

DRAINAGE CERTIFICATION WITH VERIFICATION BY ENGINEER OF RECORD

I, FRANK D. LOVELADY, NMPE 6512 OF THE FIRM OF FRANK D. LOVELADY P.E. HEREBY CERTIFY THAT THIS PROJECT HAS BEEN GRADED AND WILL DRAIN IN SUBSTANTIAL COMPLIANCE WITH AND IN ACCORDANCE WITH THE DESIGN INTENT OF THE APPROVED PLAN DATED 01-19-2005. THE RECORD INFORMATION EDITED INTO THE ORIGINAL DESIGN DOCUMENT HAS BEEN OBTAINED BY ME OR UNDER MY DIRECT SUPERVISION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. THIS CERTIFICATION IS SUBMITTED IN SUPPORT OF A REQUEST FOR GRANT OF PERMANENT CERTIFICATE OF OCCUPANCY.

THE RECORD INFORMATION PRESENTED HEREIN IS NOT NECESSARILY COMPLETE AND INTENDED ONLY TO VERIFY SUBSTANTIAL COMPLIANCE OF THE GRADING AND DRAINAGE ASPECTS OF THIS PROJECT. THOSE RELYING ON THIS RECORD DOCUMENT ARE ADVISED TO OBTAIN INDEPENDENT VERIFICATION OF ITS ACCURACY BEFORE USING IT FOR ANY OTHER PURPOSE.

Frank D. Lovelady
 NMPE 6512
 12-30-06
 DATE



DRAINAGE CALCULATIONS:

EXISTING CONDITIONS:

The site is located on Lot 2C1, Lands of Julia Oldfield, 607 Osuna Road NE, Bernalillo County, New Mexico. The lot contains 13,560 sq. Ft. (0.3113 ac.) and is on the North side of Osuna Rd. Osuna Road is paved with standard curb and gutter. There is an existing office building on the site. Runoff is generally toward Osuna Road. There are two storm inlets adjacent to the SW corner of the site. This lot is the only city lot on this section of Osuna.

PROPOSED CONDITIONS:

It is proposed to construct an addition to the existing building as shown, including asphalt parking lot and landscaping.

DRAINAGE CRITERIA:

The calculations shown on this plan were prepared in accordance with Section 22.2, Hydrology, of the Development Process Manual, Volume 2, Design Criteria, for the City of Albuquerque in cooperation with Bernalillo County, New Mexico and the Metropolitan Arroyo Flood Control Authority, January, 1993.

PRECIPITATION ZONE:

The site is between the Rio Grande River and San Mateo Blvd. and is, therefore, in Precipitation Zone 2.

LAND TREATMENT AREAS, ETC.:

The peak discharge per acre and excess precipitation are shown for the four land treatments in Zone 2 in the table below, and the values shown are from the City of Albuquerque D.P.M. Also shown are the existing and proposed land treatment areas.

TREAT	100-yr. 10-yr.	100-yr. 10-yr.	C (in)	%	Existing Site Areas	%	Developed Site Areas	%
					Sq.Ft.		Sq.Ft.	Acres
A	1.56	0.38	0.53	0.13	0.0	0.0000	0.0	0.0000
B	2.28	0.95	0.78	0.28	0.0	0.0000	12.2	1.652
C	3.14	1.71	1.13	0.52	89.9	12,195	0.2800	14.4
D	4.70	3.14	2.12	1.34	20.9	1,365	0.0313	73.4
Totals					100.0	13,560	0.3113	100.0

PEAK DISCHARGE:

EXISTING CONDITIONS:

Q100 = 0.2800 * 3.14 + 0.0313 * 4.70 = 1.03 cfs
 Q10 = 0.2800 * 1.71 + 0.0313 * 3.14 = 0.57 cfs

DEVELOPED CONDITIONS:

Q100 = 0.0379 * 2.28 + 0.0449 * 3.14 + 0.2884 * 4.70 = 1.30 cfs
 Q10 = 0.0379 * 0.95 + 0.0449 * 1.71 + 0.2884 * 3.14 = 0.83 cfs

VOLUME, 100-YEAR AND 10-YEAR, 6-HOUR:

