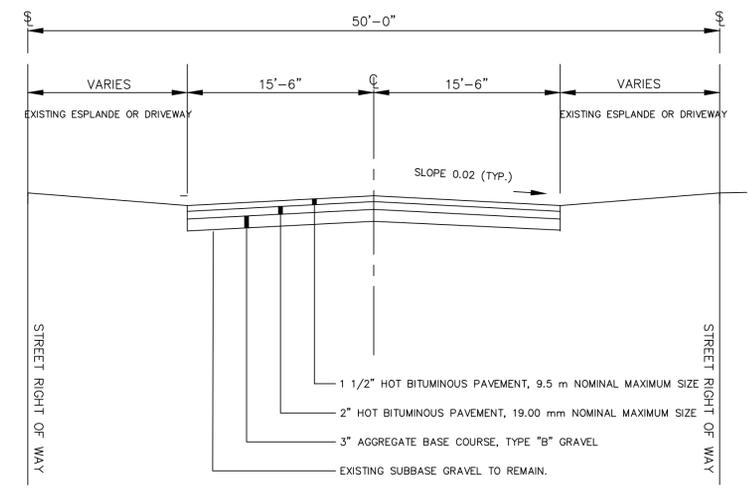
SIDEWALK RAMP DETECTABLE WARNING PANEL
NOT TO SCALE



NOTES:

- COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
- CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
- CONTRACTOR SHALL PAVE TRENCHES WITH 5" OF 19.00mm HMA AT TIME OF SUBSTANTIAL COMPLETION. CONTRACTOR REQUIRED TO MILL AND PAVE 2" OF 12.5mm HMA THE FOLLOWING SPRING.

TYPICAL ROADWAY AREA SECTION (BRIGHTON AVENUE-TRENCH)
NOT TO SCALE



NOTES:

- COMPACT GRAVEL SUBBASE, BASE COURSE TO 92% OF MAXIMUM DENSITY USING HEAVY ROLLER COMPACTION.
- CONTRACTOR SHALL SET GRADE STAKES MARKING SUBBASE AND FINISH GRADE ELEVATIONS FOR CONSTRUCTION REFERENCE.
- CONTRACTOR TO USE MINIMUM DISTANCE REQUIRED TO TIE EXISTING DRIVEWAY APRONS INTO NEW ROADWAY. THE MAXIMUM DRIVEWAY ADJUSTMENT LENGTH WILL BE 5' FROM THE ROADWAY PAVEMENT LIMIT.

MOTLEY STREET TYPICAL CROSS-SECTION
NOT TO SCALE



REV	SUBMISSION	DATE
3	PLANS ISSUED FOR BIDDING	10-15-19
2	CITY ENGINEER REVIEW SET	09-16-19
1	FINAL REVIEW SET	08-05-19

PROJECT NAME:
MOTLEY STREET STORM DRAIN AND SEWER REPLACEMENT PROJECT

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
WATER RESOURCES DIVISION
212 CANAL ROAD, PORTLAND, MAINE 04103
PHONE (207) 874-8866 FAX (207) 874-8862



DESIGN BY: JRP/KET
DRAWN BY: KET/JRP
CHECKED BY: JRP/BAR
SHEET NAME:

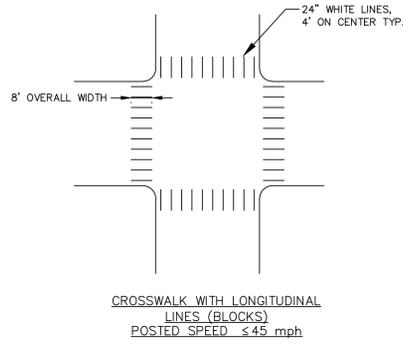
CONSTRUCTION DETAILS

DATE: OCTOBER 2019

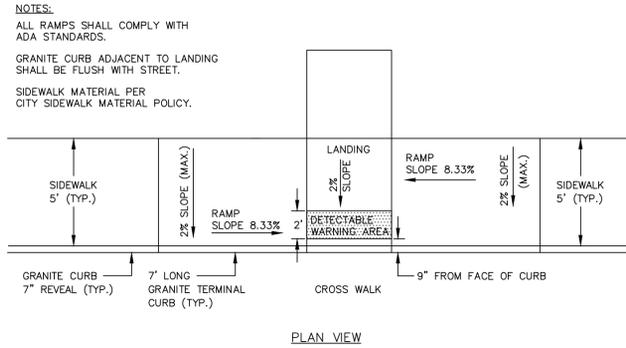
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VAULT #:

