Galloway
1155 Kelly Johnson Blvd., Suite 305
Colorado Springs, CO 80920
719.900.7220 • GallowayUS.com

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Kari Parsons
Planning & Community Development
El Paso County, Colorado
Colorado Springs, CO 80901

RE: PUDSP-21-010 – GRANDVIEW RESERVE (WITH PSSG) SECOND SUBMITTAL Comment MEMO.

File No.: PUDSP2110

Dear Ms. Kari Parsons,

Below are the comments from the Planning & Community Development comment memo (issued 1/23/2022) on the above referenced project along with our response in ***bold and italics***:

Engineering Division – General / Letter of Intent

Action Items:

1. **Resolved.**

2. Address the pre-subdivision site grading request, including installation of wet utilities (if requested) in the LOI. **Partially resolved; utility construction plans need to be submitted and approved with the PUDSP if construction is proposed prior to final plat approval.**
   Response: Utility Construction will not be requested with Pre-Development Grading.

3. Address all proposed ECM deviations/PUD modifications in the LOI. Deviations/PUD modifications appear to be required for the following:
   a. **Resolved.**

   b. **Resolved with right-in/right-out.**

   c. Rex Road intersection spacing (received under DEV-21-001) Note: The deviation request is still under review and any comments will be forwarded when available. **(see https://epcdevplanreview.com/Public/ProjectComments/175208)**
   Response: The deviation was submitted, and we are awaiting approval.

   d. **Resolved.**

   e. Low flow channel and bottom width design not meeting DCM sections 10.5.3 and 10.5.4 (deviation). **Address what the cross-section would be using 10% of the 100-year flow (40-55 cfs)? The deviation request is under review and any additional comments will be forwarded when available. The owner's signature will be required.**
   Response: The deviation request has been submitted regarding using a different low flow channel. The low flow channel has been designed to convey approximately 70% of the two year event which is the standard of practice for a geomorphically informed designed channel. Using a higher flow as the flow flow channel design generally increases depths and thus shears within the low flow channel leading to additional degradation of the channel and typically a low flow channel of the channel forming flows would erode within the larger low flow channel. By allowing larger events to spread into the more frequently

inundated floodbanks it creates better habitat for plant life and reduces the depth on larger flow events to protect the channel.

f. **Eyebrow design on Sheet C3.2: The design proposed exceeds the maximum length (100' from ROW to center of island radius) per ECM Figure 2-32, and that design is proposed for revision to be a maximum of 45 feet, with no island in the next ECM update. If a deviation is requested, it should be for a shorter length and without sidewalk around the inner island (only at the crossing).**
Response: The applicant has worked with the County (specifically Elizabeth NijKamp) on the design of this model home court. We have come to agreements on the general layout. It is our understanding a formal deviation request is not needed based on our conversations with Elizabeth Nijkamp.

Information Items:

1. It is recommended that any other deviations be submitted for approval prior to the other project documents and not to submit the other documents until the deviations are approved or denied. (PUD Modifications need justification under LDC Section 4.2.6.F.2.h and deviations need justification per ECM Section 1.9.)

PUD / Preliminary Plan

Action Items

1. See PUD/SP redlines. **Partially resolved; see updated/remaining redlines.**
Response: Remaining redlines are addressed with this submittal.

2. If a roundabout might be the preferred option for the Eastonville/Rex intersection (or other intersections) as mentioned in the TIS, provide an alternative plan/footprint for the intersection (in addition to the T intersection) or add a note stating this to the PUDSP plan sheets showing the intersection(s). **Unresolved; coordinate with EPC DPW.**
Response: Discussions are ongoing with EPC DPW on future design of Eastonville Road and EPC has not yet decided whether or not Eastonville/Rex intersection will be a traffic signal or a roundabout. At this preliminary plan stage, we are showing a preliminary configuration for that intersection assuming a future traffic signal. Whether it will be a roundabout or a signal, design will be progressed accordingly in construction document phase once we are provided with further direction by EPC DPW through ongoing coordination.

3. Show the future Rex Road improvements west of Eastonville, the existing park improvements, and how lanes will align. **Unresolved; see redlines. The improvements shown on the drainage plan can be used.**
Response: Added future Rex Road improvements to the West of Eastonville.

