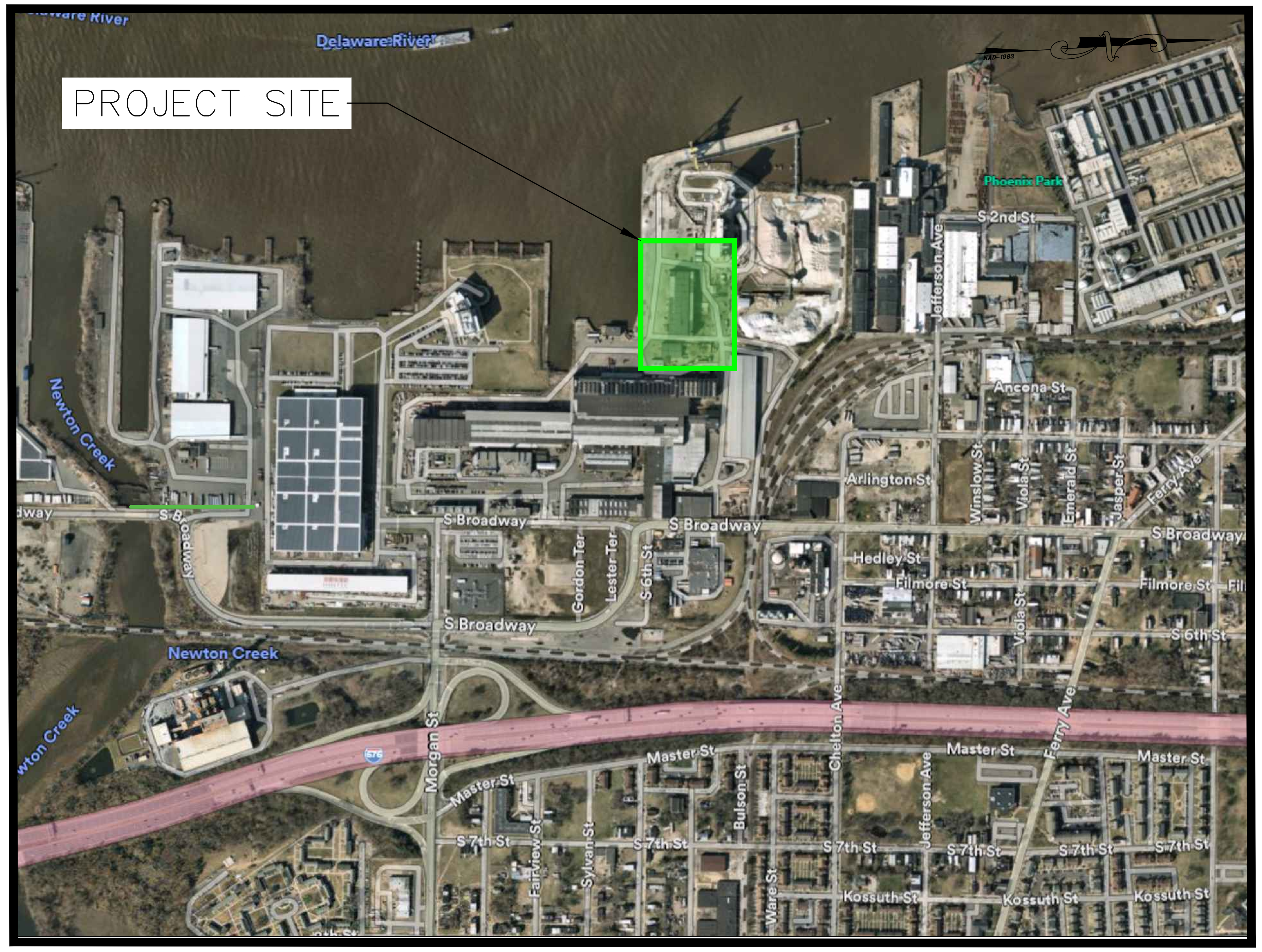
SOUTH JERSEY PORT CORPORATION
BUILDING Y-2 EMERGENCY FIRE MAIN REPAIR

LIST OF UTILITIES AND EMERGENCY CONTACT INFORMATION	
FIRE DEPARTMENT:	**CAMDEN CITY FIRE DEPARTMENT** SQUAD 7 1115 KAIGHN 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 LOCATION MAP
2500 S BROADWAY , CAMDEN, NJ
N.T.S

SHEET INDEX	
SHEET#	**DESCRIPTION**
T-1	TITLE SHEET
G-1	GENERAL NOTES
G-2	LEGEND
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C-2	PROPOSED SITE PLAN PHASE 2
SESC-1	SOIL EROSION AND SEDIMENT CONTROL DETAILS
D-1	DETAILS

New Jersey One Call
CALL BEFORE YOU DIG
811 or 1-800-272-1000
ITS THE LAW
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO CONTACT NJ ONE CALL PRIOR TO THE START OF CONSTRUCTION. CALL FOR MARKOUTS THREE (3) FULL BUSINESS DAYS IN ADVANCE AND BEGIN EXCAVATION WITHIN 10 DAYS. ALL CONTRACTORS ON-SITE MUST HAVE THEIR OWN MARKOUT.

CAMDEN COUNTY, NEW JERSEY
AUGUST 2025

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.

No.	REVISION	DATE	BY	CHK
1	CHANGES REQUESTED BY CLIENT	6/12/25	RG	TM

TITLE SHEET

SOUTH JERSEY PORT CORP
BUILDING Y-2 EMERGENCY FIRE MAIN REPAIR
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. : T-1	
JOB No. : 3965X004			

Z:\Shared\2_OldServers\HQ\Design\CADD Projects\NJ\Camden Co\SJPC\3965X004 - Broadway Terminal Fire Main\CAD\Current DWGs\Y-2 Emergency\T-1 Title Sheet.dwg 8/6/2025 7:53:02 AM

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 ¼" 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.

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

No	REVISION	DATE	BY	CHK
1	CHANGES REQUESTED BY CLIENT	6/12/25	RG	TM

GENERAL NOTES

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
JOB No.: 3965X004
SHEET No.: G-1

STANDARD LEGEND

NOTE: ALL SYMBOLS MAY NOT BE USED

UTILITIES

ITEM	DESCRIPTION	EXISTING	PROPOSED
UTILITIES	OVERHEAD WIRE	OHW	
	SANITARY FORCE MAIN PIPE	FW	FM
	STORM SEWER PIPE ≤12"	D (SIZE & TYPE)	D (SIZE & TYPE)
	STORM SEWER PIPE >12"		
	GAS SERVICE	G	G
	SANITARY SEWER PIPE ≤12"	S (SIZE & TYPE)	S (SIZE & TYPE)
	SANITARY SEWER PIPE >12"		
	ELECTRIC SERVICE	E	E
	FIBER OPTIC SERVICE	FO	FO
	TELEPHONE SERVICE	T	T
	COMMUNICATIONS SERVICE	C	C
	IRRIGATION PIPE	IRR	IRR
	FIRE SERVICE	FIRE	W
	WATER SERVICE	W	W
	WATER SHUT-OFF		WSO
	WATER METER		W.M
	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, WATER, CATV, UNDERDRAIN, 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

ITEM	DESCRIPTION	EXISTING	PROPOSED
SURVEY	BENCHMARK LOCATION	BM X	
	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		(SET)
	IRON PIPE		(SET)
	IRON PIN		
	CROSS CUT		(SET)
	DISK		
	STONE		
	REBAR		
	BASELINE	7+00	8+00
	CENTERLINE		
	EASEMENT		
	RIGHT-OF-WAY		
	PROPERTY BOUNDARY		
	ADJACENT PROPERTY BOUNDARY		
	RAILROAD TRACKS		
	STATE BOUNDARY		
	MUNICIPAL / COUNTY BOUNDARY		

ENVIRONMENTAL

ITEM	DESCRIPTION	EXISTING	PROPOSED
ENVIRONMENTAL	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

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

GRADING

ITEM	DESCRIPTION	EXISTING	PROPOSED
GRADING	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	x3.48	x3.48
	ROADWAY GRADE	TC5.45 GL4.95	TC5.45 GL4.95
	DRAINAGE FLOW		

SITE & ROADWORK

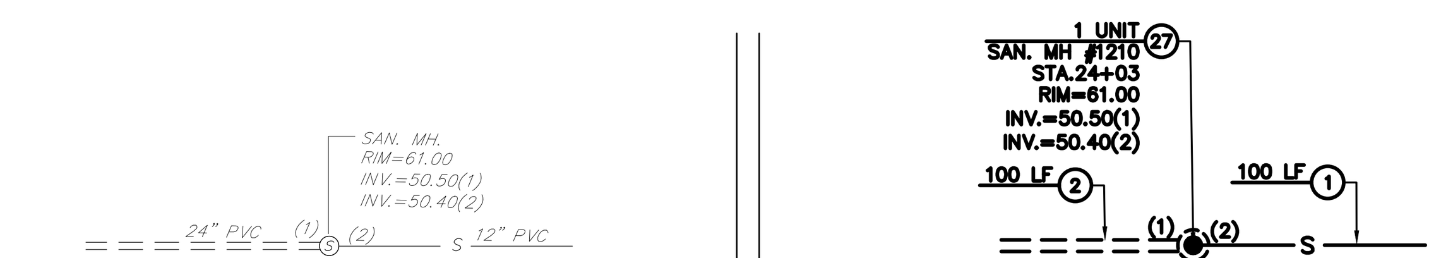
ITEM	DESCRIPTION	EXISTING	PROPOSED
SITE & ROADWORK	EDGE OF PAVEMENT		
	CURB		
	PAVEMENT / CONC. / SIDEWALK	BITUMINOUS/ASPHALT; CONCRETE; BRICK/PAVERS; STONE	CONCRETE SIDEWALK; PAVEMENT, FULL DEPTH RESTORATION; PAVEMENT MILLING; DRIVEWAY RESTORATION, ASPHALT; DRIVEWAY RESTORATION, BRICK; DRIVEWAY RESTORATION, 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	NAD–1983	

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	LSA	LANDSCAPED AREA	R.O.W.	RIGHT OF WAY		
CS	CARBON STEEL	LF	LINEAR FEET	R.R.	RAILROAD		
CF	CUBIC FEET	LST	LANDSCAPE TIE	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				
		P	PIPE				

DRAWING NOMENCLATURE REPRESENTATION



EXISTING CONDITIONS

PROPOSED CONDITIONS

RVE 1901
REMINGTON & VERNICK ENGINEERS
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No.	REVISION	DATE	BY	CHK
1	CHANGES REQUESTED BY CLIENT	6/12/25	RG	TM

