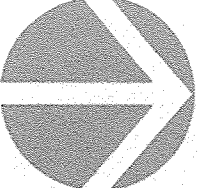
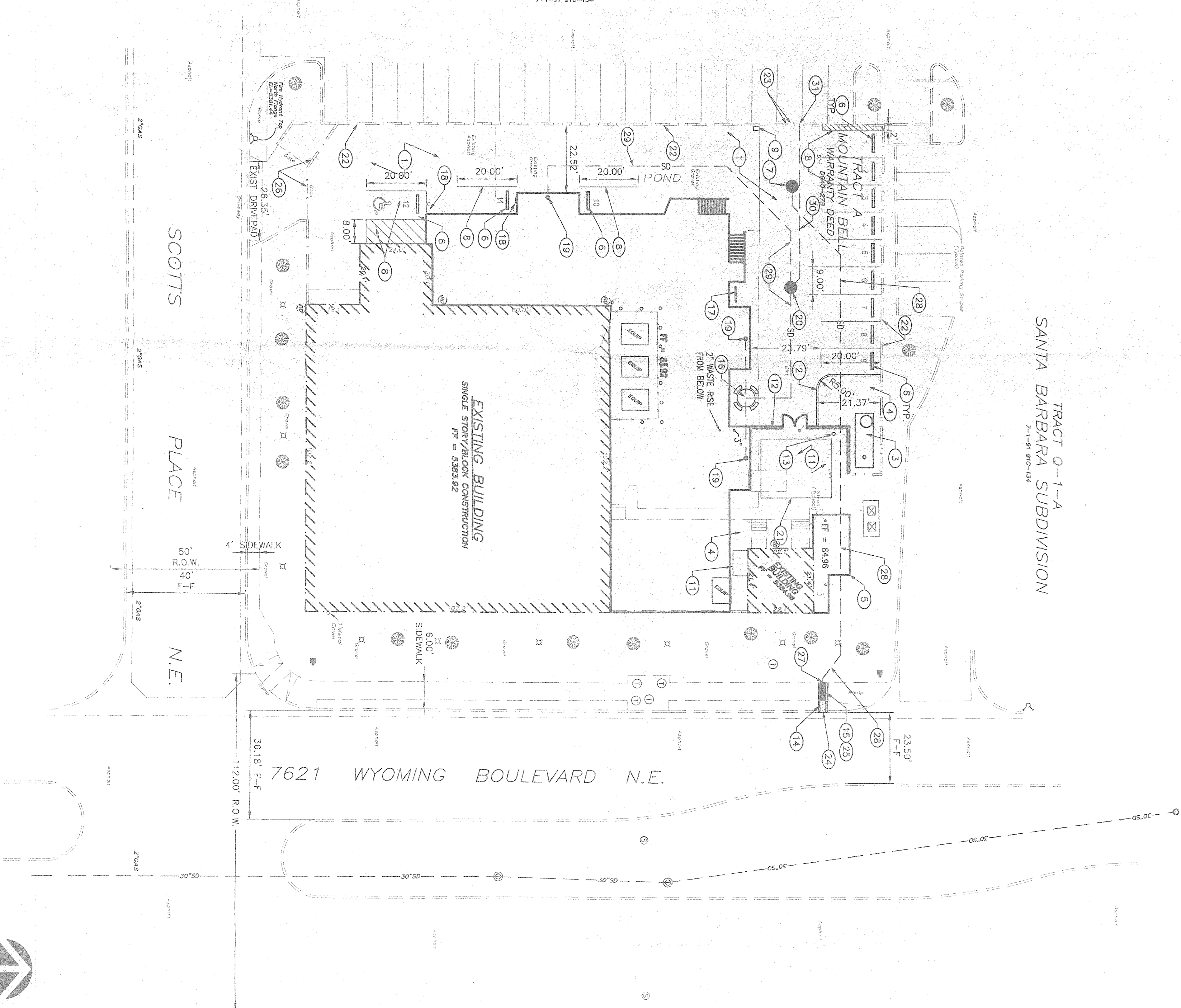


TRACT Q-1-A  
SANTA BARBARA SUBDIVISION

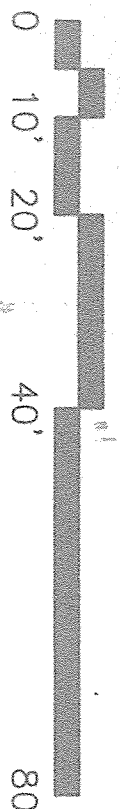
7-1-91 91C-134

TRACT Q-1-A  
SANTA BARBARA SUBDIVISION

7-1-91 91C-134



SITE PLAN

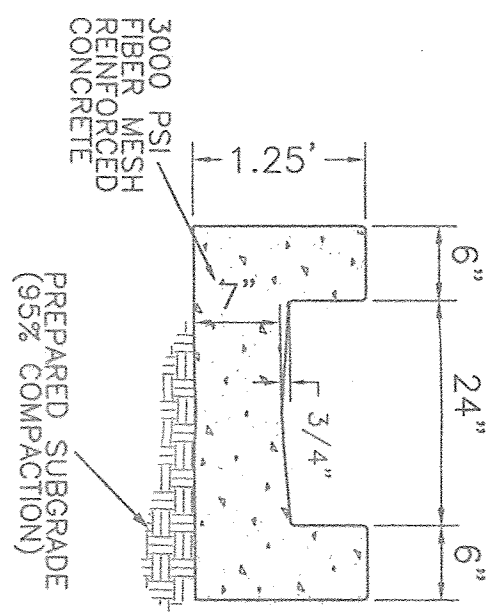


LEGEND (EXISTING)

CONCRETE AREA	
VAULT	
POWER POLE W/ FEED	
TRANSFORMER	
TELEPHONE PEDESTAL	
LIGHT POLE	
GROUND LIGHT	
CHAIN LINK FENCE	
ABOVE GROUND EQUIPMENT	
BOLLARD	
BLOCK WALL	
TELEPHONE MAN HOLE	
STANDARD CURB & GUTTER	
TREE	
WATER METER	
HEADER CURB	
ROOF DRAIN	
PULL BOX	
SANITARY SEWER MAN HOLE	
STORM DRAIN MANHOLE	
SANITARY SEWER LINE	
STORM DRAIN LINE	
OVERHEAD ELECTRIC LINE	
UNDERGROUND UTILITIES	
UNDERGROUND TELEPHONE LINE	
UNDERGROUND GAS LINE	
WATER LINE	
FIRE HYDRANT	
WATER VALVE	
PROPERTY LINE	

LEGEND (NEW)

