



VILLAGE OF OSWEGO PENN COURT LIFT STATION REHABILITATION

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LOCATION MAP
(NOT TO SCALE)

**FOR CONSTRUCTION
AUGUST 2024**

LEGEND

	EXISTING	PROPOSED
BUSH/SHRUB		
BYPASS		
CONSTRUCTION FENCE		
SILT FENCE		
FORCEMAIN		
GAS PIPE		
SAN. SEWER		
TREE - DECIDUOUS		
HYDRANT		



K. S. Archana

REGISTERED P.E., STATE OF ILLINOIS
11/30/25
EXPIRES



LICENSE #184.000813-0002
EXPIRES 4/30/2025

2655 WARRENVILLE RD.
DOWNERS GROVE, IL 60515

GENERAL NOTES

1. Division II, III and IV, and the applicable standard drawings of the "Standard Specifications for Water and Sewer Main Construction in Illinois 8th Edition" Updated January, 2020, shall govern the construction of the proposed improvement, except as modified or revised, and/or amended as shown on the plans, or called for on the contract document, and/or as ordered by the engineer. All the references in Division II, III and IV to Division I of the Standard Specifications shall be deleted and reference made to the applicable sections of the contract documents.
2. Construction provisions shall follow the "Standard Specifications for Road and Bridge Construction", adopted January 1, 2022 (referred to hereinafter as the Standard Specifications); the "Supplemental Specifications and Recurring Special Provisions", adopted January 1, 2024; the latest edition of the "Manual on Uniform Traffic Control Devices For Streets and Highways" (MUTCD); the Illinois Supplemental to MUTCD, adopted November 2021.
3. It shall be the contractor's responsibility to verify all dimensions and conditions existing in the field prior to ordering materials and beginning construction.
4. Contractor shall have one set of approved plans on site at all times.
5. Wherever obstructions not shown on the plans are encountered during the progress of the work and interfere to such an extent that an alteration in the plans is required, the Engineer shall be notified prior to any changes.
6. As-Built drawings shall be prepared by the contractor and submitted to the Engineer as soon as the project is completed. Any change in the length or location shall be shown in red.
7. Leakage testing and deflection testing shall be performed in accordance with Section 31-1.11B (3 & 4) of the "Standard Specifications for Sewer and Watermain Construction in Illinois", Latest Edition. Vacuum testing of the manholes shall be performed in accordance with ASTM C-1244.
8. Erosion control will be constructed in accordance with standard specifications for soil erosion and sediment control as contained in IEPA/WPC/87-012 or Current Edition.
9. It shall be the Contractor's duty and responsibility to ascertain and execute the means, methods and sequence of construction in accordance with the plans, specifications and other contract documents. This shall include, but shall not be limited to, the exclusive duty and responsibility to provide for workplace safety and worker supervision. It shall exclusively be the Contractor's duty and responsibility to investigate and ascertain the current physical state and operational status of the Village's water supply system and the Village's sanitary sewer system, including whether a water main or other vessel is operational, contains water, is pressurized or is otherwise safe to alter. Any information provided by the Village, or its employees and consultants, regarding the state of its water supply and sanitary sewer systems is provided as a courtesy to the Contractor but is not warranted to be true and may not be relied on by the Contractor in satisfaction of, or to diminish, its exclusive duty to ascertain and execute the means, methods and sequence of construction in accordance with the plans, specifications and other contract documents and its exclusive responsibility to provide for workplace safety and worker supervision.
10. If, in the Village's opinion, work shown on the plans is not required, the quantities and payment to contractor for those pay items will be deducted from the contract.
11. Any damage to private property or fences shall be replaced in kind or repaired at the contractor's expense.
12. Where section or sub-section monuments or benchmarks are encountered, the engineer shall be notified before such monuments are removed. The contractor shall protect and carefully preserve all property iron pipes and monuments until an authorized surveyor or agent has witnessed or otherwise referenced their location.
13. All surplus, unsuitable and waste material shall be legally disposed of, at the contractor's expense, outside the limits of the project in a manner that public or private property will not be damaged or endangered.
14. The contractor will not be allowed to start construction until surface condition video recording (in digital format) is completed and the content approved by the Village.
15. Disturbance to all lawn areas shall be minimized. Trenches shall be backfilled to match existing grade. surface shall receive a minimum of 4" topsoil, seed and blanket.
16. Contractor to bypass flow from both incoming sanitary sewer pipes to wet well. Contractor to submit bypass pumping plan to engineer prior to start of construction. Contractor is fully responsible for maintaining sewer service during these operations and shall not be allowed to backup or flood any sewer system user, building, or property.
17. The suggested bypass plan is shown on sheet 5 of the planset.

18. The contractor shall maintain access to emergency vehicles and residents at all times. At least one lane of traffic must be open at all times.
19. Access to driveways must be available at all times.

MATERIAL LIST

1. PIPE: All piping shall be AWWA C115 Class 53 ductile iron flanged pipe. Fittings shall be AWWA C110 ductile iron flanged joins.
2. STRUCTURAL LINING : The protective lining system shall be a multi layer/component protective lining system including Polyurea Adhesion Coating, Polymer surface layer, and final polyurea armor layer.

UTILITIES NOTES

1. The locations of existing underground utilities, such as water mains, sewers, gas and electric lines, etc., as shown on the plans have been determined from the best available information and is given for the convenience of the contractor. However, the engineer and owner do not assume responsibility for the accuracy of the locations shown. It shall be the contractor's responsibility to contact all utility companies and their facilities shall be located prior to any work.
2. The location, size and depth of the water mains, storm sewers and/or various utilities, as shown on the plans, are from the latest and best available information to the engineer. It shall be the contractor's responsibility to have utilities located and to coordinate construction activities with all utility companies in order to maintain services during construction at no additional expense to the contract.
3. Before starting any excavation, the contractor shall call "JULIE" at 1-800-892-0123 for field locations of buried utilities (48-hours notification is required).

SANITARY NOTES

1. Lift station wet well and valve vault shall be thoroughly cleaned of dirt and debris, and all visible leakage eliminated, before final inspection and acceptance.
2. If sanitary force main installation fails to meet the test requirements specified, the contractor shall determine the cause or causes of the defect and shall, at his own expense, repair or replace all materials and workmanship as may be necessary to comply.
3. The contractor shall maintain flows through existing sewer systems at all times. The existing structures shall be inspected before construction starts. Any accumulation of material in the structure due to construction operations shall be removed by the contractor at his expense.
4. If floats are removed during wet well rehabilitation, the contractor shall coordinate with the Village to ensure that floats are reinstated to pre-construction set points.
5. When existing drainage facilities are disturbed, the contractor shall provide and maintain temporary outlets and connections for all private or public drains, sewers or structures. The contractor shall provide facilities to take in all storm water which will be received by these drains and sewers, and discharge the same. The contractor shall provide and maintain an efficient pumping plan, if necessary, and a temporary outlet. The contractor shall be prepared at all times to dispose of the water received from temporary connections until such time as the permanent connections with sewers are built and in service.
6. Contractor shall coordinate with the Village and Fox Metro Water Reclamation District (FMWRD) and haul all sewage to the agreed disposal site.

EROSION CONTROL

1. Soil erosion control measures shall be in accordance with the "Procedures and Standards for Urban Soil Erosion and Sedimentation Control in Illinois" and as directed by the Village/Engineer.
2. All streets adjacent to the work site shall be kept free of dirt, mud and debris.
3. No sediment will be allowed to enter adjacent ditches or storm sewers. Inlet filters shall be installed and properly maintained during the project. See details.
4. Unless soil erosion items are specifically referred to in the specifications as bid items (such as silt fence, sod, etc.) they shall be considered incidental to the cost of the contract.
5. Any soil erosion control measures that are deemed necessary by the Village Engineer shall be implemented immediately by the contractor.

