

# SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE ECKERSON WELL NO. 71

## CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK

### FOR CONSTRUCTION



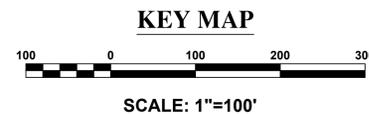
PROJECT DIRECTORY	
<b>OWNER</b>	SUEZ WATER NEW YORK INC.
	162 OLD MILL ROAD WEST NYACK, NY 10994 (845)357-4411
<b>SITE ENGINEERING &amp; LAND SURVEYOR</b>	SUBURBAN ENGINEERING
	7 COKESBURY CALIFORN ROAD LEBANON, NJ 08833 973-398-1776

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PUBLIC UTILITIES LIST	
GAS	ORANGE AND ROCKLAND UTILITIES
WATER	SUEZ WATER NEW YORK
SEWER	TOWNSHIP OF RAMAPO
ELECTRICITY	ORANGE AND ROCKLAND UTILITIES
COMMUNICATIONS	VERIZON

- REFERENCES:**
1. TAX MAP - LOT 52, BLOCK 55.12, ON THE CURRENT TAX MAP OF THE TOWN OF RAMAPO, SHEET #55.12.
  2. AERIAL IMAGERY - © NEARMAP US, INC. <http://go.nearmap.com>, IMAGE TAKEN MARCH 27, 2019



REV. PER DESIGN COMMENTS	A	05/24/2022	JAW	WAS
DESCRIPTION	NO.	DATE:	BY:	CHK:
REVISIONS				

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE  
ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK

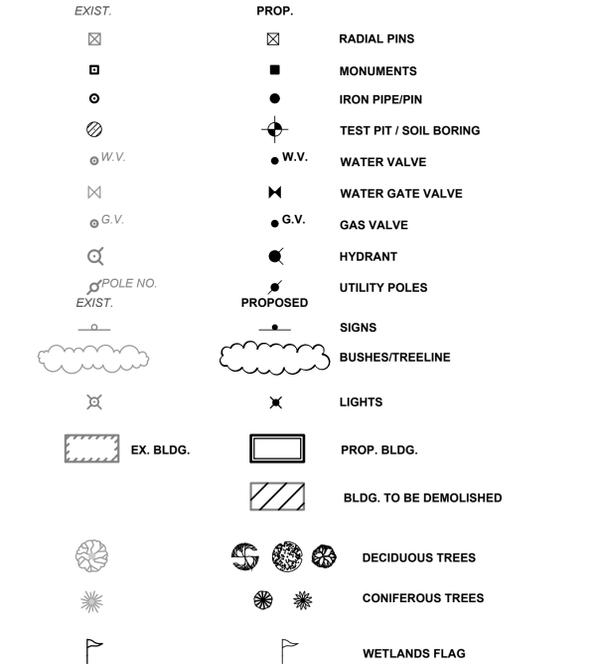
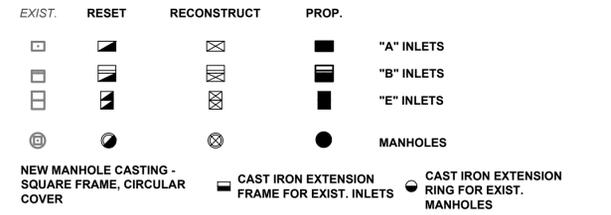
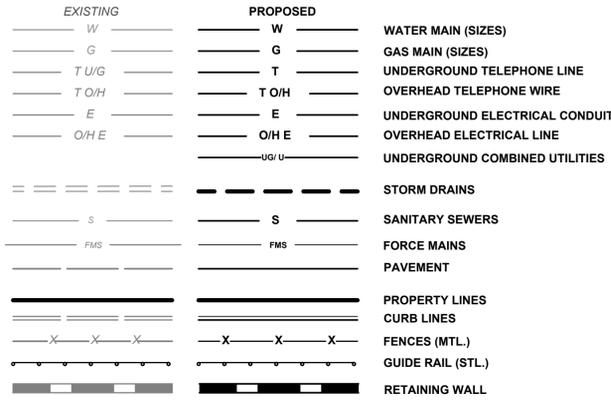
**FOR CONSTRUCTION  
COVER SHEET**



PROJECT NUMBER: SCE-12162.001 SHEET 1 OF 22      REVISION A

DATE: 03/11/2022

**LEGEND**



**REFERENCES:**

- TAX MAP - LOT 51, BLOCK 2, ON THE CURRENT TAX MAP OF THE TOWN OF RAMAPO, SHEET #50.15.
- ORTHOGRAPHY - NY STATEWIDE DIGITAL ORTHOIMAGERY PROGRAM (NYS DOP) DATA (2000-2018), NYS GIS PROGRAM OFFICE, AND U.S. GEOLOGICAL SURVEY NATIONAL AERIAL PHOTOGRAPHY PROGRAM (1994-1999), NAD83(2011) NY EAST STATE PLANE FEET: 1220 WASHINGTON AVENUE, BUILDING 5 - FLOOR 1, ALBANY, NY, 12226, US. <https://orthos.dhss.ny.gov/#>
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- FILED MAP - "FINAL SUBDIVISION PLAT - KERBER PARK - TOWN OF RAMAPO, ROCKLAND COUNTY, NEW YORK" PREPARED BY OSTERTAG AND MCDUGALL ENGINEERS AND SURVEYORS, DATED JUNE 1970, LAST REVISED MARCH 15, 1971 AND FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON APRIL 13, 1971 AS MAP NO. 4131.
- FILED MAP - "SUBDIVISION PLAT - ECKERSON TERRACE - SECTION 2B, TOWN OF RAMAPO, ROCKLAND COUNTY, NEW YORK" PREPARED BY OSTERTAG AND MCDUGALL ENGINEERS AND SURVEYORS, DATED JANUARY 1974, LAST REVISED SEPTEMBER 15, 1975 AND FILED IN THE ROCKLAND COUNTY CLERK'S OFFICE ON DECEMBER 1, 1975 AS MAP NO. 4686.
- SITE PLAN - "SPRING VALLEY WATER COMPANY INCORPORATED, SPRING VALLEY, N.Y. - ECKERSON RD, WELL, RAMAPO, N.Y.", DATED DECEMBER 1972, LAST REVISED DECEMBER 1974 AS REVISION "REVISED AS BUILT".
- FIELD SURVEY - PARTIAL SITE CONDITIONS PREPARED BY SCE

**GENERAL NOTES**

- OWNER:** SUEZ WATER NEW YORK INC.  
162 OLD MILL ROAD  
WEST NYACK, NY 10994
- APPLICANT:** SUEZ WATER NEW YORK INC.  
162 OLD MILL ROAD  
WEST NYACK, NY 10994
- THE SUBJECT PROPERTY IS KNOWN AS LOT 51, BLOCK 2 AS SHOWN ON THE TOWN OF RAMAPO TAX MAP SHEET # 50.15.
  - THE SUBJECT PROPERTY CONTAINS 2.642 ACRES (115,104 SF)
  - HORIZONTAL DATUM BASED ON NAD-83 (2011), PER GPS SATELLITE OBSERVATION.
  - VERTICAL DATUM IS BASED ON NAVD-88, PER GPS SATELLITE OBSERVATION.
  - PARTIAL BOUNDARY & TOPOGRAPHIC SURVEY REFERENCED FROM SUBURBAN ENGINEERING, ENTITLED "SUEZ WATER NEW YORK, INC. - PFAS COMPLIANCE - ECKERSON #71" DATED MARCH 30, 2021.
  - ALL UTILITIES WILL BE INSTALLED AS DEFINED ON PLANS..
  - ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF RAMAPO STANDARDS AND SPECIFICATIONS, AND ALL STRUCTURES ARE SUBJECT TO REVIEW BY THE CONSTRUCTION CODE OFFICIAL. THE CONSTRUCTION OF ALL SITE IMPROVEMENTS SHALL COMPLY WITH THE NEW YORK STATE CONSTRUCTION CODE.
  - A PORTION OF THE SUBJECT PROPERTY IS SUBJECT TO FLOODING FROM THE 100 YEAR STORM, BASED ON THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF RAMAPO, PANEL 94 OF 207, COMMUNITY PANEL NUMBER 365340, LAST REVISED MARCH 3, 2014.
  - WORK MAY BE PERFORMED MONDAY THROUGH FRIDAY BETWEEN THE HOURS OF 8:00 AM AND 1:00 PM. THE TOWN AND OWNER MUST APPROVE EARLY STARTS AND WORK ON SATURDAYS, SUNDAYS AND HOLIDAYS. WORKING HOURS ON SUEZ PROPERTY MUST BE CONFIRMED AND ANTICIPATED BETWEEN THE WORKING HOURS OF 8:00 AND 6:00 PM.
  - NO MATERIAL OR EQUIPMENT IS TO BE STORED ON ANY AREA THAT HAS NOT BEEN ESTABLISHED AS A DESIGNATED STAGING AREA. ALL EXCAVATIONS SHALL BE PROTECTED AT THE END OF EACH WORK DAY. THE CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. STAGING AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION CONDITIONS BY THE CONTRACTOR.
  - ALL CONSTRUCTION MATERIALS, PRODUCTS, HOURS OF OPERATION, ETC. SHALL BE IN ACCORDANCE WITH THE OWNER, THE ON-SITE ENGINEER, THE STATE OF NEW YORK, THE COUNTY OF ROCKLAND, AND THE TOWN OF RAMAPO. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL AS-BUILTS TO THE TOWN (AS REQUIRED) AND THE OWNER OF THE SITE.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ALL LOCAL BUILDING PERMITS. THE OWNER WILL OBTAIN ALL PLANNING, ZONING AND LAND DISTURBANCE PERMITS, IF DEEMED NECESSARY.
  - BUILDING PERMITS SHALL SHOW LOWEST FLOOR ELEVATIONS SUBJECT TO APPROVAL AND INSPECTION BY DEPARTMENT OF ENGINEERING & FACILITIES MAINTENANCE. NO BUILDING PERMIT FOR A BUILDING SUBJECT TO SITE PLAN APPROVAL SHALL BE ISSUED BY THE BUILDING INSPECTOR EXCEPT UPON AUTHORIZATION OF AND IN CONFORMITY WITH THE SITE PLAN APPROVED BY THE RAMAPO PLANNING BOARD.
  - ALL EXISTING ITEMS NOT DENOTED "TO BE REMOVED" SHALL REMAIN AND BE PROTECTED THROUGHOUT CONSTRUCTION.
  - SUEZ WATER NEW YORK INC. AND THE CONTRACTOR SHALL CONFORM TO SOIL EROSION AND SEDIMENT CONTROL PLAN ON FILE IN DEPARTMENT OF ENGINEERING & FACILITIES MAINTENANCE.
  - ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE NEW YORK STATE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES IF REQUIRED FOR CONSTRUCTION.
  - PRIOR TO ANY EXCAVATION, CONTRACTOR MUST HAVE ALL UTILITIES MARKED OUT BY THE APPROPRIATE UTILITY COMPANIES -> CALL 811

**GENERAL ENVIRONMENTAL NOTES:**

- THE CONTRACTOR MUST PERFORM THE WORK IN ACCORDANCE WITH APPLICABLE PROVISIONS AND CONDITIONS OF THE ROCKLAND COUNTY STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL.
- THE TRENCH EXCAVATION MAY BE NO WIDER THAN NECESSARY TO COMPLY WITH OSHA SAFETY STANDARDS AND THE CONSTRUCTION DETAILS UNDER THE ACTUAL SURFACE AND SUBSURFACE CONDITIONS AS MAY BE ENCOUNTERED DURING CONSTRUCTION.
- AVOID DISTURBANCE OF NATURAL VEGETATION DURING CLEARING OPERATIONS TO THE GREATEST EXTENT PRACTICABLE.
- PERFORM "SOIL EROSION AND SEDIMENT CONTROL" AS DIRECTED BY THE ENGINEER OR SOIL CONSERVATION AGENCY REPRESENTATIVE AS CALLED FOR ON THE PLANS. PERFORM WORK IN ACCORDANCE WITH THE SPECIFICATIONS AS MAY BE WARRANTED BY ACTUAL FIELD CONDITIONS AND THE CONTRACTOR'S MEANS AND METHODS OF CONSTRUCTION. NO SEPARATE PAYMENT WILL BE MADE FOR ADJUSTMENTS, ADDITIONAL MATERIALS AND MAINTENANCE OF THIS WORK.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR THE INSTALLATION, MAINTENANCE, AND REPAIR OF SOIL EROSION AND SEDIMENT CONTROL MEASURES IN ACCORDANCE WITH THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PERMIT. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES OR REMEDIATION REQUIRED DUE TO EROSION OR DOWNSTREAM SEDIMENT DEPOSITION.
- MAINTAIN WORK WITHIN THE DESIGNATED LIMITS OF DISTURBANCE AS DELINEATED AND NOTED ON THE PLANS. RESTORE ANY DISTURBANCE BY WORK CONDUCTED OUTSIDE THOSE LIMITS AT NO ADDITIONAL EXPENSE TO THE OWNER.
- DISPOSE OF ALL WASTE, DEBRIS, AND UNSUITABLE EXCAVATED MATERIALS IN ACCORDANCE WITH THE SPECIFICATIONS, THE STATE AND LOCAL RULES AND REGULATIONS.

**GENERAL WATER MAIN CONSTRUCTION NOTES:**

- USE DUCTILE IRON RESTRAINED JOINT FITTINGS WITH MANUFACTURER RETAINER GLANDS ACCORDING TO THE CONTRACT DOCUMENTS. RESTRAIN ALL BENDS, TEES, VALVES, PLUGGED ENDS, ETC. IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.
- SIZE AND LOCATION OF EXISTING MAINS TO WHICH CONNECTIONS ARE BEING MADE ARE BASED ON THE BEST INFORMATION AVAILABLE AT THE TIME OF DESIGN. THE CONTRACTOR MUST BE PREPARED TO ACCOMMODATE CHANGES IN THE SIZE OR LOCATION OF THE CONNECTION BY MAINTAINING AT THE JOB SITE, ADDITIONAL PIPE, FITTINGS, AND VALVES IN THE RANGE OF SIZES AS MAY EXIST.

**GENERAL CONSTRUCTION NOTES:**

- COORDINATE ALL WATER SYSTEM CONNECTIONS, SHUT DOWNS, OR OTHER SYSTEM RELATED OPERATIONS WITH THE OWNER AND NOTIFY AFFECTED RESIDENCES AND BUSINESSES A MINIMUM OF ONE WEEK PRIOR TO THE SCHEDULED DATE FOR SAID SHUT DOWN OPERATIONS. ONLY SUEZ PERSONNEL SHALL OPERATE EXISTING VALVES AND HYDRANTS. THE CONTRACTOR MUST PROVIDE WRITTEN NOTIFICATION OF THE START OF CONSTRUCTION TO PROPERTY OWNERS WITHIN THE PROJECT LIMITS 72 HOURS PRIOR TO CONSTRUCTION OPERATIONS AND 72 HOURS PRIOR TO OPERATIONS THAT MAY AFFECT PROPERTY ACCESS.
- CONSTRUCTION SHALL CONFORM TO APPROPRIATE SECTIONS OF: 1) NATIONAL ELECTRICAL CODE; 2) NATIONAL STANDARD PLUMBING CODE; AND 3) INTERNATIONAL MECHANICAL CODE, LATEST EDITIONS.

**CERTIFIED PROPERTY OWNERS LIST WITHIN 500 FT.**

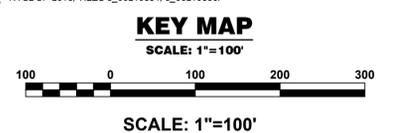
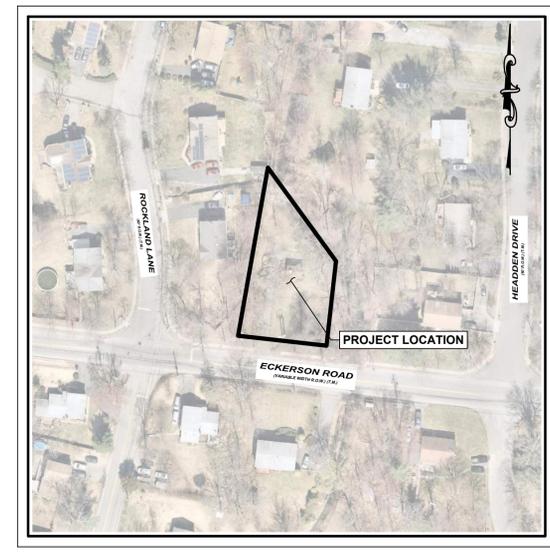
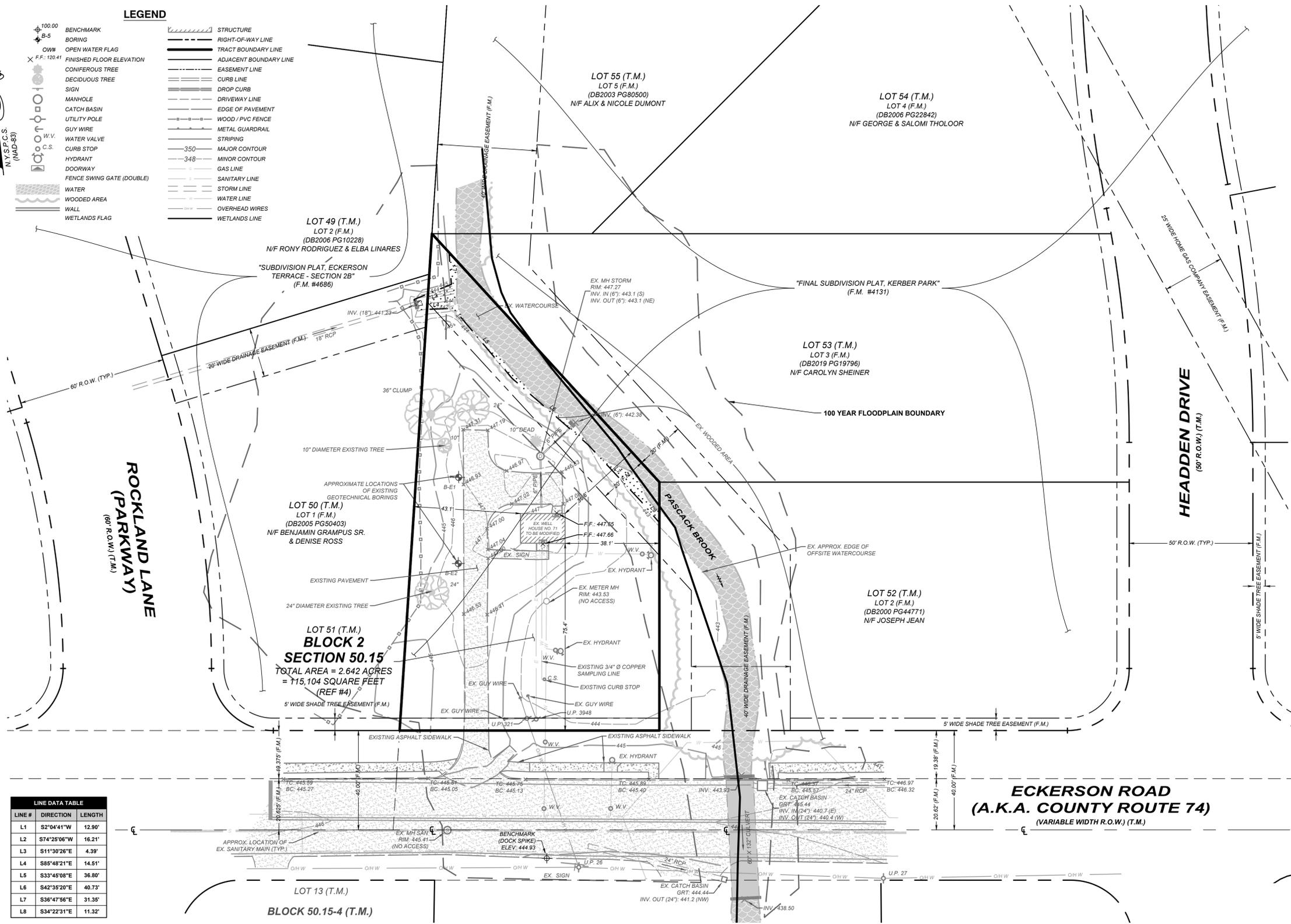
89/50.15-4-48 LEONARD ROSE R 14 INWOOD DR SPRING VALLEY, NY 10977	89/50.15-4-13 SOFER JOEL & SALAMON JOEL 7 CARDINAL LANE MONSEY, NY 10952	89/50.15-4-52 STERNBERGER BENJAMIN 58 PARK AVE MONTICELLO, NY 12701	89/50.15-2-17 BOYKIN KENNETH 154 ROCKLAND LANE SPRING VALLEY, NY 10977	89/50.15-2-16 DEMOSTHENE ANTHONY & MARIE SONIA 121 E ECKERSON RD SPRING VALLEY, NY 10977	89/50.15-2-50 ROSS DENISE M & GRAMPUS BENJAMIN SR 153 ROCKLAND PKWY SPRING VALLEY, NY 10977
89/50.15-4-45 LOPEZ JOSE F 17 INWOOD DR SPRING VALLEY, NY 10977	89/50.15-4-42 LOUISAINT MYRELENE 4 GREENE RD SPRING VALLEY, NY 10977	89/50.15-4-53 CONTRERAS LAURA J & CHINTUS RAFAEL 6 NORTHBROOK RD SPRING VALLEY, NY 10977	89/50.15-2-76 LE CORPS SIENA & FABRICE RONEL 4 HEADDEN DR SPRING VALLEY, NY 10977	89/50.15-2-51 SUEZ WATER NY 461 FROM RD PARAMUS, NJ 07652	89/50.15-2-79 TORRES FERNANDO & DADIN 2 INWOOD LA SPRING VALLEY, NY 10977
89/50.15-4-59 SINGER ZELDA 13 SHERMAN DR SPRING VALLEY, NY 10977	89/50.15-4-39 EMILE BETTY & BERNADETTE 3 GREENE ROAD SPRING VALLEY, NY 10977	89/50.15-4-47 MUNROE ROSEZELLA 16 INWOOD DR SPRING VALLEY, NY 10977	89/50.15-2-53 SHEINER CAROLYN 3 HEADDEN DR SPRING VALLEY, NY 10977	89/50.15-2-15 FISCHER MORDECHAI 29 OAK GLEN ROAD MONSEY, NY 10952	89/50.15-2-18 MANU ELIZABETH 152 ROCKLAND LA SPRING VALLEY, NY 10977
89/50.15-4-54 STERNBERGER BENJAMIN 58 PARK AVE MONTICELLO, NY 12701	89/50.15-4-58 MC MURRIN DENNIS & HERMINE 7 NORTHBROOK RD SPRING VALLEY, NY 10977	89/50.15-4-33 FRANKLYN GLORIA & SMITH PAULETTE & VASSELL DONNA 2 EDWARD LA SPRING VALLEY, NY 10977	89/50.15-2-54 THOLOOR GEORGE T & SALOMI 5 HEADDEN DR SPRING VALLEY, NY 10977	89/50.15-2-19 GERMAIN GAILLETANE 4 JORDAN PL HILLCREST, NY 10977	89/50.15-2-75 LOUIS PAUL MARIE JOCELYNE 6 HEADDEN DR SPRING VALLEY, NY 10977
89/50.15-4-40 GONZALEZ JOHN RAY & ROSARIO ANA M 1 GREENE RD SPRING VALLEY, NY 10977	89/50.15-4-41 BREUER ABRAHAM & FRAIDY 186 DIVISION AVENUE BROOKLYN, NY 11211	89/50.15-4-46 COLEMAN MARK & REGINA 18 INWOOD DR SPRING VALLEY, NY 10977	89/50.15-2-49 RODRIGUEZ RONY G & LINARES ELBA 151 ROCKLAND LA SPRING VALLEY, NY 10977	89/50.15-2-80 MEHU PEGGY 4 INWOOD LA SPRING VALLEY, NY 10977	89/50.15-2-55 DUMONT ALIX & NICOLE 7 HEADDEN DR SPRING VALLEY, NY 10977
89/50.15-4-67 JEFFERIES BOBBY & MICHELLE A 11 SHERMAN DR SPRING VALLEY, NY 10977	89/50.15-4-55 DALEY MARK & ANITA B 2 NORTHBROOK RD SPRING VALLEY, NY 10977	89/50.15-4-57 UNGAR CHESKI YAKOV 3 NORTHBROOK ROAD SPRING VALLEY, NY 10977	89/50.15-2-48 LICERALDE OFELIA & GERONIMO 149 ROCKLAND LANE SPRING VALLEY, NY 10977	89/50.15-2-74 BELZAIRE NYVA & FRANCOIS YVES 8 HEADDEN DR SPRING VALLEY, NY 10977	89/50.15-2-81 6 INWOOD LLC PO BOX 293 MONSEY, NY 10952
89/50.15-4-18 HOLLENSWORTH FREDERICK & CAROL 156 EAST ECKERSON RD SPRING VALLEY, NY 10977	89/50.15-4-17 EDWARDS PAULINE A M & GERALD 154 E ECKERSON RD SPRING VALLEY, NY 10977	89/50.15-4-16 WILLIAMSON MELVIN A & ELIZABETH M 152 E ECKERSON RD SPRING VALLEY, NY 10977	89/50.15-2-20 LOUIS MARIE & PERSONNA JEAN 3 JORDAN PLACE SPRING VALLEY, NY 10977	89/50.15-2-21 REMY ETHEL 2 JORDAN PL SPRING VALLEY, NY 10977	89/50.15-2-22 BOURISQUOT JACQUELINE 150 ROCKLAND LANE SPRING VALLEY, NY 10977
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89/50.15-4-12 RODRIGUES FERNANDO & NOEMI A 15 CHAMBERLAIN CT POMONA, NY 10970	89/50.15-4-11 FUENTES JESUS H & VALERIE 134 ECKERSON RD SPRING VALLEY, NY 10977	89/50.15-4-10 HESTER CLAUDIA & SCOTT 132 E ECKERSON RD SPRING VALLEY, NY 10977	89/50.15-2-56 LUCKSON NIMA R & URMI 9 HEADDEN DR SPRING VALLEY, NY 10977	89/50.15-2-23 DICKENS SYLVIA H 6 MAALOT CT SPRING VALLEY, NY 10977	89/50.15-2-46 LUNGER PERYL 50 TRUMAN AVE SPRING VALLEY, NY 10977
89/50.15-2-78 CHALLENGER DORIEAN & CHALLENGER HILL MYRTLE E 141 E ECKERSON RD SPRING VALLEY, NY 10977	89/50.15-2-77 PAUL FRANCES CAROL 2 HEADDEN DR SPRING VALLEY, NY 10977	89/50.15-2-52 JEAN JOSEPH VITAL 500 EAST 77TH ST APT 1214 NEW YORK, NY 10162	89/50.15-2-58 VAN LEER STEVEN & ANDREA H 15 HEADDEN DR SPRING VALLEY, NY 10977	89/50.15-2-24 5 MAALOT LLC 5203 62 TRUMAN AVE SPRING VALLEY, NY 10977	89/50.15-2-25 FRANCOIS MARIE KETTLY 4 MAALOT CT SPRING VALLEY, NY 10977
89/50.15-2-27 KURIAN KURIAN T & SARAMMA M 2 MAALOT CT SPRING VALLEY, NY 10977	89/50.15-2-28 JEAN-BAPTISTE SERGE & REGINE 1 MAALOT CT SPRING VALLEY, NY 10977	89/50.15-2-60 SABBAGH PAUL & MANOCHAK 37 DYKES PARK NANUET, NY 10954			
89/50.15-2-59 BRANDSOFER JUDA & ESTHER 12 DORSET ROAD SPRING VALLEY, NY 10977	89/50.15-2-45 EFESE SAMSON 143 ROCKLAND LA SPRING VALLEY, NY 10977	89/50.15-2-72 DEEVEY RICHARD W & KATHLEEN M 12 HEADDEN DR SPRING VALLEY, NY 10977			
89/50.15-2-44 27 WESTSIDE II LLC 16 ELENOR LANE SPRING VALLEY, NY 10977					