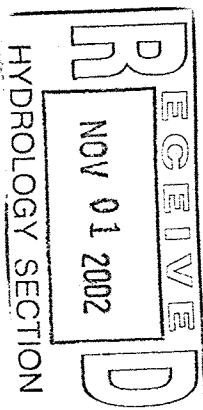
MANHOLE	
PARKING BUMPER	
CLEANOUT	



24" CONCRETE RUNDOWN  
NOT TO SCALE

KEYED NOTES

1. INSTALL ASPHALT PAVING PER DETAIL 2 ON SHEET C06. (ORIGINAL APPROVED 05-09-01 PLAN SET)
2. CONSTRUCT 6" CONCRETE HEADER CURB PER COA STD DWG 2415.
3. UNDERGROUND FUEL TANK PER MECHANICAL PLANS. (ORIGINAL APPROVED 05-09-01 PLAN SET)
4. INSTALL 1/2" LANDSCAPE GRAVEL.
5. EMERGENCY GENERATOR BUILDING EXPANSION.
6. INSTALL CONCRETE PARKING BUMPERS PER DETAIL 6 ON SHEET C06. (ORIGINAL APPROVED 05-09-01 PLAN SET)
7. EXISTING STORM DRAIN INLET CONSTRUCTED PER DETAIL 7 ON SHEET C06. (ORIGINAL APPROVED 05-09-01 PLAN SET).
8. PAINT 4" WIDE WHITE PARKING SPACE STRIPING AS INDICATED.
9. EXISTING STORM WATER PUMP STATION CONTROLS. (ORIGINAL APPROVED 05-09-01 PLAN SET)
10. EXISTING HEATED PIPE ENCLOSURE. (ORIGINAL APPROVED 05-09-01 PLAN SET)
11. CONSTRUCT CONCRETE PAD PER STRUCTURAL DRAWINGS. SEE MECHANICAL PLANS FOR SIZE AND LOCATION. SEE ELECTRICAL PLANS FOR SIZED WATER. (ORIGINAL APPROVED 05-09-01 PLAN SET)
12. CONSTRUCT MECHANICAL YARD WALL AND GATE PER PLAN SET.
13. EXISTING SINGLE CLEANOUT ON SAS LINE. (ORIGINAL APPROVED 05-09-01 PLAN SET)
14. CONSTRUCT 24" WIDE CONCRETE RUNDOWN PER DETAIL ON THIS SHEET.
15. INSTALL 1 2/4" WIDE SIDEWALK CULVERT PER CITY OF ALBUQUERQUE STD DWG 2236.
16. INSTALL SHARED EMPLOYEE BREAK AREA TO COFFMAN TABLE WITH SHADING AND CHAIRS. AREA TO BE APPROVED BY OWNER.
17. INSTALL BIKE RACK PER DETAIL 3 ON SHEET C06. (ORIGINAL APPROVED 05-09-01 PLAN SET)
18. INSTALL VAN HANDICAPPED SIGN PER DETAIL 5 ON SHEET C06. (ORIGINAL APPROVED 05-09-01 PLAN SET)
19. EXISTING 2" FLOOR DRAIN.
20. MODIFY EXISTING STORM DRAIN MANHOLE CONSTRUCTED 05-09-01 PLAN SET. CONSTRUCT NEW 24" WIDE WATERRIGHT FRAME SOLID LID AND INNER LID OR APPROVED ALTERNATE. INSTALL HYDROMATIC BX-A1 30" DIAMETER 12' DEEP. PUMP TO BE CAPABLE OF DISCHARGING 5gpm @ 20 FT OF HEAD. INSTALL 1" CONDUIT FOR POWER SOURCE TO BUILDING AND 1-1/2" PVC DISCHARGE LINE TO WEST WALL AS SHOWN.
21. COVERED CONCRETE UTILITY TRENCH BUILT INTO EQUIPMENT PAD. SEE STRUCTURAL DETAIL 10 ON SHEET S06. (ORIGINAL APPROVED 05-09-01 PLAN SET)
22. EXISTING WALL. PROTECT DURING CONSTRUCTION.
23. CORE DRILL 2-6" DIAM./ HOLES IN EXISTING WALL AT GRADE. SEE GRADING PLAN FOR ELEVATION.
24. NEATLY SAWCUT, REMOVE AND DISPOSE OF EXISTING CURB AND GUTTER. REPLACE WITH NEW CURBED GUTTER AS NECESSARY PER CITY OF ALBUQUERQUE STD DWG 2415.
25. NEATLY SAWCUT, REMOVE AND DISPOSE OF EXISTING CONCRETE SIDEWALK. REPLACE WITH NEW CONCRETE SIDEWALK PER CITY OF ALBUQ. STD DWG 2430.
26. EXISTING FENCE AND GATE TO REMAIN.
27. DISCHARGE FORCED MAIN STORM DRAIN AT BACK OF SIDEWALK CULVERT.
28. EXISTING 4" FORCED MAIN STORM DRAIN. (ORIGINAL APPROVED 05-09-01 PLAN SET)
29. EXISTING 2" PVC DRAIN LINE. (ORIGINAL APPROVED 05-09-01 PLAN SET)
30. 1-1/2" PVC C-900 DRY WELL PUMP DISCHARGE LINE.
31. CORE DRILL HOLE IN WALL FOR 1-1/2" DISCHARGE LINE AT GRADE.



HYDROLOGIST SECTION

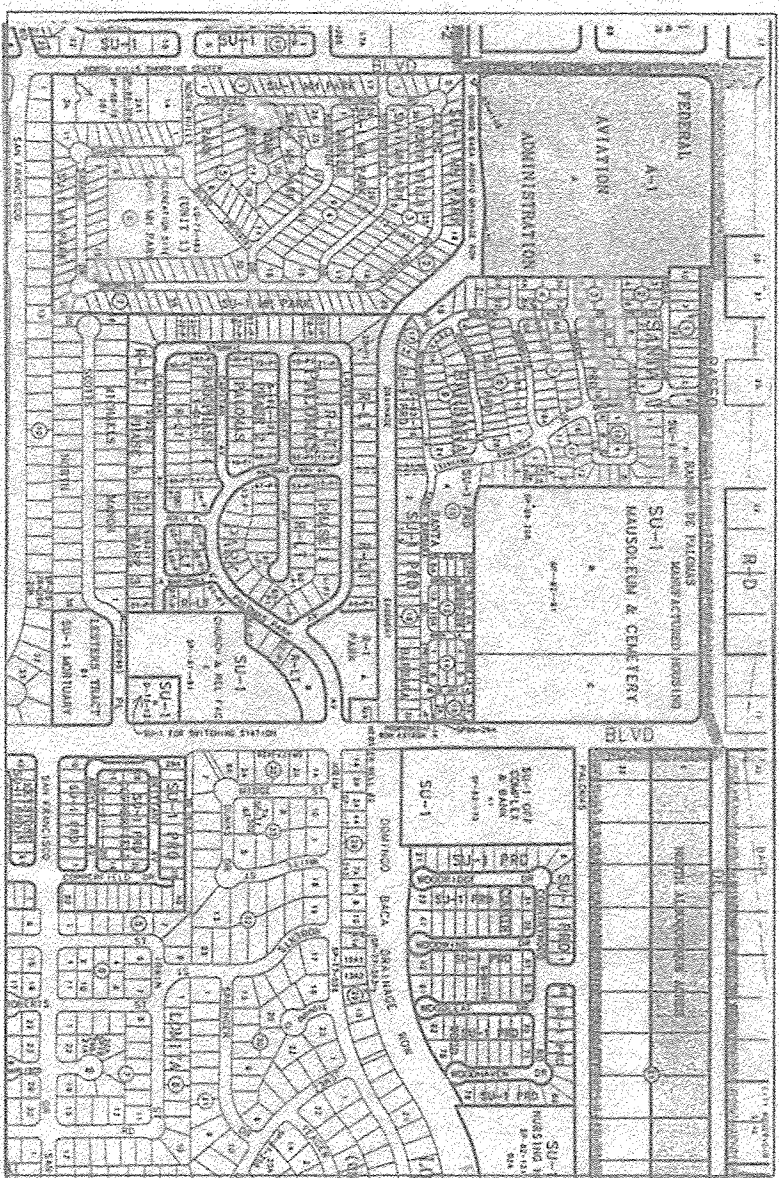
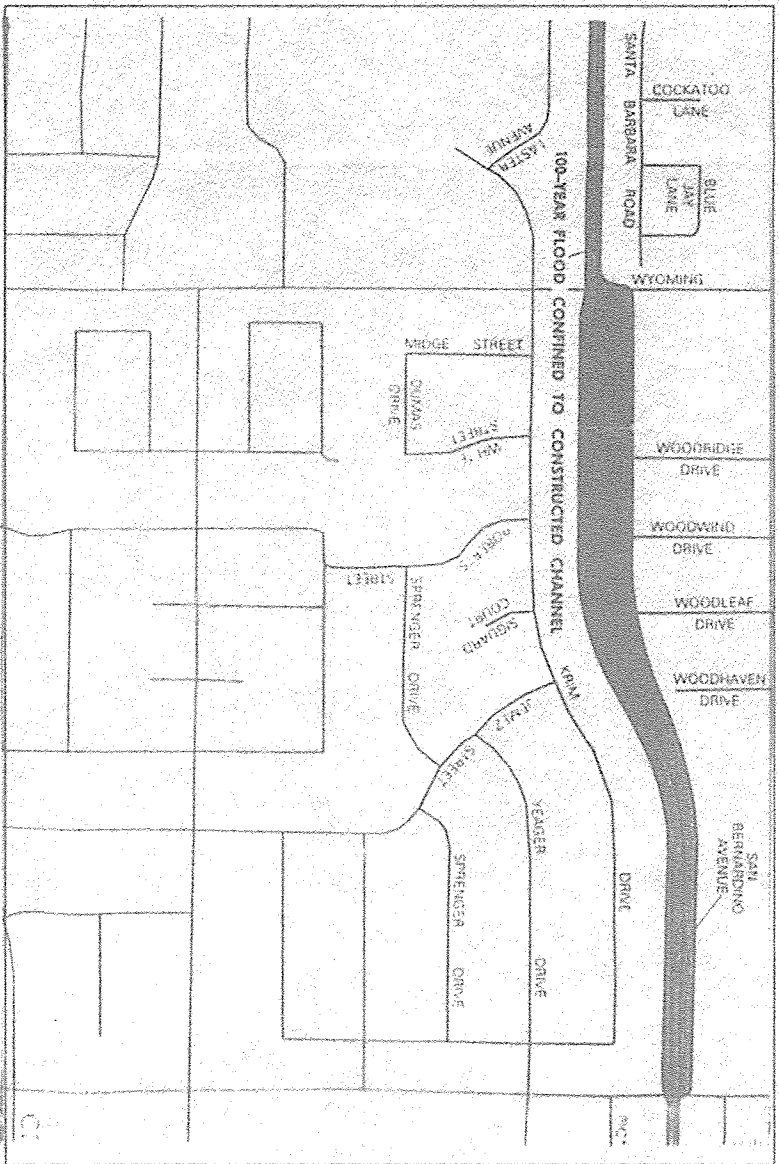
Albuquerque, NM

