




KEYED NOTES

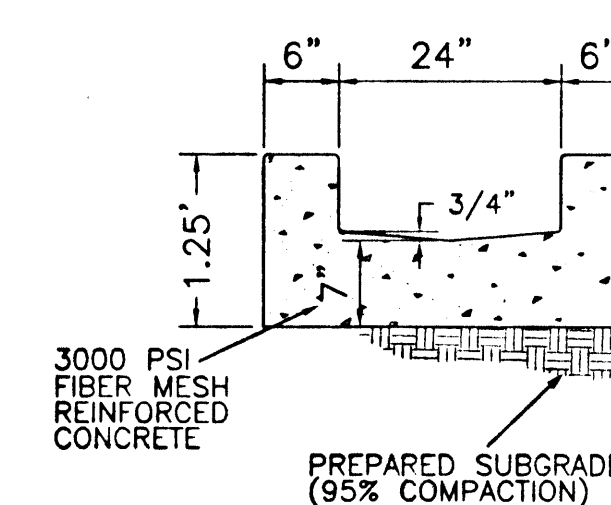
- 1 INSTALL ASPHALT PAVING PER DETAIL 2 ON SHEET C06. (ORIGINAL APPROVED 05-09-01 PLAN SET)
- 2 CONSTRUCT 6" CONCRETE HEADER CURB PER COA STD DWG 2415.
- 3 UNDERGROUND FUEL TANK PER MECHANICAL PLANS. (ORIGINAL APPROVED 05-09-01 PLAN SET)
- 4 INSTALL 1/2" LANDSCAPE GRAVEL.
- 5 EMERGENCY GENERATOR BUILDING 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. CONSTRUCT PAD TO SHED WATER. (ORIGINAL APPROVED 05-09-01 PLAN SET)
- 12 CONSTRUCT MECHANICAL YARD WALL AND GATE PER ARCHITECTURAL PLANS. (ORIGINAL APPROVED 05-09-01 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 24" WIDE SIDEWALK CULVERT PER CITY OF ALBUQUERQUE STD DWG 2236.
- 16 INSTALL SHADED EMPLOYEE BREAK AREA TO CONTAIN TABLE W/SHADE DEVICE 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 PER DETAIL 8/SHEET C06 (ORIGINAL APPROVED 05-09-01 PLAN SET). INSTALL NEENAH R-1755 WATERTIGHT FRAME SOLID LID AND INNER LID OR APPROVED ALTERNATE. INSTALL HYDRAULIC BV-A1 SUBMERSIBLE SUMP PUMP OR APPROVED ALTERNATE AT BOTTOM OF MANHOLE. 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./ HOLFS IN EXISTING WALL AT GRADE. SEE GRADING PLAN FOR ELEVATION.
- 24 NEATLY SAWCUT, REMOVE AND DISPOSE OF EXISTING CURB AND GUTTER. REPLACE WITH NEW CURB AND 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.

LEGEND (EXISTING)

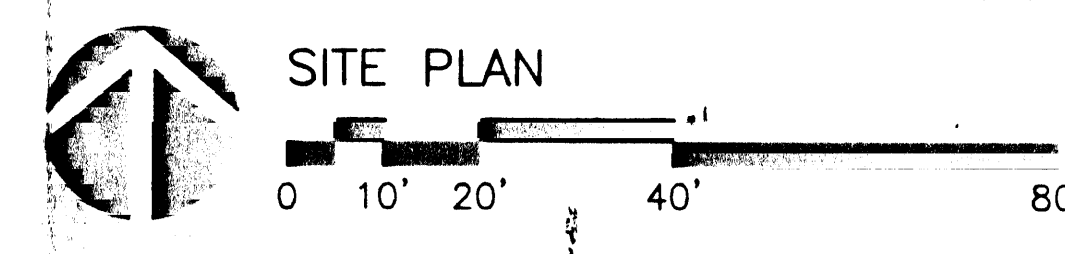
CONCRETE AREA	
VAULT	
POWER POLE W/ FEED	
TRANSFORMER	
TELEPHONE PEDESTAL	
LIGHT POLE	
GROUND LIGHT	
CHAIN LINK FENCE	— x — x — x
ABOVE GROUND EQUIPMENT	
BOLLARD	
BLOCK WALL	
TELEPHONE MAN HOLE	
STANDARD CURB & GUTTER	
TREE	
WATER METER	
HEADER CURB	
ROOF DRAIN	
PULL BOX	
SANITARY SEWER MAN HOLE	
STORM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

LEGEND (NEW)


