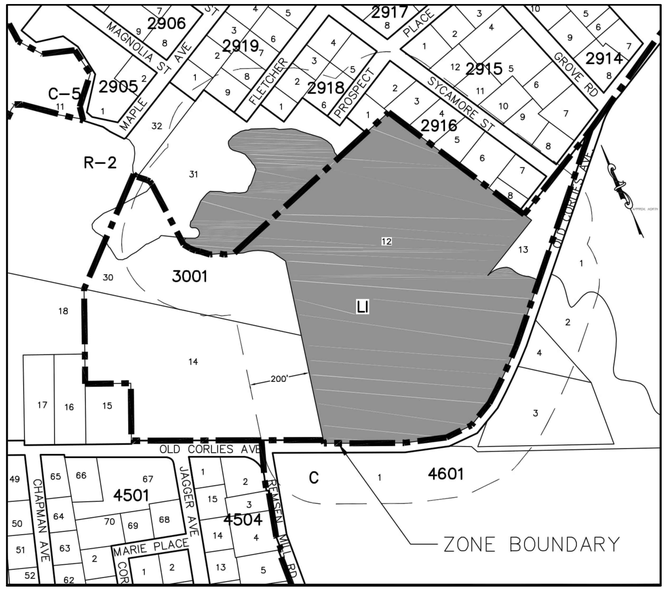
PRELIMINARY AND FINAL MAJOR SITE PLAN
PROPOSED CLEARWELL AND HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
BLOCK 3001; LOT 12
FOR
NEW JERSEY AMERICAN WATER
JUMPING BROOK WATER TREATMENT PLANT
625 OLD CORLIES AVENUE, TOWNSHIP OF NEPTUNE
MONMOUTH COUNTY, NEW JERSEY

200' PROPERTY OWNER LIST NEPTUNE TOWNSHIP

BLOCK	LOT	NAME AND ADDRESS
2915	1	ARCHER, GREGORY C & JENNIFER M 614 PROSPECT PLACE NEPTUNE, NJ 07753
2915	8	VECCHIO, NINA & BRENNAN, CAITLIN M 607 OLD CORLIES AVENUE NEPTUNE, NJ 07753
2915	9	DESIDERIO, CHRISTOPHER & CHRISTINA 104 SYCAMORE ST NEPTUNE, NJ 07753
2915	10	ROBERTS, DANIEL L & PATRICIA E 108 SYCAMORE ST NEPTUNE, NJ 07753
2915	11	MOLINA, VICTOR SANCHEZ & OSORIO, NO 114 SYCAMORE ST NEPTUNE, NJ 07753
2915	12	GOLDSTEIN, JASON 118 SYCAMORE ST NEPTUNE, NJ 07753
2916	1	ADAMS, ROBERT H & JUDITH A 706 PROSPECT PLACE NEPTUNE, NJ 07753
2916	2	TAYLOR, JOSEPH R & TINA M 700 PROSPECT PLACE NEPTUNE, NJ 07753
2916	3	SCALES, JANIS KAY & KRANSKI, CHRISTINE 117 SYCAMORE ST NEPTUNE, NJ 07753
2916	4	MCCORMICK, LINDA H. 115 SYCAMORE ST NEPTUNE, NJ 07753
2916	5	CORY, GLEN R & SHARON M 109 SYCAMORE ST NEPTUNE, NJ 07753
2916	6	THOMAS J & JO NELL R REITER FAMILY TRUST 105 SYCAMORE ST NEPTUNE, NJ 07753
2916	7	HOFFMAN, MAUREEN & ROBERT JAMES 103 SYCAMORE ST NEPTUNE, NJ 07753
2916	8	GAIL LYNN PROPERTIES LLP 2567 COLLIER ROAD MANASQUAN, NJ 08736
2918	1	MARRON, JAMES C & LIN L 714 FLETCHER DR NEPTUNE, NJ 07753
2918	2	FARRELL, BRIAN J. 710 FLETCHER DR NEPTUNE, NJ 07753
2918	3	JOHNSON, GEORGE 706 FLETCHER DR NEPTUNE, NJ 07753
2918	5	ABATEMARCO, JOSEPH & JOANN 10 WILDWOOD PLACE COLONIA, NJ 07067
2918	6	LYNN, DANNY & WALKER, SHANAY 2 NELSON PLACE MAPLEWOOD, NJ 07040
2919	8	DIANA, LINDSEY & TAYLOR, CHRISTOPHER 715 FLETCHER DR NEPTUNE, NJ 07753
2919	9	WOOLLEY, LOUIS & JANIS 717 FLETCHER DR NEPTUNE, NJ 07753
3001	12	NJ AMERICAN WATER CO %ENGINE INSIGHT PO BOX 2440 % MS 4437 SPOKANE, WA 99210
3001	13	TOWNSHIP OF NAPTUNE PO BOX 1125 NEPTUNE, NJ 07754
3001	14	TOWNSHIP OF NAPTUNE PO BOX 1125 NEPTUNE, NJ 07754
3001	30	TOWNSHIP OF NAPTUNE PO BOX 1125 NEPTUNE, NJ 07754
3001	31	TOWNSHIP OF NAPTUNE PO BOX 1125 NEPTUNE, NJ 07754
4601	1	COUNTY OF MONMOUTH-GOLF COURSE%A/P 805 NEWMAN SPRINGS RD LINCROFT, NJ 07738
4601	2	NEPTUNE TOWNSHIP SEWERAGE AUTHORITY PO BOX 765 NEPTUNE, NJ 07753
4601	3	NEPTUNE TOWNSHIP SEWERAGE AUTHORITY PO BOX 765 NEPTUNE, NJ 07753
4601	4	EICHENOUR, ROGER D & LORETTA M 632 OLD CORLIES AVENUE NEPTUNE, NJ 07753



KEY MAP
SCALE: 1"=250'±

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7	CS100	OVERALL SITE PLAN
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19	C-504	CONSTRUCTION DETAILS
20	C-505	CONSTRUCTION DETAILS

APPROVED BY THE NEPTUNE TOWNSHIP
ZONING BOARD ON _____
ATTEST:

_____
CHAIRPERSON DATE

_____
ADMINISTRATIVE OFFICER DATE

_____
BOARD ENGINEER DATE

_____
OWNER/APPLICANT DATE

SWORN TO AND SUBSCRIBED BEFORE ME
THIS _____ DAY OF _____ , 20 __.

_____
NOTARY PUBLIC OF NEW JERSEY

FEBRUARY 2023

Jacobs
JACOBS ENGINEERING GROUP INC.
412 MOUNT KEMBLE AVE.
MORRISTOWN, NJ 07960
NJDCA 246A27990200

REVISIONS		REVISIONS	
1		1	
2		2	
3		3	
4		4	
5		5	

NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI
NJ LICENSED PROFESSIONAL ENGINEER
24GE04377400

AMERICAN WATER ENGINEERING
1 WATER STREET
CAMDEN, NJ 08102

NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R

DATE 10/24/22

PROJECT i18-180059-01

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION

COVER SHEET

NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE N.T.S.

G-001

GENERAL NOTES:

1. THESE PLANS REFERENCE LOCATION AND TOPOGRAPHIC SURVEYS PREPARED BY:
   NAME : COLLIERS ENGINEERING & DESIGN
   331 NEWMAN SPRINGS ROAD
   SUITE 203
   RED BANK, NJ 07701

   PHONE: (732) 383-1950
   DATED: 12/14/2021

   MORGAN ENGINEERING AND SURVEYING
   P.O. BOX 5232
   TOMS RIVER, NJ 08754

   PHONE: (732) 270-9690
   DATED: 02/05/2021
   REVISED: 05/27/2021

   HORIZONTAL DATUM: NAD 83
   VERTICAL DATUM: NGVD 88

2. OWNER/APPLICANT: NEW JERSEY AMERICAN WATER
   AMERICAN WATER ENGINEERING
   1 WATER STREET
   CAMDEN, NJ 08102

3. PARCEL: 625 OLD CORLIES AVENEUE
   NEPTUNE, NJ 07753
   BLOCK 3001, LOT 12 - TOWNSHIP OF NEPTUNE

4. ZONE: LI (LIGHT INDUSTRIAL)
   R-2 (LOW DENSITY SINGLE-FAMILY RESIDENTIAL)

5. CONDITIONAL USE: EXISTING - PUBLIC UTILITY FACILITY
   PROPOSED - PUBLIC UTILITY FACILITY (NC)

6. BULK REQUIREMENTS:

ZONING REQUIREMENTS FOR LIGHT INDUSTRIAL ZONE LI & LOW DENSITY RESIDENTIAL ZONE R-2				
ITEM	LI REQUIRED	R-2 REQUIRED	EXISTING	PROPOSED
LOT AREA (MIN.)	40,000 SF	10,000 SF	811,461 SF	811,461 SF (NC)
LOT DENSITY (MAX.)	N/A	4.3	N/A	N/A
FLOOR AREA RATIO (MAX.)	1.6	N/A	0.03	0.04
LOT WIDTH (MIN.)	150'	100'	882'	882' (NC)
LOT FRONTAGE (MIN.)	150'	100'	1,151'	1,151' (NC)
LOT DEPTH (MIN.)	200'	100'	1,247'	1,247' (NC)
FRONT YARD SETBACK (MIN.)	40'	25'	49.07'	49.07' (NC)
SIDE YARD SETBACK (MIN.)	25'	10'	11.81'	11.81' (EN) (NC)
COMBINED SIDE YARD SETBACK (MIN.)	50'	25'	113.58'	85.4'
REAR YARD SETBACK (MIN.)	25'	30'	199.25'	199.25' (NC)
BUILDING COVERAGE (MAX.)	40%	30%	2.99%	4.39%
LOT COVERAGE (MAX.)	70%	40%	16.5%	17.8%
NUMBER OF STORIES (MAX.)	4	2.5	2	2 (NC)
BUILDING HEIGHT (MAX.)	60'	35'	<35'	<35' (NC)*
IMPROVABLE AREA (MIN.)	16,800 SF	2,400 SF	292,736 SF	292,736 SF (NC)
IMPROVABLE AREA - DIA. OF CIRCLE (MIN.)	84'	32'	610'	610' (NC)
OFF-STREET PARKING SPACES	N/A	N/A	14	18
LOADING SPACES	N/A	N/A	1	1 (NC)
SIGNS	N/A	N/A	N/A	N/A
EXISTING USE:	WATER TREATMENT PLANT			
PROPOSED USE:	WATER TREATMENT PLANT			
EXISTING FLOOR AREA:	24,290 SF			
PROPOSED FLOOR AREA:	35,650 SF			

(NC) - NO CHANGE, (EN) - EXISTING NON-CONFORMITY
* THE NEW BUILDING HEIGHT TO PARAPIT IS 24'-0". BUILDING HEIGHT TO ROOF DECK IS TO BE 20'-0".

7. PARKING REQUIREMENTS (WAREHOUSE AND DISTRIBUTION FACILITY)
   REQUIRED: (1) PARKING SPACE / 2,500 SF GROSS FLOOR AREA
   EXISTING: 24,290 SF / 2,500 SF = 10 PARKING SPACES
   EXISTING PARKING SPACES (10' X 18'): 14 SPACES
   PROPOSED: 35,650 SF / 2,500 SF = 15 SPACES
   PROPOSED PARKING SPACES (10' X 18'): 18 SPACES

8. CONDITIONAL USE REQUIREMENTS:
   - NO BUILDING MAY EXCEED TWENTY (20) FEET IN HEIGHT (EN)
   - SIX (6) FOOT HIGH BOARD-ON-BOARD FENCE TO BE PROVIDED TO SCREEN THE PUBLIC UTILITY FACILITY FROM PUBLIC VIEW (EN)
   - A STRUCTURE ASSOCIATED WITH THE PUBLIC UTILITY FACILITY IN A NON-RESIDENTIAL ZONE DISTRICT MAY NOT BE LOCATED CLOSER THAN FIFTY (50) FEET TO THE RESIDENTIAL PROPERTY LINE (EN)

9. ALL IMPROVEMENTS SHALL BE IN ACCORDANCE WITH NJAW STANDARDS AND SPECIFICATIONS, NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2019 WITH AMENDMENTS THERETO, AND AS SPECIFIED IN THIS SITE PLAN AND TECHNICAL SPECIFICATIONS.

10. PROVIDE PROPER AND SUFFICIENT CONSTRUCTION PROTECTION TO THE WORKERS AND THE PUBLIC. OSHA AND OTHER LOCAL, STATE, AND FEDERAL CODES SHALL BE FOLLOWED.

11. ALL WORK AND MATERIAL SHALL MEET THE REQUIREMENTS OF THE STATE OF NEW JERSEY UNIFORM CONSTRUCTION CODE AND ANY LOCAL CONSTRUCTION CODES, LATEST EDITION.

12. ALL QUANTITIES SHOWN HEREIN ARE APPROXIMATE AND FOR GENERAL INFORMATION ONLY. VERIFY ALL QUANTITIES AND PROVIDE ALL MATERIAL, LABOR, SURVEYING, AND COORDINATION WITH UTILITY COMPANIES AND CONTRACTING OFFICER / REPRESENTATIVE, ETC. NECESSARY TO CONSTRUCT THE PROJECT COMPLETE AS GENERALLY INTENDED IN THE CONTRACT DOCUMENTS.

13. ALL SITE CURBING SHALL BE CONCRETE.

14. RESTORE ALL DISTURBED PERVIOUS AREAS WITH TOPSOIL, FERTILIZER, AND SEED UNLESS OTHERWISE NOTED. RESTORE ANY PAVEMENT AREAS THAT WERE DAMAGED DURING CONSTRUCTION TO THE SATISFACTION OF NJAW.

15. IMPLEMENT AND MAINTAIN ALL SOIL EROSION CONTROL STRUCTURES AND MEASURES THROUGHOUT CONSTRUCTION. ALL REQUIREMENTS FROM THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE FOLLOWED. MODIFICATIONS TO THE SEQUENCE OF CONSTRUCTION SHALL BE SUBMITTED TO NJAW FOR REVIEW AND THE CONSERVATION DISTRICT FOR APPROVAL.

16. ALL EXISTING SITE INLETS AND/OR SWALES IMMEDIATELY BELOW THE DISTURBED AREA SHALL HAVE TEMPORARY FILTER FABRIC / CHECK DAMS OR APPROVED EQUAL, TO PREVENT ENTRY OF SEDIMENT DURING CONSTRUCTION. DISTURBED AREAS SHALL BE STABILIZED BY SEEDING OR STABILIZING FABRIC IN ACCORDANCE WITH THE SOIL EROSION CONTROL PLAN. SUBMIT AN UPDATED SEQUENCE OF CONSTRUCTION SCHEDULE PRIOR TO START OF WORK.

17. IN CASE OF DISCREPANCIES BETWEEN THESE PLANS AND THE PROJECT SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.

18. DESIGN ALL TEMPORARY CONSTRUCTION STRUCTURES SUCH AS SHEETING & SHORING FOR EXCAVATIONS, CLOSURES, BARRICADES, RAILINGS, AND TEMPORARY PROTECTION USED TO PROTECT EXISTING STRUCTURES, WORK, THE PUBLIC, AND PERSONNEL. IF REQUESTED, PROVIDE DESIGN CALCULATIONS AND DRAWINGS SHOWING LOCATION, EXTENT, AND CONSTRUCTION DETAILS OF SAID TEMPORARY STRUCTURES AND SUPPORTS PROPOSED. ALL DOCUMENTS SHALL BE PREPARED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NJ.

19. ALL INGRESS AND EGRESS TO AND FROM THE CONSTRUCTION SITE SHALL BE KEPT READILY ACCESSIBLE AND UNOBSTRUCTED AT ALL TIMES. CONSTRUCTION EQUIPMENT WILL NOT BE PERMITTED TO OBSTRUCT ROADWAYS AND/OR PASSAGEWAYS. ALL STAGING, MATERIAL STORAGE, OPERATIONS, TRAILERS, ETC. SHALL BE CONTAINED WITHIN THE LIMIT OF DISTURBANCE.

20. MAINTAIN THE CONSTRUCTION SITE AND THE AREAS OF WORK WHILE PERFORMING THE WORK OF THIS CONTRACT. CONSTRUCTION DEBRIS SHALL BE REMOVED FROM THE CONSTRUCTION SITE ON A DAILY BASIS. NO BURNING OF DEBRIS OR EXPLOSIVES SHALL BE PERMITTED.

21. PREPARE, LAYOUT, AND INSTALL WORK IN SUCH A MANNER AS NOT TO DELAY OR INTERFERE WITH THE PROGRESS OF OTHER CONTRACT WORK AND/OR ANY WORK DESIGNATED TO BE PERFORMED UNDER ANY OTHER CONTRACTS.

22. PERFORM ALL WORK IN THE CONTRACT DOCUMENTS INCLUDING DEMOLITION AND REMOVALS AND INSTALLATION OF ALL MATERIALS IN FULL COMPLIANCE WITH CODES, RULES, AND REGULATIONS GOVERNING SAID WORK.

23. BEFORE THE EXECUTION OF WORK, NOTIFY NJ ONE-CALL (1-800-272-1000), AND ALL LOCAL UTILITY COMPANIES OWNING OR HAVING JURISDICTION CONCERNING POLES, CONDUITS, PIPE UTILITIES, ETC. ON / ADJACENT TO THE SITE AND ARRANGE FOR REMOVAL OR RELOCATION OF THE ITEMS AS REQUIRED TO COMPLETE THE WORK.

GENERAL NOTES (CONT.):

24. PROVIDE ALL TESTING SERVICES.

25. ALL QUALITY CONTROL INSPECTION AND TESTING SHALL BE MADE BY AN NJDOT-APPROVED LABORATORY. COPIES OF ALL REPORTS AND TESTING RESULTS ASSOCIATED WITH THE QUALITY CONTROL PROGRAM SHALL BE SUBMITTED TO THE A/E.

