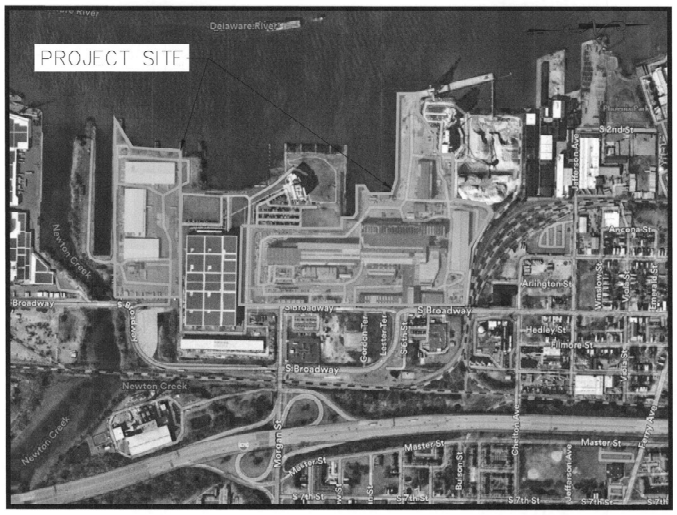
SOUTH JERSEY PORT CORPORATION
BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

LIST OF UTILITIES AND EMERGENCY CONTACT INFORMATION	
FIRE DEPARTMENT:	**CAMDEN CITY FIRE DEPARTMENT** SQUAD 7 1115 KAIGHIN AVENUE CAMDEN, NJ 08103 856-757-7548
POLICE DEPARTMENT:	**CAMDEN COUNTY POLICE DEPARTMENT** 800 FEDERAL STREET CAMDEN, NJ 08103 856-757-7400
PUBLIC WORKS:	**CAMDEN CITY DEPARTMENT OF PUBLIC WORKS** KEITH L. WALKER, DIRECTOR 101 NEWTON AVENUE CAMDEN, NJ 08102 856-757-7034
SEWER:	**CAMDEN WATER L.L.C.** 100 S. 17TH STREET CAMDEN, NJ 08105 609-635-1264
WATER:	**AMERICAN WATER** 1 WATER ST. CAMDEN, NJ 08102 856-955-4001
ELECTRIC:	**PUBLIC SERVICE ELECTRIC COMPANY** ELECTRIC T&D 300 NEW ALBANY ROAD MOORESTOWN, NJ 08057 856-573-2077
CABLE:	**COMCAST CABLE** 1250 HADDONFIELD-BERLIN ROAD CHERRY HILL, NJ 08034 856-354-1880
GAS:	**PSE&G** 300 CONNECTICUT DRIVE BURLINGTON, NJ 08086 609-778-6776
TELEPHONE:	**TRANSCONTINENTAL CABLE ROUTE** UNDERGROUND LOCATION SERVICE NEW JERSEY UTILITIES ASSOCIATION 800-252-1133


PROJECT SITE
Delaware River
Newton Creek
S Broadway
Jefferson St
Morgan St
Master St
Chestnut St
Mickle St
Burnett St
Cooper St
Federal St
Mt Ephraim Ave
Haddon Ave
Arlington St
Hedley St
Fillmore St
Ascena St
Vireo St
Kaighn Ave
Ferry Ave
Broadway
Cedar St
Mulberry St
Walnut St
Linden St
Chestnut St
Market St
Cuthbert Blvd
Mt Ephraim Ave
Haddon Ave
Kaighn Ave
Ferry Ave
Broadway
Jefferson St
Morgan St
Chestnut St
Mickle St
Burnett St
Cooper St
Federal St
Mt Ephraim Ave
Haddon Ave
Arlington St
Vireo St
Kaighn Ave
Ferry Ave
Broadway
Jefferson St
Morgan St
Chestnut St
Mt Ephraim Ave
Haddon Ave

1. ALL WATER AND WASTE WATER FACILITIES SHALL BE CONSTRUCTED IN ACCORDANCE WITH NEW JERSEY AMERICAN WATER COMPANY (NJAW) CAMDEN CO. SOIL CONSERVATION DISTRICT & NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP) STANDARDS.
2. CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF THE CONSTRUCTION, ANY ERRORS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
3. LOCATION OF EXISTING UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO THE START OF CONSTRUCTION.
4. THE CONTRACTOR SHALL USE EXCAVATED MATERIALS FOR BACKFILL UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
5. ALL PAVED AND CONCRETE AREAS DISTRIBUTED DURING CONSTRUCTION SHALL BE RESTORED TO EXISTING CONDITION AT LEAST EQUAL TO THAT WHICH EXISTED PRIOR TO THE START OF CONSTRUCTION.
6. ALL FILL SHALL BE PLACED IN 12" LAYERS AND THOROUGHLY COMPACTED TO THE SATISFACTION OF THE ENGINEER. IF BORROW FILL IS REQUIRED, IT SHALL BE SUBJECT TO THE APPROVAL OF THE ENGINEER.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF THE UNDERGROUND AND SURFACE UTILITIES AND STRUCTURES AT OR ADJACENT TO THE SITE OF CONSTRUCTION AND IT SHALL BE AT HIS OWN EXPENSE TO REPAIR OR REPLACE ANYTHING THAT HE DAMAGES.
8. BASELINES HAVE BEEN PROVIDED ON THE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE THE BASELINE AS SHOWN ON THE PLAN.
9. APPROXIMATE DEPTH OF ALL WATER MAIN IS ± 4 FEET.
10. APPROXIMATE DEPTH OF ALL ELECTRIC MAIN IS ± 2 FEET
11. APPROXIMATE DEPTH OF ALL GAS MAIN IS ± 3 FEET.
12. ALL CONSTRUCTION DETAILS NOT SHOWN SHALL BE IN ACCORDANCE WITH N.J.D.O.T. STANDARDS AS DETAILED IN:
    - "STANDARD ROADWAY CONSTRUCTION/TRAFFIC CONTROL/BRIDGE CONSTRUCTION DETAILS."
    - "ELECTRICAL BUREAU STANDARD DETAILS: 2001."

    INCLUDING ALL APPLICABLE BASELINE DOCUMENT CHANGES AND APPENDICES. THESE DETAILS MAY BE PURCHASED THROUGH THE N.J.D.O.T. PLANS AND SPECIFICATION CENTER AT:

    1035 PARKWAY AVENUE,
    TRENTON, NEW JERSEY
    08625-0600
    (TELEPHONE: 1-609-530-2098)

13. SEPARATE PAYMENT WILL NOT BE MADE FOR SAW CUTTING OF ANY KIND, BUT THE COST SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.
14. PAYMENT FOR JOINT MATERIAL FOR ALL CONCRETE WORK WILL NOT BE MEASURED BUT SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.
15. TRAFFIC CONTROL SHALL BE PAID UNDER "MAINTENANCE AND PROTECTION OF TRAFFIC" AND SHALL BE IN ACCORDANCE WITH THE LATEST NJ DEPARTMENT OF TRANSPORTATION STANDARDS.
16. MANHOLE CASTINGS THAT ARE TO BE RESET SHALL BE RESET ¾" LOWER THAN THE PROPOSED PAVEMENT ELEVATION.
17. THE NEW JERSEY DEPARTMENT OF TRANSPORTATION (NJDOT) STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION ALONG WITH THE 2010 STATE AID SUPPLEMENTAL SPECIFICATION AS MODIFIED SHALL GOVERN THIS PROJECT.
18. ALL UNUSED MATERIAL EXCAVATED FROM THE PROJECT SITE ARE TO BE DISPOSED OF AT AN APPROVED FACILITY. THE CONTRACTOR IS RESPONSIBLE FOR TESTING OF SOIL TO BE REMOVED FROM THE SITE.
19. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS INDICATED IN THE PLANS AND SPECIFICATIONS. SEPARATE PAYMENT FOR ALL ASSOCIATED COSTS WILL NOT BE MADE, BUT SHALL BE INCLUDED UNDER VARIOUS ITEMS OF THE PROPOSAL.
20. THE CONTRACTOR SHALL ANTICIPATE GROUND WATER INFILTRATION OCCURRING THROUGHOUT THE COURSE OF THE VARIOUS TASKS ASSOCIATED WITH THIS PROJECT. ALL COSTS ASSOCIATED WITH THE TEMPORARY BYPASS PUMPING AND OR DEWATERING SHALL BE INCLUDED IN THE VARIOUS ITEMS IN THE PROPOSAL.
21. ALL UTILITY WORK SHALL BE CONSTRUCTED TO ALLOW UNINTERRUPTED SERVICE TO ADJACENT PROPERTIES.
22. EXISTING WATER MAIN, SANITARY SEWER, GAS MAIN STORM SEWER, ELECTRICAL SERVICES AND ALL OTHER UTILITIES SHALL BE FULLY SUPPORTED AND MAINTAINED DURING INSTALLATION OF THE PROPOSED UTILITY WORK, SERVICES AND LATERALS.
23. THE TRENCH LIMIT OF DISTURBANCE WITHIN THE ASPHALT ROADWAY SHALL BE LIMITED TO A 4' WIDTH PER UTILITY TRENCH. THE LAY DOWN AREA FOR THE EXCAVATED MATERIAL SHALL BE IMMEDIATELY ADJACENT TO THE TRENCH AND SHALL BE ISOLATED TO THE ASPHALT ROADWAY. TRENCH SHALL BE BACKFILLED AT THE END OF EACH DAY. ALL BASE PAVING SHALL BE COMPLETED ONCE A MONTH FOR ALL WORK COMPLETED THAT WEEK.
24. THE CONTRACTOR WILL BE RESPONSIBLE FOR KEEPING THE PAVED TRAVEL PATH FREE AND CLEAR OF SEDIMENT EACH DAY THE WORK PROGRESSES AND AS OFTEN AS NECESSARY TO KEEP A CLEAN BROOM SWEPT CONDITION AND OR AS DIRECTED BE THE ENGINEER.
25. THE ELEVATION OF THE EXISTING WATER MAIN AS DEPICTED ON THE DRAWINGS IS ASSUMED. CONTRACTOR SHALL CONFIRM ELEVATION OF EXISTING WATER MAIN AND LOCATION OF ALL SERVICE CONNECTION DURING CONSTRUCTION.
26. ALL CONNECTIONS TO THE EXISTING WATER MAIN SHALL BE REPLACED. THE INSTALLATION OF NEW FIRE SERVICE LATERALS SHALL INCLUDE ALL PIPING, VALVES, VALVE BOXES AND RECONNECTION OF EXISTING SERVICE.
27. ALL UTILITY CROSSINGS/OFFSETS SHALL INCLUDE COMPACTED STABILIZATION MATERIAL FOR FULL LENGTH OF CROSSING.
28. SEPARATE PAYMENT WILL NOT BE MADE FOR EXCAVATION, DEWATERING, FITTINGS, PIPE BEDDING, SHEETING, BRACING, SHORING, INLET CONNECTIONS, TRAPS, AND SUITABLE BACKFILL MATERIAL INVOLVED IN ALL PIPE AND ASSOCIATED STRUCTURES REMOVAL, RECONSTRUCTION AND INSTALLATION, BUT THE COST SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL REGARDLESS OF DEPTH.
29. THE CONTRACTOR SHALL EXERCISE PARTICULAR CARE, ESPECIALLY AT INTERSECTIONS AND GUTTER LINES, IN MILLING AND CONSTRUCTION OF PAVEMENT TO PROVIDE POSITIVE FLOWING STORMWATER. ANY AREAS WHERE WATER IS IMPOUNDED SHALL BE CORRECTED BY THE CONTRACTOR AT NO COST TO THE OWNER.
30. ALL WORK TO BE COORDINATED WITH SEPARATE CONTRACTORS FOR ONGOING WORK IN AREAS SURROUNDING THE SITES.
31. AT ALL LIMITS OF PAVING (L.O.P.) THE CONTRACTOR SHALL SAWCUT, TACK COAT AND SEAL TO MATCH EXISTING PAVEMENT. SEPARATE MEASUREMENT AND PAYMENT FOR ALL THIS WORK SHALL NOT BE MADE AND ALL COSTS SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE BID.
32. INLET SEDIMENT PROTECTION SHALL BE INSTALLED AT ALL EXISTING AND PROPOSED INLETS AND CATCH BASINS SHOWN ON THE PLANS. SEPARATE PAYMENT WILL NOT BE MADE, BUT SHALL BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.
33. THE CONTRACTOR SHALL NOT BE PERMITTED TO UTILIZE ANY KIND OF HMA VIBRATORY ROLLER OR VIBRATORY DRUM COMPACTOR ON THIS PROJECT. ALTERNATIVE COMPACTION TECHNIQUES, SUCH AS STATIC ROLLERS, SHALL BE APPROVED BY THE RESIDENT ENGINEER.
34. STAINLESS STEEL BOLTS ARE TO BE USED FOR ALL BURIED BOLTS.
35. POLYETHYLENE WRAP SHALL BE USED ON ALL DUCTILE IRON PIPING, FITTINGS & APPURTENANCES THROUGHOUT THE PROJECT.

