

Project: <u>Central Wastewater Treatment Plant</u>	Project Number: _____
Owner: <u>City of Pflugerville</u>	<u>88</u>
Contractor: <u>BAR Constructors, Inc</u>	<u>279</u>
Engineer: <u>Freese and Nichols, Inc</u>	<u>PFL16607</u>
Change Proposal No.: <u>CP0003</u> Description: <u>Structural Support Changes</u>	
Specification: <u>05 53 00 Metal Gratings</u>	
Drawing No.: <u>N/A</u> Detail Description: <u>N/A</u>	
Reference Document:	
<input type="checkbox"/> Request for a Change Proposal No.: _____ <input checked="" type="checkbox"/> Request for Information No.: <u>0009</u> <input type="checkbox"/> Shop Drawing Deviation Request No.: _____ <input type="checkbox"/> Field Order No.: _____	
Contractor proposes the following modifications to the Contract Documents:	
1. Provide additional metal grating support beams at the BNR Basins and the Influent Pump Station and Headworks as well as changing the cable trench embed material from Galvanized to Aluminum.	
Purpose of Change Proposal:	
FNI responded to RFI0009 to clarify the dimension of the grating support beams at the BNR Basin and Influent Pump Station and Headworks resulting in the requirement to provide additional grating support beams. Also, during shop drawing reviews, FNI changed the cable bed embed material from galvanized to aluminum.	
Attachments:	
CP0003	
Requested Action:	
<input type="checkbox"/> Issue a Field Order <input checked="" type="checkbox"/> Issue a Work Change Directive or Change Order for the described changes	
Basis of Compensation:	
<input type="checkbox"/> Unit Prices <input checked="" type="checkbox"/> Lump Sum calculated using Cost of Work provisions in General Conditions Paragraph 13.01 <input type="checkbox"/> Time and Materials using Cost of Work provisions in General Conditions Paragraph 13.01	
Required Documentation:	
<input checked="" type="checkbox"/> Detailed cost breakdown attached showing labor, materials, equipment, and all other costs for this change <input type="checkbox"/> Schedule attached to show impacts and justification for requested change in Contract Times	
Total Change Proposal Amount: <u>\$20,586.03</u>	
Adjustment in Contract Times (days): <u>0</u>	

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Engineer:	<u>Freese and Nichols, Inc</u>		<u>PFL16607</u>

The compensation offered for this Change Proposal is the full, complete, and final compensation for all costs the Contractor may incur as a result of or relating to this change whether said costs are known, unknown, foreseen, or unforeseen at this time, including without limitation, any cost for delay, extended overhead, ripple or impact cost, or any other effect on changed or unchanged Work as a result of this Contract Modification. Requested changes in Contract Times are the complete and final adjustments for direct impacts to the ability of the Contractor to complete the Work within the Contract Times and are the only adjustments to which the Contractor is entitled. Except as modified hereby, the Contract Documents and all of the terms and provisions thereof remain in full force and effect.

Certified by: Dennis Berger **Date:** 5/28/2020

Action:

Field Order No.: _____ Issued Change Order No.: 0001 Issued

Contract Amendment No.: _____ Issued Work Change Directive No.: _____ Issued

Change Proposal Not Accepted Additional information required. See comments. Cancelled

Comments:
To be included in CO0001 along with CP0001, CP0002, CP0005, CP0006 and CP0007

Response by:  **Date:** 6/10/2020



May 28, 2020

Mr. Matt Gaughan
Plus Six Engineering
15500 Sun Light Near Way B
Pflugerville, TX 78660

Re: City of Pflugerville, Texas
Central WWTP Expansion Phase I Improvements
Project No. PFL16607
CP003r1 Cody Builders – Embeds Material Change

Dear Mr. Gaughan,

Please find the attached pricing and quotations for Cody Builders. BAR Constructors, Inc. requests an ADD to the contract amount of \$20,586.03 and a time extension of 0 calendar days. Below are those inclusions and exclusions associated with this work.

Inclusions:

- Cody Builder's changes in embed material and extra supports
- All "Activities" associated with Cody Builders additional supports

Exclusions:

- Any exclusions stated in the attached quotation(s).
- Anything not explicitly stated as an inclusion.

Sincerely,

Dennis J. Berger
Project Manager
BAR Constructors, Inc.

BAR Constructors, Inc. - Cost Detail Worksheet

Job Name: Central WWTP Expansion Phase 1

Job # 279

Date: 05/28/2020

Proposal No. CP003r1

Labor	Cody Builders - Steel to Alum							
	Rate	Unit	Day 1	Day 2	Day 3	Day 4	Total	
Foreman	\$ 40.00	4	HR	1				\$ 160.00
Crane operator	\$ 32.00	8	HR	1				\$ 256.00
Labors (4)	\$ 24.00	32	HR	1				\$ 768.00
								\$ -
								\$ -
Subtotal								\$ 1,184.00
Payroll Taxes and Insurance (55%)								\$ 651.20
Total Labor								\$ 1,835.20

Non-Taxed Material	Cody Builders - Steel to Alum							
	Rate	Unit	Day 1	Day 2	Day 3	Day 4	Total	
Cost of Aluminum Support Beam and Embed Changes	\$ 16,554.00	1	Day					\$ 16,554.00
Credit for Galvanized Embeds at Cable Trench	\$ (2,150.00)	1	Day					\$ (2,150.00)
								\$ -
								\$ -
Subtotal								\$ 14,404.00

Taxed Material	Cody Builders - Steel to Alum							
								\$ -
								\$ -
Subtotal Taxed Material + 8.25%								\$ -

General Condition Material	Cody Builders - Steel to Alum							
Small Tools 5% labor								\$ 59.20
Total Material								\$ 14,463.20

Equipment	Cody Builders - Steel to Alum							
	Rate	Unit	Day 1	Day 2	Day 3	Day 4	Total	
Cherry Picker - 55 Ton	\$ 750.00	1	Day					\$ 750.00
								\$ -
								\$ -
Subtotal								\$ 750.00
Fuel, Oil, Grease & Maintenance (40% fo Equipment)								\$ 300.00
Tax @ 8.25%								\$ 61.88
Total Equipment								\$ 1,111.88

Subcontractor	Cody Builders - Steel to Alum							
								\$ -
								\$ -
								\$ -
Total Subcontractor								\$ -

Totals	Labor	Subcontractor	Material	Equipment	Total
Totals	\$ 1,835.20	\$ -	\$ 14,463.20	\$ 1,111.88	\$ 17,410.28
Insurance (1.8%)					\$ 313.38
Overhead and Profit (5% for subs)					\$ -
Overhead and Profit (15% Self Performed Work)					\$ 2,658.55
Subtotal					\$ 20,382.21
Bond @ 1%					\$ 203.82
Total					\$ 20,586.03

To: Bar Constructor Inc.
Attn: Dennis Berger

Cody Builders Supply
12002 N Lamar Blvd
Austin, TX 78753
Ph 512/339-9834
Fax 512/339-0165
metals@codybuilderssupply.com



CHANGE ORDER

Date: 05/27/2020

CO NO.: PF-CO-02-R1

Project: Pflugerville Central WWTP Phase1

SUBJECT Aluminum support beams and Cable trench embeds changes

REFERENCE (RFI/Dwg/Etc): RFI009 and Submittal response

REQUESTED BY: Dennis Berger

Information/Explanation of Change:

This change order request includes change of aluminum support beams at S-AS-6, S-AS13, additional aluminum support beams at S-HW-11 per RFI009 and cable trench embeds material change from galvanized to aluminum per submittal response.

Pricing:

Cost of aluminum support beam and embed changes	+\$16,554
Credit for galv. embeds	+\$ 2,150
This change order total	+\$14,404

Attachments: None

SCHEDULE IMPACT? YES NO TBD ADD SUBTRACT _____ number of _____

PREPARED BY: Erdem Biyikli APPROVED BY: _____

Note: Notice to proceed is considered acceptance of price quoted.

COR-2			Contract drawings		RFI009							
Sheet	Item	Item	Qty.	Length	Qty.	Length	Diff. feet	Unit weight	Diff. Lbs	Unit Price	Cost	
S-AS-6	Alm. Beam	I10x10.3	3	38	4	56	18	10.3	185.4	7.02	1,301.51	
S-AS-13	Alm. Beam	I12x12.7	2	24	4	48	24	12.7	304.8	7.02	2,139.70	
S-HW-11	Alm. Beam	I10x8.65	0	0	3	48	48	8.65	415.2	7.02	2,914.70	
	Alm. Bent plates/hardware								147	25.34	3,724.98	
S-UV-2	Alm. Embed angles	2x2x1/4				256	256	1.11	284.16	16.6	4,717.06	
S-UV-2	PL3/8 Straps	PL3/8				12	12	5.295	63.54	16.6	1,054.76	
S-UV-2	FB	3/8x3/8				256	256	0.165	42.24	16.6	701.18	
							Alm. Total		1052.4	15.73	16,553.89	
							Credit for Galv. Embeds					(2,150.00)
							COR-02 Total					14,403.89

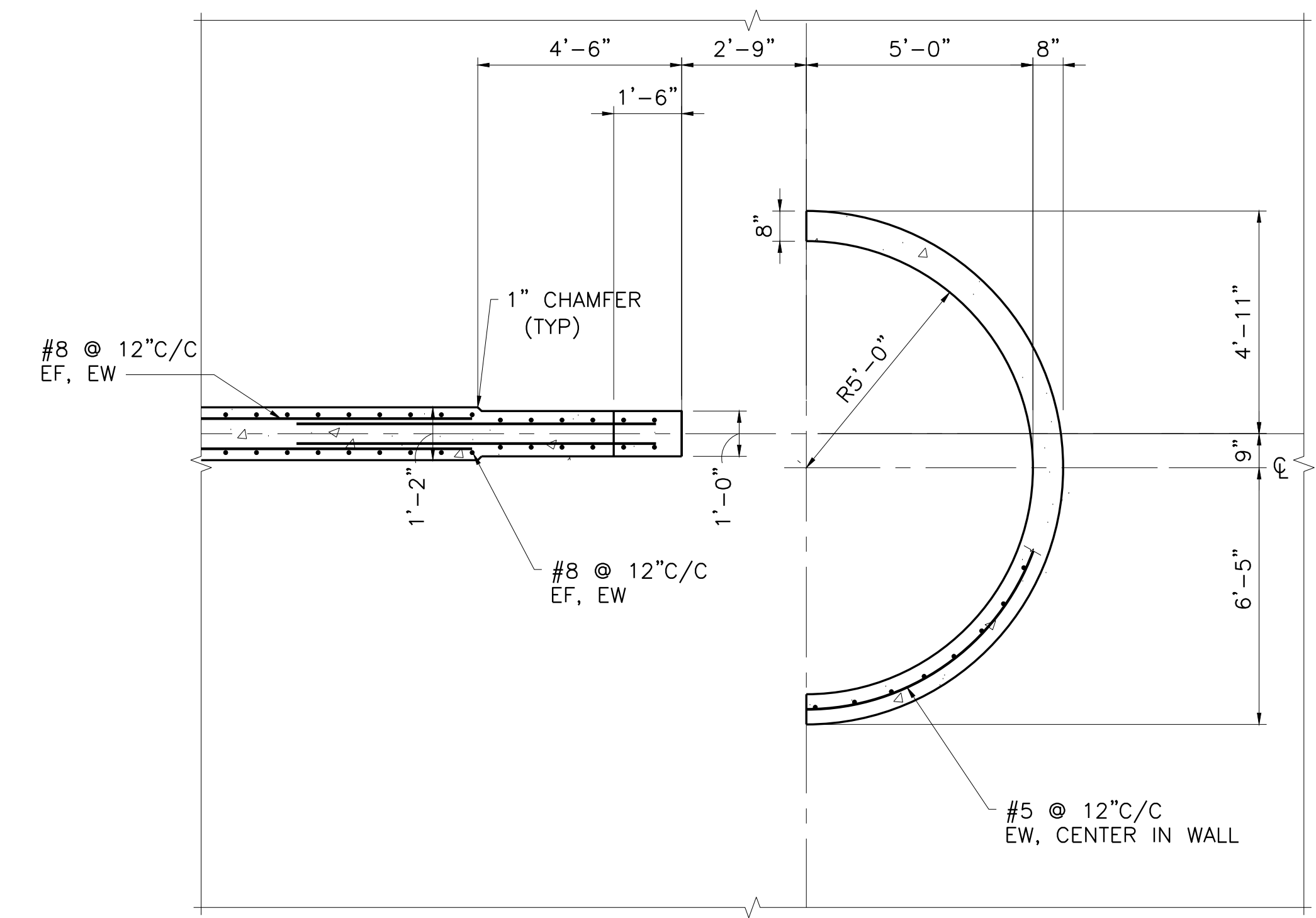
ISSUED FOR CONSTRUCTION ON 11/04/19

Freese and Nichols, Inc. Texas Registered Engineering Firm F-2144

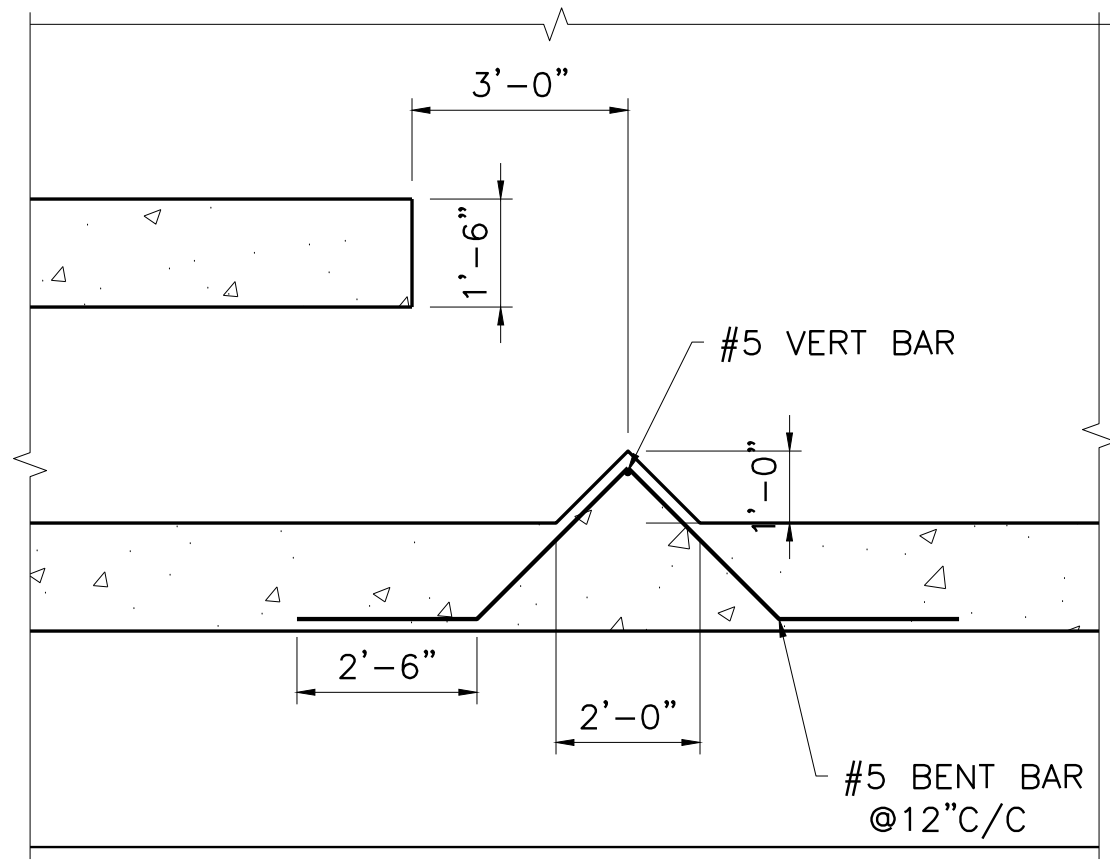


FREES & NICHOLS
10431 Morado Circle, Suite 300
Austin, Texas 78759
Phone - (512) 617-3100
Fax - (512) 617-3101

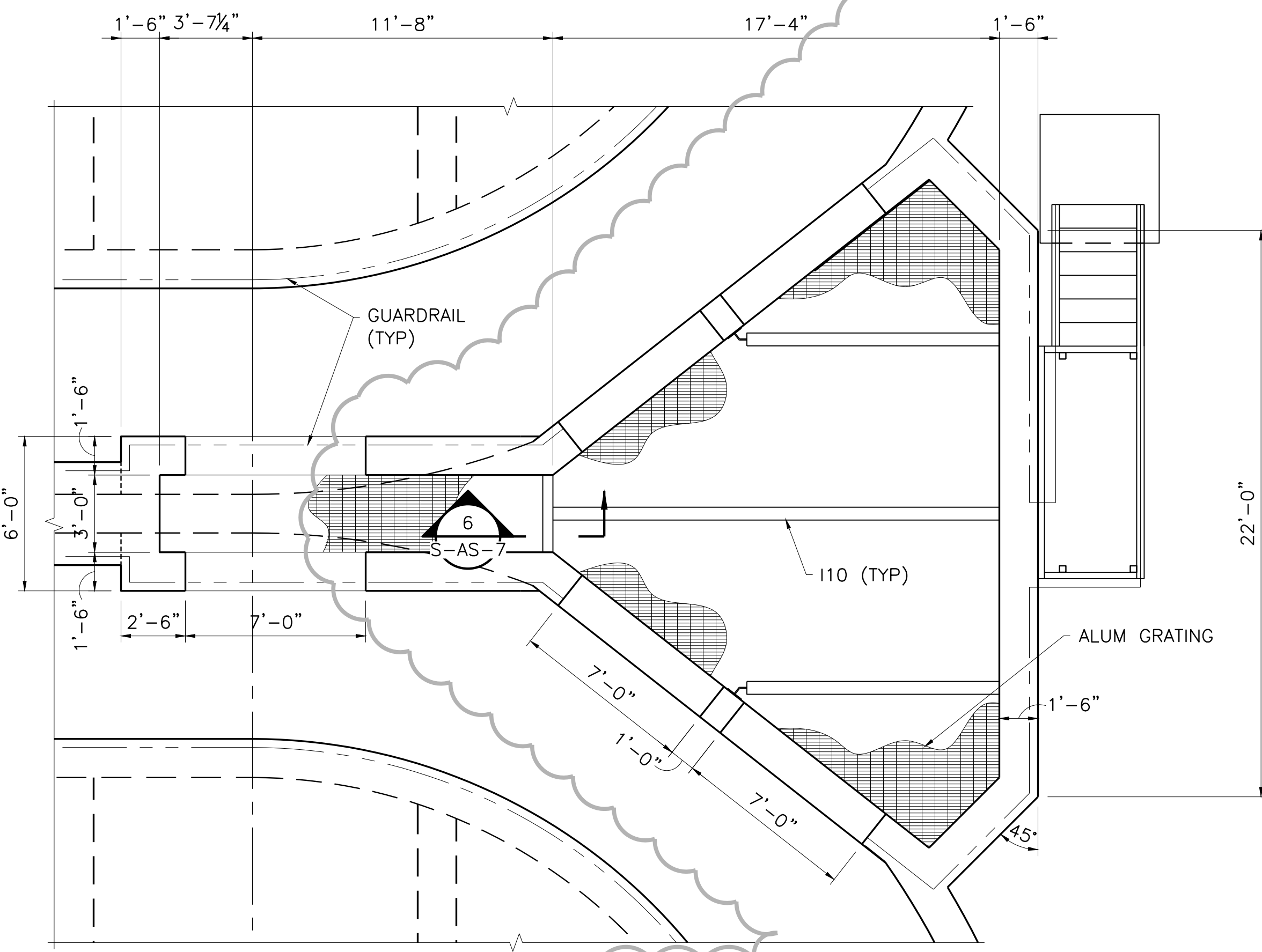
CITY OF PFLUGERVILLE
**CENTRAL WWTP EXPANSION
PHASE I IMPROVEMENTS**
STRUCTURAL
BNR BASIN PLAN DETAILS



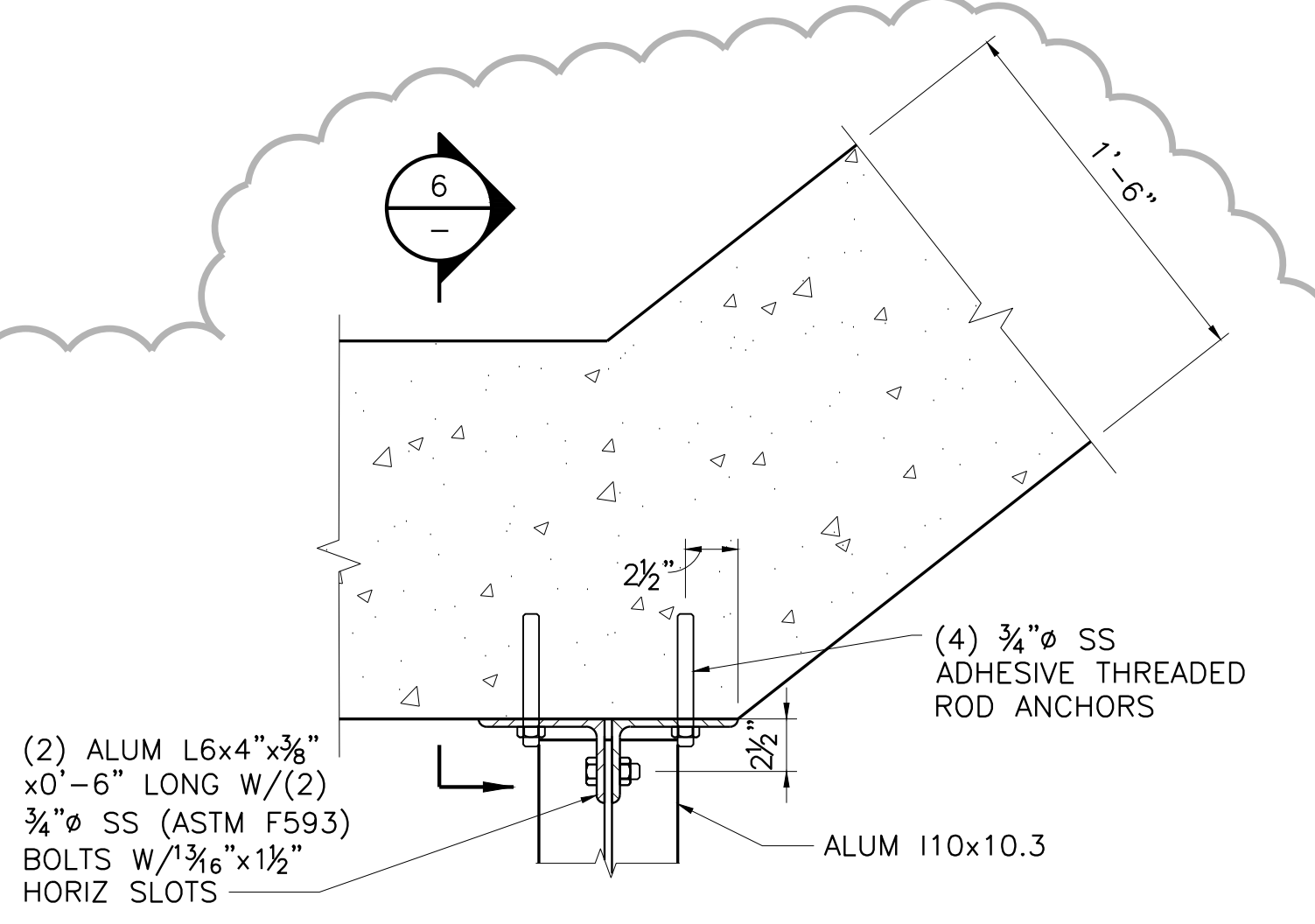
1 PLAN DETAIL
S-AS-1 3/8"=1'-0"



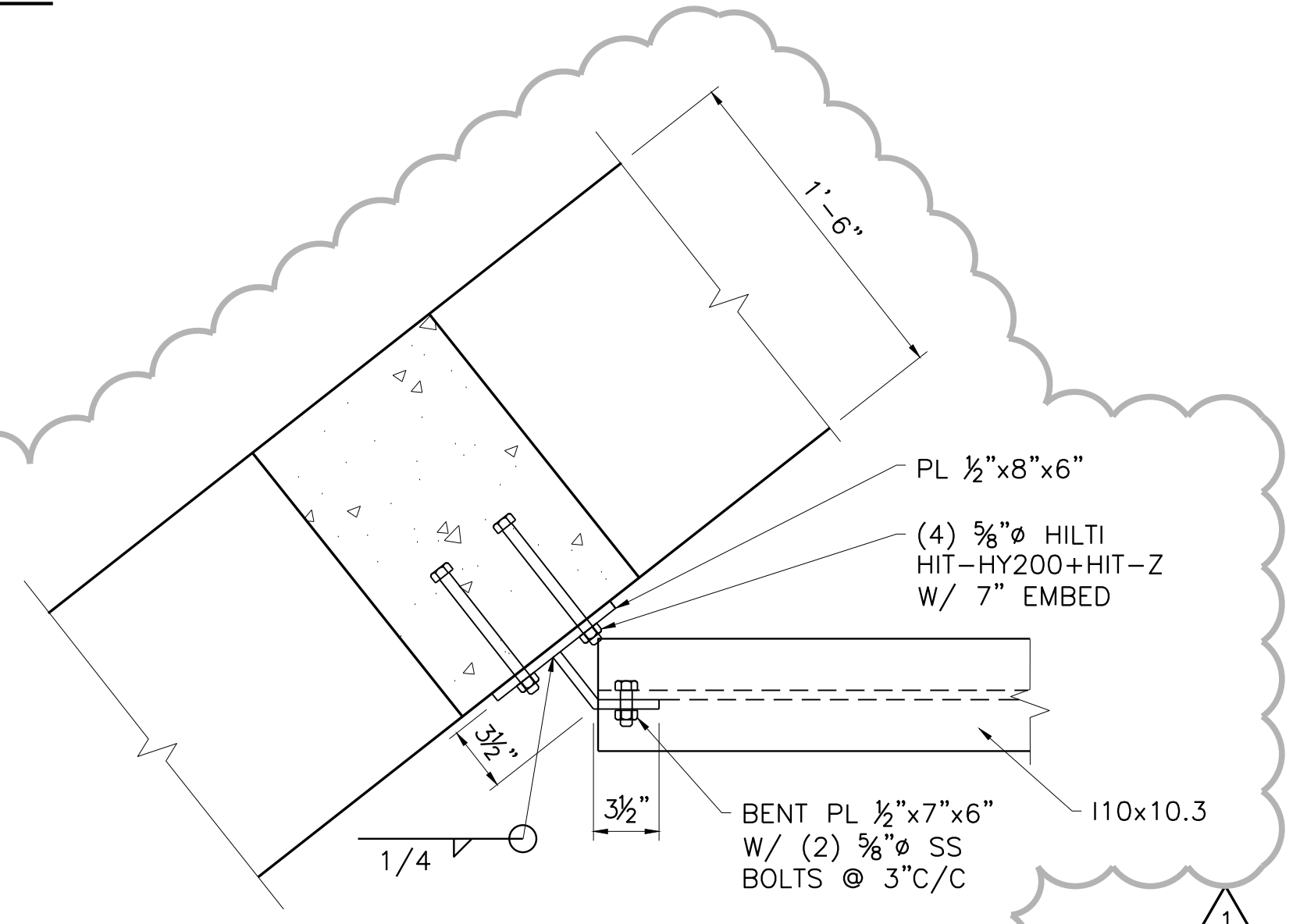
2 PLAN DETAIL
S-AS-1 3/8"=1'-0"



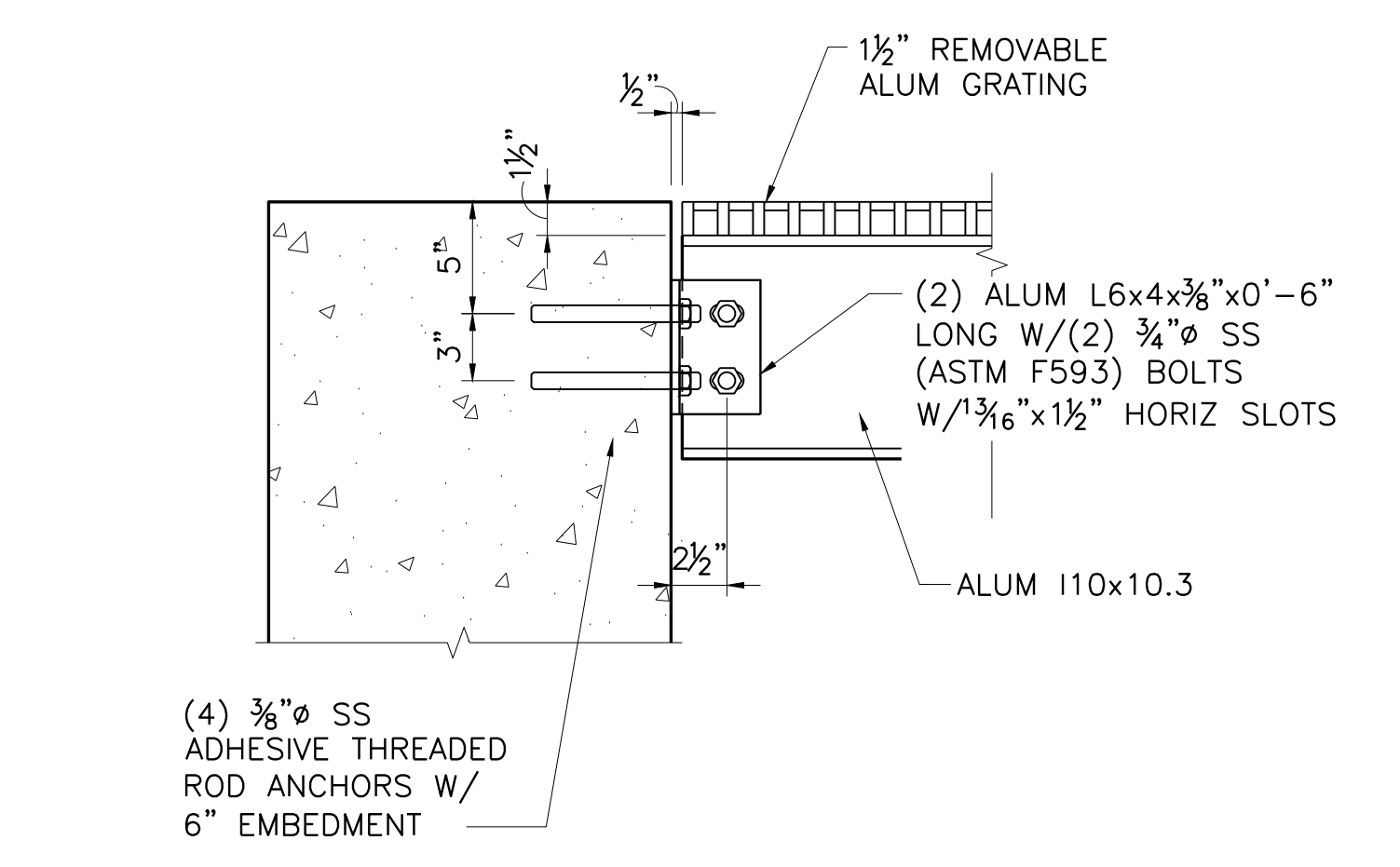
3 EFFLUENT BOX - ENLARGED DETAIL
S-AS-2 1/4"=1'-0"



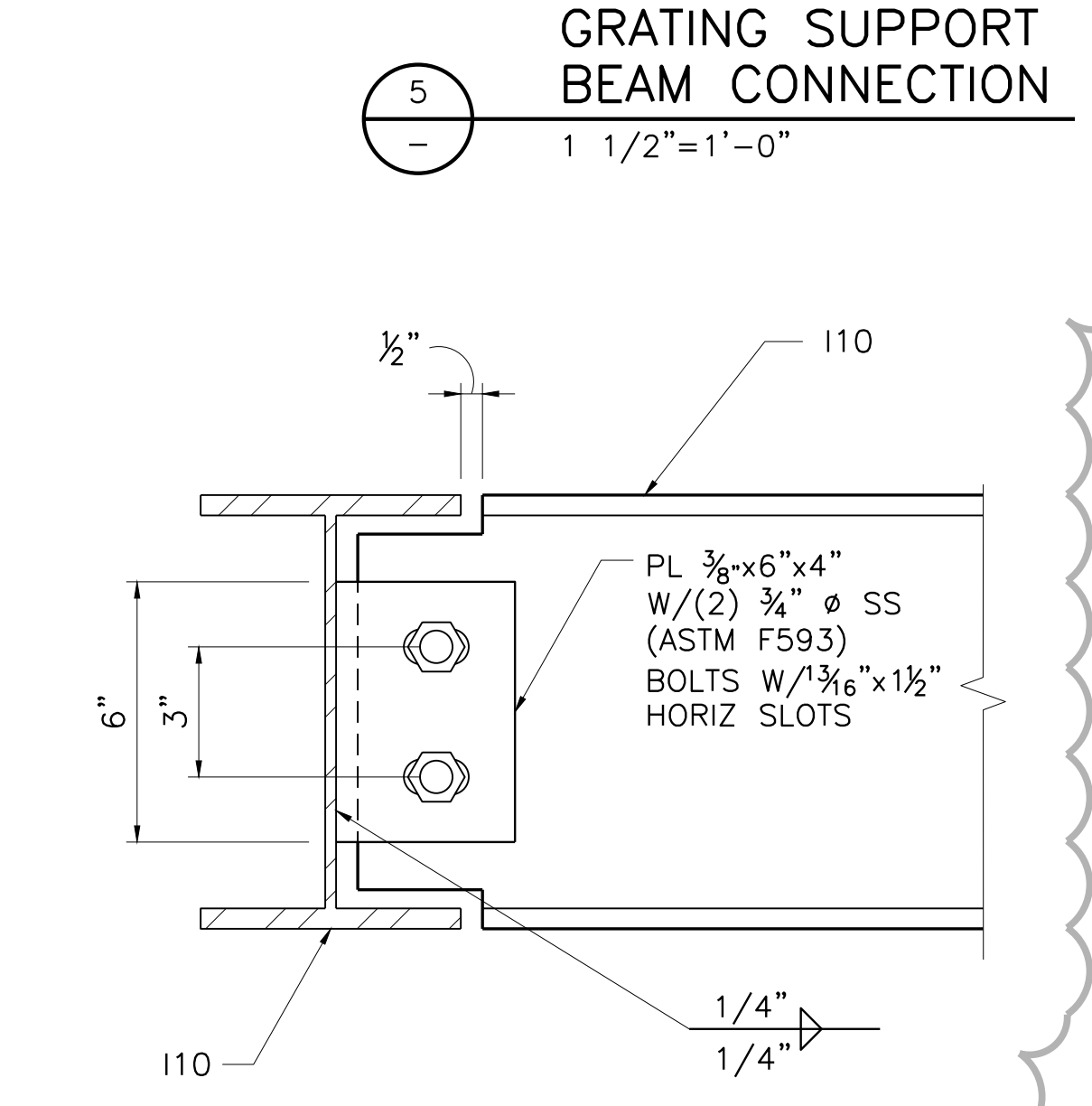
4 ALUMINUM GRATING SUPPORT BEAM PLAN
1 1/2"=1'-0"



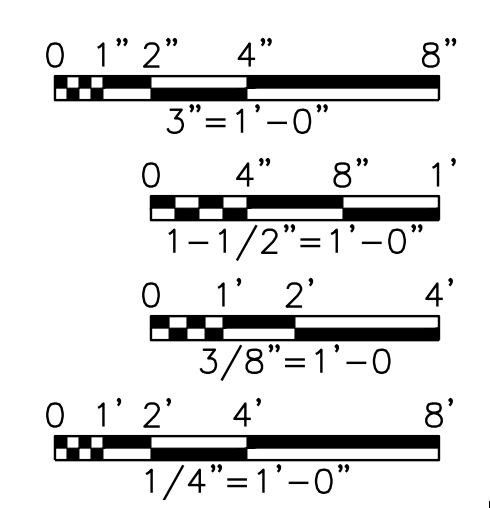
5 GRATING SUPPORT BEAM CONNECTION
1 1/2"=1'-0"



6 ALUMINUM GRATING SUPPORT BEAM SECTION
1 1/2"=1'-0"



7 COPED BEAM SECTION
3"=1'-0"



NO.	ISSUE	BY	DATE	DESIGNED	DATE	DESIGNED	DATE	DESIGNED	DATE	FILE NAME	AD
0	ADDENDUM NO. 2			MRR	09/04/19	REVISION	JLM	AD		ST-BNR-DT-FNDN01.dwg	

Bar is one inch on original drawing, if not one inch on this sheet, adjust scale.

