

CONTRACT DOCUMENTS - DRAWINGS

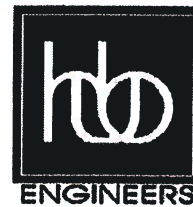
FOR

**HAIKEY CREEK OPERATION & MAINTENANCE
CAPITAL EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2
BAMA PROJECT NO. 2154140**

ATTENDANCE AT PRE-BID CONFERENCE IS MANDATORY


PREPARED BY:

Account Number: 9508900-541101



HOLLOWAY, UPDIKE AND BELLEN, INC.
905-A SOUTH 9TH STREET
BROKEN ARROW, OK 74102
918-251-0717 OFFICE
918-251-0754 FAX
C.A. No. 219
EXPIRES 6-30-21




Stephen Tolar, P.E. No. OK 20679


1-18-2021
Date




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Where opportunity lives


Clayton Edwards, P.E.
Director, Water & Sewer Department.

1-19-21
Date


Charles Vokes
Utilities Director

1-19-21
Date

Note: The Drawings attached hereto as part of these Specifications are for information purposes only. The Authority makes no representation or guarantee with respect to the accuracy of any information contained in the Drawings. It is the Contractors responsibility to verify information on the drawings to ensure the equipment installed or controlled by work performed under this Contract performs as specified herein.

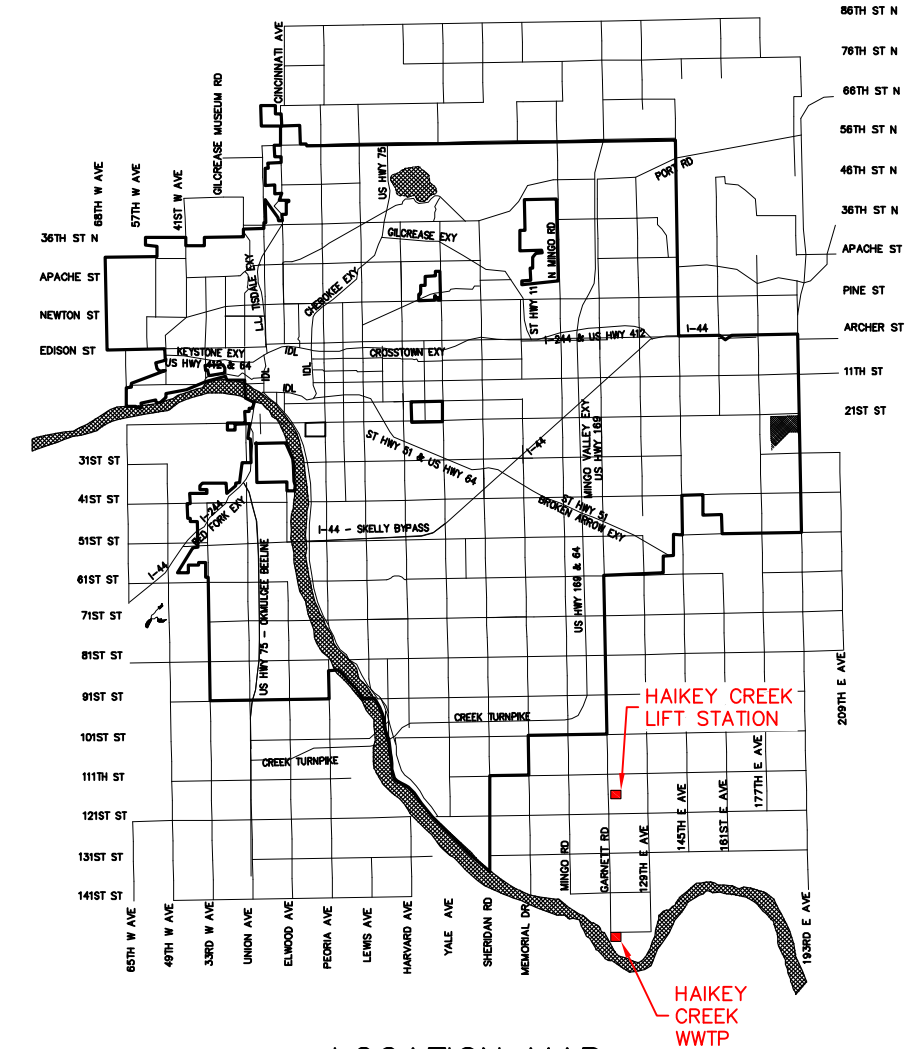
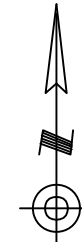
Water and Sewer Department
175 E. 2nd Street, Suite 1400
Tulsa, Oklahoma 74103
(918) 596-9845

INDEX OF SHEETS					
PLAN SHEET NO.	DRAWING NO.	DESCRIPTION	EQUIPMENT	ID	LOCATION
1		COVER			
2		INDEX OF SHEETS & GENERAL NOTES			
3		HCWWTP & HCLS LOCATION PLAN			
4	203.100.A	DISINFECTION DRAINAGE BASIN PUMP REPLACEMENT	PUMP #1	H060-CHL2-SUP01	HCWWTP
			PUMP #2	H060-CHL2-SUP02	
5	203.200.A	RAS PUMP GEAR BOX REPLACEMENT	BOX #1	H040-SCR1-RAP01	HCWWTP
6	203.200.B		BOX #2	H040-SCR1-RAP02	
7	203.300.A		BOX #3	H040-SCR1-RAP03	
8	203.300.A	LIFT STATION STAIR REHABILITATION (ADDITIVE ALTERNATE #1)	-	-	HCLS
8-9	203.400.A	DISINFECTION BUILDING SUMP PUMP REPLACEMENT & CONTROL RELOCATION	PUMP #1	H060-CHL1-SUP01	HCWWTP
			PUMP #2	H060-CHL1-SUP02	
10	203.450.A	FINAL CLARIFIER FLOW METER REPLACEMENT	CLARIFIER #1	H050-FCL1-FMT01	HCWWTP
			CLARIFIER #2	H050-FCL2-FMT01	
			CLARIFIER #3	H050-FCL3-FMT01	
			CLARIFIER #4	H050-FCL4-FMT01	
11	203.500.A	OPERATIONS BUILDING INTERIOR REHABILITATION (ADDITIVE ALTERNATE #2)	BUILDING	H001-OPS1-BLDG1	HCWWTP
12	203.500.B				
13	203.500.C				
14	203.550.A	OPERATIONS BUILDING PUMP ROOM REHABILITATION (ADDITIVE ALTERNATE #3)	-	-	HCWWTP
13	203.560.A	OPERATIONS BUILDING ABANDONED HVAC EQUIPMENT (ADDITIVE ALTERNATE #4)	BUILDING	H001-OPS1-BLDG1	HCWWTP
15	203.600.A	DISINFECTION BUILDING ABANDONED EYEWASH REHABILITATION & REPAIRS (ADDITIVE ALTERNATE #5)	-	-	HCWWTP
16	203.600.B				
17-18		MISCELLANEOUS DETAILS			
EB1		ELECTRICAL LEGEND & ABBREVIATIONS			
EB2-EB4	203.800.A-C	LIGHTING REPLACEMENT			HCWWTP

GENERAL NOTES

- CONTRACTOR SHALL HAVE ONE (1) EXECUTED COPY OF THE CONTRACT DOCUMENTS, SPECIFICATIONS AND DRAWINGS AT THE JOB SITE WHEN WORK IS IN PROGRESS.
- CONTRACTOR SHALL MAINTAIN A CLEAN CONSTRUCTION SITE AT ALL TIMES. TRASH, SPENT PALLETS, CONTAINER REMNANTS, BINDINGS, ETC. SHALL BE PICKED UP WHEN NO LONGER IN USE AND DEPOSITED IN TRASH CONTAINERS.
- ALL PIPE SUPPORTS, STAND, BRACKETS, BOLTS, ANCHOR BOLTS, SCREWS, FASTENERS, PANEL STANDS & APPURTENANCES UNLESS OTHERWISE NOTED SHALL BE 316 STAINLESS STEEL MINIMUM SUITABLE FOR SANITARY APPLICATIONS.
- ALL DIMENSIONS SHOWN WITH ± SHALL BE CONFIRMED BY THE CONTRACTOR ACCORDING TO ACTUAL FIELD CONDITIONS OR EQUIPMENT REQUIREMENTS.
- DISSIMILAR METALS SHALL BE SEPARATED BY GASKET OR COATING TO PREVENT GALVANIC CORROSION. ALL ALUMINUM IN CONTACT W/CONCRETE SHALL BE COATED.
- ANY EXISTING ITEMS, EQUIPMENT, STRUCTURES OR SURFACES DISTURBED OR DAMAGED BY CONTRACTOR SHALL BE REPAIRED OR REPLACED TO ORIGINAL CONDITION OR BETTER AT NO ADDITIONAL COST TO THE OWNER.
- CONTRACTOR SHALL CONFIRM ALL DIMENSIONS WITH EQUIPMENT SUPPLIERS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER OF DISCREPANCIES.
- THE IMPROVEMENTS SET FORTH IN THE PLANS SHALL NOT PROHIBIT ON-SITE TRAFFIC AND/OR RELATED TASKS REQUIRED IN THE TREATMENT AND DISCHARGE OF WASTEWATER.
- ALL WORKMANSHIP SHALL BE NEAT, PLUMB, SQUARE AND CONSTRUCTED IN A PROFESSIONAL MANNER.
- ALL ELECTRICAL CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH ALL N.E.C. ELECTRICAL CODES.
- HCWWTP CONTACT INFORMATION:
 ANDREW LANKFORD
 HCWWTP SUPERINTENDENT
 (918) 596-7154

 MATT VAUGHAN
 WATER POLLUTION CONTROL MANAGER
 (918) 569-9845
- ALL PROJECT POT HOLING OF TIE-IN LOCATIONS SHALL BE PERFORMED WITHIN 30 CONTRACT DAYS OF CONTRACTOR MOBILIZATION. SUBMIT FIELD VERIFIED LOCATIONS AND DEPTHS TO THE ENGINEER.
- CONTRACTOR SHALL PROTECT ALL PIPING, ELECTRICAL AND PLANT SERVICES NOT SHOWN TO BE DEMOLISHED DURING CONSTRUCTION ACTIVITIES.
- DELIVER ALL HAIKEY CREEK WWTP EQUIPMENT TO HAIKEY CREEK WWTP ONLY. DO NOT DELIVER TO OR TEMPORARILY STORE AT OTHER LOCATIONS.



LOCATION MAP

REVISION	BY	DATE

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INDEX OF SHEETS & GENERAL NOTES

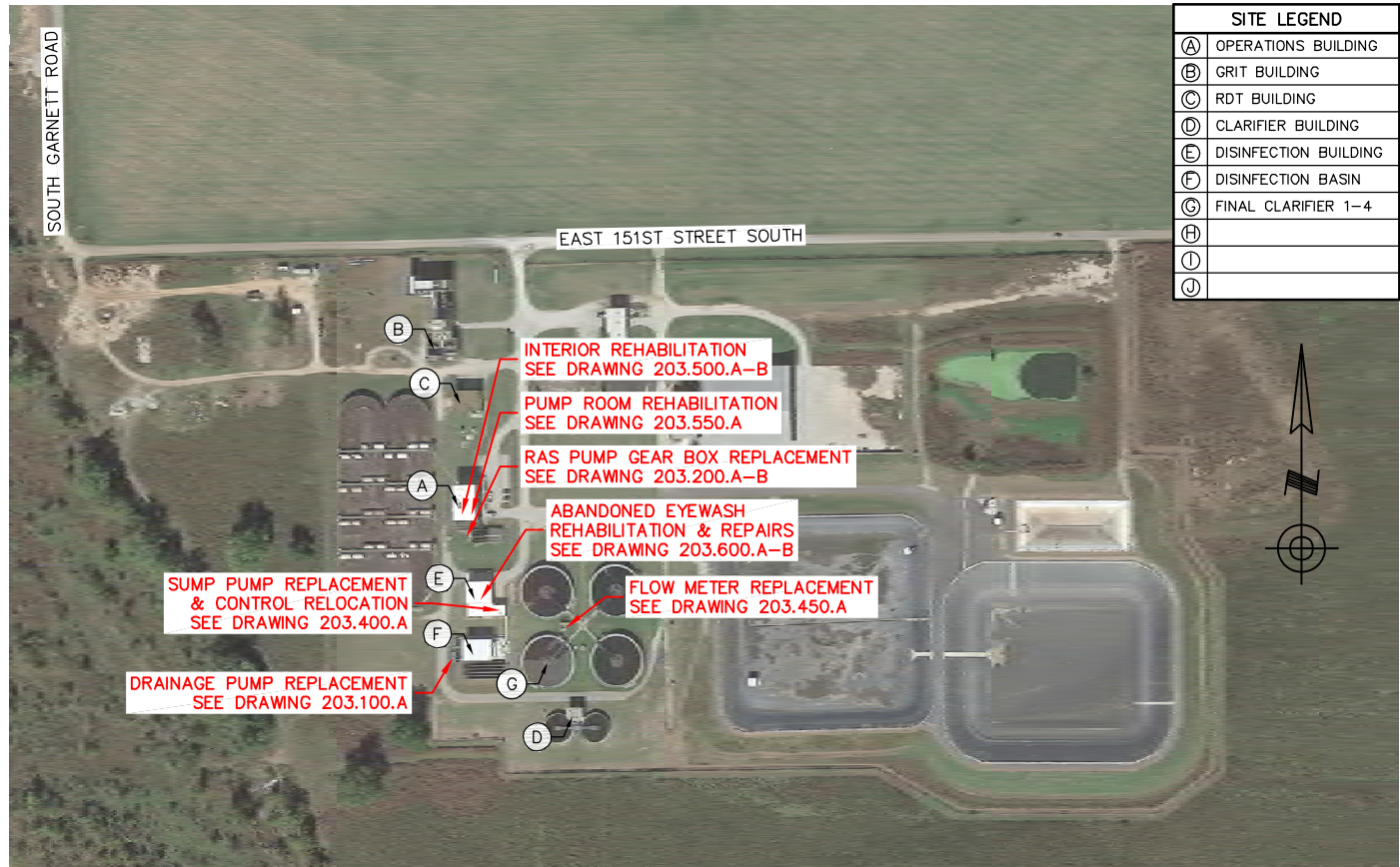
HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS RMUA PROJECT NO. WPC 21-2

REGIONAL METROPOLITAN UTILITY AUTHORITY

PLANS AND ESTIMATES PREPARED BY:		HOLLOWAY, UPDKE + BELLEN, Inc. <small>800-A & 8TH ST, BROOKHURST, OKLAHOMA 74109 (918) 477-4777, FAX (918) 477-4744</small>	
PLAN SCALE:	DRAWN	JME	APPROVED:
	DESIGNED	LST	
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1 HAIKEY CREEK WWTTP
11602 EAST 151ST STREET SOUTH



2 HAIKEY CREEK LIFT STATION
11601 SOUTH GARNETT ROAD

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**HCWTP & HCL
LOCATION PLAN**

**HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2**

REGIONAL METROPOLITAN UTILITY AUTHORITY

PLANS AND ESTIMATES PREPARED BY: **HOLLOWAY, UPDKE + BELLEN, Inc.**
800-A & 8TH ST., BROOKHURST, OKLAHOMA 74109
918-281-4777, FAX 918-281-0744

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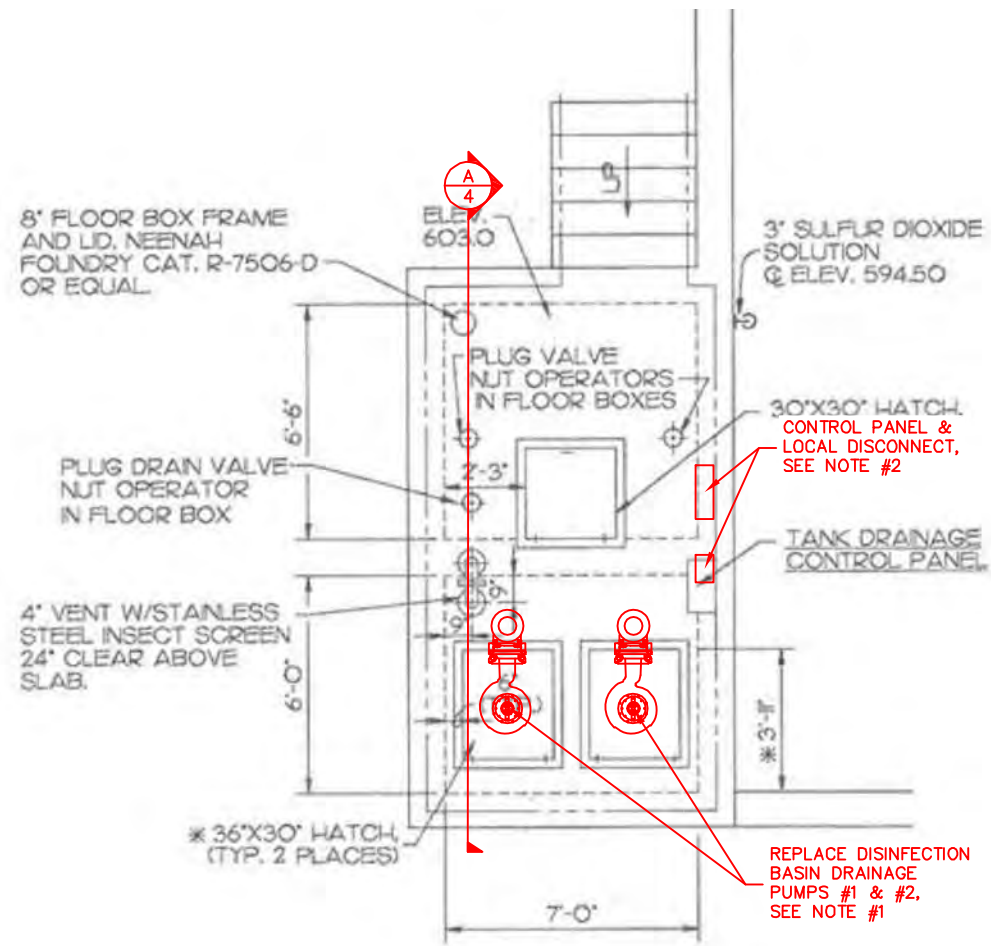