Academy  
Building Addition

SITE PLAN

Drawn by	TS	Job No.	21003.02
Checked by	JP	No. of Sheets	1
Date	10/31/02	Project	CIVIL
BPLW Architects & Engineers, Inc. 6200 UPTOWN BOULEVARD NE - SUITE 400 ALBUQUERQUE, NEW MEXICO 87110 (505) 881-2758			
Manager - Raul Estela Albuquerque, New Mexico			
Guest - Paul Estela Albuquerque, New Mexico			
5A202-AC-SK003			

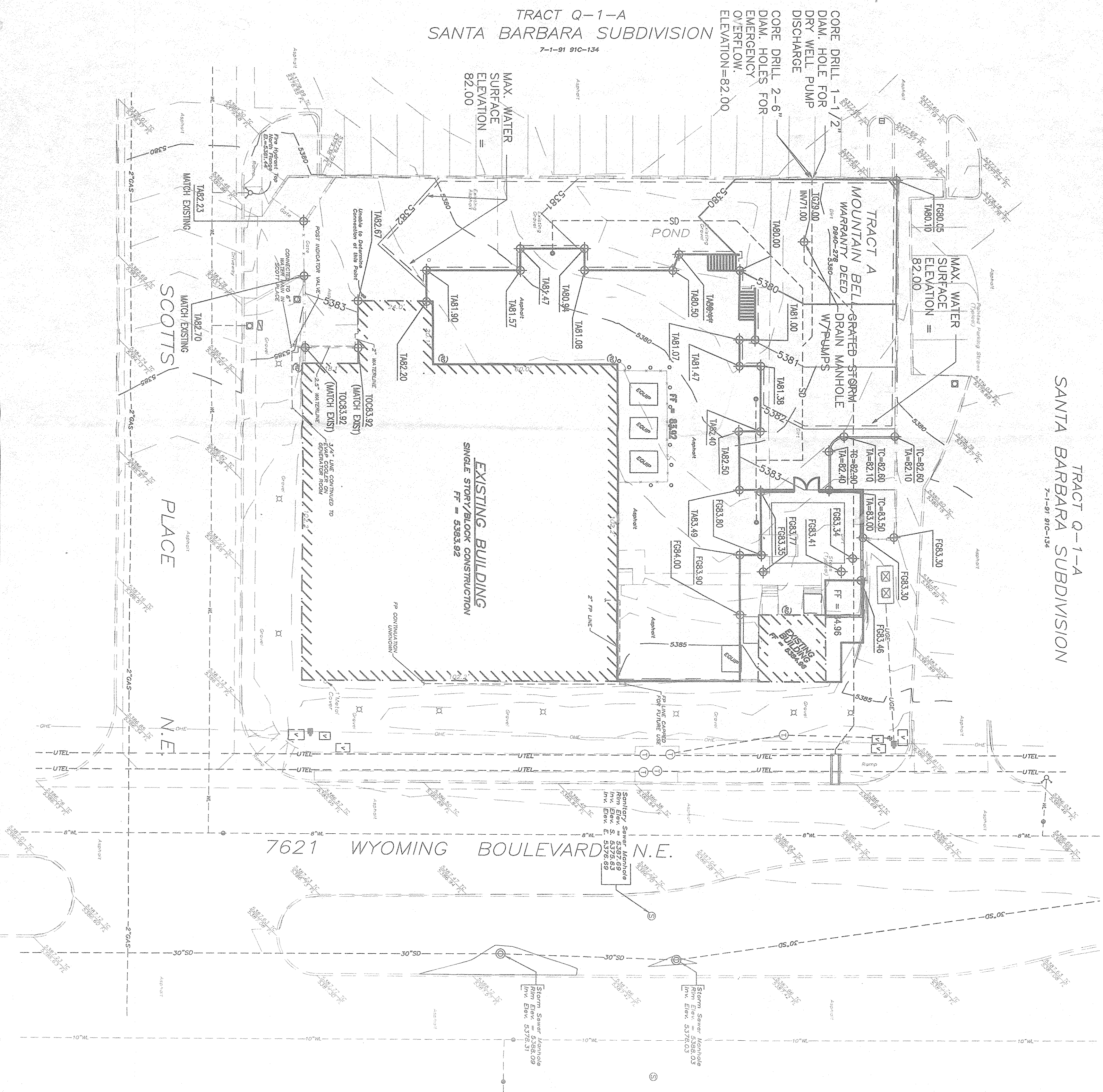


VICINITY MAP  
ZONE ATLAS PAGE D-19-Z

FEMA MAP PANEL

TRACT Q-1-A  
SANTA BARBARA SUBDIVISION

7-1-91 91C-134



## LOCATION

THE PROJECT AREA IS LOCATED ON THE CORNER OF WYOMING BLVD AND SCOTTS PL. THIS PROJECT AREA CAN BE FOUND ON THE CITY OF ALBUQUERQUE ZONE ATLAS PAGE D-19-Z.

## PROJECT BENCHMARK

NATIONAL GEODETIC SURVEY MONUMENT "HEAVEN" LOCATED 800 FEET WEST OF WYOMING BOULEVARD N.E. ALONG THE SOUTH RIGHT OF WAY LINE OF PASO DEL NORTE N.E. EL.=5375.62 (NAMD29)

## TEMPORARY BENCHMARK (TBM)

5/8" REBAR WITH CAP MARKED "SURV-TEK CONTROL" EL.=5380.85  
(NAVD29)

## LEGEND

FF	FINISHED FLOOR ELEVATION
FG	FINISHED GRADE ELEVATION
TA	TOP OF ASPHALT ELEVATION
TC	TOP CURB
80	EXISTING CONTOUR
80	PROPOSED CONTOUR

## SURVEY INFORMATION

- 1 SURVEY WAS PERFORMED BY SURV-TEK, INC. ALBUQUERQUE, NEW MEXICO.
- 2 VERTICAL DATUM IS BASED UPON THE NATIONAL GEODETIC SURVEY MONUMENT "HEAVEN", ELEVATION = 5575.62 (NAVD 1929)
- 3 CONTOUR INTERVAL IS ONE FOOT.
- 4 FIELD SURVEYS WERE PERFORMED DURING THE MONTHS OF MARCH 2001
- 5 NO TITLE REPORT WAS PROVIDED FOR THIS PROPERTY. ANY POSSIBLE EASEMENTS, CONDITIONS OR RESTRICTIONS THAT MAY BE DISCLOSED BY SUCH A REPORT ARE NOT SHOWN ON THIS SURVEY.

## CONSTRUCTION NOTES


THE LOCATION OF EXISTING UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND WERE DERIVED FROM AS-BUILT DRAWINGS, GAS COMPANY OF NEW MEXICO LINE LOCATION MAPS, PUBLIC SERVICE COMPANY OF NEW MEXICO LINE LOCATION MAPS AND SURFACE INDICATIONS EITHER SCOTTED BY THE RESPECTIVE UTILITY COMPANIES OR APPARENT BY VISUAL OBSERVATION. ALL UTILITIES SHOULD BE FIELD VERIFIED AND SCOTTED BY THE CONTRACTOR(S) PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.