MANHOLE	
PARKING BUMPER	
CLEANOUT	



24" CONCRETE RUNDOWN



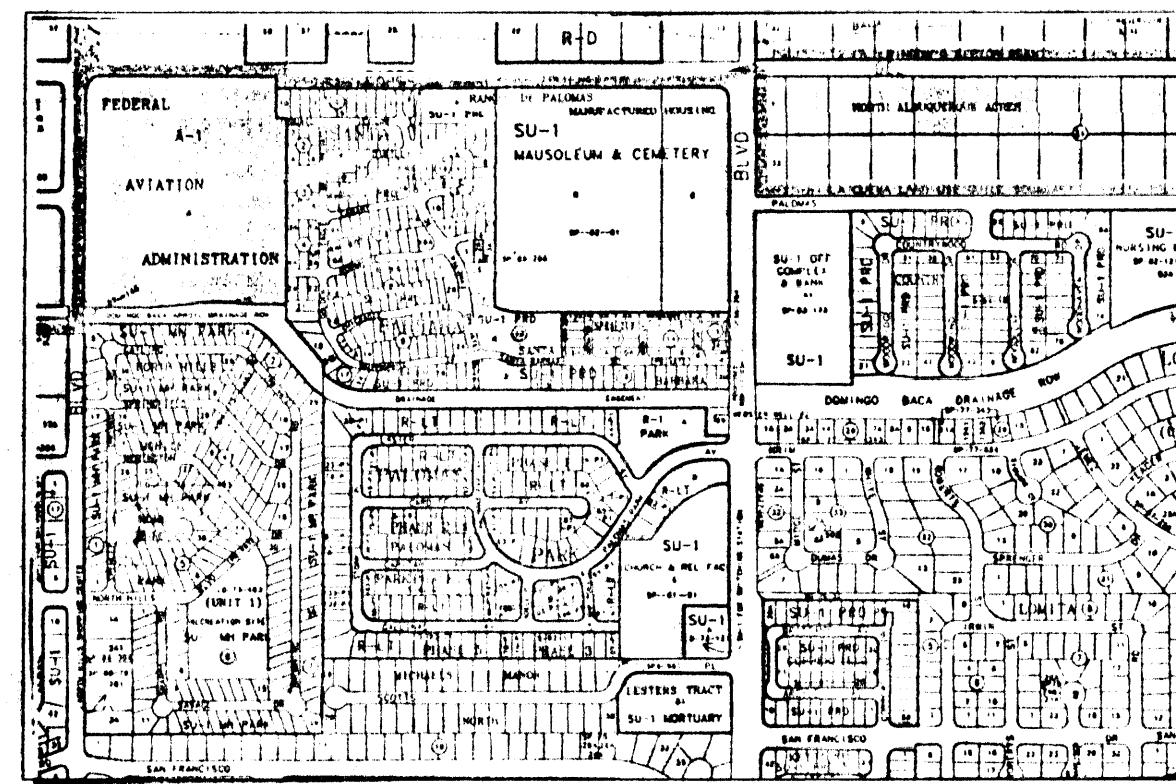
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HYDROLOGY SECTION

DRAWN BY	TS	BPLW Architects & Engineers, Inc. 	Job No.	21003.02	No. of Sheets
CHECKED BY	JP				
DATE	10/31/02		6200 UPTOWN BOULEVARD NE - SUITE 400 ALBUQUERQUE, NEW MEXICO 87110 (505) 881-2759	CIVIL	

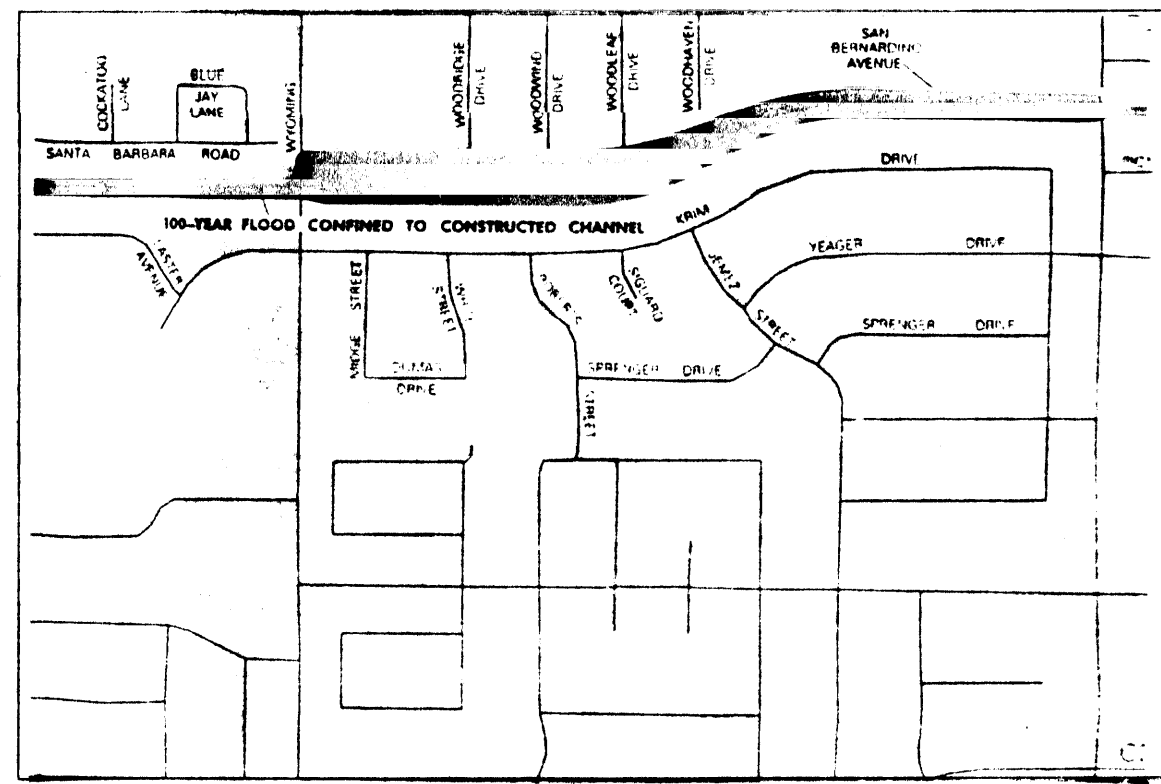
Albuquerque, NM
Academy
Building Addition
SITE PLAN

Qwest	2		
Manager - Real Estate Engineering			
Qwest Business Resources - Real Estate Albuquerque, New Mexico	5A202-AC-SK00.3		