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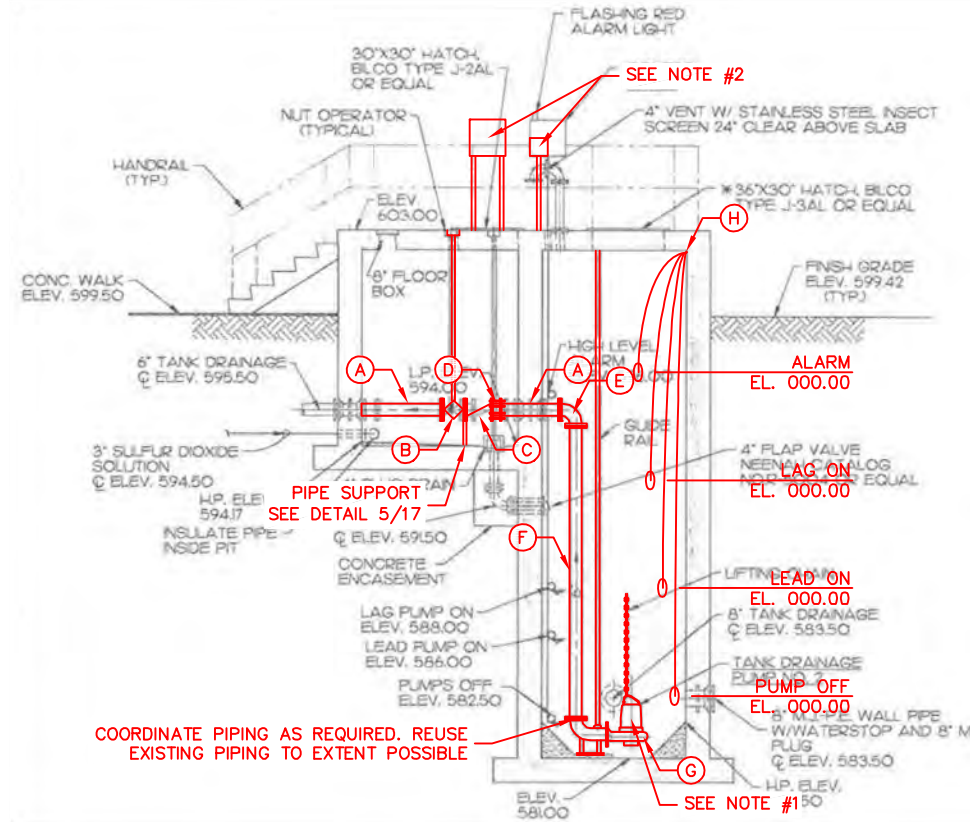
LEGEND	
(A)	6" FLGxPE PIPE(S)
(B)	6" PLUG VALVE(S)
(C)	6" CHECK VALVE(S)
(D)	6" F.C.A.
(E)	6" 90° BEND(S)
(F)	6" FLGxFLG PIPE(S)
(G)	6" PUMP(S), SEE SCHEDULE
(H)	BALL FLOATS

NOTES:

1. REMOVE AND REPLACE DISINFECTION DRAINAGE BASIN PUMP #1 & #2 COMPLETELY INCLUDING GUIDE RAILS, PULL CHAINS, FLOATS AND CONTROL PANEL.
2. INSTALL A LOCAL DISCONNECT WHERE THE EXISTING CONTROL PANEL IS AND A NEW CONTROL PANEL AS SHOWN.
3. PAINT ALL PIPING IN WELL, NEW & EXISTING.
4. ALL CONDUITS SHALL BE THREADED ALUMINUM.
5. SEE SHEET #2 FOR EQUIPMENT NUMBERS, (TYP)
6. ROUTE NEW CONDUIT FROM NEW CONTROL PANEL FOR FLOATS & PUMP SUBMERSIBLE CABLE. CORE DRILL TOP OF WET WELL AS REQUIRED.



1
4 PLAN @ DISINFECTION BASIN
SCALE: 3/8" = 1'-0"



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



B
4 PHOTO @ DISINFECTION BASIN
SCALE: NTS



C
4 PHOTO @ DISINFECTION BASIN
SCALE: NTS

REVISION	BY	DATE

REFERENCE ORIGINAL ES 90-20-5 RECORD DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION

DRAWING 203.100.A
DISINFECTION BASIN DRAINAGE PUMP REPLACEMENT
HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2
REGIONAL METROPOLITAN UTILITY AUTHORITY

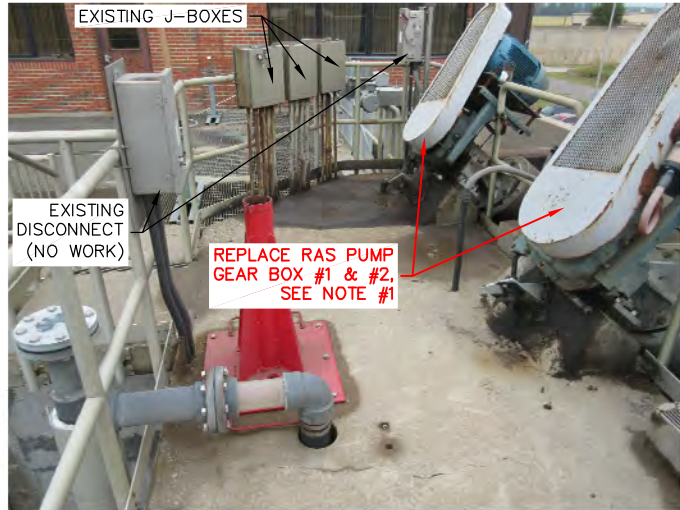
PLANS AND ESTIMATES PREPARED BY: **HOLLOWAY, UPDKE + BELLEN, Inc.**

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NOTES:

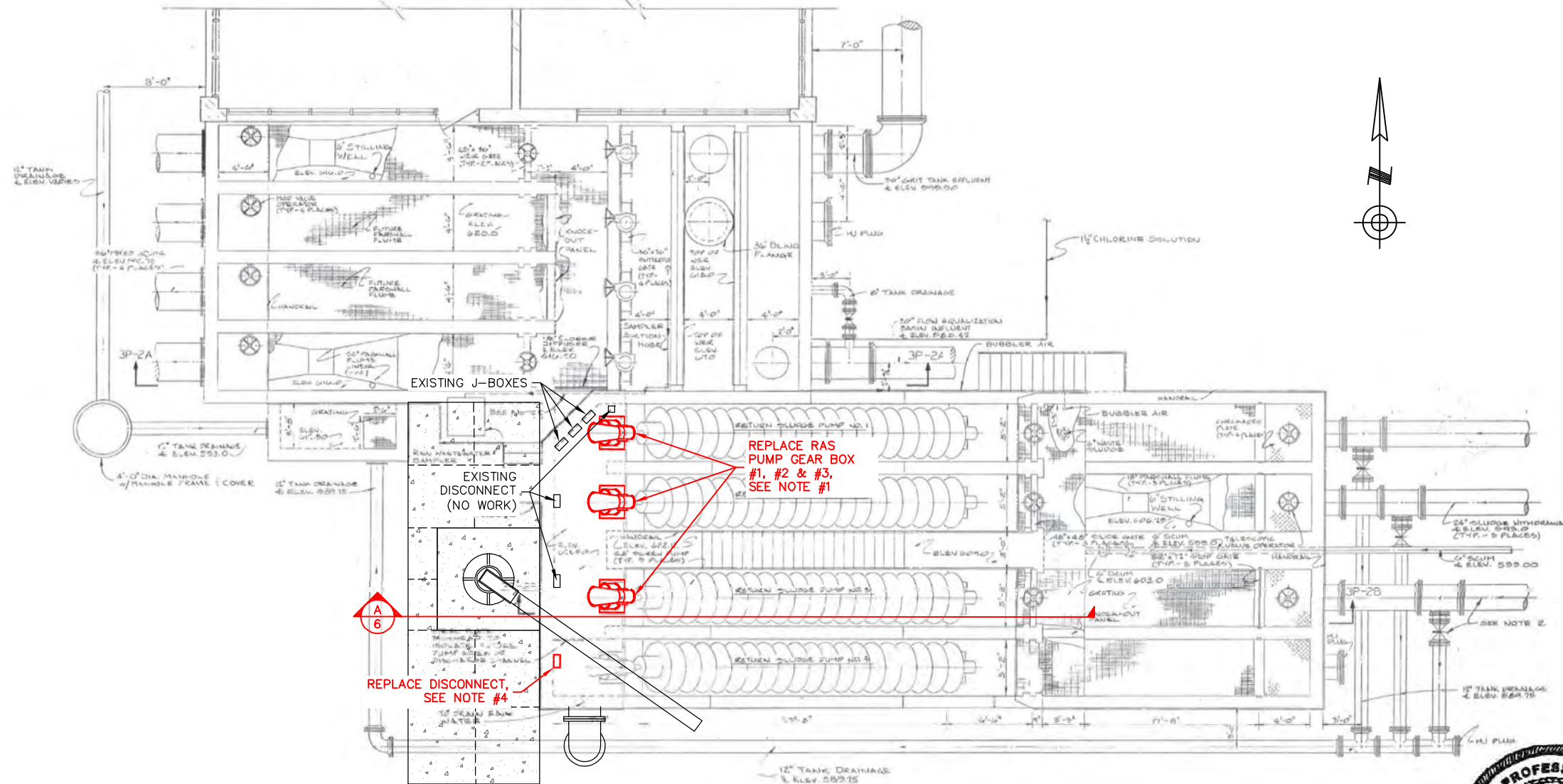
1. REPLACE THREE (3) RAS PUMP GEAR BOXES #1, #2 & #3. REPLACE RAS PUMP GEAR BOX MODEL TA6307 WITH NEW TXT7 INCLUDING NEW CUSTOM HOT DIPPED GALVANIZED (HDG) BELT COVER, NEW SHEAVES, NEW BELTS, CUSTOM HDG NEW MOUNTING BRACKETS, NEW TAPERED BUSHING FOR CONNECTIONS ON EXISTING MOTORS, NEW BACKSTOP PREVENTER AND RELATED COMPONENTS. REUSE THE EXISTING MOTORS AND ELECTRICAL DISCONNECTS #1, #2 & #4.
2. CONTRACTOR IS LIMITED TO ONE RAS PUMP OUT OF SERVICE AT A TIME.
3. SEE CONCRETE REPAIR DETAIL 4/18.
4. REPLACE EXISTING START-STOP STATION W/NEW DISCONNECT. PROVIDE NEW 316 SST, NEMA 4X DISCONNECT. MOUNT TO SIMILAR EXISTING SHOWN ON A/5 & B5. PROVIDE NEW WIRE, CONDUITS & COMPONENTS AS REQUIRED.
5. SPARE PARTS- FOUR (4) EACH SPARE BELTS.
6. SEE SHEET #2 FOR EQUIPMENT NUMBERS, (TYP)



A
5 PHOTO @ RAS PUMP
(LOOKING NORTH)



B
5 PHOTO @ RAS PUMP
(LOOKING SOUTH)

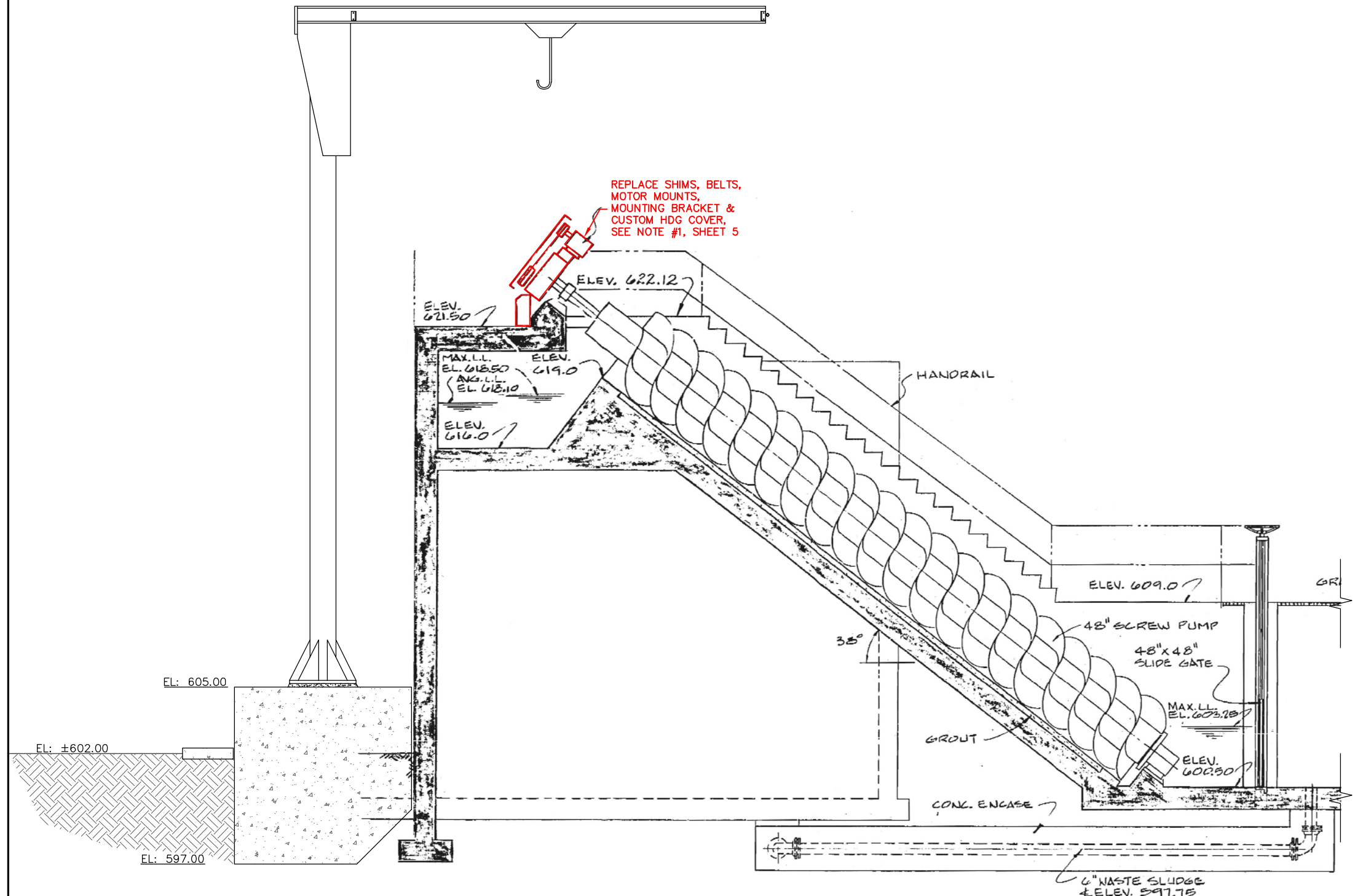


1
5 PLAN @ RAS PUMP GEAR BOX REPLACEMENT
SCALE: 3/16" = 1'-0"



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REFERENCE ORIGINAL SA 83-1 RECORD DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION		
DRAWING 203.200.A RAS PUMP GEAR BOX REPLACEMENT		
HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS RMUA PROJECT NO. WPC 21-2		
REGIONAL METROPOLITAN UTILITY AUTHORITY		
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A
6 SECTION @ RAS PUMP GEAR BOX REPLACEMENT
SCALE: 1/4" = 1'-0"

