CITY OF ATLANTA

EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS SEDIMENTATION BASIN NO. 2 WALL REPAIR

FACILITY	PARCEL ID	DISTRICT	LAND LOT	COUNTY
EAST AREA WATER QUALITY CONTROL FACILITY	15.11101005	15	111	DEKALB

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STRUCTURAL						
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S-002	STRUCTURAL QUALITY ASSURANCE					
S-003	SEDIMENTATION BASIN 2 BOTTOM DEMOLITION PLAN					
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S-009	SEDIMENTATION BASIN 2 CONNECTION DETAILS I					
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S-011	SEDIMENTATION BASIN 2 TYPICAL DETAILS					
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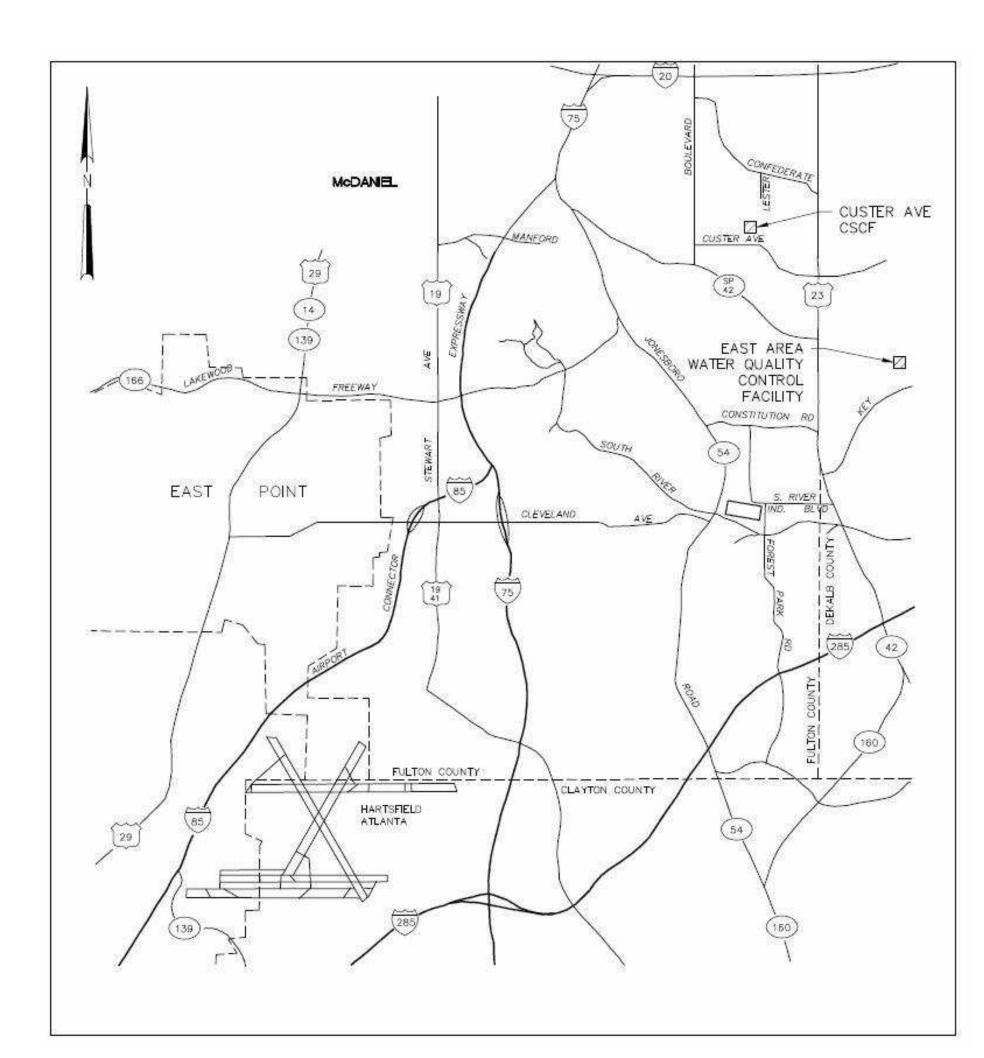
PROJECT MANAGER: GEORGIA REGISTRATION NO.: BRIAN RUGGS, PE 040202



OWNER CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT 72 MARIETTA STREET, NW ATLANTA, GEORGIA 30303

CITY OF ATLANTA **MAYOR**

WATERSHED MANAGEMENT COMMISSIONER MIKITA BROWNING



LOCATION MAP

ANDRE DICKENS



CSS MANAGER LAMONT FERREBEE

PF	PROJECT NO.: 30030286				
1	OCTOBER	100% DESIGN	CG		
	2022	SUBMITTAL			
NO.	DATE	ISSUED FOR	BY		
	1	1 OCTOBER 2022	1 OCTOBER 100% DESIGN SUBMITTAL		

DESIGN COORDINATOR: GEORGIA REGISTRATION NO.: CARLOS GALLO, PE, SE 018726

STANDARD DETAILS SHOWN ON STRUCTURAL TYPICAL DRAWINGS SHALL BE USED, UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

DESIGN IS IN ACCORDANCE WITH AND CONSTRUCTION SHALL COMPLY WITH THE PROVISIONS OF THE 2018 INTERNATIONAL BUILDING CODE WITH GEORGIA STATE AMENDMENTS (2020), EXCEPT WHERE OTHER APPLICABLE CODES AND THE CONTRACT DOCUMENTS ARE MORE RESTRICTIVE.

SEISMIC DESIGN DATA:

1. RISK CATEGORY: III 2. SEISMIC IMPORTANCE FACTOR, I_e = 1.25

3. MAPPED SPECTRAL RESPONSE ACCELERATIONS:

A) Ss = 17.8%B) $S_1 = 8.4\%$

4. SITE CLASS = D 5. SPECTRAL RESPONSE COEFFICIENTS:

> A) $S_{DS} = 19.0\%$ B) $S_{D1} = 13.4\%$

6. SEISMIC DESIGN CATEGORY = C

WIND DESIGN DATA:

1. ULTIMATE DESIGN WIND SPEED: 113 MPH 2. RISK CATEGORY: III

3. WIND EXPOSURE: C

DRAWING DIMENSIONS ARE TO BE VERIFIED EITHER BY FIELD MEASUREMENTS FOR EXISTING STRUCTURES OR BY SHOP DRAWINGS FOR EQUIPMENT FURNISHED. STRUCTURAL DIMENSIONS NOT SHOWN BUT CONTROLLED BY OR RELATED TO EQUIPMENT SHALL BE VERIFIED BY THE CONTRACTOR WITH THE MANUFACTURER PRIOR TO CONSTRUCTION.

EQUIPMENT ANCHOR BOLT SIZES, TYPES, AND PATTERNS SHALL BE AS REQUIRED BY THE APPROVED EQUIPMENT MANUFACTURER. ALL BOLT PATTERNS SHALL BE TEMPLATED TO INSURE ACCURACY OF PLACEMENT

STRUCTURAL DRAWINGS SHALL BE USED IN COORDINATION WITH DRAWINGS OF ALL OTHER DISCIPLINES AND MANUFACTURER'S SHOP DRAWINGS.

IF A CONFLICT IS FOUND BETWEEN DIFFERENT PORTIONS OF THE CONTRACT DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY. CONTINUED CONSTRUCTION OF THE AREA IN CONFLICT SHALL BE AT THE CONTRACTOR'S OWN RISK UNTIL THE CONFLICT IS RESOLVED BY THE ENGINEER.

STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURE. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND TEMPORARY SUPPORTS WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR. OVERSTRESSING OF ANY STRUCTURAL ELEMENT IS PROHIBITED.

CONTRACTOR SHALL PROVIDE A 1.5:1 LAYBACK DISTANCE FOR EXCAVATION AT ALL STRUCTURES, EXCEPT WHERE SHEETING IS USED TO FACILITATE EXCAVATION.

NO BACKFILL SHALL BE PLACED AGAINST ANY WALL UNLESS ALL SUPPORTING ELEMENTS OF THE STRUCTURE HAVE BEEN CONSTRUCTED AND HAVE REACHED THE SPECIFIED MINIMUM CONCRETE STRENGTH AT 28 DAYS.

G-13 DO NOT SCALE THESE DRAWINGS, USE DIMENSIONS

CONTRACTOR'S CONSTRUCTION AND/OR ERECTION SEQUENCES SHALL RECOGNIZE AND CONSIDER THE EFFECTS OF THERMAL MOVEMENTS OF STRUCTURAL ELEMENTS DURING THE CONSTRUCTION PERIOD.

WHERE CONNECTIONS TO OR MODIFICATIONS OF EXISTING STRUCTURES ARE SHOWN, EXISTING FOUNDATIONS, WALLS, COLUMNS, SLABS, BEAMS, FLOORS, DECKS, (CONCRETE, STEEL, TIMBER, ETC.) ARE ASSUMED TO BE IN GOOD CONDITION. THIS MUST BE VERIFIED IN THE FIELD BY THE CONTRACTOR. UNSOUND CONDITIONS SHALL BE REPORTED TO THE ENGINEER. ALL UNSOUND STRUCTURAL ELEMENTS SHALL BE REPAIRED TO SOUND CONDITION AS APPROVED BY THE ENGINEER. EXISTING CONSTRUCTION DIMENSIONS SHALL BE VERIFIED BY THE CONTRACTOR BEFORE WORK COMMENCES. VARIATIONS FROM DIMENSIONS SHOWN ON THESE DRAWINGS SHALL BE REPORTED TO THE ENGINEER.

ARCADIS IS ONLY RESPONSIBLE FOR THE NEW WALL CONSTRUCTED ABOVE THE FOUNDATION AND INTERIOR HORIZONTAL MEMBER CONNECTIONS INTO

FOUNDATION

ARCADIS IS NOT RESPONSIBLE FOR STRUCTURAL CONDITION AND CAPACITY OF EXISTING FOUNDATION

CONCRETE

C-1 CONCRETE 28-DAY COMPRESSIVE STRENGTH:

CLASS A - 4500 PSI C-2 REINFORCEMENT: ASTM A615, GRADE 60.

ASTM A706, GRADE 60 C-3 CONCRETE COVER FOR REINFORCING:

A) SURFACES CAST AGAINST EARTH B) SURFACE WITH EMBEDDED PVC WATERSTOP C) ALL OTHER SURFACES

C-4 CONSTRUCTION JOINTS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS. WHERE NOT SHOWN, CONSTRUCTION JOINTS SHALL BE LOCATED AS REQUIRED BY THE SPECIFICATIONS. CONSTRUCTION JOINT TYPES AND LOCATIONS SHALL BE AS APPROVED BY THE ENGINEER.

C-5 WHERE HORIZONTAL CONSTRUCTION JOINTS, LOCATED ABOVE THE FOUNDATION SLAB, EXTEND BEYOND WHERE NEEDED, TERMINATE AT A VERTICAL CONSTRUCTION JOINT AS APPROVED BY THE ENGINEER.

PROVIDE PVC WATERSTOPS IN ALL FOUNDATION, SLAB AND WALLS FOR WATER RETAINING STRUCTURES.

SHOP DRAWINGS FOR EQUIPMENT SUPPORTS, ANCHORAGES, OPENINGS, RECESSES AND REVEALS SHALL BE PROVIDED PRIOR TO PLACING CONCRETE.

C-8 AT ALL TYPICAL CURBS, EQUIPMENT PADS, AND SUPPORT PIERS, REINFORCING DOWELS SHOWN MAY BE REPLACED WITH MATCHING DOWELS SET IN EPOXY IN DRILLED HOLES AS SPECIFIED. DOWELS LOCATED CLOSER THAN 3 INCHES FROM ANY EDGE OF CONCRETE SHALL NOT BE REPLACED WITH DRILLED DOWELS.

C-9 WHERE DRILLED EPOXY DOWELS ARE PLACED INTO HARDENED CONCRETE, ADJUST THE DOWEL LOCATIONS AS NEEDED TO AVOID DRILLING THROUGH ANY REINFORCING BARS. IF THE DOWEL LOCATION NEEDS TO BE MODIFIED, CONTACT THE ENGINEER BEFORE PROCEEDING.