LEGEND

SOUTH JERSEY PORT CORP

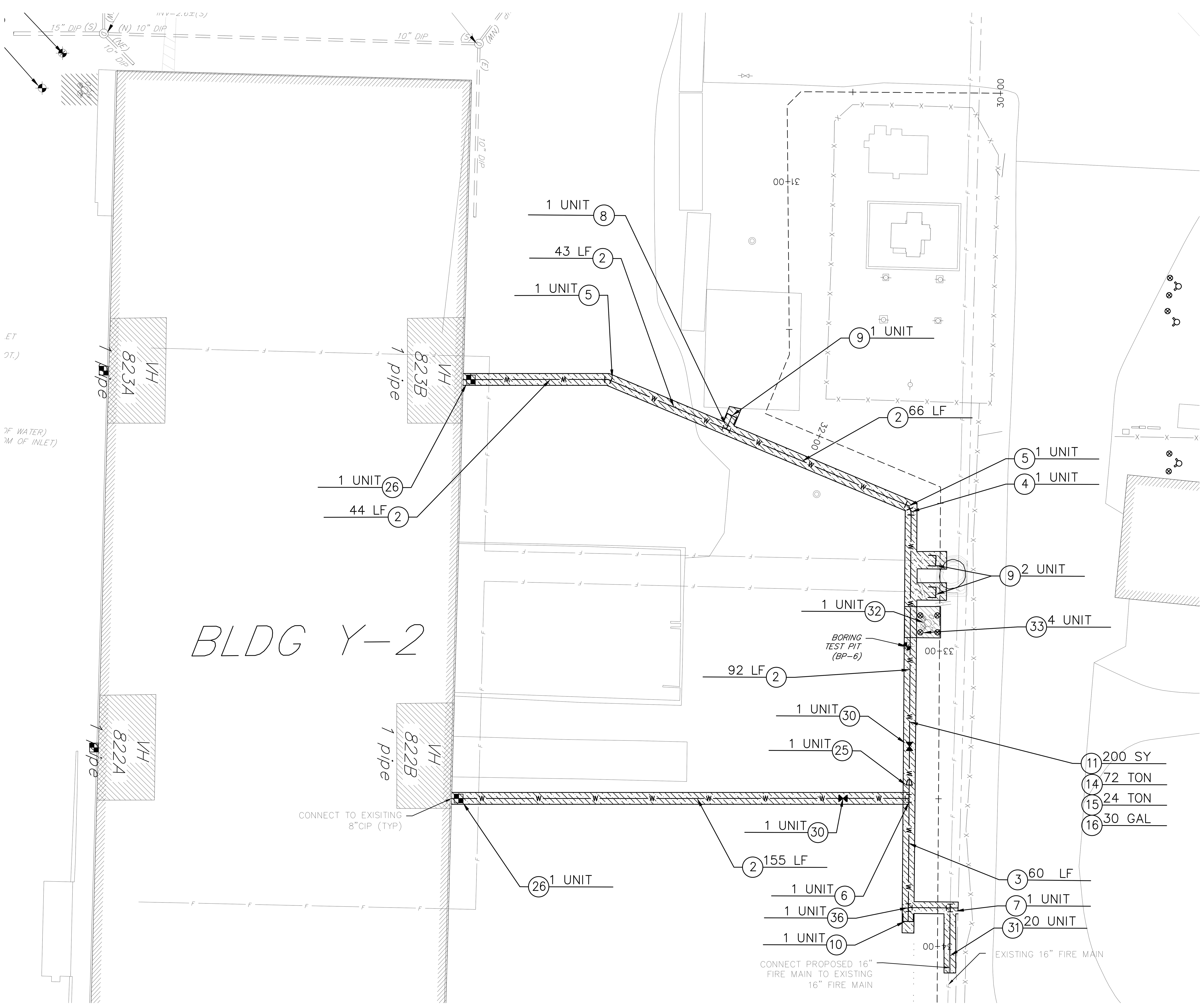
BROADWAY TERMINAL WATER FIRE MAIN REPLACEMENT

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. : G-2	
JOB No. : 3965X004			

Z:\Shared\2_OldServers\HQ\Design\CADD Projects\NJ\Camden Co\SJPC\3965X004 - Broadway Terminal Fire Main\CAD\Current DWGs\General Notes and Legend.dwg 8/6/2025 7:53:09 AM

NJ SPCS NAD-83



PHASE 1

GRAPHIC SCALE

20 0 10 20

(IN FEET)
1 inch = 20 ft.

TO BE CONSTRUCTED

ITEM	DESCRIPTION	UNIT	QTY
2	8" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	400
3	12" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	60
4	8" 22.5 DEGREE MJT RESTRAINED CLDIP FITTING	UN	1
5	8" 45 DEGREE MJT RESTRAINED CLDIP FITTING	UN	2
6	12" X 12" X 8" MJT RESTRAINED CLDIP TEE	UN	1
7	16" X 16" X 12" MJT RESTRAINED CLDIP TEE	UN	1
8	8" X 8" X 8" MJT RESTRAINED CLDIP TEE	UN	1
9	8" MJT RESTRAINED END CAP	UN	3
10	12" MJT RESTRAINED END CAP	UN	1
11	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK	SY	200
14	HOT MIX ASPHALT BASE COURSE, 19M64, 6" THICK	TON	72
15	HOT MIX ASPHALT SURFACE COURSE, 12M64, 2" THICK	TON	24
16	TACK COAT	GAL	30
25	12" X 8" MJT RESTRAINED CLDIP REDUCER	UN	1
26	TEST PITS, INCLUDING RESTORATION	UN	2
30	8" MJT RESTRAINED RESILIENT SEAT GATE VALVE, COMPLETE	UN	2
31	16" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHYLENE	UN	20
32	FURNISH AND INSTALL FIRE HYDRANTS, COMPLETE	UN	1
33	6" STEEL BOLLARDS, FILLED WITH CONCRETE AND PLASTIC COVER	UN	4
36	12" X 12" X 12" MJT RESTRAINED CLDIP TEE	UN	1

CONSTRUCTION NOTES:

1. HATCHING SURROUNDING PROPOSED PIPING INDICATES LIMITS OF DISTURBANCE.
2. THE CONTRACTOR IS TO LOCATE THE EXACT LOCATION OF THE EXISTING FIRE MAINS TO EACH VALVE HOUSE TO DETERMINE EXISTING MATERIAL, SIZE AND REQUIRED CONNECTION FITTING.
3. AFTER SUCCESSFUL PRESSURE TEST BEING PERFORMED, THE CONTRACTOR IS TO REMOVE THE RESTRAINED CAP AND MAKE THE FINAL CONNECTION TO THE EXISTING FIRE MAIN ENTERING THE VALVE HOUSE. NO SEPARATE PAYMENT WILL BE MADE FOR THE CONNECTION, INCLUDING THE CONNECTION FITTING; BUT ALL COSTS ARE TO BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.

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WEB SITE ADDRESS : WWW.RVE.COM
Certification of Authorization: 24 GA 28003300
~ENGINEERING EXCELLENCE~

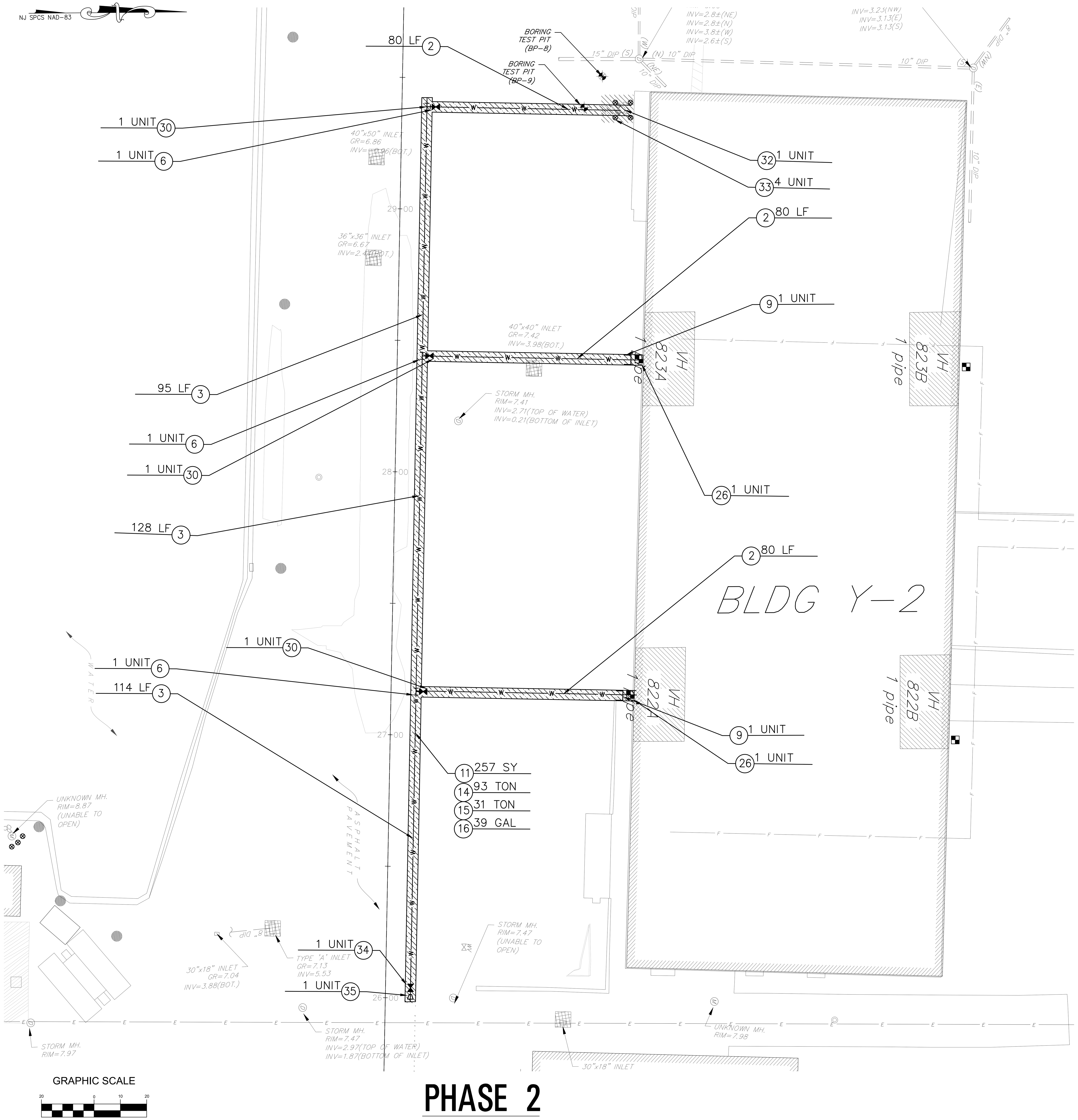
DATE:
STEPHANIE A. CUTHBERT
NJ PROFESSIONAL ENGINEER LIC. No. 42136

No.	REVISION	DATE	BY	CHK
1	CHANGES REQUESTED BY CLIENT	6/12/25	RG	TM

PROPOSED SITE PLAN

SOUTH JERSEY PORT CORP
BUILDING Y-2 EMERGENCY FIRE MAIN REPAIR
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.: C-1	
JOB No.: 3965X004			



PHASE 2

TO BE CONSTRUCTED

ITEM	DESCRIPTION	UNIT	QTY
2	8" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	240
3	12" CLASS 52 DUCTILE IRON PIPE, WRAPPED IN POLYETHELENE	LF	337
6	12" X 12" X 8" MJT RESTRAINED CLDIP TEE	UN	3
9	8" MJT RESTRAINED END CAP	UN	2
11	DENSE GRADED AGGREGATE BASE COURSE, 6" THICK	SY	257
14	HOT MIX ASPHALT BASE COURSE, 19M64, 6" THICK	TON	93
15	HOT MIX ASPHALT SURFACE COURSE, 12M64, 2" THICK	TON	31
16	TACK COAT	GAL	39
26	TEST PITS, INCLUDING RESTORATION	UN	2
30	8" MJT RESTRAINED RESILIENT SEAT GATE VALVE, COMPLETE	UN	3
32	FURNISH AND INSTALL FIRE HYDRANTS, COMPLETE	UN	1
33	6" STEEL BOLLARDS, FILLED WITH CONCRETE AND PLASTIC COVER	UN	4
34	12" MJT RESTRAINED RESILIENT SEAT GATE VALVE, COMPLETE	UN	1
35	16" X 12" MJT RESTRAINED CLDIP REDUCER	UN	1

CONSTRUCTION NOTES:

1. HATCHING SURROUNDING PROPOSED PIPING INDICATES LIMITS OF DISTURBANCE.
2. THE CONTRACTOR IS TO LOCATE THE EXACT LOCATION OF THE EXISTING FIRE MAINS TO EACH VALVE HOUSE TO DETERMINE EXISTING MATERIAL, SIZE AND REQUIRED CONNECTION FITTING.
3. AFTER SUCCESSFUL PRESSURE TEST BEING PERFORMED, THE CONTRACTOR IS TO REMOVE THE RESTRAINED CAP AND MAKE THE FINAL CONNECTION TO THE EXISTING FIRE MAIN ENTERING THE VALVE HOUSE. NO SEPARATE PAYMENT WILL BE MADE FOR THE CONNECTION, INCLUDING THE CONNECTION FITTING; BUT ALL COSTS ARE TO BE INCLUDED IN THE VARIOUS ITEMS OF THE PROPOSAL.

