

CITY OF ALBUQUERQUE



May 28, 2015

David Soule, PE
Rio Grande Engineering
PO Box 93924
Albuquerque, NM 87199

**RE: National Electric, 2200 Midtown Plaza NE
Grading and Drainage Plan
Engineer's Stamp Dated 5-06-15 (File: G16-D095E)**

Dear Mr. Soule:

Based upon the information provided in your submittal received 5-06-15, the above referenced plan cannot be approved for Building Permit until the following comments are addressed:

- 1) Show basin boundaries for the provided basin computations, and show where new improvements end and tie into existing facilities.
- 2) Label existing contours and the new contours for the ponds.
- 3) Show swale from 5049.85 spot elevation at entryway to the pond on the north side of the site.
- 4) Show existing and new roof drains.
- 5) In the "Drainage Narrative", mention overall acreage of the site, and explain that historical flow patterns for the site remain the same if this is the case. Discuss the off-site flows from Midtown Place that the site is accepting, and reference the prior drainage report. Mention that the new retention ponds retain the volume of increased runoff from existing conditions.
- 6) Label 100-year storm flow that each of the new on-site pipes is conveying and the pipe slope. Demonstrate capacities.

If you have any questions, you can contact me at 924-3924.

Sincerely,

Jeanne Wolfenbarger, P.E.
Senior Engineer, Planning Dept.
Development Review Services

Orig: Drainage file
c.pdf Addressee via Email



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET

(REV 02/2013)

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

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

Legal Description: _____

City Address: _____

Engineering Firm: _____ Contact: _____

Address: _____

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

Owner: _____ Contact: _____

Address: _____

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

Architect: _____ Contact: _____

Address: _____

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

Surveyor: _____ Contact: _____

Address: _____

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

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
- _____ ESC CERT. ACCEPTANCE
- _____ OTHER (SPECIFY)