C-10 DOWELS, ANCHOR BOLTS, PIPES, AND OTHER EMBEDDED ITEMS SHALL BE HELD SECURELY IN POSITION WHILE CONCRETE IS BEING PLACED.

C-11 REINFORCING BARS AND ACCESSORIES SHALL NOT BE IN CONTACT WITH ANY METAL PIPE, PIPE FLANGE, METAL CONDUIT, OR OTHER METAL PARTS EMBEDDED IN CONCRETE. A MINIMUM CLEARANCE OF 2 INCHES SHALL BE PROVIDED.

C-12 CONTRACTOR SHALL PROVIDE 3/4 INCH CHAMFER USING WOOD CHAMFER STRIPS ON ALL EXPOSED CORNERS OF COLUMNS, BEAMS AND WALLS OR AS REQUIRED TO MATCH EXISTING.

C-13 LAP SPLICES SHALL BE IN ACCORDANCE WITH THE TABLE SHOWN ON THIS SHEET.

C-14 PROVIDE ADDITIONAL REINFORCEMENT AT OPENINGS AND WALL INTERSECTIONS AS SHOWN ON TYPICAL DETAILS.

GENERAL REQUIREMENTS AND SITE WORK:

SW-1 SECTION 02050 DEMOLITION AND SECTION 02060 HYDRODEMOLITION HAVE BEEN ADDED TO THE SPECIFICATION PACKAGE, REFERENCE BID PACKAGE NO. 2 EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS PROJECT FOR OTHER APPLICABLE SPECIFICATIONS FOR DIVISION 1 & 2.

ALUMINUM

1. ALL ALUMINUM SHALL BE NEW AND CONFORM TO THE APPLICABLE ASTM SPECIFICATIONS AS REGISTERED WITH "THE ALUMINUM ASSOCIATION". FOR THE ALLOYS LIST BELOW:

A. STRUCTURAL SHAPES AND PLATES ALLOY 6061-T6.

B. WELDING FILLER ALLOY 5356. C. BOLTS - STAINLESS STEEL TYPE AISI TYPE 316.

D. ANCHOR BOLTS - STAINLESS STEEL AISI TYPE 316.

2. SHOP CONNECTIONS SHALL BE BOLTED OR WELDED.

3. FIELD CONNECTIONS SHALL BE BOLTED: FIELD WELDING SHALL NOT BE PERMITTED UNLESS SO NOTED ON THE CONTRACT DRAWINGS.

4. BRACING SHALL HAVE A MINIMUM OF TWO BOLTS PER CONNECTION UNLESS NOTED.

5. ALL BOLTS SHALL BE 5/8" DIA. MIN. UNLESS OTHERWISE NOTED ON CONTRACT DRAWINGS.

6. WHERE ALUMINUM COMES IN CONTACT WITH CONCRETE OR OTHER DISSIMILAR MATERIALS, BACK PAINT ALUMINUM AS INDICATIED IN THE DRAWING

ABBREVIATIONS SYMBOLS

GRATING

DEMOLITION

HYDRODEMOLITION

- EXPANSION JOINT

- CONSTRUCTION JOINT

TYP - TYPICAL

THK - THICKNESS

DIAMETER

EQ - EQUAL

CONC - CONCRETE STD - STANDARD

- TOP AND BOTTOM

- EACH FACE

- EACH

CLR - CLEAR

HORIZ - HORIZONTAL **VERT - VERTICAL**

REINF - REINFORCEMENT

- DIAMETER OF ANCHOR BAR

LAP SPLICE AND EMBEDMENT LENGTH TABLE

	REINFORCEMENT LAP SPLICE, EMBEDMENT LENGTH AND STANDARD HOOKS (INCHES)											
	MIN LAP LENGTHS FOR				MIN EMBEDMENT LENGTHS					MIN STD. HOOKS		
BAR	BEAMS AND	COLUMNS*	SLABS AN	D WALLS **	FOR BEAMS AND COLUMNS *		FOR	SLABS	WITH	90°	13	5°
SIZE	CLAS	SS B	CLA	SS B			AND WALLS **		STANDARD	A OR G	A OR G	н
	TOP***	OTHERS	TOP***	OTHERS	TOP***	OTHERS	TOP***	OTHERS	НООК	Aona	Aona	11
#3	25	19	16	16	19	15	12	12	5	6	4	2.5
#4	33	25	20	16	25	19	15	12	7	8	4.5	3
#5	41	31	25	19	31	24	19	15	9	10	5.5	3.75
#6	49	37	29	23	37	29	23	18	10	12	8	4.5
#7	71	54	43	33	54	42	33	25	12	14	9	5.25
#8	81	62	49	37	62	48	37	29	14	16	10.5	6
#9	91	70	60	46	70	54	46	36	15	19	-	-
#10	102	79	74	57	79	61	57	44	17	22	-	-
#11	114	87	89	69	87	67	68	53	19	24	-	-

REINFORCEMENT LAP SPLICE. EMBEDMENT LENGTH AND STANDARD HOOKS TABLE IS BASED ON A MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 4000 PSI AND 60000 PSI REINFORCEMENT (WITH NO EPOXY COATING).

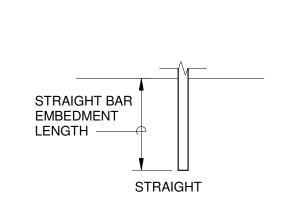
ALL LAPS SPLICES SHALL BE CLASS B SPLICES.

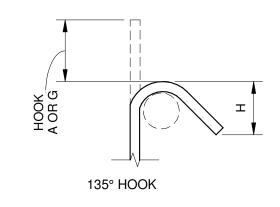
* THE MINIMUM LAP LENGTH FOR BEAMS, COLUMNS AND STRAIGHT EMBEDMENTS ARE BASED ON A 3 BAR DIAMETER MINIMUM CENTER TO CENTER BAR SPACING AND A 2 INCH BAR COVER. IF THE SPLICE AND/OR EMBEDMENT DOES NOT CONFORM TO THESE REQUIREMENTS, THEN CONTRACTOR SHALL APPLY APPROPRIATE FACTORS IN COMPLIANCE WITH ACI 318 WITH APPROVAL BY ENGINEER.

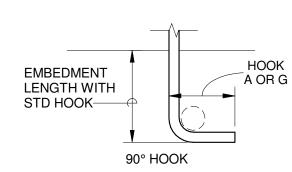
** THE MINIMUM LAP LENGTH FOR SLABS. WALLS AND STRAIGHT EMBEDMENTS ARE BASED ON A 6 INCH BAR SPACING AND A 2 INCH BAR COVER. IF THE LAP CONDITION DOES NOT CONFORM TO THESE REQUIREMENTS, THEN USE BEAM LAP LENGTHS; OR COMPLY WITH LAP REQUIREMENTS OF ACI 318 WITH APPROVAL BY ENGINEER.

*** TOP BARS ARE DEFINED AS ALL HORIZONTAL BARS WITH 12" OR MORE FRESH CONCRETE

WHERE SPLICES ARE REQUIRED BETWEEN BARS OF DIFFERENT SIZES, THE LAP LENGTH SHALL BE NO LESS THAN THE EMBEDMENT LENGTH OF THE LARGER BAR OR THE LAP LENGTH OF THE SMALLER BAR, WHICHEVER IS GREATER.







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IF THIS BAR IS NOT 1" INDICATED SCALE IS INCORRECT	3 2 1	OCTOBER 2022 SEPTEMBER 2022 JULY 2022	100% DESIGN SUBMITTAL 95% DESIGN SUBMITTAL 30% DESIGN SUBMITTAL	CG CG	
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ATLANTA, GEORGIA CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT

EAST AREA WATER QUALITY CONTROL **FACILITY IMPROVEMENTS**

SHEET TITLE STRUCTURAL **GENERAL STRUCTURAL** NOTES

OCTOBER 2022 PROJECT NO.: 30030286 DESIGNED BY: C. GALLO/ P. LUNKAD DRAWN BY: CHECKED BY: H. HOBI

NONE S-001 SHEET 2 OF 13

W.01.02.0085

STRUCTURAL QUALITY ASSURANCE PLAN **GENERAL**:

THIS STRUCTURAL QUALITY ASSURANCE PLAN IDENTIFIES THE RESPONSIBILITIES OF THE CONTRACTOR AND THE INSPECTOR IN PERFORMING THE TESTING AND INSPECTION OF THE WORK. REFER TO OTHER PORTIONS OF THE CONSTRUCTION DOCUMENTS FOR TESTING AND INSPECTIONS REQUIRED OF MECHANICAL, ELECTRICAL, CIVIL, OR OTHER BUILDING COMPONENTS.

CONTRACTOR'S RESPONSIBILITIES:

CONTRACTOR SHALL NOTIFY INSPECTION AGENCY/LABORATORY AT LEAST 48 HOURS PRIOR TO START OF WORK AND COOPERATE WITH THE INDIVIDUAL INSPECTORS AND TESTING AGENCIES.

INSPECTOR'S RESPONSIBILITIES:

THE INSPECTOR SHALL BE A LICENSED ENGINEER IN THE STATE OF GEORGIA OR PERFORMING APPROPRIATE DUTIES DIRECTLY UNDER THE SUPERVISION OF A LICENSED PROFESSIONAL ENGINEER IN THE STATE OF GEORGIA AND HAVE A THOROUGH UNDERSTANDING OF THE INSPECTION REQUIREMENTS. THE INSPECTOR SHALL BE AN INDIVIDUAL OR INDIVIDUALS CERTIFIED OR EXPERIENCED TO PERFORM SUCH INSPECTIONS IN A PARTICULAR FIELD.

A WEEKLY REPORT OF INSPECTIONS DOCUMENTING REQUIRED INSPECTIONS AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL BE SUBMITTED. AT THE COMPLETION OF THE INSPECTIONS, THE LICENSED PROFESSIONAL ENGINEER IN CHARGE OF PERFORMING THE INSPECTION SHALL CERTIFY THE FINAL INSPECTION REPORT AND AFFIX HIS/HER SEAL TO THE INSPECTOR'S FINAL REPORT. PROVIDE THREE (3) COPIES OF THIS REPORT TO THE PROJECT ENGINEER.

CAST-IN-PLACE CONCRETE:

CONTRACTOR SHALL PERFORM THE FOLLOWING:

- 1. ESTABLISH CONCRETE MIX DESIGN PROPORTIONS PER ACI 318. SUBMIT THREE COPIES OF THE CONCRETE MIX DESIGNS. INCLUDE THE FOLLOWING:
 - TYPE AND QUANTITIES OF MATERIALS
 - SLUMP
 - AIR CONTENT
 - FRESH UNIT WEIGHT
 - AGGREGATES SIEVE ANALYSIS DESIGN COMPRESSIVE STRENGTH
 - LOCATION OF PLACEMENT IN STRUCTURE
 - METHOD OF PLACEMENT
 - METHOD OF CURING
 - SEVEN-DAY AND 28-DAY COMPRESSIVE STRENGTHS
- 2. SUBMIT A CERTIFICATION FROM EACH MANUFACTURER OR SUPPLIER STATING THAT MATERIALS MEET THE REQUIREMENTS OF THE SPECIFIED ASTM AND ACI STANDARDS.
- 3. SUBMIT CERTIFICATION THAT THE READY-MIXED CONCRETE PLANT COMPLIES WITH THE REQUIREMENTS OF THE NATIONAL READY MIX CONCRETE ASSOCIATION.

