CITY OF ALBUQUERQUE Suzanne Lubar, Director



February 26, 2016

Levi J. Valdez, PE George T Rodriguez-Development Consultant 12800 San Juan Rd. SE Albuquerque, NM 87123

Re: 809 Locust Ave. SE

Grading & Drainage Plan

Engineer's Stamp dated: 1-20-16 (K15D096)

Dear Mr. Valdez,

Based on the information provided in your submittal received 2/9/2016, this plan is approved for building Permit.

PO Box 1293 Please attach a copy of this approved plan, dated 10-26-15, to the construction sets in the

permitting process prior to sign-off by Hydrology.

Albuquerque Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist

will be required.

Sincerely,

New Mexico 87103

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

www.cabq.gov

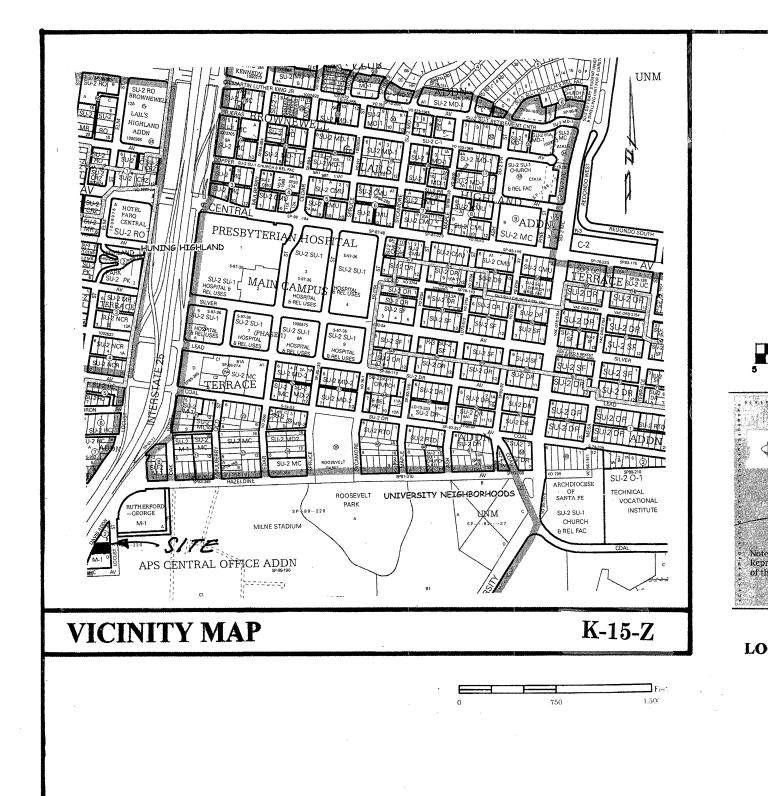
Shahab Biazar, P.E.

City Engineer, COA

Planning Department

RR/SB

C: email



THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR MANAGEMENT OF STORM RUNOFF DURING CONSTRUCTION; HE SHALL ENSURE THAT THE FOLLOWING MEASURES ARE

1) ADJACENT PROPERTY SHALL BE PROTECTED AT ALL TIMES BY CONSTRUCTION OF BERMS, DIKES, SWALES, PONDS, AND OTHER TEMPORARY GRADING AS

2) ADJACENT PUBLIC RIGHT-OF-WAYS SHALL BE PROTECTED AT ALL TIMES FROM

3) THE CONTRACTOR SHALL IMMEDIATELY AND THOROUGHLY REMOVE ANY AND ALL SEDIMENT FROM PUBLIC STREETS THAT HAS BEEN ERODED FROM THE

STORM WATER RUNOFF FROM THE SUBJECT SITE. NO SEDIMENT BEARING WATER SHALL BE PERMITTED TO ENTER PUBLIC STREET RIGHT-OF-WAYS.

1) TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION. CONTRACTOR MUST CONTACT LINE LOCATING SERVICE AT 260-1990 FOR THE ACTUAL FIELD LOCATION OF THE EXISTING SURFACE OF SUB-SURFACE UTILITIES.

2) PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY

OBSTRUCTIONS, SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY

THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM OF

3) ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, RULES AND REGULATIONS

1) NO PERIMETER BOUNDARY CORNERS HAVE BEEN FIELD ESTABLISHED PER

2) NO SEARCH HAS BEEN MADE FOR EASEMENTS OF RECORD OTHER THAN

4) ALL CONSTRUCTION WITHIN PUBLIC STREET RIGHT-OF-WAY(S) SHALL BE

ALBUQUERQUE/BERNALILLO COUNTY STANDARDS AND PROCEDURES.

THE HORIZONTAL AND VERTICAL LOCATION(S) OF ALL POTENTIAL

CONCERNING CONSTRUCTION SAFETY AND HEALTH.

THIS SURVEY OF THE SUBJECT PROPERTY.

. G"PVC DRAIN

LINE@ 2.4% SLOPE

PERFORMED IN ACCORDANCE WITH APPLICABLE CITY OF

REQUIRED TO PREVENT STORM RUNOFF FROM LEAVING THE SUBJECT SITE AND

EROSION CONTROL MEASURES:

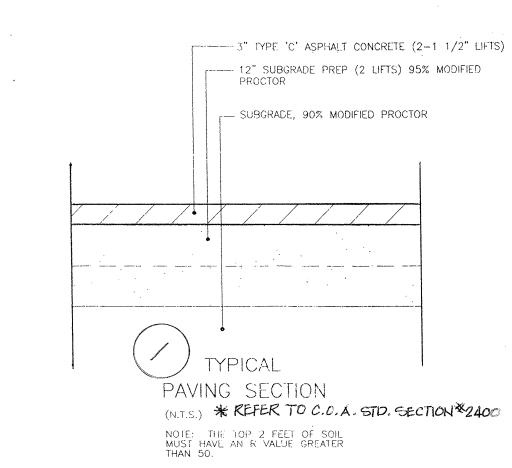
CONSTRUCTION NOTES:

GENERAL NOTES:

ENTERING ADJACENT PROPERTIES.

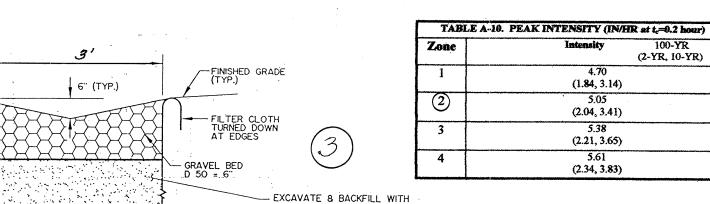
SUBJECT SITE AND DEPOSITED THEREON.

CUT-OFF WALL NO SCALE (PER CITY STD. DKIE * 2415)



ASPHALT PAVEMENT SECTION NO SCALE ASPHALTIC CONCRETE (2 1/2")
PAVING SURFACE @ MIN. 1800 LB. ---- STABILITY (ASTM D-1559) ZAĞĞREĞÁTE BASE COURSE COMPACTED @ 95% ASTM COMPACTED EARTH

TYPICAL GRAVEL BED SECTION



CLEAN SAND TO DEPTH

INDICATED

A.1 PRECIPITATION ZONES

A-1 and on FIGURE A-1.

ZONE LOCATION

West of the Rio Grande

(2) Eletween the Rio Grande and San Mateo

East; South of Interstate 40

Bernalillo County's four precipitation zones are indicated in TABLE

TABLE A-1. PRECIPITATION ZONES

Between San Mateo and Eubank, North of Interstate 40;

