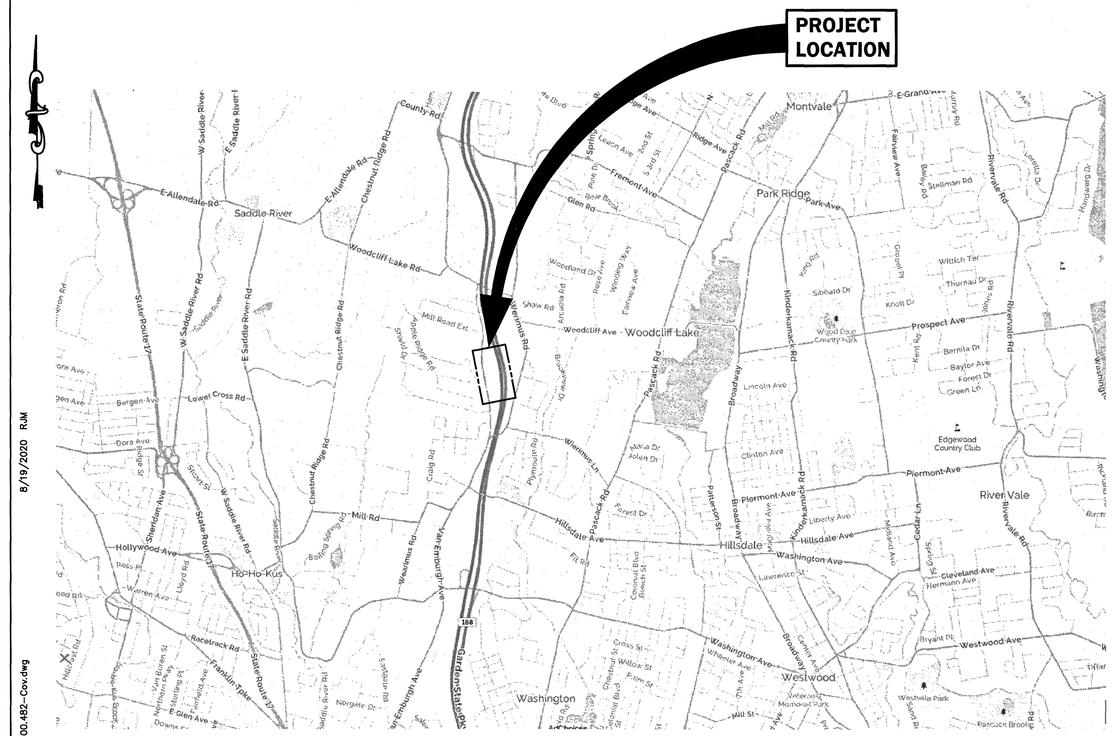
SUEZ WATER NEW JERSEY INC.

WESTERN RESERVOIR PUMPING STATION II ENCLOSURE

BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, NEW JERSEY



LOCALITY MAP
(No Scale)

Legend For Symbols And Lines

- Utility Pole
- Water Valve
- Spot Elevation
- Fire Hydrant
- Street Sign
- MH — Existing Manhole
- CB — Existing Catch Basin
- B-1 — Boring
- PZ-1 — Piezometer
- Tax Parcel Lines
- Right-Of-Way, Approx.
- OE — Overhead Elec. Wires
- ST — Storm Drain Pipe
- W — Existing Water Pipe
- x — Existing Fence
- Existing Work/Concrete
- Existing Paved Road
- Wetlands Buffer
- Easement Line
- Existing Gravel Access Road
- 75 — Existing Contour (5')
- Existing Contour (1')
- New Work
- W — New Water Pipe
- UE — New Underground Electric
- D — New Drain Pipe

DESIGN STANDARDS:

1. *International Building Code (IBC) 2018*
2. *Minimum Design Loads For Buildings And Other Structures, ASCE 7-16.*
3. *Building Code Requirements For Structural Concrete (ACI 318, Latest Edition).*
4. *Code Requirements for Environmental Engineering Concrete Structures (ACI 350, Latest Edition)*

DESIGN LOADS AND CRITERIA:

1. *IBC Use Group Classification U.*
2. *Construction Classification Type **IIB**.*
3. *Occupancy Category **IV**.*
4. *(i) Floor Load = 60psf (Live Load; To Be Confirmed By Final Design)*
   (ii) Roof Load = 30psf (Live Load)
   (iii) Wind Load
   Basic Wind Speed 120mph
   Exposure Classification C
   Wind Importance Factor, Iw=1.15
   (iv) Snow Load
   Snow Exposure Factor 0.9
   Importance Factor, Is=1.2
   Ground Snow Load 30psf Thermal Factor 1.0
   (v) Earthquake Loads
   *Fa = 1.6 Seismic Hazard Classification Category **IV***
   Fv = 2.4 Seismic Site Class D
   Soil Profile Site Class D
   Seismic Importance Factor, Ie = 1.5

INDEX TO DRAWINGS

SHEET No.	DRAWING No.	TITLE	LATEST REVISION
1	–	LOCALITY MAP AND INDEX TO DRAWINGS	0
2	400.482-N1	NOTES	0
3	400.482-G1	SITE PLAN	2
4	400.482-G2	MISCELLANEOUS SITE REFERENCES SHEET 1 OF 2	0
5	400.482-G3	MISCELLANEOUS SITE REFERENCES SHEET 2 OF 2	0
6	400.482-G4	SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS	1
7	400.482-D1	EXISTING CONDITIONS AND DEMOLITION PLAN	0
8	400.482-P1	EQUIPMENT AND PIPING PLAN	1
9	400.482-P2	EQUIPMENT AND PIPING PLAN AND SECTIONS	1
10	400.482-A1	ARCHITECTURAL SITE PLAN, EXISTING AND PROPOSED VIEWS	1
11	400.482-A2	ARCHITECTURAL ELEVATIONS, NOTES, AND SPECIFICATIONS	0
12	400.482-M1	MISCELLANEOUS DETAILS SHEET 1 OF 2	1
13	400.482-M2	MISCELLANEOUS DETAILS SHEET 2 OF 2	0
14	400.482-E1	ELECTRICAL ONE LINE DIAGRAM	0
15	400.482-E2	ELECTRICAL POWER, LIGHTING, GROUNDING PLAN	1
16	400.482-E3	ELECTRICAL PANEL SCHEDULE, SCHEMATICS, AND WIRING DIAGRAMS	0
17	400.482-E4	CONDUIT AND CABLE SCHEDULE	0

Note: Sheet Nos. 2, 9, 14 Through 17 Are Technical Sheets Which Are Not Submitted To The Board But Will Be Available Upon Request.

BS&J

BUCK, SEIFERT & JOST, INC.
Consulting Engineers
Norwood, New Jersey
CERTIFICATE OF AUTHORIZATION #24GA27996600

JULY 2020
REV. 1 - AUGUST 14, 2020
REV. 2 - AUGUST 19, 2020

8/21/20

GLENN M. RAMETTA
NEW JERSEY PROFESSIONAL ENGINEER
License No. 24GE04593000

BS&J CADD DRAWING NAME: L:\400.482 Western Reservoir Pump Enclosure\Rev. 2 (Not Issued)\400.482-Cov.dwg 8/19/2020 RJM

Notes:

1. Property Owner : SUEZ Water New Jersey Inc. (SWNJ) 200 Lake Shore Drive Haworth, N.J. 07641 .
2. Applicant : SUEZ Water New Jersey Inc. (SWNJ) 200 Lake Shore Drive Haworth, N.J. 07641 .
3. Being Known As Lot 6 Block 1201 As Shown On The Official Tax Assessment Map Of The Borough Of Woodcliff Lake, Sheet 12 Dated March 1969, Latest Revision March 1990.
4. Site Is Located In A R–30 – Zone As Principal Use Under Subsection 380–11(G) (Reservoir And Water Shed)
5. Finished Grade Level Of Proposed Building Corners (Approximate):
   South West Corner – Elevation 278.9
   North West Corner – Elevation 278.9
   North East Corner – Elevation 280.6
   South East Corner – Elevation 280.6
   First Floor Elevation (Approximate) – Elevation 280.6 (Pump Pad Level)
   No Basement Elevation 279.1 (Reservoir Roof Level)
   West Single Door – Elevation 278.9 (Sidewalk)
   West Roll Up Door – Elevation 278.9 (Sidewalk)
   South Roll Up Door – Elevation 280.6
   North Roll Up Door – Elevation 280.6
6. All Exterior Lighting Shall Be Downward Facing Wall Mounted Fixtures.

Planning Board Legend:

A. To be signed before submission:

I CONSENT TO THE FILING OF THIS SITE PLAN.

Applicant: _____ Date 8/20/20
Emad Sidhom, P.E., Director of Engineering, SUEZ Water New Jersey Inc.

Owner: _____ Date: 8/20/20
Alan Weland, V.P. & General Manager, SUEZ Water New Jersey Inc.

B. To be completed before submission:

SITE PLAN OF
LOT 6 BLOCK 1201 ZONE R-30
DATE JULY 2020, REV. 2 AUG. 19, 2020 SCALE 1"= 30'-0"

APPLICANT SUEZ Water New Jersey, Inc.
Emad Sidhom, P.E.

ADDRESS 200 Lake Shore Drive Haworth, N.J. 07641

C. To be signed before submission:

I HEREBY CERTIFY THAT I HAVE PREPARED THIS SITE PLAN AND THAT ALL DIMENSIONS AND OTHER INFORMATION SET FORTH ARE CORRECT.

Name: _____ 8/21/20
Glenn Rametta, P.E.

Title and License Number: New Jersey Professional Engineer
License No. 24GE04593000

D. To be signed before Issuance of building permit:

APPROVED BY THE _____ BOARD OF THE BOROUGH OF WOODCLIFF LAKE

By: _____ Date: _____
Chairman

E. To be signed before (preliminary or final) approval is given:

I HAVE REVIEWED THIS SITE PLAN AND CERTIFY THAT IT MEETS ALL ORDINANCES AND REGULATIONS UNDER MY JURISDICTION,

Borough Engineer: _____ Date: _____

F. To be signed before Issuance of a certificate of occupancy.

I HEREBY CERTIFY THAT ALL REQUIRED IMPROVEMENTS HAVE BEEN INSTALLED OR THAT A PERFORMANCE GUARANTY HAS BEEN POSTED IN ACCORDANCE WITH THE SITE PLAN ORDINANCE.

Construction Code Official: _____

Borough Engineer: _____

G. To be signed prior to Issuance of certificates of occupancy.

I HEREBY CERTIFY THAT ALL THE REQUIRED IMPROVEMENTS OF THIS SITE PLAN HAVE BEEN INSTALLED IN COMPLIANCE WITH ALL APPLICABLE ORDINANCES AND REGULATIONS.

Borough Engineer: _____ Date: _____

Construction Code Official: _____ Date: _____

OCCUPANCY PERMIT ISSUED: _____ Date: _____

SCHEDULE OF ZONE REQUIREMENTS
R-30 RESIDENTIAL ONE-FAMILY DISTRICT

ITEM	UNIT	REQUIRED	EXISTING	PROPOSED
MIN. LOT SIZE	SF	30,000	126,411	NO CHANGE
MIN. FRONT SETBACK	FT	50	81	76
MIN. REAR SETBACK	FT	50	10	NO CHANGE
MIN. SIDE SETBACK (ONE)	FT	20	39	NO CHANGE
MIN. SIDE SETBACK (BOTH)	FT	60	146	NO CHANGE
MIN. LOT FRONTAGE	FT	150	446	NO CHANGE
MIN. LOT DEPTH	FT	150	226	NO CHANGE
MAX. LOT COVERAGE	%	15	1.1	1.8
MAX. TOTAL SURFACE COVERAGE	%	30	17.6	18.6
MAX. BUILDING & STRUCTURE HEIGHT	FT	30	18.5*	16'-0"
	STORY	2.5	1	1

* A 137.5 ft. high monopole wireless communications tower exists on this site as well.

SITE DATA - SCHEDULE OF AREAS

DESCRIPTION OF AREAS	UNIT	PROPOSED	EXISTING	CHANGE
AREA OF OVERALL SITE	ACRE (SF)	2.902 (126,411)	2.902 (126,411)	0
AREA OF BUILDINGS	SF	2,214	1,361	(+) 853
AREA OF DRIVEWAYS, WALKWAYS, ROADS	SF	21,338	20,868	(+) 470
LANDSCAPED AREAS	SF	102,859	104,182	(-) 1,323

Approved By The Planning Board/Zoning Board Of Adjustment Of The Borough Of Woodcliff Lake, New Jersey

Date _____ Board Chairman

Date _____ Board Secretary

Date _____ Board Engineer

SITE PLAN
SCALE: 1"=30'-0"

Scale: 1"=30'-0"
15 5 0 15 30

BS&J CADD DRAWING NAME: L:\400.482 Western Reservoir Pump Enclosure\Rev. 2 (Not Issued)\400.482-G1_G4.dwg 8/19/2020 RJM

No.	DATE	DESCRIPTION	CKD.	APP'D.
2	08-19-20	Planning Board Legend Update	RJM	GMR
1	08-14-20	Temp. Pump Conn. Slab / Bulk Table /Setbacks	RJM	GMR