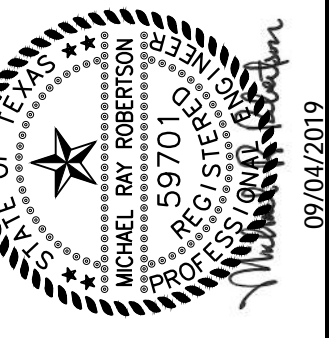
SHEET **S-AS-6**

SEQ. 122

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ISSUED FOR CONSTRUCTION
ON 11/04/19

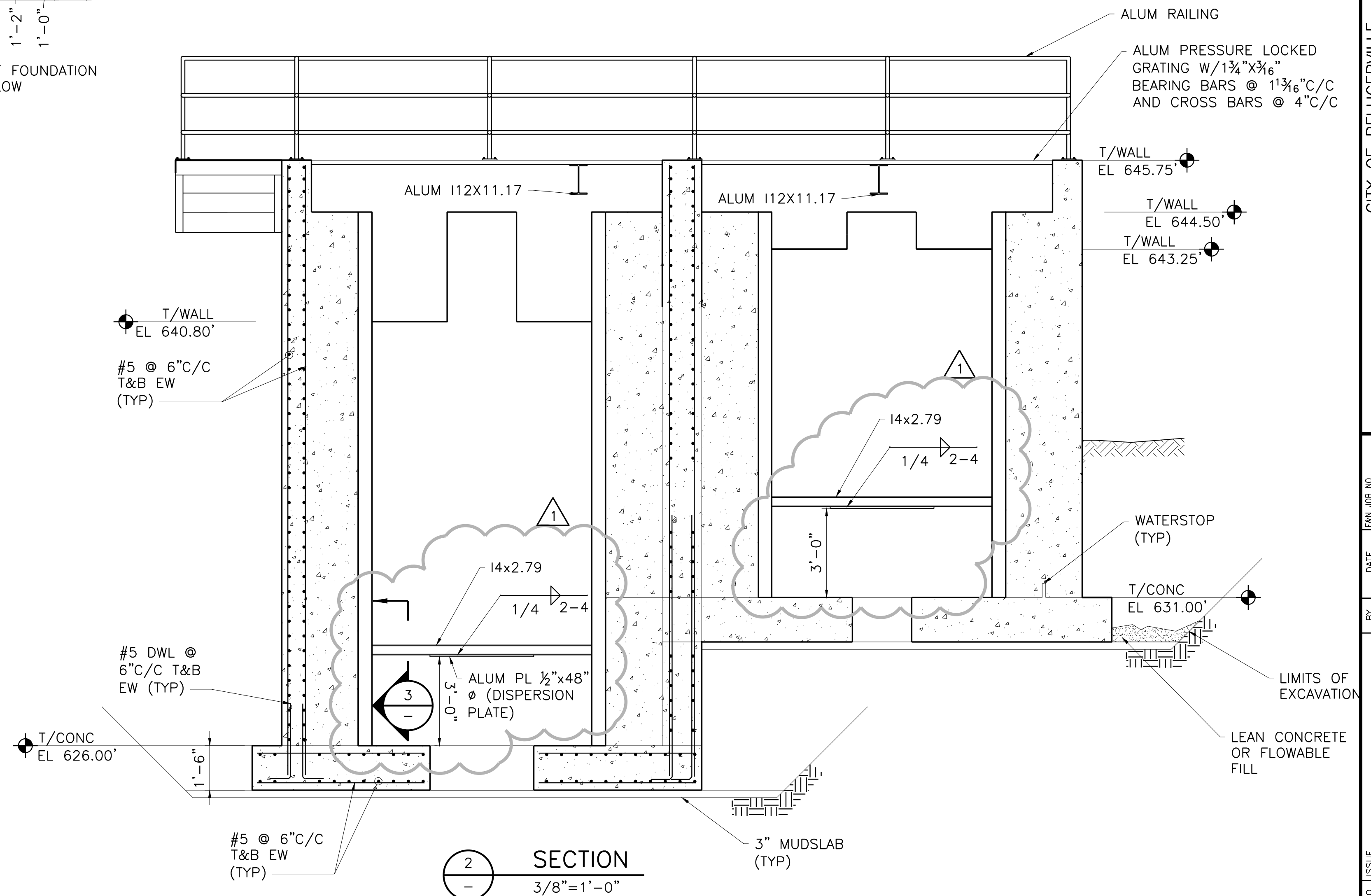
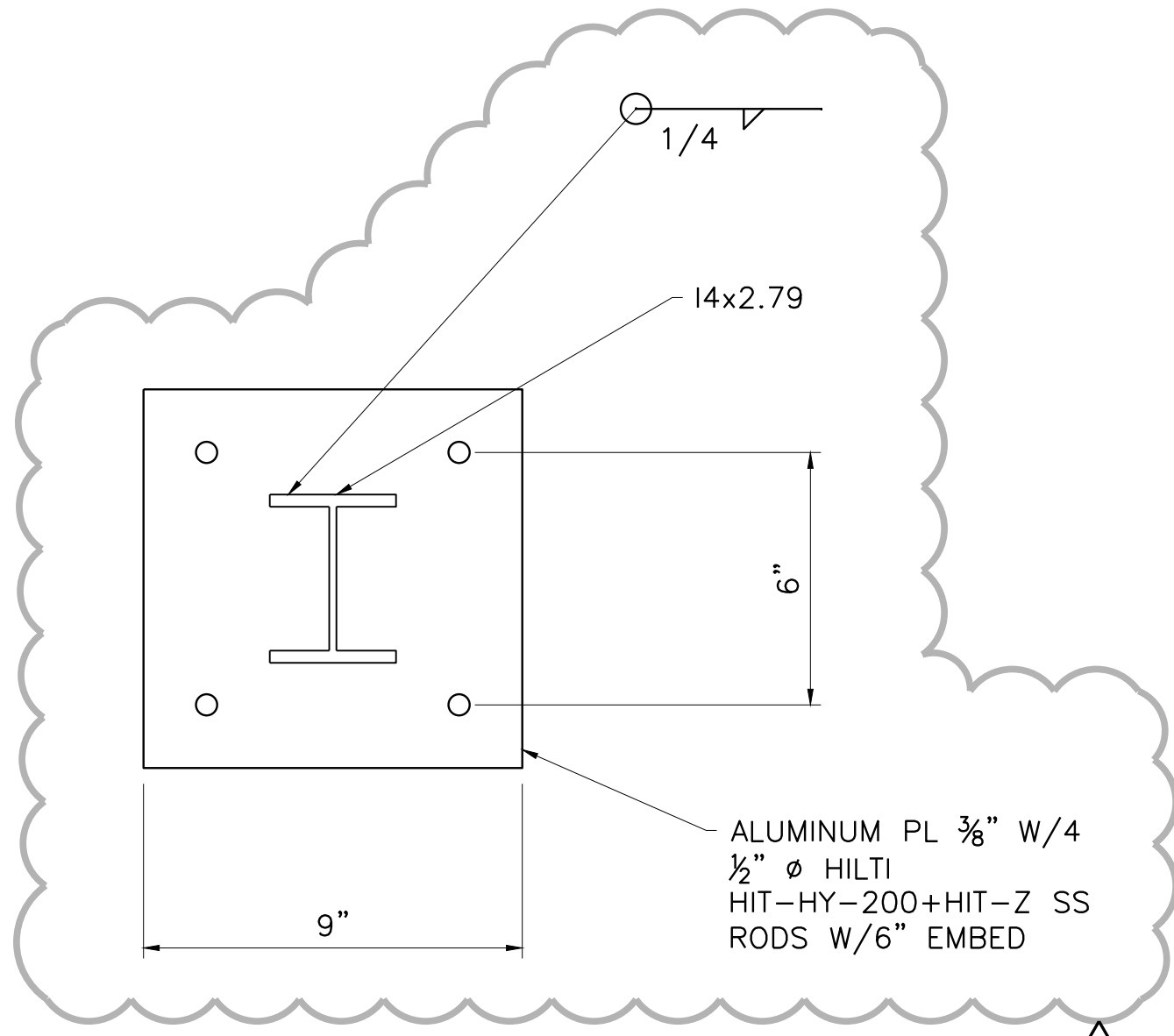
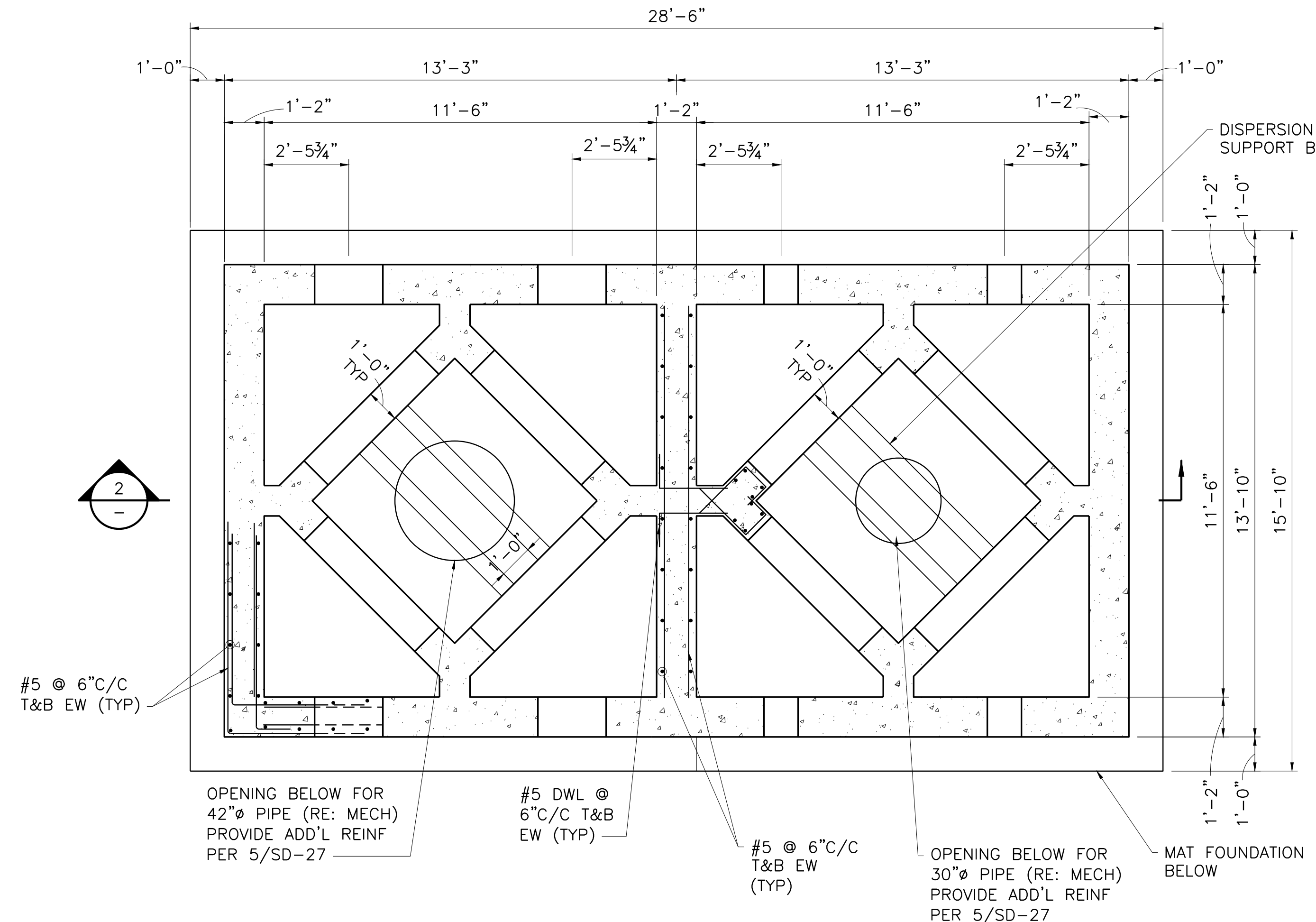
Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144



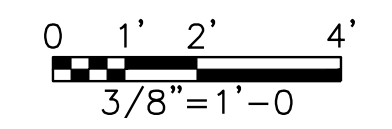
FREES & NICHOLS
10431 Morado Circle, Suite 300
Austin, Texas 78759
Phone - (512) 617-3100
Fax - (512) 617-3101

CITY OF PFLUGERVILLE
**CENTRAL WWTP EXPANSION
PHASE I IMPROVEMENTS**
STRUCTURAL
**INFLUENT & RAS SPLITTER BOX
TOP AND SECTIONAL PLANS**

NO.	ISSUE	BY	DATE	DESIGNED	DRAWN	REVISION	CHECKED	AD
				MFR	MFR	MDB		
ADDENDUM NO. 2		MRR 09/04/19						
Bar is one inch on original drawing, if not one inch on this sheet, adjust scale.								
VERIFY SCALE								
FILE NAME: ST-SBX-DT-CONC02.dwg								
SHEET S-AS-13								
SEQ. 129								



NOTES:
1 WALL NOT SHOWN



ALAU Rel: 21.us (LMS tech)
Filename: N:\ST\ST-SBX-DT-CONC02.dwg
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Saved By: 02856

Project: <u>Central Wastewater Treatment Plant</u>	Project Number: _____
Owner: <u>City of Pflugerville</u>	<u>88</u>
Contractor: <u>BAR Constructors, Inc</u>	<u>279</u>
Engineer: <u>Freese and Nichols, Inc.</u>	<u>PFL16607</u>

RFI No.: 009 **Description:** Missing dimensions of gratings.

Specification: 05 53 00

Drawing No.: _____ **Detail Description:** Missing dimensions of gratings.

Information Requested:

Look through submittal for details on grates that are lacking dimensions within the drawing plans. Vendor has gone ahead and added some textbox callouts of all information required as well as the text in purple text containing, "???", specifically calling out for those details. We went ahead and found some of the dimensions with the help of the drawing plans which can be found in red text, but would like a confirmation if those dimensions are correct.

Attachments:

Submitted by: Alejandro Guevara Date: 2/7/2020

Response: See attached for engineer's response to RFI009

Response by: Luis Varela Date: 3/30/2020



Request For Information

PROJECT	Central Wastewater Treatment Plant Expansion- Phase 1	PROJECT NUMBER	
OWNER	City of Pflugerville	88	
BUILDER	BAR Constructors, Inc.	279	
DESIGNER	Freese and Nichols, Inc.	PFL16607	
CM	Plus Six Engineering		
RFI No.	RFI-009	Builder Submittal No.	
Specification	05 53 00		
Drawing / Detail			
Builder Requests: Information for the items described below or in the attached material referenced below:			
	See attached RFI.		
Builder's Proposed Solution:			
Attachment	RFI-009-MissingDimensionsforGratings-Coby Gee-Pending.pdf		
Requested By	Coby Gee	Date	02-08-2020
Response: Information for the items described above or in the attached material referenced:			
	Refer to attached		
Status	Filed as Received		
Action	Final Distribution		
Attachments	RFI-009-MissingDimensionsforGratings-Chris Callahan-Pending.pdf RFI-009-MissingDimensionsforGratings-Coby Gee-Pending.pdf		
Response By	Chris Callahan	Date	03-30-2020

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NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 66".
 Additional Support Required. (By Others)

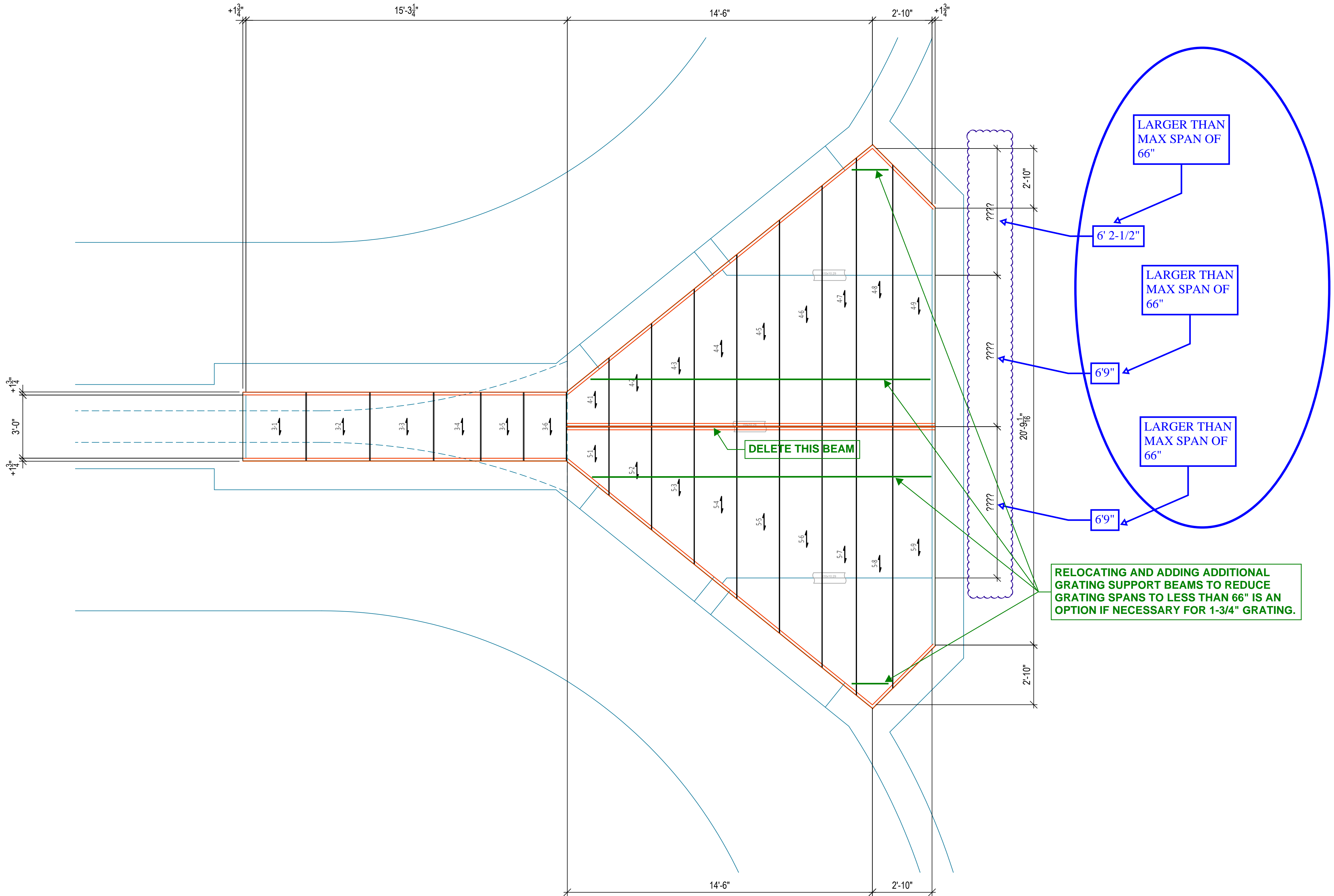
OHIO GRATINGS, INC.

Bill of Materials

19SGI4 (1 3/4") Striated
 Mill, Swaged I-Bar Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	3-1	2'-11 7/8"	3'-3 1/2"	0"	Pending
1	3-2	2'-11 7/8"	3'-3 1/2"	0"	Pending
1	3-3	2'-11 7/8"	3'-3 1/2"	0"	Pending
1	3-4	2'-2 3/8"	3'-3 1/2"	0"	Pending
1	3-5	2'-0"	3'-3 1/2"	0"	Pending
1	3-6	2'-0"	3'-3 1/2"	0"	Pending
1	4-1	2'-0"	3'-3 1/8"	0"	Pending
1	4-2	2'-0"	4'-10 3/4"	0"	Pending
1	4-3	2'-0"	6'-6 1/2"	0"	Pending
1	4-4	2'-0"	3'-2"	0"	Pending
1	4-5	2'-0"	3'-9 5/8"	0"	Pending
1	4-6	2'-0"	11'-5 1/4"	0"	Pending
1	4-7	1'-7 1/4"	12'-9 1/16"	0"	Pending
1	4-8	1'-8 7/16"	13'-4 11/16"	0"	Pending
1	4-9	2'-0"	12'-5"	0"	Pending
1	5-1	2'-0"	3'-3 1/8"	0"	Pending
1	5-2	2'-0"	4'-10 3/4"	0"	Pending
1	5-3	2'-0"	6'-6 3/8"	0"	Pending
1	5-4	2'-0"	8'-2"	0"	Pending
1	5-5	2'-0"	9'-9 5/8"	0"	Pending
1	5-6	2'-0"	11'-5 1/4"	0"	Pending
1	5-7	1'-7 1/4"	12'-9 1/16"	0"	Pending
1	5-8	1'-8 7/16"	13'-4 11/16"	0"	Pending
1	5-9	2'-0"	12'-5"	0"	Pending

Preliminary

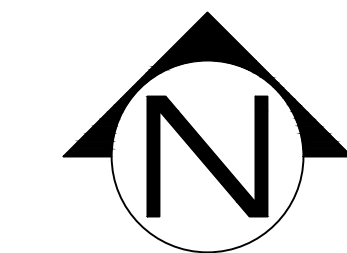
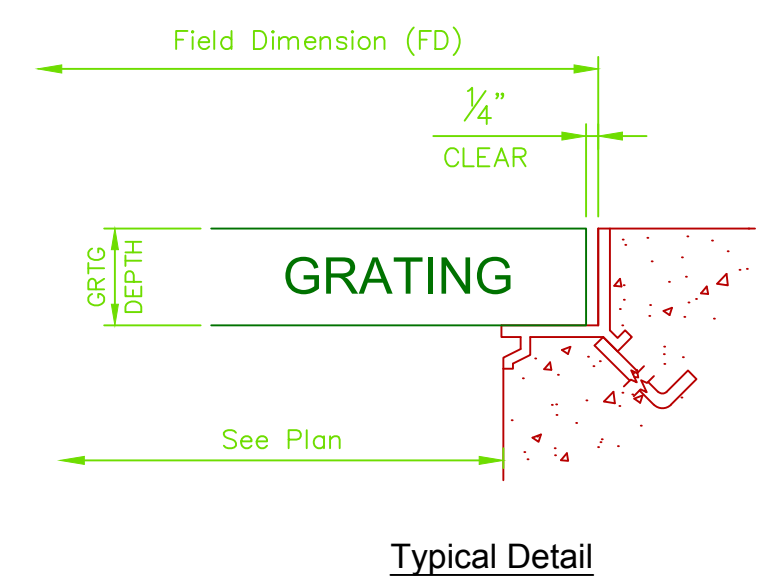


Extras Table

Band 1 3/4" x 3/16" Trim Weld Aluminum
 Saddle Clip, SS, 19 Spaced (shipped loose)
 Tek Screw #5, SS, 2 1/2" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
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Partial Plan - Effluent Box Grating Layout

3/8"=1'-0" (1 Req'd)
 Ref. Dwg #: Contract Drawing S-AS-2 (Rev 1) & S-AS-6 (Rev 1)

Revisions Record

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a tight fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

Supporting steel with flanges greater than 1/4" in thickness may need to be pre-drilled in field prior to fastening down with a standard tek screw. Cutting cross bars in the field may be necessary in some locations for fastener clearance.

The ends of all bearing bars within a grating panel must be properly supported at ends of panels and within cutouts. Ohio Gratings recommends 1" of bearing surface for grating bearing bar depths up to 2 1/2" and 2" of bearing surface for grating bearing bar depths 2 1/2" and over. Bearing bars should not be cantilevered beyond their supports.

Cutout sizes may be smaller or larger than the intended design due to the nature of grating and the standard locations of bearing bars.

Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Indicates the tagged end of panels for aligning cross rods
- Indicates the span direction of load carrying bars

This drawing and the information it contains is the property of Ohio Gratings, Inc. This drawing is not to be traced or copied, nor are its contents to be misused in any way.

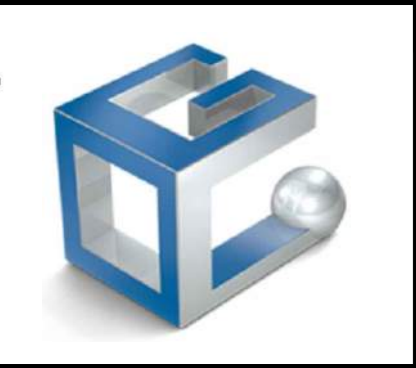
Grating panels are manufactured and cut with tolerances in accordance with the National Association of Architectural Metal Manufacturers (NAAMM).

No back charges will be accepted unless written authorization is given in advance by Ohio Gratings, Inc.

OHIO GRATINGS, INC.

OGI Canton, OH: 5299 Southway St SW, Canton, OH 44706, Ph: 1-800-321-9800
 OGI Houston, TX: 5500 Cedar Crest, Houston, TX 77087, Ph: 1-888-207-9392
 OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com



Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
Sht	1B
OGI Q:	863600
OGI SO:	
Seq:	55128-Rev 1

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.

OHIO GRATINGS, INC.

Bill of Materials

15SG4 (1 1/2" x 3/16") Serrated
 Mill, Swaged Rectangular Bar Grating, Aluminum

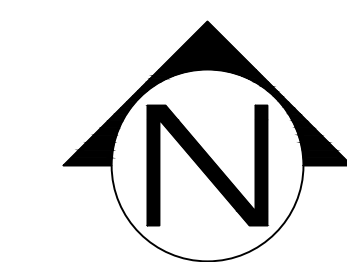
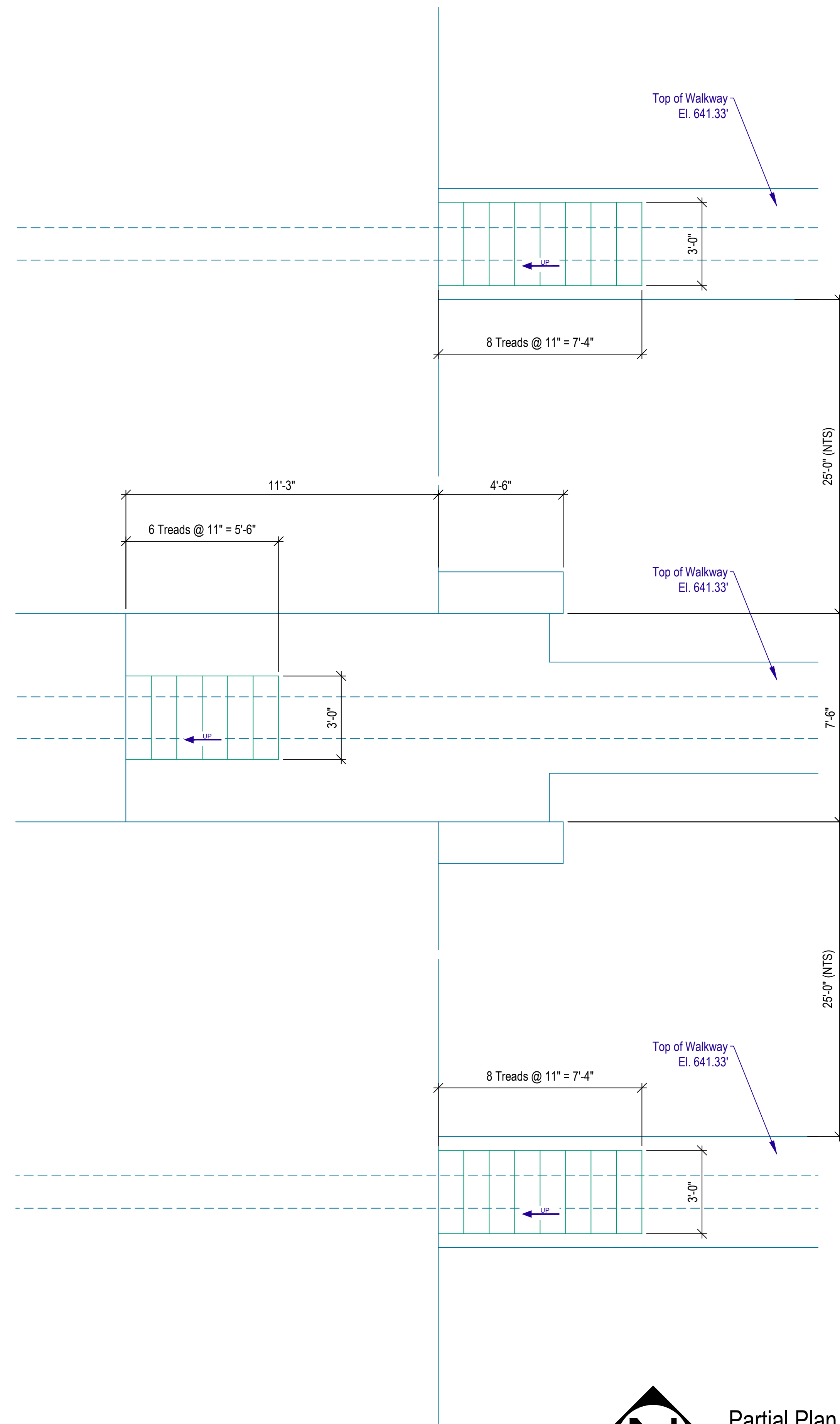
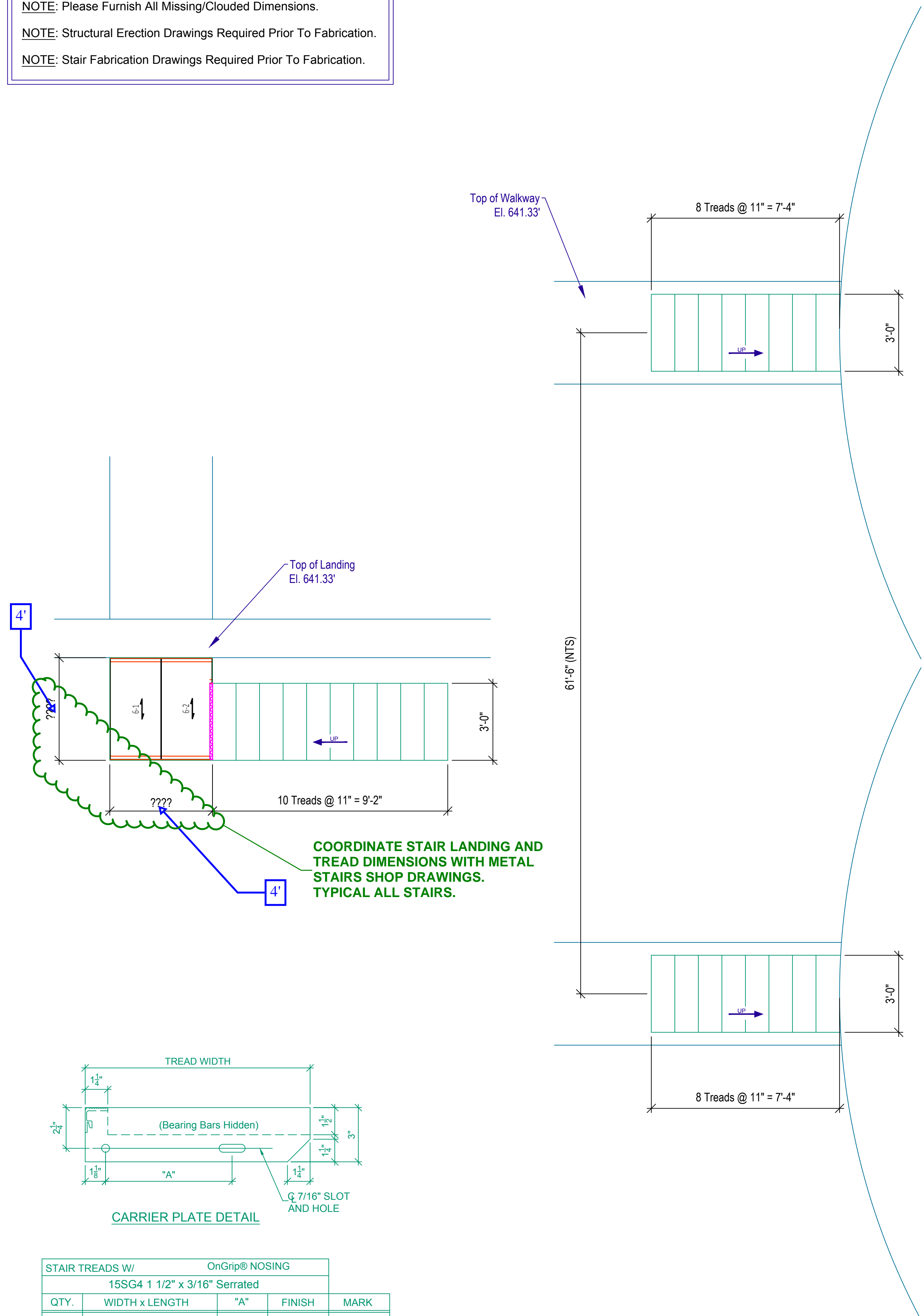
Qty	Mark	Finish Width	Finish Length	EG	Status
1	6-1	1'-11 5/8"	3'-11 1/2"	0"	Pending
1	6-2	1'-11 15/16"	3'-11 1/2"	0"	Pending

Extras Table

Band 1 1/2" x 3/16" Trim Weld Aluminum
 OnGrip® Nosing Aluminum
 Saddle Clip, SS, 6 Spaced (shipped loose)
 Tek Screw #5, SS, 2" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
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Partial Plan - BNR Basins Stairs
 3/8"=1'-0"
 (1 Req'd)

Ref. Dwg #: Contract Drawing S-AS-2 (Rev 1)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

Supporting steel with flanges greater than 1/4" in thickness may need to be pre-drilled in field prior to fastening down with a standard tek screw. Cutting cross bars in the field may be necessary in some locations for fastener clearance.

The ends of all bearing bars within a grating panel must be properly supported at ends of panels and within cutouts. Ohio Gratings recommends 1" of bearing surface for grating bearing bar depths up to 2 1/2" and 2" of bearing surface for grating bearing bar depths 2 1/2" and over. Bearing bars should not be cantilevered beyond their supports.

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Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Indicates the tagged end of panels for aligning cross rods
- Indicates the span direction of load carrying bars

This drawing and the information it contains is the property of Ohio Gratings, Inc. This drawing is not to be traced or copied, nor are its contents to be misused in any way.

Grating panels are manufactured and cut with tolerances in accordance with the National Association of Architectural Metal Manufacturers (NAAMM).

No back charges will be accepted unless written authorization is given in advance by Ohio Gratings, Inc.

OHIO GRATINGS, INC.

OGI Canton, OH: 5299 Southway St SW, Canton, OH 44706, Ph: 1-800-321-9800

OGI Houston, TX: 5500 Cedar Crest, Houston, TX 77087, Ph: 1-888-207-9392

OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	
Dwg:	863600
Sht:	1C
OGI Q:	863600
OGI SO:	
Seq:	55128-REL

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.

OHIO GRATINGS, INC.

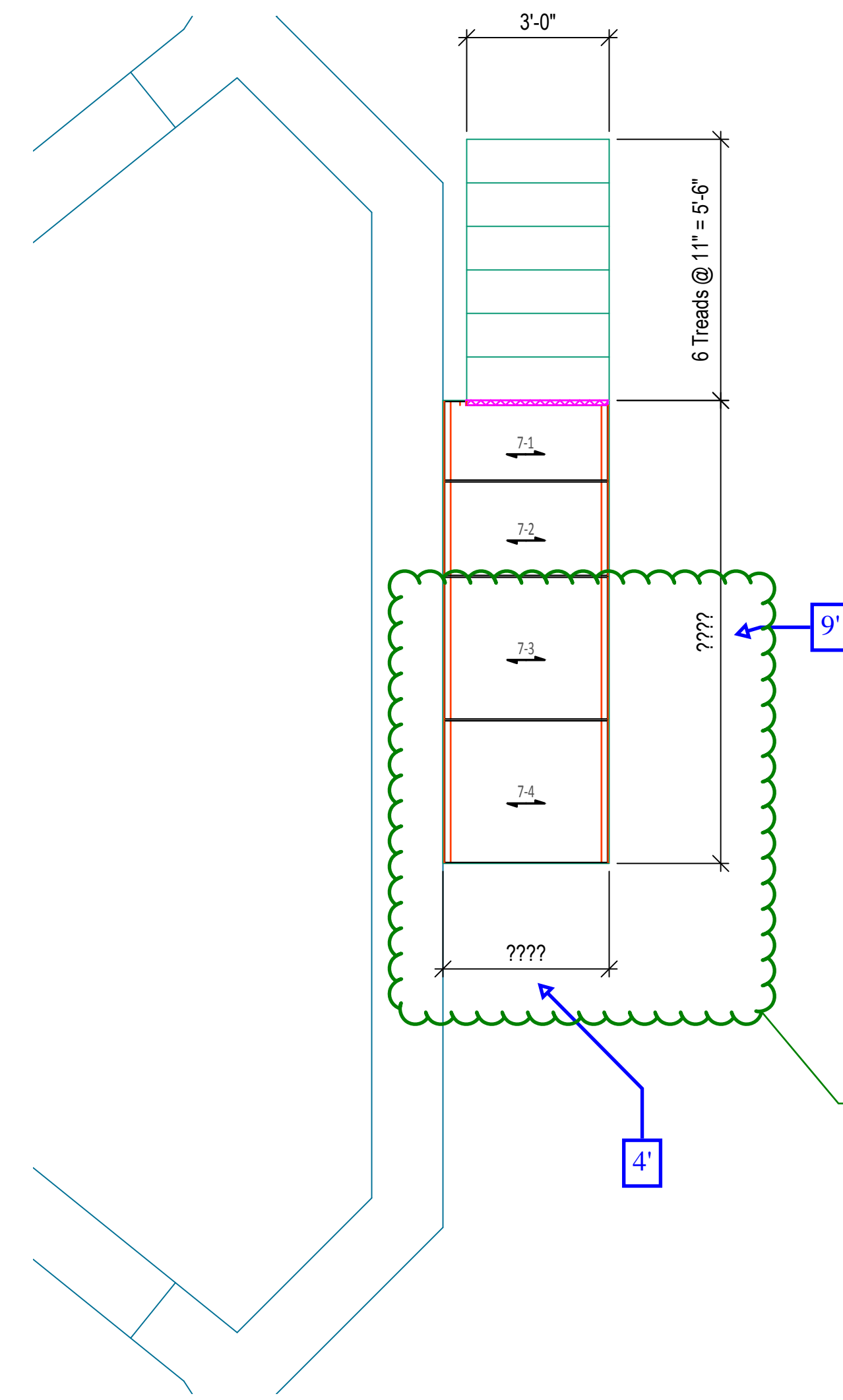
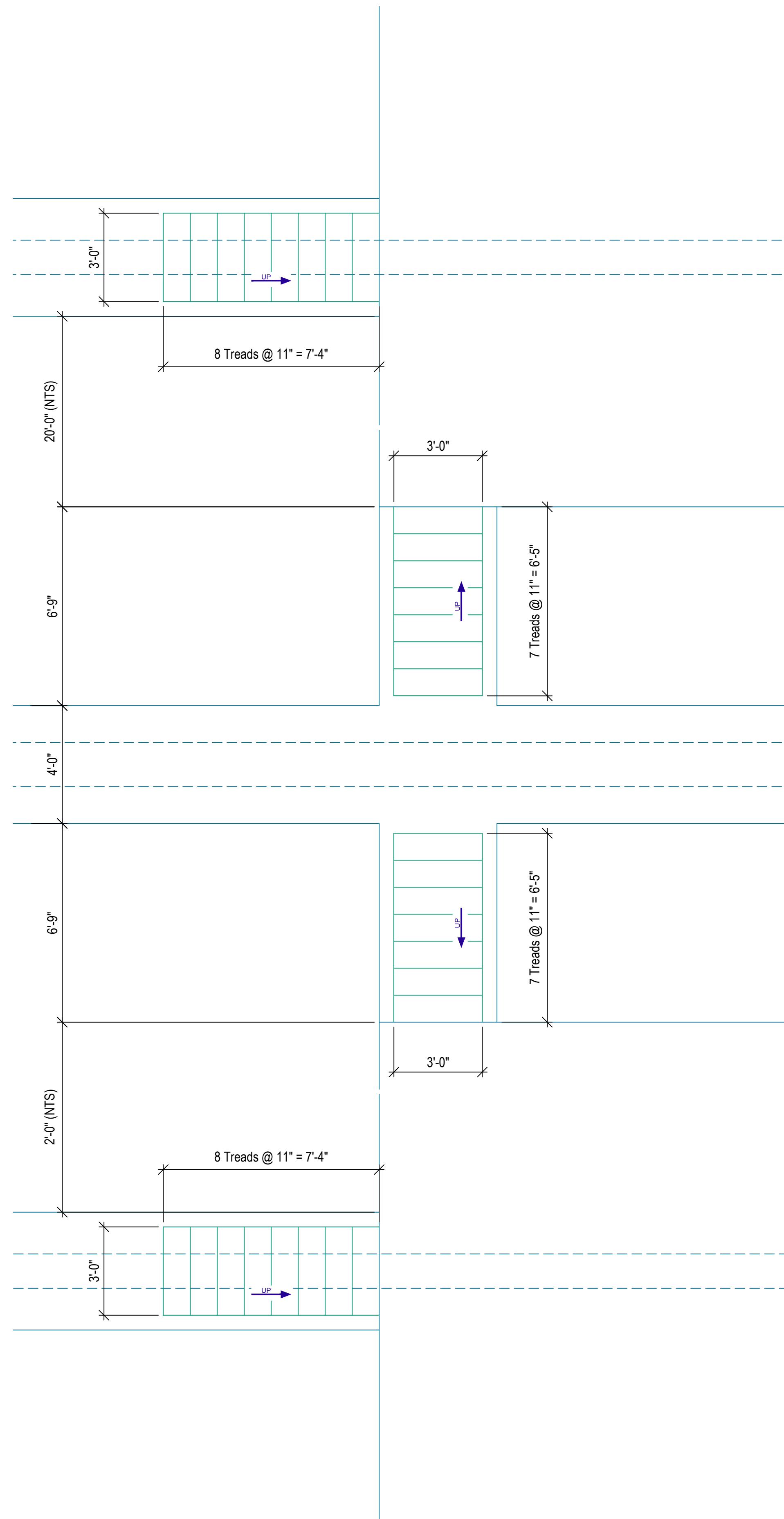
Bill of Materials

15SG4 (1 1/2" x 3/16") Serrated
 Mill, Swaged Rectangular Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	7-1	1'-8 3/16"	3'-5 1/2"	0"	Pending
1	7-2	1'-11 5/8"	3'-5 1/2"	0"	Pending
1	7-3	2'-11 13/16"	3'-5 1/2"	0"	Pending
1	7-4	2'-11 13/16"	3'-5 1/2"	0"	Pending

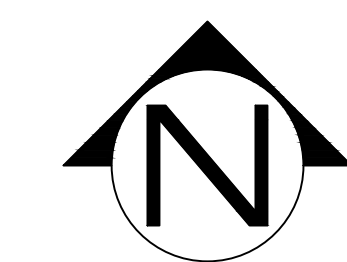
Extras Table

Band 1 1/2" x 3/16" Tri-Weld Aluminum		
OnGrip® Nosing Aluminum		
Saddle Clip, SS, 15 Spaced (shipped loose)		
Tek Screw #5, SS, 2" Long (shipped loose)		
Status: Out For Approval		
Approved	Approved As Noted	Revise & Resubmit



COORDINATE STAIR LANDING AND TREAD DIMENSIONS WITH METAL STAIRS SHOP DRAWINGS. TYPICAL ALL STAIRS.

QTY.	WIDTH x LENGTH	"A"	FINISH	MARK
36	11 3/4" x 3'-0"	7"	MILL	T1



Partial Plan - BNR Basins Stairs
 (1 Req'd)

Ref. Dwg #: Contract Drawing S-AS-2 (Rev 1)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

Supporting steel with flanges greater than 1/4" in thickness may need to be pre-drilled in field prior to fastening down with a standard tek screw. Cutting cross bars in the field may be necessary in some locations for fastener clearance.

The ends of all bearing bars within a grating panel must be properly supported at ends of panels and within cutouts. Ohio Gratings recommends 1" of bearing surface for grating bearing bar depths up to 2 1/2" and 2" of bearing surface for grating bearing bar depths 2 1/2" and over. Bearing bars should not be cantilevered beyond their supports.

Cutout sizes may be smaller or larger than the intended design due to the nature of grating and the standard locations of bearing bars.

Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Indicates the tagged end of panels for aligning cross rods
- Indicates the span direction of load carrying bars

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No back charges will be accepted unless written authorization is given in advance by Ohio Gratings, Inc.

OHIO GRATINGS, INC.

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OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Pflugerville, Texas Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-REL
Sht:	1D

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 59".
 Additional Support Required. (By Others)

OHIO GRATINGS, INC.