EXISTING CONDITIONS:

V100 = (12,195 * 1.13 + 1,365 * 2.12) / 12 = 1,389 cf
 V10 = (12,195 * 0.52 + 1,365 * 1.34) / 12 = 681 cf

DEVELOPED CONDITIONS:

V100 = (1,652 * 0.78 + 1,957 * 1.13 + 9,951 * 2.12) / 12 = 2,050 cf
 V10 = (1,652 * 0.28 + 1,957 * 0.52 + 9,951 * 1.34) / 12 = 1,235 cf

SUMMARY OF ON-SITE VOLUMES AND DISCHARGE RATES:

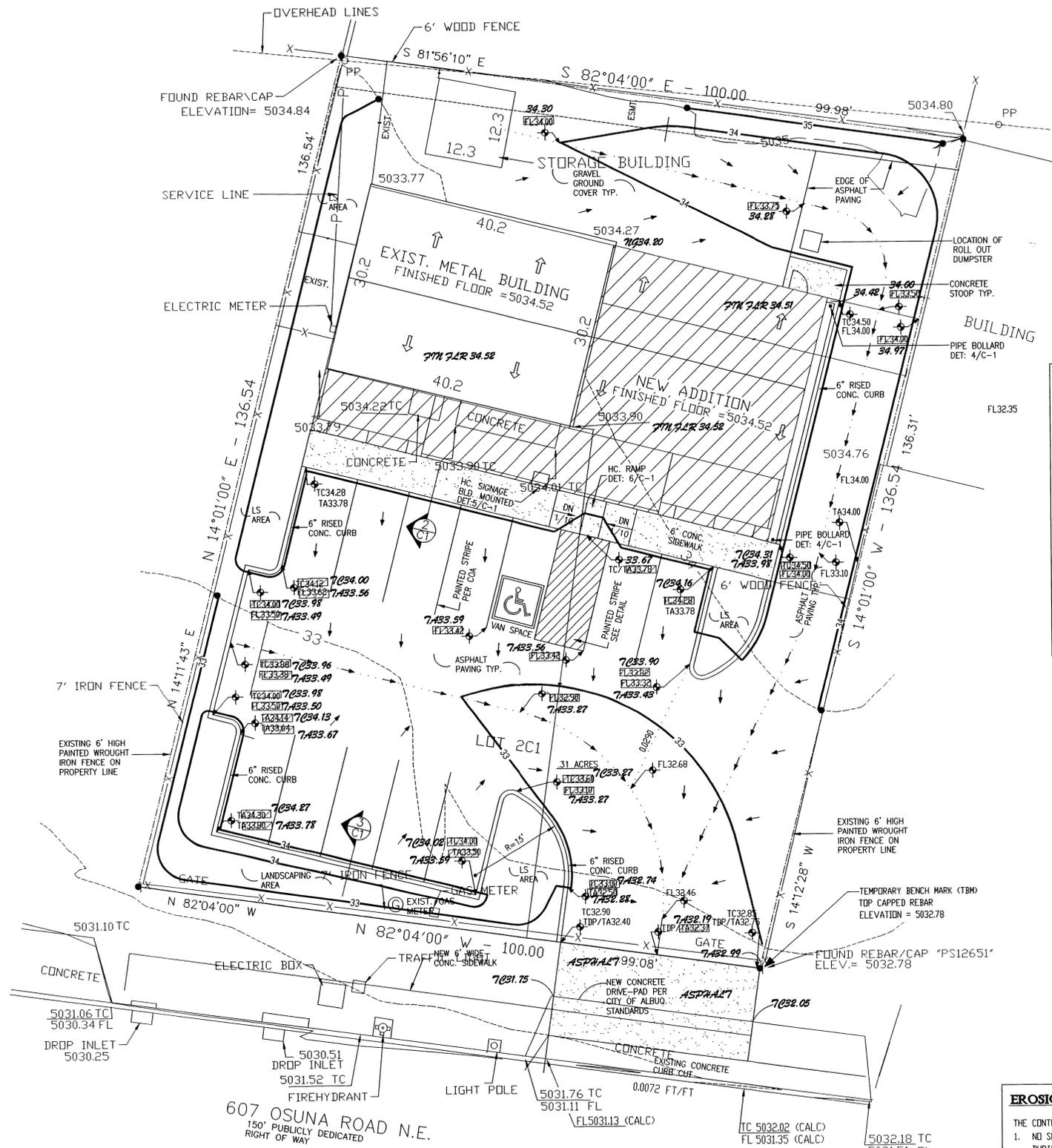
	V100(CF)	V10(CF)	Q100(CFS)	Q10(CFS)
DEVELOPED	2,050	1,235	1.30	0.83
EXISTING	1,389	681	1.03	0.57
INCREASE	661	554	0.27	0.26