REVISIONS

Drawn By: TES
Checked By: RJM/KL
Examined By: RvA
Approved By: GMR

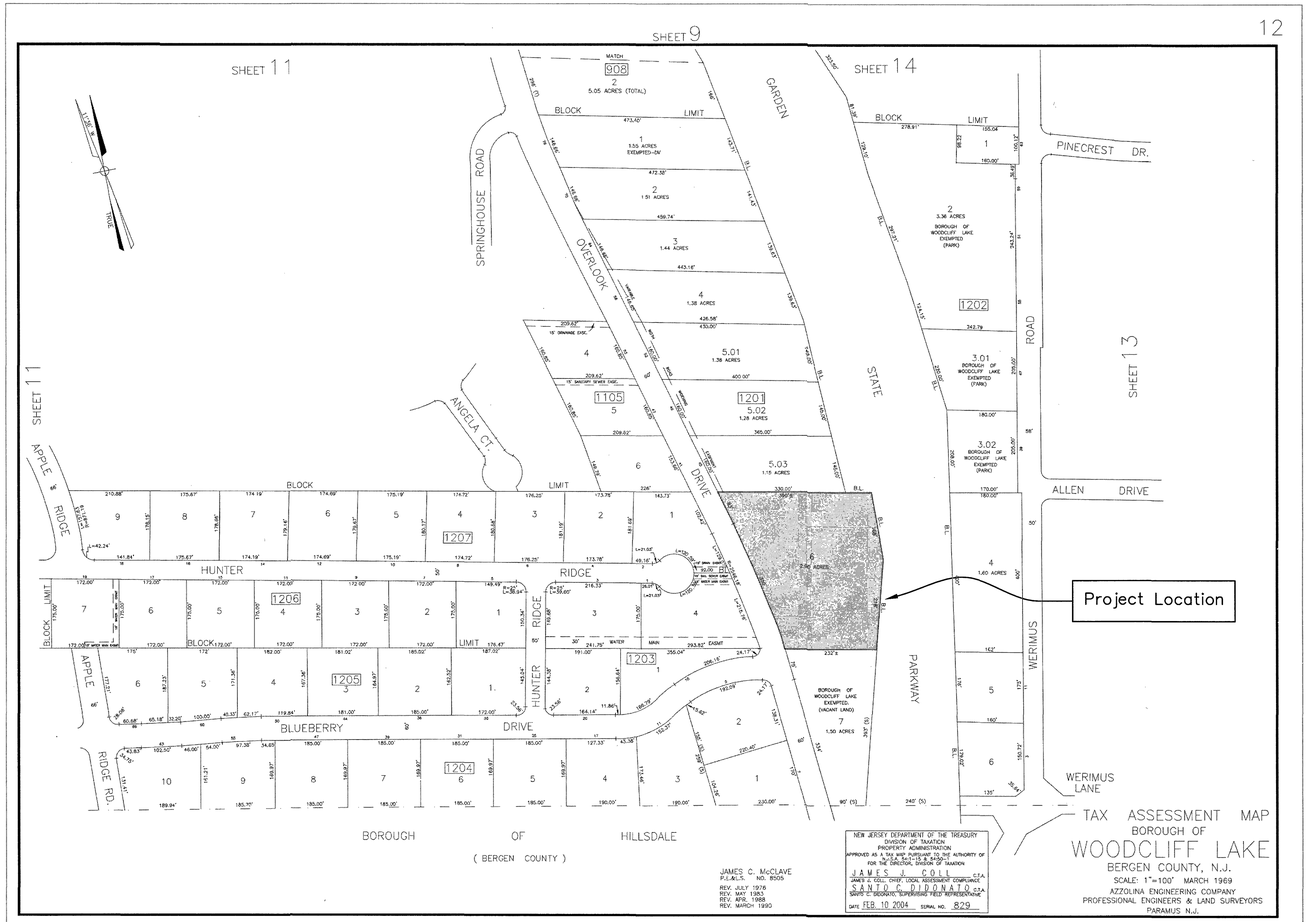
BS&J
BUCK, SEIFERT & JOST, INC.
Consulting Engineers
65 Oak Street, Norwood, New Jersey 07648
CERTIFICATE OF AUTHORIZATION #24GA27996600

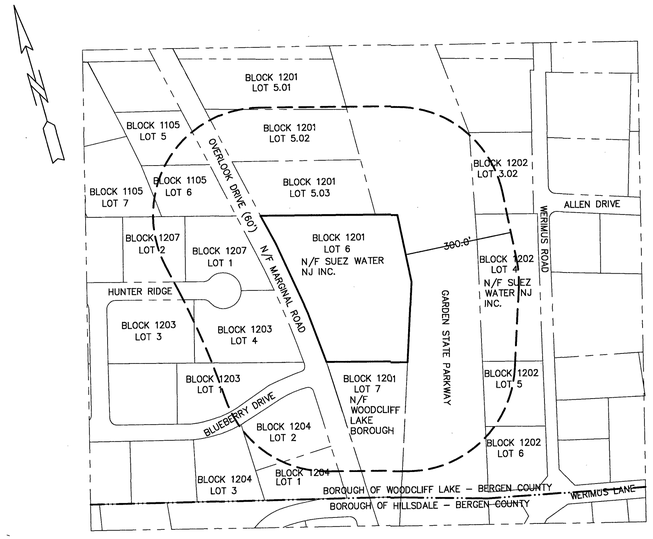
SUEZ Water New Jersey Inc.
461 From Road
PARAMUS, NJ 07652

WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
SITE PLAN

GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000
8/21/20

DRAWING No. 400.482-G1
SHEET No. 3 OF 17
SCALE: AS SHOWN
DATE: AUGUST 2020





300 FOOT RADIUS MAP

SCALE: 1"=200'-0"

Scale: 1"=200'-0"
100 50 0 100 200

Note:

1. The Base Drawing Was Originally Prepared By Cardell Land Surveying, LLC., Project #2256, Filename 400400W-1 300Ft Radius Map.dwg, Dated 3/8/2018.

WOODCLIFF LAKE TAX MAP

SCALE: None

OWNER & ADDRESS REPORT

WOODCLIFF LAKE — 01/08/20 Page 1 of 1

THE FOLLOWING IS A CERTIFIED LIST OF ALL PROPERTY WITHIN 200' OF:
BL-1201 LT-6, 200 OVERLOOK DRIVE, WOODCLIFF LAKE, NJ

BLOCK	LOT	QUAL	CLA	PROPERTY OWNER	PROPERTY LOCATION	Add'l Lots
1105	5		2	GOMEZ, LUIS H 47 OVERLOOK DR WOODCLIFF LAKE, NJ 07677	47 OVERLOOK DR	
1105	6		2	KWAK, YOON T & SHIN, SOONHO K 41 OVERLOOK DR WOODCLIFF LAKE, NJ 07677	41 OVERLOOK DR.	
1201	5.02		2	GRAZIANO, THOMAS & PAULA 46 OVERLOOK DR WOODCLIFF LAKE, NJ 07675	46 OVERLOOK DR	
1201	5.03		2	STARR, NORRIS & MARILYN 40 OVERLOOK DRIVE WOODCLIFF LAKE, NJ 07677	40 OVERLOOK DRIVE	
1201	7		15C	BOROUGH OF WOODCLIFF LAKE 188 PASCACK ROAD WOODCLIFF LAKE, NJ 07677	OVERLOOK DR	
1202	3.02		15C	BOROUGH OF WOODCLIFF LAKE 188 PASCACK RD WOODCLIFF LAKE, NJ 07677	39 WERIMUS ROAD	
1202	4		1	UNITED WATER C/O ALTUS GROUP US INC P.O. BOX #71970 PHOENIX, AZ. 85050	WERIMUS ROAD	
1202	5		2	CERUTTI, IZABEL C 11 WERIMUS ROAD WOODCLIFF LAKE, NJ 07677	11 WERIMUS ROAD	
1203	1		2	WATSON, RICHARD & VALERIE 10 BLUEBERRY DRIVE WOODCLIFF LAKE N J 07677	10 BLUEBERRY DRIVE	
1204	2		2	LEE, BRANDON & EUN YOUNG 9 BLUEBERRY DR WOODCLIFF LAKE, NJ 07677	9 BLUEBERRY DRIVE	
1207	1		2	BRISKIN, PETER & KLARA 2 HUNTER RIDGE WOODCLIFF LAKE, NJ 07677	2 HUNTER RIDGE	
1207	2		2	KISSLER, BARRY & STEPHANIE 4 HUNTER RIDGE WOODCLIFF LAKE, NJ 07677	4 HUNTER RIDGE	
1207	4		2	GRUNFELD, SHARON R 8 HUNTER RIDGE RD WOODCLIFF LAKE, NJ 07675	8 HUNTER RIDGE	

LIST OF ALL UTILITY COMPANIES WITHIN WOODCLIFF LAKE TO BE NOTIFIED	
OPTIMUM GENERAL MANAGER 40 POTASHI ROAD OAKLAND, NEW JERSEY 07436	BERGEN COUNTY UTILITIES AUTHORITY PO BOX 9 LITTLE FERRY, NEW JERSEY 07643
SUEZ 69 DE VOE PLACE HACKENSACK, NEW JERSEY 07601	VERIZON 1 VERIZON WAY BASKING RIDGE, NEW JERSEY 07926
PUBLIC SERVICE ELECTRIC & GAS CORPORATE SECRETARY 80 PARK PLACE NEWARK, NEW JERSEY 07101	PARK RIDGE WATER UTILITY CORPORATE SECRETARY 53 PARK AVENUE PARK RIDGE, NEW JERSEY 07656
BERGEN COUNTY DEPT. OF PLANNING & ECONOMIC DEVELOPMENT JOSEPH A. FEMIA, P.E. DIRECTOR & COUNTY ENGINEER ONE BERGEN PLAZA, 4TH FLOOR HACKENSACK, NEW JERSEY 07601-7000	

BS&J CADD DRAWING NAME: C:\Users\Robert Mathias\Desktop\Work At Home\UPDATED FILES\400.482 CAD\Rev. 1\400.482-G2_G3.dwg 8/7/2020 RJM

Drawn By: TES
Checked By: RJM
Examined By: RvA
Approved By: GMR

No.	DATE	DESCRIPTION	CKD.	APP'D.
		REVISIONS		

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461 From Road
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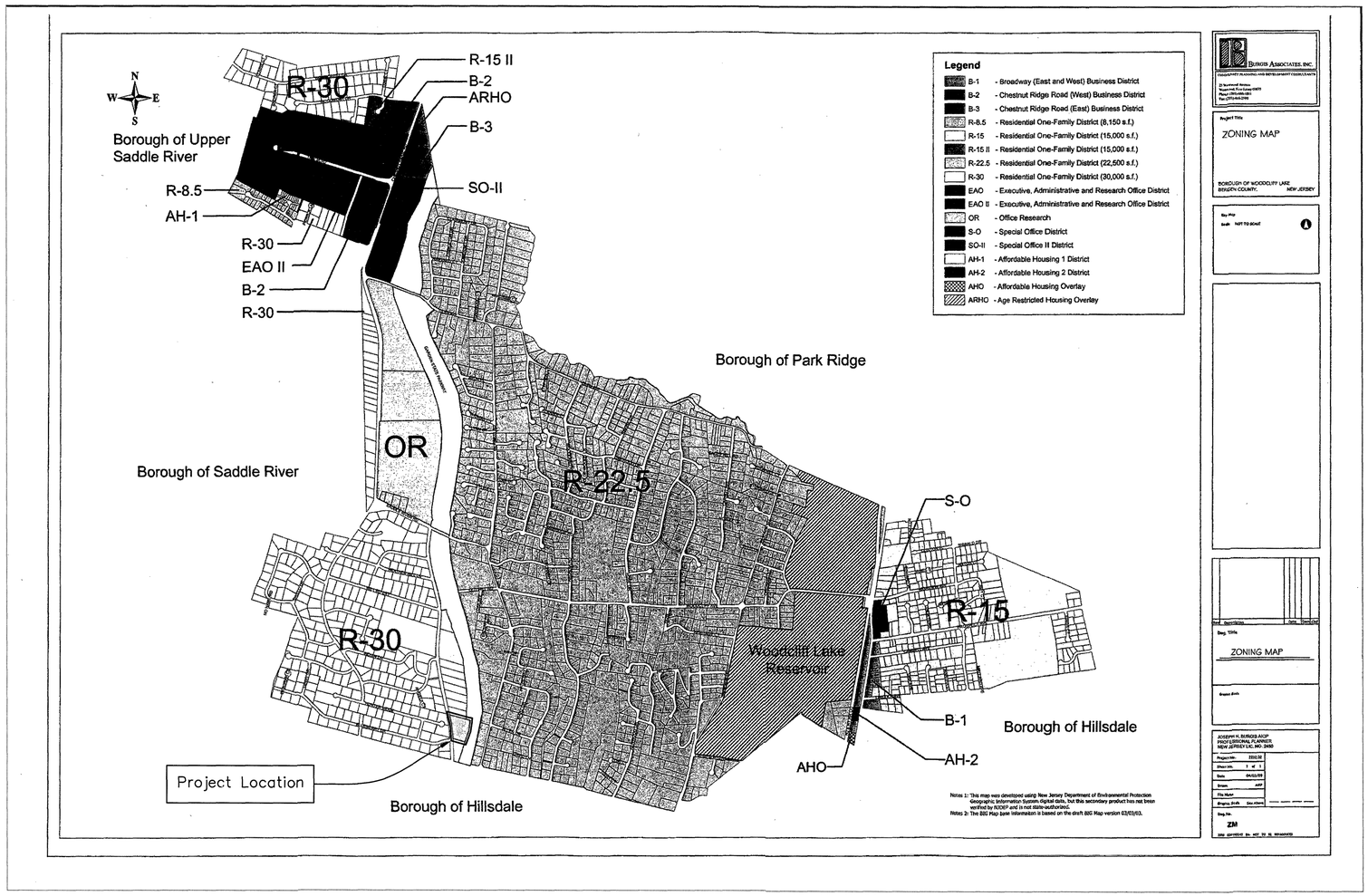
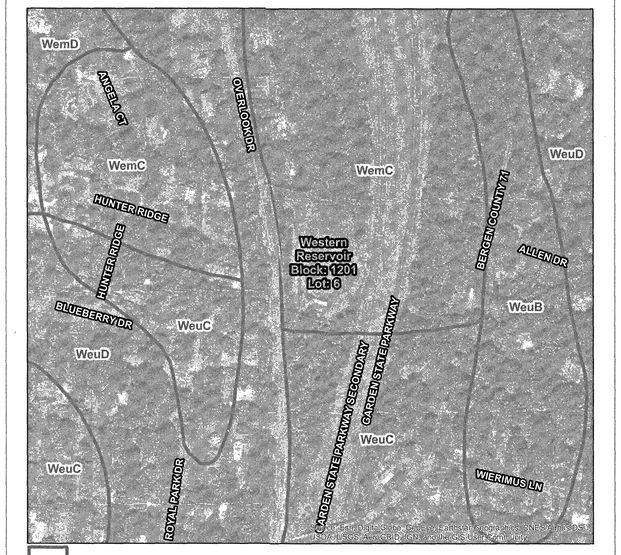
WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
MISCELLANEOUS SITE REFERENCES SHEET 1 OF 2

GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000

DRAWING No. 400.482-G2
SHEET No. 4 OF 17
SCALE: AS SHOWN
DATE: JULY 2020



WOODCLIFF LAKE ZONING MAP
SCALE: None



USDA Soil Survey
HasB - Haledon-Urban land complex, 3 to 8 percent slopes
WemC - Wethersfield gravelly loam, 8 to 15 percent slopes
WemD - Wethersfield gravelly loam, 15 to 25 percent slopes
WeuB - Wethersfield-Urban land complex, 3 to 8 percent slopes
WeuC - Wethersfield-Urban land complex, 8 to 15 percent slopes
WeuD - Wethersfield-Urban land complex, 15 to 25 percent slopes

suez

Western Reservoir
Soils Map

BS&J

250 125 0 250 500 750 Feet

Document Path: N:\NJ\UWNJ\400.482 - Western Reservoir\Soils Map - CAD.mxd

BS&J CADD DRAWING NAME: C:\Users\Robert Mathias\Desktop\Work At Home\UPDATED FILES\400.482 CAD\Rev. 1\400.482-G2_G3.dwg 8/7/2020 RJM

Drawn By: TES
Checked By: RJM
Examined By: RvA
Approved By: GMR

No.	DATE	DESCRIPTION	CK'D.	APP'D.

