

# CITY OF ALBUQUERQUE



February 10, 2016

Ronald R. Bohannon  
Tierra West, LLC  
5571 Midway Park Pl, NE  
Albuquerque, NM, 87109

Richard J. Berry, Mayor

**RE: Independence Square (Jefferson/Osuna)  
Conceptual Grading and Drainage Plan and Drainage Report  
Engineer's Stamp Date 1-29-2016 (File: E17D076)**

Dear Mr. Bohannon:

Based upon the information provided in your submittal received 1-29-2016, the above-referenced plan is approved conceptually for Site Plan for Subdivision. The following comments, however, will need to be addressed prior to approval for platting action (we understand DRB will upgrade the Minor PP/FP to a Major PP/FP):

1. The Drainage Plan anticipates conveying flows through storm drain lines across lot lines to the detention pond on Lot 4. These facilities will need private drainage easements. It is also unclear if surface drainage easements are needed over the access easements as well, (basin limits are not at the lot lines).
2. Clarify the outlet of the detention pond. It appears that the masterplan of the existing church site anticipates accepting offsite flows as described in the Report. However, is the landscaping strip designed to accept a point discharge from this site?

PO Box 1293

Albuquerque

New Mexico 87103

[www.cabq.gov](http://www.cabq.gov)

The Building Permit for the first phase will be expected to contain additional analysis for the detention pond, pipe capacities, etc, to be reviewed with a future submittal. However, note the following items that should also be addressed, that were noticed in this submittal:

1. The first flush volume required calculation appears to be low (5.99 acres impervious times 0.34"  $\approx$  7392 CF). Clarify the amount of first flush that volume will be needed to be retained on each lot; the report mentions that a portion of the volume will be retained on site, and the rest in the detention pond.
2. As mentioned above, the detention pond will need to be detailed and analyzed to show how it decreases the peak discharge as stated in the Report.

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

Sincerely,

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

S.P. in DRB file

OFFICE COPY  
w/ stamp.



# City of Albuquerque

Planning Department

Development & Building Services Division

## DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 09/2015)

Project Title: Independence Square (Jefferson and Osuna) Building Permit #: \_\_\_\_\_ City Drainage #: E1710076  
DRB#: \_\_\_\_\_ EPC#: 1005517 Work Order#: \_\_\_\_\_  
Legal Description: LT 2-A-1 & 2-A-2 of Tract B Plat of Lots 2-A-1 & 2-A-2  
City Address: \_\_\_\_\_

Engineering Firm: Tierra West, LLC Contact: Vince Carrica  
Address: 5571 Midway Park Place NE Albuquerque NM 87109  
Phone#: 505-858-3100 Fax#: 505-858-1118 E-mail: vcarrica@tierrawestllc.com

Owner: Argus Jefferson Partners, LLC Contact: Jeff Jesionowski  
Address: 4700 Montgomery Blvd NE Suite 200  
Phone#: 505-855-7602 Fax#: 505-837-0633 E-mail: jeff@amcdevelopment.net

Architect: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Other Contact: \_\_\_\_\_ Contact: \_\_\_\_\_  
Address: \_\_\_\_\_  
Phone#: \_\_\_\_\_ Fax#: \_\_\_\_\_ E-mail: \_\_\_\_\_

Check all that Apply:

DEPARTMENT:  
☐ HYDROLOGY/ DRAINAGE  
☐ TRAFFIC/ TRANSPORTATION  
☐ MS4/ EROSION & SEDIMENT CONTROL

TYPE OF SUBMITTAL:  
☐ ENGINEER/ ARCHITECT CERTIFICATION

☐ CONCEPTUAL G & D PLAN  
☐ GRADING PLAN  
☒ DRAINAGE MASTER PLAN  
☒ DRAINAGE REPORT  
☐ CLOMR/LOMR

☐ TRAFFIC CIRCULATION LAYOUT (TCL)  
☐ TRAFFIC IMPACT STUDY (TIS)  
☒ EROSION & SEDIMENT CONTROL PLAN (ESC)

☐ OTHER (SPECIFY) \_\_\_\_\_

IS THIS A RESUBMITTAL?: ☐ Yes ☐ No

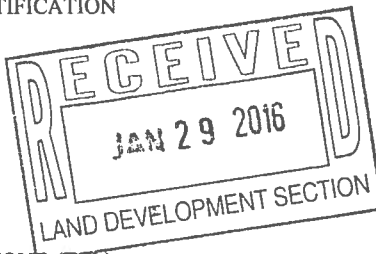
DATE SUBMITTED: 1/29/2016 By: Vince Carrica

### CHECK TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

☐ BUILDING PERMIT APPROVAL  
☐ CERTIFICATE OF OCCUPANCY

☐ PRELIMINARY PLAT APPROVAL  
☒ SITE PLAN FOR SUB'D APPROVAL  
☐ SITE PLAN FOR BLDG. PERMIT APPROVAL  
☐ FINAL PLAT APPROVAL  
☐ SIA/ RELEASE OF FINANCIAL GUARANTEE  
☐ FOUNDATION PERMIT APPROVAL  
☐ GRADING PERMIT APPROVAL  
☐ SO-19 APPROVAL  
☐ PAVING PERMIT APPROVAL  
☐ GRADING/ PAD CERTIFICATION  
☐ WORK ORDER APPROVAL  
☐ CLOMR/LOMR