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

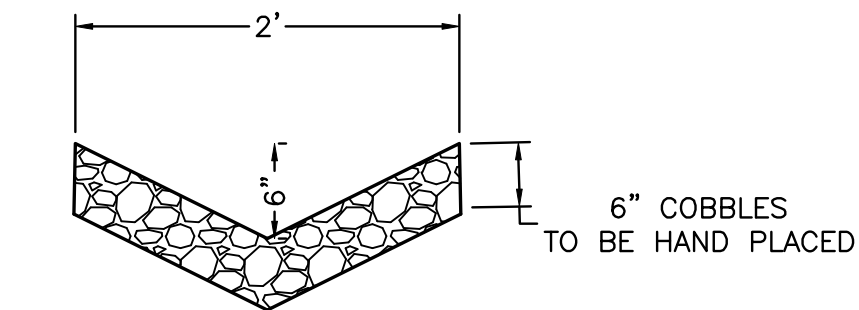
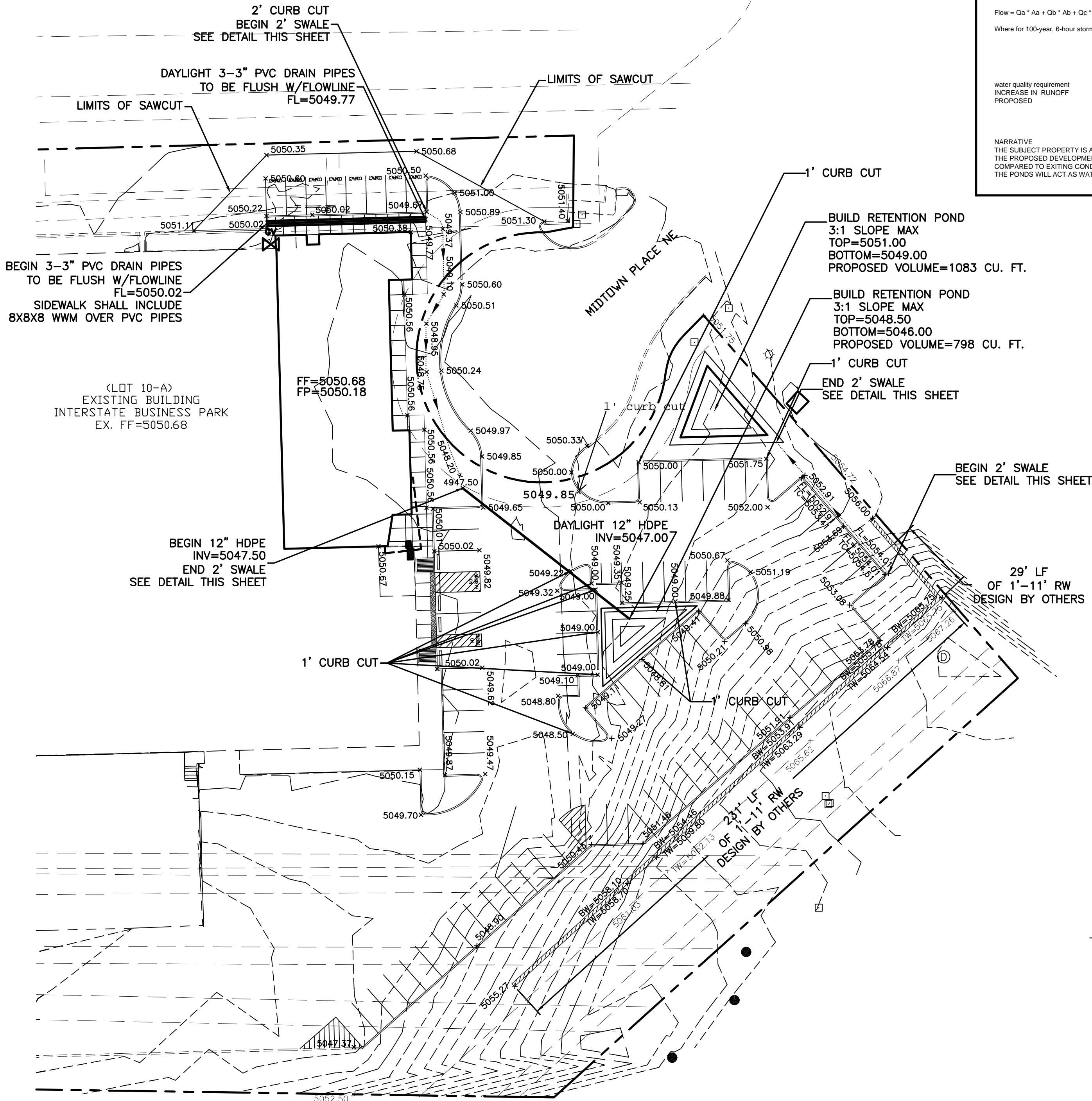
DATE SUBMITTED: _____ By: _____

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 are part of a larger common plan of development

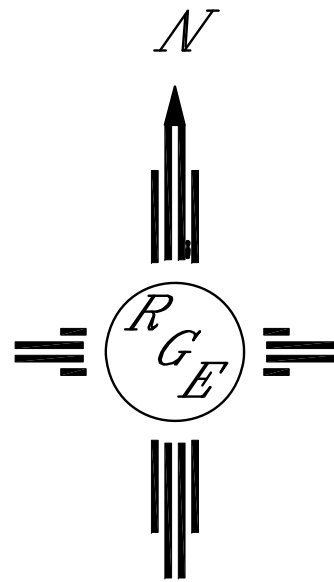
EROSION CONTROL NOTES:

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.