REVISIONS

BS&J
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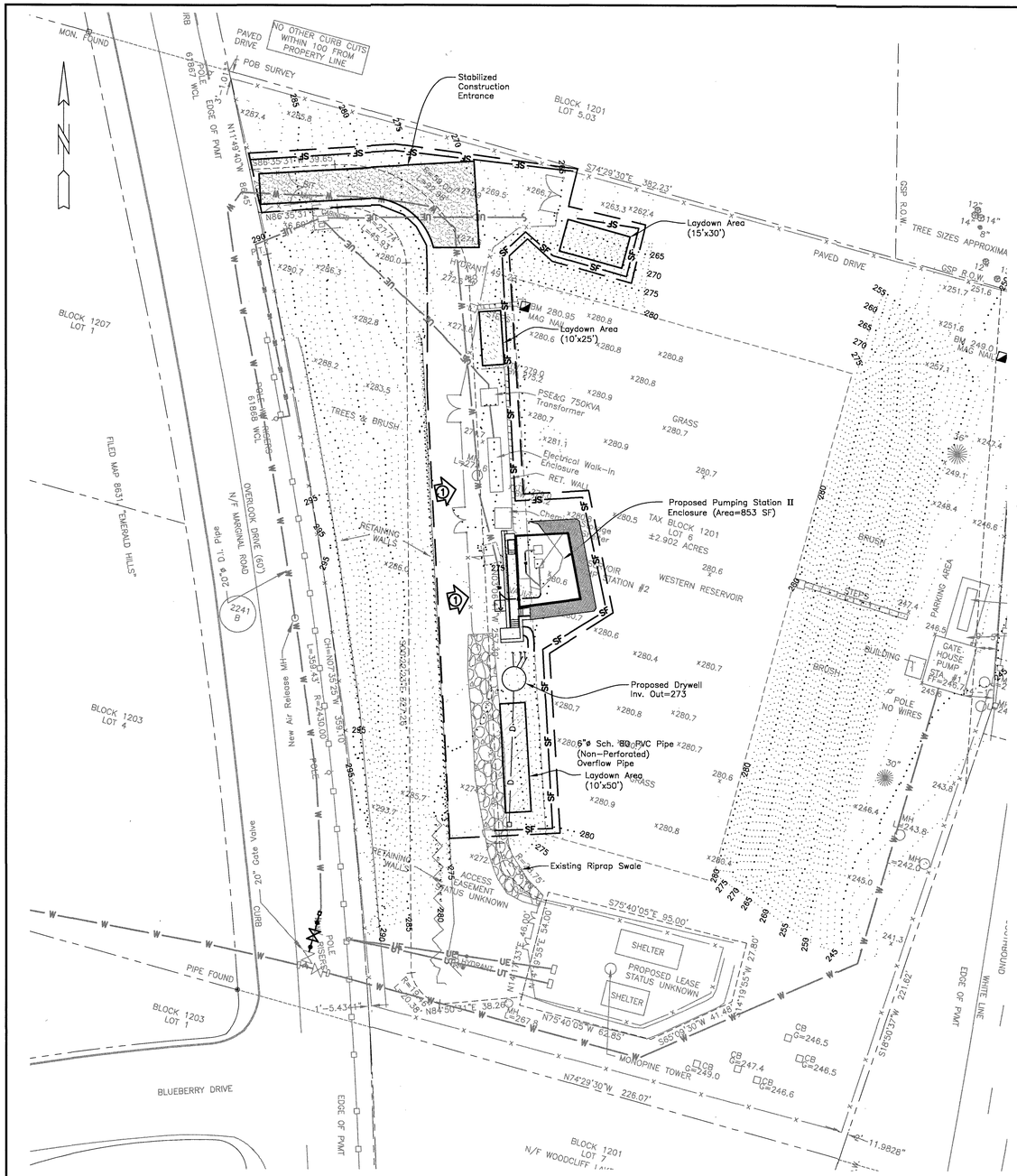
65 Oak Street, Norwood, New Jersey 07648
CERTIFICATE OF AUTHORIZATION #24GA27996600

suez
SUEZ Water New Jersey Inc.
461 From Road
PARAMUS, NJ 07652

WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
MISCELLANEOUS SITE REFERENCES SHEET 2 OF 2

GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000

DRAWING No. 400.482-G3
SHEET No. 5 OF 17
SCALE: AS SHOWN
DATE: JULY 2020

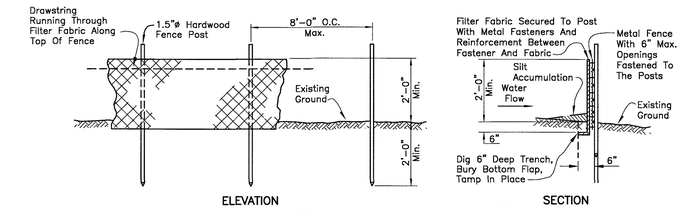


LEGEND:

- LIMIT OF DISTURBED AREA — DISTURBED AREA = 20440 SF (±0.47 Acres)
- SF — SEDIMENT SILT FENCE
- PROPOSED WORK
- STABILIZED CONSTRUCTION ENTRANCE
- LAYDOWN AREA

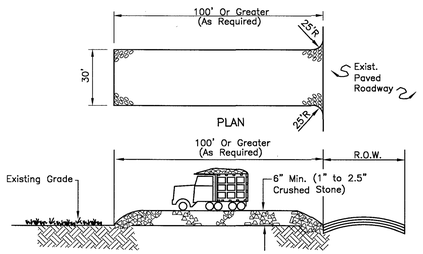
SITE PLAN
SCALE: 1"=30'-0"

Note:
This Project Is Exempt From Soil Compaction Testing And Remediation As It Is Located In An Urban Redevelopment Area.



ELEVATION SECTION

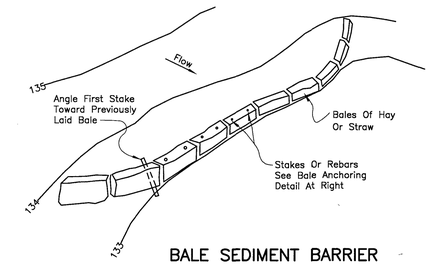
SEDIMENT SILT FENCE DETAIL



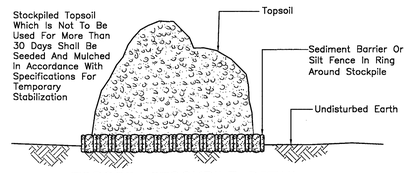
SECTION

Note:
The Entrance Shall Be Maintained In A Condition Which Will Prevent Tracking Or Flowing Of Sediment Onto Existing Rights-Of-Way. This May Require Periodic Top Dressing With Additional Stone Or Additional Length As Conditions Demand And Repair And/Or Cleanout Of Any Measures Used To Trap Sediment. All Sediment Spilled, Dropped, Washed Or Tracked Onto Existing Rights-Of-Way Must Be Removed Immediately.

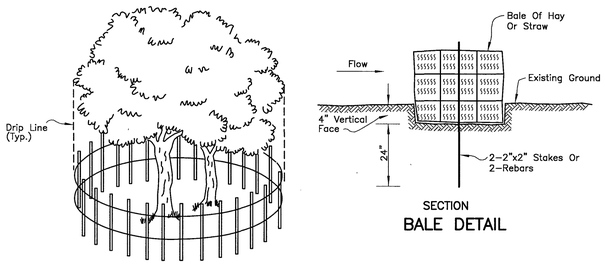
STABILIZED CONSTRUCTION ENTRANCE



BALE SEDIMENT BARRIER



TOPSOIL STOCKPILE DETAIL



SECTION

BALE DETAIL

FENCING FOR TREE PROTECTION

Sequence Of Construction

Week 1:
1. A Pre-Construction Conference Shall Be Held Among Representatives Of SUEZ Water New Jersey, The Owner's Representative, The Contractor, The Bergen County Soil Conservation District And Any Other Authority Having Jurisdiction.

The Contractor Shall:
2. Submit Written Notification To The Bergen County Soil Conservation District At Least Forty-Eight (48) Hours Prior To The Start Of Construction.

Week 2 To 3:
3. Install All Soil Erosion And Sediment Control Devices. (Stabilized Construction Entrance, Sediment Silt Fences).
4. Mobilization And Area Preparation. Excavation Of Soil In Preparation Of New Slab.

Week 4 To 9:
5. Construction Of The Reinforced Concrete Foundation And Support For Proposed Building.

Week 10-13:
6. Installation Of Proposed Building.

Week 14-16:
7. Electrical, Instrumentation, And SCADA Modifications. Area Clean Up And Site Restoration.

Week 17:
8. Restore Disturbed Areas And Stabilize With Permanent or Temporary Seeding And Mulching Or Pavement Restoration.

Week 18:
9. Remove All Soil Erosion And Sediment Control Devices.
10. Final Grading, Landscaping And Permanent Restoration.

Week 19:
11. Report Of Compliance By Bergen County Soil Conservation District; Demobilization.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. All Soil Erosion And Sediment Control Practices Will Be Installed In Accordance With The Standards For Soil Erosion And Sediment Control In New Jersey (NJ Standards), And Will Be Installed In Proper Sequence And Maintained Until Permanent Stabilization Is Established.

2. Any Disturbed Area That Will Be Left Exposed For More Than Thirty (30) Days And Not Subject To Construction Traffic Shall Immediately Receive A Temporary Seeding And Mulching. If The Season Prohibits Temporary Seeding, The Disturbed Area Will Be Mulched With Unrotted Straw At A Rate Of 2 Tons Per Acre Anchored By Approved Methods (I.E. Peg And Twine, Mulch Netting, Or Liquid Mulch Binder).

3. Immediately Following Initial Disturbance Or Rough Grading, All Critical Areas Subject To Erosion Will Receive A Temporary Seeding In Combination With Straw Mulch Or A Suitable Equivalent, At A Rate Of 2 Tons Per Acre, According To The NJ Standards.

4. Stabilization Specifications:

   A. Temporary Seeding And Mulching:

   Ground Limestone – Applied Uniformly According To Soil Test Recommendations.

   Fertilizer – Apply 11lbs./1,000 Sf Of 10-20-10 Or Equivalent With 50% Water Insoluble Nitrogen (Unless A Soil Test Indicates Otherwise) Worked Into The Soil A Minimum Of 4".

   Seed – Perennial Ryegrass 100 Lbs./Acre (2.3 Lbs./1,000 Sf) Or Other Approved Seeds; Plant Between March 1 And May 15 Or Between August 15 And October 1.

   Mulch – Unrotted Straw Or Hay At A Rate Of 70 To 90 Lbs./1,000 Sf Applied To Achieve 95% Soil Surface Coverage. Mulch Shall Be Anchored By Approved Methods (I.E. Peg And Twine, Mulch Netting, Or Liquid Mulch Binder).

   B. Permanent Seeding And Mulching:

   Topsoil – A Uniform Application To An Average Depth Of 5", Minimum Of 4" Firmed In Place Is Required.

   Ground Limestone – Applied Uniformly According To Soil Test Recommendations.

   Fertilizer – Apply 11 Lbs./1,000 Sf Of 10-10-10 Or Equivalent With 50% Water Insoluble Nitrogen (Unless A Soil Test Indicates Otherwise) Worked Into The Soil A Minimum Of 4".

   Seed – Turf Type Tall Fescue (Blend Of 3 Cultivars) 350 Lbs./Acre (8 Lbs./1,000 Sf) Or Other Approved Seeds; Plant Between March 1 And October 1 (Summer Seedings Require Irrigation)

   Mulch – Unrotted Straw Or Hay At A Rate Of 70 To 90 Lbs./1,000 Sf Applied To Achieve 95% Soil Surface Coverage. Mulch Shall Be Anchored By Approved Methods (I.E. Peg And Twine, Mulch Netting, Or Liquid Mulch Binder).

5. The Site Shall At All Times Be Graded And Maintained Such That All Stormwater Runoff Is Diverted To Soil Erosion And Sediment Control Facilities.

6. Soil Erosion And Sediment Control Measures Will Be Inspected And Maintained On A Regular Basis, Including After Every Storm Event.

7. Stockpiles Are Not To Be Located Within 50' Of A Floodplain, Slope, Roadway Or Drainage Facility. The Base Of All Stockpiles Shall Be Contained By A Haybale Sediment Barrier Or Silt Fence.

8. A Crushed Stone, Vehicle Wheel-Cleaning Blanket Will Be Installed Wherever A Construction Access Road Intersects Any Paved Roadway. Said Blanket Will Be Composed Of 1" – 2½" Crushed Stone, 6" Thick, Will Be At Least 30' X 100' And Should Be Underlain With A Suitable Synthetic Sediment Filter Fabric And Maintained.

