

VILLAGE OF HIRAM

CONSTANCE AVENUE LIFT STATION

PORTAGE COUNTY, OHIO

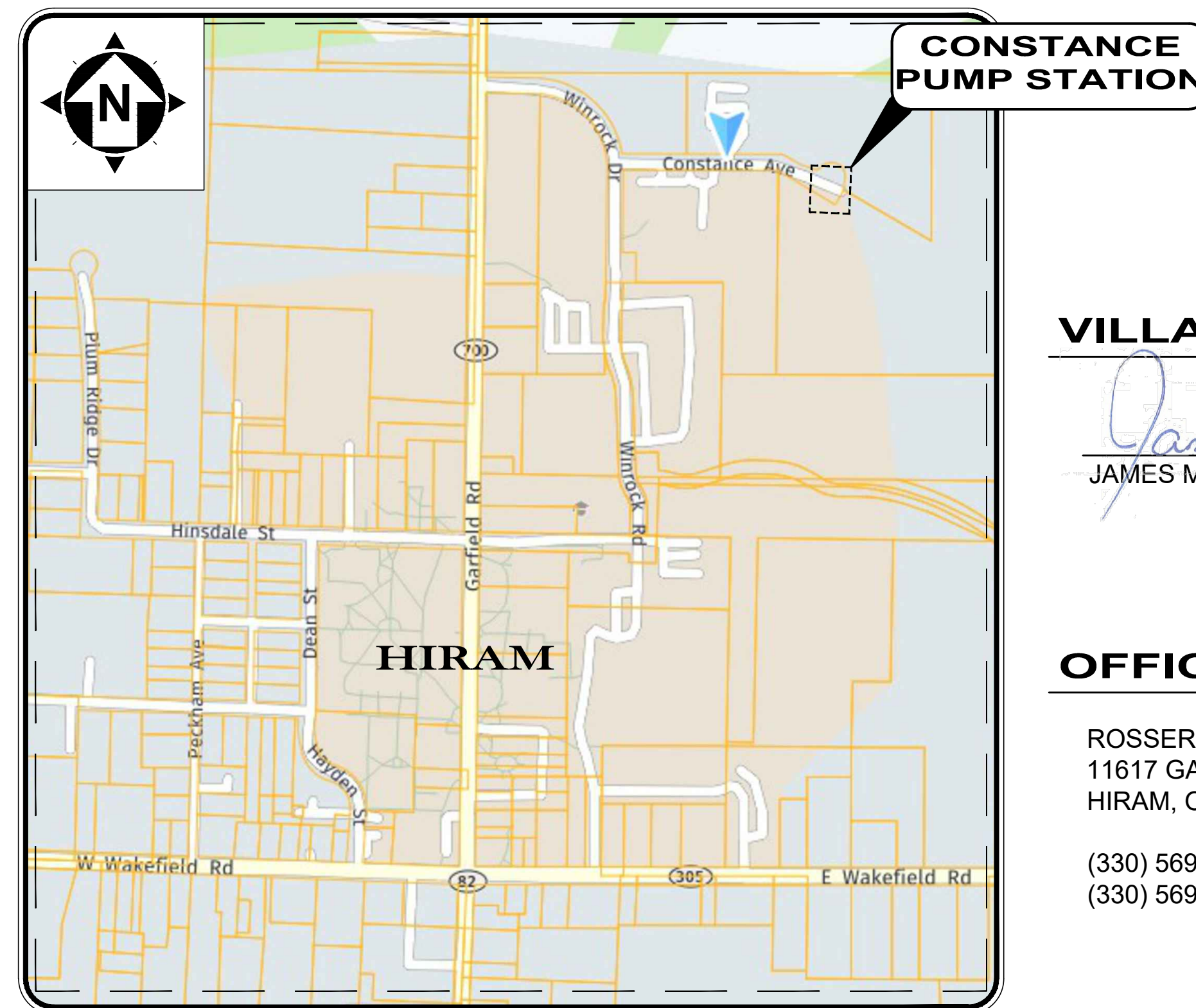
FEBRUARY 2024

COUNCIL:

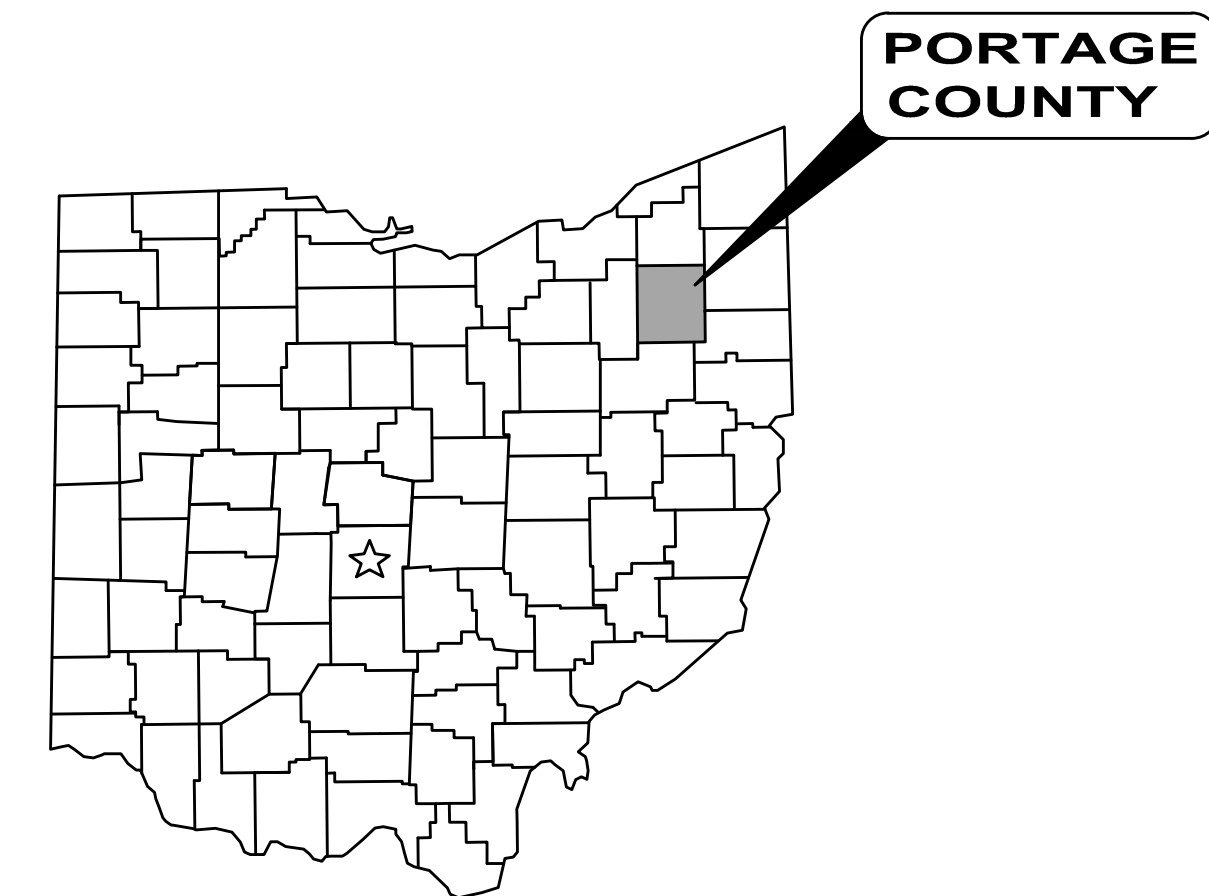
CHRIS SZELL	COUNCIL PRESIDENT
BETH GREENWOOD	COUNCIL MEMBER
FRANK HEMPHILL	COUNCIL MEMBER
CHRIS McCREIGHT	COUNCIL MEMBER
DAVID SMITH	COUNCIL MEMBER
PAUL SPENCER	COUNCIL MEMBER

ADMINISTRATIVE:

LOU BERTRAND	MAYOR
JAMES MCGEE	VILLAGE ADMINISTRATOR
SUSAN J. SKROVAN	FISCAL OFFICER
TOM REITZ	LAW DIRECTOR
STEVE SCHULLER	ASSISTANT VILLAGE ADMINISTRATOR



LOCATION MAP
NOT TO SCALE



VILLAGE ADMINISTRATOR:

James McGee
 JAMES MCGEE, VILLAGE ADMINISTRATOR 02.09.2024
 DATE

OFFICE:

ROSSER MUNICIPAL BUILDING
 11617 GARFIELD ROAD
 HIRAM, OH 44234

 (330) 569-7677 PHONE
 (330) 569-7128 FAX

DEPARTMENTS:

HIRAM VILLAGE WASTEWATER DEPARTMENT
 HIRAM VILLAGE WATER DEPARTMENT

 JAMES MCGEE
 VILLAGE ADMINISTRATOR

 (330) 569-7802 PHONE

ENGINEER:

CT CONSULTANTS, INC.
 3875 EMBASSY PARKWAY
 SUITE 200
 AKRON, OH 44333

 (330) 375-0800 PHONE
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Eric M. Fallon
 ERIC M. FALLON P.E.



P.E. No. 67551

02.09.2024
 DATE



NO	REVISION	DATE

VILLAGE OF HIRAM
 HIRAM CONSTANCE LIFT STATION
 PORTAGE COUNTY, OHIO
 GENERAL - 00 SERIES
 COVER SHEET

PROJECT NO.	230355
DISCIPLINE	GENERAL
SHEET NAME	00G-01
SHEET OF	01 11



- UNDERGROUND BUILDING SERVICE UTILITY LINES ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING, MAINTAINING AND REPLACING AS NECESSARY TO ENSURE CONTINUAL SERVICE TO BUILDINGS.
- THE CONTRACTOR IS RESPONSIBLE TO CALL OHIO UTILITIES PROTECTION SERVICE @ 1-800-362-2764, THREE WORKING DAYS PRIOR TO CONSTRUCTION.

ENGINEER'S PROJECT No. 230355

PORTAGE COUNTY WATER RESOURCES SANITARY SEWER GENERAL NOTES:

GENERAL:

- EXISTING UTILITIES SHOWN ARE FROM BEST AVAILABLE RECORDS AND FIELD INVESTIGATIONS, AND ARE NOT NECESSARILY COMPLETE OR EXACT. THE CONTRACTOR IS RESPONSIBLE FOR THE INVESTIGATION, LOCATION, SUPPORT, PROTECTION, AND RESTORATION OF ALL EXISTING UTILITIES AND APPURTENANCES WHETHER SHOWN ON THESE PLANS OR NOT. THE CONTRACTOR SHALL EXPOSE ALL UTILITIES OR STRUCTURES PRIOR TO CONSTRUCTION TO VERIFY THE VERTICAL AND HORIZONTAL EFFECT ON THE PROPOSED CONSTRUCTION AND SHALL MAKE ADJUSTMENTS IN ELEVATIONS. UTILITY SERVICES BROKEN OR DAMAGED SHALL BE REPAIRED AT ONCE TO AVOID INCONVENIENCE TO CUSTOMERS. STORM SEWERS SHALL NOT BE INTERRUPTED OVERNIGHT. THE CONTRACTOR SHALL CALL THE OHIO UTILITIES PROTECTION SERVICE (1-800-362-2764) THREE WORKING DAYS PRIOR TO WORK EXCLUDING SATURDAYS, SUNDAYS AND LEGAL HOLIDAYS.
- THE CONTRACTOR SHALL BASE HIS PROJECTED WORK SCHEDULES UPON THE FOLLOWING CRITERIA:
 - CONSTRUCTION HOURS SHALL BE FROM 8:00 AM TO 4:00 PM, MONDAY THROUGH FRIDAY - ONLY!
 - THE FOLLOWING GOVERNMENT HOLIDAYS SHALL BE OBSERVED BY THE CONTRACTOR:
 - NEW YEARS DAY
 - MARTIN LUTHER KING DAY
 - PRESIDENT'S DAY
 - MEMORIAL DAY
 - INDEPENDENCE DAY
 - LABOR DAY
 - COLUMBUS DAY
 - VETERAN'S DAY
 - THANKSGIVING DAY
 - THANKSGIVING DAY AFTER
 - CHRISTMAS DAY

SOIL BORES:

NO SOIL BORINGS WERE TAKEN AS PART OF THESE PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL TAKE ALL SOIL BORINGS HE DEEMS NECESSARY. AT LEAST 48 HOUR NOTICE MUST BE GIVEN TO THE OWNER, AND THE LOCATION OF ALL SOIL BORINGS ARE SUBJECT TO THE APPROVAL OF THE OWNER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DAMAGE RESULTING FROM DIGGING SOIL BORES AND HE SHALL RESTORE ALL PROPERTY TO A CERTAIN SIMILAR OR EQUAL TO THE CONDITION THAT EXISTING BEFORE SUCH DIGGING WAS DONE. THE CONTRACTOR SHALL NOTE ALL DEWATERING, SHEETING, ETC. WHICH SHALL BE REQUIRED FOR CONSTRUCTION DUE TO SOIL AND WATER CONDITIONS. COST FOR DEWATERING, SHEETING, ETC

SANITARY SEWERS:

- GRAVITY SEWERS SHALL HAVE FLEXIBLE ADAPTERS AT CONNECTIONS OF DISSIMILAR PIPE-CONCRETE COLLARS ARE NOT ACCEPTABLE.
- ALL CONSTRUCTION SHALL CONFORM TO THE DEPT. OF LABOR, BUREAU OF LABOR STANDARDS SAFETY AND HEALTH REGULATIONS FOR THE CONSTRUCTION AND THE CONTRACT WORK HOURS AND SAFETY ACT. (CHAPTER XVII TITLE C&R, PART 1926 AND ALL ADDITIONS AND REVISIONS).
- ALL WATER AND SANITARY OR STORM SEWER CROSSINGS SHALL HAVE AN EIGHTEEN INCH (18") MINIMUM VERTICAL SEPARATION OUTSIDE DIAMETER (O.D.) TO (O.D.) ALL WATER AND SANITARY OR STORM SEWER SHALL HAVE A TEN FOOT (10') MINIMUM HORIZONTAL SEPARATION (O.D.) TO (O.D.).
- ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE STRICTLY PROHIBITED.
- NO BRICK MANHOLE CONSTRUCTION WILL BE PERMITTED. MANHOLE CASTING AND COVER TO BE INDENTED SOLID TOP DESIGN WITH HIDDEN PICKHOLES. ALL LIDS TO BE LABELED "SANITARY SEWER", CASTING SHALL BE NEENAH R-1783-A WITH EXTRA HEAVY DUTY TYPE "B" LID (TOTAL WEIGHT APPROX. 470#) OR EAST JORDAN IRON WORKS CASTING 1522 WITH TYPE "A" LID. WHERE LABELED "WATERTIGHT" ON PLANS, LIDS SHALL BE SEALED WITH A NEOPRENE GASKET AND FOUR (4) 5/16" DIA. STAINLESS STEEL BOLTS.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE EXISTING SEWERAGE SYSTEM RESULTING FROM NON-CONFORMANCE WITH STANDARDS OR GENERAL NEGLIGENCE. ALL REPAIRS OR REPLACEMENTS MUST CONFORM TO CONTRACT DOCUMENTS.
- WHERE INLET AND OUTLET PIPES CONNECT TO MANHOLES A FLEXIBLE WATERTIGHT JOINT .

ROADWAYS & DUST CONTROL:

- TRAFFIC CONTROL SHALL BE IN ACCORDANCE WITH THE OHIO AND FEDERAL MANUALS OF UNIFORM TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL THOROUGHLY CLEAN OFF ALL ROADS OF ANY DIRT OR DEBRIS DAILY AND SHALL UTILIZE DUST CONTROL AS NECESSARY OR AS REQUESTED BY THE PCWR ENGINEERING INSPECTOR.
- ALL DISTURBED UTILITIES, SIGNS, GUARD RAIL, MAIL AND/OR PAPER BOXES, ROADWAYS AND DRIVEWAYS SHALL BE PUT TEMPORARILY IN SERVICE AT THE END OF EACH WORK DAY, UNTIL PERMANENT REPAIRS CAN BE COMPLETED. THE CONTRACTOR SHALL REPLACE ALL SIDEWALKS AND DECORATIVE ISLANDS WITHIN GRANTED WORK EASEMENTS.

EXISTING UTILITY LINES:

- ANY GAS SERVICE / MAIN LINES, WATER SERVICE / MAIN LINES, COMMUNICATIONS CABLE SERVICE / MAINS, OTHER UTILITY LINES OR UTILITY POLE (SHOWN OR NOT SHOWN ON THESE DRAWINGS) CONFLICT THAT REQUIRES TEMPORARY OR PERMANENT RELOCATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, WHO SHALL COORDINATE ALL RELOCATIONS WITH THROUGH THE OWNER OF THE UTILITY IN QUESTION. COSTS OF RELOCATIONS WILL BE RESPONSIBILITY OF OWNER OF THAT UTILITY.

UNDERGROUND UTILITIES

THE LOCATION OF EXISTING UNDERGROUND UTILITIES SHOWN ON THE PLANS WERE OBTAINED BY FIELD OBSERVATIONS, FROM EXISTING RECORDS, AND/OR FROM THE OWNERS OF THE RESPECTIVE UTILITIES. THE INFORMATION AS SHOWN IS BELIEVED TO BE CORRECT; HOWEVER, THE COMPLETENESS AND ACCURACY OF THIS INFORMATION CANNOT BE GUARANTEED. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT ALL THE VARIOUS UTILITY COMPANIES (PUBLIC AND PRIVATE) TO VERIFY THE EXISTENCE, LIMITS, AND/OR LOCATION OF ANY UTILITIES WHICH MAY BE ALONG THE ROUTE OR WITHIN THE VICINITY OF THIS IMPROVEMENT.

THE CONTRACTOR ACKNOWLEDGES THAT THE ADJACENT PROPERTIES ARE SERVICED BY THE UTILITIES AND THAT SERVICE LINES BETWEEN THE UTILITY MAINS AND RESIDENCES/COMMERCIAL BUILDINGS ARE PRESENT EVEN IF NOT SHOWN. CONTRACTOR FURTHER ACKNOWLEDGES THAT HE HAS INCLUDED THE COST TO AVOID AND WORK AROUND THESE SERVICES IS INCLUDED IN HIS BID.

UTILITY NOTIFICATION

AT LEAST TWO WORKING DAYS PRIOR TO COMMENCING OPERATIONS ON THIS PROJECT, THE CONTRACTOR SHALL NOTIFY THE VILLAGE ENGINEER, THE REGISTERED UTILITY PROTECTION AGENCY/SERVICE, AND THE OWNERS OF ANY OTHER UTILITIES (PUBLIC AND/OR PRIVATE) THAT MAY HAVE UTILITY LINES OR FACILITIES WITHIN THE VICINITY OF THIS PROJECT BUT WHO ARE NOT MEMBERS OF THE REGISTERED UTILITY SERVICE. THE OWNERS SHALL WITHIN 48 HOURS AFTER NOTICE IS RECEIVED, EXCLUDING SATURDAYS, SUNDAYS AND OTHER LEGAL HOLIDAYS: STAKE, MARK OR OTHERWISE DESIGNATE THE EXISTENCE AND/OR LOCATION OF THE UNDERGROUND UTILITY FACILITIES IN THE CONSTRUCTION AREA IN SUCH A MANNER AS TO INDICATE THEIR COURSE TOGETHER WITH THE APPROXIMATE DEPTH AT WHICH THEY WERE INSTALLED. THE MARKING AND/OR LOCATING SHALL BE COORDINATED TO STAY APPROXIMATELY TWO WORKING DAYS AHEAD OF THE PLANNED CONSTRUCTION.

OHIO UTILITIES PROTECTION SERVICE: 1-800-362-2764 (CONTACT NON-MEMBERS DIRECTLY).

NATURAL GAS
DOMINION ENERGY OHIO
320 SPRINGSIDE DRIVE
SUITE 320
AKRON, OHIO 44333
RELOCATION@DOMINIONENERGY.COM

ELECTRIC
OHIO EDISON
JOHN ZASSICK
6896 MILLS ROAD
SUITE 101
BRECKSVILLE, OHIO 44141

COMMUNICATIONS
WINDSTREAM OHIO
(606) 784-4140

CABLE
CHARTER COMMUNICATIONS (SPECTRUM)
JIM LONG
CONSTRUCTION SUPERVISOR
1200 BROWNSTONE AVE
AKRON, OHIO 44310
OFFICE 1.330.622.4106

WATER, SANITARY, STORM SEWERS
VILLAGE OF HIRAM
11617 GARFIELD ROAD
HIRAM, OHIO 44234
(330) 569-7802

CONTINGENCY QUANTITIES

WHEN SPECIFIED ON PLANS OR SPECIFICATIONS, CONTINGENCY QUANTITIES ARE TO BE PERFORMED ONLY UNDER DIRECTION OF THE ENGINEER. THE CONTRACTOR SHALL NOT ORDER ANY CONTINGENCY MATERIAL OR PERFORM ANY WORK UNTIL DIRECTED BY THE ENGINEER. THE ACTUAL WORK LOCATION AND QUANTITIES FOR SUCH ITEMS SHALL BE DOCUMENTED BY THE CONTRACTOR AND THE ENGINEER.

