

Cherne, Curtis

From: Cherne, Curtis
Sent: Monday, December 30, 2019 2:23 PM
To: 'Yolanda Padilla Moyer'; Roeder, James A.; Biazar, Shahab
Cc: Adeeb, Muhanned W; Kevin Patton (Kevin.Patton@PulteGroup.com)
Subject: RE: Del Webb 3A- looks good as long as a couple of conditions are met

Yolanda,
Good afternoon.

My analysis assumed two single "D" inlets. Per our conversation today, you are proposing two double "D" inlets. This will clearly have the capacity and negate the need for 7500 cubic feet of storage above 87.64 as previously stated.

Please prepare the Design Revision sheets and submit to DRC for review.



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From: Yolanda Padilla Moyer [mailto:ypadilla@bhinc.com]
Sent: Monday, December 30, 2019 1:23 PM
To: Cherne, Curtis; Roeder, James A.; Biazar, Shahab
Cc: Adeeb, Muhanned W; Kevin Patton (Kevin.Patton@PulteGroup.com)
Subject: RE: Del Webb 3A- looks good as long as a couple of conditions are met

Hi Curtis,

See enclosed stage storage of the pond every 1'. The sketch with the inverts was I knew it was around 84.00 and then check that it was 84.06. I will make sure the downstream inlet is 0.10' lower then the upstream.

Let me know if this works and then I will prepare a revision to the field.

Yolanda

From: Cherne, Curtis <CCherne@cabq.gov>
Sent: Thursday, December 26, 2019 10:21 AM

To: Yolanda Padilla Moyer <ypadilla@bhinc.com>; Roeder, James A. <jroeder@cabq.gov>; Biazar, Shahab <sbiazar@cabq.gov>

Cc: Adeeb, Muhanned W <madeeb@cabq.gov>; Kevin Patton (Kevin.Patton@PulteGroup.com) <Kevin.Patton@pultegroup.com>

Subject: RE: Del Webb 3A- looks good as long as a couple of conditions are met

Yolanda,

Good morning and Happy Holidays.

I have reviewed the drainage calcs you sent in as well as did them by hand myself. They are attached.

As far as I can tell this will work as long as the following conditions exist:

1. Pond has 7550 cu ft of storage above 87.64. (I added 1 foot of freeboard: therefore 89.02 (ROW grade) minus 1' equals a WSE of 88.02 (seems I am off 0.07' but I don't want to redo them, call it 0.93' of freeboard))

a. calcs based on:

1. open area of D inlet is 3.7 sq ft.

2. WSE of 88.09

3. upstream grate elev of 86.00 and downstream grate elev at 87.64

4. 15% clogging factor

2. Pipe slope stays near 3.45%, which means back of downstream inlet can't be further than 55 ft or so from the manhole.

Since the pipe slopes down from inlet to manhole, the inlets will be constructed with solid bottoms per STD DWG 2206. The invert of the downstream inlet should be 0.1 ft below the invert of the upstream inlet so there positive flow out of the inlets. (Your sketch showed the invert of the pipe 0.06 ft higher than the bottom of the upstream inlet).

Please provide a section of pond with grades and volume calcs to show the 7550 cu. ft of storage above 87.64 and below 88.02 (freeboard WSE). Close to 20,000 sq . ft area at top of pond (approx. 140' x 140').

Thanks,

Curtis

From: Yolanda Padilla Moyer [<mailto:ypadilla@bhinc.com>]

Sent: Monday, December 23, 2019 5:04 PM

To: Cherne, Curtis; Roeder, James A.; Biazar, Shahab

Cc: Adeeb, Muhanned W; Kevin Patton (Kevin.Patton@PulteGroup.com)

Subject: RE: Del Webb 3A

Hi Curtis,

See enclosed responses in red and stamped inlet and pipe calcs. I will be out of the office until Dec. 30th. Have a great holiday.