9. Maximum Side Slopes Of All Exposed Surfaces Shall Not Exceed 3H:1V Unless Otherwise Approved By The District.

10. Driveways Must Be Stabilized With 1" – 2½" Crushed Stone Or Subbase Prior To Individual Lot Construction.

11. All Soil Washed, Dropped, Spilled Or Tracked Outside The Limit Of Disturbance Or Onto Public Right-Of-Ways, Will Be Removed Immediately. Paved Roadways Must Be Kept Clean At All Times.

12. Catch Basin Inlets Will Be Protected With An Inlet Filter Designed In Accordance With Section 28 -1 Of The NJ Standards.

13. Storm Drainage Outlets Will Be Stabilized, As Required, Before The Discharge Points Become Operational.

14. Dewatering Operations Must Discharge Directly Into A Sediment Control Bag Or Other Approved Filter In Accordance With Section 14-1 Of The NJ Standards.

15. Dust Shall Be Controlled Via The Application Of Water, Calcium Chloride Or Other Approved Method In Accordance With Section 16-1 Of The NJ Standards.

16. Trees To Remain After Construction Are To Be Protected With A Suitable Fence Installed At The Drip Line Or Beyond In Accordance With Section 9-1 Of The NJ Standards.

17. The Project Owner Shall Be Responsible For Any Erosion Or Sedimentation That May Occur Below Stormwater Outfalls Or Off-Site As A Result Of Construction Of The Project.

18. Any Revision To The Certified Soil Erosion And Sediment Control Plan Must Be Submitted To The District For Review And Approval Prior To Implementation In The Field.

19. A Copy Of The Certified Soil Erosion And Sediment Control Plan Must Be Available At The Project Site Throughout Construction.

20. The Bergen County Soil Conservation District Must Be Notified, In Writing, At Least 48 Hours Prior To Any Land Disturbance: Bergen County SCD, 700 Kinderkamack Road, Suite 106, Oradell, NJ 07649. Tel: 201-261-4407; Fax 201-261-7573.

21. The Bergen County Soil Conservation District May Request Additional Measures To Minimize On Or Off-Site Erosion Problems During Construction.

22. The Owner Must Obtain A District Issued Report Of Compliance Prior To The Issuance Of Any Certificate Of Occupancy. The District Requires At Least One Week's Notice To Facilitate The Scheduling Of All Report Of Compliance Inspections. All Site Work Must Be Completed, Including Temporary/Permanent Stabilization Of All Exposed Areas, Prior To The Issuance Of A Report Of Compliance By The District.

BS&J CADD DRAWING NAME: C:\Users\Robert Mathias\Desktop\Work At Home\UPDATED FILES\400.482 CAD\Rev. 1\400.482-G1_G4.dwg 8/7/2020 RJM

Drawn By: TES
Checked By: RJM
Examined By: RvA
Approved By: GMR

No.	DATE	DESCRIPTION	CKD.	APP'D.
1	08-14-20	Temporary Pump Connection Slab	RJM	GMR

REVISIONS

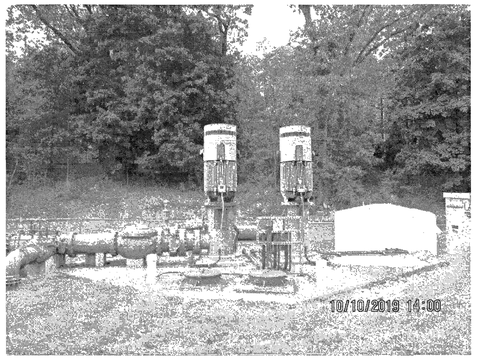
BS&J
BUCK, SEIFERT & JOST, INC.
Consulting Engineers
65 Oak Street, Norwood, New Jersey 07648
CERTIFICATE OF AUTHORIZATION #24GA27996600

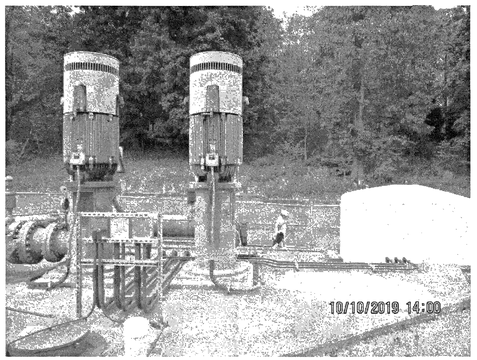
SUEZ Water New Jersey Inc.
461 From Road
PARAMUS, NJ 07652

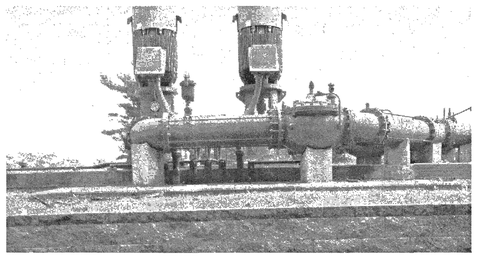
WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
SOIL EROSION AND SEDIMENT CONTROL PLAN AND DETAILS

GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000
8/21/20

DRAWING No. 400.482-G4
SHEET No. 6 OF 17
SCALE: AS SHOWN
DATE: AUGUST 2020



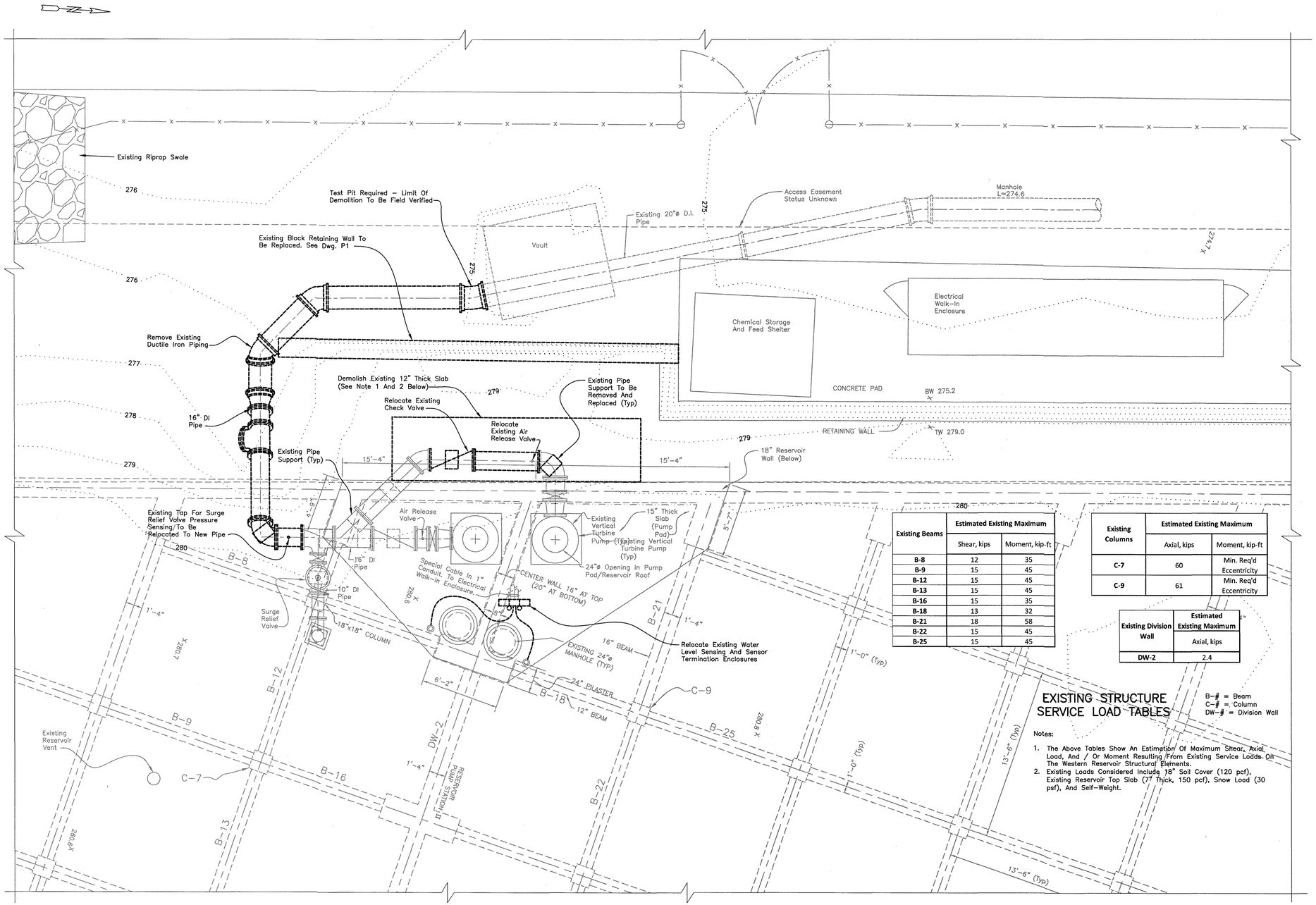




PHOTOS OF EXISTING CONDUITS

Notes:

1. All Conduits Located On Existing Slab Shall Be Relocated Off Of The Floor Slab To Eliminate Tripping Hazard In Proposed Building.



EXISTING CONDITIONS AND DEMOLITION PLAN

SCALE 1/4"=1'-0"

Legend:

------ Items To Be Removed

Notes:

1. Temporary Support Must Be Provided For Piping Supports Impacted By Slab Demolition.
2. Existing Conduits To Remain Penetrate The 12" Slab Being Demolished And Shall Be Protected, Removed, Reinstalled, Or Relocated As Required.

Existing Beams	Estimated Existing Maximum	
	Shear, kips	Moment, kip-ft
B-8	12	35
B-9	15	45
B-12	15	45
B-13	15	45
B-16	15	35
B-18	13	32
B-21	18	58
B-22	15	45
B-25	15	45

Existing Columns	Estimated Existing Maximum	
	Axial, kips	Moment, kip-ft
C-7	60	Min. Req'd Eccentricity
C-9	61	Min. Req'd Eccentricity

Existing Division Wall	Estimated Existing Maximum
	Axial, kips
DW-2	2.4

EXISTING STRUCTURE SERVICE LOAD TABLES

B-# = Beam
C-# = Column
DW-# = Division Wall

Notes:

1. The Above Tables Show An Estimation Of Maximum Shear, Axial Load, And / Or Moment Resulting From Existing Service Loads On The Western Reservoir Structural Elements.
2. Existing Loads Considered Include 18" Soil Cover (120 pcf), Existing Reservoir Top Slab (7" Thick, 150 pcf), Snow Load (30 psf), And Self-Weight.

Scale: 1/4" = 1'-0"

0 1' 2' 4' 6'

BS&J CADD DRAWING NAME: C:\Users\Robert Mathias\Desktop\Work At Home\UPDATED FILES\400.482 CAD\Rev. 1\400.482-D1_P1_P2_A1_E2.dwg 8/7/2020 RJM

Drawn By: TES
Checked By: RJM
Examined By: RvA
Approved By: GMR

No.	DATE	DESCRIPTION	CKD.	APP'D.

REVISIONS

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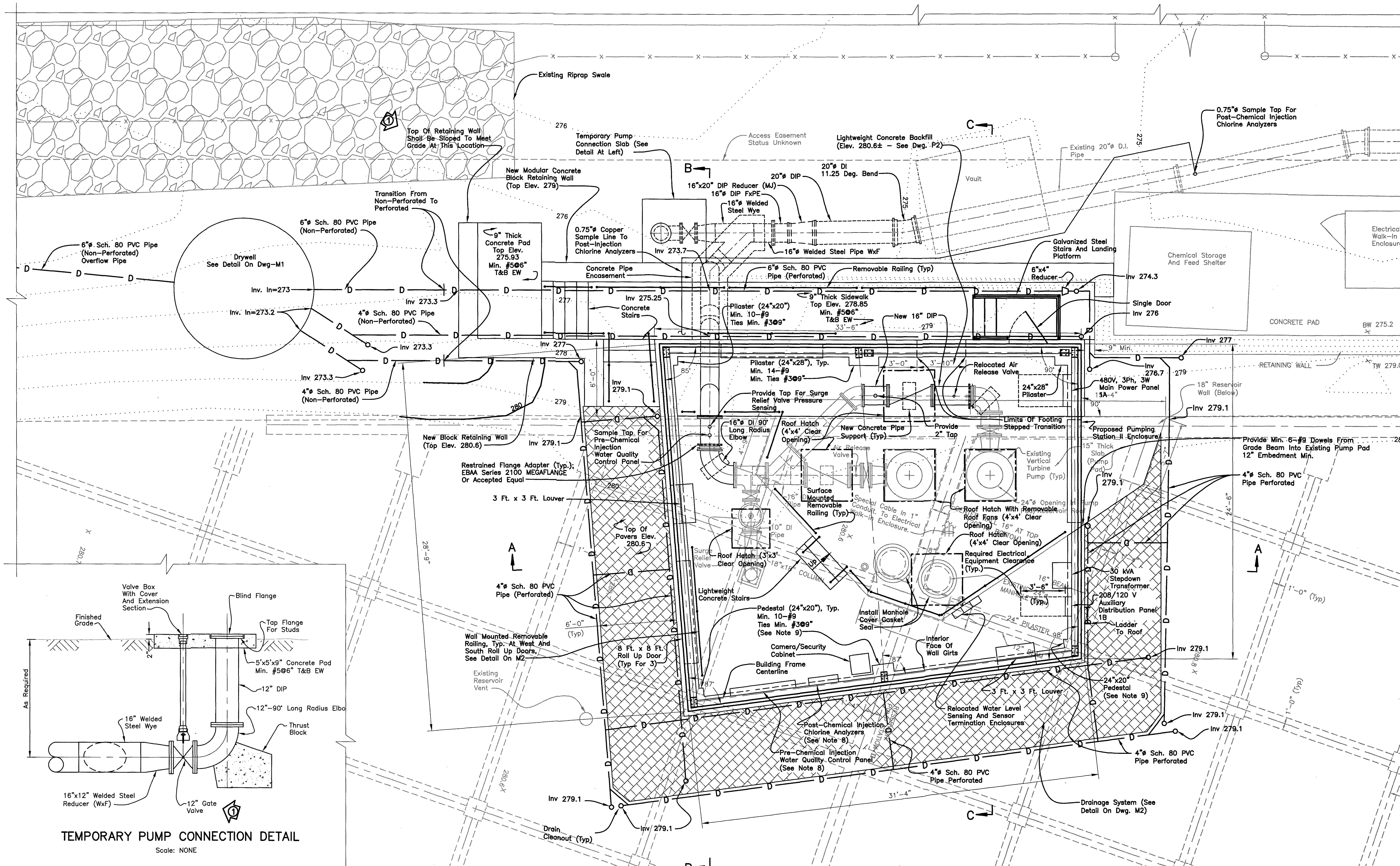
Consulting Engineers
65 Oak Street, Norwood, New Jersey 07648
CERTIFICATE OF AUTHORIZATION #24GA27996600