<b>CONSULTANT:</b> <b>ANDREW S. HOLT, PE</b> NY PROFESSIONAL ENGINEER: 095020-1  DATE: 03/11/2022	<b>NOTICE:</b> THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED. THIS DRAWING MAY NOT BE COPIED, REUSED, DISCLOSED, DISTRIBUTED, OR REPRODUCED FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF SUBURBAN ENGINEERING. ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID DIGITAL SEAL OR PAPER COPIES NOT CONTAINING A RAISED SEAL ARE NOT ORIGINALS AND MAY HAVE BEEN ALTERED.  © COPYRIGHT 2022 SUBURBAN ENGINEERING ALL RIGHTS RESERVED	DRAWN BY: JAW 03/11/2022	SUBURBAN ENGINEERING  - Civil Engineers - - Landscape Architects - - Land Surveyors -  7 Cokesbury California Road, Lebanon, N.J. 08833 - 973.398.1776	<b>SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE</b> <b>ECKERSON WELL NO. 71</b> CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK	PROJECT NUMBER: SCE-12162.001
		CHECKED BY: WAS 03/11/2022		FOR CLIENT: SUEZ WATER NEW YORK INC.	SCALE: N.T.S.
DESCRIPTION NO. DATE: BY: CHK:		CHECKED BY:	<b>GENERAL NOTES &amp; LEGEND</b>		SHEET 2 OF 22
REVISIONS					REVISION -

E:\SCE\Ramapo\12162.001\Sheets\Construction Set\12162.001 03 Existing Conditions Plan.dwg Thu, Mar 10, 2022 - 5:22pm jwalkinson SUBURBAN CONSULTING ENGINEERS, INC.

**LEGEND**

- |  |                        |
|--|------------------------|
| 100.00 BENCHMARK                       | STRUCTURE              |
| B-5 BORING                             | RIGHT-OF-WAY LINE      |
| OW# OPEN WATER FLAG                    | TRACT BOUNDARY LINE    |
| X F.F. 120.41 FINISHED FLOOR ELEVATION | ADJACENT BOUNDARY LINE |
| CONIFEROUS TREE                        | EASEMENT LINE          |
| DECIDUOUS TREE                         | CURB LINE              |
| SIGN                                   | DROP CURB              |
| MANHOLE                                | DRIVEWAY LINE          |
| CATCH BASIN                            | EDGE OF PAVEMENT       |
| UTILITY POLE                           | WOOD / PVC FENCE       |
| GUY WIRE                               | METAL GUARDRAIL        |
| WATER VALVE                            | STRIPING               |
| C.S.                                   | 350 MAJOR CONTOUR      |
| W.V.                                   | 348 MINOR CONTOUR      |
| HYDRANT                                | GAS LINE               |
| DOORWAY                                | SANITARY LINE          |
| FENCE SWING GATE (DOUBLE)              | STORM LINE             |
| WATER                                  | WATER LINE             |
| WOODED AREA                            | OVERHEAD WIRES         |
| WALL                                   | WETLANDS LINE          |
| WETLANDS FLAG                          |                        |



- REFERENCES:**
- TAX MAP - LOT 51, BLOCK 2, ON THE CURRENT TAX MAP OF THE TOWN OF RAMAPO, SHEET #50.15.
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- NOTES:**
- THE PARTIAL SURVEY AND TOPOGRAPHICAL SURVEY IS PREPARED IN ACCORDANCE WITH DOCUMENTS SUPPLIED BY THE CLIENT AND SUPPLEMENTAL INFORMATION OBTAINED BY SUBURBAN ENGINEERING. THROUGH LIMITED RECORDS RESEARCH, THE DOCUMENTS USED DO NOT REPRESENT A COMPLETE TITLE SEARCH OF THE SUBJECT PROPERTY AND MAY OR MAY NOT BE ALL THE RELEVANT TITLE DOCUMENTS FOR THE SUBJECT PROPERTY.
  - SUBJECT TO ALL EASEMENTS, RESTRICTIONS, RIGHTS OF WAY, AND EXCEPTIONS OF RECORD.
  - SUBJECT PROPERTY IS KNOWN AS LOT 51, BLOCK 2, SECTION 50.15 AS SHOWN ON THE TAX MAP OF THE TOWN OF RAMAPO, ROCKLAND COUNTY, NEW YORK, SHEET 50.15.
  - AREA = 115,104 SF OR 2.642 ACRES
  - THE MAP AND SURVEY WERE PREPARED FROM INFORMATION FURNISHED AND/OR OBTAINED TOGETHER WITH EVIDENCE FOUND ON THE GROUND AND IS SUBJECT TO SUCH FACTS THAT AN ACCURATE TITLE SEARCH MAY REVEAL.
  - LOCATION OF UNDERGROUND UTILITIES, IF DEPICTED, ARE APPROXIMATE. ALL LOCATIONS AND SIZES ARE BASED ON UTILITY MARK-OUTS, ABOVE GROUND STRUCTURES THAT WERE VISIBLE AND ACCESSIBLE AT THE TIME OF THE SURVEY. THE LACK OF UTILITY INFORMATION DOES NOT DENY THE EXISTENCE OF SAME AND SUBURBAN CONSULTING ENGINEERS, INC. DOES NOT GUARANTEE THE UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA EITHER IN SERVICE OR ABANDONED. REFERENCE TO THE APPROPRIATE UTILITY AUTHORITY SHOULD BE MADE TO VERIFY THE PRESENCE OR ABSENCE OF UTILITIES.
  - THE EXISTENCE OF UNDERGROUND STORAGE TANKS, IF ANY, WAS NOT KNOWN AT THE TIME OF THE FIELD SURVEY.
  - OPEN WATER FLAGS AS DEPICTED HEREON ARE PLACED BY SUBURBAN CONSULTING ENGINEERS, INC. (FLANDERS, NJ). THIS SITE ONLY CONTAINS AN OPEN WATERCOURSE, NO WETLANDS ARE PRESENT.
  - HORIZONTAL DATUM BASED ON NAD-83 (2011), PER GPS SATELLITE OBSERVATION.
  - VERTICAL DATUM IS BASED ON NAVD-88, PER GPS SATELLITE OBSERVATION.
  - DATUM SHOWN HEREON PER GPS SATELLITE OBSERVATION AND SOLUTIONS PROVIDED REAL TIME BY KEYNET GPS, INC. WHICH UTILIZES TRIMBLE VIRTUAL REFERENCE SYSTEM CONTINUALLY OPERATING HIGH PRECISION GNSS REFERENCE STATIONS. DATUM PROVIDED IS NAD 83 (2011) / NAVD 88 NEW YORK STATE PLANE COORDINATE SYSTEM EAST, ZONE 3101.
  - CONDITIONS DEPICTED HEREON PER ACTUAL FIELD INSTRUMENT SURVEY PERFORMED MARCH 25, 2021.
  - MISSING PROPERTY CORNERS NOT SET AT THIS TIME, PER CONTRACTUAL AGREEMENT.

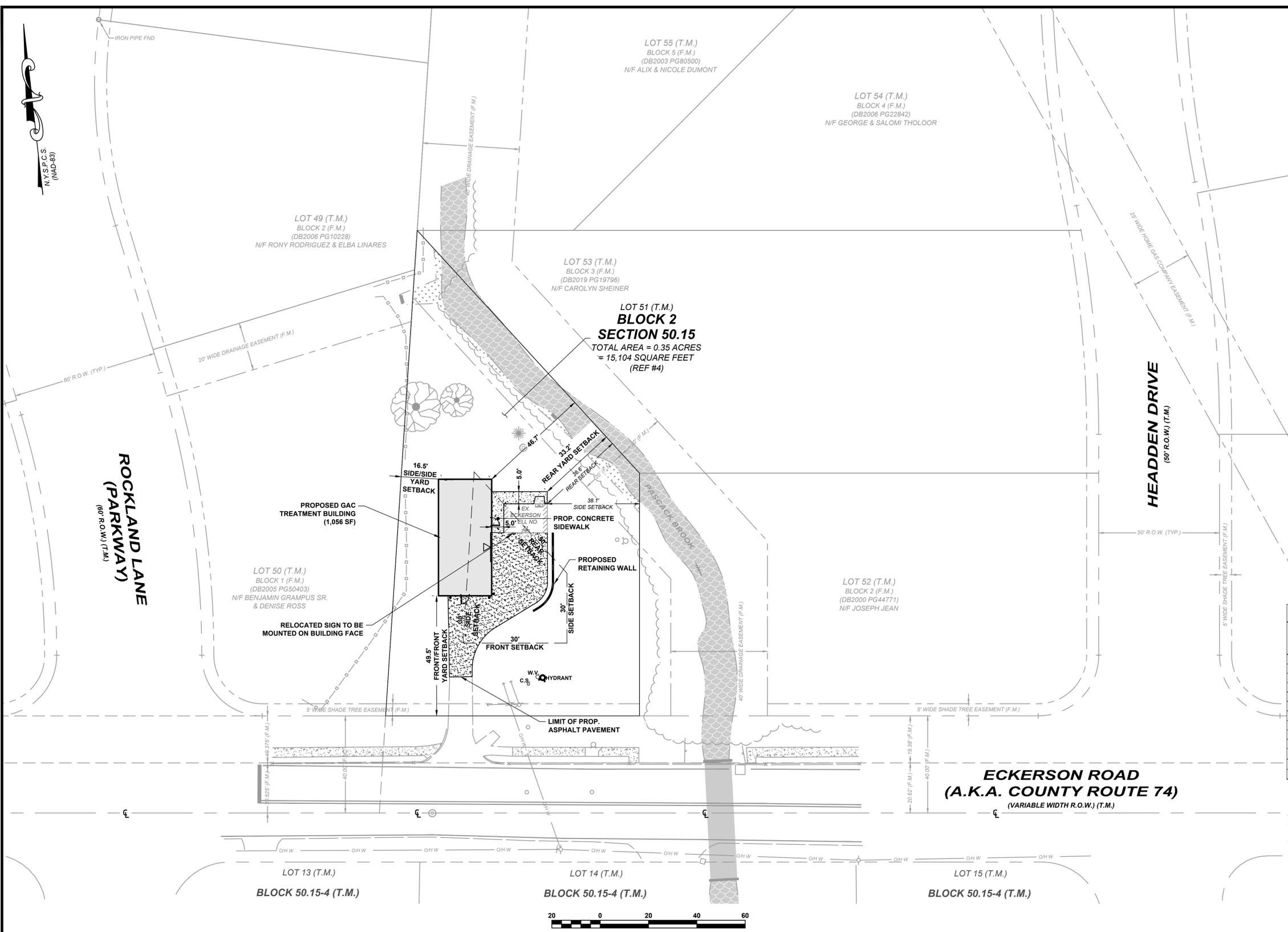
**LINE DATA TABLE**

LINE #	DIRECTION	LENGTH
L1	S2°04'41"W	12.90'
L2	S74°25'06"W	16.21'
L3	S11°30'26"E	4.39'
L4	S85°48'21"E	14.51'
L5	S33°45'08"E	36.80'
L6	S42°35'20"E	40.73'
L7	S36°47'56"E	31.35'
L8	S34°22'31"E	11.32'



<p><b>CONSULTANT:</b> <b>ANDREW S. HOLT, PE</b> NY PROFESSIONAL ENGINEER: 095020-1</p>	<p><b>NOTICE</b> THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED. THIS DRAWING MAY NOT BE COPIED, REUSED, DISCLOSED, DISTRIBUTED, OR RELIED UPON FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF SUBURBAN ENGINEERING. ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID DIGITAL SEAL OR PAPER COPIES NOT CONTAINING A NABED SEAL ARE NOT ORIGINALS AND MAY HAVE BEEN ALTERED. © COPYRIGHT 2022 SUBURBAN ENGINEERING ALL RIGHTS RESERVED</p>	<p><b>DRAWN BY:</b> JAW 03/11/2022</p> <p><b>CHECKED BY:</b> WAS 03/11/2022</p> <p><b>CHECKED BY:</b></p>	<p>7 Cokesbury Calton Road, Lebanon, NJ, 08833 - 973.398.1776 EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT</p>	<p><b>PROJECT NUMBER:</b> SCE-12162.001</p> <p><b>SCALE:</b> AS NOTED</p> <p><b>SHEET 3 OF 22</b></p> <p><b>REVISION</b></p>
<p><b>DATE: 03/11/2022</b></p>				

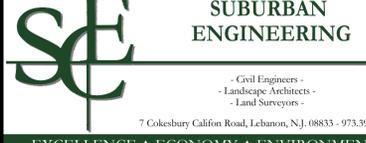
E:\SCE\Ramapo\12162.001\Sheets\Construction Set\12162.001 04 Site Layout.dwg Thu, Mar 10, 2022 - 5:22pm jwatkinson SUBURBAN CONSULTING ENGINEERS, INC.



- ### STANDARD SITE DEVELOPMENT PLAN NOTES
- THIS IS LOT 51 IN SECTION 50.15 AS SHOWN ON THE TOWN OF RAMAPO TAX MAP.
  - AREA OF TRACT: 0.35 ACRES = 15,104 SQUARE FEET
  - ZONE: MEDIUM DENSITY RESIDENTIAL - 15,000 SQ.FT. PER LOT (R-15)
  - PROPOSED USE: PUBLIC UTILITY WELL INFRASTRUCTURE
  - RECORD OWNER/APPLICANT: SUEZ WATER NEW YORK INC. 162 OLD MILL ROAD WEST NYACK, NY 10994
  - FIRE DISTRICT: TOWN OF RAMAPO
  - SCHOOL DISTRICT: EAST RAMAPO CENTRAL SCHOOL DISTRICT
  - WATER DISTRICT: SUEZ WATER NEW YORK
  - WATER SUPPLY BY: SUEZ WATER NEW YORK
  - SEWER DISTRICT: ROCKLAND COUNTY SEWER DISTRICT NO. 1
  - DATUM:  
HORIZONTAL: NAVD83 (2011)  
VERTICAL: NAVD88
  - ALL UTILITIES UNDERGROUND. ELECTRIC SERVICE SHALL BE IN CONDUIT OF NOT LESS THAN 2 INCH DIAMETER.
  - THERE ARE NO COVENANTS, DEED RESTRICTIONS, EASEMENTS OR OTHER RESERVATIONS OF LAND RELATIVE TO THIS SITE, EXCEPT AS SHOWN ON THIS PLAN. SUBJECT TO THE FINDINGS OF A COMPLETE AND UP-TO-DATE TITLE SEARCH.
  - THE ZONING BOARD OF APPEALS, ON JANUARY 27, 2022 AS CASE NUMBER ZBA 21-233 IN THE APPLICATION OF SUEZ WATER NEW YORK, INC. ECKERSON WELL NO. 71 GRANTED VARIANCES FOR LESS THAN THE REQUIRED SIDE SETBACK, TOTAL SIDE SETBACK, GREATER THAN THE PERMITTED BUILDING HEIGHT, GREATER THAN PERMITTED DEVELOPMENT COVERAGE, AND LESS THAN THE REQUIRED SEPARATION OF PRINCIPLE STRUCTURES.
  - NO SIGN(S) OTHER THAN THOSE SHOWN ON THIS DRAWING ARE PERMITTED WITHOUT PRIOR APPROVAL OF THE PLANNING BOARD (TENANTS ARE TO BE ADVISED OF THIS CONDITION).
  - THE OWNER AND/OR APPLICANT, AS A CONDITION OF APPROVAL OF THIS SITE PLAN, AGREES TO COMPLETE THE WITHIN SITE DEVELOPMENT PLAN AS DRAWN AND ALL IMPROVEMENTS SHOWN THEREON, AS A CONDITION OF THE ISSUANCE OF A BUILDING PERMIT. THE APPLICANT/OWNER IS AWARE THAT NO CHANGES IN THIS PLAN MAY BE MADE UNLESS APPROVED BY THE PLANNING BOARD.
  - PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY, AN AS-BUILT LANDSCAPING DRAWING SHALL BE SUBMITTED WHICH IS CERTIFIED BY A LANDSCAPE ARCHITECT LICENSED TO PRACTICE IN THE STATE OF NEW YORK. SAID CERTIFIED LANDSCAPING DRAWING SHALL INDICATE THE DEGREE OF COMPLETION OF SAID LANDSCAPING IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED SITE PLAN.
  - PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, AN AS-BUILT LANDSCAPING DRAWING SHALL BE SUBMITTED TO THE BUILDING INSPECTOR, PLANNING BOARD AND DEPARTMENT OF PUBLIC WORKS WHICH IS CERTIFIED BY A LANDSCAPE LICENSED TO PRACTICE IN THE STATE OF NEW YORK. SAID CERTIFIED LANDSCAPING DRAWING SHALL INDICATE THE DEGREE OF COMPLETION OF SAID LANDSCAPING IMPROVEMENTS IN ACCORDANCE WITH THE APPROVED SITE PLAN.
  - PLANS ARE BASED ON FIELD ENGINEERING DATA AND SURVEYS, AS DEPICTED ON SHEET NO. 2 OF THE PLAN SET.

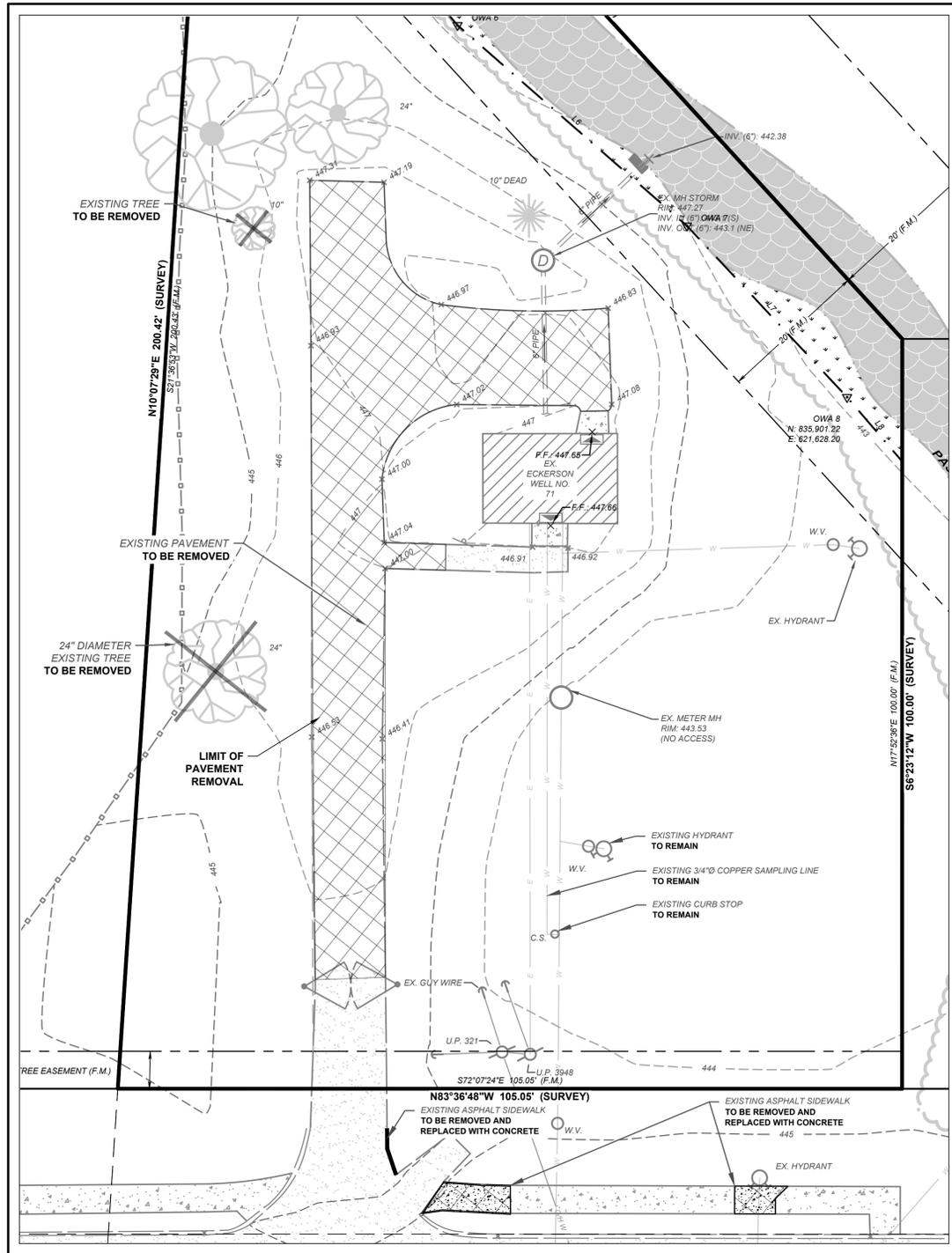
ZONING ANALYSIS - TOWN OF RAMAPO				
LAND USE REGULATION (PER CHAPTER 376 ATTACHMENT 5)	REQUIRED/PERMITTED R-15 DISTRICT USE GROUP A	EXISTING	PROPOSED	VARIANCE
MINIMUM LOT AREA	NONE	15,104 SF	15,104 SF	NO
LOT WIDTH (FEET)	N/A	105.0 FT	105.0 FT	NO
FRONT SETBACK (FEET)	30 FT	75.4 FT	49.5 FT	NO
FRONT YARD SETBACK (FEET)	0 FT	68.8 FT	49.5 FT	NO
SIDE SETBACK (FEET)	30 FT	38.1 FT	16.5 FT	YES
TOTAL SIDE SETBACK (FEET)	60 FT	81.2 FT	54.6 FT	YES
SIDE YARD (FEET)	0 FT	17.7 FT	16.5 FT	NO
REAR SETBACK (FEET)	50 FT	36.6 FT	36.6 FT	EN
REAR YARD (FEET)	0 FT	26.2 FT	33.2 FT	NO
STREET FRONTAGE (FEET)	15 FT	105.0 FT	105.0 FT	NO
MAXIMUM HEIGHT (FEET)	15 FT	15.5 FT	27.40 FT <sup>4</sup>	YES
DEVELOPMENT COVERAGE (%)	5%	12.79% <sup>2</sup>	18.51%	YES
FLOOR AREA RATIO (FAR)	N/A	N/A	N/A	NO