INSPECTOR SHALL PERFORM THE FOLLOWING:

TYPE	С	Р	REFERENCE STANDARD
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	-	Х	ACI 318 Ch: 20, 25.2, 25.3, 26.6.1-26.6.3
 2. REINFORCING BAR WELDING: a. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706; b. INSPECT SINGLE PASS FILET WELDS, MAXIMUM 5/16"; AND A. INSPECT ALL OTHER WELDS. 	- X	X	AWS D1.4 ACI 318: 26.6.4
3. INSPECT ANCHORS CAST IN CONCRETE.	-	X	ACI 318: 17.8.2
 4. INSPECT ANCHORS POST -INSTALLED IN HARDENED CONCRETE MEMBERS. a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS. b. MECHANICAL ANCHORS AND ADHESIVE ANCHORS. NOT DEFINED IN 4.a. 	х	х	ACI 318: 17.8.2.4 ACI 318: 17.8.2
5. VERIFY USE OF REQUIRED DESIGN MIX.	-	x	ACI 318 Ch: 19, 26.4.3, 26.4.4
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	X	-	ASTM C172 ASTM C31 ACI 318: 26.5, 26.12
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	Х	-	ACI 318: 26.5
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	-	Х	ACI 318: 26.5.3-26.5.5
9. INSPECT PRESTRESSED CONCRETE FOR: a. APPLICATION OF PRESTRESSING FORCE; AND b. GROUTING OF BONDED PRESTRESSING TENDONS.	X X	-	ACI 318: 26.10 ACI 318: 26.10
10. INSPECT ERECTION OF PRECAST CONCRETE MEMBERS.	-	Х	ACI 318: Ch. 26.9
11. VERIFY IN -SITU CONCRETE STRENGTH, PRIOR TO STRESSING OF TENDONS IN POST-TENSIONED CONCRETE AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM BEAMS AND STRUCTURAL SLABS.	-	х	ACI 318: 26.11.2
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	-	Х	ACI 318: 26.11.1.2 (b)

C = CONTINUOUS P = PERIODIC

ADHESIVE ANCHORS FOR ANCHORAGE INTO CONCRETE:

MANUFACTURERS:

- 1. HILTI HIT-RE 500 V3 EPOXY ADHESIVE ANCHORS
- 2. OR AS APPROVED.

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- INJECTABLE TWO-COMPONENT ADHESIVE.
- HILTI ANCHOR ROD HAS-R 316 STAINLESS STEEL THREADED ROD COMPLYING WITH ASTM F593 CONDITION CW.
- ADHESIVE ANCHORAGE SYSTEM SHALL BE SEISMIC QUALIFIED WITH CURRENT ICC-ES ESR REPORT (ICC-ES-ESR 3814).
- INSTALLERS TO BE TRAINED BY ANCHOR MANUFACTURER.
- 10% OF ALL ADHESIVE ANCHORS TO BE LOAD TESTED, AS INSTALLED IN FIELD, TO
- ENSURE ALLOWABLE MANUFACTURER LOADS ARE ACHIEVED.

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IF THIS BAR IS NOT 1"	3	OCTOBER 2022	100% DESIGN SUBMITTAL	CG	
INDICATED SCALE	2	SEPTEMBER 2022	95% DESIGN SUBMITTAL	CG	
IS INCORRECT	1	JULY 2022	30% DESIGN SUBMITTAL	CG	
	NO.	DATE	ISSUED FOR	BY	



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ATLANTA, GEORGIA CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT

EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS

W.01.02.0085

ASSURANCE

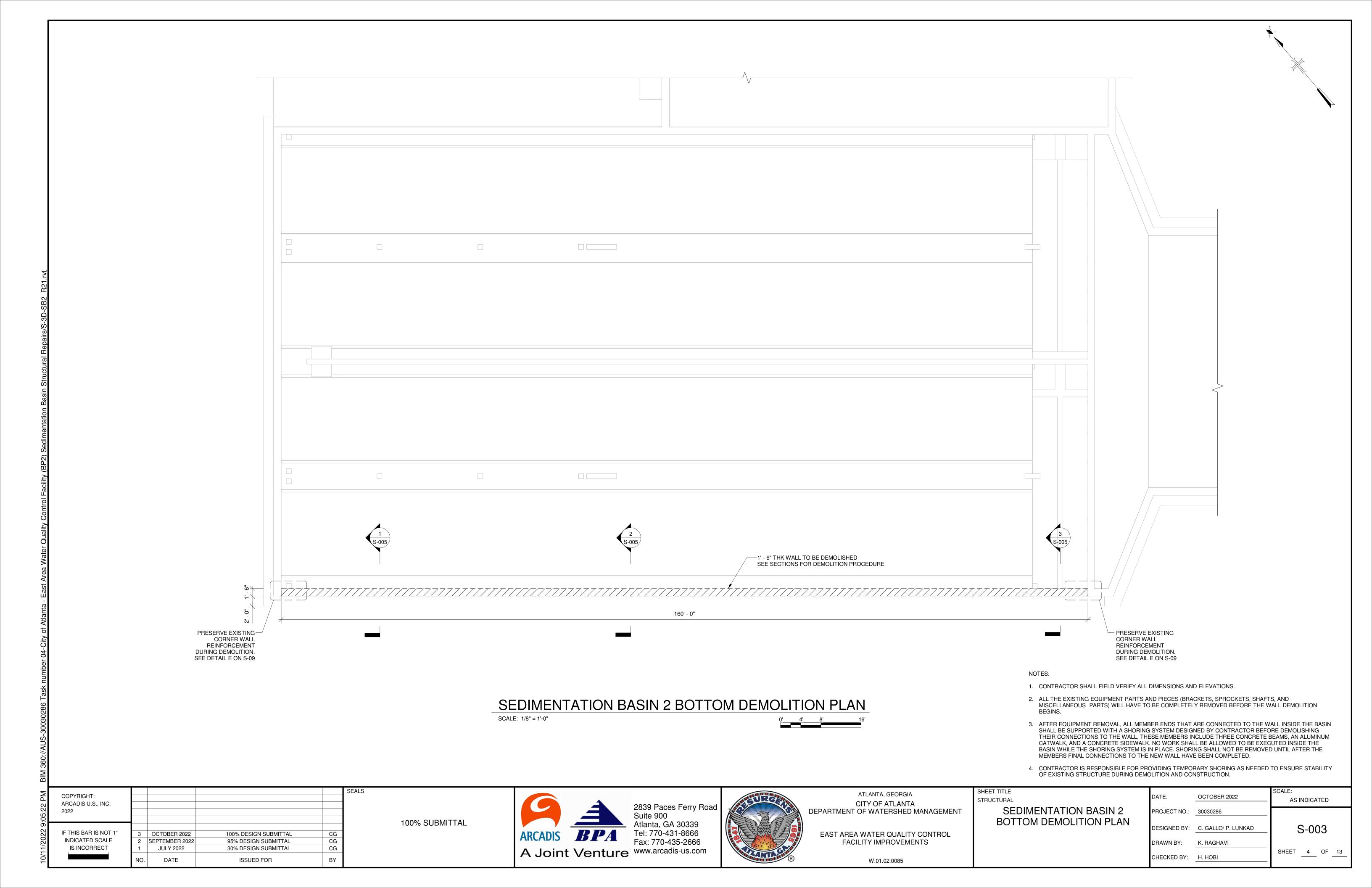
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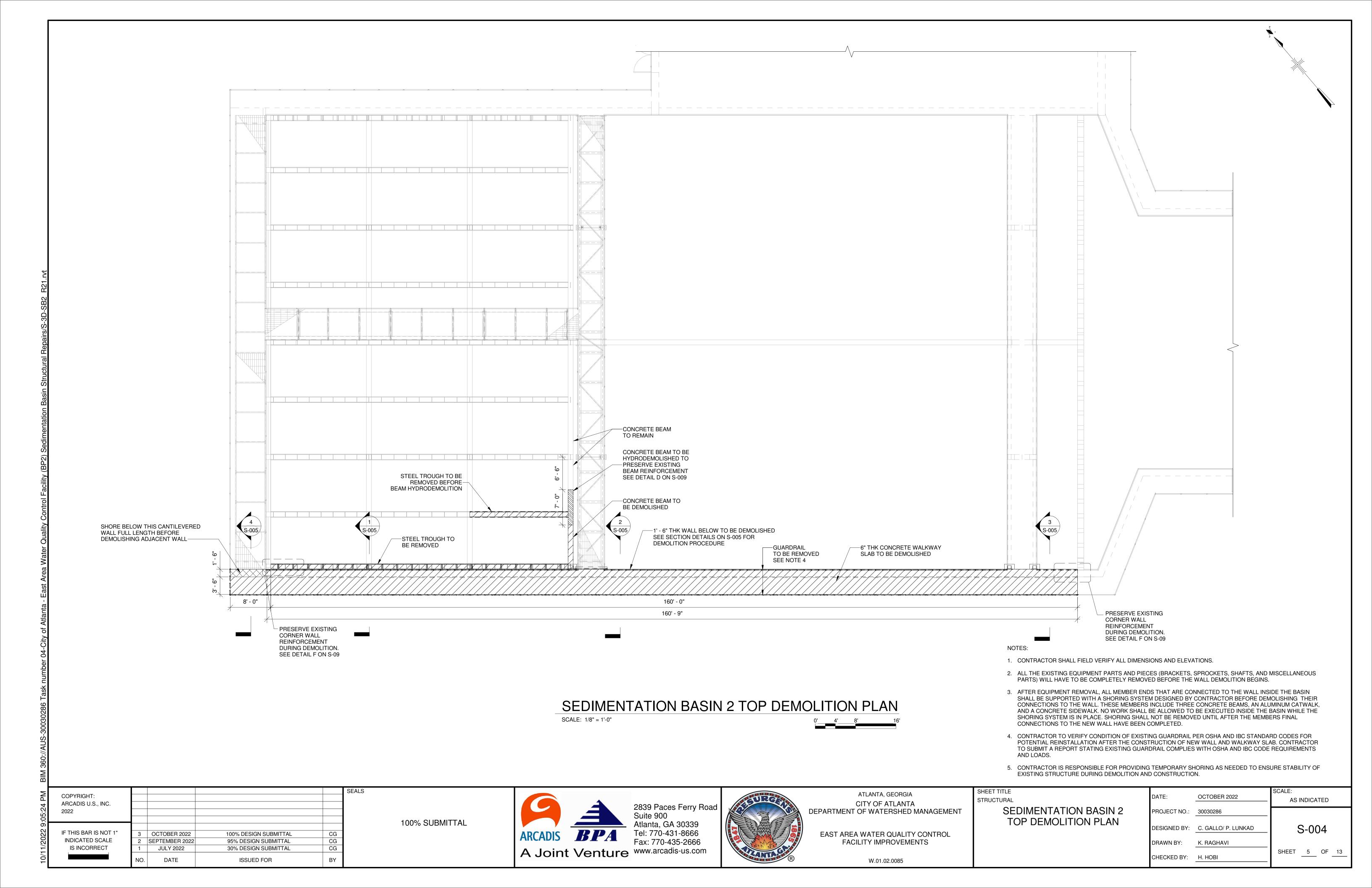
STRUCTURAL STRUCTURAL QUALITY

