



Aaron Barr <abarrmail@gmail.com>

**Fwd: FW: Parklands Archery Application - Camas Meadows Drive / Prelim Engineering Plan - Response to City Comments on Prelim Engineering Plans**

7 messages

James Kessi <james.kessi@gmail.com>

Thu, Mar 3, 2016 at 5:07 PM

To: Kevin DeFord <ngdevelopment@gmail.com>, Aaron Barr <abarrmail@gmail.com>, Paul Dennis <pdennis@cascadeplanninggroup.com>

Hi Paul, Aaron and Kevin,

Red - Wes  
Purple - Chad @ Olson

- A. Can you please quickly review these responses in red and purple to each of Wes' comments regarding the Engineering plans.
- B. Do they need to be considered as part of the MXPD Overlay approval and DA, or do they wait until subdivision approval to be considered, especially the variations in the road dimensions, which require approval of the City Engineer?
- C. Do they look adequate enough to forward to Phil or the City?
- D. or what is the best way/approach to get any variations approved up front ?
- E. Is the lot ROW frontage requirement as low as 20 feet already in the DA standards?

1. Your utility note #6 for the sewer and storm indicate that minimum cover requirements can be avoided with a recommendation from the geotechnical engineer – this may not be an accurate statement and would require city approval. RESPONSE OK. We were trying to anticipate in the Final Engineering Plans the possibility of shallowing to the bare minimum some utilities, ONLY if hard bedrock was encountered, but this can be changed if the City is unyielding on this point even with a geotechnical engineer recommendation, but it will add cost to the project, and possibly additional cost to the City Camas Meadows Drive section of road..
2. The standard individual residential STEP systems may not be able to overcome the total dynamic head of the system in Payne Road and will likely require high head pumps (probably not a favorable long term maintenance option for the city) or direction of flows into a pump station with more powerful pumps. RESPONSE : High head pumps will be necessary at each connection. There is not a local pump station with capacity to receive this flow. The system will be designed with appropriate pipe to convey the pressures needed to lift over the high point in Lake Road.
3. Based on the requirements of Table 17.19.040-1 in CMC 17.19 the westerly short cul-de-sac (NW 10<sup>th</sup> Fairway) will require Private Street standard C which consists of a 42 foot wide tract with 28 feet of pavement width with a detached 5 foot wide sidewalk on one side. RESPONSE- OK - Yes, in fact PVT 3 is proposed for NW 10th Fairway Drive, and meets these dimensions. The longer remaining private streets will require the Private Street standard D which consists of a 42 foot wide tract with two detached 5 foot sidewalks. Both private street sections restrict parking on one side. RESPONSE- OK - Yes, in fact PVT 4 is proposed for NW 16th Fairway Drive, NW Golf Drive and meets these dimensions. PVT 4 is proposed for NW 16th Fairway Drive, NW Golf Drive and meets these dimensions. Where NW Parklands Trail crosses on the upland between Wetland A and Wetland B, due to topographical constraints there is only being enough area to have an attached sidewalk on one side of the street, the connecting street is proposed as PVT 2 with 30' of ROW and a 5' attached sidewalk and 20 feet of paved width with no parking on BOTH sides. PVT 3 is proposed for NW 17th Green and , NW Parklands Trail south of the wetland to match having the sidewalk only on one side of the street, but the sidewalk has room to be detached.

4. The minimum paved cul-de-sac radius per the code is 35 feet. You are proposing 30 foot paved cul-de-sac widths. RESPONSE. Per Dead End Turnaround Detail ST36, under guidelines for sprinklered Development (ALL lots will be sprinklered), the minimum Turning Radius (inside paved radius) is 30' , and the Minimum (Outer) Turnaround Radius is 35'. As noted on the plans, All cul-de-sacs for Sprinklered Development are to be 30' Paved AC radius plus a 5' Attached Thickened Driveable Sidewalk provides for a total driveable turnaround radius of 35 feet and each sac will also signed as no parking. This appears to meet the intent of the code to provide 35 foot radius of driveable width. If this interpretation is not acceptable, then a larger radius design may be necessary , but this will increase the impervious surface of the streets and also remove potential lot area from the City Tax base and make the lots smaller. The applicant
5. Please see CMC 17.19.040 (B) (10 d) if you are proposing to vary from the minimum street requirements of Table 17.19.040-1. RESPONSE We are proposing to vary slightly from the private road standards as proposed to fit the topographically limitation of the site. A traffic study would find that the proposed street widths as adequate. The proposed variations to the streets and interpretation fo the cul de sac dimensions will either need to be part of a DA or Master Plan or approved by the City Engineer as per 10.d below.