## NOTICE TO CONTRACTORS

- 1 AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 2 ALL WORK DETALLED ON THESE PLANS TO BE PERFORMED, EXCEPT AS OTHERWISE STATED OR PROVIDED HEREON, SHALL BE CONSTRUCTED IN ACCORDANCE WITH CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1986.
- 3 TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTRACT LUE LOCATION SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- 4 PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE LOCATION AND DEPTH OF ALL KNOWN LOCATIONS OF CONDUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- 5 BACKFILL COMPACTION SHALL BE ACCORDING TO TRAFFIC/STREET USE.
- 6 MAINTENANCE OF THESE FACILITIES SHALL BE THE RESPONSIBILITY OF THE OWNER OF THE PROPERTY SERVED.
- 7 WORK ON ADJACENT STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

## APPROVAL

APPROVAL:	
INSPECTOR	DATE

DATE	10/31/02	BY	TS	JOB NO.	21003.02	NO. OF SHEETS	
CHANGED		BY					
		JP					
<b>BPLW</b> Architects & Engineers, Inc.  6200 UPTOWN BOULEVARD, NE - SUITE 400 ALBUQUERQUE, NEW MEXICO 87110 (505) 881-2759 CIVIL							

Albuquerque, NM

WEED Academy

## Building Addition

HYDROLOGY SECTION GRADING PLAN

Manager -- Real Estate Engineering

*Business Resources - Real Estate*  
*Albuquerque, New Mexico*

5A202--AC--SKC04

BID SET			
BUILDING ADDITION			
ISSUE #1			
CASE# 0158284			
DATE: 5-10-01			
TS	AF	C-G	
CHANGE ORDER			
BUILDING ADDITION			
ISSUE #4			
CASE# 0158284			
DATE: 10-31-02			
TS	JP	BPLY	





DRAINAGE PLAN

THIS DRAINAGE PLAN SHALL SUPRESEDE THE APPROVED DRAINAGE PLAN FOR THIS SITE. ENGINEER'S STAMP DATE 06-08-01, PREPARED BY CHAVEZ AND GREIERS CONSULTING ENGINEER'S INC., DRAINAGE FILE D-19-D-PA. MINOR MODIFICATIONS HAVE BEEN MADE TO THE ABOVEMENTIONED DRAINAGE PLAN NECCESSITATING THIS SUBMITAL. THE SITE, CURRENTLY UNDER CONSTRUCTION, HAS BEEN AND WILL CONTINUE TO BE CONSTRUCTED PER THE ORIGINAL PLANS WITH THE EXCEPTION OF MODIFICATIONS TO THE PREVIOUSLY PROPOSED STORM DRAIN INLET, PUMP DISCHARGE LINE, AND DRY WELL.

THE FOLLOWING ITEMS CONCERNING THE WEST ACADEMY DRAINAGE PLAN ARE CONTAINED HEREIN: 1) VICINITY MAP; 2) GRADING PLAN (SHEET C04 AS ATTACHED); 3) CALCULATIONS AND 4) FLOODPLAIN MAP.

AS SHOWN BY THE VICINITY MAP, THE SITE LIES AT THE NORTHWEST CORNER OF WYOMING BLVD NE AND SCOTT'S PLACE NE IN ALBUQUERQUE'S NORTHEAST HEIGHTS.

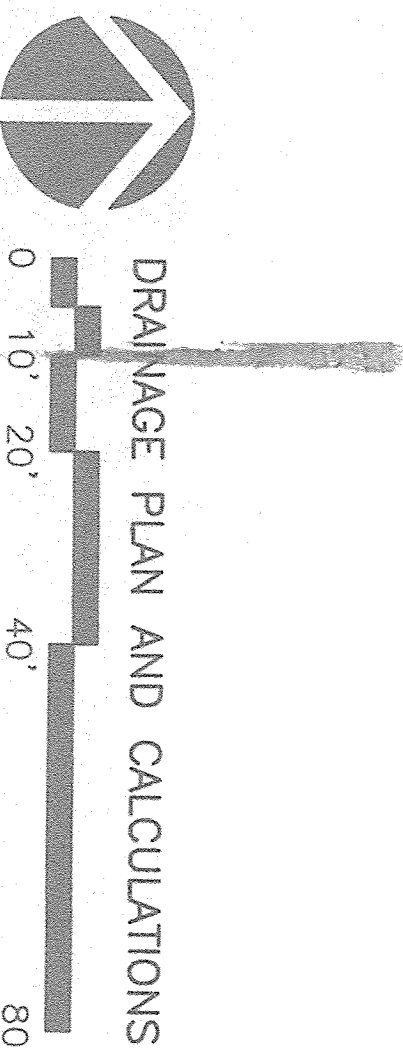
PER FLOOD INSURANCE RATE MAP 141 OF 825 FOR BERNALILLO COUNTY, DATED SEPTEMBER 20, 1996, THE SITE DOES NOT LIE WITHIN NOR ADJACENT TO A FLOOD HAZARD ZONE AREA.

THE ACCOMPANYING PLAN SHOWS EXISTING AND PROPOSED SPOT ELEVATIONS AND CONTIGUOUS AT 1'-0" INTERVALS, AS WELL AS THE LIMIT AND CHARACTER OF THE PROPOSED IMPROVEMENTS IN RELATION TO EXISTING CONDITIONS. AS SHOWN BY THIS PLAN, THE PROPOSED IMPROVEMENTS CONSIST OF THE CONSTRUCTION OF A BUILDING ADDITION TO THE EXISTING BUILDING SERVING THE SITE, AN ASPHALTIC CONCRETE PARKING/SERVICE AREA, AS WELL AS VARIOUS UTILITY IMPROVEMENTS TO SERVE THE PROPOSED CONDITION OF THE SITE.

THE SITE IS COMPOSED OF THREE SEPARATE DRAINAGE BASINS TO TOTALING 0.88 ACRES. THE EASTERN CONDITION, THE TWO SMALLEST BASINS, B AND C, CONSISTS OF APPROXIMATELY 0.27 ACRES OF LAND, WHICH IS DIRECTLY TO SCOTT'S PLACE AND WOUNGIN BLVD. RESPECTIVELY. THE LARGEST BASIN, A, WHICH CONSISTS OF 0.71 ACRES OF PERVIOUS AND IMPERVIOUS AREA, CURRENTLY CONVEYS DEVELOPED CONDITION, BASIN A, WHICH WILL BE THE WEST SIDE OF THE SITE. IN THE DEVELOPED CONDITION, BASIN A, WHICH WILL BE 100 PERCENT IMPERVIOUS, WILL CONVEY DEVELOPED RUNOFF TO A STORM INLET AT THE NORTHWEST CORNER OF THE SITE. THIS INLET WILL CONTAIN A PUMP THAT WILL PUMP THE RUNOFF TO THE BASIN B, WHICH IS SPECIALLY COLLECTED THAT IN TURN, WILL DRAIN TO THE EXISTING CURB OF 0.42 CFS. CURB AND GUTTER RUNOFF IN WOUNGIN BLVD. AT A CONTROLLED RATE OF 0.42 CFS. CURB AND GUTTER RUNOFF IS THEN CONVEYED TO THE NORTH VIA WOUNGIN BLVD., A SHORT DISTANCE TO THE DOMINGO BACK ARROYO.

OFFSITE FLOWS DO NOT ENTER THE SITE FROM THE NORTH OR WEST, WHICH LIE TOPOGRAPHICALLY LOWER THAN THE SITE. FLOWS DO NOT ENTER FROM THE SOUTH OR EAST DUE TO EXISTING CURB AND GUTTER IN THE DEVELOPED ROADWAYS BOUNDING THE SITE.

THE CALCULATIONS WHICH APPEAR HEREIN ANALYZE THE EXISTING AND DEVELOPED CATCHMENTS OF THE NORTH STAR, STORM DRAIN, AND ALL ELEVATIONS AS WELL AS THE DRAINAGE OF THE STORM DRAIN. THE CALCULATIONS WERE MADE USING THE HYDROLOGICAL DATA FOR 40 ACRES AND SMALLER BASINS SET BY SECTION 22.2. THE HYDROLOGY OF THE DEVELOPMENT PROCESS MANUAL, VOLUME 2, DESIGN CRITERIA, AND SECTION 19.3, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND FLOOD VOLUMES. THE CALCULATIONS FOR THE STORM DRAIN INLET AND THE STORM DRAIN INLET AS WELL AS POND VOLUME CALCULATIONS.