1. PER CH 376 ATTACHMENT 4, COLUMN B, UTILITIES IN A R-15 DISTRICT REFER TO RR-160 DISTRICT REQUIREMENTS.  
 2. DEVELOPMENT COVERAGE = IMPERVIOUS COVERAGE/ LOT AREA  
 EXISTING = 1,932 SF / 15,104 SF x 100 = 12.79% PROPOSED = 2,796 SF / 15,104 SF x 100 = 18.51%  
 3. EN= EXISTING NONCONFORMITY  
 4. 376-5: HEIGHT: THE VERTICAL DISTANCE FROM THE AVERAGE ELEVATION OF THE PROPOSED FINISHED GRADE ALONG THE WALL OF A BUILDING (OR ADJACENT TO THE SIDE OF A NONBUILDING USE) TO THE HIGHEST POINT OF THE ROOF FOR FLAT ROOFS AND TO THE MEAN HEIGHT BETWEEN EAVES AND RIDGE FOR GABLE, HIP, AND GAMBREL ROOFS OF SUCH BUILDING (OR NONBUILDING USES), EXCEPT AS SPECIFICALLY EXEMPTED IN § 376-60.  
 BUILDING HEIGHT CALCULATION:  
 - AVERAGE GRADE ELEVATION = (445.01' + 446.71' + 446.76' + 446.38')/4 = 446.23'  
 - PROPOSED PEAK ELEVATION = 30.17' + 447.00' = 477.17'  
 - PROPOSED EAVE ELEVATION = 23.08' + 447.00' = 470.08'  
 - MEAN BUILDING ELEVATION = (477.17' + 470.08')/2 = 473.63'  
 - BUILDING HEIGHT = 473.63' - 446.23' = 27.40'  
 5. VARIANCES:  
 §376-41 - BUILDING HEIGHT, SIDE SETBACK & COMBINED SIDE SETBACK  
 §376-41 - DEVELOPMENT COVERAGE  
 §376-62 - BUILDING SPACING

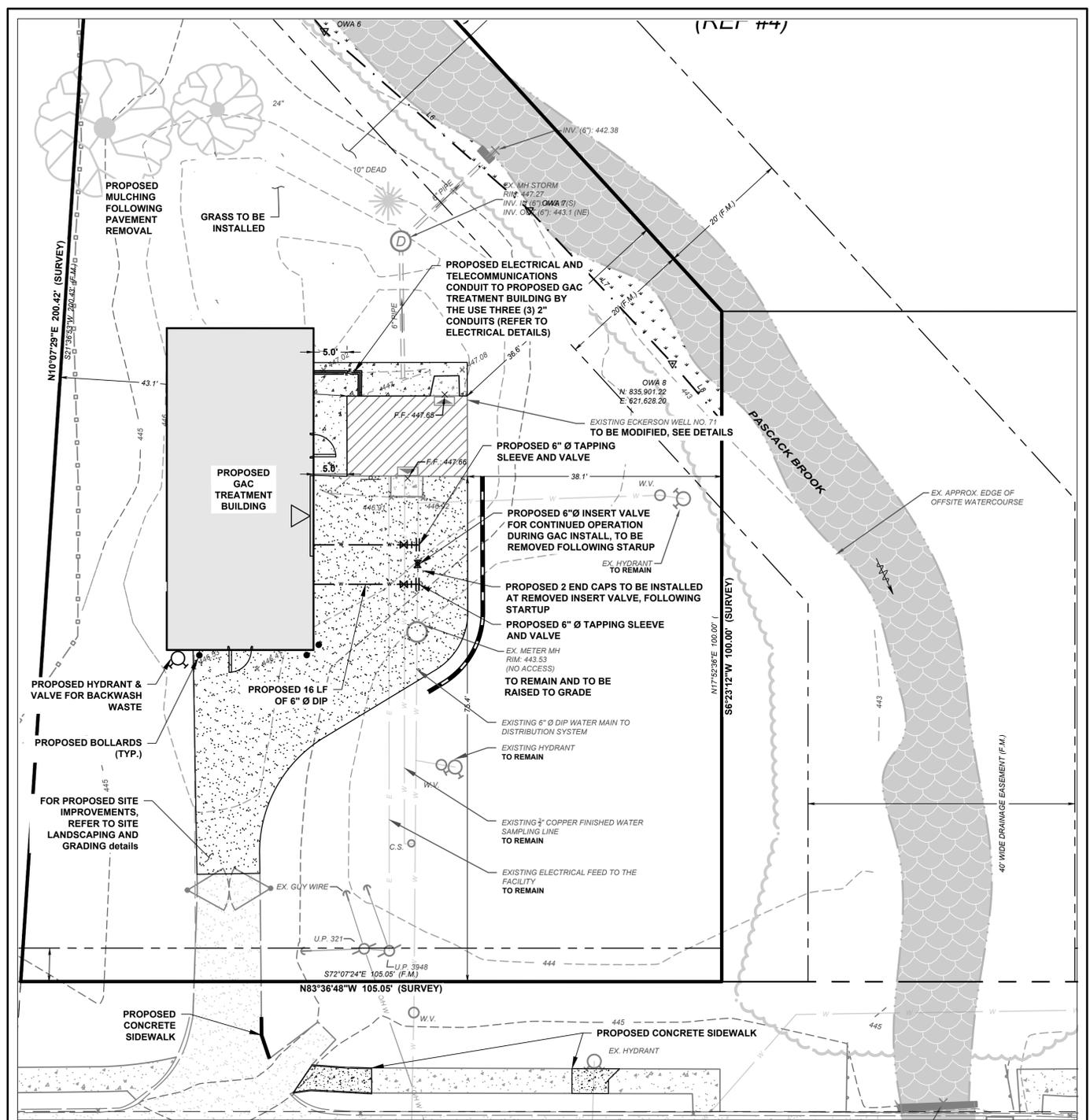
<b>CONSULTANT:</b> <b>ANDREW S. HOLT, PE</b> NY PROFESSIONAL ENGINEER: 095020-1		<b>NOTICE</b> THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED. THIS DRAWING MAY NOT BE COPIED, REUSED, DISCLOSED, DISTRIBUTED, OR RELIED UPON FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF SUBURBAN ENGINEERING. ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID DIGITAL SEAL OR PAPER COPIES NOT CONTAINING A RAISED SEAL ARE NOT ORIGINALS AND MAY HAVE BEEN ALTERED. © COPYRIGHT 2022 SUBURBAN ENGINEERING ALL RIGHTS RESERVED		<b>DRAWN BY:</b> JAW 03/11/2022 <b>CHECKED BY:</b> WAS 03/11/2022 <b>CHECKED BY:</b>		 SUBURBAN ENGINEERING - Civil Engineers - - Landscape Architects - - Land Surveyors - 7 Cokesbury Calton Road, Lebanon, NJ, 08833 - 973.398.1776 EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT		<b>PROJECT NUMBER:</b> SCE-12162.001 <b>SCALE:</b> 1" = 20' <b>SHEET 4 OF 22</b> REVISION -					
<b>DATE: 03/11/2022</b>		<b>REVISIONS</b>		<b>DESCRIPTION</b>		<b>NO.</b>		<b>DATE:</b>		<b>BY:</b>		<b>CHK:</b>	

<b>SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE</b> <b>ECKERSON WELL NO. 71</b> CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK		<b>FOR CLIENT:</b> SUEZ WATER NEW YORK INC.	
<b>SITE LAYOUT PLAN</b>			

E:\SCE\Ramapo\12162.001\Sheets\Construction Set\12162.001 05 Demo & Utility Plan.dwg Thu, Mar 10, 2022 - 5:22pm jwatkinson SUBURBAN CONSULTING ENGINEERS, INC.



**DEMOLITION PLAN**  
SCALE: 1" = 10'



**NOTE:**

1. PROPOSED DRAINS FROM NEW BUILDINGS ARE TO BE PLUMBED AND DRAINED TO THE EXISTING SWALE ON-SITE

**UTILITY PLAN**  
SCALE: 1" = 10'



SCALE: 1"=10'

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

DATE: 03/11/2022

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**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE**  
**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK

FOR CLIENT: SUEZ WATER NEW YORK INC.

DEMO & UTILITY PLAN

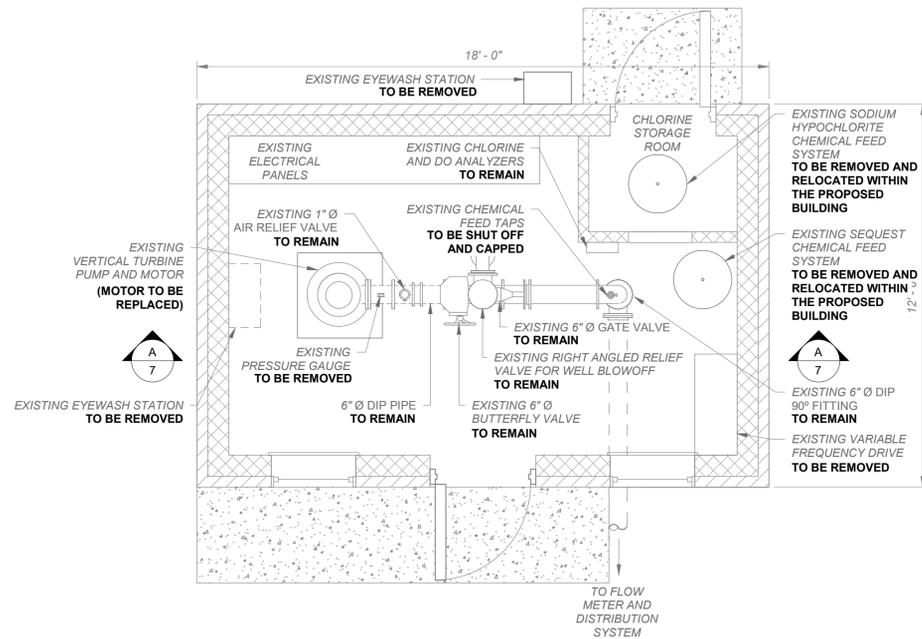
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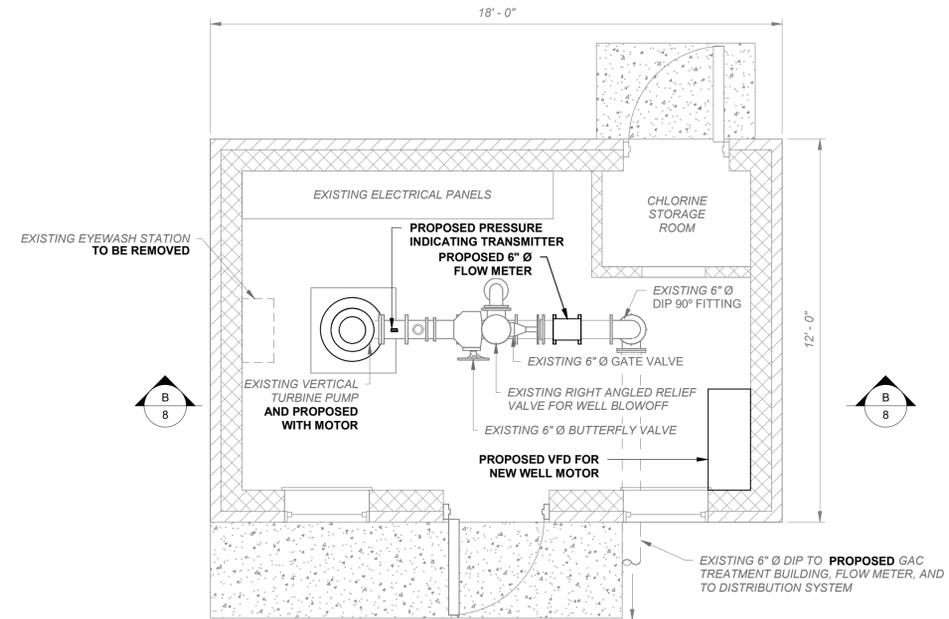
SHEET 5 OF 22  
REVISION -



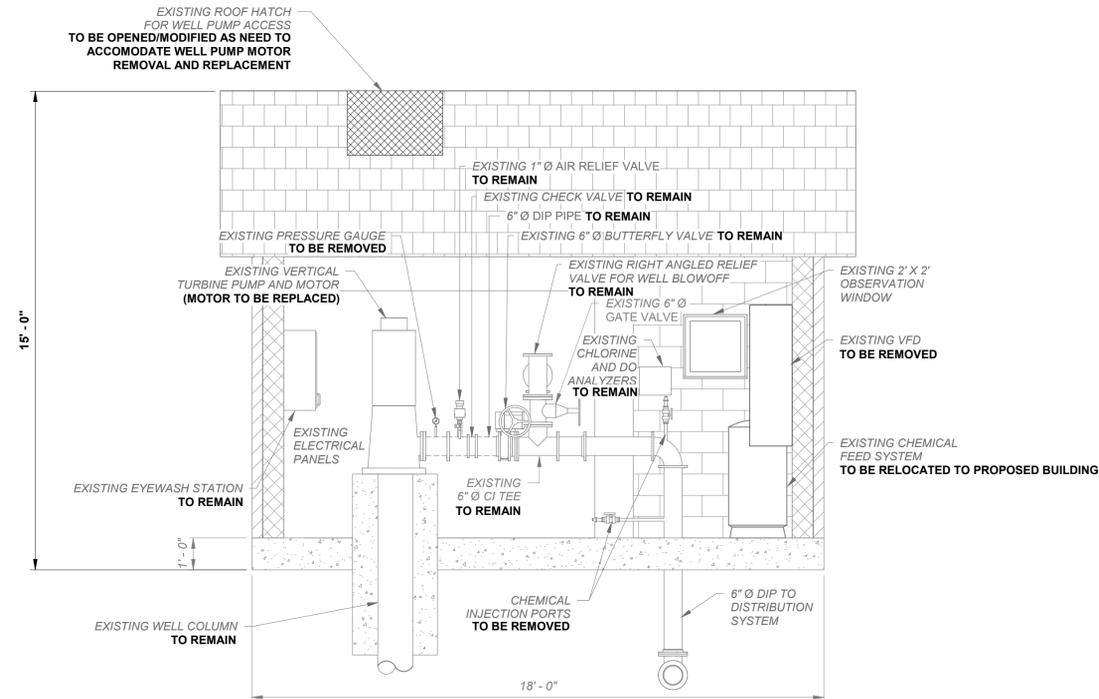




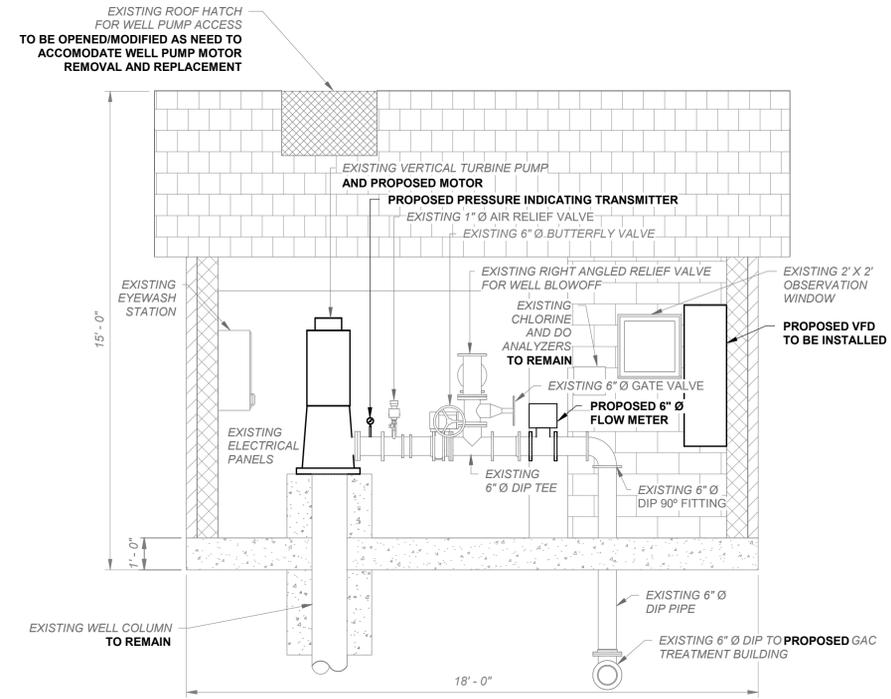
**EXISTING WELL NO. 71 PLAN VIEW**  
SCALE: 3/8" = 1'-0"



**PROPOSED WELL NO. 71 PLAN VIEW**  
SCALE: 3/8" = 1'-0"



**EXISTING WELL NO. 71 SECTION A-A**  
SCALE: 3/8" = 1'-0"



**PROPOSED WELL NO. 71 SECTION B-B**  
SCALE: 3/8" = 1'-0"

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1  
  
DATE: 03/11/2022

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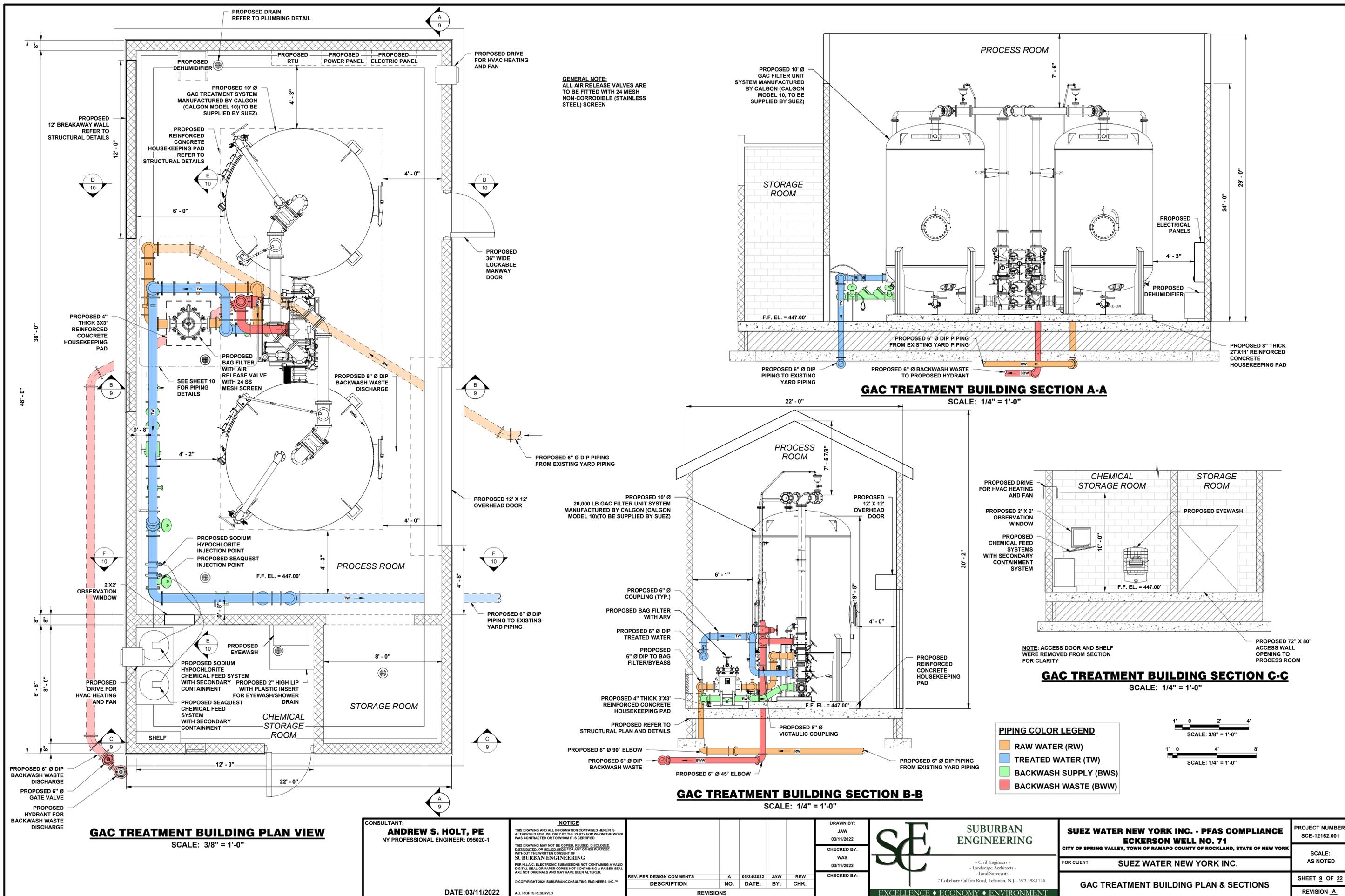
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**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE**  
**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO COUNTY OF ROCKLAND, STATE OF NEW YORK  
FOR CLIENT: **SUEZ WATER NEW YORK INC.**  
**EXISTING WELL NO. 71 MODIFICATIONS**

PROJECT NUMBER:  
SCE-12162.001  
SCALE:  
3/8" = 1'-0"  
SHEET **8** OF **22**  
REVISION **-**



GENERAL NOTE:  
ALL AIR RELEASE VALVES ARE TO BE FITTED WITH 24 MESH NON-CORRODIBLE (STAINLESS STEEL) SCREEN

PROPOSED 10" Ø GAC FILTER UNIT SYSTEM MANUFACTURED BY CALGON (CALGON MODEL 10) TO BE SUPPLIED BY SUEZ

PROPOSED 20,000 LB GAC FILTER UNIT SYSTEM MANUFACTURED BY CALGON (CALGON MODEL 10) TO BE SUPPLIED BY SUEZ

**PIPING COLOR LEGEND**

- █ RAW WATER (RW)
- █ TREATED WATER (TW)
- █ BACKWASH SUPPLY (BWS)
- █ BACKWASH WASTE (BWW)

**GAC TREATMENT BUILDING PLAN VIEW**  
SCALE: 3/8" = 1'-0"

**GAC TREATMENT BUILDING SECTION A-A**  
SCALE: 1/4" = 1'-0"

**GAC TREATMENT BUILDING SECTION B-B**  
SCALE: 1/4" = 1'-0"

**GAC TREATMENT BUILDING SECTION C-C**  
SCALE: 1/4" = 1'-0"

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

DATE: 03/11/2022

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**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO COUNTY OF ROCKLAND, STATE OF NEW YORK