DOWNSTREAM CAPACITY:

THERE ARE NO DOWNSTREAM FLOOD ZONES. THE DISCHARGE FROM THE SITE IS MINIMAL. THE SITE IS AN INFILL SITE. THEREFORE, UNRESTRICTED DISCHARGE IS WARRANTED. THIS WAS DISCUSSED WITH BRAD BINGHAM ON 1/18/05 AND HE INDICATED THAT UNRESTRICTED DISCHARGE THROUGH THE DRIVEWAY SHOULD BE PERMITTED.

OFF-SITE FLOW:

THE PROPERTY TO THE EAST DRAINS TO OSUNA, EXCEPT FOR A SHED ROOF WHICH IS ADJACENT TO THE PROPERTY LINE. THIS ROOF SLOPES TOWARDS THE WEST AND FLOW IS COLLECTED IN A GUTTER. THE GUTTER AND DOWNSPOUT ARE NOT MAINTAINED SO FLOW FROM THE ROOF WILL ENTER THE SITE. THE ROOF IS APPROXIMATELY 20' X 30' = 600 SF. Q100 = (600 / 43540) X 4.70 = 0.05 CFS (ACCEPTED)
 THE PROPERTY NORTH OF THE SITE IS A RESIDENCE WITH FULLY LANDSCAPED BACK YARD. THERE ARE CONCRETE CURBS THAT BLOCK OFF-SITE FLOW.
 THE PROPERTY WEST OF THE SITE DRAINS TO OSUNA.



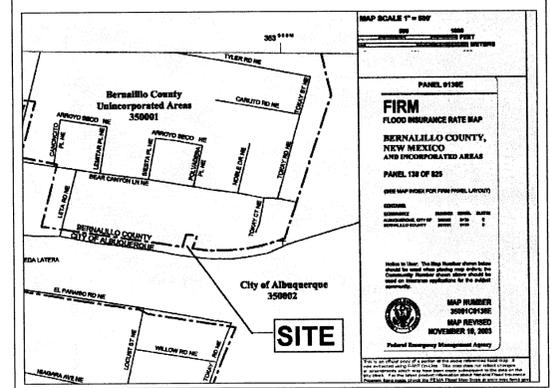
607 OSUNA ROAD N.E.
 150' PUBLICLY DEDICATED RIGHT OF WAY

1 GRADING AND DRAINAGE PLAN
 1" = 10'

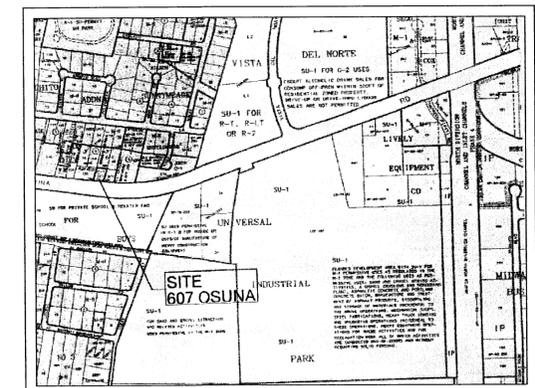
Benchmark Name	Elevation (US-Foot Datum (NGVD29))	Elevation (US-Foot Datum (NAVD88))	Description	Order/Class for NGVD29
12-E16	5023.418	5026.10	ACS 1 1/2" Aluminum disk, stamped "ACS BM, 12-E16", epoxied to top of concrete drop inlet, south side of Osuna Rd. NE., 0.29 mi. ± east of centerline Edith Blvd., 127.8 ft. east of centerline entrance to address 532 Osuna Rd. NE. (Sandia Preparatory School), centered on said drop inlet.	2nd-Order, 1st-Class