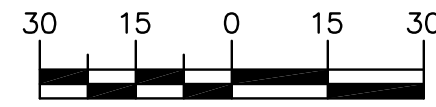


COBBLE SWALE DETAIL

NTS



GRAPHIC SCALE



SCALE: 1"=30'

STE HYDROLOGY
Weighted E Method
NATIONAL ELECTRIC ADDITION

Existing Developed Basins

Basin	Area (sf)	Area (acres)	Treatment A %	Treatment A (acres)	Treatment B %	Treatment B (acres)	Treatment C %	Treatment C (acres)	Treatment D %	Treatment D (acres)	100-Year E ₁₀₀ Weighted E (ac-ft)	Volume (cu-ft)	Flow (cfs)
IMPERVIOUS AREA INCREASE	17240	0.398	0%	0	0.0%	0.000	0.0%	0	100%	0.398	2.130	0.070	1.85
NATIVE AREA DECREASE	17240	0.398	40%	0.15831	20.0%	0.079	40.0%	0.15831	0%	0.000	0.820	0.027	0.92

Equations:

Weighted E = E₁₀₀A_a + E₁₀A_b + E₅A_c + E₂A_d / (Total Area)

Volume = Weighted D * Total Area

Flow = Q_a * A_a + Q_b * A_b + Q_c * A_c + Q_d * A_d

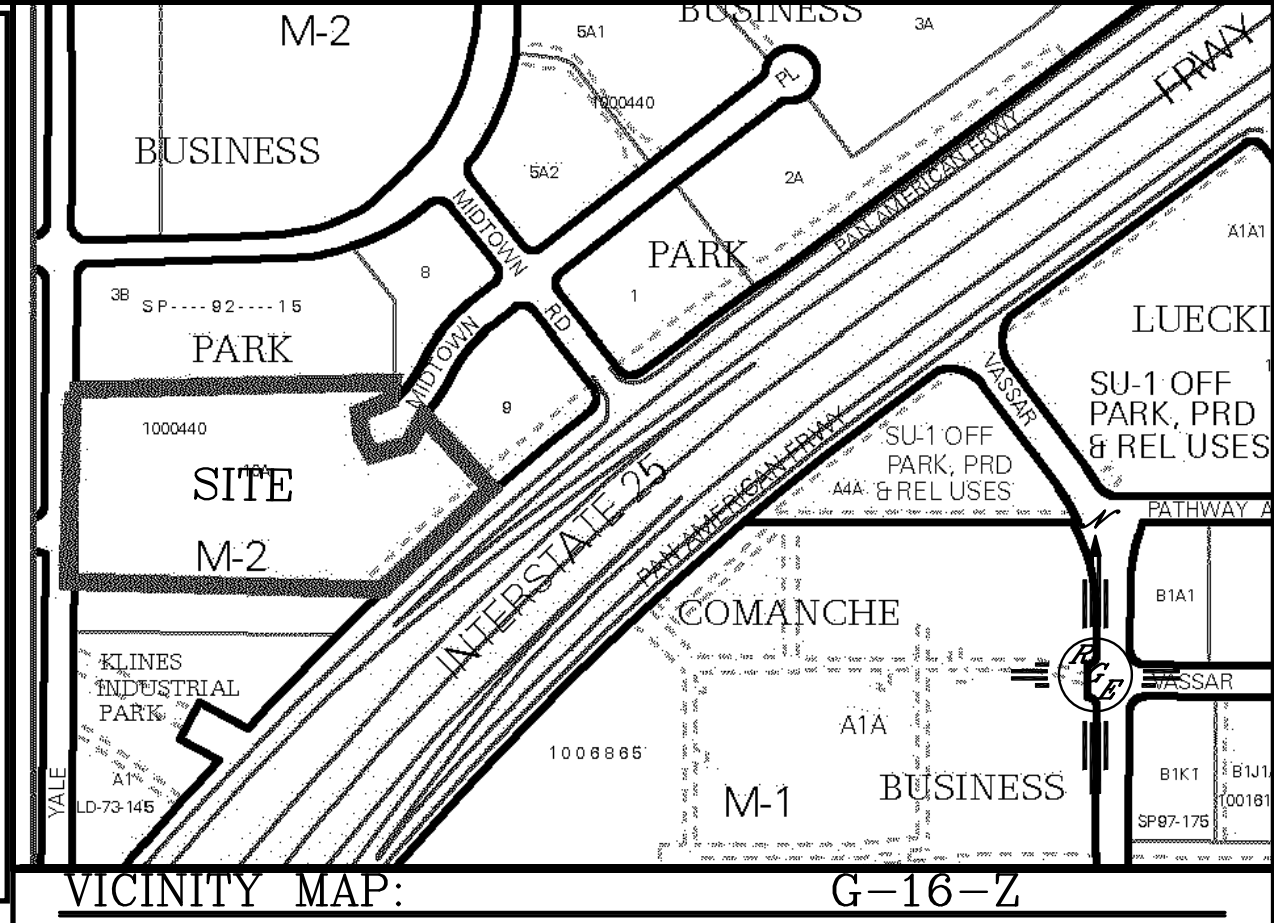
Where for 100-year, 6-hour storm (zone 2)