4. Rex Road should have medians (4-foot minimum) at Eastonville and a 14-foot turn lane per the typical section; ensure that these are accounted for in the right-of-way. **Partially resolved; see redlines regarding 1-foot discrepancy.**
Response: Revised cross-section of Rex Road to extend the 1-foot discrepancy.

5. **Resolved.**

6. **Resolved.**

7. Provide maintenance access roads for the main channel and any rear lot swales in accordance with DCM1 requirements. **Partially resolved; see drainage plan redlines regarding maintenance of the MS drainageway.**
Response: Added maintenance road along MST drainage way.

8. Landscaping Plan: Trees should not be located within the right-of-way on new developments (a license agreement is highly unlikely to be approved but can be submitted for consideration if desired). Per ECM Section 2.5.8, landscaping must be appropriate for the conditions and easily maintained by the use of power-mowing equipment. Fencing and vegetation that would obstruct sight distance easements also needs to be outside of those areas. **Partially resolved; see Landscape Plan redlines.**
   Response: Trees have been removed from the right of way. The plans now show seeding only within the ROW in compliance with ECM.

9. Provide a detail for the proposed trail crossings of the proposed channel.
   Response: Proposed trail crossings have been eliminated for this submittal.

10. Note for final design: Reference the adopted ECM revisions applying to ADA design, Chapter 6.
    Response: Noted, final design will include the required ADA design elements and meet all ADA requirements.

11. **Detail #4 on Landscape Plan Sheet L1.1 needs revisions to the trees on the west side. They need to be outside the right-of-way, which needs to be behind the curb and gutter.**
    Response: Trees have been removed from the right of way.

12. **Obtain and provide E911-approved street names on all of the documents.**
    Response: Approved street names were obtained from E911 and added to PUDSP

Transportation / Traffic Impact Study

Action Items

1. See TIS redlines. **Partially resolved; see updated/remaining redlines. Discuss with Staff the most recent Eastonville Road decisions.**
   Response: The TIS has been updated to address the redlines. Please refer to the PDF containing LSC responses to TIS Redline comments. The team has been meeting with Staff regarding Eastonville Road and those discussions will continue.

2. Note: Roundabout designs shall conform with NCHRP Report 672 – Roundabouts: An Informational Guide, Second Edition (2010), and the Wisconsin DOT Facilities Development Manual (FDM) (as amended), found at http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/design.aspx. Any other criteria proposed for use shall confirmed by the ECM Administrator prior to design. The design process shall be iterative with submittals generally conforming with the Wisconsin DOT design procedures as directed by the EPC review engineer. The Wisconsin DOT details, signing and striping recommendations, and lines of sight, should be utilized to the extent practicable. Roundabout lighting shall conform with the 2019 CDOT Lighting Design Guidelines, as amended. **The question of whether roundabouts on Eastonville Road are the preferred option needs to be addressed and/or enough ROW needs to be preserved to maintain the option of installing them in the future. Coordination with EPC DPW is ongoing. It seems that roundabouts may actually need less pavement and possibly less ROW if that is the chosen option.**
   Response: The team has been meeting with Staff regarding Eastonville Road and those discussions will continue. The following note has been added to the TIS (in the Improvements Table): "Note regarding a potential roundabout intersection instead of conventional intersection: Planning and preliminary design considerations for Eastonville Road Between Stapleton and Rex are currently in-process. The concept of roundabout traffic control is being considered as an option for some of the intersections in the corridor."

3. Note: Conditions of approval will address design and construction responsibilities with final plats. The Stapleton/Eastonville intersection shall be monitored and near-term improvements considered accordingly.
   Response: Comment noted.

4. **Obtain and provide E911-approved street names on all of the documents.**
   Response: The TIS update shows the latest street names provided to LSC. Street names have been approved and added to the plans.

Preliminary Drainage Report / Drainage Plans

*Note: this review **remains** cursory due to the need for additional information in the PDR **and a channel analysis and design report** and revisions to the PUD/SP plan.*

Action Items:

1. See PDR redlines. **Partially resolved; see updated/remaining redlines.**
   Response: Responses have been provided on the redlined plans – see attached.