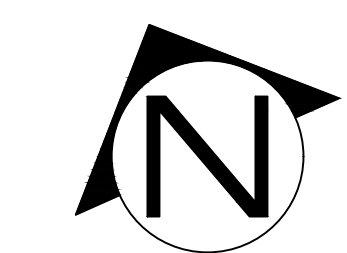
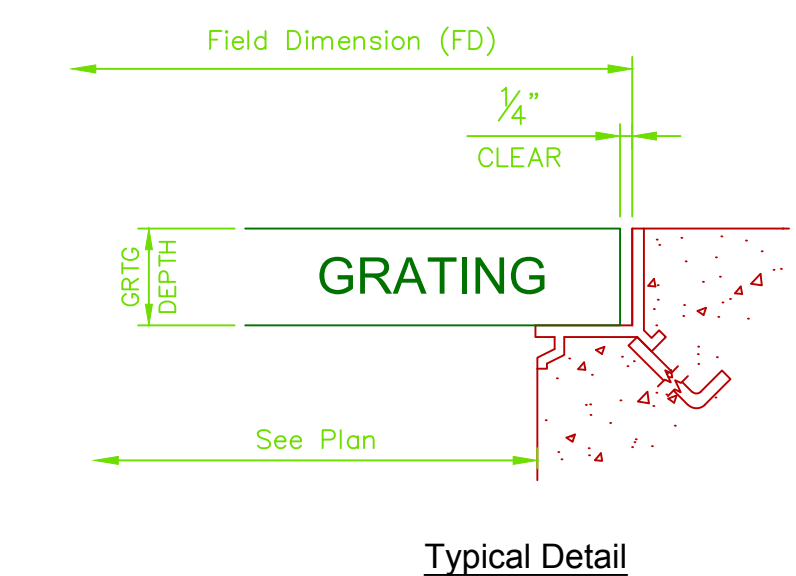
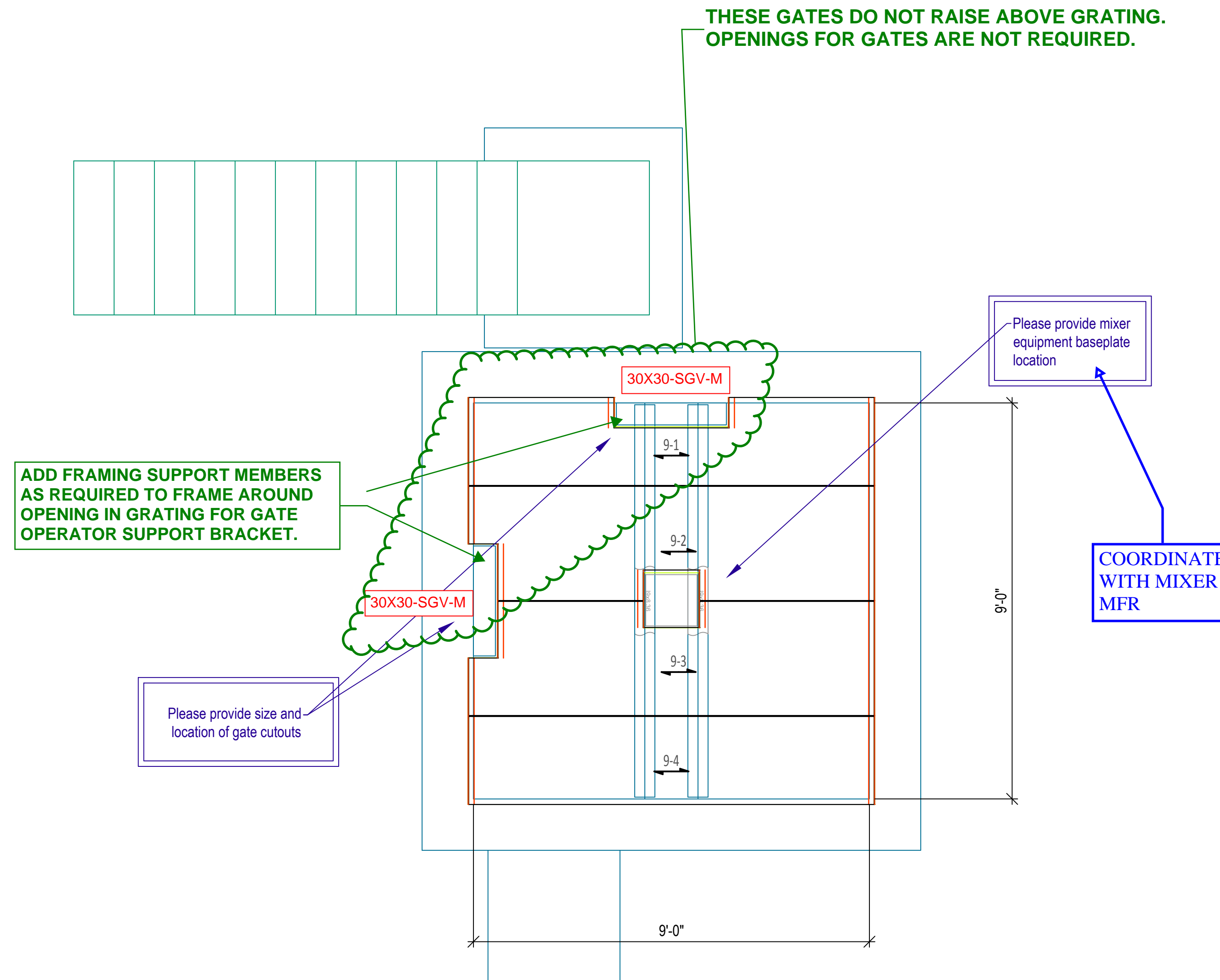
Bill of Materials

19SGI4 (1 1/2") Striated
 Mill, Swaged I-Bar Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	9-1	2'-0"	9'-3"	0"	Pending
1	9-2	2'-7 1/8"	9'-3"	0"	Pending
1	9-3	2'-7 1/8"	9'-3"	0"	Pending
1	9-4	2'-0"	9'-3"	0"	Pending

Extras Table

Band 1 1/2" x 3/16" Tri-Weld Aluminum		
Saddle Clip, SS, 19 Spaced (shipped loose)		
Tek Screw #5, SS, 2" Long (shipped loose)		
Status: Out For Approval		
Approved	Approved As Noted	Revise & Resubmit



Partial Plan - Mixed Liquor Junction Box Grating Layout
 3/8"=1'-0"
 (1 Req'd)
 Ref. Dwg #: Contract Drawing M-AS-8 & S-AS-9

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

Supporting steel with flanges greater than 1/4" in thickness may need to be pre-drilled in field prior to fastening down with a standard tek screw. Cutting cross bars in the field may be necessary in some locations for fastener clearance.

The ends of all bearing bars within a grating panel must be properly supported at ends of panels and within cutouts. Ohio Gratings recommends 1" of bearing surface for grating bearing bar depths up to 2 1/2" and 2" of bearing surface for grating bearing bar depths 2 1/2" and over. Bearing bars should not be cantilevered beyond their supports.

Cutout sizes may be smaller or larger than the intended design due to the nature of grating and the standard locations of bearing bars.

Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Ⓢ Indicates the tagged end of panels for aligning cross rods
- ← Indicates the span direction of load carrying bars

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 OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-REL
Sht:	2A

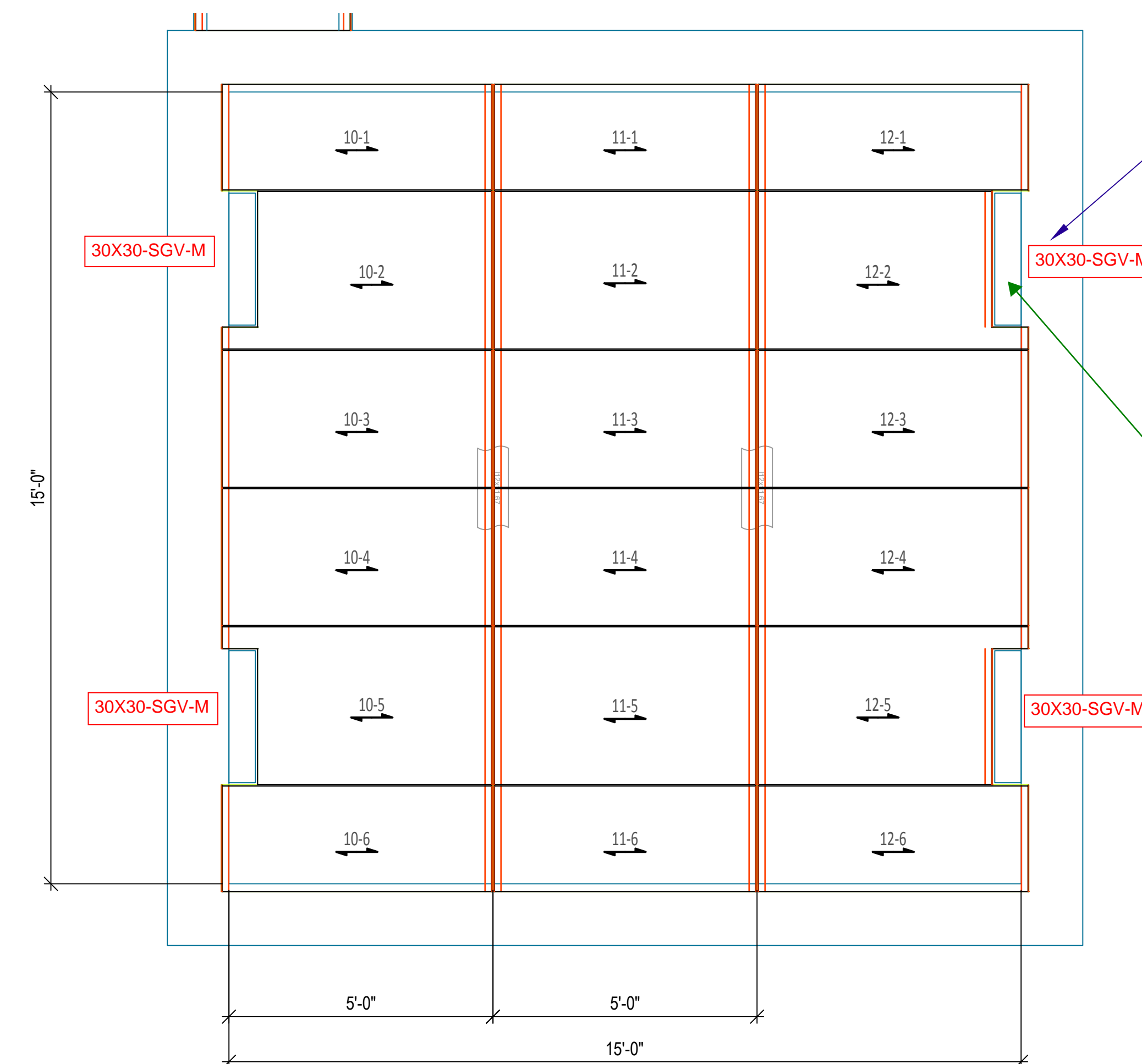
NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 66".
 Additional Support Required. (By Others)

OHIO GRATINGS, INC.

Bill of Materials

19SGI4 (1 3/4") Striated
 Mill, Swaged I-Bar Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	10-1	2'-0"	5'-1 5/8"	0"	Pending
1	10-2	2'-11 7/8"	5'-1 5/8"	0"	Pending
1	10-3	2'-7 1/8"	5'-1 5/8"	0"	Pending
1	10-4	2'-7 1/8"	5'-1 5/8"	0"	Pending
1	10-5	2'-11 7/8"	5'-1 5/8"	0"	Pending
1	10-6	2'-0"	5'-1 5/8"	0"	Pending
1	11-1	2'-0"	4'-11 3/4"	0"	Pending
1	11-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	11-3	2'-7 1/8"	4'-11 3/4"	0"	Pending
1	11-4	2'-7 1/8"	4'-11 3/4"	0"	Pending
1	11-5	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	11-6	2'-0"	4'-11 3/4"	0"	Pending
1	12-1	2'-0"	5'-1 5/8"	0"	Pending
1	12-2	2'-11 7/8"	5'-1 5/8"	0"	Pending
1	12-3	2'-7 1/8"	5'-1 5/8"	0"	Pending
1	12-4	2'-7 1/8"	5'-1 5/8"	0"	Pending
1	12-5	2'-11 7/8"	5'-1 5/8"	0"	Pending
1	12-6	2'-0"	5'-1 5/8"	0"	Pending



Please provide size and location of gate openings
 Typical (4) places

COORDINATE WITH MFR TO ENSURE PROPER CLEARANCE

THESE GATES DO NOT RAISE ABOVE GRATING. OPENINGS FOR GATES ARE NOT REQUIRED.

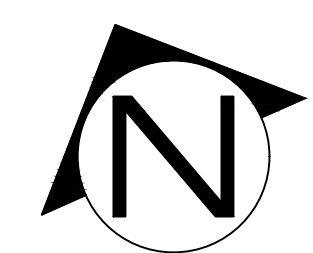
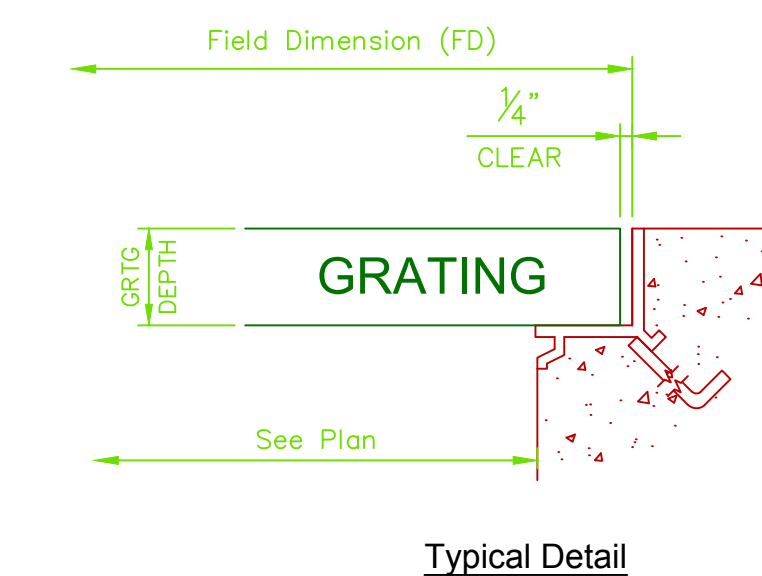
ADD FRAMING SUPPORT MEMBERS AS REQUIRED TO FRAME AROUND OPENING IN GRATING FOR GATE OPERATOR SUPPORT BRACKET. TYPICAL AT ALL GATES.

Extras Table

Band 1 3/4" x 3/16" Trim Weld Aluminum
 Saddle Clip, SS, 19 Spaced (shipped loose)
 Tek Screw #5, SS, 2 1/2" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
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Partial Plan - Mixed Liquor Splitter Box Grating Layout
 3/8"=1'-0"
 (1 Req'd)
 Ref. Dwg #: Contract Drawing M-AS-9 & S-AS-11

Revisions Record

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

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Drawing Legend

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- Indicates toeplate
- Indicates nosing
- Indicates the tagged end of panels for aligning cross rods
- Indicates the span direction of load carrying bars

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 OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project: Central WWTP Expansion Phase I Improvements
 Pflugerville, Texas

Customer: Cody Builders Supply
 PO: 59698
 Job #: 863600

OGI Q: 863600
 OGI SO:
 Seq: 55128-REL

Sht: 2B

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.

OHIO GRATINGS, INC.

Bill of Materials

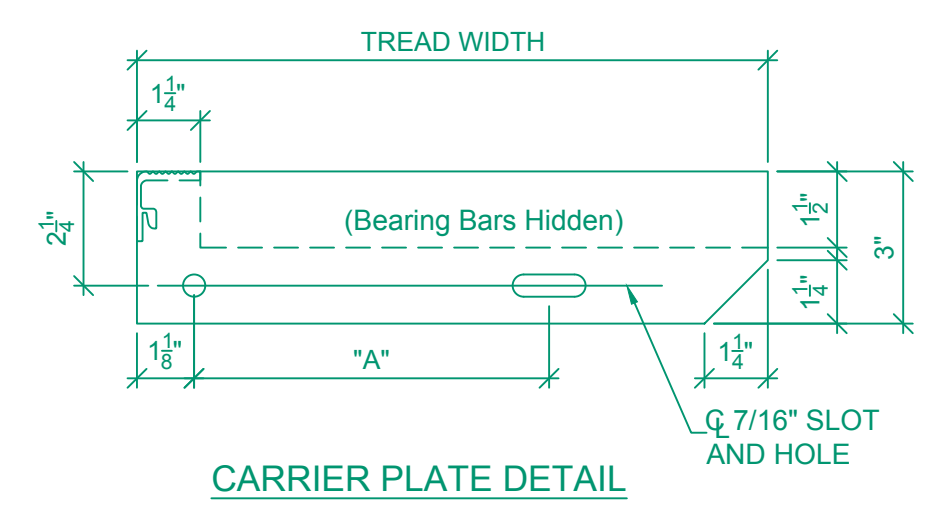
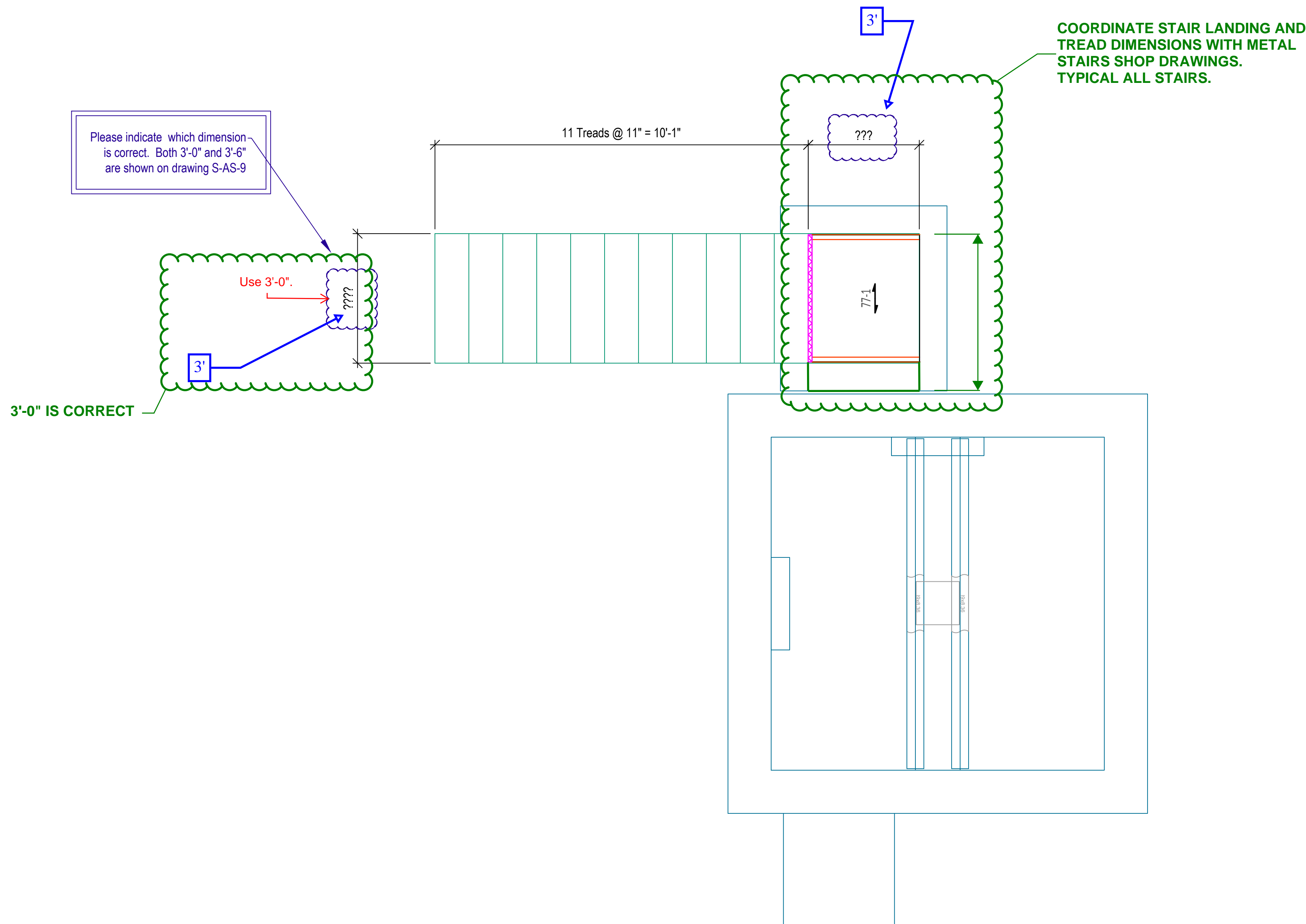
15SG4 (1 1/2" x 3/16") Serrated
 Mill, Swaged Rectangular Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	77-1	3'-0 1/8"	3'-5 1/2"	0"	Pending

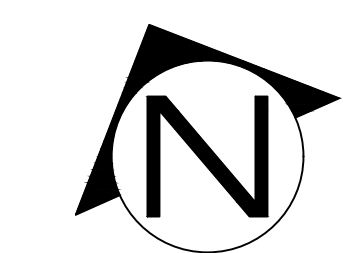
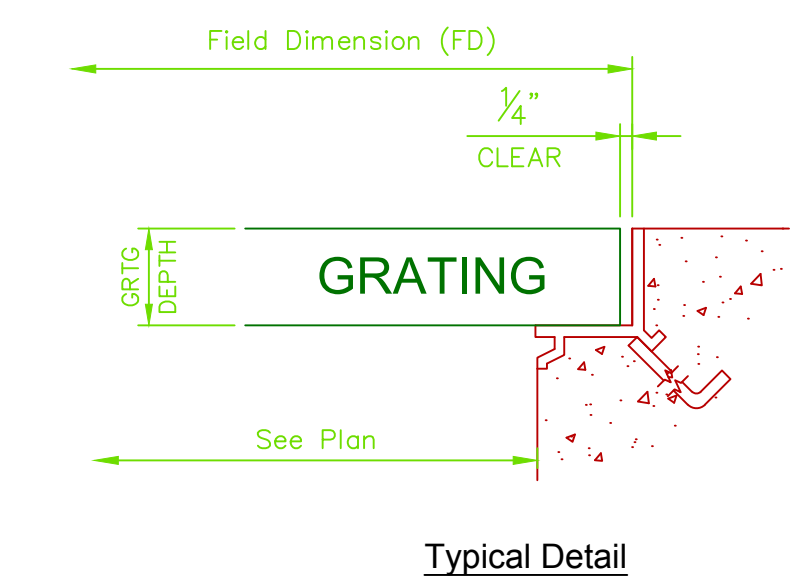
Extras Table

Band 1 1/2" x 3/16" Mill Field Aluminum
OnGrip® Nosing Aluminum
Saddle Clip, SS, 15 Spaced (shipped loose)
Tek Screw #5, SS, 2" Long (shipped loose)

Preliminary



STAIR TREADS W/	OnGrip® NOSING			
	15SG4 1 1/2" x 3/16" Serrated			
QTY.	WIDTH x LENGTH	"A"	FINISH	MARK
11	11 3/4" x ???	7"	MILL	T2



Partial Plan - Mixed Liquor Junction Box Stair
 3/8"=1'-0"
 (1 Req'd)
 Ref. Dwg #: Contract Drawing M-AS-8 & S-AS-9

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

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- Indicates toeplate
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- Indicates the span direction of load carrying bars

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OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
Customer	Pflugerville, Texas
Customer	Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-REL
Dwg:	863600
Sht:	2C

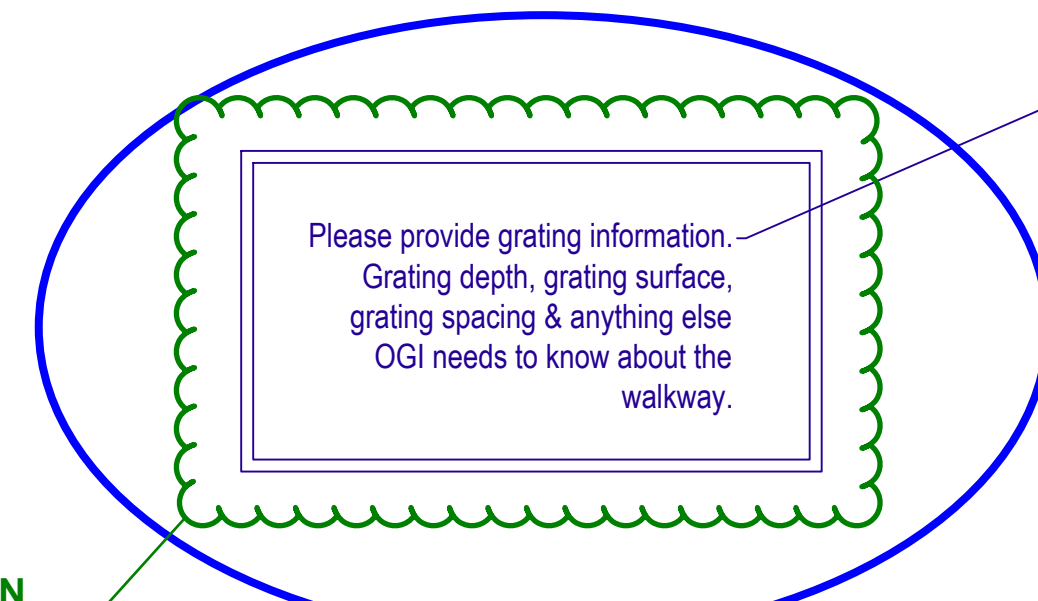
NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.

OHIO GRATINGS, INC.

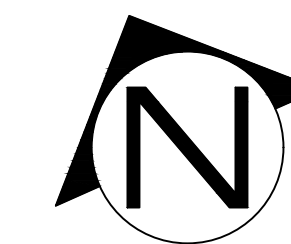
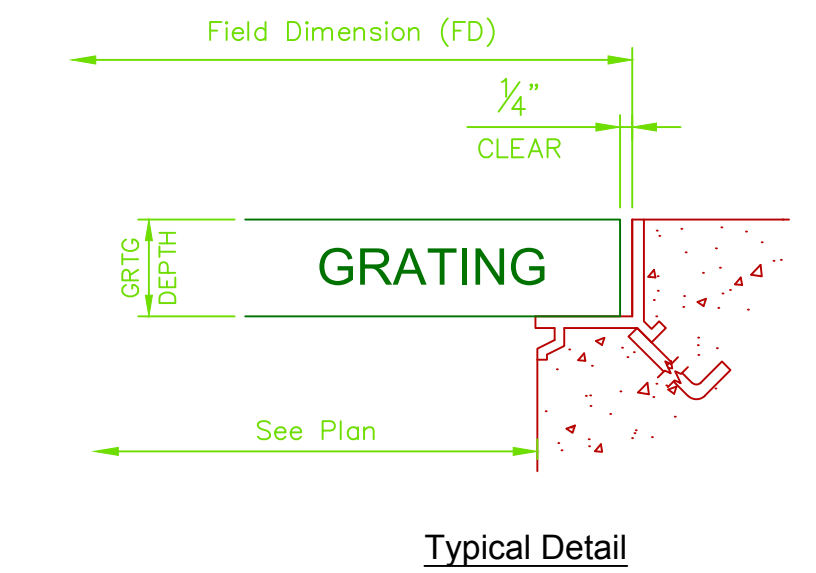
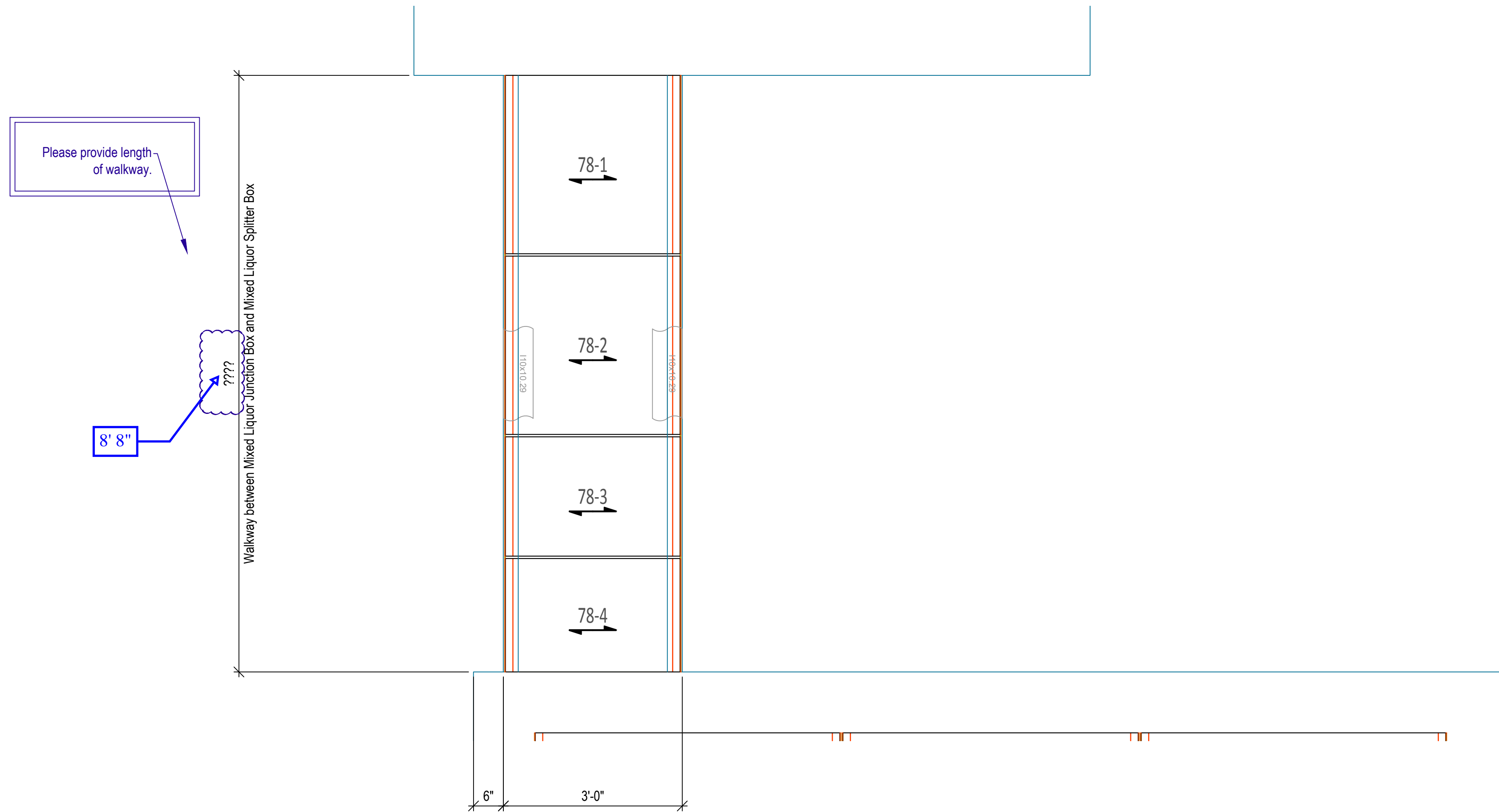
Bill of Materials

Qty	Mark	Finish Width	Finish Length	EG	Status
TBD					
Mill, TBD, Aluminum					
1	78-1	2'-11 7/8"	2'-11 1/2"	0"	Pending
1	78-2	2'-11 7/8"	2'-11 1/2"	0"	Pending
1	78-3	2'-0"	2'-11 1/2"	0"	Pending
1	78-4	1'-10 13/16"	2'-11 1/2"	0"	Pending

Extras Table		
Band	??" x 3/16"	1/4" Weld Aluminum
Saddle Clip	SS, 19 Spaced	(shipped loose)
Tek Screw	#5, SS, ??" Long	(shipped loose)
Status: Out For Approval		
Approved	Approved As Noted	Revise & Resubmit



REFER TO DRAWINGS AND SPECIFICATION SECTION 05 53 00 METAL GRATING



Partial Plan - Mixed Liquor Walkway Grating Layout
 3/8"=1'-0"
 (1 Req'd)
 Ref. Dwg #: Contract Drawing S-AS-9 & S-AS-11

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

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Drawing Legend	
	Indicates banding
	Indicates toeplate
	Indicates nosing
	Indicates the tagged end of panels for aligning cross rods
	Indicates the span direction of load carrying bars

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 OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
Seq	55128-Rev
OGI Q	863600
OGI SO	
Sht	2D

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 66".
 Additional Support Required. (By Others)

OHIO GRATINGS, INC.

Bill of Materials

19SGI4 (1 3/4") Striated
 Mill, Swaged I-Bar Bar Grating, Aluminum

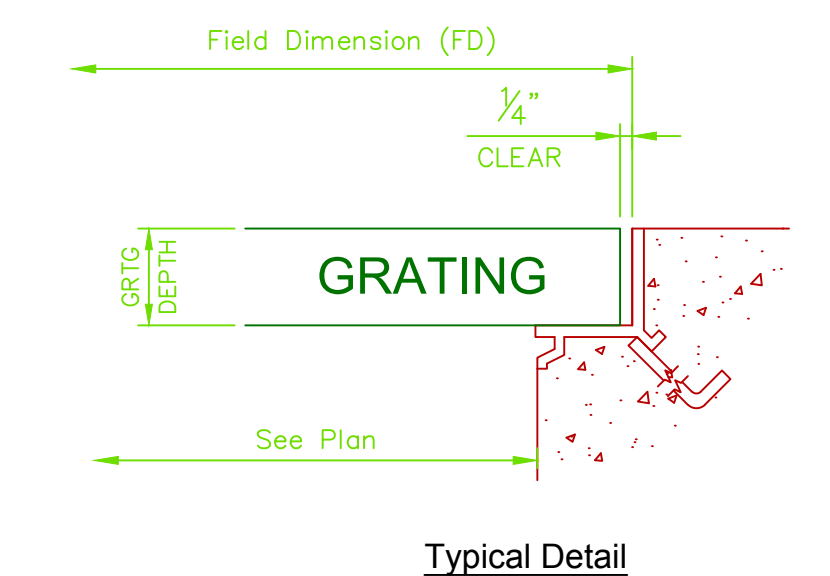
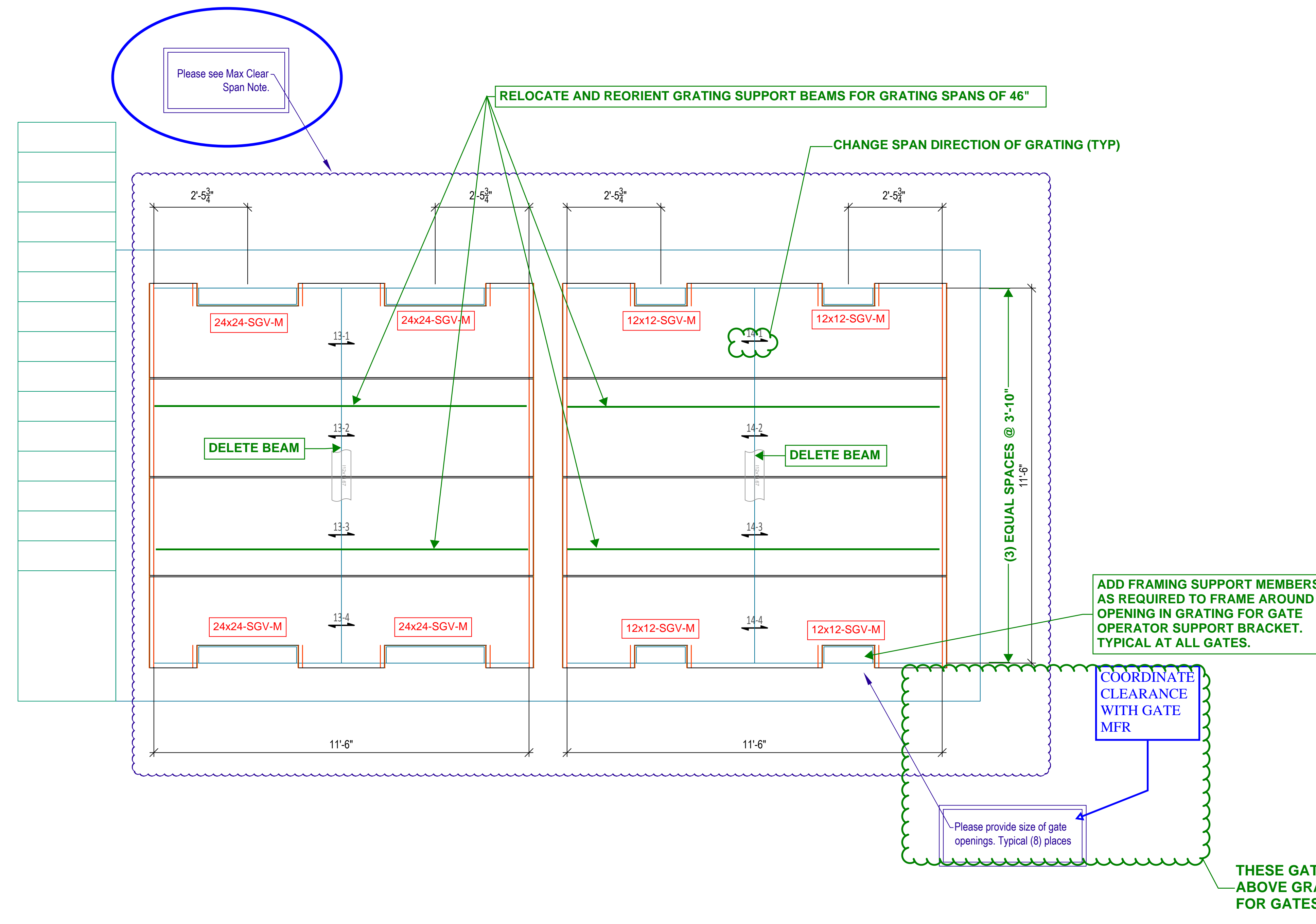
Qty	Mark	Finish Width	Finish Length	EG	Status
1	13-1	2'-10 11/16"	11'-9 1/2"	0"	Pending
1	13-2	2'-11 7/8"	11'-9 1/2"	0"	Pending
1	13-3	2'-11 7/8"	11'-9 1/2"	0"	Pending
1	13-4	2'-9 1/2"	11'-9 1/2"	0"	Pending
1	14-1	2'-10 11/16"	11'-9 1/2"	0"	Pending
1	14-2	2'-11 7/8"	11'-9 1/2"	0"	Pending
1	14-3	2'-11 7/8"	11'-9 1/2"	0"	Pending
1	14-4	2'-9 1/2"	11'-9 1/2"	0"	Pending

Extras Table

Band 1 3/4" x 3/16" Trim Weld Aluminum
 Saddle Clip, SS, 19 Spaced (shipped loose)
 Tek Screw #5, SS, 2 1/2" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
----------	-------------------	-------------------



Partial Plan - Influent & RAS Splitter Box Grating Layout
 3/8"=1'-0"
 (1 Req'd)
 Ref. Dwg #: Contract Drawing S-AS-13 (Rev 1)

Revisions Record

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

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- Drawing Legend
- Indicates banding
 - Indicates toeplate
 - Indicates nosing
 - Indicates the tagged end of panels for aligning cross rods
 - Indicates the span direction of load carrying bars

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 OGI Houston, TX: 5500 Cedar Crest, Houston, TX 77087, Ph: 1-888-207-9392
 OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	
Dwg: 863600	Sht: 3A

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.

OHIO GRATINGS, INC.