[illegible]

## CALCULATION – SITE CHARACTERISTICS

1. Precipitation Zone = 3
  2. P360 = 2.60 in.
  3. Total Area = 0.89 ac.; 38,950 sf
- Existing Conditions
7. Developed Conditions Calculations
- a. Basin A

- | Basin A        | 30.930/0.71  | 100  |
|----------------|--------------|--|
| Land Treatment | Area (a6/ac) | $\frac{EW}{E+V} = \left[ \frac{3.6 \times 0.71}{0.71 + 0.71} \right] = 2.36$ in. |
| C              | 8,280/0.19   | 27   |
| D              | 22,650/0.52  | 73   |
| Basin B        | 2,180/0.05   | 100  |
| Land Treatment | Area (a6/ac) | $\frac{EW}{E+V} = \left[ \frac{3.6 \times 0.05}{0.05 + 0.05} \right] = 3.56$ cfs |
| C              | 2,180/0.05   | 100  |
| D              | 2,180/0.05   | 100  |

- | Basin | Treatment | Area (sf/ac) | %   |
|-------|-----------|--------------|-----|
| C     |           | 5,740/0.13   | 100 |

- | Basin               | Land Treatment Area | Area (sq/oc) | %               | Q            | Therefore: Pump Discharge Covers |
|---------------------|---------------------|--------------|-----------------|--------------|----------------------------------|
| Basin A             | 30,930/0.71         | 100          | 9 = 32.2 FV/S/2 |              |                                  |
| Land Treatment      | Area (sq/oc)        | %            | C = 0.6         |              |                                  |
| D                   | 30,930/0.71         | 100          | h = 3.0         | Q = 12.5 cfs |                                  |
| Basin B             | 2,180/0.05          | 100          |                 |              |                                  |
| Land Treatment Area | (sq/oc)             | %            |                 |              |                                  |

- | NO CHANGE   | 4. Hydrograph Calculations<br>(Using Hydrograph for small watershed<br>COA DPM Section 22.2.A.8) |
|---|--|
| Bosin C   | 5,740/0.13   |
| Land Treatment Area                                 | (sf/oc) % 100  |
| E RELEASE = 0.42 cfs (Pump Discharge)<br>F 2.56 in. |  |

- ## 6. Existing Conditions Calculations

1. Volume

- $$EW = [(1.29 \times 0.45) + (2.36 \times 0.52)] / (0.71) = 2.07 \text{ in}$$

- $$V_{100} = 2.07/12 \times 0.71 = 0.1227 \text{ ac.ft.; } 5,340 \text{ cu yd}$$

- $$Q_{100} = 3.45 \times 0.19 + 5.02 \times 0.52 = 3.27 \text{ cfs}$$

- $$EW = [(EA*AA+EB*AB+EC*AC+ED*AD)]/(A1+EB+EC+ED) = [(1.29*0.05)]/(0.05) = 1.29 \text{ in.}$$

- $$V100 = 1.29/12*0.05 = 0.0054 \text{ ac.f}$$

- $$Q100 = 3.45 * 0.05 = 0.17 \text{ cfs}$$

- $$EW = [(EA*AA+EB*AB+EC*AC+ED*AD)]/(AT$$
- $$EW = [(1.29*0.13)/(0.13) = 1.29 \text{ in.}$$

2. Runoff
- V100 =  $(EW/12)^{.AT}$   
V100 =  $1.29/12^{.0.13}$  = 0.0140 ac.ft.; 610 cfs
- Q100 =  $QPA^{.AA} + QPB^{.AB} + QPC^{.AC} + QPD^{.AD}$   
Q100 =  $3.45^{.0.13}$  = 0.45 cfs

3. Change in Runoff Exiting the Site  
 $DQ = (Dvdpd, 'A', 'B' \& 'C') - (Exist, 'B' \& 'C')$   
 $= 4.18 - 0.62 = 3.56 \text{ cfs (increase)}$

DRAWN BY TS CHECKED JP DATE 10/31/02	<b>BPLW</b> Architects & Engineers, Inc.  6200 UPTOWN BOULEVARD NE - SUITE 400 ALBUQUERQUE, NEW MEXICO 87110 (505) 861-2759	Job No. 21003.02  No. of Sheets
		CIVIL

Albuquerque, NM

Academy

NOV 01 2002 Building Addition

HYDROLOGY SECTION DRAINAGE PLAN

## AND CALCULATIONS

10

ENGINE

Manager - Real Estate Engineering	
Overst	

Business Resources -- Real Estate Albuquerque, New Mexico	5A202-A
--	---------

BID SET  
BUILDING ADDITION  
ISSUE #1  
CASE# 0158284  
DATE: 5-10-01

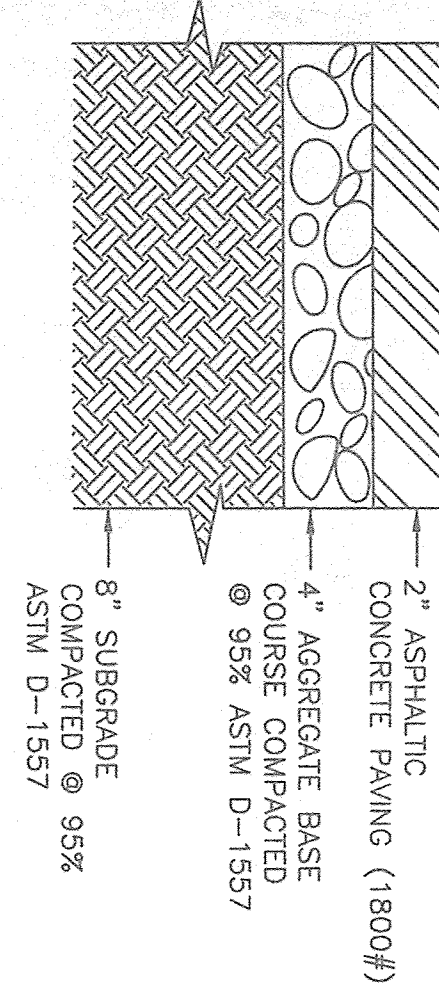
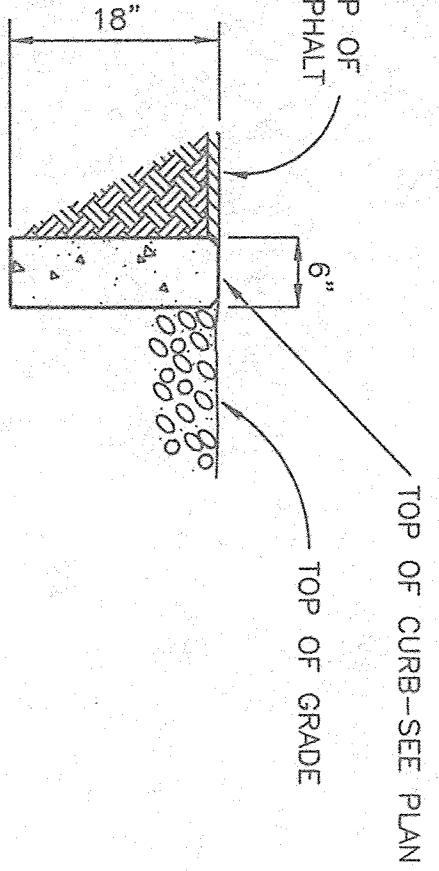
CHANGE ORDER  
BUILDING ADDITION  
ISSUE #4  
CASE# 0158284  
DATE: 10-31-02

TS	JP	BPL
----	----	-----



CONSTRUCTION NOTES:

1. USE 4000 PSI PCC AT 28 DAYS.  
2. PROVIDE CONTRACTION JOINTS @ 6' O.C.  
3. ALL EXPOSED CONCRETE CORNERS TO HAVE 3/4" RADII.