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ISSUE DATE: 03/13/2023			
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DRAWN BY: ELE			
CHECKED BY: RSS			

**VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
PORTAGE COUNTY, OHIO**

**GENERAL - 00 SERIES
GENERAL NOTES & SHEET LEGEND**

PROJECT NO.	230355
DISCIPLINE	PROCESS
SHEET NAME	00G-02
SHEET	02
OF	11

1. PROHIBITED CONSTRUCTION ACTIVITIES

- DISPOSING OF EXCESS OR UNSUITABLE EXCAVATED MATERIAL IN WETLANDS OR FLOODPLAINS, EVEN WITH THE PERMISSION OF THE PROPERTY OWNER;
- LOCATING STOCKPILE STORAGE AREAS IN ENVIRONMENTALLY SENSITIVE AREAS;
- INDISCRIMINATE, ARBITRARY, OR CAPRICIOUS OPERATION OF EQUIPMENT IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR OUTSIDE THE EASEMENT LIMITS;
- PUMPING OF SEDIMENT-LADEN WATER FROM TRENCHES OR OTHER EXCAVATIONS DIRECTLY INTO ANY SURFACE WATERS, ANY STREAM CORRIDORS, ANY WETLANDS, OR STORM SEWERS; ALL SUCH WATER WILL BE PROPERLY FILTERED OR SETTLED TO REMOVE SILT PRIOR TO RELEASE;
- DISCHARGING POLLUTANTS SUCH AS CHEMICALS, FUELS, LUBRICANTS, BITUMINOUS MATERIALS, RAW SEWAGE AND OTHER HARMFUL WASTE INTO OR ALONGSIDE OF RIVERS, STREAMS, IMPOUNDMENTS, OR INTO NATURAL OR MAN-MADE CHANNELS LEADING THERETO;
- PERMANENT OR UNSPECIFIED ALTERATION OF THE FLOW LINE OF ANY STREAM;
- DAMAGING VEGETATION OUTSIDE OF THE CONSTRUCTION AREA;
- DISPOSAL OF TREES, BRUSH, AND OTHER DEBRIS IN ANY STREAM CORRIDORS, ANY WETLANDS, ANY SURFACE WATERS, OR AT UNSPECIFIED LOCATIONS;
- OPEN BURNING OF PROJECT DEBRIS ;
- DISCHARGING INJURIOUS SILICA DUST CONCENTRATIONS INTO THE ATMOSPHERE RESULTING FROM BREAKING, CUTTING, CHIPPING, RILLING, BUFFING, GRINDING, POLISHING, SHAPING OR SURFACING CLOSER THAN 200 FEET TO PLACES OF RESIDENCES OR COMMERCIAL, PROFESSIONAL, QUASI-PUBLIC OR PUBLIC PLACES OF HUMAN OCCUPATION;
- STORING CONSTRUCTION EQUIPMENT AND VEHICLES AND/OR STOCKPILING CONSTRUCTION MATERIALS ON PROPERTY, PUBLIC OR PRIVATE, NOT PREVIOUSLY SPECIFIED ON THE PLANS BY THE ENGINEER FOR SUCH PURPOSES;
- RUNNING WELL POINT OR PUMP DISCHARGE LINES THROUGH PRIVATE PROPERTY OR PUBLIC PROPERTY AND RIGHTS-OF-WAY WITHOUT THE WRITTEN PERMISSION OF THE PROPERTY OWNER AND THE CONSENT OF THE ENGINEER;
- OPERATIONS ENTAILING THE USE OF VIBRATORY HAMMERS OR COMPACTORS OUTSIDE THE HOURS OR 8:00 AM AND 5:00 P.M. OR OUTSIDE THE HOURS ALLOWED FOR CONSTRUCTION BY LOCAL ORDINANCES OR REGULATIONS; AND
- CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE OR BOULEVARD WITHOUT THE PRIOR CONSENT OF MUNICIPAL OFFICIALS AND THE ENGINEER, AND CLOSING CLEAR ACCESS:
 - BY FIRE PROTECTION EQUIPMENT AND EMERGENCY VEHICLES;
 - BY THE PUBLIC TO ANY COMMERCIAL OR PROFESSIONAL PLACE OF BUSINESS, QUASI-PUBLIC OR PUBLIC ESTABLISHMENT, OR PLACE OF RESIDENCE; OR
 - BY VEHICLES TO DRIVEWAYS WITHOUT THE PROVISION OF ALTERNATIVE MEANS OF BUILDING INGRESS AND EGRESS.

2. MITIGATIVE MEASURES

EROSION/SEDIMENT CONTROL:

- SITE CLEARING AND GRUBBING SHALL NOT COMMENCE UNTIL SUCH TIME THAT THE CONTRACTOR IS PREPARED TO START CONSTRUCTION. REMOVE ONLY THOSE TREES, SHRUBS, AND GRASSES THAT MUST BE REMOVED FOR CONSTRUCTION OF ACTUAL FACILITIES; PROTECT THE REST TO PRESERVE THEIR AESTHETIC, HABITAT, AND EROSION CONTROL VALUES.
- IMMEDIATELY FOLLOWING SITE AND ACCESS CLEARING, TEMPORARY EROSION AND SEDIMENTATION CONTROLS SHALL BE INSTALLED. THEY WILL BE MAINTAINED IN EFFECTIVE OPERATING CONDITION DURING CONSTRUCTION UNTIL FINAL SEEDING AND SITE RESTORATION OCCURS.
- AT THE LIFT STATION CONSTRUCTION SITES INSTALL SILT FENCE BEFORE DISTURBING THE LAND THAT DRAINS INTO THEM.
- SILT FENCE WILL BE CONSTRUCTED AROUND THE LIFT STATION SITE TO COLLECT RUNOFF AND PREVENT SILT AND OTHER ERODIBLE MATERIALS FROM ENTERING LOCAL DRAINAGE COURSES.
- EXISTING TOPSOIL WILL BE STOCKPILED AND REPLACED UPON FINAL GRADING OF THE CONSTRUCTION SITE.
- EXTENSIVE AREAS OF STOCKPILED TOPSOIL AT THE CONSTRUCTION SITE ARE TO BE PROTECTED THROUGH THE USE OF TEMPORARY SEEDING AND MULCHING OR COVERING SUCH AS WITH ANCHORED STRAW MULCH. SILT BARRIERS WILL BE INSTALLED DOWN GRADIENT OF THESE AREAS ON CONTOUR AND WITH THEIR ENDS UP SLOPE OF THE CONTOUR TO PREVENT SILT LADEN RUNOFF FROM ENTERING WATERWAYS OR STORM SEWERS. WITHIN 15 DAYS OF COMPLETION OF CONSTRUCTION, ANY REMAINING SOIL MUST EITHER BE REMOVED OR PERMANENTLY STABILIZED.
- SILT FENCES SHOULD BE TRENCHED SIX TO TWELVE INCHES DEEP, THE FABRIC LAID IN THE TRENCH, AND THE SOIL PROPERLY BACKFILLED INTO THE TRENCH TO PREVENT UNDERCUTTING.
- WHERE TRENCH EXCAVATION OCCURS PARALLEL TO ANY WATERWAY, A VEGETATED BARRIER SHOULD BE MAINTAINED BETWEEN THE STREAM AND THE CONSTRUCTION SITE. ALL TRENCH SPOILS WILL BE STOCKPILED ON THE SIDE OF THE TRENCH AWAY FROM THE WATERWAY, AND A LINE OF SILT BARRIERS WILL BE ESTABLISHED ALONG THE EDGE OF CONSTRUCTION ON THE CONTOUR BETWEEN THE TRENCH AND THE WATERWAY.
- ANY DISTURBED AREA THAT WILL NOT BE ACTIVELY UNDER CONSTRUCTION FOR A PERIOD OF 15 DAYS OR MORE WILL BE TEMPORARILY STABILIZED IMMEDIATELY BY SEEDING AND MULCHING OR BY ANCHORED STRAW MULCH.
- AS CONSTRUCTION IS COMPLETED, PERMANENTLY STABILIZE EACH DISTURBED AREA IN STAGES WITH PERENNIAL VEGETATION INSTALLED ACCORDING TO OHIO EPA (OR EQUIVALENT) STANDARDS AND SPECIFICATIONS. AFTER FINAL SOIL SETTLING OVER THE SANITARY SEWER, OUTFALL SEWER, AND FORCE MAIN ALIGNMENTS, THE CONTRACTOR SHALL BRING THE TRENCH BACK TO GRADE IF NECESSARY, PLACE TOPSOIL, AND FINE GRADE, SEED, FERTILIZE, AND MULCH ALL AREAS DISTURBED BY ACTIVITIES ASSOCIATED WITH THE CONSTRUCTION OF THAT SECTION OF PIPE. FINAL GRADING WILL BE CONSISTENT WITH PRE-CONSTRUCTION TOPOGRAPHY FOR DRAINAGE AND AESTHETIC REASONS.
- WHEN BORROW MATERIAL IS OBTAINED FROM OTHER THAN COMMERCIALY OPERATED SOURCES, EROSION OF THE BORROW SITE WILL BE SO CONTROLLED BOTH DURING AND AFTER COMPLETION OF THE WORK THAT EROSION WILL BE MINIMIZED AND SEDIMENT WILL NOT ENTER STREAMS OR OTHER BODIES OF WATER. WASTE OR DISPOSAL AREAS AND CONSTRUCTION ROADS SHALL BE LOCATED AND CONSTRUCTED IN A MANNER THAT WILL KEEP SEDIMENT FROM ENTERING STREAMS. TEMPORARY EROSION CONTROL BARRIERS AND LIMITED SITE CLEARING WILL BE USED AS NEEDED.
- IF WORK IS SUSPENDED FOR ANY REASON, THE CONTRACTOR SHALL MAINTAIN THE SOIL EROSION AND SEDIMENTATION CONTROLS IN GOOD OPERATING CONDITION DURING THE SUSPENSION OF THE WORK. ALSO, WHEN SEASONAL CONDITIONS PERMIT AND THE SUSPENSION OF WORK IS EXPECTED TO EXCEED A PERIOD OF ONE MONTH, THE CONTRACTOR SHALL SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS LEFT EXPOSED WHEN THE WORK IS STOPPED.
- INSTALL THE ABOVE EROSION AND SEDIMENT CONTROL MEASURES, AS APPROPRIATE, REFERRING TO OHIO EPA, STORM WATER TECHNICAL ASSISTANCE, RAINWATER AND LAND DEVELOPMENT MANUAL STANDARDS AND SPECIFICATIONS (FORMERLY ODNR) OR EQUIVALENT FOR PARTICULAR TECHNIQUES. THESE MEASURES ARE TO BE MAINTAINED IN EFFECTIVE WORKING CONDITION DURING CONSTRUCTION AND UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED.
LINK:
[HTTP://EPA.OHIO.GOV/PORTALS/35/STORM/TECHNICALASSISTANCE/RLD11-6-14All.pdf](http://EPA.OHIO.GOV/PORTALS/35/STORM/TECHNICALASSISTANCE/RLD11-6-14All.pdf)

1. MITIGATIVE MEASURES (CONT.)

TRAFFIC CONTROL:

- AT LEAST ONE LANE OF TRAFFIC MUST BE MAINTAINED ALONG THE TRAVEL ROUTE TO THE CONSTRUCTION SITE.
- ACCESS MUST BE MAINTAINED FOR EMERGENCY VEHICLES AT ALL TIMES. REFER TO SHEET 11 FOR DETOUR ROUTES AND CONSTRUCTION SEQUENCE ON WALL STREET, BRADY LAKE ROAD AND BRUSH ROAD.
- NO TRENCH WILL BE LEFT OPEN AT THE END OF A WORK DAY, WHERE PRACTICAL; ANY OPEN TRENCH WILL BE PROPERLY IDENTIFIED AND BARRICADED FOR SAFETY PURPOSES.
- ANY CONSTRUCTION EQUIPMENT OR EXCAVATIONS NEAR ROADS MUST BE MARKED WITH LIGHTS, REFLECTORS, OIL LANTERNS, OR SMUDGE POTS.
- THE CONTRACTOR SHALL PROVIDE, ERECT AND MAINTAIN ALL NECESSARY BARRICADES, WARNING SIGNS, DANGER SIGNALS, FLAG PERSON(S), WATCHERS, AND ALL OTHER APPROPRIATE PRECAUTIONS NECESSARY FOR THE PROTECTION OF THE WORK AND FOR SAFETY.
- PRIOR TO CLOSING OFF CLEAR ACCESS TO ANY PUBLIC ALLEY, STREET, ROAD, AVENUE, OR BOULEVARD, THE CONTRACTOR MUST HAVE CONSENT FROM LOCAL OFFICIALS AND THE ENGINEER.

AIR POLLUTION / NOISE CONTROL:

- CONSTRUCTION ACTIVITIES WILL BE LIMITED TO DAYTIME HOURS.
- CONSTRUCTION EQUIPMENT WILL BE PROVIDED WITH INTAKE SILENCERS AND MUFFLERS, AS REQUIRED BY SAFETY STANDARDS.
- ALL CONSTRUCTION VEHICLES SHOULD BE EQUIPPED WITH PROPER EMISSIONS CONTROL EQUIPMENT.
- PERIODICALLY CHECK EQUIPMENT AND MACHINERY FOR PROPER TUNING TO MINIMIZE EXHAUST EMISSIONS AND NOISE.
- UNPAVED AREAS WILL BE WET DOWN (AS NECESSARY) DURING CONSTRUCTION TO MINIMIZE DUST GENERATION.

TREE / VEGETATION PROTECTION:

- TREE REMOVAL WILL BE LIMITED TO THE TIME PERIOD BETWEEN OCTOBER 1 AND MARCH 31.
- TREE REMOVAL WILL BE LIMITED TO THAT NECESSARY FOR CONSTRUCTION AND WILL BE LIMITED FURTHER TO THE PERMANENT EASEMENT WHEREVER POSSIBLE.
- NO TREE REMOVAL WILL BE PERMITTED OUTSIDE THE TEMPORARY EASEMENT WITHOUT PERMISSION OF THE ENGINEER.
- TREES WHICH ARE NOT REMOVED WILL BE PROTECTED BY ENSURING THAT TREES TO BE REMOVED ARE FELLED SO AS NOT TO INJURE THE REMAINING TREES.
- PRIOR TO CLEARING, THE CONTRACTOR AND ENGINEER, SHALL WALK THE ACQUIRED EASEMENTS IN AN EFFORT TO DESIGNATE THE TREES THAT ARE TO BE SAVED. TREES TO BE SAVED WILL BE CLEARLY MARKED BY PAINT WITH THE LETTER "S". TREES TO BE PROTECTED BY AN APPROPRIATE BARRIER SHALL BE MARKED WITH AN "S" ENCLOSED IN A CIRCLE.
- TREES MARKED FOR REMOVAL IN THE PLANS WILL BE INSPECTED BY COUNTY & THE ENGINEER BEFORE REMOVAL & WILL BE SAVED WHERE POSSIBLE.
- SOIL AND OTHER MATERIAL WILL NOT BE STORED NEXT TO OR WITHIN THE DRIP-LINE OF TREES.
- PRESERVATION OF LANDSCAPING SHOULD TAKE PRECEDENCE OVER REMOVAL. IF REMOVAL OR DAMAGE IS UNAVOIDABLE, EXISTING VEGETATION SHOULD BE REPAIRED OR REPLACED "IN-KIND" UNLESS THE HOMEOWNER SPECIFIES OTHERWISE.
- IF TREES/SHRUBS CANNOT BE REPLACED IN THE SAME LOCATION DUE TO INSTALLATION OF THE SEWER SYSTEM, RELOCATION SHOULD BE CONSIDERED.
- THE CONTRACTOR'S ARBORIST SHALL REPAIR ALL INJURIES TO BARK, TRUNKS, LIMBS, AND ROOTS OF REMAINING VEGETATION BY PROPERLY DRESSING, CUTTING, BRACING AND PAINTING, USING ONLY APPROVED TREE SURGERY METHODS, TOOLS, AND MATERIALS.
- SELECTIVE PRUNING OF TREE LIMBS PRIOR TO INITIATION OF CONSTRUCTION SHOULD ONLY BE USED WITHIN ESTABLISHED EASEMENTS WHERE REMOVAL IS NECESSARY FOR OPERATION OF EQUIPMENT.
- LIMIT THE USE OF RIP-RAP TO AREAS WHERE STREAM FLOW CONDITIONS PREEMPT VEGETATIVE STABILIZATION.

DEWATERING:

- ALL DEWATERING FLOWS ARE TO BE DIRECTED THROUGH FILTERING DEVICES BEFORE DISCHARGE TO STABILIZED SITES, SUCH AS STREAMS OR STORM SEWERS; NOT ONTO EXPOSED SOILS, STREAM BANKS, OR ANY OTHER SITE WHERE THE FLOW COULD CAUSE EROSION.
- SILT FROM CONSTRUCTION OPERATIONS SHALL NOT BE PERMITTED TO ENTER THE STORM SEWER SYSTEM. WHEN CONSTRUCTION OCCURS NEAR STORM SEWER INLETS, EROSION CONTROL MEASURES SUCH AS INLET FILTERS AND HAY BALES SHALL BE USED TO PREVENT SILT FROM ENTERING THE STORM SEWERS.
- CONVEY WATER FROM THE CONSTRUCTION SITE IN A CLOSED CONDUIT. DO NOT USE TRENCH EXCAVATIONS AS TEMPORARY DRAINAGE DITCHES.

2. MITIGATIVE MEASURES (CONT.)

ARCHAEOLOGICAL / HISTORICAL RESOURCES:

- CONTRACTORS AND SUBCONTRACTORS ARE REQUIRED UNDER OHIO REVISED CODE SECTION 149.53 TO NOTIFY THE OHIO HISTORICAL SOCIETY AND THE OHIO HISTORIC SITE PRESERVATION BOARD OF ARCHAEOLOGICAL DISCOVERIES LOCATED IN THE PROJECT AREA, AND TO COOPERATE WITH THOSE ENTITIES IN ARCHAEOLOGICAL AND HISTORIC SURVEYS AND SALVAGE EFFORTS IF SUCH DISCOVERIES ARE UNCOVERED WITHIN THE PROJECT AREA.