ENVIRONMENTAL COMMITMENTS:

1. IMPLEMENT SOIL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION.
2. IMPLEMENT STANDARD MEASURE FOR CONSTRUCTION RELATED NOISE AND AIR QUALITY IMPACT CONTROLS.
3. BEST MANAGEMENT PRACTICE WILL BE UTILIZED DURING CONSTRUCTION TO PREVENT SEDIMENT FROM ENTERING STORM WATER INLETS AND ENVIRONMENTALLY SENSITIVE AREAS.
4. CONSTRUCTION STAGING ACTIVITIES (INCLUDING STORAGE OF EQUIPMENT, VEHICLES AND MATERIALS) ARE PROHIBITED IN THE ENVIRONMENTALLY SENSITIVE AREA OR GREEN ACRES ENCUMBERED PROPERTIES.
5. IF CONTACT WITH THE NORTHERN LONG-EARED BAT IS MADE DURING MAINTENANCE OPERATION, CONSULTATION WITH USFWS AND BEPR WILL BE REQUIRED.

APPROVED
File No. 0406-05-0006.2
Activity No. LUP250001
Date: 4/23/2025
State of New Jersey
Department of Environmental Protection
Watershed and Land Management

RVE 1901
REMINGTON & VERNICK ENGINEERS
2019 SPRINGDALE ROAD
CHERRY HILL, NJ 08003
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

DATE:
STEPHANIE A. CUTHBERT
NJ PROFESSIONAL ENGINEER LIC. No. 42138

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL AND NOT VALID

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No.	Revision	Date	By

GENERAL NOTES

SOUTH JERSEY PORT CORP
BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT
CAMDEN CITY CAMDEN COUNTY NEW JERSEY

DESIGNED BY	DRAWN BY	CHECKED BY	SCALE
G.M	G.M	S.C	AS NOTED

DATE: 9.2024
SHEET No.: G-1
JOB No.: 39958004

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STANDARD LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED

UTILITIES

DESCRIPTION	EXISTING	PROPOSED
OVERHEAD WIRE	OW	
SANITARY FORCE MAIN PIPE	FM	FM
STORM SEWER PIPE ≤12"	D	D
STORM SEWER PIPE > 12"	D (SIZE & TYPE)	D (SIZE & TYPE)
GAS SERVICE	G	G
SANITARY SEWER PIPE ≤ 12"	S	S
SANITARY SEWER PIPE > 12"	S (SIZE & TYPE)	S (SIZE & TYPE)
ELECTRIC SERVICE	E	E
FIBER OPTIC SERVICE	FO	FO
TELEPHONE SERVICE	T	T
COMMUNICATIONS SERVICE	C	C
IRRIGATION PIPE	IRR	IRR
FIRE SERVICE	W	W
WATER SERVICE	W	W
WATER SHUT-OFF	WSO	WSO
WATER METER	W	W
WATER VALVE		NEW / RESET
WATER HYDRANT		NEW / RESET
WELL		
YARD HYDRANT		YH
METER PIT		
GAS SHUT-OFF		GSO
GAS METER		GM
GAS VALVE		NEW / RESET
GAS LINE MARKER		
CLEANOUT		CO
SEWER VENT		
INLET TYPE A		NEW / RESET/SET / RECONSTRUCT
INLET TYPE B		NEW / RESET/SET / RECONSTRUCT
INLET TYPE E		NEW / RESET/SET / RECONSTRUCT
AREA DRAIN		
MANHOLES	SANITARY, DRAINAGE, TELEPHONE, MW STEP, CATV, UNDETERMIN, ELECTRIC, GAS, UNKNOWN	NEW / RESET / RECONSTRUCT
HEADWALL		
HEADWALL W/ WINGS		
IRRIGATION CONTROL VALVE		NEW / RESET
IRRIGATION BOX		
IRRIGATION CONTROL BOX		
SPRINKLER HEAD		
UNKNOWN VALVE		
COMMUNICATIONS PEDESTAL		
COMMUNICATIONS LINE MARKER		
TELEPHONE PEDESTAL		
TELEPHONE LINE MARKER		
ELEC. BOX		
ELEC. METER		
ELEC. TRANSFORMER PAD		
ELEC. VAULT		
ELEC. LINE MARKER		
UTILITY POLE	STANDARD, W/ LIGHT, W/ SOLAR	
GUY ANCHOR		
ELEC. OUTLET		
LIGHTS	POLE, AREA	
VENT		
VENT PIPE		

SURVEY

DESCRIPTION	EXISTING	PROPOSED
BENCHMARK LOCATION	BM #	
CROWS FOOT		
AERIAL TARGET		
CONCRETE MONUMENT		(SET)
PK / MAG NAIL / DRILL HOLE / SPIKE		(SET)
DRILL HOLE W/ WINGS		
STAKE		(SET)
HUB		(SET)
PIN W/ CAP IRON PIPE IRON PIN		(SET) (SET)
CROSS CUT		(SET)
DISK		
STONE		
REBAR		
BASELINE	0+00	0+00
CENTERLINE		
EASEMENT		
RIGHT-OF-WAY		
PROPERTY BOUNDARY		
ADJACENT PROPERTY BOUNDARY		
RAILROAD TRACKS		
STATE BOUNDARY		
MUNICIPAL / COUNTY BOUNDARY		

ENVIRONMENTAL

DESCRIPTION	EXISTING	PROPOSED
BORING LOCATION	B-#	B-#
MONITORING WELL LOCATION	MW-#	MW-#
TEST PIT LOCATION	TP-#	TP-#
FRESHWATER WETLAND FLAG	FW-#	
FRESHWATER WETLAND LINE		
FRESHWATER WETLAND BUFFER		
EDGE OF WATER		
STREAM CENTERLINE		

LANDSCAPING

DESCRIPTION	EXISTING	PROPOSED
GRASS/SOD		
DECIDUOUS TREE		SHADE, ORNAMENTAL
SHRUBS / BUSH		
EVERGREENS		
STUMP		
WOODS / TREE LINE		
WIRE FENCE		
SPLIT RAIL FENCE		
WOOD / VINYL FENCE		
CHAIN-LINK FENCE		

GRADING

DESCRIPTION	EXISTING	PROPOSED
TOP OF BANK / DITCH	TB	
BOTTOM OF BANK / DITCH	BB	
CONTOUR (MAJOR)	5	5
CONTOUR (MINOR)	3	3
FLOW LINE / SWALE		
TIME OF CONCENTRATION		
SPOT GRADE	x 47.45	x 3.48
ROADWAY GRADE	TC 48.48 BW 46.48	TC 5.45 GL 4.95
DRAINAGE FLOW		

SITE & ROADWORK

DESCRIPTION	EXISTING	PROPOSED
EDGE OF PAVEMENT		
CURB		
PAVEMENT / CONC. / SIDEWALK	BITUMINOUS/ASPHALT, CONCRETE, BRICK/PAVERS, STONE	CONCRETE SIDEWALK; PAVEMENT, FULL DEPTH RESTORATION; PAVEMENT MILLING; DRIVEWAY RESTORATION, ASPHALT; DRIVEWAY RESTORATION, BRICK; DRIVEWAY RESTORATION, CONCRETE; DRIVEWAY RESTORATION, STONE
LIMIT OF EXCAVATION		
GUIDE RAIL		
BOLLARD		
MAILBOX		
SIGNS		
FLAG POLE		
BENCH		
PILE		
DETECTABLE WARNING SURFACE		
TYPICAL STRIPING		
ADA STRIPING		
TRAFFIC CONTROL BOX		
TRAFFIC LIGHT		(ARM TO SCALE)
DEPT. OF TRANSPORTATION MANHOLE		
STATE HIGHWAY DEPARTMENT	MANHOLE, BOX	
RAILROAD CROSSING BEACON		
CALL BOX		
OIL FILL		
UNDERGROUND STORAGE TANK LID	UST	
RISER PIPE		
RAISED PAVEMENT MARKER		
TYPICAL NORTH ARROW		

NORTH POINT TO BE USED ON STANDARD CONSTRUCTION SHEETS WHERE BEARINGS REFER TO STATE PLANE COORDINATE SYSTEM.