RVE 1901
REMINGTON & VERNICK ENGINEERS
2059 SPRINGDALE ROAD
CHERRY HILL, NJ 08003
(856) 795-9595, FAX (856) 795-1882
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STEPHANIE A. CUTHBERT
NJ PROFESSIONAL ENGINEER LIC. No. 42136

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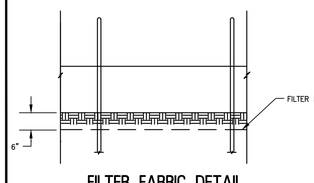
PROPOSED SITE PLAN PHASE 2

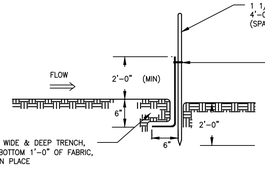
SOUTH JERSEY PORT CORP

BUILDING Y-2 EMERGENCY FIRE MAIN REPAIR

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.: C-2	
JOB No.: 3965X004			





SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES TO BE INSTALLED PRIOR TO ANY MAJOR SOIL DISTURBANCES, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED 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 10 DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. 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 VEGETATION TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING. MULCH WILL BE USED FOR PROTECTION UNTIL SEEDING IS ESTABLISHED.
4. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING 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 OF PRELIMINARY GRADING.
5. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E.: STEEP SLOPES, ROADWAY EMBANKMENTS) WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AT A RATE OF TWO (2) TONS PER ACRE.
6. ANY STEEP SLOPE RECEIVING PIPELINE INSTALLATION WILL BE BACKFILLED AND STABILIZED DAILY AS THE INSTALLATION PROCEEDS (I.E.: SLOPES GREATER THAN 3:1).
7. TRAFFIC CONTROL STANDARDS REQUIRE THE INSTALLATION OF A 50'X 30'X 1' PAD OF 1-1/2" TO 2" STONE AT ALL CONSTRUCTION DRIVEWAYS IMMEDIATELY AFTER INITIAL SITE DISTURBANCE. A CRUSHED STONE TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ENTRANCE EXISTS. THE RIP-RAP PAD MUST BE 50' IN LENGTH; THE STONE MUST BE 1.5"-4" IN SIZE, PLACED 12" THICK AND THE FULL WIDTH OF THE ENTRANCE. IT SHOULD BE UNDERLINED 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 COVERED WITH A MINIMUM OF 12 INCHES OF SOIL HAVING A PH OF 5 OR MORE PRIOR TO SEEDBED PREPARATION.
9. THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
10. AT THE TIME WHEN THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE ACCOMPLISHED, ANY SOIL THAT WILL NOT PROVIDE A SUITABLE ENVIRONMENT TO SUPPORT ADEQUATE VEGETATIVE GROUND COVER, SHALL BE REMOVED OR TREATED IN SUCH A WAY THAT WILL PERMANENTLY ADJUST THE SOIL CONDITIONS AND RENDER IT SUITABLE FOR VEGETATIVE GROUND COVER. IF THE REMOVAL OR TREATMENT OF THE SOIL WILL NOT PROVIDE SUITABLE CONDITION, NON-VEGETATIVE MEANS OF GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
11. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
12. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE 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. THE CONTRACTOR SHALL BE 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 AROUND INDIVIDUAL LOTS IN SUBDIVISIONS, WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT 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 SEEDBED 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 OF 10-20-10 OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDES) AS FOLLOWS:

SOIL TEXTURE	TONS/ACRE	LBS./1000 SQ. FT.
CLAY, CLAY LOAM, AND HIGH ORGANIC SOIL	3	135
SANDY LOAM, LOAM, SILT LOAM	2	90
LOAMY SAND, SAND	1	45

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 DISC, SPRINGTOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE 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, CULTIPACKER SEEDER, OR HYDROSEEDER. MULCH SHALL NOT BE INCLUDED IN A HYDROSEEDER TANK WITH SEED. SEED SHALL BE INCORPORATED INTO THE SOIL BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COURSE TEXTURED SOIL.
   - C. AFTER SEEDING, FIRMING THE SOIL SHALL BE PERFORMED WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE.
4. MULCHING

   MULCHING IS REQUIRED ON ALL SEEDING.
   - A. MULCH MATERIALS SHOULD BE UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MATERIAL.
   - B. SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75% TO 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
   - C. 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, STEEPNESS OF SLOPES, AND COSTS.
     1. PEG AND TWINE- DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE MULCH TO SOIL SURFACE BY STRETCHING TWINE BETWEEN PEGS IN A CRISSCROSS AND A 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. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
     3. CRIMPER (MULCH ANCHORING TOOL)- A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
   - D. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 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

THIS 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. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	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. 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 SEEDBED PREPARATION, SEEDING, MULCH APPLICATION, AND MAINTENANCE.
   - 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 OF 10-20-10 OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50% 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 DISC, SPRING TOOTH HARROW, OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OR DISCING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEEDBED IS PREPARED. ALL BUT CLAY OR SILTY SOILS AND COURSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.
   - C. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS, OR OTHER UNSUITABLE MATERIAL.
   - D. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.
3. SEEDING
   - A. SEE PERMANENT SEED MIXTURE FOR SPECIES AND APPLICATION RATES.
   - B. APPLY SEED UNIFORMLY BY HAND, CYCLONE (CENTRIFUGAL) SEEDER, DROP SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER. MULCH SHALL NOT BE INCLUDED IN A HYDROSEEDER TANK WITH SEED. EXCEPT FOR DRILLED, HYDROSEEDED OR CULTIPACKED SEEDING, SHALL BE INCORPORATED INTO THE SOIL, TO A DEPTH OF 1/4 TO 1/2 INCH, BY RAKING OR DRAGGING. DEPTH OF SEED PLACEMENT MAY BE 1/4 INCH DEEPER ON COURSE TEXTURED SOIL.
   - C. AFTER SEEDING, FIRMING THE SOIL SHALL BE PERFORMED WITH A CORRUGATED ROLLER WILL ASSURE GOOD SEED-TO-SOIL CONTACT, RESTORE CAPILLARITY, AND IMPROVE SEEDING EMERGENCE.
4. MULCHING

   MULCHING IS REQUIRED ON ALL SEEDING.
   - A. MULCH MATERIALS SHOULD BE UNROTTED SMALL GRAIN STRAW, HAY FREE OF SEEDS, OR SALT HAY TO BE APPLIED AT THE RATE OF 1 1/2 TO 2 TONS PER ACRE (70 TO 90 POUNDS PER 1,000 SQUARE FEET), EXCEPT THAT WHERE A CRIMPER IS USED INSTEAD OF A LIQUID MULCH-BINDER (TACKIFYING OR ADHESIVE AGENT), THE RATE OF APPLICATION MUST BE DOUBLE THE LOWER RATE. MULCH CHOPPER-BLOWERS MUST NOT GRIND THE MATERIAL.
   - B. SPREAD UNIFORMLY BY HAND OR MECHANICALLY SO THAT APPROXIMATELY 75% TO 95% OF THE SOIL SURFACE WILL BE COVERED. FOR UNIFORM DISTRIBUTION OF HAND-SPREAD MULCH, DIVIDE AREA INTO APPROXIMATELY 1,000 SQUARE FEET SECTIONS AND DISTRIBUTE 70 TO 90 POUNDS WITHIN EACH SECTION.
   - C. 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, STEEPNESS OF SLOPES, AND COSTS.
     1. PEG AND TWINE- DRIVE 8 TO 10 INCH WOODEN PEGS TO WITHIN 2 TO 3 INCHES OF THE SOIL SURFACE EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER APPLYING MULCH. SECURE 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. USE A DEGRADABLE NETTING IN AREAS TO BE MOWED.
     3. CRIMPER (MULCH ANCHORING TOOL)- A TRACTOR-DRAWN IMPLEMENT, SOMEWHAT LIKE A DISC HARROW, ESPECIALLY DESIGNED TO PUSH OR CUT SOME OF THE BROADCAST LONG FIBER MULCH 3 TO 4 INCHES INTO THE SOIL SO AS TO ANCHOR IT AND LEAVE PART STANDING UPRIGHT. THIS TECHNIQUE IS LIMITED TO AREAS TRAVERSABLE BY A TRACTOR, WHICH MUST OPERATE ON THE CONTOUR OF SLOPES. STRAW MULCH RATE MUST BE 3 TONS PER ACRE. NO TACKIFYING OR ADHESIVE AGENT IS REQUIRED.
   - D. WOOD-FIBER OR PAPER-FIBER MULCH AT THE RATE OF 1,500 POUNDS PER ACRE MAY BE APPLIED BY A HYDROSEEDER. USE IS LIMITED TO FLATTER SLOPES AND DURING OPTIMUM SEEDING PERIODS IN SPRING AND FALL.
5. IRRIGATION
   - A. IF SOIL MOISTURE IS DEFICIENT, SUPPLY NEW SEEDINGS WITH ADEQUATE WATER (A MINIMUM OF 1/4 INCH TWICE A DAY UNTIL VEGETATION IS WELL ESTABLISHED). THIS IS ESPECIALLY TRUE WHEN SEEDINGS ARE PERFORMED IN ABNORMALLY DRY OR HOT WEATHER OR ON DROUGHTY SITES.
6. TOP DRESSING *
   - A. SPRING SEEDING WILL REQUIRE AN APPLICATION OF FERTILIZER SUCH AS 10-10-10 OR EQUIVALENT AT 400 POUNDS PER ACRE OR 10 POUNDS PER 1,000 SQUARE FEET BETWEEN SEPTEMBER 1 AND OCTOBER 15.
   - B. FALL SEEDING WILL REQUIRE THE ABOVE BETWEEN MARCH 15 AND MAY 1.
   - C. MIXTURES DOMINATED BY WEEPING LOVEGRASS OR LEGUMES MAY NOT NEED TOPDRESSING.

   * IF SLOW RELEASE NITROGEN (300 POUNDS 38-0-0 PER ACRE OR EQUIVALENT) IS USED IN ADDITION TO SUGGESTED FERTILIZER, THIS FOLLOW-UP OF TOP DRESSING IS NOT MANDATORY.

PERMANENT SEEDING MIXTURE (DRY)

THIS SEEDING MIXTURE IS COMPOSED OF DROUGHT-TOLERANT SPECIES WHICH CAN THRIVE WITH LOW MAINTENANCE. THE PROPRIETARY NAME OF THE MIXTURE IS RECLAIM CONSERVATION MIX-DRY FORMULA AS MANUFACTURED BY LOFTS, INC., BOUND BROOK, N.J. 08805, (800)526-3890. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	COMMON NAME	BOTANICAL NAME
40	CLEMFINE TALL FESCUE	FESTUCA ARUNDINACEA "CLEMFINE"
20	WEEPING LOVEGRASS	ERAGRASTIS CURVULA
15	RELIANT HARD FESCUE	FESTUCA LONGIFOLIA "RELIANT"
10	JAMESTOWN CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA "JAMESTOWN"
10	PALMER PERENNIAL RYE	LOLIUM PERENNE "PALMER"
5	WHITE CLOVER	TRIFOLIUM REPENS
5	BLACKWELL SWITCHGRASS	PANICUM VIRGATUM "BLACKWELL"

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. SUMMER SEEDING SHALL BE PERFORMED ONLY IF ADEQUATE IRRIGATION IS PROVIDED TO ENSURE SUCCESSFUL GERMINATION.

PERMANENT SEEDING MIXTURE (MOIST)

THIS SEEDING MIXTURE IS COMPOSED OF MOISTURE-TOLERANT SPECIES WHICH CAN THRIVE WITH LOW MAINTENANCE. THE PROPRIETARY NAME OF THE MIXTURE IS RECLAIM CONSERVATION MIX-MOIST FORMULA AS MANUFACTURED BY LOFTS, INC., BOUND BROOK, N.J. 08805, (800)526-3890. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	COMMON NAME	BOTANICAL NAME
55	CLEMFINE TALL FESCUE	FESTUCA ARUNDINACEA "CLEMFINE"
15	NASSAU KENTUCKY BLUEGRASS	POA PRATENSIS "NASSAU"
10	PALMER PERENNIAL RYE	LOLIUM PERENNE "PALMER"
10	LASER POA TRIVIALIS	POA TRIVIALIS "LASER"
5	STREAKER REDTOP	AGROSTIS ALBA "STREAKER"
5	REED CANARY GRASS	PHLARIS ARUNDINACEA

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FIVE (5) POUNDS/1000 SQUARE FEET OR 220 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.

