CITY OF ALBUQUERQUE

PLANNING DEPARTMENT – Development Review Services

Richard J. Berry, Mayor

February 19, 2015

David Soule, P.E.
Rio Grande Engineering
P.O. Box 93924
Albuquerque, NM 87199

RE: American Toyota (File: C18D012)
Drainage Report and
Grading and Drainage Plan, Engineer's Stamp Date 2-5-15

Dear Mr. Soule:

Based upon the information provided in your submittal received 2-6-15, the above referenced submittal cannot be approved for action by the DRB on the Site Plan nor for Building Permit until the following comments are addressed:

1. Proposed Hydrology:
   a. The discharge at each outfall is based on subtracting the peak discharge of an equivalent area. But if the chambers fill before or during the peak discharge, the peak would not be reduced. Provide a hydrograph showing at what point the on the hydrograph the chambers fill.
   b. The rate at which the chamber fills would be based on the inlet capacity. Provide inlet capacity calculations.
   c. If the inlet capacity is less than the peak, than some flows will bypass and enter next basin.
   d. For the basins that discharge to a pipe, does the pipe have the capacity to handle the flow rate at the point in time that the chambers are filled? Or will there be surface ponding?
   e. Perhaps there could be opportunity to collect some first flush in the parking islands and landscaping?
2. To be sure that runoff from Basin B fills up the StormTech Chamber, grading around the inlets should direct runoff to the inlets.
3. We need to Tim Trujillo from NMDOT to determine what the allowable discharge to the Alameda Storm Drain is since it is NMDOT Storm drain.
4. If NMDOT allows existing discharge, then there seems to be some discrepancy between the excepts from the original drainage report, the calculations of the existing discharge. The calculations are about twice that of the excerpt.
5. NMDOT had some comments about the washout. How will this be handled in the proposed plan?
6. Provide a benchmark and datum on the Grading and Drainage Plan.
7. On the G&D plan, the leader notes indicating the StormTech chambers should also note the System # it corresponds to. Likewise, StormTech should be labeling the Systems on the sheet that shows all 4 systems, cut from the G&D plan.

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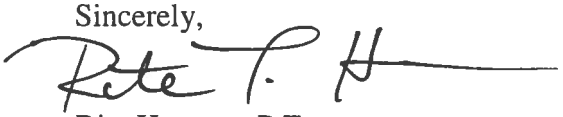
8. The flow arrows on the north side of the roof are in the wrong direction. Show a ridge line to indicate where the divide occurs.
9. Typos: On the Proposed basin plan, Basin C has verbiage calling it basin B. Basin B is has verbiage calling it basin A.
10. Size channel rundown at south end of site.
11. Regarding the StormTech System #1
    a. So that runoff is captured by the new D-inlet, it should be lower than the existing inlets. What is the grate elevation of the existing inlets. Please note the location and type of the existing inlets.
    b. The D-inlet should be upstream of the 3 existing inlets so that when the chambers fill, there is sufficient capacity of the 3 inlets to capture the overflow.
    c. Inlet invert is 2' higher than the manifold invert
12. Regarding the StormTech System #2
    a. The top of the baffle elevation should be at the elevation as where the first flush is captured. StormTech's calculation sheets indicate it is about 5204.2. How is the top of baffle being determined?
    b. What is the invert of the existing 24" storm drain? How will this affect the height of the Baffle?
    c. What are the invert elevations at the manhole?
    d. South D-Inlet should have 2 invert elevations and should match StormTech's inverts. North D-inlet should match the manifold invert
    e. The manhole detail should detail how the baffle is intended to be constructed .
    f. StormTech drawing shows a flow arrow into system at south end that seems incorrect.
13. Regarding the StormTech System #3,
    a. Show invert elevations at the D inlets and Manhole
    b. Show 12" existing storm drain
    c. The top of the baffle elevation should be at the elevation as where the first flush is captured. How is the top of baffle being determined?
14. Regarding the StormTech System #4/5,
    a. the D inlet has an invert elevation = 5223.50, and StormTech shows " 24" isolator row invert = 5219.94." Inverts don't match.
    b. StormTech Plan shows a pipe coming into the west inlet.
    c. Are there connection details from the 24" pipes to the inlets?
    d. StormTech drawing shows a flow arrow into system at west end that seems incorrect

If you have any questions, you can contact me at 924-3695.

Sincerely,



Rita Harmon, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig: Drainage file