Bill of Materials

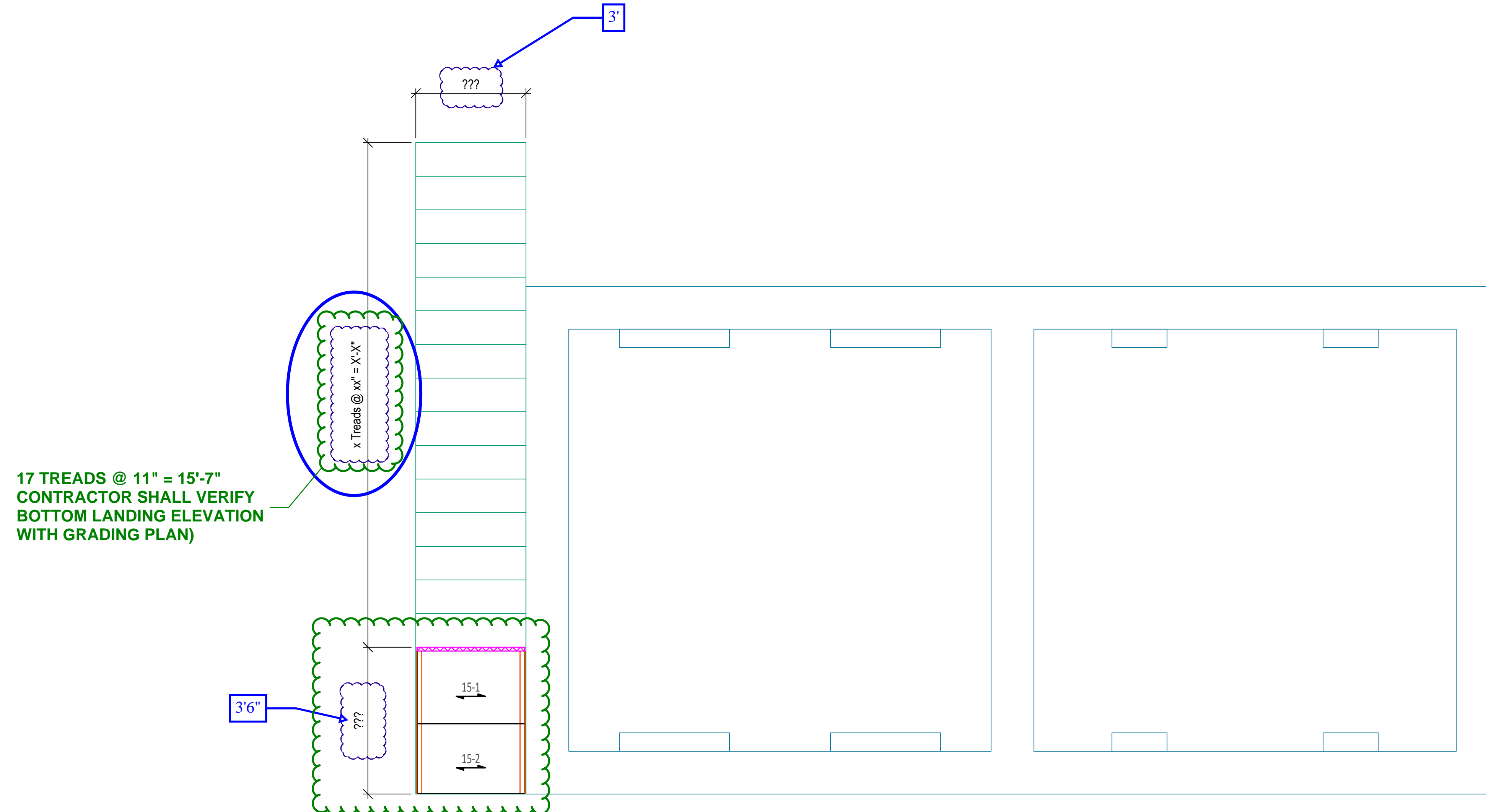
15SG4 (1 1/2" x 3/16") Serrated
 Mill, Swaged Rectangular Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	15-1	2'-0 7/8"	2'-11 1/2"	0"	Pending
1	15-2	1'-10 11/16"	2'-11 1/2"	0"	Pending

Extras Table

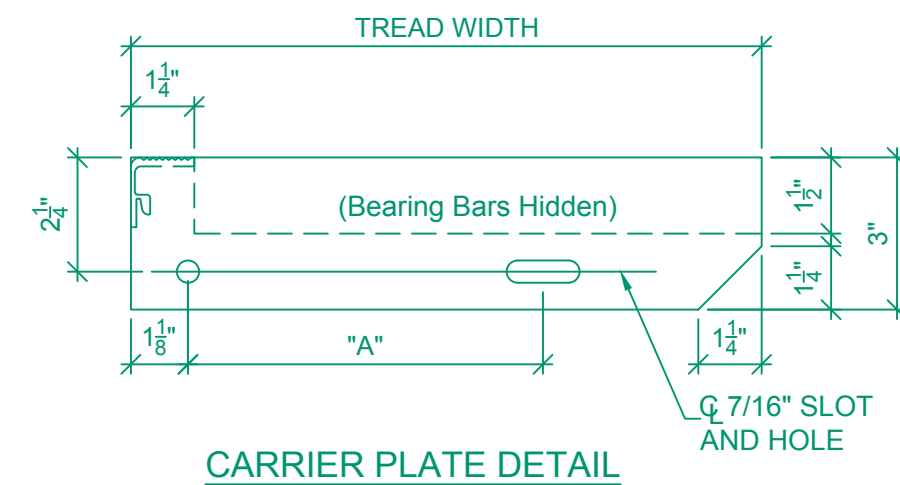
Band 1 1/2" x 3/16" Trim Weld Aluminum
OnGrip® Nosing Aluminum
Saddle Clip, SS, 6 Spaced (shipped loose)
Tek Screw #5, SS, 2" Long (shipped loose)

Preliminary

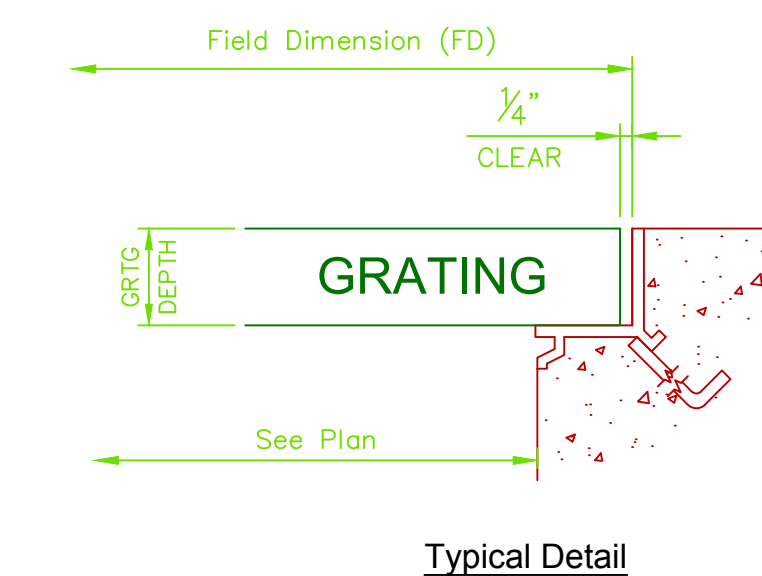


17 TREADS @ 11" = 15'-7"
 CONTRACTOR SHALL VERIFY
 BOTTOM LANDING ELEVATION
 WITH GRADING PLAN)

COORDINATE STAIR LANDING
 AND TREAD DIMENSIONS WITH
 METAL STAIRS SHOP DRAWINGS.
 TYPICAL ALL STAIRS.



QTY.	WIDTH x LENGTH	"A"	FINISH	MARK
??	11 3/4" x ???	7"	MILL	T3



Partial Plan - Influent & RAS Splitter Box Stair

3/8"=1'-0"
 Ref. Dwg #: Contract Drawing M-AS-7 & S-AS-13 (Rev1)
 (1 Req'd)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

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Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Indicates the tagged end of panels for aligning cross rods
- Indicates the span direction of load carrying bars

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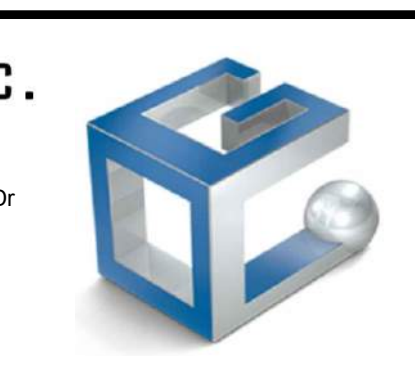
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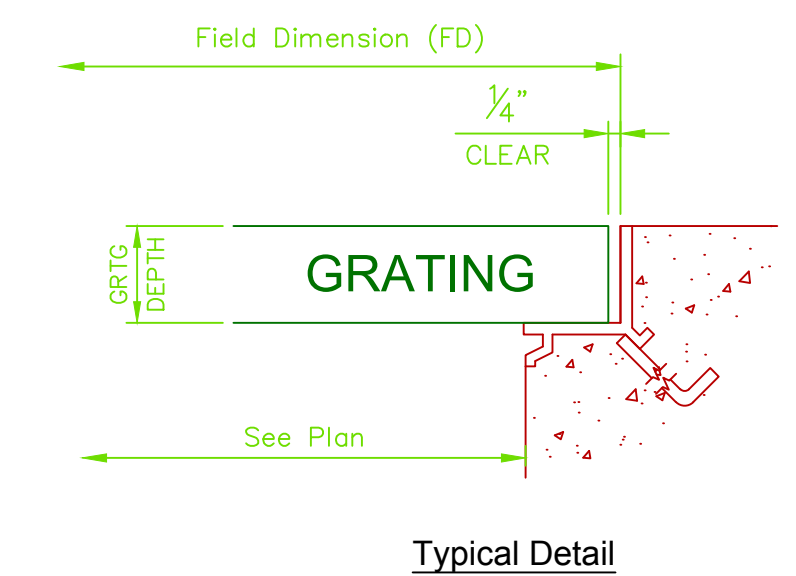
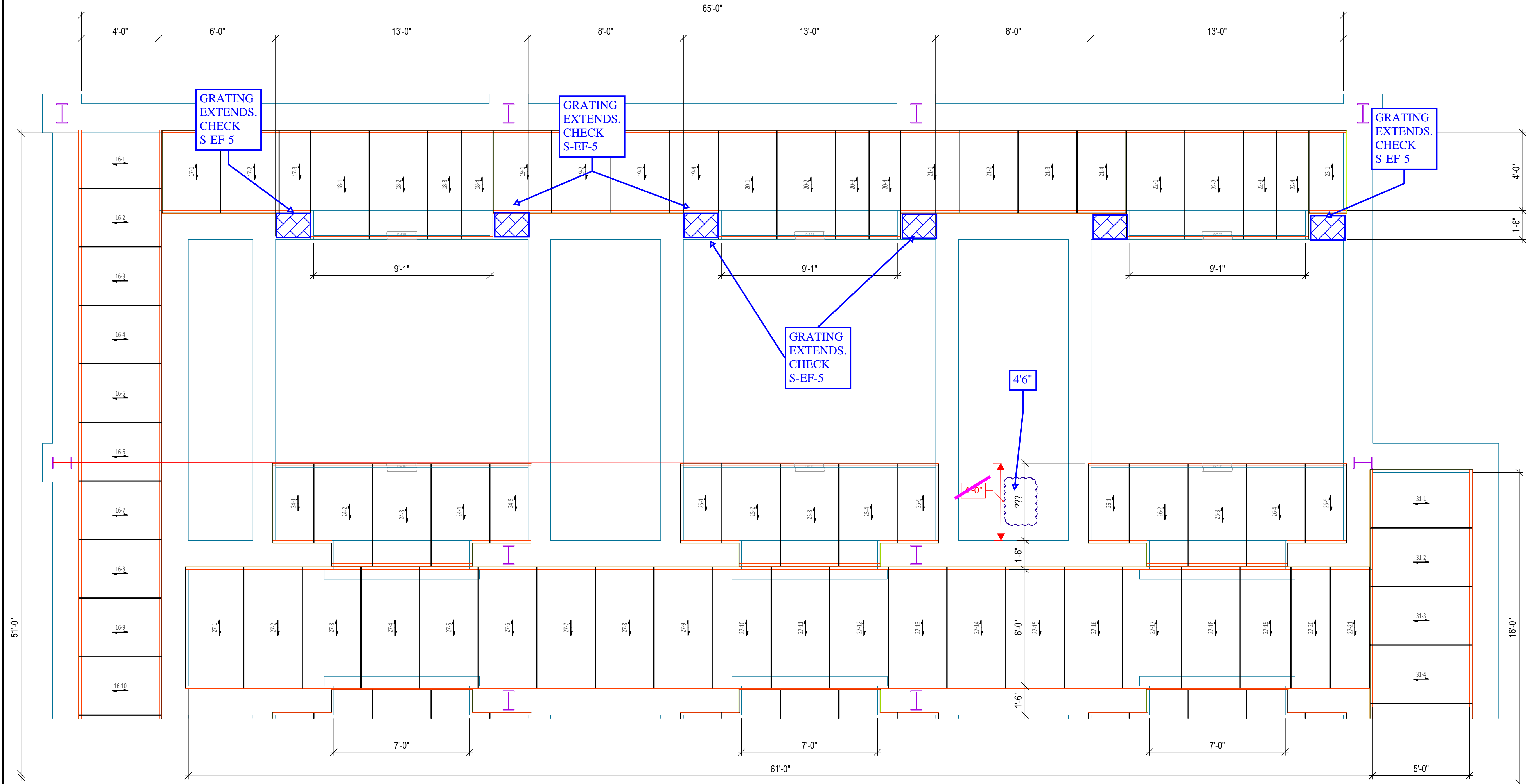
www.ohiogratings.com



Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-REL
Dwg:	863600
Sht:	3B

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 73".
 Additional Support Required. (By Others)

Bill of Materials					
19SGI4 (2") Striated					
Mat. Swaged I-Bar Bar Grating, Aluminum					
Qty	Mark	Finish Width	Finish Length	EG	Status
1	16-1	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-2	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-3	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-4	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-5	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-6	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-7	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-8	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-9	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-10	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	17-1	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	17-2	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	17-3	1'-7 1/4"	4'-3 1/2"	0"	Pending
1	18-1	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	18-2	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	18-3	1'-8 7/16"	5'-7 1/2"	0"	Pending
1	18-4	1'-7 1/4"	5'-7 1/2"	0"	Pending
1	19-1	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	19-2	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	19-3	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	19-4	2'-6 15/16"	4'-3 1/2"	0"	Pending
1	20-1	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	20-2	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	20-3	1'-8 7/16"	5'-7 1/2"	0"	Pending
1	20-4	1'-7 1/4"	5'-7 1/2"	0"	Pending
1	21-1	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	21-2	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	21-3	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	21-4	2'-6 15/16"	4'-3 1/2"	0"	Pending
1	22-1	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	22-2	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	22-3	1'-8 7/16"	5'-7 1/2"	0"	Pending
1	22-4	1'-7 1/4"	5'-7 1/2"	0"	Pending
1	23-1	1'-10 13/16"	4'-3 1/2"	0"	Pending
1	24-1	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	24-2	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	24-3	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	24-4	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	24-5	2'-11 7/8"	4'-1 1/2"	0"	Pending
1	25-1	2'-11 7/8"	4'-1 1/2"	0"	Pending
1	25-2	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	25-3	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	25-4	2'-11 7/8"	4'-1 1/2"	0"	Pending
1	26-1	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	26-2	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	26-3	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	26-4	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	26-5	2'-11 7/8"	4'-1 1/2"	0"	Pending
1	27-1	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-2	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-3	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-4	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-5	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-6	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-7	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-8	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-9	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-10	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-11	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-12	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-13	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-14	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-15	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-16	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-17	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-18	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-19	2'-11 7/8"	6'-3 1/2"	0"	Pending
1	27-20	2'-0"	6'-3 1/2"	0"	Pending
1	27-21	2'-0"	6'-3 1/2"	0"	Pending
1	31-1	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	31-2	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	31-3	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	31-4	2'-11 7/8"	5'-3 1/2"	0"	Pending



Partial Plan - Effluent Filters Grating Layout
 NTS
 (1 Req'd)
 Ref. Dwg #: Contract Drawing S-EF-1

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes
 Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a tight fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".
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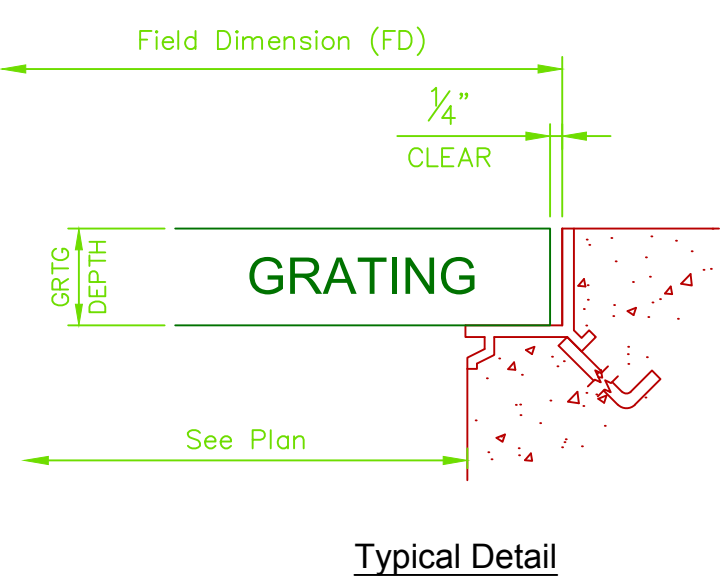
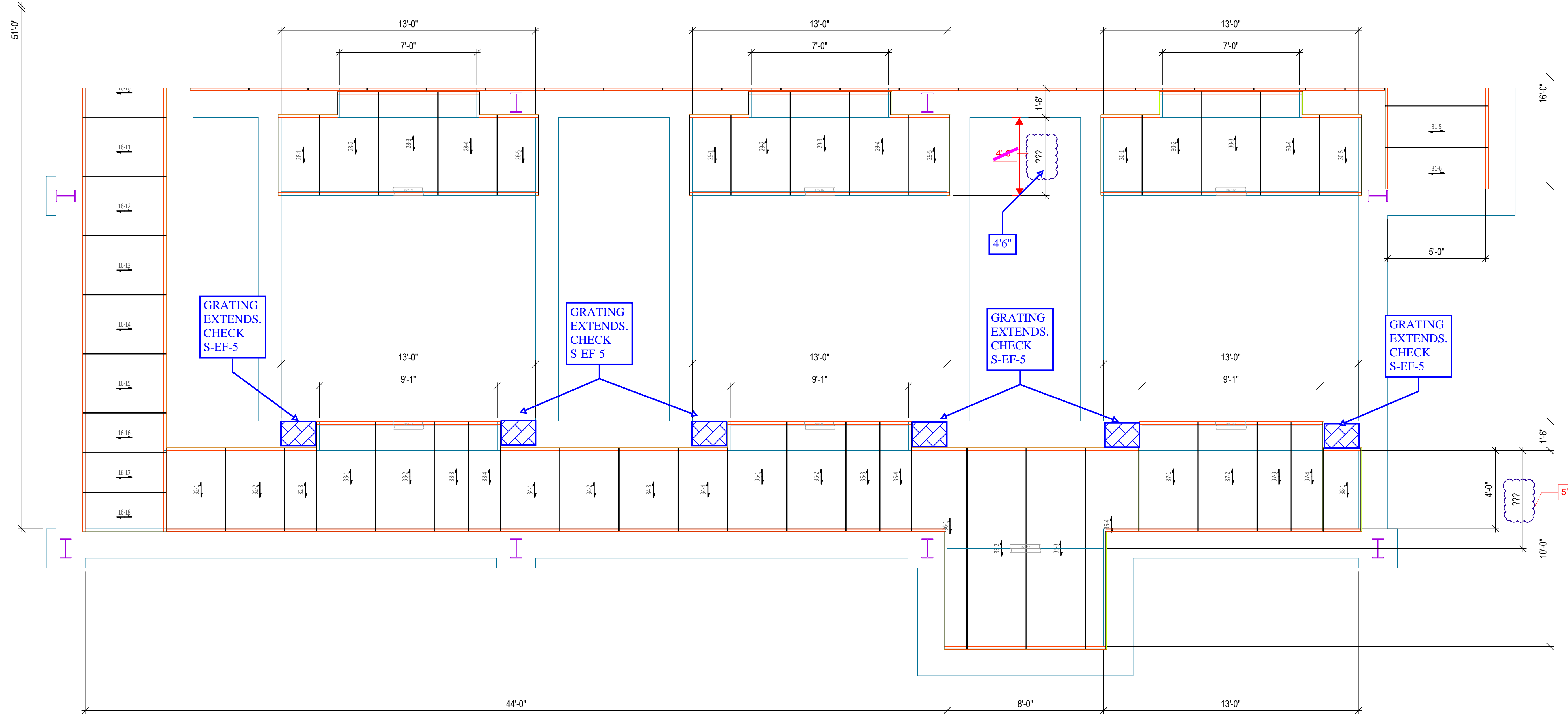
Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	
Dwg: 863600	Sht: 4A

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 73". Additional Support Required. (By Others)

Bill of Materials

19SG14 (2") Striated
 Mill, Swaged I-Bar Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	16-11	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-12	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-13	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-14	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-15	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	16-16	2'-0"	4'-3 1/2"	0"	Pending
1	16-17	2'-0"	4'-3 1/2"	0"	Pending
1	16-18	2'-0"	4'-3 1/2"	0"	Pending
1	28-1	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	28-2	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	28-3	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	28-4	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	28-5	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	29-1	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	29-2	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	29-3	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	29-4	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	29-5	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	30-1	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	30-2	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	30-3	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	30-4	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	30-5	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	31-5	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	31-6	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	32-1	2'-1 3/16"	4'-1 1/2"	0"	Pending
1	32-2	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	32-3	2'-11 7/8"	5'-3 3/4"	0"	Pending
1	33-1	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	33-2	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	33-3	1'-8 7/16"	5'-7 1/2"	0"	Pending
1	33-4	1'-7 1/4"	5'-7 1/2"	0"	Pending
1	34-1	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	34-2	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	34-3	2'-11 7/8"	4'-3 1/2"	0"	Pending
1	34-4	2'-5 15/16"	4'-3 1/2"	0"	Pending
1	35-1	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	35-2	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	35-3	1'-8 7/16"	5'-7 1/2"	0"	Pending
1	35-4	1'-7 1/4"	5'-7 1/2"	0"	Pending
1	36-1	2'-9 1/2"	10'-3 1/2"	0"	Pending
1	36-2	2'-11 7/8"	10'-3 1/2"	0"	Pending
1	36-3	2'-11 7/8"	10'-3 1/2"	0"	Pending
1	36-4	2'-8 5/16"	10'-3 1/2"	0"	Pending
1	37-1	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	37-2	2'-11 7/8"	5'-7 1/2"	0"	Pending
1	37-3	1'-8 7/16"	5'-7 1/2"	0"	Pending
1	37-4	1'-7 1/4"	5'-7 1/2"	0"	Pending
1	38-1	1'-10 13/16"	4'-3 1/2"	0"	Pending



Extras Table
 Band 2" x 3/16" Trim Weld Aluminum
 Saddle Clip, SS, 19 Spaced (shipped loose)
 Tek Screw #5, SS, 2 1/2" Long (shipped loose)
Status: Out For Approval
 Approved Approved As Noted Revise & Resubmit

Partial Plan - Effluent Filters Grating Layout
 NTS (1 Req'd) Ref. Dwg #: Contract Drawing S-EF-1

Revisions Record

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

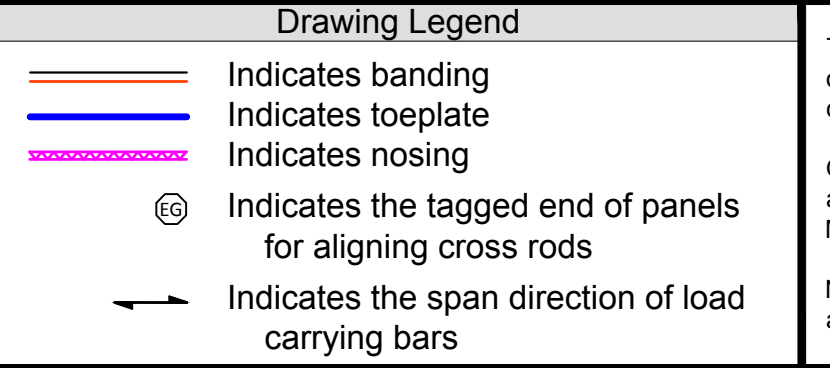
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OGI Ridgeland, SC: 5307 Cypress Ridge Dr Ridgeland, SC 29936 Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Pflugerville, Texas Cody Builders Supply
Job #	PO 59698
Dwg: 863600	Sht. 4B
OGI Q: 863600	OGI SO: 55128-R2

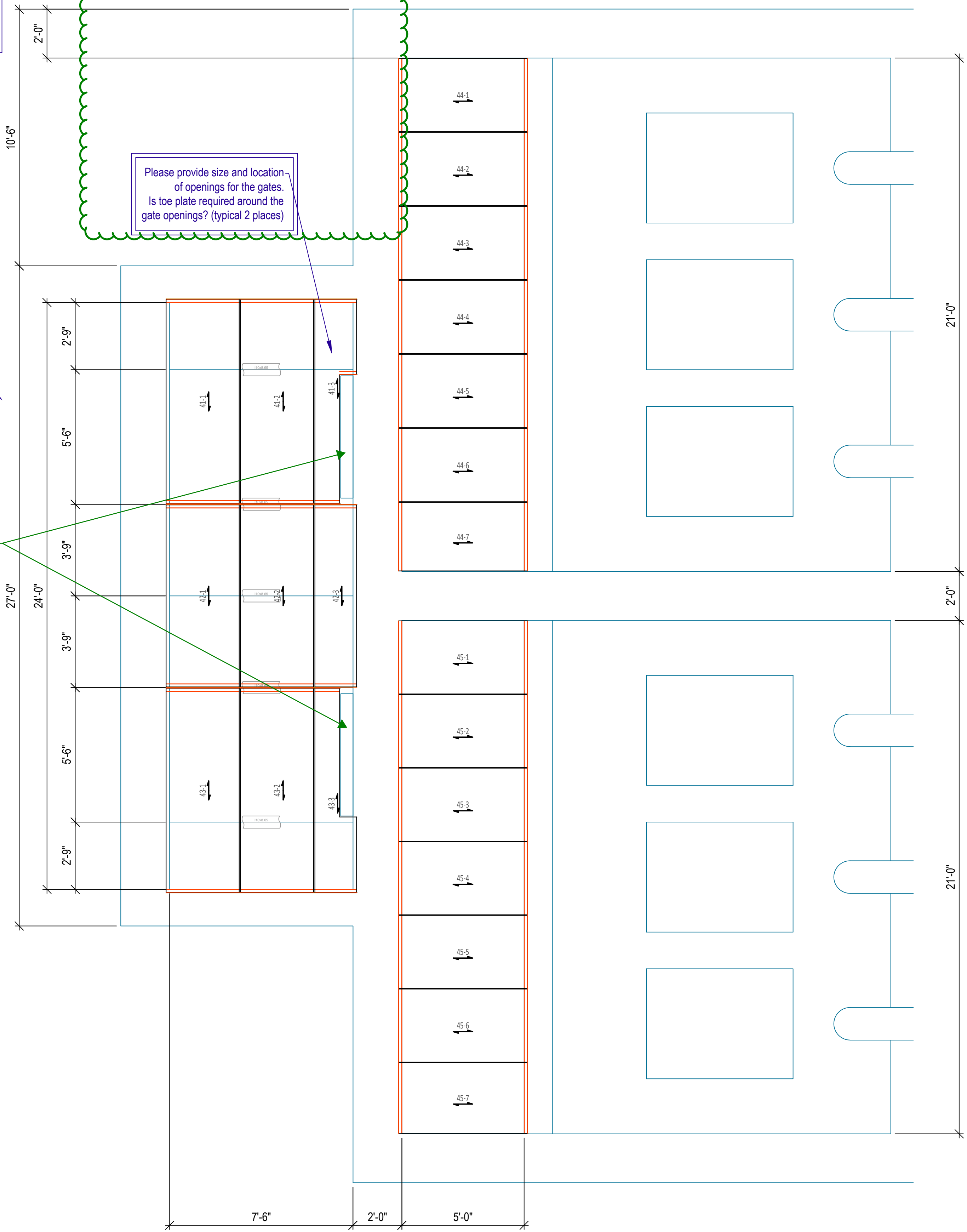
NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
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 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 66".
 Additional Support Required. (By Others)

THESE GATES DO NOT RAISE ABOVE GRATING.
 OPENINGS FOR GATES ARE NOT REQUIRED.

Please provide size and location of openings for the gates. Is toe plate required around the gate openings? (typical 2 places)

If we change the span of this area, please see Max Clear Span Note above.

ADD FRAMING SUPPORT MEMBERS AS REQUIRED TO FRAME AROUND OPENING IN GRATING FOR GATE OPERATOR SUPPORT BRACKET. TYPICAL AT ALL GATES.



OHIO GRATINGS, INC.

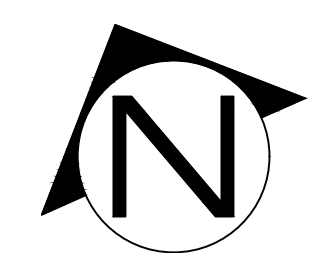
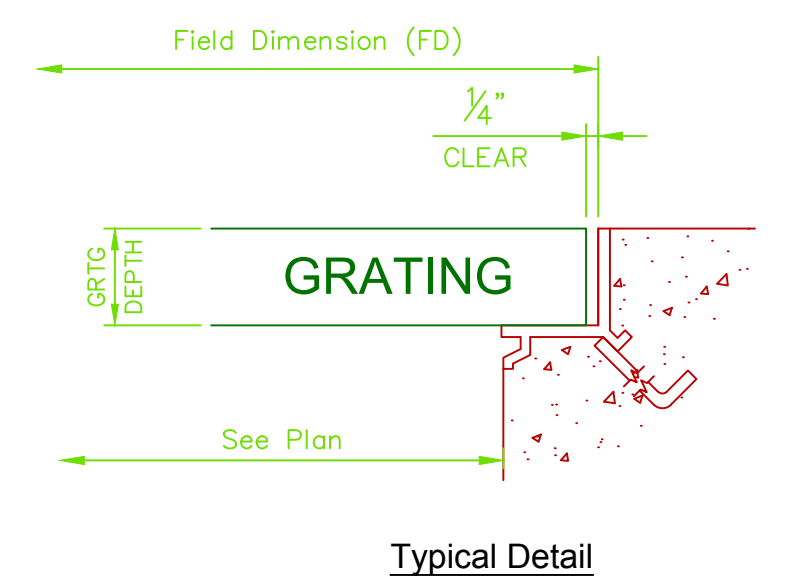
Bill of Materials					
19SGI4 (1 3/4") Striated					
Mill, Swaged I-Bar Bar Grating, Aluminum					
Qty	Mark	Finish Width	Finish Length	EG	Status
1	41-1	2'-11 7/8"	8'-4 5/8"	0"	Pending
1	41-2	2'-11 7/8"	8'-4 5/8"	0"	Pending
1	41-3	1'-8 7/16"	8'-4 5/8"	0"	Pending
1	42-1	2'-11 7/8"	7'-5 3/4"	0"	Pending
1	42-2	2'-11 7/8"	7'-5 3/4"	0"	Pending
1	42-3	1'-8 7/16"	7'-5 3/4"	0"	Pending
1	43-1	2'-11 7/8"	8'-4 5/8"	0"	Pending
1	43-2	2'-11 7/8"	8'-4 5/8"	0"	Pending
1	43-3	1'-8 7/16"	8'-4 5/8"	0"	Pending
1	44-1	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	44-2	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	44-3	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	44-4	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	44-5	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	44-6	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	44-7	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	45-1	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	45-2	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	45-3	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	45-4	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	45-5	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	45-6	2'-11 7/8"	5'-3 1/2"	0"	Pending
1	45-7	2'-10 11/16"	5'-3 1/2"	0"	Pending

Extras Table

Band 1 3/4" x 3/16" Trim Weld Aluminum
Saddle Clip, SS, 19 Spaced (shipped loose)
Tek Screw #5, SS, 2 1/2" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
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Partial Plan - Influent Lift Station Grating Layout
 (1 Req'd)

Ref. Dwg #: Contract Drawing M-HW-1 (Rev 1) & S-HW-1 (Rev 1)

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a tight fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

Supporting steel with flanges greater than 1/4" in thickness may need to be pre-drilled in field prior to fastening down with a standard tek screw. Cutting cross bars in the field may be necessary in some locations for fastener clearance.

The ends of all bearing bars within a grating panel must be properly supported at ends of panels and within cutouts. Ohio Gratings recommends 1" of bearing surface for grating bearing bar depths up to 2 1/2" and 2" of bearing surface for grating bearing bar depths 2 1/2" and over. Bearing bars should not be cantilevered beyond their supports.

Cutout sizes may be smaller or larger than the intended design due to the nature of grating and the standard locations of bearing bars.

Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Ⓢ Indicates the tagged end of panels for aligning cross rods
- ↔ Indicates the span direction of load carrying bars

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Grating panels are manufactured and cut with tolerances in accordance with the National Association of Architectural Metal Manufacturers (NAAMM).

No back charges will be accepted unless written authorization is given in advance by Ohio Gratings, Inc.

OHIO GRATINGS, INC.

OGI Canton, OH: 5299 Southway St SW Canton, OH 44706 Ph: 1-800-321-9800	OGI Houston, TX: 5500 Cedar Crest Houston, TX 77087 Ph: 1-888-207-9392	OGI Ridgeland, SC: 5307 Cypress Ridge Dr Ridgeland, SC 29936 Ph: 1-800-321-9800
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www.ohiogratings.com

Project: Central WWTP Expansion Phase I Improvements	Customer: Cody Builders Supply	OGI Q: 863600
PO: 59698	Job #: 863600	OGI SO:
Dwg: 863600		Seq: 55128-Rev 1
Sht: 5A		

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 87".
 Additional Support Required. (By Others)

COORDINATE WITH DI PIPE MFR. PIPE IS 16" DI. TOE PLATE IS NOT REQUIRED

VERIFY IF THESE GATES RAISE ABOVE GRATING. OPENINGS FOR GATES ARE NOT REQUIRED IF GATES DO NOT RAISE ABOVE GRATING. COORDINATE WITH GATE MFR.

COORDINATE WITH GATE MFR. TOE PLATE IS NOT REQUIRED

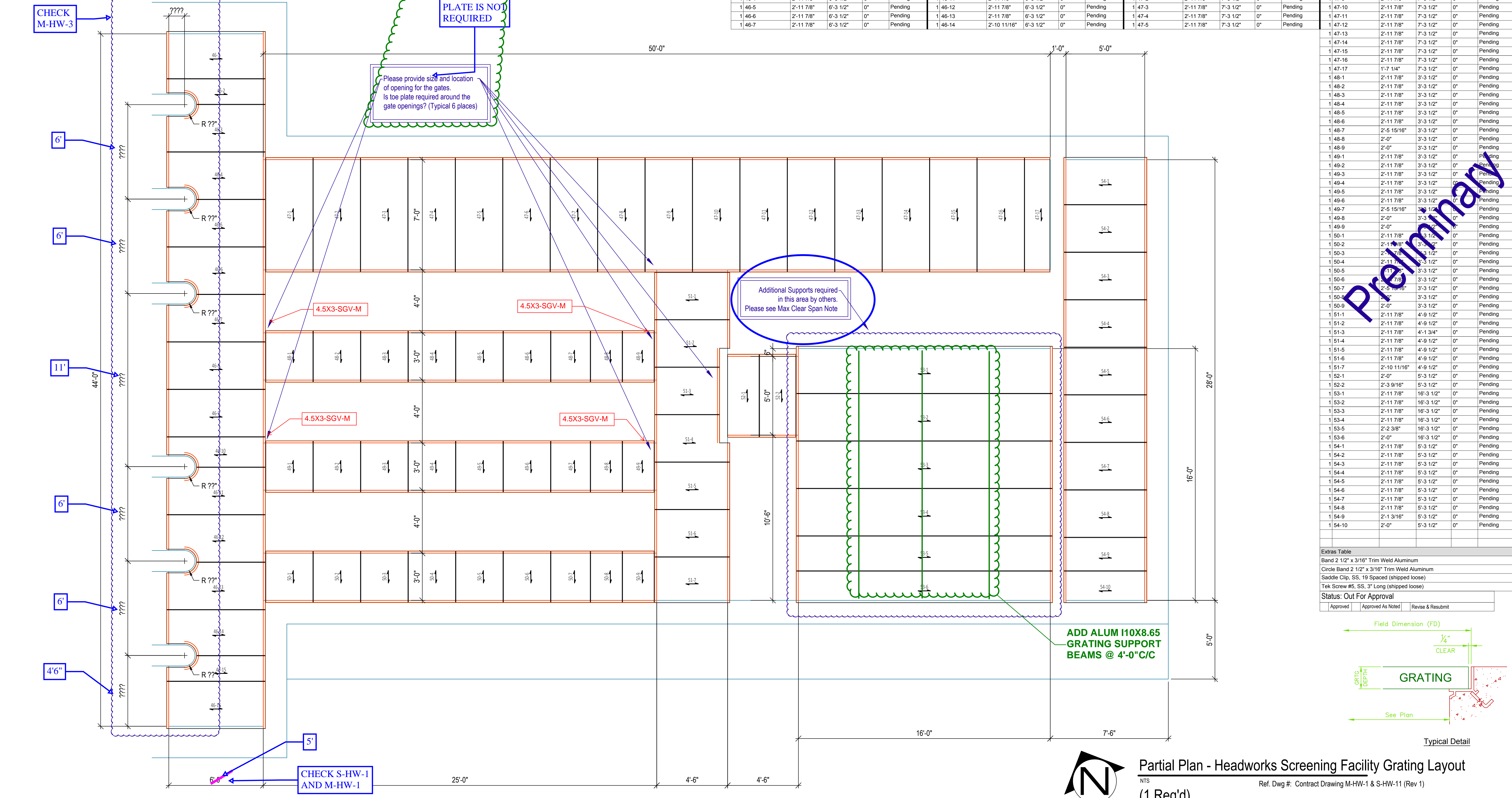
Please provide size and location of cutouts. Is toe plate required around the pipe cutouts? (Typical 6 places)

Please provide size and location of opening for the gates. Is toe plate required around the gate openings? (Typical 6 places)

OHIO GRATINGS, INC.

Bill of Materials
 19SGI4 (2 1/2") Striated
 Mill, Swaged I-Bar Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status	Qty	Mark	Finish Width	Finish Length	EG	Status	Qty	Mark	Finish Width	Finish Length	EG	Status	Qty	Mark	Finish Width	Finish Length	EG	Status
1	46-1	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-8	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-15	1'-7 1/4"	6'-3 1/2"	0"	Pending	1	47-6	2'-11 7/8"	7'-3 1/2"	0"	Pending
1	46-2	1'-7 1/4"	6'-3 1/2"	0"	Pending	1	46-9	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-16	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	47-7	2'-11 7/8"	7'-3 1/2"	0"	Pending
1	46-3	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-10	1'-10 13/16"	6'-3 1/2"	0"	Pending	1	47-1	2'-11 7/8"	7'-3 1/2"	0"	Pending	1	47-8	2'-11 7/8"	7'-3 1/2"	0"	Pending
1	46-4	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-11	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	47-2	2'-11 7/8"	7'-3 1/2"	0"	Pending	1	47-9	2'-11 7/8"	7'-3 1/2"	0"	Pending
1	46-5	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-12	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	47-3	2'-11 7/8"	7'-3 1/2"	0"	Pending	1	47-10	2'-11 7/8"	7'-3 1/2"	0"	Pending
1	46-6	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-13	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	47-4	2'-11 7/8"	7'-3 1/2"	0"	Pending	1	47-11	2'-11 7/8"	7'-3 1/2"	0"	Pending
1	46-7	2'-11 7/8"	6'-3 1/2"	0"	Pending	1	46-14	2'-10 11/16"	6'-3 1/2"	0"	Pending	1	47-5	2'-11 7/8"	7'-3 1/2"	0"	Pending	1	47-12	2'-11 7/8"	7'-3 1/2"	0"	Pending

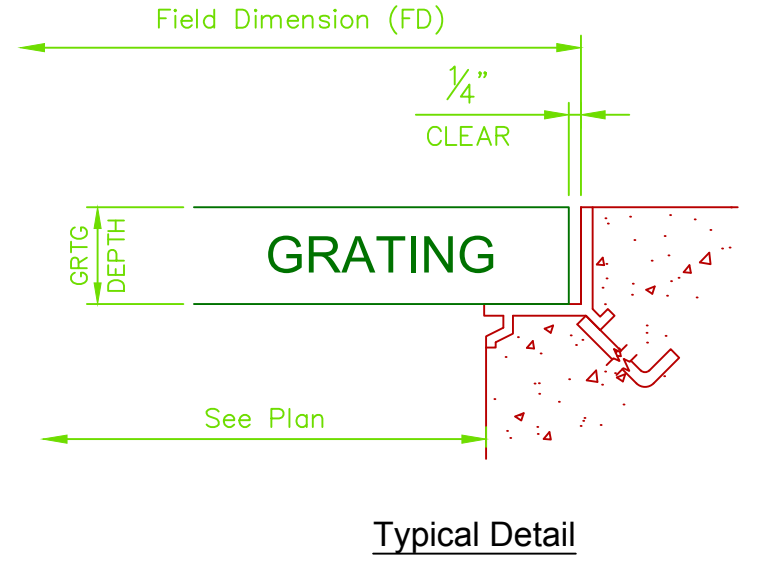


Extras Table

Band 2 1/2" x 3/16" Trim Weld Aluminum
Circle Band 2 1/2" x 3/16" Trim Weld Aluminum
Saddle Clip, SS, 19 Spaced (shipped loose)
Tek Screw #5, SS, 3" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
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Partial Plan - Headworks Screening Facility Grating Layout
 (1 Req'd)

Ref. Dwg #: Contract Drawing M-HW-1 & S-HW-11 (Rev 1)

Revisions Record

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

Supporting steel with flanges greater than 1/4" in thickness may need to be pre-drilled in field prior to fastening down with a standard tek screw. Cutting cross bars in the field may be necessary in some locations for fastener clearance.

The ends of all bearing bars within a grating panel must be properly supported at ends of panels and within cutouts. Ohio Gratings recommends 1" of bearing surface for grating bearing bar depths up to 2 1/2" and 2" of bearing surface for grating bearing bar depths 2 1/2" and over. Bearing bars should not be cantilevered beyond their supports.

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Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Ⓢ Indicates the tagged end of panels for aligning cross rods
- ↔ Indicates the span direction of load carrying bars

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OHIO GRATINGS, INC.

