COH Stormwater responses in red:

On Mon, Nov 15, 2021 at 12:58 PM Phuongmai Truong <pmaitruong@gmail.com> wrote:

Hi Ms. Wang and Ms. Morrow,

Thank you!

Just as a reference for our call tomorrow, attached are the only 2 detention & mitigation plans that we've found:

* 26 C3.4...pdf: with the city stamp of "reviewed for compliance" on 1/21/21
	+ Storm drainage approval stamp: 12/2/20
	+ Name on storm drainage approval stamp: Winnie-Grace Growe - NOT found in PE Roster search ([https://pels.texas.gov/roster/pesearch.html?ver=V111221](https://gcc02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fpels.texas.gov%2Froster%2Fpesearch.html%3Fver%3DV111221%26fbclid%3DIwAR0RjI3PpGNlu7Ffn1pGuNTivo1uAt5Rbu54Hky9rL4AJsEDHvuxA5VZi0U&data=04%7C01%7Cuttam.bhurtel%40houstontx.gov%7Cf336d8b1ad8b45de899608d9a9d3a103%7C57a85a10258b45b4a519c96c7721094c%7C1%7C0%7C637727549534040492%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C3000&sdata=SwaCrKLjPiEmtRZPn5EqYrqe3hkljj7rA8u%2FlEjNB7k%3D&reserved=0)) so we have to assume that this person is not a professional engineer in the state of Texas.
	+ The plan shows 8.43 acre-ft detention volume
* C3.4...pdf: with the city stamp of "reviewed for compliance" on 10/27/21
	+ Storm drainage approval stamp: 10/14/21
	+ Name on storm drainage approval stamp: Jahsi Nkululeko - also NOT found in PE Roster search

Texas PE is required to design the detention system, not to review for compliance. All Storm reviewers are under the supervision of a PE.

* + The plan shows 7.68 acre-ft of detention volume
		- Why is there a decrease in volume and why was it approved?

The 8.43ac-ft appears to be an approximation. The actual detention provided per that same sheet shows 7.68ac-ft which is unchanged in the original. The pond volume was not altered with the revision. Even had the detention been reduced, so long as it exceeds the required volume of 6.675ac-ft this would be allowed.

* + - Why was it approved despite the Harris County Flood Control District's guidelines and COH's Infrastructure Design Manual requiring 13 acre-ft for this property? (0.65 cre-ft x 20 acre = 13 acre-ft)

The revision meets the criteria for grandfathering into the 2020 IDM requirements used for the original sitework. The 2020 IDM does not require HCFCD detention criteria for lots less than **50** acres unless the they are discharging directly into a HCFCD ROW or easement. (2020 IDM 9.2.01(H)(3)(e & f).

* + Land clearing started at least 10/21/21, i.e., before the plan had the city stamp

They had the right to start grading based on the original plans. Even if they started work on the new grading based on the yet-to-be-approved revision (unverifiable), it is a moot point as a red tag issued would have been removed in under a week when the plans were fully approved on 10/27/21.

Both detention plans say that "the improvements shall not cause the capacity of any part of the existing C.O.H. storm system to be exceeded", which must include the storm system of Lakewood Cove, to which they are connecting the drainage pipes and pumping water from their planned detention pond.

We have requested but not received any drainage impact analysis to show to what extent the development will impact our drainage. We have also downloaded all documents available from Houston Public Works site, none of which included a drainage impact analysis, so we come to the conclusion that none has been done.

A drainage study analyzing the downstream impact of the development on the existing system was provided with the public plans. It included the record drawings for the subdivision, analyzing the combined drainage area of the existing subdivision and their tract on the ultimate outfall downstream. It was reviewed and approved by the reviewer as well as a Stormwater PE.

Furthermore, the discharge rate is controlled via pumps, thus the outflow rate is fixed rather than being a function of gravity/head as the pond fills. In the event of **both** pumps failing (a redundancy required per City standards) during a 100-yr Storm, the result would be the pond would fill and be unable to drain. It would not overflow until a rainfall event exceeds 100yr intensity, like Harvey, which is a natural disaster beyond our requirements. While the pumps are functioning there is a sensor used to reduce outflow when it detects the receiving storm line is full.

Even then, there is at least 8.2ft elevation difference between the 100yr WSE and the Laurel Springs LN ROW, so any overflow after flooding the property would go West towards the railroad. In no event would overflow pass directly across Laurel Springs Ln to the Lakewood Cove subdivision from this design.

Personally, it really hurts to see all the trees being cleared, not even a single blade of grass is left, our neighbors found dead beavers and deer on Hamblen Rd because they were not properly rehomed, and to imagine that the next rainfall will flood everything... (Hamblen Rd, part of Laurel Spring and some of our streets already have water backed up now every time it rains).

We really hope that you could help us stop this project and require the developers to actually follow the city's guidelines, to at least mitigate some of the damage.

Thank you so much in advance for giving us your time.

After reviewing the plans, the plans do meet city guidelines and detains runoff in a more controlled manner.

**Request for a Review of the Plans and Permit of Laurel Springs RV Park**

Background:

* Laurel Springs RV Park (1355 Laurel Springs Ln, Kingwood, TX 77339) is going to be built across the street (Laurel Springs Ln) from our subdivision Lakewood Cove.
* The site is 20.032 acre in total
* Project numbers: 20073449, 21078162 (plan revision)
* Construction company: Higbie Ventures, LP

Questions:

1. *Discrepancy in number of pads requested*

The record in Houston Permitting Center says that the plan is approved for **182 pads**, but the [overall site plan](https://www.higbieplans.com/jobs/218/plans/laurel-springs-rv-park/?preview=27413) (with COH “reviewed for compliance” stamp) on the website of the construction company says **226 pads**, which is a 24% increase.

