

MEMORANDUM

DATE: September 13, 2021

TO: Kari Parsons, PCD-Project Manager

FROM: Jeff Rice, PCD-Engineering
719-520-7877

SUBJECT: SP-20-008 – Homestead North - Sterling Ranch
Third Submittal

Engineering Division

Planning and Community Development (PCD)-Engineering reviews plans and reports to ensure general conformance with El Paso County standards and criteria. The project engineer is responsible for compliance with all applicable criteria, including other governmental regulations. Notwithstanding anything depicted in the plans in words or graphic representation, all design and construction related to roads, storm drainage and erosion control shall conform to the standards and requirements of the most recent version of the relevant adopted El Paso County standards, including the Land Development Code (LDC), the Engineering Criteria Manual (ECM), the Drainage Criteria Manual (DCM), and the Drainage Criteria Manual Volume 2 (DCM2). Any deviations from regulations and standards must be requested, and approved by the ECM Administrator, in writing. Any modifications necessary to meet overlooked criteria after-the-fact will be entirely the developer's responsibility to rectify.

The comments include unresolved previous comments and new comments resulting from the re-submittal in **bold italic**. All previous comments that have been resolved have been noted or deleted. A written response to all comments and redlines is required for review of the re-submittal. **Responses to all comments were not found.** Please arrange a meeting between the developer's team and County staff to review and discuss the comments and prepared revisions/responses prior to the next submittal.

(For reference, comments regarding the proposed rezoning of this development area are referenced in file P-20-005: <https://epcdevplanreview.com/Public/ProjectComments/162343>)

General / Letter of Intent

1. Include proposed right-of-way (ROW) dedications and all channel improvements areas in the preliminary plan area and legal description. Note: Because the Sand Creek channel and appurtenant improvements are not entirely included in tracts as requested, El Paso County will not be able to take ownership and maintenance responsibilities without additional documentation following construction to the required standards. The preliminary plan notes that the Sterling Ranch Metro District will maintain the channel, which is acceptable; however, design and maintenance provisions still need to meet County standards.
2. **Resolved.**
3. Resolved.
4. **An additional deviation request is required for the proposed one-way road cross-section. Also address the deviations in the Letter of Intent.**
Response: Provided.

Preliminary Plan

1. Provide all required preliminary plan checklist items on the plan. Unresolved; see redlines regarding centerline lengths and right-of-way dimensions. Label all pipes and inlets on the new road sheets. Show all easements in the title exceptions or add notes for the easements that can't be located. **See remaining/updated redlines**
2. Provide proposed road cross-sections. Resolved; see redlines on the cross-sections. **Partially resolved – add the proposed new one-way cross-section. Address whether noise walls will be provided for the two adjacent lots based on how close the road is to the building envelopes, and whether a height restriction is needed on the south lot to allow sunlight to reach the road in winter, to prevent icing conditions.**
Response: Proposed one-way cross section provided on Cover Sheet. Noise study has been updated and uploaded to EDARP. Noise walls are not recommended for Jane Kirkham Drive. A height restriction is not needed. Lots and setbacks are proposed in similar configurations on site.
3. In accordance with Section 8.5.5(B) of the Land Development Code, the developer shall plat all tracts in their entirety that are deemed by the County to be necessary for drainage improvements and maintenance, including the Sand Creek channel with maintenance access provisions (see redlines) and wetland mitigation areas. Ensure that the access road/trail will not be in areas of unstable slopes or wetlands/boggy areas and address the crossing of the drainageway along Briargate Parkway. Unresolved;
 - a. See General comment #1 above.
 - b. Verify wetlands locations on all plans – they appear to be offset to the east by 100 feet in some locations based on the wetlands studies that have been provided. **Unresolved.**
4. Resolved.
5. Verify that enough right-of-way is provided on Briargate and Vollmer where additional turn lanes are required. Unresolved; label overall right-of-way dimensions and proposed ROW dedication widths per redlines. **See remaining/updated redlines.**
6. Note: Ensure that road grades will allow for ADA requirements to be met at final design, particularly pedestrian crossings at stop and yield conditions.
7. Note: Ensure that all proposed trees are outside of the proposed ROW.
8. See preliminary plan redlines. **See remaining/updated redlines.**
JR Response: Redlines on preliminary grading and utility plans addressed

Transportation / Traffic Impact Study (TIS)

Note: Copied from P-20-005 comments.