OGI Canton, OH: 5299 Southway St SW Canton, OH 44706 Ph: 1-800-321-9800	OGI Houston, TX: 5500 Cedar Crest Houston, TX 77087 Ph: 1-888-207-9392	OGI Ridgeland, SC: 5307 Cypress Ridge Dr Ridgeland, SC 29936 Ph: 1-800-321-9800
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www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Pflugerville, Texas Cody Builders Supply
PO	59698
Job #	
Dwg: 863600	Sht: 5B

OGI Q: 863600
OGI SO:
Seq: 55128-R&I

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.

OHIO GRATINGS, INC.

Bill of Materials

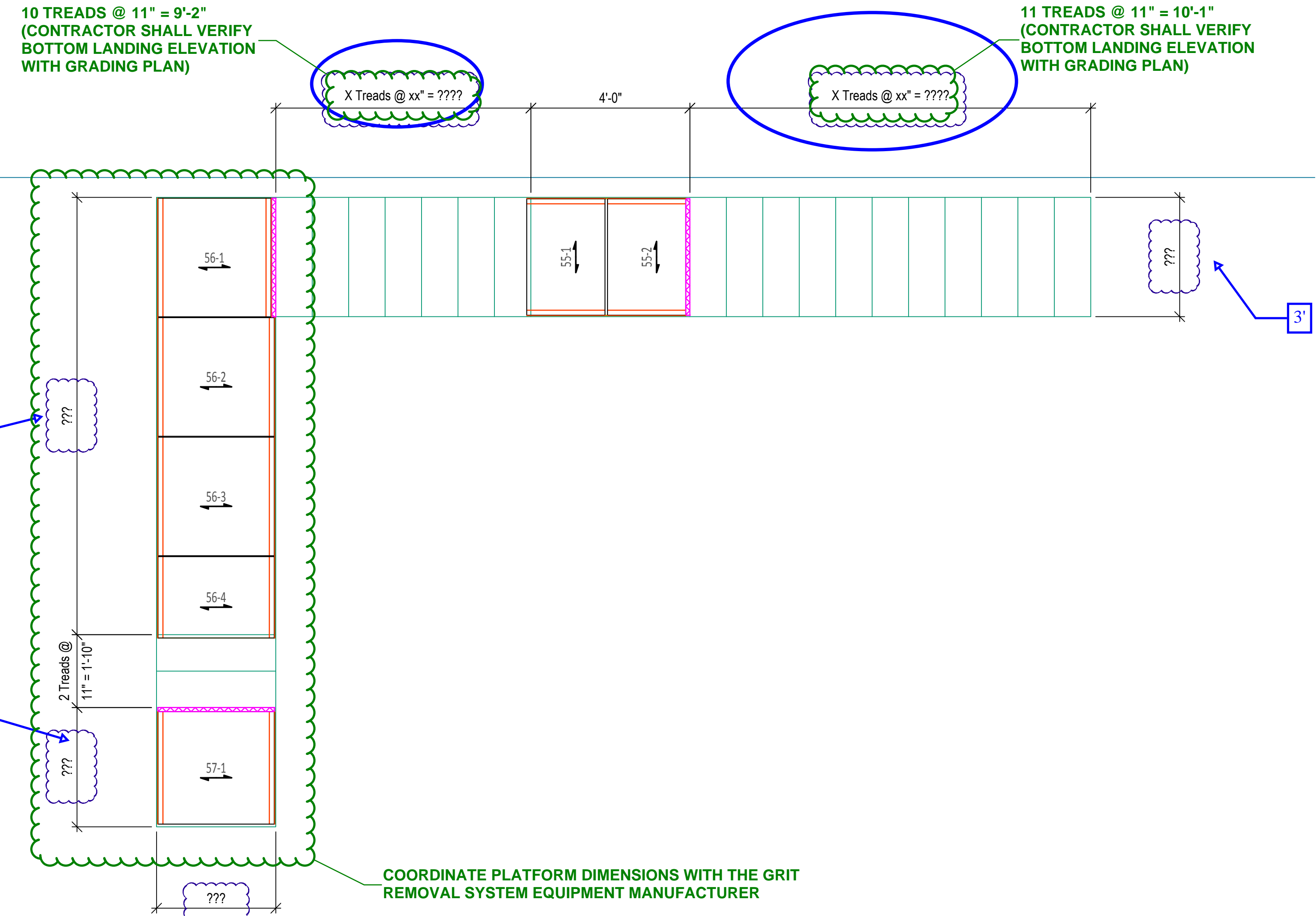
15SG4 (1 1/2" x 3/16") Serrated
 Mill, Swaged Rectangular Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	55-1	1'-11 5/8"	2'-11 1/2"	0"	Pending
1	55-2	2'-0 7/8"	2'-11 1/2"	0"	Pending
1	56-1	2'-11 13/16"	2'-11 3/4"	0"	Pending
1	56-2	2'-11 13/16"	2'-11 1/2"	0"	Pending
1	56-3	2'-11 13/16"	2'-11 1/2"	0"	Pending
1	56-4	2'-9 9/16"	2'-11 1/2"	0"	Pending
1	57-1	2'-11 5/16"	2'-11 1/2"	0"	Pending

Preliminary

Extras Table

Band 1 1/2" x 3/16" Trim Weld Aluminum		
OnGrip® Nosing Aluminum		
Saddle Clip, SS, 15 Spaced (shipped loose)		
Tek Screw #5, SS, 2" Long (shipped loose)		
Status: Out For Approval		
Approved	Approved As Noted	Revise & Resubmit

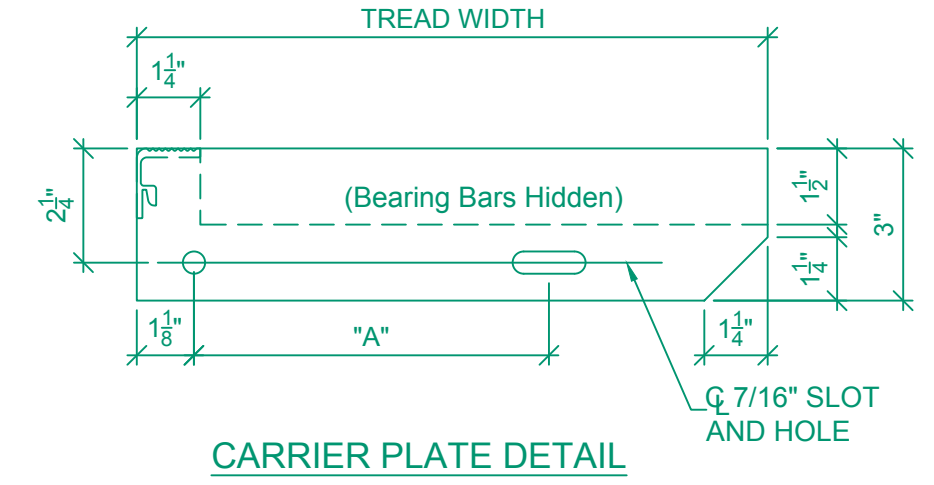


11'1"

3'6"

3'6"

3'



QTY.	WIDTH x LENGTH	"A"	FINISH	MARK
??	11 3/4" x ???	7"	MILL	T5

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

Lay all grating panels out in an entire area with a loose fit prior to fastening down in order to ensure a proper fit and uniform gaps between panels. Gaps between panels can range from a light fit to a size equal to the space between two adjacent bearing bars in a panel. A typical gap is approximately 3/8".

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Drawing Legend

- Indicates banding
- Indicates toeplate
- Indicates nosing
- Indicates the tagged end of panels for aligning cross rods
- Indicates the span direction of load carrying bars

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OHIO GRATINGS, INC.

5299 Southway St SW
Canton, OH 44706
Ph: 1-800-321-9800

5500 Cedar Crest
Houston, TX 77087
Ph: 1-888-207-9392

5307 Cypress Ridge Dr
Ridgeland, SC 29936
Ph: 1-800-321-9800

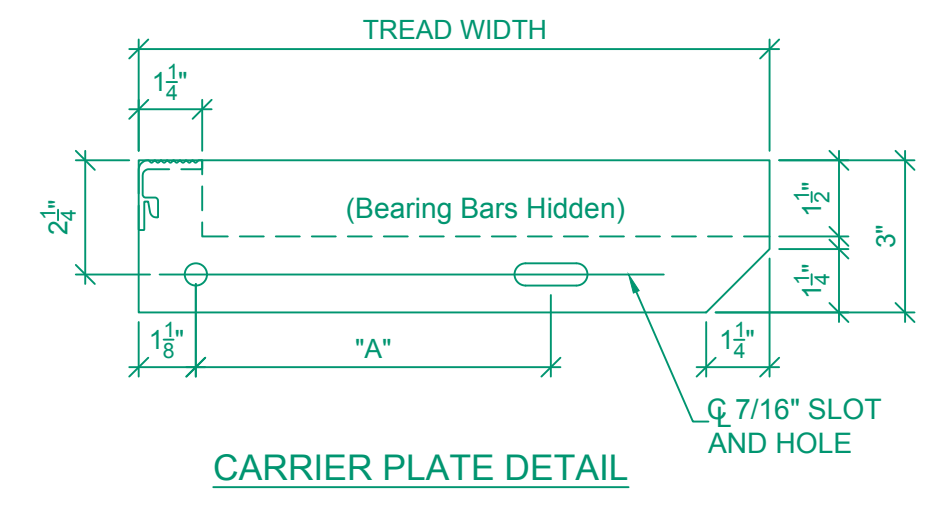
www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Pflugerville, Texas Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-RE1
Sht:	5C

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 66".
 Additional Support Required. (By Others)

THESE ARE CAST-IN-PLACE CONCRETE STAIRS WITH
 2 TREADS @ 11" = 1'-10" (CONTRACTOR SHALL VERIFY
 BOTTOM LANDING ELEVATION WITH GRADING PLAN)

REFER TO RCP001 UPDATED UV DRAWINGS



STAIR TREADS W/		OnGrip® NOSING		
15SG4 1 1/2" x 3/16" Serrated				
QTY.	WIDTH x LENGTH	"A"	FINISH	MARK
??	11 3/4" x 4'-0"	7"	MILL	T6

OHIO GRATINGS, INC.

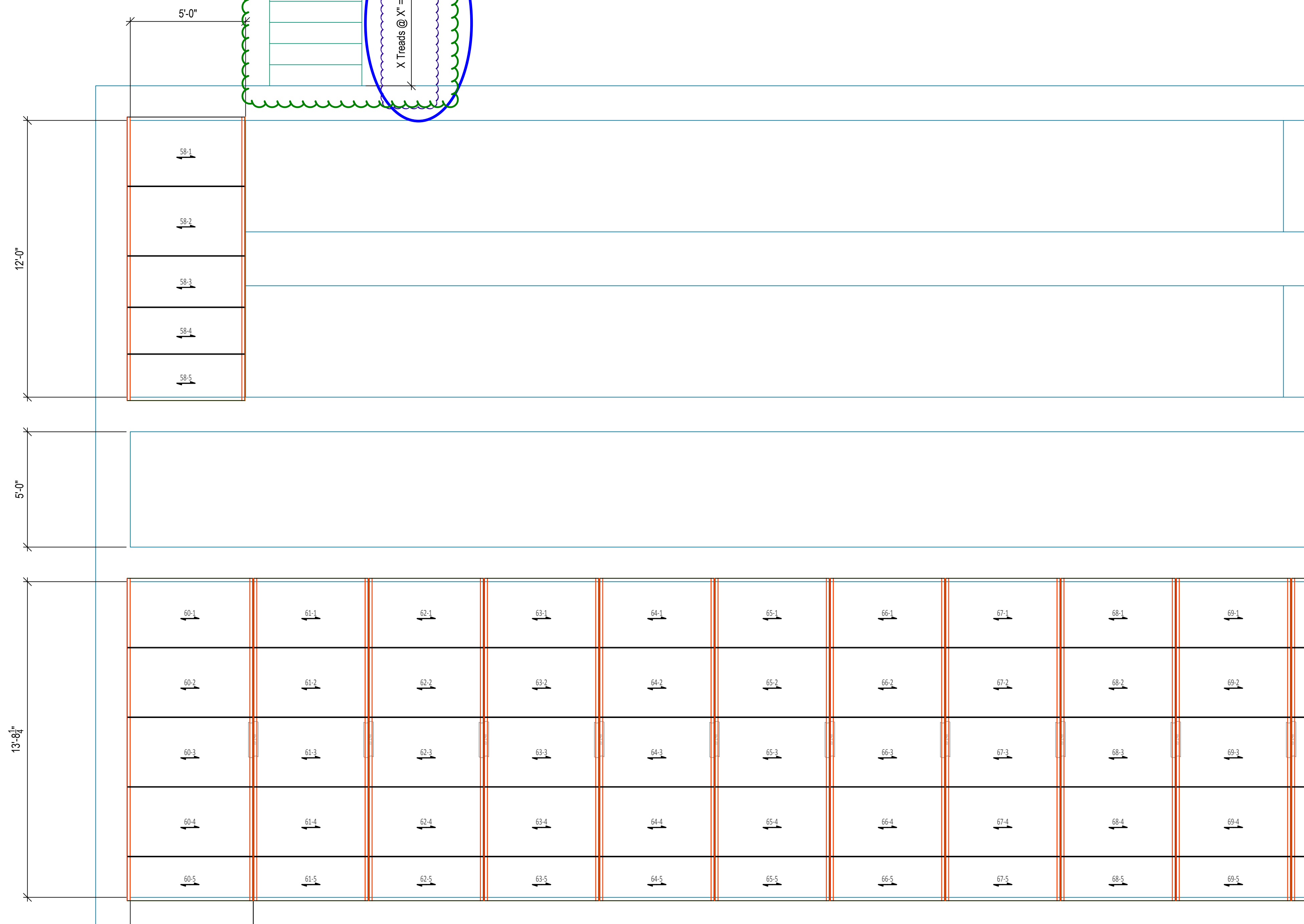
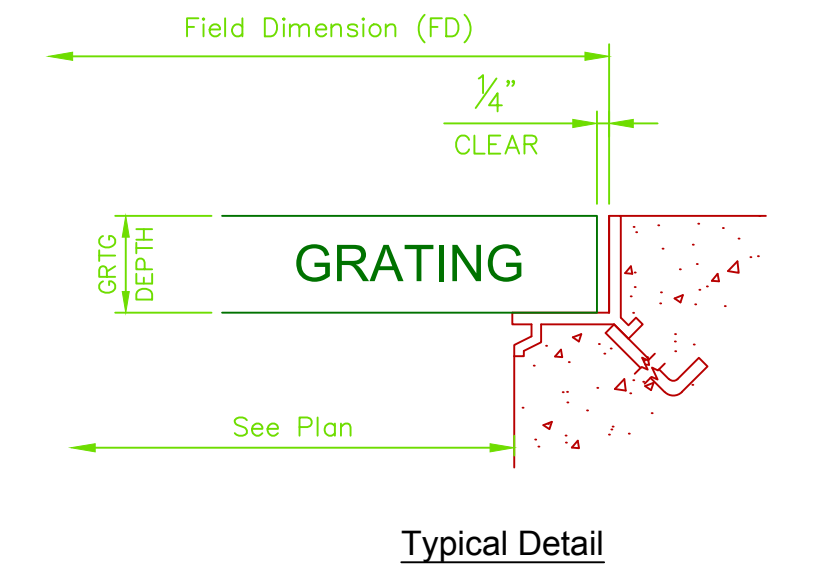
Bill of Materials					
19SG14 (1 3/4") Striated Mill, Swaged I-Bar Bar Grating, Aluminum					
Qty	Mark	Finish Width	Finish Length	EG	Status
1	58-1	2'-11 7/8"	5'-1 1/2"	0"	Pending
1	58-2	2'-11 7/8"	5'-1 1/2"	0"	Pending
1	58-3	2'-2 3/8"	5'-1 1/2"	0"	Pending
1	58-4	2'-0"	5'-1 1/2"	0"	Pending
1	58-5	2'-0"	5'-1 1/2"	0"	Pending
1	60-1	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	60-2	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	60-3	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	60-4	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	60-5	1'-10 13/16"	5'-5 5/8"	0"	Pending
1	61-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	61-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	61-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	61-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	61-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	62-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	62-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	62-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	62-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	62-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	63-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	63-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	63-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	63-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	63-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	64-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	64-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	64-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	64-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	64-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	65-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	65-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	65-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	65-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	65-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	66-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	66-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	66-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	66-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	66-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	67-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	67-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	67-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	67-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	67-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	68-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	68-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	68-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	68-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	68-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	69-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	69-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	69-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	69-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	69-5	1'-10 13/16"	4'-11 3/4"	0"	Pending

Extras Table

Band 1 3/4" x 3/16" Trim Weld Aluminum
Saddle Clip, SS, 19 Spaced (shipped loose)
Tek Screw #5, SS, 2 1/2" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
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4'8" PENDING
 RCP001
 UPDATED UV
 DRAWINGS

PENDING
 RCP001
 UPDATED UV
 DRAWINGS

19 @ 4' EACH

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

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Drawing Legend	
	Indicates banding
	Indicates toeplate
	Indicates nosing
	Indicates the tagged end of panels for aligning cross rods
	Indicates the span direction of load carrying bars

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OHIO GRATINGS, INC.

OGI Canton, OH: 5299 Southway St SW, Canton, OH 44706, Ph: 1-800-321-9800

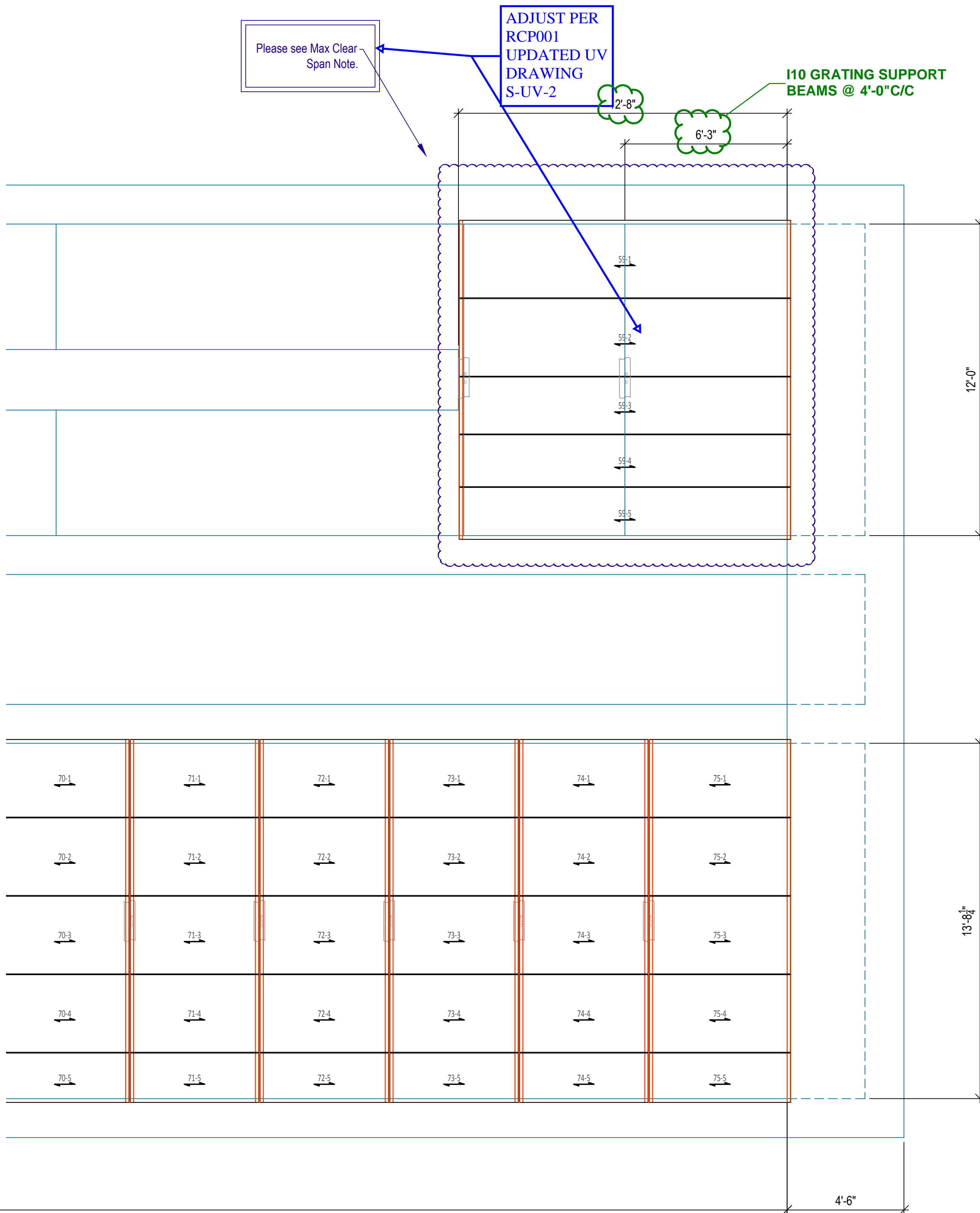
OGI Houston, TX: 5500 Cedar Crest, Houston, TX 77087, Ph: 1-888-207-9392

OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project	Central WWTP Expansion Phase I Improvements
Customer	Pflugerville, Texas Cody Builders Supply
PO	59698
Job #	863600
Dwg:	863600
Sht:	6A
OGI Q:	863600
OGI SO:	
Seq:	55128-REL

NOTE: Field Dimensions Required Prior To Fabrication
 NOTE: Please Furnish All Missing/Clouded Dimensions.
 NOTE: Structural Erection Drawings Required Prior To Fabrication.
 NOTE: Stair Fabrication Drawings Required Prior To Fabrication.
 NOTE: Grating In Clouded Area Exceeds The Max Clear Span of 66".
 Additional Support Required. (By Others)



REFER TO RCP001 UPDATED UV DRAWINGS

OHIO GRATINGS, INC.

Bill of Materials

19SGI4 (1 3/4") Striated
 Mill, Swaged I-Bar Bar Grating, Aluminum

Qty	Mark	Finish Width	Finish Length	EG	Status
1	59-1	2'-11 7/8"	12'-9 1/2"	0"	Pending
1	59-2	2'-11 7/8"	12'-9 1/2"	0"	Pending
1	59-3	2'-2 3/8"	12'-9 1/2"	0"	Pending
1	59-4	2'-0"	12'-9 1/2"	0"	Pending
1	59-5	2'-0"	12'-9 1/2"	0"	Pending
1	70-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	70-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	70-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	70-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	70-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	71-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	71-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	71-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	71-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	71-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	72-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	72-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	72-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	72-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	72-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	73-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	73-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	73-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	73-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	73-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	74-1	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	74-2	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	74-3	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	74-4	2'-11 7/8"	4'-11 3/4"	0"	Pending
1	74-5	1'-10 13/16"	4'-11 3/4"	0"	Pending
1	75-1	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	75-2	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	75-3	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	75-4	2'-11 7/8"	5'-5 5/8"	0"	Pending
1	75-5	1'-10 13/16"	5'-5 5/8"	0"	Pending

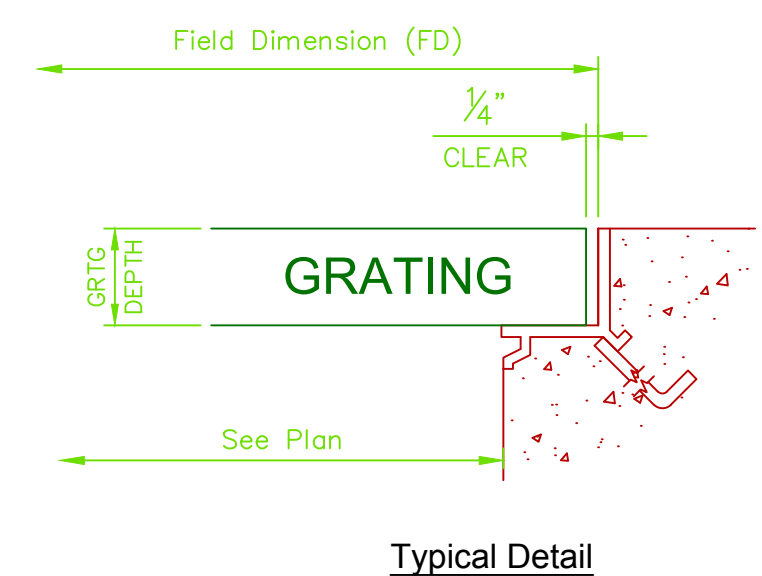
Preliminary

Extras Table

Band 1 3/4" x 3/16" Trim Weld Aluminum
Saddle Clip, SS, 19 Spaced (shipped loose)
Tek Screw #5, SS, 2 1/2" Long (shipped loose)

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
----------	-------------------	-------------------



15 Spaces @ 4'-0"
 19 @ 4' EACH
 PENDING RCP001 UPDATED UV DRAWINGS

Revisions Record

Rev	Date	By	Ckd	Description
B	1/31/2020			Issued For Approval
A	1/28/2020			Issued For Approval

General Notes

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OGI Canton, OH: 5299 Southway St SW, Canton, OH 44706, Ph: 1-800-321-9800

OGI Houston, TX: 5500 Cedar Crest, Houston, TX 77087, Ph: 1-888-207-9392

OGI Ridgeland, SC: 5307 Cypress Ridge Dr, Ridgeland, SC 29936, Ph: 1-800-321-9800

www.ohiogratings.com

Project: Central WWTP Expansion Phase I Improvements

Customer: Cody Builders Supply

Job #: 863600

PO: 59698

OGI Q: 863600

OGI SO:

Seq: 55128-Rev 1

Dwg: 863600 Sht: 6B

NOTE: Field Dimensions Required Prior To Fabrication

NOTE: Please Furnish All Missing/Clouded Dimensions.

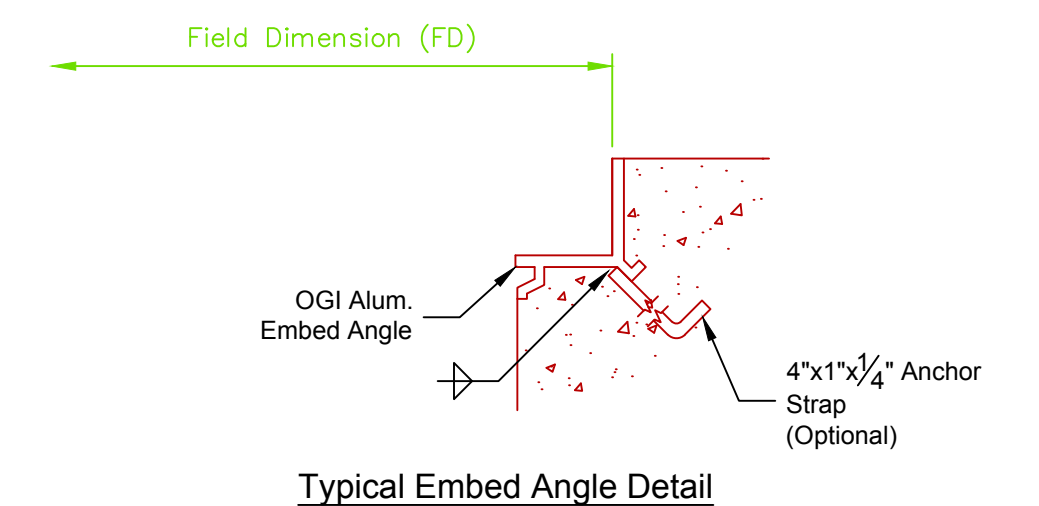
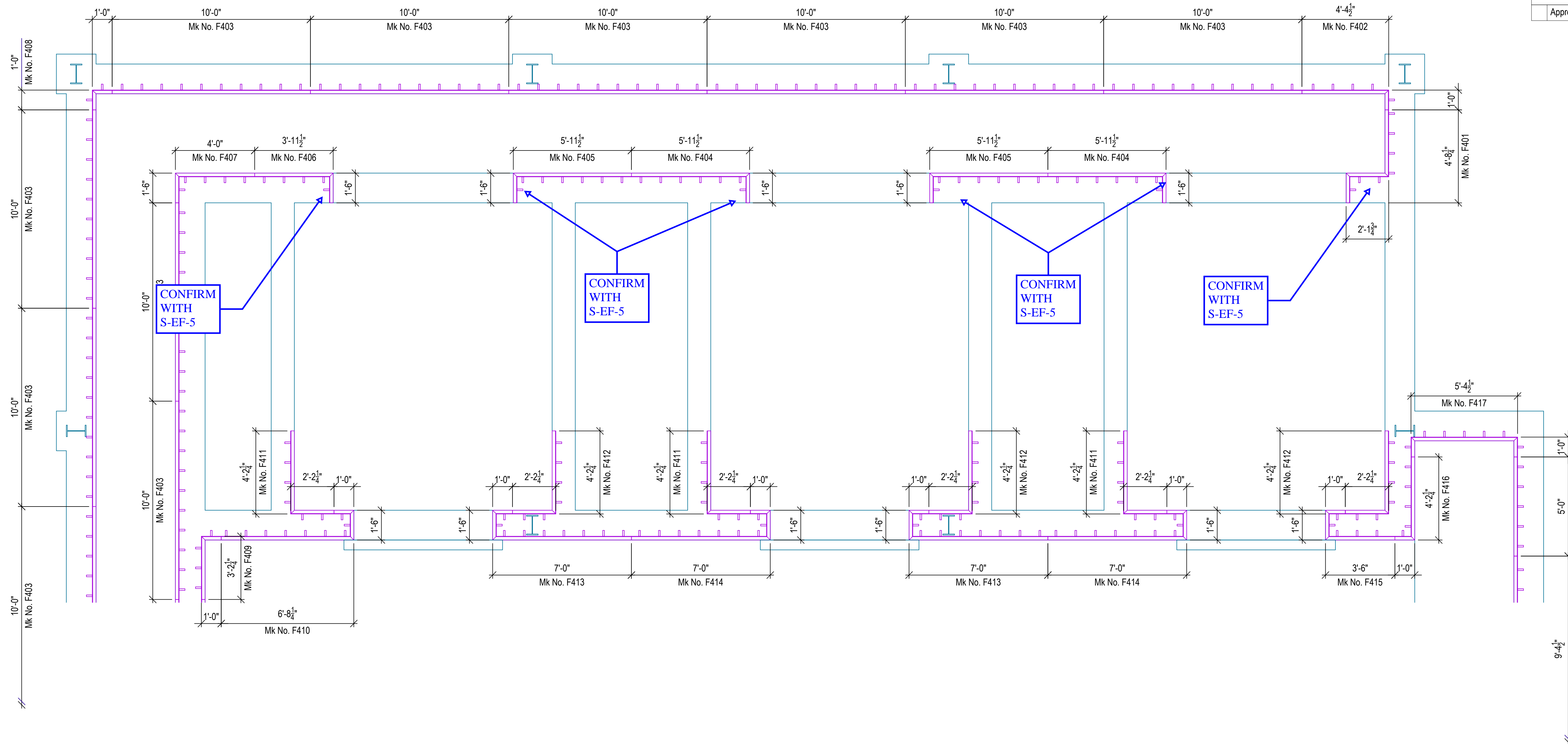
OHIO GRATINGS, INC.

(2") Embed Angle

Mill, Extruded Aluminum, Gray Powder Insulating Coating on Backside "Only", Anchor Straps 1'-0" O.C.

Status: Out For Approval

Approved Approved As Noted Revise & Resubmit



Partial Plan - Effluent Filters Embed Angle Layout

NTS Ref. Dwg #: Contract Drawing S-EF-1 (1 Req'd)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

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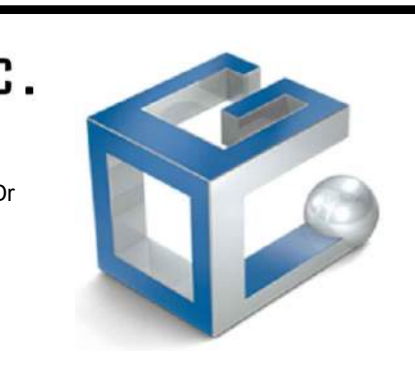
OHIO GRATINGS, INC.

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OGI Houston, TX: 5500 Cedar Crest Houston, TX 77087 Ph: 1-888-207-9392

OGI Ridgeland, SC: 5307 Cypress Ridge Dr Ridgeland, SC 29936 Ph: 1-800-321-9800

www.ohiogratings.com



Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
Location	Pflugerville, Texas
OGI Q:	863600
OGI SO:	
Seq:	55128-RE1
Dwg:	863600
Sht:	4AF

NOTE: Field Dimensions Required Prior To Fabrication

NOTE: Please Furnish All Missing/Clouded Dimensions.

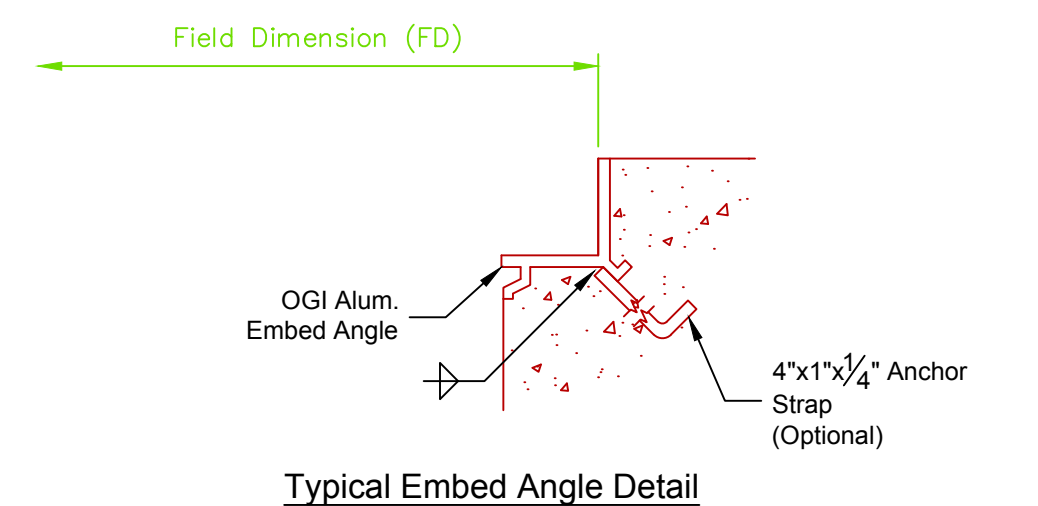
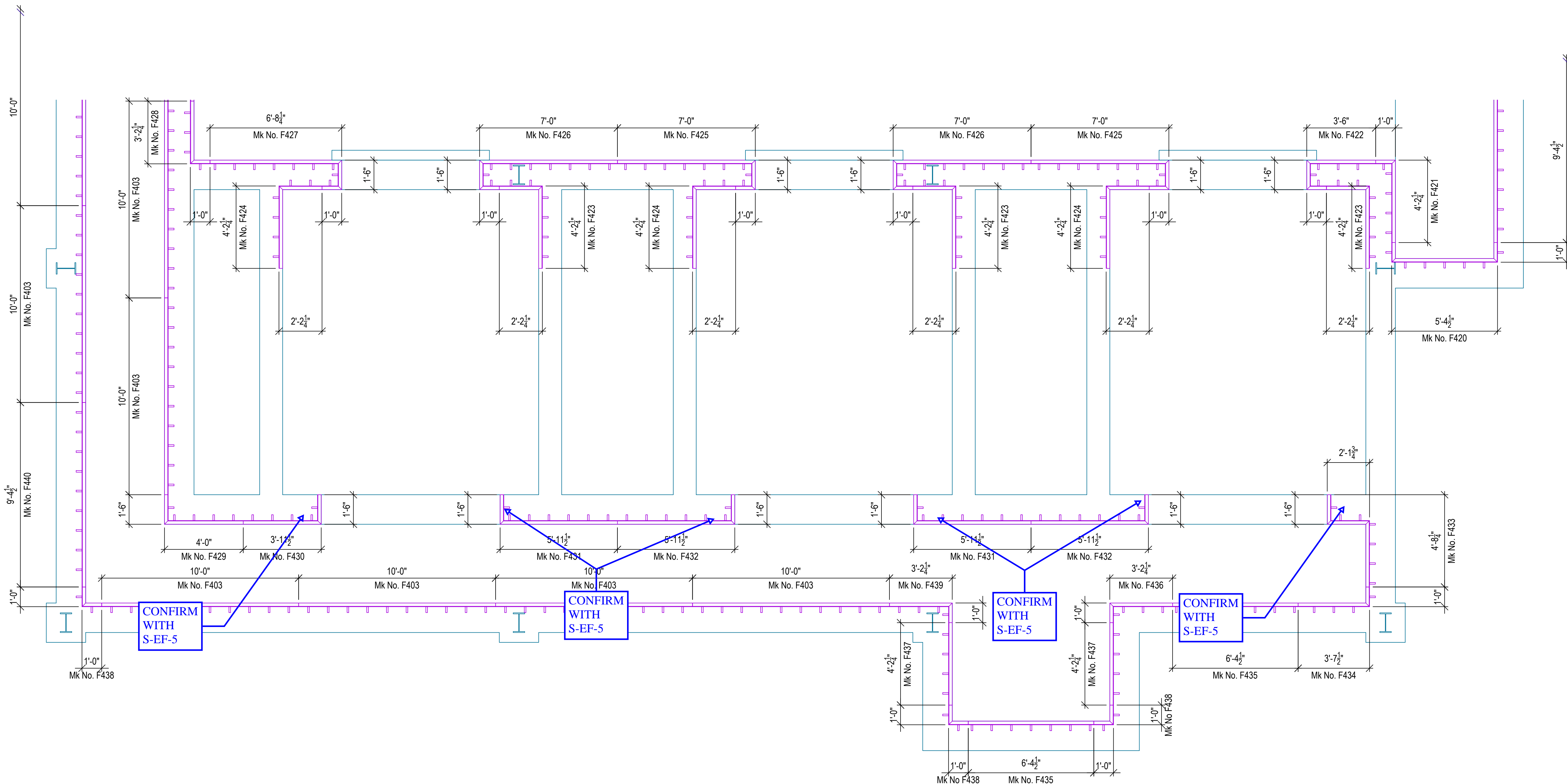
OHIO GRATINGS, INC.

(2") Embed Angle

Mill, Extruded Aluminum, Gray Powder Insulating Coating on Backside "Only", Anchor Straps 1'-0" O.C.

Status: Out For Approval

Approved Approved As Noted Revise & Resubmit



Partial Plan - Effluent Filters Embed Angle Layout

NTS Ref. Dwg #: Contract Drawing S-EF-1
(1 Req'd)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes

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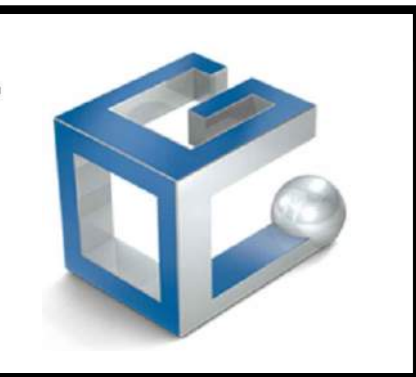
OHIO GRATINGS, INC.

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www.ohiogratings.com



Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
Location	Pflugerville, Texas
OGI Q:	863600
OGI SO:	
Seq:	55128-R2
Dwg:	863600
Sht:	4BF

NOTE: Field Dimensions Required Prior To Fabrication

NOTE: Please Furnish All Missing/Clouded Dimensions.