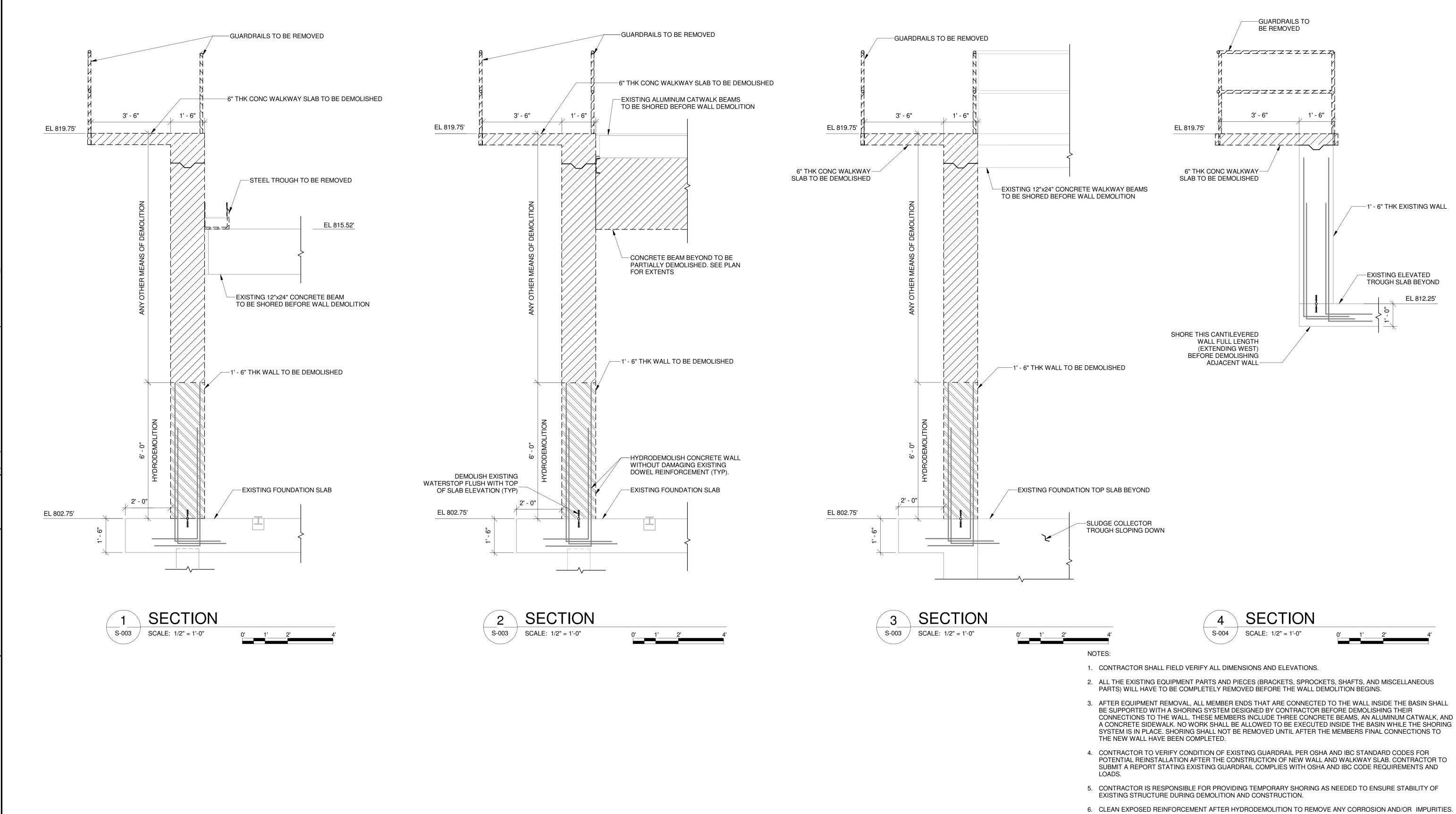
OCTOBER 2022 PROJECT NO.: 30030286 DESIGNED BY: C. GALLO/ P. LUNKAD DRAWN BY:

NONE

S-002 V. SRIPAL SHEET <u>3</u> OF <u>13</u> CHECKED BY: H. HOBI







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OCTOBER 2022

JULY 2022

DATE

2 SEPTEMBER 2022

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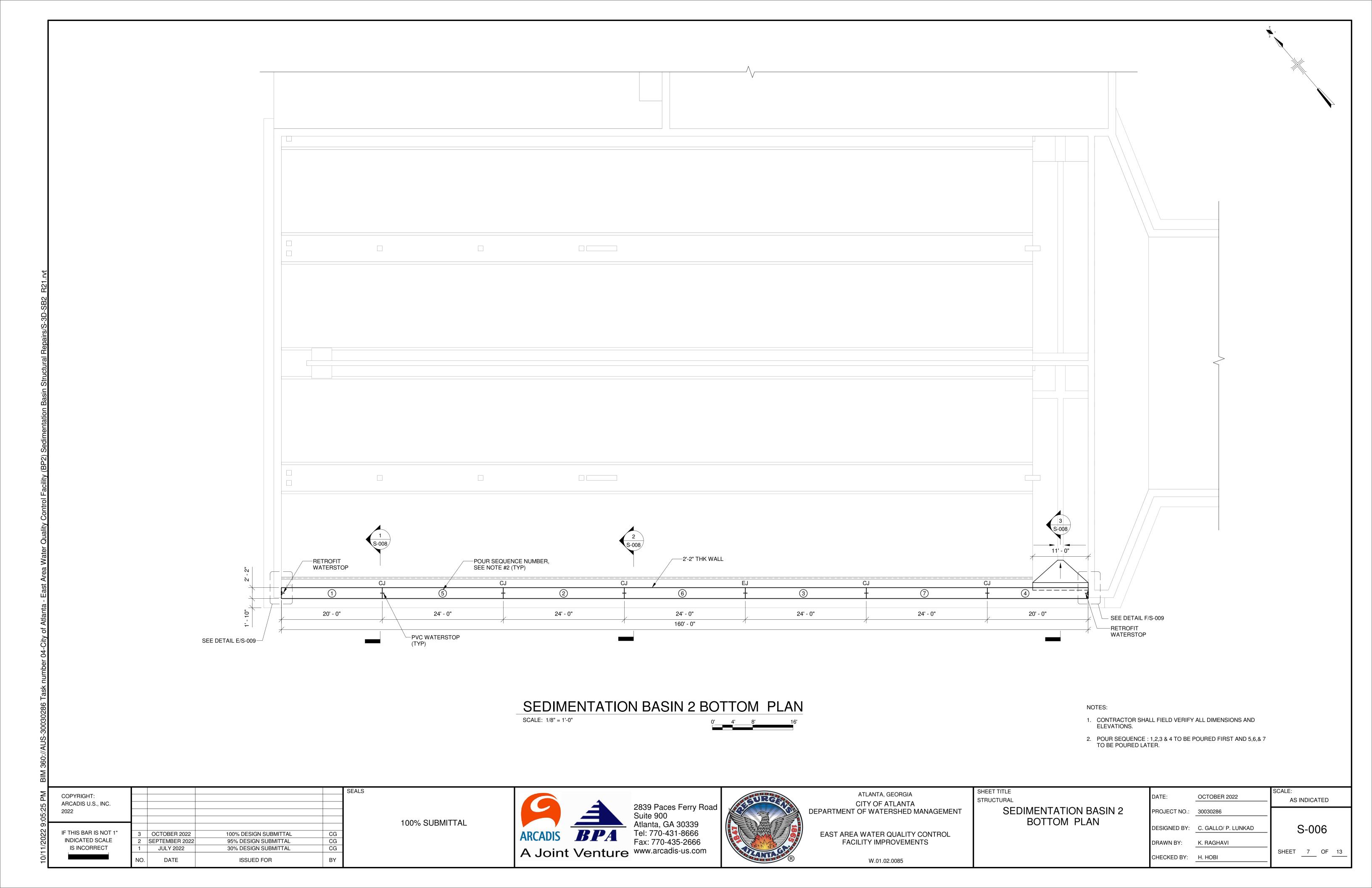
EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS

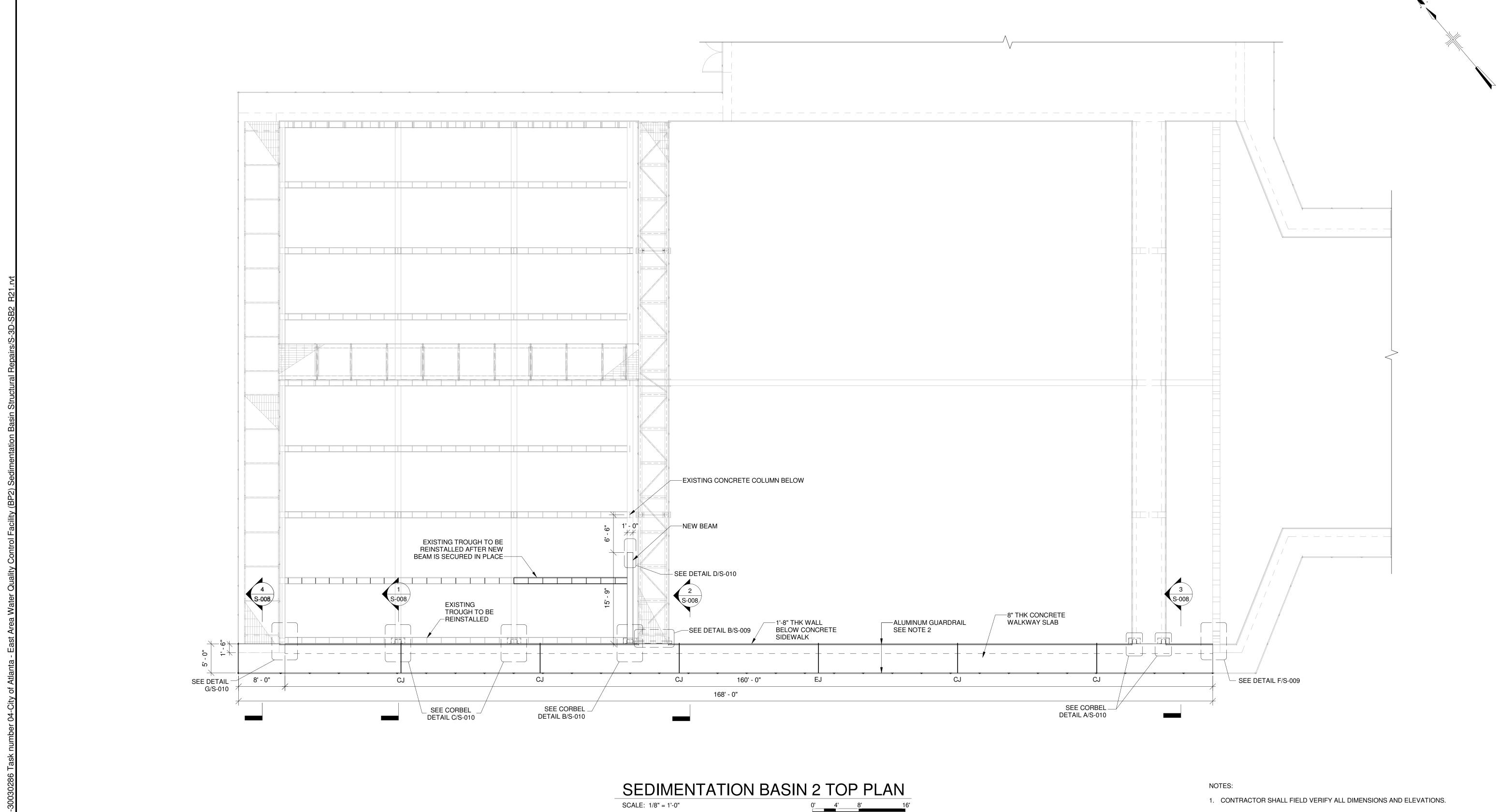
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TRUCTUR	AL
S	SEDIMENTATION BASIN 2
	DEMOLITION SECTIONS

SHEET TITLE

	DATE:	OCTOBER 2022	SCALE: AS INDICATED
12	PROJECT NO.:	30030286	
IS	DESIGNED BY:	C. GALLO/ P. LUNKAD	S-005
	DRAWN BY:	K. RAGHAVI	
	CHECKED BY:	Н. НОВІ	SHEET 6 OF





- 2. CONTRACTOR TO VERIFY CONDITION OF EXISTING GUARDRAIL PER OSHA AND IBC STANDARD CODES FOR POTENTIAL REINSTALLATION AFTER THE CONSTRUCTION OF NEW WALL AND WALKWAY SLAB. CONTRACTOR TO SUBMIT A REPORT STATING EXISTING GUARDRAIL COMPLIES WITH OSHA AND IBC CODE REQUIREMENTS AND LOADS.
- 3. CONSTRUCTION JOINTS AND EXPANSION JOINTS TO MATCH WALL JOINTS LOCATIONS.