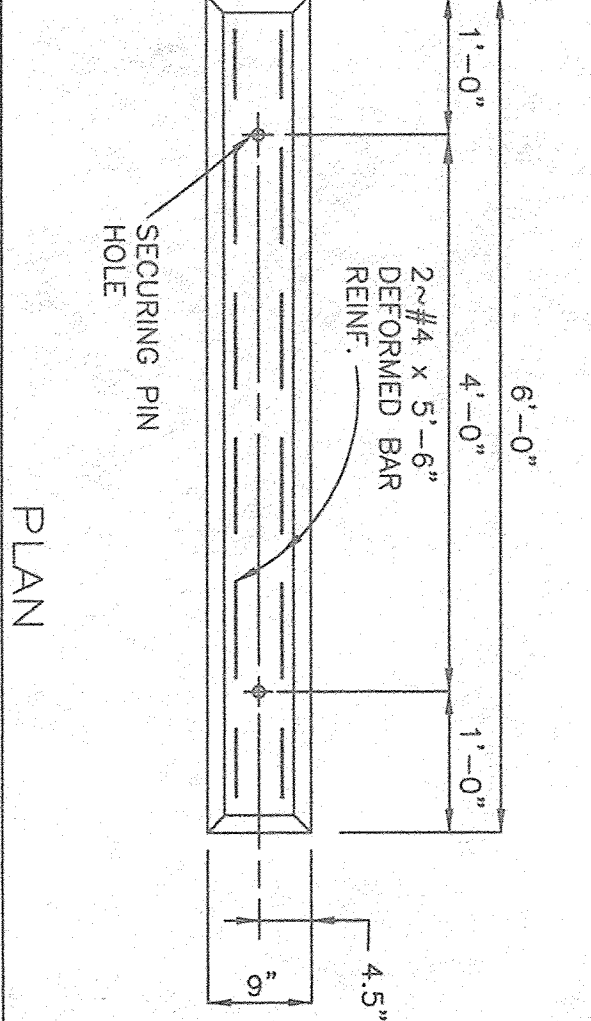


1 CUT OFF WALL

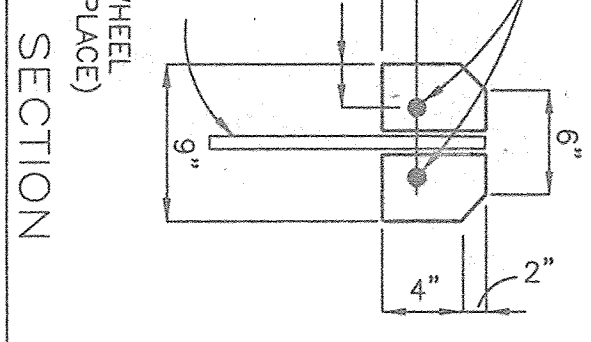
NTS

2 PAVING SECTION (PER GEOTECH REPORT)

NTS



PLAN



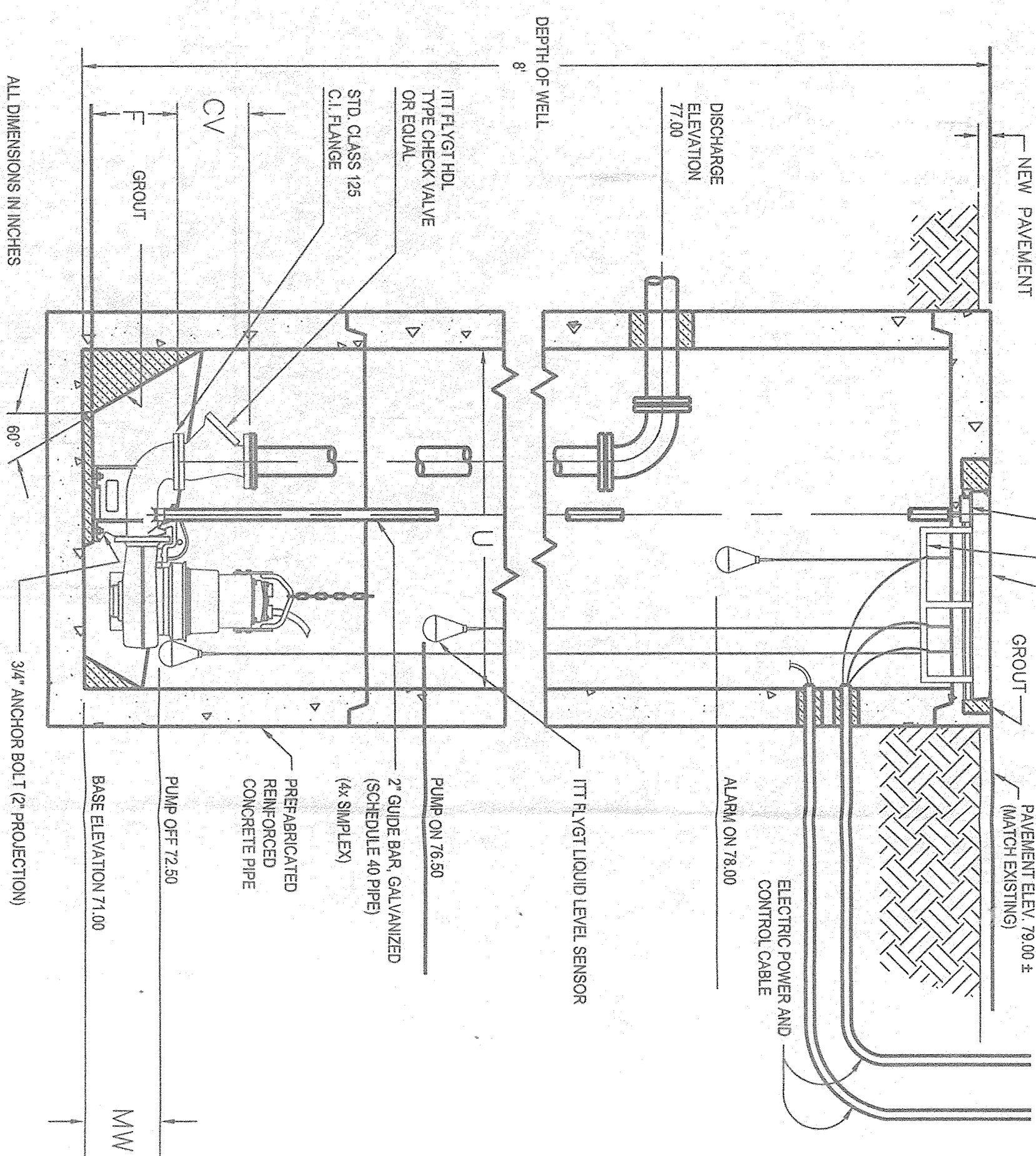
SECTION

6 PRE-CAST CONCRETE WHEEL STOP

NTS

NOTES

1. LOCATE ANCHOR BOLTS USING CLEAR INSIDE EDGE OF ACCESS FRAME AND CENTER LINE OF PUMP AS REF. POINT. BOLT LOCATIONS MUST BE HELD TO MAINTAIN EXACT POSITION OF PUMP RELATIVE TO ACCESS FRAME.  
2. HEAVY DUTY FRAME AND LID. CATCH BASIN FRAME, GRADE NEEHAH R-2556 OR APPROVED EQUAL.
- ITT FLYGT CONTROL CENTER  
SUBJECT TO ENGINEER'S SPECIFICATIONS (WALL, POLE, OR PEDISTAL MOUNTING)  
JUNCTION BOXES (NOT SHOWN) FOR THE PUMP AND CONTROL CABLES MUST BE LOCATED ABOVE THE FLOOD ELEVATION.



ALL DIMENSIONS IN INCHES

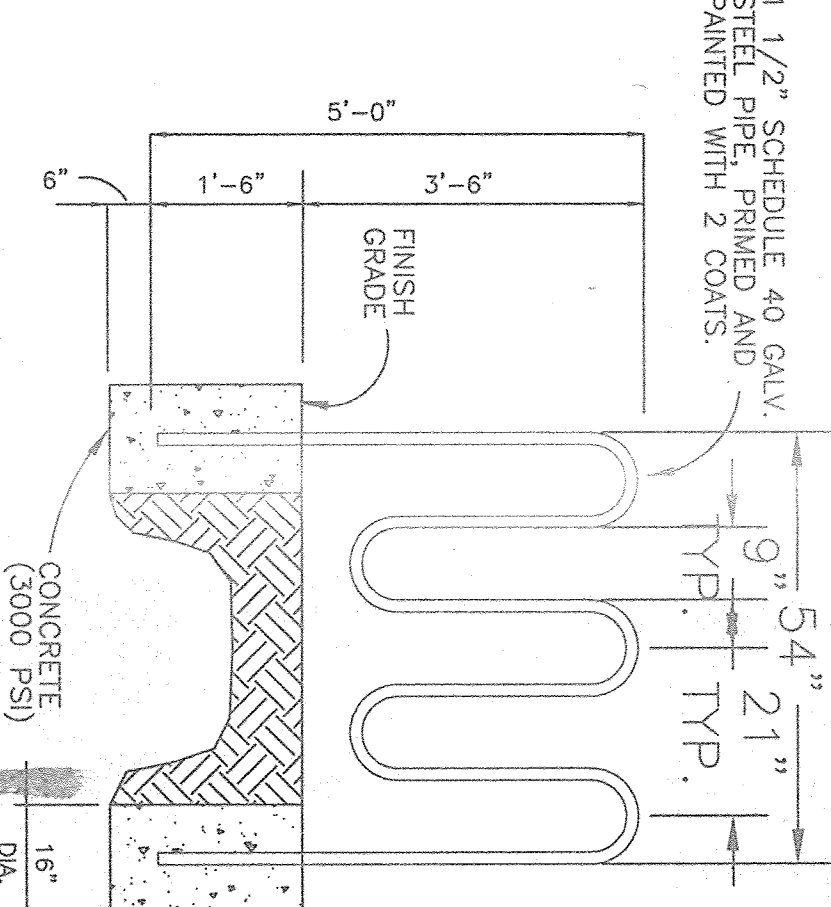
DIMENSIONAL CHART												
STATION												
NOM. SIZE	VERSION	A	B	C	D	F	G	H	R	S	T	U
4"	STD	2 3/4	9 3/8	7 3/4	3 3/8	15 3/8	1	39	-	17 3/4	10 3/4	80
										11 1/2	13	