21003C10

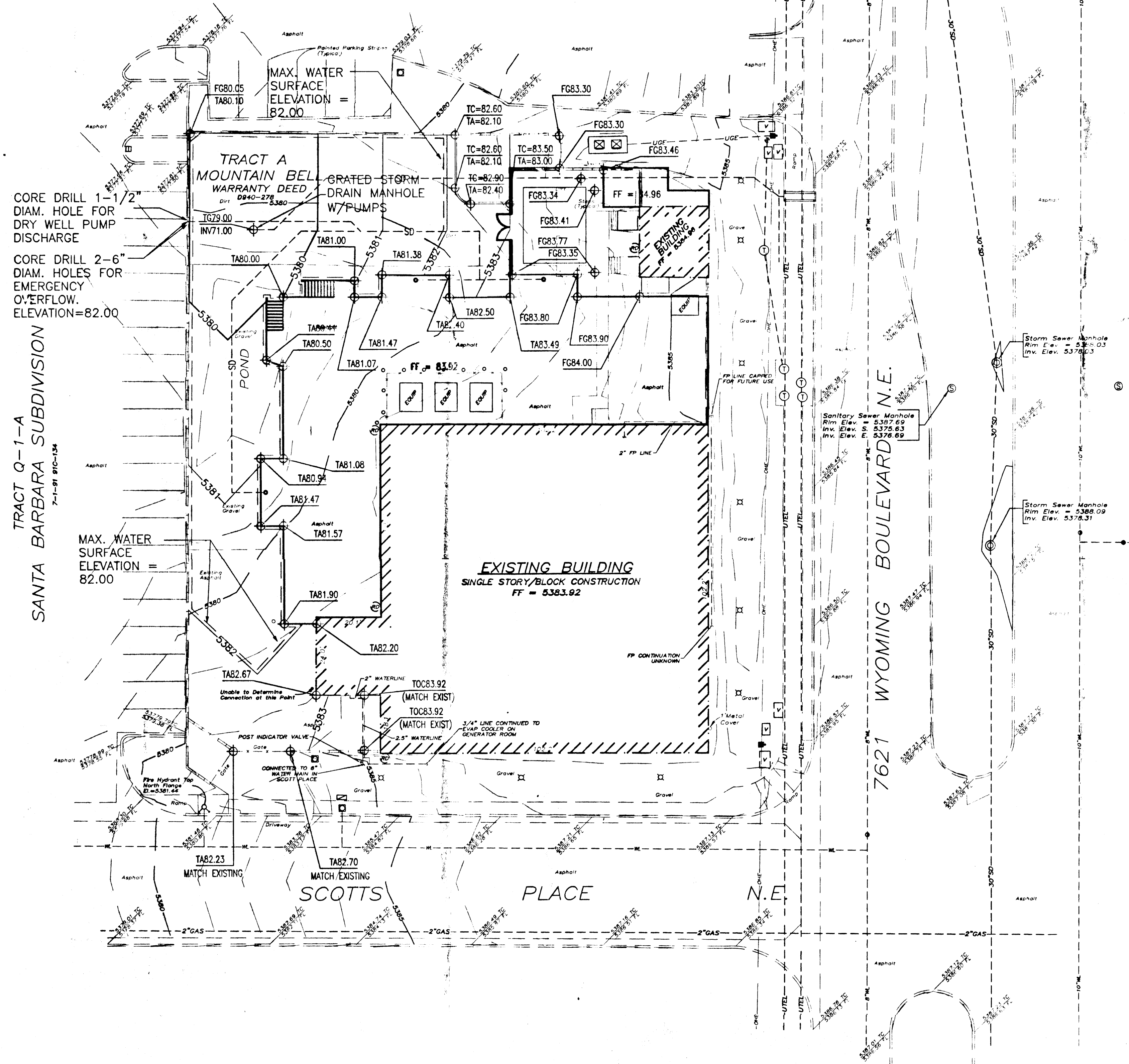


VICINITY MAP
ZONE ATLAS PAGE D-19-Z



FEMA MAP PANEL

TRACT Q-1-A
SANTA BARBARA SUBDIVISION
7-1-91 81C-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 PASEO DEL NORTE N.E. EL=5375.62 (NAVD29)

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 = 5375.62 (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

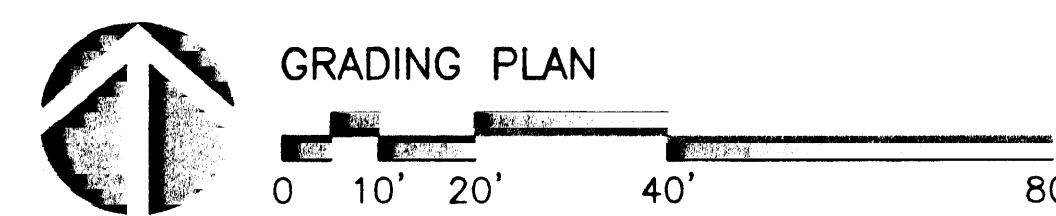
THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES AS SHOWN HEREON ARE APPROXIMATE AND WERE DERIVED FROM AS-BUILT DRAWINGS, GAS COMPANY OF NEW MEXICO LINE LOCATION MAPS, PUBLIC SERVICE COMPANY OF NEW MEXICO LINE LOCATION MAPS AND SURFACE INDICATIONS EITHER SPOTTED BY THE RESPECTIVE UTILITY COMPANIES OR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