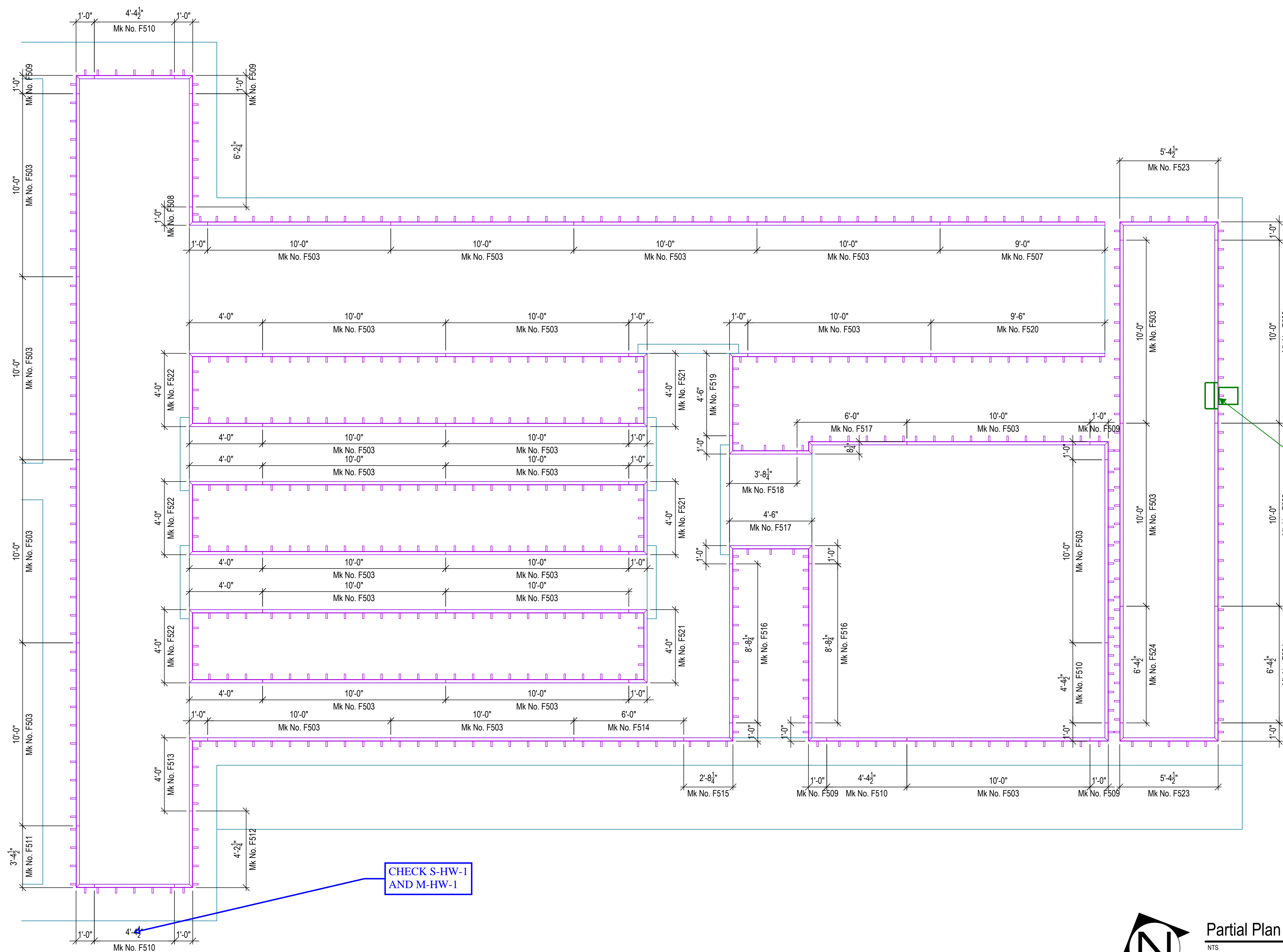
OHIO GRATINGS, INC.

(2 1/2") Embed Angle

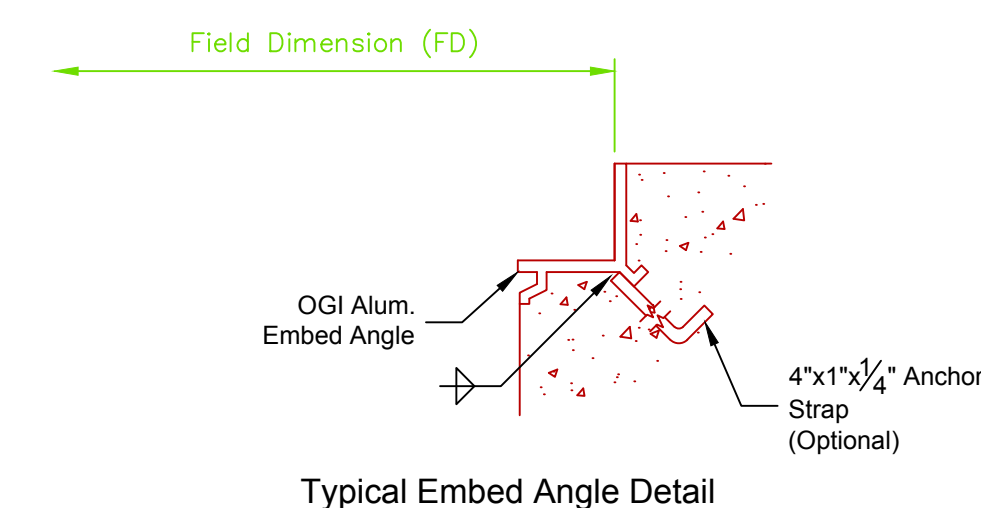
Mill, Extruded Aluminum, Gray Powder Insulating Coating on Backside "Only", Anchor Straps 1'-0" O.C.

Status: Out For Approval

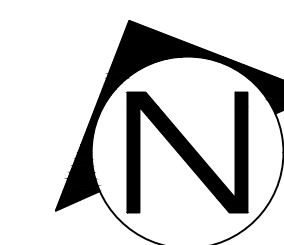
Approved Approved As Noted Revise & Resubmit



THERE IS A CONFLICT WITH THE GRATING SUPPORT EMBED ANGLE AND THE COLUMN BASE PLATE AT THIS LOCATION. STOP THE EMBED ANGLE A MINIMUM OF 2" FROM EACH SIDE OF THE COLUMN BASE PLATE. INSTALL AN ALUMINUM L5x3x1/4" LLV TO THE FACE OF THE CONCRETE WALL WITH 5/8" SS 316 ADHESIVE ANCHORS @ 12" C/C WITH 5-5/8" EMBEDMENT (7/SD-27).



CHECK S-HW-1 AND M-HW-1



Partial Plan - Headworks Screening Facility Embed Angle Layout

(1 Req'd)

Ref. Dwg #: Contract Drawing S-HW-11 (Rev 1)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

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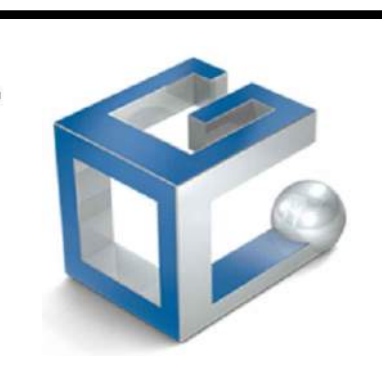
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www.ohiogratings.com



Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-R2
Sht:	5BF

NOTE: Field Dimensions Required Prior To Fabrication

NOTE: Please Furnish All Missing/Clouded Dimensions.

REFER TO RCP001 UPDATED UV DRAWINGS

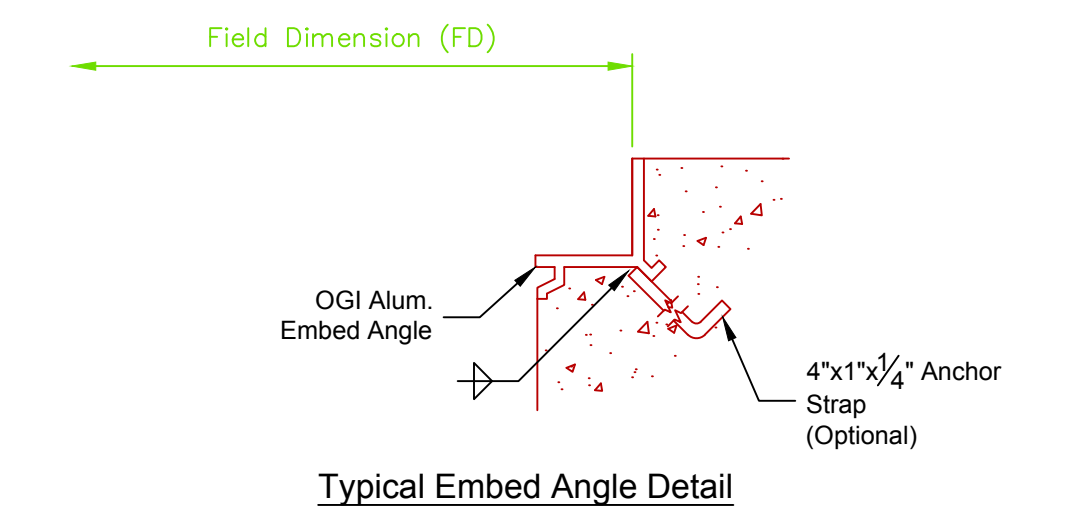
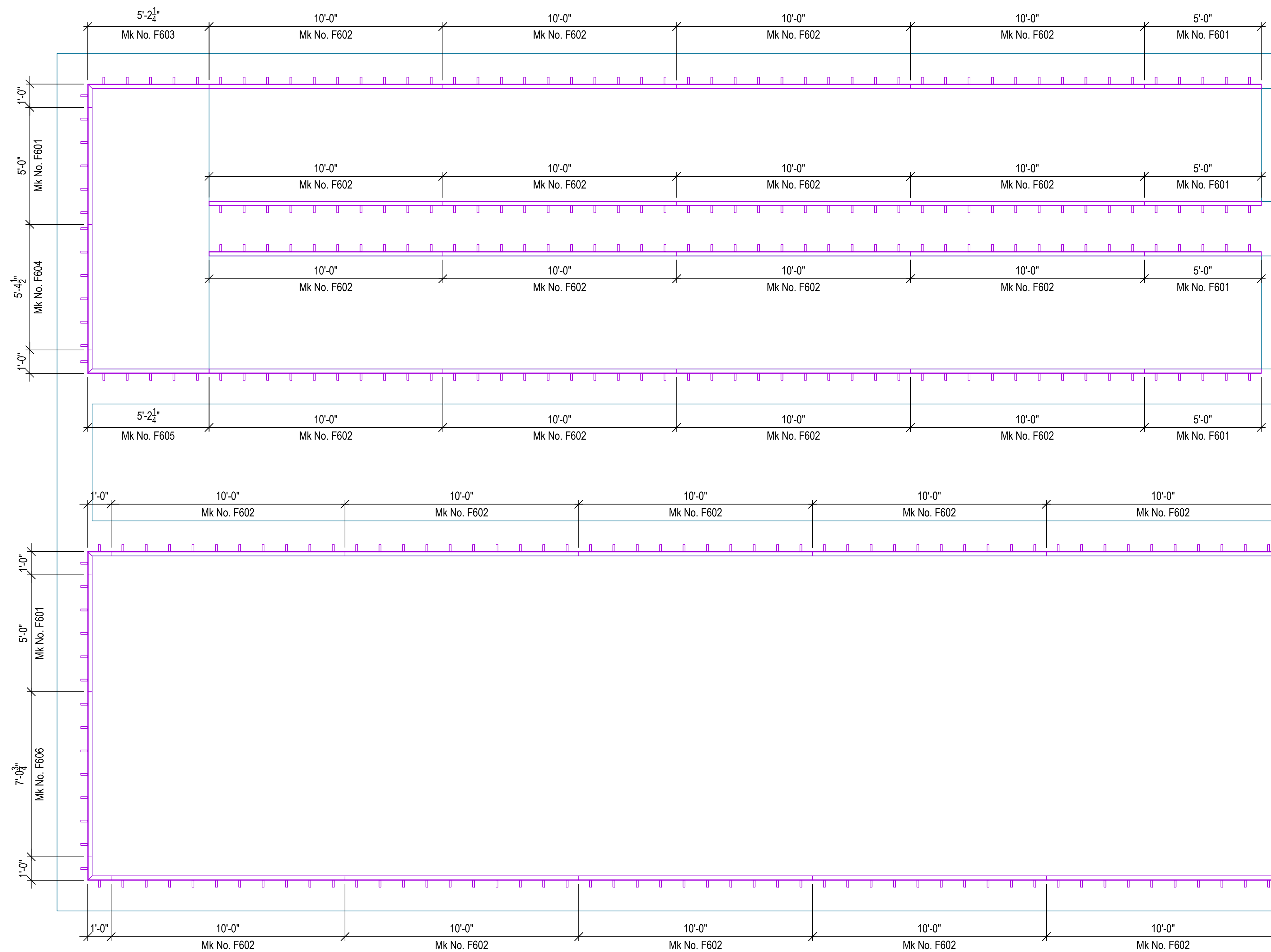
OHIO GRATINGS, INC.

(1 3/4") Embed Angle

Mill, Extruded Aluminum, Gray Powder Insulating Coating on Backside "Only", Anchor Straps 1'-0" O.C.

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
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Partial Plan - UV Disinfection Basin Embed Angle Layout

NTS

Ref. Dwg #: Contract Drawing S-UV-2

(1 Req'd)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

General Notes
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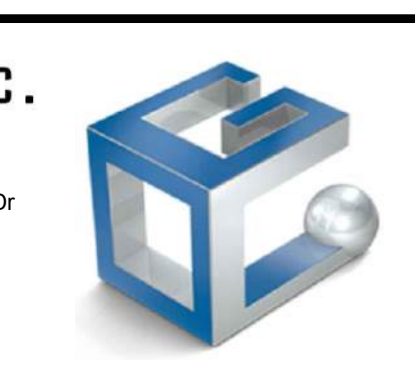
Drawing Legend	
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www.ohiogratings.com



Project	Central WWTP Expansion Phase I Improvements
Customer	Pflugerville, Texas Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-REL
Dwg:	863600
Sht:	6AF

NOTE: Field Dimensions Required Prior To Fabrication

NOTE: Please Furnish All Missing/Clouded Dimensions.

OHIO GRATINGS, INC.

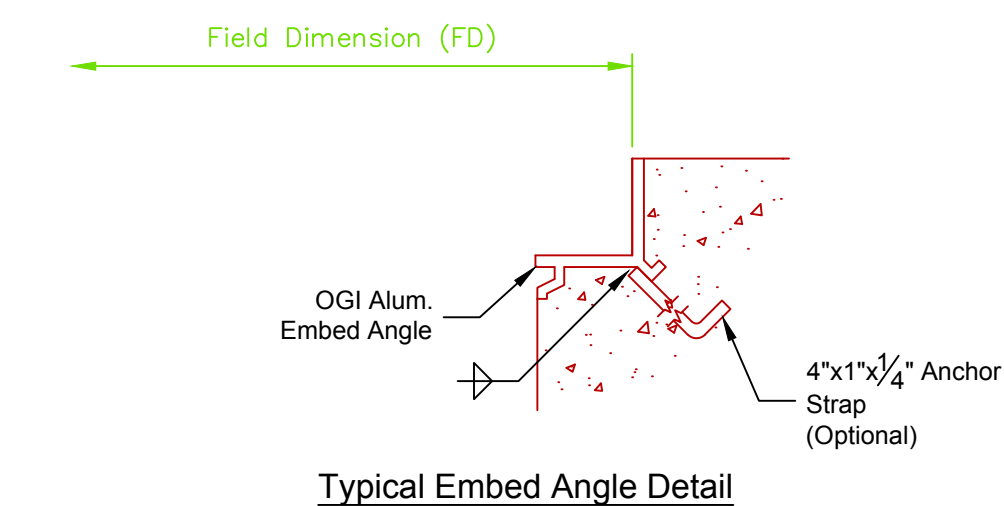
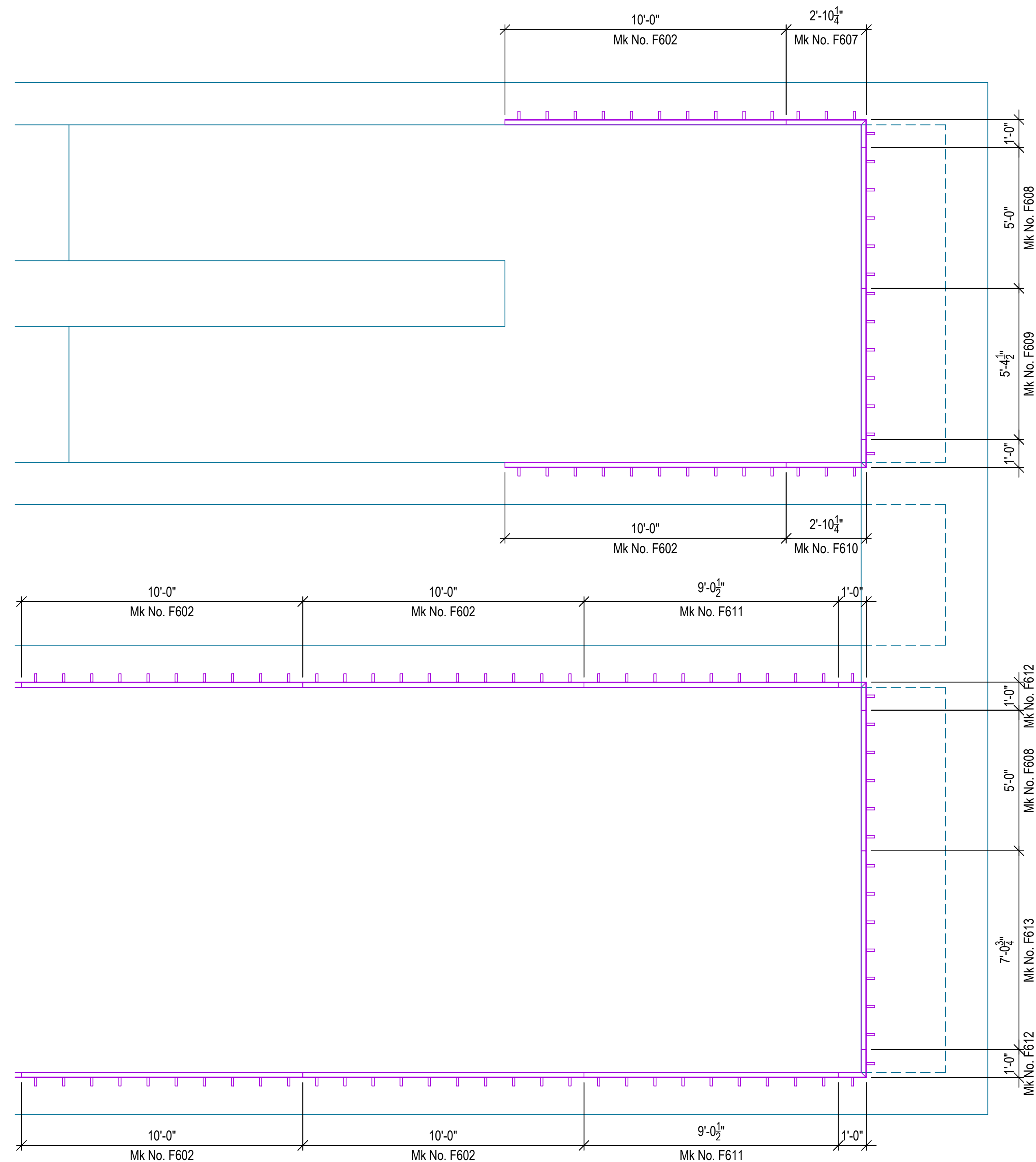
(1 3/4") Embed Angle

Mill, Extruded Aluminum, Gray Powder Insulating Coating on Backside "Only", Anchor Straps 1'-0" O.C.

Status: Out For Approval

Approved	Approved As Noted	Revise & Resubmit
----------	-------------------	-------------------

REFER TO RCP001 UPDATED UV DRAWINGS



Partial Plan - UV Disinfection Basin Embed Angle Layout

NTS Ref. Dwg #: Contract Drawing S-UV-2
(1 Req'd)

Rev	Date	By	Ckd	Description
A	1/28/2020			Issued For Approval

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www.ohiogratings.com



Project	Central WWTP Expansion Phase I Improvements
Customer	Cody Builders Supply
PO	59698
Job #	863600
OGI Q:	863600
OGI SO:	
Seq:	55128-Rev
Sht:	6BF

Project:	<u>Central Wastewater Treatment Plant</u>	Project Number:	<u>88</u>
Owner:	<u>City of Pflugerville</u>		
Contractor:	<u>BAR Constructors, Inc</u>		<u>279</u>
Engineer:	<u>Freese and Nichols, Inc</u>		<u>PFL16607</u>
Change Proposal No.:	<u>CP0005</u>	Description:	<u>Temporary Communications for Administration Building and Field Operations Building</u>
Specification:	<u>N/A</u>		
Drawing No.:	<u>N/A</u>	Detail Description:	<u>N/A</u>
Reference Document:			
<input type="checkbox"/> Request for a Change Proposal No.: _____ <input type="checkbox"/> Request for Information No.: _____ <input type="checkbox"/> Shop Drawing Deviation Request No.: _____ <input type="checkbox"/> Field Order No.: _____			
Contractor proposes the following modifications to the Contract Documents:			
1. Provide temporary communications for the Public Works Administration Building and Field Operations Building. The temporary communications will take the form of two 5GHz Lite Beam M5 23dbi Ubiquiti radios communicating to the existing radio housed at Electrical Building 4.			
Purpose of Change Proposal:			
During site investigation by Team Morales it was discovered that there was a fiber optic line in the electrical ductbank routed from Electrical Building 4 to behind the Public Works Administration Building. The ductbank was shown to contain power and could be abandoned after demolition of the existing lab building. This fiber optic line provides service to the Public Works Admin Building. This ductbank will need to be demolished as it is routed through the site of the new headwords facility. As a result of the ductbank demolition, temporary communications are required for the Public Works Administration Building and Field Operations Building.			
Attachments:			
CP0003			
Requested Action:			
<input type="checkbox"/> Issue a Field Order <input checked="" type="checkbox"/> Issue a Work Change Directive or Change Order for the described changes			
Basis of Compensation:			
<input type="checkbox"/> Unit Prices <input checked="" type="checkbox"/> Lump Sum calculated using Cost of Work provisions in General Conditions Paragraph 13.01 <input type="checkbox"/> Time and Materials using Cost of Work provisions in General Conditions Paragraph 13.01			
Required Documentation:			
<input checked="" type="checkbox"/> Detailed cost breakdown attached showing labor, materials, equipment, and all other costs for this change <input type="checkbox"/> Schedule attached to show impacts and justification for requested change in Contract Times			
Total Change Proposal Amount:		<u>\$7,299.50</u>	Adjustment in Contract Times (days): <u>0</u>

Project:	<u>Central Wastewater Treatment Plant</u>	Project Number:	
Owner:	<u>City of Pflugerville</u>		<u>88</u>
Contractor:	<u>BAR Constructors, Inc</u>		<u>279</u>
Engineer:	<u>Freese and Nichols, Inc</u>		<u>PFL16607</u>

The compensation offered for this Change Proposal is the full, complete, and final compensation for all costs the Contractor may incur as a result of or relating to this change whether said costs are known, unknown, foreseen, or unforeseen at this time, including without limitation, any cost for delay, extended overhead, ripple or impact cost, or any other effect on changed or unchanged Work as a result of this Contract Modification. Requested changes in Contract Times are the complete and final adjustments for direct impacts to the ability of the Contractor to complete the Work within the Contract Times and are the only adjustments to which the Contractor is entitled. Except as modified hereby, the Contract Documents and all of the terms and provisions thereof remain in full force and effect.

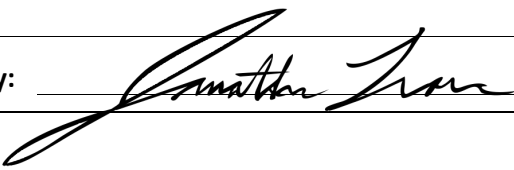
Certified by: Dennis Berger **Date:** 5/14/2020

Action:

- Field Order No.: _____ Issued Change Order No.: 0001 Issued
- Contract Amendment No.: _____ Issued Work Change Directive No.: _____ Issued
- Change Proposal Not Accepted Additional information required. See comments. Cancelled

Comments:

To be included in CO0001 along with CP0001, CP0002, CP0003, CP0006 and CP0007

Response by:  **Date:** 6/10/2020



May 14, 2020

Mr. Matt Gaughan
Plus Six Engineering
15500 Sun Light Near Way B
Pflugerville, TX 78660

Re: City of Pflugerville, Texas
Central WWTP Expansion Phase I Improvements
Project No. PFL16607
CP005 Temp Comms Admin & Field Operations

Dear Mr. Gaughan,

Please find the attached pricing and quotations for Temp Comms from T. Morales. BAR Constructors, Inc. requests an ADD to the contract amount of \$,7299.50 and a time extension of 0 calendar days. Below are those inclusions and exclusions associated with this work.

Inclusions:

- As stated in T. Morales Company Quote
- All "Assumptions" as stated in T. Morales Quote

Exclusions:

- Any exclusions stated in the attached quotation(s).
- Anything not explicitly stated as an inclusion.

Sincerely,

Dennis J. Berger
Project Manager
BAR Constructors, Inc.

BAR Constructors, Inc. - Cost Detail Worksheet

Job Name: Central WWTP Expansion Phase 1

Job # 279

Date: 05/14/2020

Proposal No. CP005

Labor	Temp Comms - Admin & Field Operations							
	Day 1	Day 2	Day 3	Day 4	Total			
Temp Comms - Admin & Field Operations					\$	-		
					\$	-		
					\$	-		
					\$	-		
					\$	-		
					\$	-		
Subtotal					\$	-		
Payroll Taxes and Insurance (55%)					\$	-		
Total Labor					\$	-		

Non-Taxed Material	Rate	Temp Comms - Admin & Field Operations						
Temp Comms - Admin & Field Operations								
							\$ -	
							\$ -	
							\$ -	
							\$ -	
							\$ -	
							\$ -	
Subtotal							\$ -	

Taxed Material	Temp Comms - Admin & Field Operations						
							\$ -
							\$ -
Subtotal Taxed Material + 8.25%							\$ -

General Condition Material	Temp Comms - Admin & Field Operations						
Small Tools 5% labor							\$ -
Total Material							\$ -

Equipment	Rate	Temp Comms - Admin & Field Operations							Total
Temp Comms - Admin & Field Operations									
								\$ -	
								\$ -	
								\$ -	
Subtotal								\$ -	
Fuel, Oil, Grease & Maintenance (40% fo Equipment)								\$ -	
Tax @ 8.25%								\$ -	
Total Equipment								\$ -	

Subcontractor	Rate	Temp Comms - Admin & Field Operations							Total
T. Morales Company	\$ 6,750.00	LS	1	1				\$ 6,750.00	
								\$ -	
								\$ -	
								\$ -	
Total Subcontractor								\$ 6,750.00	

Totals	Labor	Subcontractor	Material	Equipment	Total
Totals	\$ -	\$ 6,750.00	\$ -	\$ -	\$ 6,750.00
Insurance (1.8%)					\$ 121.50
Overhead and Profit (5% for subs)					\$ 337.50
Overhead and Profit (15% Self Performed Work)					\$ 18.23
Subtotal					\$ 7,227.23
Bond @ 1%					\$ 72.27
Total					\$ 7,299.50



Project: Pflugerville Central Plant WWTP
Expansion Phase 1

Date: 05/14/20

TMC Change #: COR-04

Owner: City of Pflugerville

Project Change #: N/A

Change Order Request

Per the request of the engineer, T. Morales Company offers a change in pricing for consideration by the owner to provide temporary communication for the duration of the fiber demo.

CP USA will be adding the Administration and the Field Operations buildings to the existing network created by CP USA between Electrical Building 4 and the Bio Solids building.

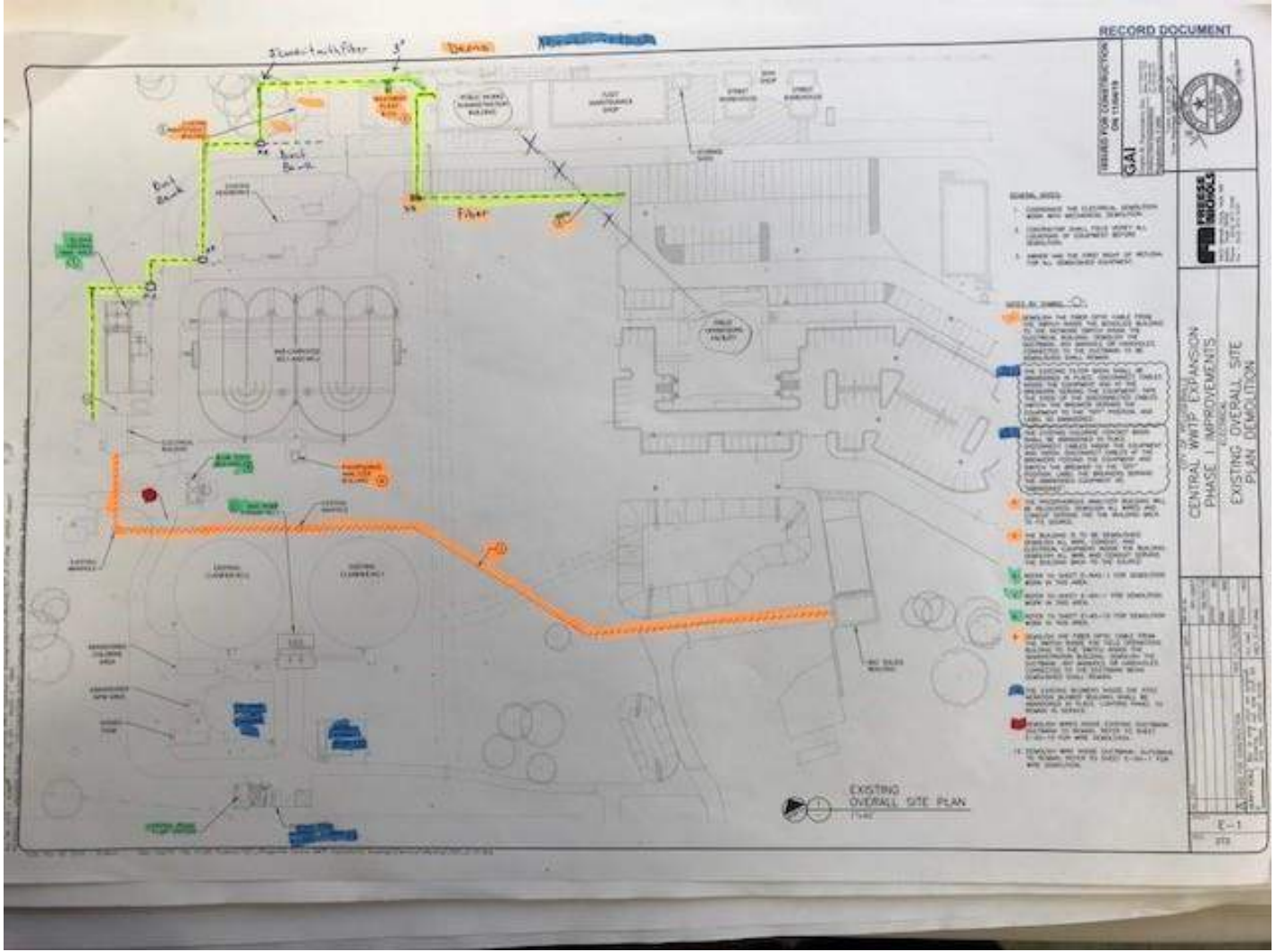
The installation will consist of two 5GHz Lite Beam M5 23dbi Ubiquiti radios P/N LBE-M5-23-US, one located at the Administration Building mounted on an extender pole, and the other will be a spare radio for this addition as a contingency. The Field Operations building will utilize the LBE-M5-23-US existing radio that is currently being used at the Electrical Building and this will be mounted on an extender pole. Repurposing the radio from the Electrical building will help alleviate the amount of radios being purchased and sitting on the shelf. The Electrical building will now utilize an Omni antenna P/N AMO-5G10 and a Rocket M5 radio to create an access point for each of the other buildings to communicate back too. Each radio will have an ethernet surge protector P/N ETH-SP-G2, as well as a POE adapter. CP USA will program the radios with the IP addresses provided by Alterman. As a contingency, CP USA will provide one spare preprogrammed radio for both part numbers LBE-M5-23-US and the Rocket M5. This will make for an easy swap should either of the radios ever fail or have issues.

TMC feels this scope of work does qualify to be a change order as it is not clearly shown on the plans or specifications that the purposed buildings were needed to maintain communications nor did the did the plans show the Ductbank with fiber being demoed from the Electric Building No.4 to the Admin Building (Exhibit A yellow highlight) during the bid process, the Ductbank was not discovered until TMC was onsite wire tracing the conductors leaving the EB4 building that the fiber line was discovered and redlined by TMC. Giving TMC no way to know that it would be needed to maintain communications between the three buildings during the bid process.

The Total Cost to provide the temporary communications towers will equate to a total of \$6,750.00

Change Initiated By: Luis Varela / Freese&Nichols Change Prepared By: Tye Eldridge / TMC
Change Delivered To: Dennis Berger / Bar Const Response Rqst'd By: ASAP
Carbon Copy To: Randy Eldridge / TMC

Exhibit A



PO Box 859
 Florence, Texas 76527
 Phone: 254-793-4344

601 South Patterson Avenue
 Florence, Texas 76527
 Fax: 254-793-3044

Project:	<u>Central Wastewater Treatment Plant</u>	Project Number:	<u>88</u>
Owner:	<u>City of Pflugerville</u>		
Contractor:	<u>BAR Constructors, Inc</u>		<u>279</u>
Engineer:	<u>Freese and Nichols, Inc</u>		<u>PFL16607</u>

Change Proposal No.:	<u>CP0006</u>	Description:	<u>60" Hobas Pipe at Mixed Liquor Junction/Splitter Box</u>
Specification:	<u>N/A</u>		
Drawing No.:	<u>N/A</u>	Detail Description:	<u>N/A</u>

Reference Document:

Request for a Change Proposal No.: _____
 Request for Information No.: 0032
 Shop Drawing Deviation Request No.: _____
 Field Order No.: _____

Contractor proposes the following modifications to the Contract Documents:

- Change the 60" HOBAS pipe wall penetration at the Mixed Liquor Junction/Splitter Box from the proposed 342/Type penetration to a cast in place wall penetration.

Purpose of Change Proposal:

BAR submitted RFI0032 proposing the use of the cast in place 60" HOBAS pipe instead of the 342/type wall penetration at the Mixed Liquor Junction/Splitter Box as this will allow a true alignment of the pipe and a better water stop installation. HOBAS will place an FRP wall ring on the two vertical sticks of pipe. This will result in a credit back to the Owner.

Attachments:

CP0006

Requested Action:

Issue a Field Order
 Issue a Work Change Directive or Change Order for the described changes

Basis of Compensation:

Unit Prices
 Lump Sum calculated using Cost of Work provisions in General Conditions Paragraph 13.01
 Time and Materials using Cost of Work provisions in General Conditions Paragraph 13.01

Required Documentation:

Detailed cost breakdown attached showing labor, materials, equipment, and all other costs for this change
 Schedule attached to show impacts and justification for requested change in Contract Times

Total Change Proposal Amount: <u>(\$7,626.27)</u>	Adjustment in Contract Times (days): <u>0</u>
--	--

Project:	<u>Central Wastewater Treatment Plant</u>	Project Number:	<u>88</u>
Owner:	<u>City of Pflugerville</u>		
Contractor:	<u>BAR Constructors, Inc</u>		<u>279</u>
Engineer:	<u>Freese and Nichols, Inc</u>		<u>PFL16607</u>

The compensation offered for this Change Proposal is the full, complete, and final compensation for all costs the Contractor may incur as a result of or relating to this change whether said costs are known, unknown, foreseen, or unforeseen at this time, including without limitation, any cost for delay, extended overhead, ripple or impact cost, or any other effect on changed or unchanged Work as a result of this Contract Modification. Requested changes in Contract Times are the complete and final adjustments for direct impacts to the ability of the Contractor to complete the Work within the Contract Times and are the only adjustments to which the Contractor is entitled. Except as modified hereby, the Contract Documents and all of the terms and provisions thereof remain in full force and effect.

Certified by: Dennis Berger **Date:** 5/20/2020

Action:

Field Order No.: _____ Issued Change Order No.: 0001 Issued

Contract Amendment No.: _____ Issued Work Change Directive No.: _____ Issued

Change Proposal Not Accepted Additional information required. See comments. Cancelled

Comments:

To be included in CO0001 along with CP0001, CP0002, CP0003, CP0006 and CP0007

Response by:  **Date:** 6/10/2020



May 20, 2020

Mr. Matt Gaughan
Plus Six Engineering
15500 Sun Light Near Way B
Pflugerville, TX 78660

Re: City of Pflugerville, Texas
Central WWTP Expansion Phase I Improvements
Project No. PFL16607
CP006 60" HOBAS Pipe @ ML Junction/Splitter Box

Dear Mr. Gaughan,

Please find the attached pricing and quotations for 60" HOBAS pipe at the ML junction/splitter box from BAR. BAR Constructors, Inc. CREDITS to the contract amount of \$7,626.27 and a time extension of 0 calendar days. Below are those inclusions and exclusions associated with this work.

Inclusions:

- As stated in Associated Quotes
- All "Assumptions" as stated in Associated Quotes

Exclusions:

- Any exclusions stated in the attached quotation(s).
- Anything not explicitly stated as an inclusion.

Sincerely,

Dennis J. Berger
Project Manager
BAR Constructors, Inc.

BAR Constructors, Inc. - Cost Detail Worksheet

Job Name: Central WWTP Expansion Phase 1

Job # 279

Date: 05/20/2020

Proposal No. CP006

Labor		Unit	Quantity	60" HOBAS PIPE @ ML Splitter/Junction Box				
	Rate							
60" HOBAS PIPE @ ML Splitter/Junction Box				Day 1	Day 2	Day 3	Day 4	Total
Install of Wall Sleeve and Link Seal	\$ 24.00	MH	2	-2				\$ (96.00)
								\$ -
								\$ -
Subtotal								\$ (96.00)
Payroll Taxes and Insurance (55%)								\$ (52.80)
Total Labor								\$ (148.80)

Non-Taxed Material	Rate			60" HOBAS PIPE @ ML Splitter/Junction Box				
60" HOBAS PIPE @ ML Splitter/Junction Box								\$ -
								\$ -
								\$ -
								\$ -
Subtotal								\$ -

Taxed Material				60" HOBAS PIPE @ ML Splitter/Junction Box				
								\$ -
								\$ -
Subtotal Taxed Material + 8.25%								\$ -

General Condition Material								
Small Tools 5% labor								\$ (4.80)
Total Material								\$ (4.80)

Equipment	Rate			60" HOBAS PIPE @ ML Splitter/Junction Box				Total
60" HOBAS PIPE @ ML Splitter/Junction Box								\$ -
								\$ -
Subtotal								\$ -
Fuel, Oil, Grease & Maintenance (40% fo Equipment)								\$ -
Tax @ 8.25%								\$ -
Total Equipment								\$ -

Subcontractor	Rate			60" HOBAS PIPE @ ML Splitter/Junction Box				Total
Ferguson (Link Seals for 60")	\$ (49.12)	EA	132	1				\$ (6,483.84)
Ferguson (Wall Sleeve 68")	\$ (950.00)	EA	2	1				\$ (1,900.00)
HOBAS Wall Ring	\$ 650.00	EA	2	1				\$ 1,300.00
Hydrophillic WS	\$ 199.61	EA	1	1				\$ 199.61
								\$ -
Total Subcontractor								\$ (6,884.23)

	Labor			Subcontractor	Material	Equipment		Total
Totals	\$ (148.80)			\$ (6,884.23)	\$ (4.80)	\$ -		\$ (7,037.83)
Insurance (1.8%)								\$ (126.68)
Overhead and Profit (5% for subs)								\$ (344.21)
Overhead and Profit (15% Self Performed Work)								\$ (42.04)
Subtotal								\$ (7,550.76)
Bond @ 1%								\$ (75.51)
Total								\$ (7,626.27)



200 Park Central Blvd
Georgetown, TX 78626
Phone: 512-930-2262
Fax: 512-930-2388

Job Name: Pflugerville Central WWTP
Customer: BAR Constructors
Customer PO: 0
Ferguson Project Manager: DANIEL SHIMEK
Ferguson Project Manager Email: DANIELSHIMEK@FERGUSON.COM
Ferguson Project Manager Phone: 210-662-4902

Original PO \$'s:	\$1,844,705.87
\$'s Added:	\$138,494.16
\$'s Deducted:	-\$135,923.97
Total \$'s:	\$1,847,276.07
\$'s Invoiced/Ordered:	\$836,762.57
Total \$'s Remaining:	\$1,010,513.50

Color Codes represent:		Released, shipping to job	Delivered, invoiced	On PO, hold for release			Material deducted from scope																						
Seq #	Product Code	Description	Grouping	Order Date	Ship Date	Release #	Scope Qty	Relsd Qty	Add Qty	Deduct Qty	Remain Qty	Net Price	UM	Total Remaining	FEI Invoice #	FEI PO #	Vendor	System	Comments	Free Form 1	Free Form 2	Free Form 3	Free Form 4	Free Form 5					
339	NEEDCODE	68" x 1'6" PExCxPE HD-GALV PIPE SLV	WS				2				2	\$ 950.00	EA	\$ 1,900.00				MIXED LIQUOR											
342	NEEDCODE	60" CIOD FRP WALL SEAL (33- LS615S LINKS PER SEAL)	LINK				132				132	\$ 49.12	EA	\$ 6,483.84				MIXED LIQUOR											

Trevor Wolfe

From: Trevor Wolfe
Sent: Wednesday, May 20, 2020 2:04 PM
To: Dennis Berger
Subject: FW: 60" FRP Pipe - Mixed Liquor Splitter/Junction Box (M-AS-8 &9)

From: Rivera, Victor (RIV) [<mailto:vrivera@hobaspipe.com>]
Sent: Tuesday, May 12, 2020 3:42 PM
To: Trevor Wolfe <trevorw@barconstructors.com>
Cc: Alejandro Guevara <alejandrog@barconstructors.com>
Subject: RE: 60" FRP Pipe - Mixed Liquor Splitter/Junction Box (M-AS-8 &9)

Trevor,

Per our conversation, the price to add an FRP Ring to the pipe is \$650 a ring.