2. Provide channel analyses and recommendations in the PDR, specifically in regard to impacts to the onsite and downstream channels, capacities, and necessary and proposed improvements; the channel is part of the development. If a separate report is being provided it can be an appendix of the PDR. **Unresolved.**
   Response: A separate report titled "Grandview Reserve CLOMR Report" prepared by HR Green, Revised January 2022 includes the channel analyses and recommendations. This report is referenced in the PDR and will be included in the FDR appendix when submitted for approval as part of the Final Plat submittal.

   a. Regarding the "Summary and BOD" document, see email dated 10/8 with cursory comments:
      i. The cross-section template appears to have been run through the whole channel alignment, creating berms along the channel in some locations. I just want to verify that those will be graded out or widened where appropriate. (see attached redlines highlighting some of the areas of concern). **Partially resolved; the grading needs to be completed and side swales addressed (see redlines).**
         Response: Grading has been revised to remove berms adjacent to the channel.

      ii. A deviation request will need to be approved for the low flow channel and bottom width design not meeting DCM sections 10.5.3 and 10.5.4. I would recommend submitting this request as soon as you can. **Resolved; the request is under review.**
         Response: Noted.

   b. Provide channel stability analysis for the main tributary (south) channel. **Unresolved. Also, the area proposed to be graded at a 3% slope is of concern.**
      Response: HR Green completed a HEC-RAS analysis for the existing channel with both existing and future condition flows. Both scenarios throughout the channel fall within the channel stability criteria. HR Green will provide the HEC-RAS model with the channel report as part of the Channel Construction plan submittal process.

3. The grading shown on some of the lots and along the proposed channel needs to be revised (see redlines.) **Unresolved.**
   Response: Grading across the site has been revised, specifically where lots abut the proposed channel.

4. Provide discussion on maintenance access and aspects of the preliminary design. Show all access roads/paths for permanent BMPs, swales and channels on the drainage plans. Reference ECM 3.3.3.K. **Unresolved for MT.**
   Response: Plans revised to show maintenance access road for Main Stem Tributary as requested. Narrative updated to reflect this change.

5. The four-step process includes a statement that all proposed developed areas will be treated by the WQCV ponds. Revise to describe any areas that won't be (areas that meet criteria – discuss with staff) if applicable, referencing the WQCV/MS4 plan (WQ Map/Sheet DR-4). **Unresolved (drainage basins need to be revised per redlines and the areas not treated need to be verified).**
   Response: Drainage basins have been revised to reflect the grading. WQ Map – Sheet DR-4 was revised accordingly.

6. If Eastonville road drains into the site, its developed sub-basins and the necessary WQCV facilities need to be accounted for and conceptually designed. If it is necessary for this development to construct segments of Eastonville Road, complete design will be needed with the final plat. **Unresolved; see redlines.**
   Response: Eastonville Road will not drain into the site. A separate drainage report will be prepared and provided for review as part of the Eastonville Road project. The road sub-basins and anticipated locations of water quality treatment facilities have been provided on the drainage map for reference. Narrative has been revised to reference the future Eastonville Road drainage report for all analyses and design associated with the road.

7. Provide complete preliminary FSD design worksheets, including facilities for the proposed institutional parcel. **Partially resolved; see redlines.**
   Response: FSD design worksheets for the (5) proposed on-site detention basins have been revised and included in the report. Sizing for the (2) on-site TSB's were provided and referenced in the report. See further responses in the attached redlined plans.

8. Address spillway design and FSD pond freeboard. Show the 100-year water surface elevations in the ponds and the channels. **Unresolved.**
   Response: Preliminary spillways and freeboard designs are included in the pond design worksheets, ponds are adequately sized to provide required volume for the spillway and freeboard. Drainage map updated to show pond & channels 100-year WSE.

9. Provide channel and swale cross-sections and drop/check structure design on the plan. Provide a channel plan and profile. **Unresolved.**
   Response: The channel cross-section, drop/check structure design as well as the channel plan and profile will be provided in a separate channel report/CD's. This will be submitted as a separate project. These are final design details that will completed as part of the final design and are too much to complete with a Preliminary Drainage Report.