7 STORM WATER PUMP STATION

NTS

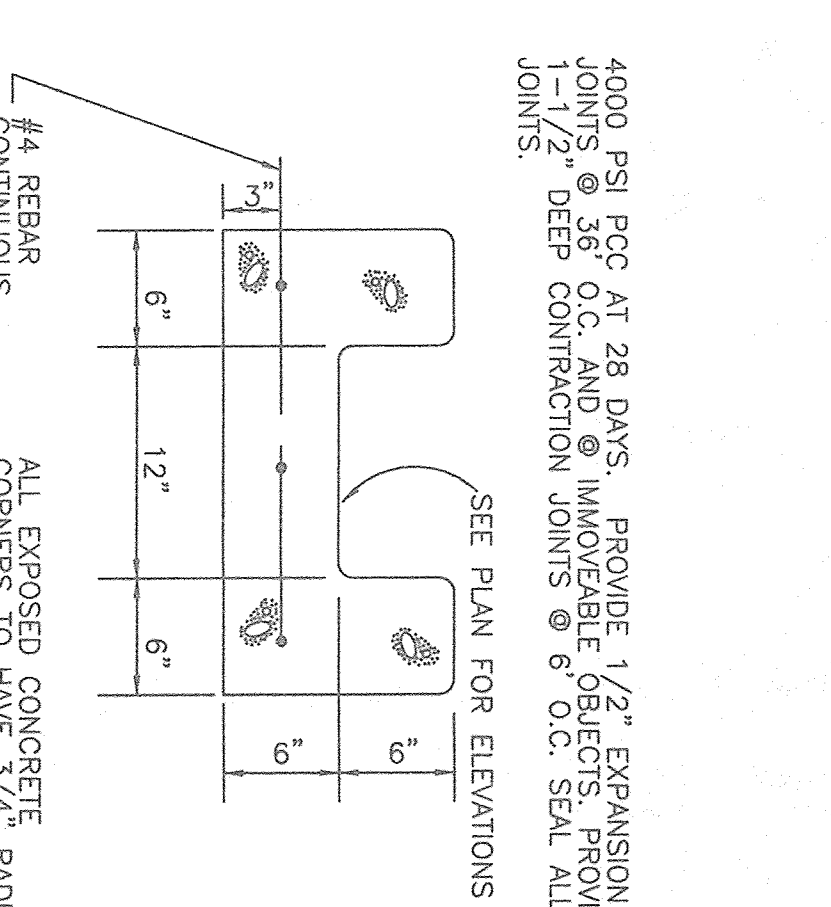
3 BIKE RACK DETAIL

NTS



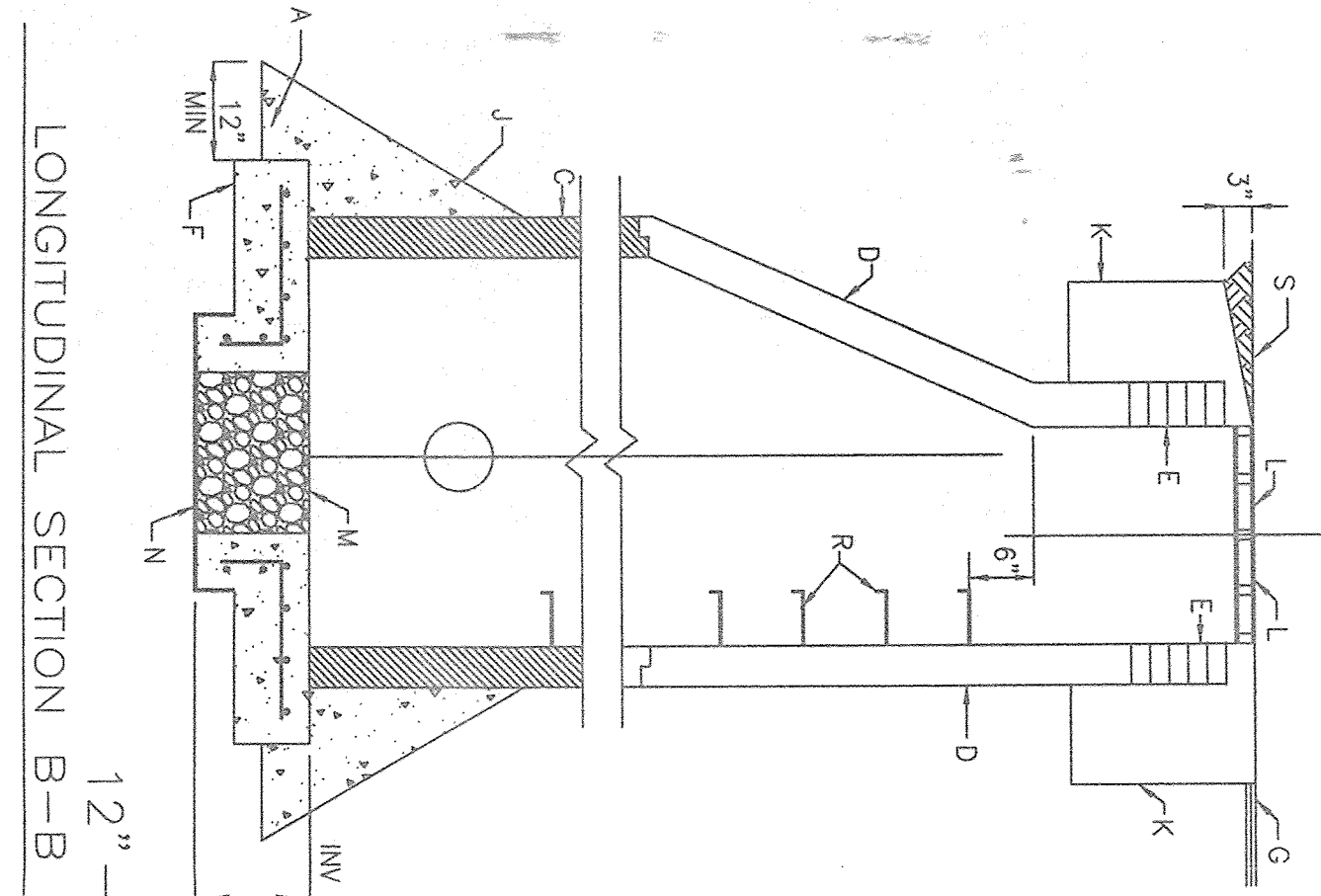
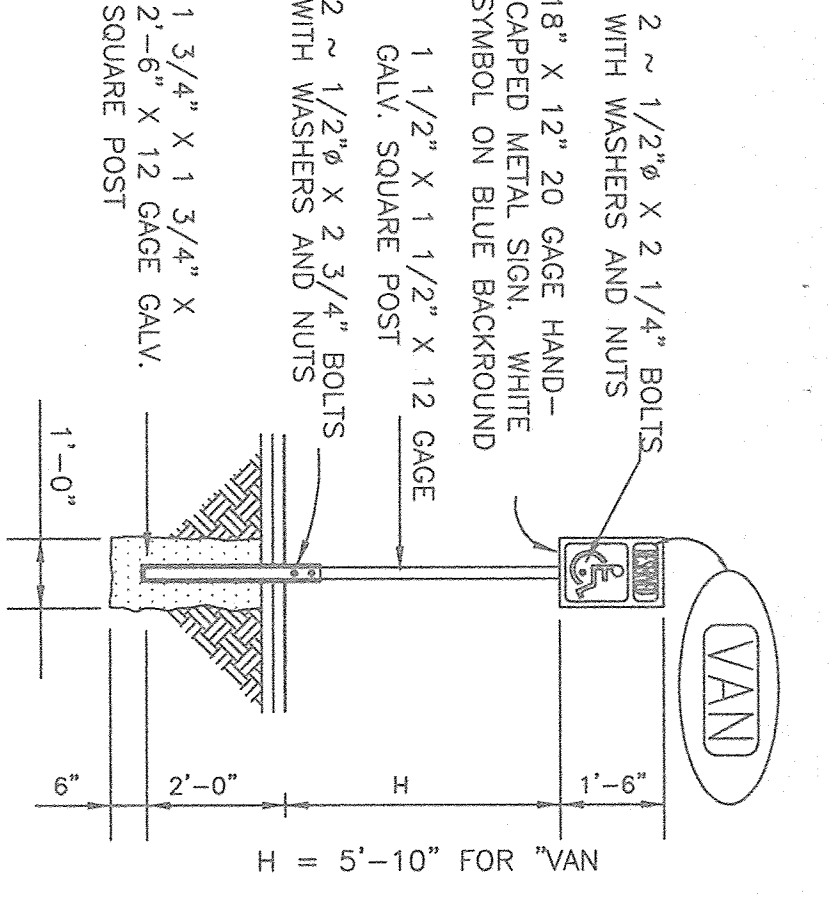
4 CONCRETE TROUGH

