

CITY OF ALBUQUERQUE



May 25, 2016

Richard J. Berry, Mayor

David B. Thompson, P.E.
Thompson Engineering Consultants, Inc.
P.O. Box 65760
Albuquerque, NM, 87193

**RE: Midtown Self Storage Expansion
Grading and Drainage Plan
Engineer's Stamp Date 4-19-2016 (File:H17D112)**

Dear Mr. Thompson:

Based upon the information received on 4-21-2016, the above-referenced Grading and Drainage Plan is approved for Grading Permit, Paving Permit and Building Permit with the following condition:

PO Box 1293 1. First flush ponding will be managed in the rip rap swale along the western edge of the property, provide dimensions and approximate volume of the pond with the Certification.

Albuquerque Please attach a copy of this approved plan in the construction sets when submitting for the building permit. Prior to Certificate of Occupancy release, Engineer Certification per the DPM checklist will be required.

New Mexico 87103 If you have any questions, you can contact me at 924-3986.

www.cabq.gov

Sincerely,

Abiel Carrillo, P.E.
Principal Engineer, Planning Dept.
Development Review Services

Orig: Drainage file

DRAINAGE INFORMATION SHEET

(REV. 1/28/2003rd)

PROJECT TITLE: BLUEWATER POINTE SUBDIVISION

ZONE MAP/DRG. FILE #: H17

DRB #: _____ EPC #: _____

WORK ORDER#: _____

LEGAL DESCRIPTION: A PORTION OF TRACT K, TIMETEO CHAVEZ ADDITION

CITY ADDRESS: _____

ENGINEERING FIRM: Thompson Engineering Consultants, Inc.

ADDRESS: P.O. Box 65760

CITY, STATE: Albuquerque, NM

CONTACT: David Thompson

PHONE: 271-2199

ZIP CODE: 87193

OWNER: Midtown Self Storage

ADDRESS: 4339 Cutler NE

CITY, STATE: Albuquerque, NM

CONTACT: Richard Hix

PHONE: 250-1655

ZIP CODE: 87110

ARCHITECT: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

SURVEYOR: A.M. Surveying Company

ADDRESS: 612 Cerro de Ortega SE

CITY, STATE: Rio Rancho, NM

CONTACT: Mike Shook

PHONE: 896-1716

ZIP CODE: 87124

CONTRACTOR: _____

ADDRESS: _____

CITY, STATE: _____

CONTACT: _____

PHONE: _____

ZIP CODE: _____

CHECK TYPE OF SUBMITTAL:

- ☐ DRAINAGE REPORT
☒ DRAINAGE PLAN 1st SUBMITTAL, REQUIRES TCL or equal
☐ DRAINAGE PLAN RESUBMITTAL
☐ CONCEPTUAL GRADING & DRAINAGE PLAN
☐ GRADING PLAN
☐ EROSION CONTROL PLAN
☐ ENGINEER'S CERTIFICATION (HYDROLOGY)
☐ CLOMR/LOMR
☐ TRAFFIC CIRCULATION LAYOUT (TCL)
☐ ENGINEER'S CERTIFICATION(TCL)
☐ ENGINEER'S CERTIFICATION (DRB APPR. SITE PLAN)
☐ OTHER

CHECK TYPE OF APPROVAL SOUGHT:

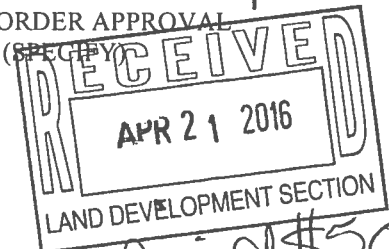
- ☐ SIA/FINANCIAL GUARANTEE RELEASE
☐ PRELIMINARY PLAT APPROVAL
☐ S. DEV. PLAN FOR SUB'D. APPROVAL
☐ S. DEV PLAN FOR BLDG. PERMIT APPROVAL
☐ SECTOR PLAN APPROVAL
☐ FINAL PLAT APPROVAL
☐ FOUNDATION PERMIT APPROVAL
☒ BUILDING PERMIT APPROVAL
☐ CERTIFICATE OF OCCUPANCY (PERM.)
☐ CERTIFICATE OF OCCUPANCY (TEMP.)
☒ GRADING PERMIT APPROVAL
☒ PAVING PERMIT APPROVAL
☐ WORK ORDER APPROVAL
☐ OTHER (SPECIFY)