SUEZ Water New Jersey Inc.
461 From Road
PARAMUS, NJ 07652

WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
EXISTING CONDITIONS AND DEMOLITION PLAN

GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000

DRAWING No. 400.482-D1
SHEET No. 7 OF 17
SCALE: AS SHOWN
DATE: JULY 2020



TEMPORARY PUMP CONNECTION DETAIL

Scale: NONE

EQUIPMENT AND PIPING PLAN

SCALE 1/4"=1'-0"

Notes:

1. Roll Up Doors Shall Be Provided With Windows And Folding Accordion Style Security Gates.
2. Existing Reservoir Roof Exposed Within Proposed Building To Be Skim Coated.
3. All Exposed Concrete Surfaces Shall Be Epoxy Coated.
4. Discharge From Water Quality And Chlorine Analyzers To Be Provided With An Air Gap And Tied Into Drainage System.
5. Gutters Shall Be 'Leaf-Free' Type.
6. All Steel Reinforcement And Dimensioning Of Structural Foundation / Support System Elements Are Estimated For Bidding Purposes Only. Contractor Shall Engage A Professional Engineer Licensed In The State Of New Jersey For Final Design Of The Building, Foundation, And Impact To Existing Reservoir Structure. Please Reference The 'Basis Of Design' Section Of 'Schedule A – Project Criteria' Document For Additional Requirements Related To Limitations Including But Not Limited To Access To Top Of Existing Reservoir Structure, Soil Borings, And Concrete Core Testing.
7. Roof Hatch Locations Are Approximate And Shall Be Field Verified Based on Equipment Location.
8. For Water Quality Parameters And Device Models Please Refer To 'Schedule A – Project Criteria' Document.
9. Pedestals Shall Be Installed Directly On Existing Concrete Where Pedestals Shall Be Anchored To Existing Columns / Division Wall By A Minimum Of Four (4) Stainless Steel 1" Threaded Rods With HILTI HIT-HY200 Adhesive Anchor System. Anchor Embedment Depth Shall Be A Minimum Of 12". Anchors Must Be Within Existing Column / Division Wall Limits. Existing Rebar Shall Be Field Located And Must Not Be Cut.

Scale: 1/4" = 1'-0"
0 1' 2' 4' 6'

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Drawn By: TES
Checked By: RJM
Examined By: RvA
Approved By: GMR

No.	DATE	DESCRIPTION	CKD.	APP'D.
1	08-14-20	Temp. Pump Conn. Detail / Retaining Wall	RJM	GMR

REVISIONS

BS&J
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Consulting Engineers
65 Oak Street, Norwood, New Jersey 07648
CERTIFICATE OF AUTHORIZATION #24GA27996600

suez
SUEZ Water New Jersey Inc.
461 From Road
PARAMUS, NJ 07652

WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
EQUIPMENT AND PIPING PLAN

9/21/20
GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000

DRAWING No. 400.482–P1
SHEET No. 8 OF 17
SCALE: AS SHOWN
DATE: AUGUST 2020

EXISTING VIEW D

EXISTING VIEW E

EXISTING VIEW F

SITE PLAN

EXISTING VIEW A

EXISTING VIEW B

(FROM OVERLOOK DRIVE)

EXISTING VIEW C

PROPOSED VIEW D

PROPOSED VIEW E

PROPOSED VIEW F

△ - REVISED 8/ 13/ 20 : CLARIFIED DETAILS BASED ON ENGINEER'S REVIEW

PROPOSED PUMPING STATION II ENCLOSURE (WESTERN RESERVOIR) FOR:

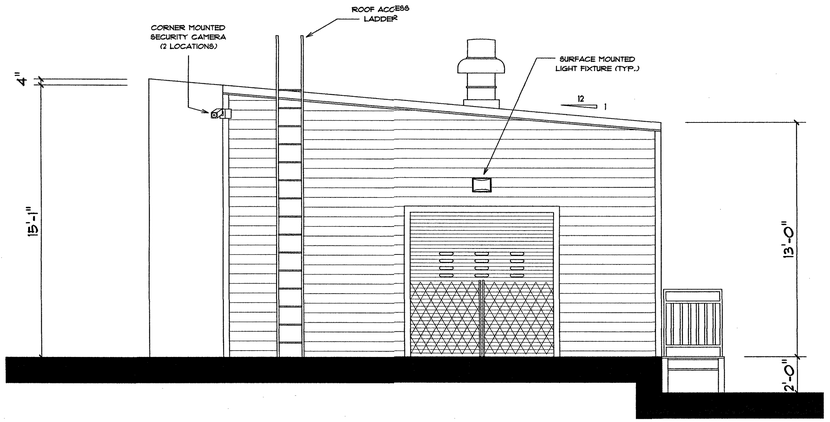
SUEZ

OVERLOOK DRIVE — BOROUGH OF WOODCLIFF LAKE, N.J.

JEFFREY BARTON, A.I.A., P.C.
ARCHITECT
N.J. LIC. - 9235 — N.J. PLANNER - 3346
697 MILL CREEK RD., SUITE 10-12, MANAHAWKIN, N.J. 08050 (609) 488 - 5190

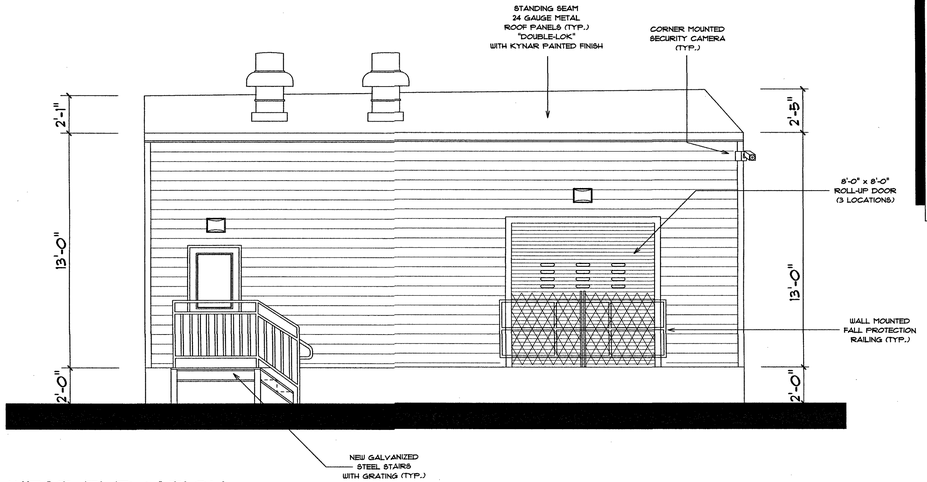
DWG. NO. 400.482 - A1

DATE: 3/ 19/ 20



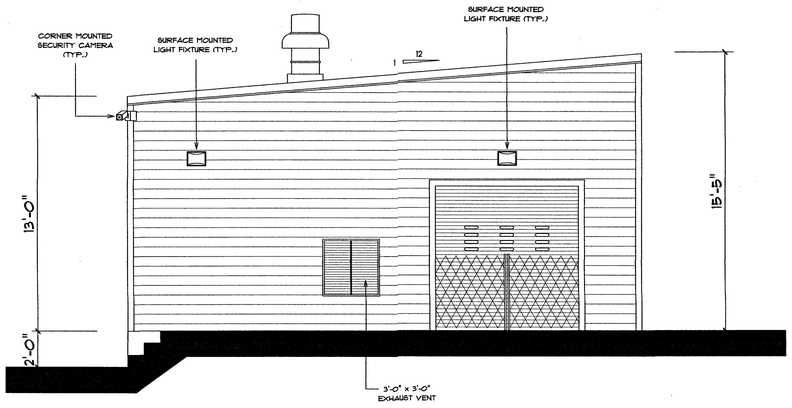
NORTH ELEVATION

SCALE: 1/4" = 1'-0"



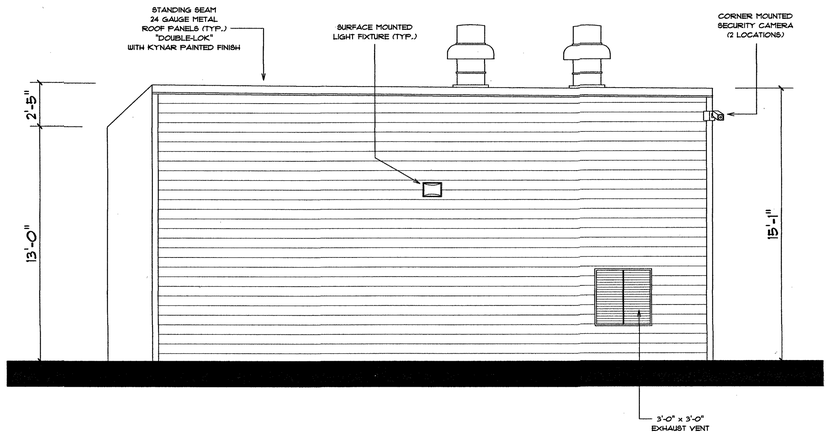
WEST ELEVATION

SCALE: 1/4" = 1'-0"



SOUTH ELEVATION

SCALE: 1/4" = 1'-0"



EAST ELEVATION

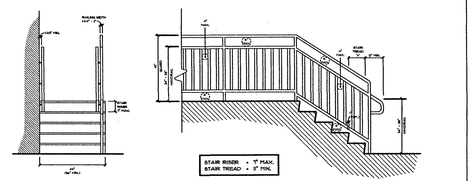
SCALE: 1/4" = 1'-0"

NOTES TO GALVANIZED STEEL STAIRS AND GUARDRAILS

- STAIR RISER HEIGHT SHALL BE 7 INCHES MAXIMUM AND 4 INCH MINIMUM. TREAD DEPTH SHALL BE 11 INCHES MINIMUM. (EXCEPTION - RESIDENTIAL DWELLING UNITS TO HAVE MAXIMUM RISER HEIGHT OF 8-1/4 INCHES AND TREAD DEPTH OF 9 INCHES MINIMUM.)
- LANDINGS SHALL BE AT THE TOP AND BOTTOM OF EVERY STAIR AND LANDING WIDTHS SHALL BE EQUAL TO THE WIDTH OF THE STAIRWAY. LANDING DEPTHS, MEASURED PARALLEL TO THE DIRECTION OF TRAVEL, TO BE EQUAL TO THE WIDTH OF THE STAIRWAYS OR 48 INCHES, WHICHEVER IS LESS.
- ALL STAIRS TO RECIEVE HANDRAILS ON BOTH SIDES (EXCEPTION - STAIRWAYS WITHIN A SINGLE DWELLING UNIT MAY BE EQUIPPED WITH (1) HANDRAIL.
- HANDRAIL TO HAVE A MINIMUM HEIGHT OF 34" AND MAXIMUM OF 38" MEASURED VERTICALLY FROM THE NOSING OF THE TREADS. THE HANDGRIP PORTION OF THE HANDRAILS SHALL NOT BE LESS THAN 1-1/4" AND NOT MORE THAN 2" IN DIAMETER OR IF NOT CIRCULAR SHALL HAVE A PERIMETER DIMENSION NOT LESS THAN 4" AND NOT MORE THAN 6-1/4" AND A CROSS-SECTIONAL DIMENSION OF NOT MORE THAN 2-1/4", AND SHALL HAVE A SMOOTH SURFACE WITH NO SHARP CORNERS. PORCHES, BALCONIES OR RAISED FLOOR SURFACES LOCATED MORE THAN 30" ABOVE THE GRADE OF THE FLOOR OR GRADE BELOW SHALL HAVE GUARDRAILS NOT LESS THAN 42" IN HEIGHT. ALL REQUIRED RAILINGS AND GUARDRAILS SHALL NOT ALLOW PASSAGE OF AN OBJECT 4" OR MORE IN DIAMETER.
- ALL RAILINGS SHALL RETURN TO A WALL, GUARD, OR THE WALKING SURFACE OR SHALL BE CONTINUOUS TO THE HANDRAIL OF AN ADJACENT STAIR FLIGHT. WHERE HANDRAILS ARE NOT CONTINUOUS BETWEEN FLIGHTS, THE HANDRAILS SHALL EXTEND HORIZONTALLY AT LEAST 12" BEYOND THE TOP RISER AND CONTINUE TO SLOPE FOR THE DEPTH OF ONE TREAD BEYOND THE BOTTOM RISER.
- THE GREATEST RISER HEIGHT WITHIN ANY FLIGHT OF STAIRS SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8". THE GREATEST TREAD RUN SHALL NOT EXCEED THE SMALLEST BY MORE THAN 3/8". STAIRWAYS SHALL NOT BE LESS THAN 3'-0" CLEAR WIDTH.
- ALL STAIRS SHALL HAVE RAILINGS CONSTRUCTED AND INSTALLED TO SUSTAIN A CONTINUOS LATERAL LOAD OF 50 LBS. PER LINEAR OR 200 LBS. CONCENTRATED LOADFOOT APPLIED TO THE TOP OF THE RAIL AND NOT DEFLECT MORE THAN 1/2". ALL STAIRS SHALL BE SONCTRUCTED AND INSTALLED TO SUSTAIN A LIVE LOAD OF 125 LBS. SQ. FT.

