



▷ 5619 DTC Parkway | Suite 1150 | Greenwood Village, CO 80111
Main 720.602.4999 + Fax 844.273.1057

▷ HRGREEN.COM

Grandview Reserve

Resubmittal comment responses - July 13, 2020

Note: County embedded comments are highlighted in **yellow** and/or noted with the applicants responses in **green**.

TIS Comments – Jeff Rice, PCD-Engineering (719-520-7877)

Transportation / Traffic Impact Study

Note: These comments are cursory. A detailed outside review will be provided when available. Any additional comments may be addressed with the Master TIS or the subsequent TIS required for rezoning, depending on level of detail. For reference, a draft TIS checklist is provided, which the outside review will be based on. Some checklist items do not apply to a Master TIS.

1. Provide a signature page with signature blocks per ECM B.8.
Response: The signature page will be included with the updated report.
2. Address the project's approximate traffic impacts at Eastonville/Judge Orr/Meridian Ranch Blvd. and Eastonville/McLaughlin in terms of percentage increase at project buildout (address all ECM B.2.3.A items).
Response: As the approximate traffic impacts exceed 10 percent, analysis of the two intersections has been included in the updated report.
3. Specify year and AM/PM peak hours being referenced as "existing" conditions. It is unclear what is being used.
Response: The date and times of the peak hours has been included in the text of the updated report.
4. Please clearly state in the narrative what the ADT/AADT is on the roads for all analysis scenarios (info provided in figures).
Response: The requested information has been included in the updated report.
5. Heavy Vehicle percentages used do not match CDOT data. Please revise and state the percentage used in the report text.
Response: The CDOT heavy-vehicle data is based on the daily traffic volumes. The percentage of heavy vehicles during the peak hour is likely lower than during the off-peak times and will likely to continue to decrease as the large number of residential uses currently planned in the region are developed. LSC used the Synchro default of 2 percent trucks for all movements.
6. Please specify the Peak Hour Factor used in each scenario and its basis (for example, 0.95 used in 2040 scenario is based on ECM criteria).
Response: The requested information has been included in the updated report.



7. List ECM Criteria for stacking, storage and taper for applicable auxiliary lanes in addition to CDOT State Highway Access Code criteria already stated in the report.
Response: The requested information has been included in the updated report.
8. Please state whether or not any improvements required by the project are anticipated to be reimbursable under the current MTCP.
Response: The requested information has been included in the updated report.
9. Provide a summary table of recommended improvements and responsibilities.
Response: The requested table has been included in the updated report.
10. Address proposed pedestrian accommodations and connectivity, specifically regarding to school(s) and the regional park.
Response: The requested information has been included in the updated report.
11. Address ECM 2.5.8.D, regarding snow drifting on Eastonville Road. Staff's understanding is that snow drifts form across Eastonville Road in this area.
Response: As the proposed development is located in an urban area and the lots are smaller than 2.5 acres this section of the ECM is not applicable.
12. The proposed plan does not match the PEL intersection location of Rex Road/Highway 24. Additional discussion with CDOT is necessary to confirm approval of the exact location of the proposed Rex Road/Highway 24 intersection.
Response: Comment Noted. A request for a change to the access control plan is currently being prepared for submittal to CDOT as per meetings with and direction from EPC and CDOT.
13. See TIS redlines for additional comments.
Response: See LSC's response in the TIS redline document.

Technical Report Comments

Existing Traffic Conditions

1. Please state how ADTs have been determined from peak hour counts in this study?
Response: The requested information has been included in the updated report.
2. Table 1 should show LOS delay range as shown in the Highway Capacity Manual, 6th Ed.
Response: Table 1 has been modified as requested.
3. Under Existing conditions, please provide headers for intersection names before providing intersection performance information such as LOS.
Response: Completed

4. Stapleton/US 24 LOS information provided does not match HCM output report.
Response: The text has been updated to reflect the correct LOS information.
5. Report mentions “afternoon peak”. Please change this to PM Peak as referenced in the remainder of the report.
Response: The use of “afternoon peak” is consistent with all reports submitted to the County by LSC. A definition of the “afternoon peak” has been included in the “Existing Traffic Conditions” section.
6. Minor text modification required for Stapleton/Eastonville to correct PM LOS result. Short-Term (2023) Background Traffic
Response: In scenarios with very high level of delay, HCS and Synchro both report a “-“ instead of a delay and LOS. Modifying the volumes to below these thresholds confirms that the minor movements are expected to operate at LOS F.
7. What is the growth rate applied to background traffic for existing to year 2023? Please specify growth rate used in the study.
Response: The following has been added to the report: The addition of new roadways (notably the completion of Lambert Road between Stapleton Drive and Londonderry Drive and the completion of Rex Road between Meridian Road and Eastonville Road) will greatly impact the existing traffic patterns. In lieu of a general/”blanket” growth rate, LSC has developed small area traffic models for Meridian Ranch, Waterbury, and the Trails as part of previous work completed in the area. The results of these modeling efforts have been combined to estimate the background traffic volumes. The one exception to this is through traffic on US Hwy 24. The background volumes for these movements were calculated using a growth rate based on the CDOT 20-year growth factor for US Hwy 24 adjacent to the site.
8. Please provide context as to why year 2023 is chosen as short-term horizon. Phase 1 is mentioned later in the report.
Response: The requested information has been included in the updated report. The short-term horizon has been updated to 2028 in the updated report. This year has been selection as it is one year from the anticipated completion date of Phase 1.

2040 Background Traffic

1. Please state which source was used to develop a growth factor/growth rate, or if a combination of the PEL and LSC work was applied, how was this done.
Response: In lieu of general/”blanket” growth rate, LSC has developed small area traffic models for Meridian Ranch, Waterbury, and the Trails as part of previous work completed in the area. The results of these modeling efforts have been combined to estimate the background traffic volumes.



The exception to this is through traffic on US Hwy 24 and traffic to and from Curtis Road. The background volumes for these movements were calculated taken from the PEL.

2. Please provide growth rate used in the analysis.

Response: See response above.

Trip Generation

1. Please clarify the basis for 50% internal school trip capture rate. If it based on the school's catchment area, please address whether this could be a magnet school that draws students from across the District.

Response: Based on discussions with Jeff Rice, the trip generation estimate and internal trip reduction has been updated to include the possibility that the school site could be used as a charter school.

2. Phase 1 is mentioned in this section; please relate to short-term horizon.

Response: The requested information has been included in the updated report.

Projected Level of Service

1. US 24/Stapleton operations seem to deteriorate from a 2040 background LOS of C/D (AM/PM) to LOS F/F in the 2040 Total Traffic scenario. Please state what improvements are needed at this intersection to achieve an appropriate LOS.

Response: The requested information has been included in the updated report.

Traffic Signal Warrant Analysis

2. Please clarify that this warrant analysis is incomplete since only two of the four hours were evaluated. If the author wishes to present a four-hour warrant evaluation, we suggest using (and documenting) factors for estimating two other hours of the day for this analysis.

Response: The requested information has been included in the updated report.

Multi-Modal and Pedestrian/Bike Transportation

3. Please add a section on on-site bike/ped design elements per ECM requirements. While it is understood that roadways within the site may not have been designed, anticipated internal multimodal corridors and planned connections to the off-site elements outlined on Page 9 should be documented.

Response: The requested information has been included in the updated report.

Required Improvements

4. Please add "total speed change lane length" for each auxiliary turn lane.

Response: The requested information has been included in the updated report.

5. Provide similar lane change length information for Rex Road and other site access points.

Response: The roads and access points shown on the Sketch Plan are conceptual and may change during the subdivision process. This is a "Master TIS" report. Detailed information for speed change lanes will be provided at the Preliminary Plan/PUD/subdivision level.



Enclosure: Table 2

1. Please add to the table notes that the "Trip Generation Rates" provided are calculated from results of Fitted Equations and are not the ITE published Average Rates for these land uses.

Response: The requested information has been included in the updated report.

Enclosure: Table 3

2. Some of the LOS shown do not match the HCM reports. These discrepancies are circled in red in the comment pdf.

Response: In scenarios with very high level of delay, HCS and Synchro both report a “-“ instead of a delay and LOS. Modifying the volumes to below these thresholds confirms that the minor movements are expected to operate at LOS F.

Enclosure: Figure 9

3. Please show LOS similar to Figure 3 (same comment for Figure 10).

Response: The LOS tables have been replaced with figures showing the LOS graphically as requested.