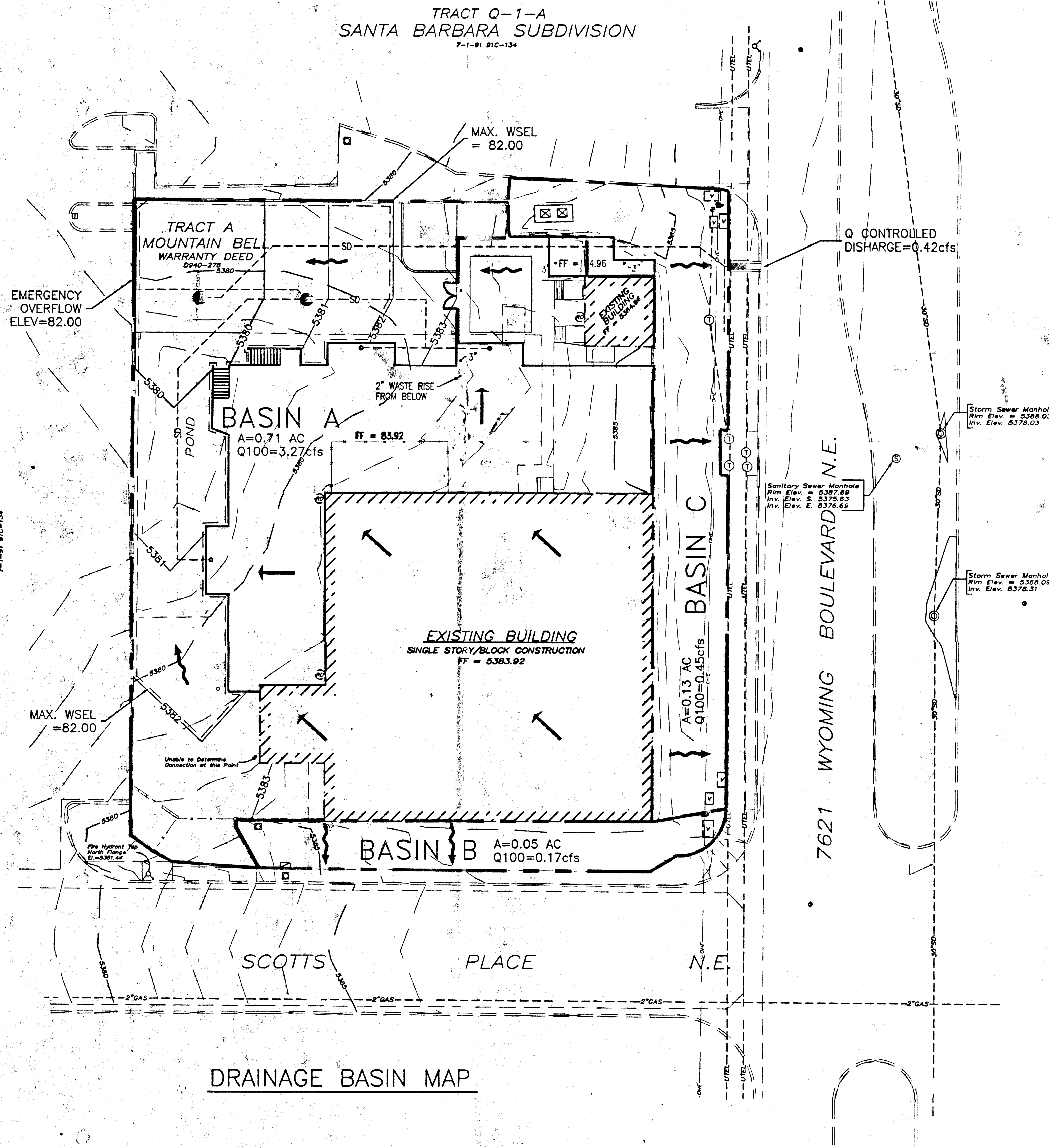
NOTICE TO CONTRACTORS

- 1 AN EXCAVATION/CONSTRUCTION PERMIT WILL BE REQUIRED BEFORE BEGINNING ANY WORK WITHIN CITY RIGHT-OF-WAY.
- 2 ALL WORK DETAILED 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, 1985.
- 3 TWO WORKING DAYS PRIOR TO ANY EXCAVATION, CONTRACTOR MUST CONTRACT LINE LOCATING SERVICE, (260-1990) FOR LOCATION OF EXISTING UTILITIES.
- 4 PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF CONSTRUCTIONS 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 ARTERIAL STREETS SHALL BE PERFORMED ON A 24-HOUR BASIS.

APPROVAL:	
INSPECTOR	DATE

DRAWN BY: TS CHECKED BY: JP DATE: 10/31/02	BPLW Architects & Engineers, Inc. 6200 UPTOWN BOULEVARD NE - SUITE 400 ALBUQUERQUE, NEW MEXICO 87110 (505) 881-2759	Job No. 21003.02 No. of Sheets 1
Albuquerque, NM Academy Building Addition NOV 01 2002 HYDROLOGY SECTION GRADING PLAN		
OWESE Manager - Real Estate Engineering Owner: Business Resources - Real Estate Albuquerque, New Mexico		
5A202-AC-SKC04		





DRAINAGE PLAN

THIS DRAINAGE PLAN SHALL SUPERCEDE THE APPROVED DRAINAGE PLAN FOR THIS SITE, ENGINEER'S STAMP DATE 06-08-01, PREPARED BY CHAVEZ AND GRIEVES CONSULTING ENGINEER'S INC. DRAINAGE FILE D-19-D4A. MINOR MODIFICATIONS HAVE BEEN MADE TO THE AFOREMENTIONED DRAINAGE PLAN NECESSITATING THIS SUBMITTAL. 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 QWEST 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 GRADING PLAN SHOWS EXISTING AND PROPOSED SPOT ELEVATIONS AND CONTOURS 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 COMPRISED OF THREE SEPARATE DRAINAGE BASINS TOTALING 0.89 ACRES. IN THE EXISTING CONDITION, THE TWO SMALLER BASINS, B AND C, CONVEY PRIMARILY UNDEVELOPED STORM WATER RUNOFF DIRECTLY TO SCOTT'S PLACE AND WYOMING BLVD, RESPECTIVELY. THE LARGEST BASIN, BASIN A, WHICH CONSISTS OF 0.71 ACRES OF PERVIOUS AND IMPVIOUS AREA, CURRENTLY CONVEYS RUNOFF TO A SMALL RETENTION POND AT THE WEST SIDE OF THE SITE. IN THE DEVELOPED CONDITION, BASIN A, WHICH WILL BE 100 PERCENT IMPVIOUS, WILL CONVEY DEVELOPED RUNOFF TO A STORM INLET AT THE NORTHWEST CORNER OF THE SITE. THIS INLET WILL CONTAIN A PUMP THAT WILL CONVEY THE DEVELOPED RUNOFF TO THE BACK OF A SIDEWALK CULVERT THAT IN TURN WILL DRAIN TO THE EXISTING CURB AND GUTTER ON THE WEST SIDE OF WYOMING BLVD. AT A CONTROLLED RATE OF 0.42 CFS. CURB AND GUTTER RUNOFF IS THEN CONVEYED TO THE NORTH VIA WYOMING BLVD., A SHORT DISTANCE TO THE DOMINGO BACA ARROYO.