26. ILLUMINATE EXCAVATED TRENCHES AND OPENINGS, PROVIDE SIGNS AND BARRICADES AS NECESSARY, TO PROTECT AGAINST INJURY TO WORKERS, PEDESTRIANS, WILDLIFE, ETC.

27. DO NOT SCALE DRAWINGS. DETAILS, NOTES, AND THE LIKE ARE TYPICAL AND APPLY IN GENERAL TO SIMILAR CONDITIONS.

28. ALL WORK WILL BE SCHEDULED AND FULLY COORDINATED IN ADVANCE OF PERFORMANCE WITH THE OWNER.

29. ALL CURB / EOP RADII ARE 3' UNLESS OTHERWISE NOTED.

30. PROVIDE MAINTENANCE OF TRAFFIC AS REQUIRED. SUBMIT PLAN FOR REVIEW AND APPROVAL BY OWNER. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) REQUIREMENTS.

DEMOLITION NOTES:

1. ENSURE THAT ALL PIPES, CATCH BASINS, MANHOLES, SWALES, ETC. WITHIN AND NEAR THE AREA OF WORK ARE KEPT FREE FROM MATERIAL THAT WOULD HAMPER THE PERFORMANCE OF THE DRAINAGE SYSTEMS DURING CONSTRUCTION. PERIODICALLY CLEAN CATCH BASIN SEDIMENT TRAPS. UPON COMPLETION OF CONSTRUCTION, REMOVE ALL ACCUMULATED SEDIMENT. DISPOSE OF ALL UNSUITABLE OR EXCESS EXCAVATED MATERIALS.

2. UPON COMPLETION OF THE WORK, REMOVE ALL DEBRIS, EQUIPMENT, AND UNUSED MATERIALS FROM THE PROJECT SITE.

3. ALL EXCAVATED ASPHALT AND CONCRETE SHALL BE RECYCLED AND RECOVERED PER STATE OF NEW JERSEY REGULATIONS.

4. EXCAVATED SOIL MAY BE USED FOR BACKFILLING AND FILLING PROVIDED IT MEETS THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS.

5. REMOVE ALL PONDED WATER ON THE SITE RESULTING FROM OPERATIONS.

6. EXERCISE CARE TO PREVENT DAMAGE TO ANY MATERIALS OR STRUCTURES THAT ARE TO REMAIN IN PLACE. REPAIR ANY DAMAGE TO ORIGINAL CONDITION.

7. ALL AREAS OUTSIDE THE "LIMITS OF WORK" WHICH ARE DAMAGED BY THE WORK SHALL BE RESTORED TO THEIR ORIGINAL CONDITION AND THAT OF THE SURROUNDING AREA. THE RESTORATION SHALL BE APPROVED BY NJAW.

8. ALL DEMOLISHED MATERIAL, EXCEPT ITEMS DIRECTED BY THE CONTRACT DOCUMENTS TO BE SALVAGED, IS TO BE REMOVED FROM THE SITE AND LEGALLY DISPOSED OF.

9. ALL PRECAUTIONS SHALL BE TAKEN AS NECESSARY OR MAY BE REQUIRED TO PERMANENTLY PREVENT CONTAMINATED WATER, GASOLINE, OR ANY OTHER CONTAMINANT FROM ENTERING EXCAVATIONS AND/OR SURFACE AREAS.

10. DISPOSAL OF HAZARDOUS OR CONTAMINATED MATERIALS, GROUNDWATER, OR UNSATISFACTORY SOILS AND/OR MATERIALS ENCOUNTERED SHALL BE IN ACCORDANCE WITH ALL STATE, AND LOCAL REQUIREMENTS. SHOULD SUSPECT SOILS / SUBGRADE BE ENCOUNTERED, CONTACT NJAW AND THE A/E IMMEDIATELY.

11. REMOVE BRUSH, SHRUBS, DOWN-TIMBER, ROOTS, RUBBISH, SIGNS, STRUCTURES, FENCES, AND EXISTING IMPROVEMENTS WHERE INDICATED AND/OR WITHIN THE DEVELOPMENT AREAS FROM THE CONSTRUCTION SITE PROPERTY IN ACCORDANCE WITH APPROVED SCHEDULE. THE SITE SHALL BE LEFT IN AN ORDERLY AND NEAT CONDITION.

12. ARRANGE WITH NJAW PRIOR TO THE DISCONNECTION AND RECONNECTION OF UTILITY SERVICES AND REMOVAL OF FITTINGS AND EQUIPMENT WHERE REQUIRED BY THE WORK BEFORE STARTING DEMOLITION WORK. PROVIDE TEMPORARY UTILITY SERVICES AS REQUIRED TO AVOID INTERRUPTION OF SERVICES TO OTHER FACILITIES.

13. STRICTLY OBSERVE POLICE AND FIRE PREVENTION CODE REGULATIONS AT ALL TIMES.

14. CONTROL DUST BY PERIODICALLY SPRAYING DEMOLITION WORK WITH WATER, PER FREEHOLD SOIL CONSERVATION DISTRICT STANDARDS.

15. THE INTENT OF THE DEMOLITION ON THE DRAWINGS IS TO GENERALLY OUTLINE THE TYPES OF MATERIALS TO BE REMOVED AND THE LIMITS OF THE REMOVALS. THE QUANTITY OF ITEMS TO BE REMOVED WITHIN THE LIMITS OF DEMOLITION REQUIRED MAY VARY FROM THOSE DEPICTED ON THE PLANS. THE INTENT AND REQUIREMENT IS TO REMOVE THE EXISTING VEGETATION AND IMPROVEMENTS AS REQUIRED TO CONSTRUCT THE PROPOSED DEVELOPMENT. UTILIZE ALL MEANS AND METHODS INCLUDING SAFETY REQUIREMENTS.

16. CONCRETE CURB SHALL BE REMOVED TO THE NEAREST JOINT.

17. PAVEMENT SAWCUT SHALL EXTEND A MINIMUM OF 2 FEET BEYOND EXISTING SITE FEATURES. ALL SAWCUTS OF PAVEMENTS SHALL BE FULL DEPTH.

GRADING NOTES:

1. GRADE: MAXIMUM SLOPE OF DISTURBED AREAS RECEIVING TOPSOIL, FERTILIZER, AND SEED SHALL BE 3:1. STEEPER GRADES SHALL BE RESTORED WITH EROSION CONTROL MATTING.

2. ALL SUB-GRADE MATERIAL SHALL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. PROVIDE CERTIFICATION BY A PROFESSIONAL GEOTECHNICAL ENGINEER, LICENSED IN THE STATE OF NEW JERSEY, THAT ALL SUBGRADES BELOW STRUCTURAL IMPROVEMENTS INCLUDING DRAINAGE STRUCTURE, PAVEMENT, AND OTHER PROJECT COMPONENTS HAVE BEEN COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

3. ALL TOPSOIL TO BE RE-USED SHALL BE SCREENED, TESTED, AND SUPPLEMENTED AS REQUIRED TO COMPLY WITH THE REQUIREMENTS OF NJDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. ALL TOPSOIL SHALL PASS THROUGH A 1/4" SIEVE BEFORE PLACEMENT IN TURF AREAS.

4. REPORT SUBGRADES NOT MEETING THE REQUIREMENTS OF THE PROJECT SPECIFICATIONS TO THE A/E.

5. VERIFY ALL GRADES PRIOR TO CONSTRUCTION.

6. PROVIDE CURB GRADE SHEETS TO THE A/E FOR REVIEW PRIOR TO CURB INSTALLATION.

7. WHERE PROPOSED CURBING IS TO BE INSTALLED ADJACENT TO EXISTING PAVEMENT TO REMAIN, THE TOP OF CURB SHALL BE SET GENERALLY 6" ABOVE THE EXISTING PAVEMENT AS REQUIRED BY THE CONTRACT DOCUMENTS.

8. BORING LOCATIONS AND CLASSIFICATION OF SUBGRADE MATERIALS CAN BE FOUND IN THE GEOTECHNICAL REPORT LOCATED WITHIN THE PROJECT SPECIFICATIONS.

9. ALL SURPLUS TOPSOILS AND SUBSOILS ARE TO BE REMOVED FROM THE PROPERTY AND DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. NO HAZARDOUS MATERIALS ARE ANTICIPATED TO BE ENCOUNTERED.

10. ANY SPILLS OF HAZARDOUS, SANITARY WASTES, FUELS, OILS, ETC. MUST BE REPORTED TO NJAW AND THE A/E. SPILLS MUST BE RESPONDED TO BY THE CONTRACTOR IMMEDIATELY (IF SAFE TO DO SO) TO PREVENT MIGRATION TO STORM DRAINS/INLETS, SOILS, ETC.

Jacobs
JACOBS ENGINEERING GROUP INC.
412 MOUNT KEMBLE AVE.
MORRISTOWN, NJ 07960
NJDCA 246A27990200

REVISIONS		REVISIONS	
1		6	
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5		10	

NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI

NJ LICENSED PROFESSIONAL ENGINEER
24GE04377400

AMERICAN WATER ENGINEERING
1 WATER STREET
CAMDEN, NJ 08102

NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R

DATE 10/24/22

PROJECT i18-180059-01

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
GENERAL NOTES

NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE N.T.S.

C-001

22.0S (LMS TECH) C:\PW_WORKDIR\DEN003\JEG_JKURNATH\D1314723\C1-NOTES.DWG 10/25/2022

DRAINAGE AND UTILITY NOTES:

1. NOTIFY AND COORDINATE WORK WITH ALL UTILITY COMPANIES AND NJAW .
2. SIZE, LOCATION, AND INVERTS OF EXISTING UTILITIES INCLUDING STORM SEWER, SANITARY SEWER, AND CATCH BASINS SHALL BE VERIFIED PRIOR TO THE INSTALLATION OF PROPOSED IMPROVEMENTS.
3. LOCATION OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE. CONFIRM LOCATIONS INDEPENDENTLY WITH NJAW AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. CONFIRM SANITARY SEWER AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN FIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. REPORT ALL DISCREPANCIES IMMEDIATELY IN WRITING TO THE A/E. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT, INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION AND/OR THE PURCHASE OF ANY STRUCTURES.
4. ALL UTILITY VALVE COVERS, RIMS, GRATES, VENTS, AND OTHER COMPONENTS WHICH ARE NOT BEING REMOVED AND ARE WITHIN AREAS OF DISTURBANCE SHALL BE RESET TO FINISHED GRADE.
5. USE EXTREME CAUTION DURING DISTURBANCE ACTIVITIES ADJACENT TO EXISTING ON-SITE UTILITY SERVICES. PROTECT THOSE UTILITIES AS REQUIRED DURING CONSTRUCTION TO AVOID DAMAGE. ANY DAMAGE TO EXISTING UTILITY SERVICE SHALL BE REPAIRED IN ACCORDANCE WITH THE RESPECTIVE UTILITY COMPANY REQUIREMENTS.
6. TYPE B INLETS SHALL HAVE BICYCLE SAFE ECO GRATE WITH 6" FACE AND TYPE N CURB BOX.
7. THE GEOTECHNICAL INVESTIGATION REPORT, PREPARED BY JACOBS, DATED ???, FOR THIS PROJECT SHALL BE REVIEWED THOROUGHLY PRIOR TO BID SUBMISSION,
8. THE LOCATION, ELEVATION, AND SIZE OF EXISTING UTILITIES SHOWN ON THE CONTRACT DRAWINGS ARE APPROXIMATE. THE FOLLOWING SHALL BE PERFORMED:
   - A. VERIFY THE LOCATION OF EXISTING UNDERGROUND UTILITIES WITHIN THE WORK AREA PRIOR TO CONSTRUCTION;
   - B. EXERCISE EXTREME CAUTION WHEN WORKING ADJACENT TO EXISTING POWER, COMMUNICATIONS, WATER, SEWER OR GAS LINES TO PREVENT DAMAGE;
   - C. IMMEDIATELY REPAIR ANY DAMAGE TO THE EXISTING UTILITIES RESULTING FROM CONSTRUCTION;
   - D. MAINTAIN UTILITIES IN ACTIVE OPERATION AT ALL TIMES UNLESS THEY ARE TO BE ABANDONED OR REMOVED;
9. ALL FIRE HYDRANTS ARE TO REMAIN OPERATIONAL DURING CONSTRUCTION.
10. ADEQUATELY PROTECT THE CONSTRUCTION SITE, ADJOINING PROPERTY, AND UTILITY SERVICES AS WORK PROCEEDS THROUGH THE STAGES.
11. PERFORM ALL WORK IN A SAFE AND CAUTIOUS MANNER.
12. REINFORCING STEEL WITHIN PRE-CAST STRUCTURES SHALL BE DESIGNED BY THE MANUFACTURER, SHOP DRAWINGS OF THE PRECAST STRUCTURES, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY, SHALL BE SUBMITTED TO THE A/E FOR REVIEW AND APPROVAL. REINFORCING STEEL WITHIN POURED-IN-PLACE DRAINAGE STRUCTURES SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW JERSEY AND SUBMITTED TO THE A/E FOR REVIEW AND APPROVAL.
13. ALL HDPE PIPE SHALL BE SMOOTH BORE UNLESS OTHERWISE NOTED.
14. ALL STORM STRUCTURES AFFECTED BY THE REMOVAL OF ANY PENETRATING SERVICE SHALL BE SEALED WITH MASONRY AND COATED WITH BITUMASTIC WATERPROOFING COMPOUND CONFORMING TO ASTM D 449, TYPE 1.
15. ALL PRE-CAST CONCRETE STRUCTURES IN AND WITHIN 20' OF PAVEMENT AREAS SHALL BE DESIGNED BY THE MANUFACTURER FOR H-20 LOADING UNLESS SPECIFIED OTHERWISE.
16. CONTRACTOR TO COORDINATE WITH NJAW SO THAT ALL BURIED UTILITIES THAT ARE BEING INSTALLED PRIOR TO BACKFILLING AND EXISTING UTILITIES THAT ARE UNCOVERED CAN BE DOCUMENTED.
17. PLUG RCP WHERE INDICATED WITH CONCRETE BRICK MORTARED IN PLACE. APPLY 3/8" THICK MORTAR PLASTER COAT FLUSH WITH INSIDE OF MANHOLE AND SEAL WITH BITUMASTIC WATERPROOFING COMPOUND.
18. PRIOR TO DISCONNECTION, CUTTING, REMOVAL, OR ANY UTILITY SERVICE WORK, EXCAVATION OR INTERRUPTION, COORDINATE WITH NJAW AND THE PRIVATE UTILITY PURVEYOR TO ENSURE UNINTERRUPTED SERVICE TO SURROUNDING FACILITIES. SUBMIT TEMPORARY SERVICE PLANS FOR APPROVAL PRIOR TO ANY UTILITY WORK.

LEGEND

ITEM	EXISTING	PROPOSED
CURB		
EDGE OF PAVEMENT		
FENCE	X	X
GUIDERAIL		
MAJOR CONTOURS	20	20
MINOR CONTOURS	21	21
SPOT ELEVATIONS	X 21.00	X 21.00
SIGNS		
STORM INLET		
STORM MANHOLE	D	D
HEADWALL		
UNDERGROUND STORM DRAINAGE PIPE	SD	SD
SANITARY MANHOLE	S	S
UNDERGROUND SANITARY PIPE	SAN	SS
SANITARY CLEANOUT	CO	
WATER MAIN	W	W
WATER MANHOLE	W	
WATER VALVE	WV	
FIRE HYDRANT		
GAS MAIN	G	
GAS VALVE	GV	
ELECTRICAL HANDHOLE	E	
TREE LINE		
TREES		
LIGHT POLE		
UTILITY POLE		
WETLAND LINE		
WETLAND MARKER	WL D1	
LIMIT OF DISTURBANCE		
INLET PROTECTION		

LIST OF ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
ABC	AGGREGATE BASE COURSE
AC	ACRES
APPROX.	APPROXIMATE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIAL
AWG	AMERICAN WIRE GAUGE
BC	BOTTOM OF CURB / GUTTER
BW	BOTTOM OF WALL
CFS	CUBIC FEET PER SECOND
CL	CENTER LINE
CONC	CONCRETE
d50	RIP-RAP GRADATION SIZE
DGA	DENSE GRADED AGGREGATE
DIA	DIAMETER
EA	EACH
E/ELEC.	ELECTRIC
EL./ELEV.	ELEVATION
ETC	ET CETERA
EX./EXIST.	EXISTING
FT	FEET
GPS	GLOBAL POSITIONING SYSTEM
GR	GRATE
HDPE	HIGH DENSITY POLYETHYLENE
IN.	INCH
INV	INVERT
LB/LBS	POUND
LF	LINEAR FEET
LOD	LIMIT OF DISTURBANCE
LP	LOW POINT
MAX.	MAXIMUM
MH	MANHOLE
MIN.	MINIMUM
MUTCD	MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
NAD	NORTH AMERICAN DATUM
NAVD	NORTH AMERICAN VERTICAL DATUM
NJ	NEW JERSEY
NJAW	NEW JERSEY AMERICAN WATER
NJDOT	NEW JERSEY DEPARTMENT OF TRANSPORTATION
NJFHADF	NEW JERSEY FLOOD HAZARD AREA DESIGN FLOOD
NO.	NUMBER
NTS	NOT TO SCALE
O.C.	ON CENTER
O.D.	OUTSIDE DIAMETER
OSHA	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PERF.	PERFORATED
PROP.	PROPOSED
PSI	POUNDS PER SQUARE INCH
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
REQ'D	REQUIRED
SF	SQUARE FEET
STM	STORM
SWM	STORMWATER MANAGEMENT
TC	TOP OF CURB
TFS	TOP SOILS, FERTILIZER & SEED AREAS
TW	TOP OF WALL
TYP.	TYPICAL
W/	WITH

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NORTHEAST REMSCO Construction

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1 WATER STREET
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NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R
DATE 10/24/22
PROJECT i18-180059-01

NEW JERSEY AMERICAN WATER
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
GENERAL NOTES, LEGEND AND ABBREVIATIONS

USE DIMENSIONS ONLY
SCALE N.T.S.