PROTECTIVE MEASURES

1. Contractor shall provide equipment and materials that will limit or prevent unnecessary damage to private/public lawns, driveways, aprons, bike paths, parkways, trees and landscaping.
2. The contractor will utilize rubber tracked/wheeled equipment and/or protective matting throughout the duration of the project.
3. Ingress and egress shall be restricted to specific locations on a daily basis to reduce the damage and stress to the established lawns and trees.

PROJECT NOTES

1. The contractor shall protect all existing utilities and infrastructure.
2. The contractor shall get approval by the Engineer and the Village before removing and replacing any water main or storm sewer.
3. The Contractor shall provide bypass pumping as needed to maintain the sewer service and to prevent sewage backups during construction.
4. On a daily basis, the work and the adjacent areas affected thereby shall be cleaned up and all rubbish, surplus materials, and unneeded construction equipment shall be removed and all damage repaired so that the public and private owners will be inconvenienced as little as possible. Upon completion of the work, these areas shall be left in a clean and neat condition.
5. No equipment or materials shall be left on Village streets or private property without prior authorization from the Village.
6. No work of any kind shall be done on Sundays or holidays in residential areas unless previously approved by the Engineer. These time restrictions shall not apply to maintenance or operation of safety and traffic control devices such as barricades, signs, and lighting, or to construction of an emergency nature. If the contractor requires additional time to complete a portion of the work on any given day or if he forseees the need to work extended hours for a number of days to comply with the construction schedule, he must receive the approval of the Engineer.
7. Contractor shall coordinate the shutdown of the force main with the Village for the final connection. All other installations, connections and required testing shall be completed prior to the shutdown.

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DESIGNED: AK	
DRAWN: SM	
CHECKED: YG	
DATE: AUGUST 2024	



PENN COURT LIFT STATION
REHABILITATION

GENERAL NOTES

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL:	KENDALL	9	2
VERTICAL:	STA.	TO STA.	
PROJECT NO. 11-4138-00			

VILLAGE OF OSWEGO
PENN COURT LIFT STATION REHABILITATION

SUMMARY OF QUANTITIES

ITEM NO.	DESCRIPTION	UNIT OF MEASURE	BID QUANTITY
1	PRE-CONSTRUCTION SURFACE TELEVISIONING	L SUM	1
2	BYPASS PUMPING	L SUM	1
3	TEMPORARY CONSTRUCTION FENCE	LF	80
4	DEMOLITION OF EXISTING EQUIPMENT WITHIN VALVE VAULT	L SUM	1
5	STRUCTURAL LINING, 5' DIA. - 20' DEEP WET WELL	L SUM	1
6	STRUCTURAL LINING, 5' DIA. - 7' DEEP VALVE VAULT	L SUM	1
7	MECHANICAL PIPING, VALVES AND QUICK CONNECT	L SUM	1

MATERIALS LIST

ITEM NO.	DESCRIPTION	UNIT	QTY
1	2" DIP PIPE	LF	5
2	2" CHECK VALVE	EACH	2
3	2" PLUG VALVE	EACH	2
4	2" QUICK CONNECT	EACH	1
5	2" 90° FITTING	EACH	2
6	2" TEE FITTING	EACH	1

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DRAWN: SM	
CHECKED: YG	
DATE: AUGUST 2024	



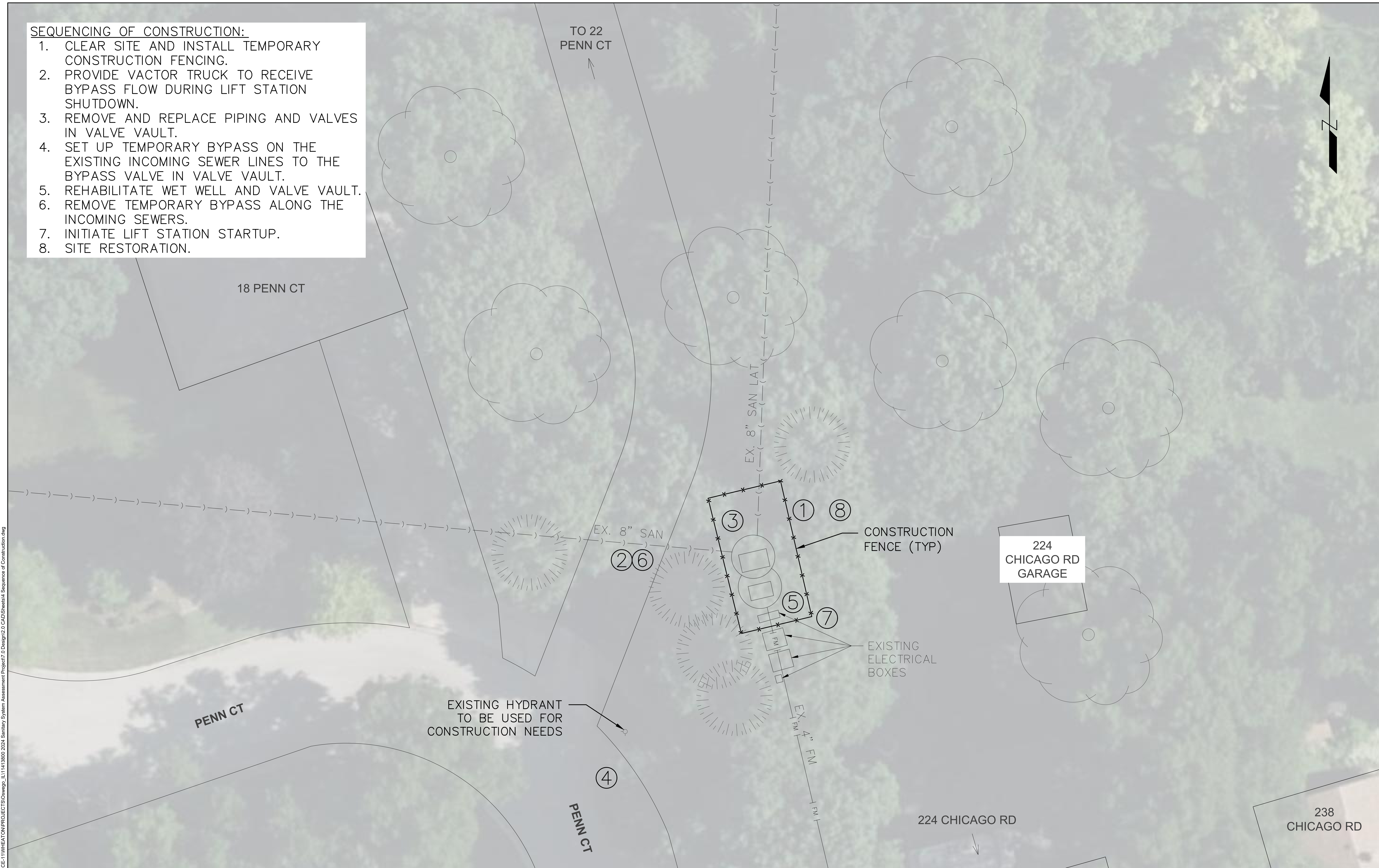
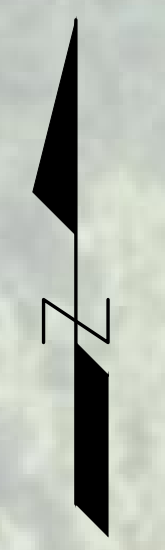
PENN COURT LIFT STATION
REHABILITATION