1. Resolved.
2. See General / Letter of Intent comment #2 regarding deviations. (Deviations will be addressed with the preliminary plan.) **See deviation request redlines. Provide a deviation request and cross-section for the proposed one-way road.**
3. See TIS redlines. **See updated TIS redlines.**
4. Verify that the intersection improvements shown on the preliminary plan match the necessary 2040 modeled lanes, and that the ROW is adequate. **See Preliminary Plan redlines. If the preliminary plan shows different lanes on Vollmer Road than already approved on Sterling Ranch Filing No. 1 CDs, please explain the changes in the TIS.**
5. **Note: the proposed 3/4 movement at the Briargate/Wheatland south leg may need to be a RI/RO in the future based on the draft Briargate-Stapleton Corridor Study and Access Control Plan.**

Preliminary Drainage Report/MDDP Addendum (PDR)

1. See PDR redlines. **See updated redlines.**
JR Response: Redlines addressed
2. Specifically address the existing conditions offsite basins and flows to add detail to the MDDP. **Partially resolved;**
 - a. **Resolved.**
 - b. Address the existing basins east of Sand Creek where Briargate Pkwy and Sterling Ranch Road are proposed. **see redlines**
JR Response: Redlines addressed
3. Address how existing offsite flows will be conveyed through the site. Address the existing diversion along Briargate Blvd. and show it on the drainage plans. Partially resolved;
 - a. Address all offsite sub-basin flows for interim and proposed conditions.
 - b. **Resolved.**
JR Response: Addressed
4. Address proposed DBPS improvements (including Sand Creek adjacent to the site), proposed replacements/substitutions, and potential fee offsets/credits in general. The final plat FDR for either the plat triggering completion of the DBPS improvements or an earlier plat desiring to document credits upon construction will need to document the offset fees, costs, and potential credits. Unresolved. **(Discussed at final plat EA meeting on September 1)**
 - a. The updated Kiowa channel design needs to be discussed, submitted and reviewed. **(email received September 10)**
 - b. Concurrence with the Kiowa design will be required to verify coordination of the channel stabilization (costs and design) with the preliminary plan design of lots and cul-de-sacs east of Wheatland Drive.
JR Response: Noted
5. Address outfall design to the Sand Creek channel from the detention basins. Partially resolved; the channel improvement plans are needed to coordinate locations and improvements.
JR Response: Noted
6. Note: not all inlet and storm drain calculations were checked in detail with this review.
JR Response: Noted

Also provide a drainage plan for the interim pre-development site grading not showing curb and gutter and showing temporary facilities. This should match the grading shown on the early grading and erosion control plan. **Partially resolved; see redlines.**
JR Response: Redlines addressed
7. Provide a Water Quality Capture Plan including all proposed development areas and indicating the areas draining to each pond and areas proposed to drain offsite. Ensure that the offsite flow acreage for each development area meets EPC MS4 permit requirements (ECM Appendix I) and all developed areas possible drain to a WQCV facility or other appropriate control measure. Additional measures may be required. Color-coding or hatching of the respective areas on the plan is helpful (detailed design features are not required on this plan). Partially resolved;
 - a. See redlined plan regarding inclusion of Vollmer Road in the treatment areas. **Unresolved. A separate PBMP Applicability form may be required for Vollmer Road.**
 - b. Highlight the areas proposed not to be treated and provide acreages. **Partially resolved; see redlines.**

- c. The Sterling Ranch Road and Briargate Pkwy areas east of Sand Creek need to be shown **(Resolved.)** ~~or notes added that a separate plan will be provided~~ and those areas will be treated, with details to be provided in the FDR needed for the construction of those roads.

JR Response: Redlines addressed

8. Regarding Briargate Pkwy and Sterling Ranch Road east of Sand Creek:
 - a. If they are included in early grading (Interim Condition Plan), details to the FDR level will be required. An interim and conceptual ultimate storm drain system will be needed. **(response is that this will be provided separately)**
 - b. A separate FDR will be required for construction of these roads, so it is recommended that they be left out of the early grading plans. If they remain included, stormwater quality facilities will be required and a condition of approval will be provided that grading of these roads east of Sand Creek will not be permitted until the road and bridge construction plans have been reviewed and the proposed design agreed to by County staff (also requiring concurrence on the Sand Creek channel design parameters). **(response is that this will be provided separately)**
9. **Resolved.**
10. **Address how the potentially unstable areas along Sand Creek at the northeast corner of the site will be stabilized. This comment is in regard to the Soils and Geology study showing the west bank of Sand Creek from Wheatland north being potentially unstable. A statement in the PDR narrative about this will be sufficient.**

JR Response: Addressed, potentially unstable slope will be mitigated with proposed grading not steeper than 4:1 and the use of retaining walls per the recommendation of the soil report.