CONTACT: STATE HISTORIC PRESERVATION OFFICE
PHONE: 1-614-298-2000

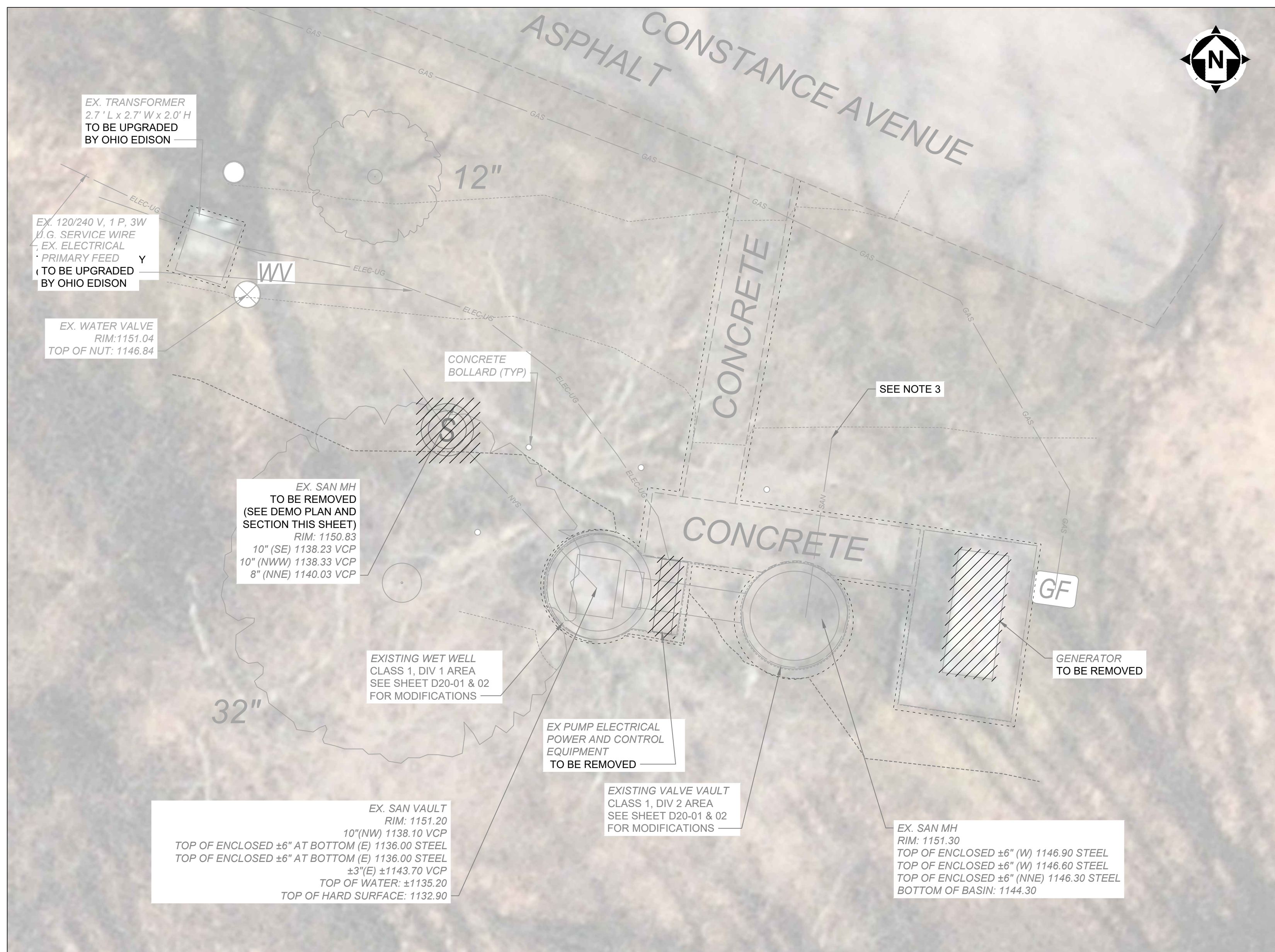


NO	REVISION	DATE

ISSUED FOR:	
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CHECKED BY:	RSS

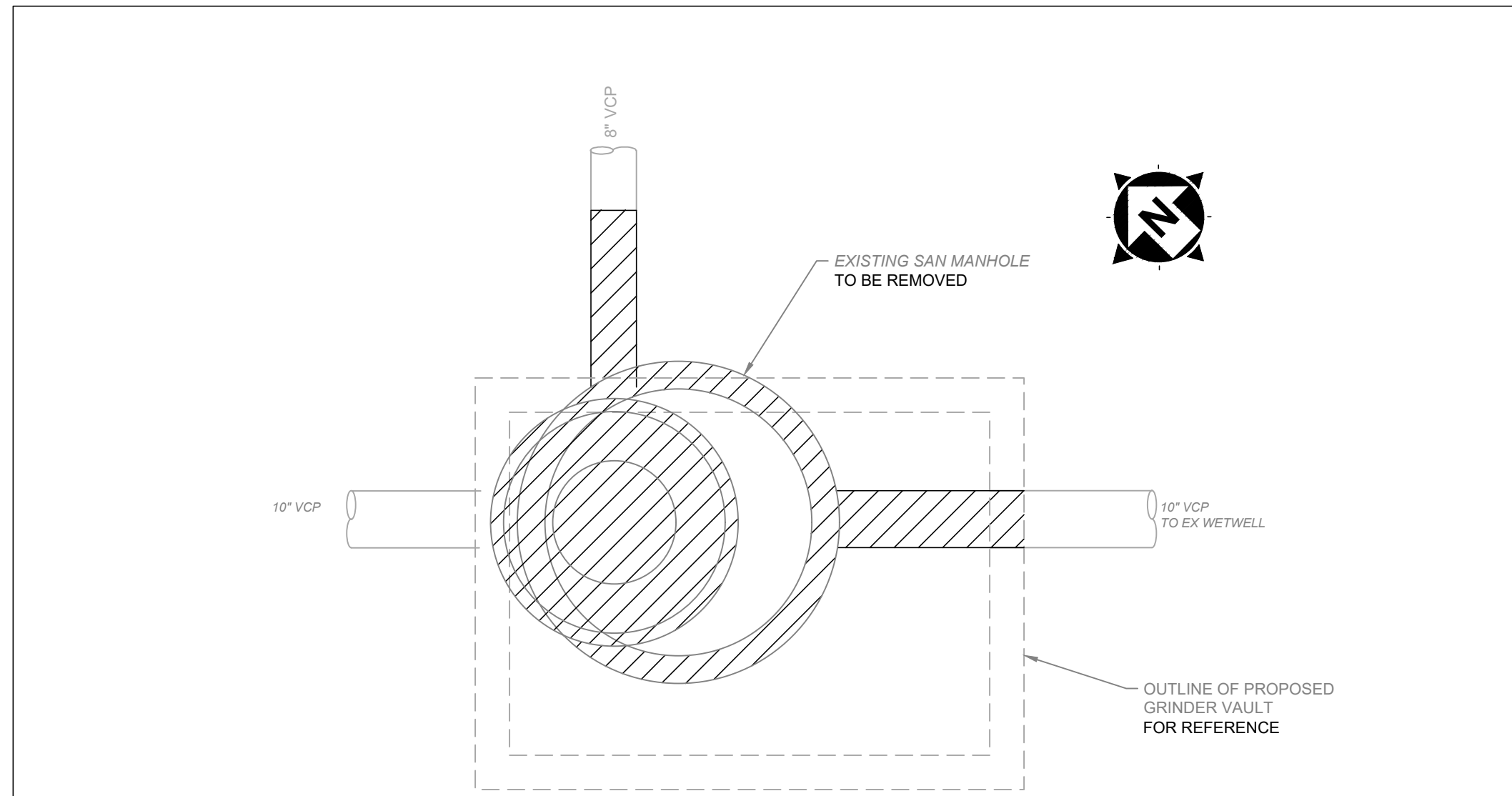
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VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
PORTAGE COUNTY, OHIO
GENERAL - 00 SERIES
GENERAL NOTES

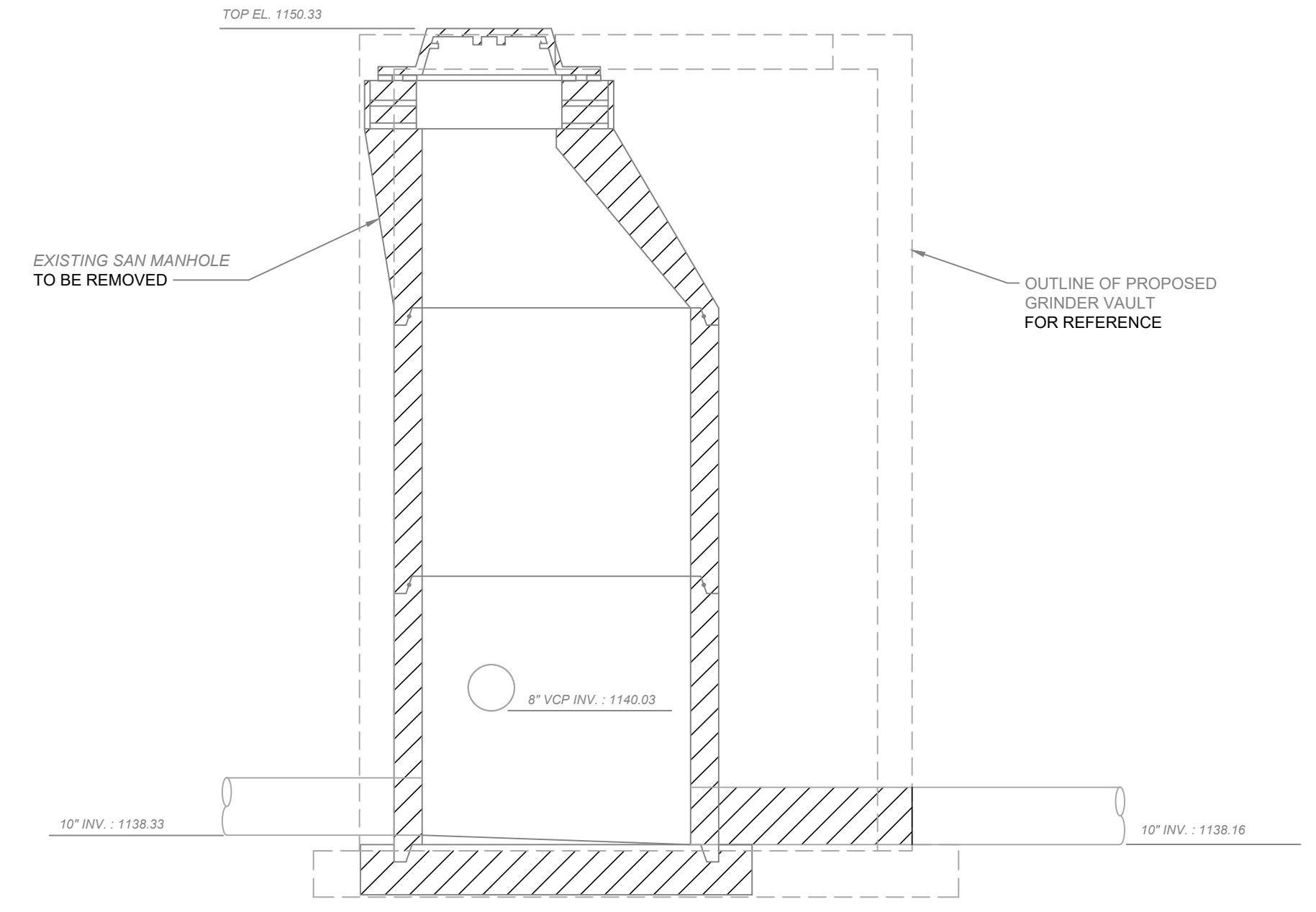


EXISTING SITE PLAN
SCALE: 1"= 5'

- NOTES:**
1. CONTRACTOR SHALL MAINTAIN FLOW TO THE SANITARY SEWER AT ALL TIMES.
 2. CONTRACTOR SHALL ESTABLISH BY-PASS PUMPING PRIOR TO BEGINNING OF WORK.
 3. CONTRACTOR SHALL FIELD LOCATE EX. 4" SANITARY FORCE MAIN. FIELD CUT EX. FORCE MAIN AND CONSTRUCT PROP. BYPASS VAULT.
 4. CONTRACTOR SHALL REMOVE EXISTING SANITARY SEWER AS REQUIRED FOR THE INSTALLATION OF THE NEW GRINDER VAULT.



EXISTING MANHOLE DEMOLITION PLAN VIEW
SCALE: 1/2"=1'-0"



EXISTING MANHOLE DEMOLITION SECTION VIEW
SCALE: 1/2"=1'-0"



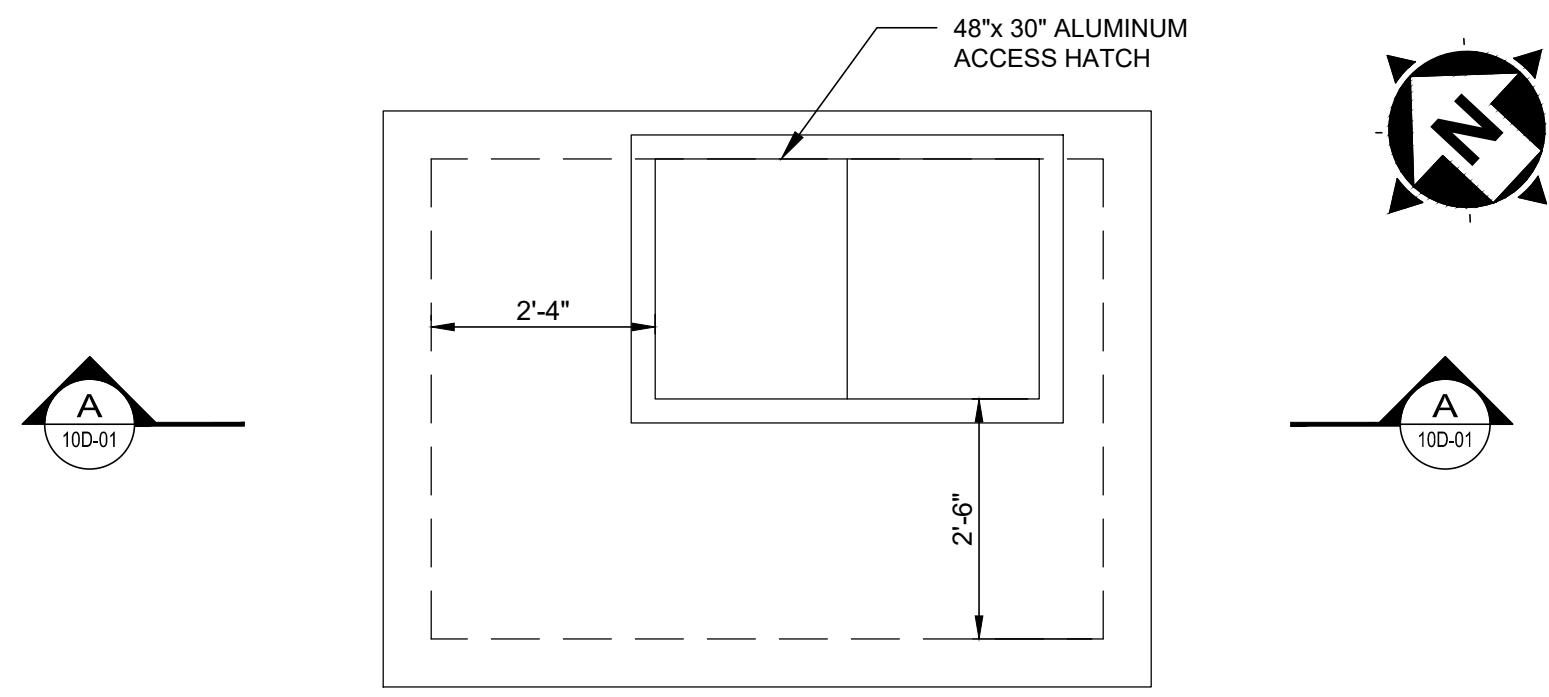
ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
	03/13/2023	AS NOTED	ELE/RS	ELE	RS

NO	REVISION	DATE

VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
PORTAGE COUNTY, OHIO

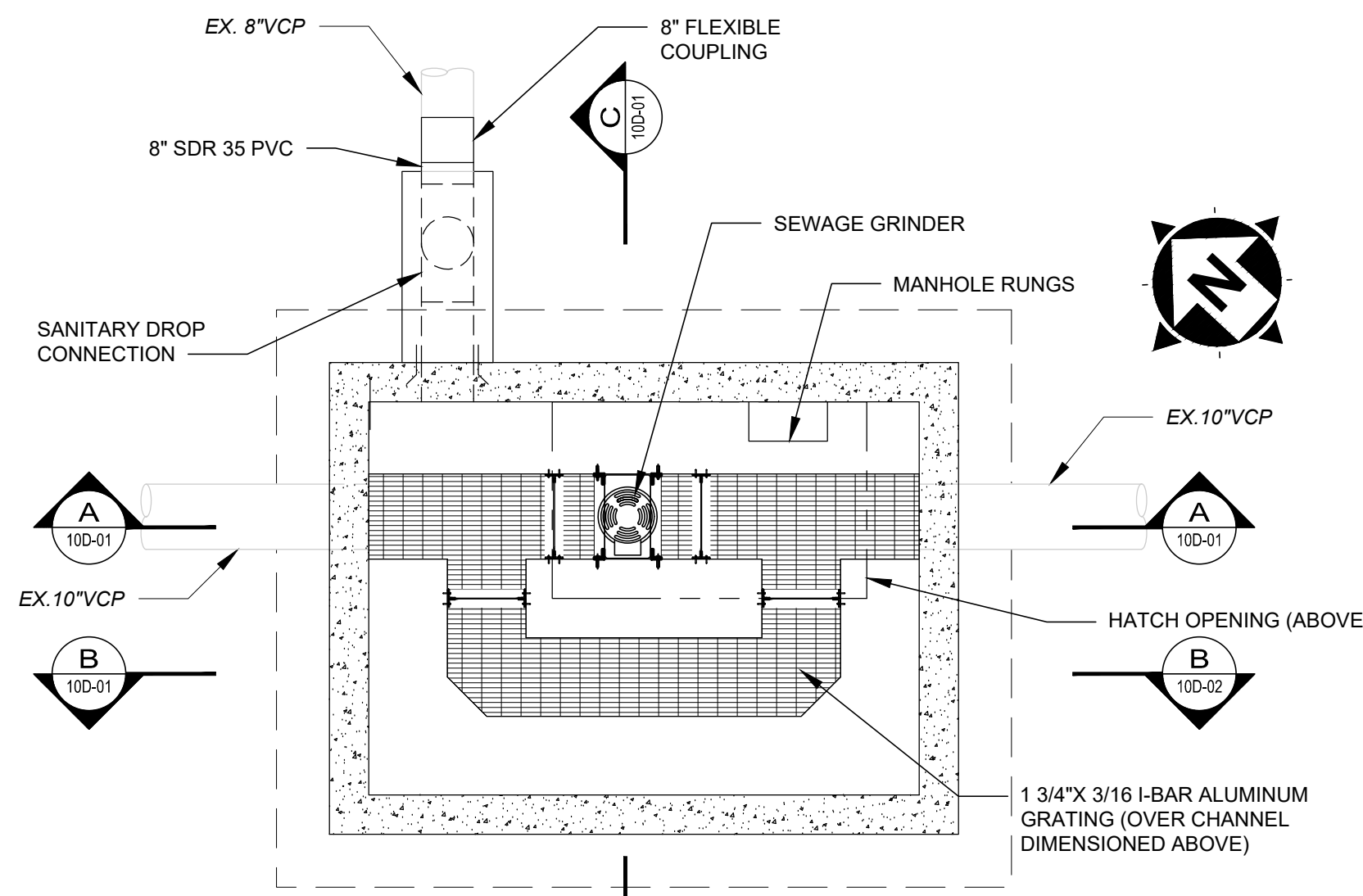
SITE IMPROVEMENT - 01 SERIES
EXISTING SITE PLAN

PROJECT NO.	230355
DISCIPLINE	CIVIL
SHEET NAME	01C-01
SHEET OF	04 11



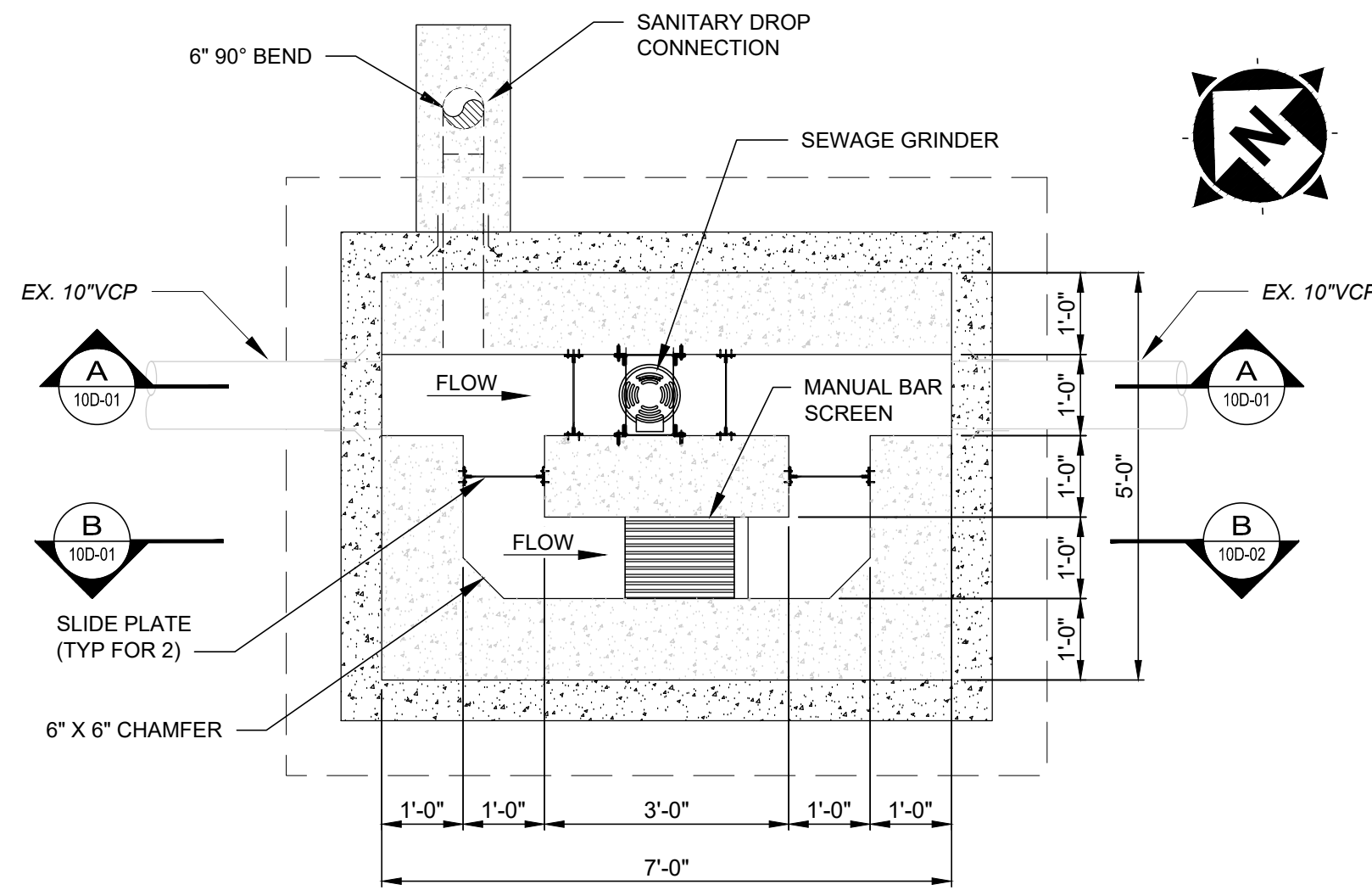
**PROPOSED GRINDER VAULT
PLAN AT ABOVE EL. 1150.83**