Enclosure: Figure 11

4. Please use ECM urban/rural terminology for Arterial and Collectors (i.e., ‘Urban’ Minor Arterial & ‘Urban’ Residential/Nonresidential Collector).

Response: The requested information has been included in the updated report.

El Paso County Planning and Community Development Department – Jeff Rice (719-520-7877)

ENG-SKP20001-R1-MDDP-redlines Summary_Markup Summary – MDDP Redlines.pdf

II. Project Characteristics

a. Location in Drainage Basin, offsite flows, size

Grandview Reserve is located within the Geick Ranch Drainage Basin which covers approximately 22 square miles. This drainage basin is tributary to Black Squirrel Creek and joins said creek just to the south of Elicott, CO about 18 miles to the south. Black Squirrel Creek eventually drains to the Arkansas River in Pueblo Colorado. The majority of the Geick Ranch Drainage basin is undeveloped consisting of rural farmland. The Geick Ranch Drainage basin is also recognized as **(lies north of?)** the Haegler Ranch drainage basin.

Response: Revised to describe general location of basin.

e. Existing and proposed land uses

The existing site is open rangeland and farmland with no visible structures. The proposed development will consist of low, medium, and high density residential, along with two institutional sites, multiple pocket park sites, a large community park and a commercial area adjacent to Highway 24. The current land plan assumes approximately 3,261 dwelling units will be constructed on the site.

Provide description or table of proposed lot sizes as applicable in the density categories (high, medium, low....) used below.

Response: Table Added.

Subbasin Description

The entire site drains in a south easterly direction and is divided into 8 major drainage basins and a total of 18 subbasins together as described below.

- Subbasin A1 is located in the southwestern corner of the site, to the south and west of MS. The basin drains towards the southeast to proposed detention pond A. Current planning documents call for **medium density** dwelling units and a small pocket park. The basin is 37.00 acres, with a composite impervious value of 35.22% and runoff rates for the 5 and 100 year of 30.72 cfs and 100.64 cfs respectively. The pond will discharge at predevelopment rates and into MS via the ponds outlet structure.

Response: Assumption made that the medium density highlighted was in reference to previous comment.

- Subbasin B1 is located between MS and MST2 to the east of subbasin A1. The basin drains towards the southeast and towards subbasin B2. Current planning documents call for **medium** density dwelling units and some parkland area. The basin is 37.00 acres, with a composite impervious value of 45.00% and runoff rates for the 5 and 100 year of 29.46 cfs and 97.08 cfs respectively.

Response: Assumption made that the medium density highlighted was in reference to previous comment regarding adding a table.

- Subbasin B2 is located between MS and MST2 to the northeast of subbasin A1. The basin drains towards the southeast and towards Detention Pond B. Current planning documents call for medium density dwelling units. The basin is 24.89 acres, with a composite impervious value of 43.26% and runoff rates for the 5 and 100 year of 12.02 cfs and 42.26 cfs **(seems low)** respectively.

Response: Reviewed calculations and verified 42.26 is the 100 year flow. Node 21 in SWMM model represents basin B2.

- Subbasin F2 is located east of the existing drainage channel EFT. The basin drains towards the southwest and towards basin F4 and to the EFT drainage channel which runs parallel to the north east with Highway 24. Current planning documents call for high density dwelling units and commercial space. The basin is 67.64 acres, with a composite impervious value of 51.39% and runoff rates for the 5 and 100 year of 60.11 cfs and 170.90 cfs respectively. **(seems low)**



Response: Reviewed impervious and routing calculations and verified 51.39% and 170.90 cfs match calculations. Node 61 in SWMM model represents basin F2.

IV. Hydraulic Analysis

a. Major Drainageways

In general the site runoff runs into the 4 major drainageways and in a southeasterly direction. These basins are described in more detail below:

The Main Stem (MS) in the south western portion of the site, the Main Stem Tributary #2 (MST2) to the north and east of the Main Stem, the East Fork Tributary (EFT) in the middle of the site north and east of MST2, and the East Fork Upper (EF)

Include appropriate culvert sizes if known

Response: Specified culvert diameters unknown at this time from the survey information. Sizes have been estimated based off prior studies and are shown in the analysis.

The Main Stem (MS) is in the southwestern portion of the site. Offsite flows collect and are conveyed under Eastonville Road via a culvert. MS travels in a southeasterly direction and combines with the Main Stem Tributary #2 (MST2) just off site and then is conveyed past Highway 24 via a culvert. Jurisdictional wetlands exist within this channel and the area is within a Zone A floodplain towards the southern portion of the site. This channel sees only intermittent flows at this time however once development occurs there may be a more constant baseflow.

MST2 crosses Eastonville road via an existing culvert and flows through the site in a southeasterly direction. An existing breached stock pond exists in the approximate center point of the channel within the site. Portions of this channel are within a mapped floodplain as shown in the existing FIRM Panel. Per a July email from the USACE this drainage channel was determined to be a non-jurisdictional waters/wetland.

The East Fork tributary (EFT) crosses the north property line and are conveyed through the site via a natural channel. The channel has been mapped as a Zone A floodplain per the existing FIRM panel. There is no existing crossing for this section of the drainage channel below Highway 24 and instead the flows are conveyed to the north east towards the East Fork Upper (EF). Per a July email from the USACE this drainage channel was determined to be a non-jurisdictional waters/wetland.

The EF crosses the north property line approximately 1500' east of the EFT crossing. The flow through the site is via a natural channel and travels in a southeasterly direction. The channel is mapped as a Zone A floodplain, and the channel crosses Highway 24 via an existing shallow bridge. The EF and EFT eventually merge approximately 1750 southeast of the site, however as mentioned above Highway 24 blocks the flow of the EFT and flows are conveyed northeast to the EF bridge crossing.

These drainageways will require further analysis and design which will be completed as the project progresses.

Does FEMA modeling show velocities that may require channel stabilization? Mention types of stabilization that may be required

Response: The following note was added, “Per SWMM modeling the current velocities will require channel stabilization. The channels are to be engineered later in the design which will likely include a combination of channel widening, lowering of slope facilitated by the implementation of drop structures to meet non erosive velocity requirements. Bank stabilization, should it be necessary, may include coir rolls, erosion control blankets, live willow staking, soil lifts and/or other measures to ensure successful bank stabilization.”

V. Environmental Evaluations

b. Stormwater quality considerations and proposed practices

As part of the development, full spectrum detention facilities will be installed to provide water quality for the development. The facilities will be designed using El Paso County criteria and provide stormwater quality by slowing the release of stormwater captured by the ponds and allowing solids to settle out. Additionally when possible the revised drainage channels, which were not jurisdictional wetlands, will be used to convey stormwater via a natural channel. **(state that stormwater must be treated before entering the natural channels (waters of the state))** The natural channel will provide an pervious means to transport stormwater and provide some water quality benefits as well.

Response: Statement added.

On site practices for the homes, schools, churches and other buildings should use means such that impervious areas drain across pervious area to allow for infiltration during the minor events. This would include discharge of the gutters onto landscape areas vs. directly connecting to storm sewer and using natural ditches and swales where it is logical and makes sense to convey stormwater inlieu of storm sewer piping.

c. Permitting requirements

When work infringes upon the wetlands or floodplain a 404 Permit will be required. If the work within the waterways is minimal, it will likely be covered under a nationwide 404 permit; it is however possible that an individual permits will be required.

The Colorado Department of Public Health and Environment will require permits for any disturbance that exceed 1 acre of land. Should groundwater be encountered, a dewatering permit will also be required.

El Paso County will require and Erosion and Stormwater Quality Control Permit and any other construction permits required to complete the construction of the site.

(add FEMA LOMR requirements and Floodplain Development permits)

Response: Requirements added.

VI. Selected Plan

b. Detention Ponds – provide a table listing pre-development and proposed detained release rates at each design point discharging offsite

Response: Summary table added.



VIII. Summary – add a “no adverse impact” statement regarding the proposed design to downstream properties

Response: Statement added.

IX. References – EPC Engineering Criteria Manual (Appendix I updated July, 2019) Meridian Ranch MDDP, January 2018

Response: References added.