*10.d. When, on the basis of topography, projected traffic usage or other relevant facts, it is unfeasible to comply with the foregoing right-of-way, tract and street width standards, the approval authority, upon recommendation from the city engineer, may permit a deviation from the standards of Table 17.19.040-1 and Table 17.19.040-2.*

6. There are several areas on the plan where the water and sewer notes are swapped. RESPONSE OK. We will correct notes on final engineering plans as needed.

7. The sewer notes on the plans refer to STEP and STEF systems, however the only possible STEF line that could work would be located in CM Drive and would then need to flow into the pump station near the clubhouse which could then overcome the TDH in Payne Road. RESPONSE: The existing Camas Meadows pump station (formerly known as Two Creeks #2) does not have capacity to accept flows from this proposed development. As a result, all of the lots/buildings will be served by individual STEP services with a common force main.

8. Other items that are non-engineering related would be the location of the parking lots serving the commercial uses (buildings should be up front and parking should be in the rear). RESPONSE - Paul - is this still an issue or concern, or has this issue been fully addressed in the MXPDP Overlay, Development Agreement or Master Plan

9. Also, are we providing adequate buffering between incompatible uses? Design review stuff – see CMC 18.19. RESPONSE - Paul - is this still an issue or concern, or has this issue been fully addressed in the MXPDP Overlay, Development Agreement or Master Plan?

10. Here is a copy of the requested street cross sections and cul-de-sac call outs as noted on Sheet 1:

PRELIMINARY PLAT AND BINDING SITE PLAN:

REFER TO MASTER PLAN AND DEVELOPMENT AGREEMENT  
D.A. FOR PROJECT SPECIFIC RESIDENTIAL AND BUSINESS  
PARK DEVELOPMENT STANDARDS TABLE.

PRIVATE STREET PER PVT2

30' PRIVATE R/W  
20' PAVED ROAD WITH CURB AND GUTTER  
NO PARKING BOTH SIDES  
5' ATTACHED SIDEWALK WEST SIDE  
CENTERLINE 240 LF  
NW PARKLANDS TRAIL DR ASPHALT PAVING = 4,927 SF  
PER TABLE 17.19.040-1-B TO MINIMIZE BUFFER IMPACTS,  
MINIMIZE STREET WIDTH & ATTACH SIDEWALK, ALL LOTS  
SPRINKLERED AS > 100' IN LENGTH.

PRIVATE STREET PER PVT3

42' PRIVATE TRACT R/W  
28' PAVED ROAD WITH CURB AND GUTTER  
5' DETACHED SIDEWALK ONE SIDE  
NW 10TH FAIRWAY DR ASPHALT PAVING = 11,151 SF  
NW PARKLANDS TRAIL DR ASPHALT PAVING = 6,541 SF  
NW 17TH GREEN DR ASPHALT PAVING = 10,815 SF  
NO PARKING ONE SIDE

PRIVATE STREET PER PVT4

48' PRIVATE R/W  
28' PAVED ROAD WITH CURB AND GUTTER  
5' PLANTER BOTH SIDES  
5' DETACHED SIDEWALK BOTH SIDES  
CENTERLINE 1480 LF  
NW 16TH FAIRWAY CT ASPHALT PAVING = 11,194 SF  
NW GOLF DR ASPHALT PAVING = 28,860 SF

ALL CUL-DE-SAC TURNAROUNDS PER ST36  
FOR SPRINKLERED DEVELOPMENT WITH 30'  
PAVED & 5' ATTACHED SIDEWALK WITH OUTER  
SIDEWALK TURNAROUND RADIUS BULB = 35'  
35' RADIUS CUL-DE-SAC BULB  
30' PAVED CUL-DE-SAC BULB

*James Kessi P.E.*

*Kessi Engineering & Consulting*

*Civil Engineering - Stormwater - Planning*

T (360) 991-9300 E [James.Kessi@gmail.com](mailto:James.Kessi@gmail.com)

----- Forwarded message -----

From: **Chad McMurry** <[chad@olsonengr.com](mailto:chad@olsonengr.com)>

Date: Fri, Feb 26, 2016 at 3:10 PM

Subject: Re: FW: Parklands Archery Application - Camas Meadows Drive / Prelim Engineering Plan Discussion

To: James Kessi <[james.kessi@gmail.com](mailto:james.kessi@gmail.com)>

See my responses below in purple.