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GENERAL SHEET NOTES

1. PURPOSE OF THIS PLAN IS TO SHOW PARTIAL TOPOGRAPHY AND UTILITIES OF PORTION OF LOT 12, BLOCK 3001.
2. SITE FEATURES, TOPOGRAPHY AND UTILITIES SHOWN OUTSIDE LIMIT OF TOPOGRAPHY SURVEYED BY COLLIERS ENGINEERING & DESIGN SHOWN HEREON ARE BASED UPON ELECTRONIC CAD FILE PROVIDED BY NJAW AND MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, LOT 12, BLOCK 3001, TOWNSHIP OF NEPTUNE, COUNTY OF MONMOUTH, NEW JERSEY" PREPARED BY MORGAN ENGINEERING & SURVEYING, DATED: FEBRUARY 5, 2021, REVISED MAY 27, 2021.
3. BOUNDARY LINE AND EASEMENTS SHOWN HEREON ARE BASED UPON MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, LOT 12, BLOCK 3001, TOWNSHIP OF NEPTUNE, COUNTY OF MONMOUTH, NEW JERSEY" PREPARED BY MORGAN ENGINEERING & SURVEYING, DATED: FEBRUARY 5, 2021, REVISED MAY 27, 2021 FOR ORIENTATION PURPOSE ONLY. COLLIERS ENGINEERING & DESIGN HAVE NOT PERFORMED BOUNDARY SURVEY.
4. HORIZONTAL AND VERTICAL DATUM ARE BASED UPON ELECTRONIC CAD FILE PROVIDED BY NJAW AND MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, LOT 12, BLOCK 3001, TOWNSHIP OF NEPTUNE, COUNTY OF MONMOUTH, NEW JERSEY" PREPARED BY MORGAN ENGINEERING & SURVEYING, DATED: FEBRUARY 5, 2021, REVISED MAY 27, 2021.

0 40' 80'
SCALE: 1"=40'

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NEW JERSEY AMERICAN WATER

DRAWN BY
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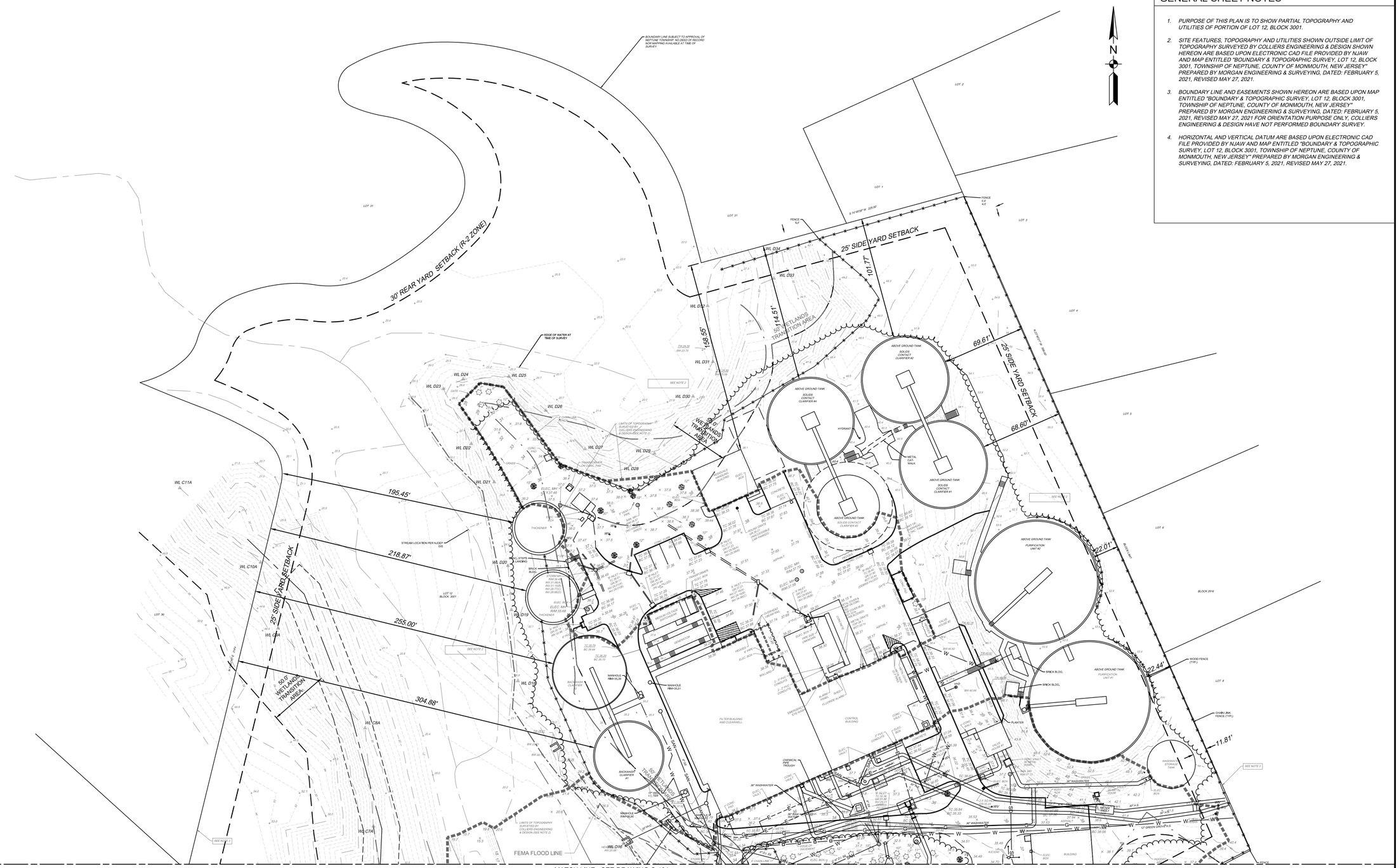
DATE 10/24/22
PROJECT i18-180059-01

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
EXISTING CONDITIONS PLAN - SOUTH

NEW JERSEY AMERICAN WATER
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES
USE DIMENSIONS ONLY SCALE 1"=40'
4 OF 20
C-101

GENERAL SHEET NOTES

1. *PURPOSE OF THIS PLAN IS TO SHOW PARTIAL TOPOGRAPHY AND UTILITIES OF PORTION OF LOT 12, BLOCK 3001.*
2. *SITE FEATURES, TOPOGRAPHY AND UTILITIES SHOWN OUTSIDE LIMIT OF TOPOGRAPHY SURVEYED BY COLLIERS ENGINEERING & DESIGN SHOWN HEREON ARE BASED UPON ELECTRONIC CAD FILE PROVIDED BY NJAW AND MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, LOT 12, BLOCK 3001, TOWNSHIP OF NEPTUNE, COUNTY OF MONMOUTH, NEW JERSEY" PREPARED BY MORGAN ENGINEERING & SURVEYING, DATED: FEBRUARY 5, 2021, REVISED MAY 27, 2021.*
3. *BOUNDARY LINE AND EASEMENTS SHOWN HEREON ARE BASED UPON MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, LOT 12, BLOCK 3001, TOWNSHIP OF NEPTUNE, COUNTY OF MONMOUTH, NEW JERSEY" PREPARED BY MORGAN ENGINEERING & SURVEYING, DATED: FEBRUARY 5, 2021, REVISED MAY 27, 2021 FOR ORIENTATION PURPOSE ONLY. COLLIERS ENGINEERING & DESIGN HAVE NOT PERFORMED BOUNDARY SURVEY.*
4. *HORIZONTAL AND VERTICAL DATUM ARE BASED UPON ELECTRONIC CAD FILE PROVIDED BY NJAW AND MAP ENTITLED "BOUNDARY & TOPOGRAPHIC SURVEY, LOT 12, BLOCK 3001, TOWNSHIP OF NEPTUNE, COUNTY OF MONMOUTH, NEW JERSEY" PREPARED BY MORGAN ENGINEERING & SURVEYING, DATED: FEBRUARY 5, 2021, REVISED MAY 27, 2021.*



MATCH LINE - SEE DRAWING C-101

0 40' 80'

SCALE: 1"=40'

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CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
EXISTING CONDITIONS PLAN - NORTH

NEW JERSEY AMERICAN WATER		USE DIMENSIONS ONLY SCALE 1"=40'
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	5 OF 20	C-102

GENERAL SHEET NOTES

1. ALL COMPONENTS OF THE ELECTRIC SLIDE GATE, INCLUDING BUT NOT LIMITED TO, THE CONTROL UNIT, GATE, LIGHTS, SIGNAGE, ELECTRIC BOXES, KEYPADS/CARD READERS, ACCESSORIES, ETC., MUST BE REMOVED, SALVAGED, AND STORED IN A SECURE LOCATION APPROVED BY NJAW. THE CONTRACTOR MUST TAKE CARE NOT TO DAMAGE THE COMPONENTS DURING REMOVAL
2. EXISTING IMPROVEMENTS SHOWN DARK WITHIN THE LOD MUST BE REMOVED, CLEAR AND REGRADE WITHIN THE LOD AS REQUIRED TO INSTALL THE PROPOSED SITE IMPROVEMENTS.

SHEET KEYNOTES

1. LIMIT OF DISTURBANCE
2. CURB TO BE REMOVED
3. FENCE TO BE REMOVED
4. GUIDE RAIL TO BE REMOVED
5. 2" BITUMINOUS PAVEMENT MILLING AREA (TYP.)
6. CONCRETE VAULT TO BE REMOVED
7. STORM INLET TO BE REMOVED
8. STORM PIPE TO BE REMOVED
9. TREES TO BE REMOVED (TYP.)
10. SANITARY MANHOLE TO BE REMOVED
11. SANITARY SEWER PIPE TO BE REMOVED
12. UTILITY POLE & GUY POLE TO BE REMOVED
13. PORTION OF WATERMAIN TO BE REMOVED
14. PORTION OF WATERMAIN PIPE TO BE ABANDONED
15. SIGN TO BE REMOVED AND SALVAGED
16. CONCRETE SIDEWALK TBR
17. ELECTRICAL BOX MOUNTED ON WALL TBR (SEE ELECTRICAL DRAWINGS)
18. PROTECT EXISTING STORM PIPE DURING CONSTRUCTION
19. PAVEMENT MILLING LIMIT
20. ELECTRIC BOX TO BE REMOVED AND SALVAGED
21. BOLLARD TO BE REMOVED
22. CUT AND CAP PIPE (TYP.)
23. PAVEMENT SAWCUT (TYP.)
24. FULL DEPTH PAVEMENT REMOVAL (TYP.)
25. CONCRETE PAD TO BE REMOVED

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NEW JERSEY AMERICAN WATER

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CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
DEMOLITION PLAN

NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE 1"=30'

6 OF 20

CD101

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SHEET KEYNOTES

0 80' 160'
SCALE: 1"=80'

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NEW JERSEY AMERICAN WATER

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CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
OVERALL SITE PLAN

NEW JERSEY AMERICAN WATER
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES
USE DIMENSIONS ONLY
SCALE 1"=80'
7 OF 20
CS100

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SHEET KEYNOTES

1. BITUMINOUS PAVEMENT (TYP.) (C-501/4)
2. MEET EXISTING (TYP.)
3. CONCRETE CURB (C-501/1)
4. STORM INLET TYPE B (TYP.) (C-502/1)
5. STORM MANHOLE (TYP.) (C-502/2)
6. TRENCH DRAIN (C-502/8)
7. STORMWATER INLET TYPE A (C-504/3)
8. UNDERGROUND STORMWATER MANAGEMENT BASIN AREA (C-504/1)
9. CONCRETE PAD (C-501/3)
10. VEGETATED PERMEABLE GRASS PAVERS (C-501/2)
11. 4" WIDE WHITE PAINTED PARKING STRIPE
12. HEADWALL (C-505/2)
13. NEW TREE LINE
14. REINSTALL/REPLACE EQUIPMENT, ACCESS GATE, FENCE AND ACCESSORIES THAT WAS REMOVED FROM CONSTRUCTION.
15. CONCRETE SIDEWALK (C-501/7)
16. CONCRETE CLEARWELL (SEE ARCHITECTURAL AND STRUCTURAL DRAWINGS)
17. METAL STAIRS (SEE STRUCTURAL DRAWINGS)
18. 2" BITUMINOUS PAVEMENT OVERLAY AREA (TYP.)
19. BITUMINOUS PAYMENT OVERLAY LIMIT
20. 1" CLEAN STONE/GRAVEL
21. ELECTRIC HANDHOLES (SEE ELECTRICAL DRAWINGS)
22. UNDERGROUND ELECTRIC SERVICE (SEE ELECTRICAL DRAWINGS)
23. REINSTALL SALVAGED SIGN
24. REINSTALL SALVAGED ELECTRIC BOX
25. RESIDUALS BUILDING ELECTRIC ROOM ADDITION, 14'x20' (SEE ARCHITECTURAL AND ELECTRICAL DRAWINGS)
26. MODIFIED STORM MANHOLE (C-504/5)
27. CONTROL STRUCTURE (C-504/2)
28. EXTERIOR EQUIPMENT PAD (C-501/10)
29. ELECTRIC TRANSFORMERS (SEE ELECTRICAL DRAWINGS)
30. CONTAINMENT TRENCH DRAIN (C-505/3)
31. MV FUSIBLE SWITCH ON 6' X 4' EXTERIOR EQUIPMENT PAD (SEE ELECTRICAL DRAWINGS)
32. BOLLARD (TYP.) (C-502/7)

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NEW JERSEY AMERICAN WATER

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
SITE PLAN

DRAWN BY PROJECT ENG'R		
DATE 10/24/22	NEW JERSEY AMERICAN WATER	USE DIMENSIONS ONLY SCALE 1"=30'
PROJECT i18-180059-01	USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	8 OF 20 / CS101

GENERAL SHEET NOTES

1. SEE UTILITY AND PROCESS DRAWINGS FOR WATER AND SANITARY PIPE SIZE, LAYOUT LOCATION, ETC.
2. SEE ELECTRICAL DRAWINGS FOR OVERHEAD AND UNDERGROUND ELECTRIC SERVICE AND COMPONENTS.
3. SEE SHEET C-201 FOR STORM DRAINAGE PROFILE FROM INLET #1 TO MODIFIED STORM MH #2.

SHEET KEYNOTES

1. LIMIT OF DISTURBANCE

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NEW JERSEY AMERICAN WATER

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CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
GRADING AND DRAINAGE PLAN

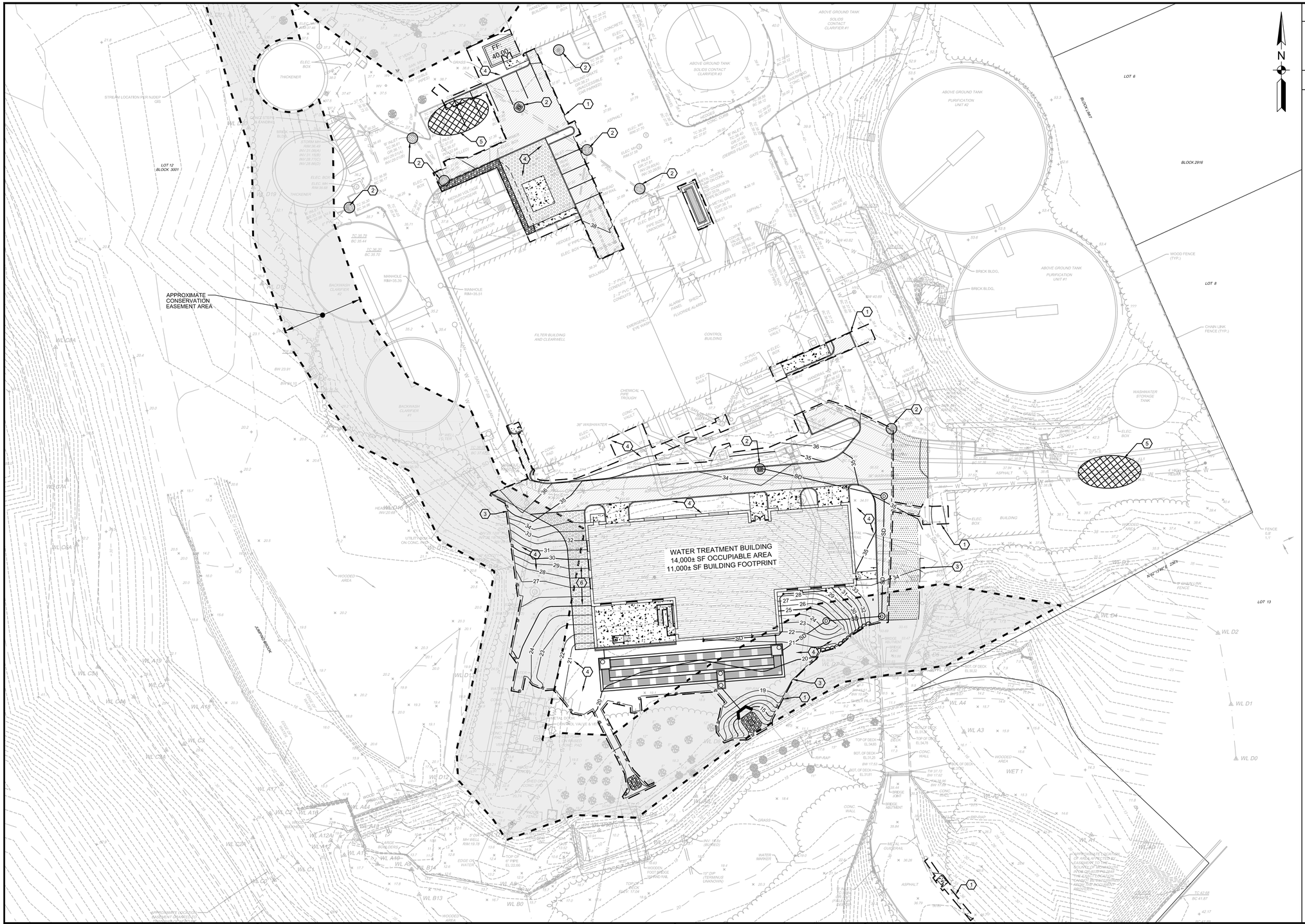
NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE 1"=30'

9 OF 20

CG101



GENERAL SHEET NOTES

1. THE PROJECT WILL UTILIZE THE EXISTING INTERIOR PAVED ACCESS DRIVE AS THE PRIMARY CONSTRUCTION ENTRANCE. IF REQUIRED, CONSTRUCTION VEHICLE TIRES WILL BE HOSED OFF PRIOR TO LEAVING THE CONSTRUCTION SITE AND THE PAVEMENT WILL BE SWEPT AND CLEANED DAILY AT THE END OF THE WORK DAY.