FOR CLIENT: **SUEZ WATER NEW YORK INC.**

**GAC TREATMENT BUILDING PLAN & SECTIONS**

PROJECT NUMBER:  
SCE-12162.001

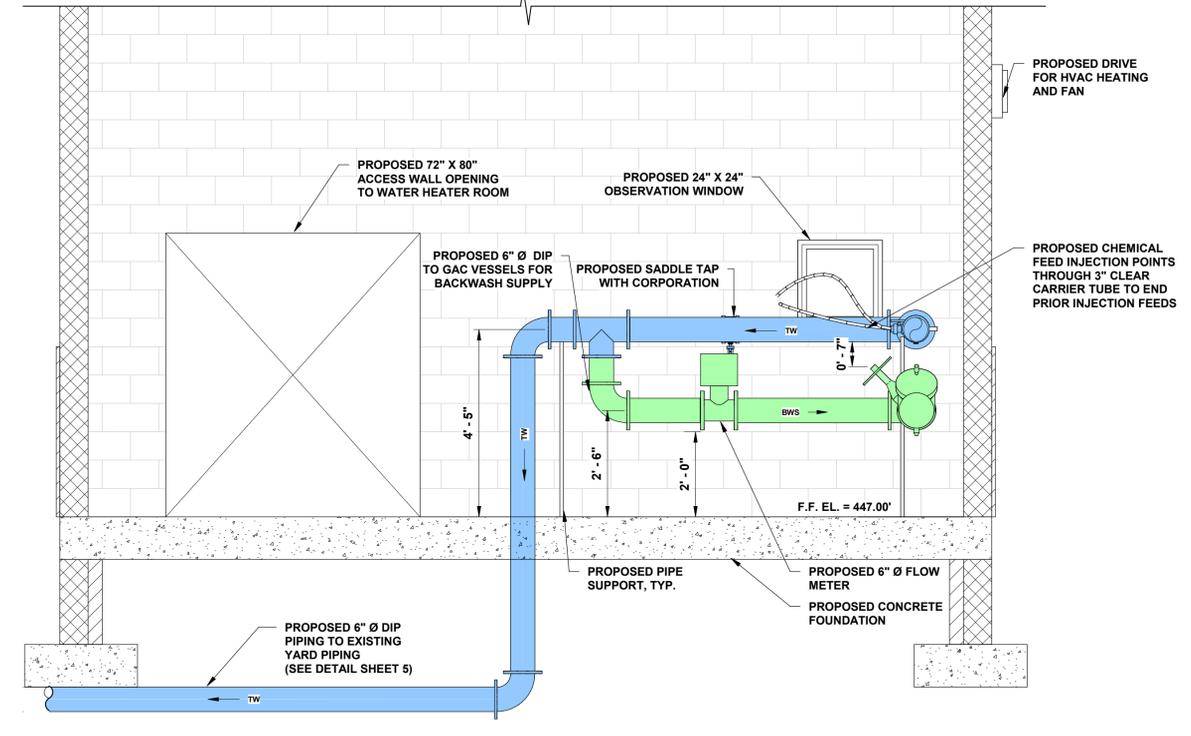
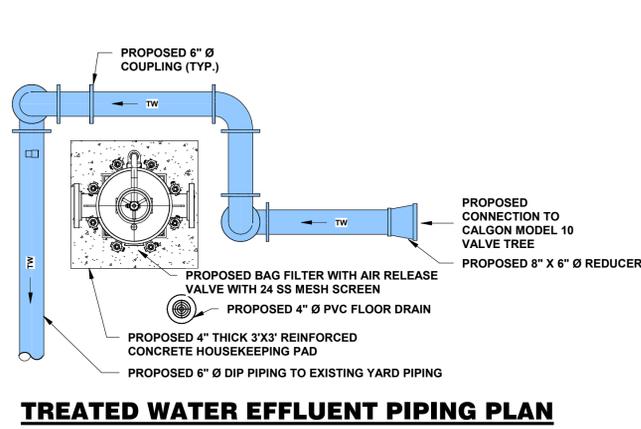
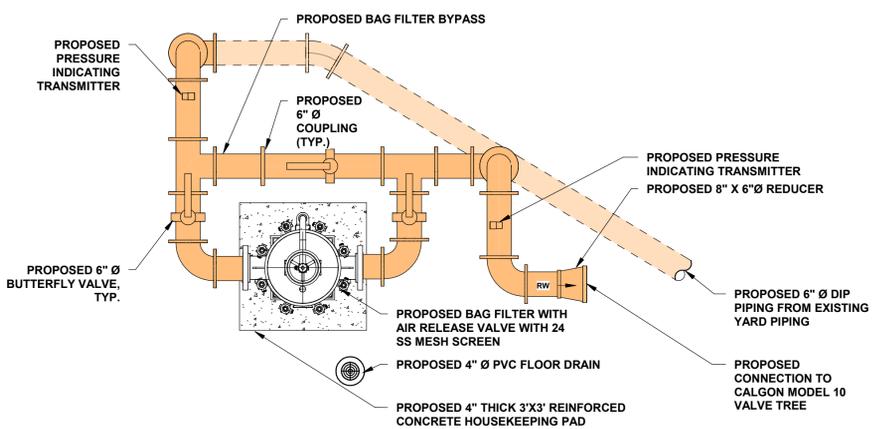
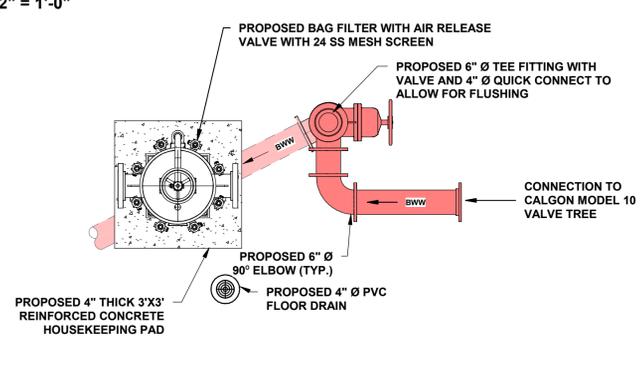
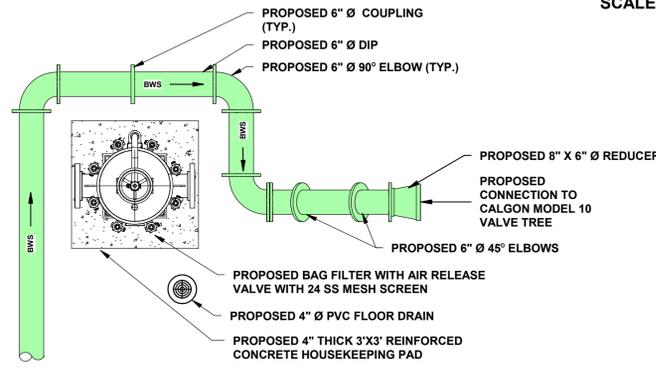
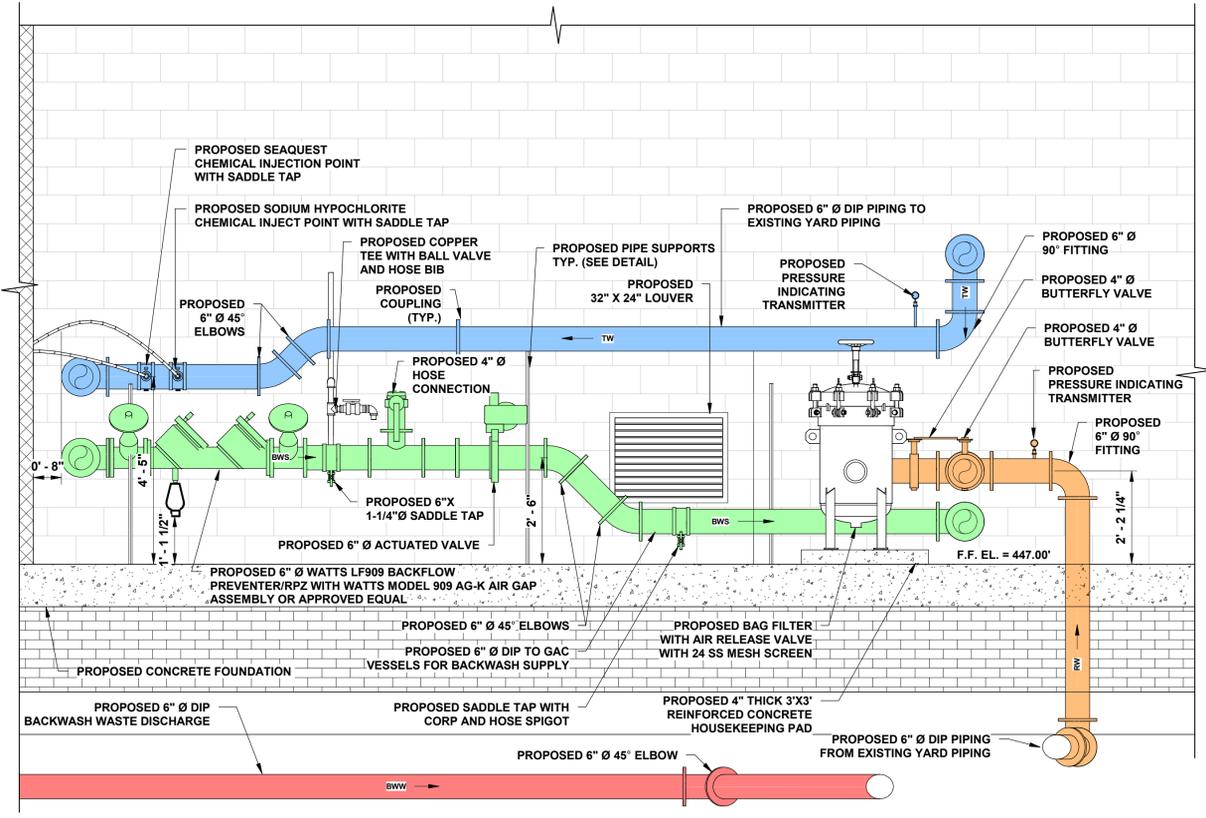
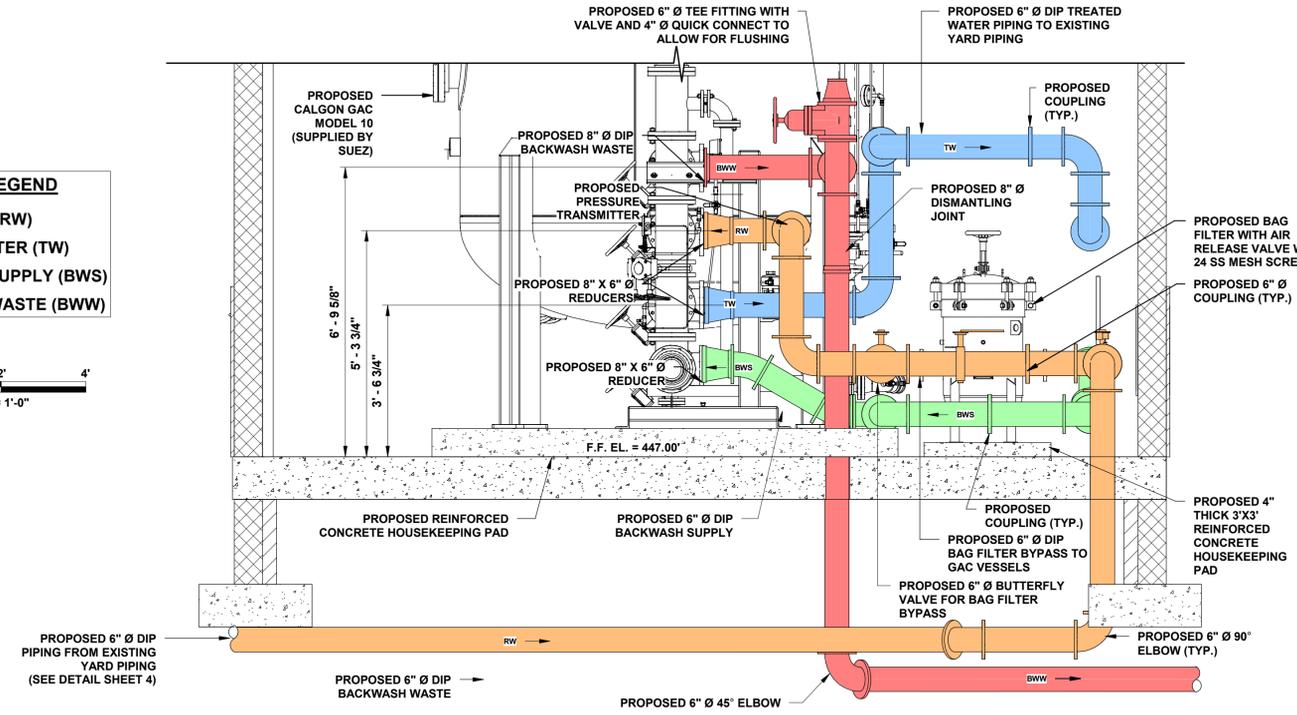
SCALE:  
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SHEET **9** OF **22**

REVISION **A**

**PIPING COLOR LEGEND**

Orange	RAW WATER (RW)
Blue	TREATED WATER (TW)
Green	BACKWASH SUPPLY (BWS)
Red	BACKWASH WASTE (BWW)



CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

DATE: 03/11/2022

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**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO COUNTY OF ROCKLAND, STATE OF NEW YORK

FOR CLIENT: **SUEZ WATER NEW YORK INC.**

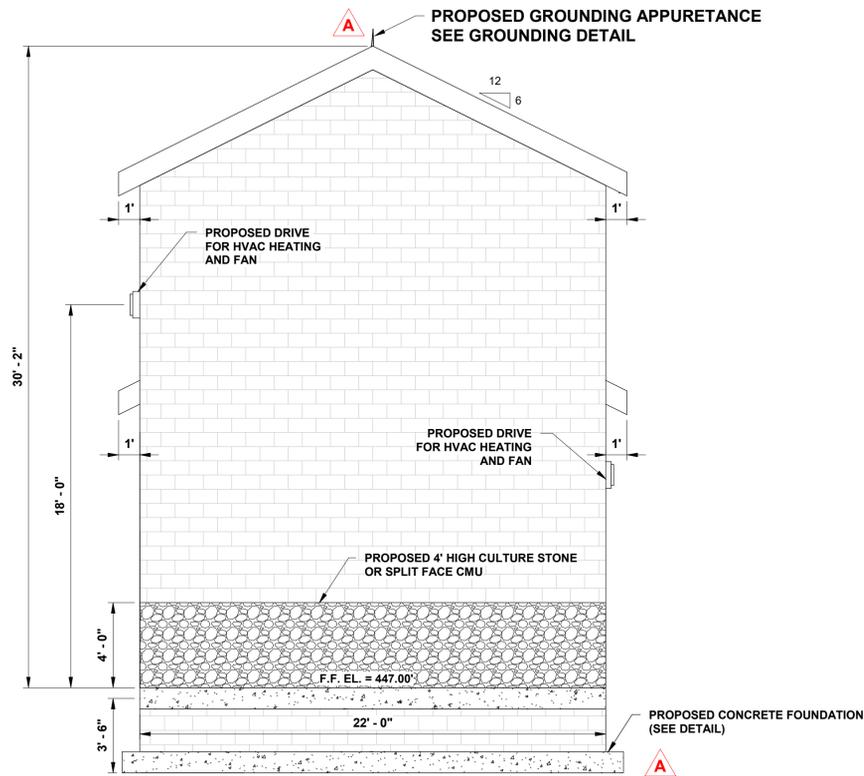
**PROCESS PIPING PLAN & SECTIONS**

PROJECT NUMBER:  
SCE-12162.001

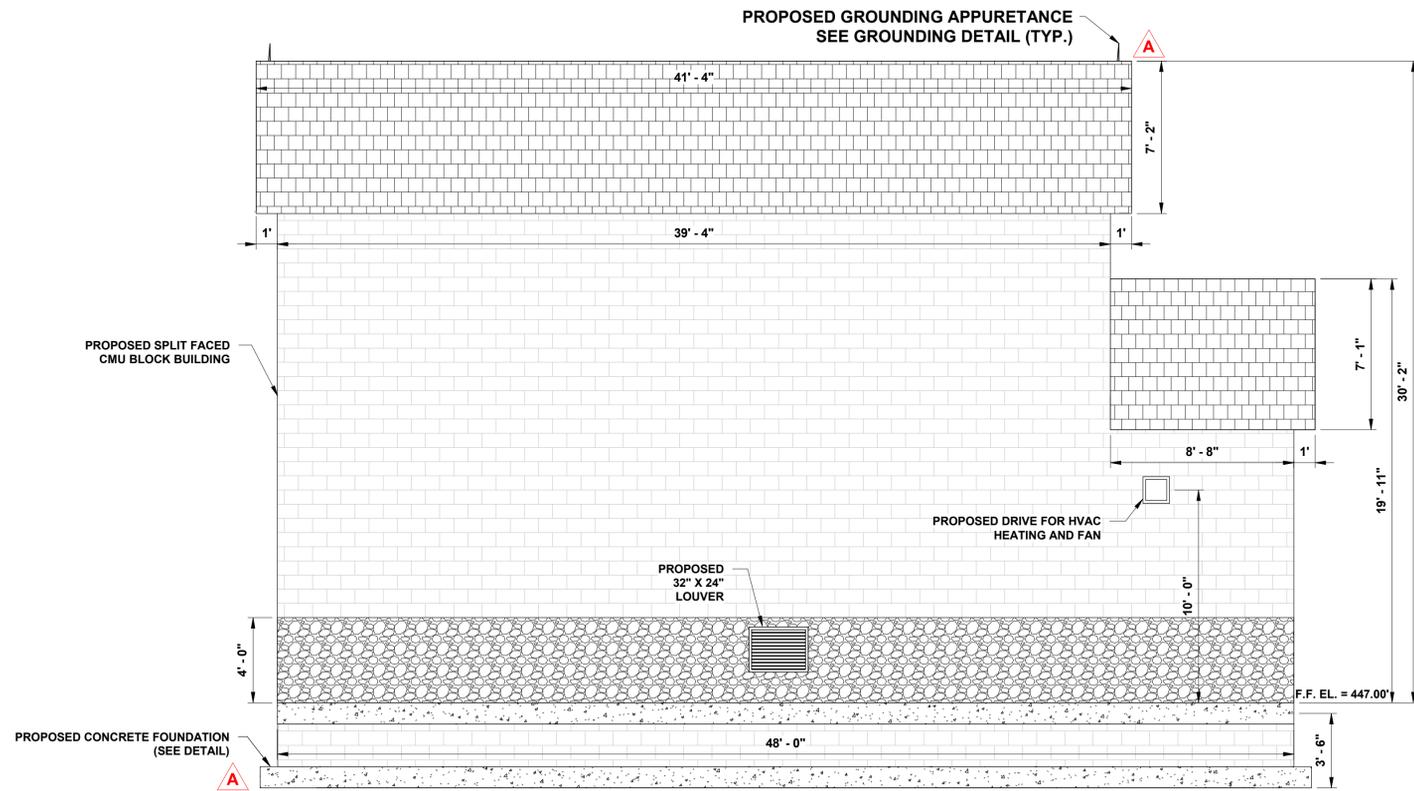
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1/2" = 1'-0"

SHEET **10** OF **22**

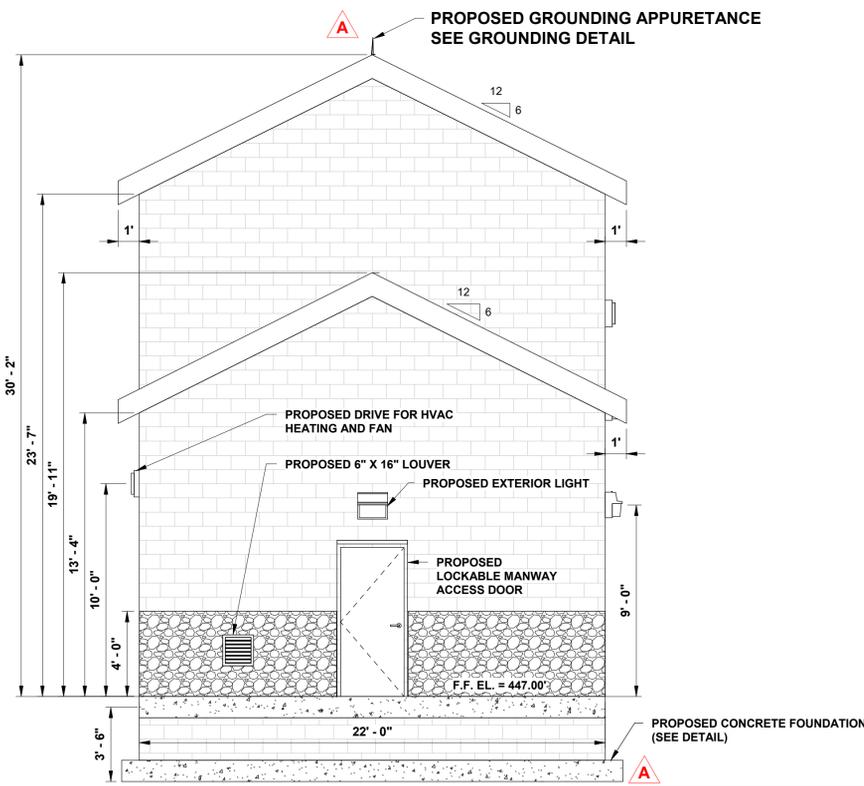
REVISION **A**



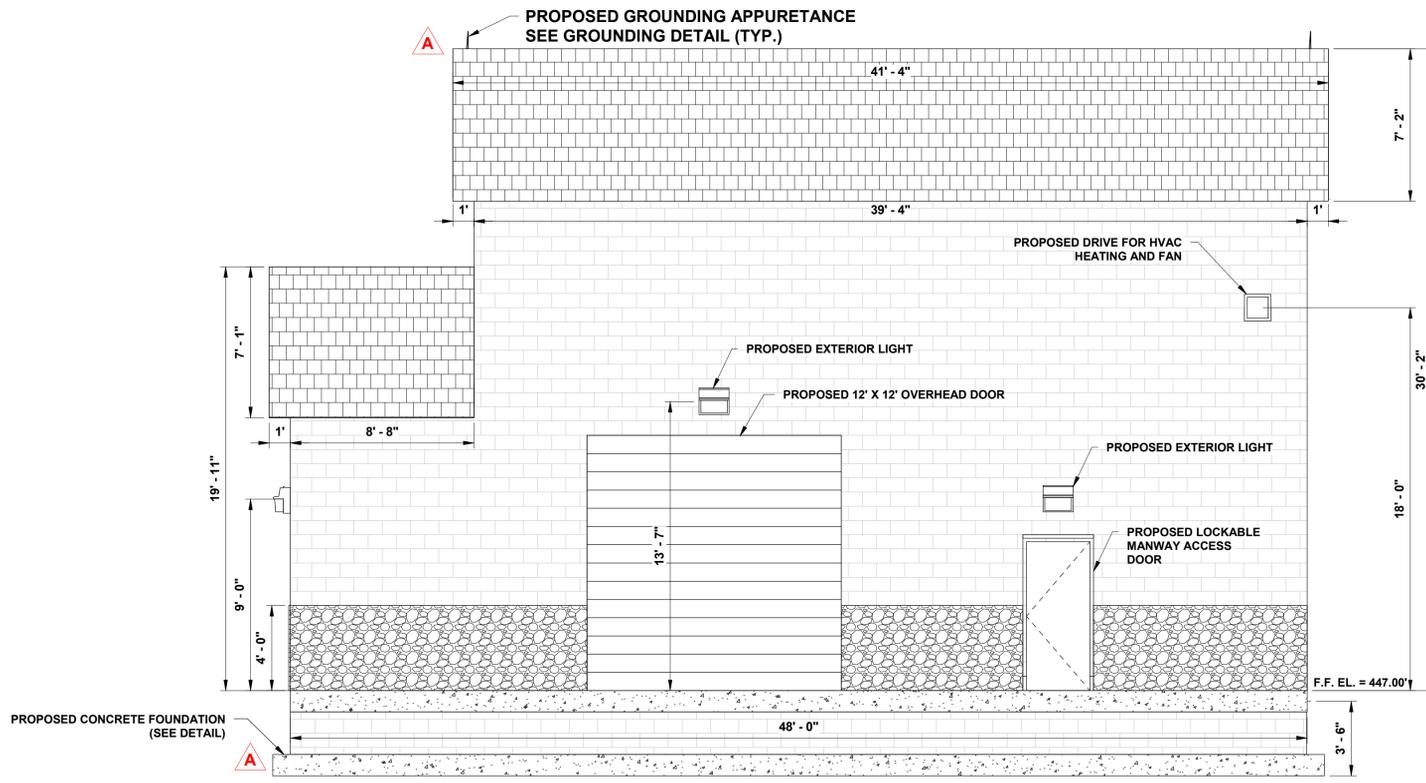
**NORTH ELEVATION VIEW**  
SCALE: 1/4" = 1'-0"



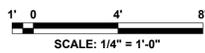
**WEST ELEVATION VIEW**  
SCALE: 1/4" = 1'-0"



**SOUTH ELEVATION VIEW**  
SCALE: 1/4" = 1'-0"



**EAST ELEVATION VIEW**  
SCALE: 1/4" = 1'-0"



CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

DATE: 03/11/2022

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**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE**  
**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO COUNTY OF ROCKLAND, STATE OF NEW YORK

FOR CLIENT: **SUEZ WATER NEW YORK INC.**

**GAC TREATMENT BUILDING ELEVATION VIEWS**

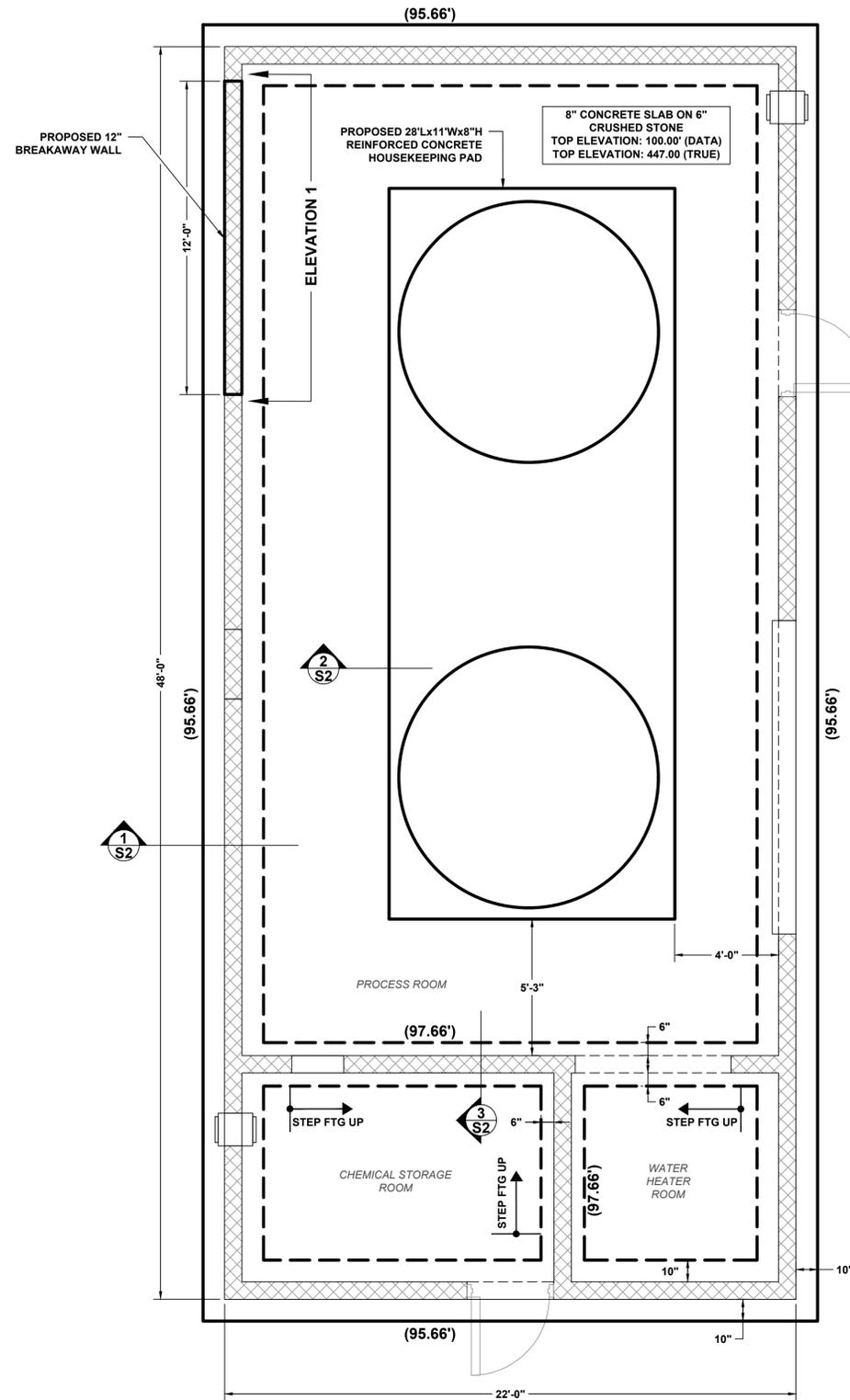
PROJECT NUMBER: SCE-12162.001

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

SHEET **11** OF **22**

REVISION **A**

E:\SCE\Ramapo\12162.001\Sheets\construction set\12162.001\_12-13 Structural Plan & Details.dwg Wed, May 25, 2022 - 5:48pm weschurmann SUBURBAN CONSULTING ENGINEERS, INC.



