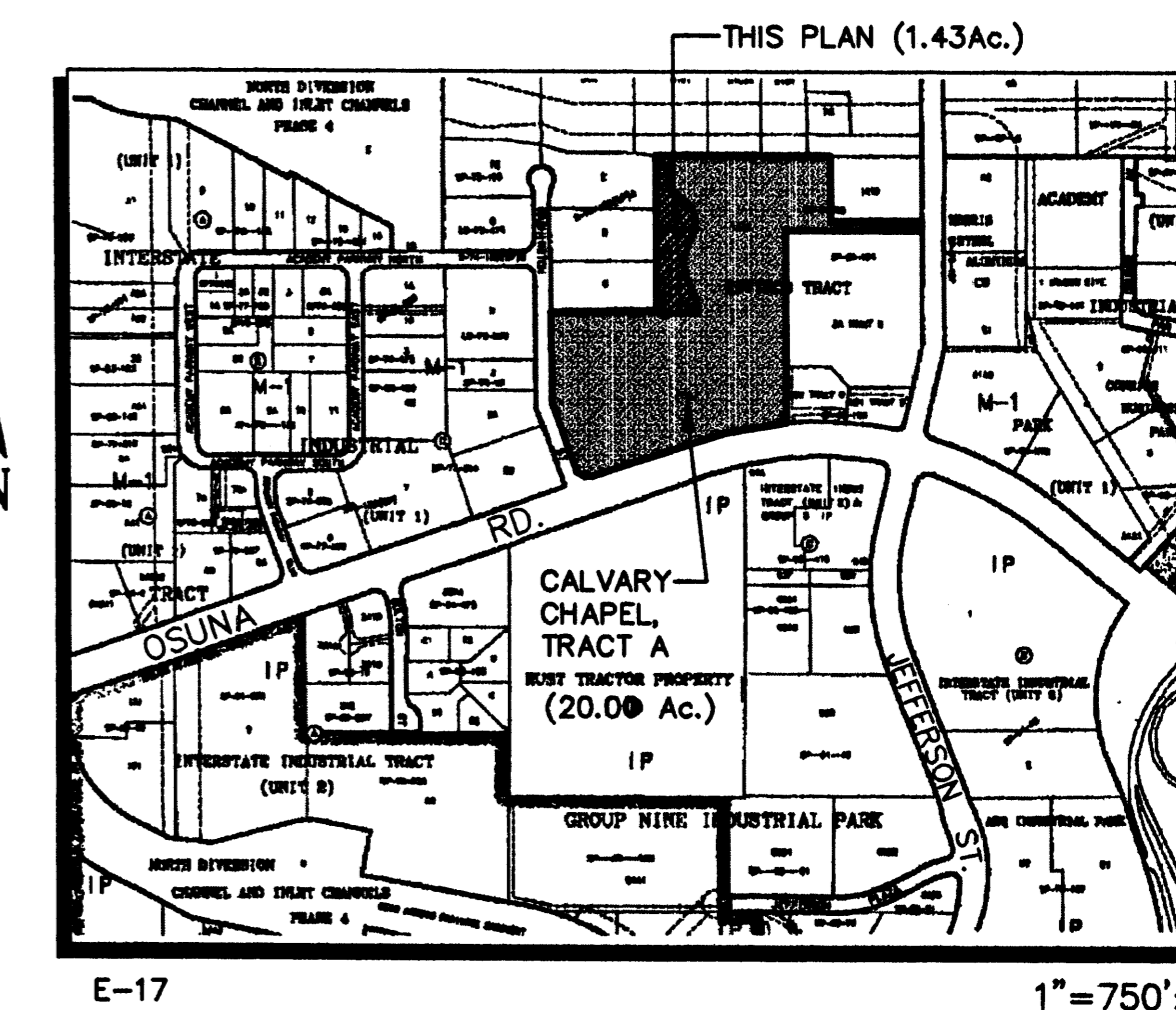


# LEGEND

- 19 EXISTING CONTOURS
- 18.3 PROPOSED CONTOURS
- 18.3 FINISH SPOT ELEVATION
- (23.76) EXISTING ELEVATION
- [18.1] INVERT ELEVATION
- RETENTION POND
- ..... DRAINAGE BASIN BOUNDARY
- 10 DRAINAGE BASIN NUMBER



VICINITY MAP

## DRAINAGE INFORMATION

**Legal Description:**  
Calvary Chapel, Tract A, filed 8/3/2000

**Engineer:**  
Isaacson & Arfman, P.A.  
128 Monroe Street NE  
Albuquerque, NM 87108

**Area:** 20.00 Acres (Tract A), 1.43 acres this plan.

**Flood Hazard:**  
The site is not subject to any flood hazard areas according to Map 35001C0136 of the Flood Rate Insurance Maps.