WAS A PRE-DESIGN CONFERENCE ATTENDED:

- ☐ YES
☒ NO
☐ COPY PROVIDED

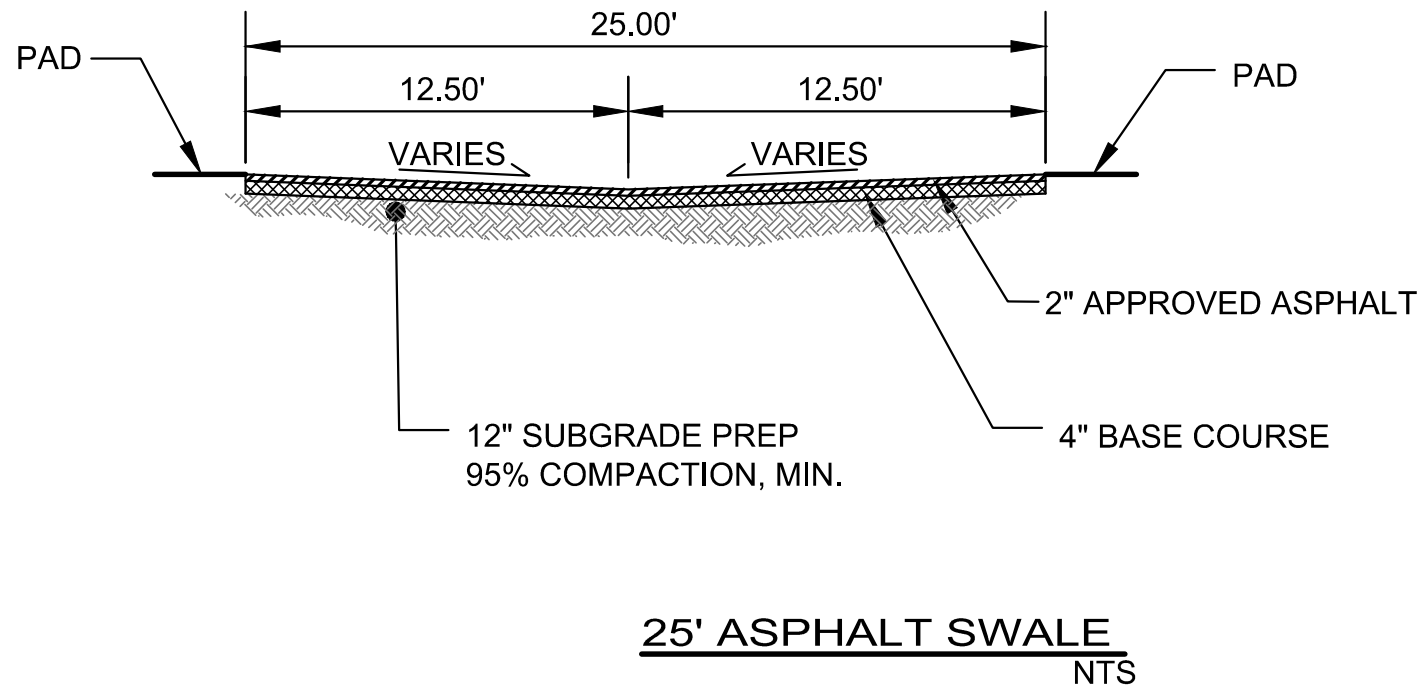