SUMMARY OF QUANTITIES
& MATERIALS LIST

SCALES		COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL:		KENDALL	9	3
VERTICAL:		STA.	TO STA.	
PROJECT NO. 11-4138-00				

SEQUENCING OF CONSTRUCTION:

1. CLEAR SITE AND INSTALL TEMPORARY CONSTRUCTION FENCING.
2. PROVIDE VACTOR TRUCK TO RECEIVE BYPASS FLOW DURING LIFT STATION SHUTDOWN.
3. REMOVE AND REPLACE PIPING AND VALVES IN VALVE VAULT.
4. SET UP TEMPORARY BYPASS ON THE EXISTING INCOMING SEWER LINES TO THE BYPASS VALVE IN VALVE VAULT.
5. REHABILITATE WET WELL AND VALVE VAULT.
6. REMOVE TEMPORARY BYPASS ALONG THE INCOMING SEWERS.
7. INITIATE LIFT STATION STARTUP.
8. SITE RESTORATION.



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DRAWN: SM	
CHECKED: YG	
DATE: AUGUST 2024	



PENN COURT LIFT STATION
REHABILITATION

SEQUENCE OF
CONSTRUCTION

SCALES		COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL:	1" = 10'	KENDALL	9	4
VERTICAL:	1" = 10'	STA.	TO STA.	
PROJECT NO. 11-4138-00				

BYPASS NOTES:

1. CONTRACTOR SHALL INSTALL FLOW-THROUGH BYPASS PLUGS PRIOR TO REHABILITATION OF WET WELL AND VALVE VAULT.
2. FOR THE DURATION OF REHABILITATION, ALL UPSTREAM FLOW SHALL BE BYPASSED TO THE VALVE VAULT.
3. FOR THE DURATION OF THE REPLACEMENT OF THE PIPING AND VALVES INSIDE THE VALVE VAULT THE CONTRACTOR SHALL COORDINATE TEMPORARY SHUT DOWN OF THE LIFT STATION. CONTRACTOR SHALL COORDINATE WITH THE VILLAGE AND ARRANGE FOR A VACTOR TRUCK TO BYPASS ALL THE UPSTREAM FLOW TO FMWRD.

TO 22 PENN CT

TO 18 PENN CT

EX. 8" SAN

EX. 8" SAN LAT

FLOW THROUGH PLUGS TO BE INSTALLED ON INCOMING 8" SANITARY INLETS (TYP)

EXISTING WET WELL
5' DIAMETER
RIM: 650.89'
INV: 631.20'
NW IN INV: 634.30'
N IN INV: 634.00'

BYPASS FLOW FROM BOTH WET WELL INLETS TO BYPASS VALVE IN VALVE VAULT

EXISTING VALVE VAULT
5' DIAMETER
RIM: 650.89'
INV: 644.08'
S OUT INV: 650.07'

EXISTING ELECTRICAL BOXES

PENN CT

EX. 4" FM

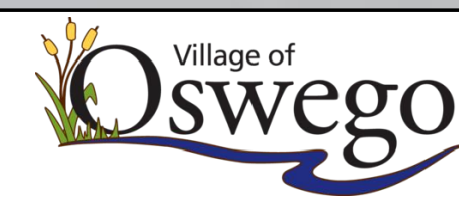
224 CHICAGO RD



224 CHICAGO RD GARAGE

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CHECKED: YG	
DATE: AUGUST 2024	



PENN COURT LIFT STATION
REHABILITATION

BYPASS PLAN

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: 1" = 5'	KENDALL	9	5
VERTICAL: 1" = 5'	STA.	TO STA.	
PROJECT NO. 11-4138-00			



LIFT STATION AREA



WET WELL TOPSIDE FACING NORTH



WET WELL WALL CORROSION



WET WELL DISCHARGE PIPE CORROSION



VALVE VAULT TOPSIDE FACING NORTH



VALVE VAULT CLOSE-UP



NORTHWEST MAINLINE IN-PIPE



NORTH LATERAL IN-PIPE

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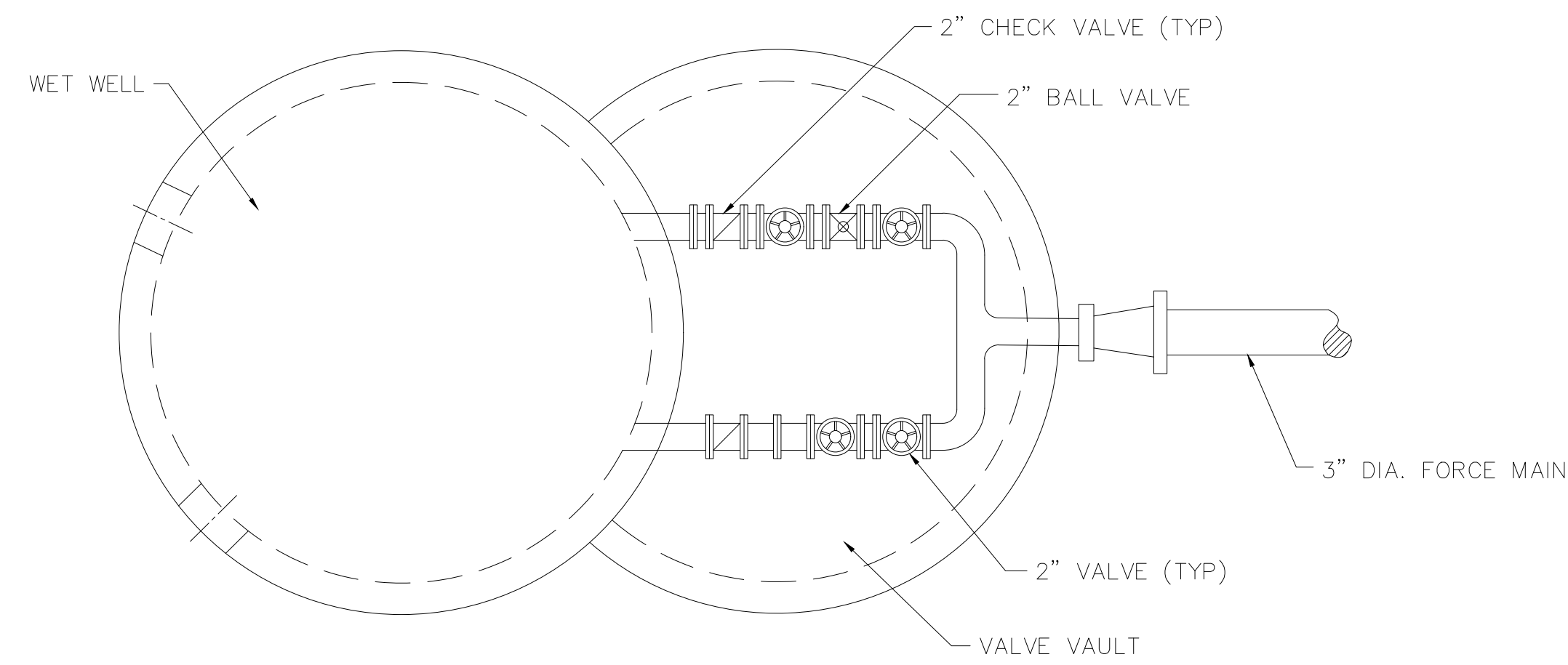
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DATE: AUGUST 2024	