Yolanda

From: Cherne, Curtis <CCherne@cabq.gov>

Sent: Wednesday, December 18, 2019 8:47 AM

To: Yolanda Padilla Moyer <ypadilla@bhinc.com>; Roeder, James A. <jroeder@cabq.gov>; Biazar, Shahab <sbiazar@cabq.gov>

Cc: Adeeb, Muhanned W <madeeb@cabq.gov>; Kevin Patton (Kevin.Patton@PulteGroup.com) <Kevin.Patton@pultegroup.com>

Subject: RE: Del Webb 3A

Yolanda,
Good afternoon.
Still considering design and provide the following comments:

1. Please provide sealed hydraulic calcs from inlet(s) to manhole. Please include a clogging factor of 15% for the inlet(s). Manning's OK for pipe if not under pressure. **See attached inlet and pipe calculations.**
2. What is the invert elevation at the manhole immediately downstream of the inlet? **See enclosed plans originally sent to you for review. The downstream manhole is 5382.08**
3. Open bottom inlets are not uncommon, but I don't know if I've seen one in a pond. Due to hydrostatic pressure water will be pushed up through the bottom of the inlet at an elevation of 84.06. This will complicate the hydraulic calculations as it is difficult to figure out how fast the water can infiltrate upward into the inlet and we do not wish to exceed the 44.2 cfs. The perched grate will accomplish the stormwater quality goal and therefore it does not seem necessary to build an open-bottomed inlet(s). **A gravel bottom was requested by Pulte so there is no standing water in the inlet. The pond bottom is at a 5383.00 with the outlet at a 5384.05. However the inlets are place at the pipe invert location which is up the slope at 85 and 86 contour so the invert of the inlet can be placed at the pipe invert of 84.00 and have no standing water.**
4. Sedimentation issue:
I've attached a couple pics of the storm drains in the pond taken on 12-12-19. There is a sedimentation issue causing the storm drain into the pond to be plugged. I'm guessing it is two-fold: pond banks eroding and sediment coming down from the open space.
The Preliminary Plat in the construction plans states that Tracts L and M are to be maintained by the City. If these areas are to be left unprotected, sedimentation will continue to be an issue and require a higher level of maintenance than should be acceptable.
Please let me know if there are plans to landscape these tracts and the size of aggregate to be used. **Kevin indicated that he sent you a plat. The City is not maintaining the pond the HOA is. I defer to Kevin on the Landscaping of the pond. The gravel at the bottom of the pipe shall be (1 ½" – 3" gravel).**

Thanks,



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From: Yolanda Padilla Moyer [<mailto:ypadilla@bhinc.com>]
Sent: Tuesday, December 17, 2019 9:21 AM
To: Cherne, Curtis; Roeder, James A.; Biazar, Shahab
Cc: Adeeb, Muhanned W; Kevin Patton (Kevin.Patton@PulteGroup.com)
Subject: RE: Del Webb 3A

Hi All,

See below for responses to Curtis' comments. For the fix on the storm drain pipe, we are looking at putting in stepped Inlet type "D" per the enclosed exhibit. We cannot put in just one inlet at the SD inlet pipe. The sd pipe has an asbuilt invert of 5384.05. Once you add the pipe diameter plus thickness of pipe and the inlet frame and grate, it would have a grate elevation of 5387.64. The head needed to push the 44.2cfs through the inlet is 1.25' which would be an elevation of 5388.89 which is only 0.13' lower than the ROW elevation. This is the reason for the lower elevation inlet that the grate would be set at the correct 5386.05 elevation. The higher grate inlet would act as an emergency overflow.

Please let me know if you have any questions and if this is acceptable.

Thanks
Yolanda

From: Cherne, Curtis <CCherne@cabq.gov>
Sent: Friday, October 4, 2019 11:34 AM
To: Roeder, James A. <jroeder@cabq.gov>; Biazar, Shahab <sbiazar@cabq.gov>
Cc: Adeeb, Muhanned W <madeeb@cabq.gov>; Yolanda Padilla Moyer <ypadilla@bhinc.com>; Kevin Murtagh <kmurtagh@bhinc.com>
Subject: RE: Del Webb 3A