Victor

From: Rivera, Victor (RIV) [<mailto:vrivera@hobaspipe.com>]
Sent: Tuesday, May 12, 2020 2:38 PM
To: Trevor Wolfe <trevorw@barconstructors.com>
Cc: Alejandro Guevara <alejandrog@barconstructors.com>
Subject: RE: 60" FRP Pipe - Mixed Liquor Splitter/Junction Box (M-AS-8 &9)

Good afternoon Trevor,

So you would want to have the vertical sticks similar to the PE x PE wall piece we provided previously?

If, so let me know what lengths you would want the vertical sticks.

Let me know if you have any questions.

Regards,

Victor M. Rivera
Area Manager
Hobas Pipe USA
713-907-4406

From: Trevor Wolfe <trevorw@barconstructors.com>
Sent: Thursday, May 7, 2020 11:04 AM
To: Rivera, Victor (RIV) <vrivera@hobaspipe.com>
Cc: Alejandro Guevara <alejandrog@barconstructors.com>
Subject: RE: 60" FRP Pipe - Mixed Liquor Splitter/Junction Box (M-AS-8 &9)

Victor,

Trevor Wolfe

From: Denise Jones <djones@rsstexas.com>
Sent: Thursday, March 12, 2020 2:11 PM
To: Trevor Wolfe
Cc: Dennis Berger; Alejandro Guevara
Subject: Re: Hydrophilic Waterstops
Attachments: Hydrotite Brochure Mar08-Greenstreak.pdf; Hydrotite Brochure Mar08-Greenstreak.pdf

Trevor,

As we are only a Sika distributor, I have listed the options for the two most popular profiles here. You have the choice to use with adhesive backing, or no adhesive backing. Typically, I recommend using the one with backing, so you don't have to use as much of the leak master. Leak master is typically used at seams of waterstop and can be used as an adhesive.

SIKA HYDROTITE:

CJ-0725-3KADH (7mm x 25mm) with adhesive - 191.90/ea (4 - 32.8ft rolls per carton)

CJ-0725-3K (7mm x 25mm) no adhesive - 201.87/ea (4 -- 32.8 ft rolls per carton)

CJ-1020-2KADH (10mmx20mm) with adhesive - 179.73/ea (5 -- 32.8ft rolls per carton)

CJ-1020-2K (10mm x 20mm) no adhesive - 199.61/ea (5 -- 32.8 ft rolls per carton)

Leakmaster LV-1 to bead at seams and use as extra adhesive - \$31.44/ea (24 tubes/carton)

I attached the brochure, so if there's a different profile you're looking for, please let me know.

Thanks,

Denise

On Thu, Mar 12, 2020 at 12:59 PM Trevor Wolfe <trevorw@barconstructors.com> wrote:

The profile is rectangular, but could you send all of the below manufactures as we are looking for the best price.

Thanks,

Trevor Wolfe

Construction Project Engineer

Project:	<u>Central Wastewater Treatment Plant</u>	Project Number:	
Owner:	<u>City of Pflugerville</u>		<u>88</u>
Contractor:	<u>BAR Constructors, Inc</u>		<u>279</u>
Engineer:	<u>Freese and Nichols, Inc</u>		<u>PFL16607</u>
Change Proposal No.:	<u>CP0007</u>	Description:	<u>Temporary Lift Station for Project Charm / SH130</u>
Specification:	<u>N/A</u>		
Drawing No.:	<u>N/A</u>	Detail Description:	<u>N/A</u>
Reference Document:			
<input type="checkbox"/> Request for a Change Proposal No.: _____ <input type="checkbox"/> Request for Information No.: _____			
<input type="checkbox"/> Shop Drawing Deviation Request No.: _____ <input type="checkbox"/> Field Order No.: _____			
Contractor proposes the following modifications to the Contract Documents:			
1. Install a temporary lift station at Manhole No 12 and bypass pump the incoming wastewater flow into existing Manhole No 15 and on into the existing headworks. This will be achieved by raising the existing Manhole No 12 by 4.5ft, installing a sump pump, complete with electrics and controls, into Manhole No 12 and installing overland piping to Manhole No 15. Additional Security fencing will be installed also.			
Purpose of Change Proposal:			
The City requested modifications to provide a temporary lift station in the vicinity of the Influent Lift Station and Headworks to accommodate the anticipated wastewater flows from the Project Charm/SH130 Interceptor by November 2020.			
Attachments:			
CP0007			
Requested Action:			
<input type="checkbox"/> Issue a Field Order <input checked="" type="checkbox"/> Issue a Work Change Directive or Change Order for the described changes			
Basis of Compensation:			
<input type="checkbox"/> Unit Prices <input checked="" type="checkbox"/> Lump Sum calculated using Cost of Work provisions in General Conditions Paragraph 13.01			
<input type="checkbox"/> Time and Materials using Cost of Work provisions in General Conditions Paragraph 13.01			
Required Documentation:			
<input checked="" type="checkbox"/> Detailed cost breakdown attached showing labor, materials, equipment, and all other costs for this change			
<input type="checkbox"/> Schedule attached to show impacts and justification for requested change in Contract Times			
Total Change Proposal Amount:		<u>\$97,014.89</u>	Adjustment in Contract Times (days): <u>6</u>

Project:	<u>Central Wastewater Treatment Plant</u>	Project Number:	
Owner:	<u>City of Pflugerville</u>		<u>88</u>
Contractor:	<u>BAR Constructors, Inc</u>		<u>279</u>
Engineer:	<u>Freese and Nichols, Inc</u>		<u>PFL16607</u>

The compensation offered for this Change Proposal is the full, complete, and final compensation for all costs the Contractor may incur as a result of or relating to this change whether said costs are known, unknown, foreseen, or unforeseen at this time, including without limitation, any cost for delay, extended overhead, ripple or impact cost, or any other effect on changed or unchanged Work as a result of this Contract Modification. Requested changes in Contract Times are the complete and final adjustments for direct impacts to the ability of the Contractor to complete the Work within the Contract Times and are the only adjustments to which the Contractor is entitled. Except as modified hereby, the Contract Documents and all of the terms and provisions thereof remain in full force and effect.

Certified by: Dennis Berger **Date:** 6/9/2020

Action:

- Field Order No.: _____ Issued Change Order No.: 0001 Issued
- Contract Amendment No.: _____ Issued Work Change Directive No.: _____ Issued
- Change Proposal Not Accepted Additional information required. See comments. Cancelled

Comments:

To be included in CO0001 along with CP0001, CP0002, CP0003, CP0005 and CP0006

Response by:  **Date:** 6/10/2020



June 9, 2020

Mr. Matt Gaughan
Plus Six Engineering
15500 Sun Light Near Way B
Pflugerville, TX 78660

Re: City of Pflugerville, Texas
Central WWTP Expansion Phase I Improvements
Project No. PFL16607
CP007r1 Temporary Lift Station at Manhole 12

Dear Mr. Gaughan,

Please find the attached pricing and quotations for the temporary lift station at manhole 12. BAR Constructors, Inc. requests an ADD to the contract amount of \$97,014.89 and a time extension of 6 calendar days. Below are those inclusions and exclusions associated with this work.

Inclusions:

- As stated in the Option 1 Site Plan Sketch.
- All "Assumptions" as stated in Option 1 Site Plan Sketch.

Exclusions:

- Any exclusions stated in the attached quotation(s).
- Anything not explicitly stated as an inclusion.

Sincerely,

Dennis J. Berger
Project Manager
BAR Constructors, Inc.

BAR Constructors, Inc. - Cost Detail Worksheet

Job Name: Central WWTP Expansion Phase 1

Job # 279

Date: 06/09/2020

Proposal No. CP007

Labor	Rate	Unit	Quantity	Temp Influent Lift Station @ MH 12				Total
				Day 1	Day 2	Day 3	Day 4	
BERM								
Labor	\$ 24.00	MP	2	10				\$ 480.00
Foreman	\$ 40.00	MP	1	8				\$ 320.00
Excavator Operator	\$ 32.00	MP	1	10				\$ 320.00
Trucker	\$ 32.00	MP	1	4				\$ 128.00
Compactor operator	\$ 32.00	MP	1	4				\$ 128.00
Loader Operator	\$ 32.00	MP	1	4				\$ 128.00
Yuke Operator	\$ 32.00	MP	1	4				\$ 128.00
FENCE								
Labor	\$ 24.00	MP	2	5				\$ 240.00
PIPING & PUMPS								
Pipe Crew	\$ 30.00	MP	3	8	8			\$ 1,440.00
Pipe Foreman	\$ 40.00	MP	1	8	8			\$ 640.00
INSTALL & REMOVAL OF PLUG								
Pipe Crew	\$ 30.00	MP	4	4	8			\$ 1,440.00
Pipe Foreman	\$ 40.00	MP	1	4	8			\$ 480.00
CONTROL PANEL PAD								
Labor	\$ 24.00	MP	2	5				\$ 240.00
Foreman	\$ 40.00	MP	1	3				\$ 120.00
								\$ -
								\$ -
								\$ -
Subtotal								\$ 6,232.00
Payroll Taxes and Insurance (55%)								\$ 3,427.60
Total Labor								\$ 9,659.60

Non-Taxed Material	Rate	Unit	Quantity	Temp Influent Lift Station @ MH 12				Total
Temp Influent Lift Station @ MH 12								
Pump Solutions (Pump & Control Panel)	\$ 22,107.00	LS	1	1				\$ 22,107.00
Ferguson (MH Riser)	\$ 537.28	LS	1	1				\$ 537.28
Ferguson (Misc Pipe and Fittings)	\$ 2,521.51	LS	1	1				\$ 2,521.51
Inflatable Plug	\$ 4,741.00	LS	1	1				\$ 4,741.00
Seed	\$ 4.70	LBS	43.56	1				\$ 204.73
Fertilizer	\$ 15.03	50LBS	4	1				\$ 60.12
Modified MH Lids (Ferguson)	\$ 168.75	LS	1	1				\$ 168.75
Safety Box	\$ 1,000.00	LS	1	1				\$ 1,000.00
Fusing Machine	\$ 300.00	Day	1	2				\$ 600.00
Control Panel Pad	\$ 500.00	LS	1	1				\$ 500.00
								\$ -
								\$ -
								\$ -
Subtotal								\$ 32,440.39

Taxed Material	Rate	Unit	Quantity	Temp Influent Lift Station @ MH 12				Total
								\$ -
								\$ -
Subtotal Taxed Material + 8.25%								\$ -

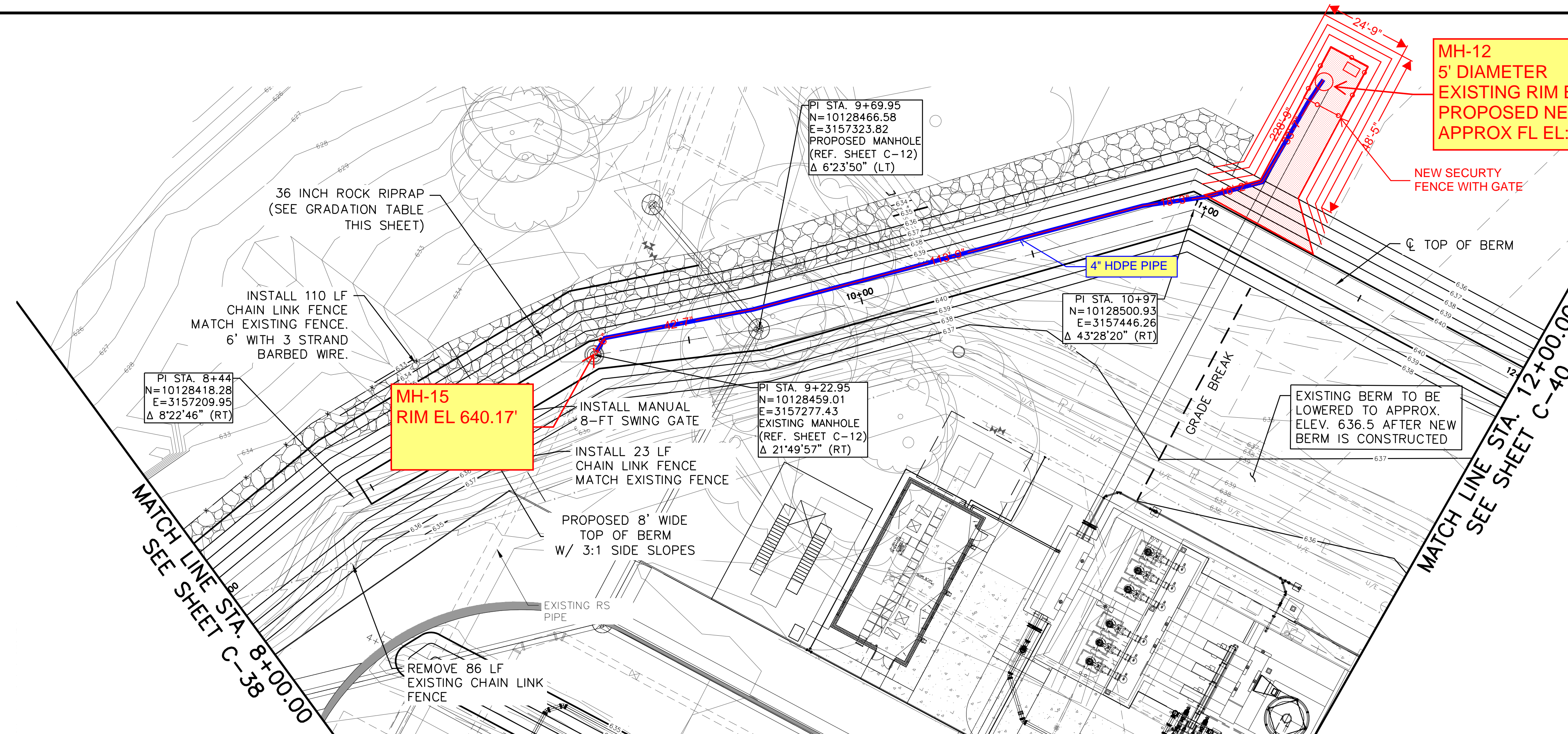
General Condition Material	Rate	Unit	Quantity	Temp Influent Lift Station @ MH 12				Total
Small Tools 5% labor								\$ 311.60
Total Material								\$ 32,751.99

Equipment	Rate	Unit	Quantity	Temp Influent Lift Station @ MH 12				Total
Temp Influent Lift Station @ MH 12								
Excavator	\$ 955.55	Day	1	1	0.5			\$ 1,433.33
Yuke	\$ 955.55	Day	0.5	1				\$ 477.78
Compactor	\$ 183.34	Day	0.5	1				\$ 91.67
Loader	\$ 375.84	Day	0.5	1				\$ 187.92
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -
								\$ -
Subtotal								\$ 2,190.69
Fuel, Oil, Grease & Maintenance (40% fo Equipment)								\$ 876.28
Tax @ 8.25%								\$ 180.73
Total Equipment								\$ 3,247.70

Subcontractor	Rate	Unit	Quantity	Temp Influent Lift Station @ MH 12				Total
TMC	\$ 25,434.00	LS	1	1				\$ 25,434.00
Alterman	\$ 9,190.00	LS	1	1				\$ 9,190.00
Travis Industries (Protective Coatings)	\$ 2,000.00	LS	1	1				\$ 2,000.00
VIKING Fencing	\$ 3,164.00	LS	1	1				\$ 3,164.00
								\$ -
Total Subcontractor								\$ 39,788.00

Totals	Labor	Subcontractor	Material	Equipment	Total
Totals	\$ 9,659.60	\$ 39,788.00	\$ 32,751.99	\$ 3,247.70	\$ 85,447.29
Insurance (1.8%)					\$ 1,538.05
Overhead and Profit (5% for subs)					\$ 1,989.40
Overhead and Profit (15% Self Performed Work)					\$ 7,079.60
Subtotal					\$ 96,054.34
Bond @ 1%					\$ 960.54
Total					\$ 97,014.89

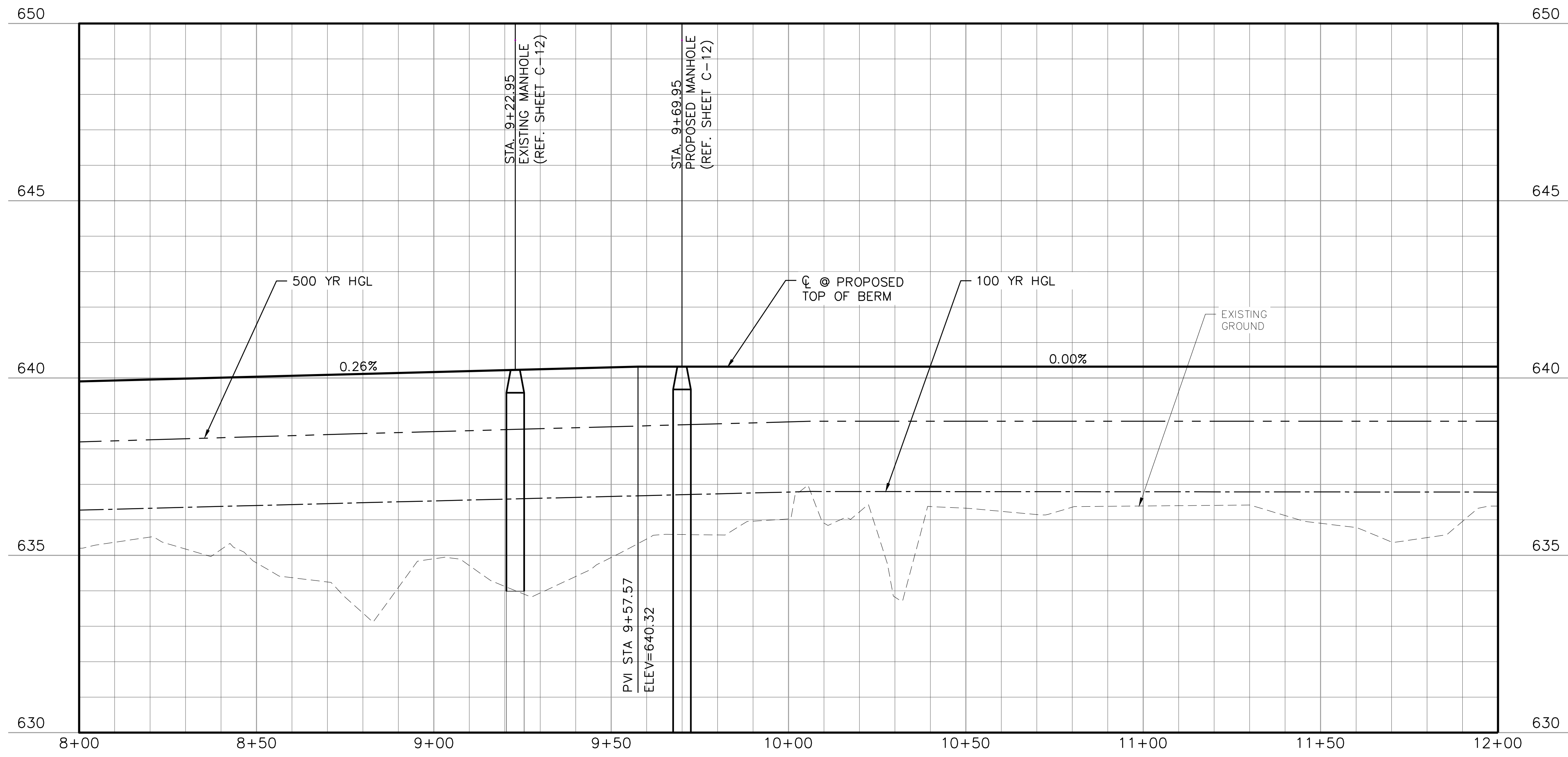
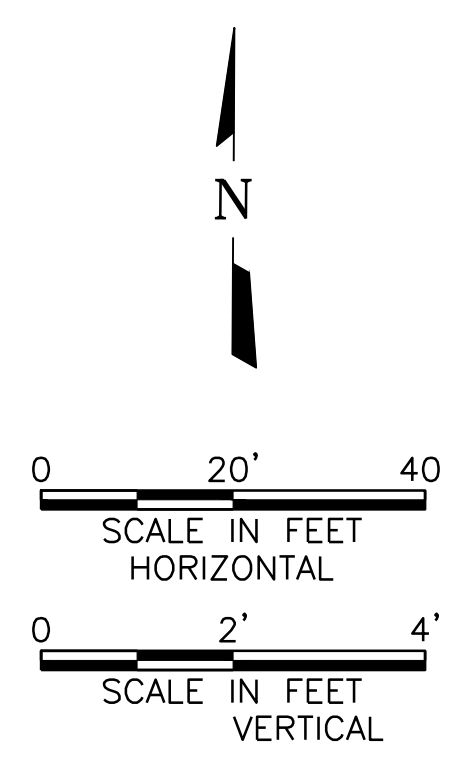
OPTION 1: USE EXISTING MANHOLE 12 AS TEMPORARY LIFT STATION






MH-12
 5' DIAMETER
 EXISTING RIM EL: APPROX 636.00'
 PROPOSED NEW RIM EL: 640.5'
 APPROX FL EL: 603.7'

MH-15
 RIM EL 640.17'

- SCOPE OF WORK:**
1. INSTALL 4.5' RISER ON EXISTING MANHOLE 12 AND PLUG OUTLET
 2. INSTALL TEMPORARY SUBMERSIBLE NON-CLOG OR GRINDER PUMP, 4" HDPE DISCHARGE PIPE, AND APPURTENANCES.
 3. EXTEND 480V ELECTRICAL FEED TO PUMP PANEL (NEW ONCOR LINES OR DIRECT BURY FROM ADMIN BLDG)
 4. EXTEND BERM AROUND MANHOLE FOR ACCESS
 5. ALTERMAN TO INSTALL RADIO CONNECTION TO PLANT SCADA FOR ALARMS



ACAD_Ret: 21.0s (LMS Tech)
 Filename: N:\SW\Drawings\CV-PFL-PP-BERM01.dwg
 Last Saved: 8/1/2019 1:17 PM
 Saved By: no

 Reply  Reply All  Forward



Fri 6/5/2020 3:27 PM

Carlton Catalani <carltonc@travisind.com>

RE: Coatings Quote

To Trevor Wolfe

Cc Edward Jimenez

Action Items

+ Get more apps

Trevor –

In the interest of time, put us in for an additional \$2,000.00 for this unit (1 each MH-15) based on the same lining system we're installing in the other MH structures. Please advise if you need a formal CO request document.

Thanks for your patience.

Carlton Catalani

Travis Industries, LLC

(210) 648-1990 Office

(210) 648-1972 Fax

(210) 501-5400 Mobile

www.travis-industries.com



From: Edward Jimenez <ejimenez@travisind.com>

Deliver To:
From: Daniel Shimek
Comments:

09:02:33 JUN 05 2020

FERGUSON WATERWORKS #1106

Price Quotation
 Phone: 512-930-2262
 Fax: 512-930-2388

Bid No: B447061
Bid Date: 06/04/20
Quoted By: XXA

Cust Phone: 972-227-3287
Terms: NET 10TH PROX

Customer: BAR CONSTRUCTORS INC
 279-23 PFLUGERVILLE-CENTR
 805 KATY ST
 LANCASTER, TX 75146

Ship To: BAR CONSTRUCTORS INC
 279-23 PFLUGERVILLE-CENTR
 805 KATY ST
 LANCASTER, TX 75146

Cust PO#: TEMP LIFT STATION

Job Name: 279-23 PFLUGERVILLE-CENTR

Item	Description	Quantity	Net Price	UM	Total
	TEMP LIFT STATION				

	M/HOLE				
CMHRP48	4 X 48 M/HOLE RSR SECT	1	449.280	EA	449.28
ACGR30MS	3X30 CNCRT GRD RNG	2	44.000	EA	88.00
SMH1151N	32 M/HOLE SAN CVR	1	168.750	EA	168.75

	SUBTOTAL				706.03

	PIPING MATERIAL				

IGCICFM	3 GALV CI 125# THRD COMP FLG	1	27.390	EA	27.39
IG9M	3 GALV MI 150# 90 ELL	1	61.920	EA	61.92
P80SFAM	3 PVC S80 SXF ADPT	4	19.870	EA	79.48
P80BM	3 X 20 FT PVC S80 BE PIPE	40	343.450	C	137.38
P80SCM	3 PVC S80 SXS COUP	4	12.410	EA	49.64
P80SCPM	4X3 PVC S80 SXS COUP	1	31.580	EA	31.58
PFX31M	LF 3 BRS 125# THRD SWG CHK VLV	1	137.140	EA	137.14
P80SUM	3 PVC S80 SXS UNION EPDM	1	29.460	EA	29.46
P80S9M	3 PVC S80 SXS 90 ELL	2	9.210	EA	18.42
P80PP	4 X 20 FT PVC S80 PE PIPE	20	467.860	C	93.57
P80VSSFP	4 PVC S80 VAN STONE SOC FLG	2	19.740	EA	39.48
PEI17FLAP	4 IPS PC125 DR17 FLG ADPT	2	22.340	EA	44.68
FNWNBGS61RF8P	4 316 SS 150# RR FF 1/8 FLG PKG	2	17.320	EA	34.64
SP-GHDPEBVP	4 HDPE SDR 11 BV	1	273.810	EA	273.81
PEI17APR	4 IPS SDR17 HDPE PIPE RMNT BLAC	280	3.860	FT	1080.80
PEI17B4P	4 IPS PC125 DR17 45	4	24.230	EA	96.92
PEI17B9P	4 IPS PC125 DR17 90	2	21.460	EA	42.92
S41100045002003	4X7 STL BLT COUP 4.50	2	121.140	EA	242.28

Net Total: \$3227.54
Tax: \$0.00
Freight: \$0.00
Total: \$3227.54



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=1006&on=47384>

Fax: 512-930-2388

09:02:33 JUN 05 2020

Reference No: B447061

Quoted prices are based upon receipt of the total quantity for immediate shipment (48 hours). SHIPMENTS BEYOND 48 HOURS SHALL BE AT THE PRICE IN EFFECT AT TIME OF SHIPMENT UNLESS NOTED OTHERWISE. QUOTES FOR PRODUCTS SHIPPED FOR RESALE ARE NOT FIRM UNLESS NOTED OTHERWISE.

CONTACT YOUR SALES REPRESENTATIVE IMMEDIATELY FOR ASSISTANCE WITH DBE/MBE/WBE/SMALL BUSINESS REQUIREMENTS.

Seller not responsible for delays, lack of product or increase of pricing due to causes beyond our control, and/or based upon Local, State and Federal laws governing type of products that can be sold or put into commerce. This Quote is offered contingent upon the Buyer's acceptance of Seller's terms and conditions, which are incorporated by reference and found either following this document, or on the web at <https://www.ferguson.com/content/website-info/terms-of-sale>
Govt Buyers: All items are open market unless noted otherwise.

LEAD LAW WARNING: It is illegal to install products that are not "lead free" in accordance with US Federal or other applicable law in potable water systems anticipated for human consumption. Products with *NP in the description are NOT lead free and can only be installed in non-potable applications. Buyer is solely responsible for product selection.



HOW ARE WE DOING? WE WANT YOUR FEEDBACK!

Scan the QR code or use the link below to
complete a survey about your bids:

<https://survey.medallia.com/?bidsorder&fc=1006&on=47384>



Viking Fence Co., Ltd.

9602 Gray Blvd.
Austin, Texas 78758
(512) 837-6411, 1-800-252-8117

HUB CERTIFICATION #1742043230800

Project: Pflugerville Central WWTP
Re: Fencing and Gates
Date: 6/9/2020

Change Order

- 1) Furnish and install 56' of 8' galvanized chain link fence which includes one 5' opening personnel gate. Fence will be built using 2 7/8" sch. 40 terminal and gate posts, 2 3/8" sch. 40 line posts, 1 5/8" sch. 40 top and brace rail and 9 Ga. Galvanized chain link fabric with a 2 Oz. coating.

Total \$3,164.00

- **Clearing (If needed) is not included.**
- **Core drilling (If needed) is not included.**
- **Grounding (If needed) is not included.**
- **Mow strip (If needed) is not included.**

Customer Authorization: _____

Customer Name (please print): _____

Date: _____

We appreciate your business. Thank you.

Blair Wilson

Viking Fence Co, Ltd
Commercial Estimator
Phone: 512-837-6411 Ext. 406
Email: blair@vikingfence.com

Proposal based on current prices and are subject to potential price adjustment pending market impact of the Steel Tariffs.

Permanent Fence Installation - Terms & Conditions

Proposal Terms and Conditions

This bid is based upon the plans, specifications and drawings given to Viking Fence at the time of this bid, and assumes utilization of industry-standard material and labor types and quantities. Viking does not provide engineering or architectural services. If any documents provided to Viking for reliance in making this bid later prove to be incomplete or inaccurate, to an extent requiring Viking to utilize parts or labor in excess of those used in preparing this bid, Viking reserves the right to amend this bid as may be necessary to comply with changes in the foregoing documents, and to amend any contract made in reliance upon the price quotes contained in this bid. To the extent that any documents submitted to Viking by you for review in making this bid incorporate by reference any other document not given to Viking, or refer Viking to the contents of any other document not given by you to Viking, Viking will not be bound by the contents of any such document unless: (1) it is a public statute, rule, ordinance, or published industry code (for example, the Int'l Building Code); or (2) such document may be readily downloaded on the internet from a website or other URL to which Viking is given access prior to making this bid. No merger or integration clause in any subsequent contract executed by Viking is intended to supersede this paragraph, because Viking cannot knowingly bind itself to any contract terms contained in documents to which Viking is not given access before signing a final contract.

Payment Terms:

Payment due upon completion unless approved for credit. Net 30 terms, w/ regular progress billing as project is completed. Credit approval may be required. Retainage, if applicable, TBD. **Any accounts past due will be charged 1.5% monthly interest (as allowed per State Law).**

Insurance/Price:

All work done in professional manner by experienced, insured personnel. **Quote is valid for 15 days** and is preliminary based on estimated footage and initial scope of work. Final contract price will be determined with field measurement of actual completed iron work.

Warranty:

Viking Fence Co, Ltd hereby guarantees the workmanship and material for the contracted job, per the original contract as follows (a copy of our warranty can be downloaded at <http://www.vikingfence.com/warranty-certificate.html>):

- (1) All Material is guaranteed to be as specified in original contract. Viking warrants that all work will be free of workmanship defects for one year from the date of installation and all defects occurring within that period shall be replaced at no cost to the owner. Any exceptions to this must be specified in original purchase contract.
- (2) Western Red cedar products provided will be consistent with our grading standards...see copy of Western Red Cedar Grading Standards. Defective material is defined as material that does not meet the grading standards or is structurally compromised if applicable. Western Red Cedar is a natural product, in which cracks, wane or checking may appear over time.
- (3) Pre-manufactured ornamental iron products are supplied with original manufacturer's warranties (ranging in term from 5 to 20 years, based on product).
- (4) Abuse or neglect of installed materials shall void this warranty.
- (5) All implied warranties, including merchantability, are limited to one year.
- (6) Viking does not warranty any Western Red Cedar wood fence material against termite infestation. We encourage our customers to read our Western Red Cedar page on our website for more detailed information regarding termites and to consult with your pest control professional.
- (7) Viking is not responsible for damage caused by shifting soil/terrain.
- (8) Gate Operators and other access control systems and accessories are supplied with original manufacturer's warranties. During the first year, defects in these components will be repaired without charge to the customer. After the first year, the customer will be charged for repair labor costs, but not for parts costs, as long as the original manufacturer's warranty is still valid.
- (9) Non-payment, in part or in whole, by the customer for services rendered or materials provided, per the original contract or invoice, shall void this warranty.

The warranties given above shall be the exclusive remedy for any breach by Viking Fence, and all liability for consequential, special or incidental damages is disclaimed.

Other:

Mechanics Lien: All materials remain the property of Viking Fence Inc. until the contract is paid in full. Customer is responsible for obtaining all necessary permits, except where noted. Viking Fence is relieved of all liability related to location and property lines. Viking Fence is not responsible for damage to any underground lines or pipes. A copy of all other Viking Standard Subcontract Terms included with this proposal are posted at <http://www.vikingfence.com/standard-commercial-subcontract-terms>.

06.04.2020

BAR Contractors

RE: Pflugerville WWTP Temporary Lift station SCADA Monitoring

Dear Mr. Berger,

We are pleased to present this proposal to provide SCADA monitoring of the temporary lift station. This proposal will cover the monitoring of the following points as per my discussion with James Mansfield of Pump Solutions on 6/2/2020.

Points to be monitored:

- | | | |
|------------------------|----|---------------------------|
| 1. Pump 1 Run Status | DI | - History |
| 2. High Level | DI | - History, Operator Call |
| 3. Panel Common Alarm | DI | - History, Operator Call |
| 4. Pump 1 Remote Start | DO | - Operator Remote Control |

We propose using the Samsara Industrial Gateway to enable the cellular based cloud monitoring and control of this station. Alterman proposes to manufacture the enclosure that will contain this device and the associated hardware.

The device is proposed and priced with 5 years of service. The City will have the ability to move this device to other locations of their choosing to gain quick and easy access to bring other areas of their City online on a temporary or permanent basis.

Alterman Scope of Work

1. Build the enclosure to contain the Industrial Gateway and all necessary apprentices to support the I/O of the device and deliver to the jobsite.
2. Terminate I/O between the Industrial Gateway and appropriate points in the lift station control panel.
3. Program, and commission the Industrial Gateway.
4. Design the appropriate dashboards, historical trends and alarming as required by the City.

Tasks by others for a successful project

1. Mount the Alterman provided enclosure in an appropriate manner with the lift station control panel.
2. Provide 120VAC power to the Alterman provided enclosure.

Project Timeline

Allow 2 weeks after Alterman receipt of fully executed change order for submittals.

Allow 2-4 weeks after Alterman receipt of approved submittals procurement of necessary material.

Allow 1 week after receipt of material to construct and deliver completed panel.

Allow 2 days after power provided to the panel to terminate IO, setup the device and perform startup.

Standard Qualifications, Clarifications and Exclusions

Qualifications and Clarifications

Exclusions

Furnishing and installation any new conduit or wire to field devices
Furnishing and installation of any new enclosures
Furnishing and installation of any instrumentation
Alterman is not responsible for existing field conditions
Furnishing Sims cards for Cell Modems
Temporary power and temporary lighting.
Utility company service charges and administration fees.
Existing utility service size and condition.
Supply and installation of hydraulic equipment (i.e. motors, pumps, valves, blowers, appliances, etc.).
HVAC equipment, controls, and installation.
Saw cutting and replacing concrete and asphalt.
Formed concrete (i.e. equipment pads, pole bases, housekeeping pads, duct bank extensions, etc.).
Engineering of structural components (i.e. equipment pads, pole bases, foundations, supports, etc.).
Welding, torching, tapping, and cutting structures (i.e. tanks, pipe, footplates, beams, etc.).
Fabrication and installation of structural items (i.e. canopies, racks, tank ladders, etc.).
Functionality and warranty of existing electrical and control systems.
Safety and functionality of existing electrical systems by others, during or prior to work described herein (i.e. owner's maintenance departments, maintenance contracts, etc.).
Solid rock excavation.
Spoil relocation from work area/site and all associated fees.
Dumpsters and portable toilets.
Payment and performance bonds.
Sandblasting or Painting.
Potholing, investigative excavation, location services, and all associated fees.
Dewatering.
Tunneling and boring for the installation of underground raceways.
Supply and installation of heat trace insulation.
Termination of any Vendor Supplies Control Panels
Furnishing and Installation of any Vendor supplied Instrumentation
Calibration of any Vendor Supplied Instrumentation

Overtime, expediting, and acceleration fees.

Price is contingent upon execution of a mutually acceptable contract and project schedule.

Price is based on AutoCAD and/or Revit Files being provided so that we may create 2D & 3D field points.

Price is valid for 30 days from date listed above.

Proposal Price: \$9,190.00

Please see the attached Samsara IG21 Datasheet for further information regarding the proposed solution.

If you have any questions or need further clarifications please let me know.

Sincerely,

ALTERMAN, INC.

Matthew Temple
Senior Automation Specialist



IG21 Industrial Controller

Datasheet



OVERVIEW

Managed by Samsara’s secure web-based dashboard, the IG21 provides the same universal connectivity, easy setup, and global analytics and control that are standard across the IG-family. Integrated LTE connectivity, built-in I/O , and Class 1, Division 2 certification make the IG21 a great fit for remote and distributed operations.

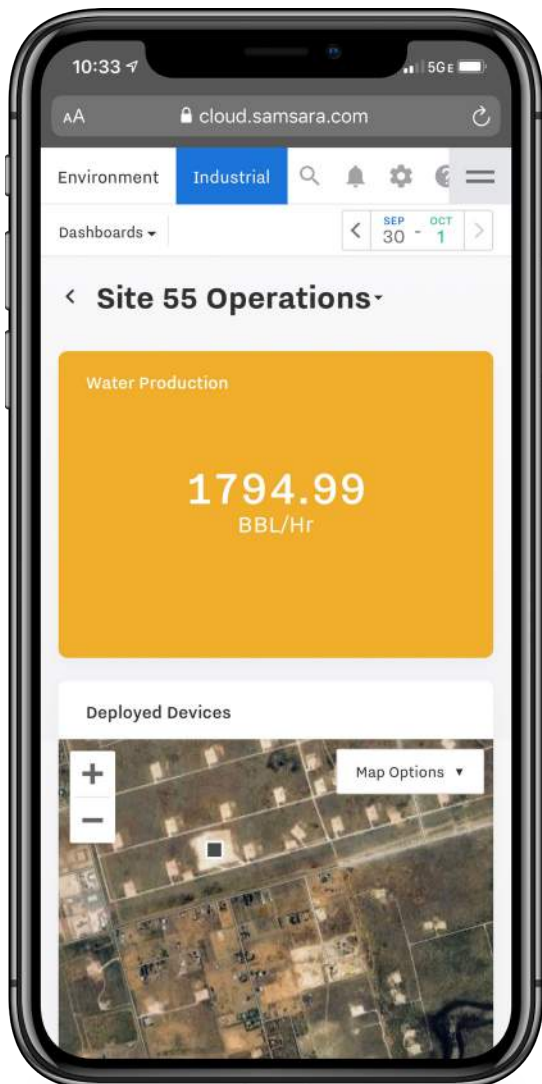
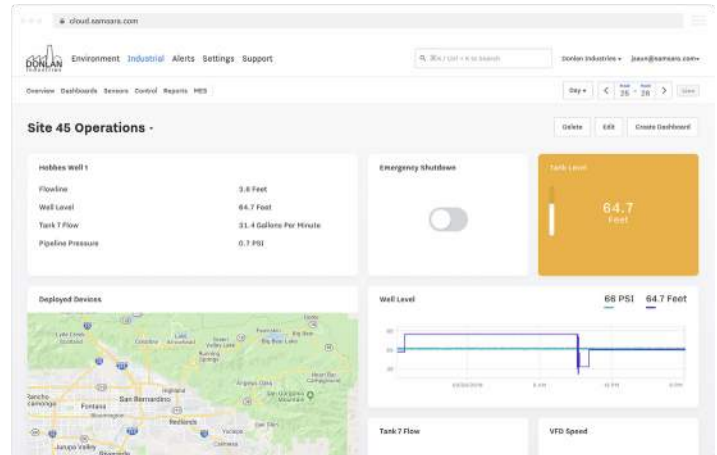
HIGHLIGHTS

- | | |
|--------------------------|--|
| Built-in cellular | Gain visibility and control into hard to wire locations with built in 4G LTE |
| Open platform | Easy to integrate with existing PLCs and SCADA systems via any common industrial protocol: Modbus RTU/TCP, EtherNet/IP, OPC-UA, MQTT |
| Built-in I/O | Analog, digital, and counter I/Os for direct monitoring and control |
| Rugged hardware | Class 1, Division 2 certified, Groups A, B, C, D |

Features and capabilities

FASTER AND EASIER TO DEPLOY

An integrated platform means that whether you are monitoring critical equipment on the shop floor or hundreds of remote sites, it's easy to gain immediate visibility on your browser or mobile device. Simply connect your IOs—no servers to set up, no software to manage, no complexity.



