

JASPER WATER WORKS & SEWER BOARD

SEWER IMPROVEMENTS

TOWN CREEK WWTP CLARIFIER #1 AND #2 IMPROVEMENTS

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OCTOBER 2021

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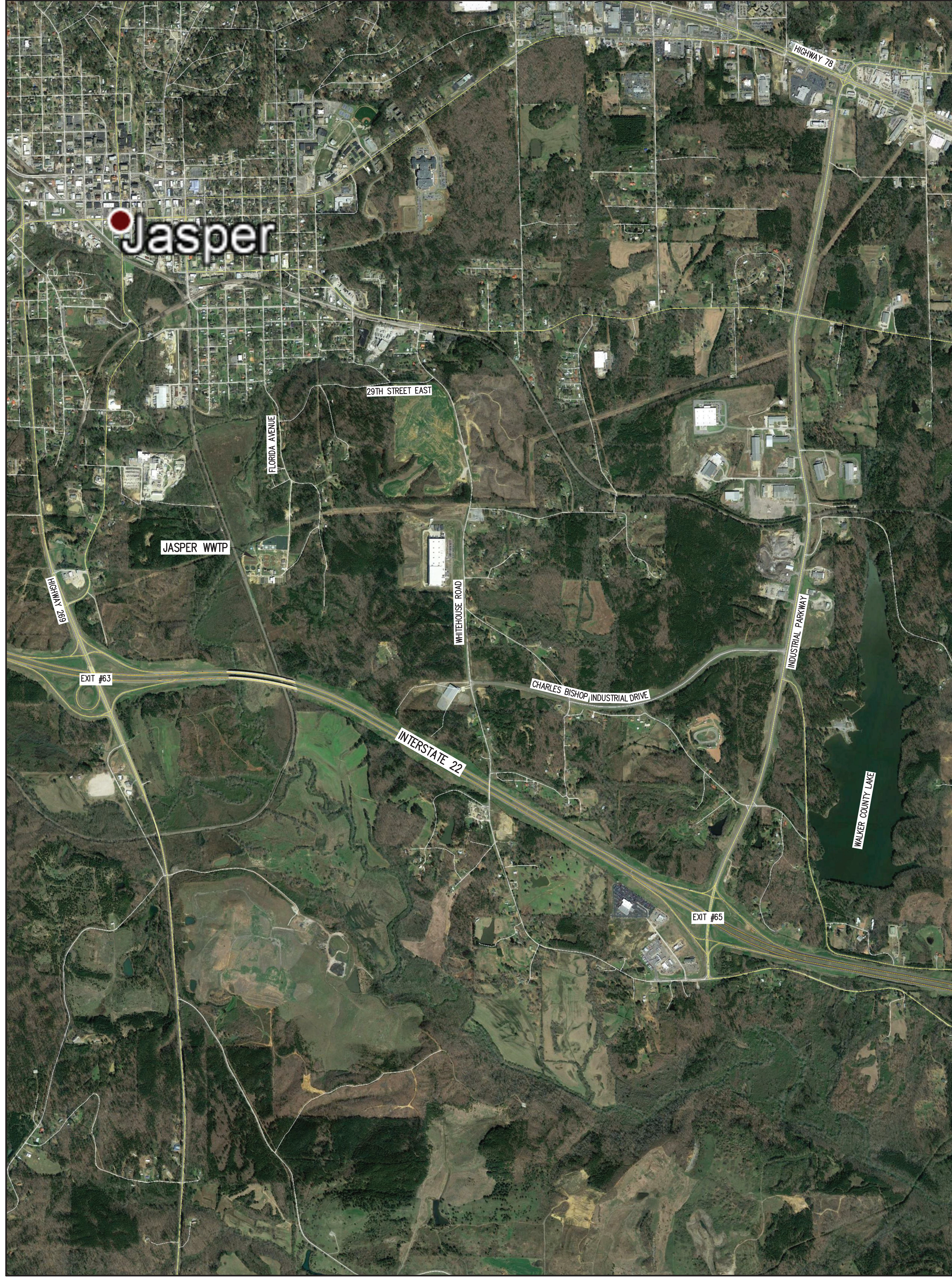
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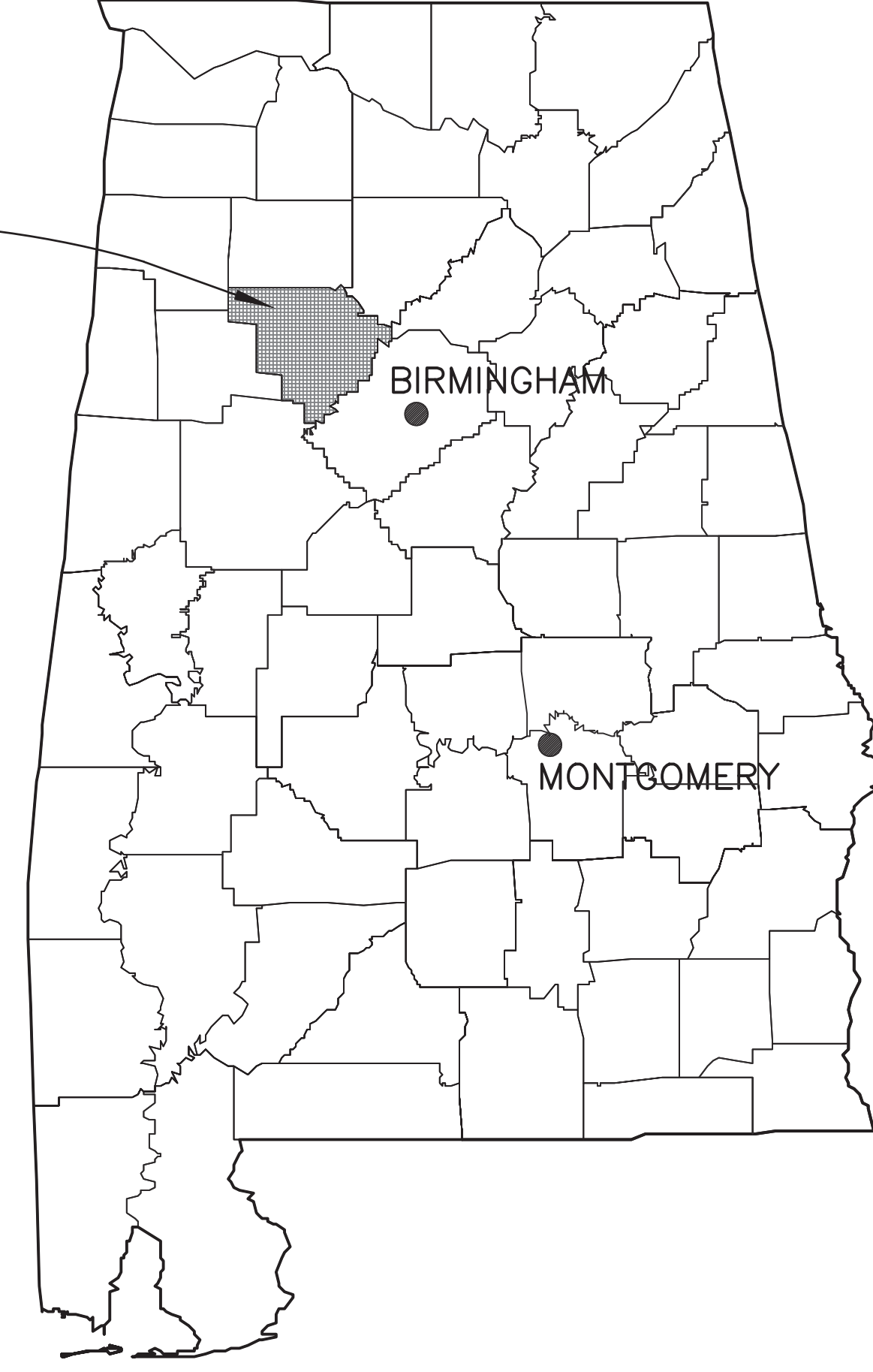


10-06-21

BID SET



WALKER COUNTY



ALABAMA MAP



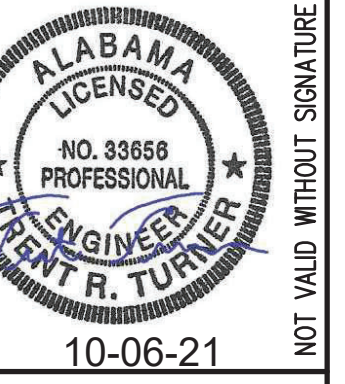
WALKER COUNTY, ALABAMA

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JASPER WATER & SEWER BOARD

TOWN CREEK WWTP
CLARIFIER #1 AND #2 IMPROVEMENTS

2021



NOT VALID WITHOUT SIGNATURE

BAR = 1"

Drawing Project No.	Title	
	10-2021	LOCATION MAP
Date	AS SHOWN	BID SET
Scale	1	
Sheet		

GENERAL NOTES

1. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR SAFETY DURING CONSTRUCTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PROCEDURES, TECHNIQUES, MEANS AND METHODS OF CONSTRUCTION.
2. WASTEWATER TREATMENT PLANTS CONTAIN MANY DANGERS AND HAZARDS. THESE INCLUDE, **BUT ARE BY NO MEANS LIMITED TO**, SUCH DANGERS AS CONFINED SPACES, ATMOSPHERES WITH DANGEROUSLY LOW OXYGEN LEVELS, TOXIC AND EXPLOSIVE GASES, POTENTIALLY HAZARDOUS GASES STORED AND USED ONSITE, SEWAGE AND SLUDGE WITH PATHOGENS, ELECTRICAL HAZARDS, FALLING HAZARDS, DROWNING HAZARDS, NATURAL GAS HAZARDS, UNANTICIPATED EQUIPMENT STARTING, AND TRENCH DANGERS, AMONG OTHERS. NOTE THAT POWER IN A PANEL, AN ENCLOSURE, OR AT EQUIPMENT, ETC., MAY ORIGINATE FROM MULTIPLE, DIFFERENT AND INDEPENDENT SOURCES. THE CONTRACTOR SHALL HAVE A THOROUGH UNDERSTANDING OF ALL THE DANGERS AND HAZARDS ASSOCIATED WITH THIS TYPE OF WORK. THE CONTRACTOR SHALL INSURE THAT ALL HIS PERSONNEL AND ALL SUBCONTRACTOR PERSONNEL, ETC., FOLLOW ALL APPROPRIATE SAFETY PRECAUTIONS AT ALL TIMES. CONTINUOUSLY COMPLY WITH ALL OSHA REGULATIONS AND REQUIREMENTS, ETC. AND ALWAYS FOLLOW GOOD SAFETY PRACTICES. THE CONTRACTOR SHALL BE AWARE THAT THIS IS AN OPERATING FACILITY AND THAT PERSONNEL MUST MAKE THEIR ROUNDS THROUGH ALL AREAS OF THE WWTP THROUGHOUT THE DAY. AS SUCH, THE CONTRACTOR MUST CAREFULLY PLAN HIS ACTIVITIES AND ALWAYS PROVIDE ADEQUATE SAFETY BARRIERS AND OTHER MEASURES AS DESIRABLE, ETC., TO CONTINUOUSLY PROTECT PERSONNEL AND VISITORS, AS WELL AS HIS OWN PERSONNEL. SAFETY IS THE RESPONSIBILITY SOLELY OF THE CONTRACTOR. NEITHER THE OWNER NOR THE ENGINEER HAVE ANY DUTY TO REVIEW THE SAFETY PRACTICES OF THE CONTRACTOR.
3. CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS EQUIPMENT AND MATERIALS REQUIRED FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR TO FIELD VERIFY ALL EXISTING PIPE FITTINGS AND LENGTHS BEFORE ORDERING MATERIALS.
4. THIS PROJECT REQUIRES WORK IN AND CONNECTIONS TO AN EXISTING, ACTIVE, OPERATING WASTEWATER TREATMENT PLANT. AS SUCH, THE CONTRACTOR SHOULD ANTICIPATE THE PROBLEMS ASSOCIATED WITH SUCH WORK, INCLUDING BUT NOT LIMITED TO, COORDINATION OF ALL WORK WITH THE OWNER (THROUGH THE ENGINEER) INCLUDING MAKING TIE-INS, ELECTRICAL TIE-INS AND MODIFICATIONS, AND INTERRUPTIONS DURING SUITABLE PERIODS, THOROUGHLY PLANNING WORK ACTIVITIES TO MINIMIZE INTERRUPTIONS OF NORMAL OPERATIONS, MAINTAINING SITE SAFETY FOR THE OPERATIONS AND MAINTENANCE STAFF, AND LEAKING GATES AND VALVES, ETC. SOME ACTIVITIES MAY BE BEST PERFORMED DURING THE EARLY MORNING HOURS OF DRY WEATHER. THE CONTRACTOR SHALL COORDINATE ALL WORK WITH THE OWNER/ENGINEER DURING LOW DEMAND TIMES. THIS MAY REQUIRE WEEKEND AND OR NIGHT TIME WORK (NO ADDITIONAL PAYMENTS WILL BE MADE FOR THIS WORK IF NEEDED).
5. WHERE WORK TIES TO, OR IS LOCATED IN OR ADJACENT TO, EXISTING STRUCTURES OR PIPING, CAREFULLY INSPECT FACILITIES AND VERIFY MATERIALS, DEPTHS, DIMENSIONS, AND ANY POSSIBLE CONFLICTS PRIOR TO PLANNING THE WORK OR ORDERING MATERIALS, ETC. DEMATER OR EXCAVATE EXISTING FACILITIES AS REQUIRED FOR THESE INSPECTIONS. THE CONTRACTOR SHALL ANTICIPATE THAT CHANGES WILL BE NECESSARY AS A RESULT OF THESE INSPECTIONS AND THERE SHALL BE NO EXTRA PAYMENT OR TIME FOR THESE CHANGES OR ADJUSTMENTS.
6. PRIOR TO PLACING ANY NEW STRUCTURES, PIPING, OR EQUIPMENT, ETC., INTO SERVICE, CLEAN UP ALL TRASH AND DEBRIS AND CHECK OUT ALL EQUIPMENT, GATES, AND ALL APPURTENANCES TO THE MAXIMUM EXTENT POSSIBLE AND TAKE OTHER ACTIONS AS APPROPRIATE TO MINIMIZE THE POTENTIAL FOR PROBLEMS.
7. THE CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR ANY AND ALL BACKUPS, BYPASSES, OR OVERFLOWS, ETC., RESULTING FROM HIS WORK, AND FOR ANY AND ALL SUBSEQUENT DAMAGES, FINES, PENALTIES, OR OTHER COSTS INCURRED, INCLUDING ANY AND ALL COSTS INCURRED BY THE OWNER, CAUSED BY WORK BY THE CONTRACTOR.
8. THIS IS AN EXISTING PLANT THAT HAS BEEN MODIFIED AFTER THE ORIGINAL CONSTRUCTION. MUCH INFORMATION IS BASED ON DRAWINGS PREPARED FOR THE CONSTRUCTION OF THE ORIGINAL PLANT AND OTHER ADDITIONS. MUCH OF THIS INFORMATION HAS NOT BEEN FIELD VERIFIED. CONTRACTOR SHALL FIELD VERIFY INFORMATION AS REQUIRED FOR THE TIMELY PROSECUTION OF THE WORK.
9. ALL WORK ACTIVITIES (INCLUDING ELECTRICAL) THAT AFFECT PLANT OPERATIONS MUST BE SEQUENCED WITH THE EXISTING PLANT OPERATIONS. THESE SHALL BE CAREFULLY PLANNED AND COORDINATED WITH BOTH THE OWNER AND THE ENGINEER TO RESULT IN A MINIMUM OF INTERFERENCE WITH THE EXISTING OPERATIONS. THE CONTRACTOR SHALL PERFORM AS MUCH PRELIMINARY OR ASSEMBLY WORK AS POSSIBLE PRIOR TO INITIATING OPERATIONS REQUIRING SEQUENCING. WHERE APPLICABLE, THE CONTRACTOR SHALL HAVE STANDBY EQUIPMENT ON SITE SUCH THAT THE LOSS OF INDIVIDUAL EQUIPMENT WILL NOT PREVENT THE COMPLETION OF SUCH CONNECTIONS, ETC.
10. THE CONTRACTOR SHOULD ANTICIPATE THAT EXISTING VALVES, GATES, OR OTHER FLOW CONTROL STRUCTURES OR DEVICES WILL LEAK. THE CONTRACTOR SHALL MAKE ALL PROVISIONS AND PROVIDE ALL REQUIRED EQUIPMENT (I.E. PLUGS, CAPS, COVERS, ETC.) TO HANDLE THE EXISTING FLOW WHILE PERFORMING THE REQUIRED WORK.
11. ALL CONSTRUCTION TO BE IN ACCORDANCE W/ CITY OF JASPER RULES AND REGULATIONS. CONTRACTOR SHALL OBTAIN & PAY FOR ALL PERMITS REQUIRED FOR CONSTRUCTION.

DEMOLITION NOTES

1. THE CLARIFIER STRUCTURES ARE EXISTING. THE CONTRACTOR SHALL REMOVE AND DEMOLISH ALL ITEMS NOTED OR INFERRED IN REGARDS TO THE CLARIFIER MECHANISM, CENTER COLUMN, TRUSS ARMS, CAGES, SCUM BEACH, SCUM ARMS, CENTER WELL, ETC. THE CONTRACTOR SHALL BE AWARE THAT ALL EQUIPMENT, COMPONENTS, PIPING, ELECTRICAL, ETC. THAT WILL BE REQUIRED TO BE REMOVED MAY NOT BE SHOWN OR NOTED ON THE PLAN VIEW OR SECTIONS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REMOVE AND PROPERLY DISPOSE OF ALL EQUIPMENT, MATERIALS, ETC. REQUIRED TO COMPLETE THE PROJECT.
2. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR THE PROPER DISPOSAL OF ANY AND ALL EXCESS MATERIALS, EQUIPMENT, ETC. RESULTING FROM THE DEMOLITION AND/OR THE WORK PERFORMED. ANY AND ALL EXCESS MATERIALS, EQUIPMENT, CONSTRUCTION WASTE, ETC. SHALL BE HAULED OFF-SITE AND PROPERLY DISPOSED OF BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER. ALL COST(S) ASSOCIATED WITH THIS WORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
3. ALL UNUSED/OLD ANCHOR BOLTS, MISCELLANEOUS METAL, ETC. SHALL BE CUT AND GROUND SMOOTH FLUSH (OR BELOW THE SURFACE) WITH SURROUNDING CONCRETE FLOORS, WALLS, ETC.
4. SLAB DEFECTS SUCH AS HOLES, IMPERFECTIONS, DETERIORATED AREAS SHALL BE REPAIRED WITH GROUT AS DIRECTED BY THE ENGINEER DURING CONSTRUCTION.