LEGEND

- PROPERTY LINES
 - INDICATES 0.5' CONTOURS
 - INDICATES 1' CONTOURS
 - NEW CONTOUR
 - EXISTING SPOT ELEVATION
 - NEW SPOT ELEVATION
 - SHEET FLOW DIRECTION.
 - SWALE FLOW DIRECTION.
 - ↘ ROOF SLOPE.
- TC = TOP OF CURB
 EA = EDGE OF ASPHALT
 EC = EDGE OF CONCRETE
 FF = FINISH FLOOR
 FL = FLOW LINE
 EG = EXISTING GROUND
 TA = TOP OF ASPHALT



VICINITY MAP MAP NO. 138 E



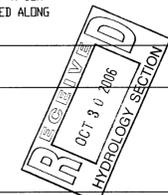
VICINITY MAP ZONE ATLAS NO. E-16-Z

EROSION CONTROL NOTES:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLIANCE WITH THE FOLLOWING:
 - NO SEDIMENT-BEARING WATER SHALL BE ALLOWED TO DISCHARGE FROM THE SITE DURING CONSTRUCTION.
 - DURING GRADING OPERATIONS AND UNTIL THE PROJECT HAS BEEN COMPLETED, ALL ADJACENT PROPERTY, RIGHTS-OF-WAY, AND EASEMENTS SHALL BE PROTECTED FROM FLOODING BY RUNOFF FROM THE SITE.
 - SHOULD THE CONTRACTOR FAIL TO PREVENT SEDIMENT-BEARING WATER FROM ENTERING PUBLIC RIGHT-OF-WAY, HE SHALL PROMPTLY REMOVE FROM THE PUBLIC RIGHT-OF-WAY ANY AND ALL SEDIMENT ORIGINATING FROM THE SITE.
 - CONTROL OF SEDIMENT-LADEN WATERS WILL BE ACCOMPLISHED BY USE OF A COMPACTED EARTH BERM OF ADEQUATE HEIGHT. THE BERM SHALL BE LOCATED ALONG THE DOWNSTREAM PERIMETER OF THE PROPERTY.

LEGAL DESCRIPTION

LOT 2C1 OF LANDS OF JULIA OLDFIELD
 607 OSUNA ROAD N.E.
 ALBUQUERQUE, NEW MEXICO

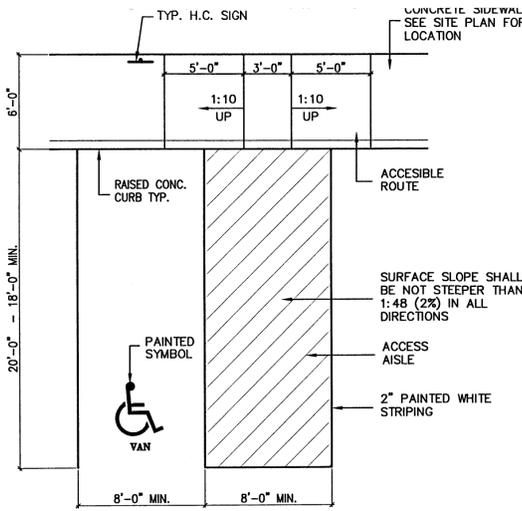


GRADING AND DRAINAGE PLAN
TIM RIZEK OFFICE ADDITION
 607 OSUNA ROAD N.E.
 ALBUQUERQUE, NEW MEXICO

FRANK D. LOVELADY, P.E.
 (505) 346-2287 • Fax (505) 345-2115 • 300 ALAMOSA RD. NW • Albuquerque, NM • 87107

JOB NO:	678
DATE:	01/19/2005
REVISIONS:	
AS-CONSTRUCTED SPOTS:	