**Offsite Flows:**  
There are no offsite flows entering this portion of the property.

**Existing Conditions:**  
The existing site is presently a graded and vacant portion of the Calvary Chapel property. The site has an existing retention pond near the center. At the north end there is an existing concrete spillway structure which overflows into the adjacent, concrete-lined Pino Arroyo Channel. Details of these features are given in the Calvary Chapel Parking Lot Grading and Drainage Plan (E-17/D-35).

**Proposed Development:**  
The site is proposed to be developed into a private park used for Church activities. The "floor" of the park will be turf; the berms and banks will be planted with trees, shrubs and ground cover with 3 inches of crusher fines mulch.

**Proposed Drainage Management Plan:**  
The site will be graded with a shallow storm water retention pond located near the northerly end of the site. Runoff from the park will collect in the pond. The pond is designed to store runoff from two 100-year, 6-hour storms. The existing concrete overflow structure at the north end of the site will serve as a spillway to the Pino Channel for the site in the event the retention pond overflows. The plan is in conformance with the approved Calvary Chapel Master Drainage Plan, Phase 4, Basin 103 (E17/D35).

**Existing Site Runoff (BASIN 103):**  
Precipitation Zone 2  
At = Ac = 1.43 ac  
Q100 = 1.43 x 3.14 = 4.5 cfs

**Proposed Site Runoff:**  
At = 1.43 ac, Ab = 0.88 ac, Ac = 0.53 ac, Ad = 0.02 ac  
Q100 = (0.88 x 2.28) + (0.53 x 3.14) + (0.02 x 4.70) = 3.8 cfs

**Retention Pond Calculations:**  
Runoff Volume:  
AT = 1.43 ac, AB = 0.88 ac, AC = 0.53 ac, AD = 0.02 ac.  
V100 = (0.88 x .78) + (0.53 x 1.13) + (0.02 x 2.12) x 43,560 = 4820 cu. ft.  
2V100 = 9,640 cu. ft.

**Pond Volume:**

Elevation	Area (sf)	Avg. Area (sf)	Volume (cu. ft.)
5116.5	0	-	-
5117	3442	1721	860
5118	18,900	11,170	12,030
ELEV. 5117.8(±)			9640 cu. ft.

## EROSION CONTROL

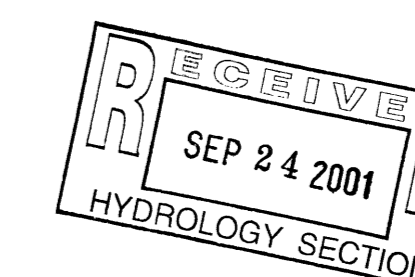
- THE CONTRACTOR SHALL SECURE "TOPSOIL DISTURBANCE PERMIT" FROM CITY ENVIRONMENTAL HEALTH DEPARTMENT PRIOR TO BEGINNING CONSTRUCTION. AN EXCAVATION PERMIT IS REQUIRED FOR ANY WORK WITHIN PUBLIC RIGHT-OF-WAY.
- THE CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR ONTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY CONSTRUCTING EROSION CONTROL BERMS AT THE PROPERTY LINES AND WETTING THE SOIL TO KEEP IT FROM BLOWING.

