

FIRM PANEL 35001C0354E

# GRADING & DRAINAGE PLAN

### PURPOSE AND SCOPE

PURSUANT TO THE ESTABLISHED DRAINAGE ORDINANCE OF THE CITY OF ALBUQUERQUE AND THE DEVELOPMENT PROCESS MANUAL, THIS GRADING AND DRAINAGE PLAN OUTLINES THE DRAINAGE MANAGEMENT CRITERIA FOR CONTROLLING DEVELOPED RUNOFF FROM THE PROJECT SITE. THE PROJECT CONSISTS OF THE RE-DEVELOPMENT OF THE PROPERTY FOR AIRE MECHANICAL BY CONSTRUCTING A NEW COMMERCIAL BUILDING. PROPOSED SITE IMPROVEMENTS INCLUDE PAVING. UTILITY, LANDSCAPING, GRADING AND DRAINAGE IMPROVEMENTS. THIS PLAN IS PREPARED TO SUPPORT BUILDING PERMIT APPLICATION.

#### **EXISTING CONDITIONS**

THE PROJECT SITE CONTAINS APPROXIMATELY 0.21 ACRES AND IS LOCATED AT 6612 ACOMA SE. THE UNDEVELOPED PROPERTY IS BOUNDED TO THE NORTH BY ACOMA ROAD, TO THE SOUTH BY A 16 FOOT PUBLIC PAVED ALLEY, TO THE WEST BY A COMMERCIAL BUILDING AND TO THE EAST BY AN UNDEVELOPED PARCEL OF LAND. CURRENTLY, ON-SITE RUNOFF DRAINS NORTH ONTO ACOMA AND SOUTH ONTO THE 16 FOOT ALLEY. OFFSITE RUNOFF, FROM THE ROOF OF THE EXISTING COMMERCIAL BUILDING TO THE WEST, DRAINS NORTH AND SOUTH ALONG THE WEST PROPERTY LINE. TO THE EAST, THE HIGHER ELEVATED UNDEVELOPED LOT DRAINS NORTH AND SOUTH ALONG THE EAST END OF THE PROPERTY LINE.

AS SHOWN BY THE FIRM PANEL FOR THIS AREA, THIS PROPERTY IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD ZONE. A 100 YEAR - AO ZONE (DEPTH = 1 FOOT) IMPACTS THE NORTHERLY PORTION OF THE SITE. THE REMAINDER OF THE SITE IS WITHIN ZONE X (500 YEAR).

#### PROPOSED CONDITIONS

AS SHOWN BY THE PLAN, THE PROPERTY IS TO BE RE-DEVELOPED BY CONSTRUCTING A 3185 SF COMMERCIAL BUILDING.

ALL DRAINAGE FLOWS WILL BE MANAGED BY ON-SITE SWALES, CONVEYING RUNOFF TO ACOMA AND THE ALLEY. THE PLAN SHOWS THE ELEVATIONS REQUIRED TO PROPERLY GRADE AND CONSTRUCT THE RECOMMENDED IMPROVEMENTS. FLOW ARROWS ARE GIVEN TO DEMONSTRATE THE DIRECTION OF DRAINAGE FLOWS, AND PROJECT HYDROLOGY IS GIVEN FOR BOTH EXISTING AND DEVELOPED CONDITIONS.