OFF-SITE 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 CONDITIONS FOR THE 100-YEAR, 6-HOUR RAINFALL EVENT AS WELL AS THE DEVELOPED AND FUTURE CONDITIONS FOR THE 100-YEAR, 24-HOUR EVENT. THE PROCEDURE FOR 40 ACRE AND SMALLER BASINS SET BY SECTION 22.2, HYDROLOGY OF THE DEVELOPMENT PROCESS-MANUAL, VOLUME 2, DESIGN CRITERIA, DATED JANUARY 1993, HAS BEEN USED TO QUANTIFY THE PEAK RATE OF DISCHARGE AND VOLUME OF RUNOFF GENERATED. OTHER CALCULATIONS INCLUDE HYDROGRAPH CALCULATIONS FOR A SMALL WATERSHED (COA DPM SECTION 22.2.A.8), INLET CALCULATIONS FOR THE STORM DRAIN INLET AS WELL AS POND VOLUME CALCULATIONS.

AS ILLUSTRATED BY THESE CALCULATIONS, THERE WILL BE A SLIGHT INCREASE IN GENERATED RUNOFF AND DISCHARGE RATE, AND A MODERATE INCREASE IN RUNOFF EXITING THE SITE DUE TO THE REMOVAL OF THE EXISTING RETENTION SITUATION ON THE SITE. ALSO ILLUSTRATED BY THE CALCULATIONS IS THE EXCESS DETENTION PONDING CAPACITY OF THE SITE WHICH IS SHOWN AS A MODIFICATION TO THE PREVIOUSLY APPROVED PLAN. STORM WATER WILL BE ALLOWED TO RISE APPROXIMATELY 3 FEET BEFORE EXITING THE SITE TO THE ADJACENT CHURCH PROPERTY TO THE WEST VIA AN EMERGENCY OVERFLOW. THE SUBJECT DETENTION POND IS CONTAINED WITHIN A FENCED COMPOUND WITH STRICTLY CONTROLLED ACCESS. THE EMERGENCY OVERFLOW WILL CONSIST OF 2-6 INCH CORE DRILLED HOLES IN THE EXISTING WEST SITE WALL SEPARATING THE SUBJECT SITE AND THE CHURCH SITE TO THE WEST. THE PORTION OF THE CHURCH SITE AFFECTED BY THE EMERGENCY OVERFLOW CONSISTS OF AN ASPHALT PARKING LOT WITH A PAVED SWALE CONVEYING RUNOFF ACROSS THE SITE, DISCHARGING TO GALLINAS AVENUE. GALLINAS AVENUE IS IMPROVED WITH STORM INLETS TO CONVEY DEVELOPED RUNOFF TO THE DOMINGO BACA ARROYO. STORM WATER WOULD NOT ENTER THE SUBJECT BUILDING IMPROVEMENTS UNTIL REACHING A DEPTH OF 4.9 FEET. THE STORM DRAIN MANHOLE CONSTRUCTED AS A DRY WELL WILL BE MODIFIED WITH A WATERTIGHT LID TO PREVENT DETAINED STORM WATER FROM ENTERING IT, AS WELL AS A PUMP AS A SECONDARY MEASURE TO INSURE WATER FROM THE DRY WELL DOES NOT BACK UP INTO THE BASEMENT OF THE PROPOSED BUILDING.

CALCULATION - SITE CHARACTERISTICS

- Precipitation Zone = 3
- P360 = 2.60 in.
- Total Area = 0.89 ac.; 38,850 sf
- Existing Conditions

Basin A	30,930/0.71	100
Land Treatment	Area (sf/ac)	%
C	8,280/0.19	27
D	22,650/0.52	73

Basin B	2,180/0.05	100
Land Treatment	Area (sf/ac)	%
C	2,180/0.05	100

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

5. Developed Conditions

Basin A	30,930/0.71	100
Land Treatment	Area (sf/ac)	%
D	30,930/0.71	100

Basin B	2,180/0.05	100
Land Treatment	Area (sf/ac)	%

NO CHANGE

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

NO CHANGE

6. Existing Conditions Calculations

a. Basin A

- Volume
 $EW = [(EA*AA+EB*AB+EC*AC+ED*AD)]/(AT)$
 $EW = [(1.29*0.45)+(2.36*0.52)]/(0.71) = 2.07$ in.
100 Year - 6 Hour Event
 $V100 = (EW/12)*AT$
 $V100 = 2.07/12*0.71 = 0.1227$ ac.ft; 5,340 cf
- Runoff
 $Q100 = QPA*AA+QPB*AB+QPC*AC+QPD*AD$
 $Q100 = 3.45*0.19+5.02*0.52 = 3.27$ cfs

b. Basin B

- Volume
 $EW = [(EA*AA+EB*AB+EC*AC+ED*AD)]/(AT)$
 $EW = [(1.29*0.05)]/(0.05) = 1.29$ in.
100 Year - 6 Hour Event
 $V100 = (EW/12)*AT$
 $V100 = 1.29/12*0.05 = 0.0054$ ac.ft; 230 cf
- Runoff
 $Q100 = QPA*AA+QPB*AB+QPC*AC+QPD*AD$
 $Q100 = 3.45*0.05 = 0.17$ cfs

c. Basin C

- Volume
 $EW = [(EA*AA+EB*AB+EC*AC+ED*AD)]/(AT)$
 $EW = [(1.29*0.13)]/(0.13) = 1.29$ in.
100 Year - 6 Hour Event
 $V100 = (EW/12)*AT$
 $V100 = 1.29/12*0.13 = 0.0140$ ac.ft; 610 cf
- Runoff
 $Q100 = QPA*AA+QPB*AB+QPC*AC+QPD*AD$
 $Q100 = 3.45*0.13 = 0.45$ cfs