***Can this be considered a violation?***

The description of work shows 182 spaces initially, but this was revised in September 2020 to 226 pads, months before the original plans were approved for 226 pads. Also, just to be clear, the impervious cover is still the same.

1. *Building a smaller detention pond than required*

The detention plan (“C3.4 DETENTION AND MITIGATION.pdf”, attached) shows 7.68 acre-ft detention provided. The 2021 COH Infrastructure Design Manual calls for 0.65 acre-ft of detention per acre, i.e., 13 acre-ft for a 20-acre site. City’s 2021 standards also [provided a 90-day grace period for plans *initially* submitted before July](https://www.houstonpermittingcenter.org/news-events/2021-infrastructure-design-manual-announcement). The detention plan is dated 30 July 2021, so we believe that they are trying to take advantage of this grace period to build a smaller detention pond and maximize the concrete area for the RV pads.

*Considering the big difference and its impact on the surrounding area,* ***can the city enforce the 2021 standard in this case****?*

The revision meets the criteria for grandfathering into the 2020 IDM requirements used for the original sitework. The 2020 IDM does not require HCFCD detention criteria for lots less than **50** acres unless the they are discharging directly into a HCFCD ROW or easement. (2020 IDM 9.2.01(H)(3)(e & f) which they are not in this project.

1. *Using the Lakewood Cove Sewage system for the Laurel Springs RV park*

The detention plan shows that they will have a pipe and pumping system to pump water into the drainage system under Laurel Springs Ln, which is to drain water for Lakewood Cove.

 We found the following documents under public plan,

1. [Storm & Sewer Plan & Profile](https://www.higbieplans.com/jobs/218/plans/laurel-springs-rv-park/?preview=29192)
2. Construction details: page [1](https://www.higbieplans.com/jobs/218/plans/laurel-springs-rv-park/?preview=29193), page [2](https://www.higbieplans.com/jobs/218/plans/laurel-springs-rv-park/?preview=29189), page [3](https://www.higbieplans.com/jobs/218/plans/laurel-springs-rv-park/?preview=29191)

**Were they correctly done?**

Work in the ROW under project 20069767 was re-examined and it was determined they were approved correctly by Storm.

1. *Drainage Impact on Lakewood Cove Neighborhood - possible flooding?*

The drainage system for Lakewood Cove is already struggling with normal rain, with water buildup on Laurel Springs Ln. During Imelda in 2019, we have pictures of water buildup on Mystic Glen Loop and Trail Spring Ct (the water was above half of the car wheels) and water got into some garages on Mystic Trail Loop.

It is City policy that runoff should not go from the ROW into private areas by design. Any flooding inside the private properties would be due to a deficiency in how the private lots were graded, not an issue with the ROW or properties across the public street. Please keep in mind, ponding in the roads is by design as provided detention, this is certainly the case in the ROW and within the subdivision in the knuckles/cul-de-sacs where the curb inlets are located.

Could you please help us review the plan to see whether they calculated:

* ***the impact of the RV Park (with >13 acre of impervious area) on our drainage?***

There was no adverse impact to the Laurel Spring LN ROW, and the ROW should not drain to private areas except during extreme rain events exceeding 100yr intensity. Thus, there is no impact to the neighboring properties (including yours), outside of extreme events exceeding design requirements.

Just to be clear, storm line at ROW is public property and can be used by all neighboring properties.

* ***the impact of the 24% increase in the number of RV pads be on the detention and drainage?***

Sufficient detention was provided for this impervious cover with the original project under the design requirements at the time. The revision did not alter this.

* ***the drainage impact on the community in case the pump cannot work due to loss of electricity****?*

If both pumps cannot operate due to a loss of power, the required secondary source of power (typically a mobile generator) is to be activated for emergency service for the pumps. The pond was designed not to overflow up to a 100yr storm, even should the pond stop draining completely.

1. *Mistakes in Declaration of Support*

The Declaration of Support (“Doc\_01356171\_Declaration.pdf”, attached) shows multiple mistakes, as highlighted in the red boxes:

* The plat, deed and HCAD all show “W Massey”, not “S Massey”
* The street address should be “Laurel Springs Lane”, not “Laurel Springs Road”
* The city should be “Kingwood” or “Houston”, not “Huffman”
* The owner is not “77339”
* The person who filed the Declaration of Support, Leslie B. Mickelis, lists her address as “12320 Barker Cypress, Suite 600”, but that is a PostNet store. According to the Secretary of State, Mickelis operated a company called Texas State Permits LLC, which [lost its right to do business in Texas due to a tax forfeiture in 2009](https://reduceflooding.com/wp-content/uploads/2021/11/Tex-St-Permits-LLC-Forfeiture-270874392098.pdf).

The Declaration of Support clearly states that “I UNDERSTAND AND AGREE that if any fact stated in this Declaration is false, the City may void any permit(s) issued by the City for the Project, and the City may order the Owner or its successor to remove all or part of the Project at my or our own expense.”

Despite the importance of this statement, these mistakes were made and therefore do not inspire confidence that other documents submitted for this project were correctly done, and only you have the expertise to review them. **Could you please help us review them?**

These are mistakes made by the agent, not the engineers, and it does not warrant voiding the project. The agent is only responsible for submitting documents to ProjectDox. They have no hand in the design, which met City requirements and was approved by all departments.