-Chad

Chad McMurry, PE, CWRE

Olson Engineering

222 E. Evergreen Blvd.

Vancouver, WA 98660

(360) 695-1385

(360) 695-8117 fax

(503) 289-9936 from Portland

[chad@olsonengr.com](mailto:chad@olsonengr.com)

On Thu, Feb 25, 2016 at 6:15 PM, James Kessi <[james.kessi@gmail.com](mailto:james.kessi@gmail.com)> wrote:

Hi Chad,

Can you just get me a response and reply to

#2 and

#7

Can we connect & discharge directly to the 10 inch force main in Payne? That is the current plan. The Camas Meadows Pump Station (formerly Two Creeks #2) doesn't have capacity to serve this development without significant upgrade.

Or do we still have to pump all the way to the Two Creeks pump station?

thanks

James

1. Your utility note #6 for the sewer and storm indicate that minimum cover requirements can be avoided with a recommendation from the geotechnical engineer – this may not be an accurate statement and would require city approval.
2. The standard individual residential STEP systems may not be able to overcome the total dynamic head of the system in Payne Road and will likely require high head pumps (probably not a favorable long term maintenance option for the city) or direction of flows into a pump station with more powerful pumps. High head pumps will be necessary at each connection. There is not a local pump station with capacity to receive this flow. The system will be designed with appropriate pipe to convey the pressures needed to lift over the high point in Lake Road.
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4. The minimum paved cul-de-sac radius per the code is 35 feet. You are proposing 30 foot paved cul-de-sac widths.
5. Please see CMC 17.19.040 (B) (10 d) if you are proposing to vary from the minimum street requirements of Table 17.19.040-1.
6. There are several areas on the plan where the water and sewer notes are swapped.
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9. Also, are we providing adequate buffering between incompatible uses? Design review stuff – see CMC 18.19.

**James Kessi P.E.**

*Kessi Engineering & Consulting*

*Civil Engineering - Stormwater - Planning*

T (360) 991-9300 E [James.Kessi@gmail.com](mailto:James.Kessi@gmail.com)

----- Forwarded message -----

From: **Wes Heigh** <[WHeigh@cityofcamas.us](mailto:WHeigh@cityofcamas.us)>

Date: Thu, Feb 25, 2016 at 3:38 PM

Subject: FW: Parklands Archery Application - Camas Meadows Drive / Prelim Engineering Plan Discussion

To: James Kessi <[james.kessi@gmail.com](mailto:james.kessi@gmail.com)>

Cc: "Curleigh (Jim) Carothers" <[jcarothers@cityofcamas.us](mailto:jcarothers@cityofcamas.us)>, Steve Wall <[SWall@cityofcamas.us](mailto:SWall@cityofcamas.us)>, Robert

Maul <RMaul@cityofcamas.us>, Phil Bourquin <PBourquin@cityofcamas.us>

Hi James,

Thank you for the composite preliminary submittal for review.

Below are my quick initial review comments/concerns:

- Your utility note #6 for the sewer and storm indicate that minimum cover requirements can be avoided with a recommendation from the geotechnical engineer -- this may not be an accurate statement and would require city approval.
- The standard individual residential STEP systems may not be able to overcome the total dynamic head of the system in Payne Road and will likely require high head pumps (probably not a favorable long term maintenance option for the city) or direction of flows into a pump station with more powerful pumps.
- Based on the requirements of Table 17.19.040-1 in CMC 17.19 the westerly short cul-de-sac (NW 10<sup>th</sup> Fairway) will require Private Street standard C which consists of a 42 foot wide tract with 28 feet of pavement width with a detached 5 foot wide sidewalk on one side. The longer remaining private streets will require the Private Street standard D which consists of a 42 foot wide tract with two detached 5 foot sidewalks. Both private street sections restrict parking on one side.
- The minimum paved cul-de-sac radius per the code is 35 feet. You are proposing 30 foot paved cul-de-sac widths.
- Please see CMC 17.19.040 (B) (10 d) if you are proposing to vary from the minimum street requirements of Table 17.19.040-1.
- There are several areas on the plan where the water and sewer notes are swapped.
- The sewer notes on the plans refer to STEP and STEF systems, however the only possible STEF line that could work would be located in CM Drive and would then need to flow into the pump station near the clubhouse which could then overcome the TDH in Payne Road.

Other items that are non-engineering related would be the location of the parking lots serving the commercial uses (buildings should be up front and parking should be in the rear). Also, are we providing adequate buffering between incompatible uses? Design review stuff -- see CMC 18.19.