DRAWN BY:

CHECKED BY: H. HOBI

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IF THIS BAR IS NOT 1" INDICATED SCALE	3 2	OCTOBER 2022 SEPTEMBER 2022	100% DESIGN SUBMITTAL 95% DESIGN SUBMITTAL	CG CG	
IS INCORRECT	1	JULY 2022	30% DESIGN SUBMITTAL	CG	
	NO.	DATE	ISSUED FOR	BY	

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ATLANTA, GEORGIA CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT

EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS

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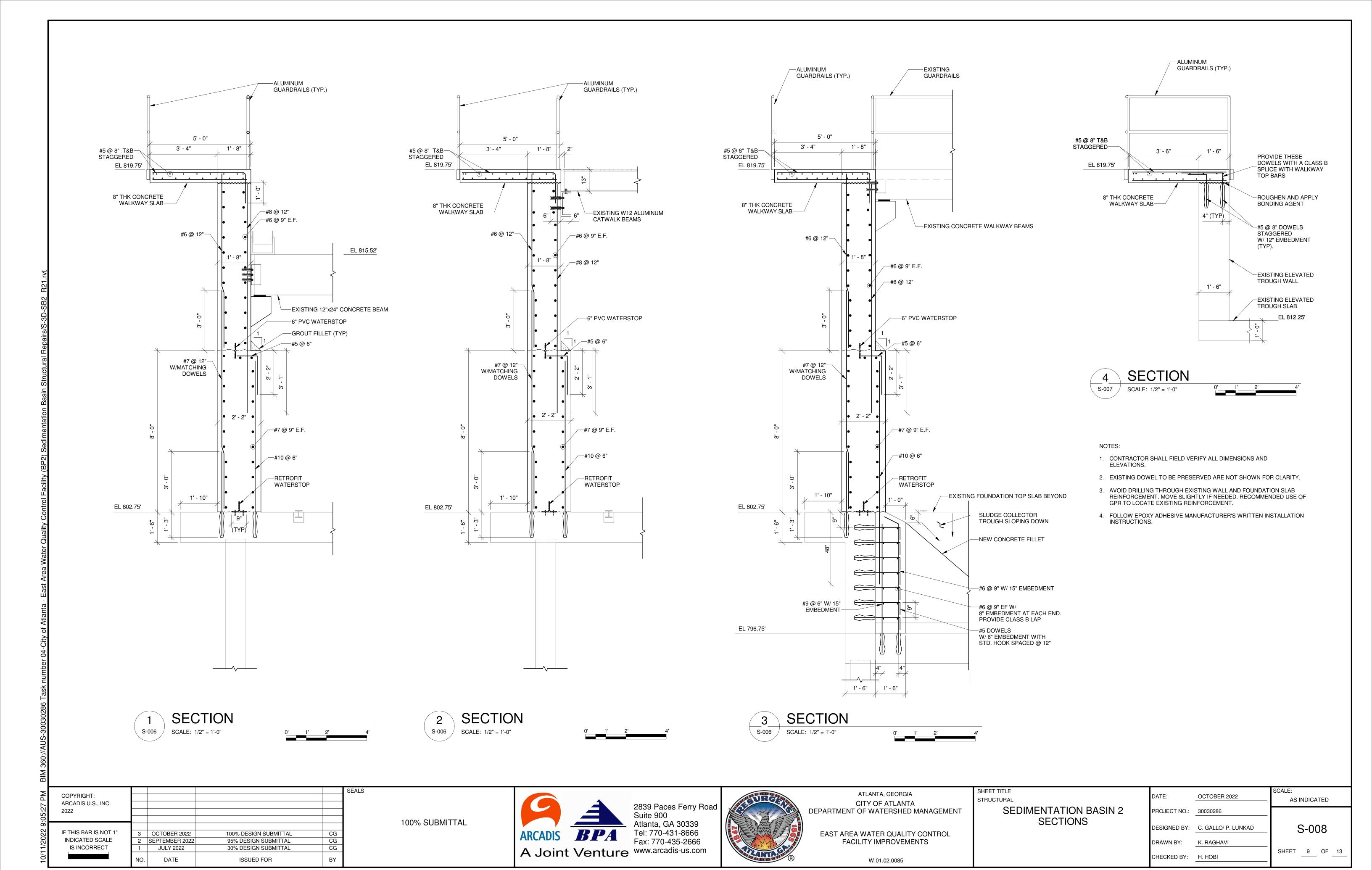
STRUCTURAL
SEDIMENTATION BASIN 2
TOP PLAN

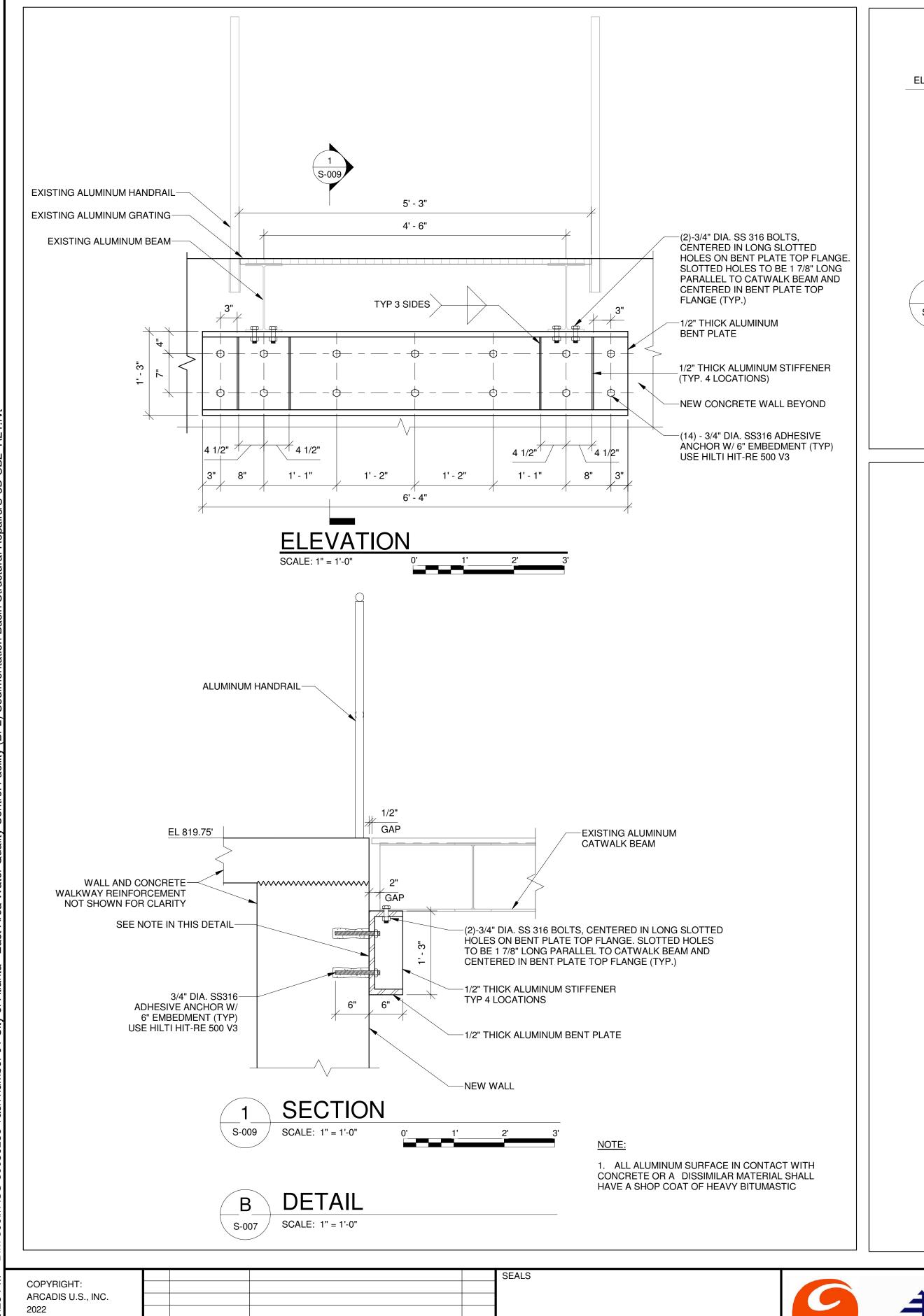
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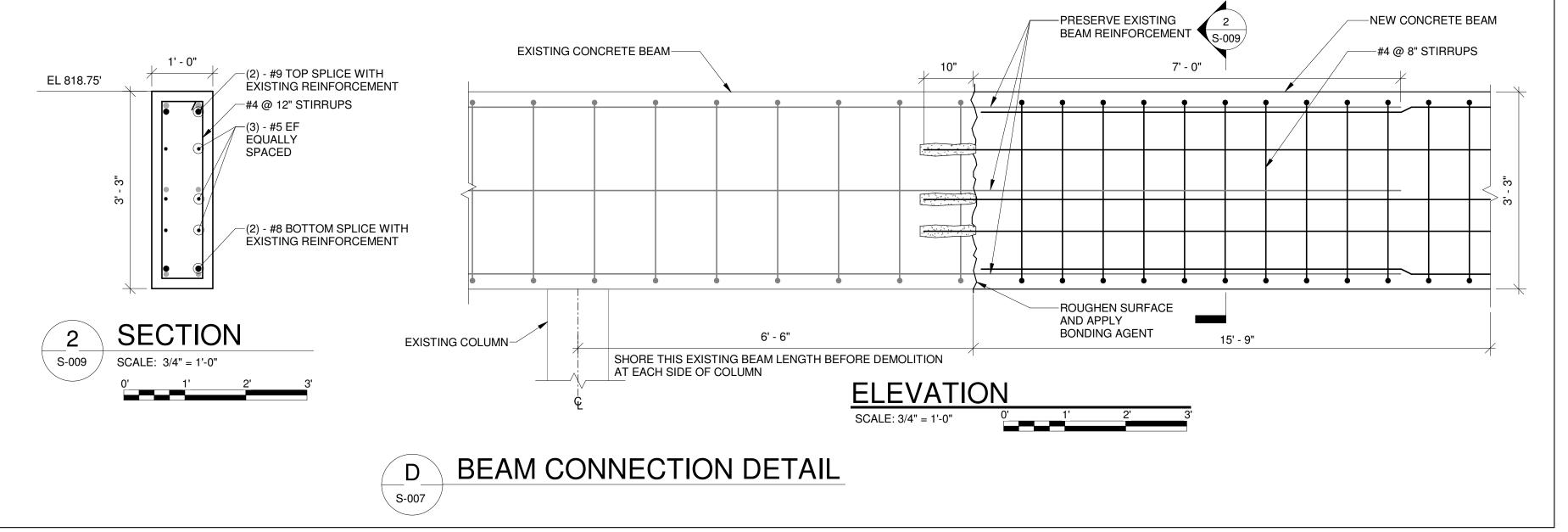
	DATE:	OCTOBER 2022	SCALE: AS INDICATE
2	PROJECT NO.:	30030286	
	DESIGNED BY:	C. GALLO/ P. LUNKAD	S-007

