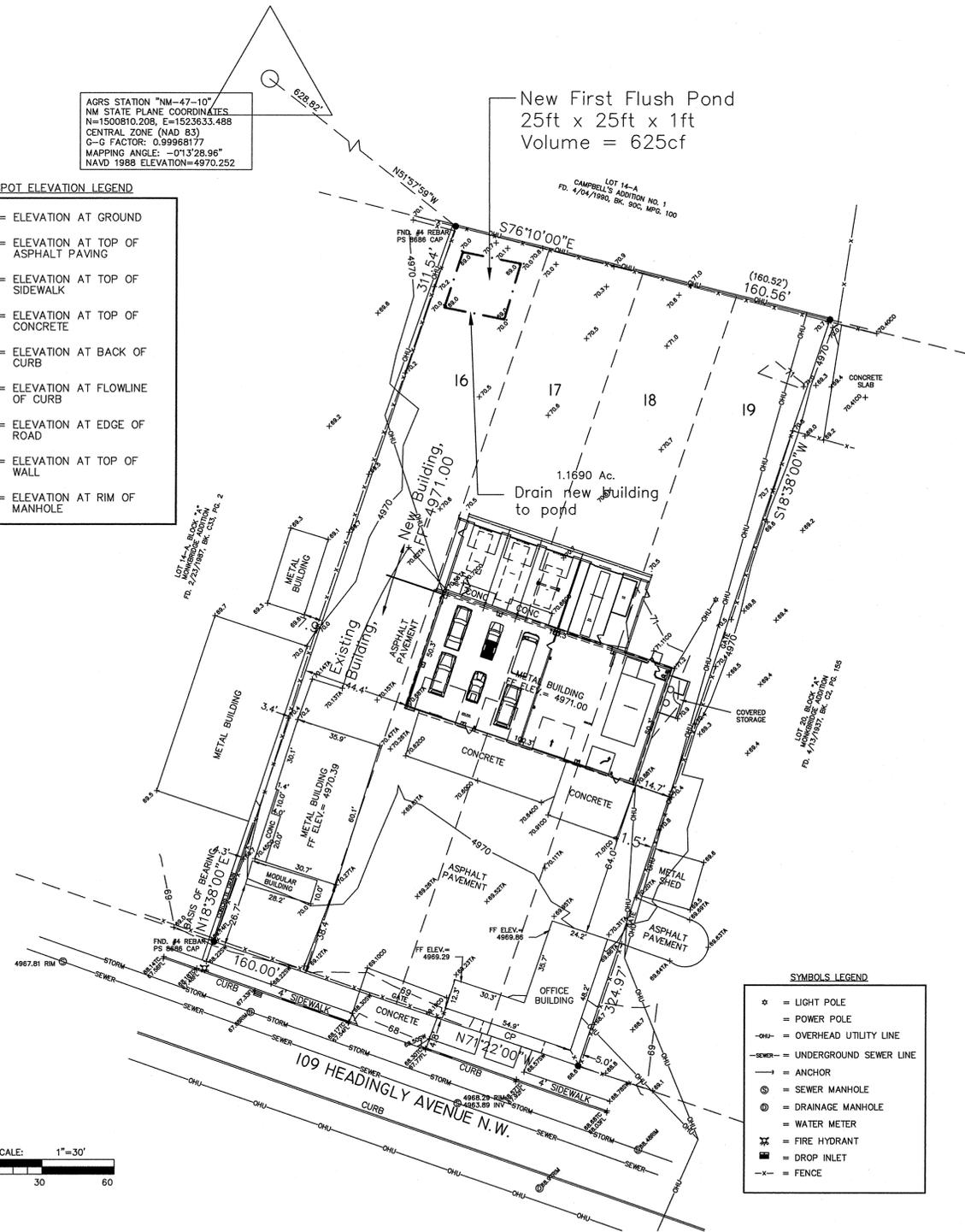


CAUTION:
EXISTING UTILITIES ARE NOT SHOWN.
IT SHALL BE THE SOLE RESPONSIBILITY
OF THE CONTRACTOR TO CONDUCT ALL
NECESSARY FIELD INVESTIGATIONS PRIOR
TO ANY EXCAVATION TO DETERMINE THE
ACTUAL LOCATION OF UTILITIES & OTHER
IMPROVEMENTS.