ABBREVIATIONS

APR	APRON	EL	ELEVATION	PERF	PERFORATED	SWL	SINGLE WHITE LINE
ASB	ASBESTOS CEMENT PIPE	EX	EXISTING	PC	POINT OF CURVATURE	SYL	SINGLE YELLOW LINE
AFF	ABOVE FINISHED FLOOR	FFE	FINISH FLOOR ELEVATION	PI	POINT OF INFLECTION	TBA	TO BE ABANDONED
ASB	ASBESTOS	FT	FEET	PT	POINT OF TANGENCY	TBR	TO BE REMOVED
AL	ALUMINUM	E.B./W.B. N.B./S.B.	EASTBOUND, WESTBOUND NORTHBOUND, SOUTHBOUND	PSI	POUNDS PER SQUARE INCH	TC	TOP OF CURB
BL	BASELINE	GL	GUTTER LINE	PK	PARKER KAYLON MASONRY NAIL	TEL	TELEPHONE
BM	BENCH MARK	GR	GRATE	PROP	PROPOSED	TEMP	TEMPORARY
BIT	BITUMINOUS	GALV	GALVANIZED	PVC	POLYVINYL CHLORIDE PIPE	TYP	TYPICAL
BLDG	BUILDING	HW	HEADWALL	PVC	POINT OF VERTICAL CURVATURE	UD	UNDERDRAIN
BGS	BELOW GROUND SURFACE	HDPE	HIGH DENSITY POLYETHYLENE PIPE	PVI	POINT OF VERTICAL INTERSECTION	UP	UTILITY POLE
CL	CENTERLINE	INV.	INVERT	PVT	POINT OF VERTICAL TANGENCY	V	VOLTS
CIP	CAST IRON PIPE	IP	IRON PIN	R	RADIUS	VAR.	VARIES
CONC	CONCRETE	IN	INCHES	RCP	REINFORCED CONCRETE PIPE	WM	WATER METER
CMP	CORRUGATED METAL PIPE	JB	JUNCTION BOX	RMC	RIGID METALLIC CONDUIT		
CULV	CULVERT	LDA	LANDSCAPED AREA	R.O.W	RIGHT OF WAY		
CS	CARBON STEEL	LF	LINEAR FEET	R.R.	RAILROAD		
CF	CUBIC FEET	LS1	LANDSCAPE TYE	RTE	ROUTE		
CY	CUBIC YARDS	LOM	LIMIT OF MILLING	SAN.	SANITARY		
CMU	CONCRETE MASONRY UNIT	LOP	LIMIT OF PAVING	SS	STAINLESS STEEL		
D.C.	DEPRESSED CURB	MB	MAILBOX	SWK	SIDEWALK		
DH	DRILL HOLE	MAX	MAXIMUM	SHD	STATE HIGHWAY DEPARTMENT		
DIA	DIAMETER	MIN.	MINIMUM	SHLD.	SHOULDER		
DIP	DUCTILE IRON PIPE	MH	MANHOLE	STY.	STORY		
DWY	DRIVEWAY	NO.	NUMBER	STA.	STATION		
DYL	DOUBLE YELLOW LINE	N.T.S.	NOT TO SCALE				
		E	EAST				

DRAWING NOMENCLATURE REPRESENTATION

EXISTING CONDITIONS

PROPOSED CONDITIONS

APPROVED

File No. 0408-03-0002.2

Activity No. IJ/PZ30001

Date: 4/23/2025

State of New Jersey
Department of Environmental Protection
Watershed and Land Management

RVE 1901

REMINGTON & VERNICK ENGINEERS

2059 SPRINGDALE ROAD
CHERRY HILL, NJ 08003
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM

Certification of Authorization: 24 GA 28000300
~ENGINEERING EXCELLENCE~

DATE 9/ 9/2024

STEPHANIE A. CUTHBERT
NJ PROFESSIONAL ENGINEER LIC. No. 42136

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REV.	DATE	BY	DESCRIPTION
1	9/9/24	EAB	REVISIONS
2	4/23/25	EAB	REVISIONS

LEGEND

SOUTH JERSEY PORT CORP.

BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

CAMDEN CITY / CAMDEN COUNTY / NEW JERSEY

DRAWN BY	REVIEWED BY	CHECKED BY	SCALE
G.M.	G.M	S.C	AS NOTED

DATE: 9/ 9/2024

JOB No.: 2960/2/04

SHEET No.: G-2

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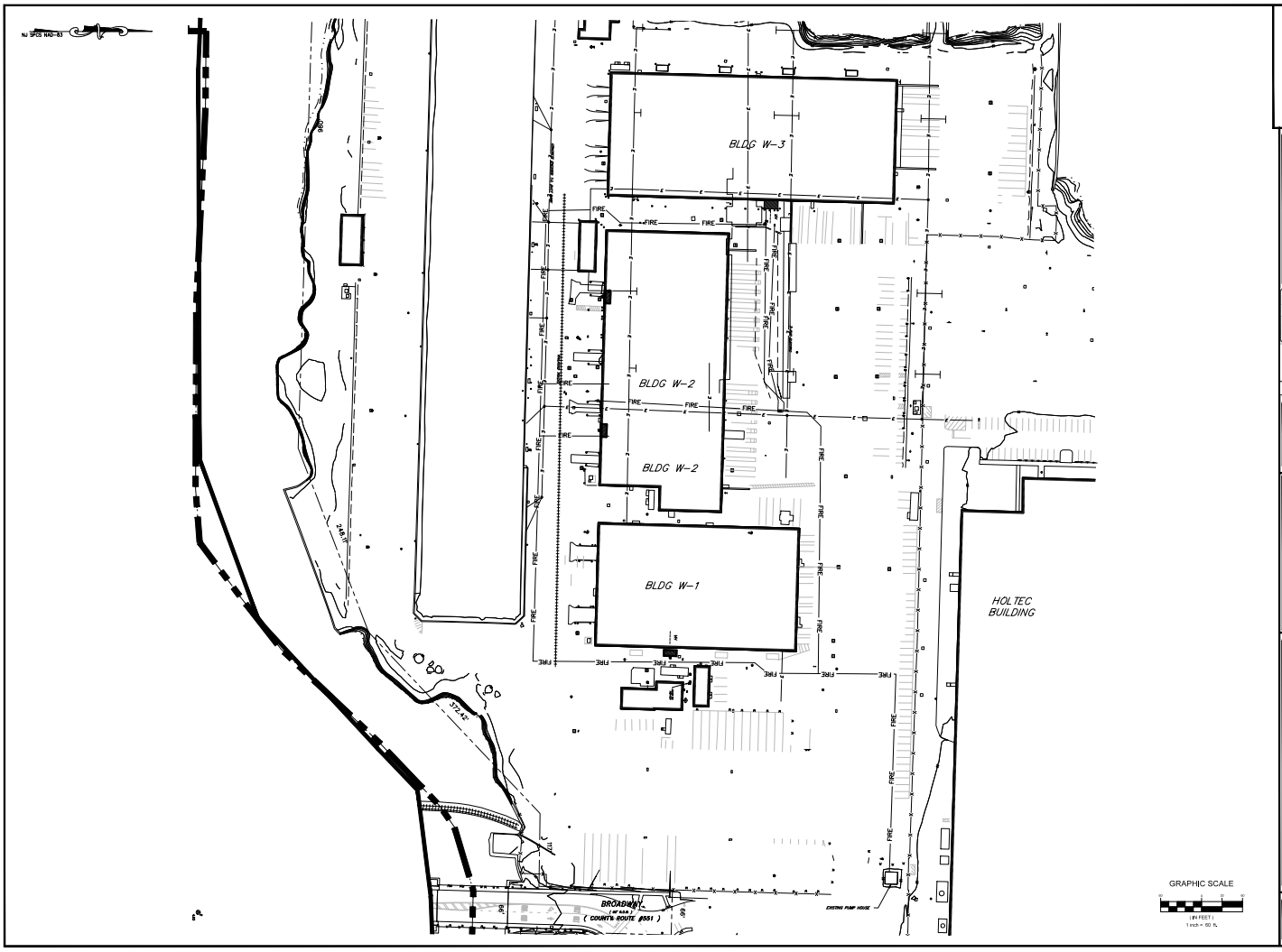

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NO.	DATE	REVISIONS
1	10/21/24	REVISED PER COMMENTS

EXISTING SITE PLAN OVERALL

SOUTH JERSEY PORT CORP.

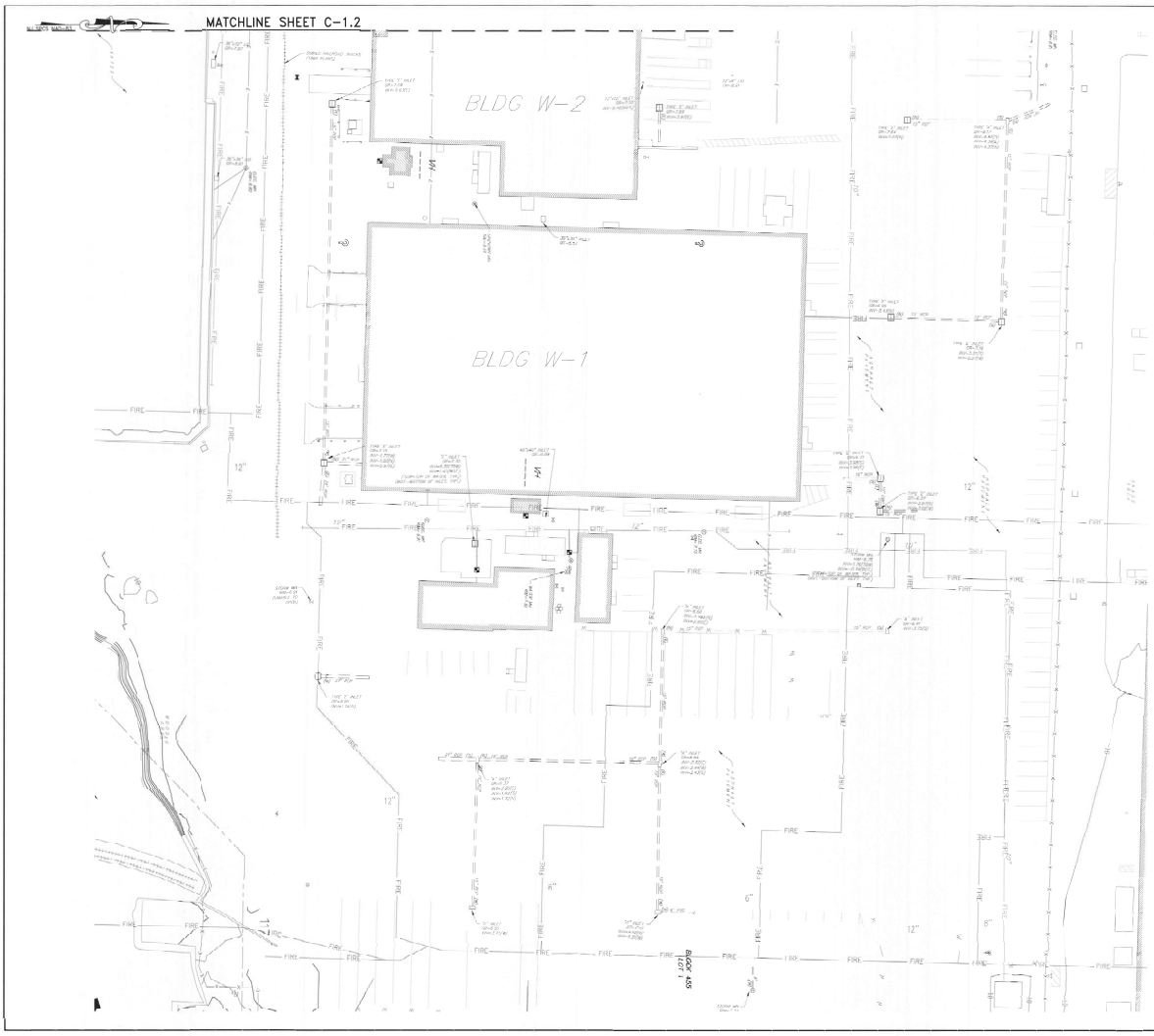
BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

