



LEGAL DESCRIPTION

BEING ALL OF TRACT 8-01, BLOCK 8, INDIAN ACRES SUBDIVISION, AS THE SAME IS SHOWN AND DESIGNATED ON THE PLAT OF RECORD, FILED IN THE OFFICE OF THE COUNTY CLERK OF BERNALILLO COUNTY, NEW MEXICO ON JUNE 2ND, 1999 IN MAP BOOK 99C, PAGE 131. FOR A TOTAL AREA OF 3.0769 AC.

ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED UNDER CONTRACT SHALL, EXCEPT AS OTHERWISE STATED OR PROVIDED FOR HEREON, BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986 EDITION AS REVISED THROUGH UPDATE #8.

Drainage Management Plan - The streets adjacent to this site have adequate capacity to convey pre-development and post-development peak 100 year storm water runoff from this 3.54 acre site. This project will reduce the 100 year peak rate of storm water runoff from this site. The discharge from the northwest corner of the site will be reduced from 8.71 cfs pre-development to 8.55 cfs post-development by reducing the impervious cover in the north half of the site by 0.16 acres and replacing it with landscaping.

Grading Information - Generally the existing site is flat with slopes from east to west ranging from 0.5% to 2%. Proposed grades are about the same as existing grades with a maximum fill of 2.1' at the northwest entrance into the proposed building. All of the new construction this project will drain into a storm water quality retention pond. Existing ponding in the southwest corner of the site will remain unchanged by this project.

Drainage Research - This drainage plan accounts for drainage from Lot 8-A, Block 8 of the Indian Acres Subdivision, 0.44 acres, which is the only off-site area draining into this site. A drainage plan by Jeff Mortenson & Associates with Drainage Certification date 4/26/2000 incorrectly assumed that most of the drainage from Lots 8-A and 8-B drains either into Carlisle Blvd. or into the pond on lot 8-C. The survey by Aldrich Land surveying for the current 2011 project shows that all the area drains to Cherokee Road instead. So the flows into Carlisle Blvd. and the pond on Lot 8-C are significantly less than the 2000 plan called for. This drainage plan assumes that the pump identified in the 2000 plan (100 gpm) is in place and will continue to function. This drainage plan has verified that the existing pond volume, which is considerably smaller than that shown on the 2000 plan, is adequate to serve the area draining to it, which is also considerably smaller than that shown on the 2000 plan. The existing pond is the south west corner of this site and the area draining to it will remain unchanged by this project.

NPDES Permit Not Required - The Total area of Land Disturbance this project is 0.8 acres so a NPDES Permit is not required for Discharges from these construction activities.

DRainage CERTIFICATION

I, JAMES D. HUGHES, NIMPE 11674 OF THE FIRM MARK GOODWIN AND ASSOC., HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 6-18-2012 EXCEPT AS NOTED ON THE RECORD INFORMATION ATTACHED TO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME ON 5-22-2013 AS SUPPLEMENTAL DATA TO THE ORIGINAL TOPOGRAPHIC SURVEY PREPARED BY TIM ALDRICH, NIMPS 7719 OF THE FIRM ALDRICH LAND SURVEYING, AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR CERTIFICATE OF OCCUPANCY.

THE AS-BUILT GRADES, CIRCLED ON THIS SHEET, OF THE SIDEWALK AND SWALE ON THE EAST SIDE OF THE NEW BUILDING, DEVIATED FROM THE APPROVED PLAN. THE HIGHER THAN PLANNED ELEVATION OF THE SIDEWALK WOULD OTHERWISE PREVENT DRAINAGE FROM FLOWING SOUTH TO NORTH ACROSS IT. IF IT WERE NOT FOR THE 4" PVC CULVERT THAT HAS BEEN RETROFITTED UNDERNEATH IT, THE RETROFITTED SWALE IS 12" TO 15" BELOW THE SIDEWALK HAS A 6" WIDE FLAT BOTTOM AND 1:1 SIDE SLOPES INSTEAD OF THE ORIGINALLY APPROVED 4:1 SIDE SLOPES. BOTH THE CULVERT AND THE DITCH HAVE LESS CAPACITY THAN THE ORIGINALLY PLANNED SWALE, BUT WILL PROVIDE ADEQUATE DRAINAGE IF PROPERLY MAINTAINED. THE STEEP SIDE SLOPES OF THE SWALE AND THE LIMITED CROSS SECTIONAL AREA OF THE 4" PVC CULVERT WILL MAKE THEM BOTH MORE SUSCEPTIBLE TO CLOGGING AND WILL REQUIRE MORE MAINTENANCE THAN THE APPROVED DESIGN.