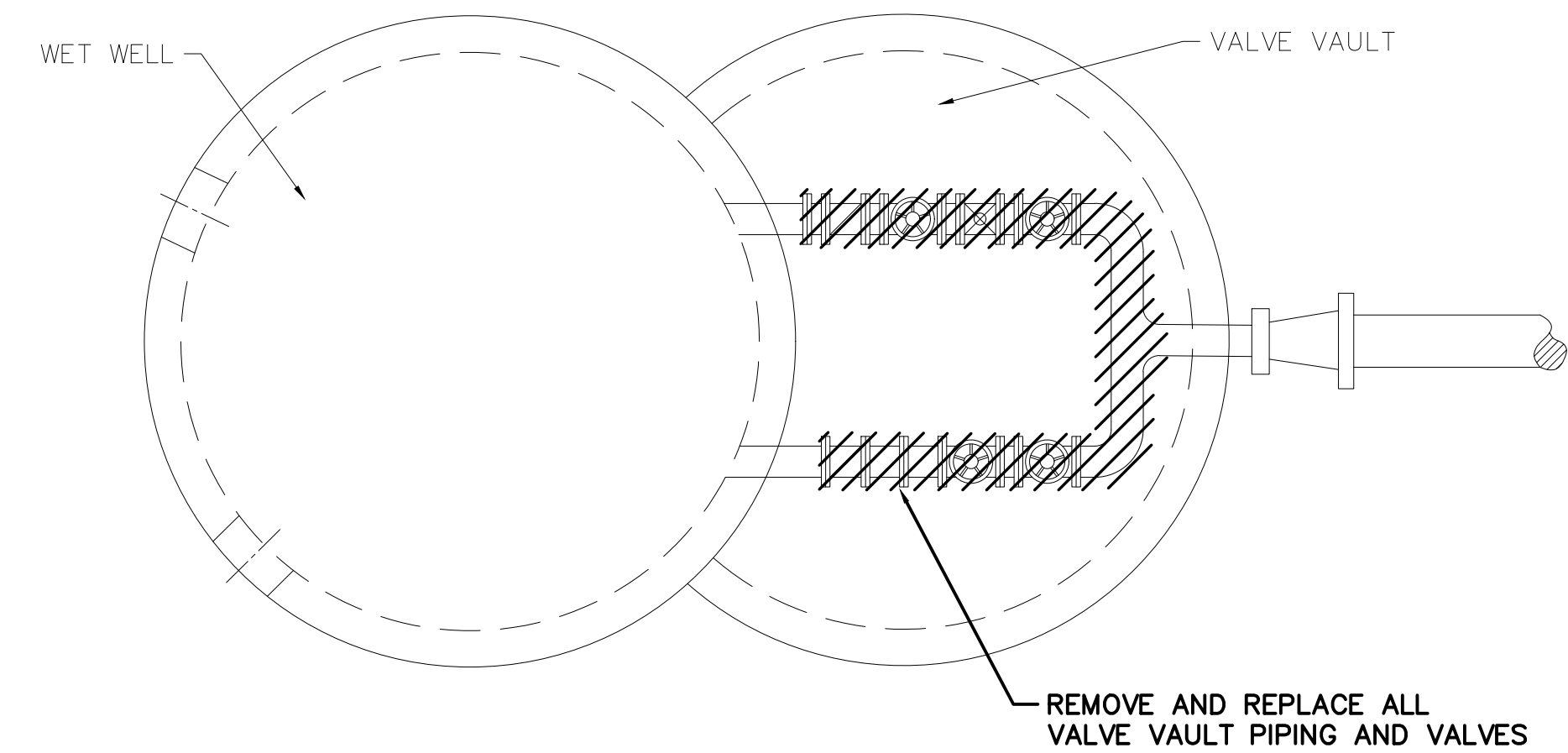
PENN COURT LIFT STATION
REHABILITATION

EXISTING CONDITIONS –
PHOTOS

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL:	KENDALL	9	6
VERTICAL:	STA.	TO STA.	
PROJECT NO. 11-4138-00			

