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December 1, 2011

Mr. Wes Weaver, President
Weaver Construction Management, Inc.
3679 South Huron Street, Suite 404
Englewood, CO 80110

Via Email to: wes@weavergc.com
No Hard Copy to Follow

Re: Harold D. Thompson Regional Water Reclamation Facility (HDTRWRF)
Lower Fountain Metropolitan Sewage Disposal District (LFMSDD)

Dear Wes:

Reference is made to your shop submittal identified as follows:

Submittal No.:	05500-004
Date of Submittal:	November 11, 2011
Title:	Miscellaneous Metals for Pumping and Disinfection Building
Specification Section:	05500 – Metal Fabrications
Manufacturer:	American Fabricators

The referenced submittal has been stamped "**No Exception Taken**" and "**Revise and Resubmit**".
Our comments are as follows:

1. Sheet N-01: **No Exception Taken**
2. Sheet SD-01
 - a. Detail 1: **No Exception Taken**
 - b. Detail 2: Please indicate where the sump pump grate and frame is to be placed. Per the Construction Drawings, there is no sump pump drain with a grate.
3. Sheet SD-02: Please reference comments on the following sheets for each design length of embeds. (Redlined copy of Sheet SD-02 attached for reference.)
4. Sheet SD-03: **No Exception Taken** and **Revise and Resubmit**
 - a. Embed Elevation No. 1: **Revise and Resubmit**
 - 1) The 11'-1½" dimension on this segment of embed is acceptable; however, no accommodation has been made for the UV module cleaning tank. Taking this into consideration, the embeds for this side of the channel will likely change.
 - b. Embed Elevation No. 2: **No Exception Taken**
 - c. Embed Elevation No. 3: **No Exception Taken**

- d. Embed Elevation No. 4: **Revise and Resubmit**
 - 1) The embed will terminate at the pilaster. Therefore, the dimension for this embed should be 5'-2".
 - e. Embed Elevation No. 5: **Revise and Resubmit**
 - 1) The embed will terminate at the pilaster. Therefore, the dimension for this embed should be 3'-7³/₄".
 - f. Embed Elevation No. 6: **No Exception Taken**
 - g. Embed Elevation No. 7: **No Exception Taken**
5. Sheet SD-04: **No Exception Taken and Revise and Resubmit**
- a. Embed Elevation No. 8: **No Exception Taken**
 - 1) However, the embed plan indicates a 1³/₄" angle (A) will be placed along the end of the channels to support the grating. Please reference the attached Sheet SD-02 for recommended supports of the grating along this segment of channel. The grating should be notched into the walls to minimize the movement of the grating. In addition, the blockouts in the intersecting channels have not been accounted for. Please reference and will be addressed in other comments in this response.
 - b. Embed Elevation No. 9: **Revise and Resubmit**
 - 1) Assuming the 17' remains in Embed Elevation No. 14, the dimension for No. 9 will be 13'-3¹/₂".
 - c. Embed Elevation No. 10: **Revise and Resubmit**
 - 1) This segment of embed has an overall length of 12'-9³/₄", rather than the 12'-11¹/₂" shown on the shop submittal. Consideration must be given for two items: the pilaster location and a blockout for a slide gate that has not been accounted for.
 - d. Embed Elevation No. 11: **Revise and Resubmit**
 - 1) Embed No. 11 terminates at the pilaster. The dimension for this embed should be 2'-1³/₄".
 - e. Embed Elevation No. 12: **Revise and resubmit**
 - 1) The overall dimension provided in the shop submittal of 10'-0³/₄" is correct. However, the blockout for the slide gate has not been accounted for.
 - f. Embed Elevation No. 13: **No Exception Taken**