THE NORTHERN PORTION OF THE SITE (BASIN 1) RUNOFF WILL DRAIN ONTO ACOMA AND THE SOUTHERN PORTION (BASIN 2) ONTO THE ALLEY. THE OFFSITE RUNOFF ON THE WEST FROM THE EXISTING COMMERCIAL BUILDING WILL DRAIN ONTO ACOMA AND THE ALLEY ALONG THE WEST PROPERTY LINE. OFFSITE RUNOFF FROM THE NORTHERN PORTION OF THE UNDEVELOPED LOT TO THE EAST (BASIN A1) WILL DRAIN INTO THE SITE WITHIN A LANDSCAPED DEPRESSION THAT DRAINS TO ACOMA. A SIDEWALK CULVERT WILL BE CONSTRUCTED TO DRAIN THE DEPRESSION TO ACOMA. A DRAINAGE EASEMENT WILL BE GRANTED TO LOT 5 TO ALLOW DRAINAGE THROUGH TTHE SITE. THE SOUTHERN PORTION (BASIN A2) WILL DRAIN UNALTERED ONTO THE ALLEY. SINCE THIS IS AN INFILL SITE, NO ON-SITE PONDING IS REQUIRED.

AS SHOWN BY THE PLAN, THE PROPOSED BUILDING IS TO BE CONSTRUCTED OUTSIDE OF, AND ELEVATED APPROXIMATELY 1.0 FOOT ABOVE THE MAPPED 100 YEAR FLOOD PLAIN.

### TEMPORARY EROSION CONTROL

TEMPORARY EROSION CONTROL MEASURES WILL BE IMPLEMENTED DURING CONSTRUCTION TO LIMIT THE DISCHARGE OF SEDIMENT FROM THE SITE TO ADJACENT PROPERTIES. SILT FENCING IS RECOMMENDED ALONG THE DOWNSTREAM CONSTRUCTION BOUNDARIES. IT IS THE CONSTRUCTOR'S RESPONSIBILITY TO MAINTAIN ALL TEMPORARY EROSION CONTROL MEASURES UNTIL COMPLETION OF ALL SITE PAVING, GRADING, DRAINAGE AND LANDSCAPING IMPROVEMENTS.

## CALCULATIONS

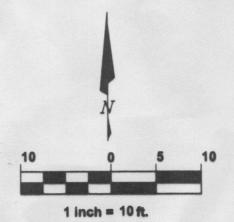
THE CALCULATIONS SHOWN HEREON DEFINE THE 100 YEAR/6 HOUR DESIGN STORM IMPACTING THE SITE AND CONTRIBUTING OFF-SITE DRAINAGE BASINS UNDER EXISTING AND DEVELOPED CONDITIONS. THE AHYMO METHOD OF ESTIMATING PEAK RUNOFF IS PRESENTED AS OUTLINED IN THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, SECTION 22.2, PART 'A', UPDATED JULY 1997.

## DRAINAGE PLAN NOTES

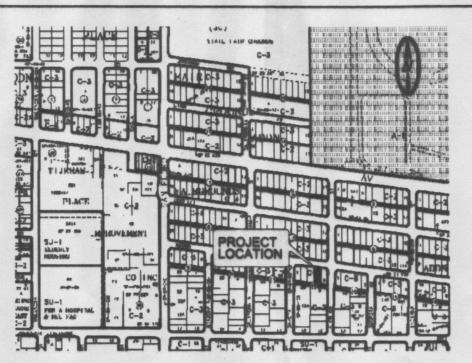
could cause settlement.

- 1. BLI recommends that the Owner obtain a Geotechnical Evaluation of the on-site soils prior to foundation/structural design.
- 2. This Plan recommends positive drainage away from all structures to prohibit ponding of runoff which may cause structural settlement. Future
- alteration of grades adjacent to the proposed structures is not recommended. 3. Irrigation within 10 feet of any proposed structure is not recommended. Introduction of irrigation water into subsurface soils adjacent to the structure
- 4. This Plan is prepared to establish on-site drainage and grading criteria only. BLI assumes no responsibility for subsurface analysis, foundation/structural design, or utility design.
- 5. Local codes may require all footings to be placed in natural undisturbed soil. If the Contractor plans to place footings on engineered fill, a certification by a registered Professional Engineer will be required. If the contractor wishes BLI to prepare the Certification, we must be notified PRIOR to placement of the fill.
- 6. BLI recommends that the Owner obtain the services of a Geotechnical Engineer to test and inspect all earthwork aspects of the project.
- 7. The property boundary shown on this Plan is given for information only to describe the project limits. Property boundary information shown hereon does not constitute a boundary survey. A boundary survey performed by a licensed New Mexico Registered Professional Surveyor is recommended prior to
- 8. All spot elevations are top of pavement unless noted otherwise.