PINELANDS SEEDING MIXTURE (DRY)

THIS SEEDING MIXTURE IS COMPOSED OF DROUGHT-TOLERANT SPECIES WHICH CAN THRIVE IN THE ACIDIC SOIL CONDITIONS COMMONLY FOUND IN THE PINELANDS. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	COMMON NAME	BOTANICAL NAME
65	ARID TALL FESCUE	FESTUCA ARUNDINACEA "ARID"
20	RELIANT HARD FESCUE	FESTUCA LONGIFOLIA "RELIANT"
15	JAMESTOWN CHEWINGS FESCUE	FESTUCA RUBRA VAR. COMMUTATA "JAMESTOWN"

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FIVE (5) POUNDS/1000 SQUARE FEET OR 220 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.

PINELANDS SEEDING MIXTURE (MOIST)

THIS SEEDING MIXTURE IS COMPOSED OF SPECIES WITH A HIGH DEGREE OF MOISTURE TOLERANCE WHICH CAN THRIVE IN THE ACIDIC SOIL CONDITIONS COMMONLY FOUND IN THE PINELANDS. A MIXTURE OF EQUAL QUALITY MAY BE SUBSTITUTED IF APPROVED BY OUR OFFICE.

%	COMMON NAME	BOTANICAL NAME
55	REBEL 2 TALL FESCUE	FESTUCA ARUNDINACEA "REBEL 2"
25	STREAKER REDTOP	AGROSTIS ALBA "STREAKER"
15	RED FESCUE	FESTUCA RUBRA
5	SWITCHGRASS	PANICUM VIRGATUM "BLACKWELL"

THE MINIMUM APPLICATION RATE FOR THIS SEEDING MIXTURE SHALL BE FIVE (5) POUNDS/1000 SQUARE FEET OR 220 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.

TOP SOILING

TOPSOIL SHOULD BE USED WHERE SOILS ARE: SANDS, GRAVELY SOILS, CLAYS, SILTY CLAYS, VERY SHALLOW, OR WHERE THEY ARE EXTREMELY ACID (LESS THAN pH 4.0) OR SALTY (CONDUCTIVITY GREATER THAN 1.0 MILLIMHOS PER CENTIMETER); OR WHERE 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, AND CONTAIN NO TOXIC SUBSTANCE THAT MAY BE HARMFUL TO PLANT GROWTH. A pH RANGE OF 5.0-7.5 IS ACCEPTABLE. SOLUBLE SALTS SHOULD NOT BE EXCESSIVE (CONDUCTIVITY LESS THAN 0.5 MILLIMHOS PER CENTIMETER). TOPSOIL HAULED IN FROM OFF SITE SHOULD HAVE A MINIMUM ORGANIC MATTER CONTENT OF 2.75 PERCENT. ORGANIC MATTER CONTENT MAY BE RAISED BY ADDITIVES.
2. STRIPPING AND STOCKPILING
   - A. FIELD EXPLORATION SHOULD BE MADE TO DETERMINE WHETHER QUANTITY AND/OR QUALITY OF SURFACE SOIL JUSTIFIES STRIPPING.
   - B. STRIPPING SHOULD BE CONFINED TO THE IMMEDIATE CONSTRUCTION AREA.
   - C. WHERE FEASIBLE, LIME MAY BE APPLIED BEFORE STRIPPING AT A RATE DETERMINED BY SOIL TESTS TO BRING THE SOIL pH TO 6.5. IN LIEU OF SOIL TESTS, SEE LIME RATE GUIDE IN SEEDBED PREPARATION FOR PERMANENT VEGETATIVE COVER.
   - D. A 4-6 INCH STRIPPING DEPTH IS COMMON, BUT MAY VARY DEPENDING ON THE PARTICULAR SOIL.
   - E. STOCKPILES OF TOPSOIL SHOULD BE SITUATED SO AS NOT TO OBSTRUCT NATURAL DRAINAGE OR CAUSE OFF-SITE ENVIRONMENTAL DAMAGE.
   - F. STOCKPILES SHOULD BE VEGETATED IN ACCORDANCE WITH TEMPORARY SEEDING STANDARDS PREVIOUSLY DESCRIBED HEREIN.
3. SITE PREPARATION
   - A. GRADE AS NEEDED AND FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH APPLICATION AND ANCHORING, AND MAINTENANCE.
   - B. SUBSOIL SHOULD BE TESTED FOR LIME REQUIREMENT AND LIMESTONE, IF NEEDED, SHOULD BE APPLIED TO BRING SOIL pH TO 6.5 AND INCORPORATED INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES.
   - C. IMMEDIATELY PRIOR TO TOPSOIL DISTRIBUTION, THE SURFACE SHOULD BE SCARIFIED TO PROVIDE A GOOD BOND WITH THE TOPSOIL.
   - D. EMPLOY NEEDED EROSION CONTROL PRACTICES SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, CHANNEL STABILIZATION MEASURES, SEDIMENTATION BASINS, AND WATERWAYS.
4. APPLYING TOPSOIL
   - A. TOPSOIL SHOULD BE HANDLED ONLY WHEN IT IS DRY ENOUGH TO WORK WITHOUT DAMAGING SOIL STRUCTURE; I.E., LESS THAN FIELD CAPACITY.
   - B. A UNIFORM APPLICATION TO A DEPTH OF 5 INCHES (UNSETTLED) IS RECOMMENDED. SOILS WITH A pH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE SHALL BE COVERED WITH A MINIMUM DEPTH OF 12 INCHES OF SOIL HAVING A pH OF 5.0 OR MORE.

CAMDEN COUNTY SOIL EROSION & SEDIMENT CONTROL NOTES:

1. ALL APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATION AND/OR INSTALLATION OF PROPOSED STRUCTURES OR UTILITIES.
2. SOIL EROSION AND SEDIMENT CONTROL PRACTICES ON THIS PLAN SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY.
3. APPLICABLE EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE LEFT IN PLACE UNTIL CONSTRUCTION IS COMPLETED AND/OR THE AREA IS STABILIZED.
4. THE CONTRACTOR SHALL PERFORM ALL WORK, FURNISH ALL MATERIALS AND INSTALL ALL MEASURES REQUIRED TO REASONABLY CONTROL SOIL EROSION RESULTING FROM CONSTRUCTION OPERATIONS AND PREVENT EXCESSIVE FLOW OF SEDIMENT FROM THE CONSTRUCTION SITE.
5. ANY DISTURBED AREA THAT IS TO BE LEFT EXPOSED FOR MORE THAN TEN (10) DAYS AND NOT SUBJECT TO CONSTRUCTION TRAFFIC SHALL IMMEDIATELY RECEIVE A TEMPORARY SEEDING AND FERTILIZATION IN ACCORDANCE WITH THE NEW JERSEY STANDARDS AND THEIR RATES SHOULD BE INCLUDED IN THE NARRATIVE. IF THE SEASON PROHIBITS TEMPORARY SEEDING, THE DISTURBED AREAS WILL BE MULCHED WITH SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BINDER).
6. IT SHALL BE TI-IE RESPONSIBILITY OF THE DEVELOPER TO PROVIDE CONFIRMATION OF LIME, FERTILIZER AND SEED APPLICATION AND RATES OF APPLICATION AT THE REQUEST OF THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT.
7. ALL CRITICAL AREAS SUBJECT TO EROSION WILL RECEIVE A TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH AT A RATE OF 2 TONS PER ACRE, ACCORDING TO THE NEW JERSEY STANDARDS IMMEDIATELY FOLLOWING ROUGH GRADING.
8. THE SITE SHALL AT ALL TIMES BE GRADED AND MAINTAINED SUCH THAT ALL STORMWATER RUNOFF IS DIVERTED TO SOIL EROSION AND SEDIMENT CONTROL FACILITIES.
9. ALL SEDIMENTATION STRUCTURES WILL BE INSPECTED AND MAINTAINED ON A REGULAR BASIS AND AFTER EVERY STORM EVENT.
10. A CRUSHED STONE, TIRE CLEANING PAD WILL BE INSTALLED WHEREVER A CONSTRUCTION ACCESS EXISTS. TILE STABILIZED PAD WILL BE INSTALLED ACCORDING TO THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS
11. ALL DRIVEWAYS MUST BE STABILIZED WITH 2 ' CRUSHED STONE OR SUBBASE PRIOR TO INDIVIDUAL LOT CONSTRUCTION.
12. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
13. ALL CATCH BASIN INLETS WILL BE PROTECTED ACCORDING TO THE CERTIFIED PLAN.
14. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED, AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
15. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA. THE SEDIMENT FILTER SHOULD BE COMPOSED OF A SUITABLE SEDIMENT FILTER FABRIC. (SEE DETAIL) THE BASIN MUST BE DEWATERED TO NORMAL POOL WITHIN 10 DAYS OF THE DESIGN STORM.
16. NJSA 4:24-39, ET SEQ. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE ALL PROVISIONS OF TIIE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK FOR THE PROJECT MUST BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE AS A PREREQUISITE TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY. MULCHING IS REQUIRED ON ALL SEEDED AREAS TO INSURE AGAINST EROSION BEFORE GRASS IS ESTABLISHED TO PROMOTE EARLIER VEGETATION COVER.
17. OFFSITE SEDIMENT DISTURBANCE MAY REQUIRE ADDITIONAL CONTROL MEASURES TO BE DETERMINED BY THE EROSION CONTROL INSPECTOR.
18. A COPY OF THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLAN MUST BE MAINTAINED ON THE PROJECT SITE DURING CONSTRUCTION.
19. THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED 72 HOURS PRIOR TO ANY LAND DISTURBANCE.
20. ANY CONVEYANCE OF THIS PROJECT PRIOR TO ITS COMPLETION WILL TRANSFER FULL RESPONSIBILITY FOR COMPLIANCE WITH THE CERTIFIED PLAN TO ANY SUBSEQUENT OWNERS.
21. IMMEDIATELY AFTER THE COMPLETION OF STRIPPING AND STOCKPILING OF TOPSOIL, THE STOCKPILE MUST BE STABILIZED ACCORDING TO THE STANDARD FOR TEMPORARY VEGETATIVE COVER. STABILIZE TOPSOIL PILE WITH STRAW MULCH FOR PROTECTION IF TEE SEASON DOES NOT PERMIT THE APPLICATION AND ESTABLISIIMENT OF TEMPORARY SEEDING. ALL SOIL STOCKPILES ARE NOT TO BE LOCATED WITHIN FIFTY (50) FEET OF A FLOODPLAIN, SLOPE, ROADWAY OR DRAINAGE FACILITY AND THE BASE MUST BE PROTECTED WITH A SEDIMENT BARRIER.
22. ANY CHANGES TO THE SITE PLAN WILL REQUIRE THE SUBMISSION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN TO THE CAMDEN COUNTY SOIL CONSERVATION DISTRICT. THE REVISED PLAN MUST BE IN ACCORDANCE WITH TILE CURRENT NEW JERSEY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
23. METHODS FOR THE MANAGEMENT OF 11101-1 ACID PRODUCING SOILS SHALL BE IN ACCORDANCE WITH THE STANDARDS. HIGH ACID PRODUCING SOILS ARE THOSE FOUND TO CONTAIN IRON SULFIDES OR HAVE A pH OF 4 OR LESS.
24. TEMPORARY AND PERMANENT SEEDING MEASURES MUST BE APPLIED ACCORDING TO THE NEW JERSEY STANDARDS, AND MULCHED WITI I SALT HAY OR EQUIVALENT AND ANCHORED IN ACCORDANCE WITH THE NEW JERSEY STANDARDS (I.E. PEG AND TWINE, MULCH NETTING OR LIQUID MULCH BENDER),
25. MAXIMUM SIDE SLOPES OF ALL EXPOSED SURFACES SHALL NOT BE CONSTRUCTED STEEPER THAN 3:1 UNLESS OTHERWISE APPROVED BY THE DISTRICT.
26. DUST IS TO BE CONTROLLED BY AN APPROVED METHOD ACCORDING TO THE NEW JERSEY STANDARDS AND MAY INCLUDE WATER.
27. ADJOINING PROPERTIES SHALL BE PROTECTED FROM EXCAVATION AND FILLING OPERATIONS ON THE PROPOSED SITE.
28. USE STAGED CONSTRUCTION METHODS TO MINIMIZE EXPOSED SURFACES, WHERE APPLICABLE.
29. ALL VEGETATIVE MATERIAL SHALL BE SELECTED IN ACCORDANCE WITH AMERICAN STANDARDS FOR NURSERY STOCK OF THE AMERICAN ASSOCIATION OF THE NURSERYMEN AND IN ACCORDANCE WITH THE NEW JERSEY STANDARDS.
30. NATURAL VEGETATION AND SPECIES SHALL BE RETAINED WHERE SPECIFIED ON THE LANDSCAPE PLAN.
31. THE SOIL EROSION INSPECTOR MAY REQUIRE ADDITIONAL SOIL EROSION MEASURES TO BE INSTALLED, AS DIRECTED BY THE DISTRICT INSPECTOR.