SHEET NO.
 1 OF 1



6 HC. PARKING PLAN TYP.
NOT TO SCALE

UBC CODE DESIGN DATA

OCCUPANCY GROUP	= B (OFFICE)
TYPE OF CONSTRUCTION	= #-B
HEATED AREA	= 1,341 S.F.
COVERED AREA	= 459 S.F.
EXISTING AREA	= 1,200 S.F.
BUILDING FOOTPRINT	= 3,000 S.F. (NEW/EXIST.)
OCCUPANT LOAD	
EXIST. LEASE AREA #1	= 1,283/100 = 13 OCC.
NEW LEASE AREA #2	= 1,138/100 = 11 OCC.
SEISMIC ZONE	
	= CAT6 D
SOIL BEARING CAPACITY	
	= 1,500 PSI
CONCRETE STRENGTH	
	= 3,000 PSI
STRESS VALUES	
	= LUMBER: F _b = 970 MIN.
	= STEEL: 50,000 PSI.
WIND DESIGN LOAD	
	= 16.4 PSF HORIZ. (75 MPH WIND)
ROOF DESIGN LOAD	
	= 15 PSF DL, 20 PSF LL
FLOOR DESIGN LOAD	
	= SLAB ON GRADE

GENERAL NOTES

- PAVING SHALL BE MAINTAINED LEVEL AND SERVICEABLE, SHALL BE BLACKTOP OR EQUAL, 3" INCHES OF ASPHALTIC CONCRETE ON A PRIME COAT OVER A SIX INCH COMPACTED SUBGRADE.
- LIGHTING: LIGHTING SHALL NOT HAVE AN OFFSITE LUMINANCE GREATER THAN 1000 FOOT LAMBERTS MEASURED FROM ANY PRIVATE PROPERTY IN A RESIDENTIAL ZONE.
- IRRIGATION: SEE LANDSCAPE PLAN
- PREMISE ID ADDRESS SHALL BE LEGIBLE AND VISIBLE FROM THE STREET FRONTING THE PROPERTY AND SHALL CONTRAST TO ITS BACKGROUND.

NOTE:

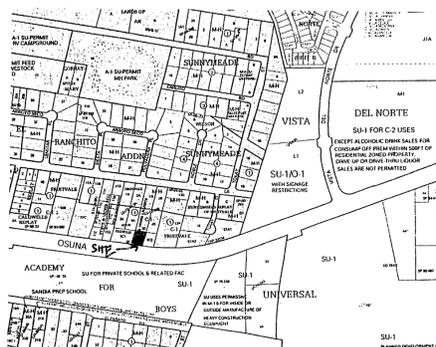
- *CERTIFICATION BY THE DESIGNER OF RECORD, REQUIRED BY THE TRANSPORTATION SECTION, NEEDS TO STATE THAT THIS SITE WAS CONSTRUCTED IN ACCORDANCE WITH THE TRAFFIC CIRCULATION LAYOUT (TCL) BEFORE C.O. IS RELEASED.
- *INSPECTION OF CONSTRUCTION FOR C.O. BY TRANSPORTATION WILL BE DONE FROM THIS SHEET.
- *PATCH AND REPAIR EXIST. CURBS AND SIDEWALKS AS REQUIRED

CONTRACTORS NOTE:

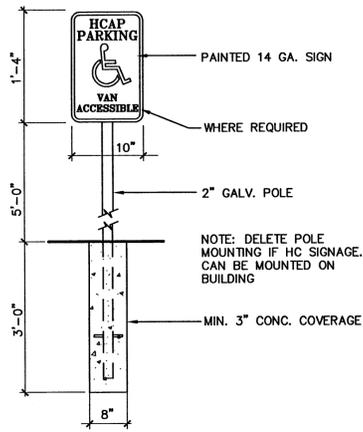
- *ANY AGREEMENT WITH THE OWNER, STATING THAT ANY PORTIONS OF PERMIT CONSTRUCTION, CHOSEN TO BE COMPLETED BY THE OWNER, OR HIS SELECTED REPRESENTATIVE, OTHER THAN THAT CONTRACTOR, WILL MOST LIKELY RESULT IN DELAY. IN THIS CASE, CERTIFICATE OF OCCUPANCY WILL NOT BE ISSUED UNTIL ALL WORK IS FINISHED.