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DRAWING 203.200.B
RAS PUMP GEAR BOX REPLACEMENT

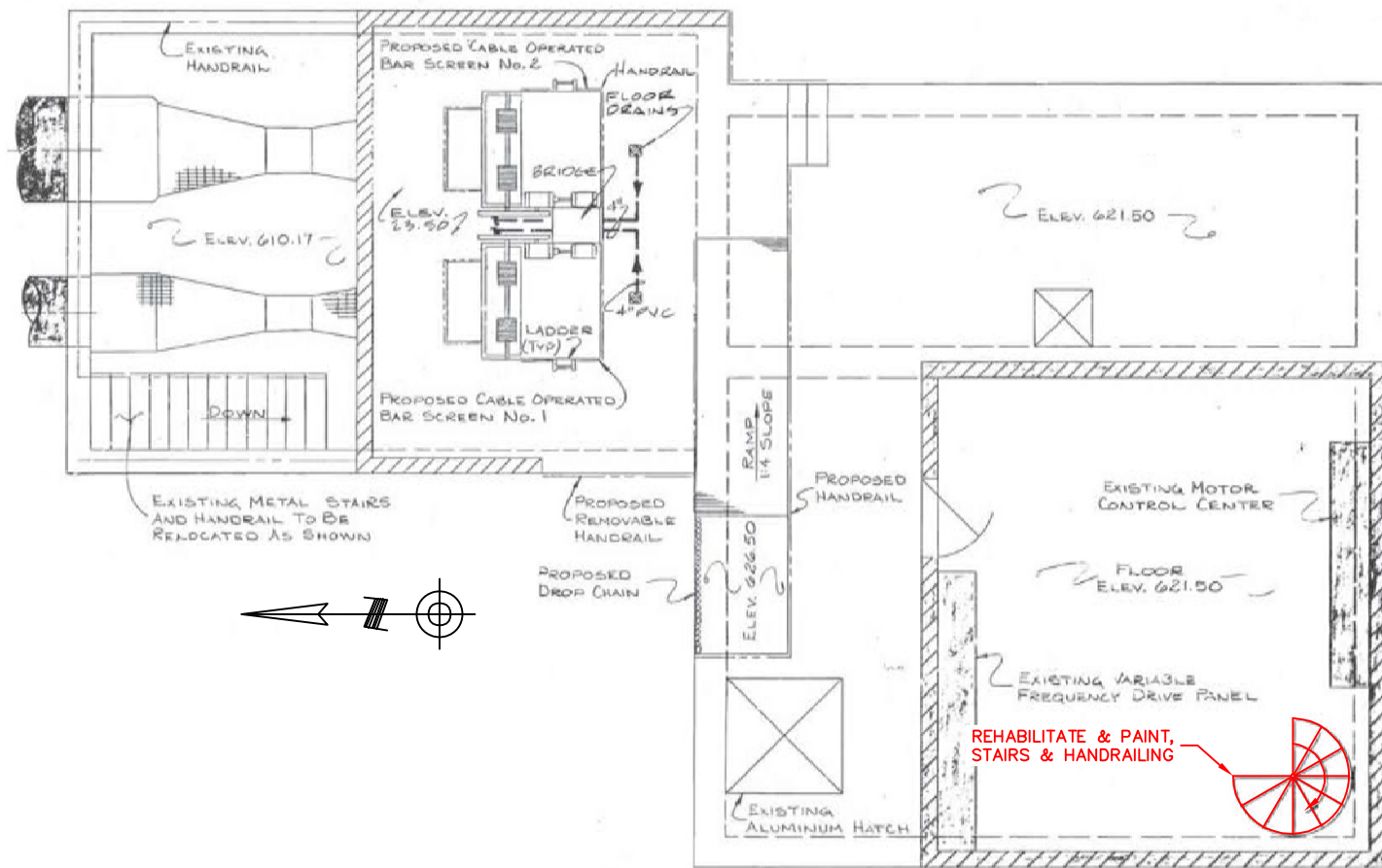
HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2

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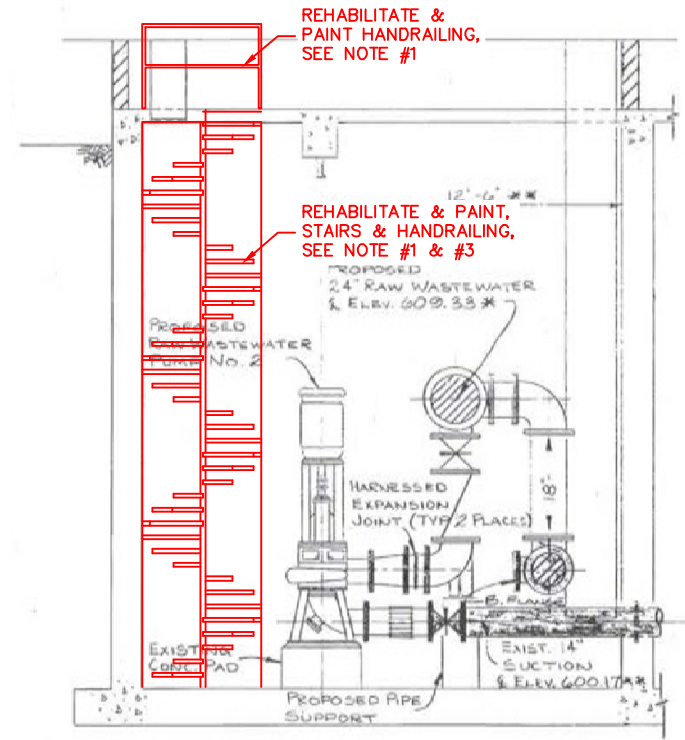
PLANS AND ESTIMATES PREPARED BY: HOLLOWAY, UPDIKE + BELLEN, Inc.
800-A & 5TH ST, BROOKHURST, OKLAHOMA 74109
PH: 405-477-7777, FAX: 405-477-0744

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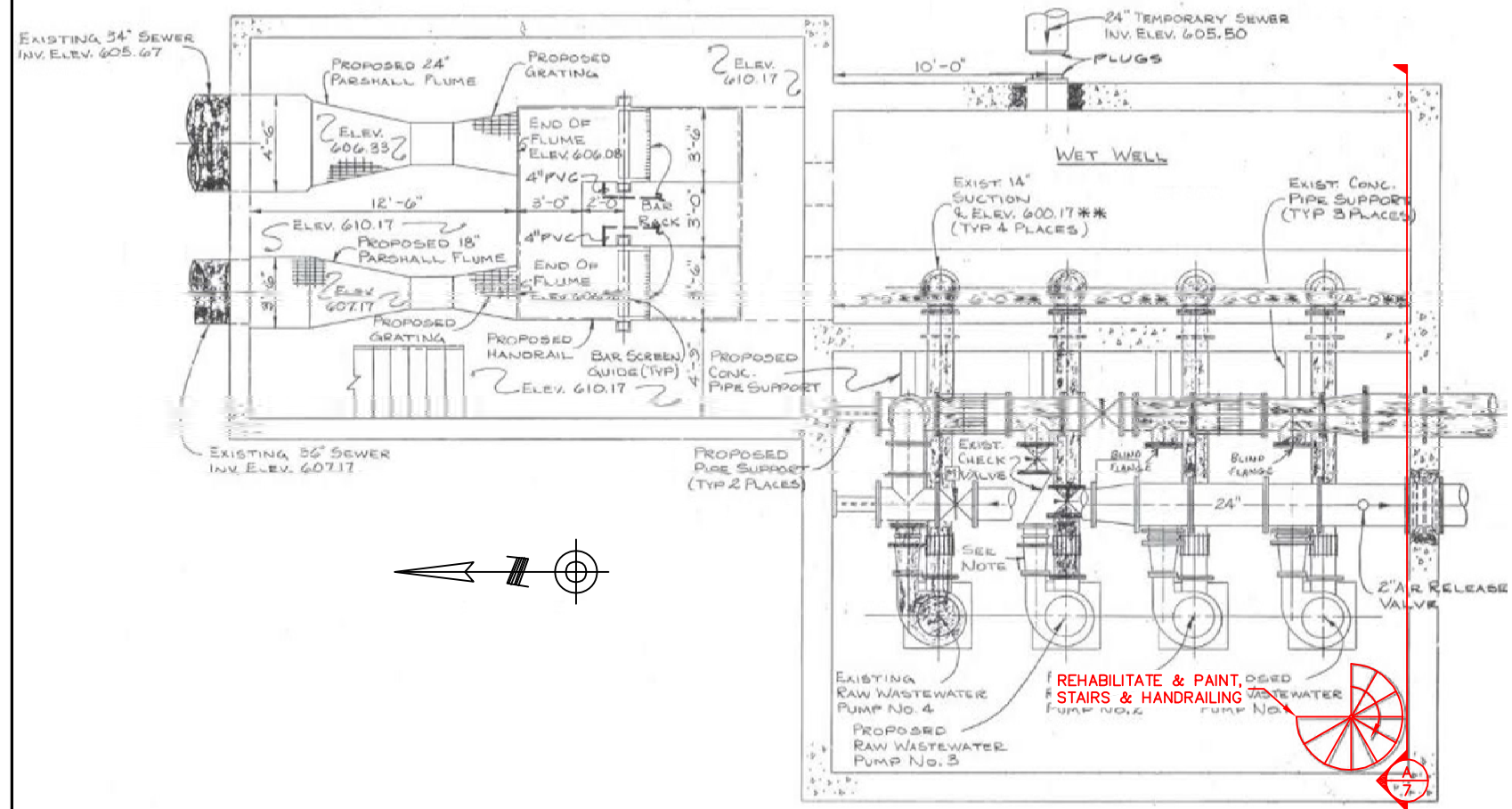


1 UPPER PLAN @ HAIKEY CREEK LIFT STATION
SCALE: 1/8" = 1'-0"



A SECTION @ HAIKEY CREEK LIFT STATION
SCALE: 1/8" = 1'-0"

- NOTES:
- REHABILITATE STAIRS & HANDRAILING COMPLETELY. SANDBLAST TO SP-10 WHITE BLAST AND SPRAY PAINT FINISH. PROVIDE SHARK BITE OR EQUAL ANTI SLIP IN FINISH ON ALL THREADS. PAINT COLOR SHALL BE STANDARD COLOR EQUIPMENT "GRAY".
 - PROVIDE CUSTOM PIPE SUPPORTS TO WALL WITH 1/2" ANCHOR BOLTS HILTI HY200 & BOLTED ADJUSTABLE SADDLE CENTER PIPE SUPPORT UNDER TREAD SIMILAR TO EMPIRE INDUSTRIES U-BOLT KIT OR EQUAL. MAINTAIN 7'-0" CLEARANCE TO TREADS. ALL MATERIALS SHALL BE 316SS.
 - SOME SPINDLES ARE LOOSE. TIGHTEN ALL THREAD BOLT SPINDLES. ADD WASHER/NUTS AS REQUIRED.
 - SEE SHEET #2 FOR EQUIPMENT NUMBERS, (TYP)



2 LOWER PLAN @ HAIKEY CREEK LIFT STATION
SCALE: 1/8" = 1'-0"



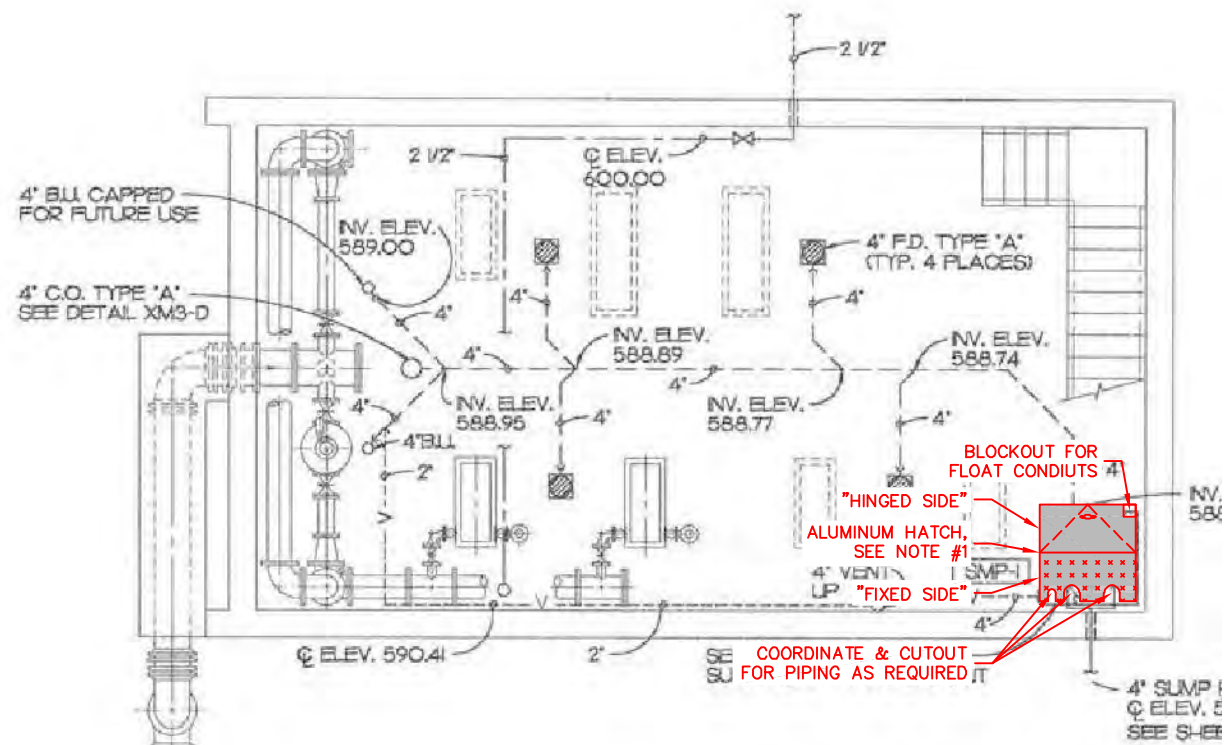
B PHOTO @ HAIKEY CREEK LIFT STATION
SCALE: NTS



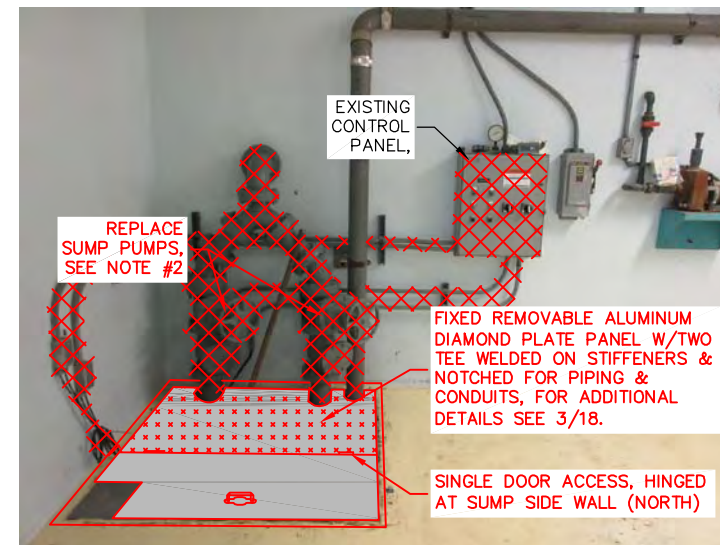
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DRAWING 203.300.A HAIKEY CREEK LS STAIR REHABILITATION		
HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS RMUA PROJECT NO. WPC 21-2		
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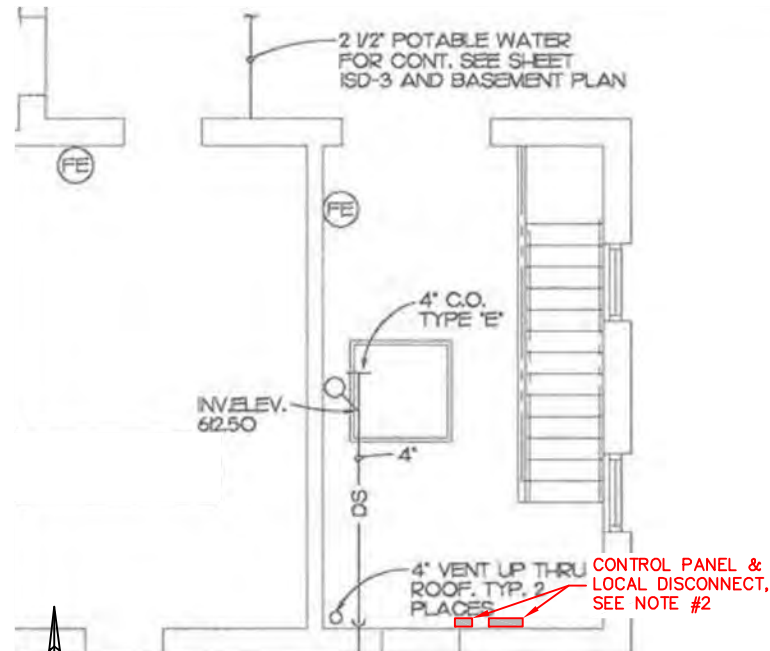
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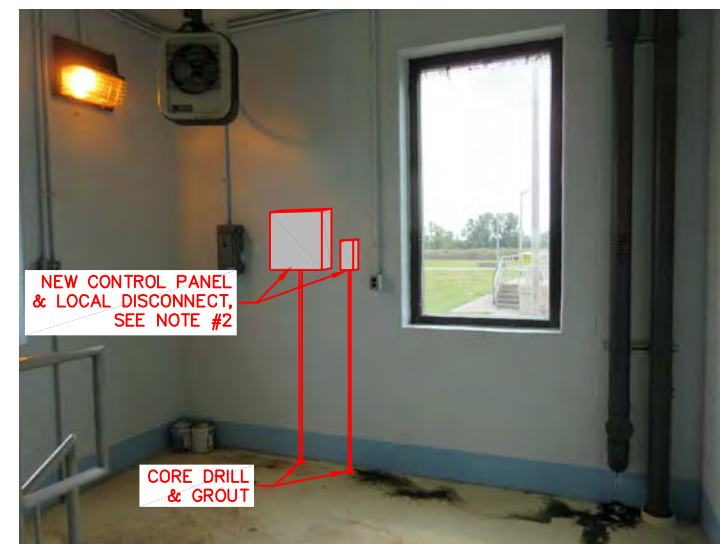
1
8 PLAN @ DISINFECTION BUILDING BASEMENT
SCALE: 1/4" = 1'-0"