☐ PRE-DESIGN MEETING  
☐ OTHER (SPECIFY) \_\_\_\_\_



COA STAFF: \_\_\_\_\_ ELECTRONIC SUBMITTAL RECEIVED: \_\_\_\_\_

DRAINAGE REPORT

For

**6701 Jefferson St.  
ALBUQUERQUE, NEW MEXICO**

Prepared by

Tierra West, LLC  
5571 Midway Park Place NE  
Albuquerque, New Mexico 87109

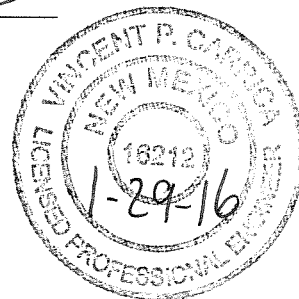
Prepared for

Argus Jefferson Partners, LLC  
Albuquerque, NM

January 28, 2016

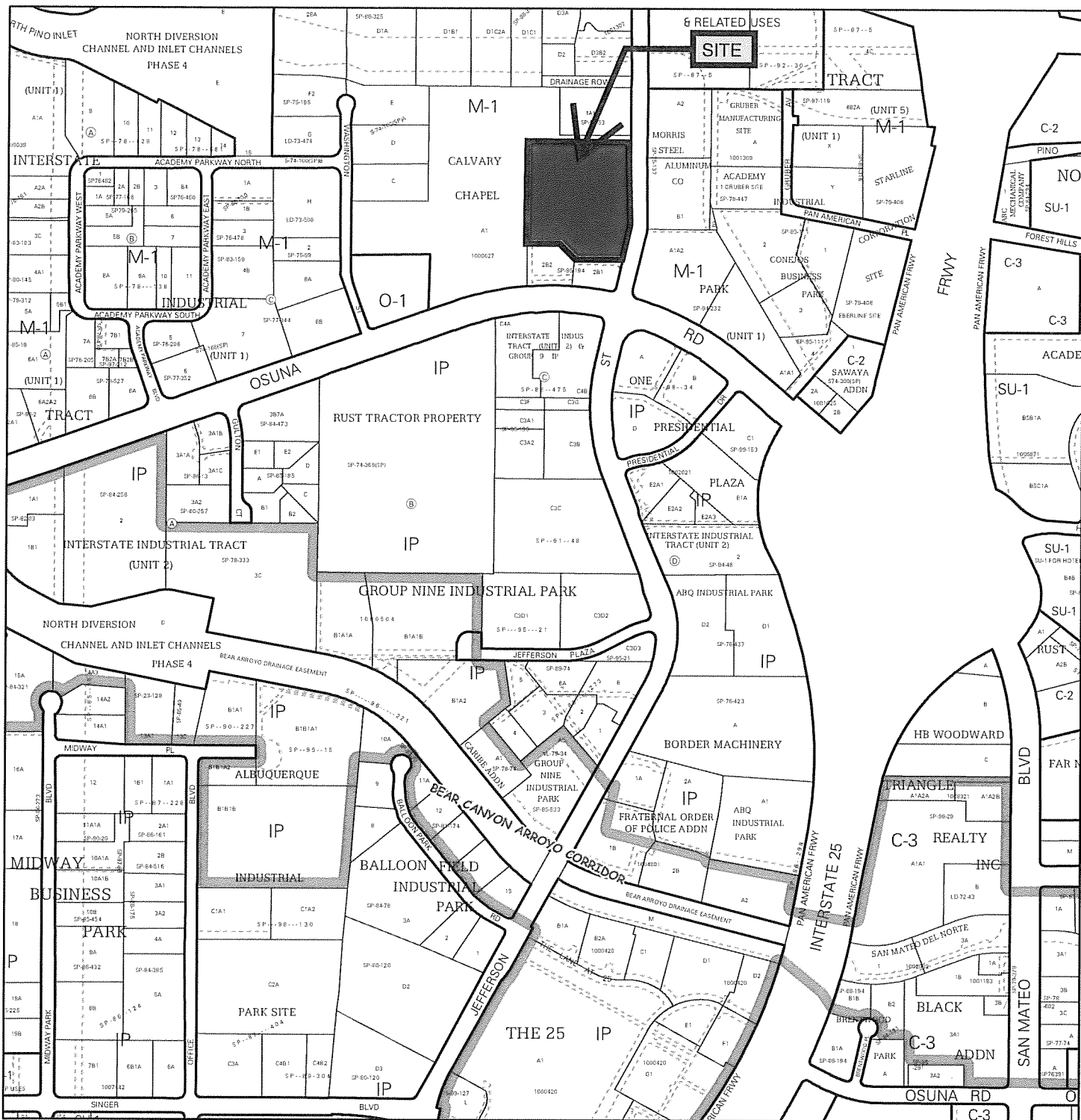


VINCENT P. CARRICA, PE # 16212

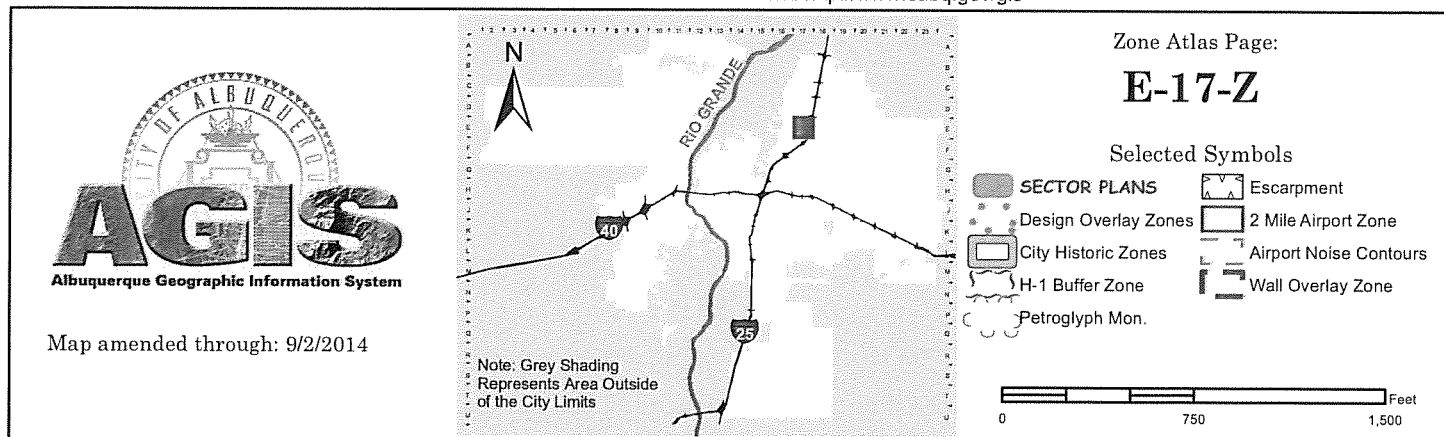


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For more current information and details visit: <http://www.cabq.gov/gis>



## **LOCATION**

The proposed commercial development is located near the northwest quadrant of the Jefferson and Osuna intersection is comprised of approximately 7.14 acres zoned M-1, Manufacturing in Albuquerque, NM.

This report represents a drainage management and grading plan for approval by the City of Albuquerque, for grading and Building Permit submittal.

## **DRAINAGE BASIN DESIGNATION**

The drainage basins for proposed conditions are as indicated on the BASIN MAP included in this report. The site, for proposed redeveloped conditions, is broken into thirteen drainage basins.

## **EXISTING DRAINAGE CONDITIONS**

The site is previously developed with a warehouse facility located in the center of the site. The Warehouse and associated improvements have since been demolished and the site currently sits vacant. Under previously developed and under current conditions runoff from the northern 2/3 of the site free discharges via surface flow to the church parking lot immediately adjacent to the site on the west side and ultimately drains to the South Pino Arroyo. Runoff from the southern portion of the site free discharges via sheet flows to the adjacent commercial property and ultimately to Osuna. No onsite ponding is provided under existing conditions.

## **FIRM MAP**

The site is not located in a designated Flood Hazard Zone per FEMA – (Firm Map 35001C0136G – See Attached Map).

## **DESIGN-CRITERIA**

Tract 1-A-1-B, Envision Tract  
(03/30/94, 840-103)

CALVARY CHAPEL  
PARKING LOT

BASIN #1  
5.339 ACRES  
Q100=5.07 CFS

BASIN #2  
1.820 ACRES  
Q100=1.73 CFS

BASIN #3  
1.997 ACRES  
Q100=5.84 CFS

Tract 2-B-2  
Tract B, Envision Tract  
(08/01/95, 850-308)

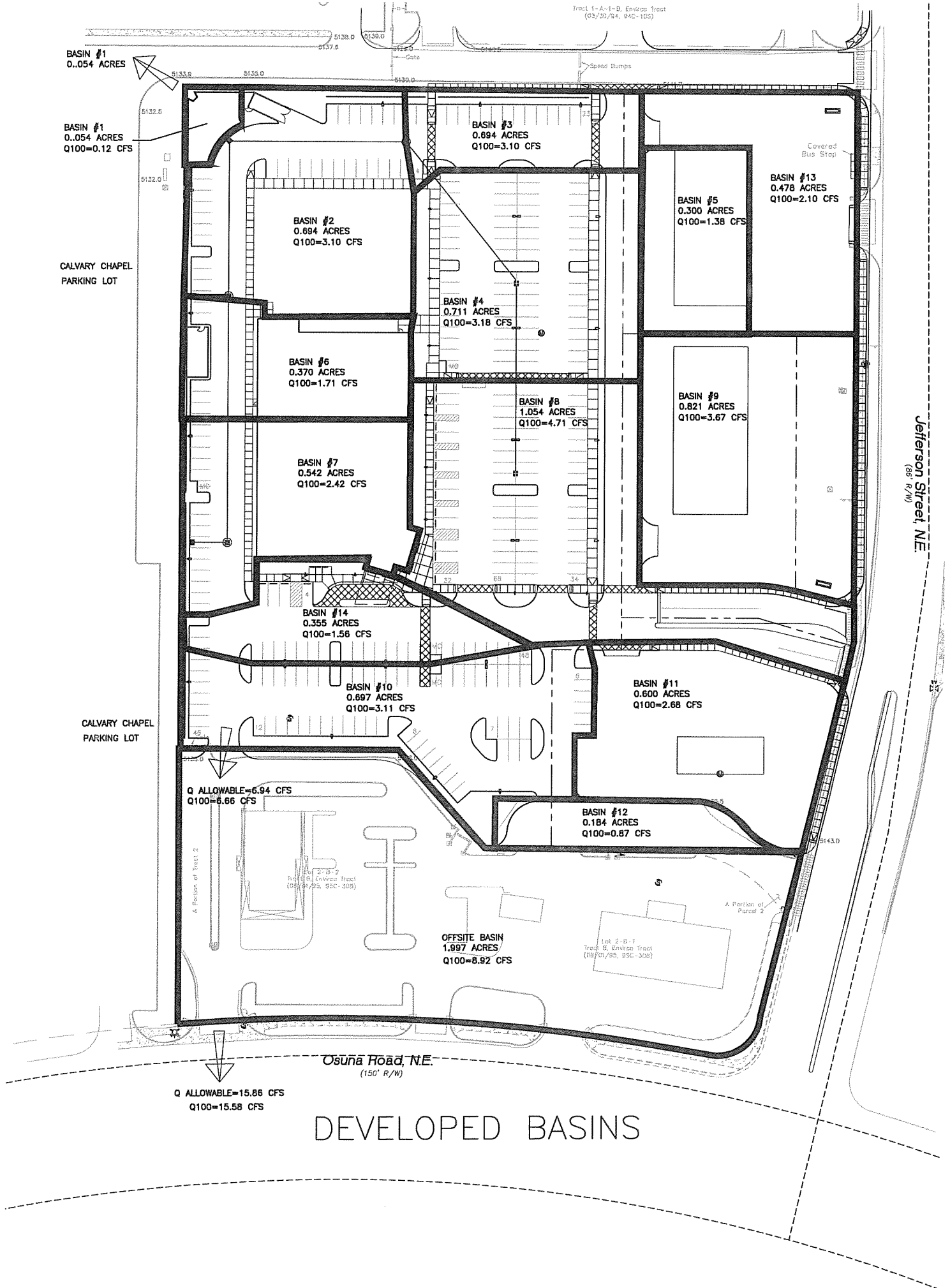
Lot 2-B-1  
Tract B, Envision Tract  
(08/01/95, 850-308)