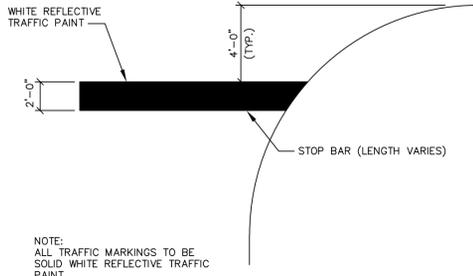
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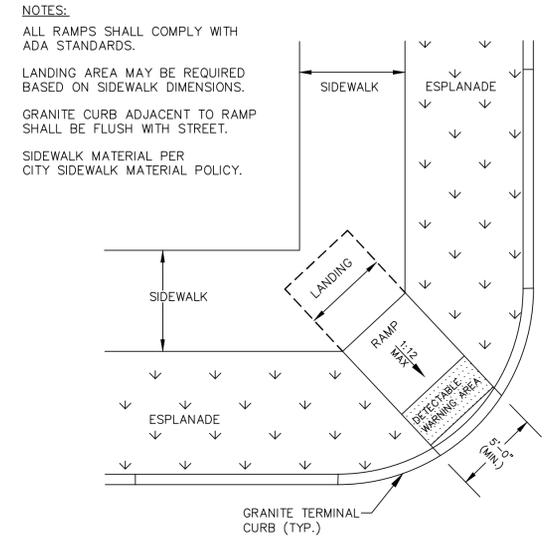
TYPICAL CROSSWALK MARKINGS
NOT TO SCALE



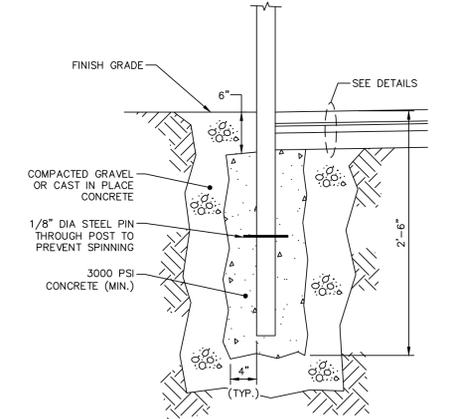
PARALLEL SIDEWALK RAMP LAYOUT FOR NARROW SIDEWALK WITH NO ESPLANADE
NOT TO SCALE



STOP BAR
NOT TO SCALE



DIAGONAL SIDEWALK RAMP LAYOUT AT INTERSECTION FOR SIDEWALK WITH ESPLANADE
NOT TO SCALE
(REQUIRES WAIVER)



POST SPECIFICATION			
TYPE	HEIGHT ABOVE FIN. GRADE	POST DIAMETER	POST MATERIAL
STREET SIGNAGE	7'-0"	2 3/8" (O.D.)	GALV. STEEL

TYPICAL SIGN POST DETAIL
N.T.S.