STAIRWAYS	(I.B.C. - NJ 2018 SECTION 1011)
HANDRAILS	(I.B.C. - NJ 2018 SECTION 1011.11 AND 1014)
GUARDS	(I.B.C. - NJ 2018 SECTION 1011.13)
OPENING LIMITATIONS	(I.B.C. - NJ 2018 SECTION 1015.4)

* SEE DRAWINGS 400.482 - P1 & 400.482 - P2 FOR SLAB & STAIR ELEVATIONS



PROPOSED STAIR CROSS SECTION & ELEVATION

SCALE: 1/4" - 1'-0"

DOOR HARDWARE & FINISH

SERVICE DOORS
- ECI 100, GRADE 1 MODEL 1 (1-3/4" THICK MIN. 20 GAGE)
- 3'-0" x 7'-0" DOOR WITH HALF TEMP. GLASS INSERT
- (2) COAT BAKED PAINT ON ALL EXPOSED SURFACES
- "BALAGE GRADE 2, ALS3PD-606-BAT LOCK AND O.H. CLOSER
- BALL BEARING SILVER POUDER COAT HINGES WITH SECURITY NON-REMOVABLE PINS
- ALL EXIT DOORS MUST SWING OUT AND HAVE PANIC HARDWARE INSTALLED

FRAME
- ECI 100 MODIFIED DRYWALL TYPE
- 5-3/4 INCH JAMB DEPTH, 16 GAGE STEEL
- SELF-FRAMING AND SELF-FLASHING

ROLL UP DOORS

- "STORMTITE" INSULATED HEAVY-DUTY ROLLING SERVICE DOOR (MODEL #625)
- R7.1 INSULATION, 24 GAUGE STEEL, INSULATED ALUMINUM COIL PANEL
- POUDERGUARD PREMIUM POUDER COAT
- PROVIDE (12 TOTAL) 1" X 10" VISION WINDOWS PER DOOR
  (3) COLUMNS AND (4) ROWS @ 6'-0" A.F.F. CENTERLINER

SILLS RESTING ON MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.

FOLDING ACCORDION STYLE SECURITY GATES

SAFETY GUARDS
- 8 GAGE GALVANIZED STEEL WIRE, 4" GRID

SECURITY BARS
- 1/2" HOT ROLLED STEEL ROUND BAR WELDED TO 1-1/2" X 1-1/2" X 1/8" STEEL ANGLE
- 8" SPACING

GUTTERS AND LEADERS

EAVE GUTTERS
- ROLL-FORMED; 26 GAGE STEEL SHEET WITH GUTTER STRAPS FASTNERS & JOINT SEALANT
- MANUFACTURER'S STANDARD COLOR

DOWNSPOUTS
- 26 GAGE, 4" X 5" IN 10'-0" LENGTHS WITH DOWNSPOUT ELBOWS AND DOWNSPOUT STRAPS
- MATCH COLOR OF WALL PANELS

LIFE/SAFETY

CONTRACTOR SHALL VERIFY THAT ALL NEW, RELOCATED, AND EXISTING FIRE/LIFE SAFETY EQUIPMENT IS INSTALLED CORRECTLY AND IN PROPER WORKING CONDITION. IF NOT, REPAIR OR REPLACE AS NECESSARY TO COMPLY WITH ALL APPLICABLE CODES AND REGULATIONS AND CONFORM TO NEW LAYOUT. (EXIT LIGHTS, EMERGENCY LIGHTS, FIRE ALARM DETECTORS, ANNUNCIATORS, SPRINKLERS, ETC.)

FIRE EXTINGUISHERS

1. PORTABLE FIRE EXTINGUISHERS SHALL BE INSTALLED IN COMPLIANCE WITH IBC-NJ 2018 SECTION 906, INCLUDING, BUT NOT LIMITED TO, LOCATIONS WITHIN 30 FEET OF COMMERCIAL COOKING EQUIPMENT. IN AREAS WHERE FLAMMABLE OR COMBUSTIBLE LIQUIDS ARE STORED, USED OR DISPENSED, IN SPECIAL HAZARD AREAS INCLUDING LABORATORIES, COMPUTER AND/OR GENERATOR ROOMS. LOCATIONS SHALL BE IN CONSPICUOUS LOCATIONS ALONG NORMAL PATHS OF TRAVEL AND MOUNTED NO HIGHER THAN 42" TO TOP AND SHALL NOT BE LESS THAN 4" CLEAR ABOVE THE FLOOR TO THE BOTTOM.
2. ANY/ALL NEW AND EXISTING PORTABLE FIRE EXTINGUISHERS SHALL BE CONFIRMED, LOCATED AND VERIFIED IN ACCORDANCE WITH LOCAL FIRE SUB CODE OFFICAL.

FINISHES

ROOF PANELS
- STANDING SEAM (24 GAUGE) ROOF PANELS
- KYNAR PAINTED PANELS
- "DOUBLE - LOK"
- 20 YEAR WEATHTIGHTNESS WARRANTY

WALL PANELS
- EXPOSED FASTNER (24 GAUGE) METAL WALL PANELS
- 7.2" WITH KYNAR PAINTED FINISH - HORIZONTAL

HAT CHANNELS
- 4'-0" O.C. FOR ATTACHMENT OF HORISONTAL 7.2 PANELS

ROOF AND WALL INSULATION FACING
- R32 ROOF OPTI-LINER INSULATION SYSTEM
- R25 WALL OPTI-LINER INSULATION SYSTEM

ALL MATERIALS AND COLORS TO BE AS SELECTED BY AND VERIFIED WITH SUEZ FROM SUPPLIED SAMPLES.

ALL INTERIOR FINISHES AS SELECTED BY AND VERIFIED WITH SUEZ SHALL COMPLY WITH "CHAPTER 8" OF THE "I.B.C. - N.J." CODE (CURRENTLY MANDATED ADDITION) FOR INTERIOR FINISHES & FLAME SPREAD INCLUDING, BUT NOT LIMITED TO PAINT, CARPET, FLOOR TILE, BASE AND CEILING TILES. CONTRACTOR TO PROVIDE CUT SHEET SPECS. AND RATING FOR APPROVALS AS REQUIRED.

GENERAL NOTES

1. THE A.I.A. GENERAL CONDITIONS DOCUMENTS A201 LATEST EDITION IS HEREBY MADE A PART OF THESE DOCUMENTS EXCLUDING ALL MENTION OF ARCHITECTS OBSERVATION AND OUNER REPRESENTATION.
2. ALL FEDERAL, STATE, AND LOCAL CODES, ORDINANCES, REGULATIONS, ETC. OF AUTHORITIES HAVING JURISDICTION SHALL BE CONSIDERED AS PART OF OF THE WORKING DRAWINGS FOR THIS BUILDING AND SHALL TAKE PREFERENCE OVER ANYTHING SHOWN, DESCRIBED OR IMPLIED WHERE SAME ARE AT VARIANCE
3. ALL LABOR & MATERIALS TO COMPLY WITH THE "I.B.C. - NJ 2018" AND "UNIFORM CONSTRUCTION CODE", N.J. ADMINISTRATIVE CODE (N.J.A.C.) 5 : 23 ALL LOCAL BUILDING LAWS AND ALL WORK SHALL BE CONSTRUCTED TO THE APPROVAL AND ACCEPTANCE OF THE BUILDING DEPT AT NO EXTRA COST; INCLUDING BUT NOT LIMITED TO THE GENERAL CONSTRUCTIONS, PLUMBING, HEATING, AIR CONDITIONING, ELECTRICAL, ETC.
4. ANYTHING NOT EXPRESSELY SET FORTH IN THE DRAWINGS AND SPECIFICATIONS BUT WHICH IS REASONABLY IMPLIED SHALL BE FURNISHED THOUGH NOT SPECIFICALLY INDICATED. FIGURES ARE TO BE TAKEN IN PREFERENCE TO SCALE. CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS (EXISTING & NEW) AND SHALL NOTIFY THE ARCHITECT IN WRITING OF ANY DISCREPANCIES BEFORE INSTALLING ANY WORK.
5. THE CONTRACTORS SHALL SHOW PROOF OF INSURANCE COVERAGE FOR GENERAL LIABILITY, FIRE, LIGHTNING, AND ANY OTHER APPLICABLE INSURANCES IN PROPER SUMS AS DICTATED BY THE BUILDING OUNER.
6. CONTRACTOR SHALL INSTALL MATERIALS IN ACCORDANCE WITH STANDARD TRADE PRACTICES & MANUFACTURER & TRADE ASSOCIATION SPECIFICATIONS.
7. THE ARCHITECT HAS NOT BEEN COMMISSIONED TO DESIGN, LAYOUT, OBSERVE OR MAKE PROVISIONS FOR HEATING AND AIR CONDITIONING AND WILL NOT BE RESPONSIBLE FOR SAME. ALL REFERENCE TO HVAC LAYOUT IN THIS PLAN IS TO CONVEY LOCATIONAL PREFERENCES FOR AESTHETIC PURPOSES ONLY ALL HEATING AND AIR CONDITIONING WORK SHALL BE IN ACCORDANCE WITH (N.J.A.C. 5 : 23 - 6 . 5 . 15) AND ANY REFERENCED SECTIONS OF THE BOCA BASIC/NATIONAL MECHANICAL CODE (LATEST ADOPTED EDITION).
8. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE (LATEST ADOPTED EDITION).

CARPENTRY

1. ALL STRUCTURAL WOODWORK SHALL COMPLY WITH NATIONAL LUMBER MANUFACTURERS ASSOC. AND WESTERN WOOD PRODUCTS ASSOC. STANDARDS AND PRACTICES.
2. SILLS RESTING ON MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.
3. ALL FRAMING LUMBER SHALL BE DOUGLAS FIR #2 OR EQUAL.
   Fb = 1450 MIN BENDING STRESS
   E = 1,700,000 PSI MIN. STRENGTH.
4. ALL STUDS SHALL BE DOUGLAS FIR #2 WITH A MINIMUM E=1,210,000 PSI, Fc GREATER THAN 520, WITH BRIDGING AT MID-HEIGHT ON ALL WALLS GREATER THAN 8'-0" HIGH OR FOR STUD WALLS IN BUILDINGS THREE STORIES HIGH.
5. FIRE STOP ALL INTERIOR FRAMING AND OVERHANGS WHERE AND AS REQUIRED BY CODE.
6. PROVIDE MINIMUM 2- 2"X 4" POSTS EACH SIDE ALL OPENINGS. PROVIDE (3) 2"X 4" POSTS EACH SIDE OF HEADERS OR BEAMS OVER 7'-0" SPAN.
7. ALL OPENINGS IN WOOD FRAME CONSTRUCTION 6 FEET AND SMALLER SHALL HAVE 2- 2"X 10" HEADERS UNLESS OTHERWISE NOTED. LARGER OPENINGS SHALL HAVE 2- 2"X 12" HEADERS UNLESS OTHERWISE NOTED.

BRACING

ALL MASONRY AND FRAME WALLS SHALL BE ADEQUATELY BRACED & BRACED DURING CONSTRUCTION UNTIL FULLY AND PROPERLY TIED BACK AND CURED. FOLLOW CODE REQUIREMENTS AND GOOD CONSTRUCTION PRACTICE FOR SAME.

STAIRS AND RAILINGS

ALL NEW STAIRS SHALL HAVE RAILINGS, CONSTRUCTED AND INSTALLED TO SUSTAIN A CONTINUOUS LATERAL LOAD OF 50 LBS. PER LINEAR FOOT AND 200 LBS. CONCENTRATED LOAD APPLIED TO THE TOP OF THE RAIL AND NOT DEFLECT MORE THAN 1/2". ALL STAIRS SHALL BE CONSTRUCTED AND INSTALLED TO SUSTAIN A LIVE LOAD OF 125 LBS. SQ. FT. (ALSO SEE "STAIR REQUIREMENTS DIAGRAM")

FLASHING AND CAULKING

PROVIDE FLASHING AND CALKING AT ALL NEW PENETRATIONS AND WHEREVER ELSE REQUIRED WITH ALUMINUM, LAPPING ALL FLASHINGS AT LEAST 6". PROVIDE FLASHING ABOVE DOORS, LOUVERS AND ALL OTHER OPENINGS. CAULK ALL EXTERIOR JOINTS AS NECESSARY. ALL WORK SHALL BE GUARANTEED THOROUGHLY WATER-TIGHT.

NOTE TO CONTRACTOR'S SHOP DRAWINGS

GENERAL CONTRACTOR SHALL SUBMIT FIVE (5) SETS OF SHOP DRAWINGS AND CUT SHEETS TO OUNER FOR APPROVAL PRIOR TO ORDERING ANY / ALL MATERIALS. SHOP DRAWINGS AND CUT SHEETS TO BE PROVIDED FOR ALL MATERIALS AND PRODUCTS SHOWN OR SPECIFIED ON ARCHITECTURAL DRAWINGS INCLUDING SPEC'S. (SHEETS 400.482 - A1 & 400.482 - A2)

PROPOSED PUMPING STATION II ENCLOSURE (WESTERN RESERVOIR) FOR:

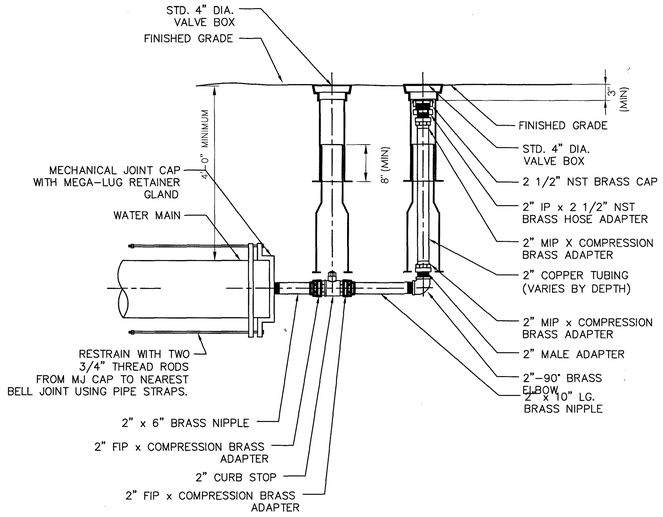
SUEZ

OVERLOOK DRIVE — BOROUGH OF WOODCLIFF LAKE, N.J.