PROJECT NOTES

1. THE CONTRACTOR SHALL REMOVE AND REPLACE THE CLARIFIER MECHANISM IN ITS ENTIRETY IN CLARIFIER #1 AND #2 WITH NEW EQUIPMENT. THE CONTRACTOR SHALL INSTALL AND MAKE FULLY FUNCTIONAL ALL EQUIPMENT AND COMPONENTS REQUIRED IN ACCORDANCE WITH THE MANUFACTURERS INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. SEE SPECIFICATIONS FOR EXACT EQUIPMENT TO BE PROVIDED. THE CLARIFIER MANUFACTURER SHALL PROVIDE (AS PART OF EQUIPMENT CONTRACT) A FIELD TECHNICIAN TO OVERSEE AND APPROVE THE INSTALLATION OF THE EQUIPMENT. CONTRACTOR WILL BE REQUIRED TO PROPERLY COORDINATE WITH THEM FOR INSPECTION OF EQUIPMENT.
2. MUCH OF THE INFORMATION IS BASED ON DRAWINGS PREPARED FOR THE CONSTRUCTION OF THE ORIGINAL PLANT AND/OR OTHER ADDITIONS/MODIFICATIONS. THE CONTRACTOR/CLARIFIER MANUFACTURER SHALL BE RESPONSIBLE FOR, IN A TIMELY MANNER, VERIFYING ALL EXISTING SIZES, MATERIALS, LOCATIONS, ELEVATIONS, DEPTHS, AND DIMENSIONS OF WALLS, CONCRETE, PIPING, ELECTRICAL, ETC. PRIOR TO ORDERING MATERIALS FOR EQUIPMENT OR OTHER PROPOSED WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, LOCATIONS, ETC. ASSOCIATED WITH THE WORK REQUIRED. CONTRACTOR/CLARIFIER MANUFACTURER SHALL PROVIDE THE VERIFIED DIMENSIONS, ELEVATIONS, SIZES, ETC. TO THE OWNER/ENGINEER.
3. THE EXISTING PIPING AND ELECTRICAL LOCATIONS ARE NOT SHOWN ON THE DRAWINGS. THE CONTRACTOR SHALL COORDINATE WITH THE OWNER FOR EXISTING PIPING AND ELECTRICAL ITEMS THAT MAY CONFLICT WITH PROPOSED IMPROVEMENTS. THE CONTRACTOR SHALL REMOVE/REPLACE, REROUTE, ETC. ANY ITEMS THAT CONFLICT WITH THE PROPOSED ITEMS TO BE INSTALLED AS DIRECTED BY THE OWNER.
4. NO EXISTING YARD PIPING AND ELECTRICAL FACILITIES ARE SHOWN. USE APPROPRIATE MEASURES AND SAFETY PRECAUTIONS TO AVOID DIGGING INTO ELECTRICAL LINES AND OTHER POTENTIAL DANGERS. COORDINATE WITH THE OWNER.
5. CONTRACTOR SHALL PROVIDE ALL MISCELLANEOUS EQUIPMENT AND MATERIALS REQUIRED FOR A COMPLETE, FULLY FUNCTIONAL SYSTEM AT NO ADDITIONAL COST TO THE OWNER. THE CONTRACTOR SHALL PROVIDE ALL SUPPORTS REQUIRED (I.E. UNI-STRUT, L BRACKETS, ETC.). THESE SUPPORTS SHALL BE STAINLESS STEEL.
6. CONTRACTOR SHALL PROVIDE A DUMPSTER (IF NEEDED) AND PORTABLE TOILET FACILITIES FOR HIS FORCES, COORDINATE LOCATION OF FACILITIES WITH OWNER AND ENGINEER.
7. COORDINATE ALL WORK WITH EQUIPMENT PROVIDED, EXISTING STRUCTURES, WALLS, FLOORS, ETC, AND ADJUST AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
8. THE CONTRACTOR SHALL BE AWARE THAT EQUIPMENT DIMENSIONS VARY BY MANUFACTURER. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH APPROVED SHOP DRAWINGS BEFORE ORDERING MATERIALS. COORDINATE ALL WORK WITH EQUIPMENT PROVIDED, EXISTING STRUCTURES, WALLS, FLOORS, ETC, AND ADJUST AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
9. THE CONTRACTOR SHALL PROPERLY ANCHOR ALL EQUIPMENT, PIPING, ELECTRICAL, SUPPORTS, BRIDGES, STAIRS, ETC. TO THE CONCRETE WALLS, FOUNDATION, OR OTHER AREAS. CONTRACTOR SHALL FOLLOW MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. PROVIDE ALL ANCHOR BOLTS AND HARDWARE AS REQUIRED. ALL ANCHOR BOLTS AND HARDWARE SHALL BE STAINLESS STEEL.
10. UNLESS INDICATED OTHERWISE ALL ANCHOR BOLTS, WEDGE ANCHORS, EPOXY ANCHORS, MISCELLANEOUS FASTENERS & HARDWARE, ETC. NOT PROVIDED WITH THE PURCHASED EQUIPMENT, SHALL BE STAINLESS STEEL AND BE PROVIDED BY THE CONTRACTOR. ALL THREADS ON STAINLESS STEEL BOLTS, ANCHORS, ETC. USED IN EQUIPMENT APPLICATIONS SHALL BE COATED WITH ANTI-GALLING COMPOUND DESIGNED FOR STAINLESS STEEL.
11. THE CONTRACTOR SHALL COORDINATE WITH OWNER FOR VERTICAL (ELEVATION) CONTROL ONSITE. CONTRACTOR SHALL ESTABLISH VERTICAL CONTROL AROUND CLARIFIER FOR SETTING EQUIPMENT. THE CONTRACTOR SHALL TRANSFER ELEVATION AS REQUIRED FOR WORK TO BE PERFORMED. COORDINATE WITH THE OWNER/ENGINEER.
12. ALL EXISTING D.I. PIPING IN THE CLARIFIER SHALL BE BRUSH BLASTED, CLEANED, AND PREPARED TO BE PRIMED WITH TNEPEC SERIES N140 OR APPROVED EQUAL. ALL NEW AND EXISTING PRIMED PIPING SHOULD BE COATED WITH 2 COATS OF A TNEPEC 142 SPECIFICALLY DESIGNED FOR SEWAGE APPLICATIONS APPLIED OVER TNEPEC PRIMER. FINAL COLOR OF PIPING SHOULD BE BLACK.
13. CONTRACTOR SHALL PROVIDE THEIR OWN JOB-SITE TRAILER (IF NECESSARY) FOR HIS FORCES. CONTRACTOR SHALL CONNECT WATER, POWER, AND OTHER UTILITIES AS REQUIRED. JOB SITE TRAILER AND OTHER ONSITE POWER DEMANDS SHALL BE SERVED FROM THE OWNERS EXISTING ONSITE POWER SUPPLY. WHERE CONSTRUCTION DEMANDS (E.G. CONCRETE VIBRATORS) EXCEED ONSITE POWER AVAILABILITY AT A LOCATION, PROVIDE AUXILIARY POWER AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL MAKE ALL UTILITY CONNECTION(S) REQUIRED.
14. THE CONTRACTOR WILL BE REQUIRED TO EXTEND 3-1" ALUMINUM CONDUITS ON THE BRIDGE TO THE CENTER PIER LOCATION OF EACH CLARIFIER. PROPERLY ATTACH AND SECURE THESE CONDUITS TO THE BRIDGE WITH STAINLESS STEEL SUPPORTS AND HARDWARE.
15. ONCE EXISTING CENTER PIER IS REMOVED, CONTRACTOR SHALL CHIP, HAMMER, GRIND, ETC. LEVELING GROUT AS REQUIRED FOR INSTALLATION OF NEW CLARIFIER CENTER PIER. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ANCHOR BOLTS, HARDWARE, EPOXY GROUT AND NON-SHRINK GROUT FOR LEVELING/INSTALLING NEW CENTER PIER AS RECOMMENDED AND REQUIRED.
16. ALL CONCRETE USED (IF ANY) ON THE PROJECT SHALL BE 4,000 PSI TYPE II CEMENT.
17. THE EXISTING SCUM BAFFLE AND EFFLUENT WEIRS IN BOTH CLARIFIERS ARE STAINLESS STEEL. THEY APPEAR TO BE OUT OF LEVEL ACROSS THE CLARIFIERS. THE CONTRACTOR SHALL REMOVE, REUSE, AND REINSTALL THE SCUM BAFFLES AND EFFLUENT WEIRS FOR THE FULL PERIMETER IN EACH OF THE CLARIFIERS. THE CONTRACTOR SHALL REMOVE ALL CAULK, SEALANT, ETC. ON EXISTING WEIRS. THE CONTRACTOR SHALL PROVIDE ALL NEW EXPANSION ANCHOR BOLTS AND HARDWARE (IF NEEDED) IN SAME SIZE AS EXISTING FOR REINSTALLATION. ONCE INSTALLED THE CONTRACTOR SHALL CAULK WALL AND WEIR JOINT AND ALL ALL EDGES, SEAMS, ETC. AS NECESSARY WITH SIKAFLEX 2C OR EQUAL. COORDINATE FINAL V-NOTCH ELEVATIONS WITH OWNER. WEIRS AND SCUM BAFFLES SHALL BE LEVELED ACROSS THE CLARIFIER WITH NO DEVIATION GREATER THAN 1/16" FROM ONE QUADRANT TO THE OTHER WITH NO GREATER THAN 1/8" VARIATION ACROSS THE CLARIFIER.
18. THE CONTRACTOR SHALL COMPLETE IMPROVEMENTS TO CLARIFIER #2 FIRST. THE CONTRACTOR WILL NOT BE ALLOWED TO TAKE THE EXISTING CLARIFIER #2 OUT OF SERVICE FOR IMPROVEMENTS UNTIL 1 WEEK PRIOR TO THE EXPECTED EQUIPMENT DELIVERY DATE. THE CONTRACTOR SHALL PROVIDE THE FIRM EQUIPMENT DELIVERY DATE TO OWNER PRIOR TO TAKING CLARIFIER OUT OF SERVICE.
19. ONCE CLARIFIER MECHANISM IS COMPLETE AND POWERED BY THE OWNER, THE CLARIFIER SHALL BE PLACED INTO SERVICE AND RUN TROUBLE FREE FOR A MINIMUM OF 10 DAYS PRIOR TO OWNER ACCEPTANCE.

SITE NOTES

1. ALL DAMAGED OR DISTURBED AREAS DURING CONSTRUCTION SHALL BE BACKFILLED AND/OR GRADED TO MATCH SURROUNDING GRADES. ALL DISTURBED AREAS SHALL BE SEED TO MATCH SURROUNDING AREA GRASSING. CONTRACTOR SHALL PROVIDE TOPSOIL, FERTILIZER, GRASSING, ETC. AS NECESSARY TO MAINTAIN AN EROSION FREE SURFACE.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL SITE GRADING AS REQUIRED FOR PROPER AND POSITIVE SITE DRAINAGE. NO PONDING OR STANDING WATER WILL BE ALLOWED OR ACCEPTED.
3. ALL EXISTING SURFACES, STRUCTURES, SIDEWALKS, PAVEMENT, ASPHALT, CURB AND GUTTER, WALKWAYS, PADS, LANDSCAPING, ETC. DAMAGED OR DISTURBED DURING CONSTRUCTION SHALL BE REPLACED IN LIKE KIND AT NO ADDITIONAL COST TO THE OWNER, EXCEPT WHERE IMPROVEMENTS OR CHANGES ARE SHOWN OR NOTED ON THE DRAWINGS. CONCRETE SHALL BE REPLACED FROM THE NEAREST UNDAMAGED CONSTRUCTION OR CONTROL JOINTS. ALL EXISTING SIDEWALKS, WALKWAYS, PADS, PAVEMENT, ETC. AND ALL OTHER CONCRETE MAY NOT BE SHOWN ON THESE DRAWINGS.
4. WALKWAYS, SIDEWALKS, MOW STRIPS, ETC. SHALL BE POURED WITH SLIGHT SLOPE AND NO LOW SPOTS TO ENSURE THEY WILL DRAIN FREE.

PIPING NOTES

1. ALL NEW PIPING INSIDE CLARIFIER SHALL BE FLANGED DUCTILE IRON WITH D.I. FLANGED FITTINGS. PROVIDE ALL GASKETS REQUIRED.
2. ALL PIPING AND FITTINGS THROUGHOUT THE PROJECT SHALL BE CEMENT LINED DUCTILE IRON PRIMED WITH TNEPEC N140 PRIMER.
3. THE CONTRACTOR SHALL PROVIDE ALL PIPE HARDWARE (I.E. BOLTS, NUTS, WASHERS, GASKETS, ETC.) AS REQUIRED TO PROPERLY SECURE ALL PIPING.
4. CONTRACTOR SHALL FURNISH AND INSTALL ALL REQUIRED PIPING, TEES, FITTINGS, REDUCERS, INCREASES, BUSHINGS, SPOOL PIECES, ETC. AS REQUIRED FOR A COMPLETE AND FUNCTIONAL PIPING SYSTEM INSTALLATION.
5. CONTRACTOR IS RESPONSIBLE FOR, IN A TIMELY MANNER, VERIFYING EXISTING LINE SIZES, MATERIAL, LOCATIONS, DEPTHS, AND DIMENSIONS PRIOR TO ORDERING MATERIALS FOR CONNECTIONS.
6. SEE PAINTING NOTE FOR PIPING IN PROJECT NOTES.
7. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL STAINLESS PIPING, FITTINGS, REDUCERS, ETC. FOR A COMPLETE WATERLINE SYSTEM. WATERLINE SHOULD BE MOUNTED SECURELY TO THE BRIDGE. CONTRACTOR SHALL PROVIDE ALL REQUIRED SUPPORTS, BRACKETS, ETC. AND HARDWARE. ALL BRACKETS AND HARDWARE SHALL BE STAINLESS STEEL.

SCHEDULING NOTES

PRE-SUBMITTAL CLARIFIER DOWNTIME NOTES:

1. PRIOR TO THE SUBMITTAL PROCESS OF THE CLARIFIER EQUIPMENT, THE CONTRACTOR SHALL STOP ALL FLOW INTO CLARIFIER #2 FIRST AND DRAIN THE CLARIFIER. CONTRACTOR SHALL CLEAN/PRESSURE WASH CLARIFIER WALLS AND FLOOR.
2. THE CONTRACTOR/CLARIFIER MANUFACTURER SHALL MEASURE/VERIFY ALL ELEVATIONS, DIMENSIONS, SIZES, LENGTHS, DIAMETER, ETC. OF THE EXISTING CLARIFIER WALLS, FLOOR, PIPING, ETC. AS REQUIRED FOR THE NEW CLARIFIER EQUIPMENT.
3. THE CONTRACTOR SHALL ALSO VERIFY THE CONDITION OF THE EXISTING CONCRETE/GROUT BOTTOM WITH THE ENGINEER.
4. THE CLARIFIER MAY ONLY BE OUT OF SERVICE FOR 3 (THREE) DAYS IN ORDER FOR CLEANING, MEASUREMENT, AND INSPECTIONS.
5. ONCE THE CLARIFIER #2 IS PUT BACK INTO SERVICE, IT SHALL BE OPERATING BEFORE TAKING CLARIFIER #1 OUT OF SERVICE.
6. THE CONTRACTOR SHALL STOP ALL FLOW INTO CLARIFIER #1 AND DRAIN THE CLARIFIER. CONTRACTOR SHALL CLEAN/PRESSURE WASH CLARIFIER WALLS AND FLOOR.
7. THE CONTRACTOR/CLARIFIER MANUFACTURER SHALL MEASURE/VERIFY ALL ELEVATIONS, DIMENSIONS, SIZES, LENGTHS, DIAMETER, ETC. OF THE EXISTING CLARIFIER WALLS, FLOOR, PIPING, ETC. AS REQUIRED FOR THE NEW CLARIFIER EQUIPMENT.
8. THE CONTRACTOR SHALL ALSO VERIFY THE CONDITION OF THE EXISTING CONCRETE/GROUT BOTTOM WITH THE ENGINEER.
9. THE CLARIFIER MAY ONLY BE OUT OF SERVICE FOR 3 (THREE) DAYS IN ORDER FOR CLEANING, MEASUREMENT, AND INSPECTIONS.
10. THE CONTRACTOR SHALL SUBMIT ALL MEASUREMENTS, DISTANCES, ETC. TO THE OWNER/ENGINEER AND CLARIFIER MANUFACTURER ONCE COMPLETE.
11. COORDINATE WITH THE OWNER/ENGINEER FOR TIMING OF ALL WORK.

NEW CLARIFIER EQUIPMENT INSTALLATION NOTES:

1. THE CONTRACTOR SHALL COMPLETE ALL IMPROVEMENTS TO CLARIFIER #2 FIRST. ONCE COMPLETE, CONTRACTOR SHALL COMPLETE IMPROVEMENTS TO CLARIFIER #1.
2. THE CONTRACTOR WILL NOT BE ALLOWED TO TAKE THE EXISTING CLARIFIER #2 OUT OF SERVICE PRIOR TO JUNE 1, 2022. THE CONTRACTOR SHALL BE COMPLETE WITH ALL WORK IN BOTH CLARIFIERS BY OCTOBER 31, 2022. COORDINATE WITH THE OWNER/ENGINEER FOR TIMING OF ALL WORK.
3. THE CONTRACTOR WILL NOT BE ALLOWED TO TAKE THE EXISTING CLARIFIER #2 OUT OF SERVICE FOR IMPROVEMENTS UNTIL 1 WEEK PRIOR TO THE EXPECTED EQUIPMENT DELIVERY DATE. THE CONTRACTOR SHALL PROVIDE THE FIRM EQUIPMENT DELIVERY DATE FROM THE CLARIFIER MANUFACTURER TO OWNER PRIOR TO TAKING CLARIFIER OUT OF SERVICE.
4. ONCE CLARIFIER #2 IS TAKEN OUT OF SERVICE FOR DEMOLITION, IT CAN NOT BE OUT OF SERVICE LONGER THAN 8 WEEKS (56 CALENDAR DAYS).
5. THE CONTRACTOR SHALL WORK EFFECTIVELY AND EFFICIENTLY TO COMPLETE THE CLARIFIER INSTALLATION WITHIN THIS TIMEFRAME.
6. THE 8 WEEK TIME FRAME INCLUDES, BUT IS NOT LIMITED TO, ALL DEMOLITION, INSTALLATION, TESTING, AND THE 10 DAY RUN IN PERIOD FOR CLARIFIER ACCEPTANCE.
7. ONCE CLARIFIER #2 IS ACCEPTED, CONTRACTOR SHALL COMPLETE IMPROVEMENTS TO CLARIFIER #1.
8. ONCE CLARIFIER #1 IS TAKEN OUT OF SERVICE FOR DEMOLITION, IT CAN NOT BE OUT OF SERVICE LONGER THAN 8 WEEKS (56 CALENDAR DAYS).
9. THE CONTRACTOR SHALL WORK EFFECTIVELY AND EFFICIENTLY TO COMPLETE THE CLARIFIER INSTALLATION WITHIN THIS TIMEFRAME.
10. THE 8 WEEK TIME FRAME INCLUDES, BUT IS NOT LIMITED TO, ALL DEMOLITION, INSTALLATION, TESTING, AND THE 10 DAY RUN IN PERIOD FOR CLARIFIER ACCEPTANCE.
11. ALL WORK IN BOTH CLARIFIERS SHALL BE COMPLETE BY OCTOBER 31, 2022

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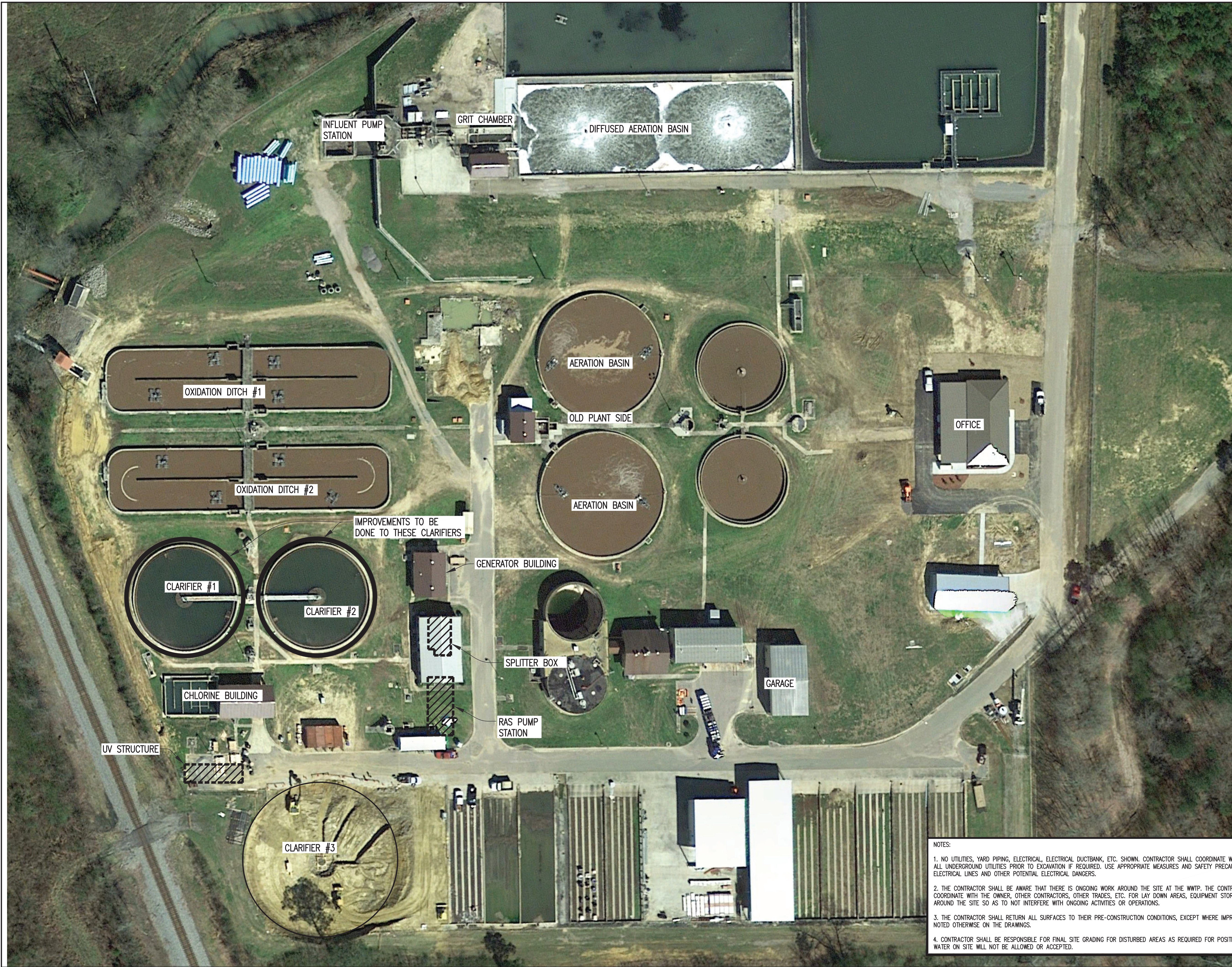


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Sheet	2	



- NOTES:
1. NO UTILITIES, YARD PIPING, ELECTRICAL, ELECTRICAL DUCTBANK, ETC. SHOWN. CONTRACTOR SHALL COORDINATE WITH OWNER FOR LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO EXCAVATION IF REQUIRED. USE APPROPRIATE MEASURES AND SAFETY PRECAUTIONS TO AVOID DIGGING INTO ELECTRICAL LINES AND OTHER POTENTIAL ELECTRICAL DANGERS.
 2. THE CONTRACTOR SHALL BE AWARE THAT THERE IS ONGOING WORK AROUND THE SITE AT THE WWTP. THE CONTRACTOR SHALL FULLY COORDINATE WITH THE OWNER, OTHER CONTRACTORS, OTHER TRADES, ETC. FOR LAY DOWN AREAS, EQUIPMENT STORAGE, TOOL STORAGE, ETC. AROUND THE SITE SO AS TO NOT INTERFERE WITH ONGOING ACTIVITIES OR OPERATIONS.
 3. THE CONTRACTOR SHALL RETURN ALL SURFACES TO THEIR PRE-CONSTRUCTION CONDITIONS, EXCEPT WHERE IMPROVEMENTS ARE SHOWN OR NOTED OTHERWISE ON THE DRAWINGS.
 4. CONTRACTOR SHALL BE RESPONSIBLE FOR FINAL SITE GRADING FOR DISTURBED AREAS AS REQUIRED FOR POSITIVE SITE DRAINAGE. PONDING OF WATER ON SITE WILL NOT BE ALLOWED OR ACCEPTED.