THIS PLAN TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL PURPOSES ONLY!

SPECIAL NOTES

1. TEMPORARY STABILIZATION – ALL EXPOSED AREAS NOT TO BE CONSTRUCTED UPON WITHIN 10 DAYS SHOULD RECEIVE TEMPORARY STABILIZATION. THE TEMPORARY SEEDING MIXTURES SHALL BE ANNUAL RYE GRASS AT A RATE OF 4 POUND PER 1000 SQ. FT. AND LIMED AT A RATE OF 45 LBS. PER 1000 SQ. FT.
2. PERMANENT STABILIZATION – ALL EXPOSED AREAS WHICH ARE TO BE PERMANENTLY VEGETATED SHOULD BE SEEDED WITHIN 10 DAYS OF FINAL GRADING, ACCORDING TO THE PERMANENT SEEDING SPECIFICATIONS.
3. EVERY EFFORT SHALL BE MADE TO PREVENT AND CORRECT PROBLEMS ASSOCIATED WITH EROSION AND SEDIMENTATION WHICH COULD OCCUR DURING AND AFTER PROJECT CONSTRUCTION. AT A MINIMUM, THE FOLLOWING EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE FOLLOWED:
4. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO ANY GRADING OPERATIONS OR CONSTRUCTION OF PROPOSED FACILITIES AND SHALL BE MAINTAINED UNTIL CONSTRUCTION IS COMPLETE AND THE CONSTRUCTION AREA IS STABILIZED. AFTER RESTORATION IS COMPLETE, TEMPORARY CONTROL MEASURES SHALL BE REMOVED AND DISPOSED OF PROPERLY.
5. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY," PREPARED BY THE NEW JERSEY STATE SOIL CONSERVATION COMMITTEE," 1999, INCORPORATED HEREIN BY REFERENCE, AS AMENDED AND SUPPLEMENTED. COPIES OF THE "STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY" ARE AVAILABLE FOR A FEE FROM THE NEW JERSEY DEPARTMENT OF AGRICULTURE, SOIL CONSERVATION COMMITTEE, OR FROM THE OFFICE OF ANY OF THE 16 LOCAL CONSERVATION DISTRICTS.

DUST CONTROL

IN ORDER TO CONTROL DUST, AS OFTEN AS REQUIRED DURING EACH WORKING DAY, AND PARTICULARLY PRIOR TO THE CONCLUSION OF EACH WORKING DAY AREAS UNDER IMMEDIATE CONSTRUCTION (INCLUDING ACCESS ROADS AND OTHER AREAS AFFECTED THEREBY) SHALL BE SWEPT AND WET DOWN WITH WATER SUFFICIENTLY TO LAY DUST. IN ADDITION THESE AREAS SHALL BE WET DOWN DURING NON-WORKING HOURS (INCLUDING WEEKENDS) AS OFTEN AS REQUIRED TO KEEP THE DUST UNDER CONTROL. THE USE OF CALCIUM CHLORIDE OR PETROLEUM PRODUCTS OR OTHER CHEMICALS FOR DUST CONTROL IS PROHIBITED.

TOTAL AREA OF DISTURBANCE: < 32,000 SQFT.

FILTER FABRIC DETAIL OR APPROVED EQUAL

N.T.S.

EMBEDDING DETAIL

N.T.S.

LEGEND

HAYBALES (TYPICAL)	▨
INLET PROTECTION (TYPICAL)	▨
SILT FENCE (TYPICAL)	—— SF —— SF ——
LIMIT OF DISTURBANCE (TYPICAL)	—— — ——

STABILIZED CONSTRUCTION ENTRANCE

(SEE PLAN FOR WIDTH)

N.T.S.

INSTALLATION/EMBEDDING DETAIL

N.T.S.

NOTE:

BAG MUST BE LOCATED AWAY FROM RECEIVING WATERS AND/OR CONSTRUCTION ACTIVITIES

BAGS MUST BE DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS. BAGS MAY NOT BE REUSED.

SEDIMENT CONTROL BAG FOR DEWATERING

N.T.S.

OUTLET PROTECTION

N.T.S.

INLET SEDIMENT PROTECTION STRUCTURE

N.T.S.

TREE PROTECTION DURING CONSTRUCTION

N.T.S.

NOTE: TO BE UTILIZED FOR ANY ANTICIPATED DISTURBANCE.

CONSTRUCTION SPECIFICATIONS:

1. PIT DIMENSIONS ARE VARIABLE. WITH THE MINIMUM DIAMETER BEING 2 TIMES THE STANDPIPE DIAMETER.
2. THE STANDPIPE SHOULD BE CONSTRUCTED BY PERFORATING A 12" TO 24" DIAMETER CORRUGATED OR PVC PIPE. THEN WRAPPING WITH 1/2" HARDWARE CLOTH AND GEOTEXTILE FABRIC. THE PERFORATIONS SHALL BE 1/2"x6" SLITS OR 1" DIAMETER HOLES.
3. A BASE OF FILTER MATERIAL CONSISTING OF CLEAN GRAVEL OR ASTM C33 STONE SHOULD BE PLACED IN THE BOTTOM 12" OF THE PIT. AFTER INSTALLING THE STANDPIPE, THE PIT SURROUNDING THE STANDPIPE SHOULD THEN BE BACKFILLED WITH THE SAME FILTER MATERIAL.
4. THE STANDPIPE SHOULD EXTEND 12" TO 18" ABOVE THE LIP OF THE PIT OR THE RISER CREST ELEVATION (BASIN DEWATERING ONLY) AND THE FILTER MATERIAL SHOULD EXTEND 3" MINIMUM ABOVE THE ANTICIPATED STANDING WATER ELEVATION.
5. LOCATE AS REQUIRED (REMOVABLE PUMPING STATION)
6. PITS MAY BE RELOCATED TO OPTIMIZE USE, BUT DISCHARGE LOCATION CHANGES MUST BE COORDINATED WITH CAMDEN COUNTY SOIL CONSERVATION DISTRICT. SEDIMENT CONTROL BAGS MAY NOT BE REUSED AND MUST BE LOCATED AWAY FROM CONSTRUCTION ACTIVITIES AND DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS.

DEWATERING DETAIL

N.T.S.

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.

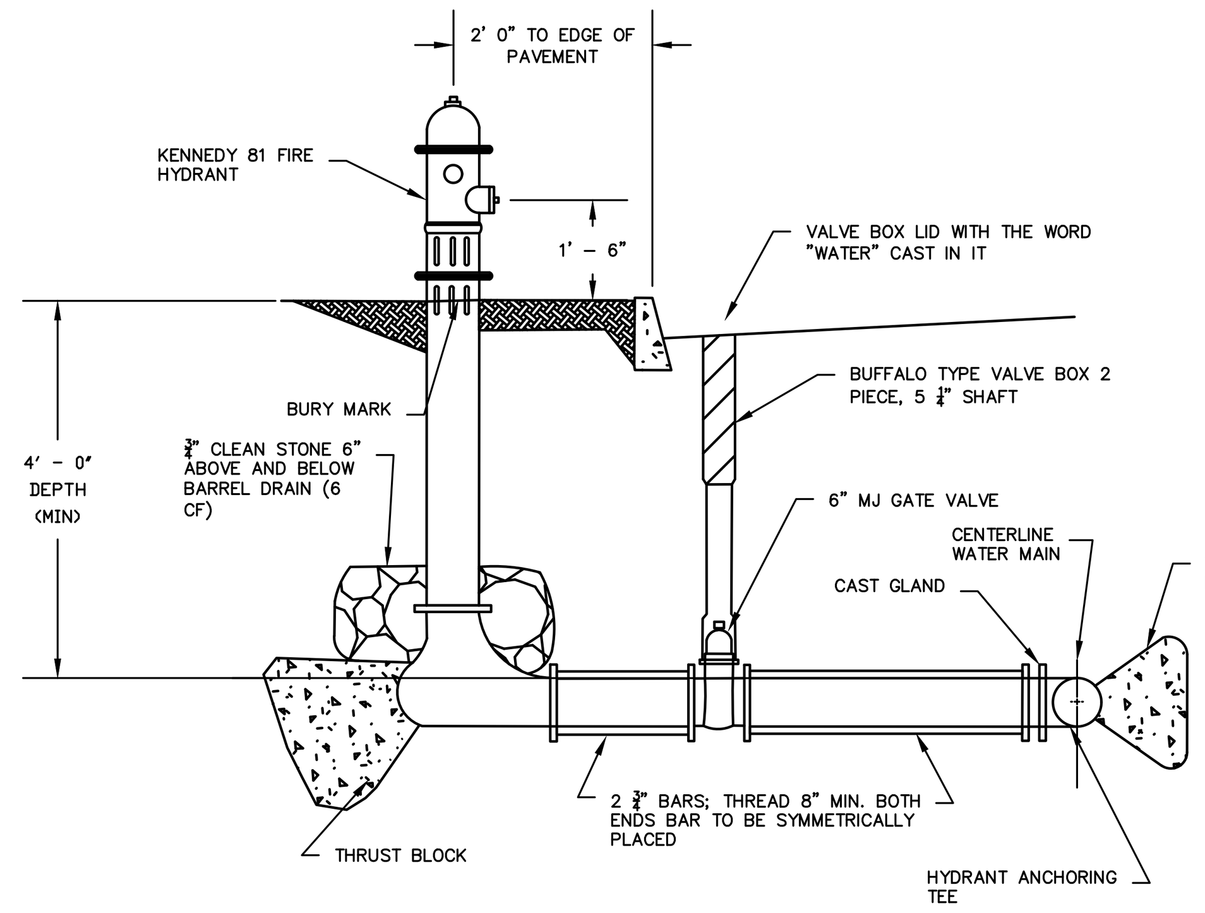
No.	REVISION	DATE	BY	CHK

SOIL EROSION AND SEDIMENT CONTROL DETAILS

SOUTH JERSEY PORT CORP
BUILDING Y-2 EMERGENCY FIRE MAIN REPAIR
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. : SESC-1	
JOB No. : 3965X004			

Z:\Shared\2_OldServers\HQ\Design\CADD Projects\NJ\Camden Co\SJPC\3965X004 - Broadway Terminal Fire Main\CAD\Current DWGs\SESC-1.dwg 8/6/2025 7:53:26 AM