E ₁₀₀ 0.03	Q _a 1.58
E ₁₀ 0.79	Q _b 2.28
E ₅ 1.13	Q _c 3.14
E ₂ 2.12	Q _d 4.7

water quality requirement
INCREASE IN RUNOFF
PROPOSED

559 CUBIC FEET
1888 CUBIC FEET

NARRATIVE
THE SUBJECT PROPERTY IS A FULLY DEVELOPED SITE. THE EXISTING WORK AREA IS PARTIALLY PAVED AND CONTAINS A LARGE SLOPE. THE PROPOSED DEVELOPMENT WILL GREATLY INCREASE RUNOFF CAUSED BY THE INCREASE IN THE IMPERVIOUS AREA COMPARED TO EXISTING CONDITIONS. THE INCREASE IN IMPERVIOUS ARE IS 17240 SQUARE FEET. THE INCREASE IN RUNOFF IS 94CFS AND 1888 CUBIC FEET. THE PONDS WILL ACT AS WATER QUALITY PONDS AS WELL AS REDUCING THE PEAK DISCHARGE RATE TO WHAT IS SIMILAR TO THE EXISTING CONDITIONS.



LEGAL DESCRIPTION:

LOT 10-A MIDTOWN BUSINESS PARK

NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FLOWLINE ELEVATION UNLESS OTHERWISE NOTED.
2. ALL CURB AND GUTTER TO 6" HEADER UNLESS OTHERWISE NOTED.
3. ALL RETAINING WALL DESIGN SHALL BE BY OTHERS.

LEGEND

- 5414--- EXISTING CONTOUR
- 5415--- EXISTING INDEX CONTOUR
- 5414--- PROPOSED CONTOUR
- 5415--- PROPOSED INDEX CONTOUR
- SLOPE TIE---
- × 4048.25 EXISTING SPOT ELEVATION
- × 4048.25 PROPOSED SPOT ELEVATION
- BOUNDARY---
- EASEMENT---
- CENTERLINE---
- RIGHT-OF-WAY---
- PROPOSED CURB---
- EXISTING CURB AND GUTTER---
- PROPOSED SIDEWALK---
- EXISTING SIDEWALK---
- PROPOSED RETAINING WALL (DESIGN BY OTHERS)---

ROUGH GRADING APPROVAL

DATE

ENGINEER'S SEAL

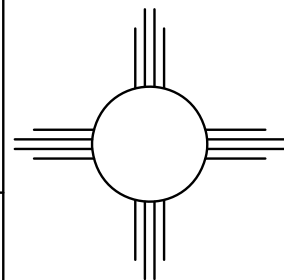


5/6/15

DAVID SOULE
P.E. #14522

NATIONAL ELECTRIC

GRADING AND DRAINAGE PLAN



Rio Grande Engineering

1806 CENTRAL AVENUE SE
SUITE 201
ALBUQUERQUE, NM 87106
(505) 872-0999

DRAWN BY WCWJ

DATE

5-04-15

21514-LAYOUT-4-29-15

SHEET #

JOB #

21514

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.