AT THE TIME OF INSPECTION ON 5-22-2013, THE SWALE AND MOST OF THE LANDSCAPE AREAS WERE BARE DIRT AND STILL NEEDED TO BE STABILIZED.

THE RECORD INFORMATION PRESENTED HEREON IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

James D. Hughes 5-23-2013
JAMES D. HUGHES, NIMPE 11674 DATE

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SCALE: 1" = 20'

Summary of Hydrology Table										
Figure A-1 shows Zone 2										
Table A-9 Q ₁₀₀		1.56	2.28	3.14	4.70					
BASIN ID #	AREA (AC)	Land treatment (%)				Q ₁₀₀ (CFS)	Cum. Q ₁₀₀ (CFS)	Street Width F-F	Slope %	Street name
		A	B	C	D					
101	3.30	15%	15%	70%	70%	13.54	13.54	40'	2.4%	Cherokee Rd.
102	4.50	15%	15%	70%	70%	18.46	32.00	40'	6.7%	Cherokee Rd.
103	1.70	15%	15%	70%	70%	6.98	38.98	32'	0.5%	Wellesly Dr.
104	6.30	15%	15%	70%	70%	25.85	64.83	32'	0.5%	Wellesly Dr.
105	5.10	10%	10%	80%	80%	21.94	86.77			
106	6.00	10%	10%	80%	80%	25.81	112.58			
107	3.30	15%	15%	70%	70%	13.54	126.12			
Onsite Pre - Development										
A	1.77	18%				7.55	7.55			
B1	0.37	51%				1.28	8.71			
B2	0.53	60%				1.72	1.72			
B3	0.27	88%				0.69	2.44			
D	0.16	15%				0.69	0.69			
Total Pre-development, on-site, 100-YR flow						9.40				
Onsite Post - Development										
A	1.77	12%	15%			7.39	7.39			
B1	0.37	51%				1.28	8.55			
B2	0.53	60%				1.72	1.72			
B3	0.27	88%				0.69	2.54			
D	0.16	15%				0.69	0.69			
Total Post-development, on-site, 100-YR flow						9.25				
Notes: 1) the 4" pipe capacity is based on Manning's Equation where n=0.013 and Slope=0.4%										

LEGEND

EXISTING CONCRETE CURB
EXISTING CONCRETE/SIDEWALK
EXISTING WALL OR HEAD WALL
EXISTING TOP CURB
EXISTING FLOWLINE

EXISTING SPOT ELEV
EXISTING AIR CONDITIONING
EXISTING BIKE RACK
EXISTING BOLLARD
EXISTING CLEANOUT
EXISTING DROP INLET
EXISTING ELECTRIC SERVICE/TRANSFORMER
EXISTING GUY WIRE
EXISTING OVERHEAD ELECTRIC
EXISTING POWER POLE
EXISTING SIGN
EXISTING LIGHT POLE
EXISTING PULLBOX
EXISTING TREE/DIAMETER
EXISTING TELEPHONE PEDESTAL
EXISTING CONTOUR (MAJOR)
EXISTING CONTOUR (MINOR)
EXISTING CHAINLINK FENCE
EXISTING FLOOD ZONE LINE

EXISTING GAS VALVE
EXISTING WATER VALVE
EXISTING FIRE HYDRANT
EXISTING WATER METER
EXISTING WOOD FENCE
EXISTING SPRINKLER CONTROL
EXISTING HANDICAPPED
EXISTING BUS BENCH
EXISTING TRASH CAN
NEW RETAINING WALL
NEW CURB & GUTTER
NEW HEADER CURB & GUTTER
NEW FLOW DIRECTION ARROW
NEW SPOT ELEVATION
NEW TOP OF WALL ELEVATION
NEW BOTTOM OF WALL ELEVATION
NEW INVERT ELEVATION
NEW FINISHED PAD ELEVATION
NEW CONTOUR MINOR
NEW CONTOUR MAJOR
NEW LIMITS OF DISTURBANCE
NEW DRAINAGE BASIN BOUNDARY
NEW DRAINAGE BASIN ID
NEW 3" RESIDENTIAL PAVING PER COA

Basin D

revision
by
date
rev
Mullen Heller
Architecture P.C.
924 Park Avenue SW
Suite B
Albuquerque 87102
505 268 4144 [p]
505 268 4244 [f]

11-09
NSM
Doug Heller, AIA
project manager
11/23/2011

Project title
First Unitarian Church of Albuquerque
3701 Carlisle Blvd. NE
Albuquerque, New Mexico 87110
sheet
Grading & Drainage Plan
C101