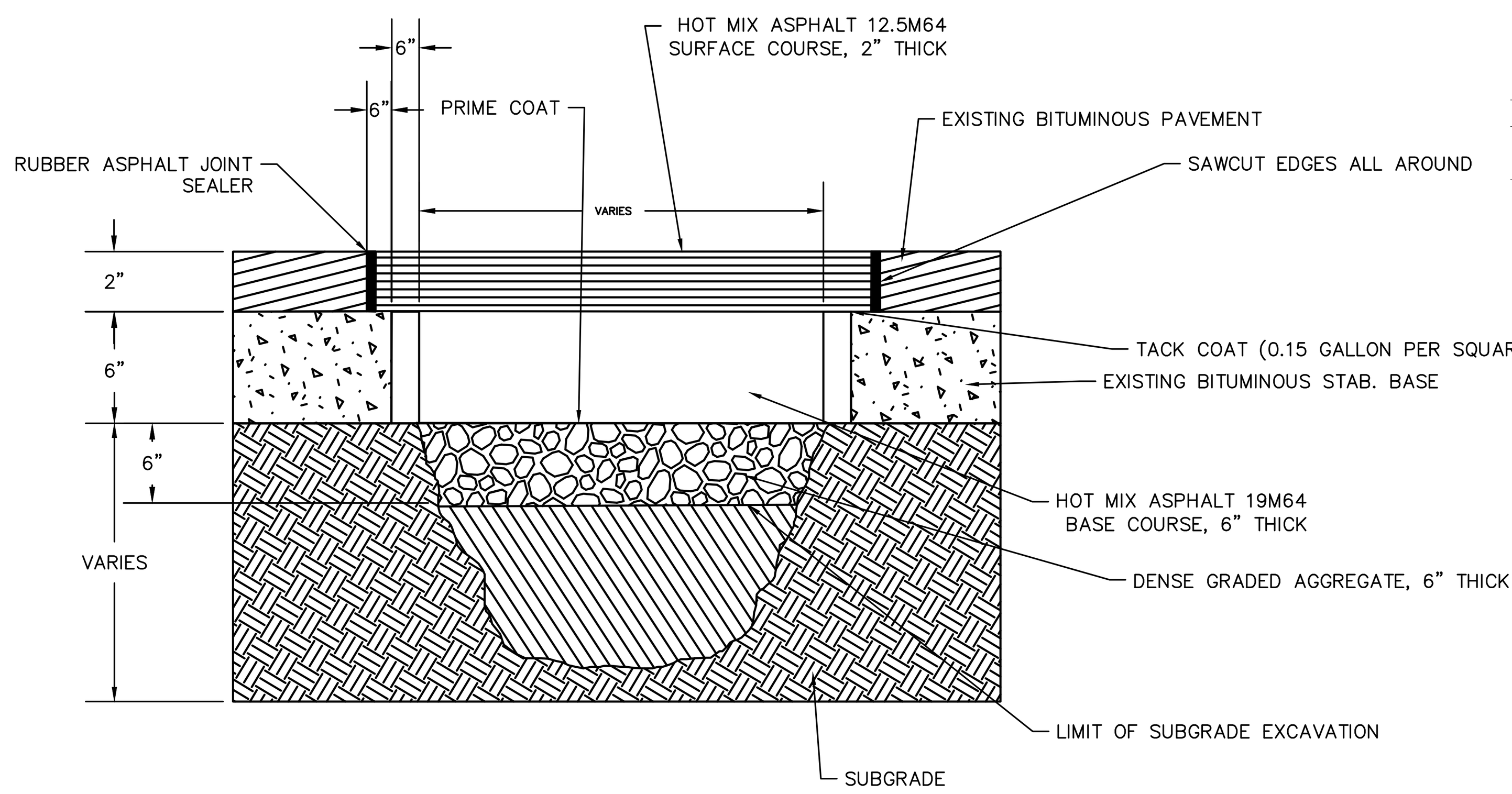


FIRE HYDRANT ASSEMBLY DETAIL

N.T.S

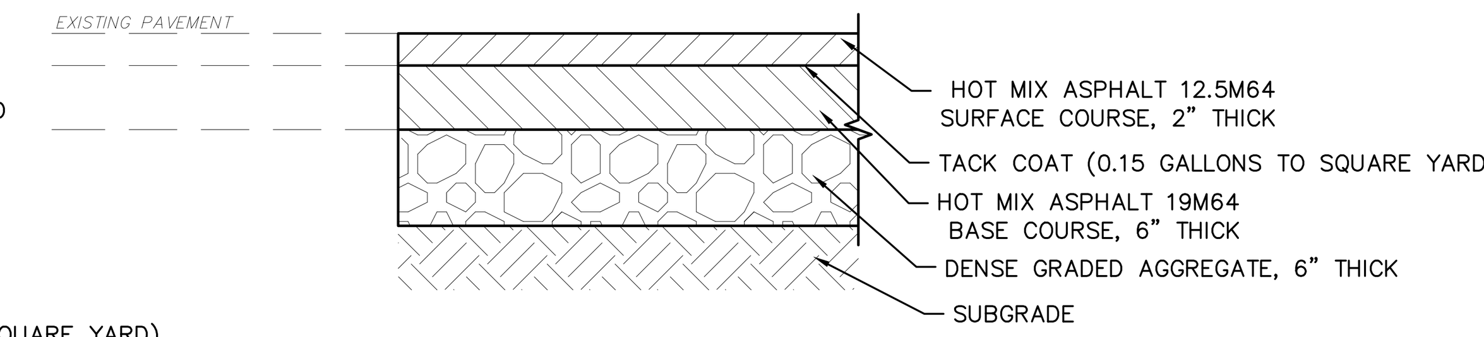
NOTES:

1. THE INLET HUB, GATE VALVE AND HYDRANT TEE SHALL BE RODDED TOGETHER WITH CONTINUO US THREADED ROD (ALL THREAD), SOCKET CLAMPS, WASHERS AND CORPORTATION EYE BOTLS TO PREVENT HYDRANT DROM BLOWING OFF.
2. CONTRACTOR SHALL INSURE THAT THE FIRE HYDRANT THREADS CONFORM TO LOCAL FIRE COMPANY'S STANDARDS.
3. HYDRANT TO BE A KENNEDY VALVE MODEL K81A GUARDIAN HYDRANT OR APPROVED EQUAL.