**NOTE:**  
(XXX) INDICATES THE BOTTOM OF THE FOOTING ELEVATION.

**GAC TREATMENT BUILDING FOUNDATION PLAN VIEW**  
N.T.S.

**GENERAL NOTES**

**GENERAL**

- GENERAL CONTRACTOR SHALL VERIFY ALL CONDITIONS AND CHECK ALL MEASUREMENTS ON JOB AND SHALL BE RESPONSIBLE FOR SAME.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CURRENT BUILDING CODE OF ALL GOVERNING AUTHORITIES.
- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH MECHANICAL DRAWINGS.
- ALL OPENINGS IN WALLS, FLOORS, ROOF, ETC. TO BE LOCATED, SIZED, FURNISHED AND INSTALLED AS PER MECHANICAL REQUIREMENTS EVEN IF NOT SHOWN AS SUCH ON STRUCTURAL AND ARCHITECTURAL DRAWINGS.
- WHERE CONSTRUCTION SEQUENCING / PHASING REQUIREMENTS ARE INDICATED OR IMPLIED IN THE CONTRACT DOCUMENTS, COORDINATE CONSTRUCTION OF BUILDING STRUCTURE TO SUIT SEQUENCING / PHASING REQUIREMENTS AND PROVIDE ALL NECESSARY AND TEMPORARY SUPPORTS AS REQUIRED TO SAFELY CONSTRUCT THE STRUCTURE.
- ALL WALLS SHALL BE ADEQUATELY BRACED UNTIL ROOF OR FLOOR THEY SUPPORT ARE COMPLETELY INSTALLED AND ARE STRUCTURALLY SOUND.
- APPROVAL OF SHOP DRAWINGS SHALL NOT RELIEVE CONTRACTOR OF ANY CONTRACT REQUIREMENTS EVEN IF SUCH ITEMS ARE NOT SHOWN ON SHOP DRAWINGS.
- ALL REVISIONS TO SHOP DRAWINGS AFTER FIRST SUBMISSION MUST BE SO IDENTIFIED ON SUBSEQUENT SUBMISSIONS.
- REPRODUCTION OF STRUCTURAL CONTRACT DRAWINGS IS NOT TO BE SUBMITTED AS SHOP DRAWINGS.

**FOUNDATIONS**

- A COPY OF THE SOIL INVESTIGATION REPORTS BY CARLIN, SIMPSON & ASSOCIATES, LLC DATED JULY 22, 2021, VISIT THE SITE AND THOROUGHLY FAMILIARIZE YOURSELF WITH ALL SURFACE AND SUBSURFACE CONDITIONS. THIS INFORMATION IS GIVEN SOLELY AS A GUIDE. NO RESPONSIBILITY IS ACCEPTED BY THE OWNER AND THE CONSULTANT FOR ITS CORRECTNESS, NOR SHALL ITS ACCURACY OR ANY OMISSIONS AFFECT THE PROVISION OF THIS CONTRACT.
- ALL FOOTINGS SHALL REST ON SOIL OF ONE (1) TON PER SQUARE FOOT (2,000 PSF) BEARING CAPACITY MINIMUM. SOILS ENGINEER, PAID FOR BY THE OWNER, MUST VERIFY ALL FOOTING BOTTOMS PRIOR TO POURING ANY CONCRETE FOOTINGS.
- ALL FILLED AREAS SHALL BE COMPACTED LAYER BY LAYER TO NOT LESS THAN 95% OF THE MAXIMUM DRY DENSITY WHEN TESTED IN ACCORDANCE WITH ASTM D1557.
- FOUND EXTERIOR FOOTING AND OTHER FOOTINGS SUSCEPTIBLE TO DAMAGE RESULTING FROM FROST ACTION 42 INCHES BELOW GRADE.
- FOUND NEW FOOTINGS WHICH ARE LOCATED ADJACENT TO EXISTING FOOTINGS, AT THE SAME ELEVATION AS THE EXISTING FOOTINGS, UNLESS NOTED OTHERWISE.
- PROVIDE STEPPED FOOTINGS NOT EXCEEDING A RISE OF 1 IN A RUN OF 2, OR AS PER DETAIL WHERE NECESSARY.
- BACKFILLING AGAINST FOUNDATION WALLS SHALL NOT BE PERMITTED UNTIL FLOORS OR ROOF THEY SUPPORT HAS BEEN COMPLETELY INSTALLED AND ATTAINED 100% OF ITS DESIGN STRENGTH, UNLESS OTHERWISE APPROVED BY ENGINEER.
- PROVIDE 15 MIL THICK VAPOR BARRIER ON 6 INCHES POROUS FILL UNDER ALL CONCRETE SLABS ON EARTH.
- ALL FOOTING DOWELS TO BE SAME SIZE, NUMBER AND GRADE AS VERTICAL REINFORCEMENT IN COLUMNS, PIERS, OR WALLS, WHICH THE FOOTING SUPPORT.

**CONCRETE**

- ALL CONCRETE SHALL BE CONTROLLED CONCRETE COMPLYING WITH ACI BUILDING CODE REQUIREMENT.
  - FOUNDATION CONCRETE (FOOTING, WALLS, PIERS POURED INTEGRALLY WITH WALL, SLAB ON GRADE, ETC): 4000 PSI NORMAL WEIGHT CONCRETE.
  - SLUMP 4" MIN. AIR CONTENT 6%.
- REINFORCING BARS SHALL BE NEW STEEL BILLET, DEFORMED TYPE, ASTM A615 GRADE 60. WELDED WIRE FABRIC SHALL CONFORM WITH ASTM A1064.
- WHEN CONSTRUCTION JOINTS ARE USED IN SLABS, WALLS, OR BEAMS, THEY SHALL BE LOCATED AT POINTS OF MINIMUM SHEAR AND SHALL BE KEYS.
- CONTRACTOR SHALL SUBMIT PLAN SHOWING POURING SEQUENCE AND TYPE AND LOCATION OF PROPOSED JOINTS IN ALL SLABS TO ENGINEER FOR APPROVAL.
- PLACE SLAB-ON-GRADE ON MATERIAL CAPABLE OF SUSTAINING 2000 PSF WITHOUT SETTLEMENT RELATIVE TO THE BUILDING FOOTINGS.
- PROVIDE MINIMUM REINFORCING IN ALL CONCRETE AS PER ACI BUILDING CODE REQUIREMENTS.
- THE REINFORCING SPLICING LENGTH SHALL CONFORM TO ACI BUILDING CODE REQUIREMENTS.
- PROVIDE #4 NOSING BAR IN EACH CONCRETE STEP.

**MASONRY**

- ALL MASONRY WALL UNITS SHALL CONFORM TO THE LATEST EDITION OF ASTM C-90 REQUIREMENTS. THE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF THE CONCRETE (fm) SHALL BE 1500 PSI ACROSS THE NET AREA (UNLESS NOTED OTHERWISE ON PLANS). AGGREGATE FOR CONCRETE SHALL BE LIGHTWEIGHT U.N.O. ALL MASONRY IN CONTACT WITH EARTH SHALL BE CONVENTIONAL NORMAL WEIGHT CONCRETE.
- USE TYPE M MORTAR ASTM C-270 FOR REINFORCED MASONRY WALLS.
- REINFORCING BARS SHALL CONFORM TO ASTM A615, AND JOINT REINFORCEMENT SHALL CONFORM TO ASTM A82.
- PRISM TESTS FOR MASONRY SHALL BE REQUIRED AT RATE OF 1 TEST PER 5000 SQUARE FEET (MINIMUM ONE TEST PER FLOOR) PRISM SHALL BE TESTED IN ACCORDANCE WITH ACI 530-92 SPECIFICATIONS.
- PROVIDE MINIMUM REINFORCING WHERE REQUIRED IN ACCORDANCE WITH THE TYPICAL DETAILS.
- ALL CONCRETE MASONRY UNITS SHALL BE BRACED DURING CONSTRUCTION UNTIL PERMANENT RESTRAINTS HAVE BEEN INSTALLED.
- PROVIDE JOINT REINFORCING OF STANDARD 9 GAUGE LADDER TYPE REINFORCING AT 16" ON CENTER MAXIMUM VERTICAL SPACING IN ALL MASONRY UNLESS SHOWN OTHERWISE.
- PROVIDE MINIMUM 2-# @ 2'-0" O/C VERTICAL FULL HEIGHT, AND 4-# AT ALL WALL ENDS, CORNERS, INTERSECTIONS, OPENINGS AND EACH SIDE OF CONTROL JOINTS.
- VOIDS IN REINFORCED MASONRY WALLS SHALL BE FILLED WITH GROUT OF MINIMUM ULTIMATE STRENGTH OF 3000 PSI, AT REINFORCING BARS AND ELSEWHERE AS SHOWN ON DRAWINGS.
- THE MINIMUM SPLICE LENGTH FOR ALL RE-BARS SHALL BE 48 BAR DIAMETERS.
- CALCIUM CHLORIDE SHALL NOT BE USED IN MORTAR OR GROUT.

**ASCE 7-16 MINIMUM DESIGN LOADS FOR BUILDING AND OTHER STRUCTURES**

ROOF LIVE LOAD = 20 PSF

ROOF SNOW LOAD

GROUND SNOW LOAD (Pg) = 30 PSF  
 SLOPED ROOF SNOW LOAD (Ps) = 21 PSF  
 UNBALANCED SNOW LOAD FOR GABLE ROOF = 6.3 PSF  
 SNOW THERMAL FACTOR (ct) = 1.0  
 SNOW EXPOSURE FACTOR (Ce) = 1.0  
 SNOW LOAD IMPORTANCE FACTOR (Is) = 1.1

WIND LOAD

ASCE 7-16 RISK CATEGORY III  
 WIND SPEED = 121 MPH  
 WIND LOAD IMPORTANCE FACTOR (Iw) = 1.0  
 WIND EXPOSURE = "C"  
 EXTERIOR WALL COMPONENTS & CLADDING FACTORED PRESSURE:  
 AT GENERAL AREA = 29 PSF  
 CORNER AREA = 36 PSF

EARTHQUAKE DESIGN DATA

0.2 SEC SPECTRAL RESPONSE ACCELERATION - (Ss) = 0.294  
 1.0 SEC SPECTRAL RESPONSE ACCELERATION - ((S1) = 0.061  
 ASCE 7-16 RISK CATEGORY III  
 SEISMIC DESIGN CATEGORY = "B"  
 SEISMIC IMPORTANCE FACTOR = 1.25  
 SITE CLASS = D  
 DESIGN SPECTRAL ACCELERATION PARAMETERS: S DS = 0.307  
 S DI = 0.098

BASIC STRUCTURAL SYSTEM = INTERMEDIATE REINFORCED SHEAR WALLS:  
 RESPONSE MODIFICATION FACTOR (R) = 3 1/2  
 SYSTEM OVER-STRENGTH FACTOR (Qo) = 2 1/2  
 DEFLECTION AMPLIFICATION FACTOR (Cd) = 2 1/4

CONSULTANT:  
**ZHAN H. DING, PE**  
NY PROFESSIONAL ENGINEER: 084251  
  
DATE: 05/24/2022

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1  
  
DATE: 03/11/2022

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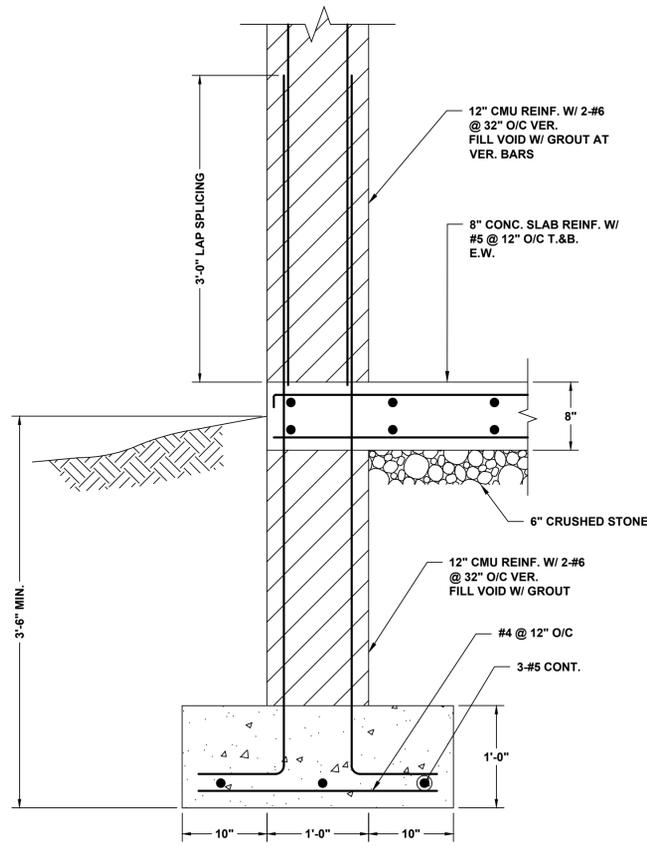
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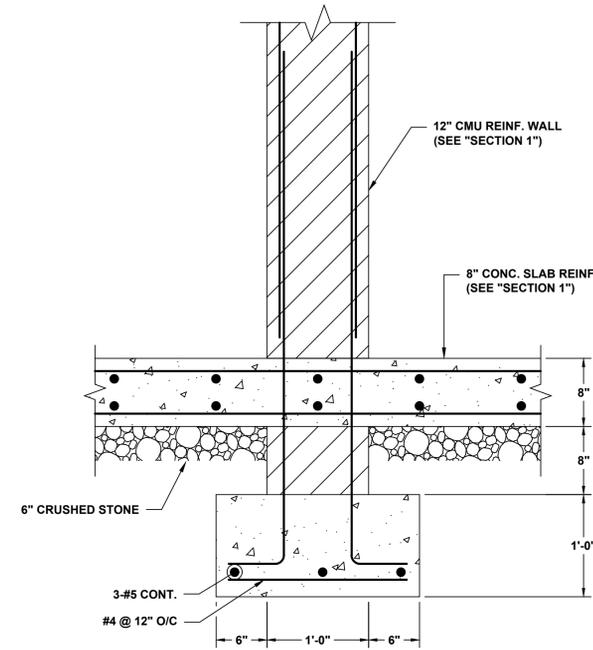
**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK  
FOR CLIENT: **SUEZ WATER NEW YORK INC.**  
**STRUCTURAL PLAN & GENERAL NOTES**

PROJECT NUMBER:  
SCE-12162.001  
SCALE:  
N.T.S.  
SHEET 12 OF 22  
REVISION -

E:\SCE\Ramapo\12162.001\Sheets\Construction Set\12162.001 12-13 Structural Plan & Details.dwg, Thu, May 26, 2022, 7:47am wschurmann SUBURBAN CONSULTING ENGINEERS, INC.

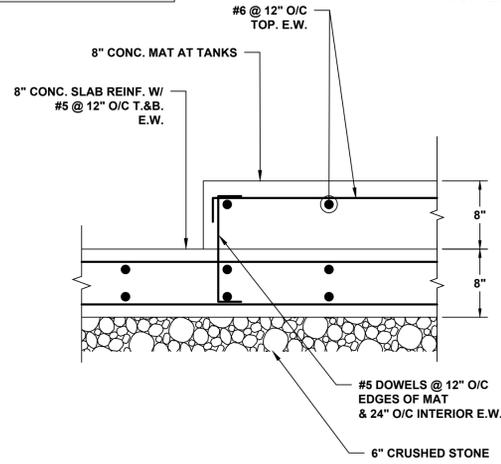


**SECTION 1**  
N.T.S.

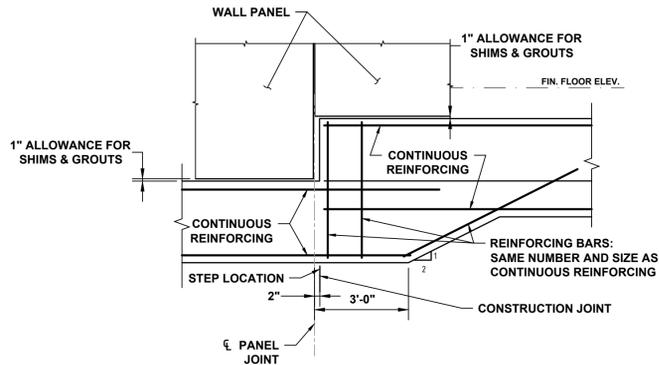


**SECTION 3**  
N.T.S.

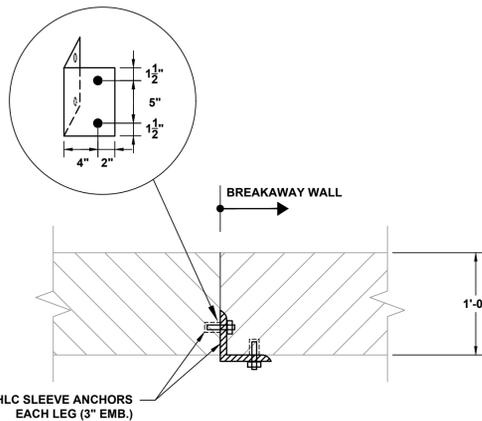
**NOTE:**  
EXISTING FILL SHALL BE REMOVED AND REPLACED W/ COMPACT FILL AS PER GEOTECHNICAL REPORT. (TYP. UNDER FTG. AND SLAB)



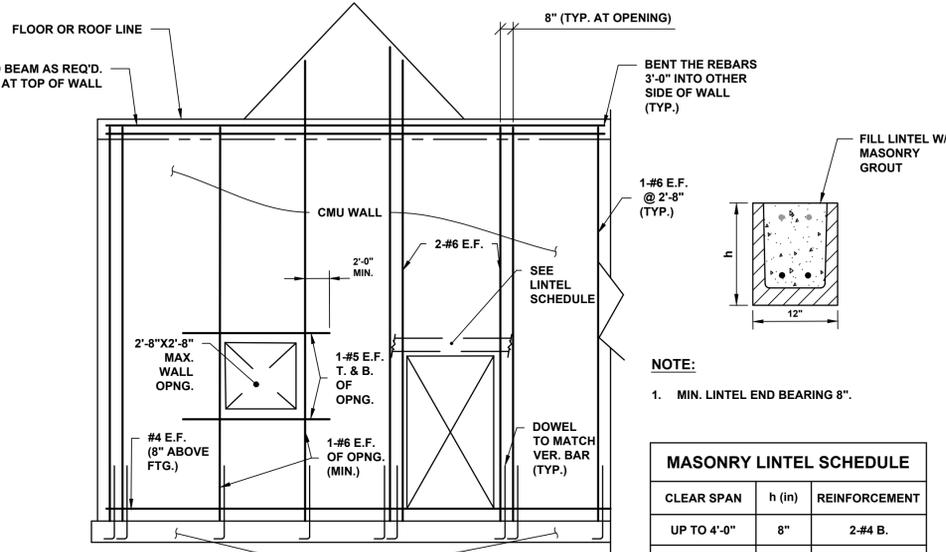
**SECTION 2**  
N.T.S.



**STEPPED FOOTING SECTION**  
N.T.S.



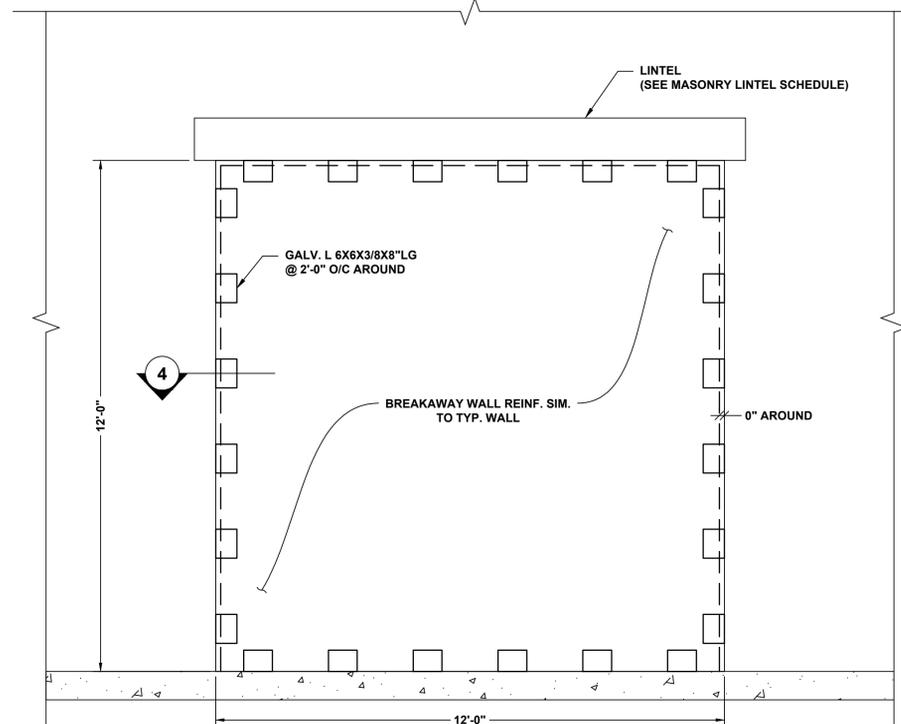
**SECTION 4**  
N.T.S.



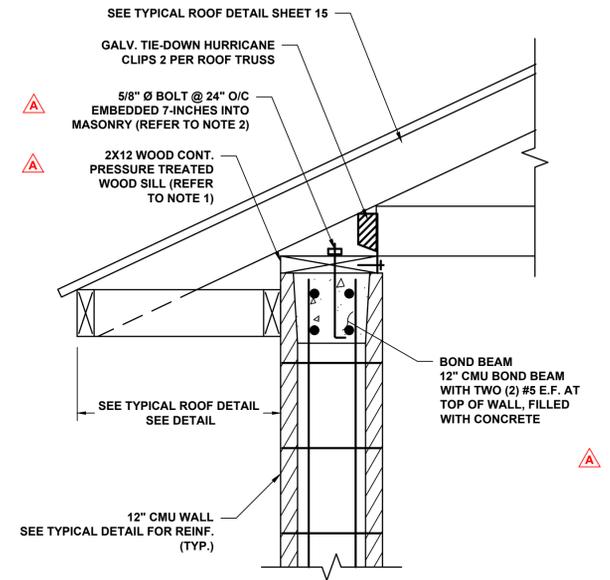
**NOTES:**  
1. SEE GENERAL NOTE FOR HORIZONTAL JOINT REINFORCEMENT.  
2. E.F. INDICATES EACH FACE OF THE WALL.

**TYPICAL 12\"/>**

MASONRY LINTEL SCHEDULE		
CLEAR SPAN	h (in)	REINFORCEMENT
UP TO 4'-0"	8"	2-#4 B.
>4'-0" TO 6'-0"	8"	2-#6 B.
>6'-0" TO 8'-0"	8"	2-#6 B.
8'-0" TO 12'-0"	1'-4"	2-#6 T. & B.



**ELEVATION 1**  
N.T.S.



**NOTE:**  
1. WOOD SILL IN CONTACT WITH THE CMU BLOCK MUST BE PRESERVATIVE TREATED (PRESSURE TREATED) WOOD.  
2. SILL PLATE ANCHORS MUST BE EMBEDDED 7" MINIMUM INTO MASONRY AND SHALL NOT BE LESS THAN 12" FROM END OF PLATE.  
3. ROOF MUST BE IN ACCORDANCE WITH UL DESIGN P522 FOR 1HR FIRE RESISTANCE RATED ASSEMBLY ON WOOD TRUSSES. REFER TO ROOF DETAIL ON SHEET 17 OF 21 FOR ADDITIONAL INFORMATION.