James,

I have reviewed the Design Revision sheets 6R and 15 (should be 15R) as well as the drainage report stamp date 6-14-18 and the Amendment 1 labeled January 23, 2019, but stamped 1-23-18 (yes, 18, think off by one year) and provide the following comments:

1. It appears the water surface elevation on Sheet 15R is incorrect. The drainage report stamp date 6-14-18 states a Q in of 52.2 cfs and a Q out of 44.2 cfs with a required detention volume of 7551 cu ft. Therefore, the water surface elevation would be higher than 86.05 as this elevation corresponds to 6963 cu ft and it seems there is 7551 cu ft. **Not sure where the table came from in the detention pond appendix, it is an error on BHIs part. This is not a detention pond but strictly a first flush pond. The total Q100 getting to pond is 52.2. (Basin 3-j, 3-k, 3-m and 3-l, 4-b, 4-j, 4-h, and offsite3 and inlet 11 &12). Qout of the pipe is 44.2cfs. The first flush calculation in the report has a required volume of 6863.50 cf which translated to a WSEL of 5386.05. The volume to allow the 44.2 cfs out of the pond is 7551.1CF which is an elevation of 5386.20. The top of pond/ROW is 5389.02.**

2. Comments on Sheet 6R:

a. Show inlets and drain pipe on profile STA 43+90 or so. Pipe needs Q,V HGL. If not enough space on the plan, you could show this on Sheet 15R. Depending on Q and V, riprap pad may be inadequate. I did not see calcs for sizing riprap pad in the drainage report. **Q, V and HGL are provided on all SD pipes. The Q coming out of the sd is only 8.8cfs. The 10x10 pad is adequate.**

b. For the inlets: delete FL elev and replace with TC elevation. **Inlet are built so I don't see the point in updating now.**

- c. Remove "Temporary Pond" near top of sheet. **Will crossout or relabel in the asbuilts**
- d. For the pipe draining the pond, change "1-24 flared section" to "1-30 flared section" as it is a 30" pipe. **Can be corrected in the asbuilt drawings.**

3. Comments on Sheet 15 (15R)

- a. Rename sheet to 15R. **See enclosed drawing for the stamp and revision**
- b. Seal the sheet. **See enclosed drawing for the stamp and revision**
- c. Revise water surface elevation and required volume based on comment #1. The actual volume looks considerably larger than the 6963.12. **See response to comment #1**
- d. It would be better to use the adjacent grade elevation of 89.05 on the pad directly north of the pond rather than the R/W ELEV of 00.45 as the road has a longitudinal slope..
- e. Pond section A-A shows riprap on the slope adjacent to the pond. Show the riprap in the plan view. In addition, specify aggregate size and thickness **Build note on Sheet 6R**
- f. Should the plan have the standard "NOTES" area similar to Sheet 6R? **Sheet shown to show the pond grading in relationship to the pond. All build notes are on Sheet 6R**
- g. Show Q,V, HGL on 30" pipe. **Shown on Sheet 6R**
- h. Remove the text "Temporary Pond". **See enclosed drawing for the stamp and revision**

Thank you.



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From: Roeder, James A.

Sent: Thursday, October 03, 2019 2:18 PM

To: Cherne, Curtis; Biazar, Shahab

Cc: Adeeb, Muhanned W

Subject: FW: Del Webb 3A

Shahab & Curtis,

Attached are Yolanda's revised drawings showing the revised configuration of the first-flush pond. Please review and comment, and I will move forward with processing the plan revision.

Thanks!



JIM ROEDER, P.E.

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From: Adeeb, Muhanned W
Sent: Thursday, October 03, 2019 2:13 PM
To: Roeder, James A.
Subject: FW: Del Webb 3A

FYI



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From: Kevin Murtagh [<mailto:kmurtagh@bhinc.com>]
Sent: Thursday, October 03, 2019 10:58 AM
To: Adeeb, Muhanned W <madeeb@cabq.gov>
Subject: Del Webb 3A



Here are the sheets you asked for these are revision issued at the beginning of the project.

Thanks

Kevin J. Murtagh, PE

Senior Project Manager [Construction Engineering](#)

Bohannon Huston

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