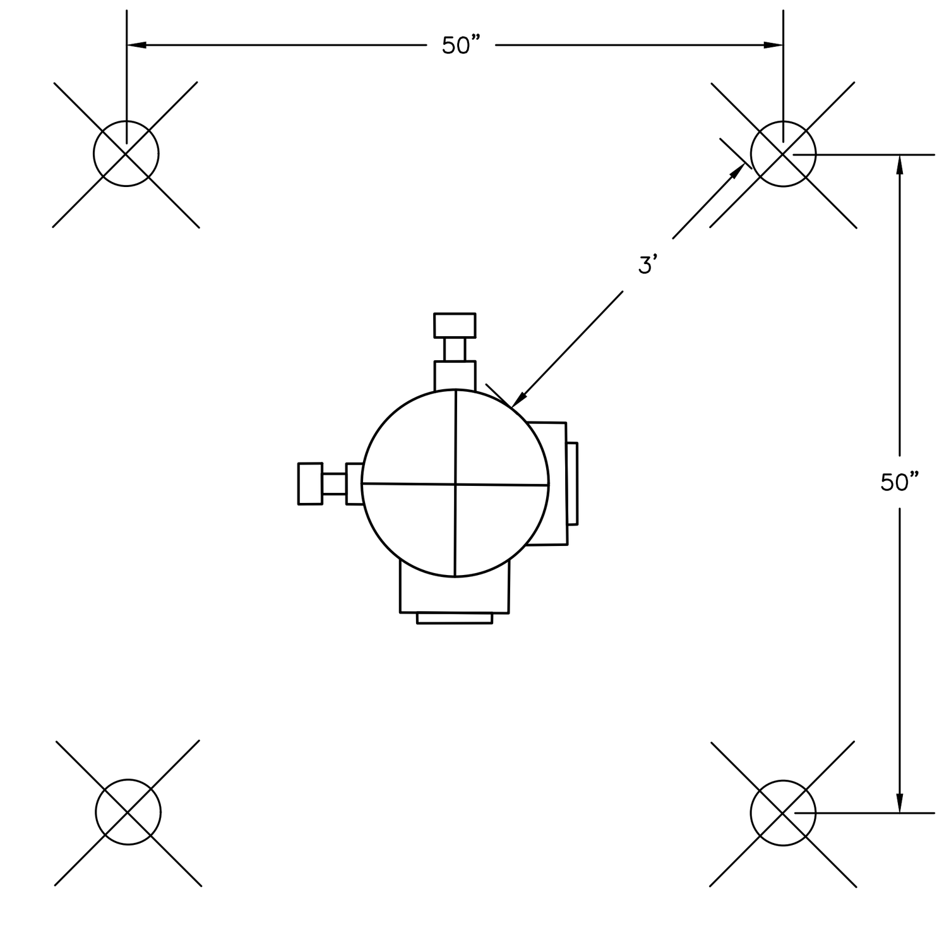


UTILITY OPENING REPAIR

N.T.S

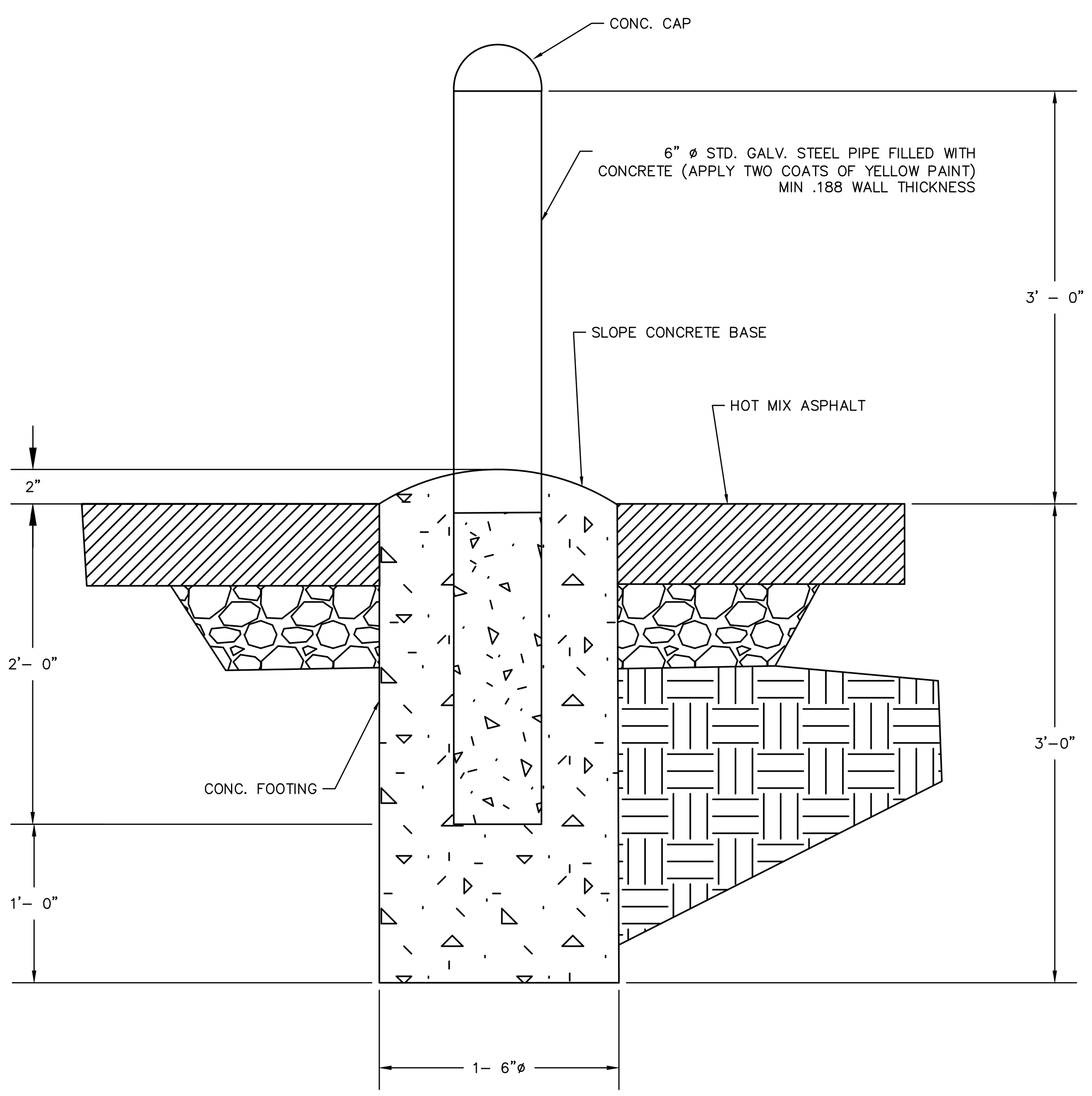


PAVEMENT RESTORATION



PIPE BOLLARD PLAN VIEW

N.T.S



PIPE BOLLARD DETAIL

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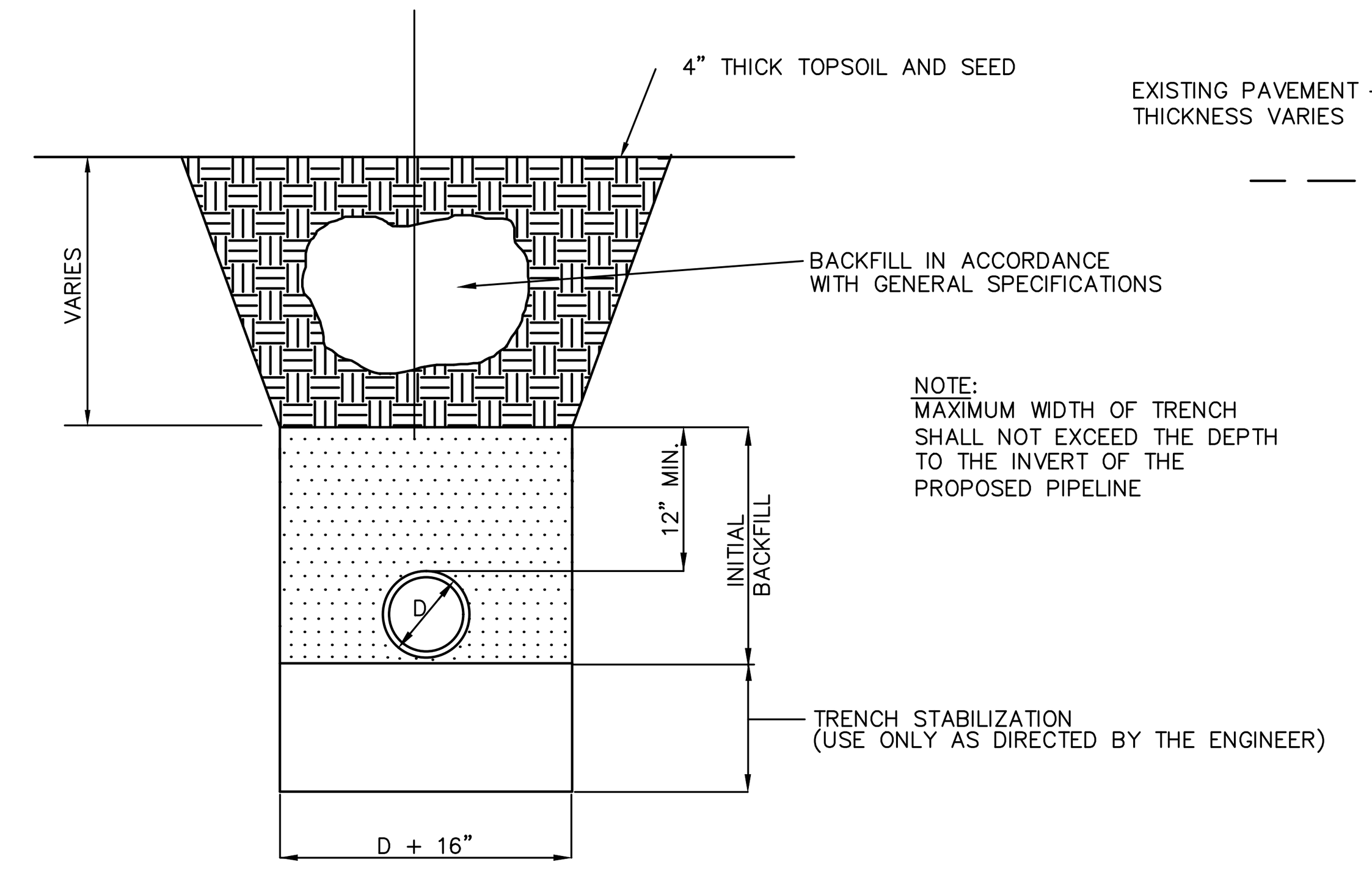
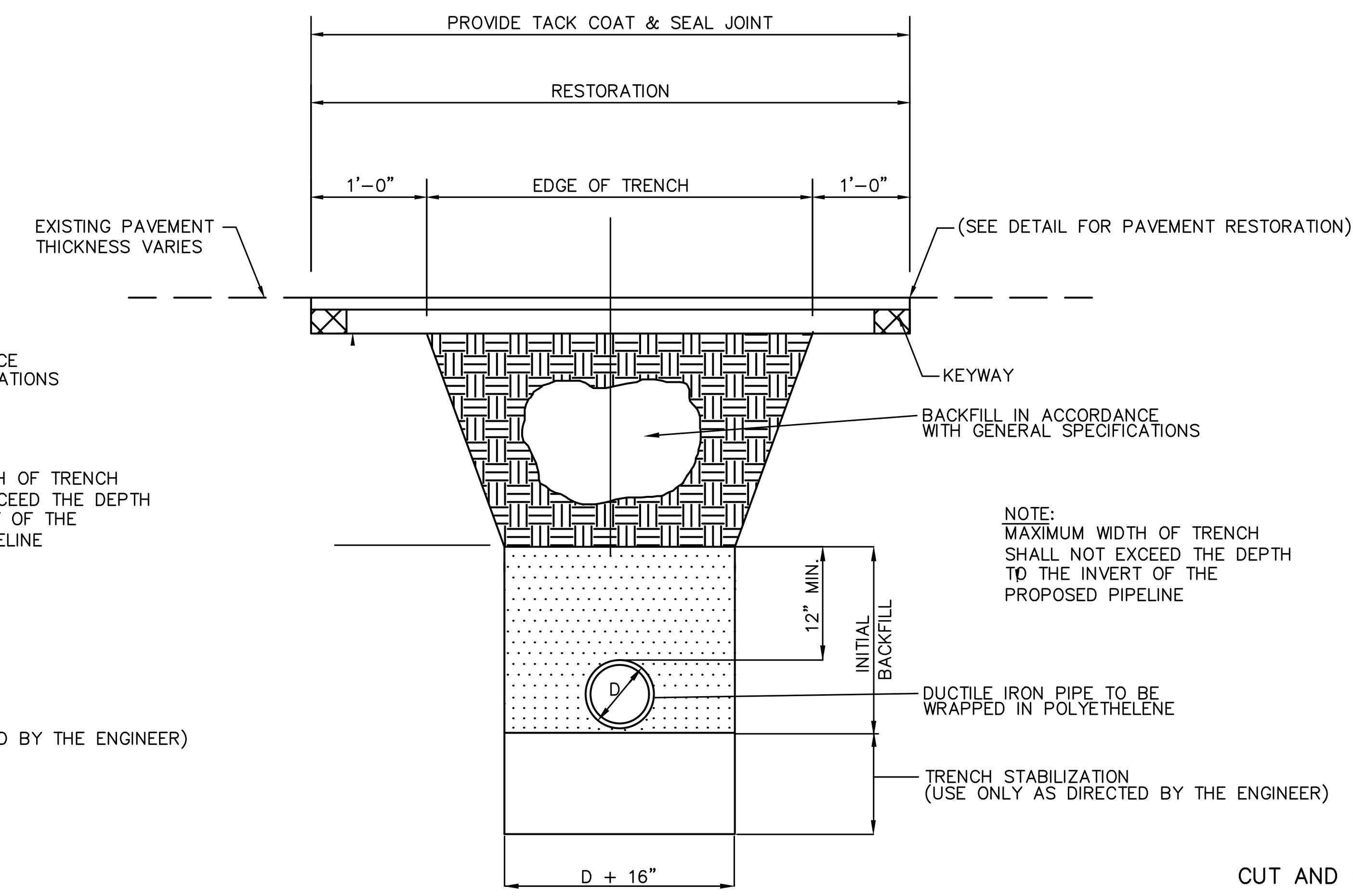


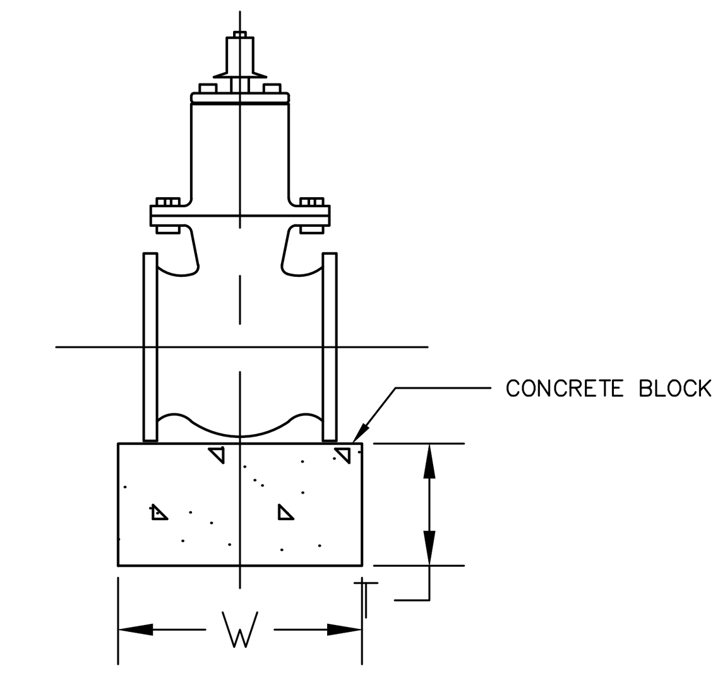
TRENCH DETAIL D.I. PIPE

N.T.S.



ROADWAY TRENCH DETAIL D.I. PIPE

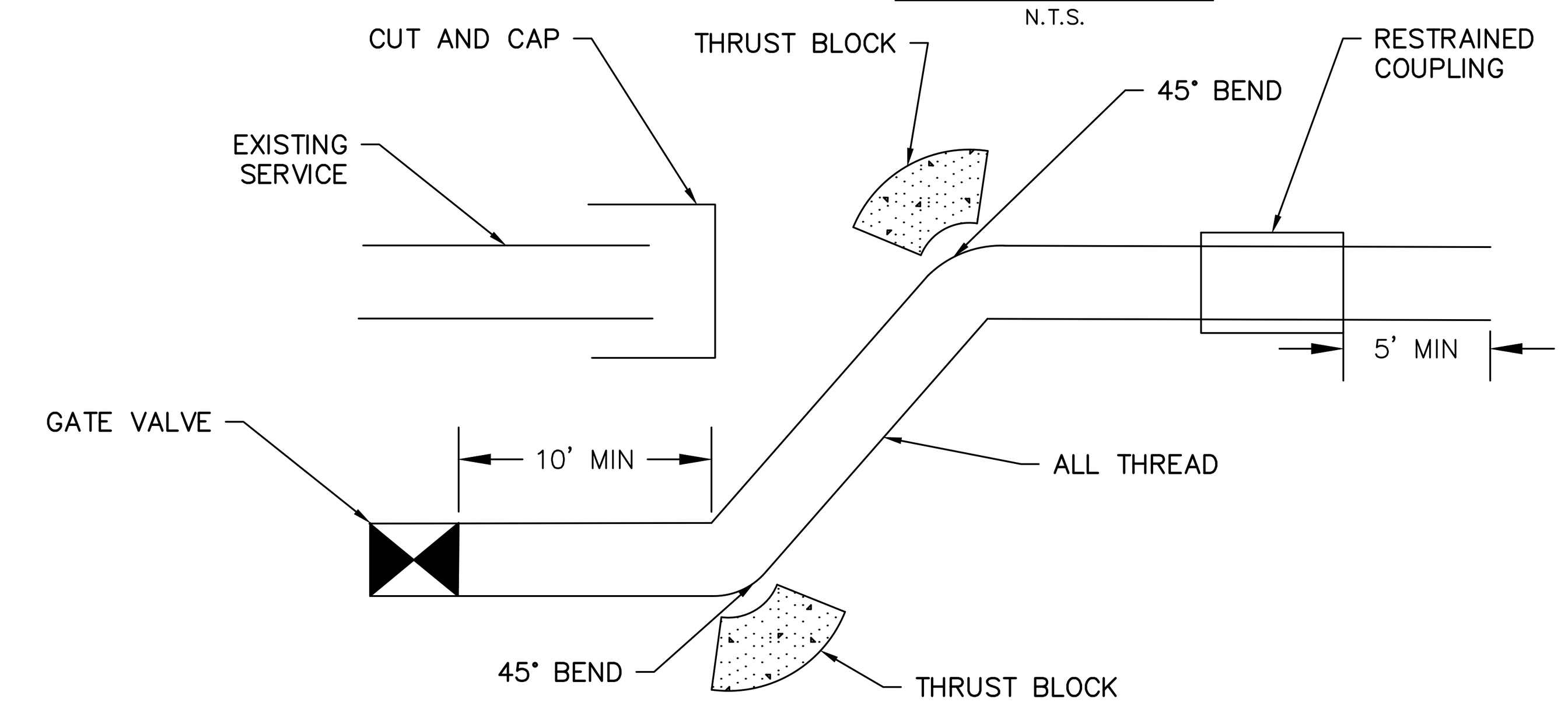
N.T.S.