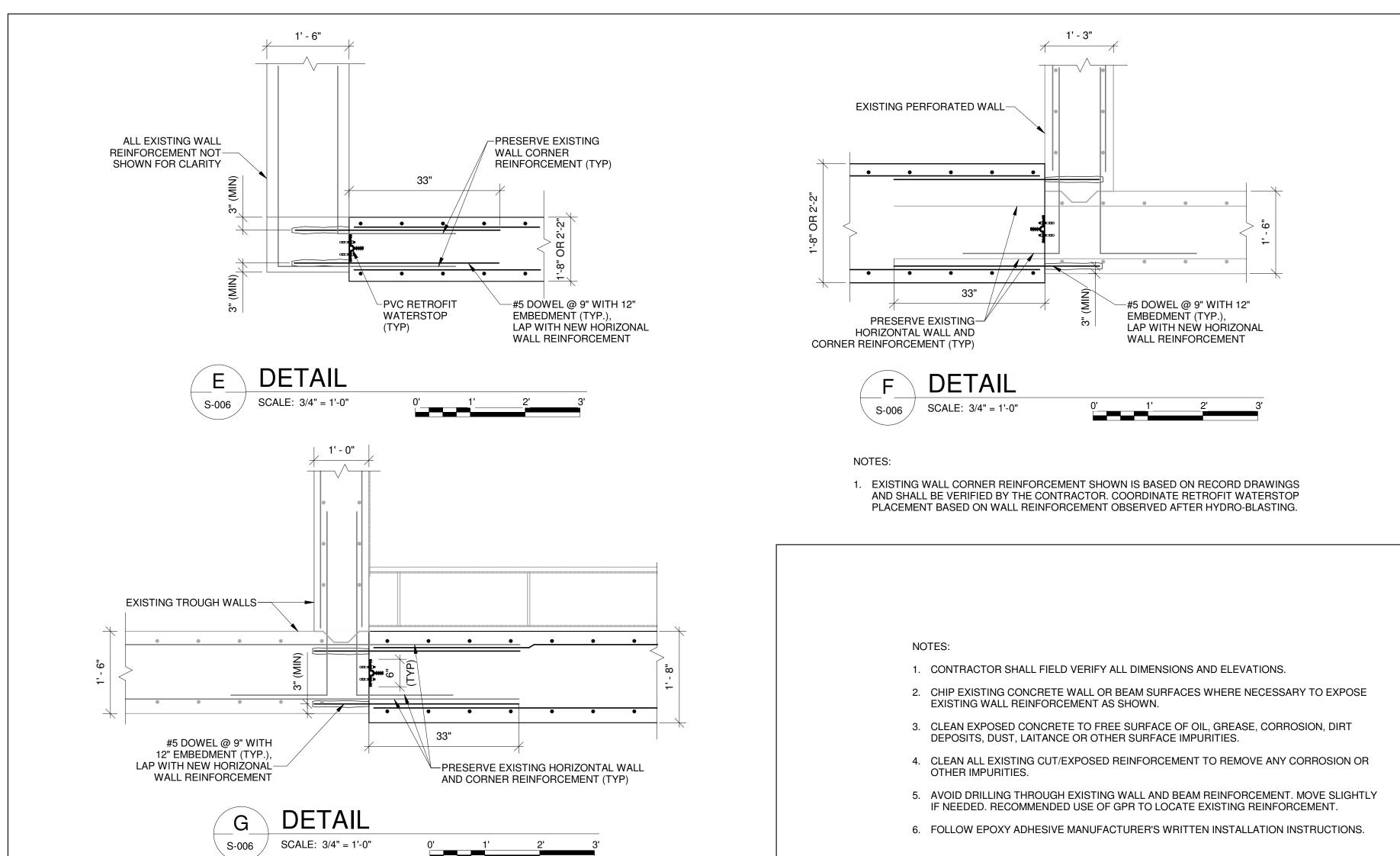
SHEET <u>8</u> OF <u>13</u>

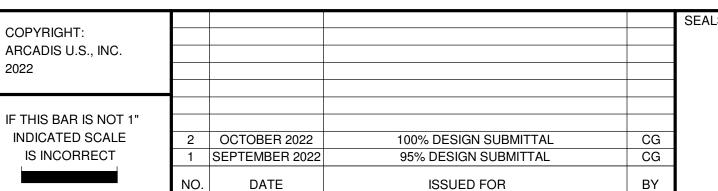
K. RAGHAVI











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ATLANTA, GEORGIA CITY OF ATLANTA DEPARTMENT OF WATERSHED MANAGEMENT

EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS

STRUCTURAL **SEDIMENTATION BASIN 2** CONNECTION DETAILS I

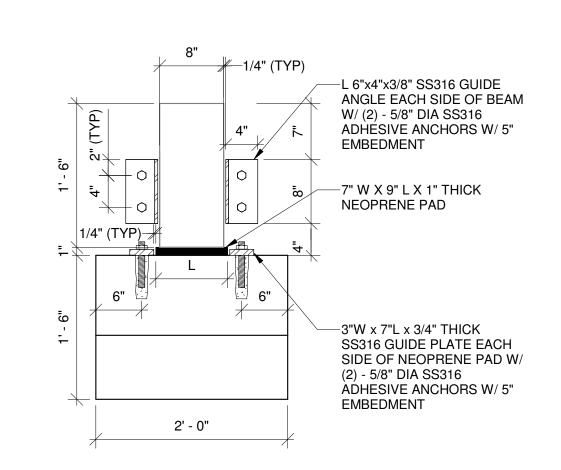
SHEET TITLE

OCTOBER 2022 AS INDICATED PROJECT NO.: 30030286 DESIGNED BY: C. GALLO/ P. LUNKAD DRAWN BY: K. RAGHAVI

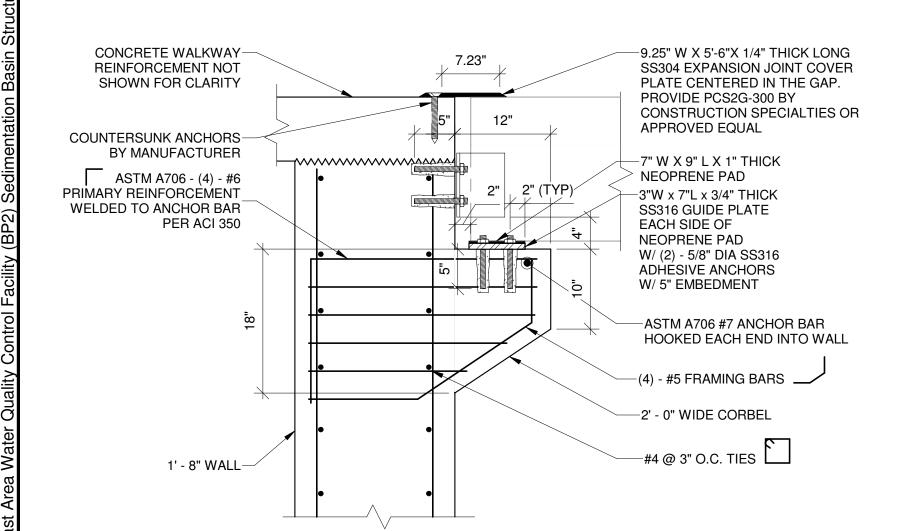
W.01.02.0085

CHECKED BY: H. HOBI

S-009 SHEET <u>10</u> OF <u>13</u>

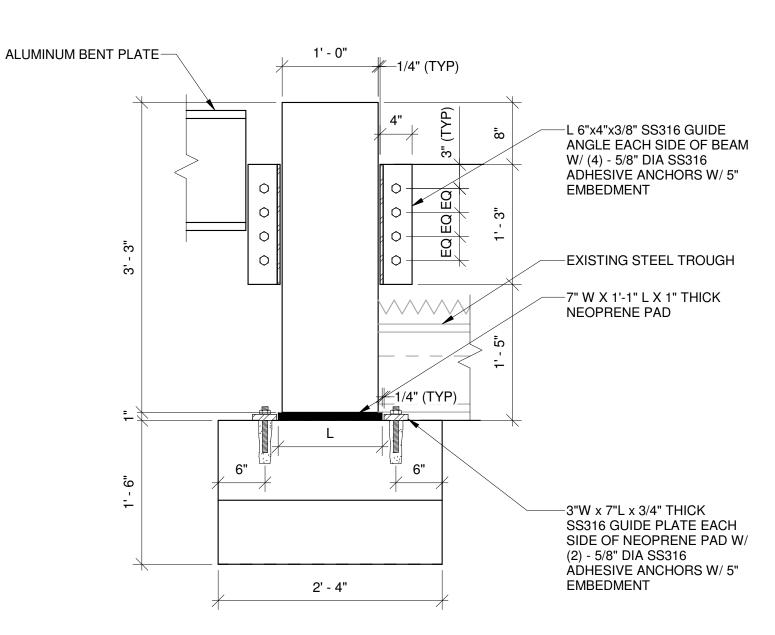


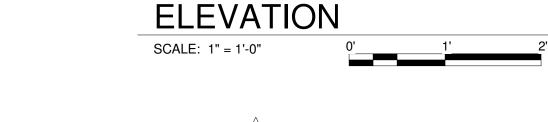


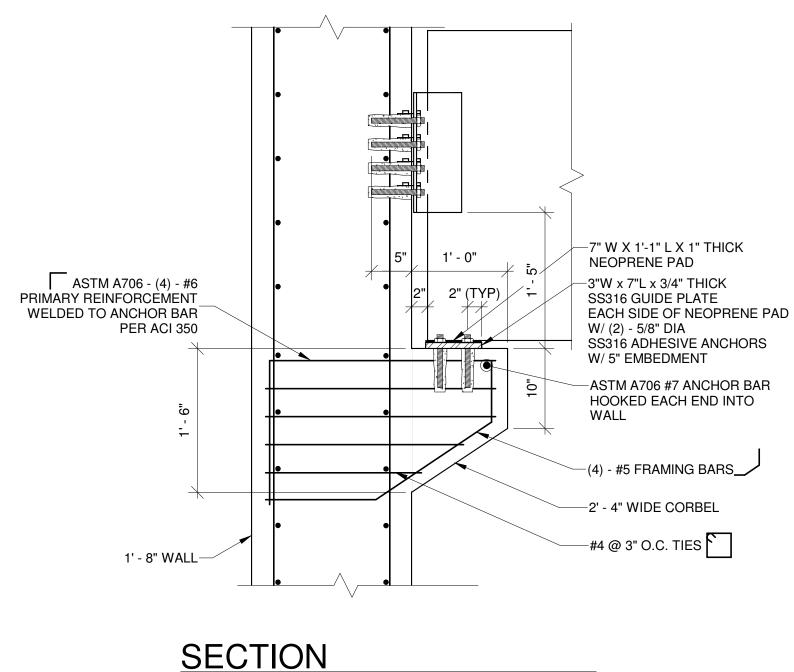


SECTION SCALE: 1" - 1'-0"

CORBEL DETAIL A

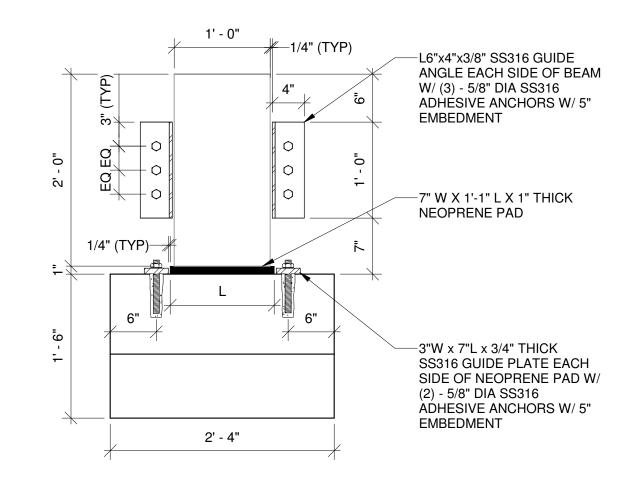






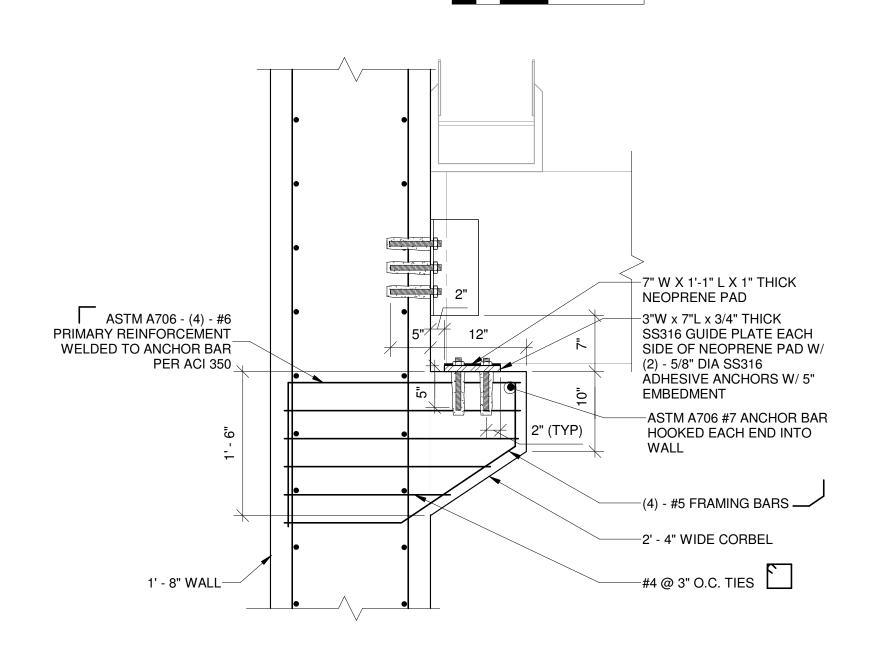
CORBEL DETAIL B

SCALE: 1" - 1'-0"





SCALE: 1" = 1'-0"

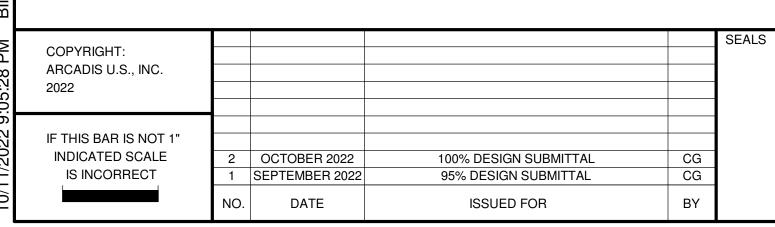


SECTION

SCALE: 1" - 1'-0"

CORBEL DETAIL C

- 1. CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS AND ELEVATIONS FOR EXISTING BEAM TO CORBEL CONNECTIONS.
- 2. CHIP SURFACE OF EXISTING CONCRETE BEAM END WHERE NECESSARY TO PROVIDE 2" GAP AS SHOWN IN DETAILS.
- 3. CLEAN EXPOSED CONCRETE TO FREE SURFACE OF OIL, GREASE, CORROSION, DIRT DEPOSITS, DUST, LAITANCE OR OTHER SURFACE IMPURITIES.
- 4. CLEAN ALL EXISTING CUT/EXPOSED REINFORCEMENT TO REMOVE ANY CORROSION
- 5. AVOID DRILLING THROUGH NEW WALL REINFORCEMENT. MOVE SLIGHTLY IF
- 6. FOLLOW WRITTEN INSTALLATION INSTRUCTIONS FOR HILTI HIT-RE 500 V3 EPOXY ADHESIVE OR APPROVED EQUAL.