JEFFREY BARTON, A.I.A., P.C.
ARCHITECT
N.J. LIC. - 9235 — N.J. PLANNER - 3346
697 MILL CREEK RD., SUITE 10-12, MANAHAWKIN, N.J. 08050 (609) 488 - 5190

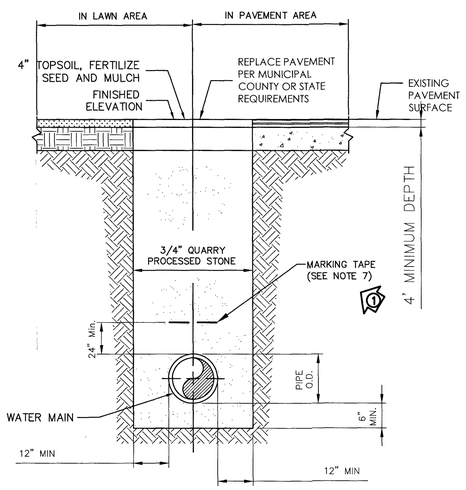
DWG. No. 400.482 - A2

DATE: 8/ 6/ 20



BLOW OFF ASSEMBLY

DETAIL B01
N.T.S. –

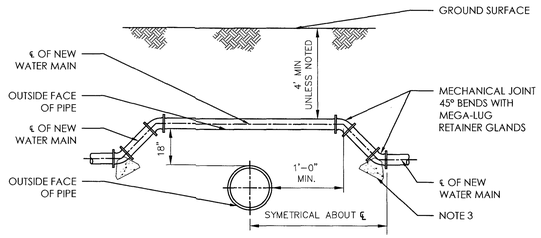


NOTES:

1. SCREENED GRAVEL SHALL BE WELL GRADED IN SIZE FROM 3/8" TO 3/4".
2. SCREENED GRAVEL SHALL BE COMPACTED TO 95% OF THE MAXIMUM DENSITY.
3. FOR UNIMPROVED AREAS, RESTORE SURFACE WITH 8" MINIMUM OF COMPACTED CRUSHED GRAVEL.
4. TOPSOIL SHALL BE SEEDED TO MATCH EXISTING GRASS TYPE.
5. COMPACTION REQUIREMENTS: MIN. 12" LIFTS WITH JUMPING JACK TYPE. MIN. 24" LIFTS WITH RAMEX TRENCH COMPACTOR TYPE. REQUIREMENTS MAY VARY BASED ON SITE CONDITIONS AS DIRECTED BY THE ENGINEER.
6. WHEN WET TRENCH CONDITION EXIST, THE CONTRACTOR SHALL USE 3/4" CLEAN CRUSHED STONE AS BEDDING.
7. PRIOR TO COMPLETION OF BACKFILLING, "WATER LINE BELOW" MARKING TAPE SHALL BE PLACED ALONG THE ENTIRE LENGTH OF THE EXCAVATION A MINIMUM OF 2' ABOVE THE TOP OF THE PIPE.

PIPE TRENCH EXCAVATION AND BACKFILL

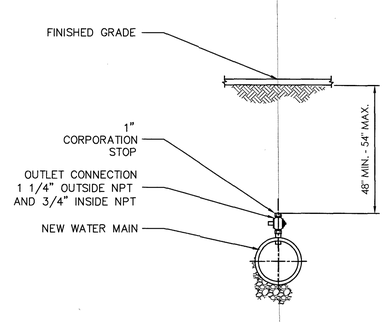
DETAIL D1
N.T.S. –



1. WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 18" VERTICAL SEPARATION ABOVE SANITARY SEWER (SEWER LATERALS ARE NOT SUBJECT TO THIS REQUIREMENT) IF THIS SEPARATION LEAVES THE WATER MAIN WITH LESS THAN 42" COVER THEN THIS WATER MAIN SHALL BE INSULATED (SEE NOTE BELOW), WITH THE APPROVAL OF SUEZ WATER. HOWEVER, IN NO CASE SHALL THIS BE LESS THAN 36"
2. INSULATION WHERE REQUIRED SHALL BE GILSULATE 500XR AS MANUFACTURED BY GILSULATE INTERNATIONAL INC., OR APPROVED EQUAL. INSTALLATION OF BEDDING AND INSULATION SHALL BE AS PER THE MANUFACTURER'S SPECIFICATIONS.
3. SEE DETAIL THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS.

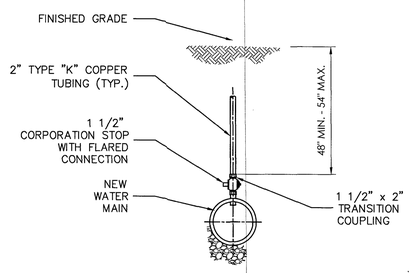
ABOVE UTILITY CROSSING DETAIL

DETAIL UC1
N.T.S. –



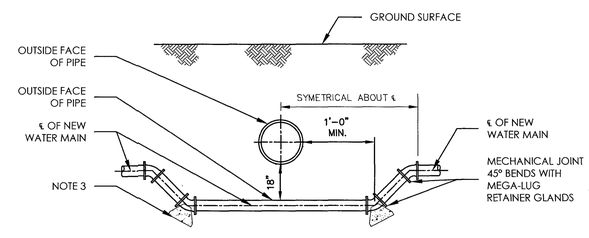
INSTALLATION OF 1" PITOMETER TAP FOR CHLORINATION

DETAIL CH1
N.T.S. –



INSTALLATION OF 2" FLUSHING/SAMPLE TAP FOR DECHLORINATION

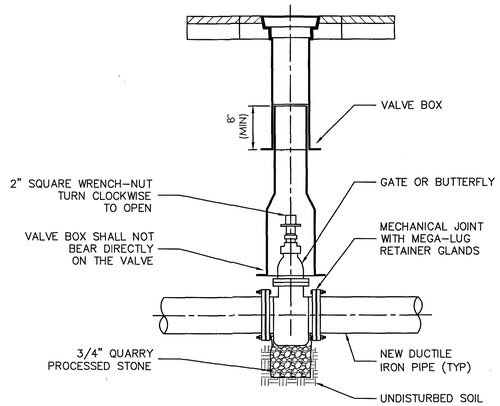
DETAIL CH2
N.T.S. –



1. WATER MAINS SHALL BE INSTALLED BENEATH SANITARY SEWER ONLY IF SUFFICIENT VERTICAL CLEARANCE ABOVE SEWER DOES NOT EXIST. IN SUCH CASES A MINIMUM OF 18" VERTICAL SEPARATION MUST BE PROVIDED. THE WATER SHALL BE INSTALLED 10' FROM THE SEWER JOINTS AND THE SEWER SHALL BE OF WATER TIGHT CONSTRUCTION [NJAC 7:10 - 11.10E(5)]
2. IF THE WATER MAIN WILL BE INSTALLED LESS THAN 18" VERTICAL OR 10' LATERAL SEPARATION FROM SANITARY SEWER, THEN THIS WATER MAIN SHALL BE INSTALLED WITH RESTRAINED JOINT GASKETS.
3. SEE DETAIL THRUST BLOCKS FOR HORIZONTAL BENDS AND LOWER VERTICAL BENDS.

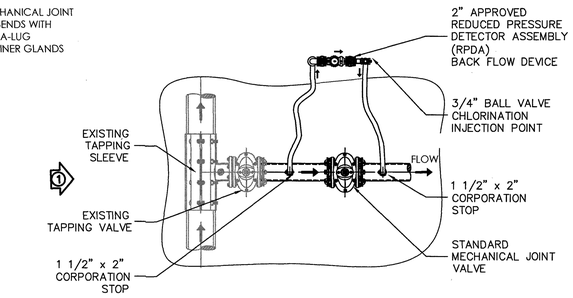
BELOW UTILITY CROSSING DETAIL

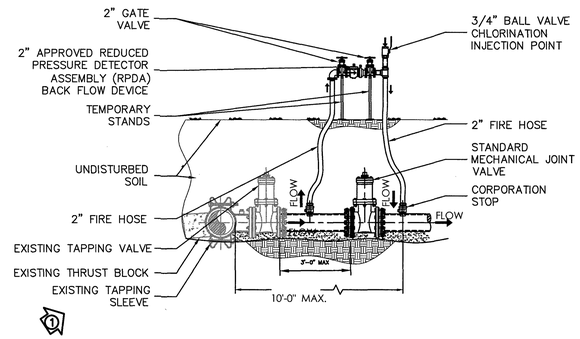
DETAIL UC2
N.T.S. –



VALVE INSTALLATION

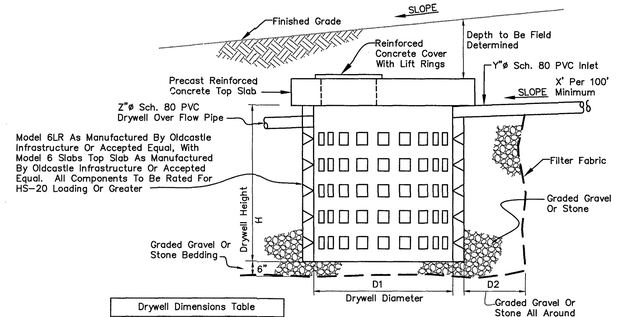
DETAIL V1
N.T.S. –





NEW WATER MAIN EXTENSION WET TAP FOR CHLORINATION SETUP

DETAIL WT2
N.T.S. –



Drywell Dimensions Table					
H	D1	D2	X	Y	Z
6'	10'	6"	*Varies	4"/6"	6"

*Slopes Based On Inverts And Scaled Lengths As Shown On Drawings G1 And P1.

DRYWELL DETAIL
Scale: None

BS&J CADD DRAWING NAME: C:\Users\Robert Mathias\Desktop\Work At Home\UPDATED FILES\400.482 CAD\Rev. 1\400.482-N1_M1_M2.dwg 8/14/2020 RJM

Drawn By: TES
Checked By: RJM/MJL
Examined By: RvA
Approved By: GMR

No.	DATE	DESCRIPTION	CKD.	APP'D.
1	08-14-20	DETAIL WT2 UPDATE	RJM	GMR

REVISIONS

BS&J
BUCK, SEIFERT & JOST, INC.
Consulting Engineers
65 Oak Street, Norwood, New Jersey 07648
CERTIFICATE OF AUTHORIZATION #24GA27996600

SUEZ Water New Jersey Inc.
461 From Road
PARAMUS, NJ 07652

WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
MISCELLANEOUS DETAILS
SHEET 1 OF 2

GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000

DRAWING No. 400.482-M1
SHEET No. 12 OF 17
SCALE: AS SHOWN
DATE: AUGUST 2020

THRUST BLOCK SCHEDULE

Pipe Size (in)	D.E., 90 Bend Bearing Area (Sq. Ft.)			45 Bend Bearing Area (Sq. Ft.)			30 Bend Bearing Area (Sq. Ft.)			22.5 Bend Bearing Area (Sq. Ft.)			11.25 Bend Bearing Area (Sq. Ft.)			Thrust Block Dimensions (ft)		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C	H	L	T (min)
4	2.8	3.8	4.2	1.6	2.1	2.3	1.1	1.4	1.6	0.8	1.1	1.2	0.4	0.6	0.6	0.9		
6	6.2	8.2	9.3	3.4	4.5	5.0	2.3	3.0	3.4	1.7	2.3	2.6	0.9	1.2	1.3	1.4		
8	10.9	14.5	16.3	5.9	7.9	8.9	4.0	5.3	6.0	3.0	4.0	4.5	1.6	2.1	2.3	1.8		
10	16.5	22.0	24.7	8.9	11.9	13.4	6.1	8.1	9.1	4.6	6.1	6.9	2.3	3.1	3.5	2.3		
12	23.3	31.0	34.9	12.6	16.8	18.9	8.6	11.4	12.8	6.5	8.6	9.7	3.3	4.3	4.9	2.7		
14	31.1	41.4	46.6	16.8	22.4	25.2	11.4	15.2	17.1	8.6	11.5	12.9	4.4	5.8	6.5	3.2		
16	40.0	53.3	59.9	21.6	28.8	32.4	14.7	19.5	22.0	11.1	14.7	16.6	5.6	7.4	8.3	3.7		
18	49.7	66.3	74.6	26.9	35.9	40.4	18.2	24.3	27.3	13.8	18.3	20.6	6.9	9.2	10.4	4.1		
20	60.4	80.5	90.6	32.7	43.6	49.0	22.1	29.5	33.2	16.7	22.3	25.0	8.4	11.2	12.6	4.6		
24	84.2	112.2	126.2	45.6	60.8	68.3	30.8	41.1	46.2	23.3	31.0	34.9	11.7	15.6	17.5	5.5		
30	124.3	165.8	186.5	67.3	89.7	100.9	45.5	60.7	68.3	34.3	45.8	51.5	17.3	23.0	25.9	6.8		
36	170.3	227.0	255.4	92.2	122.9	138.2	62.3	83.1	93.5	47.0	62.7	70.5	23.6	31.5	35.4	8.2		
42	220.1	293.5	330.2	119.2	158.9	178.7	80.6	107.5	120.9	60.8	81.0	91.1	30.6	40.7	45.8	9.5		
48	275.0	366.7	412.5	148.9	198.5	223.3	100.7	134.2	151.0	75.9	101.2	113.8	38.2	50.9	57.2	10.9		
54	337.6	450.2	506.4	182.7	243.6	274.1	123.6	164.8	185.4	93.2	124.2	139.8	46.8	62.4	70.2	12.4		
60	379.2	505.6	568.8	205.2	273.6	307.8	138.8	185.1	208.2	104.7	139.5	157.0	52.6	70.1	78.9	13.3		
72	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	Bearing Area / H	1/2 * H

Use — Construct for AWWA C600 Test Pressure — Assumptions:

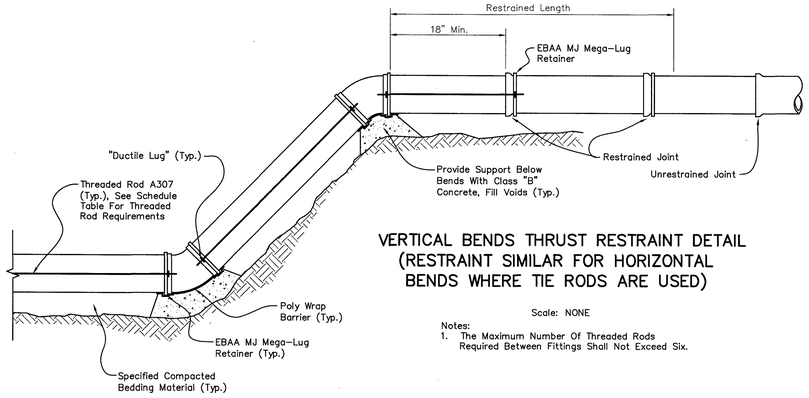
	A =	**150** psi	Thickness Class =	54	Depth of Cover = 4.0 ft
---->	B =	**200** psi	Soil Weight =	120 lb/cf	Depth To Water Table = 10.0 ft
	C =	**225** psi	Concrete Weight =	145 lb/cf	Safety Factor = 1.5
			Pipe Type =	DIP	

HORIZONTAL RESTRAINED LENGTH SCHEDULE

Pipe Size (in)	D.E., 90 Bend, Tee Restrained Length (ft)			45 Bend Restrained Length (ft)			30 Bend Restrained Length (ft)			22.5 Bend Restrained Length (ft)			11.25 Bend Restrained Length (ft)		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
4	18.4	24.6	27.6	7.7	10.2	11.5	5.0	6.6	7.4	3.7	4.9	5.5	1.9	2.5	2.8
6	28.6	38.2	42.9	11.9	15.8	17.8	7.7	10.3	11.5	5.7	7.6	8.6	2.9	3.8	4.3
8	38.9	51.9	58.3	16.1	21.5	24.2	10.5	13.9	15.7	7.8	10.4	11.6	3.9	5.2	5.8
10	48.5	64.7	72.7	20.1	26.8	30.2	13.0	17.4	19.5	9.7	12.9	14.5	4.8	6.4	7.2
12	58.2	77.5	87.2	24.1	32.1	36.2	15.6	20.8	23.4	11.6	15.5	17.4	5.8	7.7	8.6
14	67.6	90.2	101.4	28.1	37.4	42.1	18.2	24.2	27.2	13.5	18.0	20.2	6.7	8.9	10.0
16	77.2	102.9	115.8	32.0	42.7	48.0	20.7	27.6	31.1	15.4	20.5	23.1	7.6	10.2	11.4
18	86.6	115.4	129.9	35.9	47.8	53.8	23.2	31.0	34.8	17.3	23.0	25.9	8.6	11.4	12.8
20	95.8	127.7	143.7	39.7	52.9	59.6	25.7	34.3	38.5	19.1	25.4	28.6	9.5	12.6	14.2
24	113.8	151.7	170.7	47.2	62.9	70.7	30.5	40.7	45.8	22.7	30.2	34.0	11.3	15.0	16.9
30	138.7	184.9	208.0	57.5	76.6	86.2	37.2	49.6	55.8	27.6	36.8	41.4	13.7	18.3	20.5
36	161.7	215.6	242.6	67.0	89.3	100.5	43.4	57.8	65.0	32.2	42.9	48.3	16.0	21.3	23.9
42	183.1	244.2	274.7	75.9	101.2	113.8	49.1	65.5	73.6	36.5	48.6	54.7	18.1	24.1	27.1
48	202.8	270.4	304.2	84.0	112.0	126.0	54.4	72.5	81.5	40.4	53.8	60.5	20.0	26.7	30.0
54	222.7	296.9	334.0	92.3	123.0	138.4	59.7	79.6	89.5	44.3	59.1	66.5	22.0	29.3	32.9
60	237.8	317.1	356.7	98.5	131.4	147.8	63.8	85.0	95.6	47.3	63.1	71.0	23.5	31.3	35.2
72	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

Use — Construct for AWWA C600 Test Pressure — Assumptions:

	A =	**150** psi	Thickness Class =	54	Depth of Cover =	4 ft
---->	B =	**200** psi	Soil Weight =	120 lb/cf	Depth to Water Table =	10 ft
	C =	**225** psi	Concrete Weight =	145 lb/cf	Safety Factor =	1.5
			Pipe Type =	DIP	Trench Type =	3



VERTICAL BENDS THRUST RESTRAINT DETAIL (RESTRAINT SIMILAR FOR HORIZONTAL BENDS WHERE TIE RODS ARE USED)

Scale: NONE

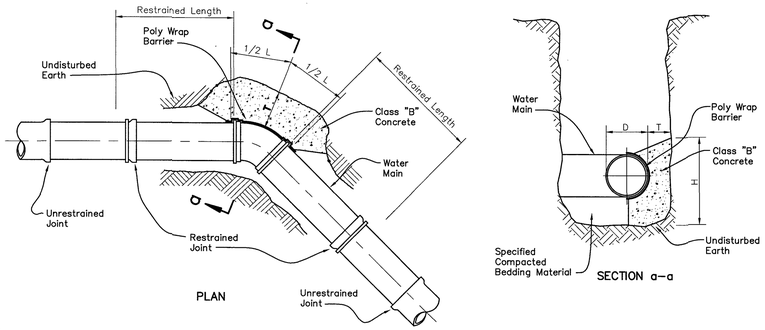
Notes:
1. The Maximum Number Of Threaded Rods Required Between Fittings Shall Not Exceed Six.

3/4" THREADED ROD SCHEDULE

Pipe Size (in)	D.E., 90 Bend, Tee Threaded Rods Required			45 Bend Threaded Rods Required			30 Bend Threaded Rods Required			22.5 Bend Threaded Rods Required			11.25 Bend Threaded Rods Required		
	A	B	C	A	B	C	A	B	C	A	B	C	A	B	C
4	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
6	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
8	2.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
10	4.0	4.0	4.0	2.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
12	4.0	6.0	6.0	4.0	4.0	4.0	2.0	4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0
14	6.0	8.0	8.0	4.0	6.0	6.0	4.0	4.0	4.0	2.0	4.0	4.0	2.0	2.0	2.0
16	8.0	10.0	10.0	6.0	6.0	8.0	4.0	6.0	6.0	4.0	4.0	4.0	2.0	2.0	2.0
18	8.0	12.0	12.0	6.0	8.0	10.0	4.0	6.0	6.0	4.0	6.0	6.0	2.0	4.0	4.0
20	10.0	14.0	16.0	8.0	10.0	12.0	6.0	8.0	8.0	4.0	6.0	6.0	2.0	4.0	4.0
24	16.0	20.0	22.0	10.0	14.0	16.0	8.0	10.0	12.0	6.0	8.0	10.0	4.0	4.0	6.0
30	22.0	30.0	34.0	16.0	22.0	24.0	12.0	16.0	18.0	10.0	12.0	14.0	6.0	6.0	8.0
36	32.0	42.0	48.0	24.0	30.0	34.0	16.0	22.0	24.0	12.0	16.0	18.0	8.0	10.0	10.0
42	44.0	58.0	64.0	30.0	40.0	46.0	22.0	30.0	32.0	18.0	22.0	26.0	10.0	12.0	14.0
48	56.0	74.0	84.0	40.0	54.0	60.0	28.0	38.0	42.0	22.0	30.0	32.0	12.0	16.0	18.0
54	72.0	96.0	#N/A	52.0	68.0	76.0	36.0	48.0	54.0	28.0	38.0	42.0	14.0	20.0	22.0
60	82.0	#N/A	#N/A	58.0	78.0	88.0	42.0	56.0	62.0	32.0	42.0	48.0	16.0	22.0	24.0
72	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A

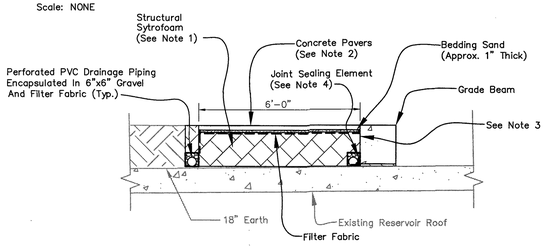
Use — Construct for AWWA C600 Test Pressure — Assumptions:

	A =	**150** psi	Thickness Class =	54	Safety Factor =	1.5
---->	B =	**200** psi	3/4" Romac Ductile Lug Tensile Strength =	7.75 kips	(A307, ASD)	
	C =	**225** psi	3/4" Threaded Rod Tensile Strength =	9.94 kips	(Max Load)	
			Pipe Type =	DIP		



HORIZONTAL BENDS AND TEES THRUST BLOCK DETAIL

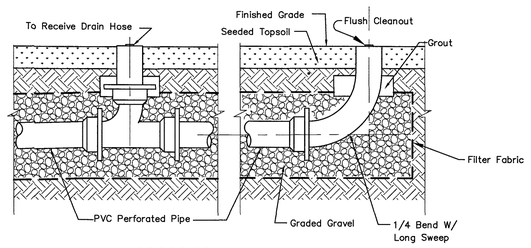
Scale: NONE



DRAINAGE SYSTEM DETAIL

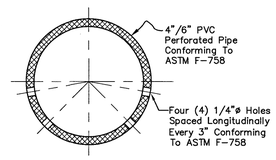
Scale: None

Notes:
1. Structural Styrofoam To Be GEOFOAM Type 29 Or Accepted Equal. Sealant To Be Provided At All Seams (Sikaflex 1A Or Accepted Equal).
2. Concrete Pavers Shall Be Two (2") Thick And Be Salt Resistant And Have A Non-Slip Surface. Pavers Shall Be Tuscan Series By Pavestone Or Accepted Equal.
3. Face Of Grade Beam Shall Be Coated With Foundation Sealant By Liquid Rubber Or Accepted Equal.
4. Joint Sealing Element Shall Be Sikadur CombiFlex SG Or Accepted Equal.



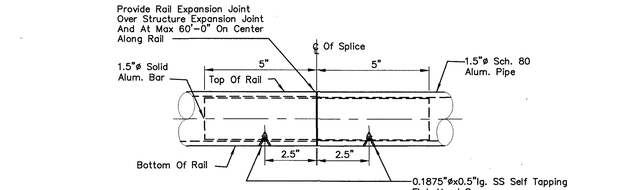
CROSS-SECTIONAL VIEW
DRAIN CLEANOUT DETAIL

Scale: None

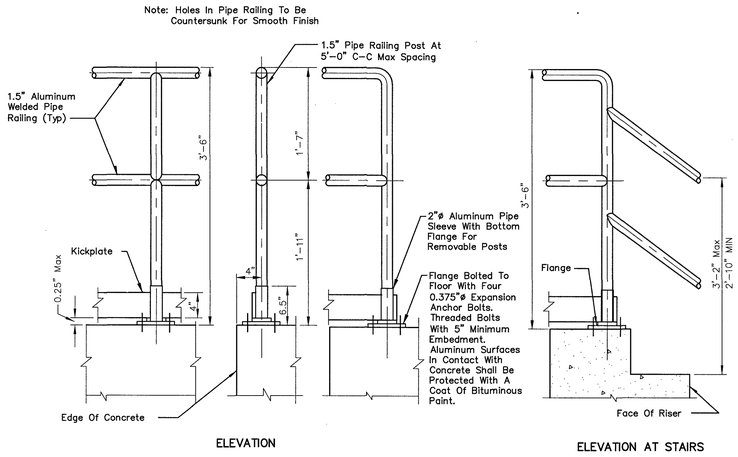


SECTION
6"ø PVC PERFORATED DRAIN PIPE DETAIL

Scale: None



FIELD SPLICE

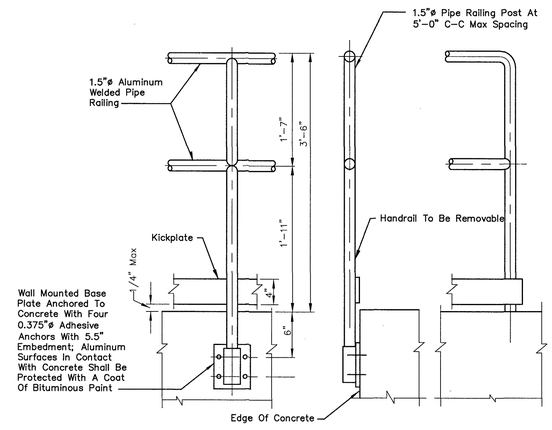


ELEVATION

ELEVATION AT STAIRS

SURFACE MOUNTED REMOVABLE RAILING DETAILS

Note: Stair Nosing Not Shown For Clarity



ELEVATION

WALL MOUNTED REMOVABLE RAILING DETAIL FOR ROLL UP DOOR OPENINGS

BS&J CADD DRAWING NAME: C:\Users\Robert Mathias\Desktop\Work At Home\UPDATED FILES\400.482 CAD\Rev. 1\400.482-N1_M1_M2.dwg 8/7/2020 TES

Drawn By: TES
Checked By: RJM/MJL
Examined By: RvA
Approved By: GMR

No.	DATE	DESCRIPTION	CKD.	APP'D.

REVISIONS

BS&J

BUCK, SEIFERT & JOST, INC.
Consulting Engineers
65 Oak Street, Norwood, New Jersey 07648
CERTIFICATE OF AUTHORIZATION #24GA27996600

SUEZ Water New Jersey Inc.
461 From Road
PARAMUS, NJ 07652

WESTERN RESERVOIR
PUMPING STATION II ENCLOSURE
BOROUGH OF WOODCLIFF LAKE, BERGEN COUNTY, N.J.
MISCELLANEOUS DETAILS
SHEET 2 OF 2

GLENN M. RAMETTA
New Jersey Professional Engineer
License No. 24GE04593000

DRAWING No. 400.482-M2
SHEET No. 13 OF 17
SCALE: AS SHOWN
DATE: JULY 2020