ZONING DESIGN DATA

ZONING	= C-1
LOT AREA	= 13,560 S.F., .31 AC.
NET LOT AREA	= 13,560-3,000 = 10,560 S.F.
LS REQUIRED	= 10,560x15% = 1,584 S.F.
LS PROVIDED	= SEE LANDSCAPING PLAN
PARKING REQUIRED	
	= 1 PER 200 S.F.
	= 2,420 S.F./200 = 12 SPACES
PARKING PROVIDED	
	= 11 REG. PARKING SPACES.
	= 1 HC. VAN SPACE
	= 12 TOTAL SPACES



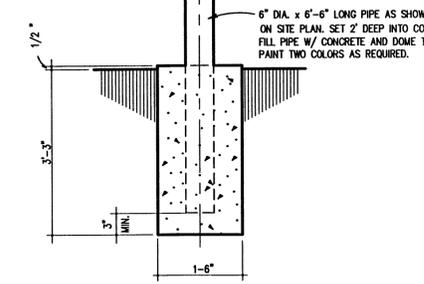
ZONE ATLAS MAP
E-16-7



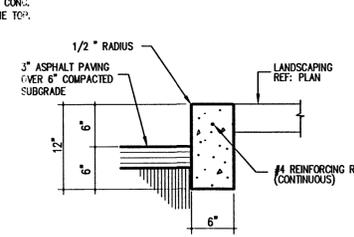
5 TYP. HC. SIGN DETAIL
SCALE: 1" = 1'-0"

MIN. PLUMBING FIXTURES

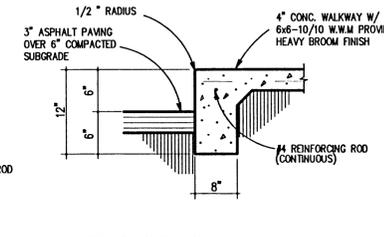
PER I.B.C., TABLE 2902.1
 GROUP B = W.C. MALE - 1 PER 25 FOR THE FIRST 50 OCC.
 GROUP B = W.C. FEMALE - 1 PER 40 FOR THE FIRST 50 OCC.
 EXIST. LEASE AREA #1 = 1,428 S.F./200 = 7 OCC. (EXIST. UNI-SEX R.R.)
 NEW LEASE AREA #2 = 993 S.F./200 = 5 OCC. (NEW UNI-SEX R.R.)
 2902.2 SEPARATE FACILITIES
 EXCEPTIONS:
 3. SEPARATE FACILITIES SHALL NOT BE REQUIRED IN STRUCTURES OR TENANT SPACES WITH A TOTAL OCCUPANT LOAD, INCLUDING BOTH EMPLOYEES AND CUSTOMERS, OF 15 OR LESS.