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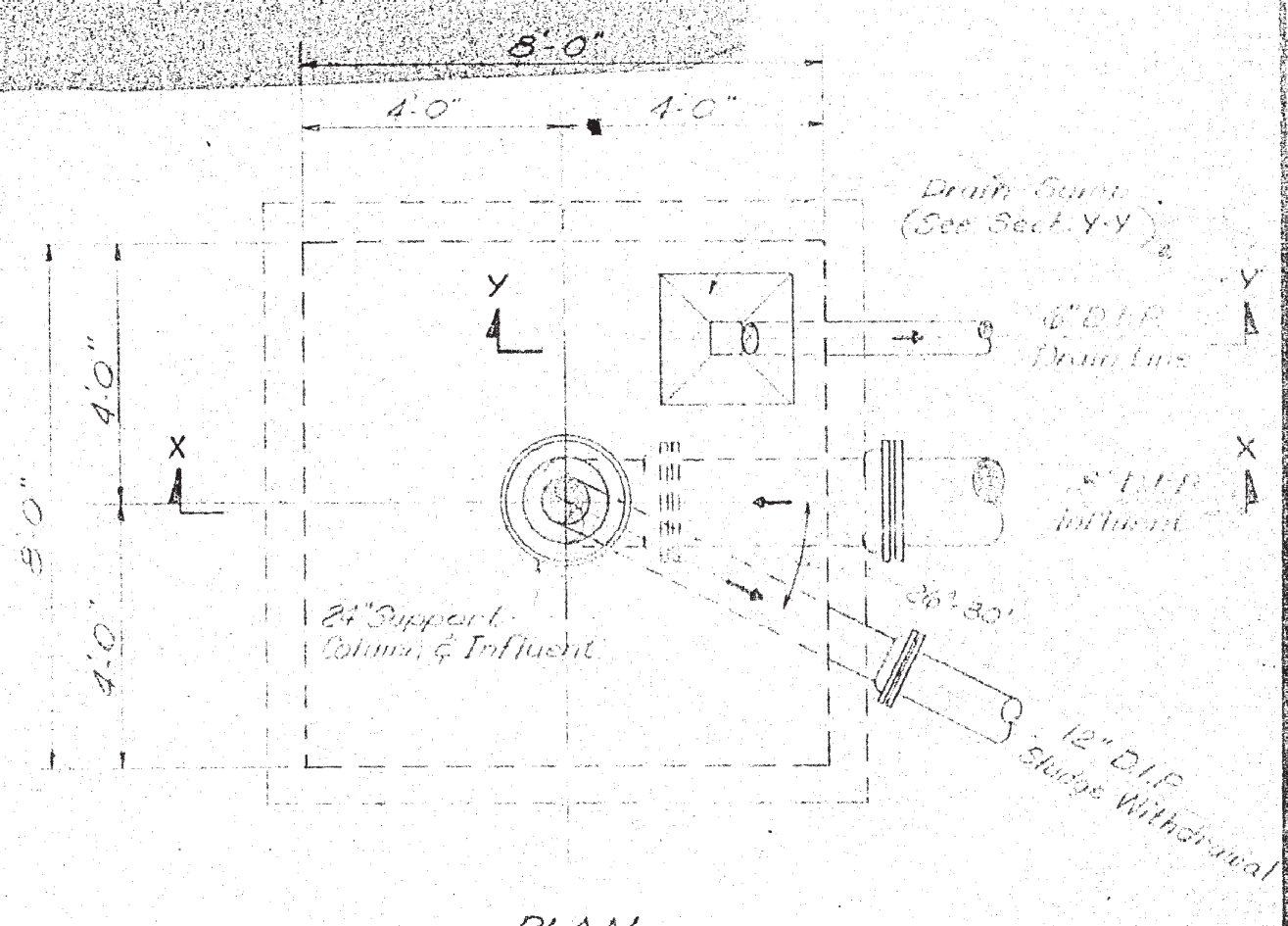
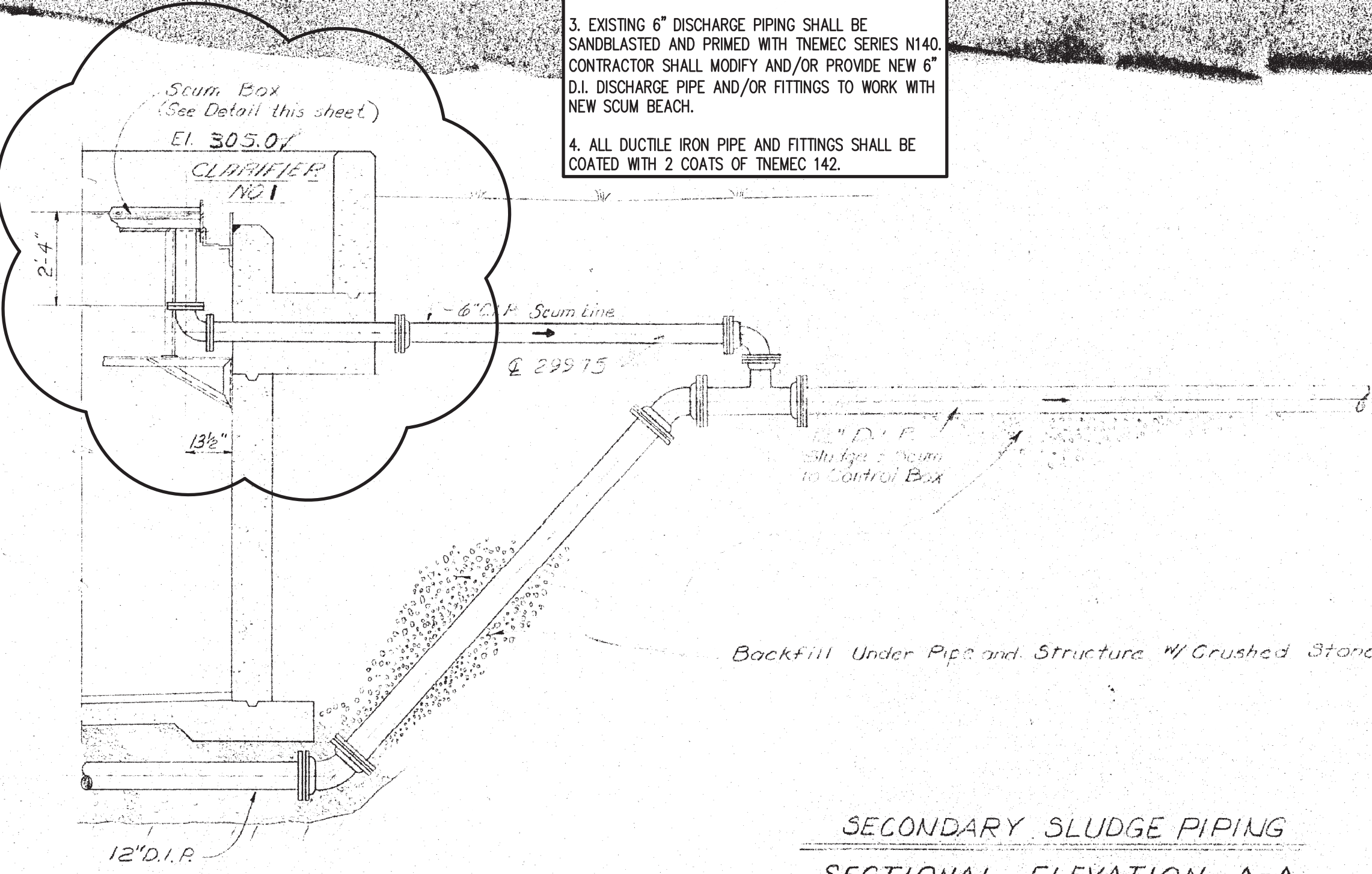
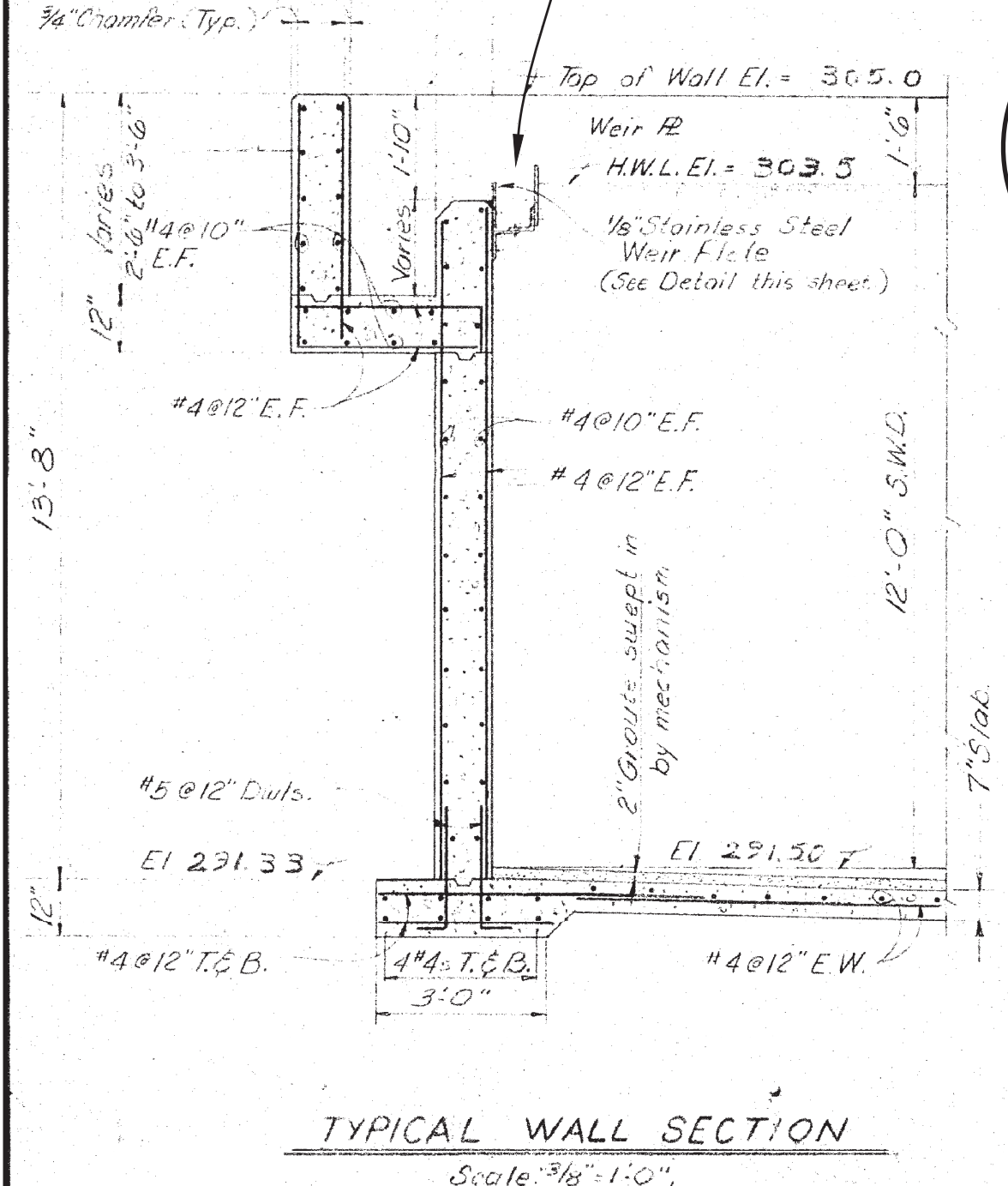


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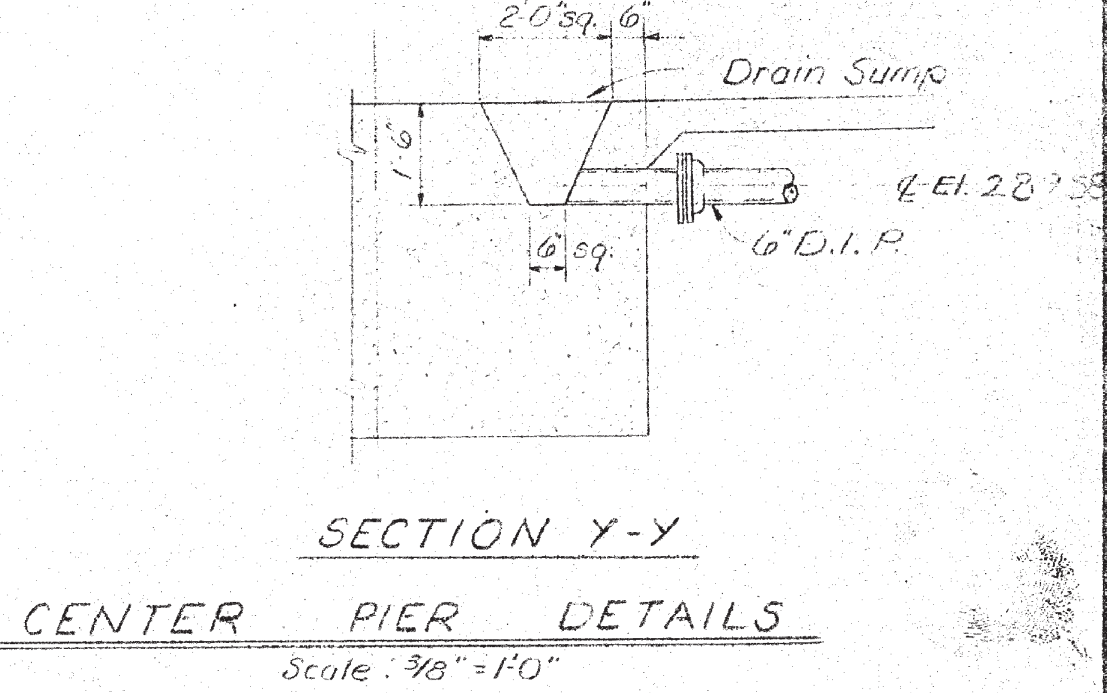
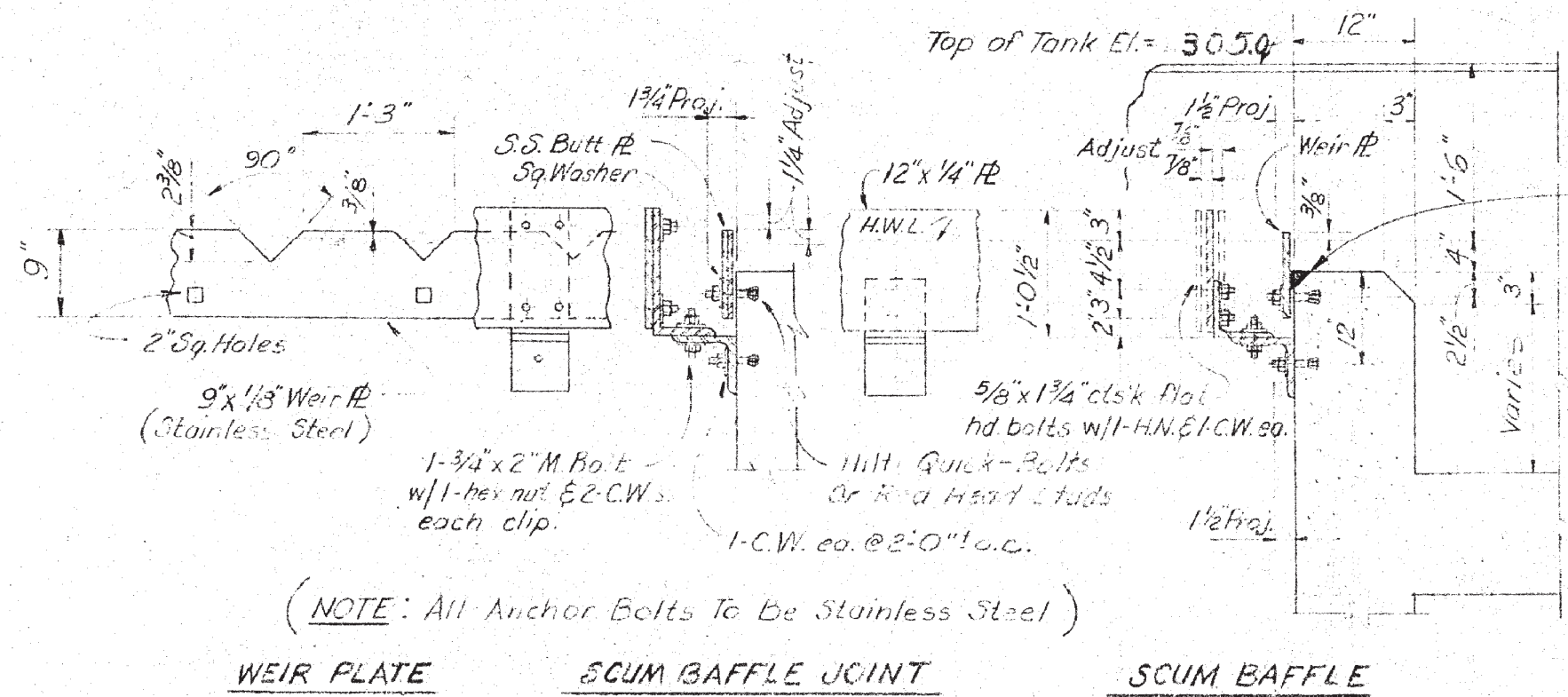
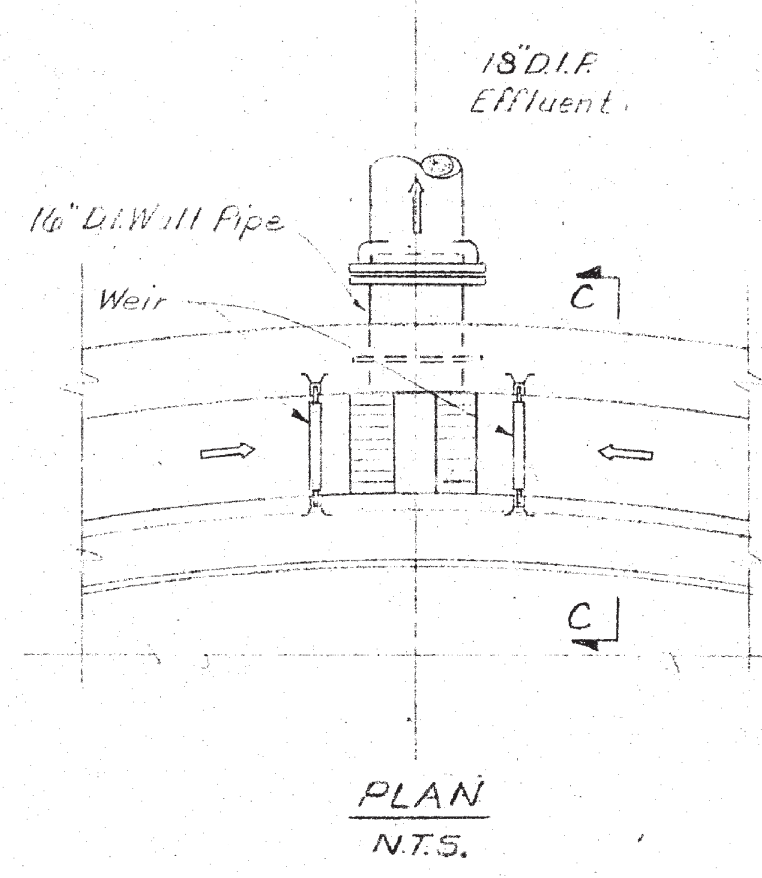
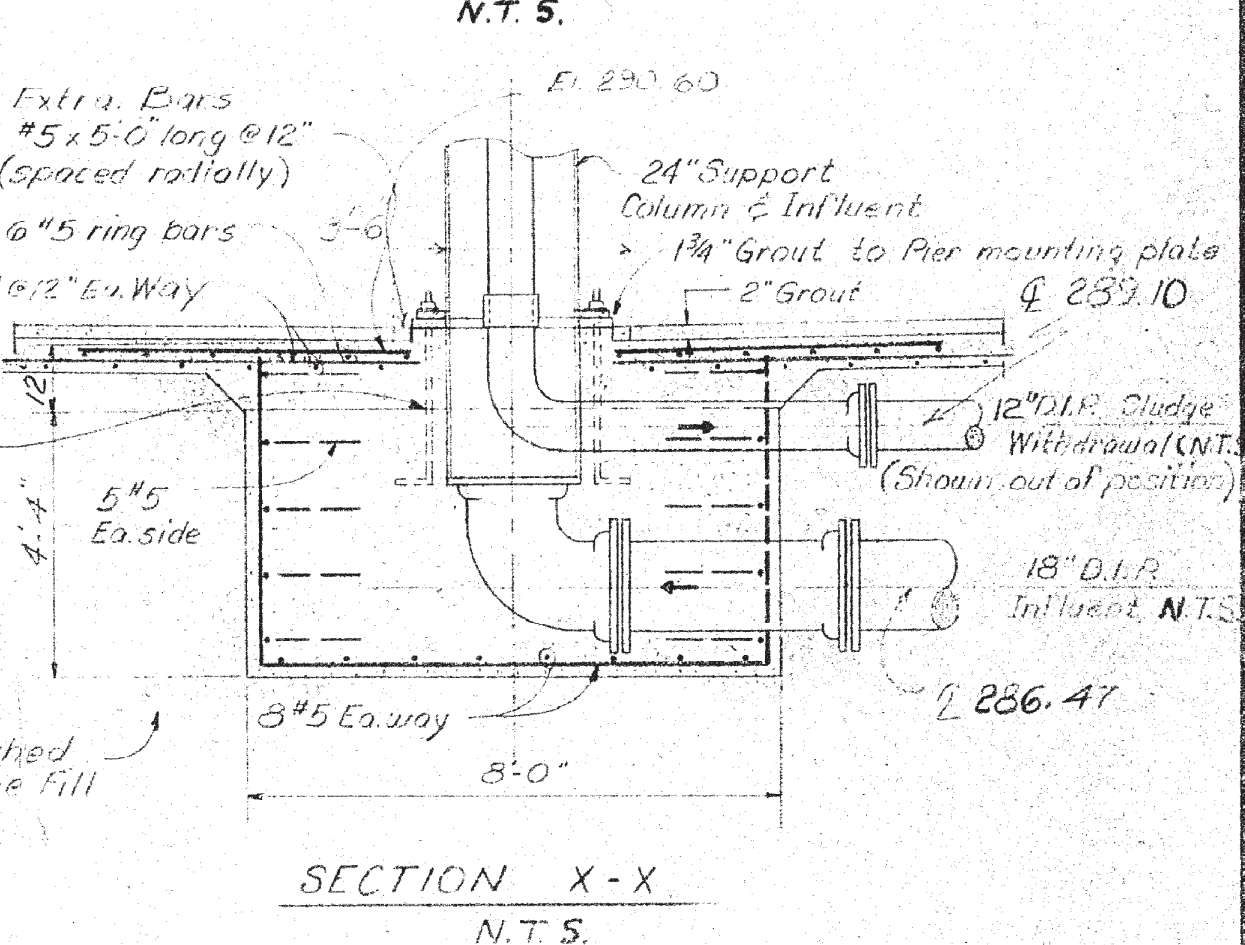
Drawing	Title	
	EXISTING SITE PLAN	
Project No.	10-2021	BID SET
Date	1" = 40'	
Scale	3	Sheet