ALL ACCESSIBLE IMPROVEMENTS MUST BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT. FAILURE TO DO SO MAY RESULT IN REJECTION OF CERTIFICATE OF OCCUPANCY.







**LOCATION MAP K-18-Z** 

BASIN A

DRAINAGE BASIN MAP

**LEGEND** 

ITEM EXISTING PROPOSED **CURB AND GUTTER** HEADER CURB OVERHEAD UTILITY WITH POWER POLE **16.7** SPOT ELEV. RIGHT OF WAY EASEMENT POWER POLE (GUYED) TOP OF CURB ELEV. CONTOUR W/ ELEVATION **BASIN DIVIDE** 

**ASPHALT PAVING** 

**DIRECTION OF FLOW** FR TIE YAPD WALL

NEW C. L. FENCE

DRAINAGE SWALE

**KEYED NOTES** 

- . EXISTING STANDARD CONCRETE CURB AND GUTTER.
- 2. EXISTING ASPHALT PAVEMENT. 3. EXISTING WATER METER.
- 4. EXISTING CHAIN LINK FENCE TO REMAIN.
- 5. REMOVE AND DISPOSE CONCRETE SLAB. 6. CONSTRUCT 6" CONCRETE CURB. ✓
- 7. CONSTRUCT ASPHALT PAVEMENT. 8. CONSTRUCT AGGREGATE BASE PAVEMENT.
- 9. CONSTRUCT REFUSE ENCLOSURE. SEE SITE PLAN. 10. CONSTRUCT NEW #6" CHAIN LINK SLIDING GATE.
- 11. REMOVE AND DISPOSE EXISTING CONCRETE > CURB AND GUTTER. CONSTRUCT CONCRETE DRIVEPAD PER COA STD DWG 2425. 12. LANDSCAPING.
- 13. CONSTRUCT CONCRETE SIDEWALK.
- 14. CONSTRUCT CONCRETE SIDEWALK FOR ADA ACCESSIBILITY. 15. CONSTRUCT 12" SIDEWALK CULVERT PER COA STD DWG 2236. ✓
- 16. REMOVE AND SALVAGE EXISTING GATE.✓ 17. CONSTRUCT CONCRETE HEADER CURB.
- 18. CONSTRUCT LANDSCAPED DRAINAGE DEPRESSION.
- 19. CONSTRUCT ROOF GUTTER. DRAIN ROOF FLOW TO SOUTHWEST BUILDING CORNER.
- 20. CONSTRUCT ROOF GUTTER. DRAIN ROOF FLOW TO NORTHWEST BUILDING CORNER.
- 21. REMOVE + SALVAGE 64. 6 C.L. FENCEY

PROJECT HYDROLOGY

AIRE MECHANICAL 2.60" 4.90" AREA (ac) A (ac) B (ac) C (ac) D (ac) E Q (cfs) VOL (ac ft) 0.21 | 0.00 | 0.00 | 0.21 | 0.00 | 1.29 | 0.7 | 0.023 0.21 | 0.00 | 0.00 | 0.06 | 0.15 | 2.04 | 1.0 | 0.036 AREA (ac) A (ac) B (ac) C (ac) D (ac) 
 0.18
 0.00
 0.00
 0.03
 0.15
 1.12
 0.8
 0.0168