A
8 PHOTO @ DISINFECTION BUILDING BASEMENT
SCALE: 1/4" = 1'-0"



2
8 PLAN @ DISINFECTION BUILDING
SCALE: 1/4" = 1'-0"



B
8 PHOTO @ DISINFECTION BUILDING
SCALE: 1/4" = 1'-0"

NOTES:

1. REMOVE PAINTED STEEL HATCH & FRAME AT CONCRETE SLAB. REPAIR CONCRETE PER 4/18 REBAR & EMBEDDED ITEM CONCRETE REPAIR DETAIL 3/18. PROVIDE CUSTOM SIZED HATCH FOR EXISTING OPENING.
2. DEMOLISH EXISTING SUMP PUMPS, PIPING, VALVES, CONTROL PANEL CONDUITS & WIRING BACK TO SOURCE. INSTALL NEW 304SST NEMA 4X CONTROL PANEL AND WIRING BACK TO SOURCE.
3. SEE SHEET #2 FOR EQUIPMENT NUMBERS, (TYP)
4. PROVIDE NEW LOCAL DISCONNECTS FOR EACH PUMP AS SHOWN.

REVISION	BY	DATE

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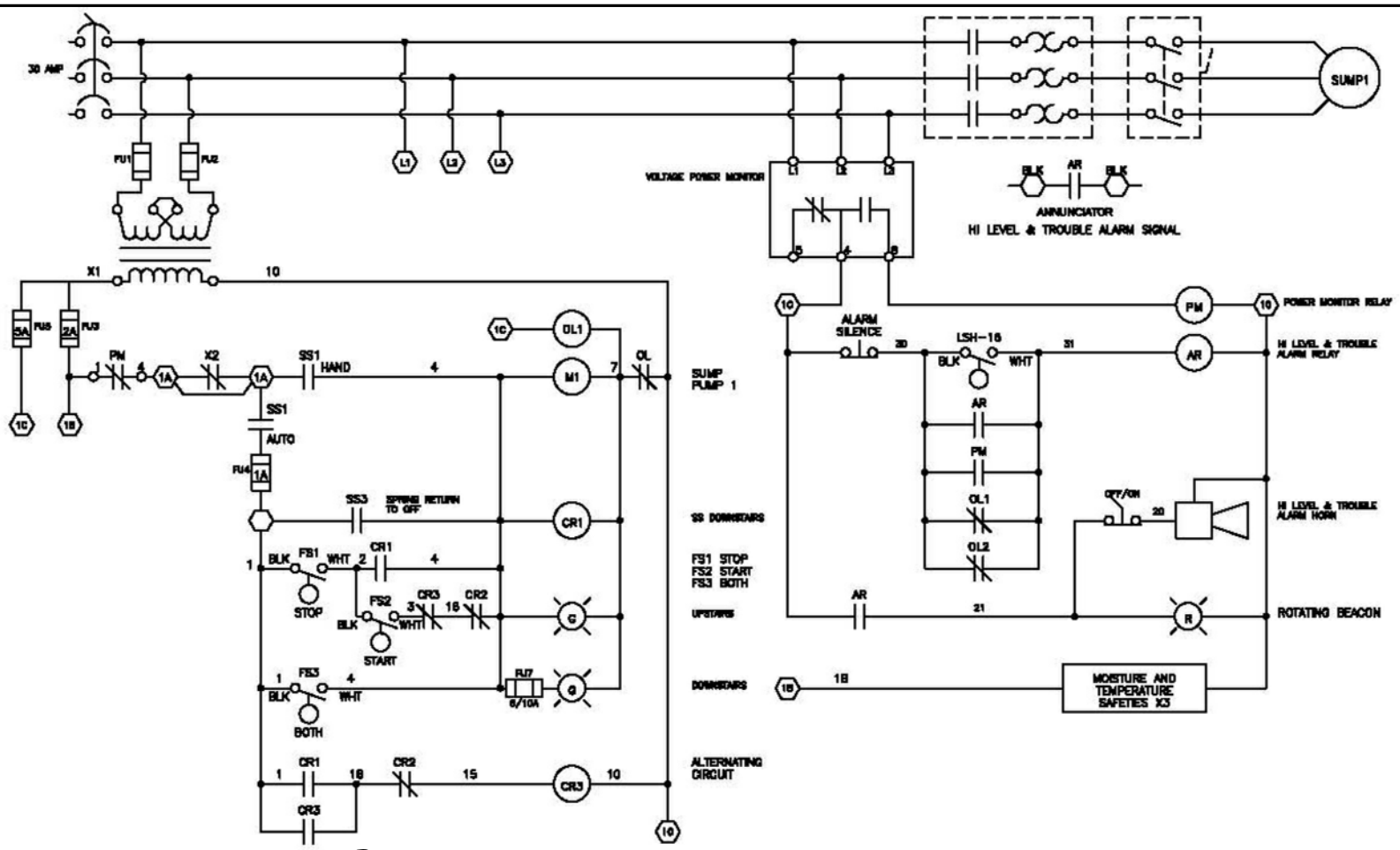
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HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS
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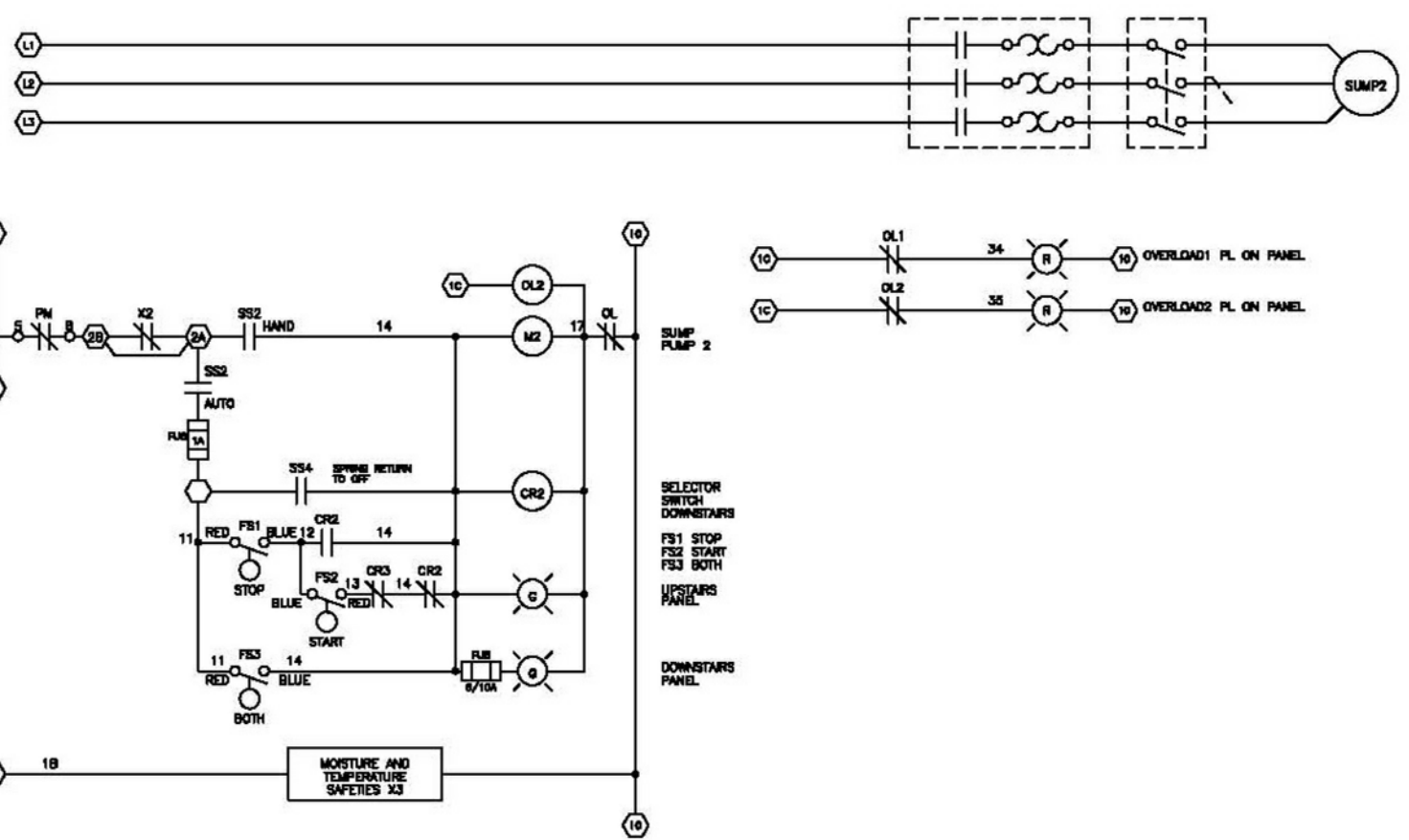
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1 SUMP PUMP ELECTRICAL SCHEMATIC
SCALE: NTS



2 SUMP PUMP ELECTRICAL SCHEMATIC
SCALE: NTS

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DRAWING 203.400.B HCWWT DISINFECTION BUILDING SUMP PUMPS SCHEMATIC HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS RMUA PROJECT NO. WPC 21-2 REGIONAL METROPOLITAN UTILITY AUTHORITY																				
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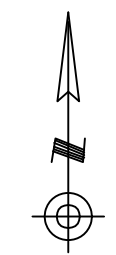


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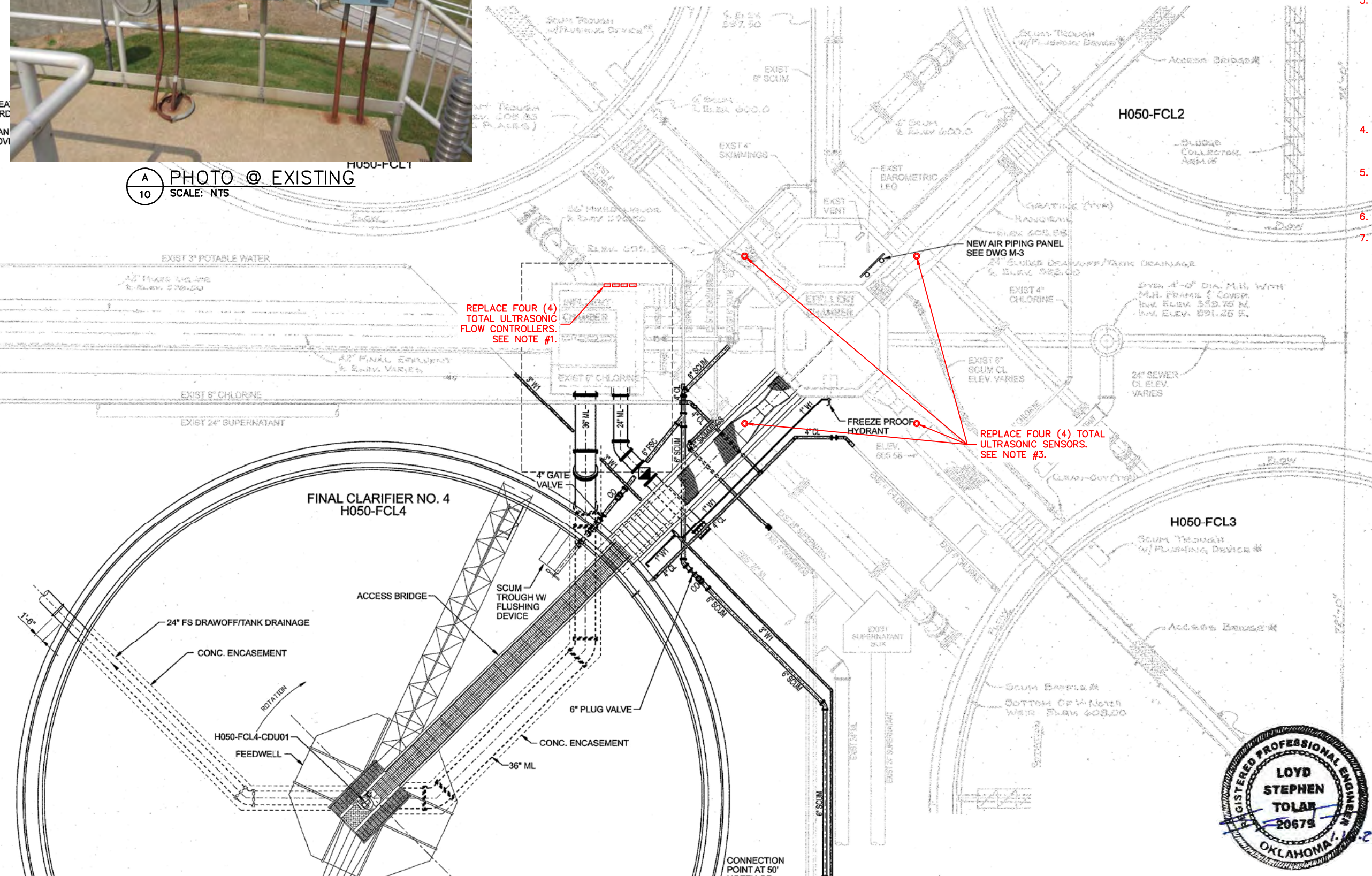
REPLACE FLOW METERS FOR FINAL CLARIFIERS #1, #2, #3, & #4. SEE NOTE #1.

A
10 PHOTO @ EXISTING
SCALE: NTS



NOTES:

1. CONTRACTOR SHALL REMOVE EXISTING AND INSTALL A TOTAL OF FOUR (4) NEW ULTRASONIC FLOW CONTROLLERS, ONE EACH FOR FINAL CLARIFIERS 1, 2, 3 AND 4. FLOW CONTROLLERS SHALL BE MODEL ULTRA 4 BY PULSAR MEASUREMENT INC., OR EQUAL. REFER TO SPECIFICATION SECTION 203.450 FOR ADDITIONAL REQUIREMENTS.
2. CONTROLLERS SHALL BE HANDRAIL MOUNTED IN THE EXISTING LOCATION. EACH CONTROLLER SHALL BE INSTALLED IN A CUSTOM NEMA 4X 304SS CABINET, HOFFMAN CONCEPT CWSEM 1-DOOR TYPE W/HANDLE, OR EQUAL.
3. CONTRACTOR SHALL REMOVE EXISTING AND INSTALL A TOTAL OF FOUR (4) NEW ULTRASONIC FLOW SENSORS, ONE LOCATED AT EACH EFFLUENT FLUME FOR FINAL CLARIFIERS 1, 2, 3 AND 4. SENSOR HEADS SHALL BE MODEL DB3 BY PULSAR MEASUREMENT INC., OR EQUAL. DO NOT INSTALL WAVEGUIDE CONES ON SENSOR HEADS. REFER TO SPECIFICATION SECTION 203.450 FOR ADDITIONAL REQUIREMENTS. REUSE EXISTING UNISTRUT MOUNTING SUPPORTS AND MATCH EXISTING SENSOR POSITION.
4. REUSE EXISTING CONDUIT. PULL NEW SENSOR CABLE BACK TO CONTROLLERS. REPLACE POWER WIRE BACK TO FIRST POINT OF TERMINATION.
5. CONTRACTOR SHALL SAND BLAST AND REPAINT EXISTING ABOVE GROUND CONDUIT. USE STANDARD GREY COLOR FOR CONDUIT.
6. SEE SHEET #2 FOR EQUIPMENT NUMBERS, (TYP)
7. FURNISH AND INSTALL SURGE PROTECTION ON EACH 120 VOLT CIRCUIT AND EACH 24 VDC, 4-20MA CONNECTED TO EACH TRANSMITTER. SURGE PROTECTION SHALL BE PHOENIX CONTACT RAIL MOUNT OR EQUAL. PROVIDE SEPARATE NEMA 4X ENCLOSURE WHERE REQUIRED.