7. Developed Conditions Calculations

a. Basin A

- Volume
 $EW = [(EA*AA+EB*AB+EC*AC+ED*AD)]/(AT)$
 $EW = [(2.36*0.71)/(0.71)] = 2.36$ in.
100 Year - 6 Hour Event
 $V100 = (EW/12)*AT$
 $V100 = 2.36/12*0.71 = 0.1396$ ac.ft; 6,080 cf
- Runoff
 $Q100 = QPA*AA+QPB*AB+QPC*AC+QPD*AD$
 $Q100 = 5.02*0.71 = 3.56$ cfs

3. Inlet Capacity

$$Q = CA(2gh)^{1/2}$$

Where:

$$A = 1.5 \text{ SF}$$
$$g = 32.2 \text{ Ft/S}^2$$
$$C = 0.6$$
$$h = 3.0$$

$$Q = 12.5 \text{ cfs}$$

Therefore: Pump Discharge Governs (0.42 cfs)

4. Hydrograph Calculations
(Using Hydrograph for small watershed
COA DPM Section 22.2.A.8)

$$Q \text{ RELEASE} = 0.42 \text{ cfs (Pump Discharge)}$$
$$E = 2.36 \text{ in.}$$
$$QP = 3.56 \text{ cfs}$$
$$AT = 0.71 \text{ ac.}$$
$$AD = 0.71 \text{ ac.}$$
$$TC = 0.2 \text{ hr.}$$

$$tP = 0.19 \text{ hr.}$$
$$tB = 0.747171 \text{ hr.}$$
$$tpk = 0.25 \text{ hr.}$$

Pond Volume Required = 5280 CF

$$\text{Time to Drain Pond} = 5280 \text{ cf} / 0.42 \text{ cfs}$$
$$= 12,571 \text{ s} = 3.5 \text{ hr.}$$

5. Pond Volume

Elev.	Area(SF)	Volume(CF)	Sum Volume (CF)
79	0	1050	1050
80	2100	3275	4325
81	4450	5590	9915
82	6730		
		9915 cf >>> 5280 cf	

a. Basin B

1. Volume
NO CHANGE2. Runoff
NO CHANGE

b. Basin C

1. Volume
NO CHANGE2. Runoff
NO CHANGE

8. Comparison

a. Existing ~vs~ Developed (Overall Site)

- Change in Volume for 100 year 6 hr. storm
 $DV = 6,920 - 6,180 = 740$ cf (increase)
- Change in Runoff Rate
 $DQ = 4.18 - 3.89 = 0.29$ cfs (increase)
- Change in Runoff Exiting the Site
 $DQ = (Dvdp. 'A', 'B' \& 'C') - (\text{Exist. 'B' \& 'C'})$
 $= 4.18 - 0.62 = 3.56$ cfs (increase)

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 AF C-G
TS JP BPLW

DRAWN BY TS
CHECKED BY JP
DATE 10/31/02

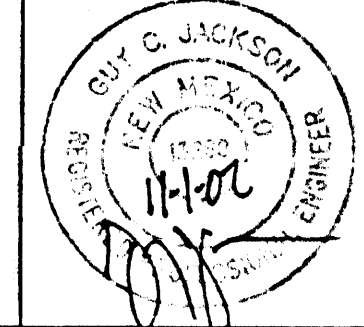
BPLW Architects & Engineers, Inc.
6200 UPTOWN BOULEVARD NE - SUITE 400
ALBUQUERQUE, NEW MEXICO 87110 (505) 881-2759

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No. of Sheets CIVIL

Albuquerque, NM

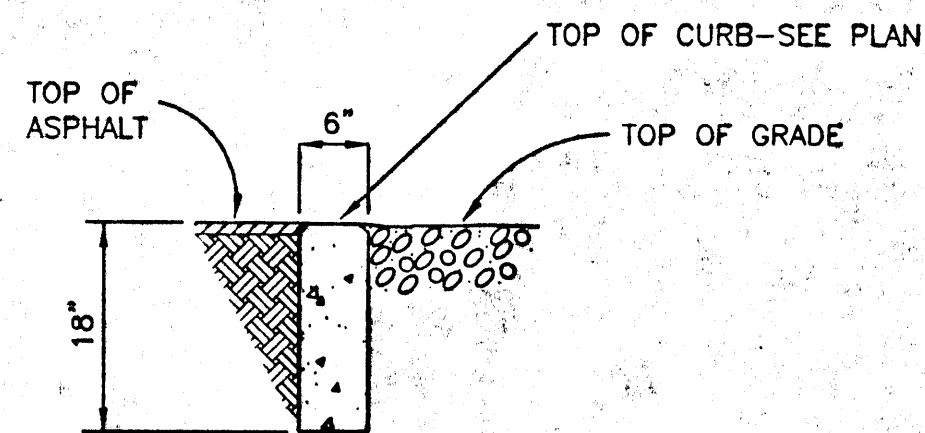
Academy

Building Addition

HYDROLOGY SECTION
DRAINAGE PLAN
AND CALCULATIONSQwest
Manager - Real Estate EngineeringQwest
Business Resources - Real Estate
Albuquerque, New Mexico
5A202-AC-SKC07

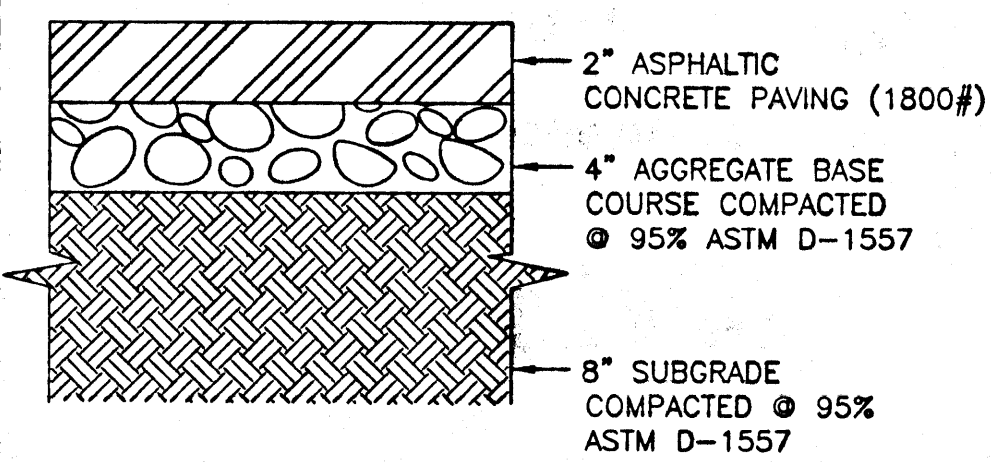
CONSTRUCTION NOTES:

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.