- g. Embed Elevation No. 14: **Revise and Resubmit**
 - 1) The blackout for the slide gate has not been accounted for.
- 6. Sheet SD-05: **Revise and Resubmit** and **No Exception Taken**
 - a. Embed Elevation No. 15: **Revise and Resubmit**
 - 1) Verify the dimension of 17'-1 $\frac{3}{4}$ " with the Construction Drawings.
 - 2) A blackout is needed on the 3' segment shown which will alter the dimensions.
 - b. Embed Elevation No 16: **Revise and Resubmit**
 - 1) Assuming the 17' dimension holds on Embed No. 14, this embed segment length will be 9'-3 $\frac{1}{2}$ ".
 - c. Embed Elevation No. 17: **Revise and Resubmit**
 - 1) The overall dimension provided of 8'-8 $\frac{1}{2}$ " is correct. However, the blackout for the slide gate has not been accounted for.
 - d. Embed Elevation No. 18: **Revise and Resubmit**
 - 1) The overall dimension provided on the shop submittal of 5'-9 $\frac{3}{4}$ " is a correct dimension. However, the blackout for the slide gate has not been accounted for.
 - e. Embed Elevation No. 19: **No Exception Taken**
 - f. Embed Elevation No. 20: **Revise and Resubmit**
 - 1) Assuming the dimension for Embed No. 19 remains at 8'-11 $\frac{3}{4}$ ", the interior dimension of this embed segment will be 14'-2". In addition, a blackout is required on the 6'-11 $\frac{1}{2}$ " segment.
- 7. Sheet SD-05A: **Revise and Resubmit**
 - a. Embed Elevation No. 21: **Revise and Resubmit** (See Utility Chase Grating comments)
 - b. Embed Elevation No. 22: **Revise and Resubmit** (See Utility Chase Grating comments)
 - c. Utility Chase Grating: **Revise and Resubmit**
 - 1) The utility chase channel will be covered with a $\frac{1}{4}$ " checker plate, which will change the depth of embeds for Embed Elevation No. 21 and No. 22.
 - 2) Lifting holes should be placed on either end of the checker plate, 1" in diameter, at one-third increments of each segment, i.e., on the 3' lengths holes should be placed at 1' intervals.

Mr. Wes Weaver
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8. Sheet SD-05B
 - a. UV Module Cleaning Tank Embeds: **No Exception Taken**
 - b. UV Module Cleaning Tank I-Bar Grate: **No Exception Taken**
9. Sheet SD-06: **No Exception Taken** and **Revise and Resubmit**
 - a. Ledge Angle Elevation A: **Revise and Resubmit**
 - 1) We recommend Ledge Angle Elevation A be eliminated and embeds be placed in accordance with the redlined detail of Sheet SD-02 attached.
 - b. Ledge Angle Elevation B: **No Exception Taken**
 - c. Ledge Angle Elevation C: **No Exception Taken**
10. Sheets SD-07 and SD-08: **Revise and Resubmit**
 - a. Modify the grating plan and grating elevations to accommodate the revised embed elevation modifications and address blockouts for the slide gates as shown on the Construction Drawings.
11. We request a resubmittal of this document, including those segments noted as No Exception Taken.

Please call if you should have any questions.