REPLACE FOUR (4) TOTAL ULTRASONIC FLOW CONTROLLERS. SEE NOTE #1.

NEW AIR PIPING PANEL SEE DWG M-3

REPLACE FOUR (4) TOTAL ULTRASONIC SENSORS. SEE NOTE #3.

FREEZE PROOF HYDRANT

REVISION	BY	DATE

BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

REFERENCE ORIGINAL SA 83-1 RECORD DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION

DRAWING 203.450.A
FINAL CLARIFIER FLOW METER REPLACEMENT

HAKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2

REGIONAL METROPOLITAN UTILITY AUTHORITY

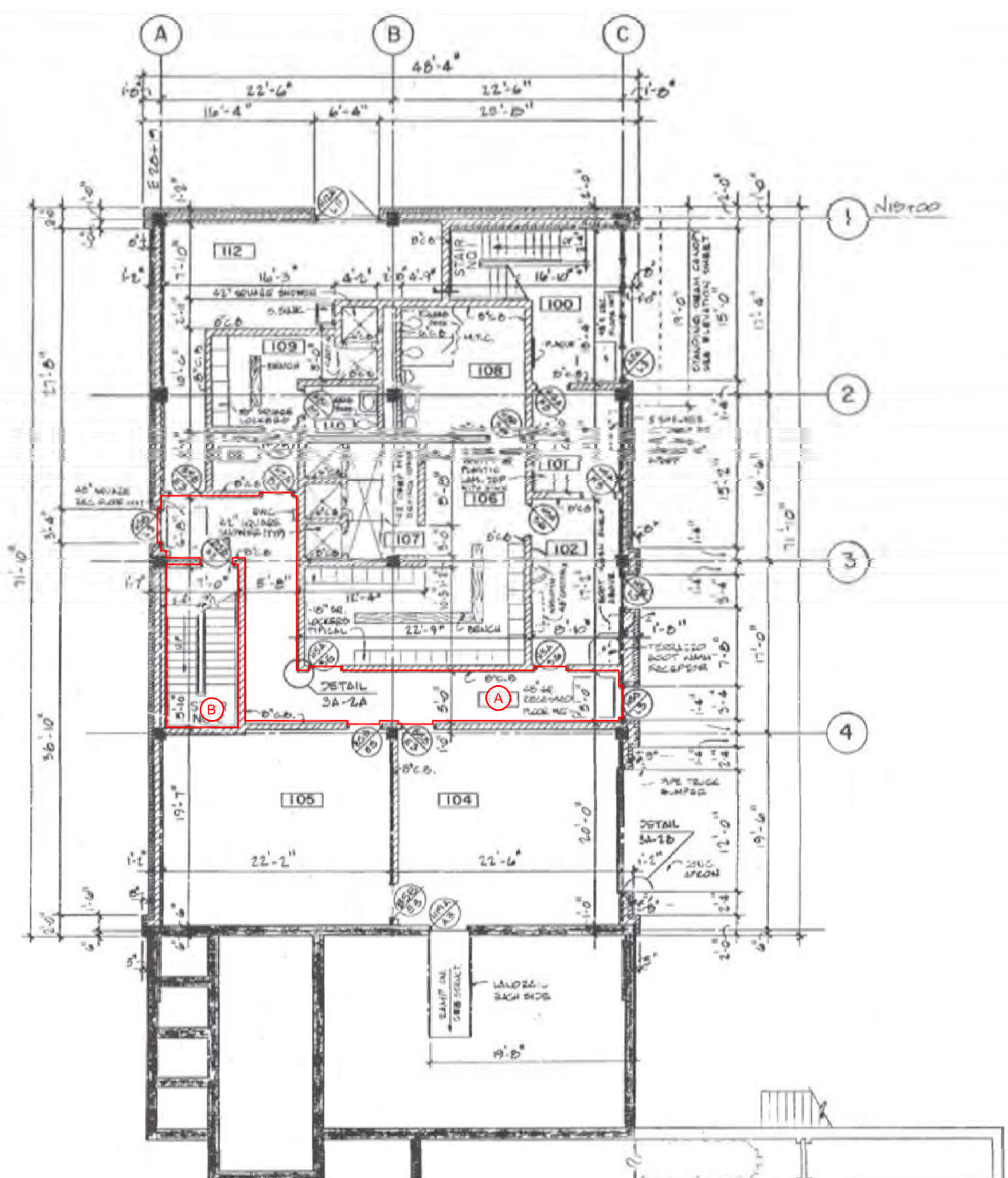
PLANS AND ESTIMATES PREPARED BY:		HOLLOWAY, UPDIKE + BELLEN, Inc. <small>800-A & 8TH ST, BROOKHURST, OKLAHOMA 74109 (918) 451-4777, FAX (918) 451-0744</small>	
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PROFILE SCALE:	FIELD MGR.	SECT. MGR.	PROJ. MGR.
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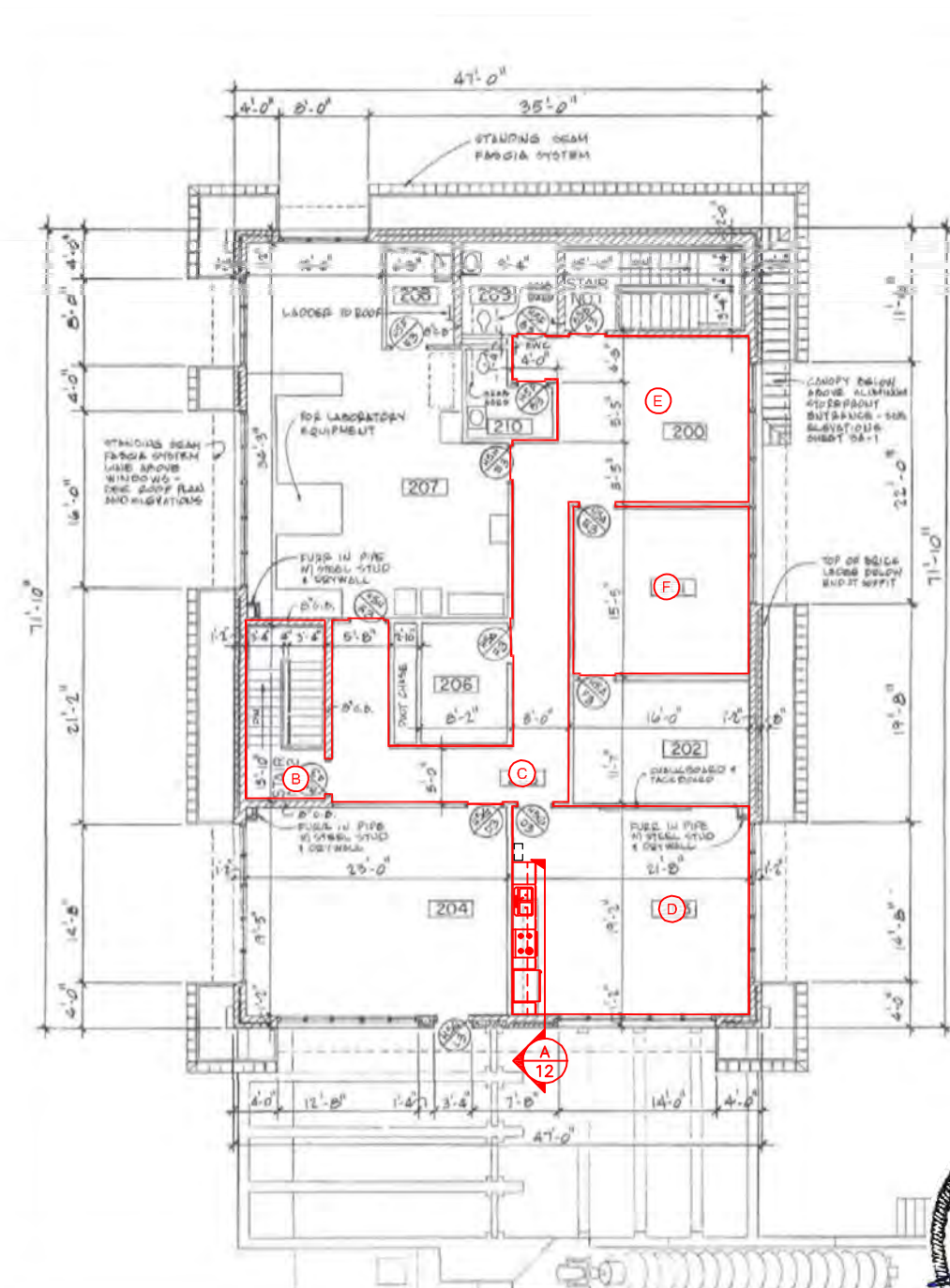
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ROOM FINISH SCHEDULE					
MARK	ROOM	FLOORING:	WALLS:	CEILING:	NOTES
A	FIRST FLOOR HALL	REFURBISH	PAINT	SUSPENDED ACOUSTIC	1, 2, 4, 5, 6
B	STAIR WELL	REFURBISH	PAINT	CONCRETE DECK	1, 2, 4, 5
C	SECOND FLOOR HALL	NEW FLOORING SYSTEM	PAINT	SUSPENDED ACOUSTIC	1, 5, 7
D	BREAK ROOM/MEETING ROOM	BURKE FLOORING 18"x18" SCULPTURED FLK-AGGRY OR EQUAL	PAINT	SUSPENDED ACOUSTIC	1, 3, 5, 7
E	OFFICE	NEW FLOORING SYSTEM	-	SUSPENDED ACOUSTIC	5, 7
F	OFFICE	NEW FLOORING SYSTEM	-	SUSPENDED ACOUSTIC	5, 7

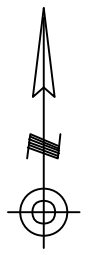
- FINISH NOTES:
- PAINT SHALL BE OIL BASED SATIN FINISH.
 - CMU BLOCK WALLS SHALL BE SANDBLASTED & INCLUDE REMOVAL OF ALL EXISTING PAINT, BLOCK FILLER & LATENTS FOR NEW PAINT. PROVIDE NEW BLOCK FILLER & PAINT.
 - REMOVE & REPLACE BLINDS W/VERTICAL 4" WIDE COMMERCIAL BLIND SYSTEM, BLIND SHOULD BE UV STABLE, ROTATE AND SIDE TO ONE SIDE IN EACH WINDOW OPEN.
 - REFURBISH EXISTING TERRAZZO FLOOR SYSTEM. CONTRACTOR TO INCLUDE MANUFACTURING REPRESENTATIVE SPECIAL SERVICES FOR INSPECTION, RECOMMENDATION & SURFACE CLEANING & SEALING.
 - REPLACE SUSPENDED CEILING TILES, FOR ADDITIONAL DETAILS SEE SHEET #13.
 - REMOVE DRINKING WATER FOUNTAIN PRIOR TO SAND BLASTING WALLS, CAP WATER LINE. DRAIN & GROUT REPAIR WALL AS NEEDED.
 - PROVIDE MANNINGTON BURKE FLOORING SYSTEM OR EQUAL, TILE 18"x18" SCULPTED COLOR ANCHORED COLLECTION (COLOR SPEC) PROVIDE NEW COMMERCIAL EXTRUDED HEAVY DUTY THRESHOLD AT ALL DOOR OPENINGS ADJACENT TO NEW FLOORING SYSTEM. PROVIDE NEW VYNAL BASE AT WALLS.



1 PLAN @ OPERATIONS BUILDING (FIRST FLOOR)
11 SCALE: 1/8" = 1'-0"



2 PLAN @ OPERATIONS BUILDING (SECOND FLOOR)
11 SCALE: 1/8" = 1'-0"



REVISION	BY	DATE

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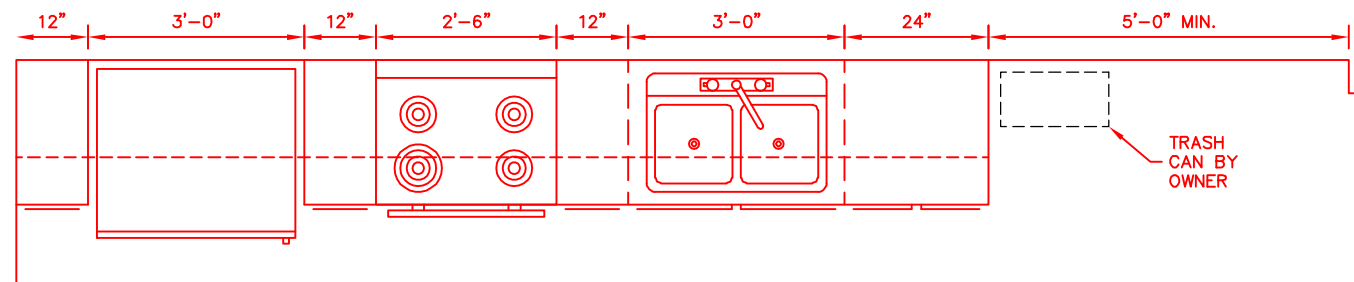
REFERENCE ORIGINAL SA 83-1 RECORD DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION

DRAWING 203.500.A
OPERATIONS BUILDING
INTERIOR REHABILITATION
HAIKEY CREEK OPERATION &
MAINTENANCE CAPITAL
EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2
REGIONAL METROPOLITAN
UTILITY AUTHORITY

PLANS AND ESTIMATES PREPARED BY:		HOLLOWAY, UPDKE + BELLEN, Inc. 300-A S. 4TH ST., BROOKHURST, OKLAHOMA 74109 918-281-4777, FAX 918-281-0744	
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HORIZONTAL:	SECT. MGR. PROJ. MGR.		
VERTICAL:			
FILE:	DRAWING:	DATE: 10/23/2020	
ATLAS PAGE NO: ---		SHEET 11 OF 16 SHEETS	



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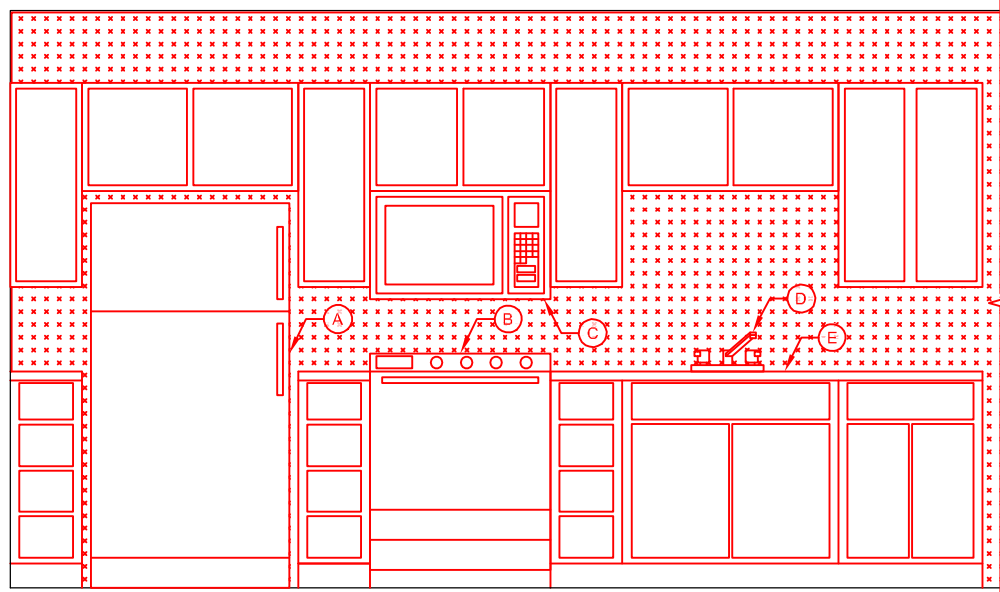


1 **DETAIL @ KITCHEN/BREAK ROOM**
 12 SCALE: 3/4" = 1'-0"

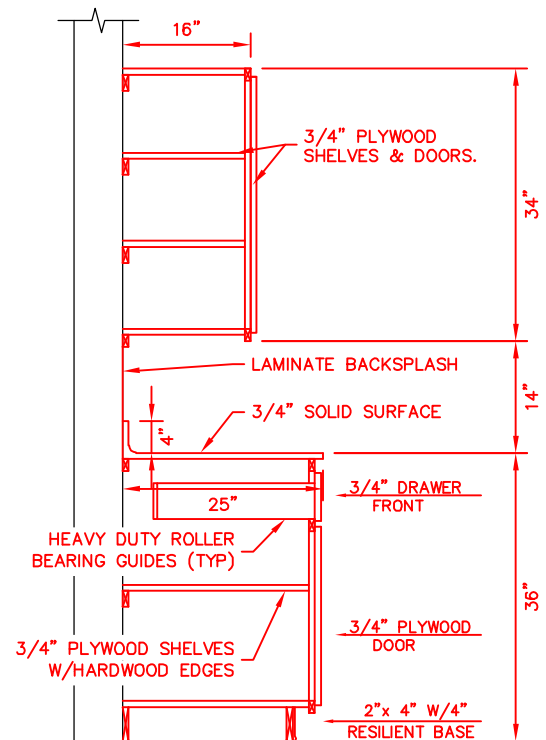
EQUIPMENT SCHEDULE				
ID	DESCRIPTION	MATERIAL/COLOR	MANUFACTURER NUMBER OR EQUAL	NOTES
A	36" REFRIGERATOR	STAINLESS STEEL FINISH	G.E., WHIRLPOOL	1, 2
B	STOVE	STAINLESS STEEL FINISH	G.E., WHIRLPOOL	1, 2
C	MICROWAVE w/VENT FAN	STAINLESS STEEL FINISH	G.E., WHIRLPOOL	1, 2
D	FAUCET w/HOT & COLD HANDLES	STAINLESS STEEL FINISH	DELTA, AMERICAN STANDARD, KOHLER	4
E	33"x29"x9" KITCHEN SINK	304 STAINLESS STEEL	SEE SIZE REQUIREMENT	

EQUIPMENT NOTES:

1. TOP FREEZER W/ICE MAKER INSIDE, BOTTOM REFRIGERATOR.
2. STAINLESS STEEL FRONT W/BLACK ACCENTS.
3. 30" SELF CLEANING, CONTROLS IN BACKSPLASH.
4. STAINLESS FINISH, TWO HANDLE (HOT/COLD) W/ HIGH ARC SPOUT & SPRAY HANDLE IN SPOUT OR SEPARATE.