SIZE	T	W	L
6"	8"	16"	16"
8"	8"	18"	18"
12"	10"	20"	20"
16"	12"	26"	26"
20"	14"	28"	28"

VALVE SUPPORT

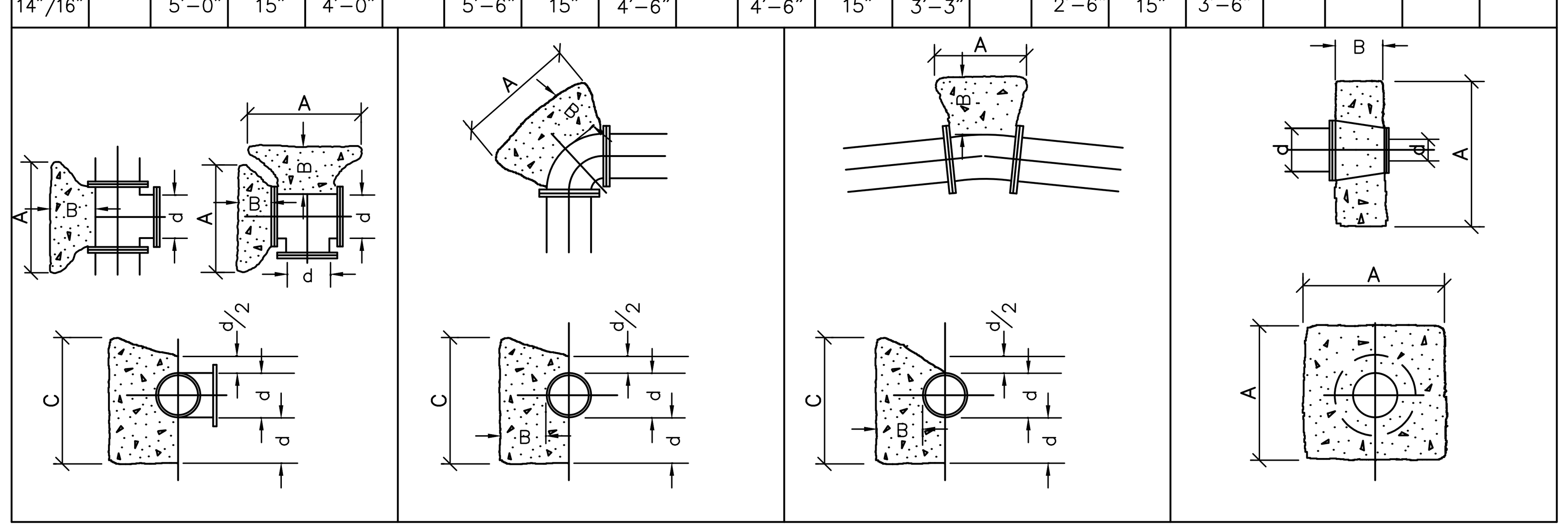
N.T.S.



VALVE HOUSE CONNECTION DETAIL

N.T.S.

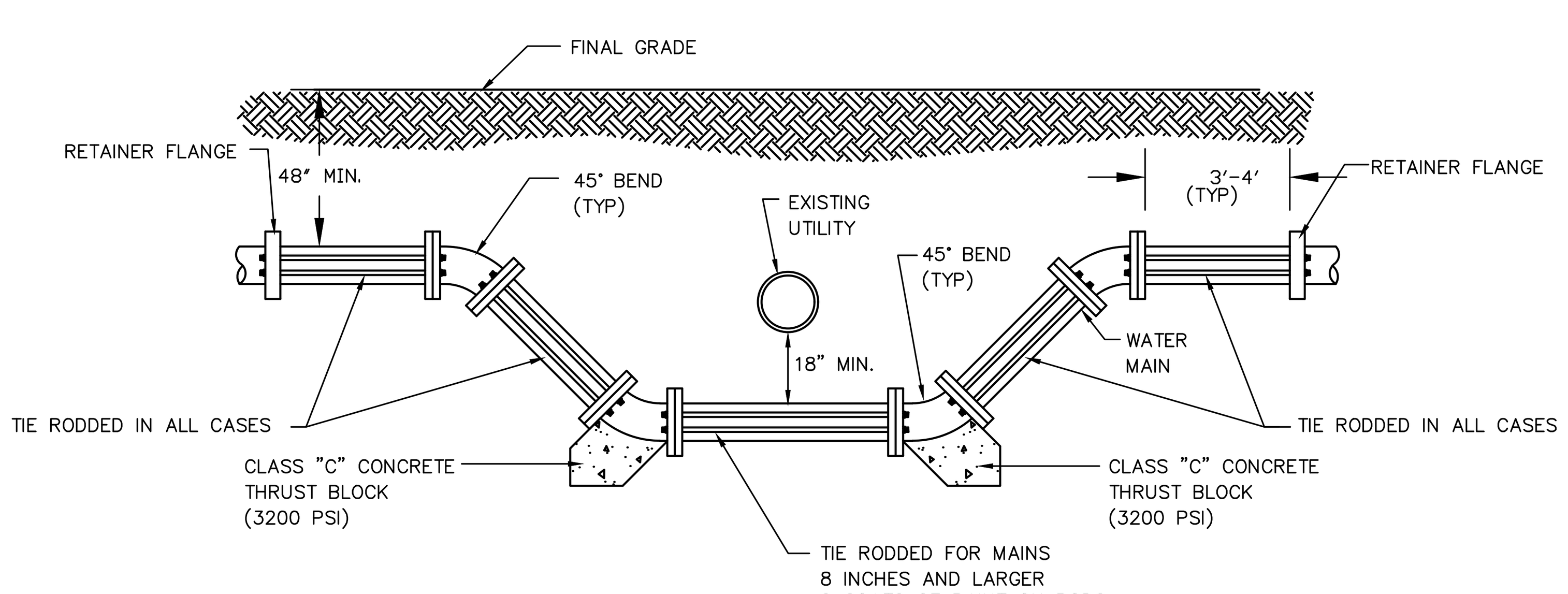
MINIMUM SIZE OF CONCRETE THRUST BLOCKS																			
d	TEES & CROSSES	A	B	C	90° BENDS	A	B	C	45° BENDS	A	B	C	22-1\2° 11-1\4° BENDS	A	B	C	REDUCERS	dxd	B	C
2" OR LESS		1'-0"	6"	1'-0"		1'-3"	6"	1'-3"		1'-3"	6"	1'-3"		1'-0"	6"	1'-0"				
4"		1'-6"	8"	1'-6"		1'-9"	8"	1'-9"		1'-3"	8"	1'-3"		1'-3"	8"	1'-3"				
6"		2'-0"	8"	1'-9"		2'-6"	8"	2'-0"		1'-6"	8"	1'-3"		1'-6"	8"	1'-3"		6"x4"	1'-6"	1'-0"
8"		2'-6"	8"	2'-0"		3'-0"	10"	2'-8"		2'-0"	10"	2'-3"		1'-6"	10"	1'-9"		8"x4"	2'-0"	1'-6"
10"		3'-0"	10"	2'-9"		3'-6"	12"	3'-6"		3'-0"	12"	2'-3"		1'-6"	12"	2'-0"		10"x6"	2'-4"	1'-9"
12"		3'-6"	10"	3'-9"		4'-6"	12"	3'-9"		3'-6"	12"	2'-6"		1'-6"	12"	3'-0"		10"x8"	2'-6"	2'-0"
14"/16"		5'-0"	15"	4'-0"		5'-6"	15"	4'-6"		4'-6"	15"	3'-3"		2'-6"	15"	3'-6"				



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.



WATER MAIN OFF-SET DETAIL

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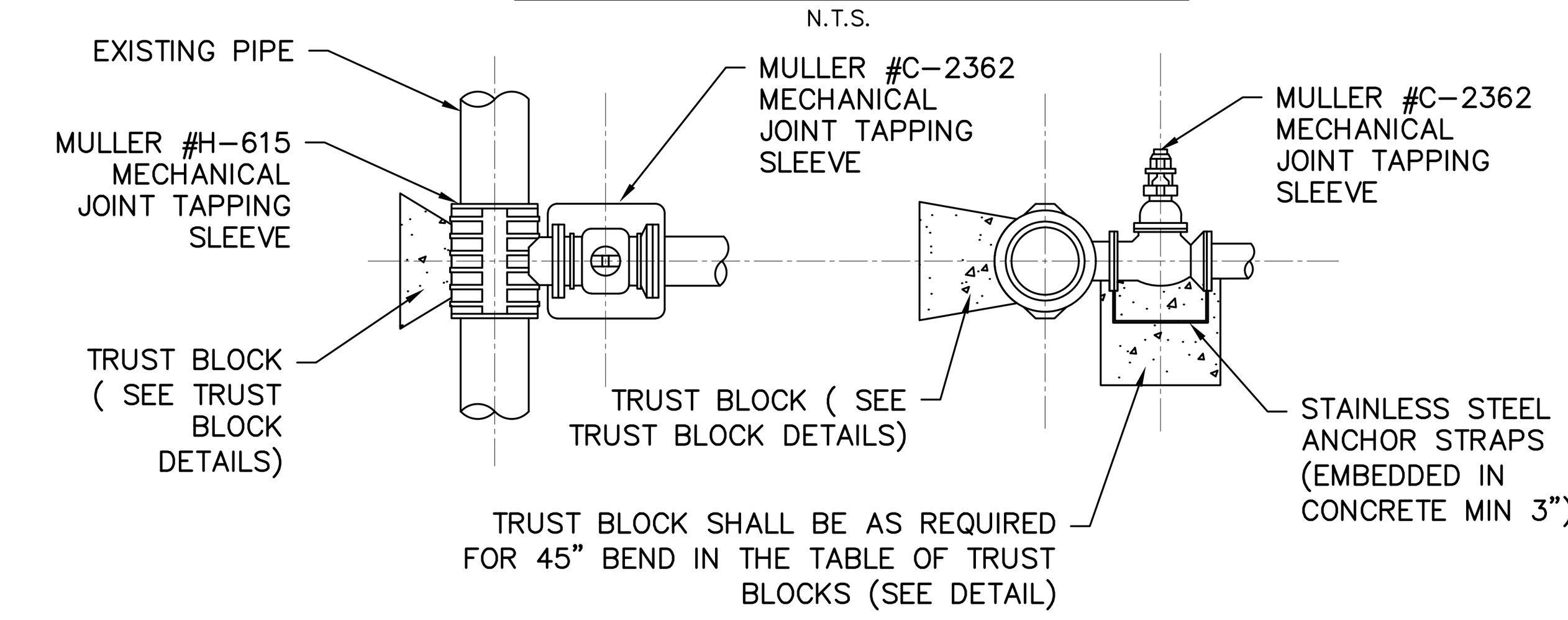

NOTES:

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.

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

No	REVISION	DATE	BY	CHK

DETAILS

SOUTH JERSEY PORT CORP

BUILDING Y-2 EMERGENCY FIRE MAIN REPAIR

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.: 3965X004			