A Portion of  
Parcel 2

Osuna Road, N.E.  
(150' R/W)

Jefferson Street, N.E.  
(66' R/W)

EXISTING DRAINAGE BASINS







106° 35' 37.35°

MAP SCALE 1" = 500'



NATIONAL FLOOD INSURANCE PROGRAM

PANEL 0136G

**FIRM**  
FLOOD INSURANCE RATE MAP  
BERNALILLO COUNTY,  
NEW MEXICO  
AND INCORPORATED AREAS

PANEL 136 OF 825

(SEE MAP INDEX FOR FIRM PANEL LAYOUT)

CONTAINS:			
COMMUNITY	NUMBER	PANEL	SUFFIX
ALBUQUERQUE CITY OF	350002	0136	G
BERNALILLO COUNTY, UNINCORPORATED AREAS	350001	0136	G
LOS RANCHOS DE ALBUQUERQUE, VILLAGE OF	350123	0136	G

Notice to User: The Map Number shown below should be used when placing map orders. The Community Number shown below should be used on insurance applications for the subject community.



MAP NUMBER  
35001C0136G

MAP REVISED  
SEPTEMBER 26, 2008

Federal Emergency Management Agency

This is an official copy of a portion of the above referenced flood map. It was extracted using F-MIT On-Line. This map does not reflect changes or amendments which may have been made subsequent to the date on the title block. For the latest product information about National Flood Insurance Program flood maps check the FEMA Flood Map Store at [www.msc.fema.gov](http://www.msc.fema.gov)

The drainage plan presented in this report was prepared in accordance with the City of Albuquerque Drainage Ordinances and Chapter 22 of the Development Process Manual DPM. The hydrological analysis is based on the 100-year frequency, 6-hour duration storm, as Represented in Section 22, Part A, Hydrology, of the Development Process Manual. The plan will also include retention of the first flush in on-site landscaped areas and drainage pond bottom.

Rainfall intensities per this report are as follows:

FREQ	ZONE	P60	P360	P1440
100YR	2	2.01	2.35	2.75

### **DEVELOPED-DRAINAGE CONDITIONS**

The site is proposed to be subdivided into four lots with the western most lot developed initially along with grading of rough building pads in the remaining three lots that front Jefferson. No offsite drainage enters the site and the existing drainage patterns will be essentially maintain for runoff from the site onto the adjacent tracts to the west and south where it will be conveyed via surface flow to the South Pino Arroyo and to Osuna Rd, respectively.

The drainage report titled "Revised Grading/Paving Plan for Calvary Chapel Parking Lot & Access Road (E17-D35E) dated 6/14/94 outlined the flows to be accepted from the subject property as well as the commercial property to the south of the subject site. On sheet 2 of 3 under OFFSITE FLOW, the report allows for 22.04 CFS from offsite area No. 1 and 15.86 CFS from offsite area No. 3. These flow rates were calculated based on ultimate developed conditions for the offsite basins as explained in plan verbiage. Offsite area No. 1 is the norther 2/3 of the subject property. Offsite area No 3 is the south 1/3 of the subject property along with the commercial properties immediately to the south, between the subject property and Osuna.

Onsite landscape areas will be used for first flush ponding volumes as well as a depressed area in the proposed detention pond to be located in the northwest corner of the property. The detention pond is required to control the flows from the site to not exceed the 22.04 cfs outlined in the report for the Calvary Chapel Parking Lot drainage

report. The flows from the subject property will match or will be less than the allowable flows (15.86 cfs) to the south.

Refer to enclosed Weighted E computation spreadsheet for existing and developed conditions.

### **SUMMARY**

The proposed grading and drainage plan for the proposed redevelopment of the previously developed and now vacant site provides the grading and drainage elements which are capable of safely passing the 100-year storm and meeting COA DPM requirements. The runoff from the site will be controlled to be at or below allow flow rates as outlined in the Revised Grading/Paving Plan for Calvary Chapel Parking Lot & Access Road (E17-D35E) dated 6/14/94, and onsite retention of the first flush runoff volumes will be provided.

Jefferson & Osuna Commercial

## Weighted E Method

1/25/2016

Zone #2

Undeveloped Basins

Basin	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		100-Year		
				%	(acres)	%	(acres)	%	(acres)	%	(acres)	Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
1	232588.00	5.339	0.00834	0%	0	100%	5.339	0%	0	0%	0.000	0.780	0.347	12.17
2	79276.00	1.820	0.00284	0%	0	100%	1.820	0%	0	0%	0.000	0.780	0.118	4.15
3	86989.00	1.997	0.00312	0%	0	0%	0.000	15%	0.299549	85%	1.697	1.972	0.328	8.92
Total	398853.00	9.156	0.01431										0.793	25.24

### Equations:

Weighted E =  $E_a \cdot A_a + E_b \cdot A_b + E_c \cdot A_c + E_d \cdot A_d / (\text{Total Area})$

Volume = Weighted D \* Total Area

Flow =  $Q_a \cdot A_a + Q_b \cdot A_b + Q_c \cdot A_c + Q_d \cdot A_d$

## Weighted E Method

### Zone #2

#### Developed Basins

100-Year														
Basin	Area (sf)	Area (acres)	Area (sq miles)	Treatment A		Treatment B		Treatment C		Treatment D		Weighted E (ac-ft)	Volume (ac-ft)	Flow cfs
				%	(acres)	%	(acres)	%	(acres)	%	(acres)			
1	2346.00	0.054	0.00008	0%	0	100%	0.054	0%	0	0%	0.000	0.780	0.004	0.12
2	30235.00	0.694	0.00108	0%	0	0%	0.000	15%	0.104115	85%	0.590	1.972	0.114	3.10
3	12477.00	0.286	0.00045	0%	0	0%	0.000	25%	0.071608	75%	0.215	1.873	0.045	1.23
4	30987.00	0.711	0.00111	0%	0	0%	0.000	15%	0.106705	85%	0.605	1.972	0.117	3.18
5	13050.00	0.300	0.00047	0%	0	0%	0.000	7%	0.020971	93%	0.279	2.051	0.051	1.38
6	16131.00	0.370	0.00058	0%	0	0%	0.000	5%	0.018516	95%	0.352	2.071	0.064	1.71
7	23611.00	0.542	0.00085	0%	0	0%	0.000	15%	0.081305	85%	0.461	1.972	0.089	2.42
8	45911.00	1.054	0.00165	0%	0	0%	0.000	15%	0.158096	85%	0.896	1.972	0.173	4.71
9	35751.00	0.821	0.00128	0%	0	0%	0.000	15%	0.12311	85%	0.698	1.972	0.135	3.67
10	30363.00	0.697	0.00109	0%	0	0%	0.000	15%	0.104556	85%	0.592	1.972	0.115	3.11
11	26143.00	0.600	0.00094	0%	0	0%	0.000	20%	0.120032	80%	0.480	1.922	0.096	2.63
12	8029.00	0.184	0.00029	0%	0	0%	0.000	15%	0.027648	85%	0.157	1.972	0.030	0.82
13	20822.00	0.478	0.00075	0%	0	0%	0.000	20%	0.095601	80%	0.382	1.922	0.077	2.10
14	15469.00	0.355	0.00055	0%	0	0%	0.000	20%	0.071024	80%	0.284	1.922	0.057	1.56
Total	311325.00	7.147	0.01117								5.990		1.166	31.74