A **SECTION @ KITCHEN/BREAK ROOM**
 12 SCALE: 3/4" = 1'-0"



DETAIL NOTES:

1. STANDARD COLOR OF THE COUNTER TOP & CABINETS TO BE SELECTED BY OWNER.
2. CABINET MATERIAL CONSTRUCTION SHALL BE PLYWOOD CONSTRUCTION. NO PARTICLE BOARD OR COMPOSITE WOOD IS PERMITTED. CABINET PULLS AND HINGES SHALL BE STAINLESS STEEL MATERIAL CONSTRUCTION.

B **SECTION @ CABINET**
 12 SCALE: 1" = 1'-0"



REVISION	BY	DATE

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DRAWING 203.500.B
OPERATIONS BUILDING
INTERIOR REHABILITATION
HAIKEY CREEK OPERATION &
MAINTENANCE CAPITAL
EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2

REGIONAL METROPOLITAN
UTILITY AUTHORITY

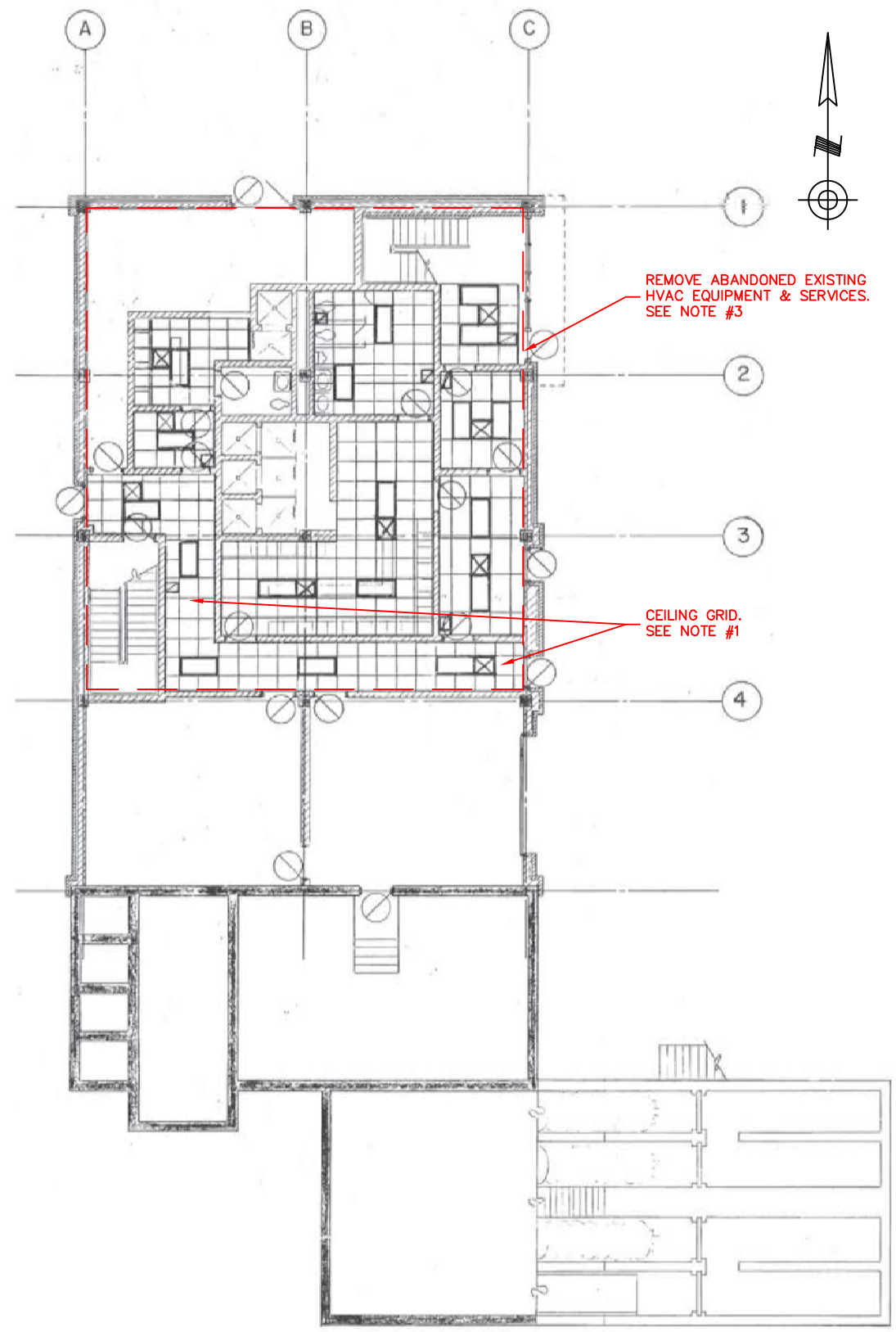
PLANS AND ESTIMATES PREPARED BY: **HOLLOWAY, UPDIKE + BELLEN, Inc.**
 800-A & 8TH ST, BROOKHURST, OKLAHOMA 74109
 (918) 477-4777, FAX (918) 477-4744

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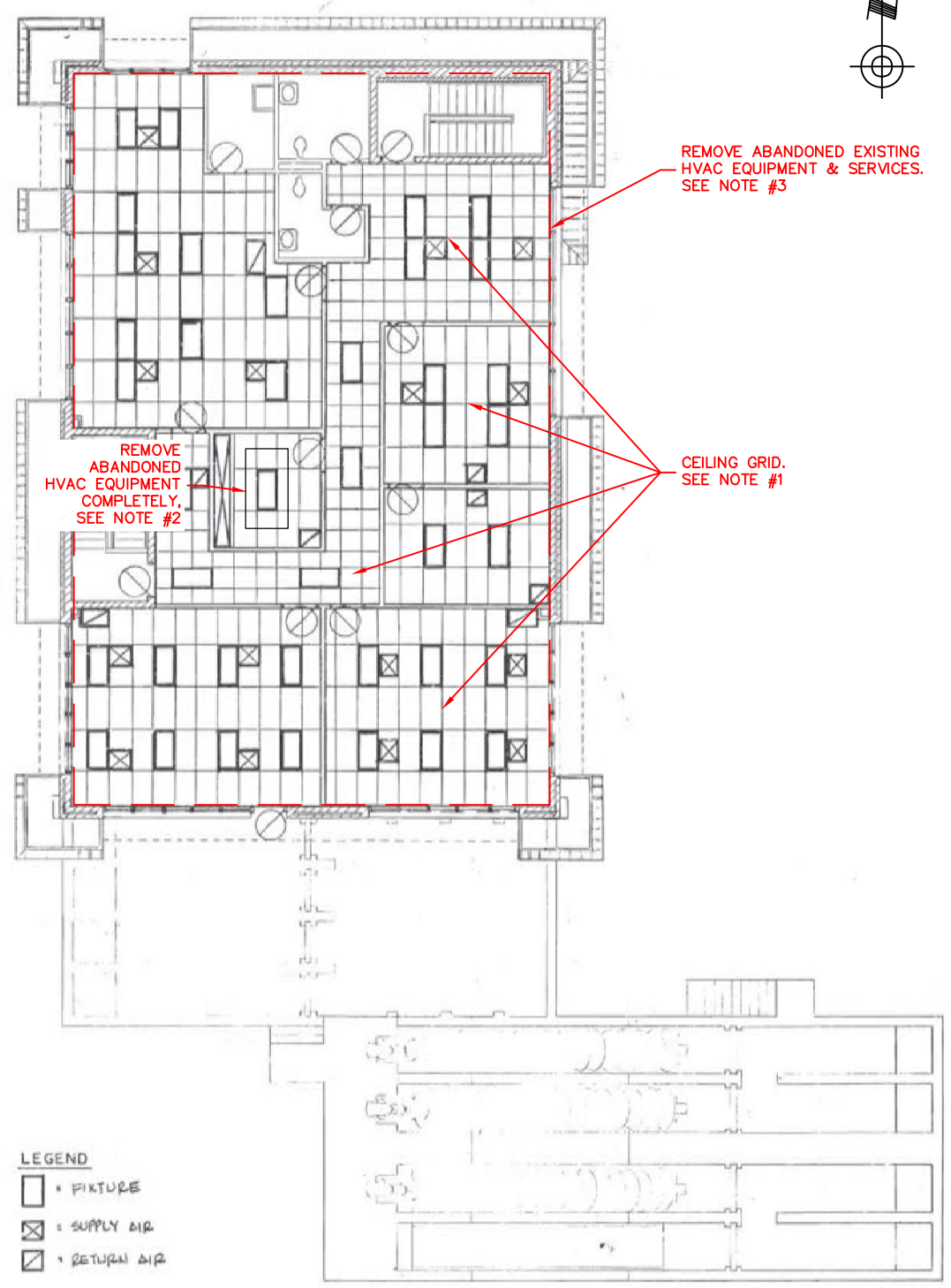
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1
13 PLAN @ OPERATIONS BUILDING FIRST FLOOR PLAN REFLECTED CEILING - PHASE I
SCALE: 1/8" = 1'-0"



2
13 PLAN @ OPERATIONS BUILDING SECOND FLOOR PLAN REFLECTED CEILING - PHASE I
SCALE: 1/8" = 1'-0"

LEGEND
 □ = PICTURE
 ⊗ = SUPPLY AIR
 ⊠ = RETURN AIR

NOTES:

1. PROVIDE & REPLACE TEN (10) 4'x2' CEILING TILES & THIRTY (30) 2'x2' CEILING TILES AS DIRECTED BY OWNERS REPRESENTATIVE.
2. DEMOLISH THE EXISTING ABANDONED HVAC EQUIPMENT IN THE STORAGE ROOM, SECOND FLOOR AND ROOF AREAS COMPLETELY. DEMOLISH THE CONCRETE HOUSE-KEEPING PAD AND REPAIR THE FLOOR PER CONCRETE REPAIR DETAIL. REMOVE DUCT WORK, HANGERS, ELECTRICAL, GAS LINES CONDUITS BACK TO SOURCE, WIRING/CONTROLS BACK TO SOURCE AND OTHER RELATED COMPONENT OF THE ABANDONED HVAC EQUIPMENT.
3. DEMOLISH THE EXISTING ABANDONED HVAC SYSTEM DUCT WORK, DUCT HEATERS, DUCT SUPPORTS, FLASHING, THERMOSTATS, TWO CONTROL PANELS WITH DISCONNECTS, WIRING/CONTROLS AND OTHER RELATED COMPONENTS COMPLETELY. REPAIR INTERIOR WALLS WITH HEAVY GALVANIZE SHEET METAL AND PAINT WALLS/OPENINGS TO MATCH AS REQUIRED. DEMOLISH THE TWO LARGE ROOF VENTS, CURBING AND OTHER RELATED COMPONENTS ON THE ROOF AND TO THE EXISTING ABANDONED HVAC SYSTEM. REPAIR ROOF OPEN WITH 1/4" SCREWS FASTENING 1/4" SHEET METAL MATCHING METAL DECKING, INSTALL TAPERED INSULATION AND REPAIR ROOF SYSTEM WITH NEW TPO SYSTEM REPAIRS. THE SLOPE OF ROOFING REPAIR SHALL MATCH EXISTING ROOFING SYSTEM WITH TAPERED INSULATION AS REQUIRED. NO WORK IS TO BE DONE TO THE EXISTING BASE BOARD HEATERS. PROTECT THE NEW MINI-SPLIT SYSTEM DURING WORK IN ALL AREAS. COORDINATE WORK WITH EXISTING SUSPENDED CEILING INCLUDING DOCUMENT EXISTING TILE CONDITIONS BY PHOTOS PRIOR TO WORK AND PROTECT SUSPENDED CEILING DURING WORK.

REVISION	BY	DATE

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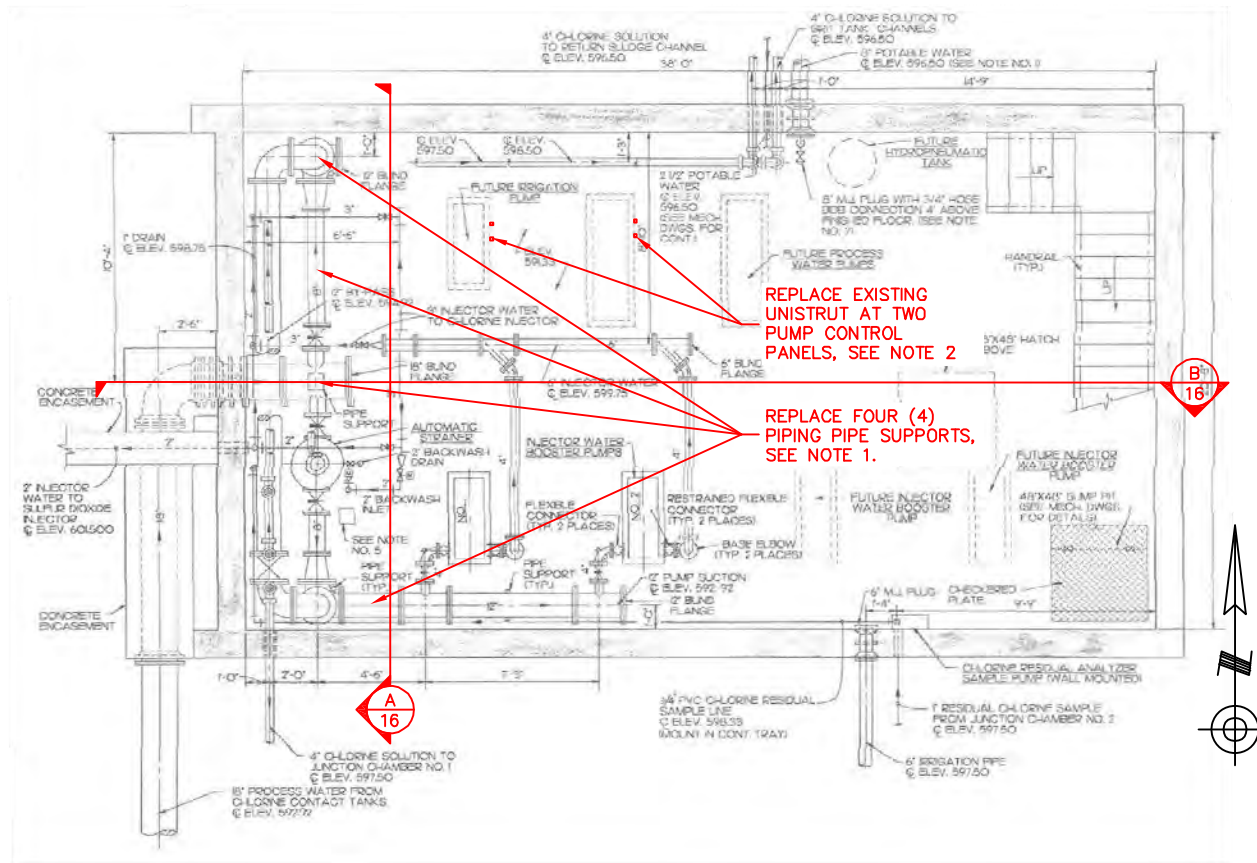
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 DRAWING 203.500.C & 203.560.A OPERATIONS BUILDING INTERIOR REHABILITATION
 HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS
 RMUA PROJECT NO. WPC 21-2
 REGIONAL METROPOLITAN UTILITY AUTHORITY