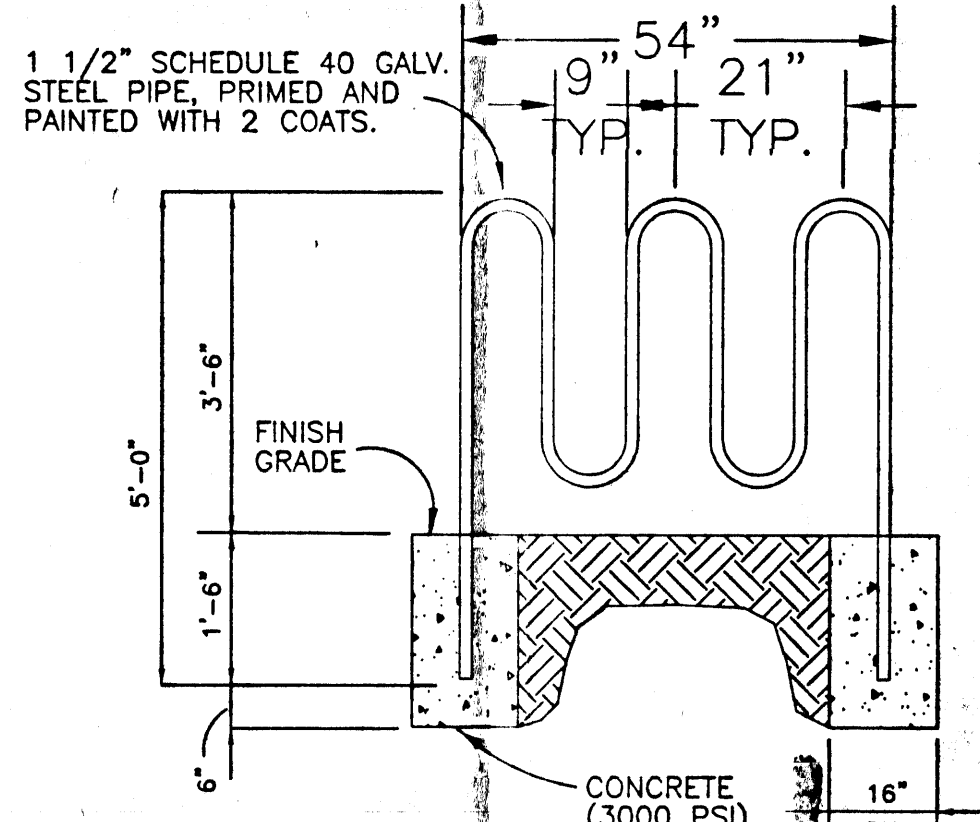
1 CUT OFF WALL

NTS



2 PAVING SECTION (PER GEOTECH REPORT)

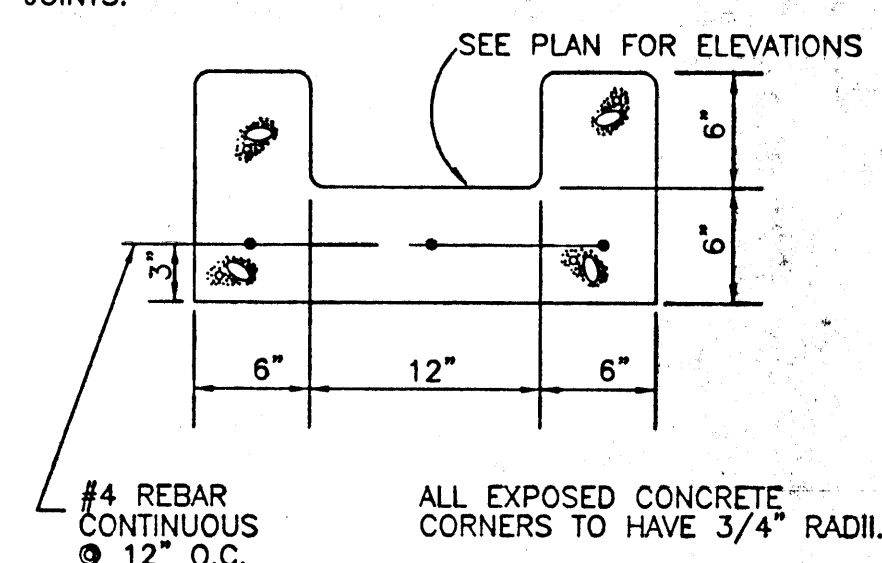
NTS



3 BIKE RACK DETAIL

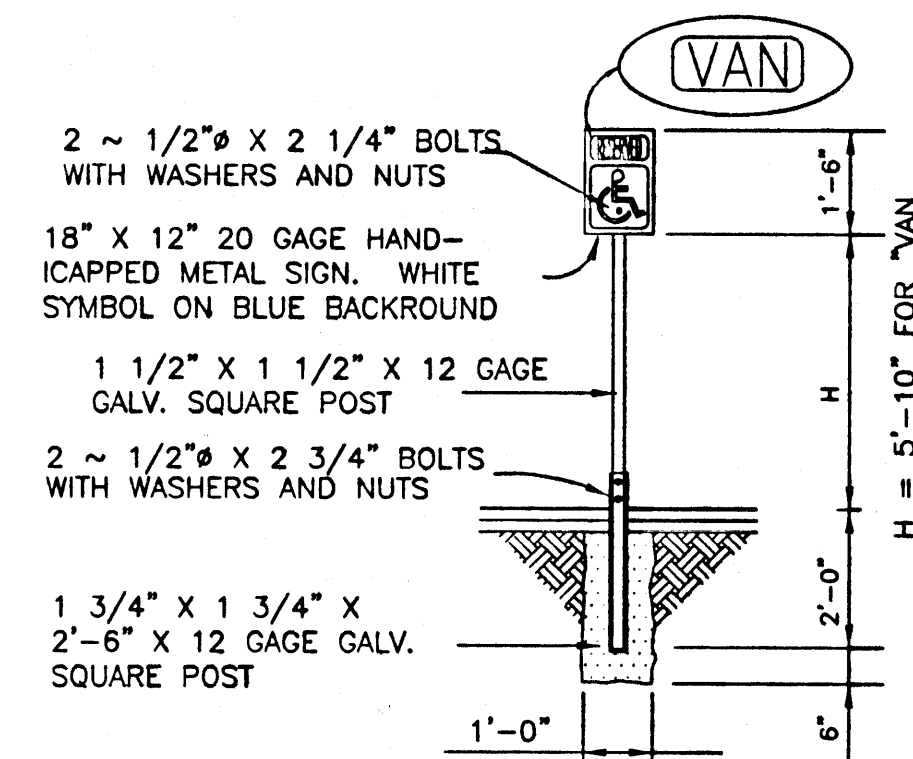
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4000 PSI PCC AT 28 DAYS. PROVIDE 1/2" EXPANSION JOINTS @ 36' O.C. AND IMMOVABLE OBJECTS. PROVIDE 1-1/2" DEEP CONTRACTION JOINTS @ 6' O.C. SEAL ALL JOINTS.