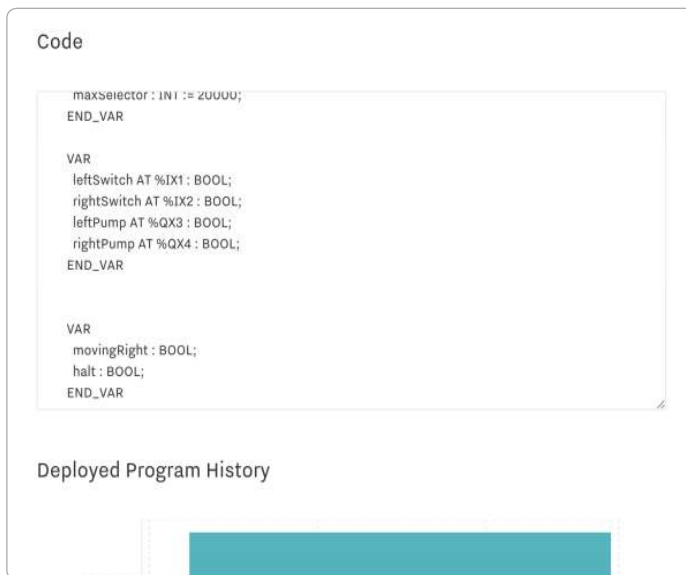
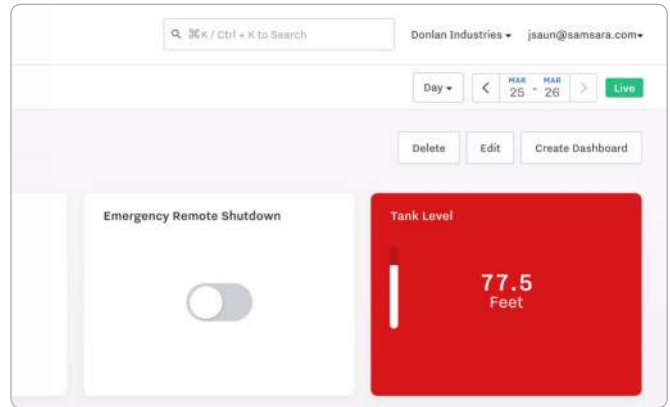
OPERATIONAL DATA AT YOUR FINGERTIPS

Samsara makes getting your data easy and lets you manipulate it to get the most out of it. With cloud dashboards that automatically resize to fit any device, you can view critical data anywhere, anytime. It's also easy to export data to the analytics tool of your choice or to directly integrate with your existing historian through modern API functionality.

Features and capabilities

REAL TIME VISIBILITY AND ALERTS

Samsara's cloud dashboard acts as historian and HMI to provide immediate visibility into real-time and historical data, and allows for simple, easy to manage alerts. Cloud infrastructure allows infinite scalability without any infrastructure investment, and on-device storage means data is captured even if the network connection is down.



EASILY VIEW & DEPLOY PROGRAM CODE

Modern IEC 61131 programming environment allows engineers to reuse code and audit program execution all without going onsite. Samsara's central visibility dramatically increases the speed at which industry standard IEC 61131 programs can be written and deployed across any number of locations.

DESIGNED FOR MODERN DATA SECURITY

Unlike legacy solutions that were designed in a different era and patched over time, Samsara is purpose-built to aggregate and process sensor data securely. Cyber threats continuously evolve, and your industrial IoT architecture should as well. Samsara's architecture ensures always up-to-date cloud software and seamless over-the-air firmware patches for on-premise devices. Find out more at samsara.com/security.

Inside the IG21

Local Storage

Low-latency control, and data storage

High-performance ARM CPU

Scales up to hundreds of IOs

Serial Port

Industry standard protocols

Ethernet Port

Local LAN Connectivity

USB

USB 2.0 compatible



Analog Input/Output

Built-in isolated channels for fast deployment

Digital & Counter IOs

6 digital and 2 counter IOs

WiFi 802.11 b/g/n

Out-of-the-box sensor connectivity

Embedded Cellular

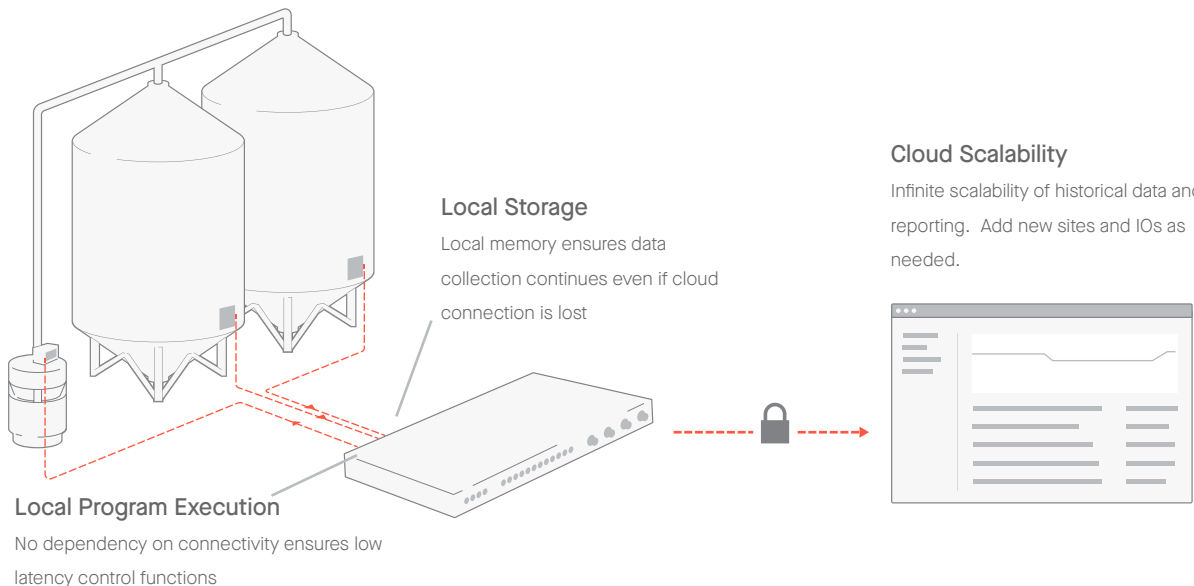
4G LTE Connectivity

Class 1, Division 2 Certified

Ready for harsh environments

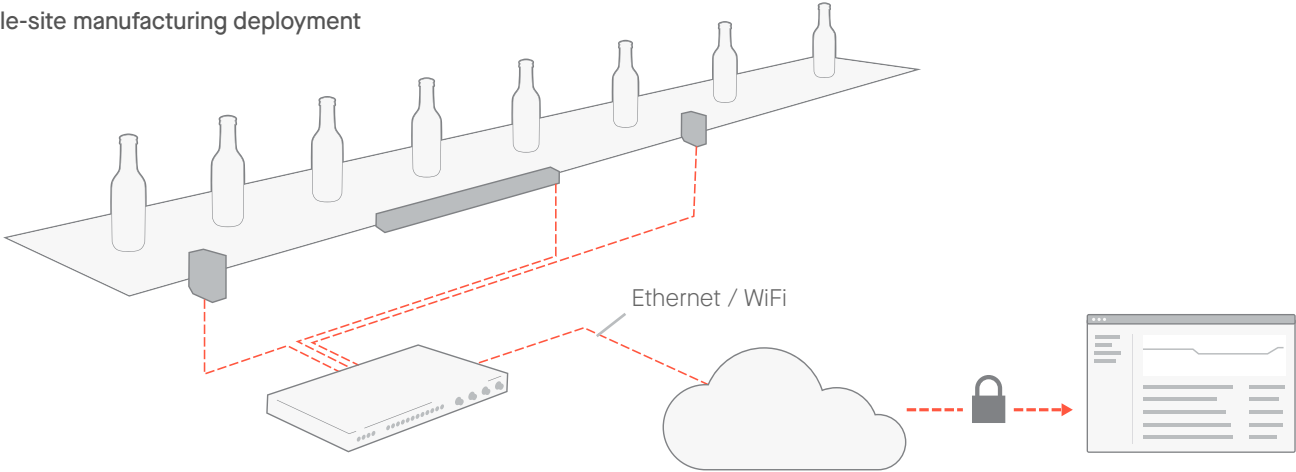
Low-latency control with the infinite scalability of cloud

Samsara's architecture delivers enterprise-grade hardware for mission-critical applications with on-device data storage that ensures highly responsive local control and battery backup to ensure data continuity and integrity in the case of network or power outages. Samsara's included cloud dashboard provides unlimited scalability, and easy access to data across all sites as a standalone system, or integrated with existing SCADA software.

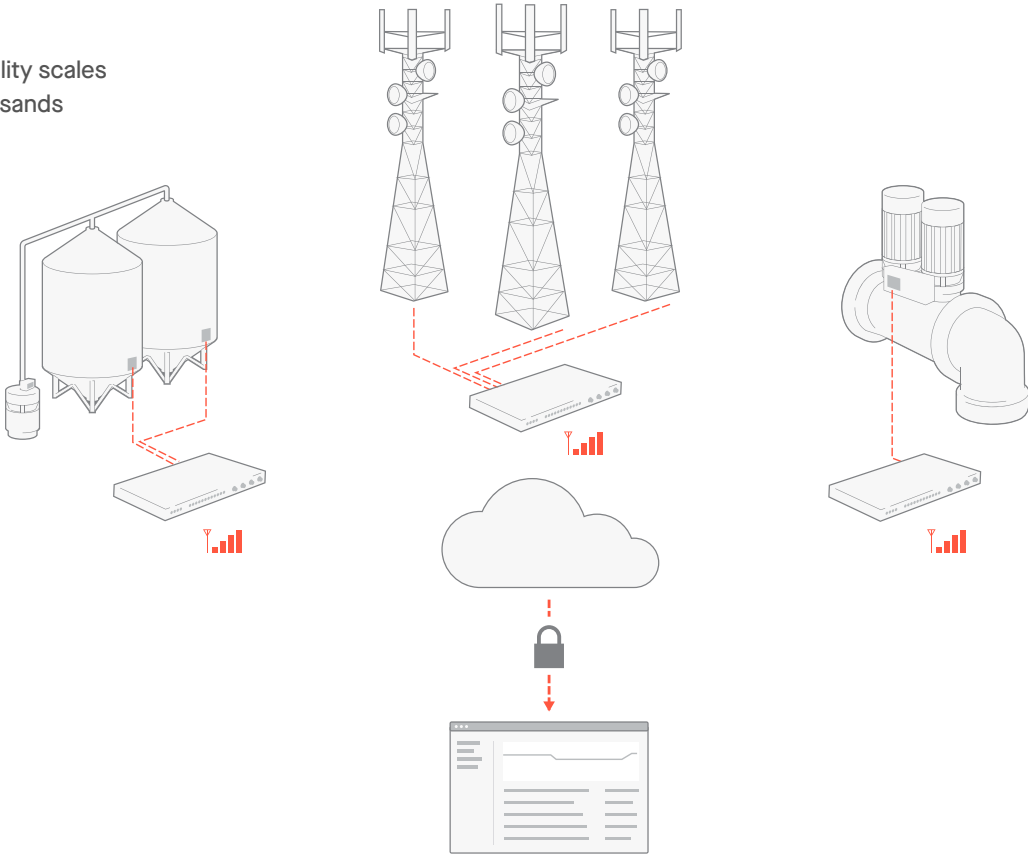


Visibility into manufacturing equipment or remote sites

Single-site manufacturing deployment



Remote site plug & play visibility scales from a single location to thousands



IG21 Industrial Controller Datasheet

POWER

Rated Voltage	10-28 VDC
Average Power Consumption	6.2W to 6.7W at 24 V

ENCLOSURE

Dimensions (W x H x D)	180 × 118 × 32 mm (7.09 × 4.65 × 1.26 in)
Weight	725 g (1.6 lbs)
Mounting	Toolless DIN rail mounting
Operating Temperature	-40 to 80 °C (-40 to 176 °F)
Hazardous Locations	Certified for Class 1, Division 2, Groups A, B, C, D

PROCESSING, STORAGE, AND SECURITY

Edge Processing	Powerful edge processor for low-latency local control
Real-time Connectivity	Streams data to the Samsara cloud in real-time
Data Security	Data secured via SSL (256-bit, military-grade encryption)
Storage	Onboard storage for offline data logging when internet connectivity is unavailable; uploads data to the cloud when connectivity is restored to ensure no data interruptions

CONNECTIVITY

Serial Port (ESD Protected)	1 x RS-232: Up to 1Mbps, 2-wire, full or half-duplex 1 x RS-485: Up to 20Mbps, 2-wire, half-duplex
USB	USB 2.0 compatible "A"-type receptacle
Protocols	Modbus/RTU, Modbus/TCP, EtherNet/IP, OPC-UA, MQTT

IG21 Industrial Controller Datasheet

LAN Ethernet	8-pin modular RJ45 jack, 10/100 Mbps (10/100 Base-T), transformer-isolated
Wi-Fi	802.11 b/g/n
Cellular	4G LTE cellular connectivity, with 3G fallback where LTE coverage is unavailable LTE: quad band 2/4/5/12. 3G: dual band 2/5. Operating area: United States, Canada

WIRELESS SENSORS

Connectivity	Proprietary low-energy wireless sensor connectivity (2.4 GHz)
Compatibility	Works with Samsara wireless sensors
Range	2.4GHz: 30m (line of sight)

LICENSE

Requires IG license. License includes cloud software, mobile apps, ongoing firmware updates, maintenance, and support

DIGITAL AND ANALOG I/O

Analog Inputs	4, Isolated channels with 0-12 V or 0-24 mA Resolution: 14-bit ADC Accuracy: 0.1% FSR at 25C ESD/EFT/Surge protected Accuracy: 0.1% FSR at 25C
Analog Outputs	2, Isolated channels with 0-12 V or 0-24 mA Resolution: 16-bit Accuracy up to +/-0.2% FSR at 25C ESD/EFT/Surge protected Settling Time: 5us Load Range: 1000 ohm (12V) - 600 ohm (20mA)
Digital Inputs/Outputs	6, User-configurable as inputs or outputs (open-drain) ESD/EFT/Surge protected

IG21 Industrial Controller Datasheet

DIGITAL AND ANALOG I/O

Digital Inputs/Outputs (Continued)	As Input: - Dry-contact (internally sourced 3.3V @ 1mA) As Output: Sinking MOSFET output, rated 30V, 0.5A
Counter Inputs	2, Counter Input (0-30V) Up to 10Hz (dry-contact) Up to 10kHz (wet-contact)
I/O Expansion	Digital and Analog input/output expansion modules available

ACCESSORY ANTENNAS

LTE Directional Antenna

ACC-DIR-ANT

RF Specifications

Frequency Range: 699~960 MHz, 1710~2170 MHz, 2300~2690 MHz

Polarization: Dual Slant +/- 45°

HPBW (+45°):

66° at 699~824 MHz

62° at 824~960 MHz

40° at 1710~2170 MHz

33° at 2300~2690 MHz

HPBW (-45°):

66° at 699~824 MHz

62° at 824~960 MHz

40° at 1710~2170 MHz

33° at 2300~2690 MHz

Gain:

8 dBi at 699~824 MHz

7 dBi at 824~960 MHz

10 dBi at 1710~2170 MHz

12 dBi at 2300~2690 MHz

VSWR: 4.0 max:1, 2.5 max:1, 2.5 max:1

Isolation: >15 dB

Power Handling: 2W (cw)

Impedance: 50 ohm

Connector: N Jack

Dimensions: 320 × 320 × 65 mm (12.6 × 12.6 × 2.56 in)

IG21 Industrial Controller Datasheet

ACCESSORY ANTENNAS

LTE Array Antenna

ACC-ARR-ANT

RF Specifications

Frequency Range: 698~960 MHz, 1710~2170 MHz, 2500~2690 MHz

Polarization: Linear

HPBW (Horizontal): 360°

HPBW (Vertical): 90°

Gain: 2.6 dBi, 3.2 dBi, 3.3 dBi max (exclude cable loss)

VSWR: 4.0 max:1, 2.5 max:1, 2.5 max:1

Power Handling: 2W (cw)

Impedance: 50 ohm

Connector: SMA Plug

Enclosure

Dimensions: 240 x 65.6 x 38.7 mm (9.45 x 2.58 x 1.52 in)

Temperature: -40 to 70 °C (-40 to 158 °F)

Humidity: 95% at 55 °C (131 °F)

Waterproof Rating: IPX7

Project
Customer pos.no
Project ID
Pos.no
Created by

Pflugerville Temporary
PSI - James Mansfield



Page 1 / 5

Created 5/21/2020
Update 5/21/2020

Data sheet

Pump type

KRT E 80-200/34XG-P (older product range)

Operating data

Flow	124	US g.p.m.	Fluid		
Head	42.7	ft	Density of fluid	62.3	lb/ft ³
Operating speed	1750	rpm	Viscosity	1.08E-5	ft ² /s
Shaft power	2.64	hp	Temperature	68	°F
Efficiency	50.1	%			
Required pump NPSH		ft			
Head H(Q=0)	52.4	ft			
Application range	Head		Flow		
	From	46.9 ft	70.4	US g.p.m.	
	To	18.2 ft	453	US g.p.m.	

Design

Make	KSB	Impeller type	Single vane impeller
Design	Submersible pump		Closed
Series	KRT E	Impeller size	(177) 7 inch
Frame size	80-200		Max. (192) 8 inch
Stages	1		Min. (141) 6 inch
Curve number	25.01.2012 09:42.18,	Free passage	3 inch
		Weight	lb
Type of bearings	Antifriction		
Nos. of bearings	2		
Lubrication	Grease lubrication. lubricated for lifetime		
Suction port	Pressure rating	--	
	Flange size	DN0 ---	
	Flange size	DN1 3"	
	Norm	--	
Discharge port	Pressure rating	CLASS 125	
	Flange size	DN2 3 inch	
	Flange size	DN3 ---	
	Norm	ASME/ANSI B16.1	
Suction port: pump (DN1)		Discharge port: pump (DN2)	

Materials

Pump casing	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Discharge cover	---
Impeller	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Shaft	Stainless steel EN-1.4021+QT800 (A 276 Type 420)
Bearing bracket	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Motor casing	Grey cast iron EN-GJL-250 (A 48 Class 35B)
Bolts. nuts	Stainless steel A4 (EN-1.4571) (A 276 Type 316)
Shaft protection sleeve	Stainless steel EN-1.4021+QT800 (A 276 Type 420)
Casing wear ring	
Impeller wear ring	
O-Rings	Nitrile rubber (NBR)

4.3.12--2019/06/25 (Build 259) 10.10.2019 15:25 UTC+2,00 ALL USA +

Project
Customer pos.no
Project ID
Pos.no
Created by

PSI - James Mansfield
Pflugerville Temporary



Page 2 / 5
5/21/2020

Data sheet

Pump type

KRT E 80-200/34XG-P (older product range)

Shaft seal

Type of seal	Double mechanical seal
Arrangement:	Tandem
Seal on medium side	with elastomer bellows
Mechanical seal. pump-side	Silicon carbide / Silicon carbide
Mechanical seal. bearing-side	Carbon / Silicon carbide

Monitoring

Thermal winding protection	By temperature sensitive switches
Explosion proof protection	---
Motor housing monitoring	By conductive moisture sensor electrode
Mechanical seal leakage detection	---
Bearing temperature monitoring	---

Coating

Preparatory treatment	SSPC near white SP 10
Blasting method	Steel grit blasting
Primer	Zinc phosphate or Zinc dust
Dry film thickness primer	> 1 1/2 mils (35 microns)
Top coat	2-component epoxy resin
Solids content	> 82 %
Dry film thickness top coat	> 6 mils (150 microns)
Color	Ultramarine Blue (RAL 5002 to DIN 6174)

Installation

INSTALLATION		
Type of installation:		Portable wet well installation
Discharge size:	3 inch	
Flange to suit:	ASME/ANSI B16.1, CLASS 125	
Stand assembly:	Feet+Plate DN 80 G BH	
bolted to the pump		
Installation depth:	15 ft (4.5 m)	
Lifting device:		
Length of lifting device:	33 ft (10 m)	
Lifting loops:	Every 8 ft (2.5 m)	
Installation accessories:	Stand assembly, lifting rigging	
Materials:		
Lifting device:		
Feet+Plate DN 80 G BH:	Galvanised steel EN-1.0038+Z (A 283 Grade B Galv.)	

INSTALLATION		
Type of installation:		Portable wet well installation
Discharge size:	3 inch	
Flange to suit:	ASME/ANSI B16.1, CLASS 125	
Stand assembly:	Feet+Plate DN 80 G BH	
bolted to the pump		
Installation depth:	15 ft (4.5 m)	
Lifting device:		
Length of lifting device:	33 ft (10 m)	

4.3.12 - 2019/06/25 (Build 259) 10:10:2019 15:25 UTC+2:00 ALL USA +

Project
Customer pos.no
Project ID
Pos.no
Created by

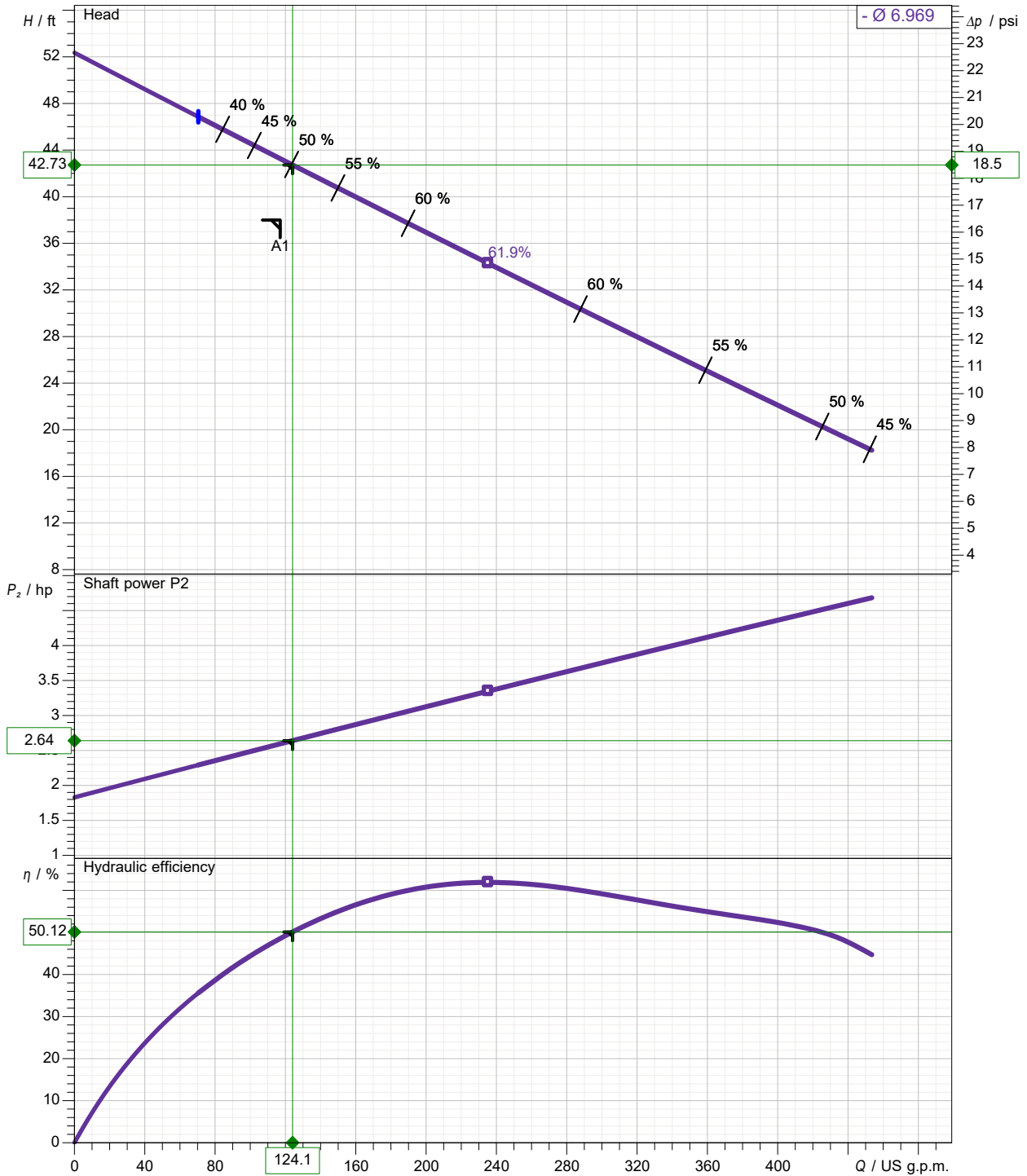
PSI - James Mansfield
Pflugerville Temporary



Page 3 / 5
Created 5/21/2020
Update 5/21/2020

Performance curve

Pump type KRT E 80-200/34XG-P (older product range)



Impeller type	Single vane impeller , Closed	Curve number	25.01.2012 09:42.18,492
Free passage	3 inch	Density of fluid	62.322 lb/ft ³
Impeller size	7 inch (177)	Viscosity	1.082E-5 ft ² /s
		Frequency	60 Hz
		Speed	1750 1/min

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4.3.12 - 2019/06/25 (Build 259)

1	2	3	4	5	6	7	8
A							A
B							B
C							C
D							D
E							E
F							F

NUR FÜR ANFRAGE/ANGEBOT
technische Änderungen vorbehalten
FOR INQUIRY/OFFER ONLY
technical modifications reserved
SEULEMENT POUR LES DEMANDES/LES OFFRES
sous réserve de modifications technique

1)Tiefster Ausschaltpunkt bei Automatikbetrieb
 1)Lowest shut-off point for automatic operation
 1)Point d'arrêt le plus bas en service automatique

2)Mindestüberdeckung bei Dauerbetrieb
 2)Minimum submergence for continuous operation
 2)Recouvrement minimal pour service continu

Hydraulik Hydraulics Hydraulique	KSB-Motor KSB-Engine KSB-Moteur	a2		Gewicht / Weight / Poids	
		mm	inch	kg	lbs
E, F	14	620	24 7/16	84	185
	24	635	25	90	198
	34	635	25	95	209

Zeichnungs-Nr./Drawing No./N°Plan	2007-12-17	Brettschneider	1	Betreiber-Nr./Customer No./N°Client
Maßstab/Scale/Echelle	2005-08-08	Paula	0	KSB Auftrags-Nr./KSB Order No./N°commande KSB
1:10 A3	Datum/Date	Name/Nom	Änderung/Revision Modification	
	Baureihe-Größe/Type-Size			KSB Werk-Nr./KSB Work No./N° de fabrication KSB
	KRT E/F 80-200			
	transportable Aufstellung transportable installation transportable stationnaire			
	<small>Bitte grundsätzlich bei Schriftverkehr angeben / Should always be stated in correspondence / A indiquer dans toute correspondance</small>			
	<small>Postfach 20 07 43 KSB Aktiengesellschaft D-06008 Halle (Saale) Tel.: (03 45) 48 28-0 Geschäftsbereich Pumpen Turmstraße 95-100 Fax: (03 45) 48 28 48 99 Wasserwirtschaftstechnik D-06110 Halle (Saale) Telex: 316284 kabha.</small>			

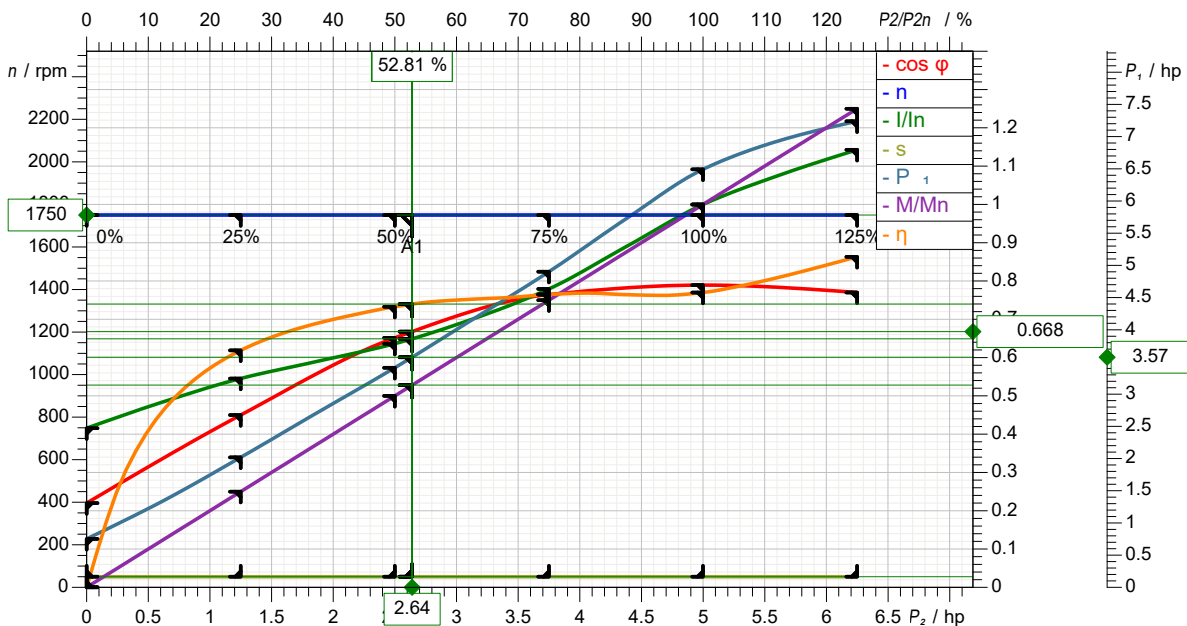
Data sheet: Motor data

Motor type 34XG

Motor manufacturer	KSB SE & Co. KGaA	Rated voltage	460	V
Design acc. standard	NEMA MG1 Design B	Rated frequency	60	Hz
Service factor	1.15	Rated HP (D.O.L) or VFD	5	hp
Degree of protection	IP 68	Rated current	7.7	A
Insulation class	F	Nominal speed	1750	rpm
Starting mode	Direct starting	NEMA code letter	E	
No. starts / h	30	Starting to rated current	4	
Coolant temperature	< / = 104 °F (40 °C)	Starting current	30.8	A
Motor casing	Grey cast iron EN-GJL-250 (A 48 Class 35B)			
Explosion protection	(FM, CSA) XP Class I, Div. 1, Groups C+D, T3			
Pump type	KRT E 80-200/34XG-P (older product range)			

Load	P1 kW	P2 hp	eta %	cos phi	I A
4/4	4.84	5.0	77.0	0.79	7.7
3/4	3.66	3.7	76.5	0.76	6.0
2/4	2.54	2.5	73.3	0.65	4.9
1/4	1.51	1.2	61.9	0.45	4.2

Main cable 1 x AWG15-8 Diameter 0.65 inch
 Control cable Diameter
 Cable. outer sheath Waterproof synthetic rubber compound
 Cable length 33 ft (10 m)



KSB Inc., 4415 Sarellen Road, Richmond, Virginia 23231, Phone: 001-804-222-1818, Fax: 001-804-226-6961
 KSB Pumps Inc, 5885 Kennedy Road, Mississauga, Ontario L4Z 2G3 (Canada), Phone: (0905) 568-9200, Fax: (0905) 568-9120

KSB Aktiengesellschaft, Turmstrasse 92, 06110 Halle (Germany), Phone +49 (345) 48260, Fax +49 (345) 4826 4699, www.ksb.com

4.3.12 - 2019/06/25 (Build 259) 10.10.2019 15:25 UTC+2.00 ALL USA +



Pump Solutions

www.pumpsolutions.net

806 Tradesmens Park Loop
Hutto, Texas 78634
Phone: (512) 846-2600
Fax: (512) 846-1163

THIS TRANSMITTAL CONSISTS OF 2 PAGE(S) INCLUDING THIS PAGE.

TO: BIDDING ESTIMATOR
FROM: James Mansfield
BID DATE: June 2nd, 2020
RE: Pflugerville Temporary Pumps

Pump Solutions Inc., is pleased to offer the following equipment:

Lift Station Equipment

Two (2) **KSB KRT F80-200/34XG-P**, 3" discharge, 5 HP, 230/460 Volt – wired for 460V, 3 Phase, explosion proof, submersible sewage pump, with vortex impellers, and 50' electric power cable.

Two (2) KSB Pump Stands for mounting on sump floor

Two (2) 3" NPT Adapters

Two (2) 20' 316 SS Lifting Chain

One (1) Float & Cable Hanger

One (1) Simplex NEMA 4X (#304 stainless steel) wall mount control panel for operation on a 480 volt 3 phase 3 wire service. Controls to operate one 5 HP motor on a pump down mode and include the following:

- Padlockable 3-point latching handle
- Inner door
- 30 Amp Main breaker
- Lightning arrestor
- Phase monitor with line fuses
- Pump circuit breaker
- NEMA rated FVNR starter with ambient insensitive solid state overload & reset
- Control transformer with primary & secondary protection
- Control circuit breaker
- Area light circuit breaker
- Duplex GFI convenience receptacle
- Panel interior light
- Serialized UL 508 label
- 24 VAC float circuit
- Hand-Off-Auto selector switch
- Run light
- Overtemp shutdown
- Overtemp alarm light
- Seal fail alarm light
- Overtemp/seal fail reset push button
- 120 VAC external alarm light
- 120 VAC external alarm horn with alarm silence push button
- Unpowered dry alarm contacts

- Laminated wiring schematic affixed inside enclosure
- Wire numbered
- Terminal strip
- Factory wired & tested
- One-year factory warranty

NOTES:

1. Estimated panel size: 30x24x12
2. One pump is going to be a spare (not installed)

Four (4) ROTO Floats with 40' Cable, NO/NC

One (1) Lot of Delivery, Submittals, O&Ms, and Start Up Services

Total Price:

Notes:

- 1) We have excluded the wet well, 90 DEG bend, control panel, SCADA, RTU, auto-dialer, area light, transducer, valve vault, check valves, gate valve, discharge piping, seal offs, junction boxes, wire/conduit, vent pipe, main disconnect, meter service, etc. The min manhole sized needed for these two pumps is a 5' manhole.
- 2) Control panel w/ floats added

Proposed Delivery Schedule:

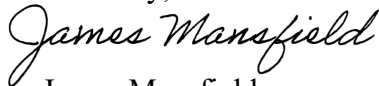
Submittals: 3-4 Week after receipt of order.

Pumps & Accessories: 6-8 Weeks After received Approved Submittals.

- (1) The price quoted is F.O.B. Jobsite.
- (2) Federal taxes, state taxes, or local taxes are NOT included.
- (3) Terms are Net 30 Days, Standard Terms and Conditions Apply.
- (4) There is not piping, valves, rails, etc. that are not specifically mentioned.
- (5) This Quote is Valid from 30 Days from the date of this quote

Thank you for your consideration of the proposed equipment.

Sincerely,



James Mansfield
Pump Solutions Inc.
(512) 809-2302



Project: Pflugerville Central Plant WWTP
Expansion Phase 1

Date: 06/05/20

TMC Change #: COR-05

Owner: City of Pflugerville

Project Change #: N/A

Change Order Request

Per the request of the engineer, T. Morales Company offers a change in pricing for consideration by the owner to provide power to a temporary Lift Station located at the Wastewater Treatment Plant.

TMC will dig a Ductbank running from the Electric Building No.4 to the location of the Temporary Lift Station located near the Admin Building 800ft away. TMC will then Supply the Ductbank with 800ft of 2" Schedule 40 PVC Conduit in order to help protect the #6 XHHW power conductors underground. TMC will then Terminate the power conductors to the control panel from the breaker located inside EB-4 as well as provide and terminate a LED overhead photocell light fixture. TMC will also provide the construction of the equipment rack for the control panel to be mounted on.

The Total Cost to provide the temporary Lift Station power will equate to a total of \$25,434.00

Change Initiated By: Luis Varela / Freese&Nichols Change Prepared By: Tye Eldridge / TMC

Change Delivered To: Dennis Berger / Bar Const Response Rqst'd By: ASAP

Carbon Copy To: Randy Eldridge / TMC

Index	Description	Reference Type	Reference	Ref Amount	Operation	Rate	Amount
1	MATERIALS / QUOTES:						0.00
2	Misc Materials:	Material	Total	9,564.88	*	1.00	9,564.88
3	Fixture Quote	Calculated		750.00	*	1.00	750.00
4	Quote #2	Calculated		0.00	*	1.00	0.00
5	SUBTOTAL						10,314.88
6	#####						0.00
7	SALES TAX:	Material	Total	9,564.88	%	8.25	789.10
8	SUBTOTAL						789.10
9	#####						0.00
10	LABOR:						0.00
11	Straight Time Labor	Labor	Total	123.16	*	46.22	5,692.46
12	Overtime Labor	Calculated		0.00	*	69.33	0.00
13	Exec Order 13706 Hours	Labor	Total	123.16	*		0.00
14	Exec Order 13706 Rate	Component	13	0.00	*		0.00
15	Gen Foreman Hours	Labor	Total	123.16	%	10.00	12.32
16	Gen Foreman Rate	Component	15	12.32	*	50.97	627.75
17	Material Hndler Hrs	Labor	Total	123.16	%	5.00	6.16
18	Material Hndler Rate	Component	17	6.16	*	35.04	215.78
19	Update As Built Dwgs	Calculated		1.00	*	49.00	49.00
20	SUBTOTAL						6,584.98
21	#####						0.00
22	DIRECT JOB EXPENSES:						0.00
23	Expendable Tools	Material	Total	9,564.88	%	6.00	573.89
24	Equipment						0.00
25	Warranty on Material	Component	5	10,314.88	%	3.00	309.45
26	Warranty on Labor	Component	20	6,584.98	%	3.00	197.55
27	SUBTOTAL						1,080.89
28	#####						0.00
29	SUBCONTRACTS:						0.00
30	Sub #1	Calculated		0.00	*		0.00
31	Sub #2	Calculated		0.00	*		0.00
32	SUBTOTAL						0.00
33	#####						0.00
34	JOB SUBTOTAL						18,769.85
35	#####						0.00
36	MARKUPS:						0.00
37	Liability/Bldrs Risk	Component	34	18,769.85	%	2.00	375.40
38	WrkComp/SS/Unmplymnt	Component	20	6,584.98	%	25.00	1,646.24
40	JOB TOTAL						22,668.48
41	#####						0.00
44	Perf_Payment Bond	Component	43	24,935.32	%	2.00	498.71
45	ADD BOND	Component	44	498.71	*	1.00	25,434.03
46	#####						0.00
47	BID TOTAL						25,434.03

NOTES

Item				Material		
Size	Item Desc	Qty	UOM	Mat Unit	Mat Adj	Mat Ext
	Mouting Solvent	1.00		100.00	1.00	100.00
	Terminating Control Panel	1.00		Skip	1.00	0.00
	Kellum Grips	3.00		120.00	1.00	360.00
2"	PVC Sch 40 Carlon #49011010	800.00	FEET	1.90	1.00	1,520.00
2"	PVC Sch 40 Elbow Carlon #UA9AJ	2.00	EACH	9.00	1.00	18.00
2"	PVC Fem Adapt Carlon #E942J	2.00	EACH	3.04	1.00	6.08
1"	MYERS HUBS GRDG	2.00	EACH	26.84	1.00	53.68
2"	BONDING BUSHINGS-INS	2.00	EACH	34.01	1.00	68.02
2"	ALUM COUPLING	2.00	EACH	28.19	1.00	56.38
3/8.	S.S.FLAT WASHERS	28.00	EACH	8.00	1.00	224.00
3/8-16	CONCRETE DROP IN ANCHOR	8.00	EACH	0.54	1.00	4.32
3/8-16	S.S.HEX NUTS	28.00	EACH	28.00	1.00	784.00
2"	S.S.STRUT STRAPS	12.00	EACH	8.40	1.00	100.80
1 1/2"	316 SSTEEL STRUT	40.00	FEET	10.00	1.00	400.00
1 1/2"	316 SSTEEL BASE POST	2.00	EACH	70.00	1.00	140.00
3/8"	Ssteel Spring Nut	10.00	EACH	3.00	1.00	30.00
	NYLON LINE	800.00	FEET	0.03	1.00	24.00
6.	XHHW STR CU	3,240.00	FEET	1.75	1.00	5,670.00
6.	WIRE TERM-LABOR ONLY	8.00	EACH	0.70	1.00	5.60
6W X 24D	TRENCHER DITCHING	800.00	FEET	Skip	1.00	0.00
6W X 24D	BACKFILL TRENCHER	800.00	FEET	Skip	1.00	0.00
Grand Totals					9,564.88	123.1600

 Reply  Reply All  Forward



Tue 6/9/2020 1:48 PM

Tye Eldridge <tdeldridge@moralescompany.com>

RE: Conduit for Temp Lift Station

To Trevor Wolfe; Kirk Brobst

Cc Dennis Berger

Action Items

+ Get more apps 

Yes sir, i threw some conduit in there in order to help protect the cable. To my understanding the cable is going to be buried pretty shallow so I figure it would be smart to have some sort of protection.

Thanks,
TDE

From: Trevor Wolfe <trevorw@barconstructors.com>

Sent: Tuesday, June 9, 2020 1:35 PM

To: Tye Eldridge <tdeldridge@moralescompany.com>; Kirk Brobst <kbrobst@moralescompany.com>

Cc: Dennis Berger <dennisb@barconstructors.com>

Subject: Conduit for Temp Lift Station

Tye,

Are you wanting to lay conduit for the temp lift station even though the engineers have allowed direct bury?

Thanks,

Trevor Wolfe

Construction Project Engineer

BAR Constructors Inc.

214-869-4403