SCALE: 1/2" = 1'-0"



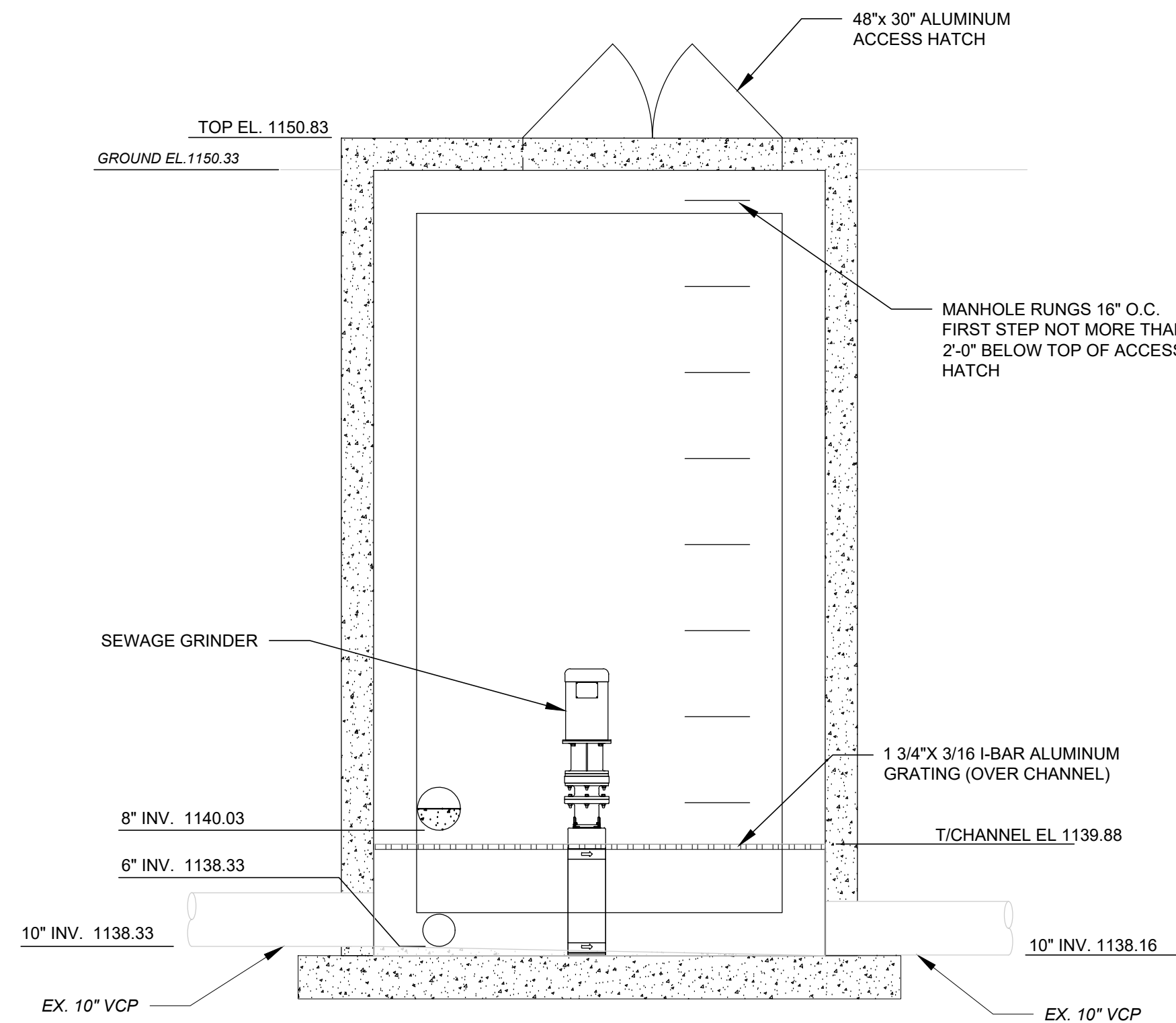
**PROPOSED GRINDER VAULT
PLAN AT EL. 1145.00**

SCALE: 1/2" = 1'-0"

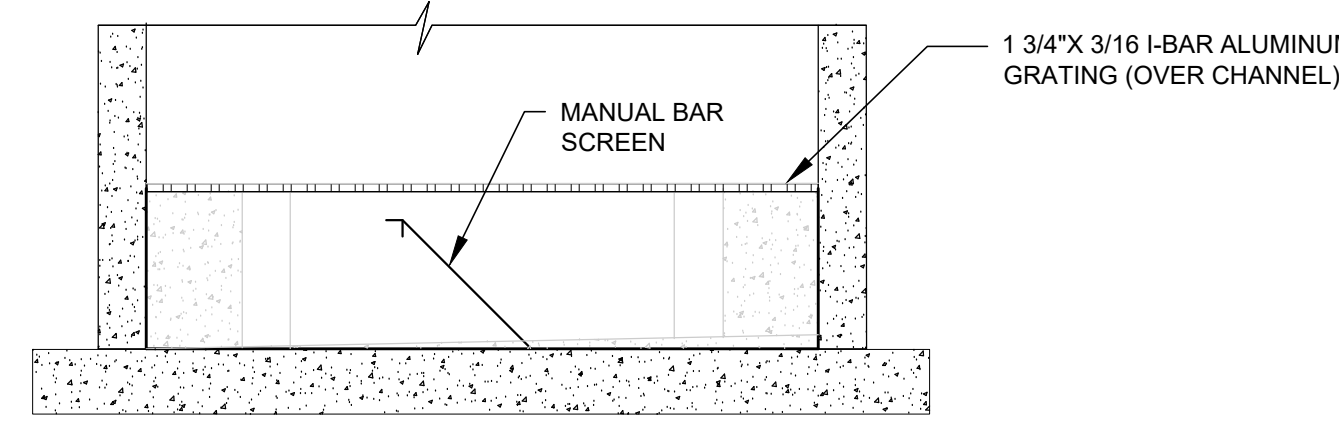


**PROPOSED GRINDER VAULT
PLAN BELOW EL. 1139.33**

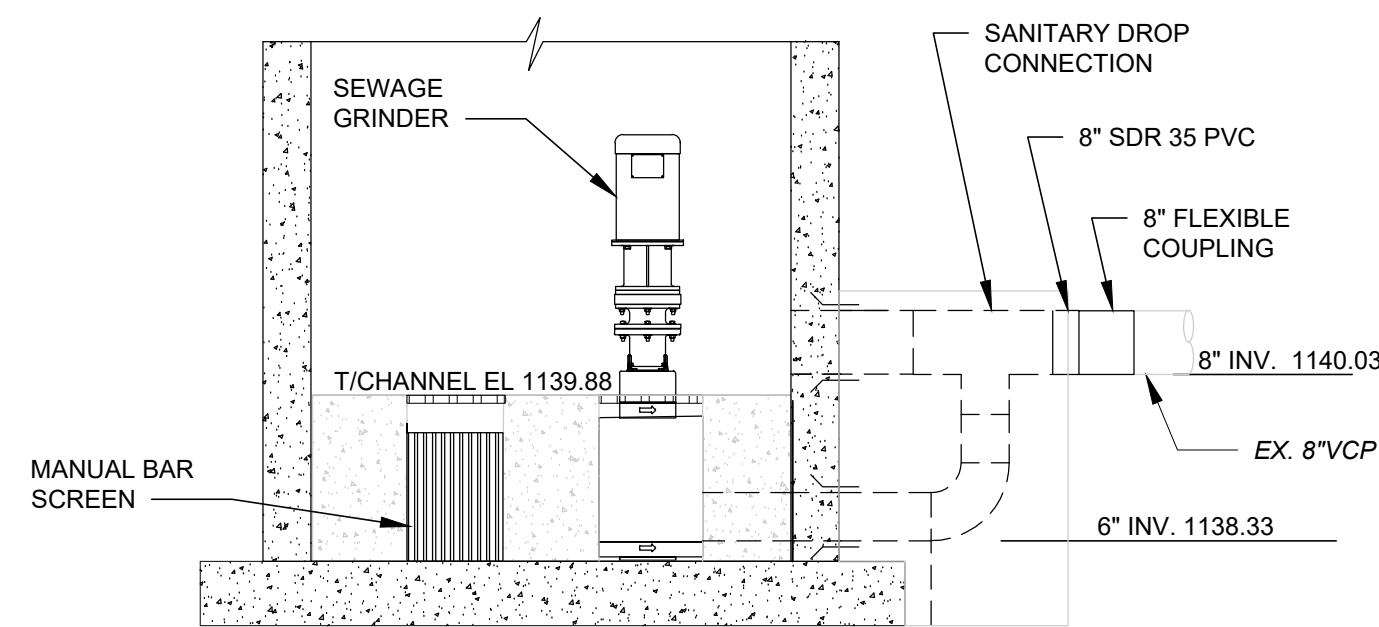
SCALE: 1/2" = 1'-0"



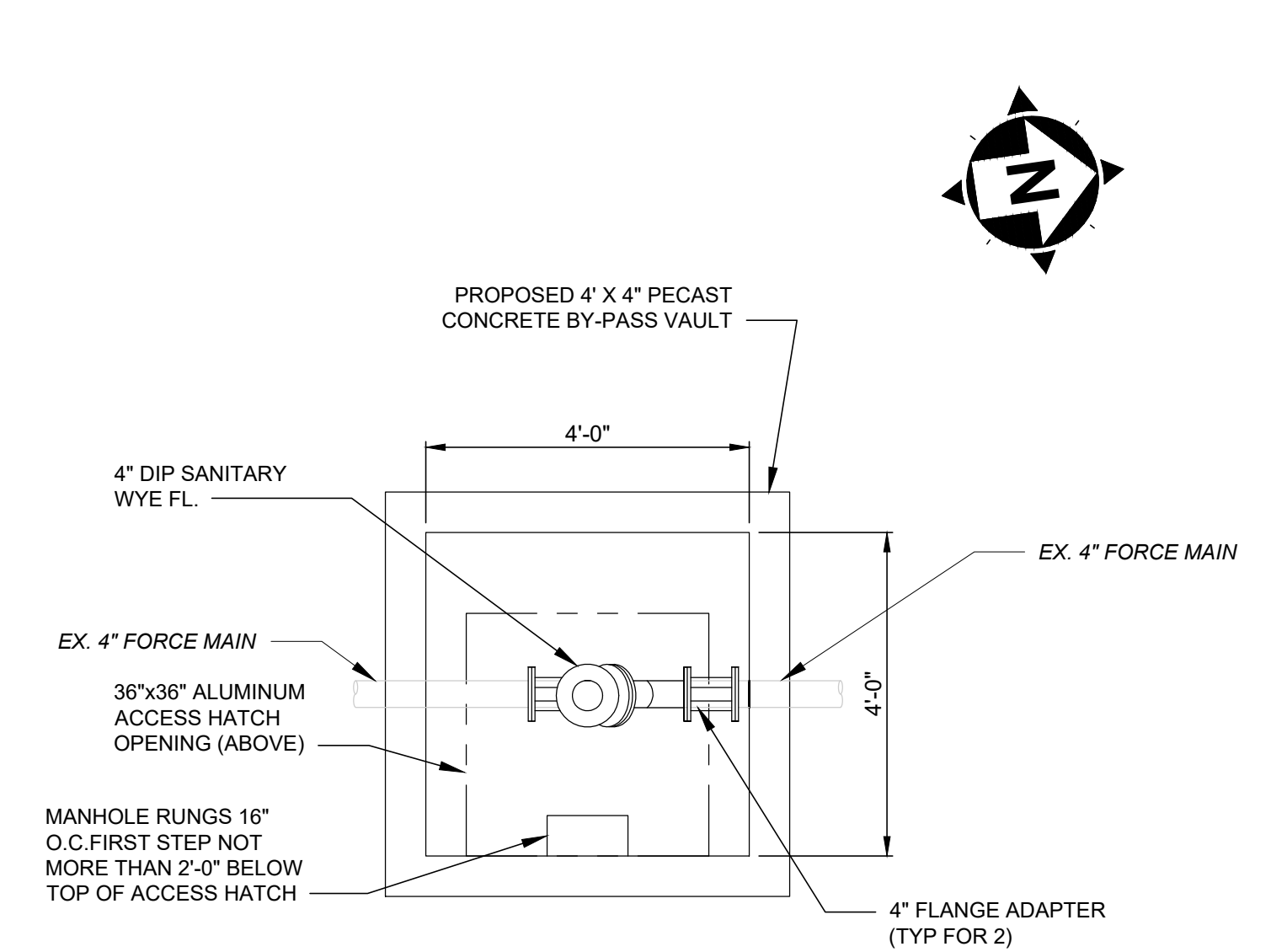
**A SECTION
A-1 SCALE: 1/2" = 1'-0"**



**B SECTION
B-1 SCALE: 1/2" = 1'-0"**

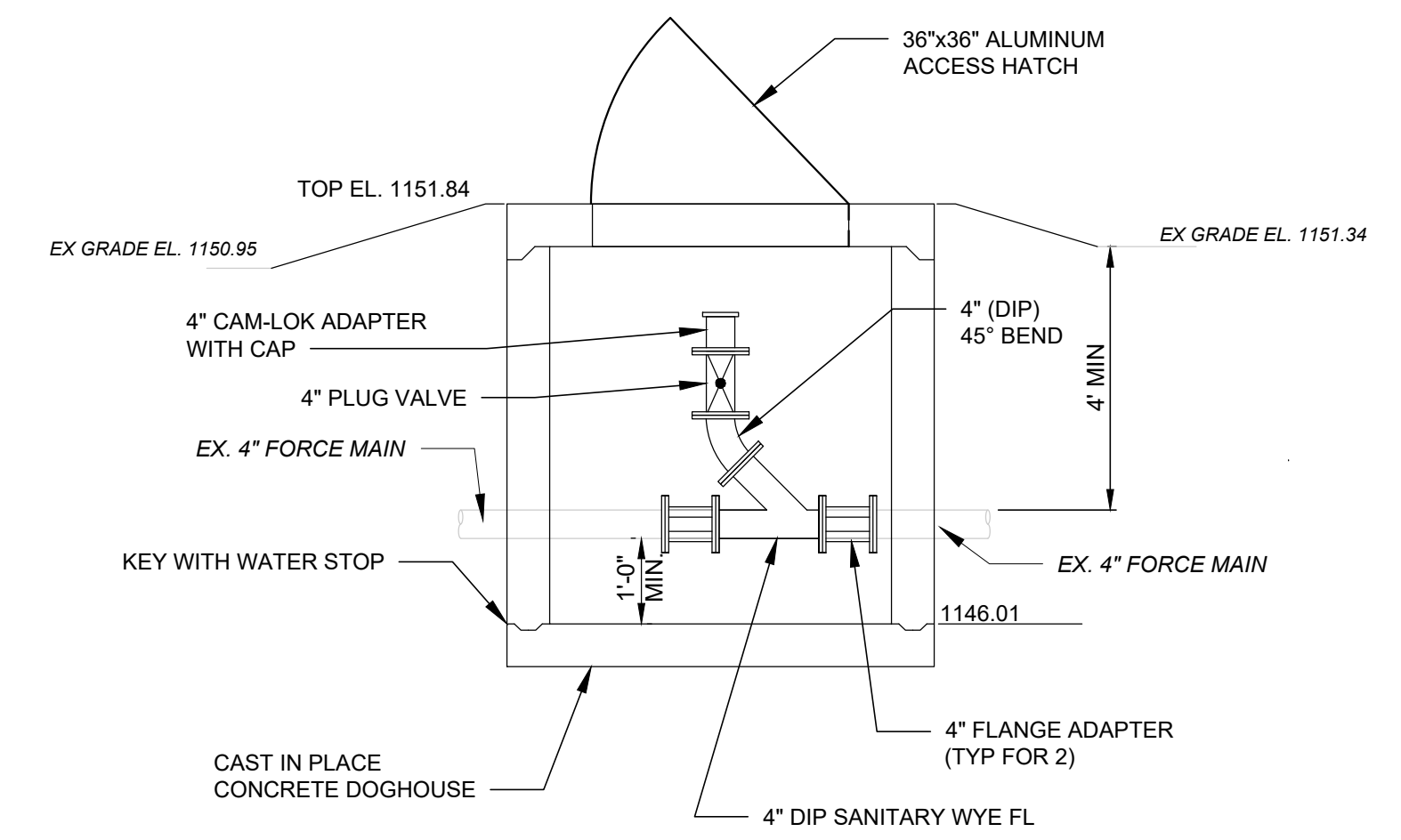


**C SECTION
C-1 SCALE: 1/2" = 1'-0"**



BY-PASS VAULT PLAN VIEW

SCALE: 1/2" = 1'-0"



BY-PASS VAULT SECTION VIEW

SCALE: 1/2" = 1'-0"

NOTES:

1. CONTRACTOR SHALL FIELD LOCATE EXISTING 4" FORCE MAIN
2. CONTRACTOR SHALL CUT EXISTING FORCE MAIN AS REQUIRED TO INSERT NEW 4" SANITARY WYE. DIP FL. PROVIDE 4" FLANGE ADAPTERS TO CONNECT EXISTING FORCE MAIN TO NEW SANITARY WYE.
3. CONTRACTOR SHALL PROVIDE A DOGHOUSE CONNECTION TO THE EXISTING FORCE MAIN. SEAL OPENING BETWEEN THE PRECAST CONCRETE VAULT WITH NON SHRINK GROUT