PLANS AND ESTIMATES PREPARED BY:		HOLLOWAY, UPDIKE + BELLEN, Inc. <small>800-A & 8TH ST, BROOKHURST AVENUE, OKLAHOMA 74108 (918) 491-4777, FAX (918) 491-0744</small>										
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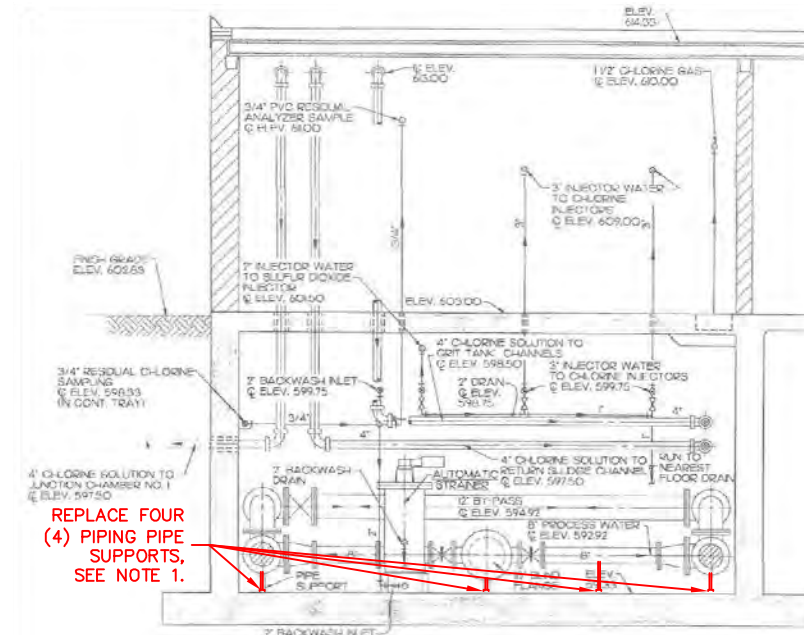


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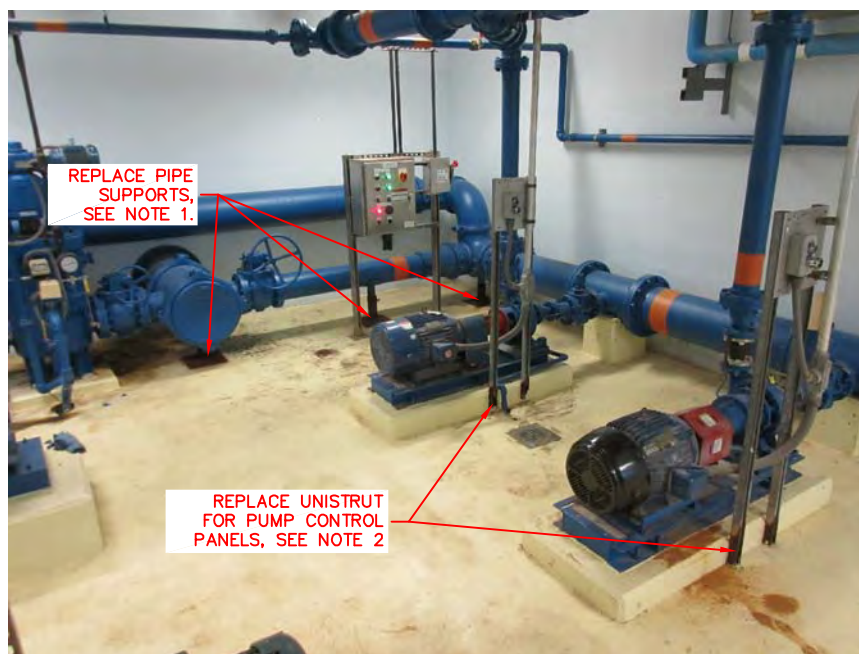
1. REPLACE FOUR (4) PIPING PIPE SUPPORTS ON THE FLOOR WITH HEAVY DUTY 316 STAINLESS STEEL HALF SADDLE STYLE, SCREW ADJUSTABLE. INSTALL ON 1/2" EQUIPMENT HOUSEKEEPING GROUT. MATCH EXISTING SUPPORTS. COORDINATE FINAL LOCATIONS WITH OWNER'S REPRESENTATIVE.
2. REPLACE EXISTING UNISTRUTS AT TWO PUMP CONTROL PANELS. WORK INCLUDES TWO UNISTRUTS AT TWO PUMPS AS SHOWN, INCLUDING BOLTS, ANCHOR BOLTS AND REUSING THE ALUMINUM PLATE WITH PUMP CONTROLS. FOCUS OF THE WORK IS REPLACING BADLY CORRODED STEEL UNISTRUTS. ALL NEW UNISTRUTS, BOLTS AND ANCHOR BOLTS SHALL BE 316 STAINLESS STEEL. INSTALL SUPPORTS IN SAME LOCATIONS AS SHOWN. PROTECT THE EXISTING FLOOR COATINGS & ELECTRICAL EQUIPMENT.



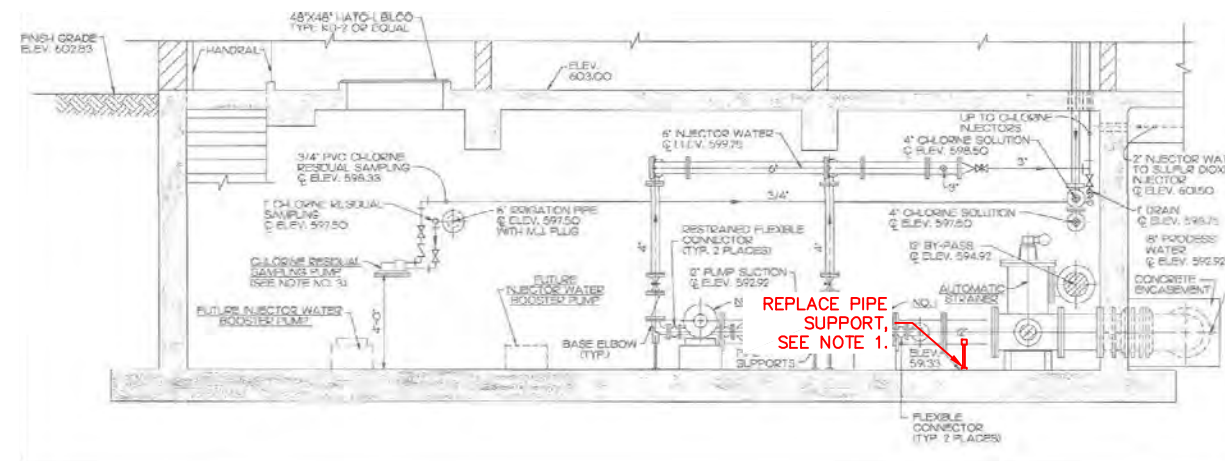
1 PLAN @ DISINFECTION BASEMENT
SCALE: 1/4" = 1'-0"



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



C PHOTO @ DISINFECTION BASEMENT
SCALE: 1/4" = 1'-0"



B SECTION @ DISINFECTION BASEMENT
SCALE: 1/4" = 1'-0"

REVISION	BY	DATE

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REFERENCE ORIGINAL ES 90-20-5 RECORD DRAWINGS FOR ADDITIONAL DETAILS & INFORMATION

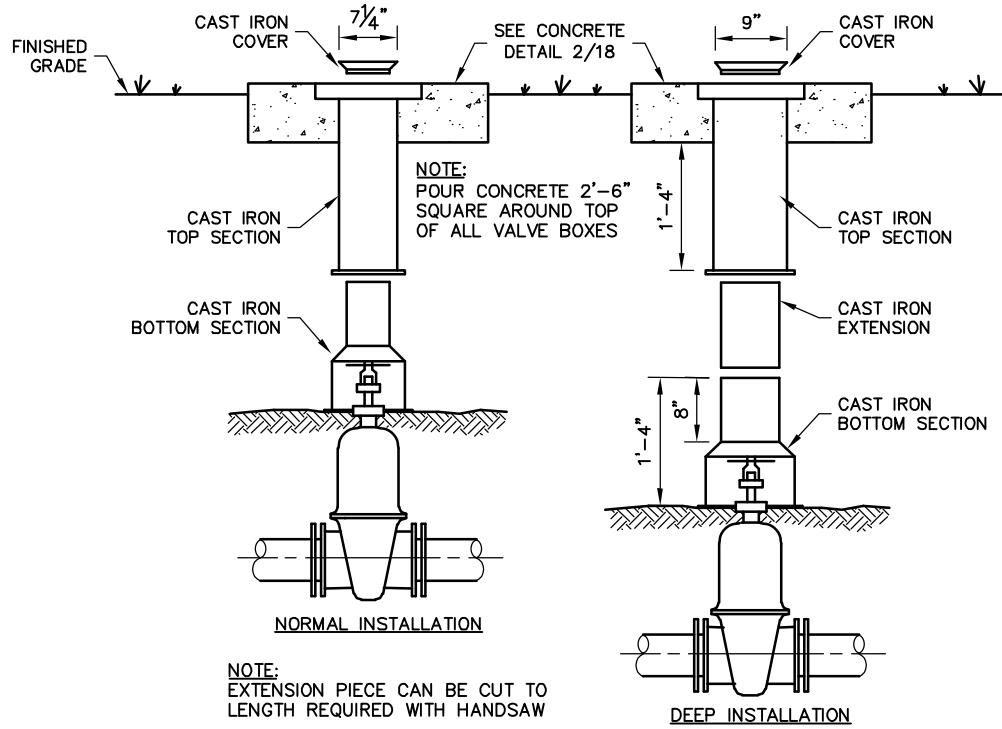
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DISINFECTION BUILDING PIPE SUPPORTS REHABILITATION
HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS
RMUA PROJECT NO. WPC 21-2

REGIONAL METROPOLITAN UTILITY AUTHORITY

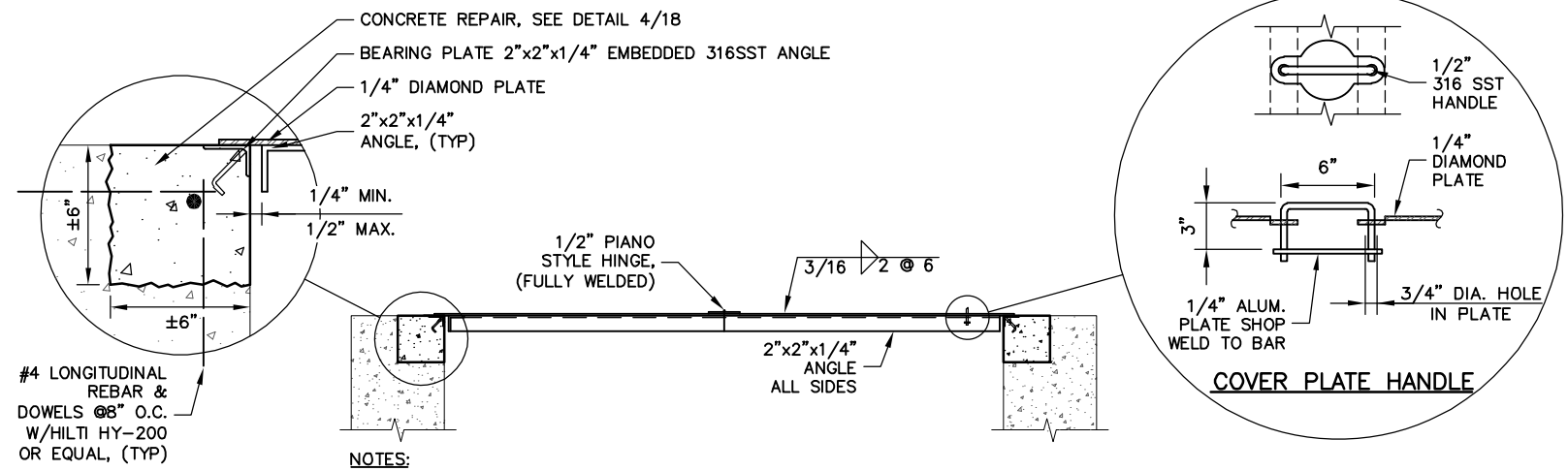
PLANS AND ESTIMATES PREPARED BY: **HOLLOWAY, UPDKE + BELLEN, Inc.**
200-A & 2TH ST, BROOKHURST, OKLAHOMA 74109
918-281-4777, FAX 918-281-0744

PLAN SCALE:	DRAWN	JME	APPROVED:
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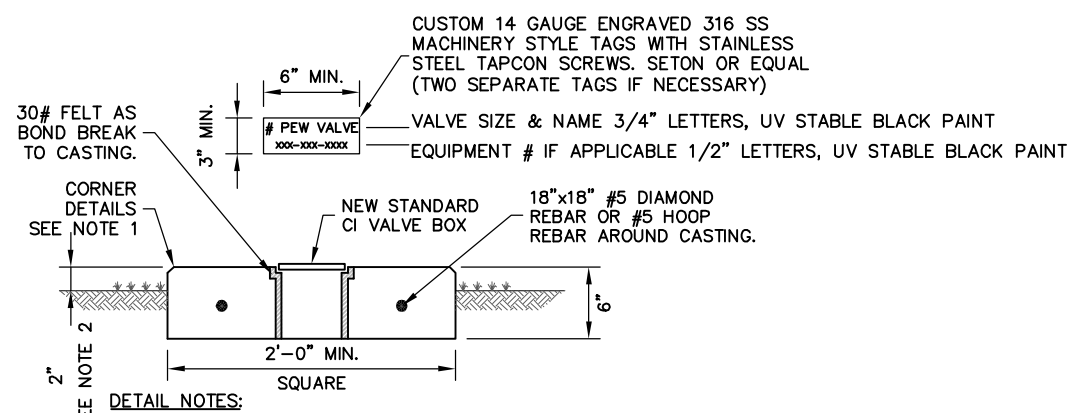




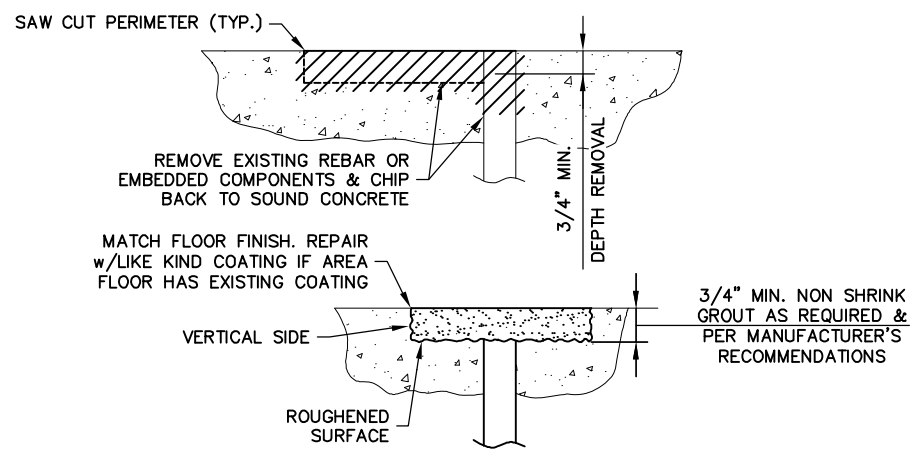
1 CONCRETE COLLAR & VALVE BOX INSTALLATION
 18 SCALE: 1" = 1'-0"



3 DETAIL @ CUSTOM ALUMINUM HATCH COVER
 18 SCALE: 1" = 1'-0"



2 VALVE BOX CONCRETE COLLAR
 18 NTS



4 REBAR & EMBEDDED ITEM CONCRETE REPAIR DETAIL
 18 NTS

REVISION	BY	DATE

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MISCELLANEOUS DETAILS

HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS RMUA PROJECT NO. WPC 21-2