SIDEWALK AND RAMP GENERAL NOTES

- THE DIMENSIONS AND GRADES SHOWN IN THESE DETAILS SHALL BE ADHERED TO IN THE DESIGN AND CONSTRUCTION OF ACCESSIBLE RAMPS. WHERE SIDEWALKS RUN ADJACENT TO ROADWAYS ON STEEP (5% OR GREATER) GRADES, RAMP GRADES WILL ADHERE TO THESE DETAILS AS BEST AS POSSIBLE.
- SIDEWALKS SHALL BE CONSTRUCTED IN BRICK, CONCRETE, OR BITUMINOUS, ACCORDING TO THE SIDEWALK & DRIVEWAY APRON MATERIALS POLICY, UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER.
- SIDEWALKS SHALL BE BUILT ACCORDING TO THE FOLLOWING DIMENSIONS AND GRADES:
SIDEWALK RUNNING SLOPE: MATCH ADJACENT STREET GRADE
SIDEWALK CROSS SLOPE: 1.0% MINIMUM, 2.0% MAXIMUM
SIDEWALK WIDTH: 5'-0" MINIMUM, WIDER PREFERRED
ESPLANADE (WHERE PROVIDED) 2'-0" MINIMUM, 4'-0" OR GREATER PREFERRED IF LANDSCAPED.
- ESPLANADES MAY BE LANDSCAPED OR MAY SERVE AS A FURNITURE ZONE. ESPLANADES THAT ARE NOT LANDSCAPED SHOULD BE CONSTRUCTED WITH A CHANGE OF MATERIAL TO SIGNAL TO PEDESTRIANS THAT THEY ARE LEAVING THE ACCESSIBLE WALKWAY.
- RAMPS SHALL HAVE THE FOLLOWING DIMENSIONS AND GRADES:
RAMP WIDTH: 5'-0" MINIMUM
RAMP RUNNING SLOPE: 8.33% MAXIMUM; UNIFORM SLOPE
RAMP CROSS SLOPE: 2.0% MAXIMUM
FLARE SLOPE: 10% MAXIMUM
- TWO CURB RAMPS ARE REQUIRED AT EACH SIDEWALK CORNER. EACH CURB RAMP SHALL CONNECT THE PEDESTRIAN ACCESS ROUTE AT EACH PEDESTRIAN STREET CROSSING. IN ALTERATIONS WHERE PHYSICAL CONSTRAINTS PREVENT TWO CURB RAMPS FROM BEING INSTALLED AT A STREET CORNER, A SINGLE PEDESTRIAN CURB RAMP IS PERMITTED.
- OPPOSING CURB RAMPS AT A SINGLE CROSSING SHALL ALIGN TO PROVIDE A STRAIGHT PATH OF TRAVEL FROM THE TOP OF THE RAMP TO THE CURB RAMP ON THE OPPOSITE SIDE OF THE ROADWAY TO

THE MAXIMUM EXTENT FEASIBLE.

- RAMPS SHALL BE CONSTRUCTED IN BRICK, CONCRETE, OR BITUMINOUS, ACCORDING TO THE SIDEWALK & DRIVEWAY APRON MATERIALS POLICY, UNLESS DIRECTED OTHERWISE BY THE CITY ENGINEER.
- ALL SIDEWALKS AND RAMPS SHALL DRAIN TOWARD THE STREET, DRIVEWAY, OR PARKING AREA, WITH A MAXIMUM CROSS SLOPE OF 2.0%.
- LEVEL LANDINGS SHALL BE PROVIDED AT THE TOP OF ALL ACCESSIBLE RAMPS, WITH THE FOLLOWING DIMENSIONS:
LANDING LENGTH AND WIDTH: 4'-0" MINIMUM
LANDING RUNNING SLOPE: 2.0% MAXIMUM
LANDING CROSS SLOPE: 2.0% MAXIMUM
- LEVEL LANDINGS (NO GREATER THAN 2.0% SLOPE IN ANY DIRECTION) AT THE BOTTOM OF PERPENDICULAR RAMPS SHALL BE WHOLLY CONTAINED WITHIN MARKED CROSSWALKS.
- GRADE BREAKS AT THE TOP AND BOTTOM OF RAMPS SHALL BE PERPENDICULAR TO THE DIRECTION OF THE RAMP RUN. GRADE BREAKS SHALL NOT BE PERMITTED ON THE SURFACE OF RAMP RUNS.
- PONDING SHALL NOT BE PERMITTED WITHIN THE CURB RAMP LIMITS. RAMPS SHALL NOT ALTER ROADWAY DRAINAGE PATTERNS.
- TRANSITION FROM RAMPS TO WALKS OR STREET SURFACE SHALL BE FLUSH AND FREE OF ABRUPT CHANGES. PAVEMENT AT THE STREET SURFACE SHALL BE MILLED TO ACHIEVE FLUSH CONDITION.
- DIAGONAL CURB RAMPS, WHERE PERMITTED, SHALL HAVE A CLEAR 4'X4' MINIMUM TURNING SPACE BEYOND THE BOTTOM GRADE BREAK WITHIN THE WIDTH OF THE PEDESTRIAN STREET CROSSING AND OUTSIDE THE ACTIVE TRAFFIC LANES OF THE ROADWAY.
- CURB RAMP AND FORM WORK SLOPES SHALL BE CHECKED WITH A DIGITAL LEVEL OF AN APPROPRIATE LENGTH. NO PORTION OF A RAMP RUN SHALL EXCEED THE MAXIMUM SLOPE REQUIREMENT.
- THE COUNTER SLOPE WITHIN 2' OF THE CURB RAMP SHALL BE 5% MAXIMUM. IN ALTERATIONS, IF THE COUNTER SLOPE OF 5% MAXIMUM