DATE SUBMITTED: April 21, 2016

BY: David B. Thompson

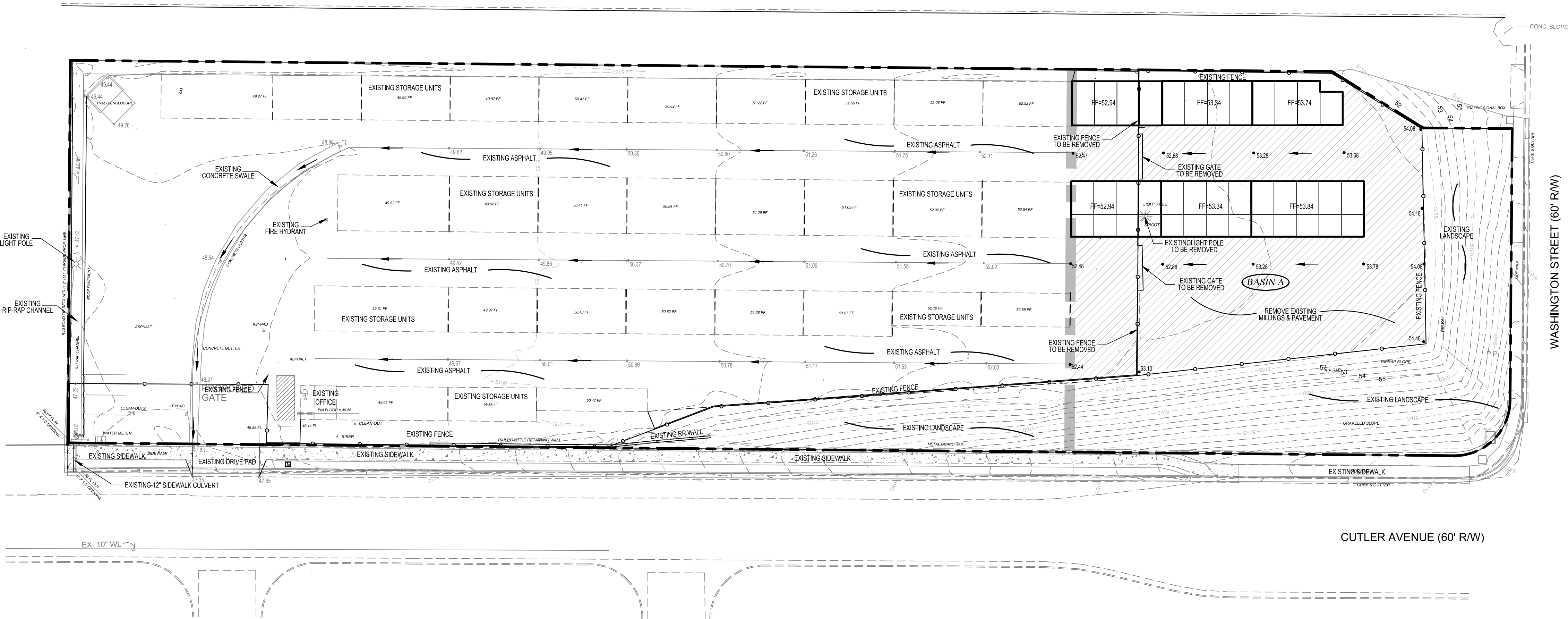
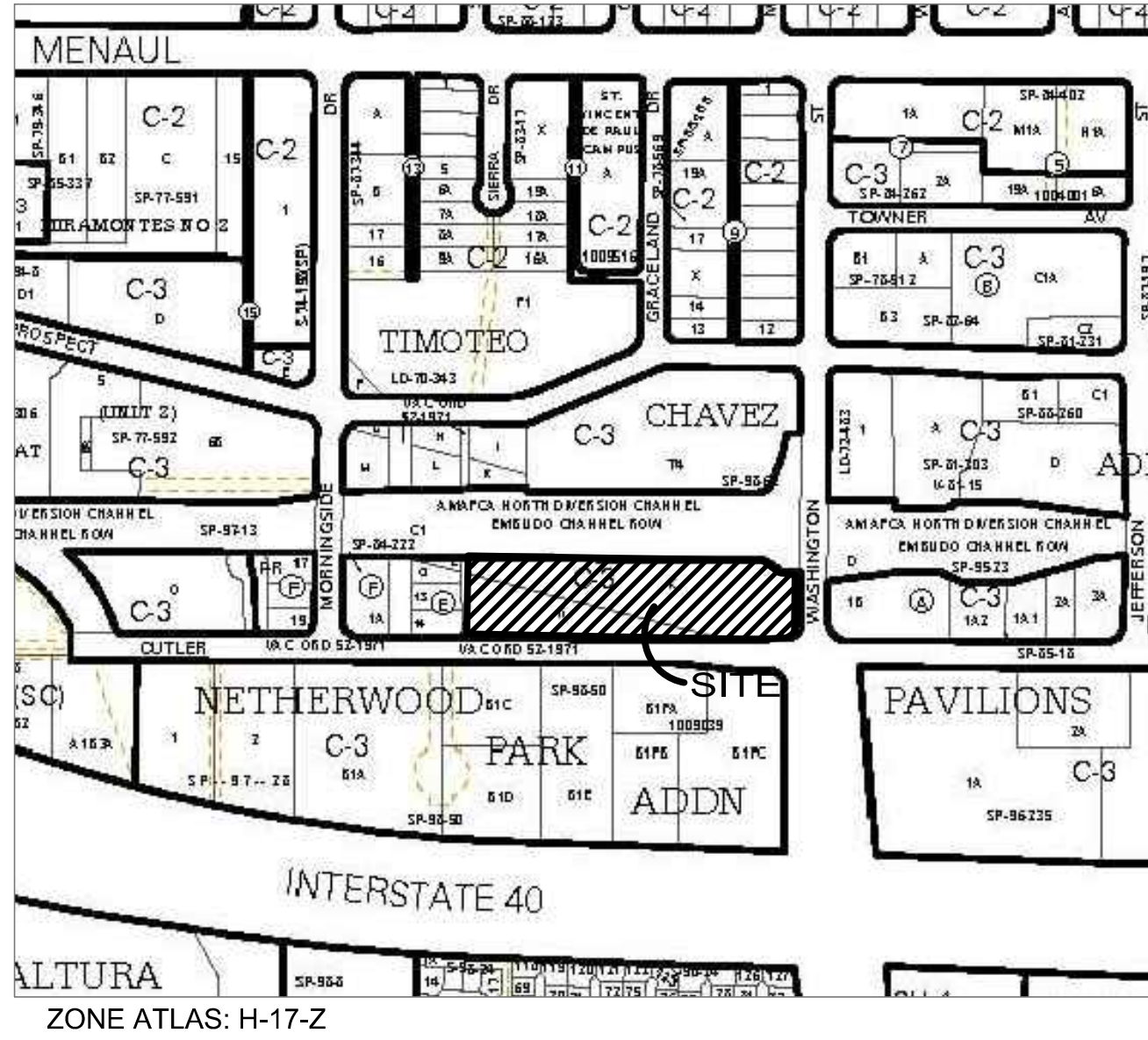


