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February 17, 2012

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.:	02709-004
Date of Submittal:	February 15, 2012
Title:	Valve Access Manholes and Appurtenances - MH-1 & MH-6
Specification Section:	02709 – Gravity Pipelines and Appurtenances
Manufacturers:	Firebaugh Precast; GMI Composites, Inc.; Concrete Sealants Inc; American Step Company, Inc.; Press-Seal Gasket Corporation; Syracuse Castings West

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

1. The subject line of the submittal transmittal letter indicates this is a submittal for Valve Access Manholes (MH-1 and MH-6). Modify the title to be a submittal for Valve Access Manholes and Manhole Numbers MH-01 and MH-06. **Revise and Resubmit**
2. The revised quotation sheet issued by Firebaugh Precast on February 8, 2012 indicates all manhole coatings and linings, if required, are to be completed by others. As a note of clarification, the exterior dampproof coating can be eliminated from these manholes. The exterior joint wrap will be required. All interior linings will be specified during the review of the respective manhole. Please reference the Manhole Coating Schedule spreadsheet provided to the field superintendent on January 20, 2012. This manhole schedule will be updated periodically and provided to the Contractor for use in identifying the lining requirements.
3. GMI Composites, Inc. 24" Cover Assembly Layout: **Revise and Resubmit**
 - a. For the purposes of this shop submittal, this manhole ring and cover will only be used at Manhole MH-01.
 - b. The shop submittal shows a locking mechanism for the manhole cover. The locking mechanism can be omitted from the manhole as this manhole lies within the secured perimeter of the HDTRWRF. **Revise and Resubmit**

4. GMI Composites, Inc. 24" Cover: **Revise and Resubmit**
 - a. Please include the labeling that is to be provided on the composite cover.
5. 48" I.D. Manhole Submittal Sheet: **No Exception Taken**
6. 72" I.D. Manhole Submittal Sheet: **No Exception Taken**
7. 72" I.D. to 40" I.D. Transition Lid: **No Exception Taken**
8. Certificate of Conformance for ConSeal CS-102 Butyl Sealant: **No Exception Taken**
9. ConSeal CS-102 Butyl Sealant: **No Exception Taken**
10. GMI Composites, Inc. Utility Access Covers and Frames: **No Exception Taken**
 - a. Please reference prior comments
11. Manhole MH-01 – Manhole Detail Sheet: **Revise and Resubmit**
 - a. The manhole detail references a 60-inch diameter manhole. In accordance with Sheet G-38 of the Construction Drawings, Manhole MH-01 is to be a 6'-0" I.D. manhole, rather than a 5'-0" I.D. manhole.
 - b. As previously noted, an exterior coating of dampproofing is not required; however, the joint wrap at all joints is required. This manhole will also require a lining. At the present time, it is anticipated the Sherwin Williams Sherflex Elastomeric Polyurethane product will be required for the full depth of the manhole including the invert.
12. Manhole MH-06 – Manhole Detail Sheet: **Revise and Resubmit**
 - a. On Sheet SC-11, the manhole detail indicates the top of the flat top lid is at elevation 5406.50. The inverts provided on the detail sheet match the inverts shown on Sheet SC-11. The detail sheet shows a 4-inch aluminum ring and cover. We find no reference in the submittal to a 30-inch diameter aluminum ring and cover. If the ring and cover are at 4 inches, it would appear the top of manhole elevation should be 5406.83. The submittal indicates the rim is at 106.92. The difference is negligible but should be reconciled.
 - b. All other components of the MH-06 shop submittal appear to be acceptable.
13. American Step Company, Inc., ML-13-NCR Manhole Steps: **No Exception Taken**
14. GMI Composites, Inc. Liber-T Lock: **Rejected**
 - a. As previously noted, a locking mechanism is not required on the composite manhole covers lying within the secured perimeter of the HDTRWRF.
15. Press-Seal Gasket Corporation PS-X: Direct Drive Manhole Boot: **No Exception Taken**

Mr. Wes Weaver
February 17, 2012
Page 3

16. Syracuse Castings West "TB" Style Pedestrian Rated Aluminum Cover for 48" ID Structure: **Submit Specified Item**
- a. The 48" I.D. aluminum cover, as shown, appears to have an FRP sleeve inserted in the 48" I.D. manhole cone. We request additional information be provided on the apparent FRP structure sleeve and how the aluminum cover is to be installed and anchored.
17. Valve Access Elevation View Details for 72" I.D. and 48" I.D. Manhole Material: **No Exception Taken**
- a. Sheet SC-10 has the detail for the valve access manhole. The top of manhole elevation is given at 5406.73. The top of the transition lid is at 5394.73, or 12 feet below the top of manhole. The top of base of the 6' I.D. portion of the manhole is 5385.73, which is 9 feet from top of base to top of the transition lid. We offer this information as it varies slightly from that provided on the shop submittal.
18. Aluminum Ring and Cover
- a. No shop submittal was provided for the aluminum manhole ring and cover proposed for Manhole MH-06. Please provide the necessary information.

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

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Ms. Leslie Brown, Weaver Construction Management, Inc., leslie@weavergc.com

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