AGRS STATION "NM-47-10"
NM STATE PLANE COORDINATES
N=1500810.208, E=1523633.488
CENTRAL ZONE (NAD 83)
G-S FACTOR: 0.99968177
MAPPING ANGLE: -0'13"28.96"
NAVD 1988 ELEVATION=4970.252

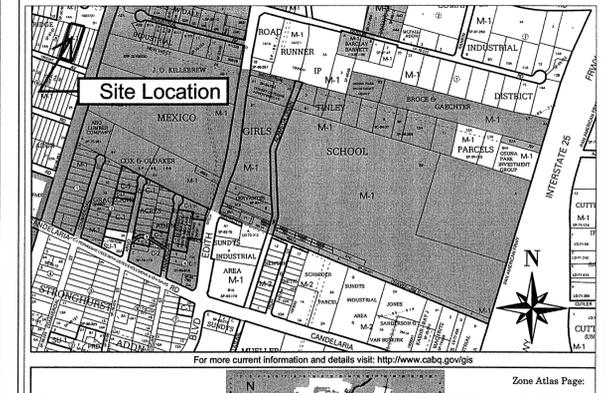
SPOT ELEVATION LEGEND

- +00.0 = ELEVATION AT GROUND
- +00.00TA = ELEVATION AT TOP OF ASPHALT PAVING
- +00.00SW = ELEVATION AT TOP OF SIDEWALK
- +00.00CD = ELEVATION AT TOP OF CONCRETE
- +00.00TC = ELEVATION AT BACK OF CURB
- +00.00FL = ELEVATION AT FLOWLINE OF CURB
- +00.0ER = ELEVATION AT EDGE OF ROAD
- +00.00TW = ELEVATION AT TOP OF WALL
- +00.00RM = ELEVATION AT RIM OF MANHOLE

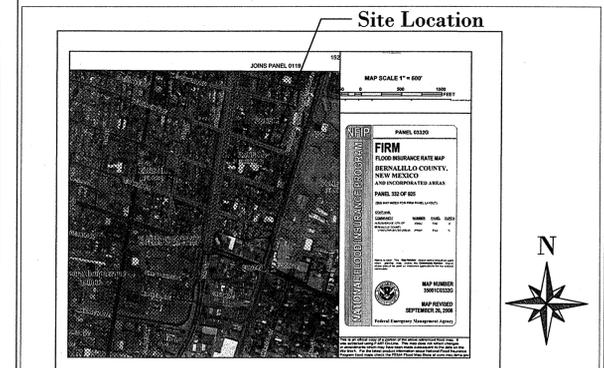


- SYMBOLS LEGEND**
- ⊙ = LIGHT POLE
 - ⊙ = POWER POLE
 - = OVERHEAD UTILITY LINE
 - = UNDERGROUND SEWER LINE
 - = ANCHOR
 - ⊙ = SEWER MANHOLE
 - ⊙ = DRAINAGE MANHOLE
 - ⊙ = WATER METER
 - ⊙ = FIRE HYDRANT
 - ⊙ = DROP INLET
 - X- = FENCE

- EROSION CONTROL NOTES:**
1. CONTRACTOR IS RESPONSIBLE FOR OBTAINING A TOPSOIL DISTURBANCE PERMIT PRIOR TO BEGINNING WORK.
 2. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING RUN-OFF ON SITE DURING CONSTRUCTION.
 3. CONTRACTOR IS RESPONSIBLE FOR CLEANING ALL SEDIMENT THAT GETS INTO EXISTING RIGHT-OF-WAY.
 4. REPAIR OF DAMAGED FACILITIES AND CLEANUP OF SEDIMENT ACCUMULATIONS ON ADJACENT PROPERTIES AND IN PUBLIC FACILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
 5. ALL EXPOSED EARTH SURFACES MUST BE PROTECTED FROM WIND AND WATER EROSION PRIOR TO FINAL ACCEPTANCE OF ANY PROJECT.