#### Equations:

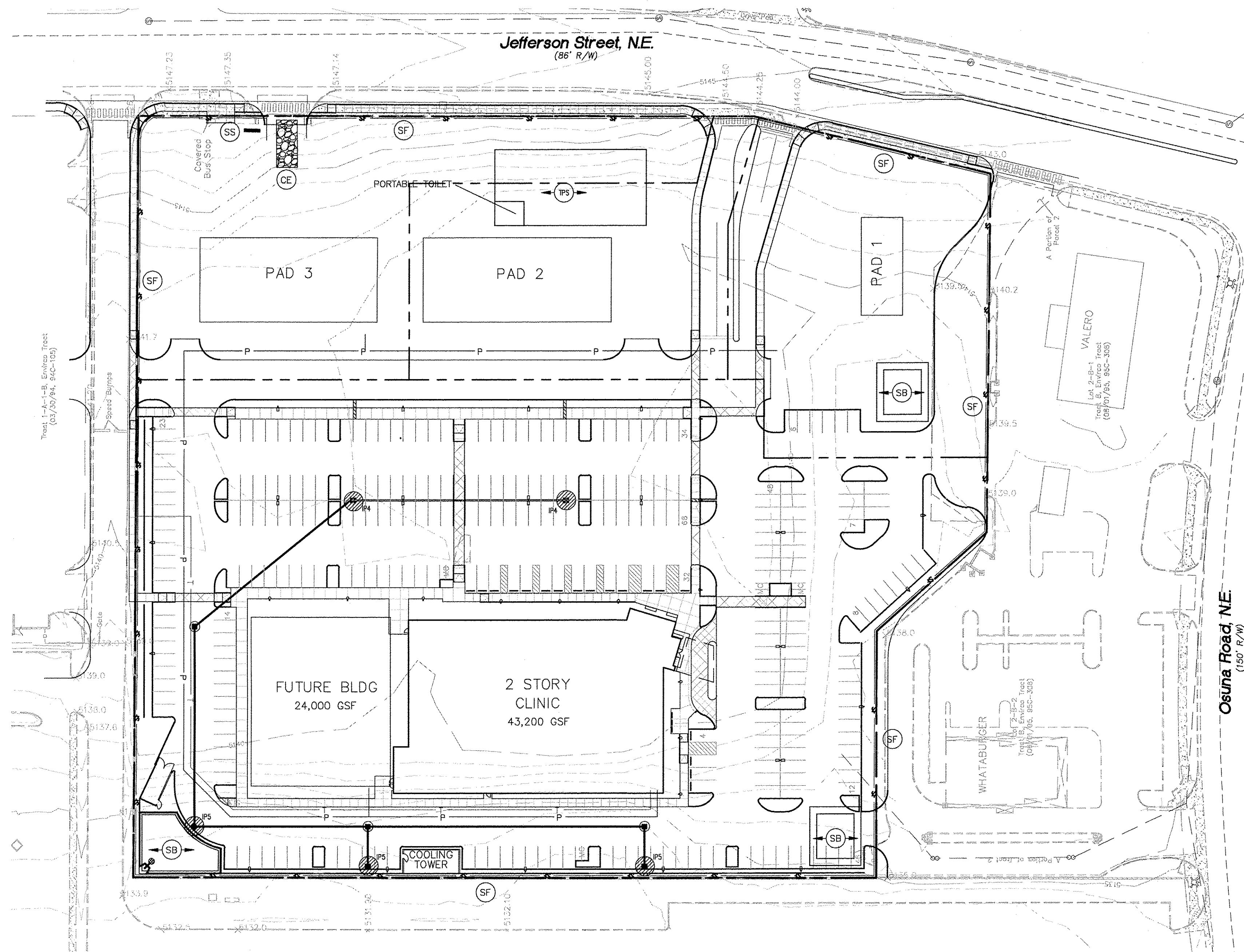
$$\text{Weighted E} = \text{Ea} * \text{Aa} + \text{Eb} * \text{Ab} + \text{Ec} * \text{Ac} + \text{Ed} * \text{Ad} / (\text{Total Area})$$

$$\text{Volume} = \text{Weighted D} * \text{Total Area}$$

$$\text{Flow} = \text{Qa} * \text{Aa} + \text{Qb} * \text{Ab} + \text{Qc} * \text{Ac} + \text{Qd} * \text{Ad}$$