General – PCD Engineering word doc

1. See Letter of Intent redlines.
Response: See Letter of Intent and associated revisions.
2. Address metro district maintenance of any required wetland mitigation areas.
Response: Wetland mitigation areas will be maintained by the Metro District and/or an HOA (Homeowners association).
3. Although the USFWS seems to agree that the project would be unlikely impact to Ute-ladies'-tresses orchids, it states that three consecutive years of surveys are required to conclude this. Their letter seems to assume wetlands and drainageways will be conserved, when some are proposed to be reconstructed. Verify the survey timeline and that the USFWS has a complete understanding of the project impacts.
Response: See other responses regarding this item.
4. Note: As shown on the sketch plan Staff supports adding the extension of Rex Road to the reimbursable Planned Improvements list in the County Road Fee program.
Response: Noted.
5. Note: Staff has no comments on the Preliminary Soil, Geology, Geologic Hazard and Wastewater Study, except that additional study will be required for road and drainage construction in accordance with ECM Appendix C, at the final plat stage.
Response: Noted.

Sketch Plan

1. Include the legal description on the sketch plan.
Response: Completed
2. Label the Eastonville Road, Rex Road, and Highway 24 MTCP classifications. Eastonville Road and Rex Road are minor arterials and Highway 24 is a principal arterial.
Response: Completed



3. Identify proposed collector roads.
Response: Completed

4. See minor redlines.
Response: Completed

Transportation / Traffic Impact Study

Note: A detailed outside review will be provided when available. Some comments may be deferred to the subsequent TIS required for rezoning, depending on level of detail. For reference, a draft TIS checklist is provided, which the outside review will finalize. (Some checklist items do not apply to a Master TIS.)

MDDP

1. Add a section titled “Four-Step Process”. Address in general the required steps provided in ECM I.7.2.A (note that Step 3 was revised in the July 2019 ECM update) and the methods this development anticipates using to minimize stormwater quality impacts.
Response: The four-step process has been added to the MDDP report.
2. Provide discussion and analysis of existing and proposed downstream facilities.
Response: A discussion of the existing facilities have been provided within the report.
3. Provide discussion of drainage problems anticipated within and downstream of the development and their solutions.
Response: Information has been added to the MDDP, in general the site is releasing at historic rates to downstream areas however notes regarding the increased volume have been added.
4. Address all offsite upstream basins and include their flows through the site.
Response: Offsite basin information has been added to the report along with oncoming flows into the site per prior reports.
5. Provide Meridian Ranch MDDP as a reference and for comparison of flows crossing Eastonville Road into the site (H16, H17, G06, G08, G09 (237 acres), and OS11 (64 acres)).
<https://epcdevplanstorage.blob.core.windows.net/project/d62d01f9-a505-4fa5-8418-103db26c89e9/71a7b3b2-a15d-445e-ab63-bdca8a4546c5.pdf>
Response: Reference has been added to the report and discussion of said report has been added.
6. Generally address interim and ultimate conditions where flows to and along Eastonville Road are potentially diverted (split flow) from intended/original locations until roadway drainage improvements (appropriate culvert sizes) are complete. It appears that upstream split flows will affect which channels receive the flow quantities previously assumed in the FEMA studies.

Response: Discussion of the flows have been added to the report with more detail of offsite development (both flows coming onto the site, and flows leaving the site)

7. Ensure that comparisons with and use of flows from other reports/models is consistent with the calculation methodology (SWMM) and model in this report and explain differences in the calculation methods and results. As noted in the DCM Update, Table 6-1, SWMM is most commonly used with urbanized watersheds; ensure that the model has been properly calibrated for use for offsite rural development.

Response: SWMM is by and large being used as a routing tool to route stormwater flows vs. using for hydrology calculations. Most hydrologic calculations are using CUHP for the basin runoff rates and then routed together. Because the basin sizes are relatively small, small routing differences should have marginal effects on the overall hydrologic calculations.

8. Developed stormwater must be treated for water quality before entering the natural channels (waters of the state). It appears that some of the proposed detention facilities are online (on the channel). Discuss generally in the report how the design will meet State and County MS4 water quality requirements.

Response: The detention facilities will be located off line in all instance and not within the channel. Additional information has been added to the report.

9. Provide summary tables listing all basins, design points, and links.

Response: Tables added to the plans.

10. Provide plans showing the offsite basins and with an adequate level of detail for offsite sub-basins to refine the information provided in the DBPS and floodplain studies.

Response: Offsite Basin map added to study.

11. Show and label approximate locations of conceptual channel improvements and approximate channel cross-section on the developed drainag plan.

Response: Approximate channel cross section added. Please note that these are preliminary in nature and a more detailed hydraulic analysis will be required to finalize.

12. See MDDP redlines for further revisions and clarification of these comments.

Response: Noted, redlines addressed per comment responses.

Peyton School District – Greg Land – Peyton school dist.pdf

Suitability for school construction:

- The reports indicate some soils testing was completed through boring and test pits. None of the test locations were in the proposed school site (i.e.; expansive soil, collapsing soil, drainage and ground water depth).

Response: At this time more detailed soil testing will not be completed. At a later date, when appropriate, additional tests will be completed and results shared with the School District.



- It does not appear any chemical analysis of soil in the proposed site was performed to determine if any chemicals or other contaminants are present and if so, at what levels?

Response: At this time, a chemical analysis was not done. When the school site is ready for development, an environmental review will be completed

- Is the site free of any endangered species or other wildlife restrictions?

Response: Per the environmental report, no endangered species or wildlife restrictions were noted in the report.

- Will the school be provided municipal water and sewer service?

Response: Yes, however details of those services are not known at this time, specifics to be determined at a later date.

- Will the school be provided access to a reclaimed water supply?

Response: Not known at this time.

- What electrical power service will be available to the school site (single phase, three phase, voltages)?

Response: Yes, details not known at this time, specifics to be determined at a later date.

- Will the school site be provided natural gas service?

Response: Yes, details not known at this time, specifics to be determined at a later date.

- Will the streets/ roads be designed to safely support the additional volume of student bus transportation, parent drop off, bicycle access and pedestrian traffic?

Response: Yes, details not known at this time, specifics to be determined at a later date when the exact site is determined and the plan is more finalized.

- Will the streets/ roads also support a separate service access for deliveries, trash service etc.?

Response: Yes, details not known at this time, specifics to be determined at a later date.

- The lot size for the proposed site appears to be small, especially considering the number of students that will be generated in this project.

Response: Comment noted.

- The proposed site appears to be for an elementary school and does not address the middle school and high school students that will be generated within this project.

Response: Discussion to date with the school district was for a elementary school, not a middle school and high school.

- If the park adjacent to the school site is intended for shared use between school activities and community use, the school's access must be protected for the life of the school (i.e. Intergovernmental agreement, Deed, etc.).

Response: Comment noted. Details to be determined at a later date with more finalized plans, this is only at Sketch Plan level.



- What easements will be required within the proposed school site?
Response: Not known at this time, to be determined at a later date.
- Will the school be granted autonomy or be excluded from any HOA rules, requirements and restrictions?
Response: Most likely yes, details not known at this time, specifics to be determined at a later date.

CDOT – Arthur Gonzales – R2 Access Manager (719-546-5732) – CDOT.pdf

CDOT Access Dept. comments are as follows:

1. A State Highway Access Permit will be required for the proposed intersection of SH24 and Rex Rd. between CDOT and El Paso County (the Permittee) and the Development as the Applicant.
Response: A request for a change to the access control plan is currently being prepared for submittal to CDOT as per meeting with and direction from EPC and CDOT.
2. The current 2005 Access Control Plan will be require an make an ammedment for the modification to the location of future Rex Rd.
Response: A request for a change to the access control plan is currently being prepared for submittal to CDOT as per meeting with and direction from EPC and CDOT.
3. The intersection location or the proposed Rex Rd. will be approximately half way between Stapleton Dr. and Elbert Rd. This new connection will be required to follow the State Highway Access Code to develop the necessary auxiliary lanes. The PEL shows a 6 lane roadway with the appopriate accel/decel turn lanes to accommodate traffic flows.
Response: A request for a change to the access control plan is currently being prepared for submittal to CDOT as per meeting with and direction from EPC and CDOT.
4. Special consideration for connection and safety will need to be addressed when making this connection to the private road on the southeasterly side of SH24 to the 6 lot subdivided area.
Response: A request for a change to the access control plan is currently being prepared for submittal to CDOT as per meeting with and direction from EPC and CDOT.

