CITY OF ALBUQUERQUE

Planning Department
Brennon Williams, Director

Mayor Timothy M. Keller

June 15, 2020

Donald Duneman
Wilson & Company Inc.
4401 Masthead St NE, Suite 150
Albuquerque, NM, 87109

RE: 4600 Edith Blvd NE – SWMD Admin. Office and Vehicle Maintenance
Drainage Report (Engineer's Stamp 5/15/2020)
Hydrology File: G15D202

Based upon the information provided in your submittal received 5/21/2020, the Grading and Drainage Plan can't be approved for Site Plan, Building Permit or Work Order until the following comments are addressed and the plan agrees with the plat and site plan.

PO Box 1293

Albuquerque

NM 87103

www.cabq.gov

Prior to approval of the final G&D Plan for Building Permit and Work Order

1. StormCAD inlet and manhole numbering does not match up structure numbers on plan sheets. No tables or references explain or tabulate the structure numbers used in the plan and profile sheets. Please provide construction specifications and details for all of the hydraulic structures (build notes). The numbering system (nodes) in the calculations should be shown match those used on the Plan and Profile sheets.

2. Sheet C-408: This sheet and the corresponding calculations in the report do not match with the Work Order plan set. This includes pipe lengths, slopes, HGL's, and velocities. Please determine which is to be used and make sure all calculations work with chosen layout.
   - On Detail D5-01 please add roadway identification or call out on overall sheet to identify where this detail sits overall.
   - Add a north arrow to Detail SD-01 so not to confuse the orientation with Detail D5-01.
   - Call out size and type of manhole on detail of SD-01.
   - Inlet structure (104) appears on the plan to be located in the middle of the road, but is called out as a Type "C" which has a curb inlet.

3. Sheets C-410 to C-412: Manhole and Inlet labels have not been added.

4. Please specify the Curb type/height on the G&D Plans. I see you added the calculation but the type and height need to be called out on the plans.

   Also in the north

5. Typical sections should be shown in the north-south direction also. Please indicate what direction the cross section is looking. Each section should show the property line, both the existing and proposed grades, slopes and walls with dimensions, both horizontal and vertical, as necessary to demonstrate compliance with DPM 22.5.B

Prior to Certificate of Occupancy

6. An engineer's Certification will be required for each building with site improvements complete according to the approved phasing plan.

If you have any questions, please contact me at 924-3986 or earmijo@cabq.gov.

Sincerely,

Ernest Armijo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

PO Box 1293

Albuquerque

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City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 11/2018)

Project Title: SWMD Main. & Admin. Buildings Project Building Permit #: _____ Hydrology File #: G15D202

DRB#: 2019-002046 EPC#: 1010582, 1001515 Work Order#: 7006.92

Legal Description: All or a portion of a northerly portion of Tract 107B1A1, Tract 107B1A1 excl portion to right-of-way & excl a northerly portion, Tract 107B1A2 excl portion to right-of-way, Tract in the SW corner-Tract 107B1B, Tract 108A3A1A, Tract 108A3A1B, and Tract 108A3B, Tracts 108A1A2B1B & 108A1A2B2, Tract 108A1A2B1A, Tract 107B2A2 excl portion to the right-of-way, Tract 107B2A1 excl portion to the right-of-way, MRGCD Map #33.

City Address: 4600 Edith Blvd. NE, Albuquerque, NM

Applicant: Wilson & Company, Inc. Contact: Donald Duneman

Address: 4401 Masthead Street NE, Suite 150, Albuquerque, NM 87109

Phone#: 505.948.5125; 505.238.0152 cell Fax#: _____ E-mail: dmduneman@wilsonco.com

Owner: City of Albuquerque, Solid Waste Management Department Contact: Jill Holbert

Address: 4600 Edith Blvd. NE, Albuquerque, NM

Phone#: 505.761.8342 Fax#: _____ E-mail: jholbert@cabq.gov

TYPE OF SUBMITTAL: _____ PLAT (___# OF LOTS) ____ RESIDENCE X DRB SITE ____ ADMIN SITE

IS THIS A RESUBMITTAL?: X Yes _____ No

DEPARTMENT: _____ TRAFFIC/ TRANSPORTATION X HYDROLOGY/ DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

____ ENGINEER/ARCHITECT CERTIFICATION
____ PAD CERTIFICATION
____ CONCEPTUAL G & D PLAN
____ GRADING PLAN
____ DRAINAGE MASTER PLAN
X DRAINAGE REPORT
____ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
____ ELEVATION CERTIFICATE
____ CLOMR/LOMR
____ TRAFFIC CIRCULATION LAYOUT (TCL)
____ TRAFFIC IMPACT STUDY (TIS)
____ OTHER (SPECIFY) _____
____ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

____ BUILDING PERMIT APPROVAL
____ CERTIFICATE OF OCCUPANCY
____ PRELIMINARY PLAT APPROVAL
____ SITE PLAN FOR SUB'D APPROVAL
____ SITE PLAN FOR BLDG. PERMIT APPROVAL
____ FINAL PLAT APPROVAL
____ SIA/ RELEASE OF FINANCIAL GUARANTEE
____ FOUNDATION PERMIT APPROVAL
____ GRADING PERMIT APPROVAL
____ SO-19 APPROVAL
____ PAVING PERMIT APPROVAL
____ GRADING/ PAD CERTIFICATION
____ WORK ORDER APPROVAL
____ CLOMR/LOMR
____ FLOODPLAIN DEVELOPMENT PERMIT
____ OTHER (SPECIFY) _____