Grading and Erosion Control Plan / SWMP / Geotechnical Issues

1. See PCD redlines and EPC Stormwater comments and redlines.
 - a. **See updated redlines.**
 - b. **(comment moved to PDR)**
2. **Resolved.**

JR Response: Redlines addressed

Financial Assurance Estimate (FAE) Form / Other

1. Note: The FAE will be reviewed in detail with the **next** submittal. **Separate the FAE into two separate FAEs - work west of, and work east of Sand Creek.**
JR Response: Addressed
2. Provide the required items listed in the Engineering Final Submittal Checklist, attached.
JR Response: Addressed
3. Note: The MS4 forms and SDI worksheets will be verified with the **next** review. **Revise Pond A as appropriate to meet FSD discharge requirements.**
JR Response: Addressed

Attachments

1. Preliminary Plan redlines
2. TIS redlines
3. Prelim. Drainage Report redlines
4. Deviation redlines

5. GEC Plan redlines
6. Redline summaries – responses required
7. ECM Chapter 6: ftp://EPCDOT_FilesIn:EPC-PSD-DOTin@elpxfr.elpasoco.com:51171/Temp_PCD/ADA_ECM
8. Engineering Final Submittal Checklist

Engineering Final Submittal Checklist for Electronic Submittals	
Check Box	Item: Report/Form
<input type="checkbox"/>	Drainage Report (signed)
<input checked="" type="checkbox"/>	PBMP Applicability Form
<input type="checkbox"/>	Traffic Impact Study (signed)
<input type="checkbox"/>	Grading & Erosion Control Plan and checklist (signed)
<input type="checkbox"/>	Construction Plans (signed)
<input type="checkbox"/>	Deviation Request (signed)
<input type="checkbox"/>	MS4 Post Construction Form and SDI worksheet
<input type="checkbox"/>	Proof of embankment/pond submittal to State Engineer
<input type="checkbox"/>	ESQCP (signed)
<input type="checkbox"/>	* Financial Assurance Estimate, SIA (signed)
<input type="checkbox"/>	* Pond /BMP Maint. Agreement and Easement (signed)
<input type="checkbox"/>	* Operation & Maintenance Manual
<input type="checkbox"/>	AutoCAD base drawing (submitted to DPW)
<input type="checkbox"/>	Pre-Development Site Grading Acknowledgement and Right of Access Form (signed)
<input type="checkbox"/>	Other: Offsite Easements, Other Permits (FEMA CLOMR, LOMR, USACE, Floodplain...), Conditions of Approval, etc.
Pre-Construction Checklist:	
<input type="checkbox"/>	Driveway/Access Permit (Temporary access permits to be obtained from EPC DPW)
<input type="checkbox"/>	Work Within the ROW Permit (DPW or CDOT)
<input type="checkbox"/>	* Stormwater Management Plan (SWMP) and checklist Submit to PCD-Inspections 2 weeks prior to precon.
<input type="checkbox"/>	* Colorado Discharge Permit (COR: _____)
<input type="checkbox"/>	* County Construction Activity Permit
<input type="checkbox"/>	* CDPHE APEN – (if over 25 ac. or 6 mos.)
<input type="checkbox"/>	* Financial Surety (Letter of Credit/Bond/Collateral/Check)
<input type="checkbox"/>	Construction Permit Fee: <i>Early Grading or Standalone Grading</i> \$ 1,637.00 (Verify fees with Inspections Supervisor at time of scheduling)
<input type="checkbox"/>	Other:

* - required items to obtain an ESQCP

** - after recordation

Permit Fee and Collateral must be separate checks

Post Construction Submittal Checklist: (ECM 5.10.6)	
<input type="checkbox"/>	As-Built Drawings
<input type="checkbox"/>	Pond Certification Letter
<input type="checkbox"/>	Acceptance Letter for wet utilities

- = Need final / signed version

- = complete, in file

- = PCD Staff to provide

- = Undetermined at this time

- = Need later