CDOT Traffic Operations Enineer has reviewed the Traffic Impact Study dated April 17, 2020, 2020 by LSC Transportation Consultants, Inc. Their comments are as follows:

1. Traffic volumes in Figure 9 does not equal the combination of traffic volumes shown in Figures 4&7.
Response: All of the traffic volumes and Synchro reports have been revised in the updated report.
2. Traffic volumes in Figure 10 does not equal the combination of traffic volumes shown in Figures 5&8.
Response: All of the traffic volumes and Synchro reports have been revised in the updated report.



3. Neither match the Synchro reports provided, please correct

Response: All of the traffic volumes and Synchro reports have been revised in the updated report.

4. On-premise and off-premise signing shall comply with the current Colorado Outdoor Advertising Act, sections 43-1-401 to 421, C.R.S., and all rules and regulations pertaining to outdoor advertising. Please contact Mr. Todd Ausbun at (719) 696-1403 for any questions regarding advertising devices.

Response: N/A

5. Any utility work within the state highway right of way will require a utility permit from the CDOT. Information for obtaining a utility permit can also be obtained by contacting Mr. Ausbun.

Response: N/A

EDARP – Kari Parsons – Project Manger (719-520-6306) – EDARP Review Comments home page pdf

1. Please provide an update as to the detailed status of the re-alignment of Rex Road in regards to the HWY 24 access management plan in the LOI or as a separate document in EDARP.

Response: A request for a change to the access control plan is currently being prepared for submittal to CDOT as per meeting with and direction from EPC and CDOT. Language has been added to the LOI

2. See comment letter and redlines.

Response: Letter and redlines have been reviewed and addressed.

3. Note: TIS redlines and comments will be provided when available.

Response: Noted

4. Please note it has been determined by the Review Engineer Manager that the traffic study will require a review by an outside independent consultant. Elizabeth Nijkamp will provide a dollar amount that will be billed to the applicant upon the outside independent consultants review. There are comments will be provided when they are available.

Response: Noted

5. Water resource report is missing some Code requirements. Please review comments and update report. See redlines.

Response: Noted, revised report included.

6. Sketch Plan redlines. Planning in green ink; engineering in blue ink.

Response: Completed

7. Letter of Intent Redlines

Response: Completed



8. MDDP Redline Summary
Response: Completed
9. MDDP Redlines
Response: Completed
10. Sketch plan checklist minimal requirements; please verify that all items are on SKP
Response: Completed
11. Natural Features and Wetland Report redlines
Response: Completed
12. El Paso County Community Services / Parks Preliminary Comments - Please See Attached Documents (PAB Presentation on 06/10/2020)
Response: Comments noted
13. The clearance letter from the USFWS dated March 25, 2019, indicated that no PMJH habitat is likely on the site. The letter did contain the incorrect number of lots; however the land area and location were correct. The letter also notes two likely jurisdictional wetlands. Additionally, it requires a survey for the Ute-ladie-tresse orchid be completed (3 years) which may delay construction. Please address a response & plan of action in the LOI upon resubmittal.
Response: Refer to the environmental study. Language has been added to the LOI
14. There are no geologic hazards or unusual geotechnical constraints present that would preclude the proposed uses and density. Planning parcels are configured around existing drainages.
Response: Noted.
15. Entech's Preliminary Soil, Geology, and Geologic Hazard Study, Grandview Reserve (April 15, 2020) provides a valid description of surface and subsurface conditions, soil and bedrock engineering properties (based on the results of widely spaced borings and test pits), and potential development constraints. These include: areas of artificial fill, potentially expansive soils and bedrock, unstable slopes along drainages, erosion, mapped FEMA flood hazard zones, areas of ponded water, and seasonally shallow groundwater.
Response: Thank you
16. Entech observed groundwater in six of their 18 borings and test pits at shallow depths which, depending on grading plans, may preclude full depth basement construction unless mitigation is implemented. The need for a groundwater collection or underdrain system beneath the sanitary sewer system, similar to that used in some areas of Meridian Ranch to the west, should be evaluated.
Response: Noted



17. CGS agrees with Entech's recommendation (page 9) for a 30 ft. non-buildable setback from the crest of steep slopes, specifically along the drainage in the eastern portion of the site.

Response: Noted

18. Woodmen Hills Metropolitan District does not oppose this development as proposed.

Response: Noted

19. No comments from County Attorney's Office at this time.

Response: Noted

El Paso County Community Services Department – Nancy Prieve (719-520-7845) – EPC Environmental Services

1. Two jurisdictional wetlands have been identified on the property. A completed U.S. Army Corps of Engineers (USCOE) permit shall be provided to the Planning and Community Development Department prior to undertaking ground-disturbing activities in these jurisdictional wetland areas. The applicant is hereby on notice that the USCOE has regulatory jurisdiction over wetlands. It is the applicant's responsibility, and not El Paso County's, to ensure compliance with all applicable laws and regulations, including, but not limited to, the Clean Water Act.

Response: The Applicant will apply for and provide a Clean Water Act Section 404 Permit to the Planning and Community Development Department prior to undertaking ground-disturbing activities if the onsite wetland areas are proposed to be impacted.

2. The project will interfere with wildlife habitat including potentially nesting migratory birds. Information regarding wildlife protection measures such as fencing requirements to avoid negative conflicts with pronghorn shall be provided. Information can be obtained from Colorado Parks and Wildlife. Additionally, the applicant is hereby on notice that the U.S. Fish and Wildlife Service has regulatory jurisdiction over migratory birds. It is the applicant's responsibility, and not El Paso County's, to ensure compliance with all applicable laws and regulations, including but not limited to, the Migratory Bird Treaty Act.

Response: The Applicant will prepare a fencing plan to avoid negative conflicts with pronghorn in accordance with CPW guidelines. The Applicant will perform two surveys for migratory birds and their nests approximately 1 – 2 months prior to 1 week prior to construction to ensure compliance with the MBTA. Avoidance of nest take or harm is typically feasible and if not, then a permit will be processed with the USFWS.

3. It is strongly recommended that the applicant obtain the necessary approvals from all federal, state and county agencies as a part of their planning process.

Response: Noted



JDS-Hydro Consultants, Inc. – Water Resource Report Comments

This report does not identify the districts current supply and ability and then the shortcoming that will need to be addressed (acquired) to serve the development overall. Please review the LDC Section 8.4.8 on line, <https://planningdevelopment.elpasoco.com/recent-amendments-land-developemnt-code/>

- Introduction – a letter stating that the 4Way Ranch Metro has ability to serve was provided for water
- Water Supply Information Summary – 2. Land Use Action should read sketch plan

Response: Letter and information provided in the report.

Falcon Fire (719-495-4050)

FINAL PLAT & FEES: The Falcon Fire Department collects a cost recovery fee of **\$429.00** per plan associated with the final plat review. At time of Final Plat application, payment shall be made to the Falcon Fire Department located at 7030 Old Meridian Road, Falcon Colorado. Please be advised that the fire hydrant/water plan or future construction document will not be reviewed by the Falcon Fire Department until these fees are received.

Response: Comment noted.

WATER SUPPLY: This development is proposed with a looped central water system consisting of mains and hydrants to meet fire code compliance. All future water supply hydrant plans shall be submitted to the Fire District for review and approval prior to installation.

Required water supplies for fire protection either temporary or permanent, shall be made available as soon as combustible material arrives on site.

Response: Comment noted.

GATES. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. The minimum gate width shall be 16 feet or as wide as necessary to facilitate the required minimum turning radius.

Response: Comment noted.

2. Gates shall be of the swinging or sliding type.

Response: Comment noted.

3. Construction of gates shall be of materials that allow manual operation by one person.

Response: Comment noted.

4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.

Response: Comment noted.

5. Electric gates shall be equipped with a DEABLO proximity automatic emergency vehicle opening devise and a KNOX (TM) key system installed in an approved manner. Electronically operated gates shall have a failsafe, manually operated, KNOX (TM) key override switch keyed to the Falcon Fire District.

Response: Comment noted.

6. Manual opening gates shall not be locked with a padlock or chain and padlock unless they are capable of being opened by means of forcible entry tools or a KNOX™ padlock.

Response: Comment noted.



7. Locking device specifications shall be submitted for approval by the fire code official.

Response: Comment noted.

FIRE LANES:

WIDTH: Fire apparatus access roads shall have an unobstructed width of not less than 20-feet except for approved security gates.