**PRE-ENGINEERED ROOF TRUSS TO CMU WALL**  
N.T.S.

CONSULTANT:  
**ZHAN H. DING, PE**  
NY PROFESSIONAL ENGINEER: 084251

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

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**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE**  
**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK

FOR CLIENT: **SUEZ WATER NEW YORK INC.**

**STRUCTURAL DETAILS**

PROJECT NUMBER:  
SCE-12162.001  
SCALE:  
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SHEET 13 OF 22  
REVISION A

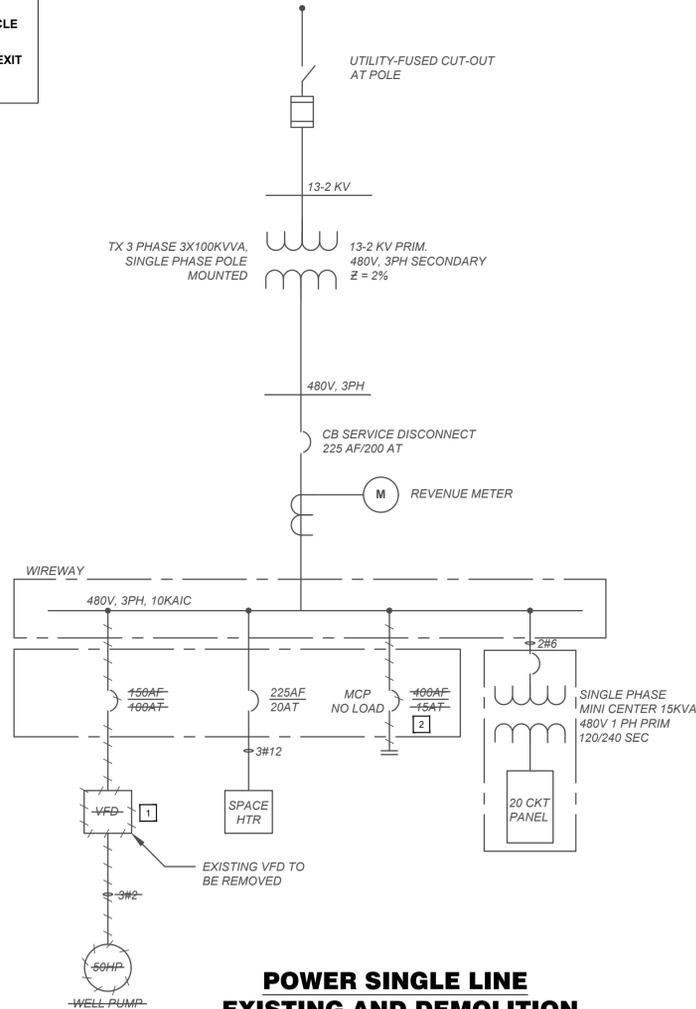
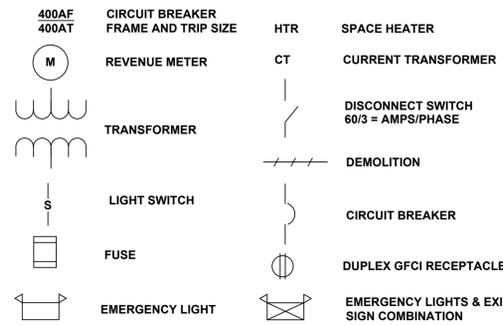
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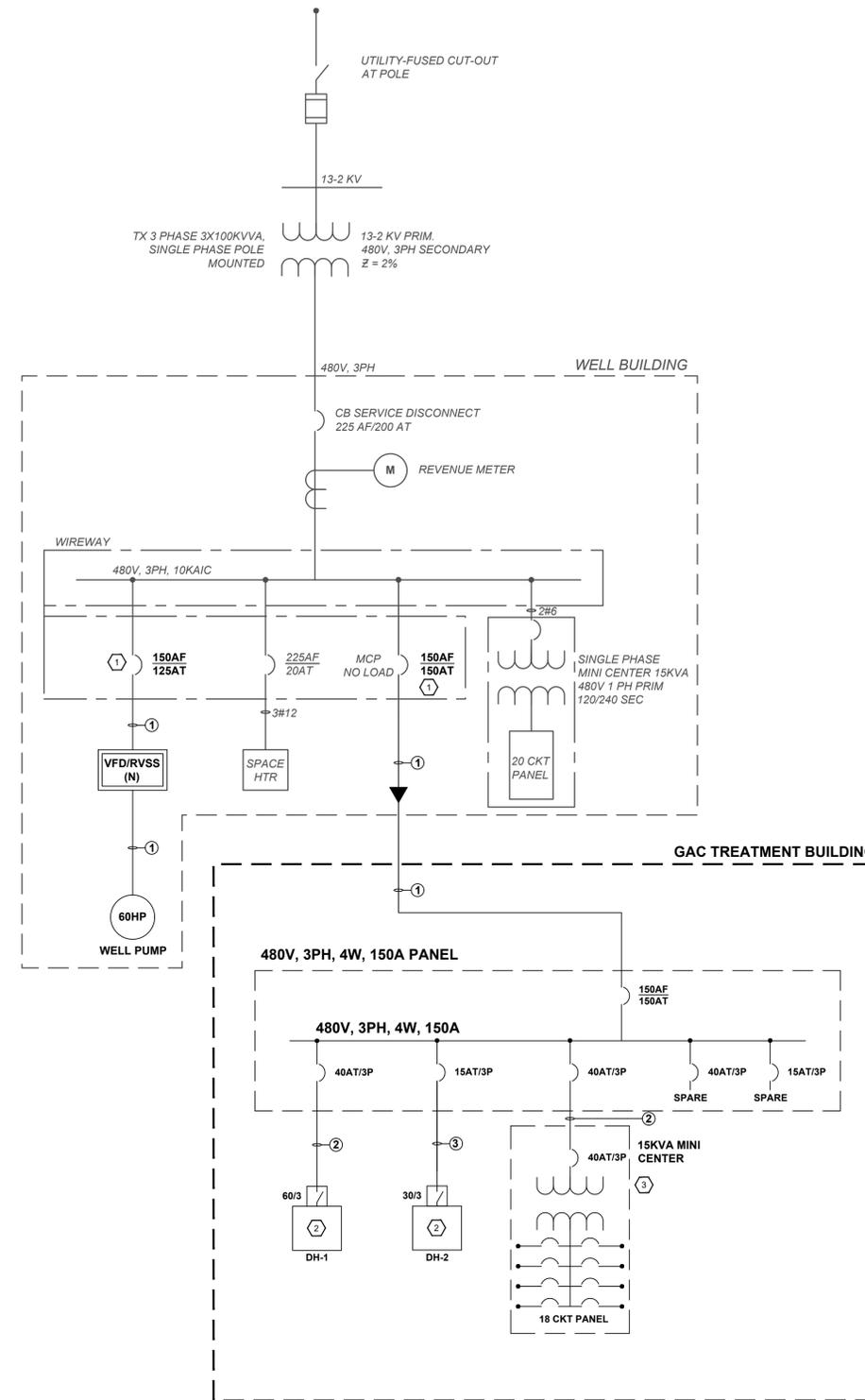
E:\SCE\Ramapo\12162.001\Sheets\Construction Set\12162.001 14 Electrical Plan.dwg Thu, Mar 10, 2022 - 5:23pm jwatkinson SUBURBAN CONSULTING ENGINEERS, INC.

**LEGEND:**



**DEMOLITION NOTES:**

- 1 REMOVE AND DISCARD EXISTING CIRCUIT BREAKER, VFD AND RELATED CONDUIT AND WIRES.
- 2 REMOVE AND DISCARD EXISTING MOTOR STARTER AND RELATED WIRING.



**KEY NOTES:**

- 1 REPLACE EXISTING CIRCUIT BREAKER WITH 150AF/125AT CIRCUIT BREAKER.
- 2 DUCT HEATER
- 3 480V TO 120/208V MINI CENTER EATON 2AT. NO. P48G28T15CUB OR APPROVED EQUAL.

**GENERAL NOTES:**

- 1. ALL NEW PANELS AND CIRCUIT BREAKERS MUST MEET OR EXCEED EXISTING SHORT CIRCUIT RATINGS.

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

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**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE**  
**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK

FOR CLIENT: **SUEZ WATER NEW YORK INC.**

**ELECTRICAL PLAN**

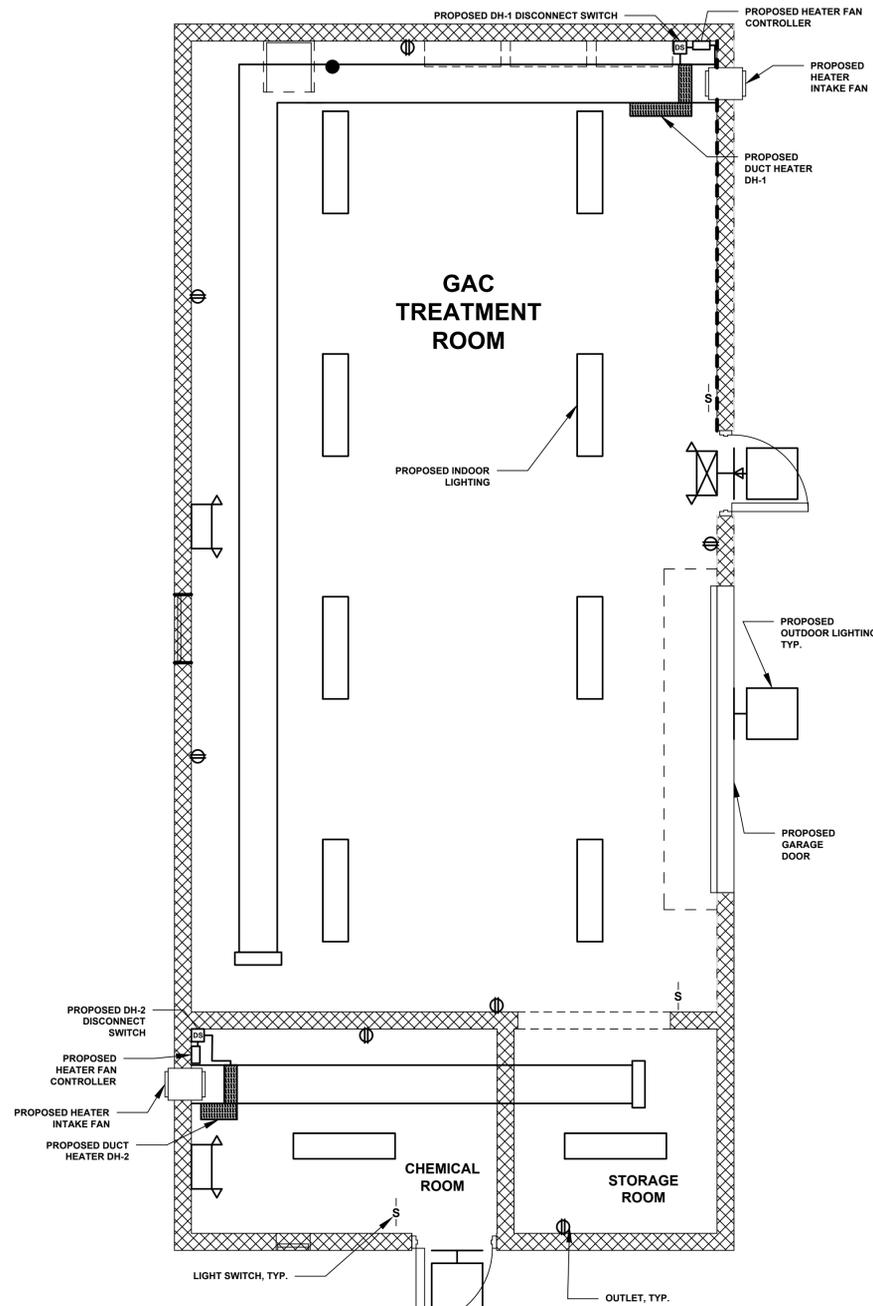
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SCE-12162.001  
SCALE:  
AS NOTED  
SHEET **14** OF **22**  
REVISION -

**SCADA SYSTEM I/O LIST**

ECKERSON WELL STATION SCADA SYSTEM I/O LIST						
No.	DESCRIPTION	WIRE NUMBER & SIZE	DIGITAL		ANALOG	
			INPUT	OUTPUT	INPUT	OUTPUT
1	ECKERSON PRESSURE (DISCHARGE)	T/S			1	
2	ECKERSON FLOW (DISCHARGE)	T/S			1	
3	WELL PUMP WP-1 SPEED CONTROL	T/S				1
4	WELL LEVEL WL-1	T/S			1	
5	ECKERSON HIGH DISCHARGE PRESSURE	T/S			1	
6	BAG FILTER CF-1 INLET PRESSURE	T/S			1	
7	BAG FILTER CF-1 OUTLET PRESSURE	T/S			1	
8	BAG FILTER BY-PASS STATUS	(2) #14 THHN	1			
9	GAC FILTER GF-1 INLET PRESSURE	T/S			1	
10	GAC FILTER GF-1 OUTLET PRESSURE	T/S			1	
11	GAC FILTER GF-2 INLET PRESSURE	T/S			1	
12	GAC FILTER GF-2 OUTLET PRESSURE	T/S			1	
13	GAC FILTER CF-1 INLET VALVE STATUS	(2) #14 THHN	1			
14	GAC FILTER CF-2 INLET VALVE STATUS	(2) #14 THHN	1			
15	CHEMICAL FEED PUMP CFP-1 FLOW PACING	(2) #14 THHN		1		
16	CHEMICAL FEED PUMP CFP-1 REMOTE START/STOP	(2) #14 THHN		1		
17	CHEMICAL FEED PUMP CFP-1 FLOW INPUT	T/S			1	
18	CHEMICAL FEED PUMP CFP-2 FLOW PACING	(2) #14 THHN		1		
19	CHEMICAL FEED PUMP CFP-2 REMOTE START/STOP	(2) #14 THHN		1		
20	CHEMICAL FEED PUMP CFP-2 FLOW INPUT	T/S			1	
21	CHLORINE ANALYZER CA-1 READING	T/S			1	
22	CHLORINE ANALYZER CA-2 READING	T/S			1	
23	DISSOLVED OXYGEN ANALYZER DO-1 READING	T/S			1	
24	POWER FAIL	NONE	1			
25	BUILDING INTRUSION ALARM BI-1	(2) #14 THHN	1			
26	BUILDING INTRUSION ALARM BI-2	(2) #14 THHN	1			
27	BUILDING INTRUSION ALARM BI-3	(2) #14 THHN	1			
28	BUILDING INTRUSION ALARM BI-4	(2) #14 THHN	1			
29	BUILDING INTRUSION ALARM BI-5	(2) #14 THHN	1			
30	BACKWASH MODULATED VALVE	T/S			1	
31	EYEWASH ALERT	(2) #14 THHN	1			
32	FLOW SWITCH	(2) #14 THHN	1			
TOTAL MINIMUM TO BE PROVIDED W/ SPARE POINTS (20% MIN)		TOTAL	14	5	17	2

**15KVA MINI CENTER SCHEDULE**

15KVA MINI CENTER							
PRIMARY VOLTAGE: 480V, 3P, SECONDARY VOLTAGE: 120/208V, 3PH, 4W							
CIR. NO.	AMP/POLE	SERVICE	CONDUIT/WIRE	CONDUIT/WIRE	SERVICE	AMP/POLE	CIR. NO.
1	20/1	MICROPROCESSOR PUMP	3/4" C 2#12 + 1#12G	3/4" C 2#12 + 1#12G	MICROPROCESSOR RECEPTACLE	20/1	2
3	20/1	MAGNETIC FLOW METER	3/4" C 2#12 + 1#12G	3/4" C 2#12 + 1#12G	EMERGENCY LIGHTS	20/1	4
5	20/2	DEHUMIDIFIER	3/4" C 2#12 + 1#12G	3/4" C 2#12 + 1#12G	INDOOR LIGHTS	20/1	6
7				3/4" C 2#12 + 1#12G	OUTDOOR LIGHTS	20/1	8
9	20/1	RECEPTACLES	3/4" C 2#12 + 1#12G	3/4" C 2#12 + 1#12G	DH-1 INTAKE FAN	20/1	10
11	20/1	RECEPTACLES	3/4" C 2#12 + 1#12G	3/4" C 2#12 + 1#12G	DH-2 INTAKE FAN	20/1	12
13	20/1	EMERGENCY LIGHTS	3/4" C 2#12 + 1#12G	-	SPARE	20/1	14
15	20/1	SPARE	-	-	SPARE	20/1	16
17	20/1	SPARE	-	-	SPARE	20/1	18



**ELECTRICAL FLOOR PLAN**  
SCALE 1" = 40'  
SCALE: 1"=40'

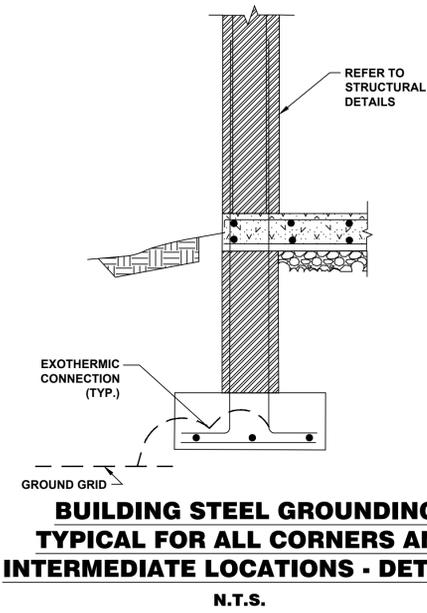
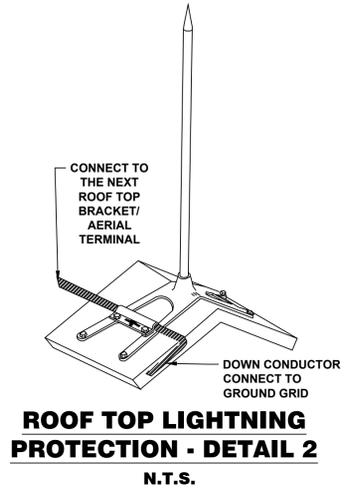
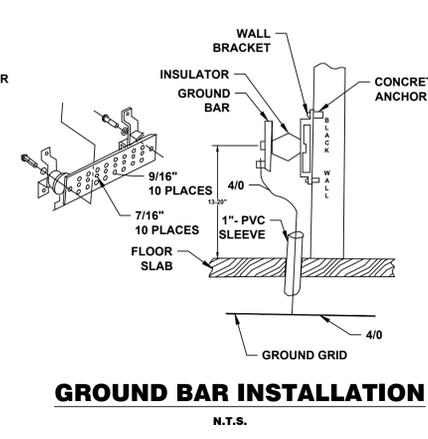
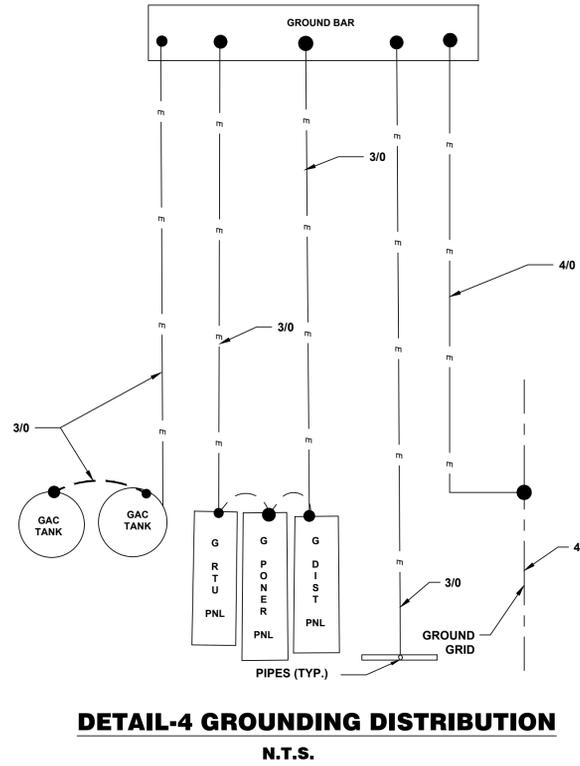
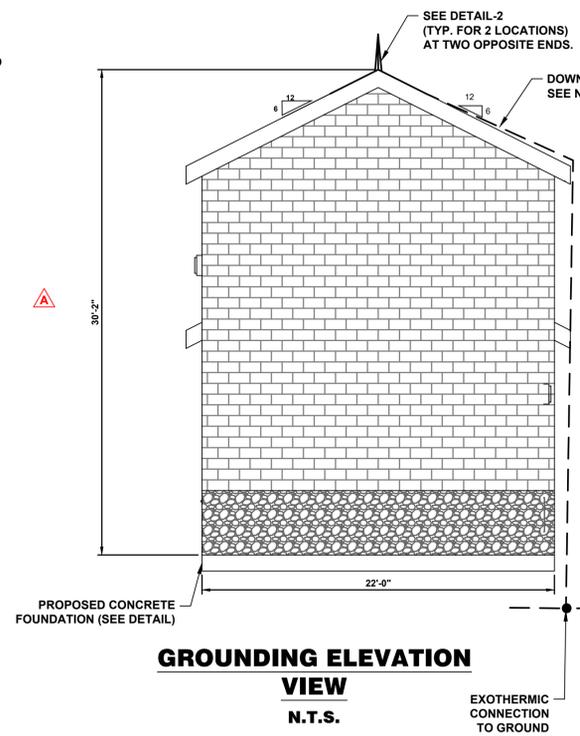
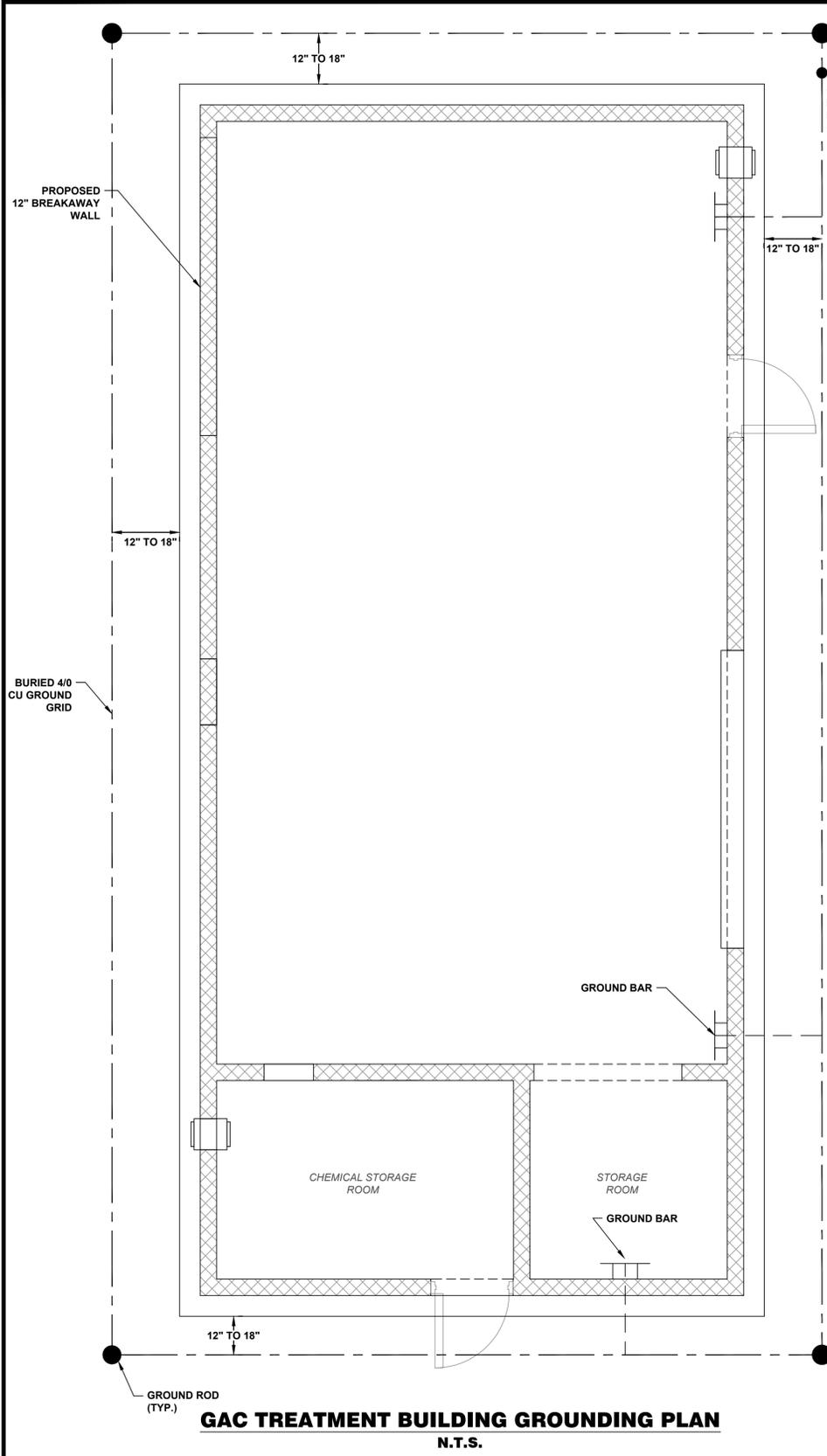
HVAC SCHEDULE		
ITEM NAME	VOLTAGE	DESCRIPTION
DH-1	480V	3PH, 35KW MAIN ROOM DUCT HEATER
DH-1 INTAKE FAN	115V	1PH, MAIN ROOM DUCT HEATER INTAKE FAN
DH-2	480V	3PH, 5KW CHEMICAL ROOM DUCT HEATER
DH-2 INTAKE FAN	115V	1PH, CHEMICAL ROOM DUCT HEATER INTAKE FAN

LIGHTING FIXTURE SCHEDULE						
PLAN SYMBOL	TYPE	LOCATION	DESCRIPTION	MANUFACTURER	CATALOG NO.	REMARKS
[Symbol]	RECESSED	INDOORS	1FT X 4FT	LITHONIA	CPX-1X4-3200LMHE 80CRI-40K-SWL-MV OR APPROVED EQUAL	
[Symbol]	SURFACE MOUNTED	INDOORS	1FT X 4FT	HOLOPHANE	EMSL48-6000LU-LPACL-MD-MV-4K OR APPROVED EQUAL	
[Symbol]	WALL MOUNTED	INDOORS	EXIT SIGN	HOLOPHANE	QM LED-W-R-HO OR APPROVED EQUAL	
[Symbol]	WALL MOUNTED	OUTDOORS	WALL PACK	HOLOPHANE	HLWPC2-P10P40K-AS-T2M-BZ OR APPROVED EQUAL	
[Symbol]	WALL MOUNTED	INDOORS	TWIN HEAD EMG LIGHT	HOLOPHANE	QMLEDR OR APPROVED EQUAL	
[Symbol]	WALL MOUNTED	INDOORS	TWIN HEAD COMBINATION EXIT & EMG LIGHT	HOLOPHANE	QMLEDR HO WITH ELA QM WP OR APPROVED EQUAL	WITH WP REMOTE HEAD SYMBOL [Symbol]

E:\SCE\Ramapo\12162.001\Sheets\Construction Set\12162.001 15 Electrical Floor Plan.dwg Thu, Mar 10, 2022 - 5:23pm jwatkinson SUBURBAN CONSULTING ENGINEERS, INC.