Requests for approvals of Site Development Plans and/or Subdivision Plats shall be accompanied by a drainage submittal. The particular nature, location and scope of the proposed development defines the degree of drainage detail. One or more of the following levels of submittal may be required based on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

1. **Conceptual Grading and Drainage Plan:** Required for approval of Site Development Plans greater than five acres
2. **Drainage Plans:** Required for building permits, grading permits, paving permits, and site plans less than five (5)
3. **Drainage Report:** Required for subdivisions containing more than ten (10) lots or constituting five (5) acres or



| 100-YEAR HYDROLOGIC CALCULATIONS | | | | | | | | | | |
|---|-------------|----------------|-------|-------|-------|-----------------------|----------------------------------|------------------|---------------------|-------------------|
| BASIN # | AREA (acre) | LAND TREATMENT | | | | WEIGHTED E (in) | 100-YEAR PRECIPITATION | | | |
| | | A (%) | B (%) | C (%) | D (%) | | V (6-hr) (acre-ft) | V (6-hr) (cu-ft) | V (24-hr) (acre-ft) | V (24-hr) (cu-ft) |
| EXISTING CONDITIONS | | | | | | | | | | |
| BASIN A | 0.7800 | 0.00 | 0.00 | 46.70 | 53.30 | 1.66 | 0.11 | 4,694 | 0.12 | 5,297 |
| TOTAL RUNOFF | 0.78 | | | | | | 0.11 | 4,694 | 0.12 | 5,297 |
| PROPOSED CONDITIONS | | | | | | | | | | |
| BASIN A | 0.7800 | 0.00 | 0.00 | 46.70 | 53.30 | 1.66 | 0.11 | 4,694 | 0.12 | 5,297 |
| TOTAL RUNOFF | 0.78 | | | | | | 0.11 | 4,694 | 0.12 | 5,297 |
| EXCESS PRECIP. | | 0.53 | 0.78 | 1.13 | 2.12 | E (in) | | | | |
| PEAK DISCHARGE | | 1.56 | 2.28 | 3.14 | 4.7 | Q _{pk} (cfs) | | | | |
| WEIGHTED E (in) = (E _a)(%A) + (E _b)(%B) + (E _c)(%C) + (E _d)(%D) | | | | | | | ZONE = 2 | | | |
| V _{6-HR} (acre-ft) = (WEIGHTED E)(AREA)/12 | | | | | | | P _{6-HR} (in.) = 2.35 | | | |
| V _{24-HR} (acre-ft) = V _{6-HR} + (A _o)(P _{24-HR} - P _{6-HR})/12 | | | | | | | P _{24-HR} (in.) = 2.75 | | | |
| Q (cfs) = (Q _{pk})(A _v) + (Q _{pk})(A _s) + (Q _{pk})(A _c) + (Q _{pk})(A _o) | | | | | | | P _{100-HR} (in.) = 3.95 | | | |