EXISTING WEIRS AND SCUM BAFFLES TO BE REMOVED, REUSED, AND RESET BY THE CONTRACTOR. CONTRACTOR SHALL CAULK ALL SEAMS AND JOINTS OF THE WEIRS ONCE SET. COORDINATE FINAL V-NOTCH ELEVATIONS WITH OWNER.

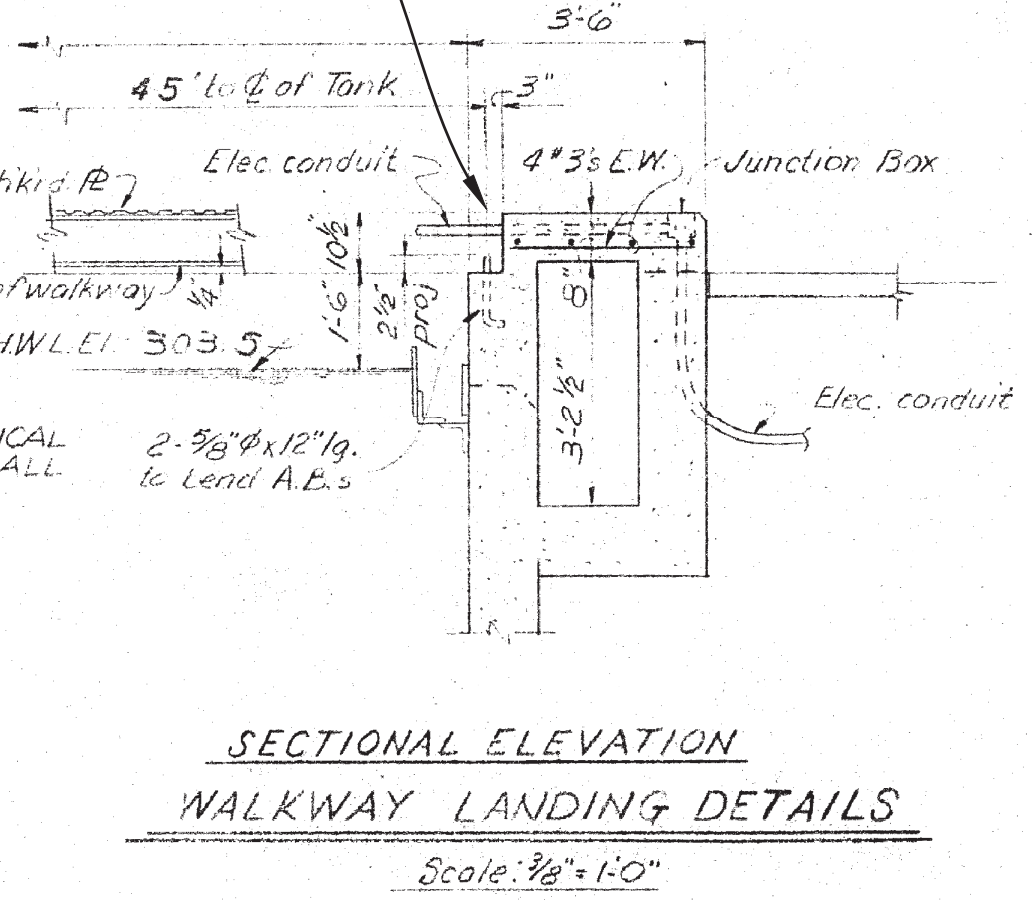
1. CONTRACTOR SHALL REMOVE THE EXISTING SCUM BEACH IN ITS ENTIRETY. CUT/GRIND ALL ANCHOR BOLTS FLUSH WITH SURROUNDING CONCRETE.
2. NEW SCUM BEACH SHOULD BE INSTALLED IN SAME GENERAL LOCATION.
3. EXISTING 6" DISCHARGE PIPING SHALL BE SANDBLASTED AND PRIMED WITH TNEPEC SERIES N140. CONTRACTOR SHALL MODIFY AND/OR PROVIDE NEW 6" D.I. DISCHARGE PIPE AND/OR FITTINGS TO WORK WITH NEW SCUM BEACH.
4. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE COATED WITH 2 COATS OF TNEPEC 142.



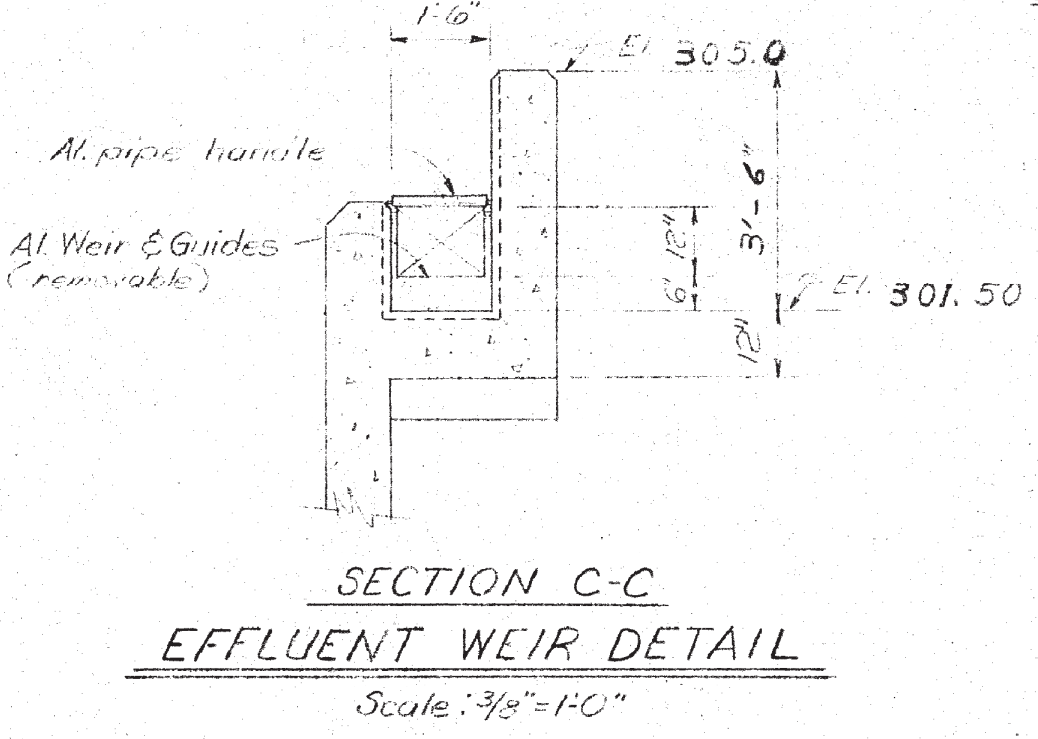
1. CONTRACTOR/CLARIFIER MANUFACTURER SHALL MAKE ALL PIPING MODIFICATIONS TO HANDLE INFLUENT PIPING AND 12" SLUDGE WITHDRAWAL (RAS) PIPING. CONTRACTOR SHALL VERIFY ALL SIZES, DIMENSIONS, ETC.
2. PROVIDE ALL COUPLINGS, FITTINGS, ETC. REQUIRED TO MAKE PIPING WORK WITH NEW EQUIPMENT.



CONTRACTOR SHALL NOTE AND ACCOUNT FOR BRIDGE LANDING AS SHOWN.



EXISTING WEIRS AND SCUM BAFFLES TO BE REMOVED, REUSED, AND RESET BY THE CONTRACTOR SUCH THAT THEY ARE LEVEL ACROSS THE CLARIFIERS. CONTRACTOR SHALL CAULK ALL SEAMS AND JOINTS OF THE WEIRS ONCE SET. COORDINATE FINAL V-NOTCH ELEVATIONS WITH OWNER.



SECTIONAL ELEVATION EFFLUENT CHANNEL DETAILS Scale: 3/8" = 1'-0" (Clarifiers No. 1, 2, 3 As Shown)

SECTIONAL ELEVATION WALKWAY LANDING DETAILS Scale: 3/8" = 1'-0"

SCUM BAFFLE & WEIR DETAILS Scale: 3/8" = 1'-0"

SECTION Y-Y CENTER PIER DETAILS Scale: 3/8" = 1'-0"

SECTION C-C EFFLUENT WEIR DETAIL Scale: 3/8" = 1'-0"

NOTE: THIS DRAWING WAS CREATED FROM SCANNED AS-BUILT DRAWINGS THAT WERE PRODUCED BY OTHERS WHEN THE ORIGINAL WASTEWATER TREATMENT PLANT WAS CONSTRUCTED AND/OR FROM FUTURE ADDITIONS/MODIFICATIONS. THE SCANNED AS-BUILT DRAWINGS HAVE NOT BEEN VERIFIED AND ARE ONLY BEING PROVIDED FOR GENERAL REFERENCE AND INFORMATIONAL PURPOSES. ANY USE OF THE AS-BUILT DRAWING INFORMATION IS AT THE CONTRACTOR'S SOLE RISK AND NO PAYMENT WILL BE MADE FOR DISCREPANCIES FOUND IN THE FIELD. THE CONTRACTOR SHALL FIELD VERIFY ANY AND ALL PERTINENT INFORMATION AS REQUIRED PRIOR TO BIDDING. THE CONTRACTOR SHOULD EXPECT REAL WORLD CONDITIONS TO DIFFER FROM THE SCANNED AS-BUILT DRAWING.

NO.	DATE	DESCRIPTION	APP'D.

THE JASPER UTILITIES BOARD
SEWAGE TREATMENT PLANT ADDITIONS
SECONDARY CLARIFIER DETAILS

LUCAS ENGINEERS, INC.
CIVIL AND ENVIRONMENTAL ENGINEERING SERVICES
BIRMINGHAM AND JASPER, ALABAMA

DRAWN: B.S. DATE: JUNE, 1984 SHEET: OF
CHECKED: T.L.J. SCALE: 3/8" = 1'-0" DWG. NO.:
APPROVED: J.L.L. **4-30**

Municipal Consultants, Inc.
200 Century Park, South, Suite 212
Birmingham, Alabama 35226
(205) 822-0387

JASPER WATER & SEWER BOARD
TOWN CREEK WWTP
CLARIFIER #1 AND #2 IMPROVEMENTS

2021

ALABAMA LICENSED PROFESSIONAL ENGINEER
TERRY R. TURNER
10-06-21
NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title: **EXISTING CLARIFIER SECTIONS AND DETAILS**

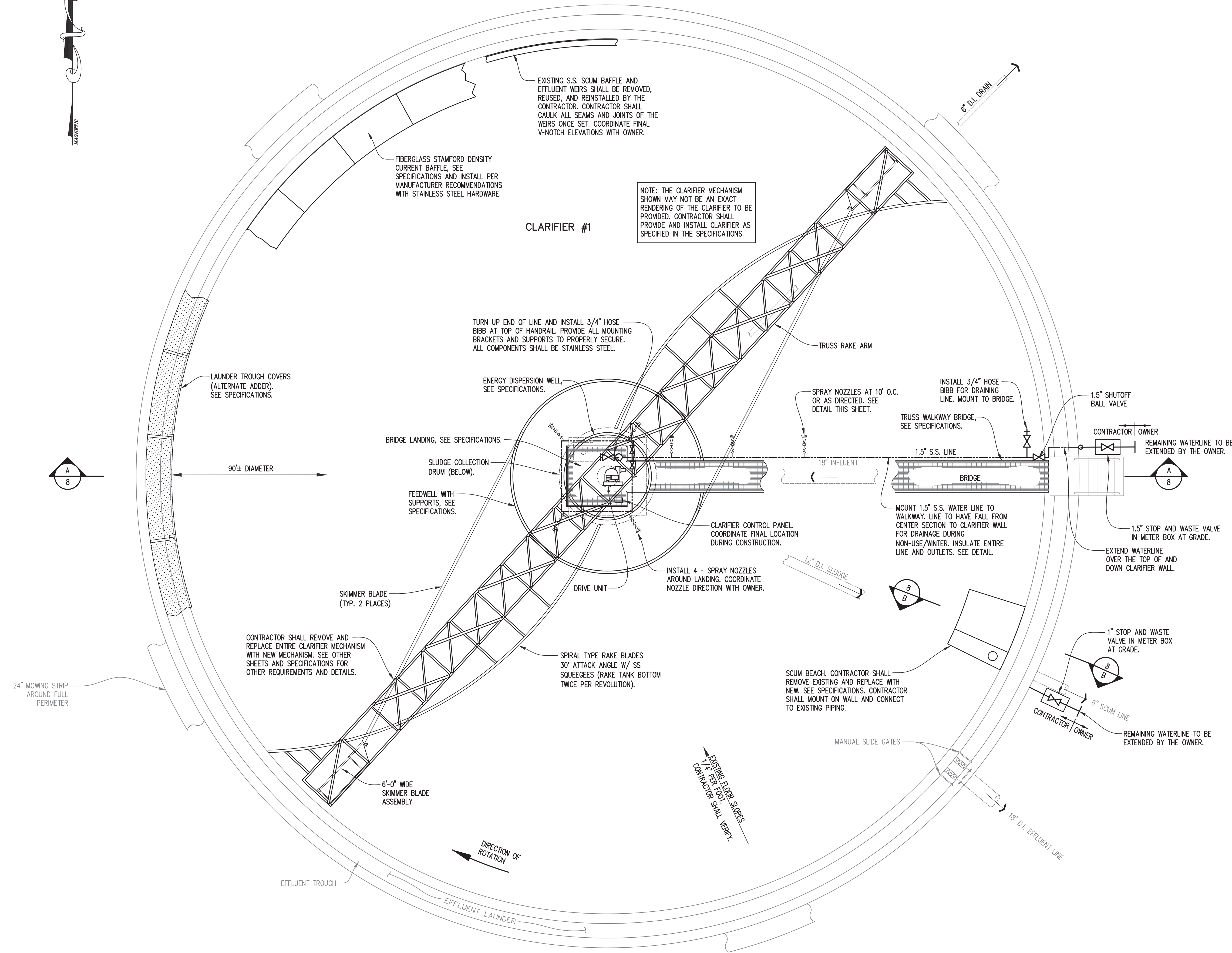
Drawing: **EXISTING CLARIFIER SECTIONS AND DETAILS**

Project No.: **10-2021**

Date: **N.T.S.**

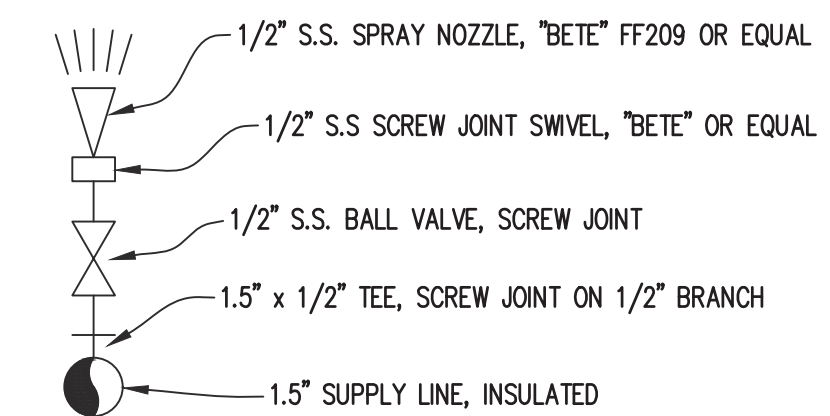
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Sheet: **5**