CONSULTANT: <b>ANDREW S. HOLT, PE</b> NY PROFESSIONAL ENGINEER: 095020-1	NOTICE THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED. THIS DRAWING MAY NOT BE COPIED, REUSED, DISCLOSED, DISTRIBUTED, OR BELIED UPON FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF SUBURBAN ENGINEERING ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID DIGITAL SEAL OR PAPER COPIES NOT CONTAINING A RAISED SEAL ARE NOT ORIGINALS AND MAY HAVE BEEN ALTERED. © COPYRIGHT 2022 SUBURBAN ENGINEERING ALL RIGHTS RESERVED	DRAWN BY: JAW 03/11/2022 CHECKED BY: WAS 03/11/2022 CHECKED BY:	SUBURBAN ENGINEERING - Civil Engineers - - Landscape Architects - - Land Surveyors - 7 Cokesbury Calton Road, Lebanon, NJ, 08833 - 973.398.1776 EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT	SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE <b>ECKERSON WELL NO. 71</b> CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK FOR CLIENT: <b>SUEZ WATER NEW YORK INC.</b>	PROJECT NUMBER: SCE-12162.001
					SCALE: AS NOTED
REVISIONS DESCRIPTION NO. DATE: BY: CHK:				SHEET <b>15</b> OF <b>22</b> REVISION -	
DATE: 03/11/2022				ELECTRICAL PLAN & DETAILS	

E:\SCE\Ramapo\12162.001\Sheets\construction set\12162.001 16 Grounding.dwg Wed, May 25, 2022 - 3:36pm wschurmann SUBURBAN CONSULTING ENGINEERS, INC.



- GENERAL NOTES:**
- REFER TO GROUNDING AND LIGHTNING PROTECTION NOTES AND DETAILS HEREIN.
  - LOCATION OF DOWN CONDUCTORS SHALL BE DECIDED BY THE OWNER IN THE FIELD.
- GENERAL ELECTRICAL NOTES:**
- ELECTRICAL SYSTEM INSTALLATION SHALL CONFORM TO ARTICLE 300 OF NFPA 70, WIRING METHODS, AND TO OTHER APPLICABLE ARTICLES OF NFPA 70 GOVERNING METHODS OF WIRING.
  - GROUND THE CONDUIT SYSTEMS, METAL ENCLOSURES, EQUIPMENT FRAMES, MOTORS AND RECEPTACLES IN ACCORDANCE WITH ARTICLE 250 OF NFPA 70, GROUNDING.
  - GROUNDING CONDUITS:
    - GROUND ALL METRIC CONDUITS, WIRING CHANNELS, AND ARMORED CABLES CONTINUOUSLY FROM OUTLET TO OUTLET, AND FROM OUTLETS TO CABINETS, JUNCTION BOXES, OR PULL BOXES.
    - BOND EACH RUN OF RACEWAYS TO FORM A CONTINUOUS PATH FOR GROUND FAULTS END TO END.
    - WHEN LIQUID TIGHT FLEXIBLE METAL CONDUIT SIZES LARGER THAN 1-INCH OR FLEXIBLE METAL CONDUIT ARE INSTALLED, PROVIDE EXTERNAL BOND WIRES.
  - GROUNDING BUSHINGS
    - PROVIDE ALL 1-INCH OR LARGER METALLIC CONDUITS WITH GROUNDING BUSHINGS UNLESS THEY ENTER METALLIC ENCLOSURES VIA INTEGRAL THREADED HUBS.
    - PROVIDE GROUNDING BUSHINGS FOR CONDUITS ENTERING THE BOTTOM OF FREESTANDING EQUIPMENT.
    - BOND WIRE FROM EVERY GROUNDING BUSHING TO THE EQUIPMENT GROUND STUD OR GROUND BUS IN THE ENCLOSURE.
    - BIND THE GROUNDING BUSHINGS TO GROUND STUDS OR GROUND BUSES IN THE ENCLOSURES.
  - PROVIDE INSULATED, INTERNAL WIRE TO ALL PULLBOXES, JUNCTION BOXES, EQUIPMENT ENCLOSURES, AND OTHER ENCLOSURES AS REQUIRED BY NFPA 70.
  - EQUIPMENT GROUNDING
    - DESIGN ALL FEEDERS AND BRANCH CIRCUITS TO INCLUDE AN EQUIPMENT GROUNDING CONDUCTOR CONSISTING OF A COPPER WIRE WITHIN A RACEWAY OR CABLE AND SIZES AS SPECIFIED HEREIN.
    - WHERE CONDUCTORS ARE RUN IN PARALLEL IN MULTIPLE RACEWAYS, RUN THE EQUIPMENT GROUNDING CONDUCTOR IN PARALLEL TO THE RELATED CONDUCTORS.
    - SIZE EACH OF THE PARALLEL EQUIPMENT GROUNDING CONDUCTORS ON THE BASIS OF THE AMPERE RATING OF THE CIRCUIT OVER CURRENT PROTECTING DEVICE.
    - GROUND ENCLOSING CASES, MOUNTING FRAMES, RACK MOUNTED COMPONENTS, RACK STRUTS, SWITCHES, BREAKERS, CONTROL PANELS, MOTORS, AND OTHER ELECTRICAL OR ELECTRICALLY OPERATED EQUIPMENT BY PROVIDING AN EQUIPMENT GROUNDING CONDUCTOR WITH PHASE CONDUCTORS FROM AN ESTABLISHED EQUIPMENT GROUND SOURCE.
  - GROUND WIRE SIZES:
    - THE MINIMUM SIZE FOR BONDING JUMPERS, EQUIPMENT GROUND CONDUCTORS, GROUNDING ELECTRODE CONDUCTORS, AND GROUND GRID CONDUCTORS IS AS FOLLOWS:
      - UNDER 600 VOLTS:
        - PROVIDE #12 AWG, MINIMUM.
        - CONTROL POWER CIRCUITS, PROVIDE #14 AWG, MINIMUM
      - OVER 600 VOLTS
        - FOR TRANSFORMERS, PROVIDE #2 AWG GROUND WIRE, MINIMUM.
        - FOR MOTORS, PROVIDE #4 AWG GROUND WIRE, MINIMUM.
  - WHEN THE GROUND WIRE SIZE IS NOT SPECIFIED OR INDICATED ON THE CONTRACT DRAWINGS, PROVIDE WIRE SIZED IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 70.
  - GROUND RODS: PROVIDE 3/4" IN DIAMETER BY 10'-0" LARGE RODS
  - PROVIDE AN APPROVED TYPE OF NON-CORROSIVE METAL FASTENER.
  - ALL BURIED UNDERGROUND CONNECTIONS SHALL BE EXOTHERMIC.
  - DERIVE GROUND CONNECTIONS FROM THE NEAREST GROUND BAR. FOLLOWING EQUIPMENT SHALL BE GROUNDED.
    - METALLIC TANKS AND PIPES
    - NON-METALLIC TANKS OF LARGE SURFACE AREA
    - ALL ELECTRIC MOTOR BASES
    - ALL ELECTRICAL PANELS
    - ALL CONTROL SYSTEM PANELS
- LIGHTNING PROTECTION INSTITUTE (LPI)**
- THE SYSTEM DESIGN AND INSTALLATION SHALL BE PERFORMED UNDER DIRECT SUPERVISION OF A MASTER INSTALLER DESIGNER CERTIFIED BY LIGHTNING PROTECTION INSTITUTE. (LPI) PROVIDE A UL MASTER LABEL FOR THE SYSTEM.
  - PROVIDE LIGHTNING PROTECTION EQUIPMENT MANUFACTURES BY ONE OF THE FOLLOWING:
    - HANGER LIGHTNING PROTECTION, INC.
    - ERICA LIGHTNING PROTECTION SYSTEM
    - ROBBINS LIGHTNING PROTECTION SYSTEM OR APPROVED EQUAL
  - PROVIDE COPPER OR ALUMINUM MATERIALS WHICH CONFORMS TO UL 96. SIZE, WEIGHT AND CONSTRUCTION SHALL SUIT THE APPLICATION IN ACCORDANCE WITH LPI & NFPA CODE REQUIREMENTS FOR CLASS 1 STRUCTURES.
  - CONDUCTORS:
    - ROOF CONDUCTORS: UL LISTED CONDUCTORS OF 28 STRANDS OF 14 GA ALUMINUM WIRE WEIGHING 114 LBS PER 1000 FT
    - DOWN CONDUCTORS FROM ROOF TO GROUND 29 STANDS OF 17 GAGE COPPER WIRE, MINIMUM.
  - AIR TERMINALS:
    - ROOF RIDGE: 1/2 INCHED BY 18 INCHED SOLID ALUMINUM.
    - AIR TERMINAL BASE: CASE ALUMINUM WELT BOLT PRESSURE CABLE CONNECTIONS. CRIMP TYPE CONNECTIONS ARE NOT ACCEPTABLE.
  - CONDUCTOR FASTENED SHALL BE OF NON-CORROSIVE METAL FASTENERS WITH AMPLE STRENGTH TO SUPPORT THE CONNECTORS.
  - LIGHTNING PROTECTION INSTALLATION AND MATERIALS SHALL COMPLY WITH:
    - LPI 175, LIGHTNING PROTECTION INSTITUTE INSTALLATION CODE
    - NFPA -780, LIGHTNING PROTECTION SYSTEMS
    - UL 96, LIGHTNING PROTECTION COMPONENTS
    - UL 96A, INSTALLATION REQUIREMENTS OF LIGHTNING PROTECTION SYSTEMS.
    - ALL APPLICABLE ASTM STANDARDS.

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1

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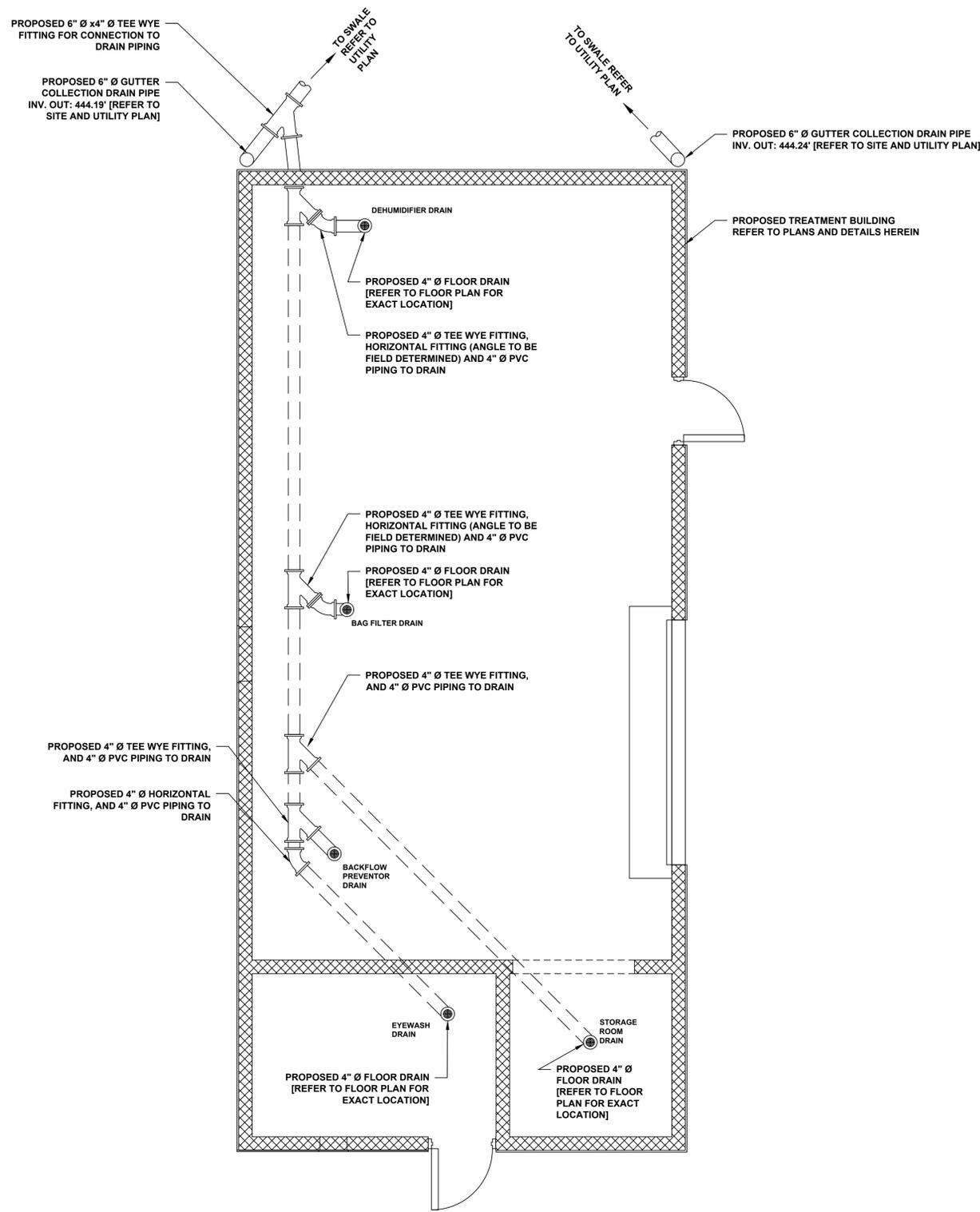
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03/11/2022

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- Land Surveyors -  
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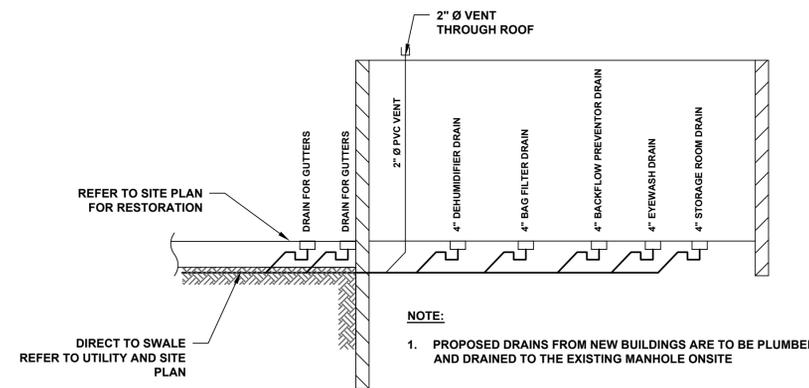
**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE  
ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK  
FOR CLIENT: **SUEZ WATER NEW YORK INC.**

PROJECT NUMBER:  
SCE-12162.001  
SCALE:  
N.T.S.  
SHEET 16 OF 22  
REVISION A

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**PLUMBING FLOOR PLAN**  
N.T.S.



**FLOOR DRAIN RISER DIAGRAM**  
N.T.S.

**NOTE:**  
1. PROPOSED DRAINS FROM NEW BUILDINGS ARE TO BE PLUMBED AND DRAINED TO THE EXISTING MANHOLE ONSITE

CONSULTANT:  
**ANDREW S. HOLT, PE**  
NY PROFESSIONAL ENGINEER: 095020-1  
  
DATE: 03/11/2022

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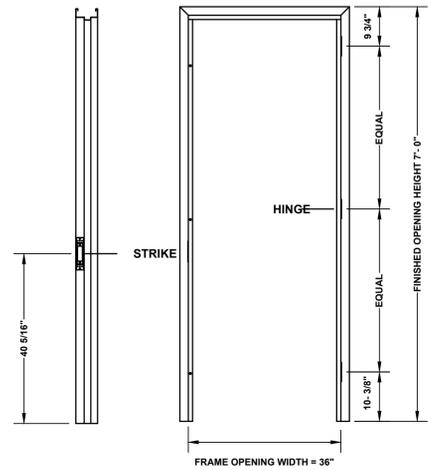
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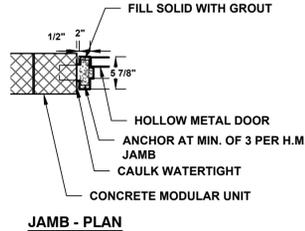
**SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE**  
**ECKERSON WELL NO. 71**  
CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK  
FOR CLIENT: **SUEZ WATER NEW YORK INC.**  
**PLUMBING PLAN**

PROJECT NUMBER:  
SCE-12162.001  
SCALE:  
N.T.S.  
SHEET **17** OF **22**  
REVISION -

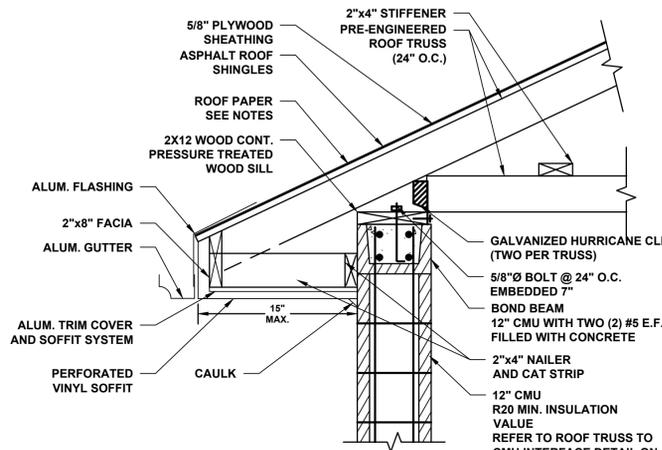
E:\SCE\Ramapo\12162.001\Sheets\Construction\12162.001 18 Construction Details Ldvg Mon, May 23, 2022 - 5:10pm wschurmann SUBURBAN CONSULTING ENGINEERS, INC.



**MASONRY WALL DOOR INSTALLATION DETAIL**  
N.T.S.

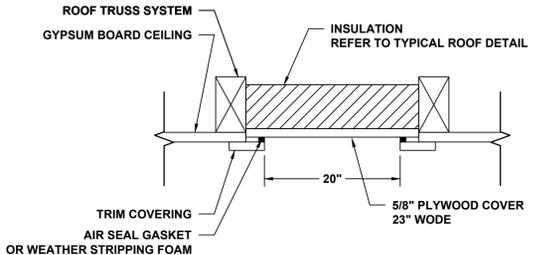


- JAMB - PLAN**
- NOTES:**
- HINGES SHALL BE 5 KUNCLE BALL BEARING HINGES, STAINLESS STEEL IN A SATIN FINISH, MANUFACTURED BY STANLEY OR APPROVED EQUAL.
  - EXIT DEVICE SHALL BE A YALE 6000 SERIES, MODEL 6100F SERIES (WIDE STYLE) WITH A 10 YEAR WARRANTY. DEVICE SHALL HAVE A SQUARE BOLT OPTION. SATIN STAINLESS STEEL.
  - EXIT DEVICE SHALL BE YALE SERIES 620F+50F OR APPROVED EQUAL WITH LOCKABLE DEVICES.
  - DOOR CLOSER SHALL BE NORTON 8000 SERIES OR APPROVED EQUAL.
  - DOOR SHALL HAVE DUTY STEEL KICK PLATE OR APPROVED EQUAL.



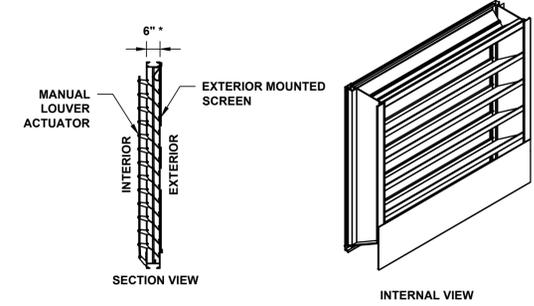
- CONSTRUCTION NOTES:**
- CONTRACTOR SHALL PROVIDE ACCESS OPENING (ATTIC SCUTTLE) WITH THE DIMENSIONS OF 20" X 30", LOCATED BETWEEN THE ROOF TRUSSES FOR ACCESS TO THE ATTIC AREA. REFER TO DETAIL THIS SHEET.
  - CONTRACTOR SHALL PROVIDE BOXED OUT AREAS FOR AIR RELEASE VALVE LOCATIONS, BETWEEN THE ROOF TRUSSES.
  - ATTIC SCUTTLE AND ARV BOX OUT LOCATIONS SHALL BE FIELD DETERMINED, BASED ON LOCATION OF PIPING AND ACCESSIBILITY.

**TYPICAL ROOF DETAIL**  
N.T.S.



**ATTIC SCUTTLE DETAIL**  
N.T.S.

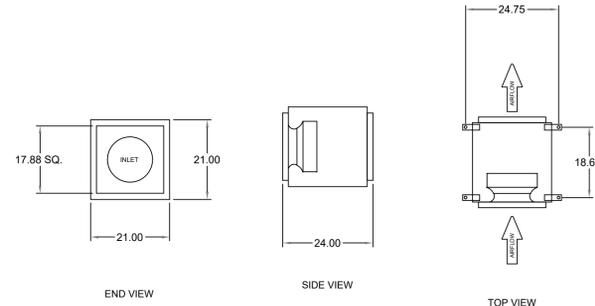
- NOTES:**
- ATTIC SCUTTLE TO BE INSTALLED BETWEEN THE WOODEN TRUSS SYSTEM.
  - ATTIC SCUTTLE IS TO BE A MINIMUM OF 20" WIDE AT 30" LONG.
  - LOCATION OF SCUTTLE TO BE FIELD DETERMINED, WHICH MUST HAVE A CLEAR HEADROOM OF NOT LESS THAN 30" WITHIN THE ATTIC SPACE.
  - TWO (2) ATTIC SCUTTLES ARE TO BE INSTALLED, ONE (1) ON EACH ROOF TRUSS SYSTEM.



**MANUAL OPERATED LOUVER DETAIL**  
N.T.S.

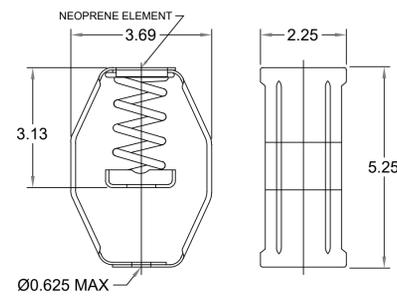
- NOTES:**
- HEATERS SHALL BE 480V, 3PH, DUCT HEATERS TO PROVIDE HEAT AND VENTILATION FOR THE SITE.
  - HEATERS SIZES SHALL BE 12"X12" FOR THE CHEMICAL FEED ROOM AND STORAGE ROOM, AND 16"X16" FOR THE MAIN ROOM.
  - DUCT HEATERS SHALL BE CONNECTED TO DUCTS SHALL BE 16"X16" AND SUPPORTED BY STEEL STRAPS, AS DIRECTED BY THE MANUFACTURER.

