HYDROLOGY REQUIRED FIRST FLUSH VOLUME PROJECT SITE PROPOSED CONDITIONS LOT DRAINAGE AS DEPICTED ON THIS PLAN SHALL BE MAINTAINED. THE PROPOSED SITE IMPROVEMENTS WILL INCLUDE THE CONSTRUCTION OF A SINGLE FAMILY RESIDENCE WITH LANDSCAPING AND ONSITE IMPROVEMENTS. A DETENTION POND WILL LOT DEPICTED HEREON SHALL BE RESPONSIBLE FOR MAINTAINING FIRST PROVIDE FOR THE ATTENUATION OF THE PEAK FLOW RATE TO AT OR BELOW THE FLUSH RUNOFF RETENTION ON THE LOT IMMEDIATELY PRIOR TO DISCHARGE. EXISTING PEAK FLOW RATE IN THE 100 YEAR EVENT. PEAK DISCHARGE FROM THE SITE WILL NOT EXCEED HISTORIC RATE OF DISCHARGE. SITE WILL CONTINUE THE VOLUME SHALL BE EQUAL TO: ROOF AREA * (0.44-0.10)/12 IN TO DISCHARGE SIMILAR TO THE EXISTING CONDITIONS. DRAINAGE WILL BE MITIGATED BY THE PROPOSED DETENTION PONDS. THE DISCHARGE FROM POND WILL BE RESTRICTED TO THE EXISTING ON SITE CONDITIONS OF 0.40 cfs. THE ROOF AREA = 2751 SQ.FT. ROOF, DRIVEWAY, AND AN ADDITIONAL 400 SQ.FT. FOR FUTURE IMPROVEMENTS ARE INCLUDED IN THE IMPERMOUS AREA PERCENTAGE FOR THE LOT. REQUIRED VOLUME = 2751 * (0.44-0.10)/12 = 78 CU.FT.VOLUME PROVIDED = 138 CU.FT.THE SITE IS COVERED BY THE SAD 228 DRAINAGE MANAGEMENT PLAN FOR UNIT 19. HOWEVER, THE LACK OF DOWNSTREAM DRAINAGE EASEMENTS HAVE DICTATED THE RESTRICTION OF FLOWS TO DETENTION POND VOLUME HISTORIC LEVELS. \square MAX STORAGE (100-YR) = 0.012 AC-FT HYDROLOGIC DATA - EXISTING ☐ MAX DISCHARGE (100-YR) = 0.40 CFS (0.40 CFS ALLOWABLE) LAND TREATMENT | YIELD | Q100 | V100-24 | (cfs/ac) | (cfs) | (acft) MAXIMUM WATER SURFACE ELEVATION (100-YR)= 5342.18 PERCENTAGES BY TYPE HYDROLOGIC DATA - PROPOSED LAND TREATMENT YIELD (cfs/ac) Q100 V100-24 (cfs) (acft) BASINS PERCENTAGES BY TYPE FIRM MAP NO. 35001C0112G VICINITY MAP F-17-Z PATO ROAD (50' R/W) (acres) GENERAL NOTES: 1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS 1. ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER THIS CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREIN, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE CURB STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION, UPDATE NO 8. (M66°55'00"E) 2. THE EROSION PROTECTION SPECIFIED ON THIS PLAN IS THE MINIMUM RECOMMENDED. THE OWNER IS (100.00') N67°15'16"E ENCOURAGED TO INCORPORATE EROSION RESISTANT LANDSCAPING ON AREAS WHERE EROSION MAY OCCUR 100.00 SUCH AS SLOPES AND SWALES. THE OWNER IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF SIDEWALK ALL EROSION CONTROL FEATURES NECESSARY TO PRESERVE THE DESIGN INTENT OF THE GRADING PLAN. ELEVATION=5343.39 3. THE DRAINAGE INFRASTRUCTURE SHOWN ON THIS PLAN IS THE RESPONSIBLITY OF THE PROPERTY OWNER. | ELEVATION=5345.88 4. ALL DISTURBED AREAS OUTSIDE THE BUILDING PAD MUST BE RESEEDED OR LANDSCAPED 5. TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES. 6. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS AND EXISTING PAVEMENT. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR SURVEYOR SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF THE ENGINEER HAS UNDERTAKEN LIMITED FIELD VERIFICATION OF THE LOCATION, DEPTH, SIZE, OR TYPE OF EXISTING UNDERGROUND UTILITY LINES, MAKES NO REPRESENTATION PERTAINING THERETO AND ASSUMES NO RESPONSIBILITY OR LIABILITY THEREFORE. THE CONTRACTOR SHALL INFORM ITSELF OF THE LOCATION OF ANY UTILITY LINE IN OR NEAR THE AREA OF THE WORK IN ADVANCE OF AND DURING EXCAVATION WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE **N22°** (N23° TO LOCATE. IDENTIFY. AND PRESERVE ANY AND ALL EXISTING UTILITIES. THE TC 43.10 CONTRACTOR SHALL COMPLY WITH STATE STATUTES, MUNICIPAL AND LOCAL ORDINANCES, RULES AND REGULATIONS PERTAINING TO THE LOCATION OF THESE LINES AND FACILITIES IN PLANNING AND CONDUCTING EXCAVATION, WHETHER BY CALLING OR NOTIFYING THE FF=5346.00 UTILITIES. COMPLYING WITH "BLUE STAKES" PROCEDURES. OR OTHERWISE. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR CONSTRUCTION SAFETY WHICH SHALL REMAIN THE RESPONSIBILITY OF THE CONTRACTOR. THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, ARE INTENDED FOR USE ON THIS PROJECT AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF GND ENGINEERING. LLC IN 11 LF 6" PVC SL=1.0% THE EVENT OF UNAUTHORIZED USE. THE USER ASSUMES ALL RESPONSIBILITY AND LOT B, BLOCK 7 // INV. IN = 42.80 LIABILITY WHICH RESULTS. - Provide 8" x 16" .07 WALL OPENING DATE: 9/29/14 DATE: 9/29/14 (0.3327 ACRES) **EROSION CONTROL NOTES** 1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK. FG 39. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY. FG 39. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITES IS THE RESPONSIBILITY OF THE CONTRACTOR. **145.00** (145.00') FF=5344.00 5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL (CITY) ACCEPTANCE OF ANY PROJECT. (145.00l) **145.00** LOT 8, BLOCK 7 - DETENTION POND VOL = 539 cu.ft.**VOLCANO CLIFFS UNIT 18** CITY OF ALBUQUERQUE BERNALILLO COUNTY, NEW MEXICO EARTHWORK (CY) COMPACTED FILL 10224 Green River Place NW Albuquerque, NM 87114 Phone: (505)-264-0472 Fax: (505)-899-6184 NET FILL: 1,086 CU.YD CONSULTING ENGINEERS CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT **LEGEND** ENGINEERING DIVISION ----- -5*338* ----- ---- 23 LF 6" PVC SL=25.0% NV. IN = 41.506504 PATO RD Nw FLOW ARROW LOT 8, BLOCK 7, VOLCANO CLIFFS UNIT 18 - FIRST FLUSH POND EL=11.28 PROPOSED ELEVATION \sim VOL = 138 cu.ft. **GRADING & DRAINAGE PLAN** EXISTING ELEVATION MONTH/DAY/YEAR USER DEPARTMENT √INV 36.00-7 GRADE BREAK - 4966----- PROPOSED CONTOUR S67°12'10"W 99.86 —4966 — EXISTING CONTOUR (S66°55'00"W) LOT 12 PROPERTY LINE (100.00" PROPOSED GRADE CITY PROJECT No. ZONE MAP No. SHEET LOT 11 D - 101 of 1 FEET

CITY OF ALBUQUERQUE

October 13, 2014



Sheldon Greer, P.E. GND, LLC. 11032 Dreamday Way DR Albuquerque, New Mexico 87114

RE: 6504 Pato Rd. NW Grading and Drainage Plan Engineers Stamp Date 9/30/14 (D10-D003L8)

Dear Mr. Greer,

Based upon the information provided in your submittal received 9/30/14, this plan is approved for Grading Permit and Building Permit.

Please attach a copy of this approved plan to the construction sets in the permitting process prior to sign-off by Hydrology.

Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required and full retention of runoff until Pond 5 and the infrastructure have been certified.

PO Box 1293

Albuquerque

If you have any questions, please contact me at 924-3695 or Rudy Rael at 924-3977.

New Mexico 87103

www.cabq.gov

Sincerely,

Curtis Cherne, P.E.

Principal Engineer, Hydrology

Gut & cha

Planning Department

RR/CC C: File