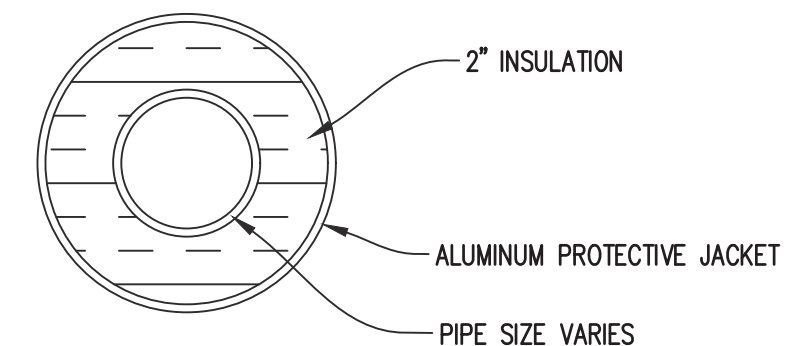


CLARIFIER #1 PLAN VIEW
SCALE: 3/16" = 1'-0"

- NOTES:
- THESE NOTES APPLY TO BOTH CLARIFIER #1 AND #2.
 - THE CONTRACTOR SHALL REMOVE AND REPLACE THE CLARIFIER MECHANISM IN ITS ENTIRETY WITH NEW EQUIPMENT AS SPECIFIED. THE CONTRACTOR SHALL INSTALL AND MAKE FULLY FUNCTIONAL ALL EQUIPMENT AND COMPONENTS REQUIRED IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. SEE SPECIFICATIONS FOR EXACT EQUIPMENT TO BE PROVIDED.
 - MUCH OF THE INFORMATION IS BASED ON DRAWINGS PREPARED FOR THE CONSTRUCTION OF THE ORIGINAL PLANT AND/OR OTHER ADDITIONS/MODIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR, IN A TIMELY MANNER, VERIFYING ALL EXISTING SIZES, MATERIALS, LOCATIONS, ELEVATIONS, DEPTHS, AND DIMENSIONS OF WALLS, CONCRETE, PIPING, ELECTRICAL, ETC. PRIOR TO ORDERING MATERIALS FOR EQUIPMENT OR OTHER PROPOSED WORK. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, LOCATIONS, ETC. ASSOCIATED WITH THE WORK REQUIRED.
 - THE CONTRACTOR SHALL BE AWARE THAT EQUIPMENT DIMENSIONS VARY BY MANUFACTURER. CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH APPROVED SHOP DRAWINGS BEFORE ORDERING MATERIALS. COORDINATE ALL WORK WITH EQUIPMENT PROVIDED, EXISTING STRUCTURES, WALLS, FLOORS, ETC. AND ADJUST AS REQUIRED AT NO ADDITIONAL COST TO THE OWNER.
 - THE CONTRACTOR SHALL COORDINATE WITH OWNER FOR VERTICAL (ELEVATION) CONTROL ON-SITE. CONTRACTOR SHALL ESTABLISH VERTICAL CONTROL AROUND CLARIFIER FOR SETTING EQUIPMENT. THE CONTRACTOR SHALL TRANSFER ELEVATION AS REQUIRED FOR WORK TO BE PERFORMED. COORDINATE WITH THE OWNER/ENGINEER.
 - ALL EXISTING D.I. PIPING IN THE CLARIFIER SHALL BE BRUSH BLASTED, CLEANED, AND PREPARED TO BE PRIMED WITH TNEPEC SERIES N140 OR APPROVED EQUAL. ALL NEW AND EXISTING PRIMED PIPING SHOULD BE COATED WITH 2 COATS OF TNEPEC 142 SPECIFICALLY DESIGNED FOR SEWAGE APPLICATIONS APPLIED OVER TNEPEC PRIMER. FINAL COLOR OF PIPING SHOULD BE BLACK.
 - ONCE EXISTING CENTER PIER IS REMOVED, CONTRACTOR SHALL CHIP, HAMMER, GRIND, ETC. LEVELING GROUT AS REQUIRED FOR INSTALLATION OF NEW CLARIFIER CENTER PIER. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ANCHOR BOLTS, HARDWARE, EPOXY GROUT AND NON-SHRINK GROUT FOR LEVELING/INSTALLING NEW CENTER PIER AS RECOMMENDED AND REQUIRED.
 - THE CLARIFIER HAS A MANUAL SLIDE GATE IN THE INFLUENT BOX FOR ISOLATION OF CLARIFIER. THE CONTRACTOR SHOULD ASSUME THAT THIS GATE WILL LEAK AND THERE WILL BE A CONTINUOUS STREAM OF FLOW ENTERING THE INFLUENT PIPE OF THE CLARIFIER DURING CONSTRUCTION. THE CONTRACTOR SHOULD PLAN TO SANDBAG, BARRICADE, SEAL, ETC. GATE TO LIMIT THE INCOMING FLOW PAST THE GATE OR PLAN TO PUMP OUT INFLUENT PIPE AS REQUIRED FOR COMPLETION OF WORK. ALSO THE CONTRACTOR SHALL PLUG THE 12" RETURN LINE TO PREVENT BACK FLOW FROM RETURN BOX.
 - THE CONTRACTOR SHALL CLEAN, PRESSURE WASH, ETC. ALL PORTIONS OF THE CLARIFIER WALLS, TROUGHES, FLOOR, PIPES, ETC. TO PERFORM WORK REQUIRED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING OF CLARIFIER REQUIRED DURING THE PROJECT.
 - THE CONTRACTOR SHALL PROVIDE ALL BRACKETS AND ATTACHMENT HARDWARE REQUIRED. ALL BRACKETS AND HARDWARE REQUIRED SHALL BE STAINLESS STEEL.
 - THE EXISTING S.S. SCUM BAFFLE AND EFFLUENT WEIRS SHALL BE REMOVED, REUSED, AND REINSTALLED BY THE CONTRACTOR SUCH THAT THEY ARE LEVEL ACROSS THE CLARIFIERS. CONTRACTOR SHALL CAULK ALL SEAMS AND JOINTS OF THE WEIRS ONCE SET. ALL CAULK SHALL BE SIKAFLEX 2C OR EQUAL. COORDINATE FINAL V-NOTCH ELEVATIONS WITH OWNER.



SPRAY NOZZLE DETAIL
NO SCALE



- NOTES:
- INSULATE ALL EXPOSED WATER PIPING AND VALVES $\leq 2"$ IN DIAMETER.
 - JACKETING TO BE JOHN'S MANVILLE - ALUMINUM ROLL AND SHEET. PROVIDE INSULATED JACKETS FOR ALL FITTINGS AND VALVES.
 - INSULATION TO BE 2" MANVILLE MICROLOK
 - INSTALL ALL COMPONENTS IN STRICT ACCORDANCE WITH MFR'S RECOMMENDATIONS
 - RESERVED
 - ALL PIPE INSULATION & JACKETING SHALL BE PROFESSIONALLY INSTALLED FOR NEAT APPEARANCE AND FOR LONG TERM DURABILITY.
 - PROVIDE PIPE SUPPORTS AND BRACING SPECIFICALLY DESIGNED FOR INSULATED PIPE INSTALLATIONS.

PIPE INSULATION DETAIL
SCALE: N.T.S.

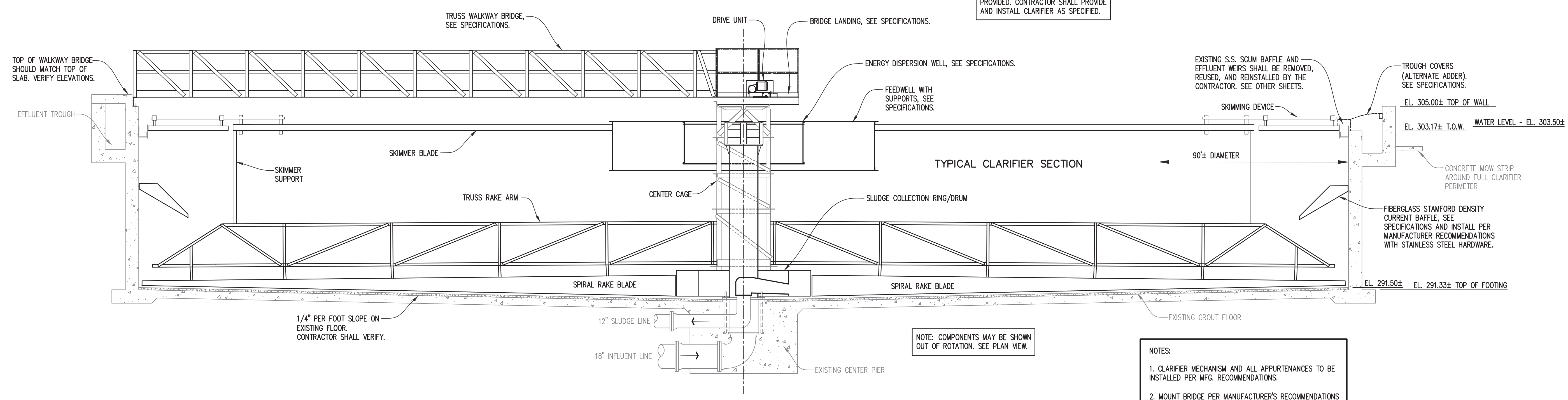


10-06-21
BAR = 1"

Drawing	Title		Sheet
	Project No.	CLARIFIER #1 PLAN VIEW	
Date	10-2021		
Scale	3/16" = 1'		
Sheet			6

NOTE: THESE NOTES, SECTION VIEWS, PLANS, ETC. ON THIS SHEET APPLY TO BOTH CLARIFIER #1 AND CLARIFIER #2.

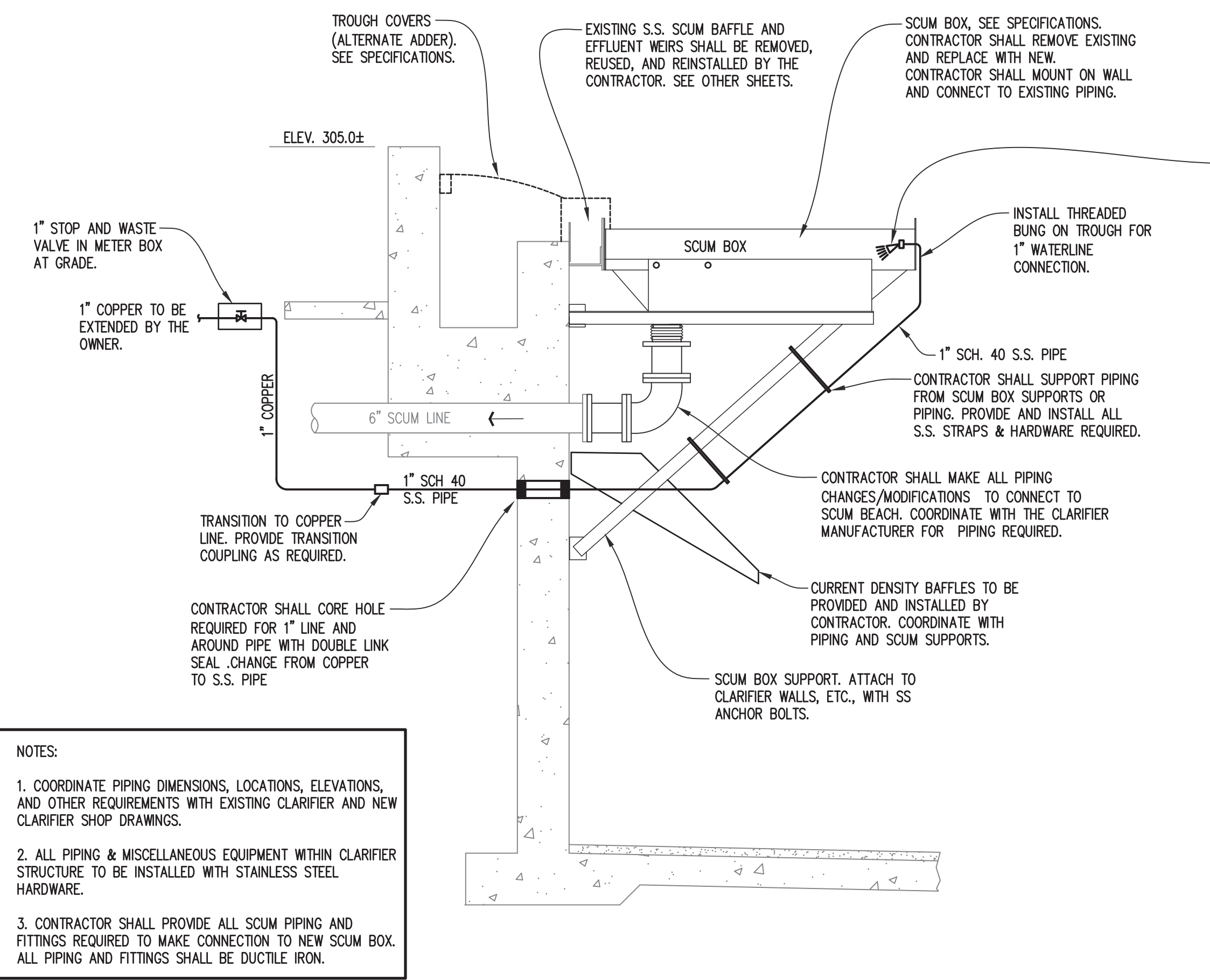
NOTE: THE CLARIFIER MECHANISM SHOWN MAY NOT BE AN EXACT RENDERING OF THE CLARIFIER TO BE PROVIDED. CONTRACTOR SHALL PROVIDE AND INSTALL CLARIFIER AS SPECIFIED.



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

NOTE: COMPONENTS MAY BE SHOWN OUT OF ROTATION. SEE PLAN VIEW.

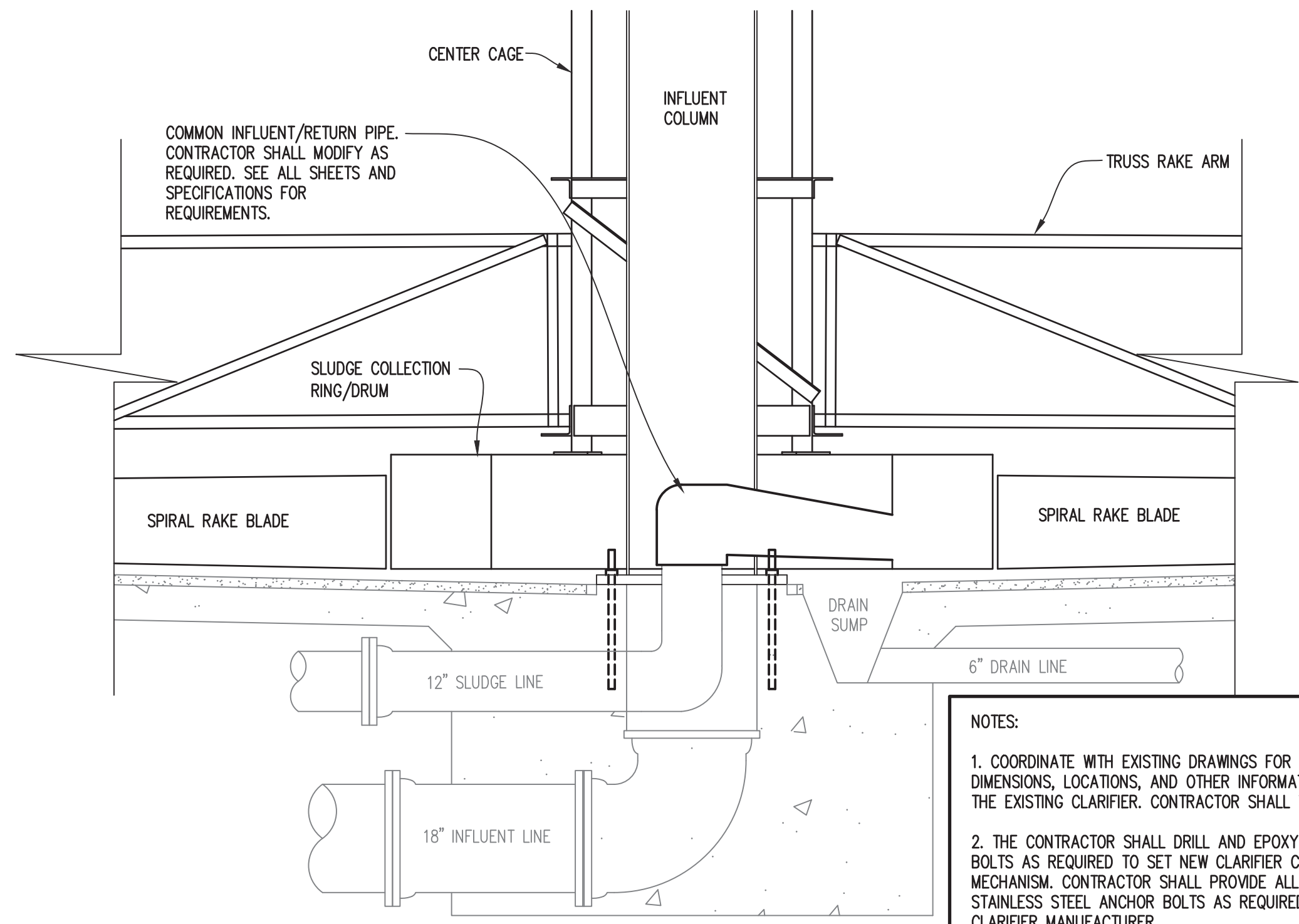
- NOTES:
1. CLARIFIER MECHANISM AND ALL APPURTENANCES TO BE INSTALLED PER MFG. RECOMMENDATIONS.
 2. MOUNT BRIDGE PER MANUFACTURER'S RECOMMENDATIONS USING SLIDE PLATES, GROUT, AND ADHESIVE ANCHORS, ETC.
 3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEWATERING OF CLARIFIER REQUIRED DURING THE PROJECT.



SECTION "B-B" AT SCUM BOX
SCALE: 1/2" = 1'-0"

- NOTES:
1. COORDINATE PIPING DIMENSIONS, LOCATIONS, ELEVATIONS, AND OTHER REQUIREMENTS WITH EXISTING CLARIFIER AND NEW CLARIFIER SHOP DRAWINGS.
 2. ALL PIPING & MISCELLANEOUS EQUIPMENT WITHIN CLARIFIER STRUCTURE TO BE INSTALLED WITH STAINLESS STEEL HARDWARE.
 3. CONTRACTOR SHALL PROVIDE ALL SCUM PIPING AND FITTINGS REQUIRED TO MAKE CONNECTION TO NEW SCUM BOX. ALL PIPING AND FITTINGS SHALL BE DUCTILE IRON.

- SPRAY NOZZLE AT SCUM TROUGH**
1. SPRAY NOZZLE SHALL BE A DIRECTIONAL NOZZLE WITH A TIGHT CONICAL SPRAY PATTERN SIMILAR TO "BETE" FF209.
 2. INSTALL THREADED BUSHING THROUGH SIDE OF TROUGH OR WELD THREADED BUNG TO TROUGH.
 3. USE 1" S.S. SUPPLY LINE.
 4. ENTIRE SPRAY NOZZLE ASSEMBLY SHALL BE BELOW WIPER BLADE AND NOT INTERFERE WITH CLARIFIER MECHANISM.
 5. COORDINATE WITH CLARIFIER MANUFACTURER.
 6. ALONG WITH THE SPRAY NOZZLE, THE CONTRACTOR SHALL PROVIDE A S.S. SWIVEL JOINT FOR DIRECTING THE SPRAY NOZZLE.