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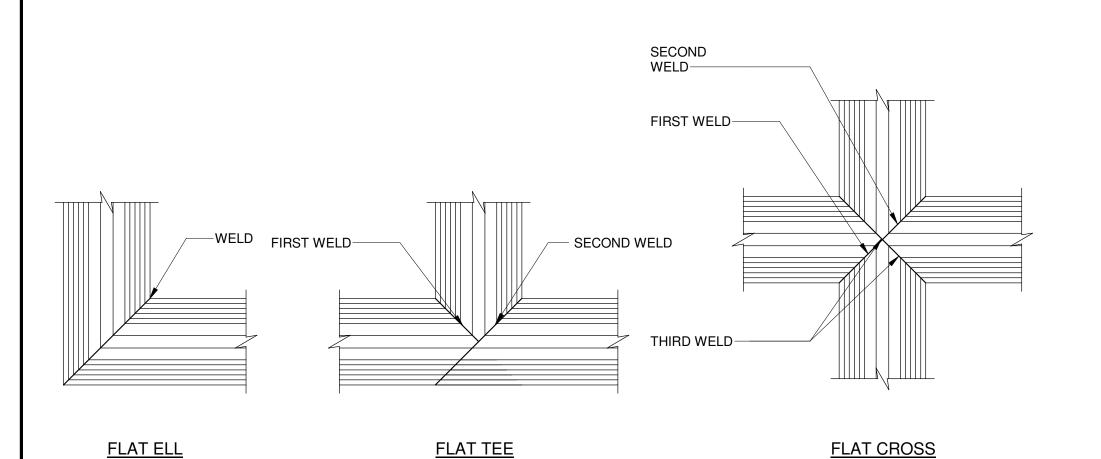
EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS

W.01.02.0085

CONNECTION DETAILS II

SHEET TITLE STRUCTURAL SEDIMENTATION BASIN 2

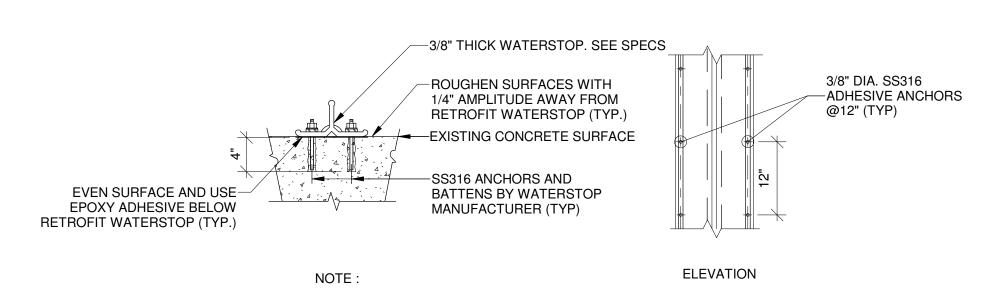
OCTOBER 2022 AS INDICATED PROJECT NO.: 30030286 S-010 DESIGNED BY: C. GALLO/ P. LUNKAD K. RAGHAVI DRAWN BY: SHEET _____ OF ____13 CHECKED BY: H. HOBI



WATERSTOP JOINTS

SCALE: NTS

- 1. ALL WELDS SHALL BE PER WATERSTOP MANUFACTURER'S RECOMMENDATIONS AND INCLUDE WELDS BETWEEN REGULAR WATERSTOPS AND BETWEEN RETROFIT/REGULAR WATERSTOPS.
- 2. IT IS RECOMMENDED THAT ABOVE WATERSTOP JOINTS TO BE ASSEMBLED AT MANUFACTURER'S SHOP.



1. SEE WATERSTOP DIMENSIONS AS SHOWN ON THE DRAWING

WATERSTOP BETWEEN NEW AND EXISTING CONCRETE

PRIMARY REINFORCEMENT-PRIMARY REINFORCEMENT $l_{weld} = 3/4 d_b$ ANCHOR BAR $I_{weld} = 3/4 d_b$ **SECTION**

TYPICAL CORBEL BAR WELD DETAIL SCALE: NTS

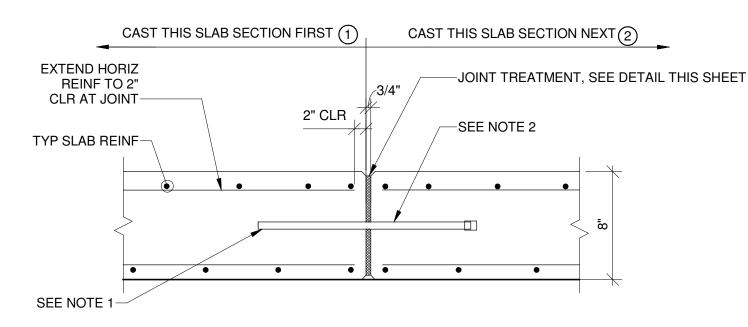
ISSUED FOR

BY

EXPOSED FACE OF WALL-INSIDE OR WATER SIDE OF WALL FILL WITH REPAIR MATERIAL--USE CONICAL TYPE **INSERTS EACH FACE** -DEPTH OF CONE WATERSTOP-

1. THE SPACING OF FORM TIES ON EXPOSED PORTIONS OF WALLS SHALL BE APPROXIMATELY EQUAL HORIZONTALLY AND VERTICALLY AND SHALL BE UNIFORM IN EACH DIRECTION.

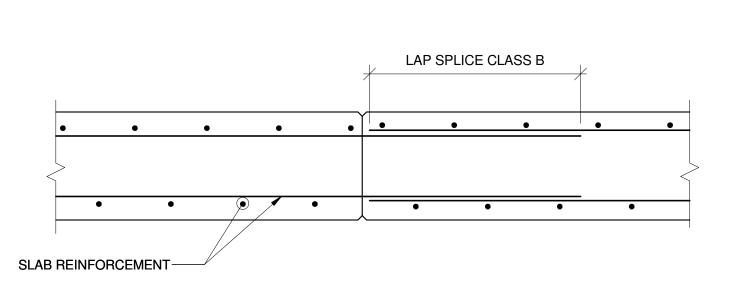
FORM SNAP- TIE HOLE



- 1. 5/8" DIA x 3'-0" SMOOTH STEEL BAR DOWELS. LOCATE AT CENTER OF SLAB. ALIGN AND TIE IN PLACE TO REINFORCING. PROVIDE CORROSION RESISTANCE COATING WITH A LUBRICANT AT HALF LENGTH OF DOWEL LOCATED AT THE SECOND CAST
- 2. 1" ID x 2" PLASTIC EXP CAP WITH 1" POLYSTYRENE BETWEEN END OF DOWEL AND END OF CAP. TAPE TO BAR FOR WATERTIGHT SEAL.

SLAB EXPANSION JOINT

SCALE: NTS



SLAB CONSTRUCTION JOINT

ATLANTA, GEORGIA CITY OF ATLANTA

DEPARTMENT OF WATERSHED MANAGEMENT

EAST AREA WATER QUALITY CONTROL **FACILITY IMPROVEMENTS**

STRUCTURAL

SEDIMENTATION BASIN 2 TYPICAL DETAILS

SHEET TITLE

OCTOBER 2022 AS INDICATED PROJECT NO.: 30030286 DESIGNED BY: C. GALLO/ P. LUNKAD DRAWN BY: K. RAGHAVI

2 - #4 HAIRPINS AT EA

SET OF DOWELS. TIE

TO BELOW AND TO

1/2" CHAMFER, TYP-

#5 VERTICALS

EXTEND HORIZ REINF TO 2"

CLR AT JOINT

TYP VERT REINF-

SEE NOTE 1-

1. 1" DIA x 3'-0" SMOOTH STEEL BAR DOWELS. LOCATE AT 1'-0" MAX FROM T & B OF WALL AND AT 1'-6" MAX SPACING. ALIGN AND TIE IN PLACE TO REINFORCING. PROVIDE CORROSION RESISTANCE COATING WITH A LUBRICANT AT HALF LENGTH OF DOWEL LOCATED AT THE SECOND CAST PORTION.

<u>PLAN</u>

CAST THIS WALL SECTION FIRST (1)

TYP

TYP

2" CLR ,

CAST THIS WALL SECTION NEXT (2)

#5 VERTICAL

-ADDITIONAL #5 EA FACE

-9" PVC WATERSTOP WELD

TO RETROFIT WATERSTOP

AT HAIRPINS

IN BASE SLAB

-NOTE 2

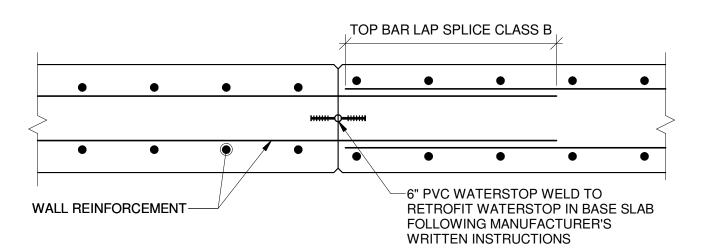
-JOINT TREATMENT, SEE DETAIL THIS SHEET

-2 - #4 HAIRPINS AT EA SET OF

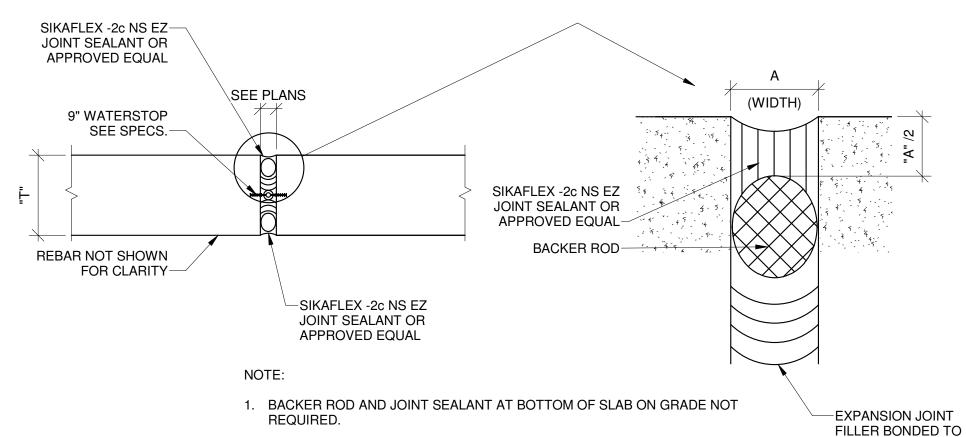
DOWELS. LOCATE 4" CLR ABOVE AND BELOW DOWELS TIE TO

2. 1-1/2" ID x 2" PLASTIC EXP CAP WITH 1" POLYSTYRENE BETWEEN END OF DOWEL AND END OF CAP. TAPE TO BAR FOR WATERTIGHT SEAL.

WALL VERTICAL EXPANSION JOINT SCALE: NTS



WALL VERTICAL CONSTRUCTION JOINT



2. PROVIDE BACKER ROD AND JOINT FILLER AS RECOMMENDED FOR COMPATIBILITY WITH SEALANT BY SEALANT MANUFACTURER. FOLLOW MANUFACTURER'S GUIDELINES AND WRITTEN INSTALLATION INSTRUCTION.