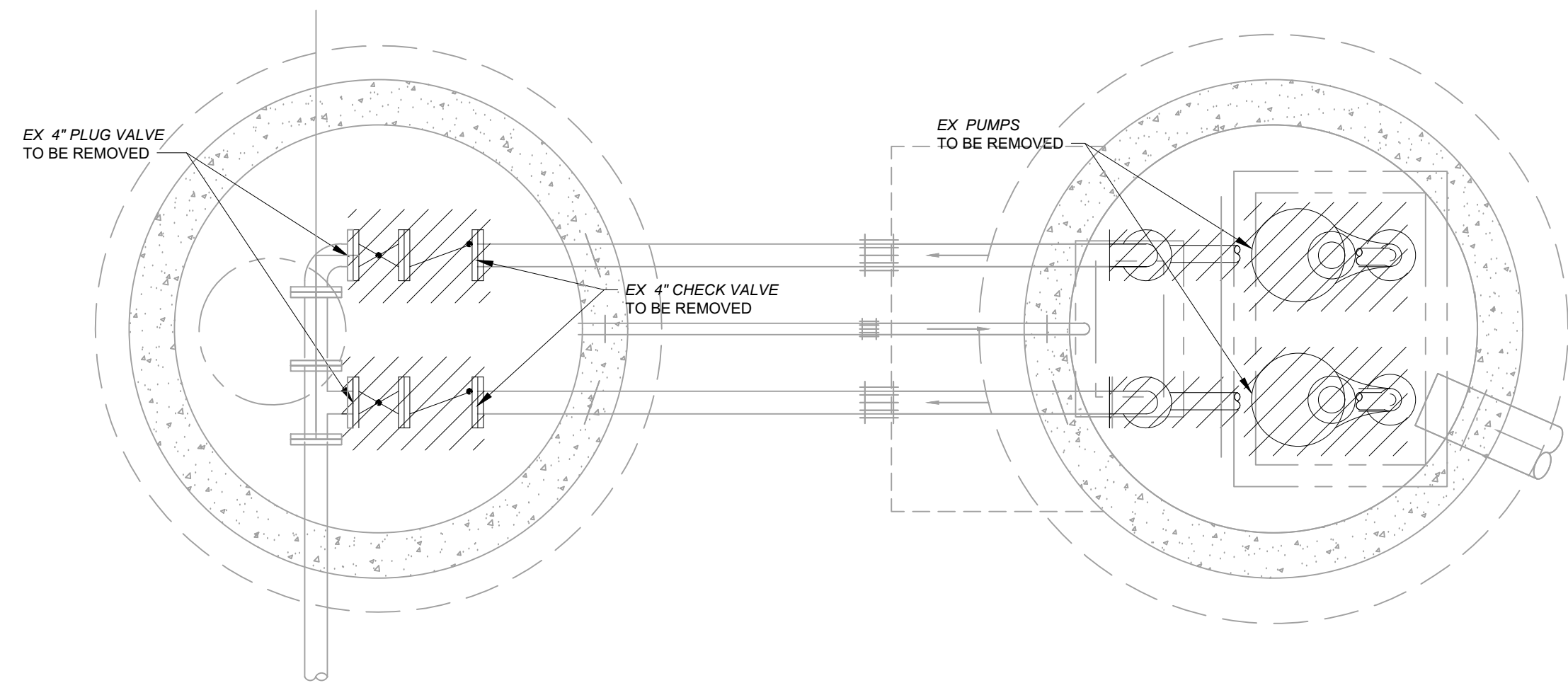
NO.	REVISION	DATE

ISSUED FOR: **VILLAGE OF HIRAM**
 ISSUE DATE: 09/13/2023
 SCALE: AS NOTED
 DESIGNED BY: ELE/RS
 DRAWN BY: ELE
 CHECKED BY: RSS

HIRAM CONSTANCE LIFT STATION
 PORTAGE COUNTY, OHIO

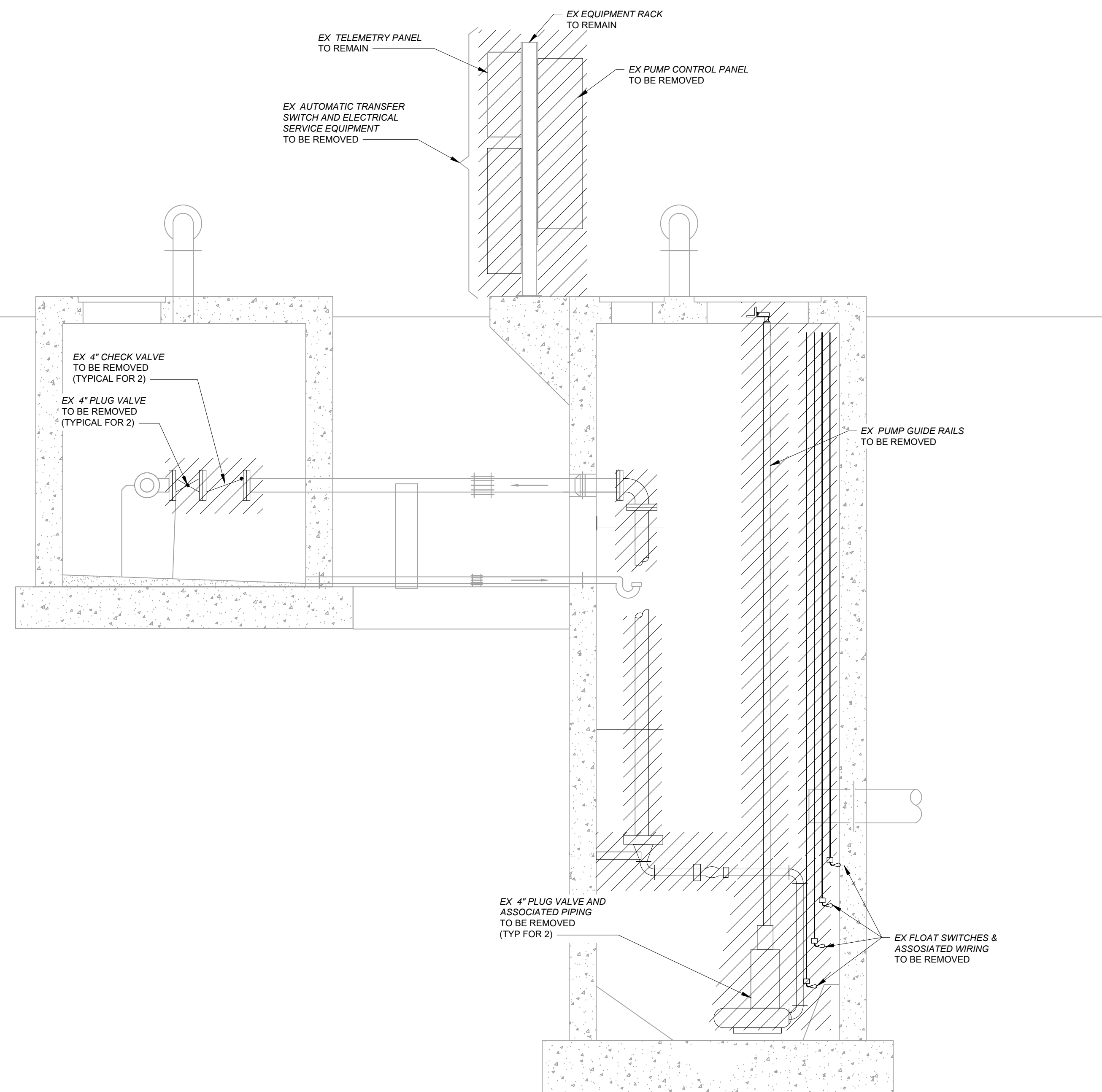
GRINDER VAULT - 10 SERIES
GRINDER & BY-PASS VAULT PLANS & SECTIONS

PROJECT NO.	230355
DISCIPLINE	PROCESS
SHEET NAME	10D-01
SHEET	06
OF	11



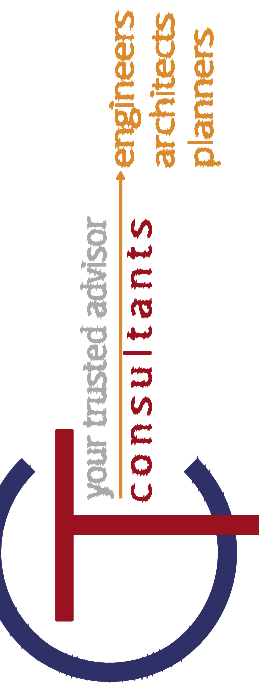
**EXISTING PUMP STATION DEMOLITION
PLAN VIEW**

SCALE: 1/2" = 1'-0"



**EXISTING PUMP STATION DEMOLITION
SECTION VIEW**

SCALE: 1/2" = 1'-0"

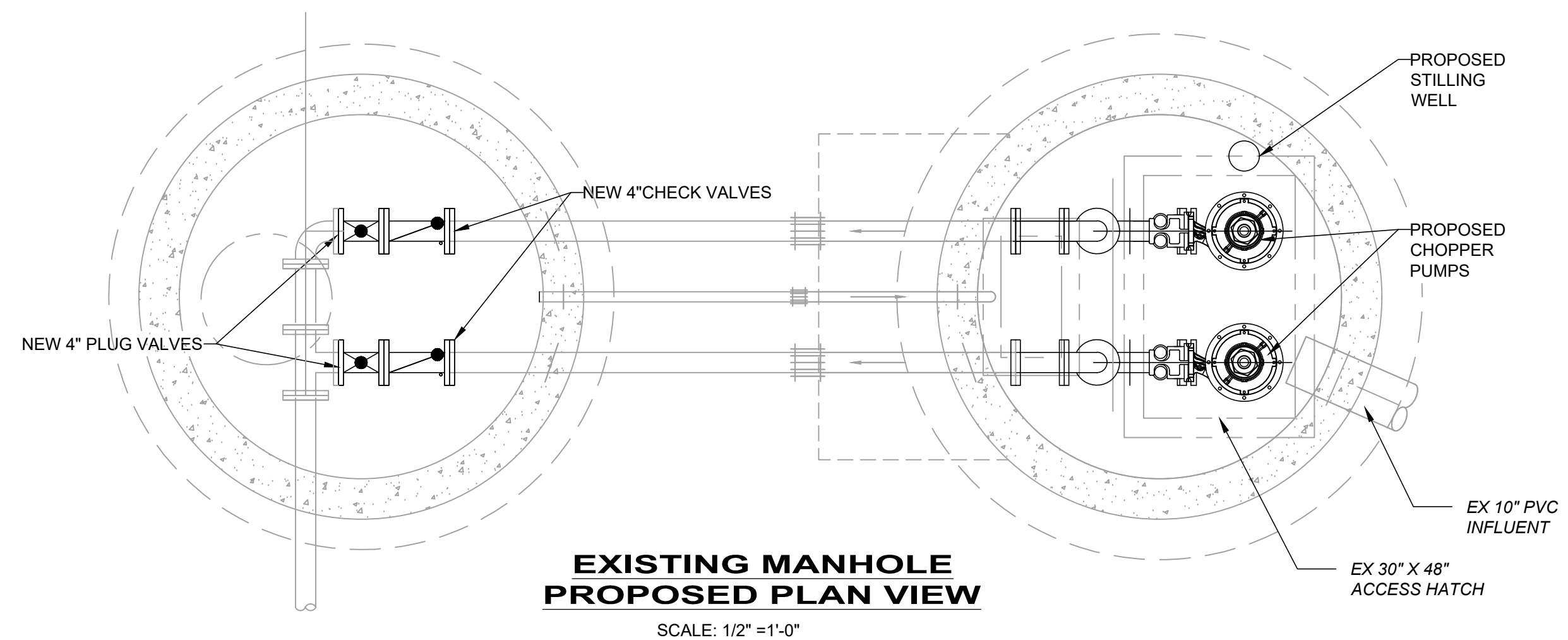


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ISSUE DATE: 09/13/2023			
SCALE: AS NOTED			
DESIGNED BY: ELE			
DRAWN BY: ELE			
CHECKED BY: RSS			

**VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
PORTAGE COUNTY, OHIO**

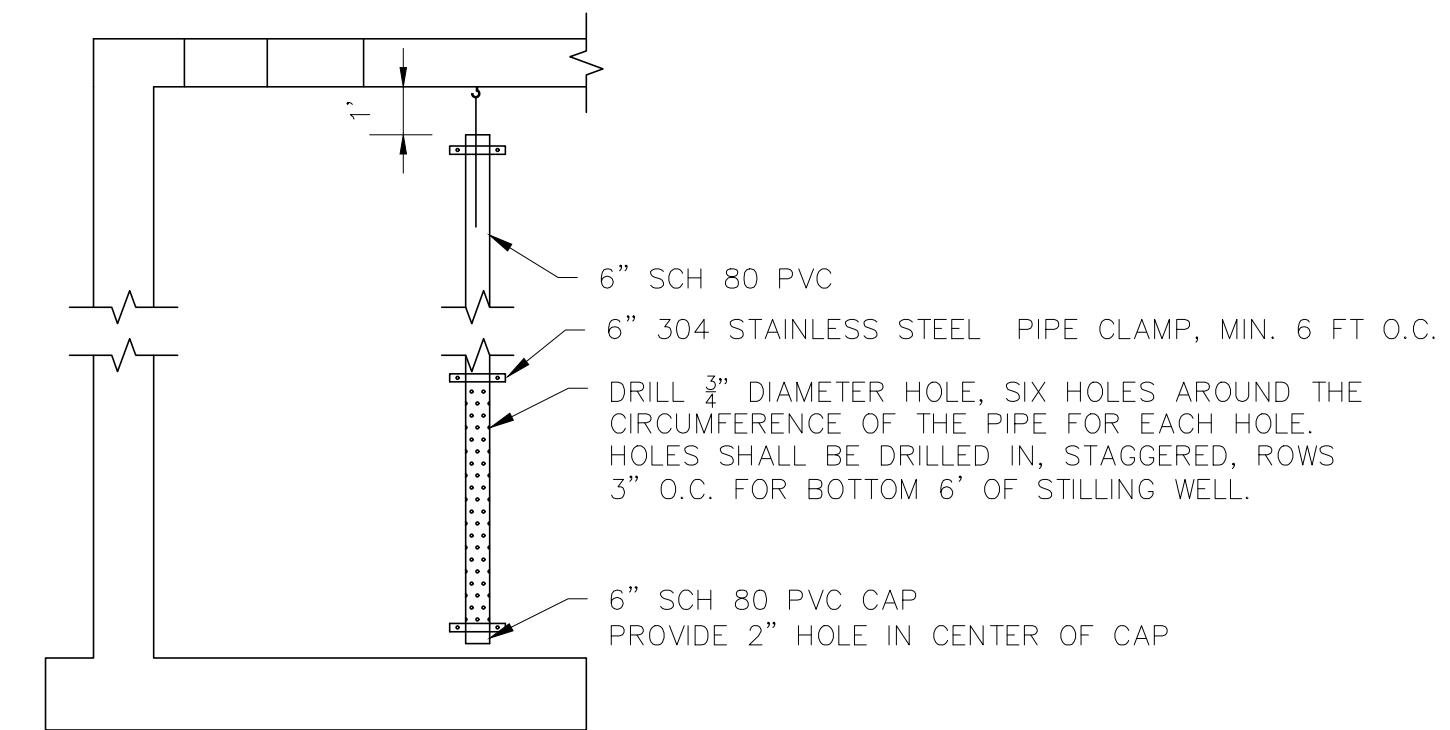
**PUMP STATION - 20 SERIES
PUMP STATION - EXISTING-DEMO**

PROJECT NO. 230355	
DISCIPLINE PROCESS	
SHEET NAME 20D-01	
SHEET 07	OF 11



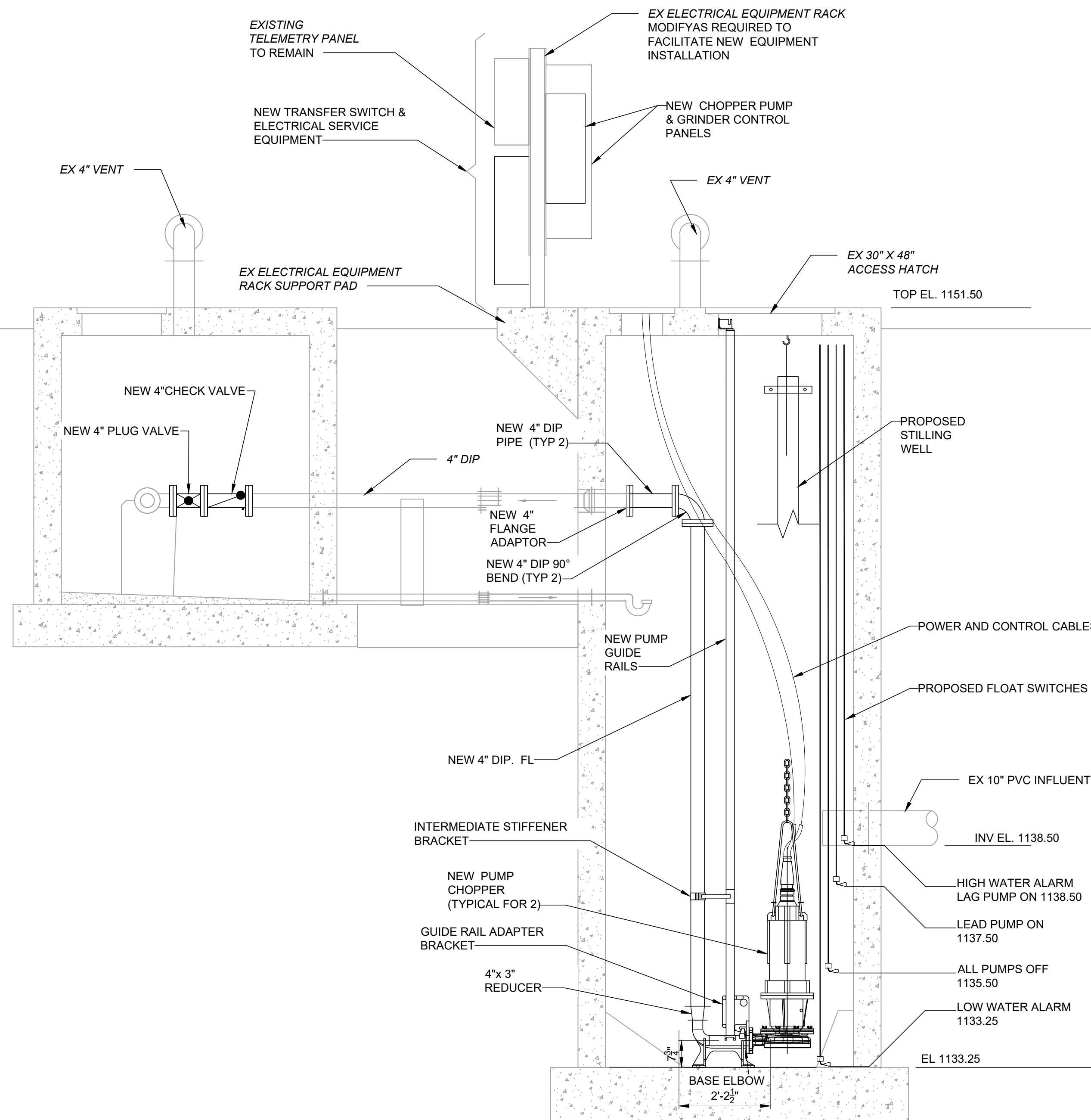
**EXISTING MANHOLE
PROPOSED PLAN VIEW**

SCALE: 1/2" = 1'-0"



STILLING WELL DETAIL

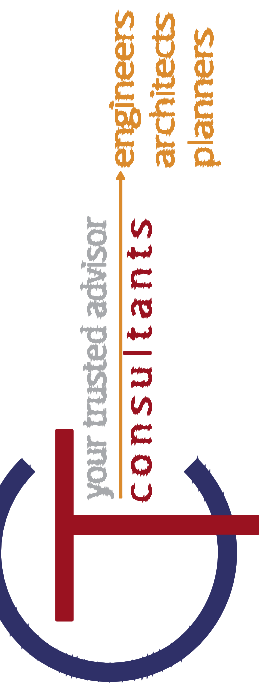
NOTES:
1. CONTRACTOR SHALL PROVIDE LEVEL TRANSDUCER AT THE BOTTOM OF THE 6" SCH 80 PVC STILLING WELL.