Regards,

Wes

Wes G. Heigh

Project Manager

City of Camas

616 NE 4<sup>th</sup> Ave.

Camas, WA 98607

(360) 817-7237

wheigh@cityofcamas.us



**From:** James Kessi [mailto:james.kessi@gmail.com]

**Sent:** Thursday, February 25, 2016 11:14 AM

**To:** Wes Heigh

**Subject:** Re: Parklands Archery Application - Camas Meadows Drive / Prelim Engineering Plan Discussion

Hi Wes,

I don't know if you saw the Composite Engineering Plan, but here it is.

It shows an overall STEP system connecting to the 10" Force Main in Payne as we had discussed

All stormwater facilities have been removed from the buffers and wetlands completely.

All Water quality will be accomplished with Filterra Treatment Vaults, and then stormwater is directed to level spreaders to spread it out and let it flow to the wetland. As we had previously discussed in the meeting with Steve Wall, direct release to 100 year flood fringe from Lacamas Lake that extends onto a portion of the wetlands on the site is unique for this site and demonstrates a connection to Lacamas Lake.

Give me a call and I can go over it with you and make sure your questions are answered.

thanks

James

*James Kessi P.E.*

*Kessi Engineering & Consulting*

Civil Engineering - Stormwater - Planning

T (360) 991-9300 E [James.Kessi@gmail.com](mailto:James.Kessi@gmail.com)

On Thu, Feb 25, 2016 at 10:04 AM, Steve Wall <[SWall@cityofcamas.us](mailto:SWall@cityofcamas.us)> wrote:

Hi James,

Not any concerns per se, since as far as I know we haven't really started any reviews yet. Just wanted to try and stay ahead of things as much as possible. I think the biggest items would probably be stormwater and sewer. I'm not sure what you ended up with on final stormwater design approach, but it may be worth discussing with Wes if there's anything that's "non-traditional" in your design.

Also, the one item that caught my attention briefly was in regards to sewer service. My limited understanding is that the project has to be served by at least one of the pump stations in the area. As such, the pump station(s) should be analyzed to ensure that there is adequate capacity to handle the flows from the new development. From past experiences, that analysis can take some time and is often an iterative approach to make sure everything has been accounted for.

Again, it was really just an offer to talk through things prior to the land use review and plan review starting up to make sure everyone on our end really understands your thought process and proposals. I won't be completing the reviews, but I'm happy to coordinate with folks on our end to help out as needed. We'll take your lead...

Thanks,

Steve

Steve Wall, P.E.

Public Works Director

Ph: 360-817-7899

Cell: 360-624-2763

Email: [swall@cityofcamas.us](mailto:swall@cityofcamas.us)



**From:** James Kessi [mailto:james.kessi@gmail.com]  
**Sent:** Monday, February 22, 2016 8:50 PM  
**To:** Steve Wall  
**Cc:** Kevin DeFord; Aaron Barr  
**Subject:** Re: Parklands Archery Application - Camas Meadows Drive / Larkspur discussion follow up

Hi Steve,

As a followup to my voice mail I left today, Kevin and Aaron asked me to also email you

and check with you to see if there were any overall storm, sanitary, water, or transportation engineering concerns or questions you had on the Parklands or Camas Meadows Drive projects?

I would be happy to have a phone conversation to go over the big picture design concepts and go over the latest engineering plans or meet with you to give you an update or answer any questions o as needed to give you a level of comfort that the big picture items are being addressed for the applications.

Please let me know what you are thinking.

Attached is a pdf the latest updated engineering composite plan - a hard paper copy was also submitted with the latest materials to the City.

thanks

James

*James Kessi P.E.*

*Kessi Engineering & Consulting*

*Civil Engineering - Stormwater - Planning*

T (360) 991-9300 E [James.Kessi@gmail.com](mailto:James.Kessi@gmail.com)

On Thu, Aug 6, 2015 at 4:00 PM, Steve Wall <SWall@cityofcamas.us> wrote:

Hi James,

I appreciate the offer to be involved and I may be able to attend tomorrow depending on the time chosen. I'm sure you're aware I won't be completing any review myself and will be relying on engineering staff to review the storm design and ensure that it meets the City's requirements. If there's a complicated proposal that you'll be presenting tomorrow, more than likely we'll need to review internally anyway before providing any kind of response...similarly throughout the review process, if there are big picture items that crop up we'd likely review as a team.

That said, feel free to get a time set with Curleigh and Wes and I'll try and attend if I have availability.