CANNOT BE ACHIEVED, THE SLOPE ELEVATION MAY BE ADJUSTED SO THAT THE COMBINED COUNTER SLOPE AND RAMP SLOPE DO NOT EXCEED 13.3%.

- VERTICAL DROP-OFF EDGES TO RAMPS SHALL NOT BE BUILT UNLESS THE RAMP ABUTS AN ESPLANADE OR OTHER AREA NOT TO BE USED BY PEDESTRIANS.
- AT MARKED CROSSWALKS, THE FULL WIDTH OF THE RAMP OR LANDING SHALL BE CONTAINED WITHIN THE PAVEMENT MARKINGS.
- TACTILE WARNING PANELS SHALL BE PROVIDED ON ALL RAMPS AS PER FIGURE 1-7 OF THESE STANDARD DETAILS.
- RAMPS FLARES SHOULD BE LOCATED OUTSIDE THE DIRECT LINE OF TRAVEL MOST LIKELY TO BE FOLLOWED BY THE VISUALLY IMPAIRED.
- SIGNS, POLES, PLANTERS, MAILBOXES, ETC. SHALL NOT BE LOCATED WHERE THEY WILL INTERFERE WITH THE USE OF SIDEWALK RAMPS. UTILITY POLES MAY BE INCORPORATED INTO THE FLARES OF THE CURB RAMP.
- SIDEWALK RAMPS SHALL NOT BE LOCATED WHERE USERS MUST CROSS DROP INLET GRATES, MANHOLE COVERS, OR OTHER ACCESS LIDS. IF THIS CANNOT BE AVOIDED, THEN GRATE DESIGN AND PLACEMENT SHALL CONFORM TO ADA REQUIREMENTS.
- THE PUBLIC SIDEWALK CURB RAMP STANDARDS DEPICTED HERE MAY NOT BE APPROPRIATE FOR ALL LOCATIONS. FIELD CONDITIONS AT INDIVIDUAL LOCATIONS MAY REQUIRE SPECIFIC DESIGNS. RAMP DESIGNS THAT ARE COMPLIANT WITH ADA BUT NOT LISTED IN THESE DETAILS MAY BE APPROVED BY THE CITY ENGINEER.
- DESIGNS MUST BE CONSISTENT WITH THE PROVISIONS OF THESE DETAILS AND TO ADA GUIDELINES TO THE MAXIMUM EXTENT FEASIBLE ON ALTERATION PROJECTS, AND WHEN STRUCTURALLY PRACTICABLE ON NEW CONSTRUCTION PROJECTS AS REQUIRED BY THE ADA ACCESSIBILITY GUIDELINES.



DATE	SUBMISSION	REV
10-15-19	PLANS ISSUED FOR BIDDING	3
09-16-19	CITY ENGINEER REVIEW	2
08-05-19	FINAL REVIEW SET	1

PROJECT NAME: MOTLEY STREET STORM DRAIN AND SEWER REPLACEMENT PROJECT

CITY OF PORTLAND, MAINE
DEPARTMENT OF PUBLIC WORKS
WATER RESOURCES DIVISION
212 CANAL ROAD, PORTLAND, MAINE 04103
PHONE (207) 874-8866 FAX (207) 874-8862



DESIGN BY:	JRP/KET
DRAWN BY:	KET/JRP
CHECKED BY:	JRP/BAR
SHEET NAME:	CONSTRUCTION DETAILS
DATE:	OCTOBER 2019
SHEET NO.:	D-4
VAULT #:	

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