**ELECTRIC DUCT HEATER DETAIL**  
N.T.S.



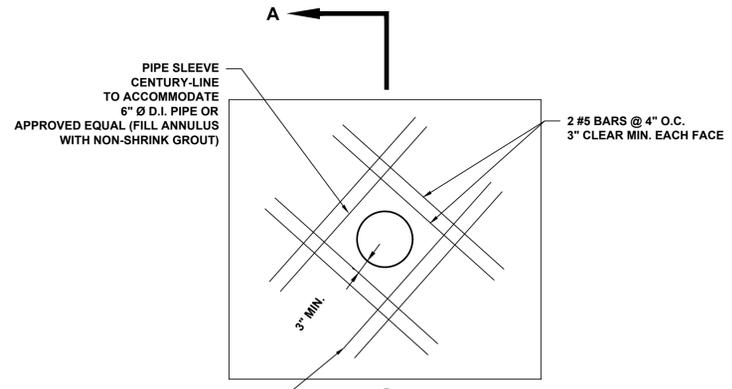
NOTE: GRRENHECK DIRECT DRIVE CENTRIFUGAL INLINE FAN, MODEL SQ-130-VG AS DEPICTED ABOVE

**INLINE FAN DETAIL**  
N.T.S.

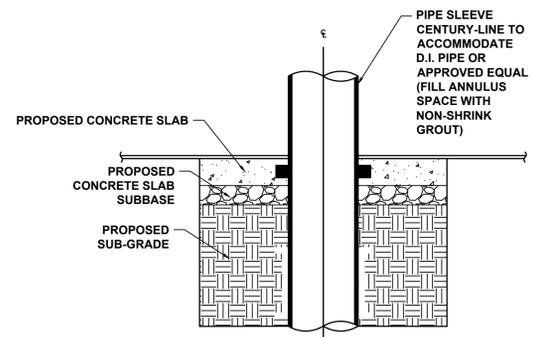


NOTE: GRRENHECK ISOLATE, SPRING, HANGING, 1 INCH DEFLECTION VIBRATION ISOLATOR, MODEL SH-1-70, AS DEPICTED ABOVE

**VIBRATION ISOLATOR FOR DUCT DETAIL**  
N.T.S.

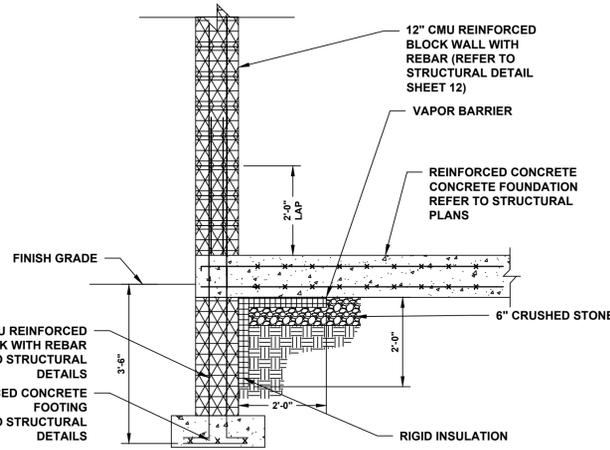


**PLAN VIEW**



**SECTION A-A**

**FLOOR PENETRATION DETAIL**  
N.T.S.



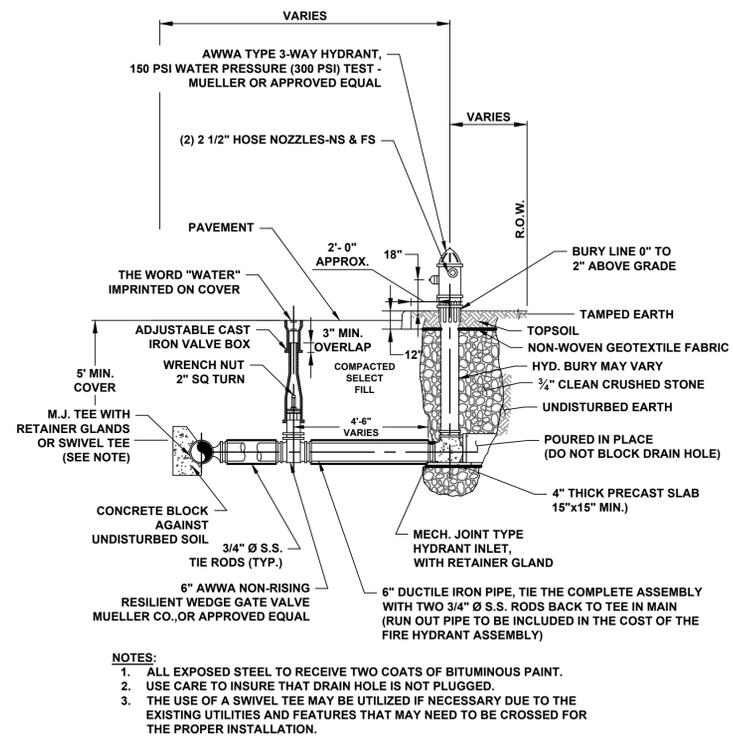
**TYPICAL WALL SECTION DETAIL**  
N.T.S.

<b>CONSULTANT:</b> <b>ANDREW S. HOLT, PE</b> NY PROFESSIONAL ENGINEER: 095020-1	<b>NOTICE</b> THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED. THIS DRAWING MAY NOT BE COPIED, REUSED, DISCLOSED, DISTRIBUTED, OR RELIED UPON FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF SUBURBAN ENGINEERING. ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID DIGITAL SEAL OR PAPER COPIES NOT CONTAINING A RAISED SEAL ARE NOT ORIGINALS AND MAY HAVE BEEN ALTERED. © COPYRIGHT 2022 SUBURBAN ENGINEERING ALL RIGHTS RESERVED	DRAWN BY: JAW 03/11/2022 CHECKED BY: WAS 03/11/2022 CHECKED BY:	 <b>SUBURBAN ENGINEERING</b> - Civil Engineers - - Landscape Architects - - Land Surveyors - 7 Cokebury Calton Road, Lebanon, NJ, 08833 - 973.398.1776 EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT	<b>SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE</b> <b>ECKERSON WELL NO. 71</b> CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK	PROJECT NUMBER: SCE-12162.001
				FOR CLIENT: <b>SUEZ WATER NEW YORK INC.</b>	SCALE: N.T.S.
<b>CONSTRUCTION DETAILS I</b>				SHEET 18 OF 22 REVISION A	

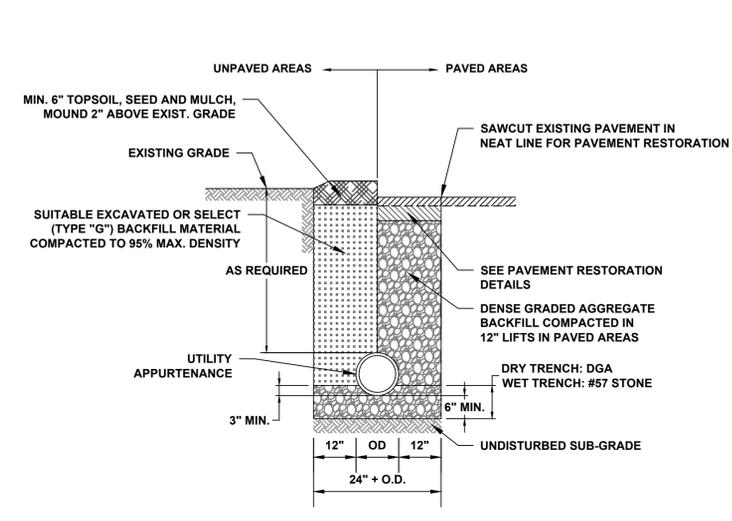
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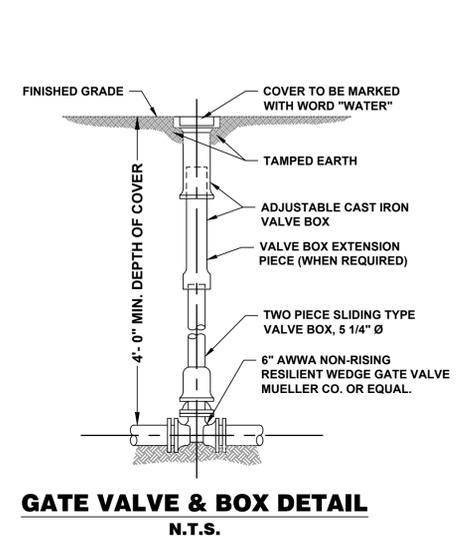
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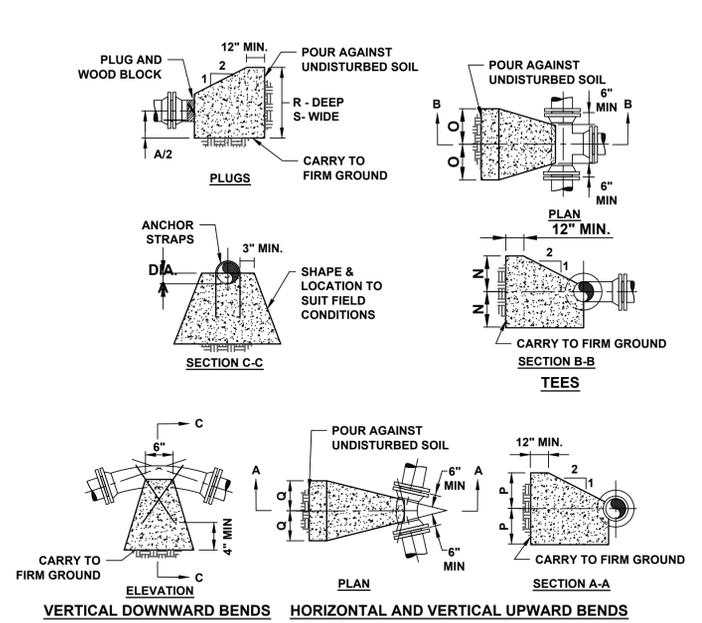
**TYPICAL HYDRANT INSTALLATION DETAIL**  
N.T.S.



**TYPICAL TRENCH DETAIL**  
N.T.S.



**GATE VALVE & BOX DETAIL**  
N.T.S.



**ANCHORAGE FOR VERTICAL BENDS**

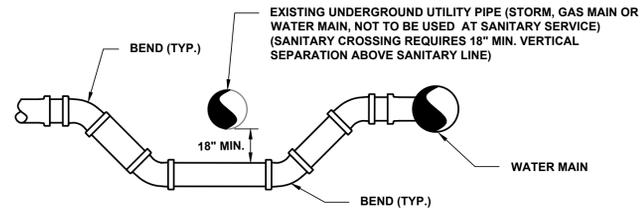
SIZE	REINFORCING BARS
6"	11-1/4" 3-#4 22-1/2" 3-#4 45"
8"	3-#4 3-#4 3-#4
10"	3-#4 3-#4 3-#5
12"	3-#4 3-#4 3-#5

ANCHORS FOR VERTICAL BENDS					
BEND	SIZE	SIZE			
		6"	8"	10"	12"
1/32 (11-1/4")	A	1'-6"	1'-6"	1'-8"	1'-11"
	B	1'-6"	2'-2"	2'-7"	2'-11"
	C	2'-0"	2'-2"	2'-7"	2'-11"
1/16 (22-1/2")	A	2'-0"	2'-2"	2'-4"	2'-6"
	B	2'-4"	2'-10"	3'-4"	3'-8"
	C	2'-4"	2'-10"	3'-4"	3'-8"
1/8 (45")	A	2'-0"	2'-5"	2'-8"	3'-0"
	B	3'-0"	3'-7"	4'-2"	4'-8"
	C	3'-0"	3'-7"	4'-2"	4'-8"

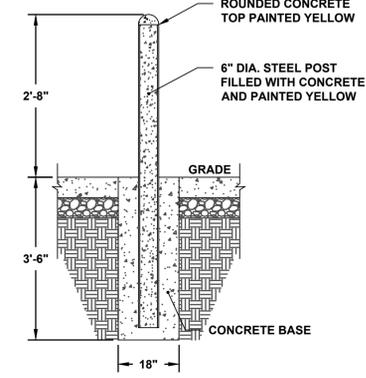
**THRUST BLOCK DETAIL**  
N.T.S.

**WATER MAIN RESTRAINT NOTES:**

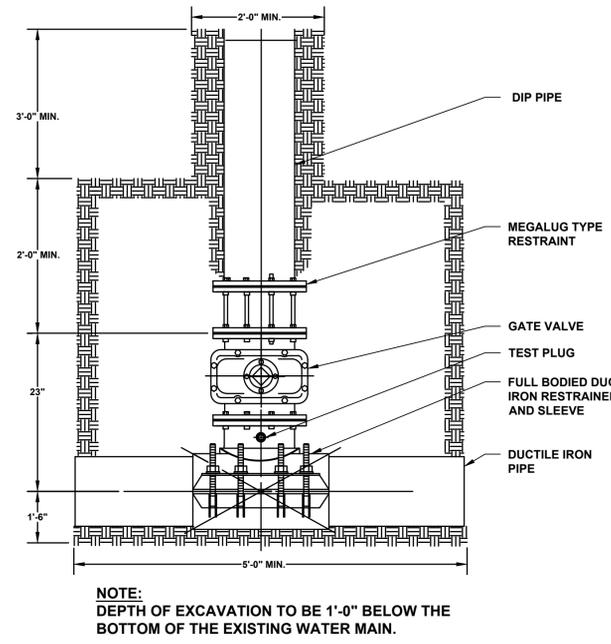
- JOINT RESTRAINT IS REQUIRED AT ALL FITTINGS, VALVES, AND AS NOTED ON THE PLANS.
- UNLESS OTHERWISE NOTED ON THE PLANS, THE CONTRACTOR CAN USE EITHER THRUST BLOCKS AND MECHANICAL JOINT GASKETS OR JOINT RESTRAINT PIPE, FOLLOWING THE RESTRAINT JOINT PIPE LENGTH FOR STANDARD PIPE FOUND ABOVE.
- EXISTING VALVES AND FITTINGS EXPOSED IN THE PROCESS OF WATER MAIN INSTALLATION SHALL BE PROPERLY RESTRAINED PER THE ENGINEER'S DIRECTION IN THE FIELD.



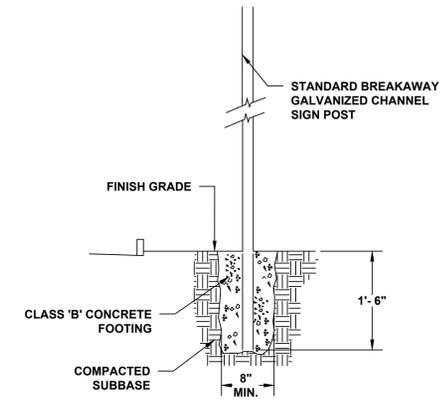
**TYPICAL UTILITY CROSSING DETAIL**  
N.T.S.



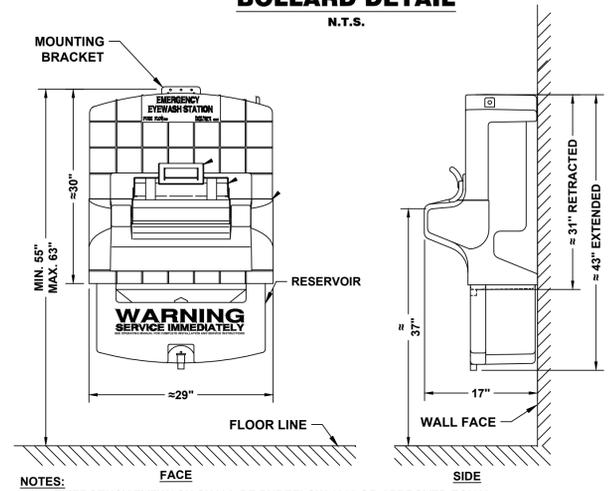
**BOLLARD DETAIL**  
N.T.S.



**WET TAP**  
N.T.S.

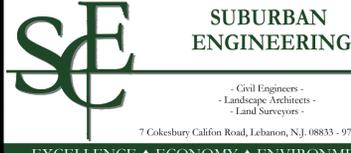


**SIGN INSTALLATION DETAIL**  
N.T.S.

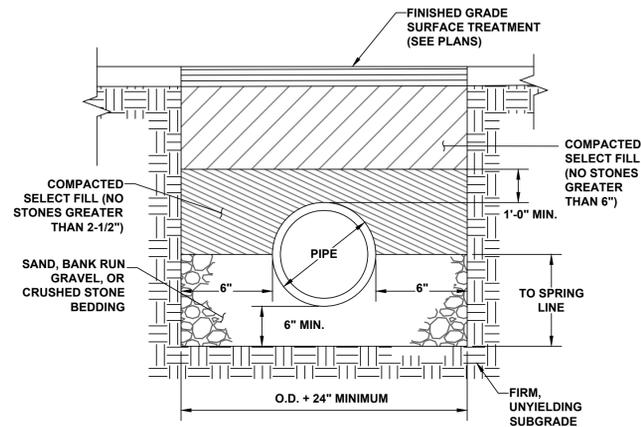


- NOTES:**
- EMERGENCY EYEWASH SHALL BE PUREFLOW 1000 OR APPROVED EQUAL.
  - CONTRACTOR SHALL INSTALL EYEWASH PER MANUFACTURER RECOMMENDATIONS
  - CONTRACTOR SHALL PROVIDE TWO (2) SETS OF SALINE CARTRIDGES, ONE TO INSTALL WITHIN THE EQUIPMENT, AND ONE TO BE USED AS A SPARE FOR EMERGENCIES.
  - CONTRACTOR IS REQUIRED TO ADEQUATELY SECURE THE EYEWASH STATION TO THE WALL AS REQUIRED.

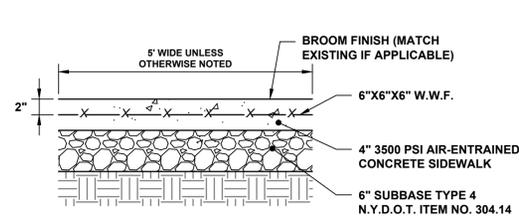
**EMERGENCY SALINE EYEWASH STATION**  
SCALE = N.T.S.

<b>CONSULTANT:</b> <b>ANDREW S. HOLT, PE</b> NY PROFESSIONAL ENGINEER: 095020-1	<b>NOTICE</b> THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED. THIS DRAWING MAY NOT BE COPIED, REUSED, DISCLOSED, DISTRIBUTED, OR BELIED UPON FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF SUBURBAN ENGINEERING ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID DIGITAL SEAL OR PAPER COPIES NOT CONTAINING A RAISED SEAL ARE NOT ORIGINALS AND MAY HAVE BEEN ALTERED. © COPYRIGHT 2022 SUBURBAN ENGINEERING ALL RIGHTS RESERVED	DRAWN BY: JAW 03/11/2022 CHECKED BY: WAS 03/11/2022 CHECKED BY:	 SUBURBAN ENGINEERING - Civil Engineers - - Landscape Architects - - Land Surveyors - 7 Cokesbury Calton Road, Lebanon, NJ, 08833 - 973.398.1776 EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT	<b>SUEZ WATER NEW YORK INC. - PFAS COMPLIANCE</b> <b>ECKERSON WELL NO. 71</b> CITY OF SPRING VALLEY, TOWN OF RAMAPO, COUNTY OF ROCKLAND, STATE OF NEW YORK FOR CLIENT: <b>SUEZ WATER NEW YORK INC.</b> <b>CONSTRUCTION DETAILS III</b>	PROJECT NUMBER: SCE-12162.001
					SCALE: N.T.S.

E:\SCE\Ramapo\12162.001\Sheets\Construction Set\12162.001 21 Construction Details III.dwg Thu, Mar 10, 2022, 5:24pm jwaskinson SUBURBAN CONSULTING ENGINEERS, INC.

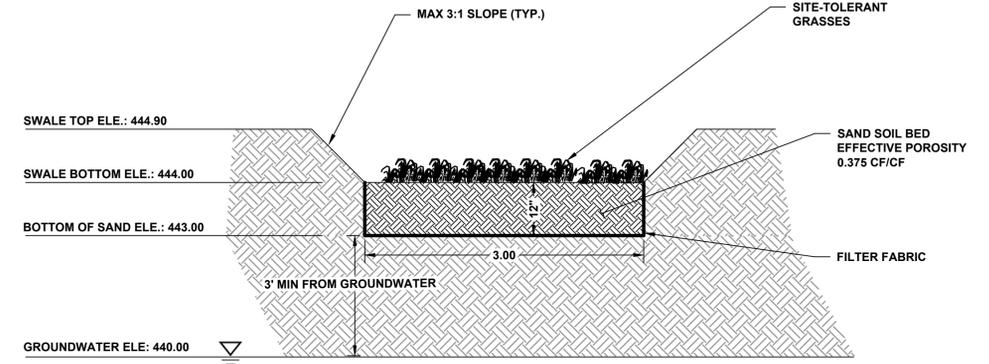


**SOLID DRAINAGE PIPE TRENCH**  
N.T.S.



- NOTES:**
- SUBBASE SHALL BE COMPACTED TO THE SATISFACTION OF THE ENGINEER.
  - EXPANSION JOINTS OF 1/2" WIDE BITUMINOUS CELLULAR TYPE JOINT FILLER WILL BE PROVIDED EVERY 12' MAX IN BOTH DIRECTIONS.
  - CONCRETE SURFACE SHALL BE SCORED AND TOOLED EVERY 5 FEET.
  - ALL EDGES SHALL BE FINISHED WITH AN EDGING TOOL WITH A RADIUS OF 1/4" INCH.
  - A 3/4" BITUMINOUS JOINT FILLER SHALL BE PLACED AT ALL JOINTS BETWEEN SIDEWALK, CURB, PAVEMENT, BUILDING, ETC.
  - THE CONCRETE SHALL BE FINISHED TO PRODUCE A SMOOTH FINISH AND THEN LIGHTLY BROOMED TO A UNIFORM TEXTURE.
  - A CLEAR MEMBRANE CURING COMPOUND SHALL BE USED UPON COMPLETION OF FINISHING.
  - ALL SIDEWALKS SHALL ADHERE TO ADA GUIDELINES.

**CONCRETE SIDEWALK DETAIL**  
N.T.S.



**REQUIRED STORAGE**

100-YEAR STORM BUILDING RUNOFF = 93 CF  
 INFILTRATION SWALE STORAGE VOLUME: 96 CF  
 INFILTRATION SURFACE AREA (@ ELEV. 444.00) = 49 SF  
 MAX WATER ELEVATION SURFACE AREA (@ ELEV. 444.90) = 177 SF

**INFILTRATION SWALE DRAIN TIME CALCULATION**  
 \*ASSUMES 0.5 IN/HR (0.041 FT/HR) (MINIMUM ALLOWABLE)

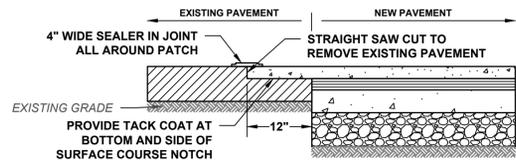
DRAIN TIME = (SWALE STORAGE VOLUME) / (INFILTRATION SURFACE AREA \* INFILTRATION RATE)  
 = 96 CF / (49 SF \* 0.041 FT/HR) = 47.78 HRS

**MAINTENANCE NOTES:**

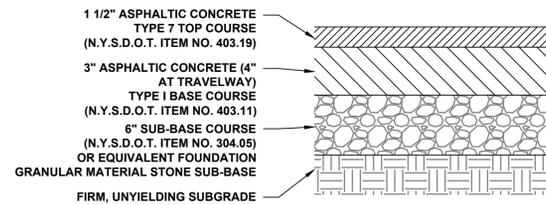
- ROUTINE MAINTENANCE OF THE SITE STORMWATER MANAGEMENT SYSTEM IS REQUIRED IN ORDER TO MAINTAIN THE STORMWATER CONVEYANCE AND CONTROL CAPABILITIES OF THE SYSTEM.
- PERIODIC INSPECTIONS OF THE ENTIRE STORMWATER MANAGEMENT (SWM) SYSTEM BY THE OWNER'S PERSONNEL SPECIFICALLY ASSIGNED TO THIS TASK, OR A DULY AUTHORIZED REPRESENTATIVE OF THE OWNER, SHOULD OCCUR AT A MINIMUM FREQUENCY OF ONCE PER MONTH, WITH ADDITIONAL INSPECTIONS AFTER SIGNIFICANT WEATHER EVENTS (E.G., SNOW, ICE, RAIN).
- THE STRUCTURE CONDITIONS DURING THE INSPECTION SHOULD BE RECORDED, AND A LOG OF INSPECTION DATES SHALL BE MAINTAINED.
- AT A MINIMUM, INSPECTIONS AND/OR MAINTENANCE OF THE SYSTEM SHOULD BE SCHEDULE AS FOLLOWS:

FACILITY COMPONENT	INSPECTION ITEM(S)	FREQUENCY
SWM SYSTEM - ABOVEGROUND (SEDIMENT AND DEBRIS TRAPPING COMPONENTS)	CLOGGING, EXCESSIVE DEBRIS, AND SEDIMENT ACCUMULATION	4 TIMES/YEAR AND AFTER EVERY STORM EVENT EXCEEDING 1" OF RAINFALL
UNWANTED VEGETATION	EXCESSIVE GROWTH (GRASS MOWING)	1 TIME / MONTH DURING GROWING SEASON
	UNWANTED GROWTH	1 TIME / YEAR (IF REMOVAL IS REQUIRED, DISRUPTION TO THE REMAINING VEGETATION SHOULD BE MINIMIZED)
	RESTORING / ESTABLISHING VEGETATIVE COVER WITH SEED AND ENVIRONMENTALLY FRIENDLY FERTILIZER(S) (ZERO PHOSPHATE)	2 TIMES / WEEK UNTIL VEGETATION IS ESTABLISHED (VEGETATION SHOULD BE MAINTAINED AT 85%)
	ESTABLISHED VEGETATION HEALTH DENSITY, AND DIVERSITY	2 TIMES / YEAR, 1 TIME DURING GROWTHING SEASON AND 1 TIME DURING NON-GROWING SEASON
	EROSION AND SCOUR	1 TIME / YEAR

**INFILTRATION SWALE**  
N.T.S.



**PAVEMENT BUTTING DETAIL**  
N.T.S.



**PAVEMENT SECTION**  
N.T.S.

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DATE: 03/11/2022		REVISIONS				CONSTRUCTION DETAILS IV				