10. Address proposed trail crossings of the channels. **Resolved (it is stated that there will be no trail crossings with this development.**
    Response: The plans have been revised to remove all trail crossings at the channels.

11. Note: Consider aligning and grading FSD pond overflow spillways to reduce impact, match existing contours better. **Response states that the spillways were revised but this is not reflected on the plans.**
    Response: FSD facilities overflow spillways were realigned & graded to match existing contours and drainage patterns.

12. If early grading will be limited per the GEC Plan, an interim drainage plan is needed to address interim conditions and conveyances… **Unresolved, with all of the grading areas shown, it**

needs to be clear how the MST channel is to be relocated (phasing), including the north and south ends.
Response: Early grading plan has been revised to insure proposed overlot grading does not encroach within 50-feet of the Main Stem Tributary Number 2 existing conditions

Grading and Erosion Control Plan / Pre-Subdivision Site Grading / SWMP

Action Items:

1. The GEC Plan does not appear to include proposed contours for all areas to be graded; revise as appropriate. **Partially resolved; see redlines. All disturbed areas need to be reseeded or otherwise stabilized. Show both existing and proposed contours (don't erase/hide existing contours in proposed grading areas).**
   Response: The EGP now shows all disturbed areas with seeding or otherwise stabilized through BMPs. Both existing & proposed contours are reflected in EGP plan set.

2. Address how flows will be conveyed to the TSBs. **Unresolved; indicate flow paths on the plans.**
   Response: Runoff is directed to TSBs via swales that direct flows into each of the TSBs respectively. Flow paths shown.

3. Provide maintenance access roads and easements to the proposed TSBs/future FSD facilities as required. **Partially resolved; show all facilities and maintenance access.**
   Response: TSBs are temporary in nature and therefore do not need easements. TSBs are only 4 feet deep, so vehicular access goes to edge of each TSB. Future FSDs will be designed in the detailed GEC plan set.

4. The use of silt fence appears to be excessive and not appropriate in some areas, especially where runoff would be channelized to flow along the silt fence; revise as appropriate.
   Response: Silt fencing extents have been revised accordingly.

5. See Planning comments on the Soils and Geology report. **Partially resolved; see updated redlines.**
   Response: See revised Soils and Geology Report

6. Provide utility plans if wet utilities are proposed to be constructed with early grading. **Unresolved.**
   Response: Utilities are not being installed with the EGP plan set. Therefore, they are not included with this submittal.

Forms / Permits / Other

Action Items:

1. See attached Final Engineering Checklist for required EGP approval documents.
   Response: Final Engineering Checklist for EGP received.

2. Provide the signed Pre-Subdivision Site Grading Acknowledgement form. **Provide when available.**
   Response: Signed forms will be provided when El Paso County is ready to approve the PUDSP submittal.

3. See cursory FAE redlines; additional comments will be provided on the updated plans. **(FAE will be reviewed with the next submittal pending additional information on the GEC plans.)**
   Response: FAE was revised to reflect EGP status.

4. Revise the latitude and longitude coordinates on each MS4 sheet to match the specific pond locations.

a. **The MS4 and SDI worksheets will be reviewed with the next submittal.**
Response: Worksheets were revised as necessary.

b. **Revise the FSD calculations in the PDR. Provide forms for all ponds requiring reporting to the State.**
Response: FSD calculations were revised as necessary.

c. **Updated State Dam permits will be required where applicable.**
Response: Noted. State Dam Permits will be provided where required.

d. **Update the O&M manual to include all PBMPS, details and locations, and maintenance requirements.**
Response: O&M plan revised as necessary.

5. Provide a wetland mitigation plan when available.
Response: The Corp of Engineers is anticipating providing us an AJD later in March. This will determine the extents of a wetland mitigation plan and if it is to be provided in the future.

Sincerely,
GALLOWAY

Grant Dennis, PE

1155 Kelly Johnson Blvd., Suite 305
Colorado Springs, CO 80920
CalebJohnson@GallowayUS.com
(719) 900-7221