Exterior Building Color & Material Samples
Color Drawdowns
Drainage Reports
TIMA
Abbreveated Water & Sewer Need Report
Archaeological Resources
Airport Vicinity Development Checklist
Parking Study
Trip Generation Comparison
Parking Master Plan
Water Study
Wastewater Study
Stormwater Waiver Application

Comments on Grading and Drainage
SCOTTSDALE BIBLE CHURCH
(City of Scottsdale Plan Check Number: 1889-13)

The Case Drainage Report should be prepared by following the City of Scottsdale (COS) Design Standards & Policies Manual (DS&PM) and in accordance with the City Stormwater Ordinance Chapter 37.

Please address any comments appear in the Case Drainage Report. In addition to that, please address the following drainage comments:

1. Although the COS DS&PM states that full size (24"X36") drainage maps under the existing and proposed conditions (containing similar info of Figure 4 and Figure 5) should be included in the Drainage Report, it would be acceptable if the current 8"X11" drainage maps under Figure 4 and Figure 5 are replaced with 11"X17" maps. [*Reference: COS DS&PM: Section 4-1.800, Section 4-1A & Section 4-1B*]

2. Please change the line type for the drainage area (DA) delineation and the retention/detention facilities so that they can easily be distinguished from each other. Please note that any modification to the existing hydrologic divide between DA1 and DA2 should be avoided as much as possible under the proposed condition so that the flow carrying capacity of the existing storm drain system for DA2 does not get overwhelmed. A statement should be made in the Case Drainage Report clarifying how equal area will be swapped between DA1 and DA2 and/or how grading will be done to ensure that the modified hydrologic divide will not impact the existing runoff pattern of DA1 and DA2. [*Reference: COS DS&PM: Section 1-2, Section 4-1.800, Section 4-1A & Section 4-1B; COS Stormwater Ordinance: Section 37-43(b)*]

3. It appears that stormwater storage requirement may have been calculated based on the entire disturbed area for sub-watershed DA1 under the proposed condition (Figure 5). Please note that the current DS&PM policy only requires stormwater storage for pre- vs. post- increase in impervious areas and/or in runoff coefficients. It appears that the two existing retention basins will be filled in and the entire 'Tract A' will be developed and/or disturbed under the proposed condition. Therefore, as long as all existing retention/detention volume (in terms of existing basins and/or parking areas) in DA1 is provided along with additional volume for developing and/or disturbing 'Tract A' under the proposed condition, there is no need to provide stormwater storage for the entire DA1. [*Reference: COS DS&PM: Section 4-1.402; COS Stormwater Ordinance: Section 37-43(l)*]

4. It has been mentioned in the Case Drainage Report that the provided stormwater storage volume includes up to 12" of depth of water in the parking areas. Please note that the City allows only up to 6" of depth of water in the

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parking areas after the first 30% of the volume is stored in surface and/or subsurface basins. Please clarify this in the texts of the drainage report and in all relevant calculations. [*Reference: COS DS&PM: Section 4-1.402; COS Stormwater Ordinance: Section 37-43(l)*]

5. Please note that natural percolation of runoff is not allowed unless a subsurface percolation test is performed by a registered Geotechnical Engineer and/or firm and an appropriate Geotechnical report is submitted to the City prior to the case approval. Please install a dual-chamber drywell in all retention basins (there appears to be a large basin with 2 separate basin bottoms under the proposed condition) so that they can be drained out within 36 hours. The use of dual-chamber drywells in retention areas must me mentioned in the Case Drainage Report. [*Reference: COS DS&PM: Section 4-1.402; COS Stormwater Ordinance: Section 37-43(l)*]

6. Please show the approximate limit of the Drainage Easement (D.E.) around the proposed retention basin on all relevant drainage maps and figures which will be required to be dedicated to the City during the Improvement Plans submittal. [*Reference: COS DS&PM: Section 4-1.700 & Section 4-1B*]

7. Please add a section in the Case Drainage Report stating that a Notice of Intent (NOI) will be submitted to ADEQ and an Authorization to Discharge (ATD) letter will be obtained from them prior to or during the Improvement Plans submittal since the disturbed area is greater than 1.0 acre. [*Reference: COS DS&PM: Section 4-1.300 & Section 4-1A*]

Please briefly respond to each of the above comments (or check them with markers) and include the responses in the re-submittals.

Stormwater Review By:
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Review Cycle #1 Date 5/14/13