**EXISTING PUMP STATION
PROPOSED SECTION VIEW**

SCALE: 1/2" = 1'-0"

CONSTANCE AVE PUMP STATION	
TYPE OF PUMP	SUBMERSIBLE CHOPPER
NUMBER REQUIRED	2
PUMPED LIQUID	WASTEWATER
DESIGN CAPACITY EACH	120 GPM
TDH	120 FT
MOTOR HORSE POWER	20 HP
MOTOR SPEED	1835 RPM
POWER REQUIREMENTS	3 PH/60 HZ/ 230V
DISCHARGE SIZE	3"
HIGH WATER ALARM	1138.50
LAG PUMP ON	1138.50
LEAD PUMP ON	1137.50
ALL PUMPS OFF	1135.50
LOW WATER ALARM	1133.25



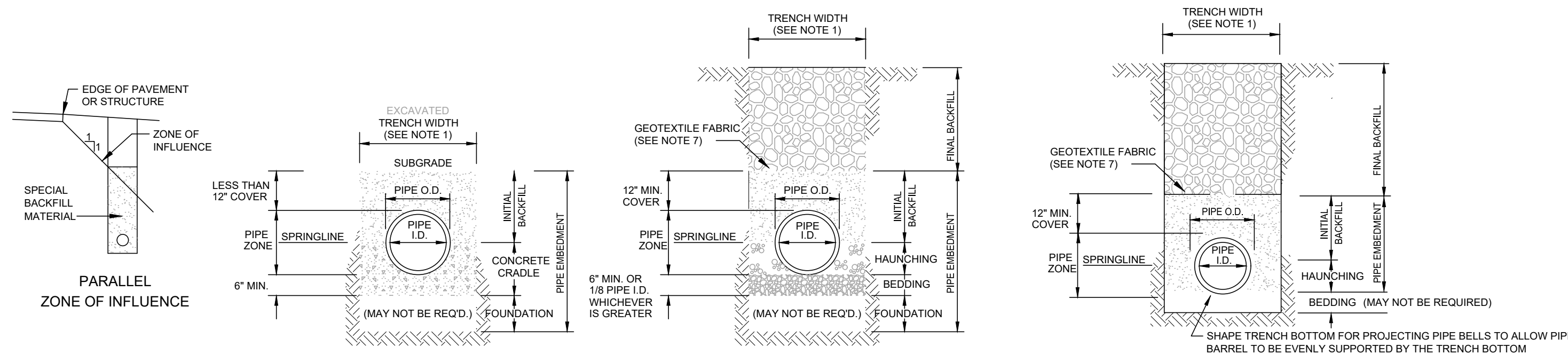
NO	REVISION	DATE

ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
	03/13/2023	AS NOTED	RSS/ELE	ELE	RSS

**VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
PORTAGE COUNTY, OHIO**

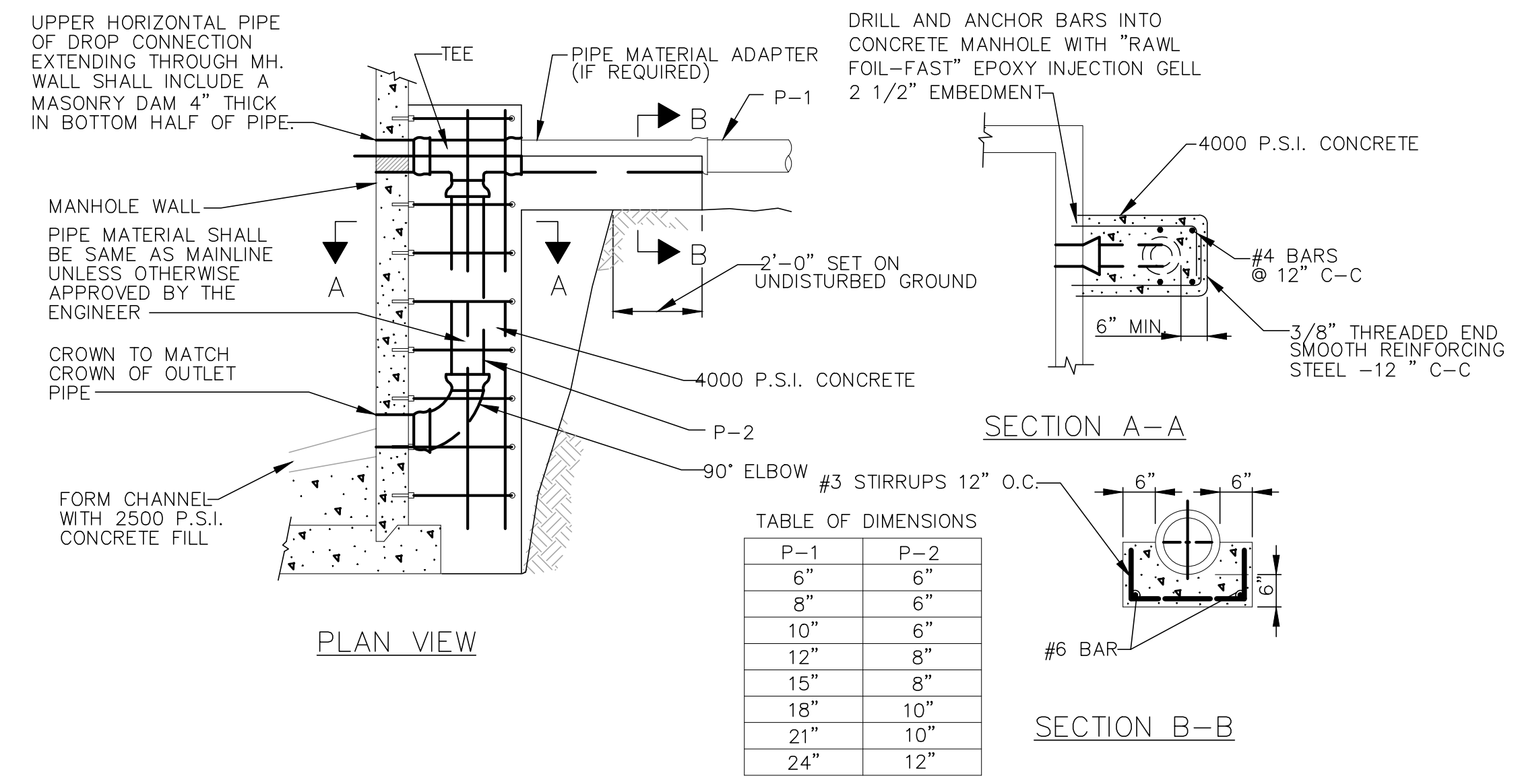
**PUMP STATION - 20 SERIES
PUMP STATION - PROPOSED**

PROJECT NO.	230355
DISCIPLINE	PROCESS
SHEET NAME	20D-02
SHEET	OF
08	11

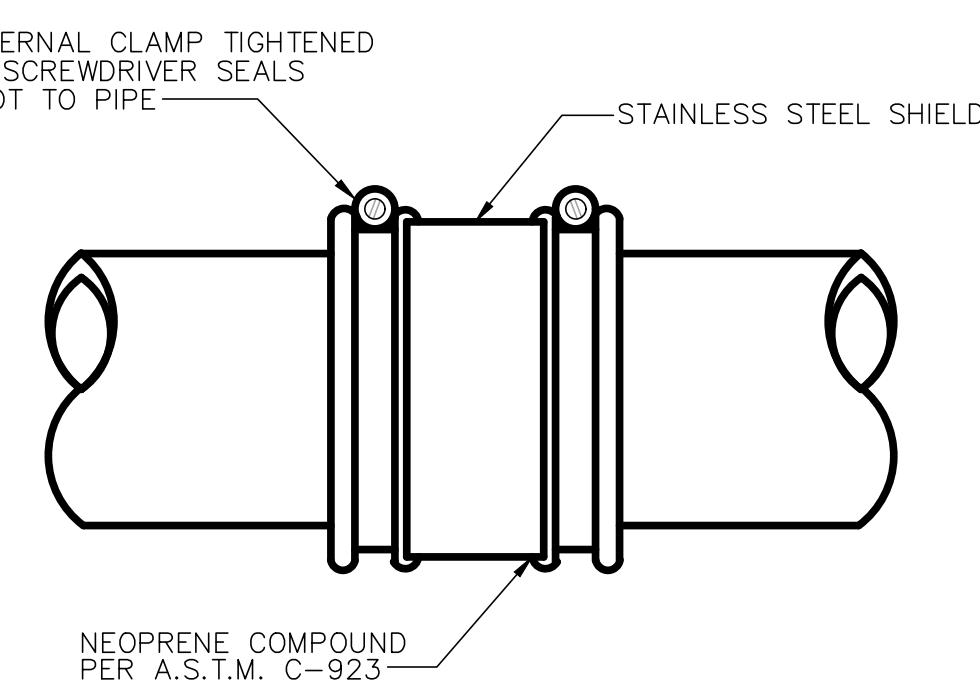


- CLASS 'A' PIPE EMBEDMENT**
- NOTES:**
1. MAXIMUM EXCAVATED TRENCH WIDTH: THE MAXIMUM EXCAVATED TRENCH WIDTH FROM THE BOTTOM OF THE TRENCH TO 12" OVER THE TOP OF THE PIPE (WITHIN PIPE EMBEDMENT) SHALL BE O.D. + 24" FOR ALL PIPES UP TO AND INCLUDING 24" I.D. + 30" FOR PIPE FROM 24" I.D. TO 54" I.D. AND O.D. + 48" FOR PIPES SIZES 60" I.D. AND OVER.
 2. FOUNDATION: WHERE AN UNSTABLE TRENCH BOTTOM CONDITION IS ENCOUNTERED, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH MATERIAL AS DIRECTED BY THE ENGINEER.
 3. PIPE EMBEDMENT:
 CLASS A: CLASS A PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNDER PAVEMENT OR STRUCTURES WITH LESS THAN 12 INCHES OF PIPE COVER TO THE SUBGRADE. THE CONCRETE CRADLE SHALL BE IN ACCORDANCE WITH ODOT ITEM 499, CLASS "C". THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.
 CLASS B: CLASS B PIPE EMBEDMENT SHALL BE USED FOR ALL PIPING UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. THE BEDDING AND HAUNCHING SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT. IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE AASHTO NO. 57 OR NO. 67 STONE GRANULAR PIPE EMBEDMENT. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER FOR ONLY REINFORCED CONCRETE PIPE AND DUCTILE IRON PIPE. THE INITIAL BACKFILL FOR ALL OTHER PIPES SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.
 CLASS C: CLASS C PIPE EMBEDMENT SHALL ONLY BE USED FOR DUCTILE IRON WATER MAIN, DUCTILE IRON FORCE MAINS OR AS AUTHORIZED BY THE ENGINEER. THE PIPE EMBEDMENT SHALL BE AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE. THE PIPE EMBEDMENT SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE. WHERE ROCK OR SHALE IS ENCOUNTERED, A MINIMUM 6-INCHES OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE BEDDING OR SAND BEDDING SHALL BE PLACED AS DIRECTED BY THE ENGINEER.
 4. FINAL BACKFILL: IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE THE FINAL BACKFILL SHALL BE SPECIAL BACKFILL MATERIAL. IN ALL AREAS OUTSIDE OF PAVEMENT, STRUCTURES OR THE ZONE OF INFLUENCE, THE FINAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL APPROVED BY THE ENGINEER.
 5. SPECIFICATIONS: ALL TRENCHING, PIPE EMBEDMENT AND BACKFILL MATERIALS SHALL BE IN ACCORDANCE WITH SPECIFICATION 02300CT - EARTHWORK.
 6. CLAY TRENCH DAMS: CLAY TRENCH DAMS SHALL BE REQUIRED AS SHOWN ON PLANS OR WHEN AND WHERE NECESSARY AS DIRECTED BY THE ENGINEER.
 7. GEOTEXTILE FABRIC: INSTALL A GEOTEXTILE FABRIC IN ACCORDANCE WITH ODOT 712.09, TYPE A, AFTER ALL INITIAL BACKFILL CONSISTING OF AASHTO NO. 57 OR NO. 67 GRANULAR PIPE EMBEDMENT.
 8. DETECTOR TAPE: IF REQUIRED IN THE SPECIFICATIONS, INSTALL DETECTABLE WARNING TAPE ABOVE UTILITIES, 12" BELOW FINISHED GRADE, EXCEPT 6 INCHES BELOW SUBGRADE UNDER PAVEMENT AND SLABS.

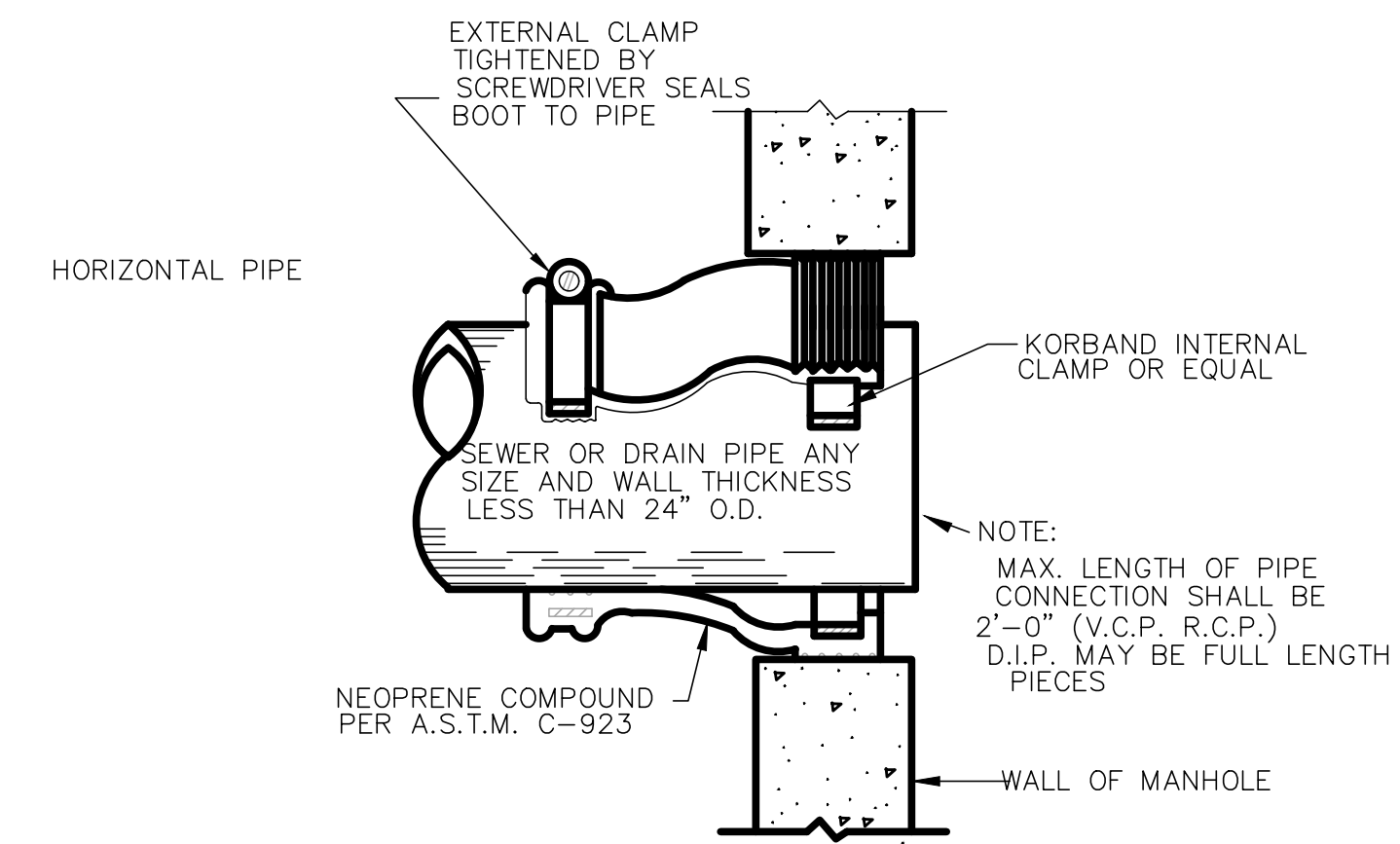
TRENCHING, EMBEDMENT AND BACKFILL DETAIL
 6/04 NO SCALE SD-1-1



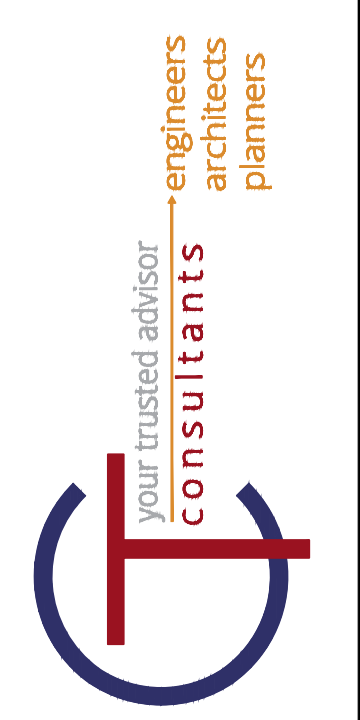
SANITARY DROP CONNECTION



SANITARY SEWER FLEXIBLE COUPLING DETAIL



SANITARY SEWER FLEXIBLE GASKET DETAIL



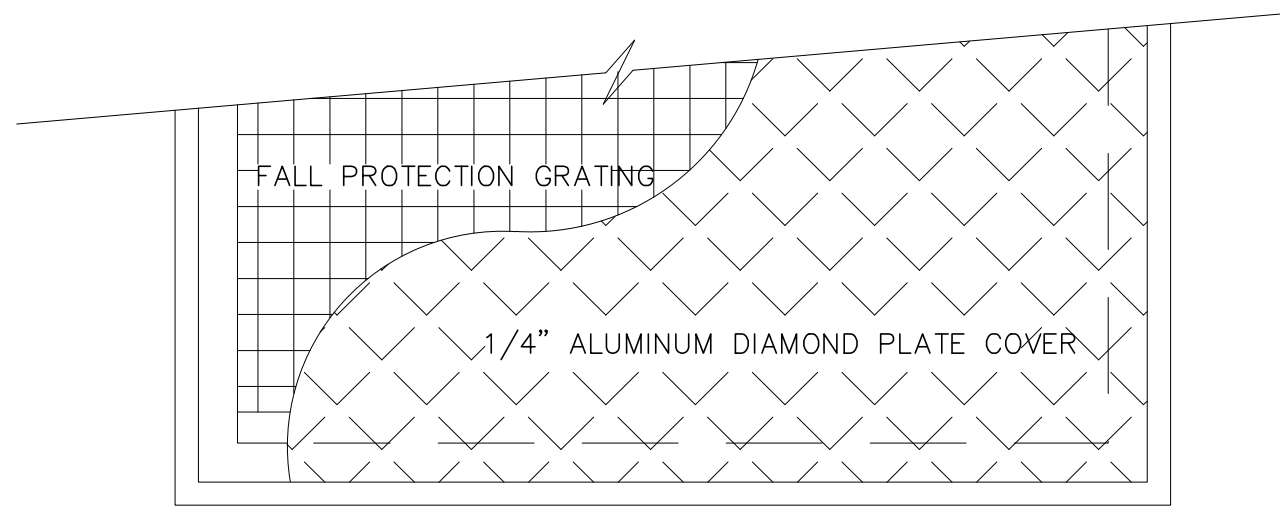
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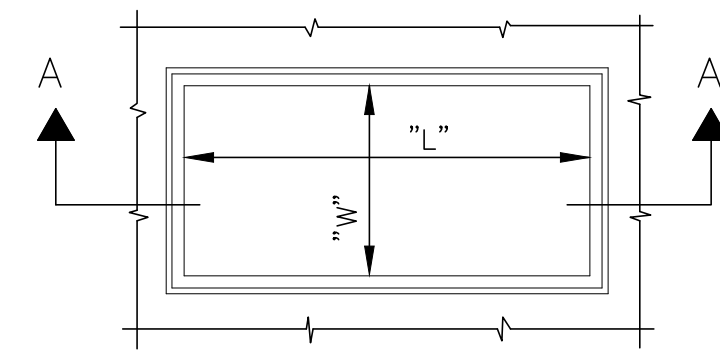
VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
 PORTAGE COUNTY, OHIO

GENERAL - 00 SERIES
STANDARD DETAILS

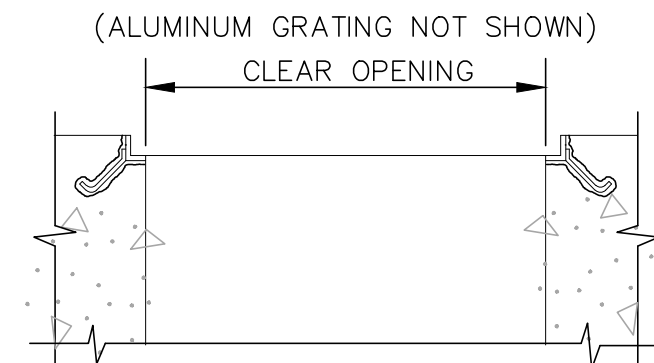
PROJECT NO.	230355
DISCIPLINE	PROCESS
SHEET NAME	SD-01
SHEET	OF
09	11