CAMDEN CITY

CAMDEN COUNTY

NEW JERSEY

DRAWN BY:	CHECKED BY:	DESIGNED BY:	SCALE:
G.M.	G.M.	S.C	AS NOTED
DATE: 5.2024		SHEET No.: C-2.0	
JOB No.: 25030604			



GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft

APPROVED
File No. 0408-03-0006 2
Activity No. LUP250001
Date: 4/22/2025
State of New Jersey
Department of Environmental Protection
Watershed and Land Management

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STEPHANIE A. CUTHBERT
NJ PROFESSIONAL ENGINEER LIC. No. 42138

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No.	DATE	BY	REVISION

EXISTING SITE PLAN ENLARGED

SOUTH JERSEY PORT CORP

BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

CAMDEN CITY CAMDEN COUNTY NEW JERSEY

DRAWN BY	DESIGNED	CHECKED BY	SCALE
G.M.	G.M.	S.C.	AS NOTED
DATE 9-2024		SHEET No. C-2.1	
JOB No. 19900004			

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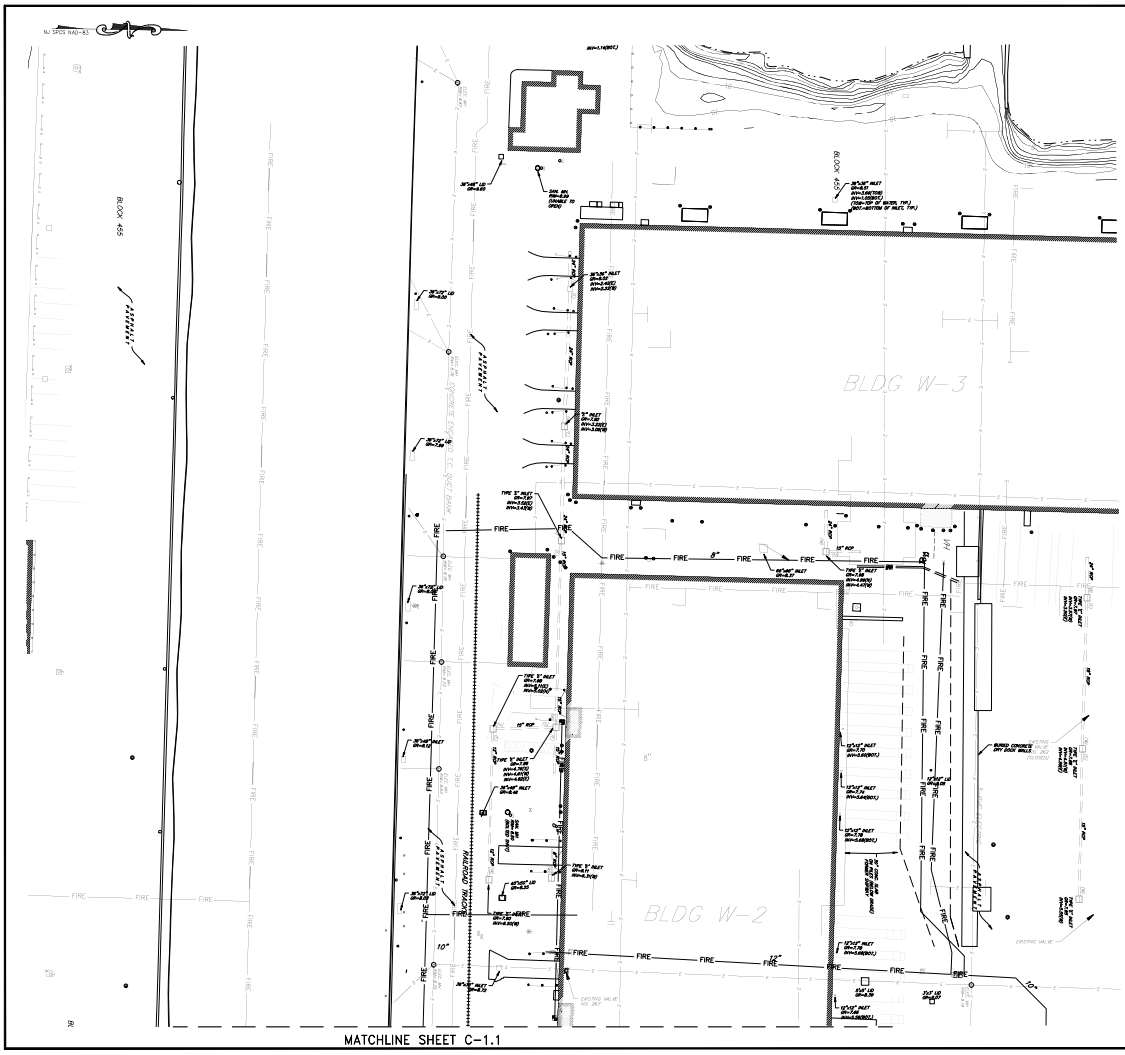

MATCHLINE SHEET C-1.1

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1901
REMINGTON & VERNICK ENGINEERS
2059 SPRINGDALE ROAD
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(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization, 24 GA 28000300
–ENGINEERING EXCELLENCE–

DATE:
STEPHANIE A. CUTHBERT
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NO.	DATE	DRN.	CHK.	DESCRIPTION
1	9/24/24	SGC	SAP	CLIENT REVIEW

EXISTING SITE PLAN - PIER 5

SOUTH JERSEY PORT CORP.

BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

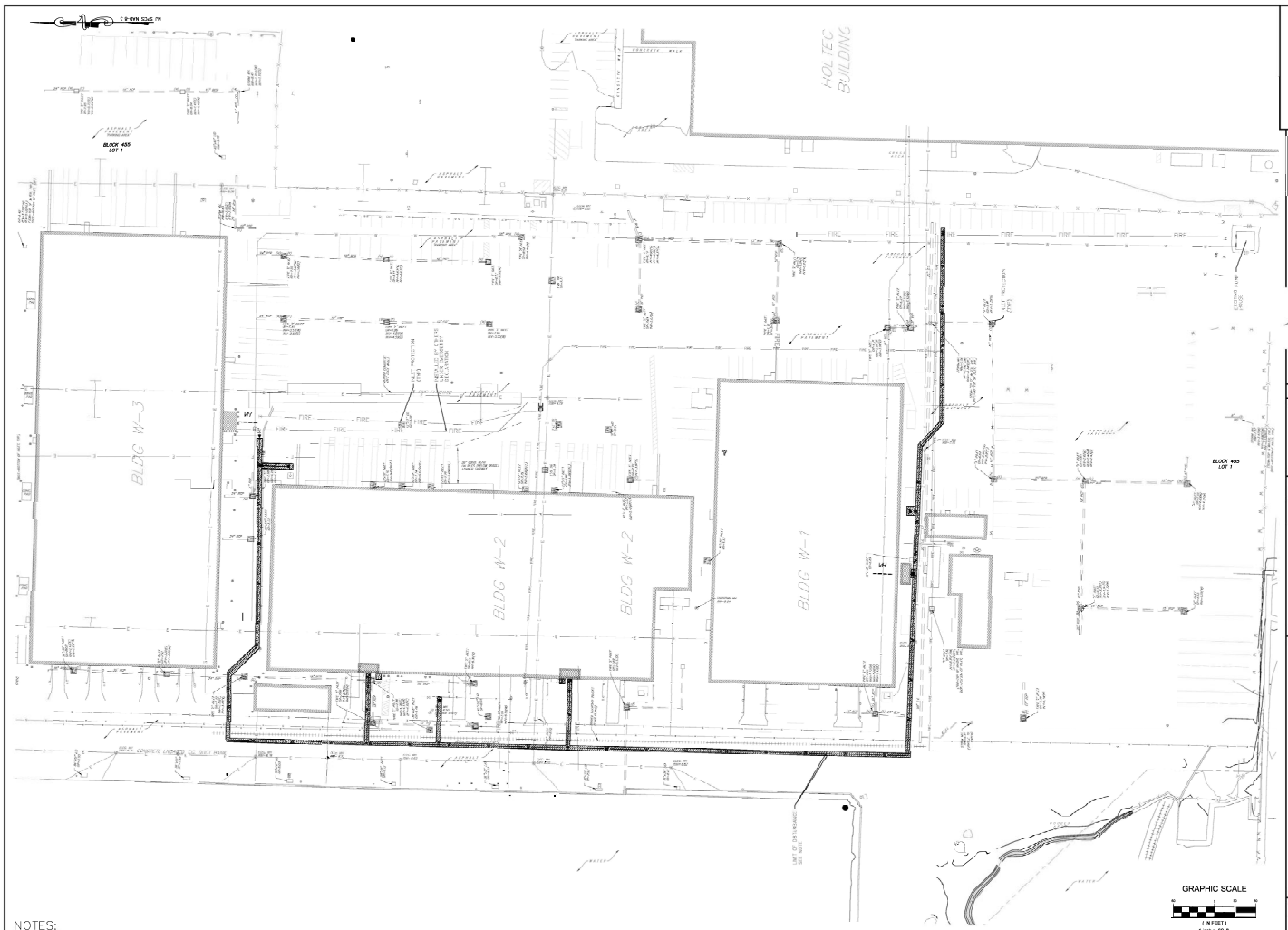
CAMDEN CITY — CAMDEN COUNTY — NEW JERSEY

DRAWN BY:	CHECKED BY:	DESIGNED BY:	SCALE:
G.M.	G.M.	ELC	AS NOTED

DATE: 9/2024

JOB No. 25030004

SHEET No. C-2.2



NOTES:

1. HATCHING SURROUNDING PROPOSED PIPING INDICATES LIMITS OF DISTURBANCE.

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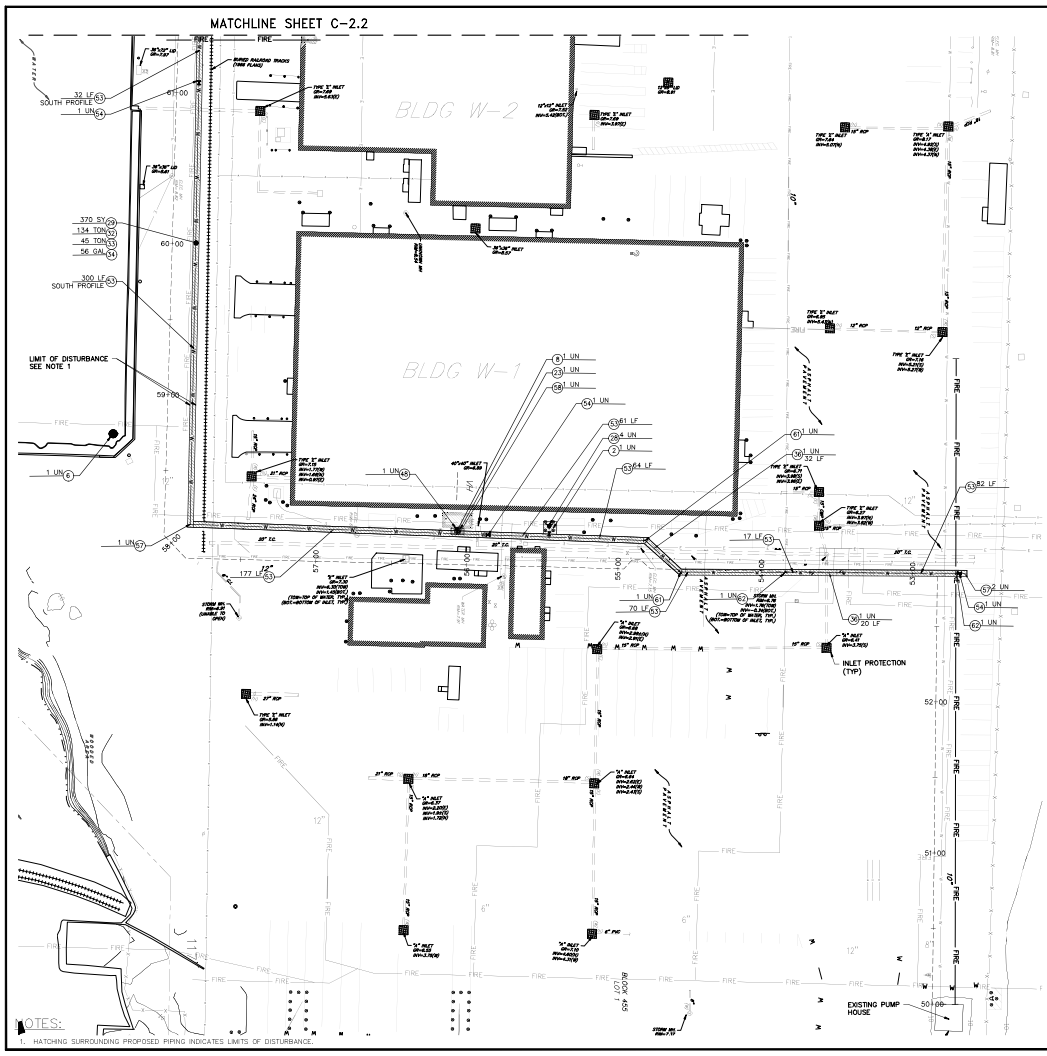
No.	REVISION	DATE	BY	CHK
1	CHANGES REQUESTED BY CLIENT	8/1/24	MCI	TM

PROPOSED OVERALL SITE PLAN AND SESC

BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

CAMDEN CITY — CAMDEN COUNTY — NEW JERSEY

DRAWN BY	CHECKED BY	CHECKED BY	SCALE
G.M	G.M	S.C	AS NOTED
DATE: 8.2024		SHEET No.: C-5.0	
JOB No.: 3965X004			



TO BE CONSTRUCTED

ITEM	DESCRIPTION	UNIT	QTY
2	RELOCATE/RECONNECT EXISTING FIRE HYDRANTS	UN	1
6	FURNISH AND INSTALL DRY HYDRANT, COMPLETE	UN	1
8	6" MJT RESTRAINED RESILIENT SEAT GATE VALVE, COMPLETE	UN	1
23	8" MJT RESTRAINED END CAP	UN	1
28	6" STEEL BOLLARDS, FILLED WITH CONCRETE AND PLASTIC COVER	UN	4
29	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK	SY	370
32	HOT MIX ASPHALT BASE COURSE, 19M64, 6" THICK	TON	134
33	HOT MIX ASPHALT SURFACE COURSE, 12.5M64, 2" THICK	TON	45
34	TACK COAT	GAL	56
36	UTILITY OFFSET, COMPLETE	UN	2
48	TEST PITS, INCLUDING RESTORATION	UN	1
53	10" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	803
54	10" MJT RESTRAINED RESILIENT SEAT GATE VALVE, COMPLETE	UN	3
57	10" 90 DEGREE MJT RESTRAINED CLDIP FITTING	UN	3
58	10" X 10" x 6" MJT RESTRAINED CLDIP TEE	UN	1
61	10" 45 DEGREE MJT RESTRAINED CLDIP FITTING	UN	2
62	10" X 10" x 10" MJT RESTRAINED CLDIP TEE	UN	2

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

NOTES:

1. HATCHING SURROUNDING PROPOSED PIPING INDICATES LIMITS OF DISTURBANCE.

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NO.	CHANGES REQUESTED BY CLIENT	DATE	BY
1		8/12/24	PKL

SHEAR

PROPOSED ENLARGED SITE PLAN AND SESC

SOUTH JERSEY PORT CORP.

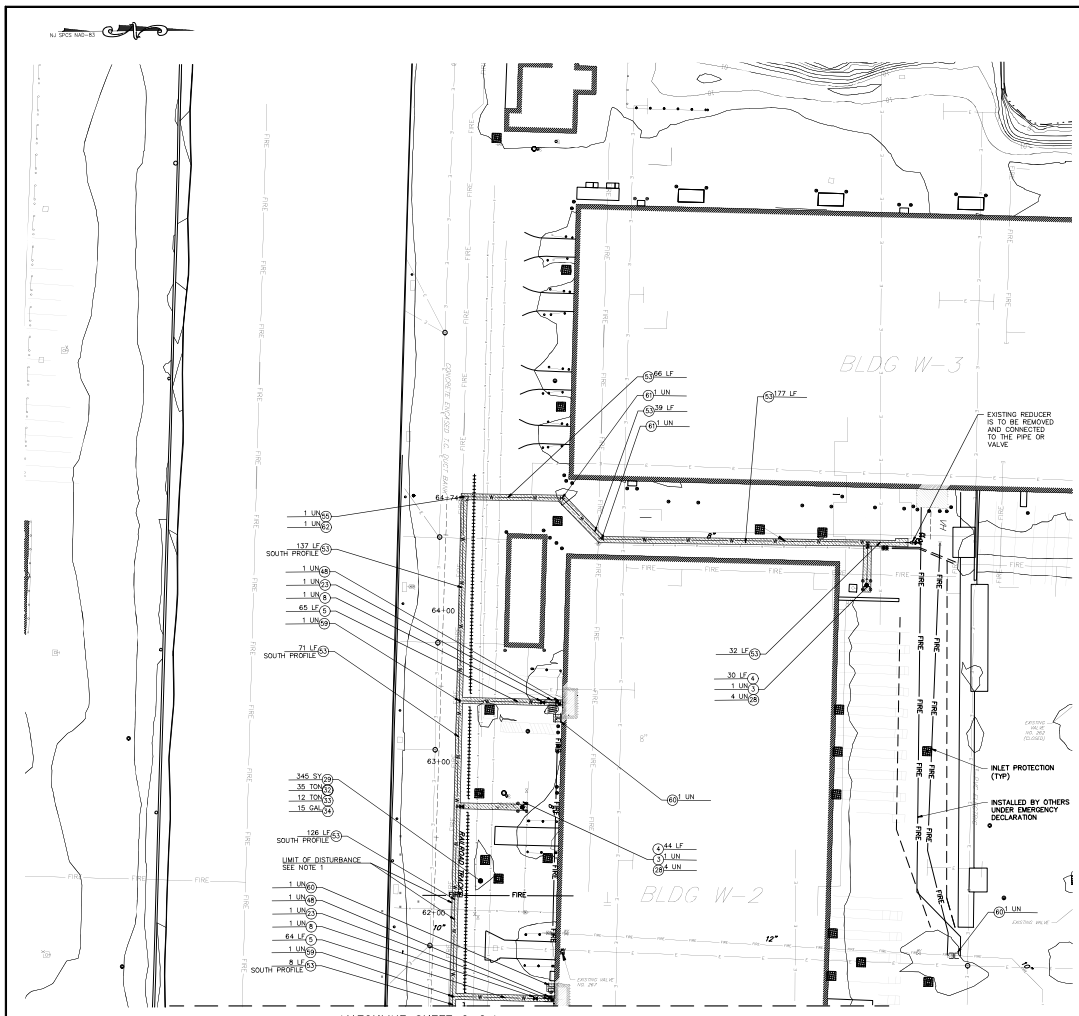
BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

CAMDEN CITY

CAMDEN COUNTY

NEW JERSEY

DRAWN BY:	CHECKED BY:	CHECKED BY:	SCALE:
G.M.	G.M.	S.C	AS NOTED
DATE: 9.2024		SHEET No. C-5.1	
JOB No. 25030004			



MATCHLINE SHEET C-2.1

TO BE CONSTRUCTED

ITEM	DESCRIPTION	UNIT	QTY
3	FURNISH AND INSTALL FIRE HYDRANTS, COMPLETE	UN	2
4	6" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	74
5	8" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	129
8	8" MJT RESTRAINED RESILIENT SEAT GATE VALVE, COMPLETE	UN	2
23	8" MJT RESTRAINED END CAP	UN	2
28	6" STEEL BOLLARD, FILLED WITH CONCRETE AND PLASTIC COVER	UN	8
29	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK	SY	345
32	HOT MIX ASPHALT BASE COURSE, 19M64, 6" THICK	TON	35
33	HOT MIX ASPHALT SURFACE COURSE, 12.5M64, 2" THICK	TON	12
34	TACK COAT	GAL	15
48	TEST PITS, INCLUDING RESTORATION	UN	2
53	10" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	656
55	10" BLIND FLANGE, COMPLETE	UN	1
59	10" X 10" X 8" MJT RESTRAINED CLDIP TEE	UN	2
60	CUT & CAP	UN	3
61	10" 45 DEGREE MJT RESTRAINED CLDIP FITTING	UN	2
62	10" X 10" X 10" MJT RESTRAINED CLDIP TEE	UN	1

GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

NOTES:

1. HATCHING SURROUNDING PROPOSED PIPING INDICATES LIMITS OF DISTURBANCE.

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DATE	REV.	BY	CHANGES REQUESTED BY CLIENT
8/12/25	PRL	TRB	

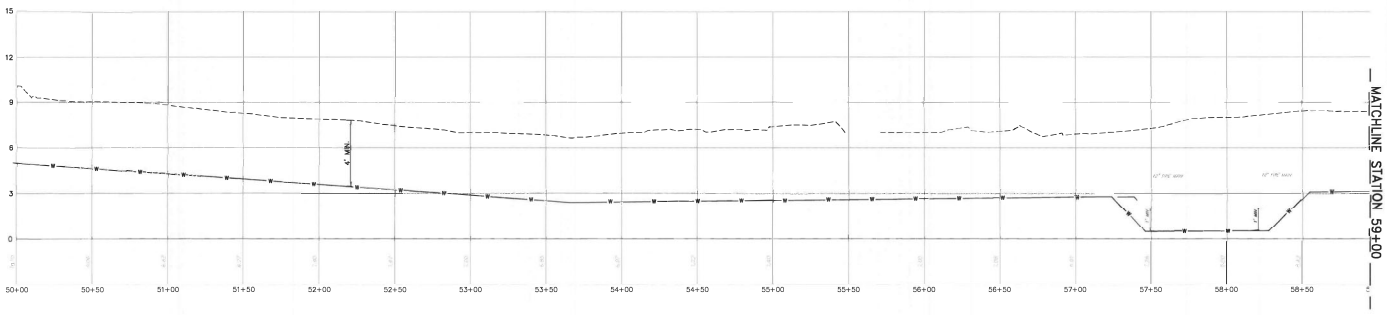
PROPOSED ENLARGED SITE PLAN AND SESC

SOUTH JERSEY PORT CORP.

BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

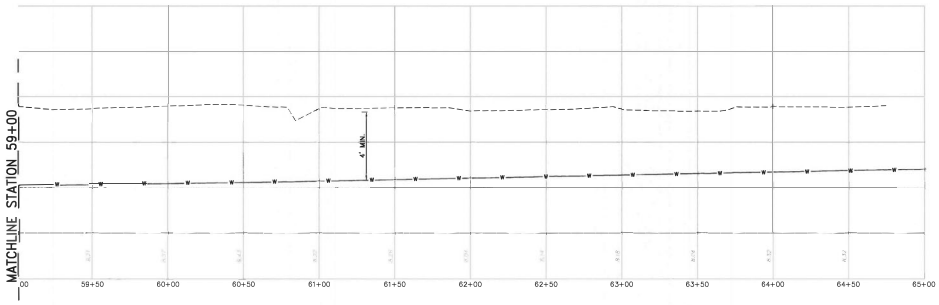
CAMDEN COUNTY NEW JERSEY

DRAWN BY:	CHECKED:	CHECKED BY:	SCALE:
GJM.	GJM	SLC	AS NOTED
DATE: 5.2024		SHEET No. C-5.2	
JOB No. 25030004			



PROFILE PIER 5

SCALE: 1"=3' VERT.
SCALE: 1"=30' HORIZ.



PROFILE PIER 5

SCALE: 1"=3' VERT.
SCALE: 1"=30' HORIZ.

APPROVED

File No.: 0408-03-0006.2
Activity No.: LU P 210 08
Date: 4/23/2025
State of New Jersey
Department of Environmental Protection
Watershed and Land Management

RVE 1901
REMINGTON & VERNICK ENGINEERS
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~ENGINEERING EXCELLENCE~

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NJ PROFESSIONAL ENGINEER LIC. No. 42135

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NO.	REVISION	DATE	BY

PROFILE PIER 5

SOUTH JERSEY PORT CORP.
BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT
CAMDEN CITY CAMDEN COUNTY NEW JERSEY

DRAWN BY	DESIGNED BY	CHECKED BY	SCALE
G.M.	G.M.	S.C.	AS NOTED

DATE: 9.2024
JOB NO.: 30EE0004
SHEET No.: C-6.0

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCE. IN THEIR PROPER SEQUENCE, AND WITHIN 48 HOURS UNTIL PERMANENT PROTECTION IS ESTABLISHED. ALL WORK TO BE DONE IN ACCORDANCE WITH THE STATE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
2. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN 14 DAYS AND NOT SUBJECT TO CONSTANT USE SHALL BE STABILIZED IMMEDIATELY AFTER PLACEMENT. IF THE SEASON PREVENTS THE ESTABLISHMENT OF A TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW OR EQUIVALENT MATERIAL, AT A RATE OF 2 TONS PER ACRE.
3. PERMANENT STABILIZATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL VEGETATION IS ESTABLISHED.
4. A FOUR-INCH COVERED BOIL, BE APPLIED IMMEDIATELY ON FINAL ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS IN ORDER TO STABILIZE STREETS, ROADS, DRIVEWAYS AND PARKING AREAS, IN AREAS WHERE NO UTILITIES ARE PRESENT THE SUB-BASE SHALL BE INSTALLED WITHIN 15 DAYS AFTER FINAL GRADING.
5. SEEDING OF TEMPORARY VEGETATION, DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION 2.5" DEEP SCORES ROADWAY EMBANKMENTS WILL BECOME A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE.
6. ANY SOIL DUST AVOIDING PRACTICE, INSTALLATION WILL BE INSTALLED AND MAINTAINED AS NECESSARY TO ELIMINATE DUST FROM LEAVING THE SITE.
7. TRAFFIC CONTROL CONDITIONS REQUIRE THE INSTALLATION OF A 50'X 30'X 1' MIX OF 1-1/2" TO 3" STONE AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER INITIAL CLEARING, GRUBBING AND ROUGH GRADING OF THE SITE. THE STONE SHALL BE MAINTAINED IN CONSTRUCTION CLEARED EXISTS. THE TEMPORARY PAD MUST BE OF SUFFICIENT THICKNESS THE STONE MUST BE 1"-4" IN SIZE, PLACED 12" THICK AND THE FULL WIDTH OF THE DRIVEWAY. IT SHOULD BE UNDERLAYED WITH A SYNTHETIC FILTER FABRIC AND MAINTAINED.
8. IN ACCORDANCE WITH STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE LIMED WITH A MINIMUM OF 12 ABODES OF SOIL HAVING A PH OF 5 OR MORE UNLESS OTHERWISE RECOMMENDED.
9. THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED TO INSPECT IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
10. IF THE SITE IS TO REMAIN DORMANT FOR PERMANENT VEGETATIVE STABILIZATION IS DONE TO BE ACCOMPLISHED, ANY SOIL WILL NOT REMAIN IN A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED, IN SUCH A WAY THAT WILL ENSURE THE ESTABLISHMENT OF VEGETATION WHEN THE SITE IS ACTIVATED. GROUND COVER MUST BE MAINTAINED UNTIL PERMANENT VEGETATION IS ESTABLISHED. ALL DISTURBED NON-VEGETATIVE MEANS OF GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
11. CONSULT SOIL PROTECTION MUST BE INSTALLED AT ALL EXPOSED SURFACE PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
12. PERMANENT STABILIZATION MUST BE ACHIEVED UPON SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE COUNTY SOIL CONSERVATION DISTRICT FOR RECERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT NEW JERSEY SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
13. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
14. A SUFFICIENT QUANTITY OF MATERIALS IS RESPONSIBLE FOR THE MAINTENANCE OF ALL SOIL EROSION & SEDIMENT CONTROL MEASURES.
15. IN THAT N.J.S.A. 4:24-39 ET SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK FOR SITE PLANS AND ALL WORK FOR SUBDIVISIONS SHALL BE COMPLETED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY.

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION
   A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SUBSEQUENT PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
   B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
2. SEEDBED PREPARATION
   A. APPLY LIMESTONE AND FERTILIZER. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET (10-10-10 OR EQUIVALENT. APPLY LIMESTONE EQUIVALENT TO FOR CALCIUM PLUS MAGNESIUM OXIDES) AS FOLLOWS

SOIL TEXTURE	TONS/ACRE	LBS./1000 SQ. FT.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	4	180
SANDY LOAM, LOAM, SILT LOAM	3	135
LOAMY SAND, SAND	2	90

   PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE.
   B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISK HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE DONE ON THE CONTOUR. CONTOUR TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.
   C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AS ABOVE.
   D. SOILS HIGH IN SULFIDES OR HAVING A pH OF 4 OR LESS SHOULD BE MULCHED ONLY.
3. SEEDING
   A. SEE TEMPORARY SEED MIXTURE FOR SPECIES AND APPLICATION RATES.
   B. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL, OR HYDROSEEDER. (HYDROSEEDER MIXTURES SHOULD BE ADJUSTED TO ALLOW FOR DEEPER PLACEMENT. WITH SEEDS MIXED IN MULCH APPLIED AFTER SEEDING.) MULCH MUST BE ANCHORED IMMEDIATELY AFTER SEEDING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.
   C. AFTER SEEDING, FIRMING THE SOIL SHALL BE PERFORMED WITH A CORRUGATED ROLLER WILL ENSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE.
4. MULCHING
   MULCHING IS REQUIRED ON ALL SEEDING.
   A. MULCH MATERIALS SHOULD BE UNIFORMLY SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY. THE RATE OF APPLICATION MUST BE 1.5 TONS PER ACRE OR 70 BALES PER ACRE. THE MULCH MUST BE EVENLY DISTRIBUTED TO COVER 90 % OF THE SOIL SURFACE. MULCH MATERIALS MUST BE ANCHORED IMMEDIATELY AFTER SEEDING. THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CHOPPER-BLOWERS MAY NOT GRIND THE MATERIAL.
   B. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STRENGTH OF SLOPES, AND COST.
      1. JUTE AND TWINE: DRIVE A 15 TO 18 INCH WOODEN PEGS TO WITHIN 3 TO 4 INCHES OF THE SOIL SURFACE AT 3 FEET INTERVALS. STRAD THE MULCH WITH JUTE TWINE. STEPPING MULCH, STRAD MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
      2. MULCH NETTING: STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTING TO THE SOIL SURFACE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.
      3. COMPUTER-ASSISTANCE SOIL: A TRACTOR-DRAWN IMPLEMENT, SOMETIMES LIKE A DISK HARROW, TEMPORARILY SEGMENTS TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH INTO 3 INCHES INTO THE SOIL FOR A 3 TO 4 INCH LIFT AND LEAVE PART MULCH ON THE SURFACE. THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH MATERIALS MUST BE 2 TONS PER ACRE. NO MORE THAN 1 TONS PER ACRE, NO MORE THAN 1 TONS PER ACRE, NO MOWING OR ADHESIVE AGENT IS REQUIRED.
      4. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,000 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

TEMPORARY SEEDING MIXTURE

THE SEEDING MIXTURE IS COMPOSED OF A SINGLE SPECIES WHICH GERMINATES QUICKLY IN ORDER TO REDUCE SOIL EROSION UNTIL A PERMANENT VEGETATIVE COVER CAN BE ESTABLISHED.

%	COMMON NAME	BOTANICAL NAME
100	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FOUR (1) POUND/1000 SQUARE FEET OR 100 POUNDS/ACRE.

RECOMMENDED SEEDING PERIODS ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15.

RECOMMENDED SEEDING RATES ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.

PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

1. SITE PREPARATION
   A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SUBSEQUENT PREPARATION, SEEDING, MULCH APPLICATION, AND MULCH ANCHORING.
   B. INSTALL NEEDED EROSION CONTROL PRACTICES OR FACILITIES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENT BASINS, AND WATERWAYS.
2. SEEDBED PREPARATION
   A. APPLY LIMESTONE AND FERTILIZER. FERTILIZER SHALL BE APPLIED AT THE RATE OF 500 POUNDS PER ACRE OR 11 POUNDS PER 1,000 SQUARE FEET (10-10-10 OR EQUIVALENT. APPLY LIMESTONE EQUIVALENT TO FOR CALCIUM PLUS MAGNESIUM OXIDES) AS FOLLOWS

SOIL TEXTURE	TONS/ACRE	LBS./1000 SQ. FT.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	4	180
SANDY LOAM, LOAM, SILT LOAM	3	135
LOAMY SAND, SAND	2	90

   PULVERIZED DOLOMITIC LIMESTONE IS PREFERRED FOR MOST SOILS SOUTH OF THE NEW BRUNSWICK-TRENTON LINE.
   B. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISK HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE DONE ON THE CONTOUR. CONTOUR TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED.
   C. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AS ABOVE.
   D. SOILS HIGH IN SULFIDES OR HAVING A pH OF 4 OR LESS SHOULD BE MULCHED ONLY.
3. SEEDING
   A. SEE PERMANENT SEED MIXTURE FOR SPECIES AND APPLICATION RATES.
   B. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL, OR HYDROSEEDER. (HYDROSEEDER MIXTURES SHOULD BE ADJUSTED TO ALLOW FOR DEEPER PLACEMENT. WITH SEEDS MIXED IN MULCH APPLIED AFTER SEEDING.) MULCH MUST BE ANCHORED IMMEDIATELY AFTER SEEDING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COARSE TEXTURED SOIL.
   C. AFTER SEEDING, FIRMING THE SOIL SHALL BE PERFORMED WITH A CORRUGATED ROLLER WILL ENSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE.
4. MULCHING
   A. MULCH MATERIALS SHOULD BE UNIFORMLY SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY. THE RATE OF APPLICATION MUST BE 1.5 TONS PER ACRE OR 70 BALES PER ACRE. THE MULCH MUST BE EVENLY DISTRIBUTED TO COVER 90 % OF THE SOIL SURFACE. MULCH MATERIALS MUST BE ANCHORED IMMEDIATELY AFTER SEEDING. THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CHOPPER-BLOWERS MAY NOT GRIND THE MATERIAL.
   B. MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER PLACEMENT TO MINIMIZE LOSS BY WIND OR WATER. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS, DEPENDING UPON THE SIZE OF THE AREA, STRENGTH OF SLOPES, AND COST.
      1. JUTE AND TWINE: DRIVE A 15 TO 18 INCH WOODEN PEGS TO WITHIN 3 TO 4 INCHES OF THE SOIL SURFACE AT 3 FEET INTERVALS. STRAD THE MULCH WITH JUTE TWINE. STEPPING MULCH, STRAD MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS AND SQUARE PATTERN. SECURE TWINE AROUND EACH PEG WITH TWO OR MORE ROUND TURNS.
      2. MULCH NETTING: STAPLE PAPER, JUTE, COTTON, OR PLASTIC NETTING TO THE SOIL SURFACE IN ACCORDANCE WITH THE MANUFACTURER'S DIRECTIONS.
      3. COMPUTER-ASSISTANCE SOIL: A TRACTOR-DRAWN IMPLEMENT, SOMETIMES LIKE A DISK HARROW, TEMPORARILY SEGMENTS TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH INTO 3 INCHES INTO THE SOIL FOR A 3 TO 4 INCH LIFT AND LEAVE PART MULCH ON THE SURFACE. THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH MATERIALS MUST BE 2 TONS PER ACRE. NO MORE THAN 1 TONS PER ACRE, NO MOWING OR ADHESIVE AGENT IS REQUIRED.
      4. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,000 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.

TEMPORARY SEEDING MIXTURE

THE SEEDING MIXTURE IS COMPOSED OF A SINGLE SPECIES WHICH GERMINATES QUICKLY IN ORDER TO REDUCE SOIL EROSION UNTIL A PERMANENT VEGETATIVE COVER CAN BE ESTABLISHED.

%	COMMON NAME	BOTANICAL NAME
100	ANNUAL RYE GRASS	LOLIUM MULTIFLORUM

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FOUR (1) POUND/1000 SQUARE FEET OR 100 POUNDS/ACRE.

RECOMMENDED SEEDING PERIODS ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15.

RECOMMENDED SEEDING RATES ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.

PERMANENT SEEDING MIXTURE (WDEST)

THIS SEEDING MIXTURE IS COMPOSED OF MOISTURE-TOLERANT SPECIES WHICH CAN THRIVE WITH ADEQUATE SOIL MOISTURE. THIS MIXTURE IS ADAPTED TO THE WETTER PORTIONS OF THE STATE. ANY MIXTURE SELECTED MUST BE ADAPTED TO THE SITE CONDITIONS. THE SEEDING MIXTURE MUST CONTAIN A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	COMMON NAME	BOTANICAL NAME
55	CLEARFIELD TALL FESCUE	FESTUCA ARUNDINACEA "CLEARFIELD"
15	MEADOW VENTENAT BLUEGRASS	POA PRATENSIS "MEADOW"
15	PALMER PERENNIAL RYE	LOLIUM PERENNE "PALMER"
10	ALSIKE CLOVER	TRIFOLIUM HYBRIDUM
5	STREAMBED BOTTOM	AGROSTIS ALBA "STREAMBED"
5	RED CLIMAXY GRASS	PHALARIS ARUNDINACEA

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FIVE (5) POUNDS/1000 SQUARE FEET OR 200 POUNDS/ACRE.

RECOMMENDED SEEDING PERIODS ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.

PWDLANDS SEEDING MIXTURE (DRY)

THIS SEEDING MIXTURE IS COMPOSED OF SPECIES WHICH CAN THRIVE IN MOISTURE TOLERANCE WHEN CAN THRIVE IN THE PWDLANDS. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	COMMON NAME	BOTANICAL NAME
60	RED TOP	AGROSTIS STOLONIFERA
20	WEEPING LOVEGRASS	ERAGROSTIS CURVULA
20	WILLMOT SWEET FESCUE	FESTUCA LONGIFOLIA
10	CREEPING RED FESCUE	FESTUCA RUBRA VAR. COMMUTATA "JAMESTOWN"
5	PALMER PERENNIAL RYE	LOLIUM PERENNE "PALMER"
5	BROAD LEAF	PARTICUM MEXICANA
5	WHITE CLOVER SWITCHGRASS	TRIFOLIUM REPENS "BLAONWELL"

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FOUR (4) POUNDS/1000 SQUARE FEET OR 175 POUNDS/ACRE.

RECOMMENDED SEEDING PERIODS ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15.

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RECOMMENDED SEEDING RATES ARE APRIL 1-MAY 31 AND AUGUST 16-OCTOBER 15. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.

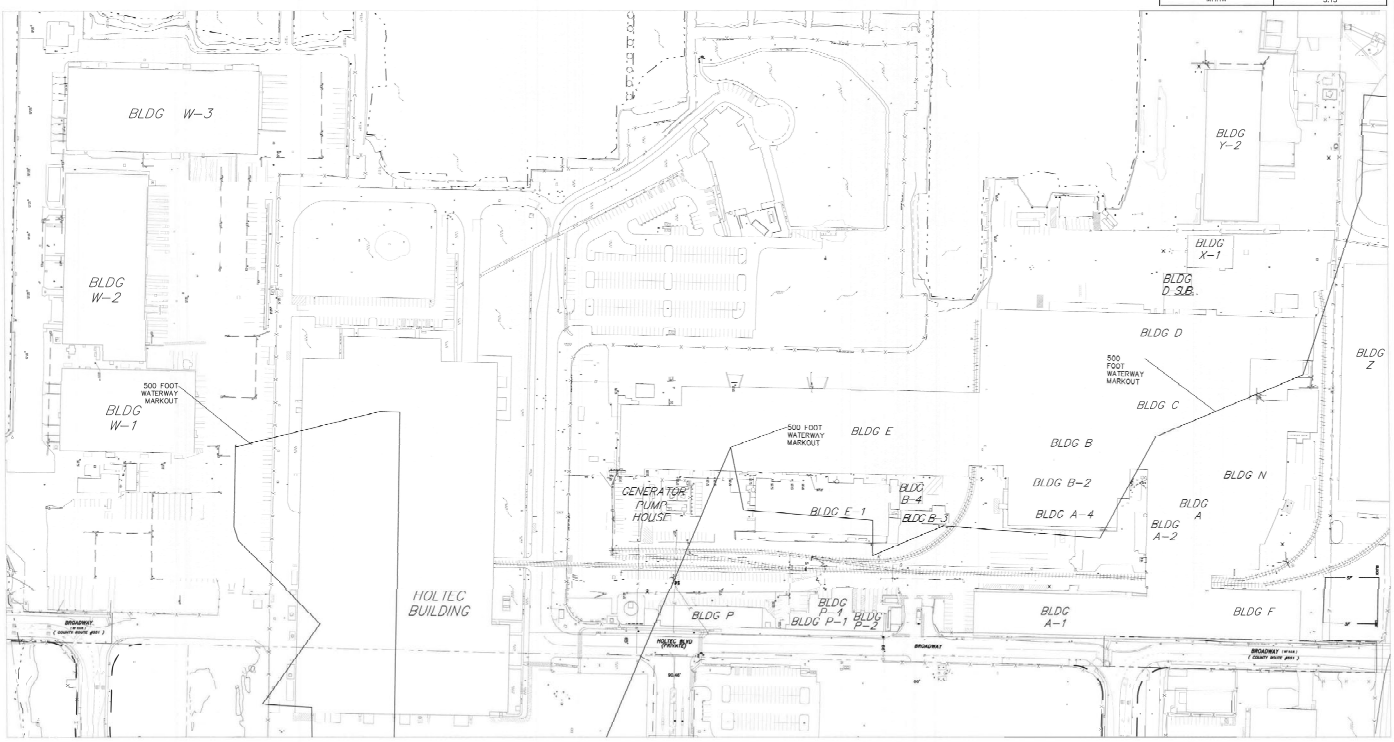
TOP SOILING

TOPSOIL SHOULD BE USED WHERE SOILS ARE SANDY, GRAVELY, SOILS, CLAYS, SILTY CLAYS, SOILS HIGH IN SHALE, OR OTHER UNFAVORABLE MATERIALS. THE TOPSOIL SHOULD BE A WELL-DRAINED, FRIABLE, LOAMY SOIL 1.0 MILLIMICRO FOR CONTAINING 20 MINUTE TOPSOIL IS AVAILABLE ON SITE AND ASSURANCE OF IMPROVED VEGETATIVE GROWTH IS DESIRED.