SHEET KEYNOTES

1. LIMIT OF DISTURBANCE
2. INLET PROTECTION (TYP.) (C-503/6)
3. SILT FENCE (TYP.) (C-503/2)
4. TOPSOIL, FERTILIZER, AND SEED (TYP.)
5. TEMPORARY STOCKPILE AREA (C-503/3)
6. STABILIZED CONSTRUCTION ENTRANCE (C-503/4)

0 30' 60'
SCALE: 1"=30'

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NEW JERSEY AMERICAN WATER

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CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
SOIL EROSION CONTROL PLAN

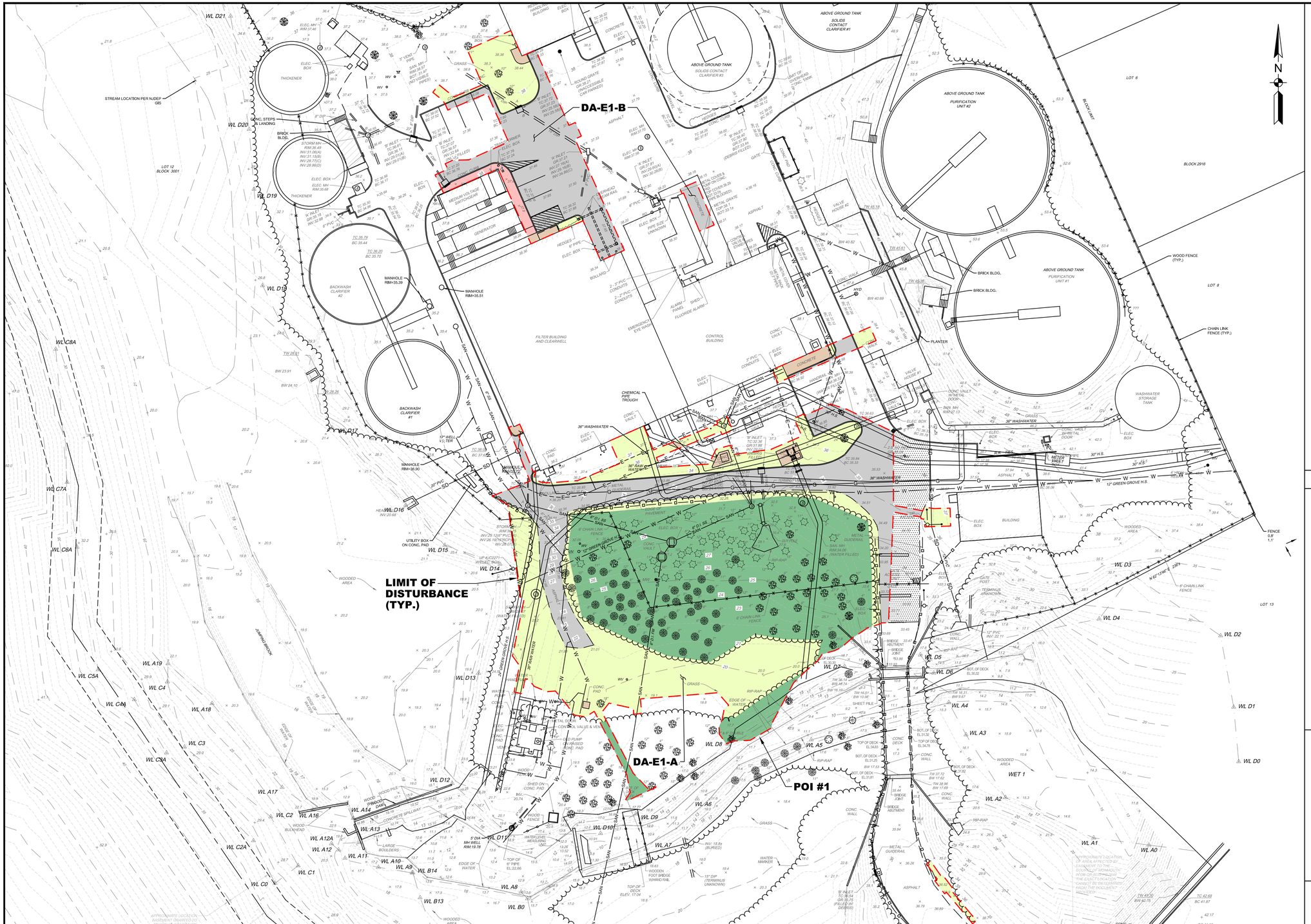
NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE 1"=30'

10 OF 20

CG102



DRAINAGE AREA TABLE

DA-E1-A (36,197 SF / 0.831 AC)

	AREA NAME	AREA (SF)	AREA (AC)
	PERVIOUS AREA	12,114	0.278
	WOODS	16,372	0.376
	REGULATED MOTOR VEHICLE SURFACE	7,174	0.165
	MISCELLANEOUS IMPERVIOUS AREA	537	0.012
	EXISTING PAVEMENT MILL/OVERLAY AREA (NO DISTURBANCE)		
	TOTAL	36,197	0.831

DA-E1-B (6,853 SF / 0.157 AC)

	AREA NAME	AREA (SF)	AREA (AC)
	PERVIOUS AREA	1,409	0.032
	WOODS	0	0.000
	REGULATED MOTOR VEHICLE SURFACE	4,867	0.112
	MISCELLANEOUS IMPERVIOUS AREA	151	0.003
	GRAVEL	426	0.010
	TOTAL	6,853	0.157

DA-E1 (43,050 SF / 0.988 AC)

	AREA NAME	AREA (SF)	AREA (AC)
	PERVIOUS AREA	13,523	0.310
	WOODS	16,372	0.376
	REGULATED MOTOR VEHICLE SURFACE	12,041	0.276
	MISCELLANEOUS IMPERVIOUS AREA	688	0.016
	GRAVEL	426	0.010
	EXISTING PAVEMENT MILL/OVERLAY AREA (NO DISTURBANCE)		
	TOTAL	43,050	0.988

0 30' 60'
SCALE: 1"=30'

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NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R

DATE 10/24/22

PROJECT E6X98900

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
EXISTING DRAINAGE AREA MAP

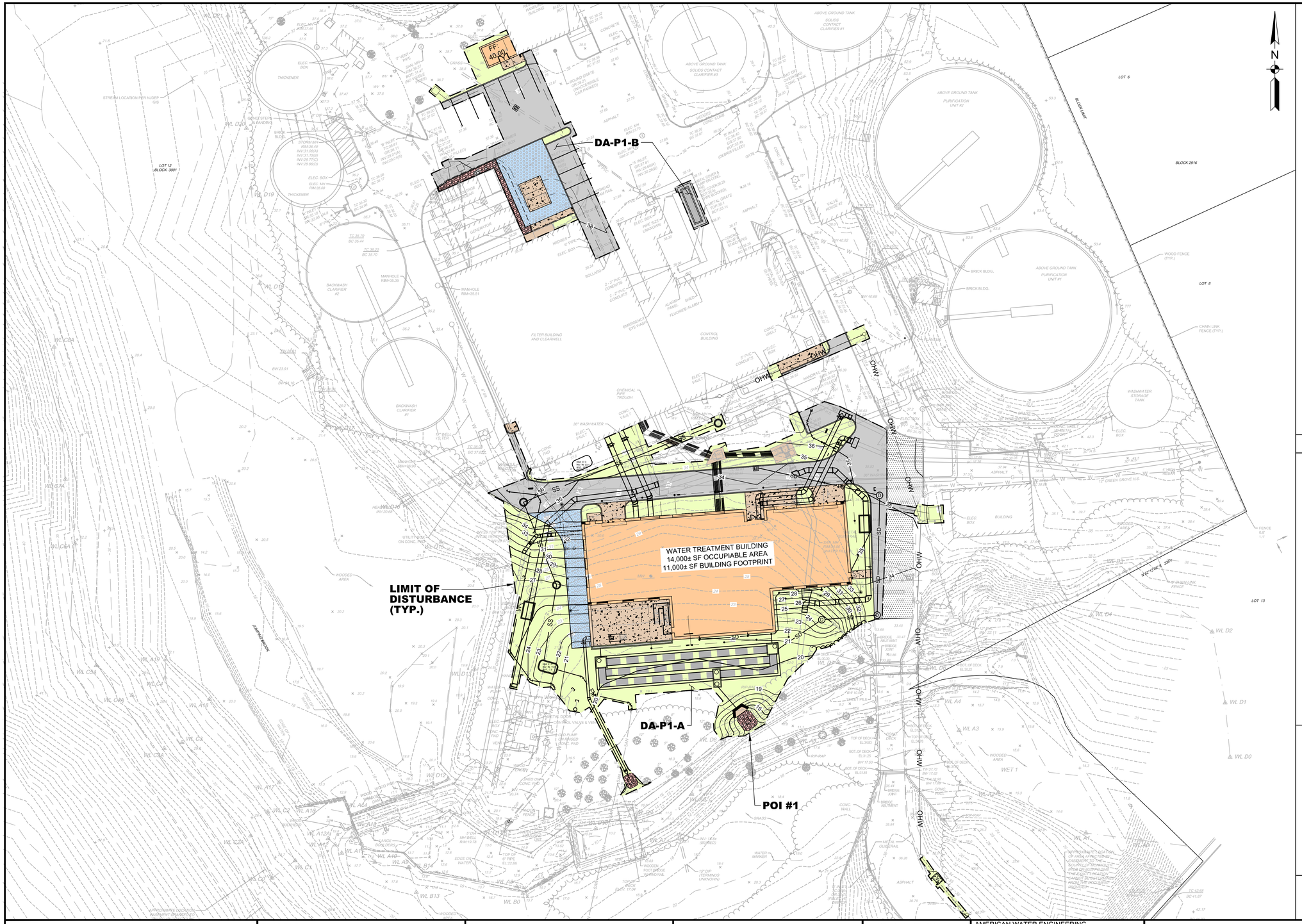
NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

11 OF 20

USE DIMENSIONS ONLY
SCALE 1"=30'

CG103



DRAINAGE AREA TABLE

DA-P1-A (36,197 SF / 0.831 AC)

	AREA NAME	AREA (SF)	AREA (AC)
	PERVIOUS AREA	16,171	0.371
	REGULATED MOTOR VEHICLE SURFACE	5,888	0.135
	MISCELLANEOUS IMPERVIOUS AREA	2,777	0.064
	PROPOSED BUILDING AREA	10,016	0.230
	VEGETATED PERMEABLE GRASS PAVER AREA	1,184	0.027
	GRAVEL	161	0.004
	EXISTING PAVEMENT MILL/OVERLAY AREA (NO DISTURBANCE)		
	TOTAL	36,197	0.831

DA-P1-B (6,853 SF / 0.157 AC)

	AREA NAME	AREA (SF)	AREA (AC)
	PERVIOUS AREA	636	0.015
	REGULATED MOTOR VEHICLE SURFACE	3,905	0.090
	MISCELLANEOUS IMPERVIOUS AREA	542	0.012
	PROPOSED BUILDING AREA	277	0.006
	VEGETATED PERMEABLE GRASS PAVER AREA	1,180	0.027
	GRAVEL	313	0.007
	TOTAL	6,853	0.157

DA-P1 (42,050 SF / 0.988 AC)

	AREA NAME	AREA (SF)	AREA (AC)
	PERVIOUS AREA	16,807	0.386
	REGULATED MOTOR VEHICLE SURFACE	9,793	0.225
	MISCELLANEOUS IMPERVIOUS AREA	3,319	0.076
	PROPOSED BUILDING AREA	10,293	0.236
	VEGETATED PERMEABLE GRASS PAVER AREA	2,364	0.054
	GRAVEL	474	0.011
	EXISTING PAVEMENT MILL/OVERLAY AREA (NO DISTURBANCE)		
	TOTAL	43,050	0.988

0 30' 60'
SCALE: 1"=30'

Jacobs
JACOBS ENGINEERING GROUP INC.
412 MOUNT KEMBLE AVE.
MORRISTOWN, NJ 07960
NJDCA 246A27990200

REVISIONS		REVISIONS	

NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI
NJ LICENSED PROFESSIONAL ENGINEER
24GE04377400

AMERICAN WATER ENGINEERING
1 WATER STREET
CAMDEN, NJ 08102

NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R

DATE 10/24/22

PROJECT E6X98900

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
PROPOSED DRAINAGE AREA MAP

NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE 1"=30'

22.0S (LMS TECH) C:\PW_WORKDIR\DEN003\JEG_JKURNATH\D1314723\DA-PROPOSED.DWG 10/25/2022

CHEMICAL INJECTION TROUGH BETWEEN CHEMICAL AND RAW WATER VAULTS (SEE DETAIL & SCHEDULE, SHEET C-504)

CHEMICAL STORAGE TANK FILL AND INJECTION LINES BETWEEN EXISTING BUILDING AND CHEMICAL VAULT, INSTALLED IN & PARALLEL TO EXISTING CHEMICAL PIPE TROUGH (SEE DETAIL & SCHEDULE, SHEET C-504)

MANHOLE (SS-03)
RIM: 37.83
INV. IN 3": 32.54
INV. IN 4" 31.01
INV. IN 2" 30.19
INV.: OUT: 25.31

CHEMICAL STORAGE TANK FILL AND INJECTION LINES BETWEEN NEW BUILDING AND CHEMICAL VAULT, INSTALLED IN & PARALLEL TO NEW CHEMICAL PIPE TROUGH (SEE PROFILE, SHEET CU102 AND DETAIL & SCHEDULE, SHEET C-504)

16"x16" ELECTRICAL DUCT BANK

(2) 36" MJ BFVs

STORM INLET (SEE DRAINAGE PLAN)

6" MJ S. SLEEVE

6" MJ 45° BEND

30" MJ TEE

30" MJ S. SLEEVE

30" MJ CAP

6" MJ 45° BEND

30" MJ BFV

30" MJ 90° BEND

36" MJ 22.5° BEND

30" MJ S. SLEEVE

THRUST RESTRAINT COLLAR

6" MJ GV

30" MJ BFV

30"x6" MJ TEE

36" MJ 90° BEND

(2) 36" MJ 45° VERT. BEND

12" MJ CAP

STORM MANHOLE (TYP.) (SEE DRAINAGE PLAN)

ELECTRICAL MANHOLE (TYP.)

36" MJ 45° BEND

AIR RELEASE & EXTRACTION CHAMBER

STORM PIPING (SEE DRAINAGE PLAN)

18"x18" ELECTRICAL DUCT BANK SEE PROFILE, SHEET CU102)

(2) 30" MJ 45° BEND

30" MJ 90° BEND, ROLLED

30" MJ 45° VERT. BEND

PROPOSED PUMP STATION & TREATMENT BUILDING
FF: 35.00±

36" MJ 90° BEND

(2) 36" MJ 45° BENDS

(2) 36" MJ 45° BENDS, ROLLED

24" MJ 45° BEND

24" MJ 45° BEND, ROLLED

12" MJ 11.25° VERT. BEND

24" MJ BFV

24" MJ 22.5° BEND

12" MJ CAP

MANHOLE (SS-01)
RIM: 28.00
INV. IN (DROP): 18.67
INV. OUT: 16.06

AIR RELEASE & EXTRACTION CHAMBER

12" DI WELL 6 RAW WATER (SEE PROFILE, SHEET CU103)

46 LF 6" SCH. 40 PVC @ 2.0%

SANITARY GRAVITY AND FORCE MAINS (SEE PROFILE, SHEET CU103)

SANITARY PUMP STATION (SPS-01)
RIM: 22.00
INV. IN: 15.64
(SEE DETAIL, SHEET M-501)

12" MJ 22.5° BEND

12" MJ 45° BEND

(2) 12" MJ 45° BEND

MANHOLE (SS-02)
RIM: 36.33
INV. IN: 22.82
INV. OUT: 19.78

30 LF 6" SCH. 40 PVC @ 3.3%

4" PVC SANITARY LATERAL

24" DI GREEN GROVE DISCHARGE (SEE PROFILE, SHEET CU102)

(2) 24" MJ 45° BEND

18" MJ 90° BEND

SANITARY PUMP STATION CONTROL PANEL

18" MJ DPV

18" DUCTILE IRON OVERFLOW

6" DUCTILE IRON PIPE

(2) 6" MJ 45° BEND

(2) 6" MJ 45° BEND

(2) 12" MJ CAPS

18" MJ 22.5° BEND

18" DUCTILE IRON OVERFLOW

18" RESTRAINED FLANGE ADAPTER

18" FL DUCKBILL VALVE
INV.: 18.0

SCOUR HOLE

UNDERGROUND STORMWATER MANAGEMENT BASIN (SEE DRAINAGE PLAN)

36" BFV

THRUST BLOCK

36" MJ 90° BEND

36" MJ S. SLEEVE

36" MJ 11.25° BEND

36" MJ 90° VERT. BEND

36" MJ 45° VERT. BEND

THRUST RESTRAINT COLLAR

36" DI GREEN GROVE RAW WATER DISCHARGE (SEE PROFILE, SHEET CU102)