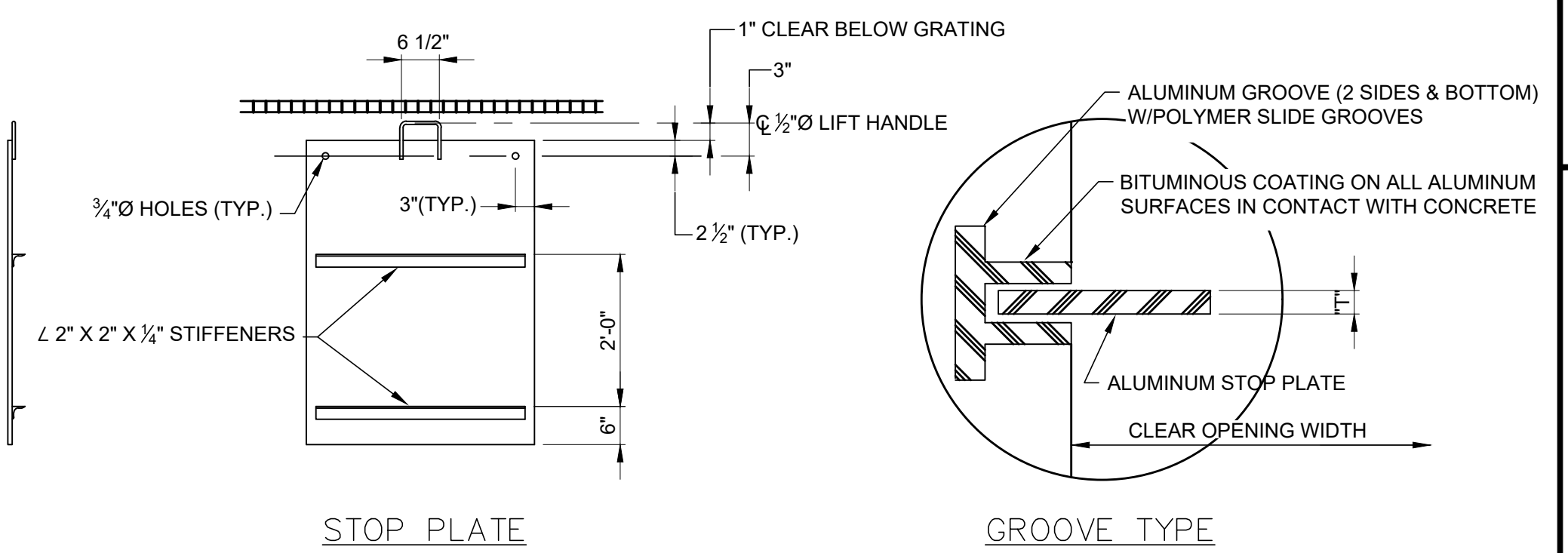
PARTIAL PLAN



PLAN



SECTION A-A

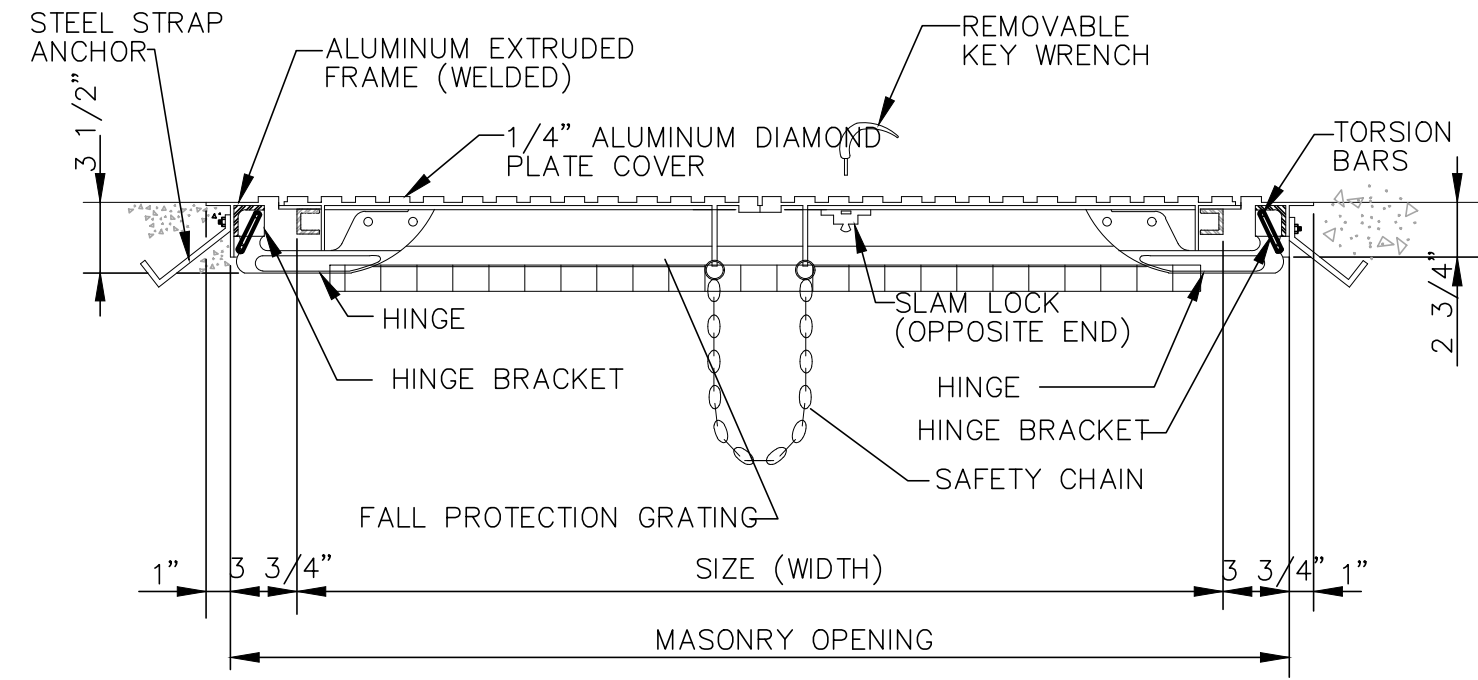


STOP PLATE

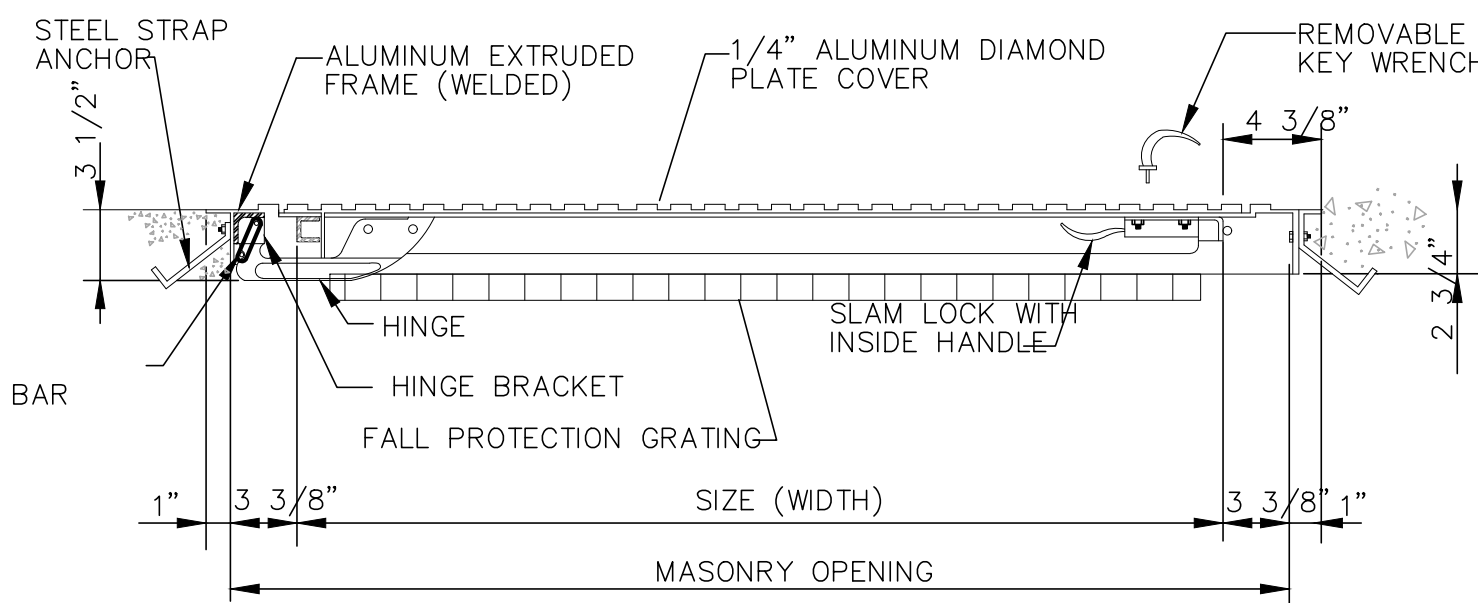
GROOVE TYPE

STOP PLATE DETAILS
11/12 SD-7-35

ALUMINUM STOP PLATE SCHEDULE				
LOCATION	MARK	CLEAR OPENING WIDTH	THICKNESS "T"	NO. REQ'D.
GRINDER VAULT		1'-0"	0.25"	2

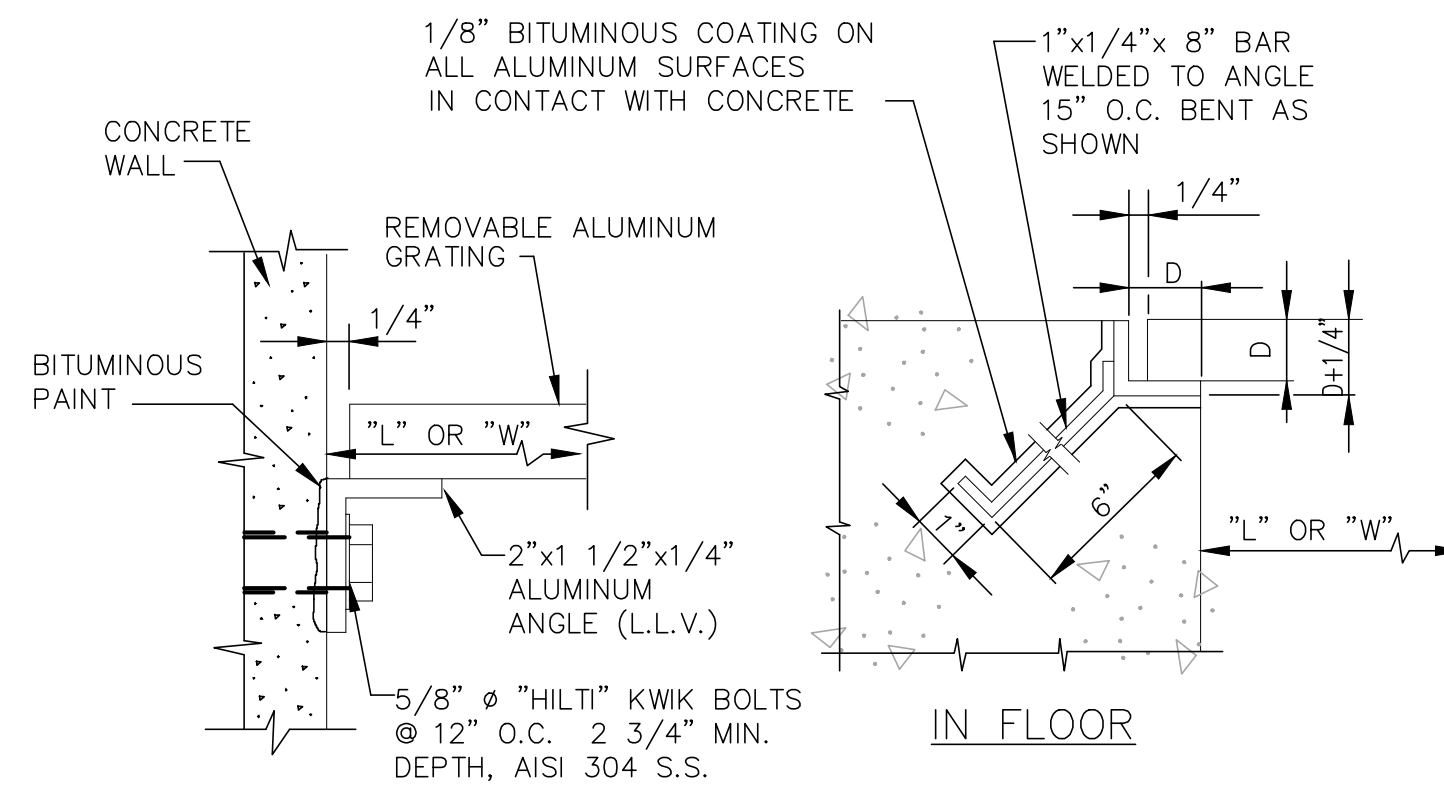


TYPE "KD"
(DOUBLE LEAF ALUMINUM)



TYPE "K"
(SINGLE LEAF ALUMINUM)

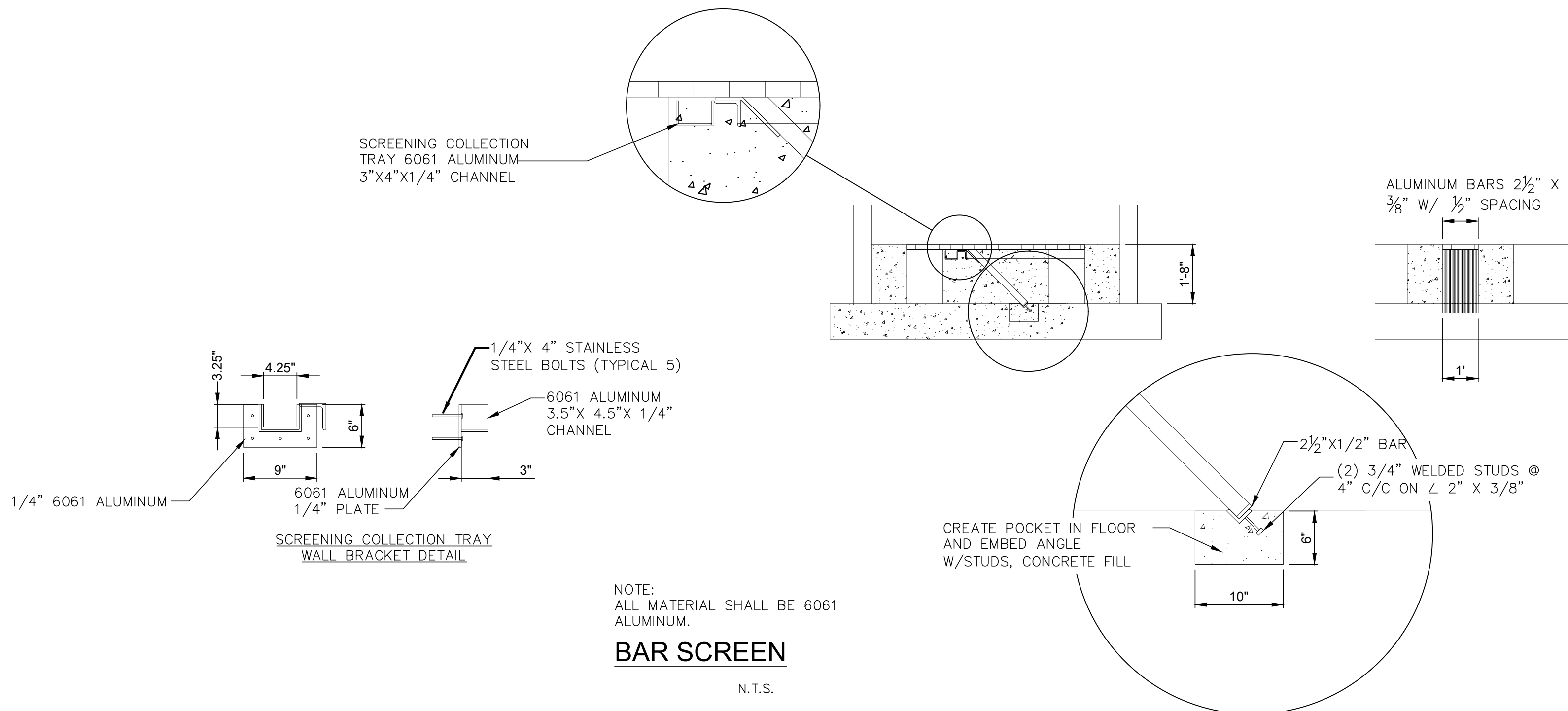
FLOOR ACCESS DOOR TYPES
N.T.S. SD-7-21



NOTE:
LENGTH OF ANGLE INSERTS TO BE DETERMINED BY AMOUNT OF GRATING USED; SIZE OF ANGLE INSERTS DETERMINED BY GRATING THICKNESS.

AT WALL

FLOOR GRATING SUPPORTS
2/98 N.T.S. SD-7-19



NOTE:
ALL MATERIAL SHALL BE 6061 ALUMINUM.

BAR SCREEN

N.T.S.



NO.	REVISION	DATE

ISSUED FOR:	ISSUE DATE:	SCALE:	DESIGNED BY:	DRAWN BY:	CHECKED BY:
	03/13/2023	AS NOTED	RSS/ELE	ELE	RSS

VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
PORTAGE COUNTY, OHIO
GENERAL - 00 SERIES
STANDARD DETAILS

PROJECT NO.	230355
DISCIPLINE	PROCESS
SHEET NAME	SD-02
SHEET	OF
10	11

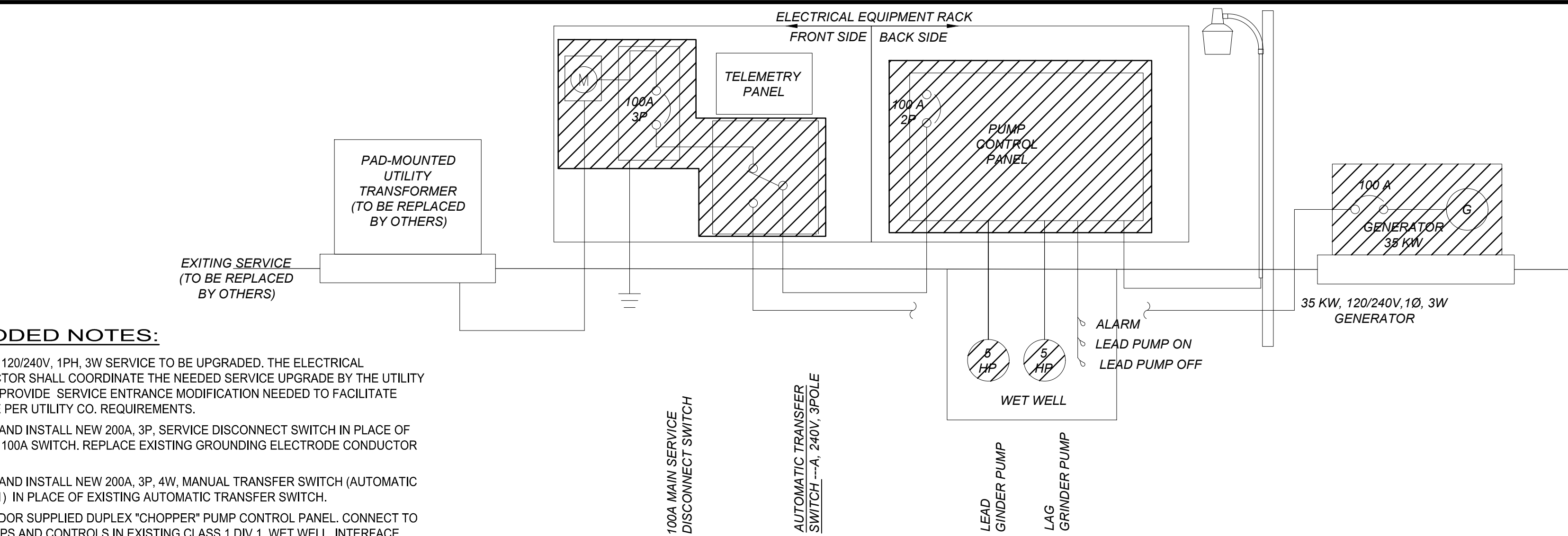
ELECTRICAL SPECIFICATIONS:

- THE ELECTRICAL CONTRACTOR SHALL APPLY FOR AND SECURE ALL COSTS AND CHARGES FOR PERMITS, CONSTRUCTION, AND MISCELLANEOUS WORK ASSOCIATED WITH AND REQUIRED FOR THE COMPLETION OF THE PROJECT ELECTRICAL WORK.
- THE ELECTRICAL CONTRACTOR SHALL ARRANGE FOR ALL INSPECTIONS OF ELECTRICAL WORK BY ALL INSPECTION AUTHORITIES HAVING JURISDICTION. COPIES OF INSPECTION REPORTS SHALL BE MADE AVAILABLE TO THE OWNER UPON REQUEST, AND THREE (3) COPIES OF THE APPROVED FINAL INSPECTION REPORT SHALL ACCOMPANY THE REQUEST FOR FINAL PAYMENT.
- ALL WORK SHALL BE IN STRICT ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE, OHIO BUILDING CODE, LOCAL CODES AND ORDINANCES WHERE APPLICABLE, AND REQUIREMENTS OF O.S.H.A.
- ALL MATERIALS AND EQUIPMENT FURNISHED AND INSTALLED BY THE ELECTRICAL CONTRACTOR SHALL BE NEW, U.L. LISTED OR LABELED, AND CONFORM TO NEMA AND ANSI STANDARD WHERE APPLICABLE.
- THE CONTRACTOR SHALL VISIT THE SITE AND FULLY FAMILIARIZE HIMSELF WITH ALL CONDITIONS WHICH AFFECT HIS WORK PRIOR TO BID. COORDINATE AND SCHEDULE WORK WITH OTHER TRADES TO ENSURE SATISFACTORY PERFORMANCE, AVOID DELAYS AND DUPLICATIONS AND MEET THE OWNER'S COMPLETION SCHEDULE FOR THE USE OF THE SITE.
- ALL WORK SHALL BE INSTALLED BY WORKMEN FULLY SKILLED IN THE WORK TO BE PERFORMED. REPAIR OR REPLACE EXISTING EQUIPMENT OR PROPERTY OF THE OWNER DAMAGED BY ELECTRICAL TRADES WORKMEN.
- THE ELECTRICAL CONTRACTOR SHALL GUARANTEE MATERIALS AND WORKMANSHIP PROVIDED BY HIM FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF OWNER'S FINAL ACCEPTANCE. REPAIR OR REPLACE ANY DEFECTIVE MATERIALS OR EQUIPMENT AT NO ADDITIONAL COST TO THE OWNER WITHIN THE GUARANTEE PERIOD.
- ALL ELECTRICAL WIRING SHALL BE INSTALLED IN CONDUIT. CONDUIT SHALL BE EMT, INTERMEDIATE, OR RIGID GALVANIZED IN ACCORDANCE WITH AND AS PERMITTED BY THE NATIONAL ELECTRICAL CODE OR LOCAL/STATE CODES AS APPLICABLE. UNDERGROUND CONDUIT SHALL BE SCHEDULE 40 PVC, 1" MINIMUM.
- FURNISH AND INSTALL PULL BOXES, JUNCTION, AND DEVICE BOXES OF SUITABLE CODE GAUGE AND SIZE. ALL TERMINATIONS IN IN-GROUND PULL BOXES SHALL BE LIQUID-TIGHT.
- ELECTRICAL WIRES SHALL BE MINIMUM #12 AWG, COPPER, 600 V RATED. #14 AWG COPPER SHALL BE PERMISSIBLE FOR CONTROL CIRCUITRY. AMPACITY RATINGS SHALL BE BASED UPON 75°C RATINGS.
 - #14, #12, AND #10 AWG CONDUCTORS SHALL BE "THHN/THWN".
 - #8 AND LARGER SHALL BE STRANDED "THHN/THWN".
- FLEXIBLE METAL CONDUIT INCLUDING LIQUIDTIGHT SHALL BE PERMITTED WHERE IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND LOCAL CODE PROVISIONS. FLEXIBLE METAL CONDUIT SHALL CONTAIN A SEPARATE GROUNDING CONDUCTOR AND BE TERMINATED WITH APPROPRIATE FITTINGS.
- THE DRAWINGS ARE DIAGRAMMATIC AND INTENDED TO DESCRIBE THE WORK REQUIRED. THE ELECTRICAL CONTRACTOR SHALL ACCURATELY FIELD MEASURE AND LAY OUT HIS WORK TO EFFECTIVELY ACHIEVE A STRUCTURALLY COORDINATED INSTALLATION WITH THE SITE LAYOUT AND OTHER TRADES.
- COORDINATE ALL SERVICE ENTRANCE REQUIREMENTS WITH THE LOCAL ELECTRIC UTILITY COMPANY TO ENSURE COMPLIANCE TO UTILITY COMPANY REQUIREMENTS. PROVIDE A COMPLETE GROUNDING SYSTEM.
- THE ELECTRICAL CONTRACTOR IS REQUIRED TO REVIEW THE SPECIFICATION PACKAGE AND COMPARE IT TO THE DRAWING PACKAGE. THE ELECTRICAL CONTRACTOR SHALL INCLUDE IN THEIR BIDS, ALL REQUIREMENTS FOUND IN ALL SECTIONS OF SPECIFICATION DIVISIONS. IN THE EVENT OF A DISCREPANCY, THE CONTRACTOR SHALL PROVIDE THE BETTER QUALITY OR GREATER AMOUNT OF WORK IN THEIR BIDS. UPON AWARD OF THE CONTRACT, THE CONTRACTOR SHALL REQUEST GUIDANCE ON HOW TO PROCEED WITH CONSTRUCTION PRIOR TO ROUGH-IN.
- THIS PROJECT INVOLVES WORK AT AN INDUSTRIAL FACILITY AND THE CONTRACTOR IS EXPECTED TO PROVIDE CRAFTSMANSHIP REFLECTING THE NATURE OF THE FACILITY. CONDUITS IN PROCESS AREAS ARE TO BE SURFACE MOUNTED RIGID GALVANIZED STEEL (RGS). ALL CONDUITS ENTERING OR LEAVING A MOTOR CONTROL CENTER, CONTROL PANEL, VALVE ACTUATOR, INSTRUMENT, A BUILDING, OR A PANELBOARD SHALL BE MADE WATERTIGHT USING AN INFLATABLE SEALED BLADDER DUCT SEALING SYSTEM, RAYCHEM "RAYFLATE" DUCT SEALING SYSTEM RDSS OR APPROVED EQUAL. ALL HARDWARE IS TO BE STAINLESS STEEL UNLESS OTHERWISE DIRECTED.
- ALL ENCLOSURES ARE TO BE RATED AS FOLLOWS:
 - OUTDOORS: NEMA 4X (STAINLESS STEEL)
 - CLASSIFIED AREAS: NEMA 7
 - INDOORS (CORROSIVE AREAS): NEMA 4X (STAINLESS STEEL), UNLESS OTHERWISE NOTED
 - INDOORS (CONTROLLED ENVIRONMENT) NEMA 12, UNLESS OTHERWISE NOTED
- ELECTRICAL CONTRACTOR SHALL REVIEW ALL OTHER TRADES' CONSTRUCTION DOCUMENTS AND/OR COORDINATE WITH OTHER TRADES AND VERIFY IF THERE ARE ANY ADDITIONAL ELECTRICAL REQUIREMENTS NOT SHOWN ON ELECTRICAL DRAWINGS. COST FOR WORK SHOWN ON OTHER TRADES' DRAWINGS SHALL BE INCLUDED IN BASE BID. ALL FIELD WIRING AND TERMINATIONS OF PROCESS EQUIPMENT AND INSTRUMENTATION AND CONTROLS SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. ALL CABLES AND WIRES PROVIDED BY VENDORS SHALL BE INSTALLED AND TERMINATED BY THE ELECTRICAL CONTRACTOR. WIRE ALL MISCELLANEOUS POWER AND CONTROLS AS REQUIRED TO PROVIDE A COMPLETE FUNCTIONING SYSTEM.
- ALL ELECTRICAL EQUIPMENT, DEVICES, CONDUIT, AND WIRING SHOWN ON THE ELECTRICAL DRAWINGS IS NEW UNLESS CLEARLY CALLED OUT AS EXISTING. ALL EXISTING ELECTRICAL EQUIPMENT THAT IS CALLED OUT TO BE REUSED SHALL BE INSPECTED IN THE FIELD BY THE ELECTRICAL CONTRACTOR AND THE CONSTRUCTION MANAGER TO DETERMINE ITS CONDITION PRIOR TO STARTING ANY WORK. PROVIDE DOCUMENTATION TO OWNER INDICATING CONDITION OF THE EXISTING EQUIPMENT, AND REUSE EXISTING EQUIPMENT ONLY IF ALL PARTIES AGREE THE CONDITION IS ACCEPTABLE. ALL EXISTING EQUIPMENT DETERMINED TO BE UNUSABLE SHALL BE REPLACED WITH LIKE KIND AS DIRECTED BY THE OWNER. ANY OF THE OWNERS EQUIPMENT DETERMINED TO BE REUSED THAT IS DAMAGED BY ANY CONTRACTOR DURING SWITCHOVER SHALL BE REPLACED BY THAT CONTRACTOR. ALL EXISTING EQUIPMENT IS THE PROPERTY OF THE OWNER (NOT THE CONTRACTOR) AND SHALL BE TREATED ACCORDINGLY.
- THE ELECTRICAL CONTRACTOR SHALL BE HELD RESPONSIBLE TO ENSURE ALL CONTROLLERS TO BE INSTALLED ARE CAPABLE OF LOCKOUT / TAGOUT PRIOR TO INSTALLATION.

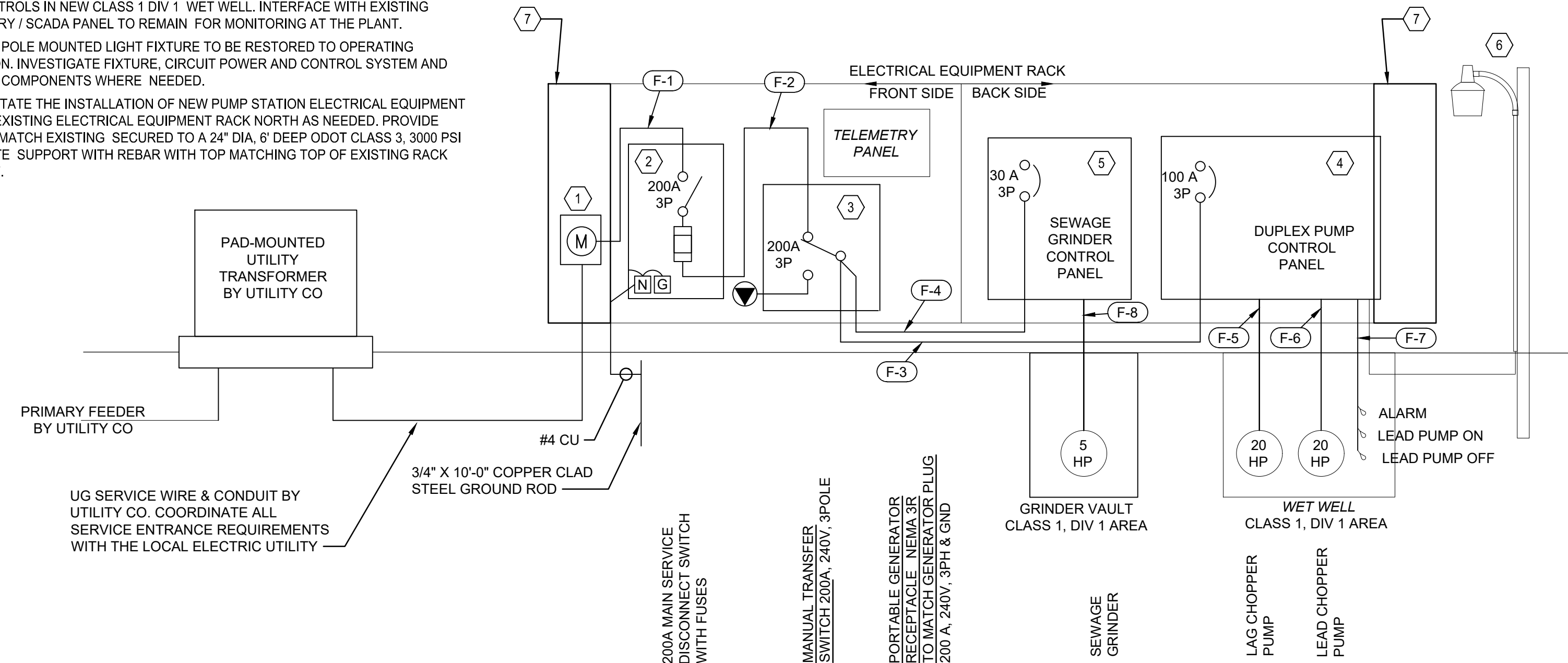
FEEDER SCHEDULE					
TAG	EQUIPMENT	POWER SOURCE	CONDUCTOR SIZE + GND	CONTROL WIRE DESTINATION	CONTROL WIRES
F-1	MAIN SERVICE DISC. SWITCH	UTILITY CO. METER	(4) #3/0 & (1) #4 GND	NONE	
F-2	NEW TRANSFER SWITCH	MAIN SERVICE DISC. SWITCH	(4) #3/0 & (1) #4 GND	NONE	
F-3	NEW CHOPPER PUMP CONTROL PANEL	NEW TRANSFER SWITCH	(4) #1/0 & (1) #4 GND	NONE	
F-4	NEW SEWAGE GRINDER CONTROL PANEL	NEW TRANSFER SWITCH	(3) #10 & (1) #10 GND	NONE	
F-5	NEW CHOPPER PUMP #1 (LEAD)	NEW CHOPPER PUMP CONTROL PANEL	(3) #3 & (1) #8 GND	MOTOR THERMAL SWITCHES	(3) #14
F-6	NEW CHOPPER PUMP #2 (LAG)	NEW CHOPPER PUMP CONTROL PANEL	(3) #3 & (1) #8 GND	MOTOR THERMAL SWITCHES	(3) #14
F-7	NEW CHOPPER PUMP FLOATS	NEW CHOPPER PUMP CONTROL PANEL		FLOAT CONTROLS	(10) #14
F-8	NEW SEWAGE GRINDER	NEW SEWAGE GRINDER CONTROL PANEL	(3) #12 & (1) #12 GND	MOTOR THERMAL SWITCHES	(3) #14

CODED NOTES:

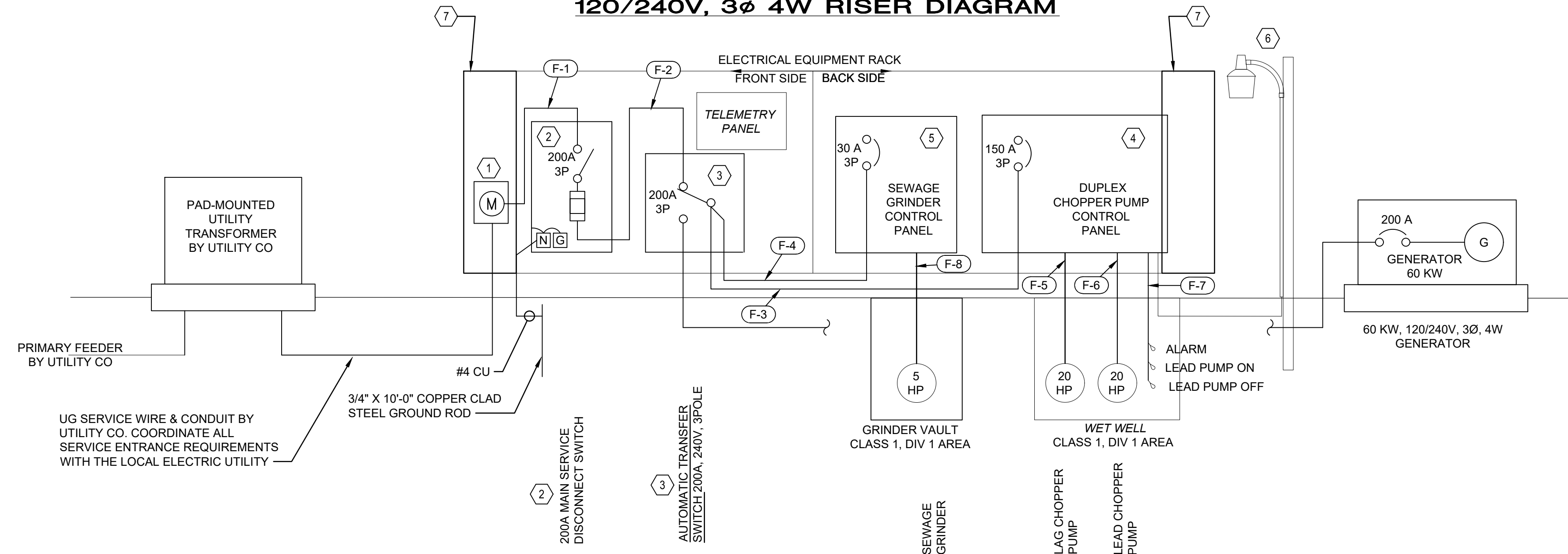
- EXISTING 120/240V, 1PH, 3W SERVICE TO BE UPGRADED. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE NEEDED SERVICE UPGRADE BY THE UTILITY CO. AND PROVIDE SERVICE ENTRANCE MODIFICATION NEEDED TO FACILITATE UPGRADE PER UTILITY CO. REQUIREMENTS.
- FURNISH AND INSTALL NEW 200A, 3P, SERVICE DISCONNECT SWITCH IN PLACE OF EXISTING 100A SWITCH. REPLACE EXISTING GROUNDING ELECTRODE CONDUCTOR WITH #4.
- FURNISH AND INSTALL NEW 200A, 3P, 4W, MANUAL TRANSFER SWITCH (AUTOMATIC FOR ALT 1) IN PLACE OF EXISTING AUTOMATIC TRANSFER SWITCH.
- NEW VENDOR SUPPLIED DUPLEX "CHOPPER" PUMP CONTROL PANEL. CONNECT TO NEW PUMPS AND CONTROLS IN EXISTING CLASS 1 DIV 1 WET WELL. INTERFACE WITH EXISTING TELEMETRY / SCADA PANEL TO REMAIN FOR MONITORING AT THE PLANT.
- NEW VENDOR SUPPLIED "GRINDER" CONTROL PANEL. CONNECT TO NEW GRINDER AND CONTROLS IN NEW CLASS 1 DIV 1 WET WELL. INTERFACE WITH EXISTING TELEMETRY / SCADA PANEL TO REMAIN FOR MONITORING AT THE PLANT.
- EXISTING POLE MOUNTED LIGHT FIXTURE TO BE RESTORED TO OPERATING CONDITION. INVESTIGATE FIXTURE, CIRCUIT POWER AND CONTROL SYSTEM AND REPLACE COMPONENTS WHERE NEEDED.
- TO FACILITATE THE INSTALLATION OF NEW PUMP STATION ELECTRICAL EQUIPMENT EXTEND EXISTING ELECTRICAL EQUIPMENT RACK NORTH AS NEEDED. PROVIDE POST TO MATCH EXISTING. SECURED TO A 24" DIA, 6" DEEP ODOT CLASS 3, 3000 PSI CONCRETE. SUPPORT WITH REBAR WITH TOP MATCHING TOP OF EXISTING RACK SUPPORT.



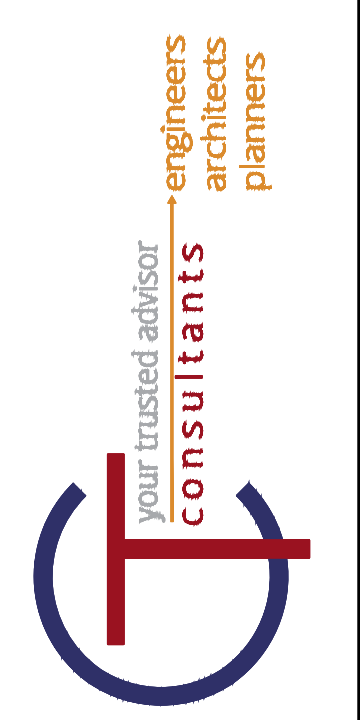
PUMP STATION EXISTING CONDITIONS/DEMOLITION 120/240V, 1Ø ONE-LINE DIAGRAM



(BASE BID) PROPOSED PUMP STATION 120/240V, 3Ø 4W RISER DIAGRAM



(ALT 1) PROPOSED PUMP STATION 120/240V, 3Ø 4W RISER DIAGRAM



NO	REVISION	DATE

ISSUED FOR:	AS NOTED	DESIGNED BY:	NSS/LEL	DRAWN BY:	ELF	CHECKED BY:	EMF
ISSUE DATE:	03/13/2023	SCALE:					

**VILLAGE OF HIRAM
HIRAM CONSTANCE LIFT STATION
PORTAGE COUNTY, OHIO**

**ELECTRICAL - E SERIES
GENERAL NOTES AND SINGLE LINE DIAGRAMS**

PROJECT NO. **230355**

DISCIPLINE **ELECTRICAL**

SHEET NAME **00E-01**

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