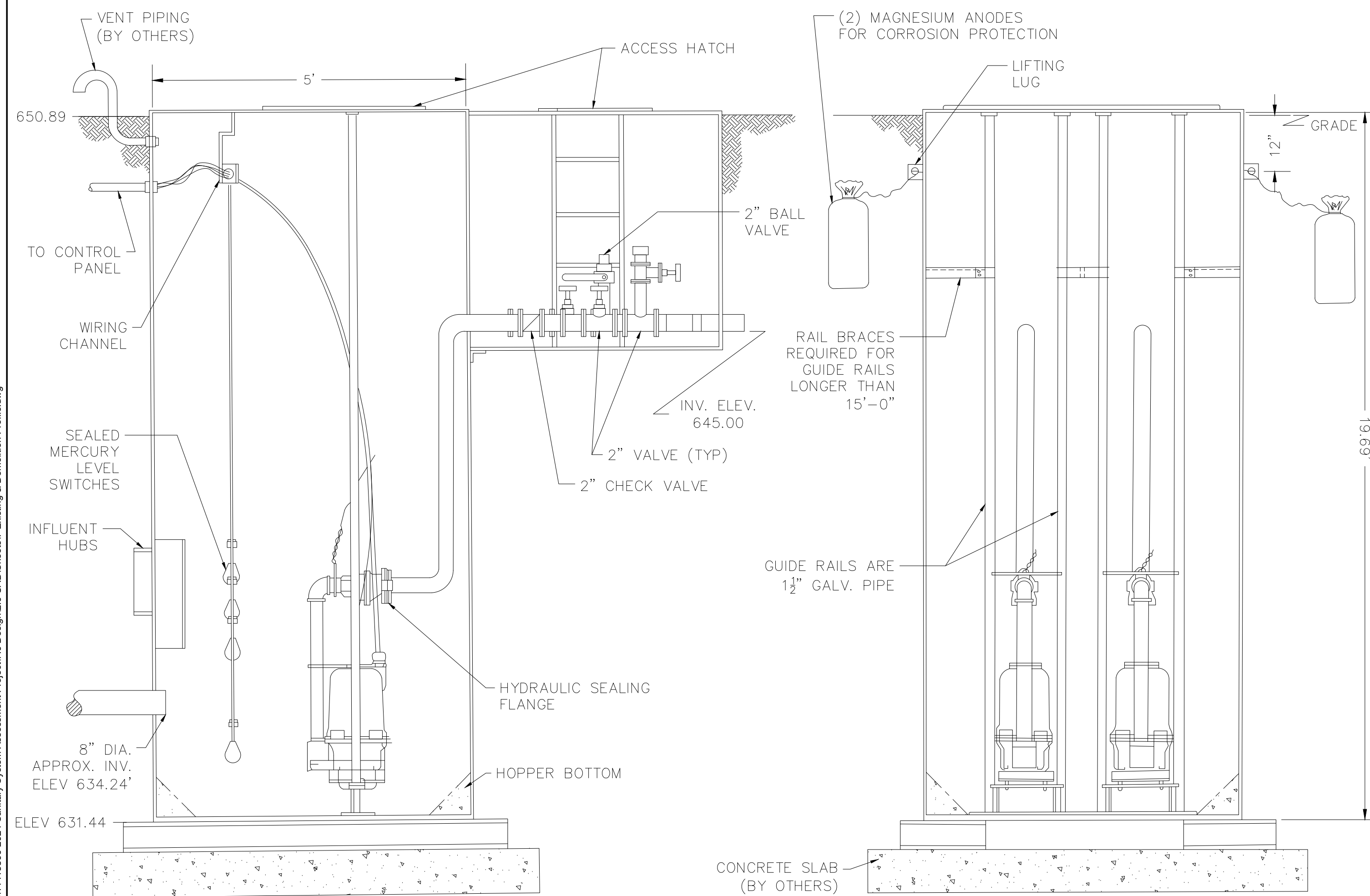


EXISTING PLAN



DEMOLITION PLAN

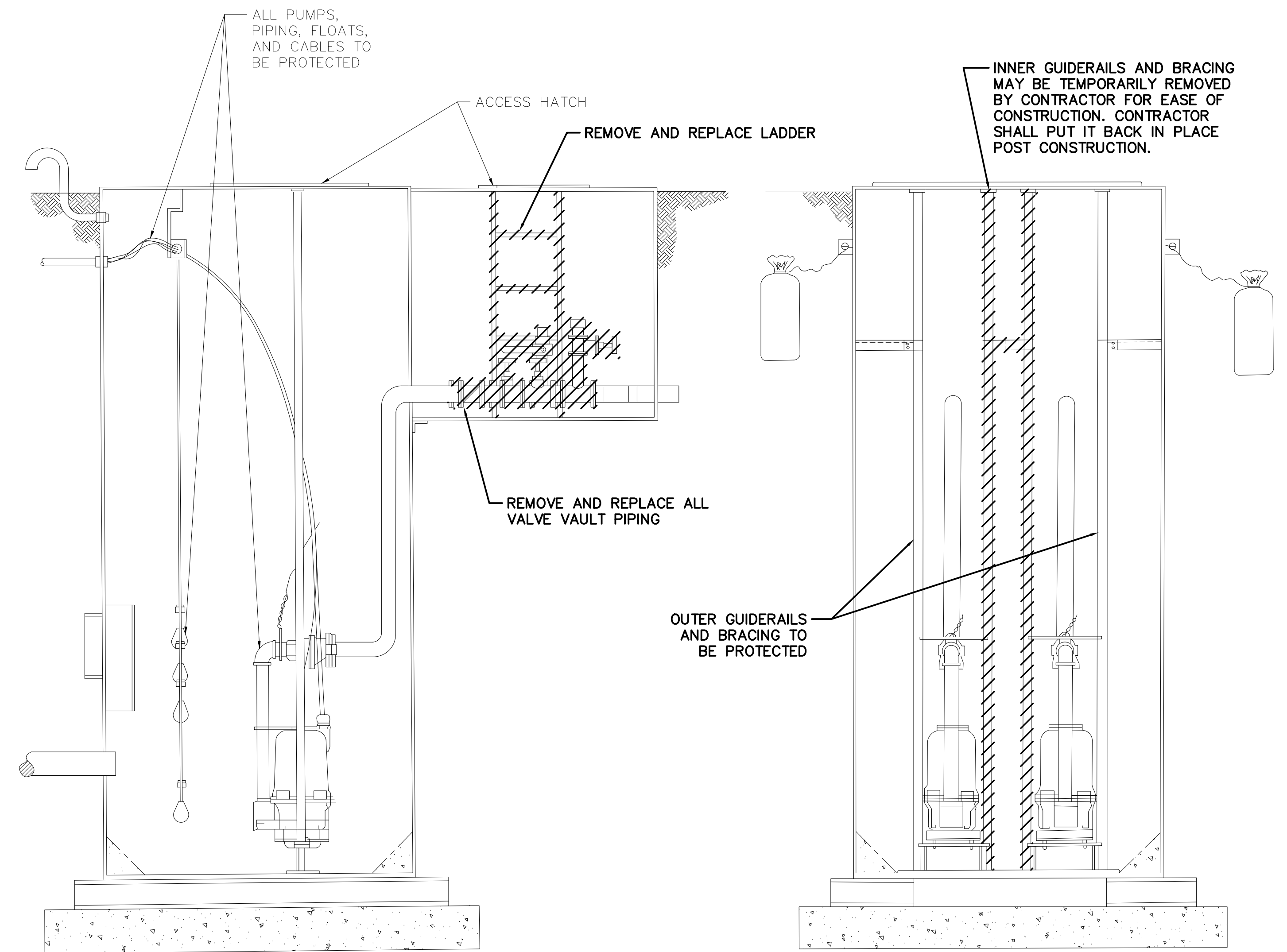
- NOTES:
1. CONTRACTOR TO FIELD VERIFY ALL PIPE SIZES BEFORE DEMOLITION.
 2. PUMPS NOT SHOWN FOR CLARITY.
 3. ALL PUMPS AND PIPING WITHIN WET WELL SHALL REMAIN IN PLACE THROUGHOUT THE ENTIRE DURATION OF THE PROJECT.



EXISTING PROFILE - EAST

EXISTING PROFILE - SOUTH

EXISTING PROFILE
NTS



DEMOLITION PROFILE - EAST

DEMOLITION PROFILE - SOUTH

DEMOLITION PROFILE
NTS

I:\Projects\11\WHEATON\PROJECTS\Oswego_IL11413809_2024_Sewer System Assessment\Project\0 Design\2.0 CAD\Sheets\7 Existing & Demolition Profile.dwg