Sincerely,



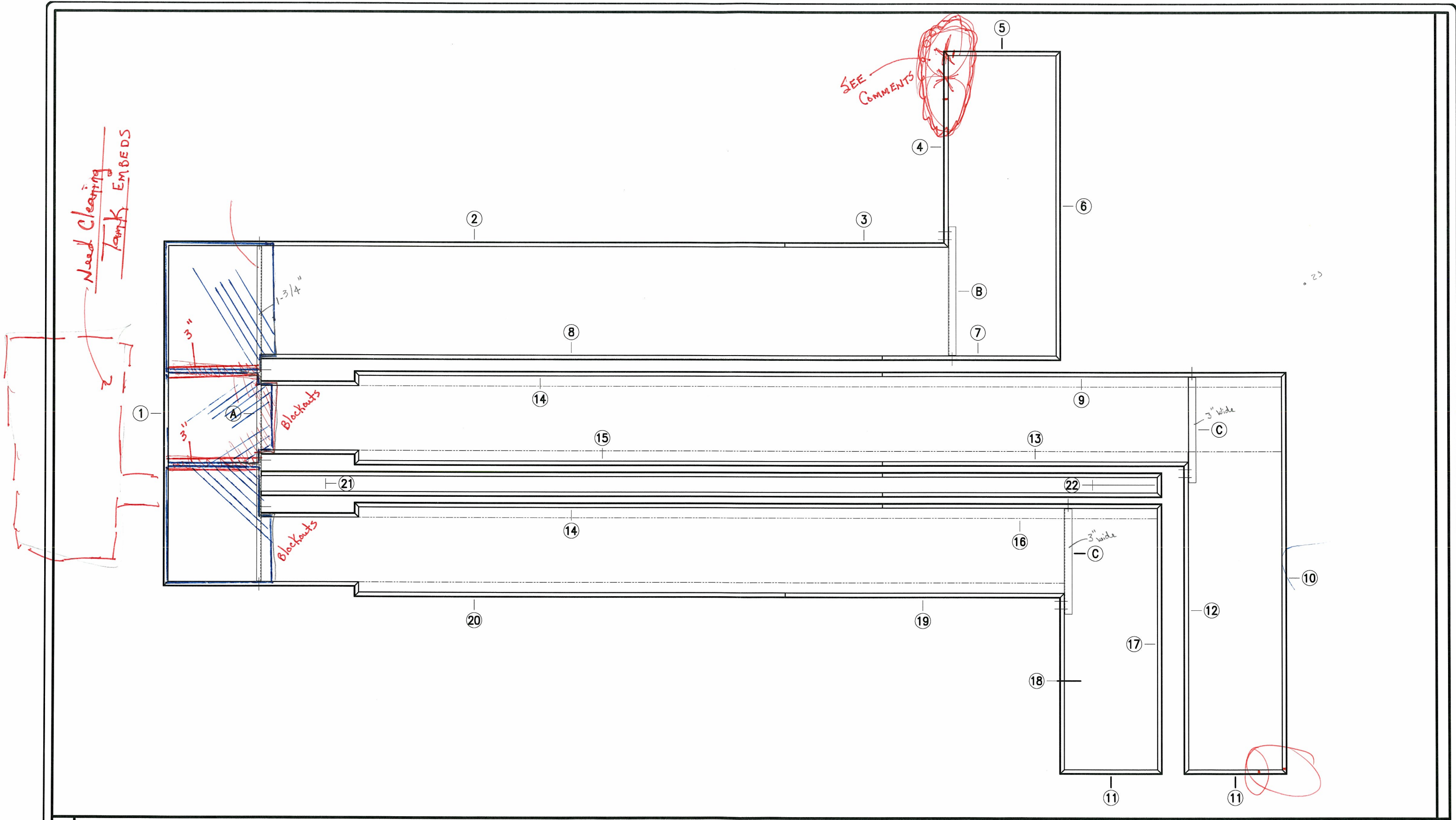
David R. Frisch, P.L.S.

DRF/kmw

ec (letter only):

Mr. Jim Heckman, Manager, LFMSDD, lfmanager@lfmsdd.org
Ms. Cindy Murray, Office Manager, Fountain Sanitation District, fsdistrict@fsd901.org
Mr. Jeff Burst, Project Supt., Weaver Construction Management, Inc., jeff@weavergc.com
Mr. John Jacob, Project Mgr., Weaver Construction Management, Inc., john@weavergc.com
Mr. Tyler Ammerman, Weaver Construction Management, Inc., tammerman@weavergc.com
Ms. Leslie Brown, Weaver Construction Management, Inc., leslie@weavergc.com

cc: Mr. Jerry Miller, Resident Project Representative, GMS, Inc.



1 Embed Plan

CONTRACTOR:
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FABRICATOR:
American Fabricators
 10200 E. 100th Ave.
 Brighton, Colorado 80001
 Ph: (303)996-6226 / Fx: (303)996-6226

PROJECT: **HD Thompson Change Order**
 TITLE: Embed Plan

Revision:	By:	Date:
1.	-	-
2.	-	-
3.	-	-
4.	-	-
5.	-	-

DWG BY: **CCA** CHK BY: **EDO**
 DATE: **NOV 07 2011**
 SHEET NUMBER:
SD-02