Response: Comment noted.

FIRE LANE SIGNS:

Roads Less Than 28 Feet in Width. Fire apparatus access roads less than 28 feet in width shall be posted on both sides as a fire lane.”

Response: Comment noted.

Roads more than 28 feet and less than 34 feet in width. Fire apparatus access roads more than 28 feet and less than 34 feet wide shall be posted on one side of the road as a fire lane.”

Fire apparatus access roads 34 feet in width or greater do not require marking as a fire lane.”

Response: Comment noted.

TURNING RADIUS:

A minimum turning radius of 33’ inside or 44’ outside shall be provided.

Response: Comment noted.

VERTICAL CLEARANCE: Fire apparatus access roads shall have an unobstructed vertical clearance of not less than 13-feet 6-inches.

Response: Comment noted.

LOADING: Fire apparatus access roads shall be designed, constructed and maintained to support the imposed loads of fire apparatus weighing at least 75,000-pounds.

Response: Comment noted.

SURFACE: Fire apparatus access roads shall be surfaced so as to provide all-weather driving capabilities by means of asphalt, concrete or other approved driving surfaces. Gravel roads or other alternatives may be acceptable; however, PE stamped engineered specifications for such alternatives, showing that the loading specifications and all weather surface capabilities have been met or exceeded must be submitted to the Falcon Fire Department for review.

Response: Comment noted.

DEAD-END ACCESS: Dead-end fire apparatus access roads in excess of 150-feet shall be provided with a turnaround meeting the requirements of the International Fire Code.

Response: Comment noted.



BRIDGES AND ELEVATED SURFACES: Where a bridge or an elevated surface is part of a fire apparatus access road, the bridge or elevated surface shall be constructed and maintained in accordance with AASHTO-Standard Specification for Highway Bridges.

Response: Comment noted.

GRADES: Grades for fire apparatus access roads shall be no more than 10% maximum grade.

Response: Comment noted.

TIMING OF INSTALLATION: Fire department access roads shall be made serviceable prior to and during the time of construction except when approved alternative methods of protection are provided.

Response: Comment noted.

ACCESS FOR FIREFIGHTING: Approved vehicle access for firefighting shall be provided to all construction/demolition sites. Vehicle access shall be provided to within 100-feet of temporary or permanent fire department connections (FDC). Vehicle access shall be provided by either temporary or permanent roads capable of supporting vehicle loading under all weather conditions. Vehicle access shall be maintained until permanent fire apparatus access roads are available.

Response: Comment noted.

STREET SIGNS: Temporary or permanent street signs shall be installed at each street intersection when construction of roadways allows passage by vehicles.

Response: Comment noted.

El Paso County Public Health – Mike McCarthy (719-575-8602) – Health dept comments

No immediate El Paso County Public Health issues noted with the proposed sketch plan.

Response: Noted.

Proposed GrandView Reserve Metropolitan District No. 1 will provide water service to the development.

Response: Noted.

Woodmen Hills Metropolitan District will provide wastewater service to the development.

Response: Noted.

El Paso County Public Health encourages planned walk-ability of residential and commercial areas. Please consider appropriate connections to commercial areas through the use of sidewalks, and bike trails. Walk-ability features help reduce obesity and associated heart diseases.

Response: Noted.



Earthmoving activities greater than 25 acres require a Construction Activity Permit from the Colorado Department of Public Health and Environment, Air Pollution Control Division. Go to:

<https://www.colorado.gov/pacific/cdphe/general-air-permits>

Response: Noted.

Radon resistant construction building techniques/practices are encouraged in this area. The EPA has determined that Colorado, and specifically the El Paso County area, have higher radon levels than other areas of the country.

Response: Noted.

The water quality detention basins must have mosquito control responsibilities included as a part of the GrandView Metropolitan District No. 1 maintenance plan to help control mosquito breeding habitat and minimize the potential for West Nile Virus.

Response: Noted.

Mountain View Electric Association, Inc. – Cathy Hansen-Lee (719-495-2283 – MVEA pdf

This area is within MVEA certificated service area. MVEA will serve this area according to our extension policy. Connection requirements may include provisions for necessary line extensions and or other system improvements, and payment of all fees under MVEA line extension policy. Information concerning these requirements can be obtained by contacting the Engineering Department of MVEA.

MVEA requests a ten (10) foot front and rear lot line utility easement, a five (5) foot each side lot line utility easement along with a twenty (20) foot exterior easement on the plat. Additional easements may be required in order to serve this development. MVEA also requests platting of existing MVEA facilities with easement on the plat. If open space, drainage and landscape tracts are designed in this subdivision MVEA requests these areas be listed to include utilities in order to serve this development.

MVEA has existing facilities within this parcel of land. If there is any removal or relocation of facilities it will be at the expense of the applicant.

Response: Noted.

Natural Features and Wetland Report – Ecos Ecosystem Services LLC (970-812-3267) – Natural Features-wetlands rpt comments

Response: Ecos has prepared an updated version of this Report addressing comments.

LIST OF ACROYNMS AND ABBREVIATIONS

Add ULTO UTE Ladie – Tresse Orchid

- **Response: Ecos has not inserted the acronym “ULTO” as we do not use said acronym in our Report.**

USFW survey required for a recommended 3 years of ULTO

Response: No mitigation plan for ULTO is required under the law as the USFWS has issued a legal document in response to our 2020 Endangered Species Act (ESA) Clearance Request that clearly states, ““Ute ladies-tresses orchid and Preble’s mouse are not likely to occupy the project site. Project is still consistent with the section 7 conclusions from 2019.” The Agency has indicated that they have “No Concern” with our findings under the ESA. We also made sure to clarify 2 items in our 2020 Revised Report:

- The recommendation for a ULTO survey was removed as it prompted the USFWS to provide Survey Guidelines in their response to our 2019 ESA Clearance Request; and
- We stated in 2 sections that “...the Site is situated between 6,860 and 7,020 feet above mean sea level, which is higher than the 6,500-foot elevation limits documented for the species and recommended for conducting surveys by the USFWS.” This fact was presented in the USFWS 2019 response to Ecos’ 2019 ESA Clearance Request that the County is referencing and inserting in their comments.

3.3 Vegetation

Address action plan for ULTO

Response: No action plan for ULTO is required under the law as the USFWS has issued a legal document in response to our 2020 Endangered Species Act (ESA) Clearance Request that clearly states, “Ute ladies-tresses orchid and Preble’s mouse are not likely to occupy the project site. Project is still consistent with the section 7 conclusions from 2019.” The Agency has indicated that they have “No Concern” with our findings under the ESA. We also made sure to clarify 2 items in our 2020 Revised Report:

- The recommendation for a ULTO survey was removed as it prompted the USFWS to provide Survey Guidelines in their response to our 2019 ESA Clearance Request; and
- We stated in 2 sections that “...the Site is situated between 6,860 and 7,020 feet above mean sea level, which is higher than the 6,500-foot elevation limits documented for the species and recommended for conducting surveys by the USFWS.” This fact was presented in the USFWS 2019 response to Ecos’ 2019 ESA Clearance Request that the County is referencing and inserting in their comments.

3.4.2 Field Assessment Findings

1) Jurisdictional wetland habitat and waters of the U.S. – **label each on figures**

Response: Figure 6 on page 15 is the only Figure referenced in this section. Figure 6 clearly labels each Drainage by alpha designation (A – D) and Jurisdictional and Non-Jurisdictional status.

2) Non-Jurisdictional, Isolated Wetlands – **label each on figures**

Response: Figure 6 on page 15 is the only Figure referenced in this section. Figure 6 clearly labels each Drainage by alpha designation (A – D) and Jurisdictional and Non-Jurisdictional status.



4.0 FEDERAL LISTED SPECIES

Under species, Ute ladies-tresses orchid – address mitigation, protection

Response: No mitigation plan for ULTO is required under the law as the USFWS has issued a legal document in response to our 2020 Endangered Species Act (ESA) Clearance Request that clearly states, ““Ute ladies-tresses orchid and Preble’s mouse are not likely to occupy the project site. Project is still consistent with the section 7 conclusions from 2019.” The Agency has indicated that they have “No Concern” with our findings under the ESA. We also made sure to clarify 2 items in our 2020 Revised Report:

- The recommendation for a ULTO survey was removed as it prompted the USFWS to provide Survey Guidelines in their response to our 2019 ESA Clearance Request; and
- We stated in 2 sections that “...the Site is situated between 6,860 and 7,020 feet above mean sea level, which is higher than the 6,500-foot elevation limits documented for the species and recommended for conducting surveys by the USFWS.” This fact was presented in the USFWS 2019 response to Ecos’ 2019 ESA Clearance Request that the County is referencing and inserting in their comments.