REGIONAL METROPOLITAN UTILITY AUTHORITY

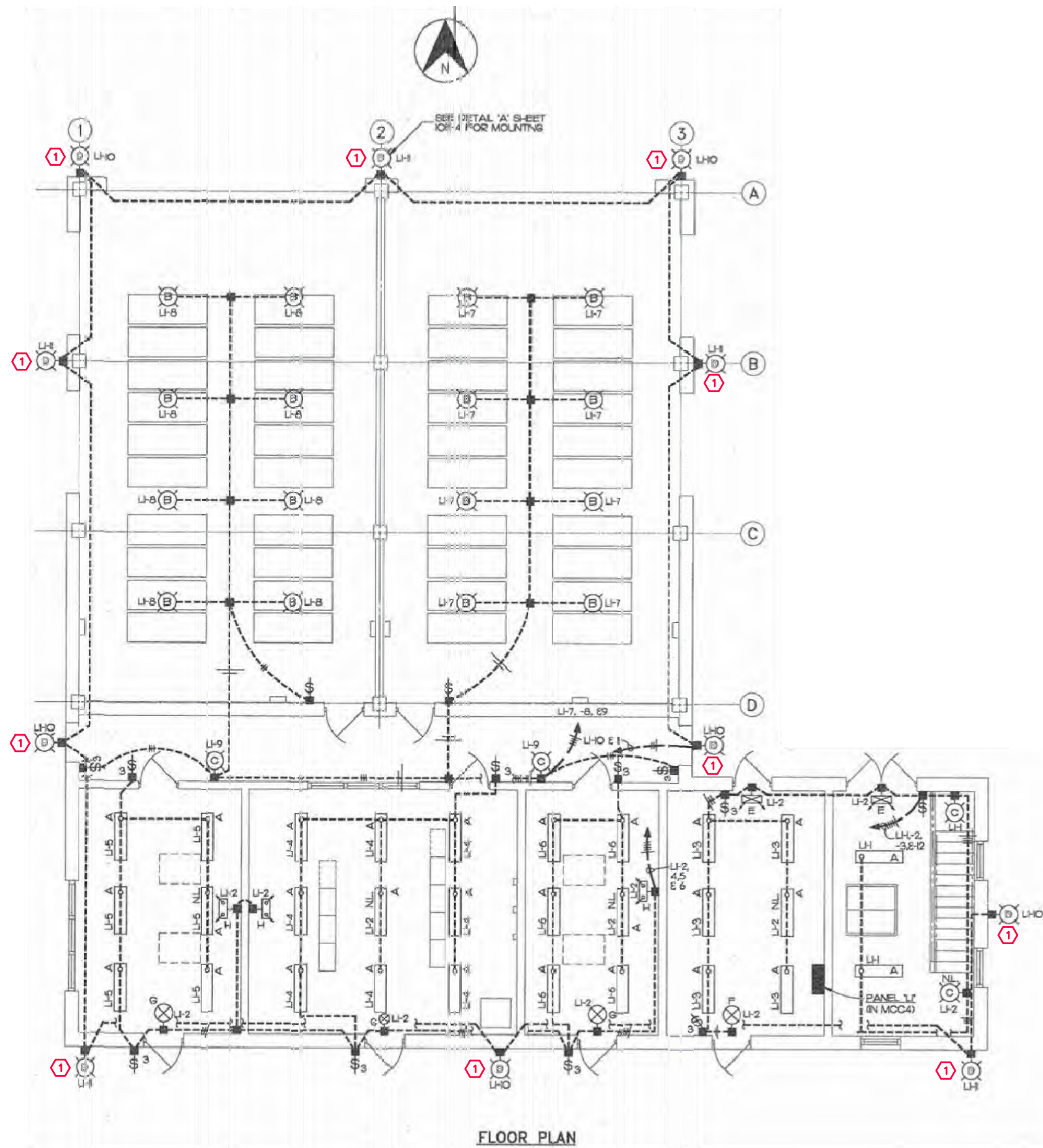
PLANS AND ESTIMATES PREPARED BY: **HOLLOWAY, UPDIKE + BELLEN, Inc.**
 800-A & 8TH ST., BROOKHURST, OKLAHOMA 74109
 (918)891-4777, FAX (918)891-0744

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CHLORINE BUILDING LIGHTING REPLACEMENT
SCALE: NONE

LIGHT FIXTURE SCHEDULE				
KEY	MARK	MANUFACTURER	CATALOG #	VOLTAGE
1	C,	HUBBELL	PGM3-180L-5K-U-DB-X	120-277

KEYED NOTES:

1. REPLACE EXISTING FIXTURE WITH NOTED FIXTURE IN SCHEDULE. FIELD VERIFY VOLTAGE AND CONTROL PRIOR TO WORK, RECONNECT TO EXISTING CIRCUIT. FIELD VERIFY REQUIREMENT FOR PHOTOCELL CONTROL AND MATCH EXISTING.

REVISION	BY	DATE

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**203.800a
HCWWTP LIGHTING REPLACEMENT**

HAIKEY CREEK OPERATION & MAINTENANCE CAPITAL EQUIPMENT REPLACEMENTS RMUA PROJECT WPC 21-2

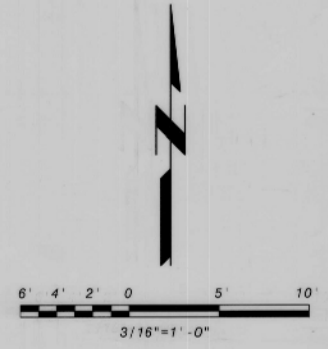
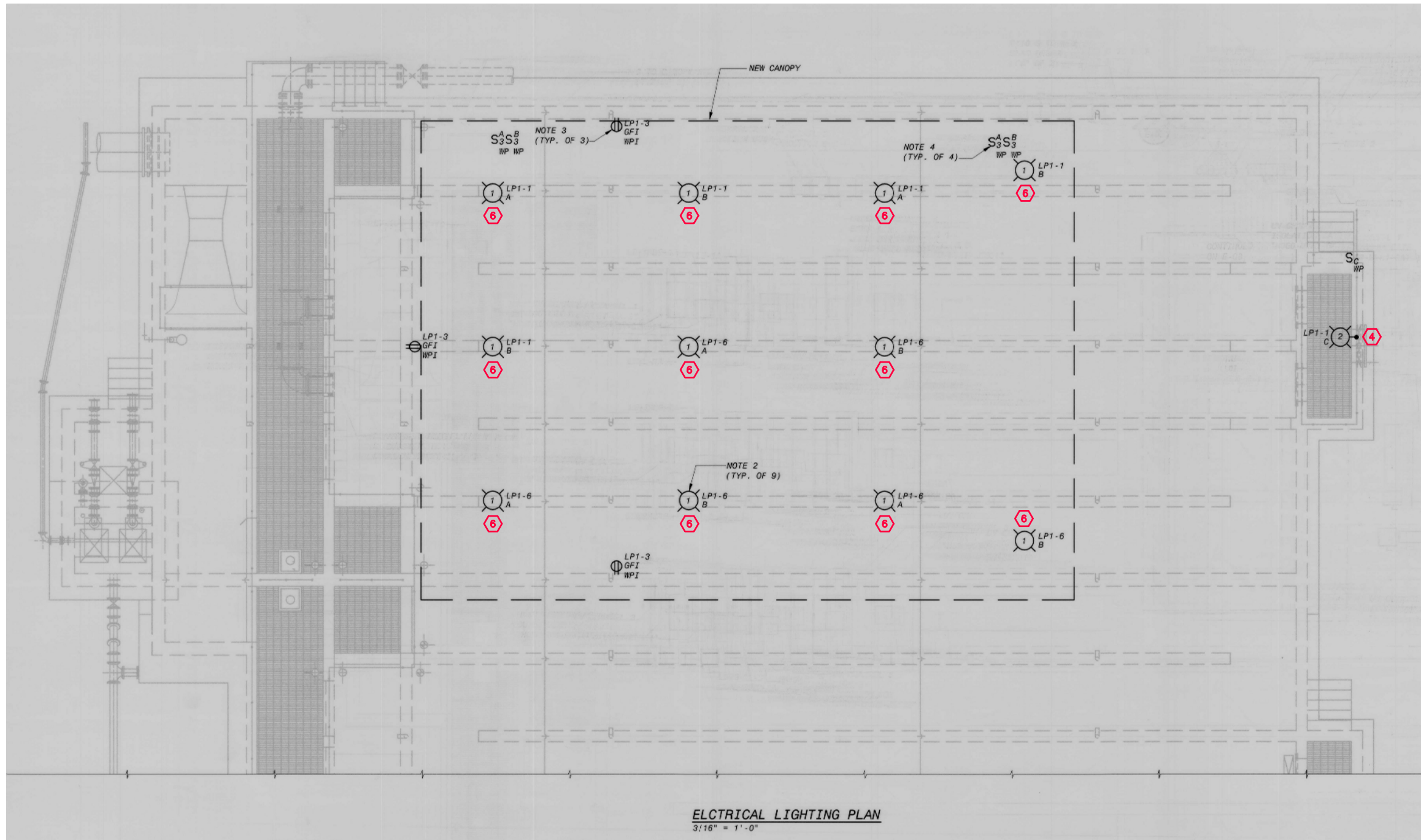
REGIONAL METROPOLITAN UTILITY AUTHORITY

PLANS AND ESTIMATES PREPARED BY: **HOLLOWAY, UPDIKE + BELLEN, Inc.**
800-A & 9TH ST., BRICKEN AVENUE, OKLAHOMA 74102
(918)251-0717, FAX (918)251-0764


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


C:\USERS\CHARLES\SYNOLOGY\DRIVE\HUB ENGINEERS (HUB)\HUB-247 TULSA CAPITAL EQUIPMENT REPLACEMENT WPC-21\DWG\EB-3\1/18/2021 9:50 AM.DWG



ELECTRICAL LIGHTING PLAN
3/16" = 1'-0"

 **CHLORINE CONTACT CANOPY LIGHTING REPLACEMENT**
SCALE: NONE

KEYED NOTES:
4,6 REPLACE EXISTING FIXTURE WITH NOTED FIXTURE IN SCHEDULE. FIELD VERIFY VOLTAGE AND CONTROL PRIOR TO WORK, RECONNECT TO EXISTING CIRCUIT. FIELD VERIFY REQUIREMENT FOR PHOTOCELL CONTROL AND MATCH EXISTING.

LIGHT FIXTURE SCHEDULE				
KEY	MARK	MANUFACTURER	CATALOG #	VOLTAGE
	D, 	AMERICAN ELECTRIC LIGHTING	245L-20LEDE10-MVOLT-5K-R5-AY-DDB-X-SS	120-277
		HOLOPHANE	PLED2-18L-5K-AS-MOUNT-X-CRG-L5-X	120-277


REVISION	BY	DATE

BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

**203.800b
HCWWTP LIGHTING REPLACEMENT**

**HAIKEY CREEK OPERATION &
MAINTENANCE CAPITAL
EQUIPMENT REPLACEMENTS
RMUA PROJECT WPC 21-2**

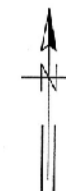
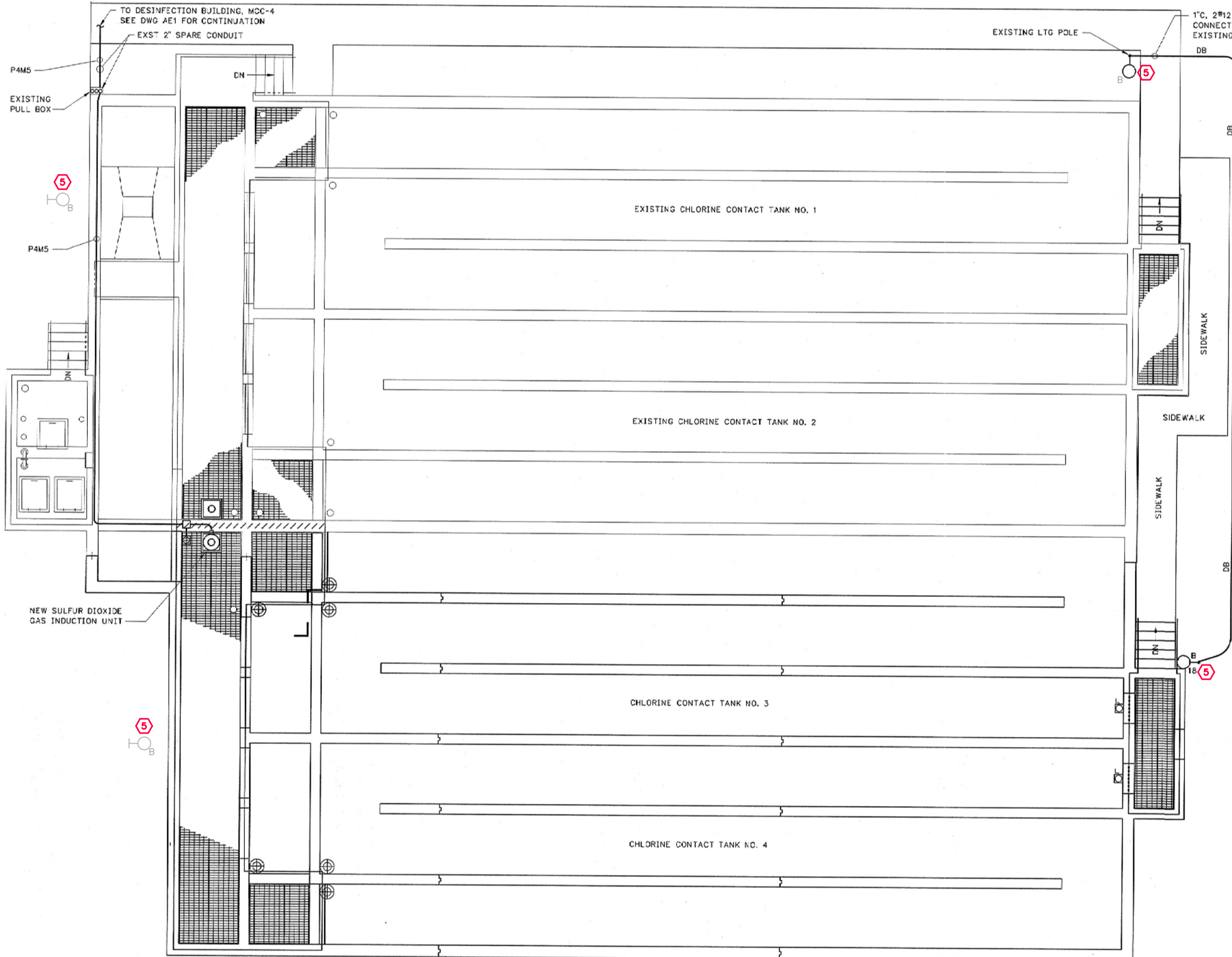
**REGIONAL METROPOLITAN
UTILITY AUTHORITY**

PLANS AND ESTIMATES PREPARED BY:  **HOLLOWAY, UPDIKE + BELLEN, Inc.**
606-A & 9TH ST., BROKEN ARROW, OKLAHOMA 74002
(918)259-0757, FAX (918)259-0764

PLAN SCALE: AS SHOWN	DRAWN	CD	APPROVED:
	DESIGNED	GB	
	SURVEY		
PROFILE SCALE:	FIELD MGR.		
	SECT. MGR.		
	PROJ. MGR.		
HORIZONTAL:			
VERTICAL:			
FILE:	DRAWING:	DATE: 10/23/2020	
ATLAS PAGE NO:	SHEET EB3 OF 4		SHEETS

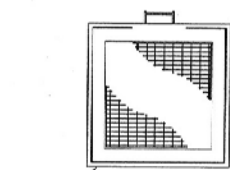


C:\USERS\CHARLES\SYNOLOGY\DRIVE\HUB\ENGINEERS (HUB)\HUB-247 TULSA CAPITAL EQUIPMENT REPLACEMENT WPC-21\DWG\EB-4...DWG
12/18/2020 1:43 PM



KEYED NOTES:

5 REPLACE EXISTING FIXTURE WITH NOTED FIXTURE IN SCHEDULE. FIELD VERIFY VOLTAGE AND CONTROL PRIOR TO WORK, RECONNECT TO EXISTING CIRCUIT. FIELD VERIFY REQUIREMENT FOR PHOTOCELL CONTROL AND MATCH EXISTING.



EXISTING JUNCTION CHAMBER NO. 2

LIGHT FIXTURE SCHEDULE

KEY	MARK	MANUFACTURER	CATALOG #	VOLTAGE
5	B, ☉	LEOTEK	GC2-96G-HV-CW-3R-GY-800-X	347-480

REVISION	BY	DATE

BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY

**203.800C
HCWWTP LIGHTING REPLACEMENT**

**HAIKEY CREEK OPERATION &
MAINTENANCE CAPITAL
EQUIPMENT REPLACEMENTS
RMUA PROJECT WPC 21-2**

**REGIONAL METROPOLITAN
UTILITY AUTHORITY**



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PLAN SCALE: AS SHOWN	DRAWN: CD	DESIGNED: GB	SURVEY:	APPROVED:
PROFILE SCALE:	FIELD MGR.	SECT. MGR.	PROJ. MGR.	
HORIZONTAL:				
VERTICAL:				
FILE:	DRAWING:	DATE: 10/23/2020		
ATLAS PAGE NO:				SHEET EB4 OF 4 SHEETS

TOP PLAN

CHLORINE CONTACT BASIN LIGHTING REPLACEMENT
SCALE: NONE