First Flush Volume = 7265 cubic feet



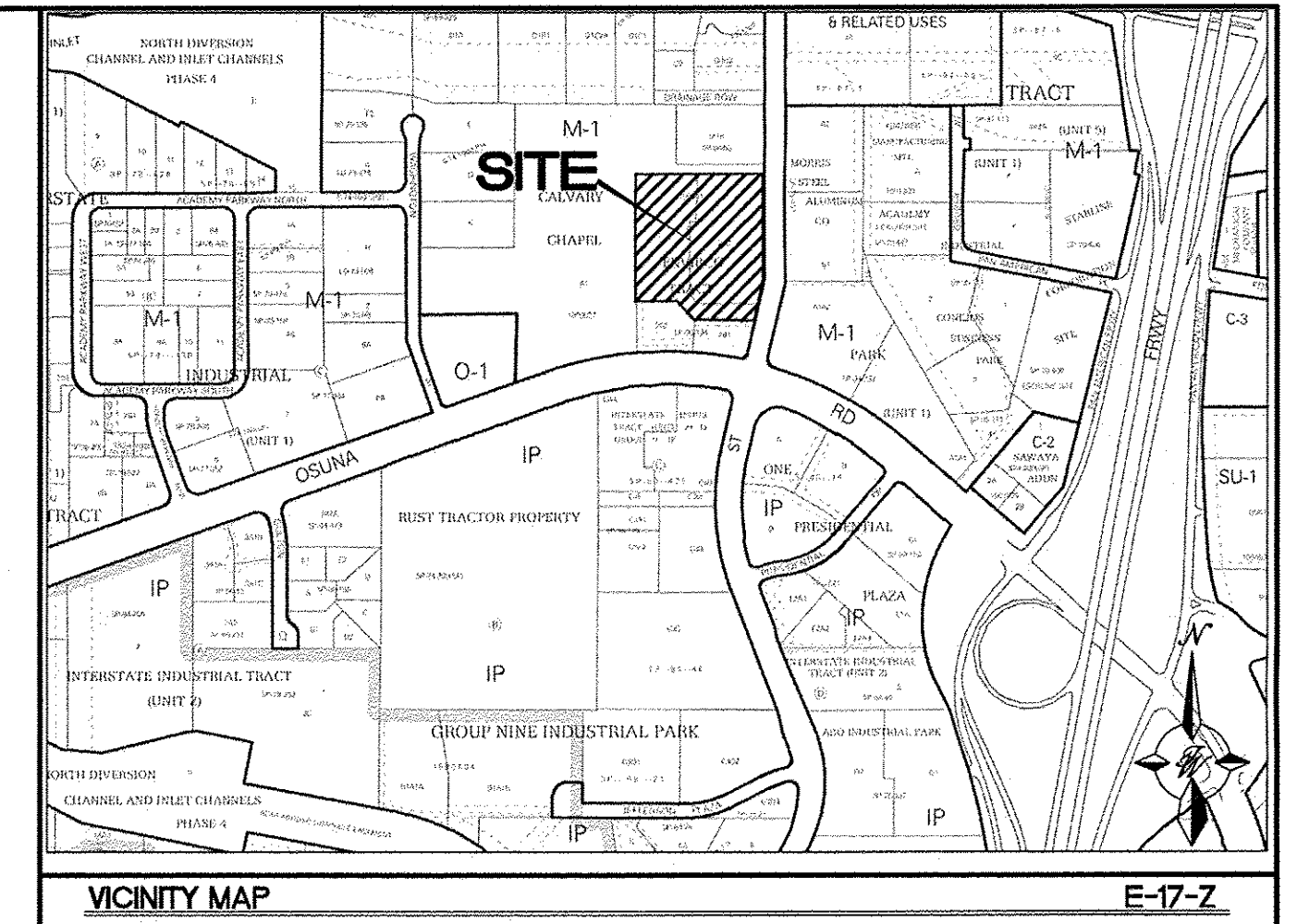


#### GENERAL EROSION NOTES

- THE STORMWATER POLLUTION PREVENTION PLAN IS COMPRISED OF THIS DRAWING, SITE MAP, THE STANDARD DETAILS, THE PLAN NARRATIVE, PLUS THE PERMIT AND ALL SUBSEQUENT REPORTS AND RELATED DOCUMENTS.
- ALL CONTRACTORS AND SUBCONTRACTORS INVOLVED WITH STORM WATER POLLUTION PREVENTION SHALL OBTAIN A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN AND THE STATE OF NEW MEXICO NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM GENERAL PERMIT (NPDES PERMIT) AND BECOME FAMILIAR WITH THEIR CONTENTS.
- CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST OF OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
- BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
- SITE MAP MUST CLEARLY DELINEATE ALL STATE WATERS, PERMITS FOR ANY CONSTRUCTION ACTIVITY IMPACTING STATE WATERS OR REGULATED WETLANDS MUST BE MAINTAINED ON SITE AT ALL TIMES.
- CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE GENERAL PERMIT.
- GENERAL CONTRACTOR SHALL DENOTE ON PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES, OFFICE TRAILERS, AND TOILET FACILITIES.
- ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
- SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
- DUST ON THE SITE SHALL BE CONTROLLED. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION OPERATIONS IS PROHIBITED.
- RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.
- ALL STORM WATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE INITIATED AS SOON AS PRACTICABLE.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS STOPPED FOR AT LEAST 21 DAYS, SHALL BE TEMPORARILY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS FROM THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. PROVIDE ADEQUATE TEMPORARY IRRIGATION FOR GERMINATION.
- DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS PERMANENTLY STOPPED SHALL BE PERMANENTLY SEEDED. THESE AREAS SHALL BE SEEDED NO LATER THAN 14 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY OCCURRING IN THESE AREAS. REFER TO THE GRADING PLAN AND/OR LANDSCAPE PLAN.
- IF THE ACTION OF VEHICLES TRAVELING OVER THE GRAVEL CONSTRUCTION ENTRANCES IS NOT SUFFICIENT TO REMOVE THE MAJORITY OF DIRT OR MUD, THEN THE TIRES MUST BE WASHED BEFORE THE VEHICLES ENTER A PUBLIC ROAD. IF WASHING IS USED, PROVISIONS MUST BE MADE TO INTERCEPT THE WASH WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.
- ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
- CONTRACTORS OR SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED IN THE STORM SEWER DRAINAGE SYSTEMS IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
- ON-SITE & OFFSITE SOIL STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES. STOCKPILE AND BORROW AREA LOCATIONS SHALL BE NOTED ON THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS.
- SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION.
- DUE TO THE GRADE CHANGES DURING THE DEVELOPMENT OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING THE EROSION CONTROL MEASURES (SILT FENCES, STRAW BALES, ETC.) TO PREVENT EROSION.
- ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH WORKING DAY. THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR BITUMINOUS PAVING FOR ROAD CONSTRUCTION.

#### SEQUENCE OF CONSTRUCTION

- INSTALL STABILIZED CONSTRUCTION ENTRANCES.
- CONSTRUCT THE SILT FENCES ON THE SITE.
- PREPARE TEMPORARY PARKING AND STORAGE AREA.
- CONSTRUCT THE SEDIMENTATION AND SEDIMENT TRAP BASINS.
- PERFORM DEMOLITION ON THE SITE.
- UNDERCUT GRADE AS REQUIRED.
- START CONSTRUCTION OF BUILDING PAD AND STRUCTURES.
- FINISH GRADING THE SITE. RAISE GRADES TO INDUCE DRAINAGE TOWARD TEMPORARY SEDIMENT BASINS.



VICINITY MAP

E-17-Z

#### PROPOSED

- BOUNDARY LINE
- RIGHT OF WAY LINE
- LIMITS OF DISTURBANCE

#### EROSION DETAILS

- CE TEMPORARY STONE CONSTRUCTION EXIT
- SF TEMPORARY SILT FENCE
- IP4 SILT FENCE INLET PROTECTION
- IP5 GRAVEL CURB INLET SEDIMENT FILTER
- SB TEMPORARY SEDIMENT BASIN
- SS SWPPP INFORMATION SIGN