TH-1 TH-2 TH-3 TH-4 TH-5 TH-6 TH-7 TH-8 TH-9 TH-10 TH-11 TH-12 TH-13 TH-14 TH-15

Test Hole #	Top of Pipe Elev.	Utility Size	Utility Description	Northing	Easting
TH-1	36.6	TBD	Gas Line	499,516.40	613,395.52
TH-2	28.3	24"	Green Grove Discharge	499,490.17	613,381.04
TH-3	18.8	24"	Green Grove Discharge	499,434.71	613,380.42
TH-4	12.7	6"	Sanitary Force Main	499,355.72	613,440.89
TH-5	N/A	N/A	Inifltration Basin Area	499,392.91	613,458.29
TH-6	14.5	36"	East Raw Water Line	499,451.94	613,552.99
TH-7	27.5	36"	Washwater Line.	499,522.92	613,609.92
TH-7	34.0	2"	Gas Line	499,522.92	613,609.92
TH-8	32.3	30"	Main Service Discharge	499,535.73	613,618.36
TH-9	32.2	30"	Main Service Discharge	499,545.32	613,620.53
TH-10	34.0	TBD	Gas Line	499,504.36	613,702.75
TH-11	N/A	N/A	Inifltration Basin Area	499,504.56	613,737.46
TH-12	25.4	36"	West Raw Water Line	499,517.13	613,450.16
TH-13	25.1	36"	East Raw Water Line	499,523.33	613,550.36
TH-13	28.5	36"	Washwater Line	499,523.33	613,550.36
TH-13	28.5	12"	Demolished Water Line	499,523.33	613,550.36
TH-14	20.0	36"	West Raw Water Line	499,507.01	613,415.34

0 20' 40' 60'
1"=20'

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MORRISTOWN, NJ 07960
NJDCA 246A27990200

REVISIONS		REVISIONS	
1		1	
2		2	
3		3	
4		4	
5		5	

NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI
NJ LICENSED PROFESSIONAL ENGINEER
24GE04377400

AMERICAN WATER ENGINEERING
1 WATER STREET
CAMDEN, NJ 08102

NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R

DATE 10/24/2022

PROJECT i18-180059-01

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
SITE PIPING AND UTILITY PLAN
PUMP STATION & CLEARWELL BUILDING

NEW JERSEY AMERICAN WATER

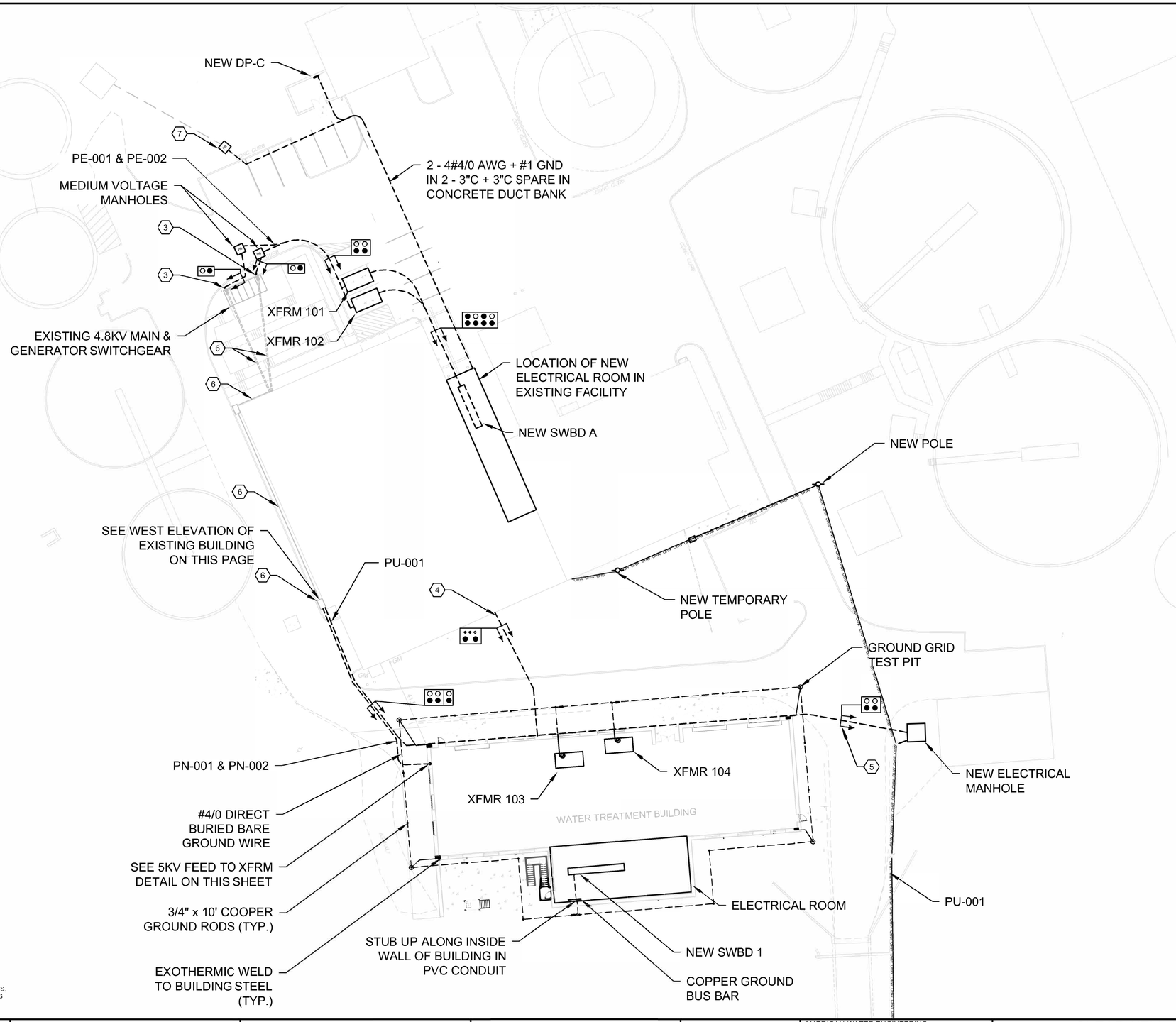
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE AS SHOWN

13 OF 20

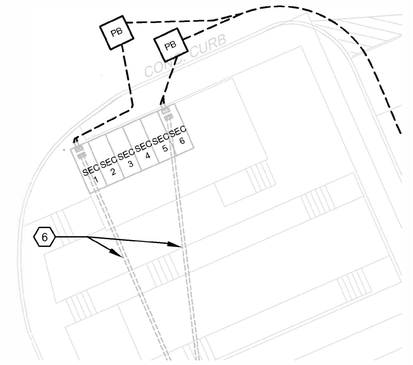
CU101

22.0S (LMS TECH) C:\PW_WORKDIR\DEN003\JEG_PATELD\D1314723\C9-SITE PIPING & UTILITY PLAN.DWG 10/24/2022

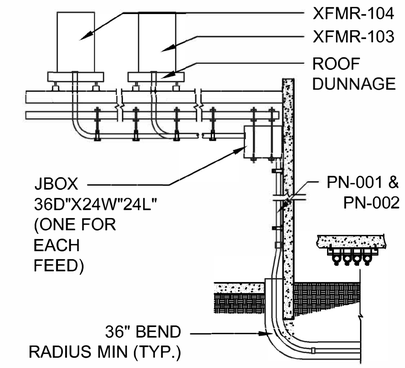


ELECTRICAL KEY NOTES

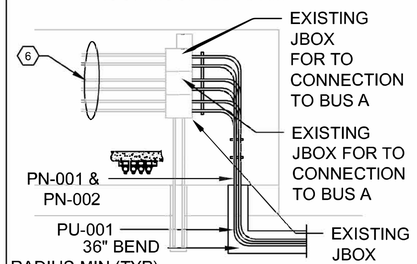
1. REFER TO DRAWINGS E-027 FOR GROUNDING DETAILS.
2. ALL GROUND CONNECTIONS TO GROUND RING, GROUND RODS, AND BUILDING STEEL SHALL BE EXOTHERMIC.
3. INTERCEPT EXISTING 2-4" SPARE CONDUIT STUB OUT RUN NEW CONDUIT TAGGED P-001 AND P-002
4. PROVIDE 2-2" C + 2" SPARE FOR COMMUNICATIONS AND 2-2"C FOR GENERATOR POWER.
5. PROVIDE 2 SETS OF 3-1/C 350MCM + 1/0 NEUTRAL (5KV SHIELDED CABLE WITH 600V INSULATED GROUND) IN 2-4" C PLUS 2-4" SPARES.
6. REUSE EXISTING 2-4" RACEWAY TO RUN WIRES IN CABLE AND CONDUIT TAG P-002¶ AND P-022 TO EXISTING OVERCURRENT PROTECTION DEVICES IN EXISTING 4.8KV MAIN AND GENERATOR SWITCHGEAR COMPARTMENTS 1 AND 2. SEE ONE-LINE DIAGRAM. CUT INTO EXISTING ASSOCIATED JUNCTION BOXES AS SHOWN WITH NEW CONDUITS.
7. INTERCEPT AND REUSE EXISTING CONDUIT TO MV TRANSFORMER TO RE-FEED WELL.



EXISTING 4.8KV MAIN & GENERATOR SWITCHGEAR ENLARGED PLAN



5KV FEED TO ROOF MOUNTED XFRM



WEST ELEVATION OF EXISTING TREATMENT BUILDING

GENERAL NOTES

1. REFER TO DRAWINGS E-024 AND E-025 FOR CABLE AND CONDUIT REQUIREMENTS.
2. REFER TO CIVIL DRAWINGS FOR ALL OUTDOOR EQUIPMENT PAD REQUIREMENTS

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REVISIONS		REVISIONS	
1		1	
2		2	
3		3	
4		4	
5		5	

NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI

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1 WATER STREET
CAMDEN, NJ 08102

NEW JERSEY AMERICAN WATER

DRAWN BY NCP
PROJECT ENG'R NCP

DATE 10/24/22

PROJECT E6X98900

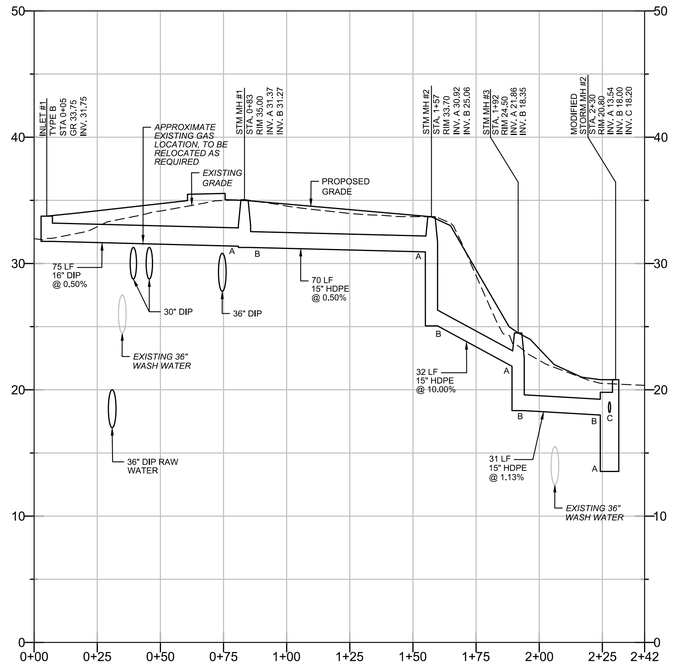
CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION ELECTRICAL SITE PLAN

NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY SCALE AS SHOWN

22.0S (LMS TECH) C:\PW_WORKDIR\DEN003\JEG_PETRIZN\D1314728\E005 - SITE & UTILITY PLAN-SHEET 1.DWG



PROFILE - INLET #1 TO MODIFIED STORM MH #2

SCALE:HORIZINTAL 1"=30', VERTICAL 1"=6'

0 30' 60'
HORIZONTAL SCALE: 1"=30'

0 6' 12'
VERTICAL SCALE: 1"=6'

Jacobs

JACOBS ENGINEERING GROUP INC.
412 MOUNT KEMBLE AVE.
MORRISTOWN, NJ 07960
NJDCA 246A27990200

REVISIONS		REVISIONS	

NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI

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AMERICAN WATER ENGINEERING
1 WATER STREET
CAMDEN, NJ 08102

NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R

DATE 10/24/22

PROJECT i18-180059-01

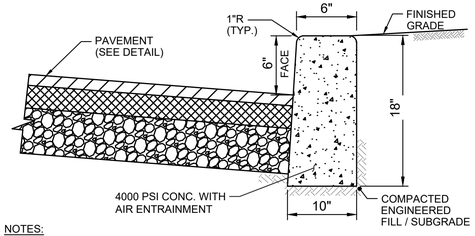
CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
STORM DRAINAGE PROFILE

NEW JERSEY AMERICAN WATER

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

USE DIMENSIONS ONLY
SCALE AS SHOWN

C-201

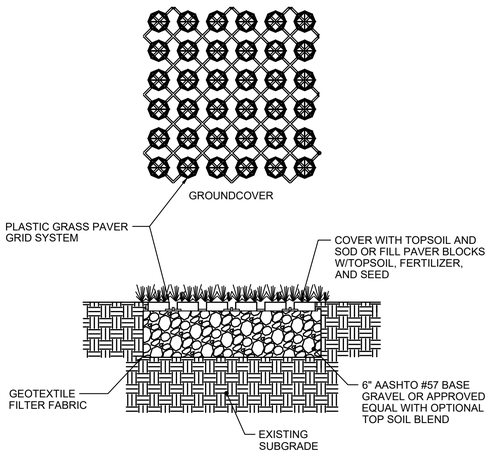


NOTES:

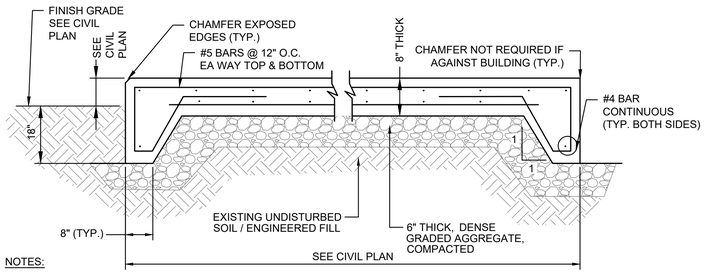
1. ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS MUST BE REPLACED WITH COMPACTED ENGINEERED FILL. ALL SUBGRADES SHALL BE APPROVED BY THE CONTRACTING OFFICER PRIOR TO POURING.

2. EXPANSION JOINTS SHALL BE PROVIDED AT EQUAL DISTANCES OF NOT MORE THAN 20', AND AT ALL JUNCTIONS W/CONCRETE, MASONARY OR METALS. JOINTS SHALL BE FILLED WITH PREFORMED EXPANSION JOINT FILLER, 1/2" THICK. CONFORMING TO STATE DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE JOINT SHALL BE RECESSED 1/4" FROM THE TOP AND FRONT OF THE CONCRETE CURB.

1 CONCRETE CURB DETAIL
NOT TO SCALE



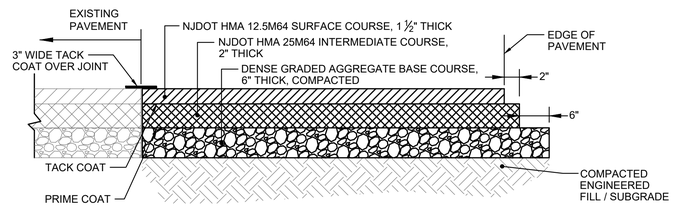
2 VEGETATED PERMEABLE GRASS PAVER DETAIL
NOT TO SCALE



NOTES:

1. PROVIDE 1/2" WIDE PREMOLDED BITUMINOUS MATERIAL EXPANSION JOINTS AGAINST ALL HARD SURFACES AND AT LOCATIONS SO THE LENGTH TO WIDTH RATIO DOES NOT EXCEED 2 TIMES.
2. PROVIDE PIPE SLEEVES OR OPENINGS IN CONC PAD FOR ANY UTILITIES AS PER EACH DISCIPLINES DRAWINGS.
3. REFER TO DWG C-001 FOR CONCRETE NOTES.

3 TYPICAL CONCRETE PAD DETAIL
NOT TO SCALE



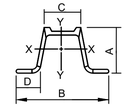
4 BITUMINOUS PAVEMENT DETAIL
NOT TO SCALE

WEIGHT LBS. / FT.	DIMENSIONS (IN)				AREA IN. 2	X-X AXIS		Y-Y AXIS	
	"A"	"B"	"C"	"D"		I(IN. 4)	S(IN. 3)	I(IN. 4)	S(IN. 3)
2.50	1.516	3.062	1.278	0.669	0.760	0.228	0.313	0.539	0.352
4.00	1.968	3.500	1.336	0.834	1.187	0.611	0.707	1.161	0.664

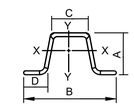
TYPE 1 STEEL U-POST PROPERTIES

WEIGHT LBS. / FT.	DIMENSIONS (IN)				AREA IN. 2	X-X AXIS		Y-Y AXIS	
	"A"	"B"	"C"	"D"		I(IN. 4)	S(IN. 3)	I(IN. 4)	S(IN. 3)
2.50	1.549	3.125	1.250	0.625	0.748	0.233	0.289	0.551	0.353
4.00	1.845	3.500	1.625	0.718	1.190	0.500	0.560	1.190	0.690

TYPE 2 STEEL U-POST PROPERTIES

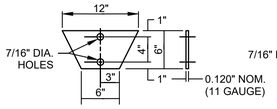


TYPE 1 STEEL U-POST

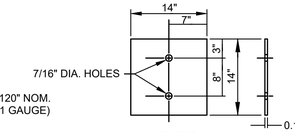


TYPE 2 STEEL U-POST

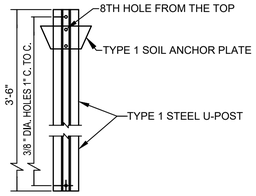
TOP POST U-POST



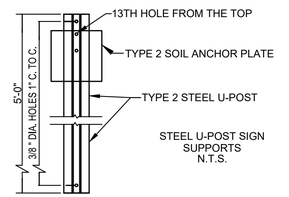
TYPE 1 SOIL ANCHOR PLATE



TYPE 2 SOIL ANCHOR PLATE



TYPE 1 ANCHOR POST ASSEMBLY

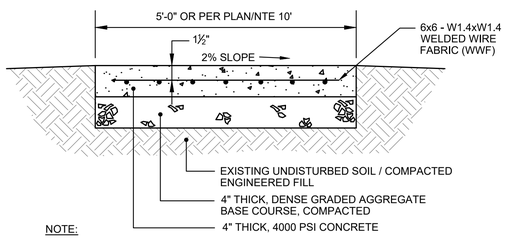


TYPE 2 ANCHOR POST ASSEMBLY

5 STEEL POSTS, POST CLIPS, SPACING, ETC.
NOT TO SCALE

NOTES:
1. SOLID WHITE PAINT FOR ARROWS AND STOP BAR.
2. SOLID YELLOW PAINT, 4" WIDE SHALL BE USED FOR ROADWAY TRAFFIC STRIPING.