PLAN - CENTER SECTION
SCALE: 1/2" = 1'-0"

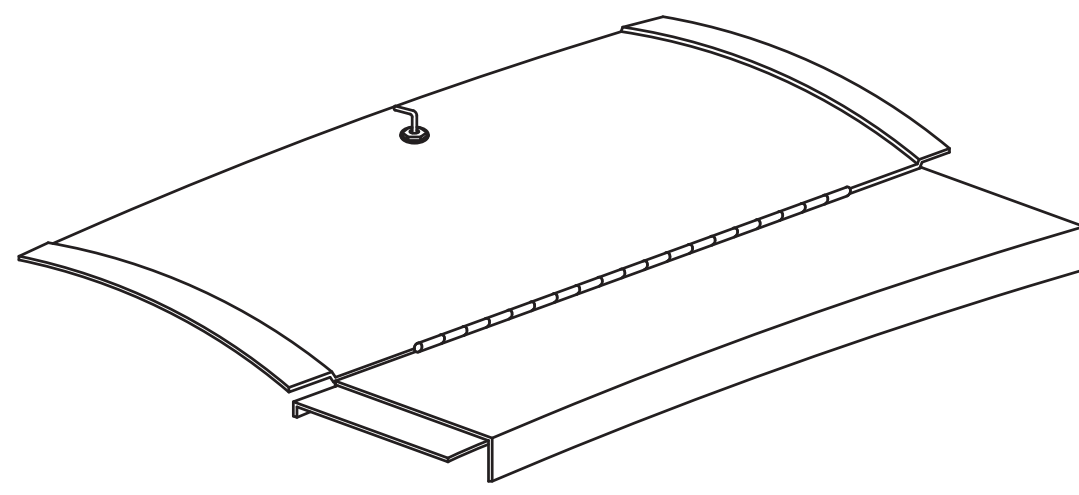
- NOTES:
1. COORDINATE WITH EXISTING DRAWINGS FOR ELEVATIONS, DIMENSIONS, LOCATIONS, AND OTHER INFORMATION REGARDING THE EXISTING CLARIFIER. CONTRACTOR SHALL VERIFY ALL.
 2. THE CONTRACTOR SHALL DRILL AND EPOXY NEW ANCHOR BOLTS AS REQUIRED TO SET NEW CLARIFIER CENTER PIER AND MECHANISM. CONTRACTOR SHALL PROVIDE ALL EPOXY AND STAINLESS STEEL ANCHOR BOLTS AS REQUIRED BY THE CLARIFIER MANUFACTURER.
 3. THE EXISTING CLARIFIER MECHANISM IS A DRAFT-TUBE STYLE CLARIFIER WITH A COMMON INFLUENT AND RETURN (SLUDGE WITHDRAWAL) PIPE. THE CONTRACTOR/CLARIFIER MANUFACTURER SHALL PROVIDE CONNECTION, FITTING, ETC. AND ALL MATERIAL NEEDED TO MODIFY THE EXISTING FOR THE NEW CLARIFIER MECHANISM. COORDINATE ALL.

Municipal Consultants, Inc.
200 Century Park South, Suite 212
Birmingham, Alabama 35226
(205) 922-0387

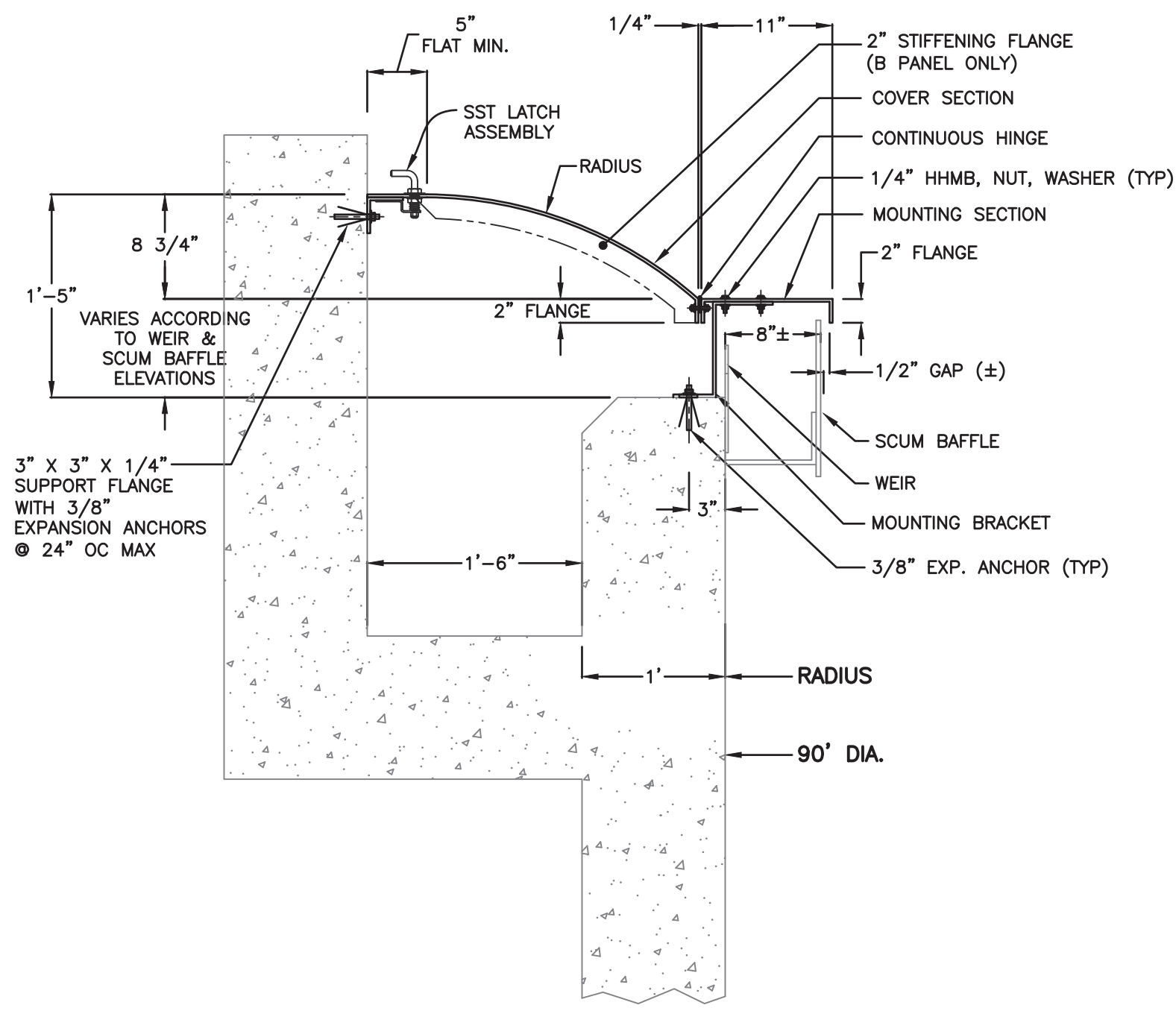
JASPER WATER & SEWER BOARD
TOWN CREEK WWTP
CLARIFIER #1 AND #2 IMPROVEMENTS

ALABAMA LICENSED PROFESSIONAL ENGINEER
LEIGHT R. TURNER
10-06-21
BAR = 1"

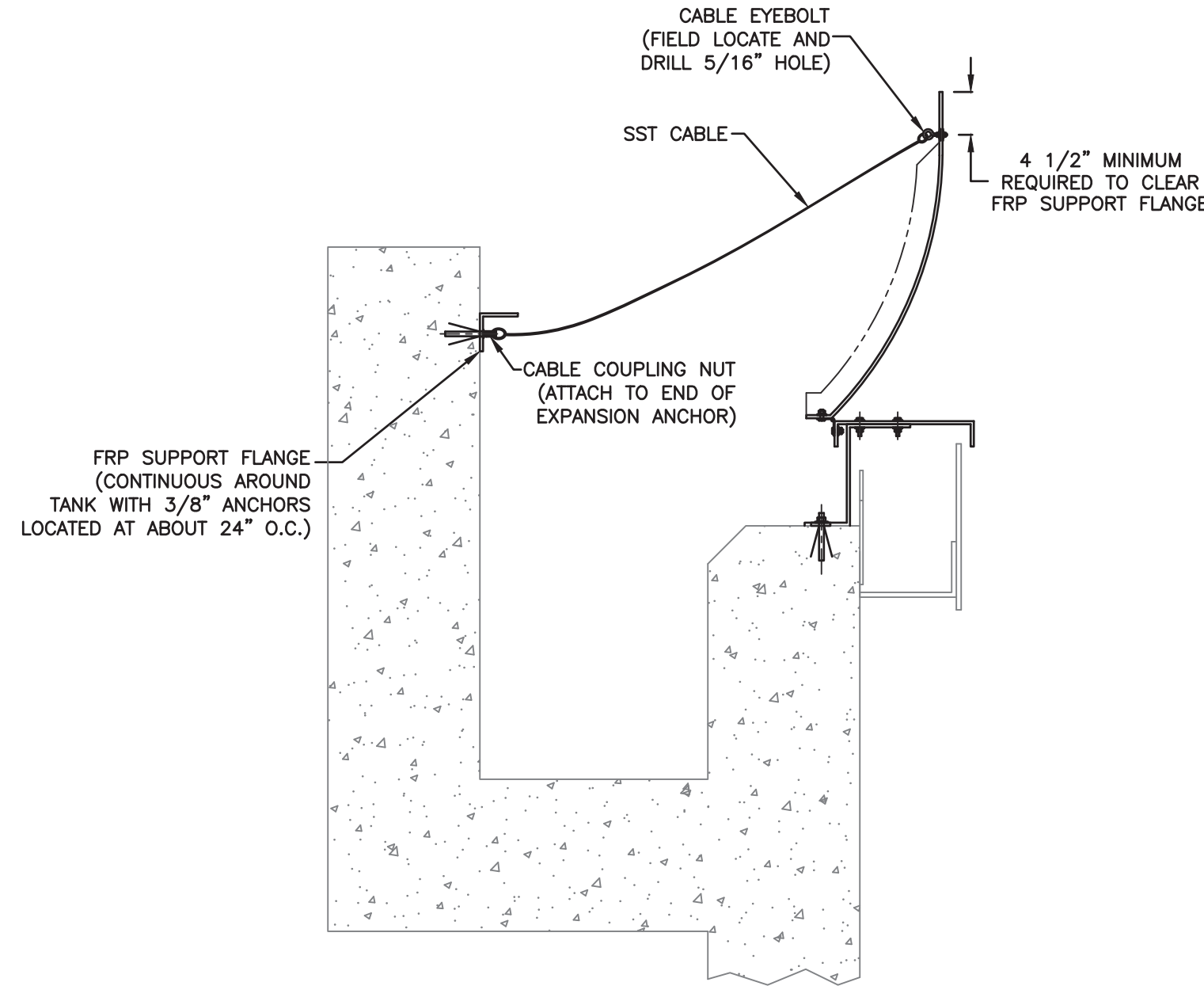
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					BID SET



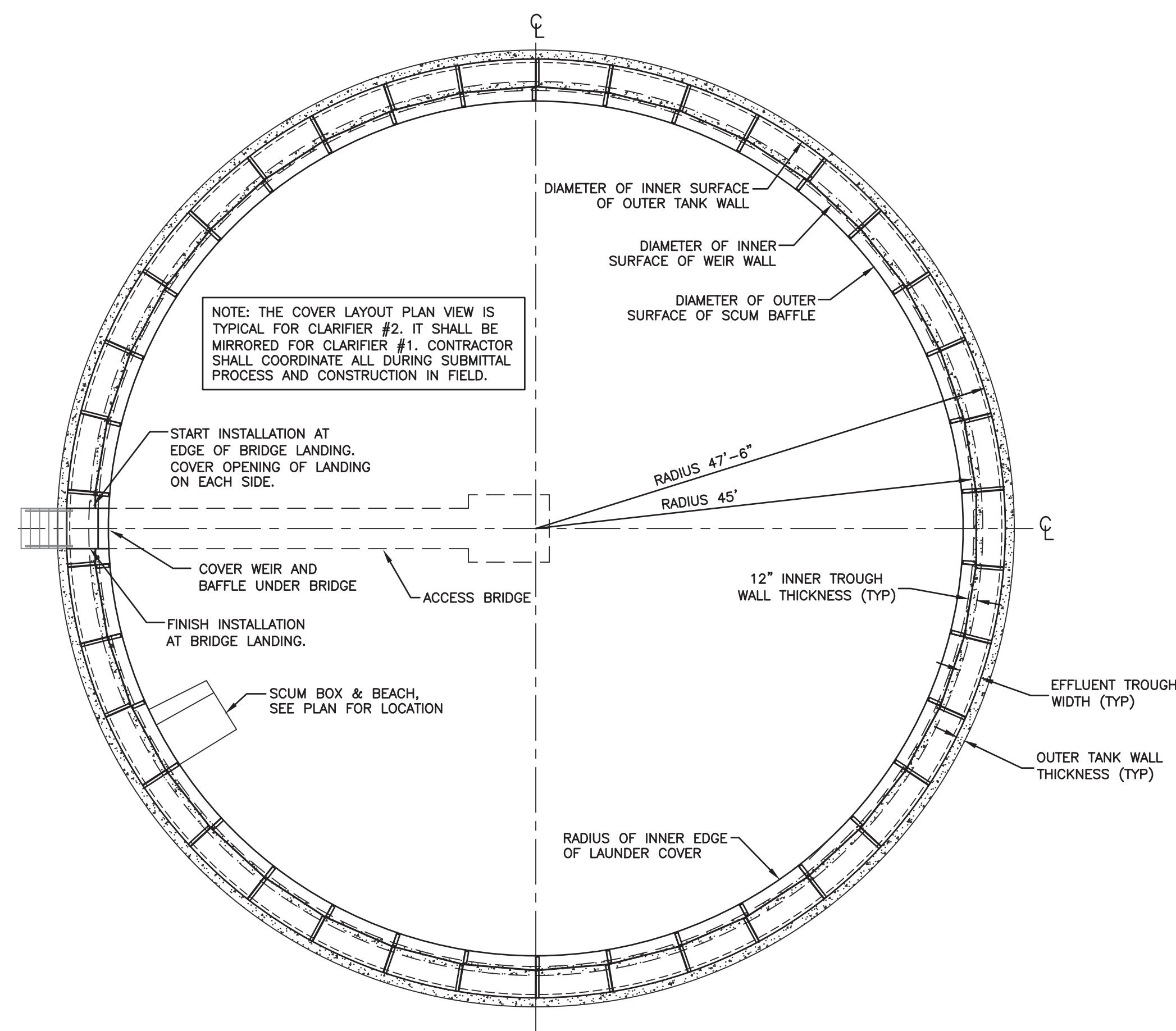
PERSPECTIVE VIEW



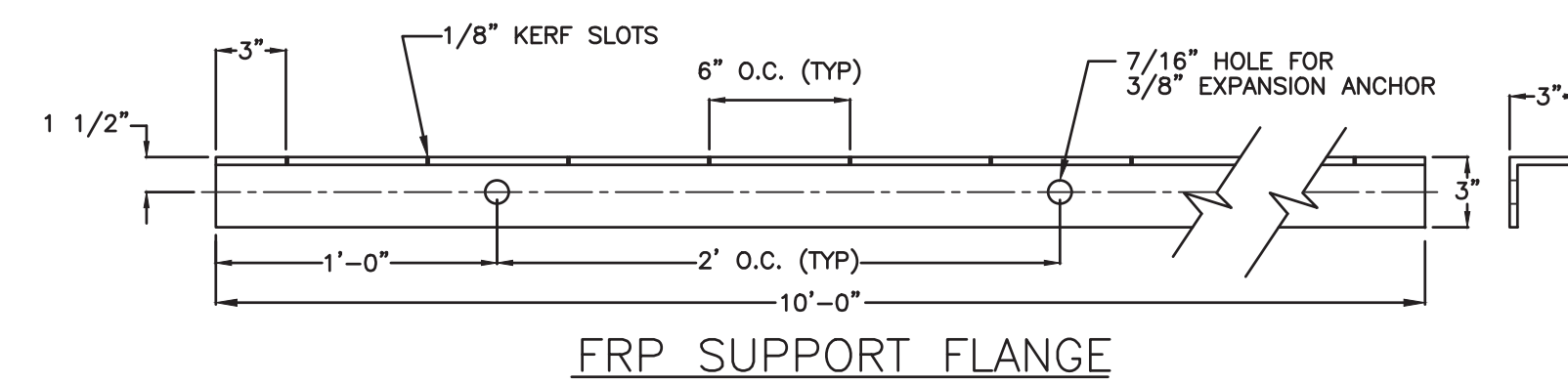
SECTION A-A



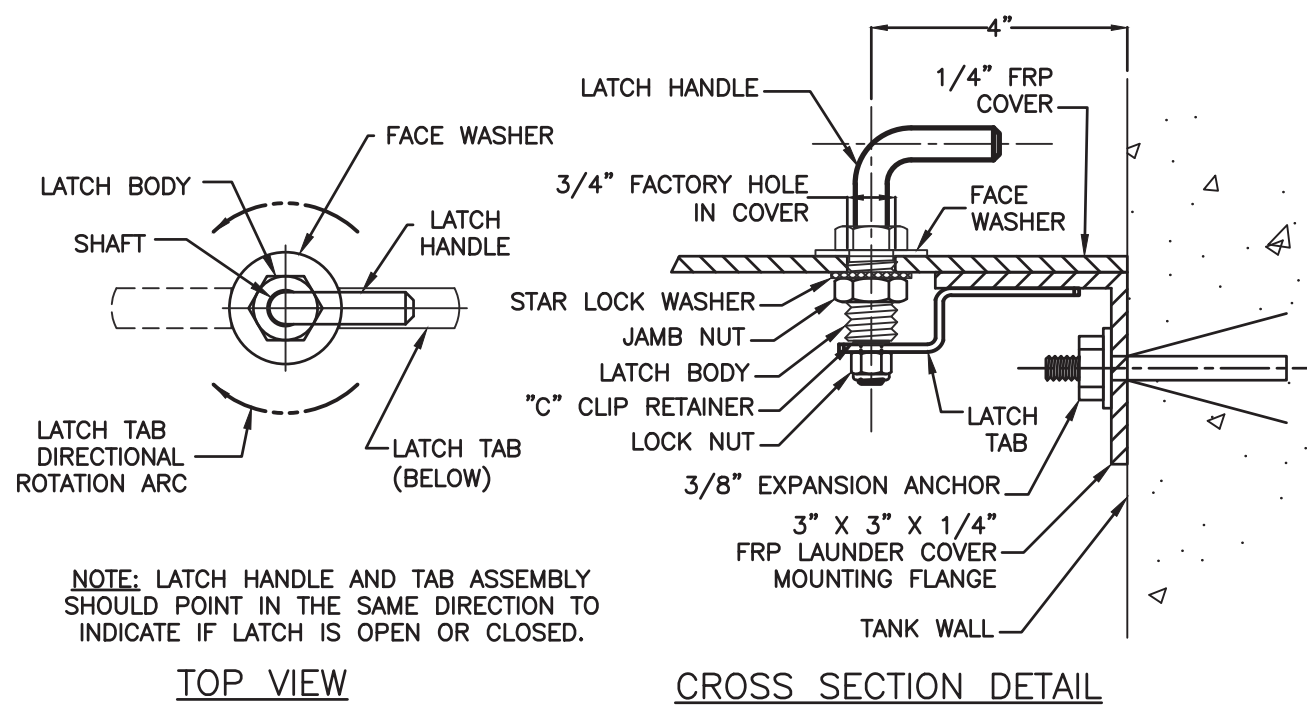
COVER CABLE RESTRAINT ASSEMBLY



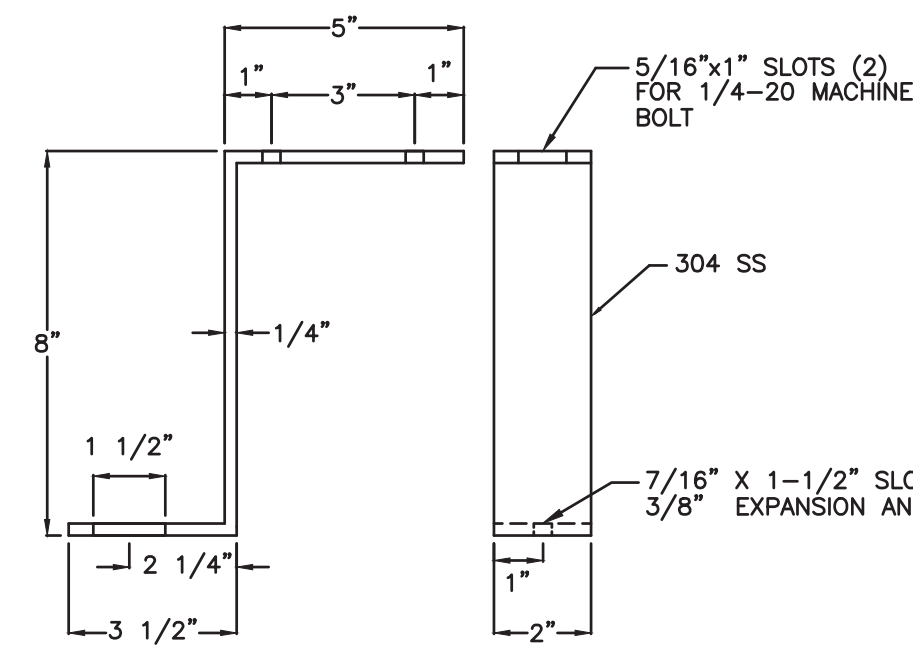
COVER LAYOUT PLAN VIEW
(NO SCALE)