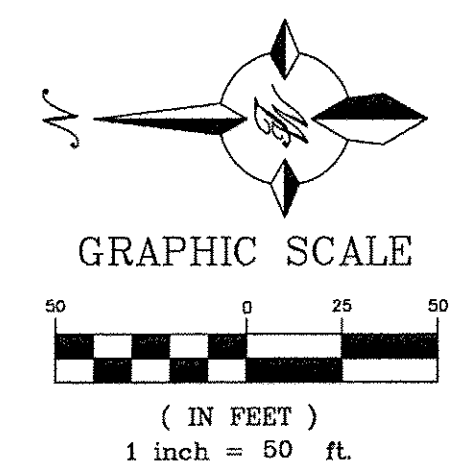
#### EROSION NOTES

- TPS TEMPORARY PARKING AND STORAGE

#### MAINTENANCE

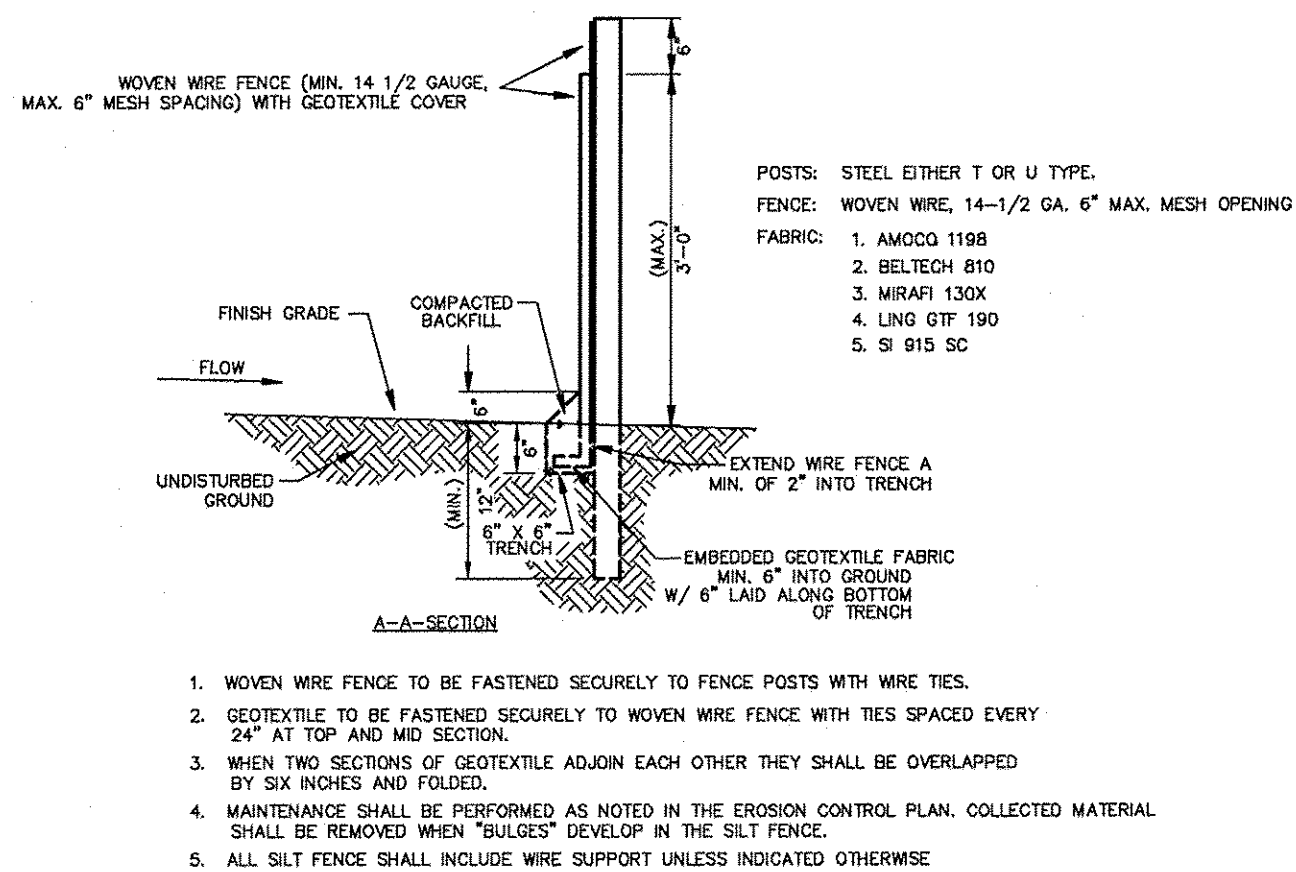
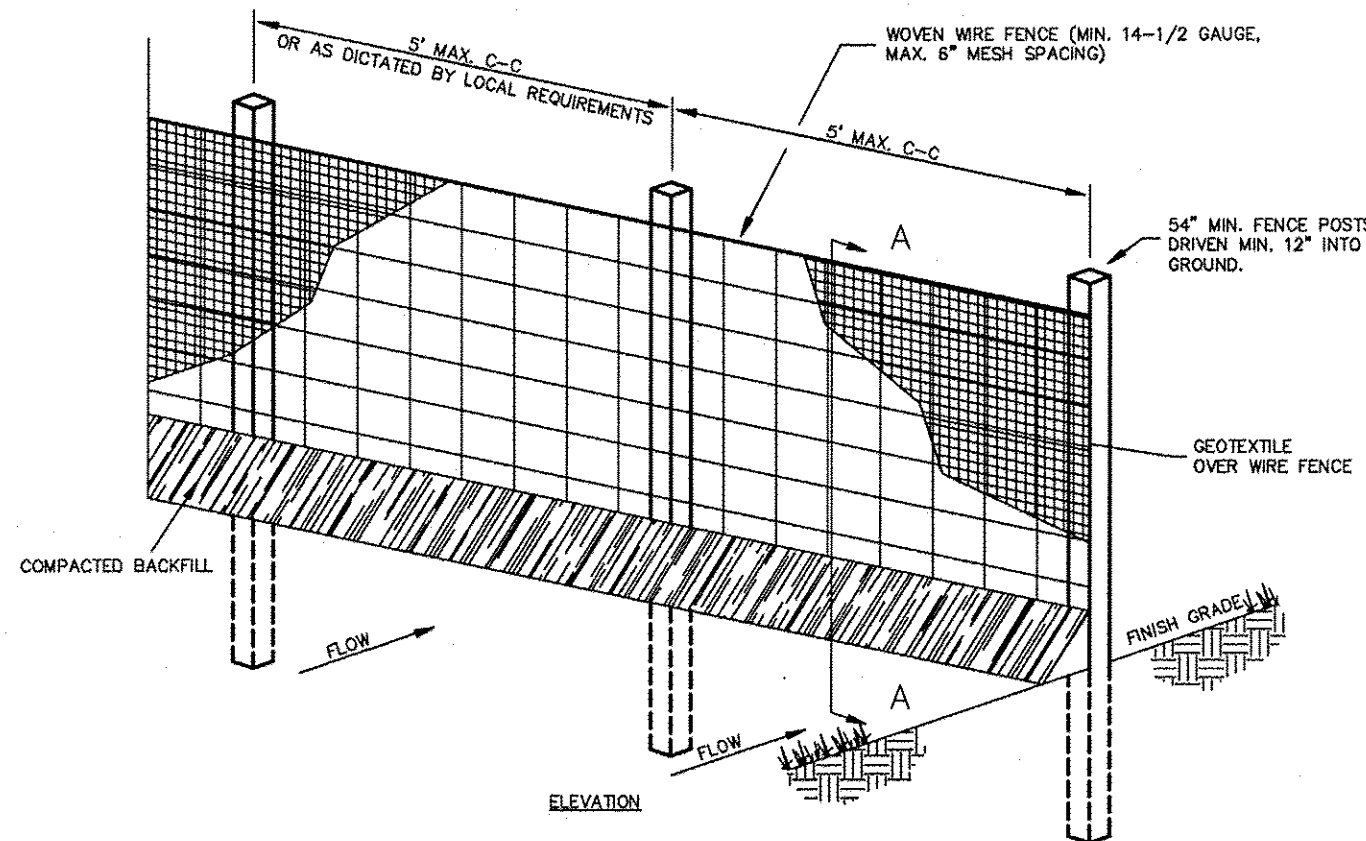
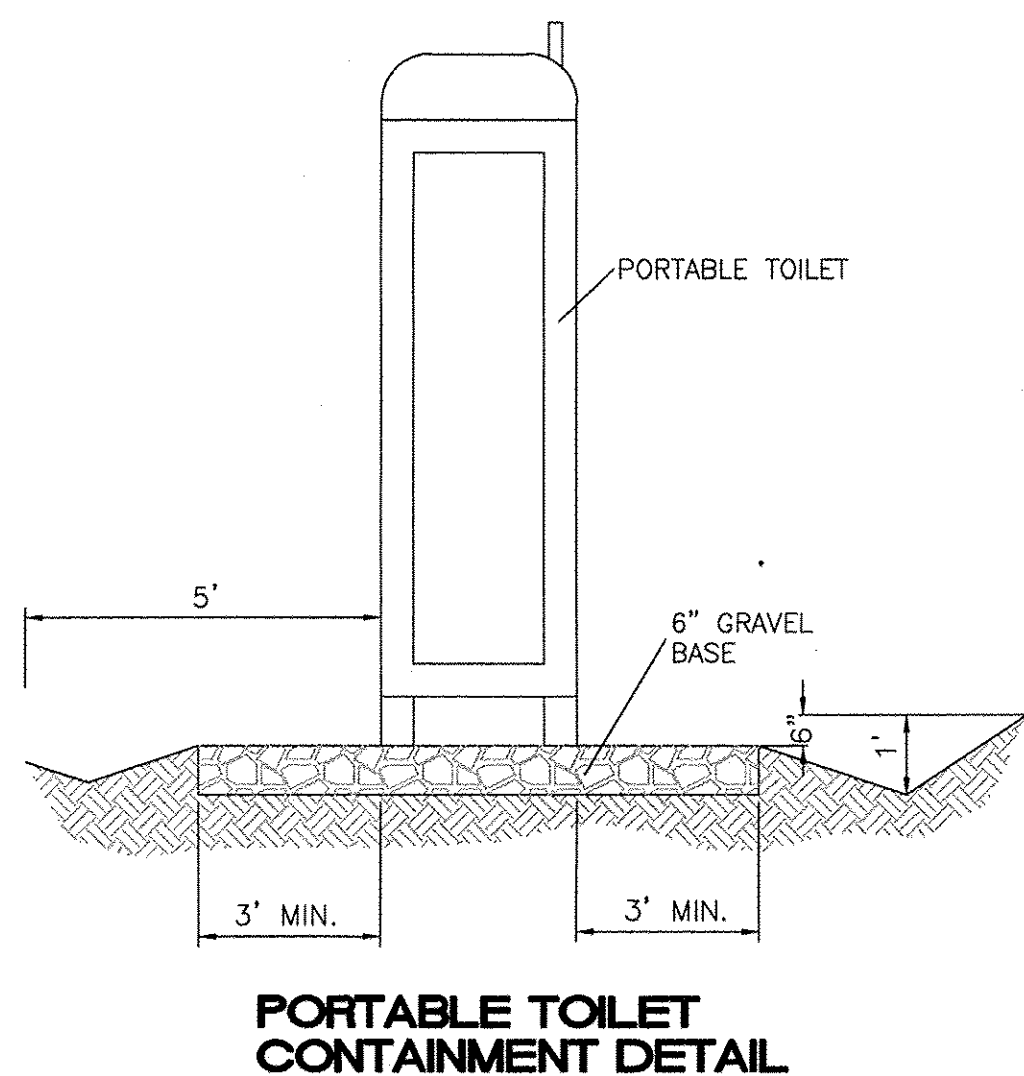
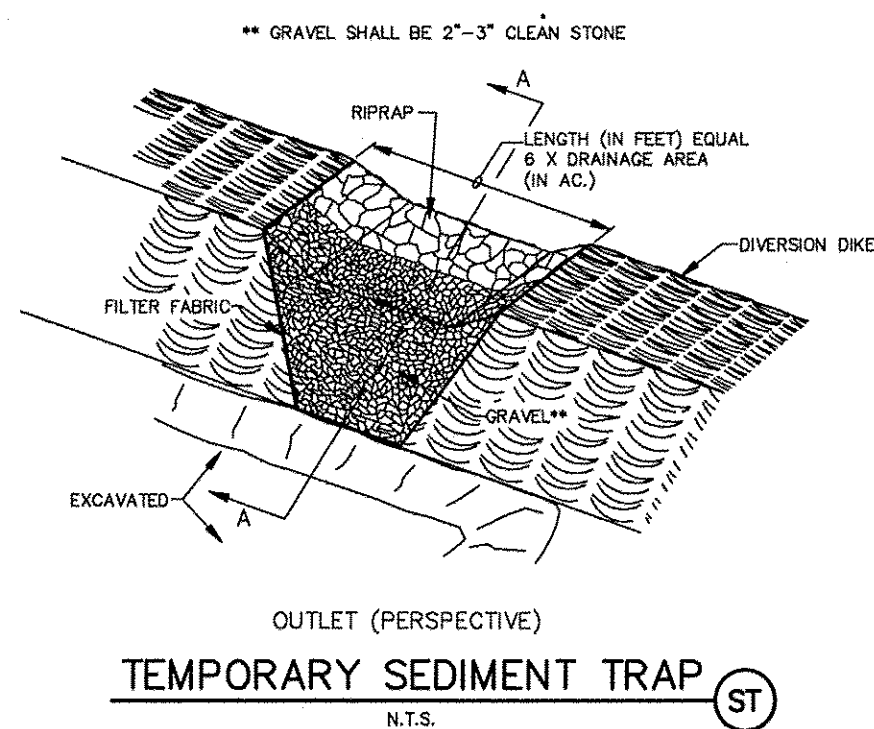
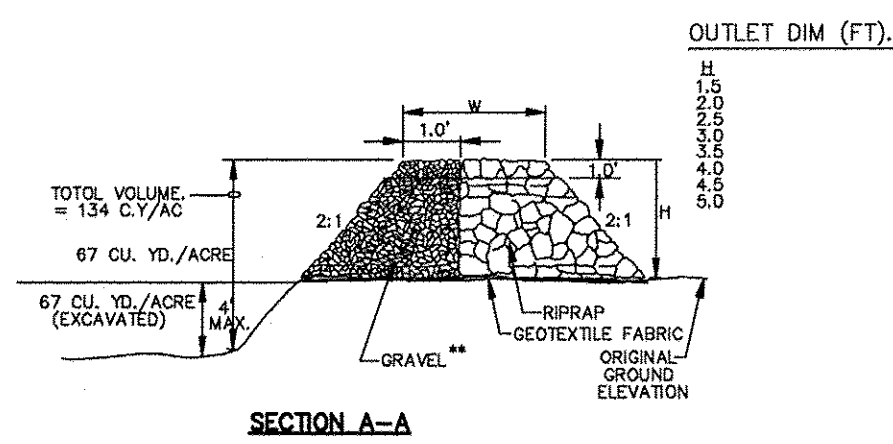
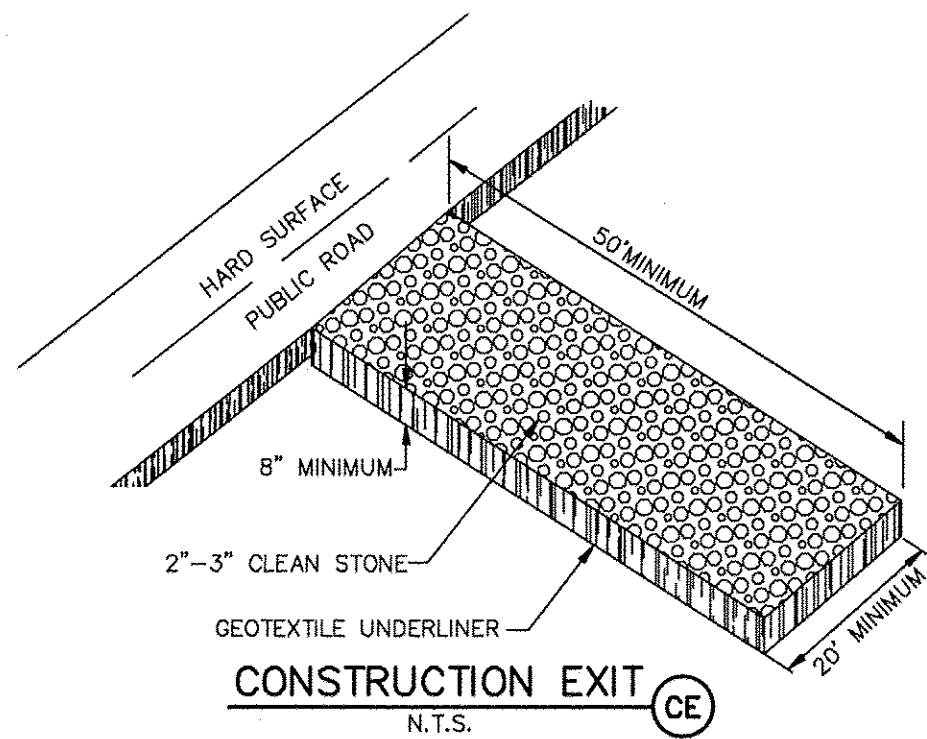
ALL MEASURES STATED ON THIS EROSION AND SEDIMENT CONTROL PLAN, AND IN THE STORM WATER POLLUTION PREVENTION PLAN, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON AT LEAST ONCE EVERY FOURTEEN CALENDAR DAYS AND WITHIN 24 HOURS OF THE END OF A 0.5" RAINFALL EVENT, AND CLEANED AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:

- INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
- ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
- SILT FENCES SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE SILT FENCES WHEN IT REACHES ONE-HALF THE HEIGHT OF THE SILT FENCE.
- THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
- THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
- OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

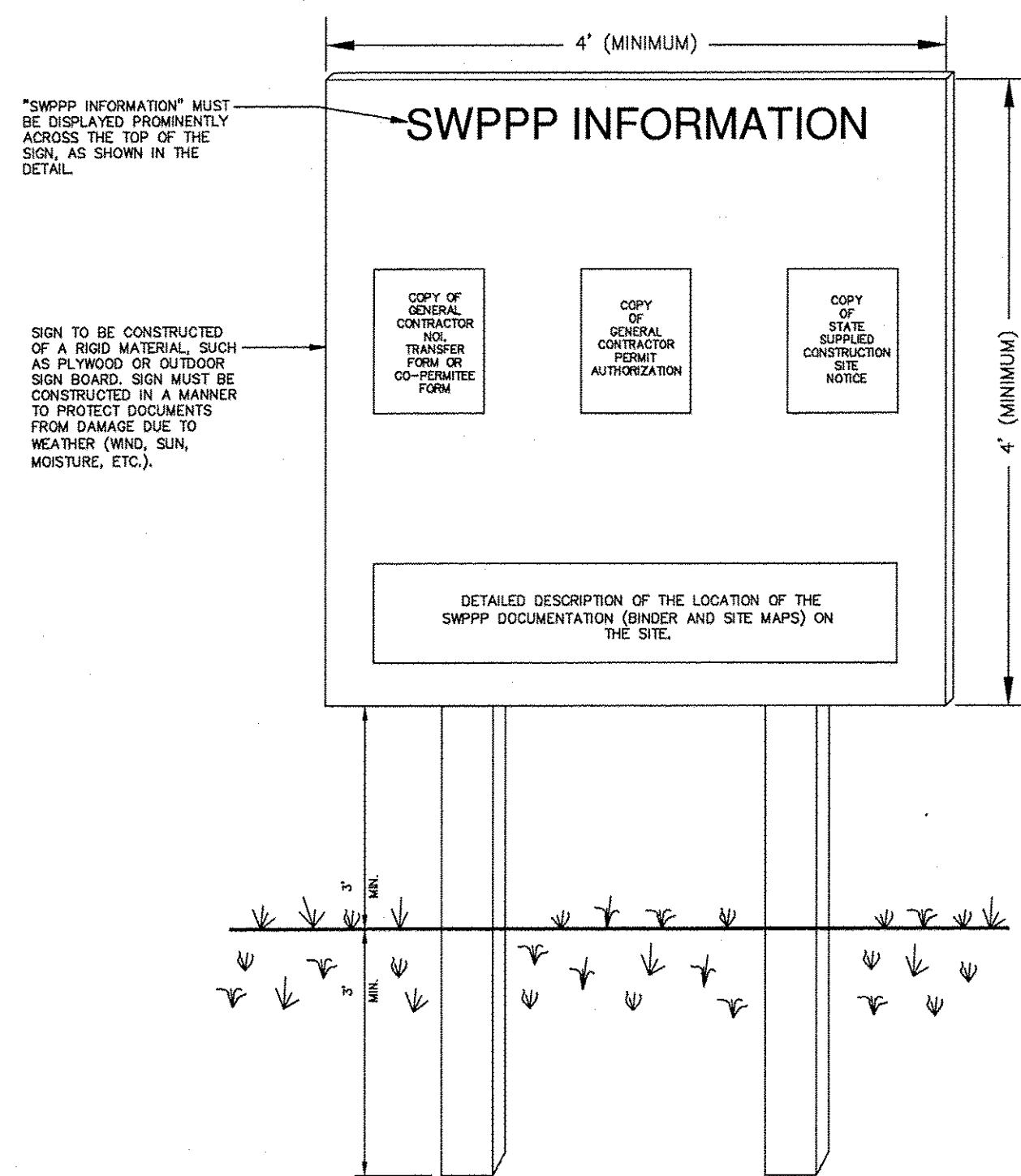


<div>ENGINEER'S SEAL</div> <div></div> <div>VINCENT P. CARRICA P.E. #16212</div>	6701 JEFFERSON ST ALBUQUERQUE, NM	DRAWN BY pm
<div>TIERRA WEST, LLC</div> <div>5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com</div>	EROSION CONTROL AND SEDIMENTATION PLAN	DATE 1-28-16
		DRAWING 2014065-GR
		SHEET # <b>SW-1</b>
		JOB # 2014065