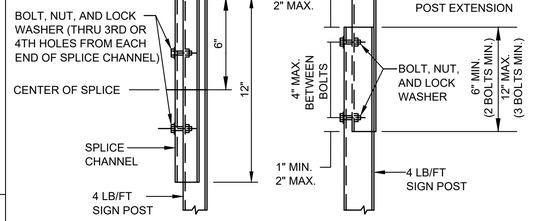
6 PAINTED STOP BAR DETAIL
NOT TO SCALE



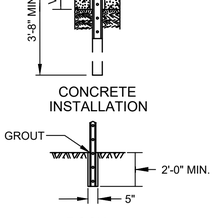
NOTE:

1. EXPANSION JOINTS 1/2" WIDE PREMOLDED BITUMINOUS MATERIAL SHALL BE INSTALLED AT 10' INTERVALS, AND AGAINST ALL HARD SURFACES, CONTRACTION JOINTS SPACED AT EQUAL INTERVALS, 5' MAXIMUM LENGTH, LENGTH TO WIDTH RATIO SHALL NOT EXCEED 2:1.
2. SLOPE SIDEWALK AWAY FROM BUILDINGS AND IN THE SAME DIRECTION AS ADJACENT TOPOGRAPHY.

7 CONCRETE SIDEWALK DETAIL
NOT TO SCALE

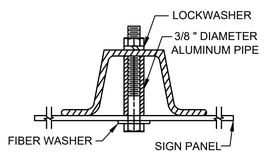


SIGN POST EXTENSION SPLICE DETAILS



CONCRETE INSTALLATION

ROCK INSTALLATION



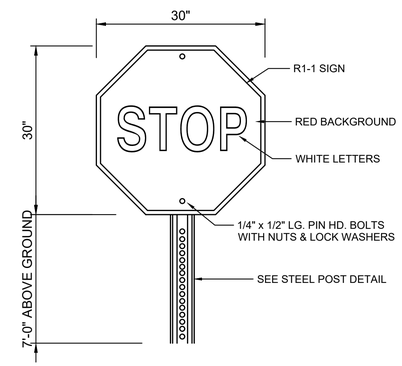
FRONT MOUNT BRACKET

PANEL SIZE (W x H)	# OF POSTS	POST SIZE (LB/ FT)
18" x 18"	1	2.5
18" x 24"	1	2.5
24" x 24"	1	2.5
24" x 30"	1	2.5
24" x 36"	1	2.5
30" x 24"	1	2.5
30" x 30"	1	2.5
36" x 12"	2	2.5
36"x36"x36"	2	2.5
30" x 36"	1	4.0

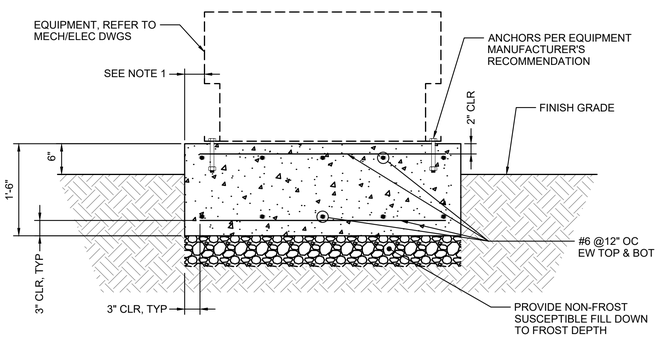
PANEL SIZE (W x H)	# OF POSTS	POST SIZE (LB/FT)
36" x 36"	2	2.5
36" x 48"	2	2.5
45" x 36"	2	2.5
48" x 24"	2	2.5
48" x 36"	2	2.5
48" x 48"	2	4.0
48"x64"x64"	2	2.5
60" x 36"	2	4.0
48" x 60"	2	4.0
60" x 30"	2	4.0

U-POST SELECTION TABLE
BREAKAWAY SIGN SUPPORT

8 U-POST SELECTION TABLE-BREAKAWAY SIGN SUPPORT
NOT TO SCALE



9 "STOP" SIGN
NOT TO SCALE



NOTES:

1. PROVIDE A MINIMUM 6" CLEARANCE OF CONCRETE PAD BEYOND EXTENTS OF EQUIPMENT.

10 TYPICAL EXTERIOR EQUIPMENT PAD DETAIL
NOT TO SCALE

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NJDCA 246A27990200

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NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI

NJ LICENSED PROFESSIONAL ENGINEER
24GE04377400

AMERICAN WATER ENGINEERING
1 WATER STREET
CAMDEN, NJ 08102

NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R

DATE 10/24/22

PROJECT i18-180059-01

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION CIVIL CONSTRUCTION DETAILS

NEW JERSEY AMERICAN WATER

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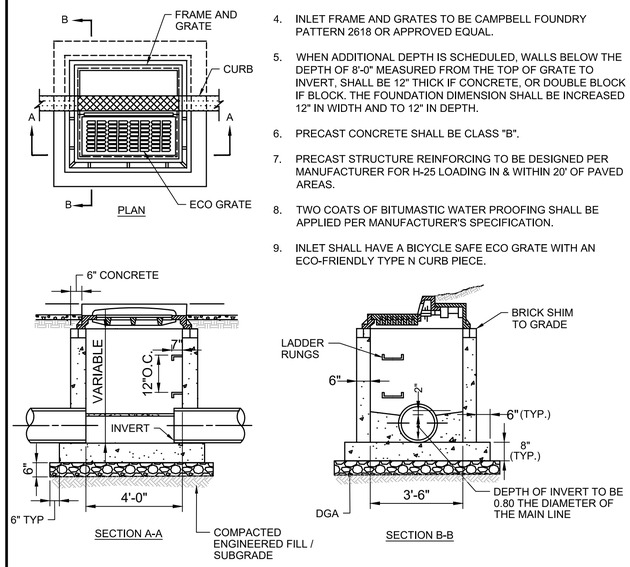
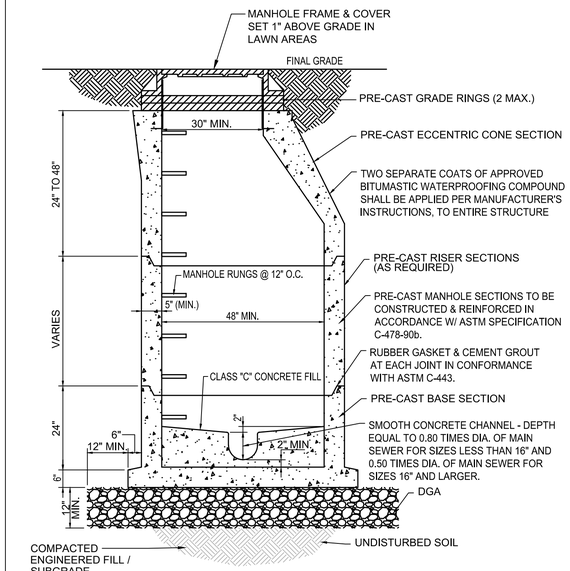
NOTES:

1. INVERTS TO BE ELIMINATED IN BOTTOM OF TERMINAL INLETS. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT A RATE OF 2 INCHES PER FOOT.
2. INLET SHALL BE PRECAST CONCRETE.
3. PROVIDE 7/8" DIA. x 7" x 12" STEEL REINFORCED POLYPROPYLENE LADDER RUNGS, 12" O.C. AT OVER 4 FOOT DEPTHS.
4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY PATTERN 2618 OR APPROVED EQUAL.
5. WHEN ADDITIONAL DEPTH IS SCHEDULED, WALLS BELOW THE DEPTH OF 8'-0" MEASURED FROM THE TOP OF GRATE TO INVERT, SHALL BE 12" THICK IF CONCRETE, OR DOUBLE BLOCK IF BLOCK. THE FOUNDATION DIMENSION SHALL BE INCREASED 12" IN WIDTH AND TO 12" IN DEPTH.
6. PRECAST CONCRETE SHALL BE CLASS "B".
7. PRECAST STRUCTURE REINFORCING TO BE DESIGNED PER MANUFACTURER FOR H-25 LOADING IN & WITHIN 20' OF PAVED AREAS.
8. TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
9. INLET SHALL HAVE A BICYCLE SAFE ECO GRATE WITH AN ECO-FRIENDLY TYPE N CURB PIECE.



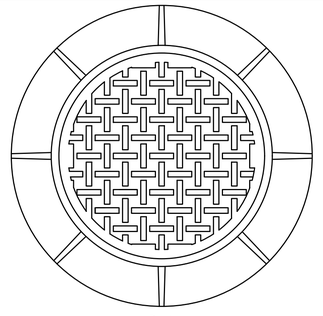
1 TYPE "B" INLET
NOT TO SCALE



NOTES:

1. MANHOLE FRAMES AND COVERS SHALL BE CAMPBELL FOUNDRY PATTERN #1012B OR APPROVED EQUAL
2. RUNGS SHALL BE STEEL REINFORCED POLYPROPYLENE.
3. PROVIDE 7/8" DIA. x 7" x 12" STEEL REINFORCED POLYPROPYLENE LADDER RUNGS, 12" O.C. AT OVER 4 FOOT DEPTHS.
4. MANHOLE RUNGS TO BE INSTALLED FACING TRAFFIC WHEN STRUCTURE IS IN A TRAVEL LANE, AND PERPENDICULAR TO TRAFFIC FLOW WHEN STRUCTURE IS INSTALLED ON ROADWAY CENTERLINE.
5. PRECAST STRUCTURE SHALL BE DESIGNED FOR H-25 LOADING IN AND WITHIN 20' OF PAVED AREAS.
6. WRAP DGA/ABC IN GEOTEXTILE FABRIC IN PAVED AREAS.

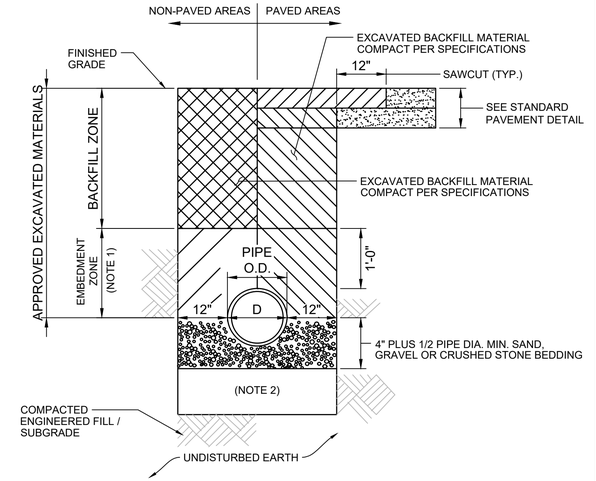
2 PRE-CAST MANHOLE DETAIL
NOT TO SCALE



NOTES:

1. STANDARD MANHOLE FRAME & COVER SHALL BE CAMPBELL FOUNDRY PATTERN #1012B, OR APPROVED EQUAL.
2. MANHOLE COVER SHALL HAVE UTILITY CAST IN COVER. THESE UTILITIES INCLUDE SANITARY, STORM, ELECTRIC AND COMMUNICATIONS.

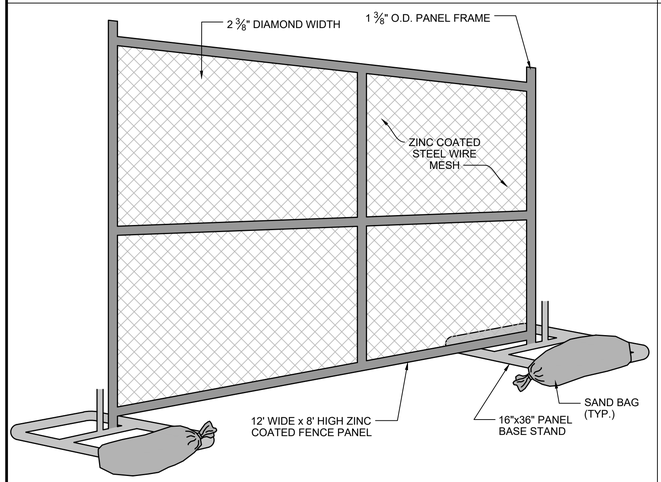
3 MANHOLE FRAME DETAIL
NOT TO SCALE



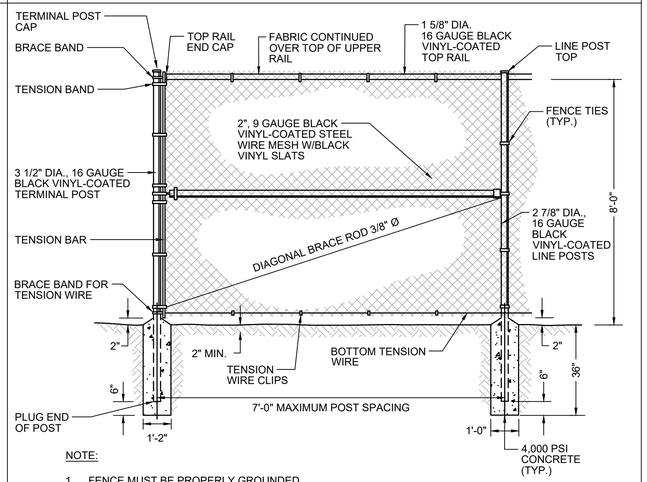
NOTES:

1. BACKFILL IN EMBEDMENT ZONE SHALL BE PLACED BY HAND IN 6-INCH LIFTS ON BOTH SIDES OF PIPE TO PREVENT DISPLACEMENT. COMPACT PER SPECIFICATIONS.
2. IF UNSUITABLE SOIL MATERIALS ARE ENCOUNTERED, REMOVE AND REPLACE WITH 12 INCHES ADDITIONAL BEDDING OR COMPACTED ENGINEERED FILL AS DIRECTED BY CONTRACTING OFFICER.

4 TYPICAL TRENCH, STORM SEWER SYSTEM
NOT TO SCALE



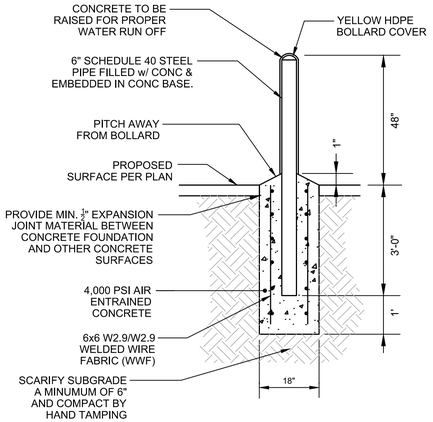
5 8' HIGH TEMPORARY CONSTRUCTION FENCE
NOT TO SCALE



NOTE:

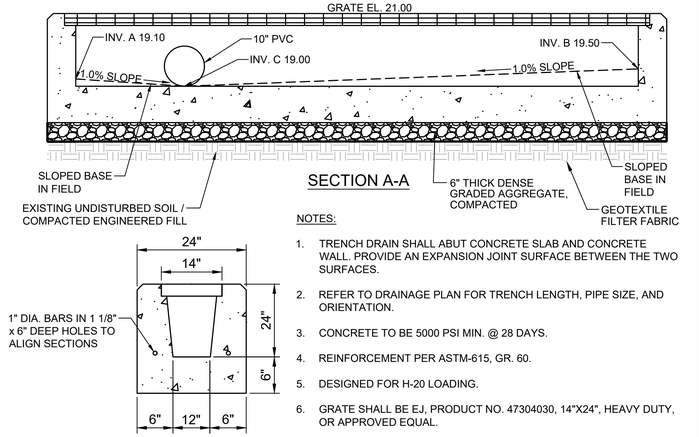
1. FENCE MUST BE PROPERLY GROUNDED.

6 TYPICAL CHAIN LINK FENCE DETAIL
NOT TO SCALE



NOTE:
BOLLARDS REQUIRED AS DEPICTED ON SITE PLAN DRAWINGS.

7 BOLLARD DETAIL
NOT TO SCALE



NOTES:

1. TRENCH DRAIN SHALL ABUT CONCRETE SLAB AND CONCRETE WALL. PROVIDE AN EXPANSION JOINT SURFACE BETWEEN THE TWO SURFACES.
2. REFER TO DRAINAGE PLAN FOR TRENCH LENGTH, PIPE SIZE, AND ORIENTATION.
3. CONCRETE TO BE 5000 PSI MIN. @ 28 DAYS.
4. REINFORCEMENT PER ASTM-615, GR. 60.
5. DESIGNED FOR H-20 LOADING.
6. GRATE SHALL BE EJ, PRODUCT NO. 47304030, 14"X24", HEAVY DUTY, OR APPROVED EQUAL.
7. GRATES SHALL INDICATE "NO DUMPING, DRAINS TO RIVER OR WATERWAY".
8. STRUCTURE MUST BE REINFORCED PRECAST CONCRETE.
9. CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF THE STRUCTURE AND FRAME/GRATE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF NEW JERSEY.