| LEGEND | |
|--------|---|
| | EXIST. MAJOR CONTOURS |
| | EXIST. MINOR CONTOURS |
| | BASIN BOUNDARY |
| | BASIN NUMBER |
| | PROPOSED SWALE |
| | PROPOSED SPOT ELEVATIONS |
| | EXISTING SPOT ELEVATIONS |
| | PROPOSED FLOW DIRECTION |
| | EXISTING CURB & GUTTER |
| | PROPERTY BOUNDARY (THIS IS NOT A BOUNDARY SURVEY) |
| | PROPOSED PAVEMENT SEE ASPHALT SWALE THIS SHEET |

DRAINAGE PLAN:
LEGAL DESCRIPTION: A PORTION OF TRACT K, TIMETEO CHAVEZ ADDITION

SITE AREA: 0.78 ACRES

FLOOD HAZARD STATEMENT: F.E.M.A. FLOODWAY BOUNDARY AND FLOODWAY MAP DATED AUGUST 16, 2012 (PANEL NO. 35001C0351H) INDICATES A FLOOD HAZARD ZONE X WHICH IS AN AREA PROTECTED BY LEVEES FROM THE 1% ANNUAL CHANCE FLOOD. DIRECTLY NORTH OF THE SITE IS THE EMBUDO CHANNEL WHICH INDICATES A FLOOD HAZARD ZONE A.

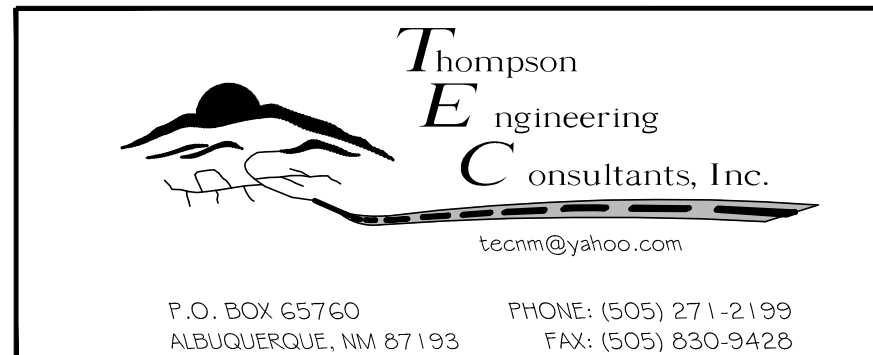
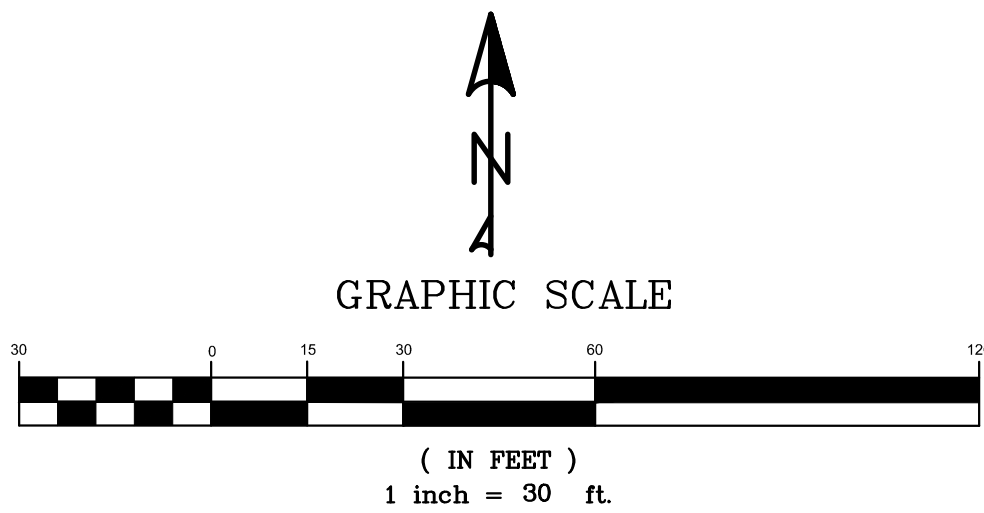
EXISTING DRAINAGE CONDITIONS:

CURRENTLY THE TRACT HAS STORAGE UNITS AND AN OFFICE ON SITE. THE PROPERTY DRAINS FROM EAST TO WEST TO CUTLER AVENUE. THE TRACT CURRENTLY HAS FREE DISCHARGE TO CUTLER AVENUE. THE ENTIRE SITE WAS DEVELOPED IN 2005 AS A STORAGE UNIT COMPLEX. THIS PLAN INVOLVES THE DEVELOPMENT OF THE EASTERN PART OF THE TRACT, WHICH CURRENTLY HAS MILLINGS AND LANDSCAPING. THE EXISTING PEAK RUNOFF UNDER CURRENT CONDITIONS OF THE AREA TO BE DEVELOPED IS 3.10 CFS. THE DRAINAGE ANALYSIS FOR THIS SITE IS IN ACCORDANCE WITH SECTION 22 OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL (DPM), ENTITLED "DRAINAGE, FLOOD CONTROL, AND EROSION CONTROL." THE DESIGN STORM USED FOR BOTH UNDEVELOPED AND DEVELOPED CONDITIONS IS THE 100-YEAR, 6-HOUR STORM EVENT FOR RUNOFF. THE SITE IS LOCATED IN ZONE 2 SO THE 100-YEAR, 6-HOUR STORM EVENT IS 2.35 INCHES. UNDER EXISTING CONDITIONS THE LOTS INCLUDE LAND TREATMENTS C AND D.

DEVELOPED DRAINAGE CONDITIONS:

THIS PROJECT INVOLVES THE ADDITION OF STORAGE UNITS TO THE EAST OF THE EXISTING BUILDINGS. THE AREA TO BE DEVELOPED HAS MILLINGS AND THEREFORE IS TREATED AS LAND TREATMENT D. SO, AFTER THE ADDITION OF STORAGE UNITS AND PAVING THERE WILL BE NO INCREASE IN RUNOFF FROM EXISTING CONDITIONS. THE TOTAL RUNOFF FROM THE AREA AFTER DEVELOPMENT IS 3.10 CFS, WHICH IS THE SAME UNDER EXISTING CONDITIONS.

IN 2005, WHEN THE SITE WAS DEVELOPED, THERE WAS NO REQUIREMENT TO RETAIN THE FIRST FLUSH ON SITE. THE LANDSCAPED AREAS OF THE SITE ARE ALONG THE SLOPING AREAS TO THE EAST AND SOUTH OF THE PAVEMENT. THERE ARE NO AREAS AVAILABLE TO CONTAIN THE FIRST FLUSH IN THE LANDSCAPED AREAS, PLUS, AS STATED EARLIER, SINCE THE AREA TO BE DEVELOPED CURRENTLY HAS MILLINGS, THERE IS NO IMPACT TO DOWNSTREAM FACILITIES WITH THE DEVELOPMENT OF THE ADDITIONAL BUILDINGS AND PAVING. THEREFORE, WE REQUEST A VARIANCE TO CONTAIN THE FIRST FLUSH FOR THIS EXPANSION.



| MIDTOWN SELF STORAGE EXPANSION GRADING AND DRAINAGE PLAN | | | |
|---|------------------------|-------------|-------------|
| DESIGN REVIEW COMMITTEE | CITY ENGINEER APPROVAL | MO./DAY/YR. | MO./DAY/YR. |
| City Project No. XXXX | Zone Map No. H-17-Z | Sheet 1 | Of 1 |