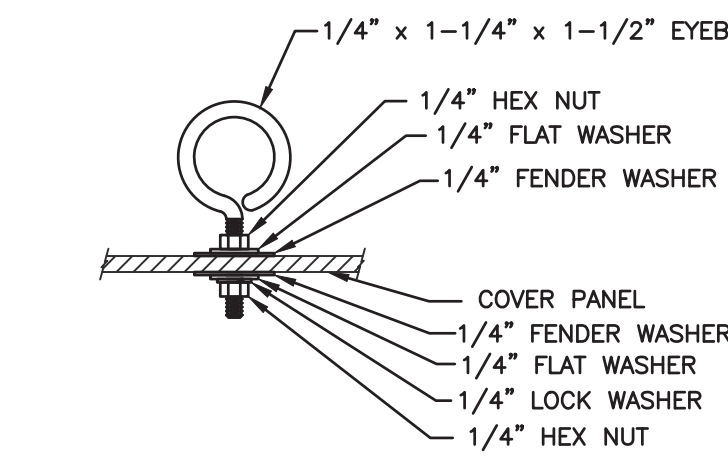
FRP SUPPORT FLANGE



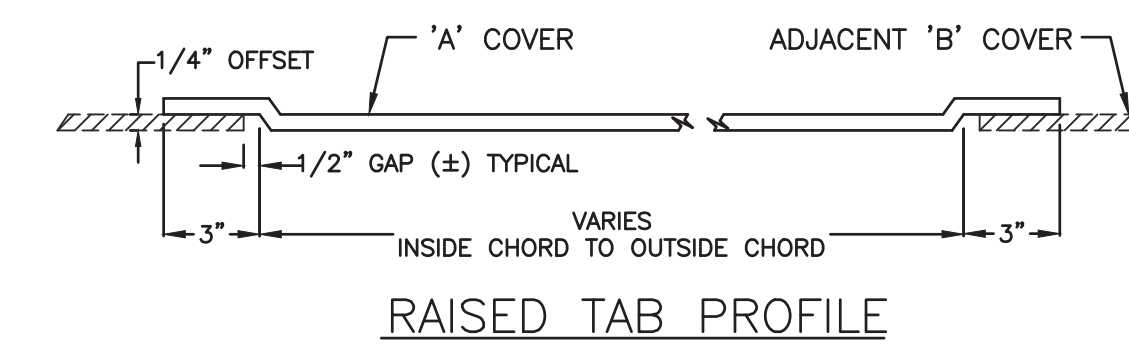
"A" PANEL LATCH



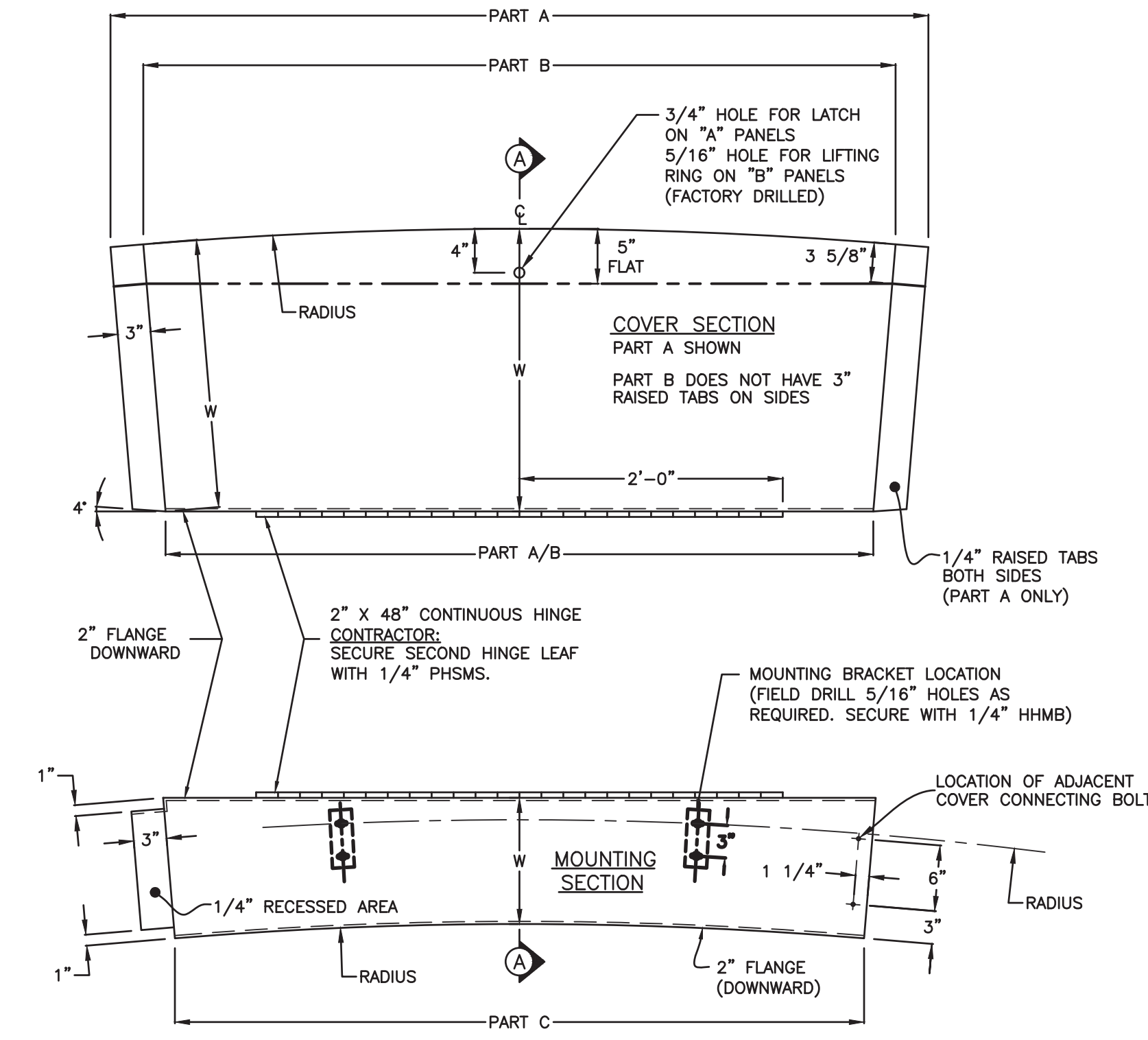
MOUNTING BRACKET



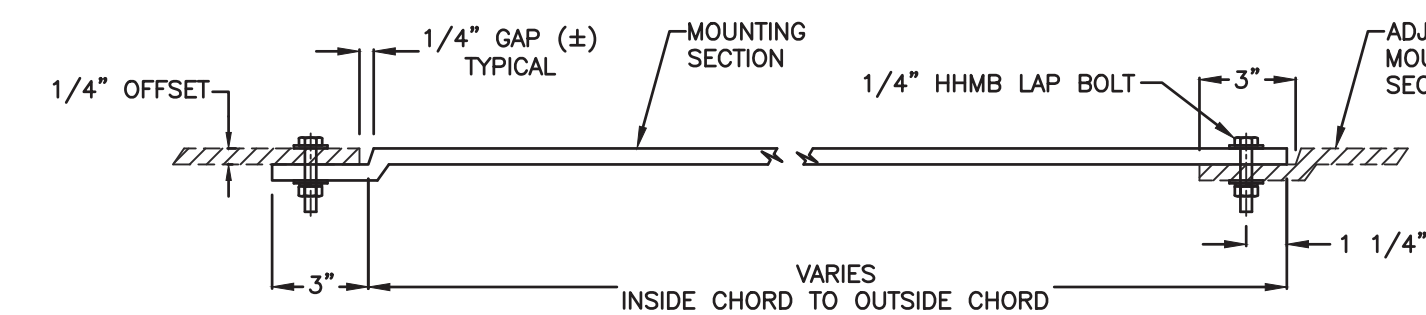
"B" PANEL LIFTING RING



RAISED TAB PROFILE



LAUNDRY COVER PANEL UNIT
TOP VIEW



MOUNTING SECTION
RECESSED TAB PROFILE

NOTE: NEFCO DETAILS SHOWN. SEE SPECS FOR ALTERNATE MANUFACTURERS

- NOTES:
- DIAMETER AT COVER = SEE PLANS, 95'-0" VERIFY
 - COVER PANELS ARE CHOPPED STRAND FRP WITH 1/4" MINIMUM THICKNESS
 - MINIMUM 20 MIL GELCOAT ON UPPER PANEL SURFACE (MARINE WHITE COLOR)
 - 357-211 PLN CTC GLASS REINFORCEMENT OR EQUIVALENT. ADDITIONAL SUPPORT/REINFORCEMENT AS REQ'D.
 - COREZYX, COR75-AQ-010, ISOPHTHALIC RESIN OR OR EQUIVALENT, WITH MINIMUM .05% BLACK PIGMENT, MAX 5% FILL AND UV SUPPRESSED
 - PARTS SHALL BE OPAQUE BLACK BENEATH GELCOAT SURFACE, WITH NO FIBER SHOWING
 - GELCOAT TO BE MARINE WHITE
 - LAMINATE SHALL NOT HAVE LESS THAN 30% GLASS CONTENT
 - ONE-EIGHTH INCH RADIUS ON ALL CORNERS
 - PARTS ARE KNIFE TRIMMED, WITH EDGES SANDED AND HOT COATED
 - MOUNTING HOLES ARE FIELD DRILLED (7/16")
 - ALL FASTENERS ARE 304 SST UNLESS OTHERWISE NOTED
 - FIELD CUT PANELS AS REQUIRED PER MANUFACTURERS INSTRUCTIONS
 - EACH PANEL SHALL HAVE THE FOLLOWING MINIMUM PHYSICAL PROPERTIES:

PROPERTY	TEST	MINIMUM VALUE
TENSILE STRENGTH	ASTM D-638	12,000 PSI
FLEXURAL STRENGTH	ASTM D-790	20,000 PSI
FLEXURAL MODULUS	ASTM D-790	1.0x10 ⁶ PSI
BARCOL HARDNESS	ASTM D-2583	40
NOTCHED IZOD IMPACT	ASTM D-256	12 FT-LBS/IN
WATER ABSORPTION	ASTM D-570	0.2%

THESE COVERS ARE AN ALTERNATE ADDER. SEE BID DOCUMENTS AND SPECIFICATIONS.



10-06-21

BAR = 1"

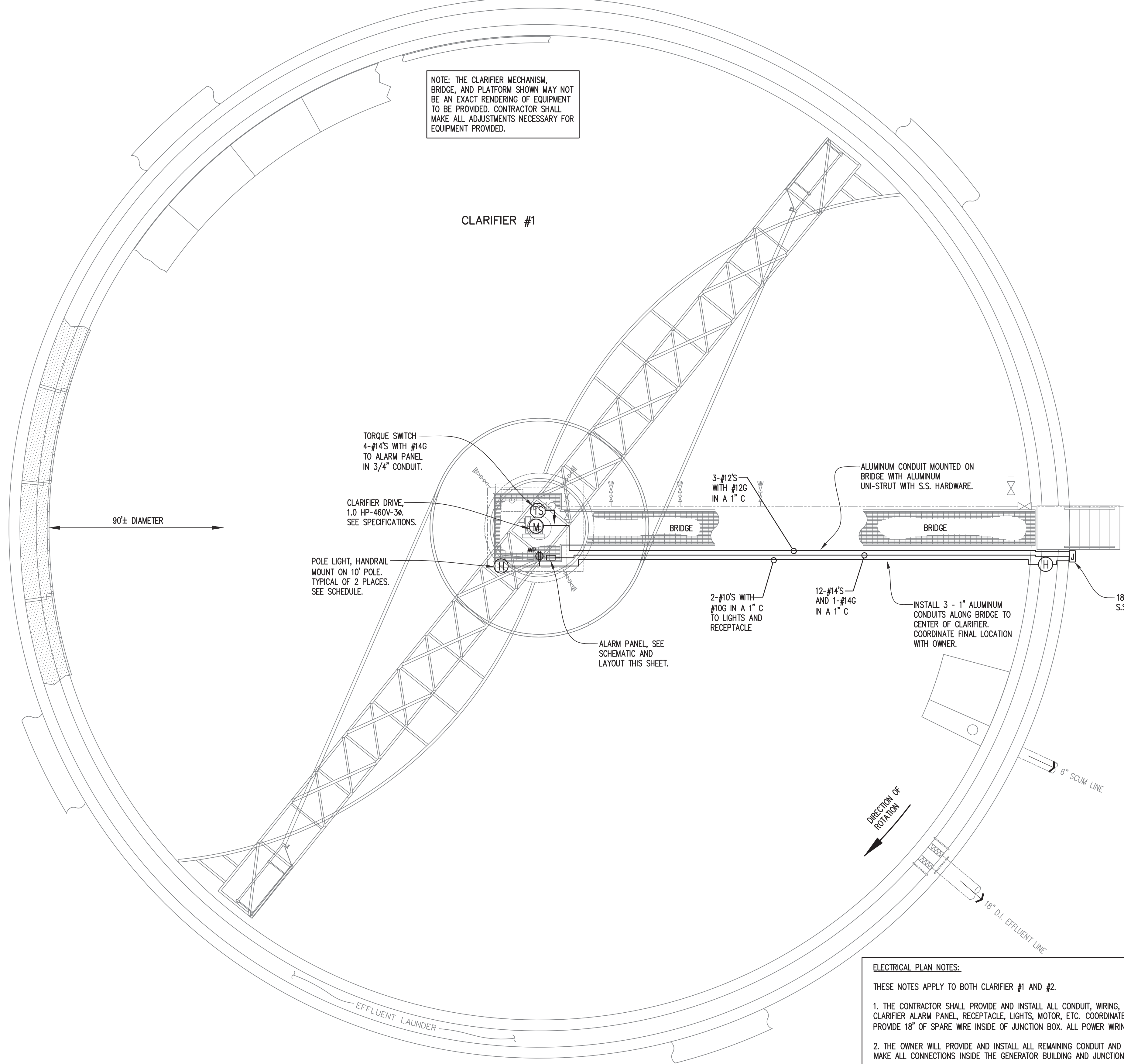
Title
LAUNDRY COVER DETAILS
BID SET

Drawing
Project No.
Date
Scale
Sheet

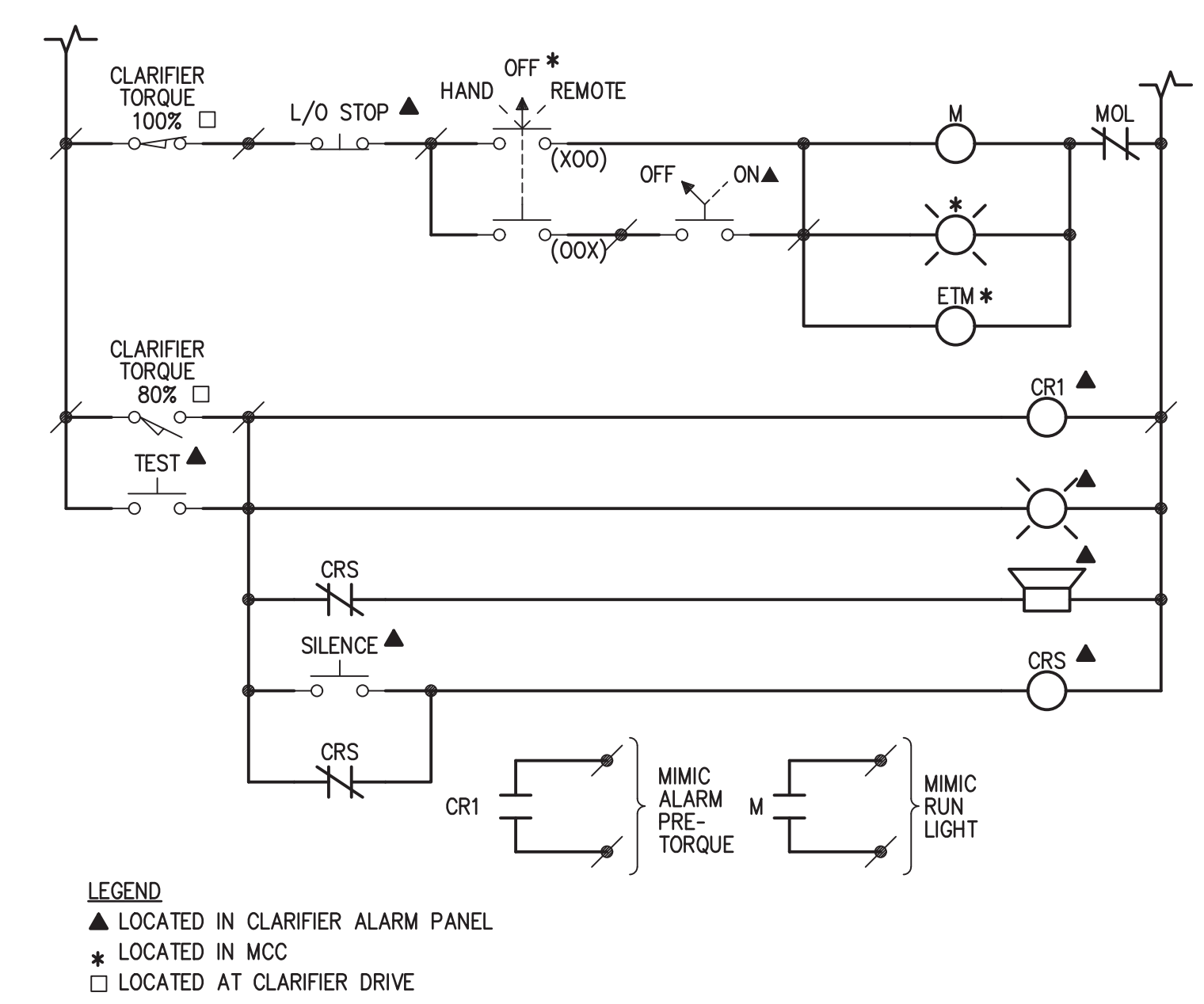
10-2021
3/16" = 1"
9

LIGHTING FIXTURE SCHEDULE							
MARK	FIXTURE MFG	CATALOG NO.	LAMPS			MOUNTING HEIGHT AND TYPE	REMARKS
			NO./FIX	WATTS-LUMENS	TYPE		
H	LITHONIA	TWO (2) - DSX0-LED-P3-40K-T5M-120-RPA-PER-DNATXD-DLL127F1.5JU	MULTI	71W 8770 LUMENS	LED	MOUNT TO 10' SWIVELPOLE, ALUMINUM POLE S3-3000-T SECURED TO HANDRAIL AND/OR BRIDGE. PROVIDE ALL COMPONENTS REQUIRED.	120V - OUTDOOR - PHOTOCCELL CONTRACTOR SHALL PROVIDE ALL S.S. BRACKETS AND ANCHOR BOLTS FOR MOUNTING.

NOTE: THE CLARIFIER MECHANISM, BRIDGE, AND PLATFORM SHOWN MAY NOT BE AN EXACT RENDERING OF EQUIPMENT TO BE PROVIDED. CONTRACTOR SHALL MAKE ALL ADJUSTMENTS NECESSARY FOR EQUIPMENT PROVIDED.