VICINITY MAP: G-15-Z



FIRM MAP: 35001C0332G

LEGAL DESCRIPTION:

Lots 16, 17, 18 & 19, Block A
Monkbridge Addition
CITY OF ALBUQUERQUE
BERNALILLO COUNTY, NEW MEXICO

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. RETAIN THE FIRST .34" OF STORM RUNOFF FROM NEW DEVELOPMENT TO CONFORM TO THE WATER QUALITY REQUIREMENTS
3. THIS SITE IS LOCATED WITHIN AN X FLOOD ZONE, PROTECTED BY LEVEE. THE ADJACENT STREET IS LOCATED IN AN AO FLOOD ZONE WITH A DEPTH OF 1FT.

LEGEND

- 46.00 = PROPOSED SPOT ELEVATION
- ⊙ TW=44.00 = TOP OF WALL ELEVATION
- ⊙ BW=39.00 = BOTTOM OF WALL ELEVATION
- 5601--- = EXISTING CONTOUR
- 5600--- = EXISTING INDEX CONTOUR
- 5601--- = PROPOSED CONTOUR
- 5600--- = PROPOSED INDEX CONTOUR
- = LOT LINE
- = CENTERLINE
- = RIGHT-OF-WAY
- = PROPOSED RETAINING WALL
- = PROPOSED ROCK FACE WALL
- = EXISTING CURB AND GUTTER
- = PROPOSED EDGE OF CONCRETE
- = PROPOSED FLOWLINE
- = EXISTING WALL
- = PROPOSED BASIN BOUNDARY

ENGINEER'S SEAL	Discount Towing 109 Headingly Ave. NW	DRAWN BY RHD
	GRADING AND DRAINAGE PLAN	DATE 9-01-15
	RHD Engineering, LLC 4305 Purple Sage Ave. NW ALBUQUERQUE, NM 87120 (505) 288-1621	SHEET # 1 of 1
Richard Dourte P.E. #10854		JOB #



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

Project Title: Discount Towing Building Permit #: _____ City Drainage #: _____

DRB#: _____ EPC#: _____ Work Order#: _____

Legal Description: Lots 16,17,18,19, Block A, Monkbridge Addition

City Address: 109 Headinlqly Ave NW

Engineering Firm: RHD Engineering, LLC Contact: Richard Dourte

Address: 4305 Purple Sage Ave. NW, Albuquerque, NM, 87120

Phone#: 505-288-1621 Fax#: _____ E-mail: rhdengeering@outlook.com

Owner: Discount Towing Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

Architect: Simons Architecture PC Contact: Joe Simons

Address: _____

Phone#: 505-480-4796 Fax#: _____ E-mail: joe@simonsarchitecture.com

Surveyor: Alpha Pro Surveying LLC Contact: Gary Gritsko

Address: _____

Phone#: 505-892-1076 Fax#: _____ E-mail: gary@alphaprosurveying.com

Contractor: _____ Contact: _____

Address: _____

Phone#: _____ Fax#: _____ E-mail: _____

TYPE OF SUBMITTAL:

- DRAINAGE REPORT
- DRAINAGE PLAN 1st SUBMITTAL
- DRAINAGE PLAN RESUBMITTAL
- CONCEPTUAL G & D PLAN
- GRADING PLAN
- EROSION & SEDIMENT CONTROL PLAN (ESC)
- ENGINEER'S CERT (HYDROLOGY)
- CLOMR/LOMR
- TRAFFIC CIRCULATION LAYOUT (TCL)
- ENGINEER'S CERT (TCL)
- ENGINEER'S CERT (DRB SITE PLAN)
- ENGINEER'S CERT (ESC)
- SO-19
- OTHER (SPECIFY)

CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- SIA/FINANCIAL GUARANTEE RELEASE
- PRELIMINARY PLAT APPROVAL
- S. DEV. PLAN FOR SUB'D APPROVAL
- S. DEV. FOR BLDG. PERMIT APPROVAL
- SECTOR PLAN APPROVAL
- FINAL PLAT APPROVAL
- CERTIFICATE OF OCCUPANCY (PERM)
- CERTIFICATE OF OCCUPANCY (TCL TEMP)
- FOUNDATION PERMIT APPROVAL
- BUILDING PERMIT APPROVAL
- GRADING PERMIT APPROVAL
- PAVING PERMIT APPROVAL
- WORK ORDER APPROVAL
- GRADING CERTIFICATION
- SO-19 APPROVAL
- ESC PERMIT APPROVAL
- BSC CERT. ACCEPTANCE
- OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED: _____ Yes No Copy Provided

DATE SUBMITTED: Sept 2, 2015 By: [Signature]

Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location, and scope to the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on the following:

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five (5) acres and Sector Plans
2. **Drainage Plans:** Required for building permits, grading permits, paving permits and site plans less than five (5) acres
3. **Drainage Report:** Required for subdivision containing more than ten (10) lots or constituting five (5) acres or more
4. **Erosion and Sediment Control Plan:** Required for any new development and redevelopment site with 1-acre or more of land disturbing area, including project less than 1-acre than an part of a larger common plan of development

Drainage Report

For

Discount Towing
109 Headingly Ave. NW
Albuquerque, New Mexico

Prepared by

RHD Engineering, LLC
Albuquerque, New Mexico

September 1, 2015

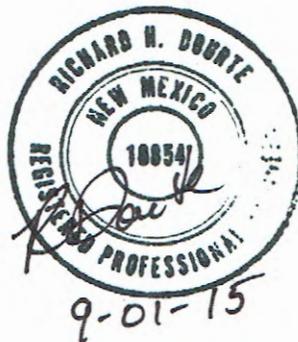


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Site Hydrology/hydraulic Calculations.....	Appendix A
Site Grading and Grading Plan.....	Appendix B

Purpose:

The purpose of this report is to obtain an approval for the Drainage and Grading plan for Discount Towing located at 109 Headingly Ave. NW, Albuquerque, New Mexico.

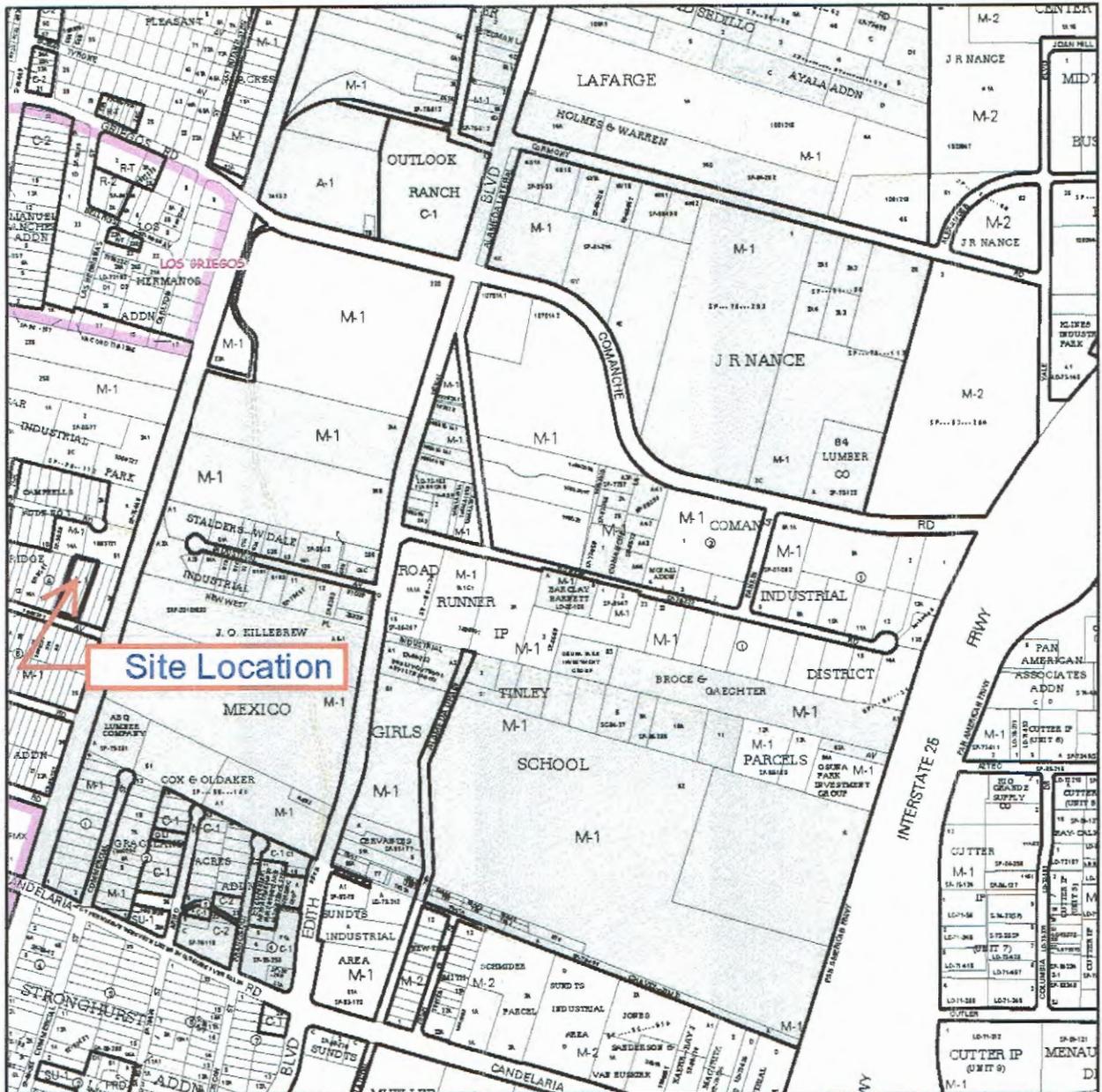
Introduction:

Discount Towing is proposing to add 2400sf onto the an existing building. The site is 1.17 acres in size.

Existing Conditions:

This site is located in an “X” flood zone, as identified on FEMA Flood Hazard Map 35001C0332G. This flood zone is identified as being protected by a levee. The adjacent street is in an “AO” flood zone with 1 ft depth. The existing grade is relatively flat in this area.

This site is in zone 2 as identified in section 22 of the DPM.



For more current information and details visit: <http://www.cabq.gov/gis>



Proposed Conditions:

A pond will be created in the northwest corner of this site. This pond will have the capacity for the 100yr 6hr flows created by the new 2400sf addition, which is much greater than the first flush flows created by the new addition. The remaining flows will follow their path as they did prior to this new addition.

Summary:

With the addition of the 2400sf building, the peak discharge will increase from 4.5cfs to 4.6cfs = 0.1cfs for the 100 year 6 hour event. The excess precipitation for this site will increase from 6704cf to 6919cf = 215cf. However with the construction of the pond, the excess precipitation that flows offsite will be reduced from 6919cf to 6919cf - 625cf = 6294cf or 410cf.

The first flush requirements for this new addition is 68cf. The 100yr, 6hr excess precipitation from the new addition will be approximately 424 cf. The pond will retain 625cf, thus the pond will retain approximately 557cf more than what is required for the first flush flow and approximately 68cf more than what is generated by the excess precipitation or the 100yr 6hr event.

Appendix A

Site Hydrology/hydraulic Calculations

The existing site is 1.17 acres.

The existing impervious area for this site is approximately 0.53 acres.

The new addition is 2400 sf or .06 acres.

Peak Discharge for the 100yr 6hr event:

Land treatment A - 1.56 cfs/ac

Land treatment B - 2.28 cfs/ac

Land treatment C - 3.14 cfs/ac

Land treatment D - 4.70 cfs/ac

Existing:

Land treatment C -- $(1.17\text{ac} - 0.53\text{ac}) \times 3.14\text{cfs/ac} = 2.0\text{ cfs}$

Land treatment D -- $0.53\text{ac} \times 4.70\text{cfs} = \underline{2.5\text{ cfs}}$

Total 4.5 cfs

Proposed:

Land treatment C -- $(1.17 - .53\text{ac} - .06) \times 3.14\text{ cfs/ac} = 1.8\text{ cfs}$

Land treatment D -- $(.53\text{ac} + .06\text{ac}) \times 4.70\text{ cfs} = \underline{2.8\text{ cfs}}$