## GRADING NOTES

- ALL TRASH, DEBRIS, & SURFACE VEGETATION SHALL BE CLEARED AND LEGALLY DISPOSED OFFSITE.
- GRADES SHOWN ARE FINISH LANDSCAPE GRADES. FINISH EARTHWORK GRADES SHALL BE 2" LOWER IN TURF AREAS AND 3" LOWER IN PLANTING AREAS.
- EXCAVATION IS UNCLASSIFIED AND INCLUDES EXCAVATION TO SUBGRADE ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIALS ENCOUNTERED.
- UNIFORMLY GRADE AREAS WITHIN LIMITS OF GRADING AS SHOWN ON PLANS. SMOOTH FINISHED SURFACE WITHIN SPECIFIED TOLERANCE, COMPACT WITH UNIFORM SLOPES BETWEEN POINTS WHERE ELEVATIONS ARE INDICATED.
- MAXIMUM SLOPES SHALL BE 3:1; MINIMUM SLOPES SHALL BE 0.5% FOR GRADED AREAS.
- TWO (2) WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTACT NEW MEXICO ONE CALL SYSTEM, 260-1990, FOR THE LOCATING OF EXISTING UTILITIES. THE CONTRACTOR SHALL EXPORT EARTH AS REQUIRED TO ACHIEVE THE GRADES SHOWN ON THIS PLAN.
- EARTHWORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE EARTHWORK PROCEDURES GIVEN IN THE APPENDIX OF THE GEOTECHNICAL INVESTIGATION, ADDITIONS TO CALVARY CHAPEL CHURCH, ALBUQUERQUE, NEW MEXICO DATED AUGUST 30, 2000.

## KEYED NOTES

- NEW CMU PERIMETER WALL, CONTINUOUS ALONG WEST BOUNDARY.
- 3:1 (MAX.) SLOPES.
- EXISTING CONCRETE SPILLWAY, INVERT ELEVATION = 5118.4
- WATER SURFACE ELEVATION FOR 2V100 = 5117.8



**ISAACSON & ARFMAN, P.A.**  
Consulting Engineering Associates  
128 Monroe Street N.E.  
Albuquerque, New Mexico 87108  
106.4GRD.DWG-rh 09/24/01

no.	date	revision
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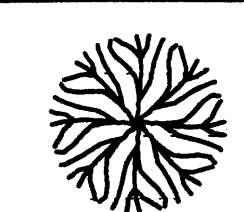
**Dekker/Perich**  
architecture interiors planning  
9001 Jefferson NE Suite 100  
Albuquerque, New Mexico 87109  
505.761.9200 Fax 505.422.2222

**Calvary Chapel Park**  
**Grading & Drainage Plan**  
Albuquerque, New Mexico

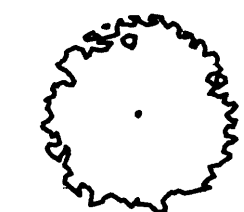
**Job no:**  
**dm.by:** RFH  
**old.by:** TOI  
**Issued:**

**1 OF 1**  
sheet

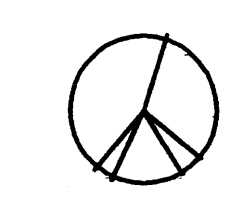
# PLANT LEGEND



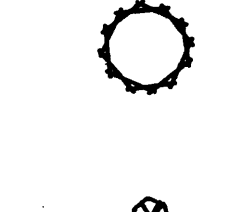
EXISTING TREES



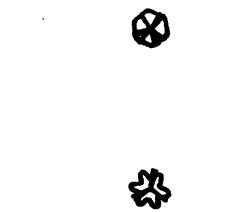
LONDON PLANE TREE (H) 72  
*Platanus acerifolia*  
3" Cal



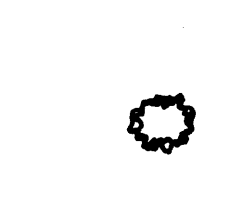
BRADFORD PEAR (M) 30  
*Pyrus calleryana* "bradford"  
3" Cal



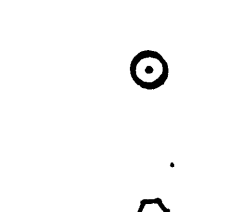
DESERT WILLOW (M) 39  
*Chiosia linearis*  
6-8"



PROSTRATE ROSEMARY (M) 127  
*Rosmarinus officinalis*  
5 gal



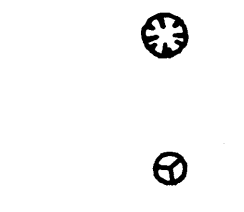
RED YUCCA (L) 32  
*Hesperaloe parviflora*  
5 gal