NTS

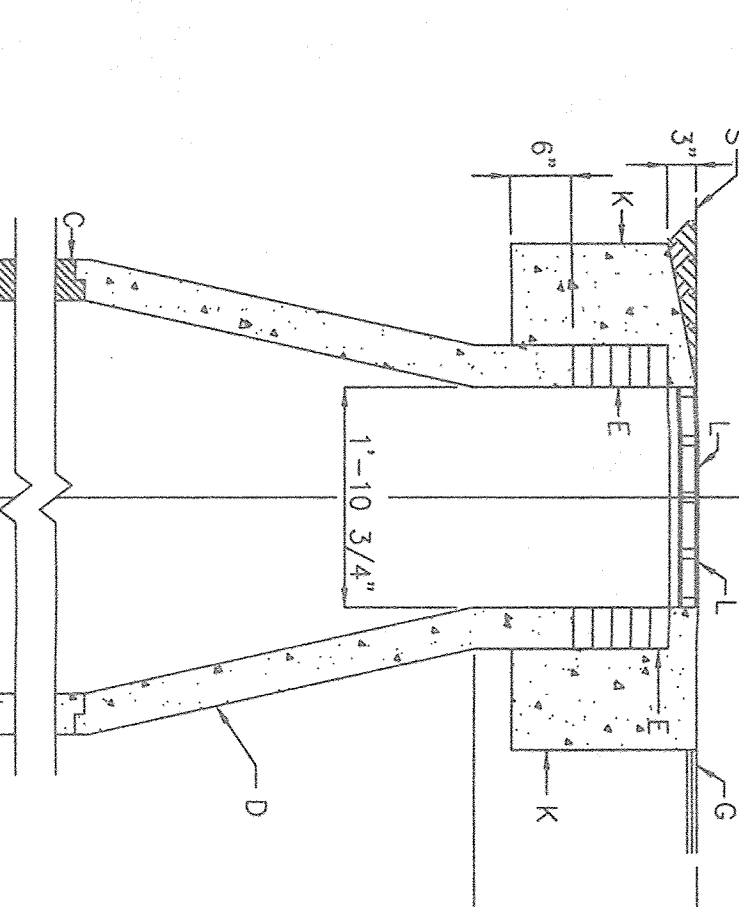


5 HANDICAPPED SIGNING DETAIL

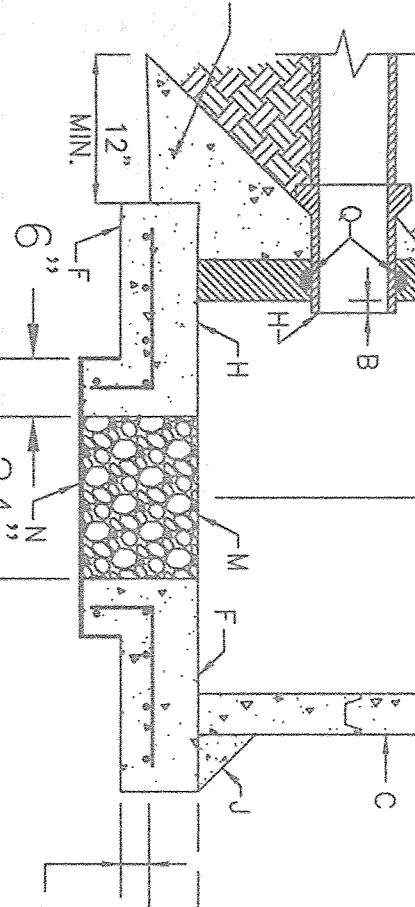
NTS



LONGITUDINAL SECTION B-B



TRANSVERSE SECTION A-A



PLAN

- GENERAL NOTES:
1. USE NON-SHRINK GROUT FOR JOINTS, FILETS, AND PENETRATIONS.  
2. COMPACT ALL BACKFILL AROUND MANHOLE TO 95% ASTM D-1557.  
3. POSITION MANHOLE OPENING OVER THE UPSTREAM SIDE OF MAIN LINE.  
4. USE TYPE "C" MANHOLE FOR DEPTHS OF 6' OR LESS MEASURED FROM INVERT TO RIM. MAY USE TYPE "C" MANHOLE OR TYPE "E" MH FOR DEPTHS GREATER
- CONSTRUCTION NOTES:
- A. CONCRETE PIPE SUPPORTS SHALL EXTEND OUTSIDE OF MANHOLE TO BELL OF FIRST JOINT AND SHALL CRADLE PIPE. (NOT APPLICABLE FOR FLEXIBLE PIPE)  
B. PIPE PENETRATION INTO MANHOLE SHALL BE FLUSH TO 2" MAXIMUM.  
C. PRECAST CONCRETE BARREL.  
D. PRECAST REINFORCED CONCRETE ECCENTRIC CONE.  
E. GRADE MS BRICKS FOR ADJUSTMENT OF MANHOLE FRAME (FOUR COURSES MAXIMUM). 1/2" MORTAR PLASTER OVER INSIDE OF BRICKS OR PRECAST CONCRETE ADJUSTMENT RINGS.  
F. CAST IN PLACE CONCRETE BASE WITH #4 BARS @ 6" O.C.E.W. FOR MANHOLE DEPTH OF 16' OR GREATER. #4 BARS @ 12" O.C.E.W. FOR MANHOLE DEPTH OF LESS THAN 16'.  
G. INVERT ELEVATION AS SHOWN.  
H. INVERT ELEVATION AS SHOWN.  
I. 6" GROUT FILL ON UPPER HALF OF PIPE AND AROUND BASE.  
J. 5'X5' SQUARE OR 5' DIA. CIRCULAR CONCRETE PAD (COLLAR). 4000 PSI PCC.  
K. HEAVY DUTY FRAME AND LID COVER.  
L. 3/4" GRAVEL TO FILL DRAIN AREA.  
M. FILTER FABRIC.  
N. 2" DRAIN PIPE.  
O. APPROVED WATERSTOP TO BE COMPATIBLE WITH TYPE OF PIPE.  
P. NON-CORROSIVE ALUMINUM OR POLYPROPYLENE STEPS.  
Q. IN UNPAVED AREAS SET FRAME TO GRADE AND SLOPE TO TOP OF PAD.  
R. "STORM" OR "SEWER" CAST ON LID AS APPROPRIATE.

FOR INFORMATION ONLY.  
PRIOR APPROVAL,  
ENGINEERS STAMP  
DATE 05-09-01.

Stamp area for BPLW Architects & Engineers, Inc.

ALBUQUERQUE, NM  
ACADEMY  
BUILDING ADDITION  
CIVIL DETAILS

Job No.	210003.02	No. of Sheets	6
Drawn by	JP	Checked by	JP
Date	10/31/02	Project	6200 UPTOWN BOULEVARD NE - SUITE 400 ALBUQUERQUE, NEW MEXICO 87110 (505) 881-2759 CIVIL
Manager	Real Estate Engineering	Client	5A202-AC-SK06