 0.03
 0.00
 0.00
 0.00
 0.03
 2.36
 0.2
 0.0059

PROJECT DATA

PROPERTY ADDRESS

6612 ACOMA RD. SE LEGAL DESCRIPTION

LOT 4 BLOCK 12, FAIR-GROUND ADDITION PROPERTY ZONING C-3

MAPPING ALL PROJECT SURVEYING BY HARRIS SURVEYING, INC. JANUARY, 2007

PROJECT BENCHMARK ACS MONUMENT "13-K18" **ELEVATION 5308.55 FEET** 





NOV 17 200

9 Z 

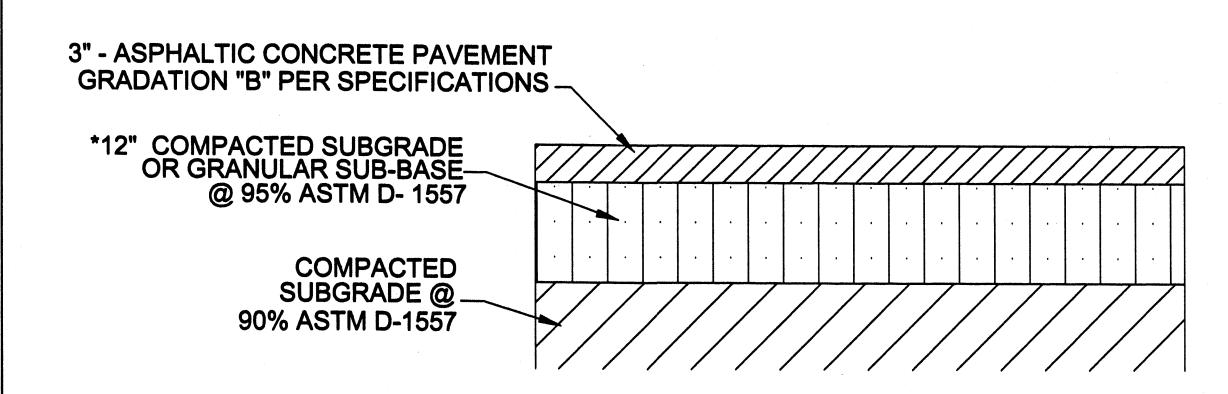
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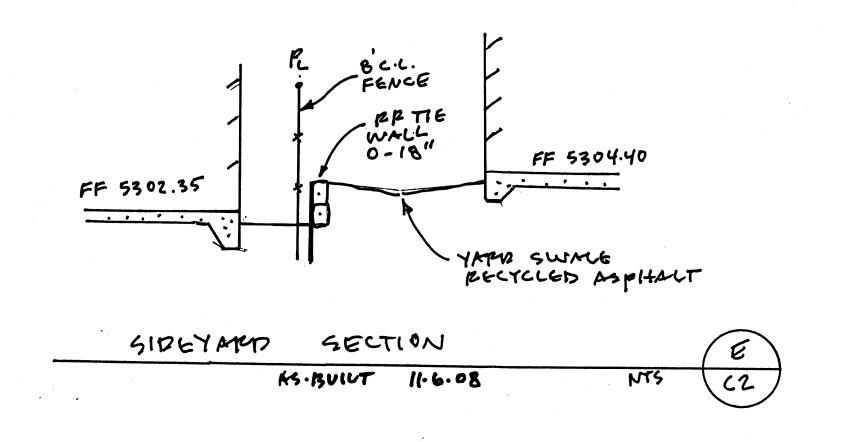
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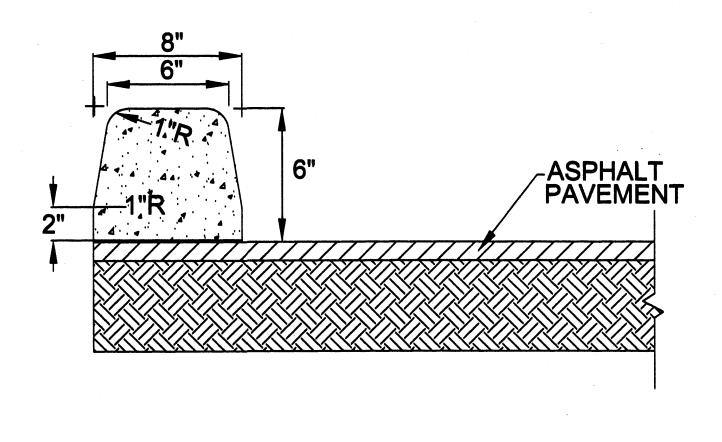
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TOTAL PAGES 4/24/07