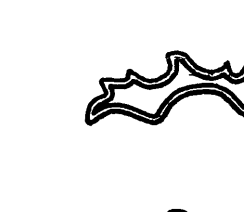
SILVERBERRY (M) 28  
*Elaeagnus pungens*  
5 gal



BLUE MIST (M) 77  
*Coruaria x clandonensis*  
1 gal



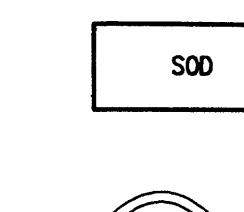
AUTUMN SAGE (M) 17  
*Salvia greggii*  
1 gal



POTENTILLA (M) 50  
*Potentilla fruticosa*  
1 gal



CHAMISA (L) 30  
*Chrysothamnus nauseosus*  
1 gal



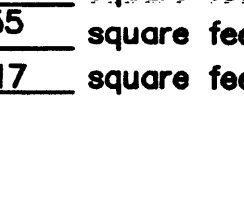
WILDFLOWER 37  
(Wallflower, Blanketflower, Coryopsis, Coneflower, Lavender, Yarrow, Daylilies)  
1 gal



(S)BLUE CHIP JUNIPER (H) 70  
*Juniperus horizontalis*  
5 gal



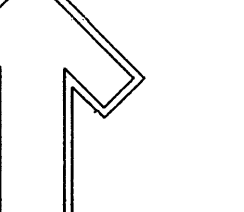
(S)SAW JUNIPER (H) 118  
*Juniperus sabin*  
5 gal



GRAVEL TO MATCH EXISTING  
W/ FILTER FABRIC



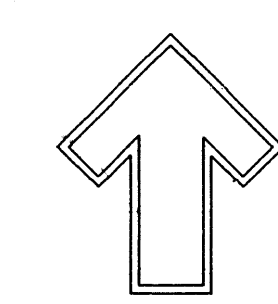
SOD



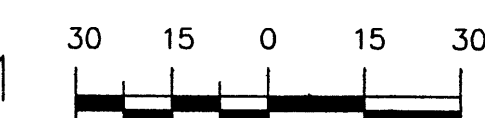
COMMERCIAL GRADE  
STEEL EDGING

## LANDSCAPE CALCULATIONS

TOTAL NEW LANDSCAPE PROVIDED	16,562	square feet
TOTAL EXISTING LANDSCAPE	15,355	square feet
TOTAL LANDSCAPE PROVIDED	31,917	square feet



## GRAPHIC SCALE



SCALE: 1"=30'

1 Enlarged Landscape Plan- Phase 1  
1"=30'

### LANDSCAPE NOTES:

Landscape maintenance shall be the responsibility of the Property Owner.

It is the intent of this plan to comply with the City Of Albuquerque, water conservation landscaping and waste water ordinance, planting restriction approach.

Approval of this plan does not constitute or imply exemption from water waste provisions of the water conservation landscaping and water waste ordinance. Water management is the sole responsibility of the Property Owner.

All landscaping will be in conformance with the City of Albuquerque Zoning Code, Street Tree ordinance, Pollen Ordinance, and Water Conservation Landscaping and Water Waste ordinance. In general, water conservative, environmentally sound landscape principles will be followed in design and installation.

Plant beds shall achieve 75% live/ground cover at Maturity.

### IRRIGATION NOTES:

Irrigation shall be a complete underground system with Trees to receive (5) 1.0 GPH Drip Emitters Shrubs to receive (2) 1.0 GPH Drip Emitters Drip and Bubbler systems to be tied to 1/2" poly pipe with flush caps at each end.

Run time per each drip valve will be approximately 15 minutes per day, to be adjusted according to the season.

Point of connection for irrigation system is unknown at current time and will be coordinated in the field.

Irrigation will be operated by automatic controller. Location of controller to be field determined and power source for controller to be provided by others.

Irrigation maintenance shall be the responsibility of the Property Owner.

WOOD STEPS

LOT 1:  
773 PARKING SPACES

19.9977 ACRES

PLANTING TO MATCH EXISTING

PLANTING TO MATCH EXISTING

EXISTING LAWN  
AND SYCAMORE TREES

4 EXISTING BRADFORD PEAR TREES  
TO BE RELOCATED

2 EXISTING BRADFORD PEAR TREES  
TO REMAIN