Total 4.6 cfs

Thus the increase in flows for the 100yr 6hr event is $4.6\text{cfs} - 4.5\text{cfs} = 0.1\text{cfs}$

Excess Precipitation for 100yr 6hr event:

Land treatment A - 0.53 in

Land treatment B - 0.78 in

Land treatment C - 1.13 in

Land treatment D - 2.12 in

Existing:

Land treatment C -- $(1.17\text{ac} - 0.53\text{ac}) \times 43560\text{sf/ac} \times 1.13\text{in} \times 1\text{ft}/12\text{in} = 2625\text{ cf}$

Land treatment D -- $0.53\text{ac} \times 43560\text{sf/ac} \times 2.12\text{in} \times 1\text{ft}/12\text{in} = 4079\text{ cf}$

Total 6704 cf

Proposed:

Land treatment C -- $(1.17 - .53\text{ac} - .06) \times 43560\text{sf/ac} \times 1.13\text{in} \times 1\text{ft}/12\text{in} = 2379\text{ cf}$

Land treatment D -- $(.53\text{ac} + .06\text{ac}) \times 43560\text{sf/ac} \times 2.12\text{in} \times 1\text{ft}/12\text{in} = 4540\text{ cf}$

Total 6919 cf

**Thus the increase in the excess precipitation for the 100yr 6hr event is
 $6919\text{cf} - 6704\text{cf} = 215\text{cf}$**

Excess Precipitation from the new 2400sf addition:

$2400\text{sf} \times 2.12\text{in} \times 1\text{ft}/12\text{in} = 424\text{cf}$

First Flush requirement:

$(2400\text{sf} \times .34\text{in})/12\text{in}/\text{ft} = 68\text{cf}$

Pond Volume:

$25\text{ft} \times 25\text{ft} \times 1\text{ft} = 625\text{cf}$

CITY OF ALBUQUERQUE



September 22, 2015

Philip W. Clark, PE
Clark Consulting Engineers
19 Ryan Rd
Edgewood, NM 87015

**Re: Signal Pointe Subdivision
Signal/Ventura
Grading and Drainage
Engineers Stamp Date 8/20/2015 (C20D070)**

Dear Mr. Clark,

Based upon the information provided in your submittal received 8/21/2015, the above referenced Grading and Drainage Plan is approved based on the following conditions

PO Box 1293

Albuquerque

New Mexico 87103

- The wall should remain in place once the erosion occurs. Please design the flood control structures accordingly. The wall detail/calculations/specifications must be clearly shown on the DRC plans.
- Provide plan and profile sheets for the flood control structure including the top and bottom elevations.
- Clearly show the limits (including stations) of Riprap Erosion Control Lining shown on Section A and the proposed floodwall on the DRC plan.
- Grading Certification will be required prior to release of Financial Guarantee, Workorder and building permits.

If you have any questions, you can contact me at 924-3999 or Rudy Rael at 924-3977.

www.cabq.gov

Sincerely,

Shahab Biazar, P.E.
City Engineer, Planning Dept.
Development Review Services

C: RR/SB
email

CITY OF ALBUQUERQUE



September 22, 2015

Richard Dourte, P.E.
RHD Engineering, LLC
4305 Purple Sage Ave NW
Albuquerque, NM 87120

**RE: Discount Towing
109 Headingly NW
Grading and Drainage Plan
Engineers Stamp Date 9/1/15 (G15D0201)**

Dear Mr. Dourte,

Based upon the information provided in your submittal received 9/2/15, this plan cannot be approved for Building Permit until the following comments are addressed:

- Provide emergency overflow/calculations.
- Where does the runoff go once it exceeds its capacity?
- Provide how offsite flows are being handled.
- Provide different line weights for existing buildings and the new building.
- Clearly show proposed and existing spot elevations and topography.
- Is re-plat required for the removal of the lot lines?

If you have any questions, please contact me at 924-3999 or Rudy Rael at 924-3977.

Sincerely,

Shahab Biazar, P.E.
City Engineer
Planning Department
Development Review Services,

RR/SB
C: File