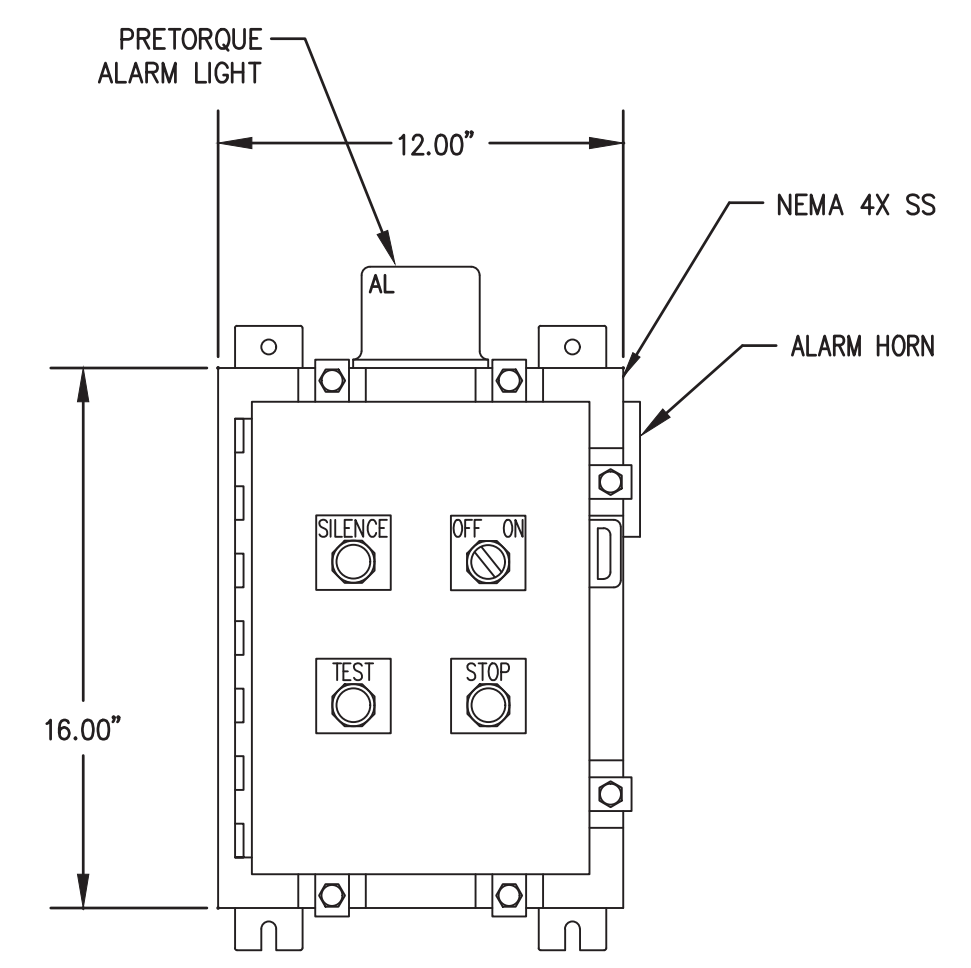


CLARIFIER #1 ELECTRICAL PLAN
SCALE: 3/16" = 1'-0"



LEGEND
▲ LOCATED IN CLARIFIER ALARM PANEL
* LOCATED IN MCC
□ LOCATED AT CLARIFIER DRIVE

CLARIFIER SCHEMATIC



FRONT VIEW (6\"/>

- PANEL NOTES:**
- 1) PANEL TO BE U.L. LISTED
 - 2) PANEL CONTROLS TO BE MOUNTED ON FRONT OF DOOR.
 - 3) PANEL TO BE PROVIDED BY CLARIFIER MANUFACTURER.
 - 4) ALL COMPONENTS TO COMPLY WITH N.E.C.
 - 5) PANEL TO BE U.L. LISTED
 - 6) SEE SCHEMATIC AND SPECS FOR ADDITIONAL DETAILS.
 - 7) PANEL, BOXES, ETC. TO BE MOUNTED WITH S.S. HARDWARE.
 - 8) EXISTING CLARIFIER STARTER, CONTROLS, ETC. IN EXISTING MCC.

- ELECTRICAL PLAN NOTES:**
- THESE NOTES APPLY TO BOTH CLARIFIER #1 AND #2.
1. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL CONDUIT, WIRING, ETC. FROM JUNCTION BOX SHOWN TO CLARIFIER ALARM PANEL, RECEPTACLE, LIGHTS, MOTOR, ETC. COORDINATE ALL FINAL LOCATION WITH THE OWNER. PROVIDE 18\"/>
 - 2. THE OWNER WILL PROVIDE AND INSTALL ALL REMAINING CONDUIT AND WIRING TO THE GENERATOR BUILDING AND MAKE ALL CONNECTIONS INSIDE THE GENERATOR BUILDING AND JUNCTION BOX. COORDINATE ALL WITH THE OWNER.
 - 3. CONDUITS FOR ALL EQUIPMENT, FIXTURES, RECEPTABLES, SWITCHES, ETC. SHALL BE MOUNTED TO BRIDGE. CONDUITS TO BE RUN NEAT, PLUMB, LEVEL, ETC. TO THE MAXIMUM EXTENT POSSIBLE. INSTALL CONDUIT SO IT DOES NOT CREATE TRIPPING HAZARDS. ABSOLUTELY NO TRIPPING HAZARDS WILL BE ALLOWED.
 - 4. ALL EXPOSED CONDUIT, BOXES, FITTINGS, ETC. SHALL BE ALUMINUM UNLESS NOTED OTHERWISE.
 - 5. ALL CONDUIT, PANELS, SWITCHES, RECEPTABLES, ETC. SHALL BE INSTALLED AND PROPERLY SUPPORTED USING ALUMINUM OR STAINLESS STEEL UNI-STRUT, STRUCTURAL MEMBERS, ETC. OR AS APPROVED BY THE ENGINEER. ALL ALUMINUM MOUNTED TO CONCRETE SHALL BE COATED WITH A BITUMASTIC COATING. PROVIDE ALL SUPPORTS, BRACKETS, ETC. AS REQUIRED TO SUPPORT CONDUIT(S).
 - 6. ALL ATTACHMENT HARDWARE (I.E. BOLTS, NUTS, ANCHOR BOLTS, WASHERS, ETC.) SHALL BE STAINLESS STEEL.
 - 7. ALL RECEPTABLES, LIGHTS, SWITCHES, ETC. ARE NOT SHOWN IN EXACT LOCATIONS. FIELD COORDINATE WITH OWNER AND ENGINEER FOR LOCATIONS DURING CONSTRUCTION. VERIFY EXACT LOCATION PRIOR TO EMBEDDING CONDUITS.
 - 8. THE CONTRACTOR SHALL PROVIDE CONDUCTORS, CONDUITS, TERMINATIONS, JUNCTION BOXES, ETC. AS REQUIRED BY NEC, THE EQUIPMENT SUPPLIED, AND AS REQUIRED FOR A COMPLETE INSTALLATION.
 - 9. THE CONTRACTOR SHALL PROVIDE A 20A DUPLEX GFCI WATERPROOF (WP) RECEPTACLE AT THE CENTER OF THE CLARIFIER. RECEPTACLE SHOULD BE MOUNTED AT TOP OF HANDRAIL.
 - 10. THE CONTRACTOR SHALL GROUND NEW BRIDGE AND PLATFORM TO THE EXISTING GROUNDING SYSTEM WITH #4/0 BARE GROUND CABLES AND CADWELD CONNECTIONS. COORDINATE WITH THE OWNER. BRIDGE/PLATFORM SECTIONS SHALL BE CONTINUOUS. CONTRACTOR SHALL VERIFY.

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JASPER WATER & SEWER BOARD
TOWN CREEK WWTP
CLARIFIER #1 AND #2 IMPROVEMENTS
2021

ALABAMA LICENSED PROFESSIONAL ENGINEER
NO. 33658
TERRY R. TURNER
10-06-21
NOT VALID WITHOUT SIGNATURE

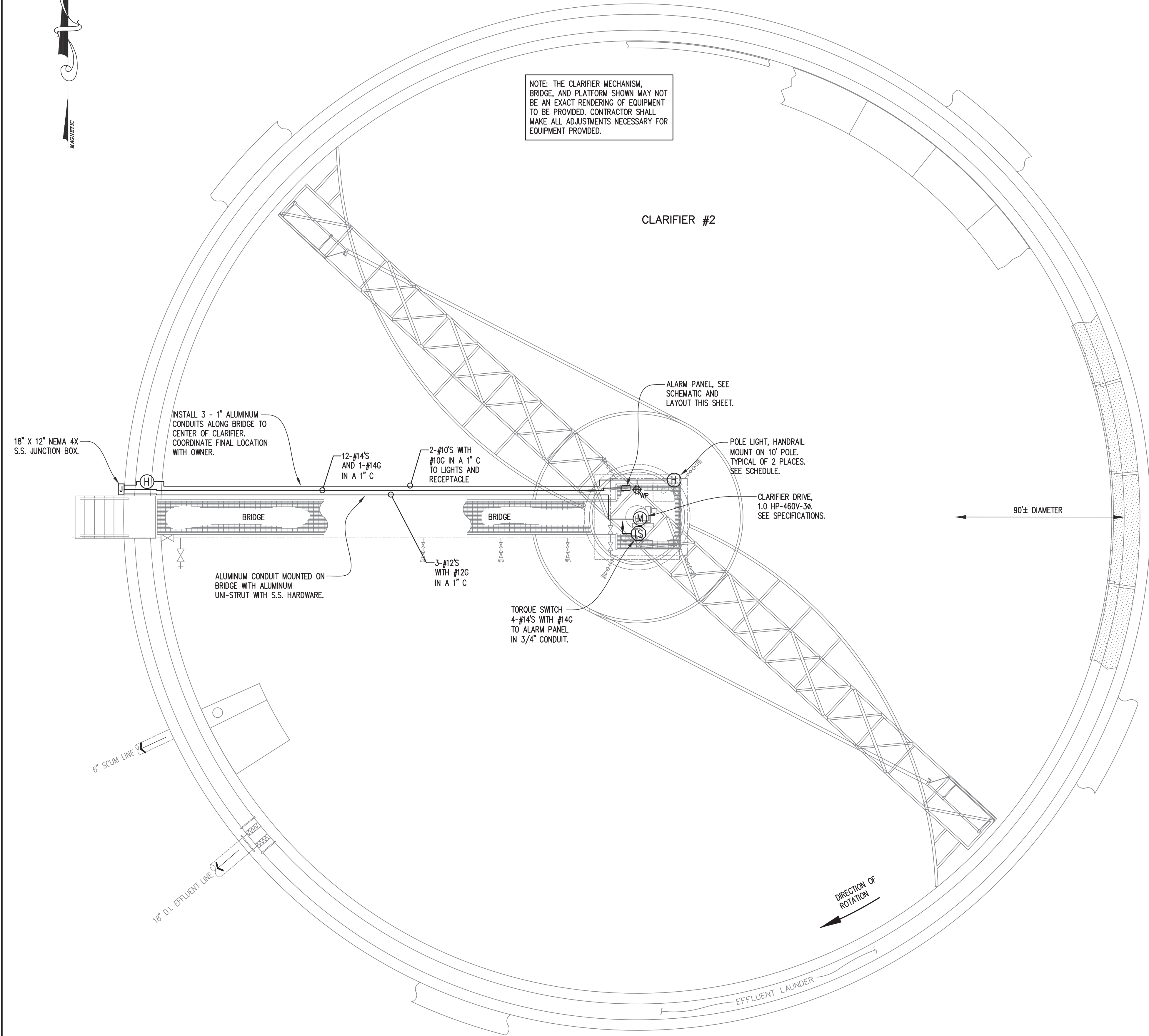
BAR = 1"

Title
CLARIFIER #1 ELECTRICAL
BID SET

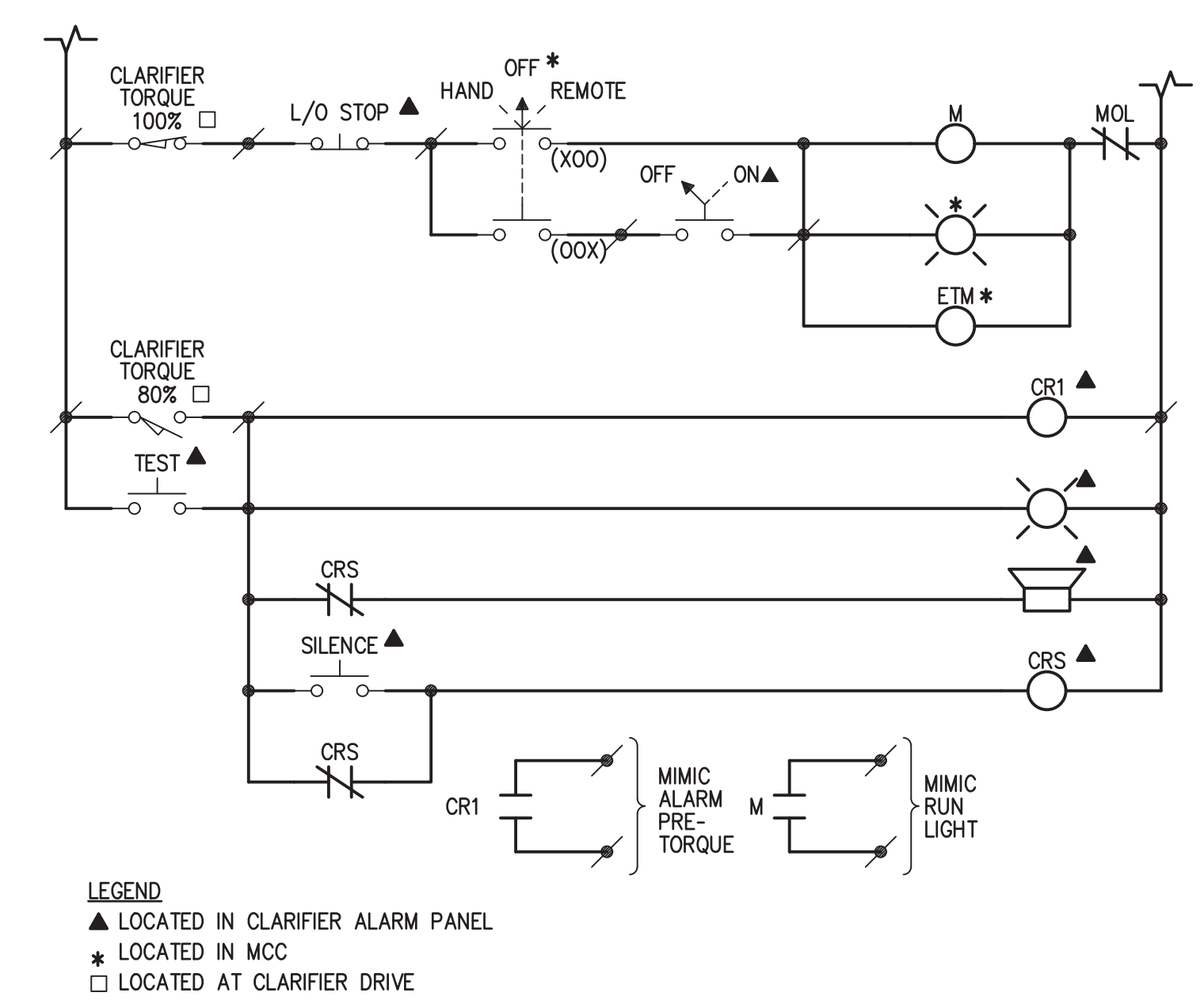
Drawing Project No. 10-2021
Date 10-2021
Scale 3/16" = 1'
Sheet 10

LIGHTING FIXTURE SCHEDULE							
MARK	FIXTURE MFG	CATALOG NO.	LAMPS			MOUNTING HEIGHT AND TYPE	REMARKS
			NO./FIX	WATTS-LUMENS	TYPE		
H	LITHONIA	TWO (2) - DSXO-LED-P3-40K-15M-120-RPA-PER-DNATXD-DLL127F1.5JU	MULTI	71W 8770 LUMENS	LED	MOUNT TO 10' SWIVELPOLE, ALUMINUM POLE S3-3000-T SECURED TO HANDRAIL AND/OR BRIDGE. PROVIDE ALL COMPONENTS REQUIRED.	120V - OUTDOOR - PHOTOCELL CONTRACTOR SHALL PROVIDE ALL S.S. BRACKETS AND ANCHOR BOLTS FOR MOUNTING.

NOTE: THE CLARIFIER MECHANISM, BRIDGE, AND PLATFORM SHOWN MAY NOT BE AN EXACT RENDERING OF EQUIPMENT TO BE PROVIDED. CONTRACTOR SHALL MAKE ALL ADJUSTMENTS NECESSARY FOR EQUIPMENT PROVIDED.

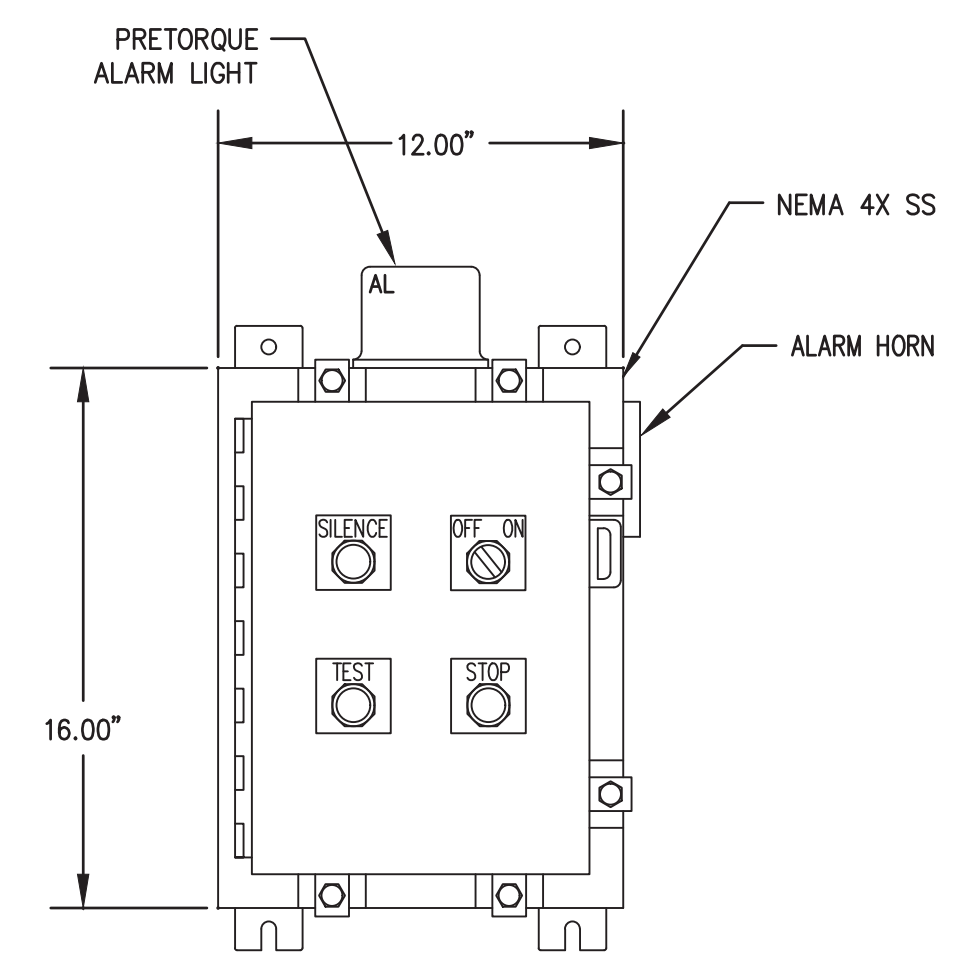


CLARIFIER #2 ELECTRICAL PLAN
SCALE: 3/16" = 1'-0"



LEGEND
▲ LOCATED IN CLARIFIER ALARM PANEL
* LOCATED IN MCC
□ LOCATED AT CLARIFIER DRIVE

CLARIFIER SCHEMATIC



PANEL NOTES:
1) PANEL TO BE U.L. LISTED
2) PANEL CONTROLS TO BE MOUNTED ON FRONT OF DOOR.
3) PANEL TO BE PROVIDED BY CLARIFIER MANUFACTURER.
4) ALL COMPONENTS TO COMPLY WITH N.E.C.
5) PANEL TO BE U.L. LISTED
6) SEE SCHEMATIC AND SPECS FOR ADDITIONAL DETAILS.
7) PANEL, BOXES, ETC. TO BE MOUNTED WITH S.S. HARDWARE.
8) EXISTING CLARIFIER STARTER, CONTROLS, ETC. IN EXISTING MCC.

CLARIFIER ALARM PANEL

SEE PREVIOUS SHEET FOR CLARIFIER ELECTRICAL NOTES

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Drawing Project No.	Title	
	CLARIFIER #2 ELECTRICAL	BID SET
Date	10-2021	
Scale	3/16" = 1'	
Sheet	11	