Northern El Paso County Coalition of Community Associations, Inc. – Greg Lynd – NEPCO 4-29-20

1. First of all, we note that this development is outside the focus area boundaries for NEPCO. Our southeast border is generally Meridian Road and Shoup Road. Although located outside our formal physical boundary, this development will definitely affect the water, traffic, and dark sky vistas for NEPCO’s constituents, and so the comments that follow pertain only to those effects.

Response: Comment noted.

2. This is the first time we have reviewed the developmental history for this 768-acre property. In this vein we note that a Preliminary Plan for this same property was submitted in January 2019, consisting of 184 units located on RR-2.5 acre lots and using approximately .42 acre-feet of water per lot per year (see Water Supply Information Summary from the Preliminary Plan). The current Sketch Plan now shows 3,261 units located on 581 residential acres and using .353 acre-feet of water per lot per year.

a. Assuming a request for rezoning to PUD will occur, this new Sketch Plan allows more than 17 times the number of units to be located on this property than the current zoning would countenance. This urban sprawl results in almost 31,000 new vehicle trips to be taken on the highways outside this development at buildout (and also causing a significant number of local LOS delays in the E and F range), and using 1,170 more acre-feet of water per year to be drawn from 8 new wells into the Denver Basin aquifers! In addition, according to the current Water Resources and Wastewater Report, off-site wells will likely be needed (from neighboring lands owned by 4-Site Investments, LLC) for full build-out! We all use the same water and the same roads, so we are hoping that El Paso County will look carefully at the developer’s supporting documentation to ensure that the water supply and road conditions of NEPCO constituents are not unreasonably affected by this development.

Response: Comment noted.

b. As a staunch supporter of northern El Paso County’s dark skies, please ensure that all lighting for this development is dark sky compliant, full cut-off lighting. Improper lighting from 3,261 homes located on rolling plains at almost 7,000 feet above mean sea level can ruin the dark sky for everyone in northern El Paso County.

Response: Comment noted.



El Paso County Park Advisory Board – Ross Williams Park Planner – Park Advisory Board Comments

Recommended Motion (Grandview Reserve Sketch Plan):

The Park Advisory Board recommends that the Planning Commission and the Board of County Commissioners include the following conditions when considering and/or approving the Grandview Reserve Sketch Plan: (1) work with El Paso County Parks staff to develop safe designs for the Rock Island Regional Trail crossing at the proposed Rex Road intersection near East Highway 24, as well as for the Eastonville Regional Trail at the proposed intersection of Eastonville Road and Rex Road; (2) designate and provide to El Paso County a 25-foot trail easement along Eastonville Road, that allows for public access, as well as construction and maintenance by El Paso County of the Eastonville Primary Regional Trail; (3) the trail easement shall be shown on all forthcoming preliminary plans and final plat(s), and the aforementioned easement shall be dedicated to El Paso County on the forthcoming final plat(s); (4) fees in lieu of land dedication for regional and urban park purposes will be calculated upon review of forthcoming preliminary plans and final plats, and will be required at time of the recording of the forthcoming final plats. A park lands agreement may be an acceptable alternative to urban park fees provided the agreement is approved by the County and executed prior to recording the forthcoming final plat(s).

Response: Comment noted.

Letter of Intent Comments

Correct SKP, it shows 15? Is that sufficient adjacent to 35 acre zoning?

Response: Comment noted. Changed to 20' buffer when next to 35 acre zoning. It is likely those areas will be rezoned to more urban densities so 20' is appropriate.

Provide more detail – low density at the northern has a maximum of 2du/acre or ½ acre lot size

Response: At this Sketch Plan level, there is not much more detail to be provided except that where the topography is steeper the idea is to have the larger lots to minimize the grading as much as feasible.

Institutional:

Two sites are planned for institutional uses. One site on the east half of the project is tentatively planned for an elementary school; the location and size of which has been discussed with the Peyton School District. The other site in the northwest corner is tentatively planned for a church. – please provide more detail

Response: Multiple conversations have been completed with the School District to focus on the size and location of this potential school site. More conversations may be needed in the future but at this time the site is being provided on the plan with the intent that Peyton School District would utilize the property or another educational organization.

Parks and Open Space:

An expansive system of parks, open space, and trails is planned throughout the community. Many of the major open space corridors follow the four major existing drainage-ways. The proposed trails within this community will connect to the existing Rock Island Trail along the eastern boundary to the rest of this community. The trails will also provide connection to the El Paso County Falcon Regional Park northwest of this project. Over 17% of the



site is proposed in open space. A large, 5.9-acre community park is the central focal point of the community, adjacent to the proposed institutional parcel that is tentatively planned for an elementary school. The park and school will be linked to the entire community by the trail system and sidewalks. There are also numerous smaller neighborhood parks (accumulative approx. X acreage) throughout the community all linked by the expansive trail system. Commercial uses are sited along Highway 24 at the main entrance to the community. It is unknown at this time the type uses; however, the intent is mixed (low to medium intensity-not industrial) commercial uses that will serve this community (within walking distance) and users traveling along Highway 24.

Response: Comment noted on the approximate acreage of smaller neighborhood parks and provided on the plan.

Utilities

Wastewater service will be provided by Woodmen Hills Metropolitan District, and water will be provided by Grandview Reserve Metropolitan District No. 1. This is addressed in the Water Resources and Wastewater Report prepared by JDS Hydro. Woodmen Hills Metropolitan District (WHMD) is willing to serve this development.

Within the overall development, eight non-potable wells will be installed and an internal collection system will collect from the wells (are they anticipating a lift station-pump station? Why install wells for wastewater treatment?) and deliver to the treatment facility. Water distribution will be typical of master planned communities, providing a backbone looping system, phased to facilitate development as well as fire demands. The sanitary sewer collection system backbone will be installed within each basin to service the future development, ultimately connecting to the lift station that will be tributary to the WHMD treatment facility. Typical collection systems will be installed within each parcel. Storm sewer networks will be located within each parcel providing collection to each drainage facility where water quality and flood attenuation treatment will occur. (Development area) Natural Gas? Water – 4 Way Ranch?

MVEA Inc. will supply electric service.

Response: The water collection of the non-potable water is not to be used or associated with wastewater treatment. The wells will be used for raw water for water supply once treated at a water treatment facility. The water from these wells will be . A lift station will be installed to take wastewater at it's collection point near the south east portion of the site and lifted to the west side of the site to gravity flow to the wastewater treatment facility.

Natural gas will be provided by Black Hills Energy and 4 Way water will supply water.

Phasing of Grandview Reserve

It is intended that the development will be phased generally starting at the intersection of future Rex Road and US24 (Thought you were starting at Eastonville and moving east?). The main backbone infrastructure will be installed to the west as necessary to service anticipated development sequencing. Phased installation will ensure ample water service and fire looping as well as access to facilitate safety. Initial infrastructure will include the lift station and force main to service the development. Extensions to the infrastructure will occur based on demand for the buildout of the development parcels. Roadways will be built and eventually expanded based on the anticipated densities associated with the phased buildout. The main drainage way parallel to Rex Road will be installed with the initial infrastructure. Future drainage-ways will be stabilized as development occurs within the



respective basins. Typical of master planned communities, demand for housing, commercial and institutional development, is dynamic and buildout will commence as market demands dictate.

As development progresses, the capacity of the adjacent roads and the need for road improvements will be assessed by a more detailed traffic impact analyses for each phase of development. Similarly, a more detailed drainage analysis will be submitted with each phase of development, with temporary measures identified as necessary. A specific finding of water sufficiency will also be necessary with each future Preliminary Plan and/or Final Plat.