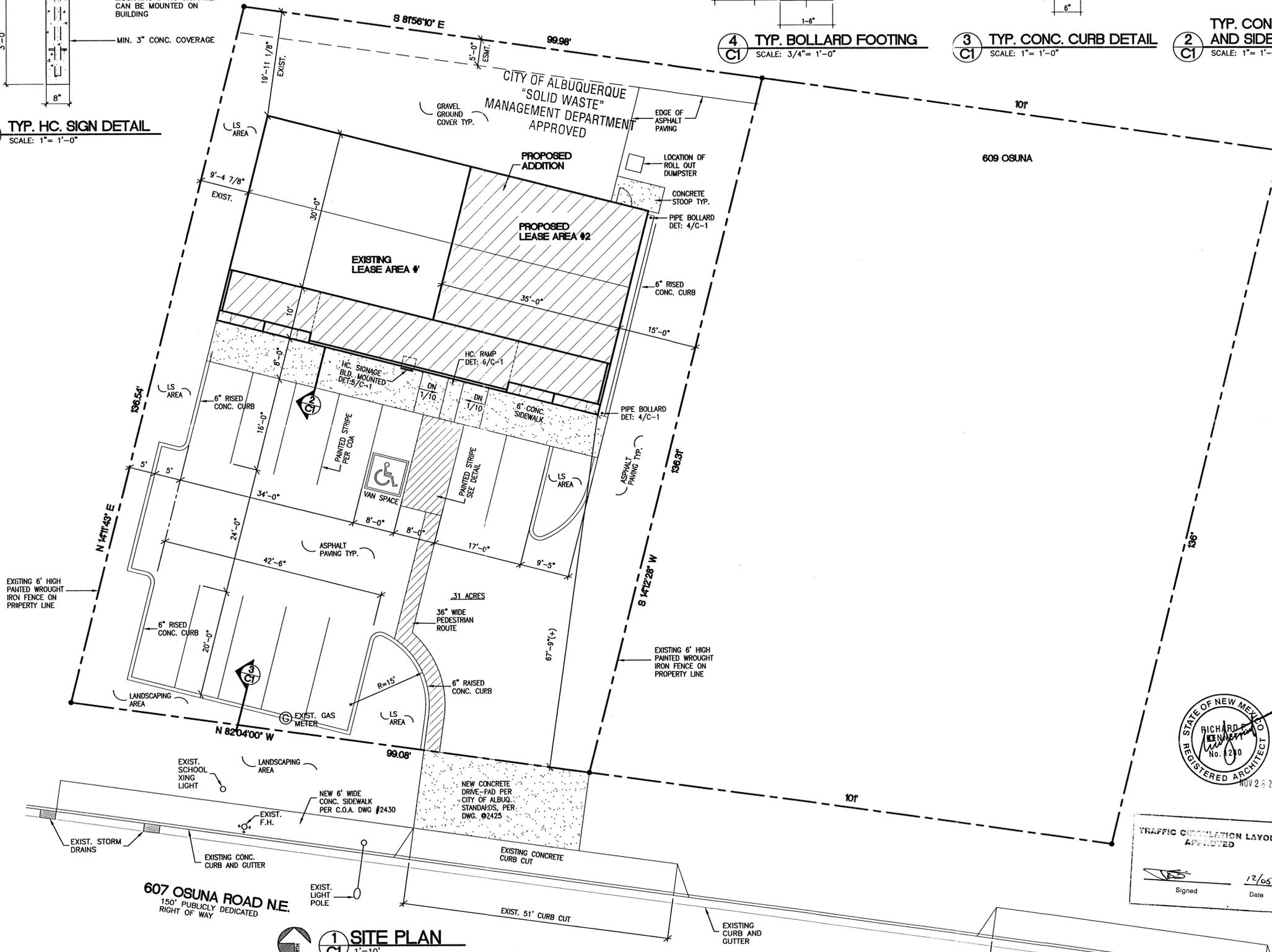
4 TYP. BOLLARD FOOTING
SCALE: 3/4" = 1'-0"



3 TYP. CONC. CURB DETAIL
SCALE: 1" = 1'-0"



2 TYP. CONC. CURB AND SIDEWALK DETAIL
SCALE: 1" = 1'-0"



1 SITE PLAN
SCALE: 1" = 10'

LEGAL DESCRIPTION
 LOT 2C1 OF LANDS OF JULIA OLDFIELD
 607 OSUNA ROAD N.E.
 ALBUQUERQUE, NEW MEXICO

TIM REZIK OFFICE ADDITION
ALBUQUERQUE, NEW MEXICO

REVISION DATE
10-06-2005

STATE OF NEW MEXICO
 REGISTERED ARCHITECT
 RICHARD P. MERA
 No. 1240
 NOV 1 1 1996

G & D DRAFTING
 EDGEWOOD, NEW MEXICO
 P.O. BOX 1484
 PHOENIX, ARIZONA 85015
 PHONE: (602) 998-1150
 FAX: (602) 998-1150
 NOV 2 8 2006
 HYDROLOGY SECTION

DRAWN BY:
DARBY MIERA

DATE:
04-12-2004

C-1

STATE OF NEW MEXICO
 REGISTERED ARCHITECT
 RICHARD P. MERA
 No. 1240
 NOV 2 8 2006

TRAFFIC CIRCULATION LAYOUT APPROVED
 Signed: [Signature] Date: 12/05/05

DEC 0 3 2005
 HYDROLOGY SECTION