EXPANSION JOINT AT WALL AND SLABS

SEALS COPYRIGHT: ARCADIS U.S., INC. IF THIS BAR IS NOT 1" INDICATED SCALE 100% DESIGN SUBMITTAL OCTOBER 2022 CG IS INCORRECT 1 SEPTEMBER 2022 95% DESIGN SUBMITTAL

DATE

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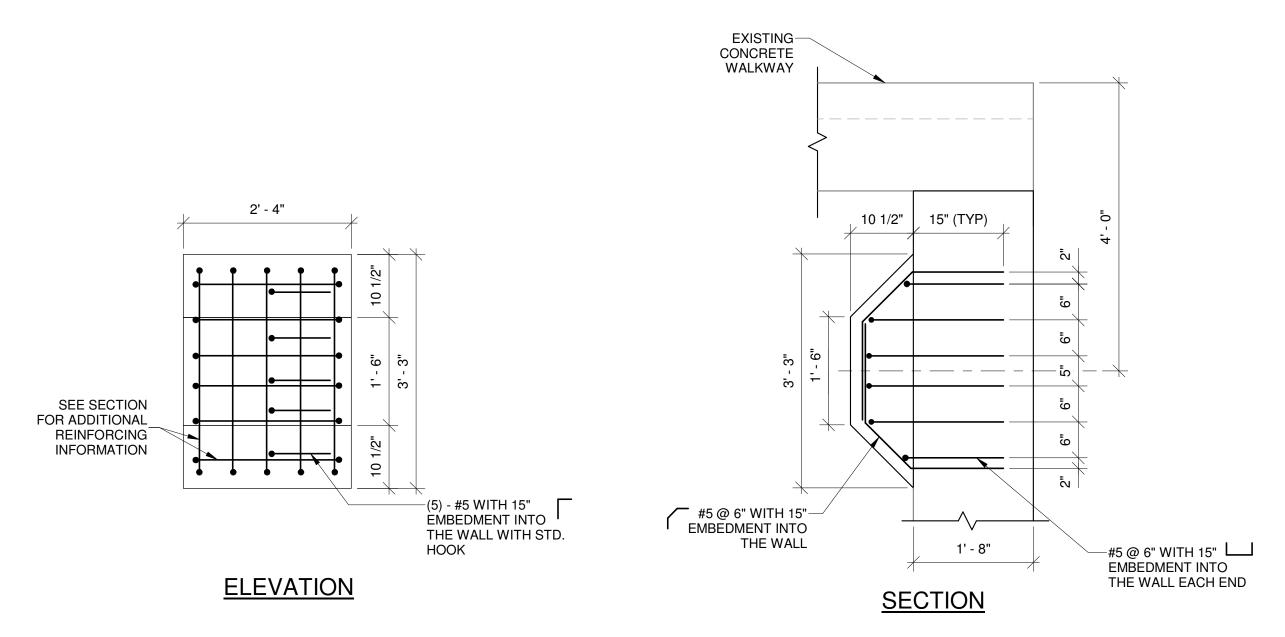
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S-011 SHEET 12 OF 13 CHECKED BY: H. HOBI

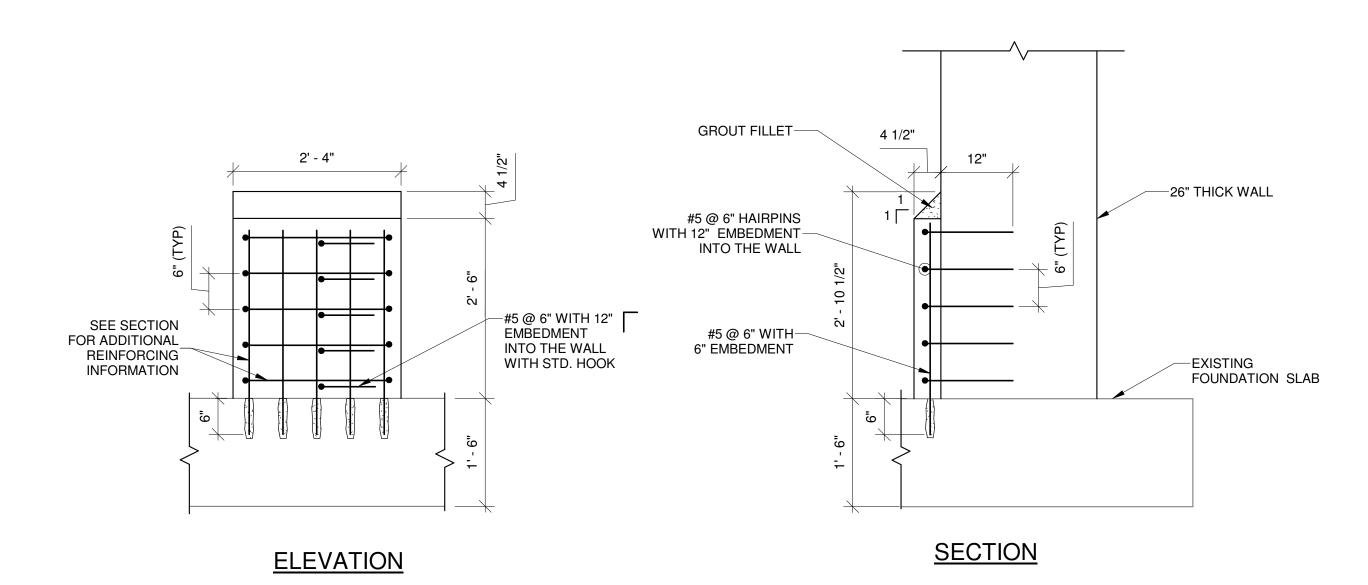
CONC ON ONE SIDE

SEE SPECIFICATION

03150



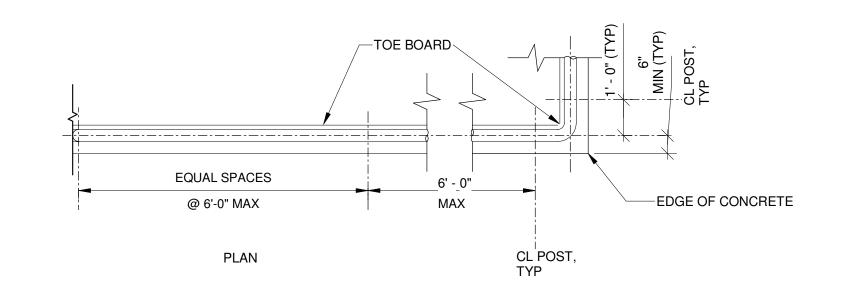
HEADSHAFT SPROCKET SUPPORT DETAIL AT SOUTH WALL SCALE: 3/4" = 1'-0"

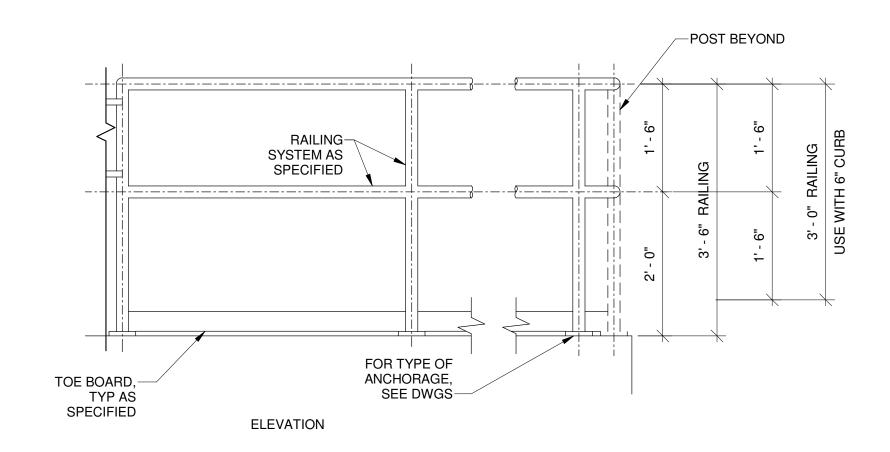


NON- HEADSHAFT SPROCKET SUPPORT DETAIL AT SOUTH WALL SCALE: 3/4" = 1'-0"

NOTES:

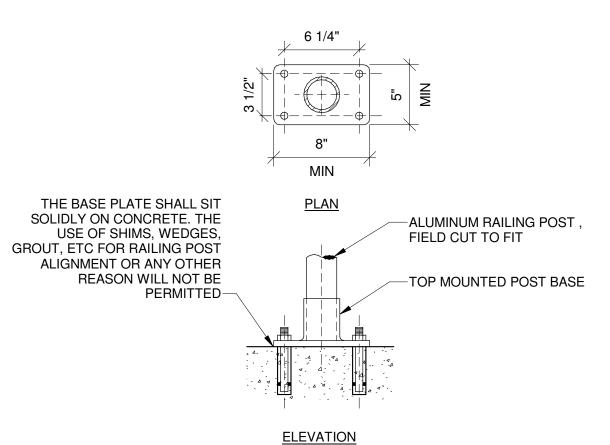
- 1. WALL AND FOUNDATION SLAB REINFORCEMENT NOT SHOWN FOR CLARITY.
- 2. SPROCKET LOCATION, DIMENSIONS AND ANCHORAGE SHALL BE PER MANUFACTURER'S SHOP DRAWINGS.
- 3. PROVIDE MINIMUM 6" ANCHOR EDGE DISTANCE FROM EACH SIDE.
- 4. AVOID DRILLING THROUGH REINFORCEMENT. MOVE SLIGHTLY AS NEEDED.
- 5. PROVIDE 2" CONCRETE COVER FOR ALL REINFORCEMENT.
- 6. CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION OF THE EQUIPMENT LOCATION AND POSITIONING WITHIN SEDIMENTATION BASIN EXISTING AND NEW WALLS.





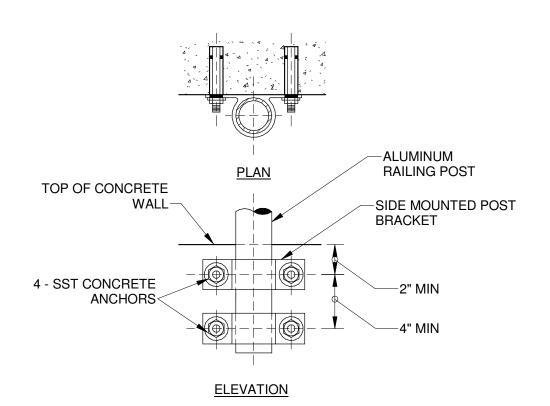
THESE DETAILS ARE TO BE USED IN CASE ONLY WHEN NEW GUARDRAIL WILL BE INSTALLED ON THE WALKWAY SLAB. SEE SPECIFICATION FOR ADDITIONAL INFORMATION.

ALUMINUM GUARDRAIL SCALE: NTS



NOTE:

ALL ALUMINUM SURFACE IN CONTACT WITH CONCRETE OR A DISSIMILAR MATERIAL SHALL HAVE A SHOP COAT OF HEAVY BITUMASTIC.



NOTES:

1. ALL ALUMINUM SURFACE IN CONTACT WITH CONCRETE OR A DISSIMILAR MATERIAL SHALL HAVE A SHOP COAT OF HEAVY BITUMASTIC.

2. USE SIDE MOUNTED POST BRACKET AS A TEMPLETE FOR THE ANCHOR BOLTS.

TYPE "B"

GUARDRAIL ANCHORAGE

SCALE: NTS

COPYRIGHT: ARCADIS U.S., INC. 2022					SEAL
IF THIS BAR IS NOT 1"					
INDICATED SCALE	2	OCTOBER 2022	100% DESIGN SUBMITTAL	CG	
IS INCORRECT	1	SEPTEMBER 2022	95% DESIGN SUBMITTAL	CG	
	NO.	DATE	ISSUED FOR	BY	

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EAST AREA WATER QUALITY CONTROL FACILITY IMPROVEMENTS

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SHEET TITLE STRUCTURAL SPROCKET SUPPORT AND RAILING DETAILS

OCTOBER 2022 PROJECT NO.: 30030286 DESIGNED BY: C. GALLO/ P. LUNKAD

S-012 SHEET <u>13</u> OF <u>13</u>

AS INDICATED

DRAWN BY: K. RAGHAVI CHECKED BY: H. HOBI