1. MATERIALS
   A. TOPSOIL SHOULD BE FRIABLE AND LOAMY, FREE OF DEBRIS, OBJECTIONABLE WEEDS AND STONES LARGER THAN 2 INCHES IN DIAMETER. THE TOPSOIL SHOULD CONTAIN NO ROOTS OR TOPS LARGER THAN 1/2 IN DIAMETER. TOPSOIL SHOULD NOT BE EXCESSIVELY ALKALINE OR ACIDIC. TOPSOIL MUST BE EXCESSIVELY DOUBLE MULCH. TOPSOIL HAVING A PH OF 5 OR MORE UNLESS OTHERWISE RECOMMENDED

NJ STATE PLANE 83

TIDAL DATUM	
MLW	-3.31
MTL	-3.12
MHW	2.74
MHHW	3.13



OVERALL
SCALE: 1"=100'

GRAPHIC SCALE
1 IN FEET
1 inch = 100ft.

APPROVED
File No.: 0408-05-0006.2
Activity No.: LUP250001
Date: 4/22/2025
State of New Jersey
Department of Environmental Protection
Watershed and Land Management

RVE 1901
REMINGTON & VERNICK ENGINEERS
2059 SPRINGDALE ROAD
CHERRY HILL, NJ 08003
(856) 795-9595, FAX (856) 795-1882
WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
—ENGINEERING EXCELLENCE—

DATE:
STEPHANIE A. CUTHBERT
NJ PROFESSIONAL ENGINEER LIC. No. 42136

PLANS WHICH DO NOT BEAR AN EMBOSSED SEAL ARE NOT VALID

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REV.	DATE	REVISION

ENVIRONMENTAL

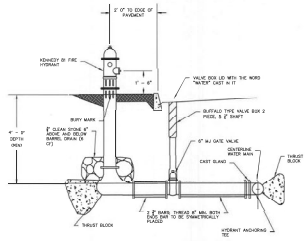
SOUTH JERSEY PORT CORP.

BROADWAY TERMINAL WATER F RE MAIN REPLACEMENT

CAMDEN CITY — CAMDEN COUNTY — NEW JERSEY

DRAWN BY:	DESIGNED BY:	CHECKED BY:	SCALE:
G.M.	G.M.	S.C.	AS NOTED

DATE: 5.2024
JOB No.: 29030004
SHEET No.: EV-1

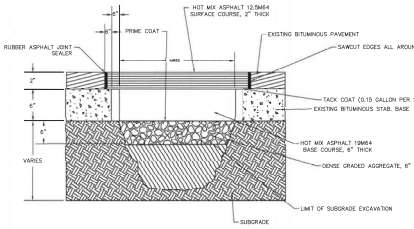


FIRE HYDRANT ASSEMBLY DETAIL

N.T.S

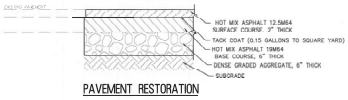
NOTES:

1. WHEN DISTANCES BETWEEN VALVE AND HYDRANT EXCEED TEN LINEAR FEET (10') ALL THREAD RODS ARE NOT REQUIRED.

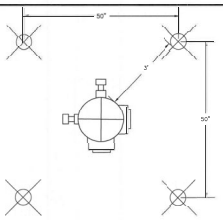


UTILITY OPENING REPAIR

N.T.S

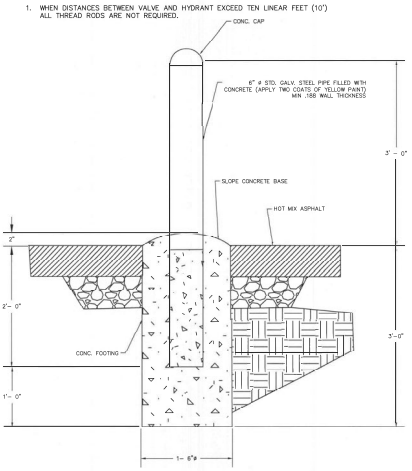


PAVEMENT RESTORATION



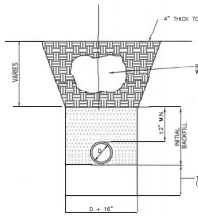
PIPE BOLLARD PLAN VIEW

N.T.S



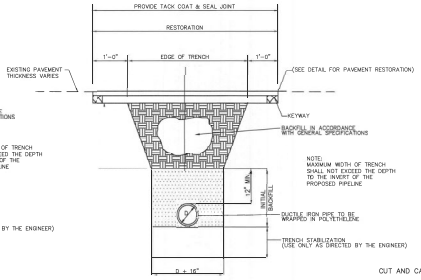
PIPE BOLLARD DETAIL

N.T.S



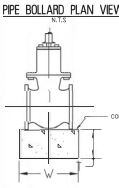
TRENCH DETAIL D.I. PIPE

N.T.S.



ROADWAY TRENCH DETAIL D.I. PIPE

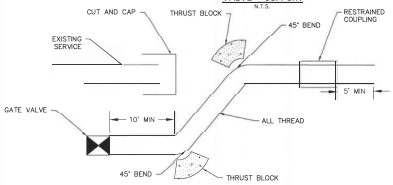
N.T.S.



SIZE	T	W	L
6"	8"	16"	18"
8"	8"	18"	18"
12"	10"	20"	20"
16"	12"	28"	28"
20"	14"	28"	28"

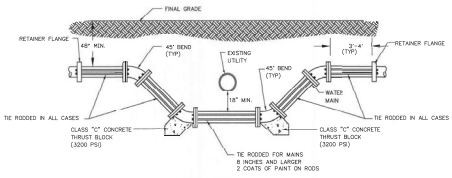
VALVE SUPPORT

N.T.S.



VALVE HOUSE CONNECTION DETAIL

N.T.S.



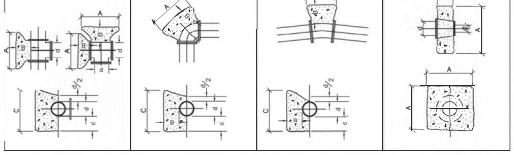
WATER MAIN OFF-SET DETAIL

N.T.S.

MINIMUM SIZE OF CONCRETE THRUST BLOCKS

d	TEES & CROSSES A	TEES & CROSSES B	TEES & CROSSES C	90° BENDS A	90° BENDS B	90° BENDS C	45° BENDS A	45° BENDS B	45° BENDS C	22½-11¼ BENDS A	22½-11¼ BENDS B	22½-11¼ BENDS C
2" OR LESS	1'-0"	8"	1'-0"	1'-3"	6"	1'-3"	1'-3"	6"	1'-3"	1'-0"	6"	1'-0"
4"	1'-6"	8"	1'-6"	1'-9"	8"	1'-9"	1'-3"	8"	1'-3"	1'-3"	8"	1'-3"
6"	2'-0"	8"	1'-9"	2'-6"	8"	2'-0"	1'-6"	8"	1'-3"	1'-6"	8"	1'-3"
8"	2'-6"	8"	2'-0"	3'-0"	10"	2'-8"	2'-0"	10"	2'-3"	1'-6"	10"	1'-9"
10"	3'-0"	10"	2'-9"	3'-6"	12"	3'-6"	3'-0"	12"	2'-3"	1'-6"	12"	2'-0"
12"	3'-6"	10"	3'-9"	4'-6"	12"	3'-9"	3'-6"	12"	2'-6"	1'-6"	12"	3'-0"
14"/16"	5'-0"	15"	4'-0"	5'-6"	15"	4'-6"	4'-6"	15"	3'-3"	2'-6"	15"	3'-6"

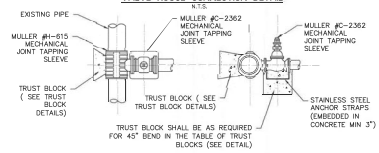
REDUCERS dxd	B	C
6"x4"	1'-6"	1'-0"
8"x4"	2'-0"	1'-6"
10"x6"	2'-4"	1'-9"
10"x8"	2'-6"	2'-0"



1. THRUST BLOCKS TO BE USED FOR WATER MAIN AND FORCE MAINS AT ALL BENDS, TEES, REDUCERS AND PLUGS.
2. BEARING AREAS FOR THRUST BLOCKS ARE BASED ON THE UNDISTURBED SOIL WITH BEARING CAPACITY OF 2000 POUNDS PER SQ. FT. FOR OTHER SOILS OF LESS BEARING CAPACITY, THE AREAS SHALL BE ADJUSTED ACCORDINGLY, (FIG. 14, ASCE "PIPELINE DESIGN FOR WATER AND WASTEWATER, 1975").
3. ALL CONCRETE FOR THRUST BLOCKS SHALL BE 3000 PSI COMPRESSIVE STRENGTH WITHIN 28 DAYS.
4. THE THRUST BLOCKS SHALL BE POURED FROM FITTING SUCH THAT THEY BEAR ON THE UNDISTURBED WALL OF THE TRENCH.
5. THE TABULATED CONTACT BEARING AREAS LISTED ARE FOR HORIZONTAL AND DOWNWARD THRUST ONLY AND ARE NOT APPLICABLE FOR UPWARD THRUST.

THRUST BLOCK DETAIL FOR SYSTEMS AT 150 PSI TEST PRESSURE OR LESS

N.T.S.



NOTES:

1. TAPPED CONNECTIONS SHALL BE MADE ONLY IN THE PRESENCE OF WATER DEPARTMENT EMPLOYEES OR THEIR DESIGNATED REPRESENTATIVE.
2. CONCRETE THRUST BLOCK UNDER VALVES SHALL HAVE A SOIL BEARING AREA EQUAL TO THAT OF A 45° ELBOW.
3. CONCRETE THRUST BLOCK FOR TAPPING SLEEVE SHALL HAVE A SOIL BEARING AREA EQUAL TO THAT OF A TEE CONNECTION

TAPPING SLEEVE AND VALVE DETAIL

N. T. S.

APPROVED

File No. 0406-03-0001.2

Activity No. LUP250001

Date: 4/22/2025

State of New Jersey

Department of Environmental Protection

Watershed and Land Management

RVE 1901

REMINGTON & VERNICK ENGINEERS

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(856) 795-9595, FAX (856) 795-1882

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Certification of Authorization: 24 GA 28000300

~ENGINEERING EXCELLENCE~

DATE

STEPHANIE A. CUTHBERT

NJ PROFESSIONAL ENGINEER LIC No. 42136

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NO.	REVISION	DATE	BY

DETAILS

SOUTH JERSEY PORT CORP

BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

CAMDEN CITY

CAMDEN COUNTY

NEW JERSEY

DRAWN BY	DESIGN BY	CHECKED BY	SCALE
G.M.	G.M.	S.C.	AS NOTED

DATE: 9.2024

SHEET No.: D-1

JOB No.: 29580024

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