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DATE: AUGUST 2024	

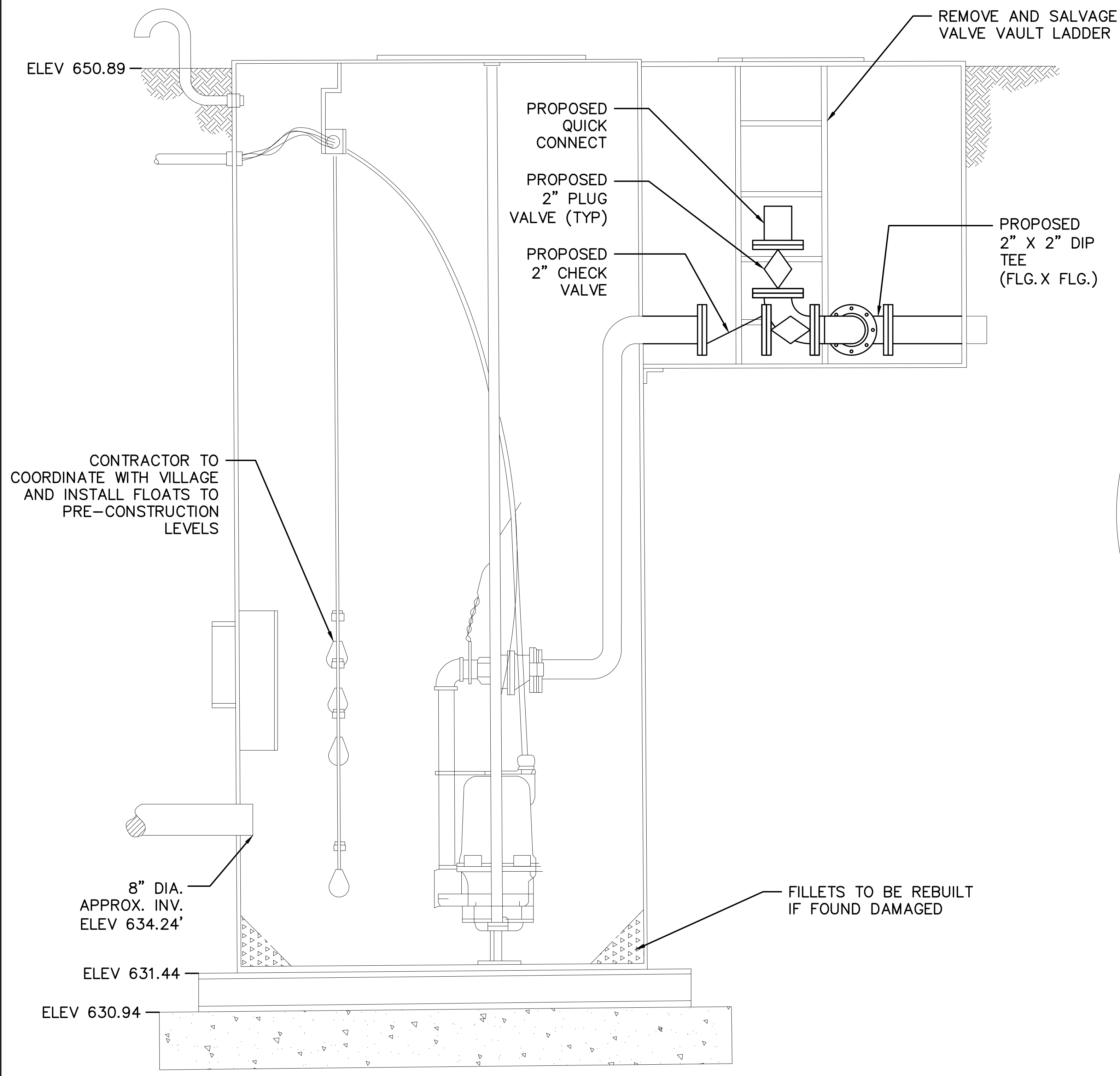


PENN COURT LIFT STATION
REHABILITATION

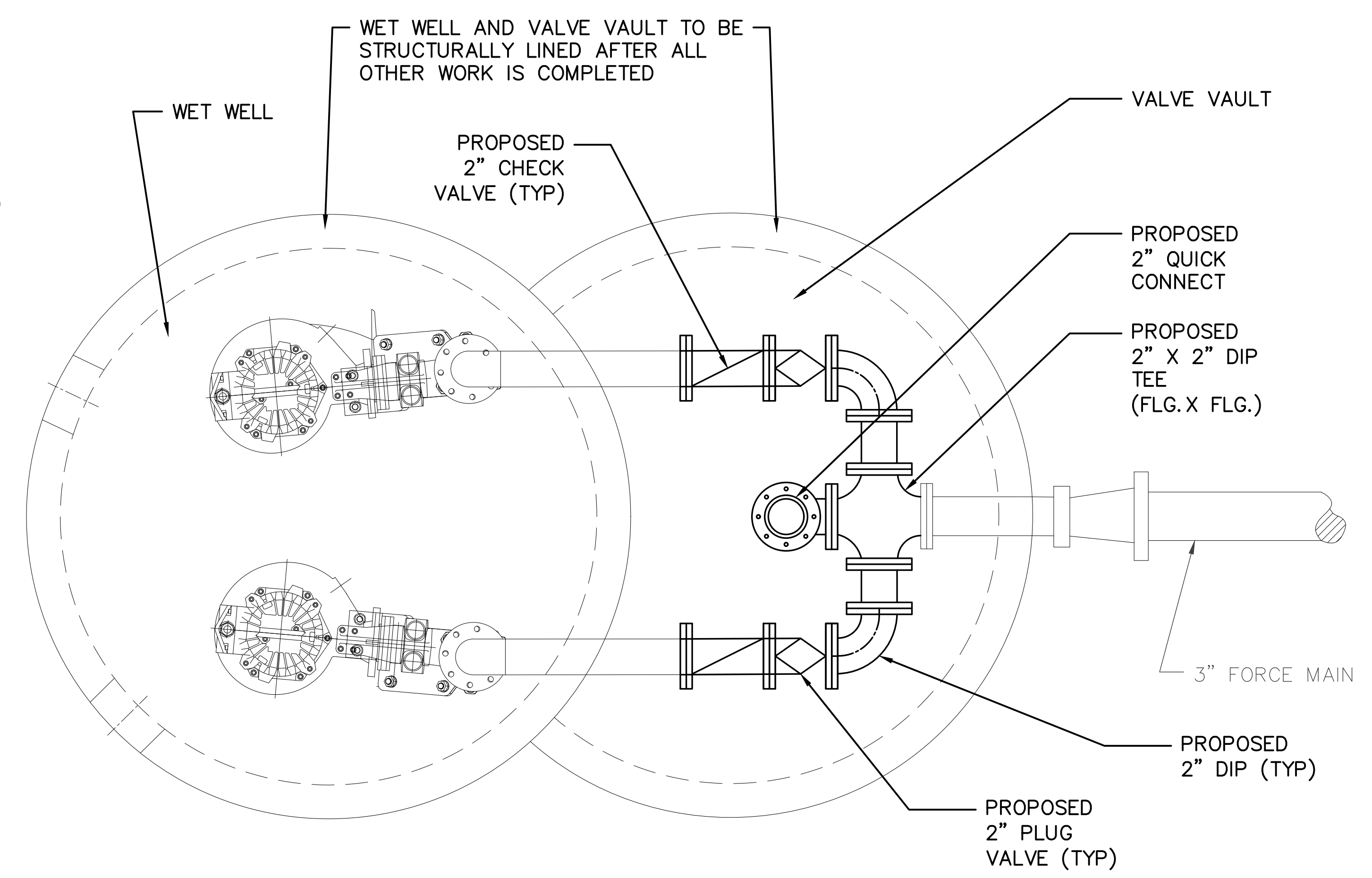
EXISTING & DEMOLITION
PROFILE

SCALES	COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL: NTS	KENDALL	9	7
VERTICAL: NTS	STA.	TO STA.	
PROJECT NO. 11-4138-00			

