December 21, 2023

Cushing Terrell

City of North Branch
Community Development
20120 E. Main Street
Parker, CO 80138

Re: Les Schwab Tire Center, Site Plan Review, Engineering Comment Responses

Dear Ashley,

We are providing the responses below in bold along with the Engineering comments provided by the City of Parker, dated October 12, 2023.

Construction Plans - Civil

1. Provide all Town standard notes. Addition of construction notes noted but the remaining standard notes still noted as missing from the construction documents. (https://www.parkeronline.org/DocumentCenter/View/1038/Construction-Notes?bidId=) **Standard notes are shown on the cover sheet C000, storm notes are shown on sheet C404, striping and signage and roadway notes are shown on sheet C001.**
2. Provide intersection details for the two proposed access points and provide site specific details for all the associated ADA ramps. Please reference Town Standard Detail 31 for the necessary information to be included with the intersection details. While these intersections will not exactly match the typical case, the primary information required is the approaching cross slopes and how it is proposed to transition at the rate shown prior to the interface with the adjacent roadway. Additionally, identify the width, cross slope, and longitudinal slope of all ADA ramps and any associated landings in accordance with Town Standard details and ADA requirements. **Slopes have been added to sheet C201 to demonstrate ramps and crossings meet ADA requirements.**

Construction Plans - Civil

1. Please add a note stating – "THE VTC PAD FOR A CWA DOES NOT NEED TO CONFORM TO THE FORMAL VTC DETAIL". **Note added to sheets C010 and C011.**
2. Please add a note stating – "THE TRUE LOCATION OF THE CWA MAY BE DETERMINED BY THE TOWN AND THE ECS". **Note added to sheets C010 and C011.**
3. Please add a note stating – "LOT PROTECTION (LP) IS REQUIRED ON COMMERCIAL LOTS WHEN COMPLETION OF LANDSCAPING IS NOT POSSIBLE and PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY." **Note added to sheets C010 and C011.**
4. Please add a note stating – "THE TRUE LOCATION OF THE PORTABLE TOILET PROTECTION (PTP) MAY BE DETERMINED BY THE TOWN AND THE ECS". **Note added to sheets C010 and C011.**
5. Please add a note stating – "MASONRY WORK PROTECTION IS REQUIRED FOR CONSTRUCTION OF BUILDINGS". **Note added to sheets C010 and C011.**
6. Please add a note stating – "ANY ONSITE BULK FUEL STORAGE REQUIRES A FIRE LIFE SAFETY PERMIT FROM THE TOWN OF PARKER PRIOR TO INSTALLATION". Contact Randy Capra at 303-805-3136 or rcapra@parkeronline.org for FLS Permit questions. **Note added to sheets C010 and C011.**

7. Please consider connecting the Stabilized Staging Area (SSA) to the north Vehicle Tracking Control (VTC) and connecting the Concrete Wash Out (CWA) to the Stabilized Staging Area (SSA) as shown in the Town's standard CBMP detail. This configuration helps limit the amount of necessary traffic across disturbed areas, further limiting tracking from the site. **The north VTC is not on the Les Schwab property and we would like to maintain the current location of the SSA as well as the CWA on the Les Schwab property to avoid potential conflicts.**
8. Please show multiple Portable Toilet Protections (PTP), a site this size must have at least 3 at initial phase. Addition PTPs may be needed in the interim and final phases. **PTP added to sheets C010 and C011.**
9. Please provide existing and proposed grading contours with arrows to indicate the direction of stormwater flow. **Existing and proposed contours with arrows are now shown on sheets C010 & C011.**
10. Please omit all existing and proposed utilities from the CBMP Drawings, except those relating to stormwater on the Erosion Control Plans. **Plans have been updated.**
11. Please provide a complete legend of the hatching and line work used on the Plan Sheets. **Legend updated to include LOD and silt fence linetypes.**
12. Please provide Parker's legend of keys/symbols to correspond to Parker's 31 CBMP Details on Erosion Control plan sheets. **CBMP legend is now shown on sheet C013 and notes and legend are updated on the erosion control plan sheets C010 AND C011.**
13. Include within the plan set immediately following the Final Erosion Control Plan sheet, all 71 pages of the Town of Parker's CBMP Legend, General Notes, and CBMP Details (in alphabetical order). **CBMP sheets added to plans.**
14. Include the Town of Parker review block on the Initial, Interim and Final Erosion Control Plan sheets. Reference the Town's Roadway Design and Construction Criteria Manual (RDCCM), Appendix B. **Signature block added to sheet C010 and C011.**
15. Add a callout/label on all properties adjacent to the project stating: "NO WORK SHALL OCCUR IN THIS AREA". These areas must be shaded for easy identification. **Callout added to sheets C010 and C011.**
16. Provide and identify Debris and Trash Control (DTC) on Sliceroo Drive, throughout the site, and around the site perimeter. **DTC added to plan sheets C010 and C011.**
17. Inlet Protection (IPAP, IPAN, IPCOG, IPCOS) on plans must have the proper legend code/symbol for the type of inlet and the diagram on the plans must match the proper type of inlet protection needed. Provide and identify the appropriate type of inlet protection from the Town of Parker's four standard types for the existing and proposed inlets to the site. **Inlet protection codes added to the plans.**
18. Provide and identify 4 curb line rock socks on Sliceroo Drive down gradient of both VTC entrances to the site. Follow the Inlet Protection Curb on Grade (IPCOG) detail in the Town's CBMP Details. **Rock socks added downstream of both VTC's.**
19. Please show jersey barriers or construction fence along the sides of the VTC to assure use of the entire 50-foot pad. The perimeter silt fence (SF) on the west side of the south VTC must turn and continue into the site along the VTC to prevent stormwater from flowing off-site over the VTC. **Silt fence revised on sheet C010. Construction fencing added to sheet C010.**
20. Show Masonry Work Protection (MWP) on the plans in two locations for Construction of the building. **MWP added to sheets C010 and C011.**
21. Sediment Control Log (SCL) is required at back of curb and back of sidewalk immediately after installation of asphalt in roadways and parking areas. This includes landscape islands and all pedestrian walks. Please provide and identify on the plans where needed. Note: if tree lawn/landscape areas are graded to final