East of Eubank, North of Interstate 40; and East of the

East boundary of Range 4 East, South of Interstate 40

and between San Mateo and the East boundary of Range 4

Soil uncompacted by human activity with 0 to 10 percent slopes. Native grasses, weeds and shrubs in typical densities with minimal disturbance to grading, groundcover and infiltration capacity. Croplands. Unlined Arroyos. Irrigated lawns, parks and golf courses with 0 to 10 percent slopes. Native grasses, weeds and shrubs, and soil uncompacted by human activity with slopes greater than 10 percent and less than 20 percent. Soil uncompacted by human activity. Minimal vegetation. Unpaved parking, roads, trails. Most vacant lots. Gravel or rock on plastic (desert landscaping). Irrigated lawns and parks with slopes greater than 10 percent. Native grasses, weeds, and shrubs, and soil uncompacted by human activity with slopes at 20 percent or greater. Native grass, weed and shrub areas with clay or clay loam soils and other soils of very low permeability as classified by SCS Hydrologic Soil Group D. D Impervious areas, pavement and roofs. fost watersheds contain a mix of land treatments. To determine proportional eatments, measure respective subareas. In lieu of specific measurement for ment D, the areal percentages in TABLE A-5 may be employed

TABLE A-4. LAND TREATMENTS

Land Condition

Zone	Treatment 100-YR (2-YR, 10-TR)			
	A	В	C	D
1	1.29	2.03	2.87	4.37
	(0.00, 0.24)	(0.33, 0.76)	(0.47, 1.49)	(1.69, 2.89
2	1.56	2.28	3.14	4.70
	(0.00, 0.38)	(0.08, 0.95)	(0.60, 1.71)	1.86, 3.14
3	1.87	2.60	3.45	5.02
	(0.00, 0.58)	(0.21, 1.19)	(0.78, 2.009)	(2.04, 3.39
4	2.20	2.92	3.73	5.25
	(0.05, 0.87)	(0.38, 1.45)	(1.00, 2.26)	(2.17, 3.57

Drainage Comments:

As shown on the Vicinity Map hereon, the subject site is located on the West side of Locust Street S.E., East of Interstate Hwy. 25, and South of Hazeldine Avenue S.E., in the City of Albuquerque, New Mexico. (City Zone Atlas Map 'K-15-Z')

The subject site is presently an partially developed lot; the proposed plan as shown hereon is to construct a warehouse addition to the existing structure with associated improvements thereon.

The subject site, 1.) does not lie within a designated floodplain, nor does it have downstream flooding conditions (Re: F.E.M.A. Firm Panel 334 of 825), 2.) does accept minimal offsite flows from the adjacent property to the South, 3.) does contribute historic offsite flows to adjacent properties to the North (City of Albuquerque Public Alley and N.M.D.O.T. property), 4.) does not lie adjacent to a natural or artificial water course. 5.) will allow for the "First Flush" of new developed flows on-site and the minimizing of "historic flows" from the subject property, (these flows do not and will not have an adverse impact to downstream properties).

Drainage Calculations:

Per Section 22.2, Hydrology of the Development Process Manual, Volume 2, Design Criteria for the City of Albuquerque, Bernalillo County, New Mexico.

SITE AREA = .015 ACRE ZONE: TWO (2) PRECIPITATION: 360 = 2.35 in. 1440 = 2.75 in. 10 day = 3.95 in.

EXCESS PRECIPT	PEAK DISCHARGE:	
TREATMENT A	0.53 in.	
	1.56 cfs/ac.	
TREATMENT B	0.78 in.	2.28 cfs/ac.
TREATMENT C	1.13 in.	3.14 cfs/ac.
TREATMENT D	2.12 in.	4.70 cfs/ac.

EXISTING CONDITIONS: PROPOSED CONDITIONS: AREA TREATMENT A 0.00 ac. 0.00 ac. TREATMENT B 0.00 ac. 0.00 ac. TREATMENT C 0.11 ac. 0.03 ac.

EXISTING EXCESS PRECIPITATION:

TREATMENT D 0.04 ac.

Weighted E= (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.11)+(2.12)x(0.04)/0.15V100-360= (1.33)x(0.15)/12 = 0.016625 ac-ft = 724.2 cf

EXISTING PEAK DISCHARGE:

Q100= (1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.11)+(4.70)x(0.04) = 0.54 cfs

0.12 ac.

