



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES &
ENVIRONMENTAL CONTROL
DIVISION OF WATER
89 KINGS HIGHWAY
DOVER, DELAWARE 19901

Surface Water Discharges Section
Construction Permits Branch

Telephone: (302) 739-9946
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September 1, 2015

Mr. John H. Reid, P.E.
Reid Engineering Company, Inc.
1210 Princess Anne Street
Fredericksburg, VA 22401

Re: Allen Harim Harbeson WWTF Upgrades and Expansion – Review Letter #1
State Wastewater Construction Permit Application Number: WPCC 3060/15

Dear Mr. Reid:

We have reviewed the plans, application forms, Final Design Summary and Technical Specifications received on August 24, 2015, and provide the following comments.

1. Even though this information can be found elsewhere, add to the Index Sheet, or add a new sheet, to provide a complete legend and abbreviation guide, including, but not limited to, items such as RAS, WAS, CMAS, DAF, UV, fence line, pavement types, stone or gravel areas, tanks, underground and overhead utilities (water, electric, gas, etc.) and other items.
2. Sheets C100, C102 and C200, correct the spelling of the work “ststion” at four (4) locations each around the abandoned anaerobic lagoon.
3. Sheet C102, label the proposed Jet Aeration Diffuser System adjacent to existing CMAS Basin No. 2A. On this sheet, and others where the contour lines are indicated, can the major (5') contours (at a minimum) be labelled?
4. Sheet C201, and other sheet where these notes appear, Note #1, add the Miss Utility of Delmarva telephone number for Delaware (1-800-282-8555) to this note.

Note #2, the minimum separation between any potable water lines and sewer lines is 18” minimum clear vertical distance, or concrete encasement (6” minimum concrete all around the pipe) is required where this separation is not possible – revise Note #2 and revise the “Concrete Encased Bedding Detail on Sheet D200, or add a new Concrete Encasement Detail.

It looks like the new UV system will be built over top of an existing water line, and we note that on Sheet M700, the existing water line to be relocated – show the relocation and can a profile of the relocated portion be provided?

Revise Note #10, see comment #5 below.

Delaware's good nature depends on you!

5. Sheets C201, C202, M201, M202, M203, M300, M400, M401, M500, M501, M600 - M604, M700 and M701, there are notes that include a circled number, such as "new 18" clarifier influent" with 14 in a circle. We are assuming these relate to the Pipe Schedule shown on Sheet D100. Additionally, there are notes regarding pipe sizes that seem to reference the Pipe Fitting Symbols Schedule on Sheet D100, such as "18" - 11" in an oval. Additionally, there are Valve Schedule notes in a hexagon. Revise note #10 (and the stand-alone notes shown on Sheet M401, etc.) to more specifically reference Sheet D100 and the specific heading, such as "See Sheet D100, Pipe Schedule for items shown thus...", etc.
6. Sheet F200, provide the top of wall and bottom elevations for the new UV Chamber.
7. Sheet M101, at the top left of the sheet, should that match line refer to Sheet M100?
8. Sheets M200, M201 and M202, there are gas and electric lines shown that do not show up on Sheet C201 - all known utilities shall be shown on Sheets C201 and C202. Were any test holes dug and, if so, is that information provided to the contractor.
9. Sheet M201, there is a note on the plan "Replace Existing DAF Air Dissolve Pump" - if this exists, should it also show up on Sheet M200?
10. Sheet M202, it looks like Section 1/M203 is shown at different locations between the Discharge and Suction Plans? Please discuss or verify.
11. Sheet M500, it looks like the proposed Jet Aeration System will be built over top of an existing storm drain - please verify size and location; and verify that this works with the proposed grades, discuss any special considerations and include any applicable construction notes.
12. Sheet M600, there are electric lines shown that do not show up on Sheet C201 - all known utilities shall be shown on Sheets C201 and C202.

There are numerous pipe reconfigurations and new piping in this area - was as-built information provided; have profiles been considered; is a Sequence of Construction and/or a Shutdown/Start-up Schedule being developed?
13. Sheet M601, Note #1, what piping is shown out of position for clarity? Can the area be clouded?
14. Sheet M700, there are gas and electric lines shown that do not show up on Sheet C201 - all known utilities shall be shown on Sheets C201 and C202. Were any test holes dug and, if so, is that information provided to the contractor.
15. Sheet D100, Piping Note #10, the Standard Bedding Detail is on Sheet D200.

Please revise the plans accordingly, including the revision block, and finalize the plans to 100%. After the Legal Notice expires on September 17, 2015, or later, submit one (1) set of final, signed and sealed plans, and the same plans on a CD in a .pdf format.

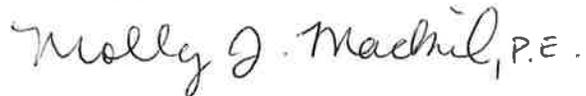
The revised plans constitute the second review under the original review fee. One additional review is included under the original review fee. Any additional revisions/resubmittals may require the submittal of an additional review fee.

If you choose to write a Response Letter, do not repeat the above comments or include a copy of this letter in the resubmittal.

If a State Wastewater Construction Permit is not issued within one (1) year of the date of this letter, a new application, including the review fee, is required.

If you have any questions, please contact me at (302) 739-9352 or via email at molly.mackil@state.de.us.

Sincerely,

Handwritten signature of Molly J. Mackil, P.E. in cursive script.

Molly J. Mackil, P.E.
Construction Permits Branch

email: Mr. Jim Quinton, Senior Manager of Environmental and Transportation –
Allen Harim Foods, LLC
Mr. Adam E. Zimmerman, P.E. – Reid Engineering Company, Inc.