8 REINFORCED PRECAST CONCRETE TRENCH DRAIN DETAIL
NOT TO SCALE

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2		2	
3		3	
4		4	
5		5	

NORTHEAST REMSCO Construction

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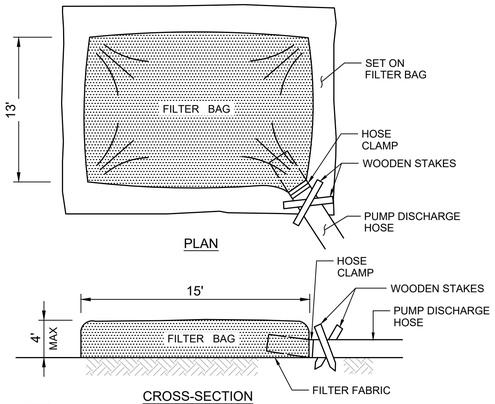


TRENCH DEWATERING

DESCRIPTION:
FILTER BAGS SHALL BE USED AS AN EFFECTIVE FILTER MEDIUM TO CONTAIN SAND, SILT AND FINES WHEN TRENCH DEWATERING. THE WETLAND FILTER BAG CONTAINS THESE MATERIAL WHILE ALLOWING THE WATER TO FLOW THROUGH THE FABRIC.

INSTALLATION:
WETLAND FILTER BAGS MAY REPLACE HAY BALE CORRALS DURING TRENCH DEWATERING, AT THE DESCRIPTION OF THE ENVIRONMENTAL INSPECTOR. TO INSURE PROPER INSTALLATION, FILTER BAGS SHALL BE PLACED ON RELATIVELY FLAT TERRAIN, FREE OF BRUSH AND STUMPS TO AVOID RUPTURE AND PUNCTURES, PROPER INSTALLATION REQUIRES CUTTING A SMALL HOLE IN THE CORNER OF THE BAG, INSERTING THE PUMP DISCHARGE HOSE, AND THEN SECURING THE DISCHARGE HOSE TO THE BAG WITH A HOSE CLAMP. FILTER BAGS SHALL BE PLACED AS FAR AWAY FROM FLOWING STREAMS AND WETLANDS AS POSSIBLE.

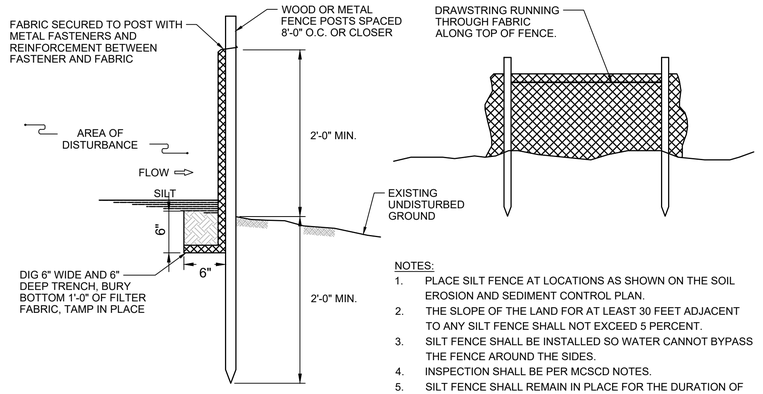
MAINTENANCE:
PRIOR TO REMOVING A BAG FROM THE HOSE, THE BAG SHALL BE TIED OFF BELOW THE END OF THE HOSE ALLOWING THE BAG TO DRAIN. DRAINAGE SHALL NOT BE ALLOWED THROUGH THE INLET HOLE. TO AVOID RUPTURE, THE BAGS SHALL BE ATTENDED AND PUMPING RATES MONITORED. ONCE THE BAG IS INFLATED TO A HEIGHT OF 4 FEET, PUMPING SHALL STOP TO AVOID RUPTURE. FILTER BAGS USED DURING CONSTRUCTION SHALL BE BUNDLED AND REMOVE FOR PROPER DISPOSAL.

SPECIFICATIONS:
FILTER BAGS ARE CONSTRUCTED OF NON-WOVEN GEOTEXTILE FABRIC. A MAXIMUM OF ONE 6 INCH DISCHARGE HOSE SHALL BE ALLOWED PER FILTER BAG. BAG CAPACITY SHALL BE EXCEEDED BEYOND 2,000 GALLONS PER MINUTE. TYPICAL BAG DIMENSIONS ARE 15 FEET BY 13 FEET. TO HELP PREVENT PUNCTURE, GEOTECTILE FABRIC WILL BE PLACED BENEATH THE FILTER BAGS WHEN USED IN WOODED LOCATIONS. UNATTENDED FILTER BAGS SHALL BE ENCIRCLED WITH A HAY BALES OR SILT FENCE CORRAL, HOSE CLAMPS SHALL BE USED TO SECURE THE DISCHARGE HOSE, WIRE OR STRING WILL NOT BE USED.

NOTES:

1. LIMIT ONE DISCHARGE HOSE PER BAG.
2. OBTAIN APPROVAL OF CONTRACTING OFFICER PRIOR TO PLACEMENT OF FILTER BAG.

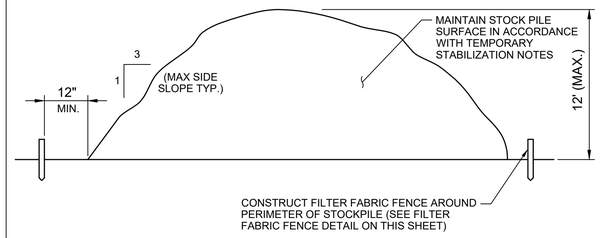
1 SEDIMENT BAG DETAIL
NOT TO SCALE



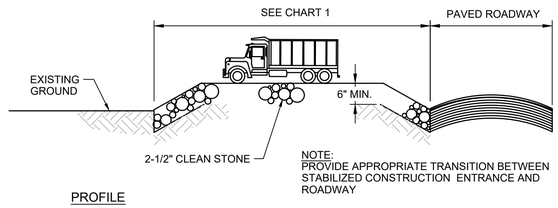
NOTES:

1. PLACE SILT FENCE AT LOCATIONS AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.
2. THE SLOPE OF THE LAND FOR AT LEAST 30 FEET ADJACENT TO ANY SILT FENCE SHALL NOT EXCEED 5 PERCENT.
3. SILT FENCE SHALL BE INSTALLED SO WATER CANNOT BYPASS THE FENCE AROUND THE SIDES.
4. INSPECTION SHALL BE PER MCSCD NOTES.
5. SILT FENCE SHALL REMAIN IN PLACE FOR THE DURATION OF THE PROJECT UNLESS OTHERWISE INSTRUCTED BY THE SOIL CONSERVATION DISTRICT.

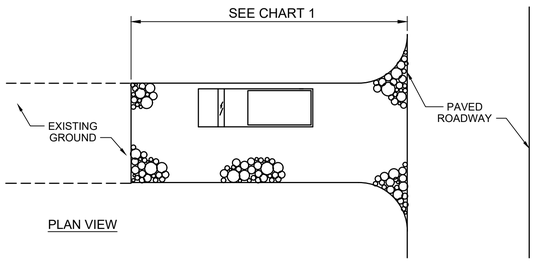
2 SILT FENCE DETAIL
NOT TO SCALE



3 TEMPORARY STOCKPILE DETAIL
NOT TO SCALE



PROFILE



PLAN VIEW

PERCENT SLOPE OF ROADWAY	LENGTH OF STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT	100 FT
2% TO 5%	100 FT	200 FT
>5%	ENTIRE ENTRANCE STABILIZED WITH FILTER FABRIC & 6" FABC BASE COURSE	

CHART 1

4 STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

PURPOSE

TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON-AND OFF-SITE DAMAGE AND HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

CONDITION WHERE PRACTICE APPLIES

THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON-SITE DAMAGE IS LIKELY WITHOUT TREATMENT. CONSULT WITH THE PROJECT ENGINEER ON ANY RESTRICTIONS.

WATER QUALITY ENHANCEMENT

SEDIMENTS DEPOSITED AS "DUST" ARE OFTEN FINE COLLOIDAL MATERIAL. USE OF THIS STANDARD WILL HELP TO CONTROL THE GENERATION OF DUST FROM CONSTRUCTION SITES AND SUBSEQUENT BLOWING AND DEPOSITION INTO LOCAL SURFACE WATER RESOURCES.

PLANNING CRITERIA

THE FOLLOWING METHODS SHOULD BE CONSIDERED FOR CONTROLLING DUST:

MULCHES- SEE STANDARDS FOR STABILIZATION WITH MULCHES ONLY

VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER, PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD.

SPRAY-ON ADHESIVES - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

TABLE 16-1: DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/ACRE
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN IN WATER	4:1	FINE SPRAY	300
POLYACRYLAMIDE(PAM) - SPRAY ON POLYACRYLAMIDE(PAM) - DRY SPREAD	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS.		
ACIDULATED SOY BEAN SOAP STICK	NONE	COARSE SPRAY	1200

TILLAGE -
TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

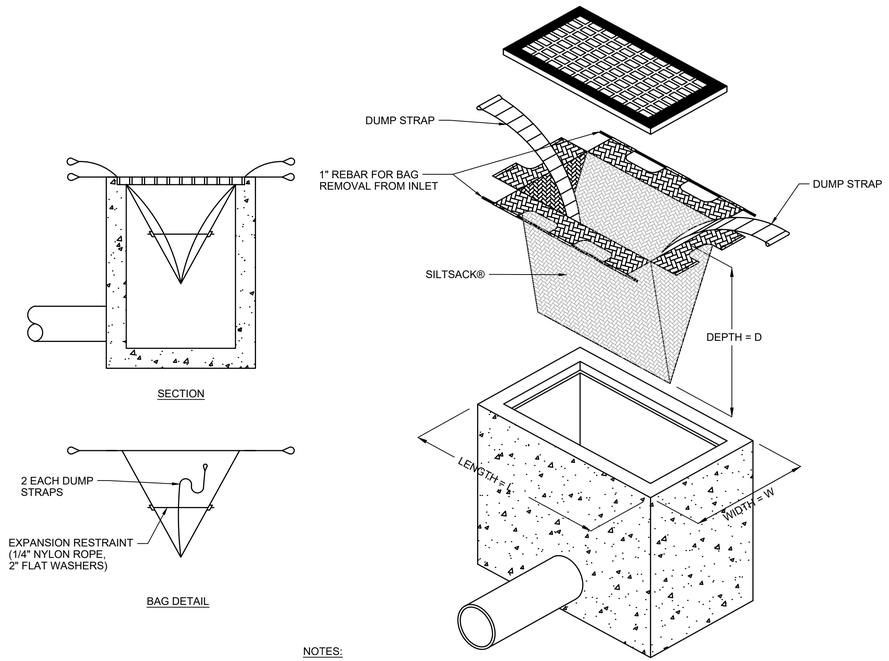
SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS -
SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE -
SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.

STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.

5 STANDARD DUST CONTROL NOTES
NOT TO SCALE



NOTES:

1. PORE OPENING SHALL BE BETWEEN 200 & 70 SIEVE.

6 INLET FILTER DETAIL
NOT TO SCALE

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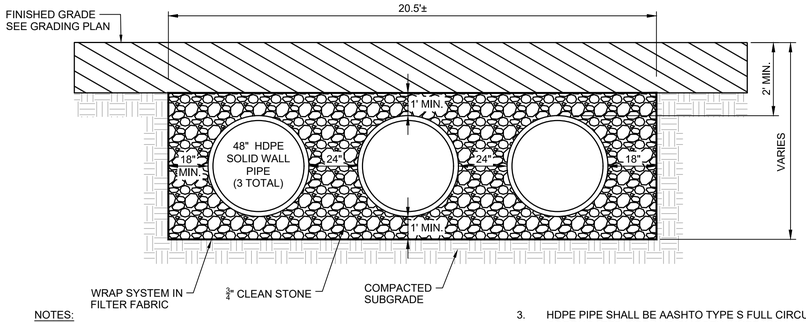
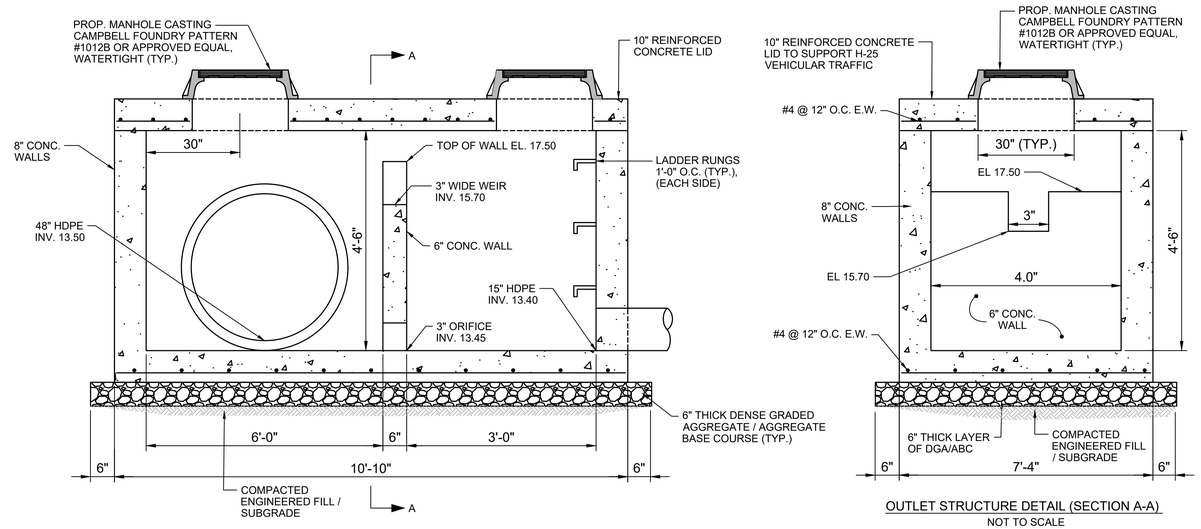


NOTES:

1. THE STORMWATER BASIN SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWER AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. MEASURES SHALL BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL.
3. HDPE PIPE SHALL BE AASHTO TYPE S FULL CIRCULAR CROSS SECTION WITH OUTER CORRUGATED PIPE AND SMOOTH INNER WALL.
4. PIPE SHALL COMPLY WITH REQUIREMENTS OF AASHTO DESIGNATIONS M252, M294, AND MP7
5. SEE PLAN FOR PIPE QUANTITY.

1 UNDERGROUND STORMWATER DETENTION BASIN DETAIL

NOT TO SCALE



OUTLET STRUCTURE DETAIL (SECTION A-A)
NOT TO SCALE

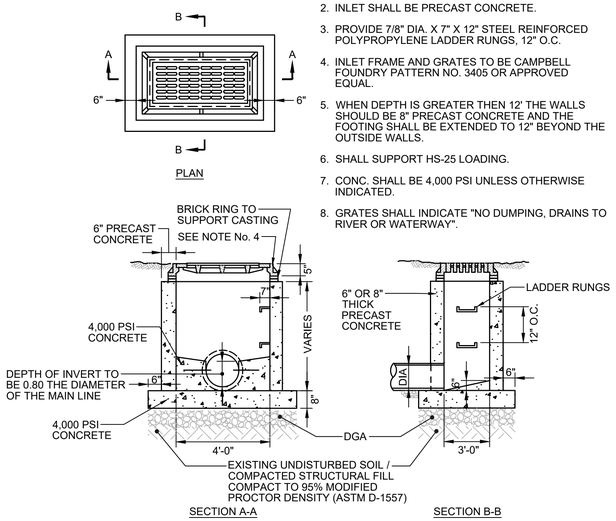
NOTES:
1. PRECAST STRUCTURE SHALL BE DESIGNED FOR H-25 LOADING IN AND WITHIN 20' OF PAVED AREAS.
2. RUNGS SHALL BE STEEL REINFORCED POLYPROPYLENE.
3. MANHOLE RUNGS TO BE INSTALLED FACING TRAFFIC WHEN STRUCTURE IS IN A TRAVEL LANE, AND PERPENDICULAR TO TRAFFIC FLOW WHEN STRUCTURE IS INSTALLED ON ROADWAY CENTERLINE.
4. WRAP DGA/ABC IN GEOTEXTILE FABRIC IN PAVED AREAS.
5. SEE PLAN FOR PIPE SIZE AND ORIENTATION.
6. ALL MANHOLE COVERS MUST BE WATERTIGHT.

2 OUTLET CONTROL STRUCTURE DETAIL

NOT TO SCALE

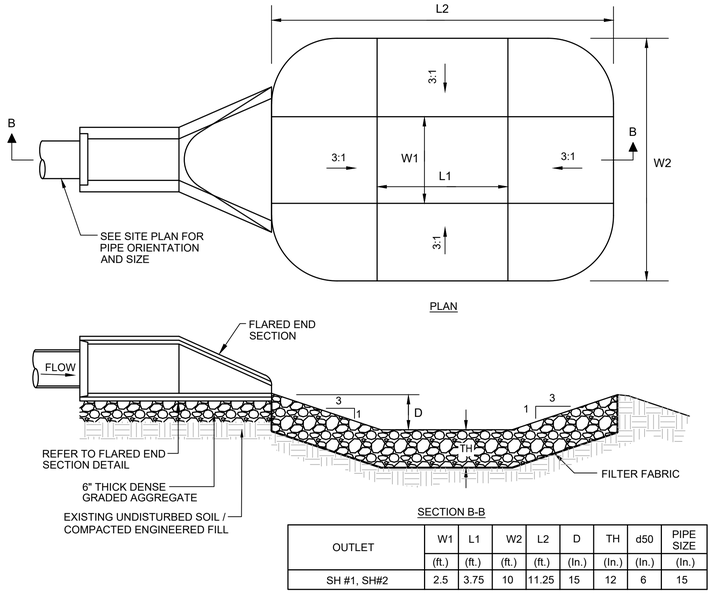
NOTES:

1. BOTTOMS SHALL BE DISHED AND SLOPED TOWARDS THE OUTLET PIPE AT A RATE OF GRADE OF 2 INCHES PER FOOT.
2. INLET SHALL BE PRECAST CONCRETE.
3. PROVIDE 7/8" DIA. X 7" X 12" STEEL REINFORCED POLYPROPYLENE LADDER RUNGS, 12" O.C.
4. INLET FRAME AND GRATES TO BE CAMPBELL FOUNDRY PATTERN NO. 3405 OR APPROVED EQUAL.
5. WHEN DEPTH IS GREATER THEN 12' THE WALLS SHOULD BE 8" PRECAST CONCRETE AND THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
6. SHALL SUPPORT HS-25 LOADING.
7. CONC. SHALL BE 4,000 PSI UNLESS OTHERWISE INDICATED.
8. GRATES SHALL INDICATE "NO DUMPING, DRAINS TO RIVER OR WATERWAY".