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PROPOSED PROFILE
NTS



PROPOSED PLAN
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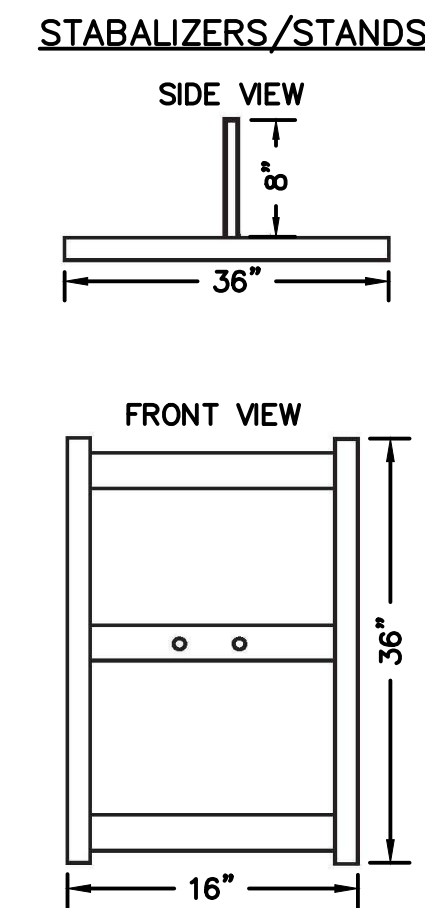
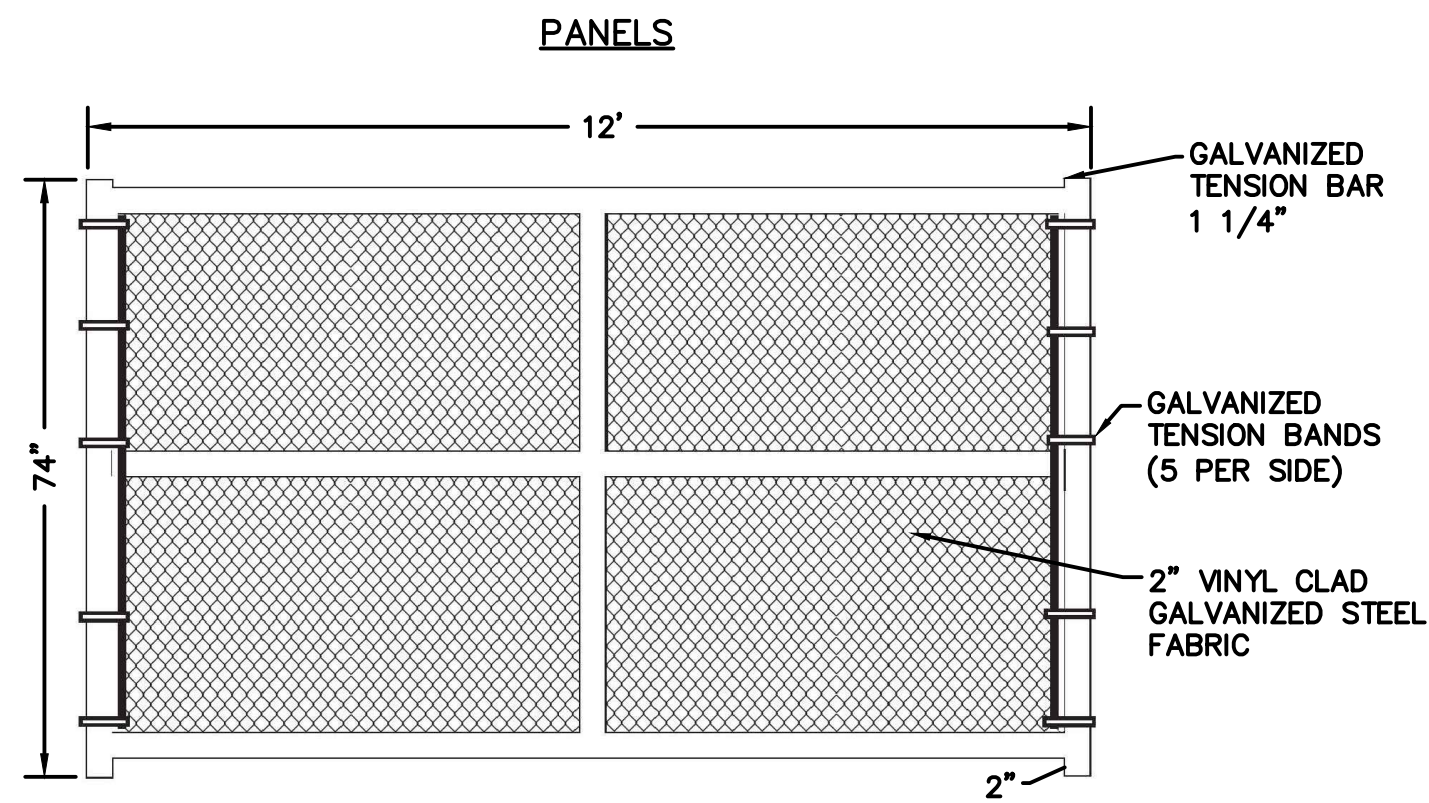
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DATE: AUGUST 2024	



PENN COURT LIFT STATION
REHABILITATION

PROPOSED MECHANICAL
PROFILE

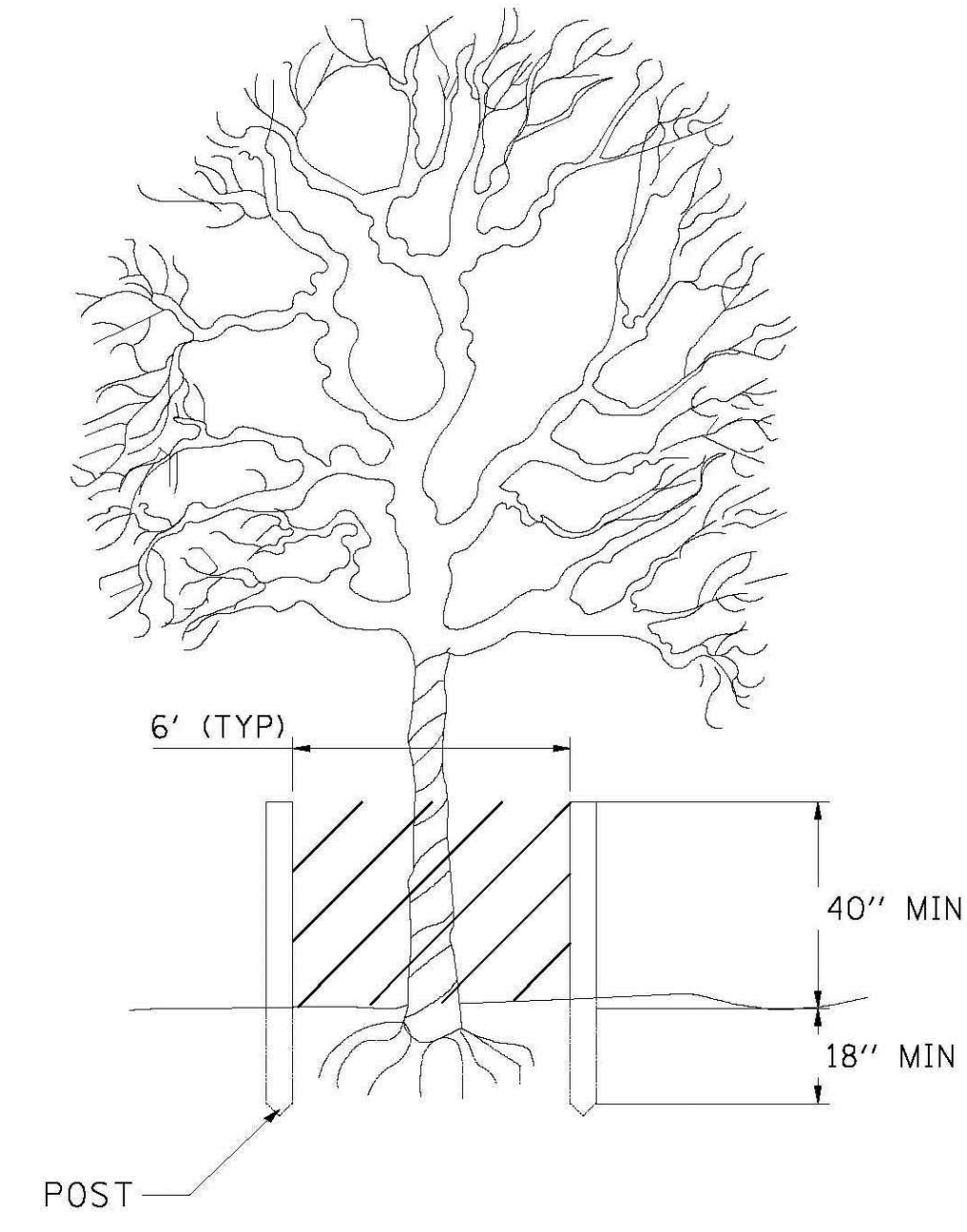
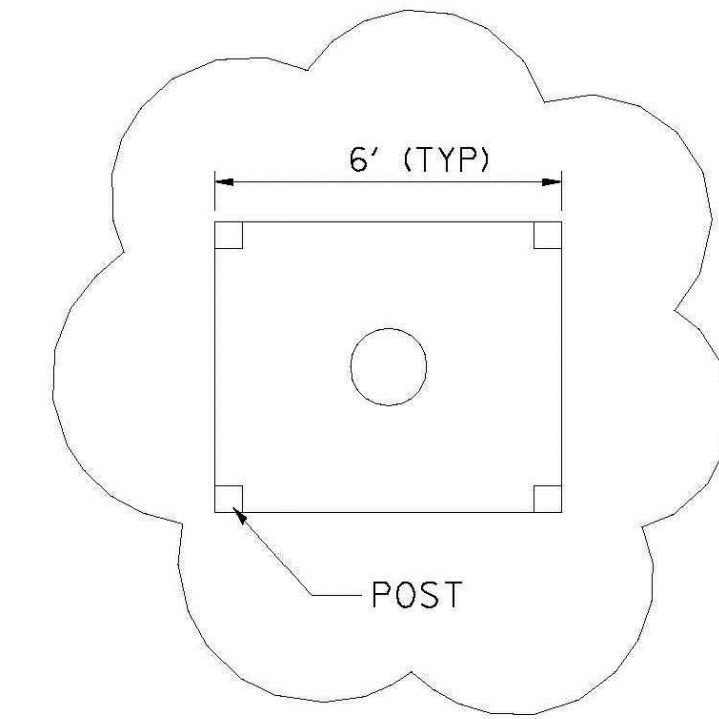
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VERTICAL: NTS	STA.	TO STA.	
PROJECT NO. 11-4138-00			