grade, Erosion Control Blanket (ECB) may be used to cover the entire tree lawn/landscape area instead of using SCL at back of sidewalk/curb. **SCL's added to pavement edges, back of curbs, and landscape islands.**

22. Please provide a minimum of one callout of both Seeding Mulching and Crimping (SMC) and Surface Roughening (SR) in all tracts proposed to be left landscaped in the final condition. Alternatively provide one label for each within each viewport and provide a hatch to define the overall extents. **Callouts for SMC and SR added to sheets C010 and C011.**

Construction Plans – Stormwater

1. All storm sewer systems collecting drainage from the proposed drive aisles and parking areas must adhere to the standards and specifications outlined within Section 6.3.3 of the Town's SDECM, including the dedication of drainage easements. Response noted and while the infrastructure is private a public drainage easement is required for the case that the property owner does not properly maintain the system and Town Operation's staff must access it to mitigate issues experienced by adjacent property owners from failures of the onsite infrastructure. **Easement is now shown on sheet C202.**
2. Provide a plan and profile for all proposed storm sewer infrastructure. Addition of profile noted, but please note the profile should be provided on its own sheet with a representative plan view associated to the profile. **Storm sewer plan and profile added to sheet C202.**
3. Provide a minimum of 0.5-percent slope for any proposed storm sewer run. **Storm revised to be 0.50%.**
4. Provide CDOT standard details for all proposed storm sewer infrastructure (inlets, manholes, storm sewer). Response noted but sheet C404 was not provided as part of the submitted pdf. **C404 now included in the plan set.**
5. Provide dimensions and bank slopes for the proposed swale section. Additionally, due to the proximity to adjacent properties a 100-year water surface elevation along with the proposed freeboard must be provided for the swale/sump. This can reflect the anticipated sump ponding depth evaluated as part of the inlet sizing calculations in lieu of a traditional conveyance water surface elevation given the limited flow, but must be provided and identified to ensure no impact to adjacent property owner's. **The proposed swale has been revised to provide 1.25' of depth. The 100-year runoff for this inlet is 3.89 cfs, using a 3" (0.25') ponding depth, the inlet can provide a capacity of 4.0 cfs.**
6. If the interim riprap swale is preferred in lieu of an inlet then the area must have adequate depth to ensure no over topping and the bank must be adequately stabilized to ensure no blow outs. Provide additional analysis on this within the drainage report and update the swale sections as needed to accommodate a minimum of 1-foot of freeboard. Please note there are concerns with the capacity of section E-E specifically. **Grading has been revised to provide additional height on the eastern side of the berm. As noted above, the 100-year runoff to the existing inlet is 3.89 cfs and using a ponding depth of 0.25 feet provides 4.0 cfs. The swale depth has been revised to 1.25 feet to provide the necessary freeboard and ponding depth to convey the 100-year flow. This language is now included in the drainage report.**

Drainage Report

1. Provide discussion on the difference in flow rate proposed offsite between basins Y and C. While it is understood this is a minimal increase, acknowledgement of the increase and determination on whether it will be negligible based on the receiving system should be provided within the narrative by the engineer of record. **Language/narrative has been added to the drainage report. The predeveloped conditions map was prepared using our survey, however, when using the overall design and incorporating subbasin A14 in the approved drainage report the net runoff is a decrease from subbasin A14 and subbasin C, 0.68 cfs – 0.63 cfs = 0.05 cfs. This has been added to the drainage report.**

Thank you for your time and please contact me should you have any questions at 406.922.7128.

Sincerely,

Ian Graham, PE
Civil Engineer
iangraham@cushingterrell.com