3 NJDOT TYPE A INLET

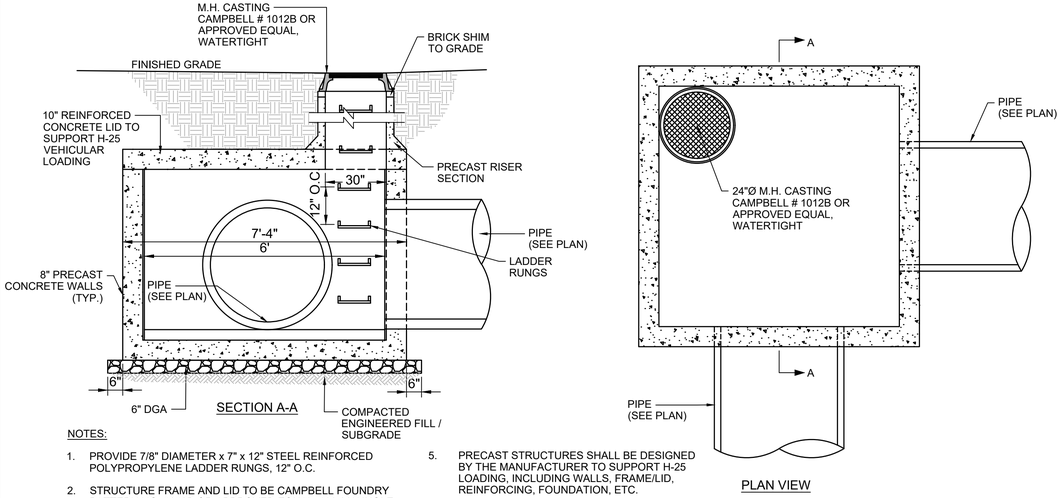
NOT TO SCALE



OUTLET	W1	L1	W2	L2	D	TH	d50	PIPE SIZE
	(ft.)	(ft.)	(ft.)	(ft.)	(In.)	(In.)	(In.)	(In.)
SH #1, SH#2	2.5	3.75	10	11.25	15	12	6	15

4 PREFORMED SCOUR HOLE DETAIL

NOT TO SCALE



PLAN VIEW

NOTES:
1. PROVIDE 7/8" DIAMETER x 7" x 12" STEEL REINFORCED POLYPROPYLENE LADDER RUNGS, 12" O.C.
2. STRUCTURE FRAME AND LID TO BE CAMPBELL FOUNDRY PATTERN NO. 1012B OR APPROVED EQUAL. ALL MANHOLE COVERS MUST BE WATERTIGHT.
3. WHEN DEPTH IS GREATER THAN 8' THE FOOTING SHALL BE EXTENDED TO 12" BEYOND THE OUTSIDE WALLS.
4. IN ACID SOILS, TWO COATS OF BITUMASTIC WATER PROOFING SHALL BE APPLIED PER MANUFACTURER'S SPECIFICATION.
5. PRECAST STRUCTURES SHALL BE DESIGNED BY THE MANUFACTURER TO SUPPORT H-25 LOADING, INCLUDING WALLS, FRAME/LID, REINFORCING, FOUNDATION, ETC.
6. REFER TO DRAINAGE PLAN FOR PIPE SIZE AND ORIENTATION.
7. PROVIDE 7/8" DIA. x 7" x 12" STEEL REINFORCED POLYPROPYLENE LADDER RUNGS, 12" O.C. AT OVER 4 FOOT DEPTHS.

5 6' x 6' MODIFIED STORM SEWER STRUCTURE

NOT TO SCALE

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C-504

FREEHOLD SOIL CONSERVATION DISTRICT - SOIL EROSION AND SEDIMENT CONTROL NOTES

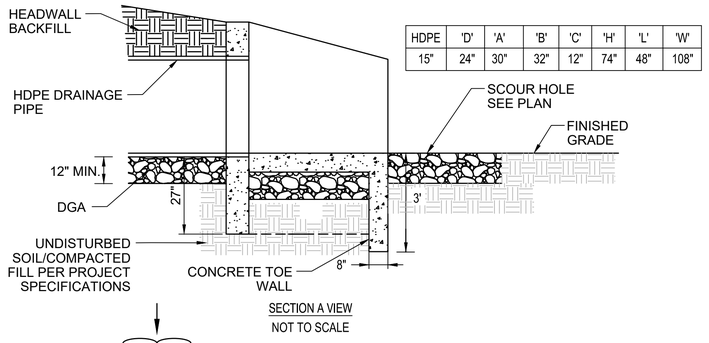
1. THE FREEHOLD SOIL CONSERVATION DISTRICT SHALL BE NOTIFIED FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY SOIL DISTURBING ACTIVITY.
2. ALL SOIL EROSION AND SEDIMENT CONTROL PRACTICES ARE TO BE INSTALLED PRIOR TO SOIL DISTURBANCE, OR IN THEIR PROPER SEQUENCE, AND MAINTAINED UNTIL PERMANENT PROTECTION IS ESTABLISHED.
3. ANY CHANGES TO THE CERTIFIED SOIL EROSION AND SEDIMENT CONTROL PLANS WILL REQUIRE THE SUBMISSION OF REVISED SOIL EROSION AND SEDIMENT CONTROL PLANS TO THE DISTRICT FOR RE-CERTIFICATION. THE REVISED PLANS MUST MEET ALL CURRENT STATE SOIL EROSION AND SEDIMENT CONTROL STANDARDS.
4. N.J.S.A 4:24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATES OF OCCUPANCY BE ISSUED BEFORE THE DISTRICT DETERMINES THAT A PROJECT OR PORTION THEREOF IS IN FULL COMPLIANCE WITH THE CERTIFIED PLAN AND STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY AND A REPORT OF COMPLIANCE HAS BEEN ISSUED. UPON WRITTEN REQUEST FROM THE APPLICANT, THE DISTRICT MAY ISSUE A REPORT OF COMPLIANCE WITH CONDITIONS ON A LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING PROVISIONS FOR STABILIZATION AND SITE WORK.
5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED MORE THAN SIXTY (60) DAYS, AND NOT SUBJECT TO CONSTRUCTION TRAFFIC, WILL IMMEDIATELY RECEIVE A TEMPORARY SEEDING. IF THE SEASON PREVENTS THE ESTABLISHMENT OF TEMPORARY COVER, THE DISTURBED AREAS WILL BE MULCHED WITH STRAW, OR EQUIVALENT MATERIAL, AT A RATE OF 2 TO 2 ½ TONS PER ACRE, ACCORDING TO THE STANDARD FOR STABILIZATION WITH MULCH ONLY.
6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. SOIL STOCKPILES, STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.
7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS TO STABILIZE STREETS, ROADS, DRIVEWAYS, AND PARKING AREAS. IN AREAS WHERE NO UTILITIES ARE PRESENT, THE SUB-BASE SHALL BE INSTALLED WITHIN FIFTEEN (15) DAYS OF THE PRELIMINARY GRADING.
8. THE STANDARD FOR STABILIZED CONSTRUCTION ACCESS REQUIRES THE INSTALLATION OF A PAD OF CLEAN CRUSHED STONE AT POINTS WHERE TRAFFIC WILL BE ACCESSING THE CONSTRUCTION SITE. AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION ACCESS CONSISTING OF ONE INCH TO TWO INCH (1" - 2") STONE FOR A MINIMUM LENGTH OF TEN FEET (10') EQUAL TO THE LOT ENTRANCE WIDTH. ALL OTHER ACCESS POINTS SHALL BE BLOCKED OFF.
9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.
10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.
11. AT THE TIME THAT 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 IT 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 CONDITIONS, NON-VEGETATIVE MEANS OF PERMANENT GROUND STABILIZATION WILL HAVE TO BE EMPLOYED.
12. IN ACCORDANCE WITH THE STANDARD FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS, ANY SOIL HAVING A PH OF 4 OR LESS OR CONTAINING IRON SULFIDES SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS/ACRE, (OR 450 LBS/1,000 SQ FT OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12" OF SETTLED SOIL WITH A PH OF 5 OR MORE, OR 24" WHERE TREES OR SHRUBS ARE TO BE PLANTED.
13. CONDUIT OUTLET PROTECTION MUST BE INSTALLED AT ALL REQUIRED OUTFALLS PRIOR TO THE DRAINAGE SYSTEM BECOMING OPERATIONAL.
14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING OPERATIONS TO MINIMIZE SEDIMENT TRANSFER. ANY DEWATERING METHODS USED MUST BE IN ACCORDANCE WITH THE STANDARD FOR DEWATERING.
15. SHOULD THE CONTROL OF DUST AT THE SITE BE NECESSARY, THE SITE WILL BE SPRINKLED UNTIL THE SURFACE IS WET, TEMPORARY VEGETATIVE COVER SHALL BE ESTABLISHED OR MULCH SHALL BE APPLIED AS REQUIRED BY THE STANDARD FOR DUST CONTROL.
16. STOCKPILE AND STAGING LOCATIONS ESTABLISHED IN THE FIELD SHALL BE PLACED WITHIN THE LIMIT OF DISTURBANCE ACCORDING TO THE CERTIFIED PLAN. STAGING AND STOCKPILES NOT LOCATED WITHIN THE LIMIT OF DISTURBANCE WILL REQUIRE CERTIFICATION OF A REVISED SOIL EROSION AND SEDIMENT CONTROL PLAN. CERTIFICATION OF A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE FEET IS DISTURBED.
17. ALL SOIL STOCKPILES ARE TO BE TEMPORARILY STABILIZED IN ACCORDANCE WITH SOIL EROSION AND SEDIMENT CONTROL NOTE #6.
18. THE PROPERTY OWNER SHALL BE RESPONSIBLE FOR ANY EROSION OR SEDIMENTATION THAT MAY OCCUR BELOW STORMWATER OUTFALLS OR OFFSITE AS A RESULT OF CONSTRUCTION OF THE PROJECT.

1. TOPSOIL STOCKPILE PROTECTION
   A. APPLY GROUND LIMESTONE AT A RATE OF 90 LBS. PER 1000 SQ. FT.
   B. APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
   C. APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT., AND ANNUAL RYEGRASS AT 1 LB. PER 1000 SQ. FT.
   D. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
   E. APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
   F. PROPERLY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE STOCKPILE.
2. TEMPORARY STABILIZATION SPECIFICATIONS
   A. APPLY GROUND LIMESTONE AT A RATE OF 90 LBS. PER 1000 SQ. FT.
   B. APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
   C. APPLY PERENNIAL RYEGRASS SEED AT 1 LB. PER 1000 SQ. FT., AND ANNUAL RYEGRASS AT 1 LB. PER 1000 SQ. FT.
   D. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
   E. APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
3. PERMANENT STABILIZATION SPECIFICATIONS
   A. APPLY TOPSOIL TO A DEPTH OF FIVE (5) INCHES (UNSETTLED)
   B. APPLY GROUND LIMESTONE AT A RATE OF 90 LBS. PER 1000 SQ. FT. AND WORK FOUR (4) INCHES INTO SOIL.
   C. APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS. PER 1000 SQ. FT.
   D. APPLY HARD FESCUE SEED AT 2.7 LBS. PER 1000 SQ. FT., CREEPING RED FESCUE SEED 0.7 LBS. PER 1000 SQ. FT., AND PERENNIAL RYEGRASS SEED AT 0.25 LBS. PER 1000 SQ. FT.
   E. MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
   F. APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.

1 VEGETATIVE COVER STANDARDS
NOT TO SCALE

	INSTALL PERIMETER SILT FENCING AND INLET PROTECTION.	3 DAYS
2.	CLEAR VEGETATION, STRIP AND STOCKPILE SOIL, TEMPORARILY STABILIZE, AND ENCOMPASS WITH SILT FENCE.	15 DAYS
3.	INSTALL STABILIZED CONSTRUCTION ENTRANCE.	1 DAY
4.	ROUGH GRADE SITE, PROVIDE PERMANENT AND TEMPORARY STABILIZATION WHERE POSSIBLE.	15 DAYS
5.	EXCAVATE FOR BUILDINGS.	45 DAYS
6.	BEGIN BUILDING CONSTRUCTION	-
7.	INSTALL STORMWATER MANAGEMENT DRAINAGE SYSTEM.	30 DAYS
8.	INSTALL ADDITIONAL INLET PROTECTION WHERE POSSIBLE.	1 DAY
9.	EXTEND UTILITIES TO BUILDING.	90 DAYS
10.	INSTALL CURBING AND WALKWAYS.	15 DAYS
11.	INSTALL BITUMINOUS ASPHALT PAVEMENT BASE COURSE.	10 DAYS
12.	PROVIDE ADDITIONAL STABILIZATION WHERE POSSIBLE.	3 DAYS
13.	COMPLETE BUILDING CONSTRUCTION.	15 MONTHS
14.	PERMANENTLY STABILIZE ALL DISTURBED AREAS.	30 DAYS
15.	REMOVE ALL TEMPORARY STABILIZATION METHODS ONCE ALL AREAS ARE PERMANENTLY STABILIZED AND DIRECTED BY FREEHOLD SCD.	3 DAYS

4 SEQUENCE OF CONSTRUCTION
NOT TO SCALE

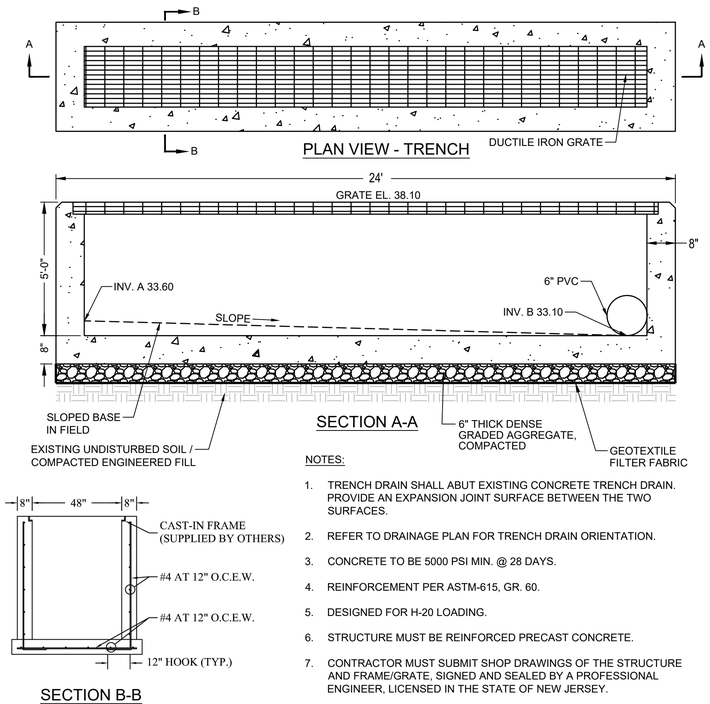


HDPE	'D'	'A'	'B'	'C'	'H'	'L'	'W'
15"	24"	30"	32"	12"	74"	48"	108"

NOTES:

1. CONCRETE STRENGTH: 4000 PSI MIN. @ 28 DAYS
2. REINFORCING STEEL: CONFORMS TO ASTM A615 & A185
3. 1" CHAMFER ON EXPOSED EDGES.

2 HEADWALL DETAIL
NOT TO SCALE



NOTES:

1. TRENCH DRAIN SHALL ABUT EXISTING CONCRETE TRENCH DRAIN. PROVIDE AN EXPANSION JOINT SURFACE BETWEEN THE TWO SURFACES.
2. REFER TO DRAINAGE PLAN FOR TRENCH DRAIN ORIENTATION.
3. CONCRETE TO BE 5000 PSI MIN. @ 28 DAYS.
4. REINFORCEMENT PER ASTM-615, GR. 60.
5. DESIGNED FOR H-20 LOADING.
6. STRUCTURE MUST BE REINFORCED PRECAST CONCRETE.
7. CONTRACTOR MUST SUBMIT SHOP DRAWINGS OF THE STRUCTURE AND FRAME/GRATE, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, LICENSED IN THE STATE OF NEW JERSEY.

3 CONTAINMENT TRENCH DRAIN DETAIL
NOT TO SCALE

Jacobs
JACOBS ENGINEERING GROUP INC.
412 MOUNT KEMBLE AVE.
MORRISTOWN, NJ 07960
NJDCA 246A27990200

REVISIONS		REVISIONS	
1		1	
2		2	
3		3	
4		4	
5		5	

NORTHEAST REMSCO Construction

JOSEPH N. BONGIOVANNI
NJ LICENSED PROFESSIONAL ENGINEER
24GE04377400

AMERICAN WATER ENGINEERING
1 WATER STREET
CAMDEN, NJ 08102
NEW JERSEY AMERICAN WATER

DRAWN BY
PROJECT ENG'R
DATE 10/24/22
PROJECT i18-180059-01

CLEARWELL / HIGH SERVICE PUMP STATION ADDITION AND CHLORINE CONVERSION
CIVIL
CONSTRUCTION DETAILS

NEW JERSEY AMERICAN WATER
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES
USE DIMENSIONS ONLY
SCALE N.T.S.

C-505