Response: At this time phasing is anticipated to be done as discussed in the letter of intent report. However depending on needs and development opportunities, phasing may also start at Eastonville and follow similar patterns generally working from downgradient (southeast) to upgradient (northwest)

Grandview Reserve Metropolitan District No. 1

Grandview Reserve Metropolitan District No. 1 will be formed to provide bonding to fund construction of the roads, stormwater infrastructure, parks **(including wetlands?)** and trails and for the ongoing maintenance of those facilities that are not dedicated to the County. Grandview Reserve Metropolitan District No. 1 will enter into an Inter-Governmental Agreement with the water and sewer districts to provide water and sewer service. The Metropolitan District will also be responsible for creating and enforcing the Covenants, Conditions and Restrictions (CC&Rs) that will control the building architecture/design, uses, and activities within the community. It is anticipated that there will be approximately five sub-districts formed within the boundaries of the Grandview Reserve Metropolitan District No. 1 to service the specific amenities and maintenance associated with each district. **(Will there be HOA's)**

Response: There may be HOA's within this development. Wetlands may be part of the overall natural stream design and thus included in the construction costs.

Potential Impacts

The process for approving a new Sketch Plan requires an assessment of the possible environmental, social and jurisdictional impacts. The following narrative addresses those items and any potential impact or lack of impact.

Water Pollution

Grandview Reserve proposes commercial, residential, open space and trail uses, which are not sources of water pollution. **(This statement is to broad-actually development will require water capture and detention, water quality treatment that meets the ECM, DCM, with subsequent developemnts to avoid pollution and to be in compliance with State, Local and Federal guidelines)**

Response: Section has been revised

Noise Pollution

Where residential uses are located adjacent to Highway 24 and Eastonville Road **(Rex Road)**, noise mitigation, such as berms or sound walls may be needed. **(Noise studies will be submitted to analyze the need and type**



of mitigation) Location, size, and type of these items is not known at this time and can be studied in the future at time of Preliminary Plan submittal for each phase or area.

Response: Paragraph revised. A noise study is provided for reference.

Vegetation

Please refer to the Natural Features and Wetland Report by Ecosystems Services, LLC for detailed information. The majority of the site is vegetated by native prairie grass, with wetland plants in the drainages and adjacent riparian areas. There are no **(see my comments on natural features wetland study)** federally threatened or endangered plant species on the property. Weeds observed on-site were nominal and included three List B noxious weed species and one List C noxious weed species. Given that the project will preserve the on-site drainages and adjacent open space buffer area, there is good potential to improve native vegetation by.

Response: Comment noted and report addresses comments as needed.

Wetland Habitat and Waters of the U.S.

Please refer to the Natural Features and Wetland Report by Ecosystems Services, LLC for detailed information. Minimal wetland and waters impacts are proposed to implement the Sketch Plan, however these impacts will be avoided and minimized to the extent feasible. Project phasing will be used to avoid site-wide, over-lot grading and related impacts from runoff, erosion, and pollutant discharge into the drainages. Stormwater control before, during, and after construction will be implemented to avoid impacts such as channel incision and streambank degradation. The drainages and open space riparian buffer areas will be planted with multi-story palette of native upland and riparian species to supplement the regrowth and regeneration of previous woody vegetation, provide shading to regulate pH and water quality, and assist in stabilizing the streambanks. **(see my comments on SKP drawing and in natural features wetland report)**

Response: Noted and information provided or narrative revised as needed.

Soil Hazards and Geologic Information:

The Soils and Geology Report prepared by Entech on January 15, 2019 identifies geologic conditions that occur on the property. The site was found to be suitable for development. **(with appropriate mitigation and avoidance)**

Response: Noted

Jurisdictional Impact - Districts serving Grandview Reserve

- Grandview Reserve Metropolitan District No. 1 (proposed).
- Mountain View Electric Association Inc. (MVEA) will provide electric service to the property. A Will Serve letter is provided with this application.
- Falcon Fire Protection District will provide fire protection. A Will Serve letter is provided with this application.
- Peyton Fire Protection District will provide the emergency services to the property. A Will Serve letter is provided with this application.



- Peyston School District will serve the property and a potential elementary school site is provided on the Sketch Plan.
- El Paso County Conservation District
- Upper Black Squirrel Ground Water District
- Pikes Peak Library District
- **Woodmen Hills Wastewater District – need to add**

Response: Wastewater District Added.

El Paso County Policy Plan

Policy 2.3.1 Preserve significant natural landscapes and features.

Applicant note: The Grandview Reserve site is vegetated by native prairie grass, with wetland plants in the drainages and adjacent riparian areas. There are no federally threatened or endangered plant species on the property. This community will preserve most of the on-site drainages and adjacent open space buffer area, allowing good potential to improve native vegetation by creating a habitat restoration and management plan for the drainages/open space corridors. Increasing native vegetation in the disturbed shortgrass prairie areas by seeding with native species. Implementing a stormwater management plan and preparing a natural channel stabilization plan for all drainages, which will provide long-term natural landscapes for wildlife and residents to enjoy for generations. **(please state the maintenance entity for these areas)**

Response: HOA or MetroDistrict.

Policy 9.2.3 Strictly limit direct access onto major transportation corridors in order to preserve their functional capacity.

Applicant note: The Grandview Reserve Sketch Plan proposes access in conformance **(Rex Road)** with County policies. Access spacing on adjacent streets meets County criteria. Only one access point is proposed on Highway 24 and limited access on Eastonville Road.

Response: Comment noted.

Policy 9.4.5 Encourage processes by which development can contribute a reasonable and fair share toward off-site transportation improvements.

Applicant note: The Grandview Reserve Sketch Plan **(development will participate in)** may pay funds towards the Countywide Transportation Fee Program. Additionally, Rex Road is being extended and constructed through this project making a key connection to Highway 24 encouraging good long-term transportation improvements.

Response: Comment noted.

El Paso County Parks Master Plan

The County Parks Master Plan has several goals that Grandview Reserve compliments very well. The narrative below describes how this project is relevant to the goals and policies. While many of the parks within Grandview Reserve area private, the concept aligns well with the overall intent of the Plan. Additionally, the applicant is



willing to consider the large central Community Park to be a County Park. **(El Paso County Water Master plan, add analysis)**

Response: Comment noted and Water Master Plan part added to LOI narrative.

Project Justification

The review criteria for approving a Sketch Plan are provided in the El Paso County Code and listed below. The proposed Sketch Plan for Grandview Reserve meets these criteria as follows.

Note: Narrative italic and quotes below is directly from the County's Code and Policy documents and narrative in bold is the applicant's note addressing that item.

1. The proposed subdivision is in general conformance with the goals, objectives, and policies of the Master Plan;

Applicant note: Grandview Reserve Sketch Plan is in general compliance with goals, objectives, and policies of the County Policy Plan, the Falcon/Peyton Small Area Plan, the 2040 Major Transportation Corridors Plan, and the County Parks Master Plan. **(Water MP)**

Response: Comment noted and Water Master Plan section added.

2. The proposed subdivision is in conformance with the requirements of the Land Development Code;

Applicant note: Grandview Reserve is in conformance with the requirements of the Land Development Code as described in this Letter of Intent. The project has the ability to obtain water and sanitation for the **(feasibility for SKP area (this provokes questions – only the 1st phase?)** first phase (s) of the development. Identification of environmentally sensitive areas and wildlife habitat areas has been completed. Potential sources of required services such as vehicular and pedestrian access and circulation has been addressed. Grandview Reserve is sensitive to the surrounding land uses. The applicant has evaluated the wildfire hazards.

Response: Noted in JDS report the availability of water and sewer

3. The proposed subdivision is compatible with existing and proposed land uses within and adjacent to the sketch plan area;

Applicant note: Grandview Reserve is compatible with existing and proposed land uses within and adjacent to the project. The Small Area Plan (FPSAP) for this area describes urban density and similar densities have been approved and constructed immediately west of this site. Adjacent developments have a variety of lot sizes, schools, parks, and open space and this property proposes the same concepts. Grandview Reserve Sketch Plan also includes the transitions of densities and appropriate buffers, which are recommended and described in the Small Area Plans.

(here is where you discuss buffers provided to and transitions in density form the adjacent props north, south, east and A-35 and to urban density west)

Response: Comment noted, buffer changed to 20'.



4. The water supply report provides sufficient information to identify probable compliance with the water supply standards and identifies any need for additional water supplies;

Applicant note: Water service will be provided by Grandview Reserve Metropolitan District No. 1 (via 4 Way Ranch etc), and is addressed in the Water Resources and Wastewater Report prepared by JDS Hydro.

Response: Noted and provided.