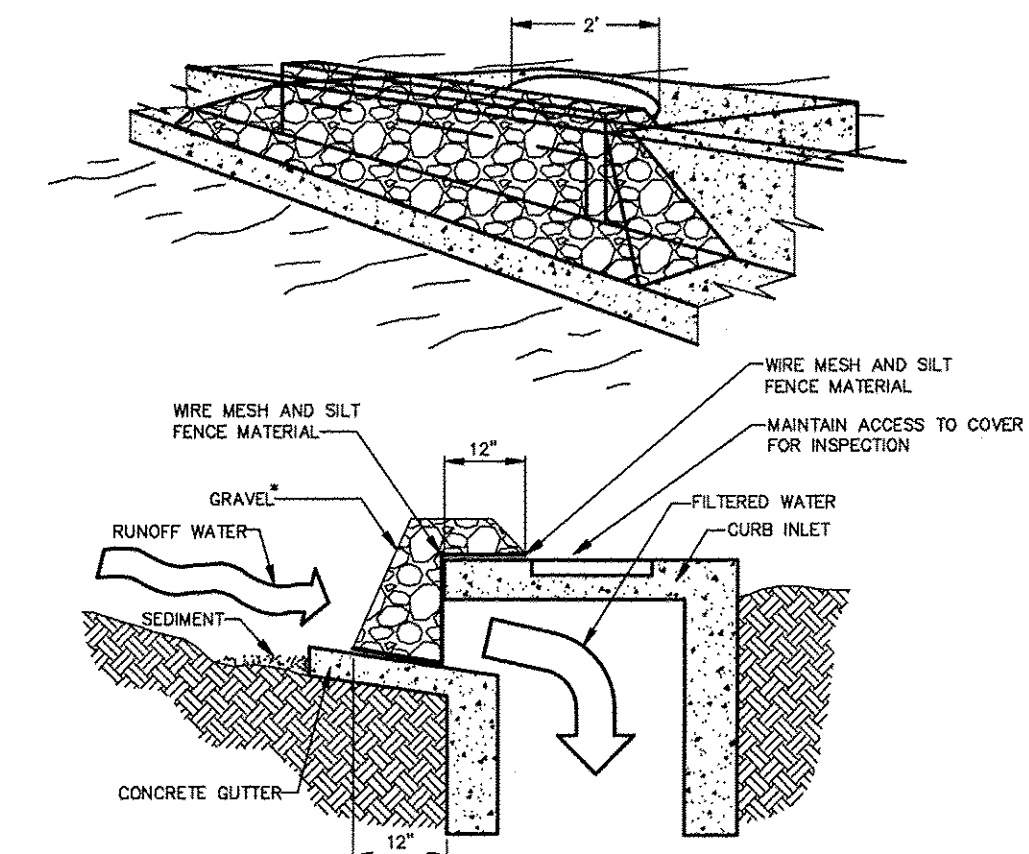


**SEDIMENTATION/SILT FENCE WITH WIRE SUPPORT**  
N.T.S.



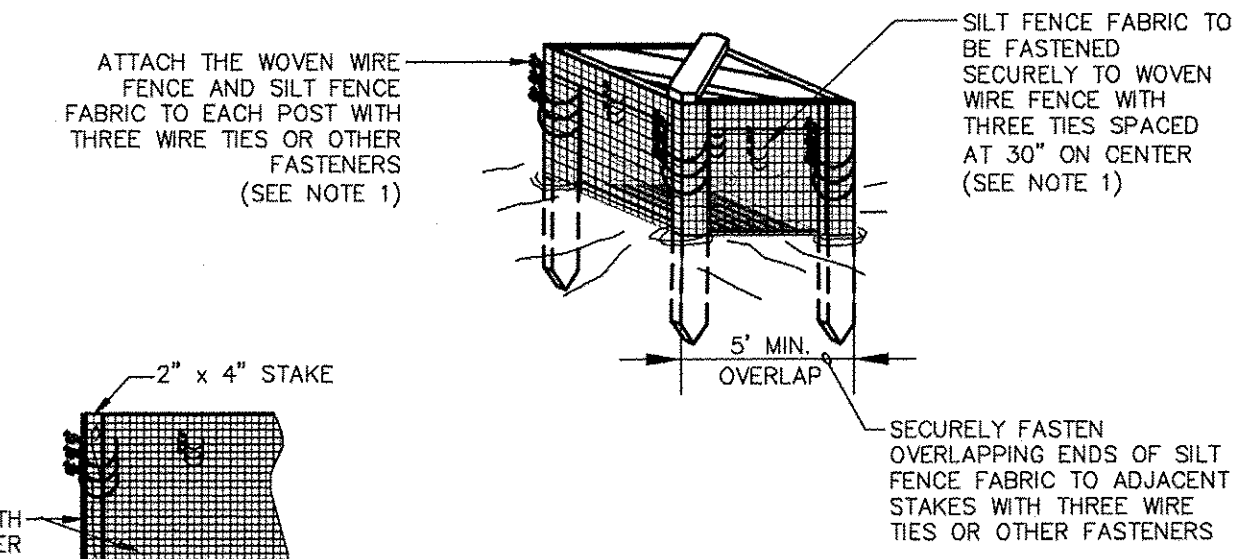
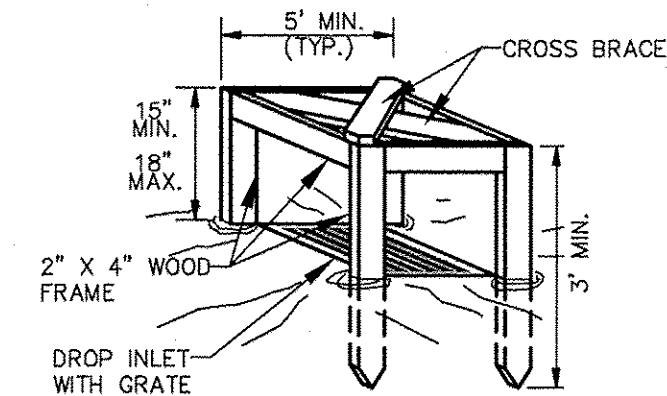
- 1) THE SWPPP INFORMATION SIGN MUST BE LOCATED NEAR THE CONSTRUCTION EXIT OF THE SITE, SUCH THAT IT IS ACCESSIBLE AND VIEWABLE BY THE GENERAL PUBLIC, BUT NOT OBSTRUCTING VIEWS AS TO CAUSE A SAFETY HAZARD.
- 2) ALL POSTED DOCUMENTS MUST BE MAINTAINED IN A CLEARLY READABLE CONDITION AT ALL TIMES THROUGHOUT CONSTRUCTION AND UNTIL THE NOTICE-OF-TERMINATION (NOT) IS FILED FOR THE PERMIT.
- 3) CONTRACTOR SHALL POST OTHER STORM WATER AND/OR EROSION AND SEDIMENT CONTROL RELATED PERMITS ON THE SIGN AS REQUIRED BY THE GOVERNING AGENCY.
- 4) SIGN SHALL BE LOCATED OUTSIDE OF PUBLIC RIGHT-OF-WAY AND EASEMENTS UNLESS APPROVED BY THE GOVERNING AGENCY.
- 5) CONTRACTOR IS RESPONSIBLE FOR ENSURING STABILITY OF THE SWPPP INFORMATION SIGN.

**SWPPP INFORMATION SIGN**  
N.T.S.



THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.  
\* GRAVEL SHALL BE 3/4"-2" ANGULAR CLEAN STONE

**GRAVEL CURB INLET SEDIMENT FILTER**  
N.T.S.



1. INLET PROTECTION DEVICES MUST BE INSPECTED FOR SEDIMENT ACCUMULATION WITHIN THE CATCH BASIN (IF USING INSERT-TYPE DEVICE) OR UPGRADIENT OF THE INLET.
2. REMOVAL OF SEDIMENT ACCUMULATED IN OR ADJACENT TO A STORM DRAIN INLET MUST BEGIN IMMEDIATELY UPON DISCOVERY, WITH COMPLETION OF THE ACTIVITY OCCURRING NO LATER THAN THE END OF THE FOLLOWING BUSINESS DAY.
3. INLET PROTECTION DEVICES SHALL BE INSPECTED FOR UNINTENDED BYPASS OR IMPROPER FLOW-RATES THAT MAY CAUSE DOWNSTREAM FLOODING.
4. CONTACT THE DEC FOR ALTERNATE INLET PROTECTION IF THE DESIGNED PROTECTION MAY IMPACT DOWNSTREAM BMPs, ADJACENT SLOPES, ETC., DUE TO PONDING ISSUES. ENSURE THAT NO UNDERMINING OF INLET PROTECTION DEVICES HAS OCCURRED.
5. INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING OR DETERIORATION.

**SILT FENCE INLET PROTECTION**  
N.T.S.

<p>ENGINEER'S SEAL</p> <p>VINCENT P. CARRICA P.E. #16212</p>	<p>6701 JEFFERSON ST ALBUQUERQUE, NM</p> <p>EROSION CONTROL DETAILS</p> <p>TERRA WEST, LLC 5571 MIDWAY PARK PL NE ALBUQUERQUE, NEW MEXICO 87109 (505) 858-3100 www.tierrawestllc.com</p>	<p>DRAWN BY pm</p> <p>DATE 1-28-16</p> <p>DRAWING 2014065-GR</p> <p>SHEET # SW-2</p> <p>JOB # 2014065</p>
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