DATE SUBMITTED: 05/21/20 By: Donald Duneman

COA STAFF: ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

WILSON &COMPANY
HIGHER RELATIONSHIPS

4401 Masthead Street NE, Suite 150
Albuquerque, NM 87109
505 348 4000 (phone)
505 348 4055 (fax)
wilsonco.com

May 15, 2020

Ernest Armijo, PE
Principal Engineer, Planning Dept.
Development Review Services
City of Albuquerque

Re: G15D202 SWMD Administration & Maintenance Building Project

Dear Mr. Armijo,
Wilson & Company has reviewed the comments provided in an email dated April 02, 2020 on the SWMD Admin. Office & Vehicle Maintenance Project. **Below are the responses to the comments:**

1. Remove the label "Not for Construction" from the G & D plan. Include an overall sheet like the Conceptual G & D plan & provide a detailed design at a larger scale on multiple 24" x 36" sheets including many more spot elevations and details of the ponds. **Label removed, sheets have been included in building permit submittal and have been included in Appendix F.**

2. Please provide a cover page and table of contents for the calculations/report, and an engineer's stamp and signature. Please number the pages and organize each copy of the report in the same order. One of the submitted reports got scrambled and was difficult to reassemble. Please bind or staple the report. **Cover page, signature page, table of contents have been added and pages numbered.**

3. Please add typical section of Rankin Road to the G & D Plan and include dimensions from the face of the curb and sidewalk to the new right of way line. Also provide a typical section of the slope/retaining wall at the west end of the Rankin Rd frontage between the sidewalk and parking lot. The Retailing wall must not encroach into the public right of way. **Sections have been added to the building permit planset. Applicable sheets are also found in Appendix F.**

4. Please provide details for Pond C, including placement details and elevations. Also include details for the water quality inlet and pipe to underground storage including profiles. Water quality inlet and **underground chamber details including profiles and elevations have been added to sheet C-510. See Appendix F.**

5. Please provide construction specifications and details on the G&D Plan for all of the hydraulic structures (build notes). Label the pipes, inlets, and manholes. The numbering system (nodes) in the calculations should be shown legibly on the G&D Plan both the overall plan and the more detailed sheets. The exhibit in the report is not legible. **Storm Drain Plan and Profile Sheets have been added to the Building Permit planset and are included in Appendix F (Sheets C-408 to C-412). We have referred to the SD P&P Sheets on the G&D Plan and included the SD P&P Sheets in Appendix F (Sheets C-408 to C-412). Notes have been added to the SD P&P's and Storm CAD plan & profiles sheets to identify system numbering (nodes) from our calculations.**

6. The AHYMO peak flow rates seem about 20% higher than they should be, probably because the "Time to Peak" (tp) values are set to -0.1 which is less than the minimum value of 0.1333 hr. When using the "Compute LT TP" command the tp should be 0.0. The precipitation values seem appropriate though quarter hour should be 0.0 for type 2 distribution. Digital input files should be provided with the next submittal. **AHYMO revised, Time to peak corrected, and quarter hour set to 0.0. See Appendix A.**

7. The numbering of Pond A and B on the G&D Plan does not agree with the labels in the AHYMO files, please fix the labels in AHYMO. Pond B, on the G&D Plan, appears to have an extended detention volume of 3' depth which can be counted as the BMP/ SWQV if the pond will drain in 48 hr or more at the average release rate calculated for the average pond depth (1.5'?). Please provide separate SWQV calculations for the area draining to each BMP. **Pond labels fixed. Pond B outlet is a 42" pipe and discharge rate using the orifice equation is minimal for the first few stages. SWQV calculations for each pond was added. See Appendix E.**

8. How were the AHYMO pond routing input tables developed? **Using CulvertMaster to determine discharge rates, volumes calculated based on the proposed contours in CADD. A description of our methodology has been added to the report. See CulvertMaster Calculation in Appendix C and Pond Calculations Table in Appendix E.**
    a. Details of the pond outfall structures are required on the G&D Plans for construction. **Structure detail added, see sheet C-502 in Appendix F.**
    b. A narrative description of the pond outfall hydraulic calculations is also needed with the calculations. **Note added, see Pond Calculations Table in Appendix E.**
    c. Provide pond volume calculations using the conic method showing the area of the contours used in the volume calculations. **See Ponds Discharge Rating Tables in Appendix E.**

9. The hydraulic HGL calculations for the on-site storm drains could not be checked because the pipe and inlet numbers are not shown on a map anywhere. Please add the pipe, inlet and MH labels to the overall G&D Plan and add the EGL to the output data table. **EGL data add to output table, see Appendix D. SD P&P's can be found in Appendix F and labels added to each profile in StormCAD.**

10. Please specify the Curb type/height on the G&D Plan and be sure that the 100 year flow depths do not overtop the curb particularly on the curbs carrying a lot of flow running north and south along the west edge. Especially consider specifying 8" STD C&G in the vicinity of curb opening inlets. **Calculations were added in Appendix B and curbs height changed to 8" in Basin 204 near inlets and Pond B.**

11. Typical sections should be shown at numerous locations around the perimeter of the site. Each section should show the property line, both the existing and proposed grades, slopes and walls with dimensions, both horizontal and vertical, as necessary to demonstrate compliance with DPM 22.5.B **Site Cross Sections have been submitted with the Building Permit submittal. See attached Sheet C-302 to C-304 in Appendix F.**

12. A Phasing Plan should identify which portions of the site work are to be completed with each building. **Phasing Plan shown in Building Permit submittal. See attached Sheet C-101.**

Please feel free to contact me, should you have any further questions or comments on these responses. Thank you for your time.

Sincerely,

Donald Duneman, PE
Project Manager
donald.duneman@wilsonco.com
505-238-0152

Attachments:

Drainage Report – PDF Copy
AHYMO Input files