5. Services are or will be available to meet the needs of the subdivision including, roads, police and fire protection, schools, recreation facilities, and utility service facilities;

Applicant note: Grandview Reserve will be provided services per the included Will Serve letters. Services such as water and wastewater can be provided for (this is about feasibility for overall SKP not finding of sufficiency for the 1st phase- reqord please) the initial phases. Grandview Reserve Metropolitan District No. 1 will be formed providing bonding to fund construction of the roads, parks and trails, stormwater facilities, and for future maintenance of those facilities. Electric service will be provided by MVEA. Fire protection services will be provided by Falcon Fire Protection District. A site for a new elementary school (size? Did district comment they agree on location in EDARP) has been included on the Sketch Plan per Peyton School District conversations.

Response: Noted and information provided as requested.

8. The design of the subdivision protects the natural resources or unique landforms;

Applicant note: The Grandview Reserve Sketch Plan respects the significant drainage-ways through the property as open space and trail corridors. These drainage-ways will be retained or redirected and will be preserved within open space tracts. Per the Natural Features Report by Ecosystems, there are wetland areas on the property, all of which are considered to be isolated and likely to be non-jurisdictional. These wetland areas will either be removed or retained within the proposed open space/drainage tracts identified on the Sketch Plan. The layout of the roads, lots, and open space have respected most of the existing drainage-ways as noted above.

Vegetation

Please refer to the Natural Features and Wetland Report by Ecosystems Services, LLC for detailed information. (2 jurisdiction/2 non – what is being preserved one is being filled in by LOMR proposed (see comments in nat features and SKP) The majority of the site is vegetated by native prairie grass, with wetland plants in the drainages and adjacent riparian areas. There are no federally (surveys required) threatened or endangered plant species on the property. Weeds observed on Site were nominal and included three List B noxious weed species and one List C noxious weed species.

Response: Additional information has been added specifically as it relates to ULTO survey.



10. The subdivision is appropriate and the design is based on mitigating the constraints of topography, soil types, geologic hazards, aggregate resources, environmental resources, floodplain, airplane flight overlays, or other constraints. **(the mineral extraction and aggregate resource on-site have not been identified-check with entech to determine what they are and if they are valuable to mine)**

Response: This will be reviewed upon future detailed geotechnical investigations

As noted above, there are few physical or environmental constraints to the development of the property and those that have been identified will be mitigated during construction. The impact identification analysis demonstrates that the site is suitable for the proposed development.

Trout Raley Law – Lisa M.Thompson Esq (303-339-5826)

J:\2019\191897\Design\Deliverables\incoming\County\2020-6-3 County comments on Sketch Plan

Water and Wastewater Service for Grandview Reserve

According to Applicant's April 2020 Water Resources and Wastewater Report ("Report") included in Applicant's application, Grandview Reserve will require 1059 acre-feet per year, or 314 gallons per day per single family equivalent, to service its water supply needs. Section 30-28-133(d), C.R.S. requires that the Applicant submit "adequate evidence that a Water supply that is sufficient in terms of quantity, quality, and dependability will be available to ensure an adequate supply of water." Applicant has not provided sufficient information regarding source of water supply. First, the proposed source of Applicant's water supply is unclear. Applicant's Letter of Intent states that water service will be provided by the Grandview Reserve Metropolitan District No. 1 whereas Applicant's Report states that supply will be met from future wells in the Arapahoe and Laramie Fox-Hills aquifers underlying the subdivision and neighboring lands. Further, Applicant does not provide information on the efforts to create a metro district nor does Applicant's application include a determination of water rights from the Colorado Ground Water Commission. A determination of water rights is needed to establish the total groundwater available beneath property owned by Applicant, the annual rate of withdrawals permitted for this groundwater, and the respective replacement requirements. Without this information it is not possible to determine if the proposed water supply is sufficient in quantity, quality, and dependability for Applicant's proposed development.

Response: Please review the revised Water Resources and Wastewater Report that states:

"The total annual water demand for 3,000 SFE's is calculated to be 1,059 AF. 4 Site Investments, the property owner, owns 1,400 AF of Arapahoe non-tributary water. The adjoining 4 Way Ranch owns 2,023 AF of Laramie-Fox Hills non-tributary water, and 1,011 AF of Arapahoe non-tributary water. Any additional water, should it be needed, will be derived from the 4 Way Ranch water."

Water rights determinations are also included in the revised report.

Required information regarding quantity, quality, and dependability will be provided in the subsequent Preliminary Plan phase. This current application is for a Sketch Plan.



Applicant's Report states that Grandview Reserve will generate an estimated average of 172 gallons of wastewater per day per single family equivalent (residential unit), totaling 560,892 gallons per day. If 314 gallons per day of supply are required for each single family equivalent, it is unclear how the remaining 142 gallons per day factor into Applicant's wastewater calculations. The Report also states that Woodmen Hills Metropolitan District will provide Grandview Reserve's wastewater services. However, Woodmen Hills' treatment facility discharges wastewater within the UBS Basin, and the treated wastewater discharged is currently noncompliant with the applicable water quality standards set forth in the Water Quality Control Commission's ("WQCC's") Regulation Nos. 41 and 42. Compliance with all applicable site-specific water quality standards is essential to ensure that water quality within the UBS Basin is not unreasonably impaired. Prior to additional effluent being generated at the Woodmen Hills treatment facility, the County should support the UBS District's efforts to ensure that the discharge meets the groundwater standards for the basin.

Response: Water usage does not directly equate to wastewater generation. A large portion of water is used for lawn irrigation which does not become wastewater. This is one of the reasons wastewater contributions are less than water usage.

The current discharge permit (through CDPHE) for the Woodmen Hills Metropolitan District (WHMD) wastewater treatment facility does not list Regulations 41 or 42 as effluent standards. However, a new discharge permit is forthcoming that will likely require standards for Reg's 41 and 42.

WHMD's treatment facility is NOT in noncompliance with any of its current discharge regulations. A new discharge permit with a compliance schedule is forthcoming from CDPHE to which WHMD must adhere.

UBS District's Regulations on Large Capacity Well Use in Subdivisions

The wells Applicant proposes for its water supply must comply with the UBS District's rules and regulations. UBS District's Rule 17.A. limits withdrawals from large capacity wells in subdivisions. Specifically, Rule 17.A. requires that the production of all wells supplying the subdivision shall not exceed the product of the number of single family residences, single condominium units, apartment units, single units within a multiple-dwelling unit or equivalent within the subdivision by 0.5 acre feet per year. And further, Rule 17.A. states that well production must be limited to the rate or amount set forth in the determination of water rights issued for the well by the Colorado Ground Water Commission. Applicant's application includes no information on Applicant's intended compliance with this rule.

Response: Production from the wells shall not exceed the product of all uses by 0.5 acre-feet per year, per UBS District's Rule 17.A.

Underdrains

Due to local high ground water and soil conditions in the area of Grandview Reserve, structures developed in Grandview Reserve may need underdrains to capture and drain water that would otherwise flood those structures. Any underdrains will require a large capacity well permit and those well permits will require a replacement plan in compliance with Designated Basin Rule 5.6. Any such replacement plan should meet the requirements of Designated Basin Rule 5.6 by replacing any groundwater collected in any of the underdrains that is discharged to the surface and for the evaporation and ET associated with the exposure of groundwater caused by the underdrain. Applicant's application includes no information



on whether underdrains will be required and, if so, how Applicant intends to meet the requirements of Designated Basin Rule 5.6.

Response: Discussion has occurred on building sites which may or may not have below grade areas due to high groundwater. Should structures required groundwater mitigation then at that point the appropriate procedures will occur to meet local, state and federal requirements. Any underdrains that may be required for this subdivision will adhere to the Designated Basin Rule 5.6. It is very likely that the development will utilize “exfiltration galleries” to prevent alluvial groundwater from daylighting to the surface, if needed. Said galleries will likely be “regional,” i.e. one gallery for multiple lots or one gallery for a large area.

Site Drainage

Applicant does not provide adequate information on how surface run-on and run-off will be managed for Grandview Reserve. The materials provided indicate four natural drainage channels traverse the property from the Northwest to Southeast and that these drainages will be incorporated into drainage control. However, there is insufficient information regarding annual run-on and run-off volumes and what treatment might be necessary prior to exiting the 768 acre property.

The UBS District reserves the right to provide additional comments at a later date founded upon information not readily as certainable from the above-referenced application.

Response: Please review the Master Development Drainage Report. The report addresses these items noted in this comment.