PROPOSED EXCESS PRECIPITATION:

Weighted E= (0.53)x(0.00)+(0.78)x(0.00)+(1.13)x(0.03)+(2.12)x(0.12)/0.15

V100-360= (1.87)x(0.15)/12.0 = 0.023380 ac-ft = 1,018.2 cf

V100-1440= (0.05)+(0.07)x(3.10-2.60)/12 = 0.05292 ac-ft = 2,305.0 cf

V100-10day= (0.05)+(0.07)x(4.90-2.60)/12 = 0.06342 ac-ft = 2,762.4 cf

PROPOSED PEAK DISCHARGE:

Q100= (1.56)x(0.00)+(2.28)x(0.00)+(3.14)x(0.03)+(4.70)x(0.12) = 0.65 cfs INCREASE: V100-360 = 294.0 cfQ100 = 0.11 cfs

"FIRST FLUSH STORM VOLUME": 0.34" X IMPERVIOUS AREA, IMPERVIOUS AREA = 5,176.0 SQ. FT. 0.34" (0.03') X 5,176.0 = 155.3 CU. FT.

-3" RIVER RUN ROCK, G"DEEP

NO SCALE

PONDING AREA SECTION A-A

POUD VOLUME:

19'X 22' = 418.0 SQ.FT.X 1.30'DEPTH

= 543.4 CU. FT. (PROVIDED)

A PROPOSED GRADING AND DRAINAGE PLAN FOR A BUILDING ADDITION TO ALLIED PLUMBING FACILITIES (809 LOCUST AVENUE S.E.) ALBUQUERQUE, NEW MEXICO

LOCATION MAP GLRAGE =5029.65 NEW ADDITION EXISTING STRUCTURE LOWER F.F. = 5025.58 INTERMEDISTE F.F. = 5033. + F.F. = 5033.10 T.B.M. UPPER F.F. = 5043.33 @ 29.90 TOP OF WALL VARIES-- SPILLKISY @31.20 : POLIO BOTTOM = 29.90

TOP OF CURB ELEVATION = 7C = 34.00 CURB FLOWLINE ELEVATION = # = 33.33 EXISTING SPOT ELEVATION = -4-3/54 EXISTING CONTOUR ELEVATION = __ - 28.0 - _ -PROPOSED SPOT ELEVATION = + 28 50 PROPOSED CONTOUR ELEVATION = 25.0 PROPOSED OR EXISTING CONCRETE SURFACE = \(\sum_{\text{T}}\) EXISTING FENCE LINE = 4/4 4" ROOF DRAIN. I"xI" ANGLE W/ANCHORS (TYPICAL ALL 4 SIDES)-1/2" EXPANSION JOINT (TYP) # 4 REBARS AT 10" Q.C. (TYPICAL) ---COMPACT SUBGRADE AT

95 % ASTM D-1557

(TYPICAL)

Drainage Facilities within City Right-of-Way Notice to Contractor

1. An excavation permit will be required before beginning any work within City Right-2. All work on this project shall be performed in accordance with applicable federal, state and local laws, rules and regulations concerning construction safety and health. 3. Two working days prior to any excavation, the contractor must contact the line locating service, New Mexico One Call 260-1990, for the location of existing utilities. 4. Prior to construction, the contractor shall excavate and verify the locations of all obstructions. Should a conflict exist, the contractor shall notify the engineer so that the conflict can be resolved with a minimum amount of delay. 5. Backfill compaction shall be according to traffic/street use. 6. Maintenance of the facility shall be the responsibility of the owner of the property

7. Work on arterial streets shall be performed on a 24-hour basis. APPROVALS NAME

> HYDROLOGY INSPECTOR NOTE: ALL WORK WITHIN PUBLIC EASEMENT

SHALL BE PERFORMED UNDER SEPARATE

Legal Description:

Lot Six (6), Block Two (2), DAVIS ADDITION, Albuquerque, New Mexico.

Bench Mark Reference:

A.C.S. Station "G-10", (N.A.V.D. 1988), Elevation = 4980.32; T.B.M. as shown on plan

Note: Provide new 25.0' wide concrete Drivepad per C.O.A. Std. Dwg. No. 2425.

ENGINEER'S SEAL