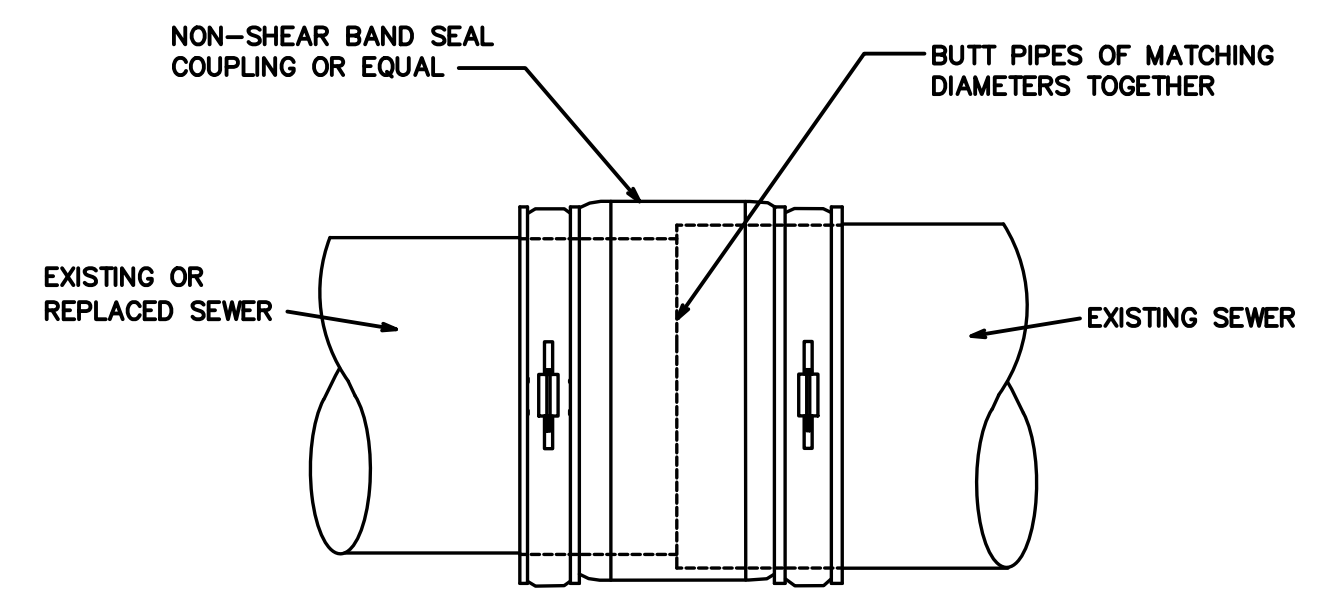
	HEIGHT	MESH	GAUGE
FABRIC	6'	2"	11
		O.D.	WALL
FRAMEWORK	1 3/8"	1.065"	

- NOTES:
- 2 X 11 GA WIRE FILL.
 - TENSION BANDS WITH NUTS AND BOLTS.
 - WIRE TIES EVERY 12 INCHES.

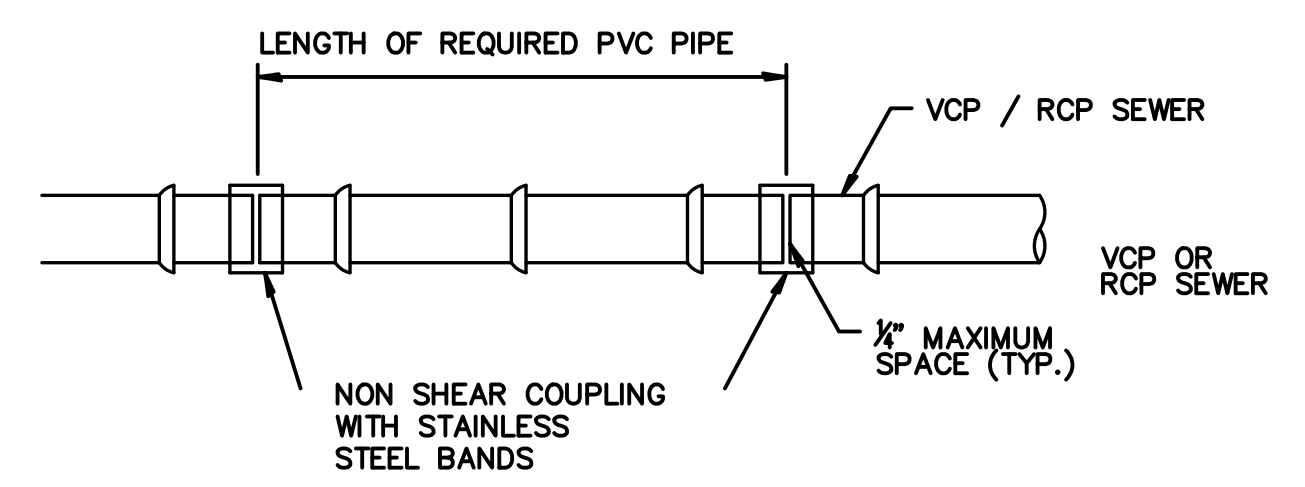
STANDARD TEMPORARY CONSTRUCTION FENCE PANEL DETAIL
NTS



TREE PROTECTION FENCING
NTS



PIPE COUPLING DETAIL
NTS



CONNECTING SEWER PIPES OF DISSIMILAR MATERIAL
NTS

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PENN COURT LIFT STATION
REHABILITATION

DETAILS

SCALES		COUNTY	TOTAL SHEETS	SHEET NO.
HORIZONTAL:		KENDALL	9	9
VERTICAL:		STA.	TO STA.	
PROJECT NO. 11-4138-00				