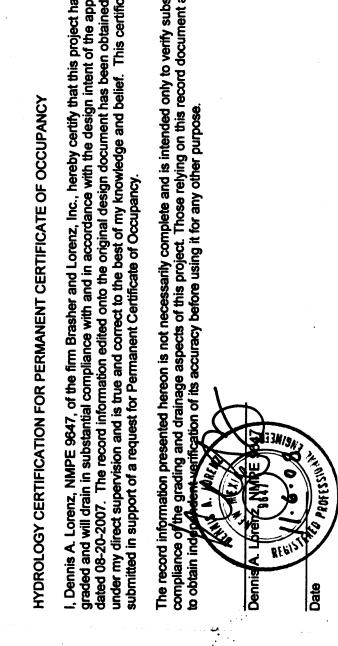








6" EXTRUDED CURB DETAIL



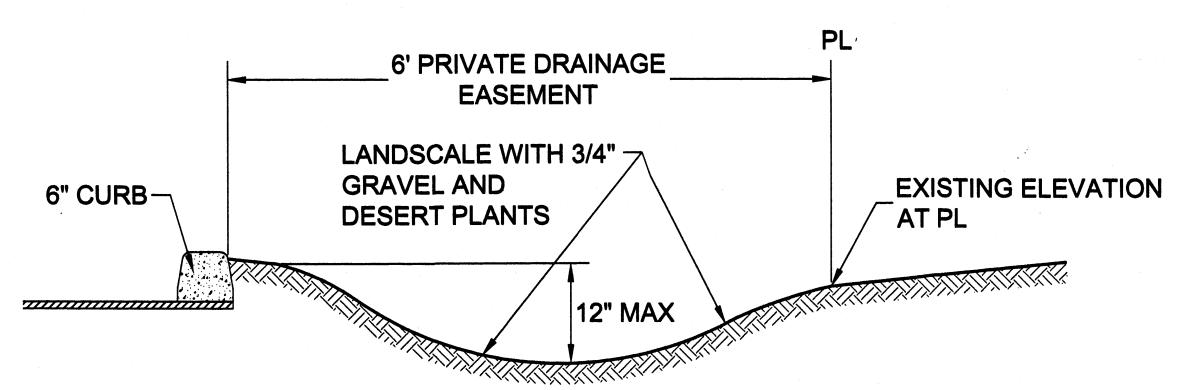
REVISION

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MOIL

SHIWER

A NEW SHEET METAL SHOP FOR:
AIBUQUERQUE
6612 ACOMA S.E.
ALBUQUERQUE



 $\bigcirc$ D LANDSCAPED DEPRESSION C2/



RAINAGE	<b>FACILITIES</b>	WITHIN (	CITY	<b>RIGHT-OF</b>	WAY
	NOTICE TO	CONTRA	ACTO	R	

- AN EXCAVATION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
   ALL WORK DETAILED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE "CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION", 1986 EDITION, AS AMENDED THROUGH UPDATE NO. 7.
   THREE WORKING DAYS PRIOR TO ANY EXCAVATION, THE CONTRACTOR MUST CONTACT LINE LOCATING SERVICE, 765-1234 FOR THE LOCATION OF EXISTING UTILITIES.
   PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATIONS OF ALL CONSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
   BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
   MAINTENANCE OF THE FACILITY SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY BEING SERVED.
   WORK ON ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVALS

INSPECTOR

DATE