4 CONCRETE TROUGH

NTS



5 HANDICAPPED SIGNING DETAIL

NTS

PLAN

6 PRE-CAST CONCRETE WHEEL STOP

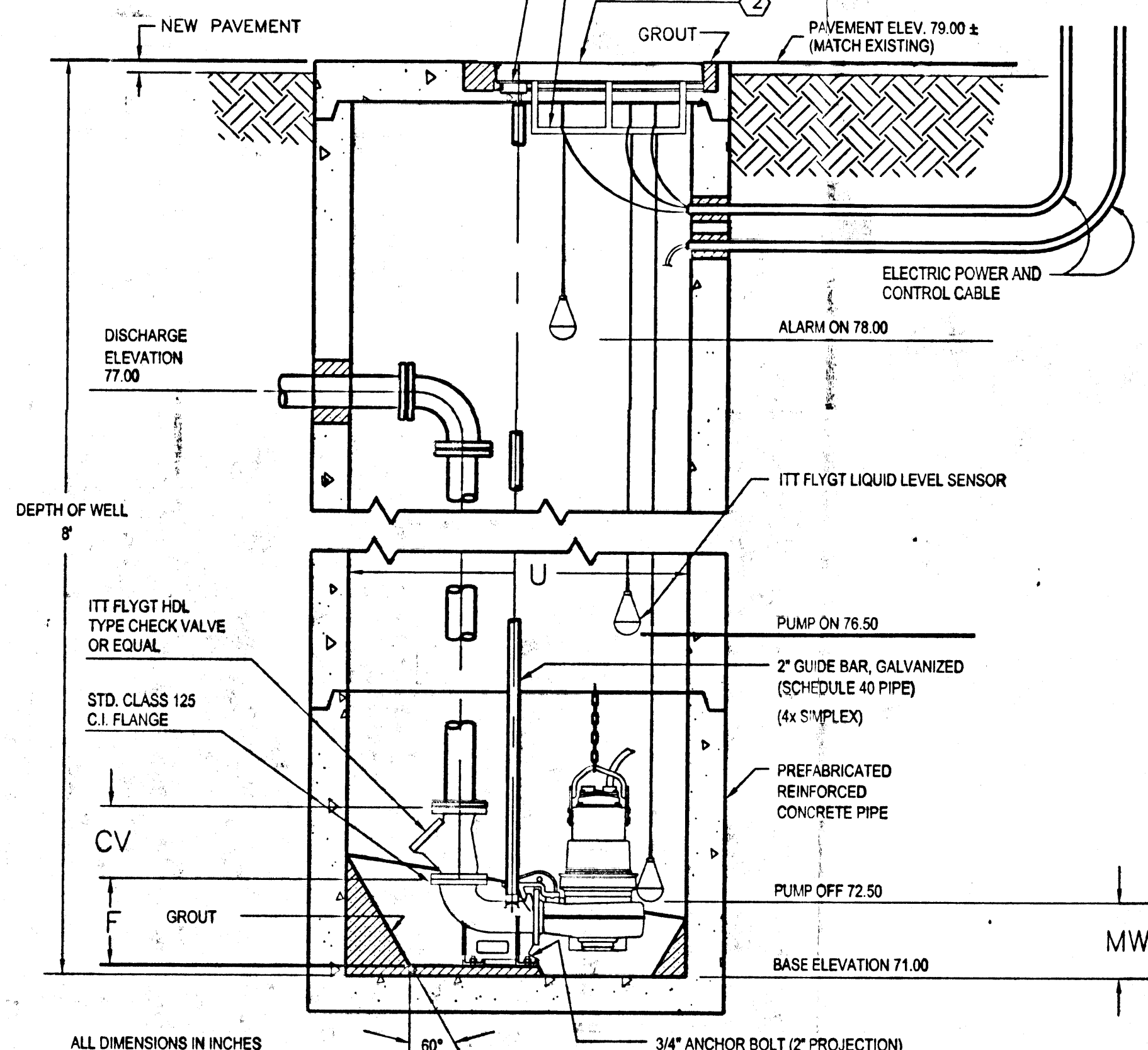
NTS

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, GRATE NEENAH R-2556 OR APPROVED EQUAL.

ITT FLYGT CONTROL CENTER SUBJECT TO ENGINEER'S SPECIFICATIONS (WALL, POLE, OR PEDESTAL MOUNTING)

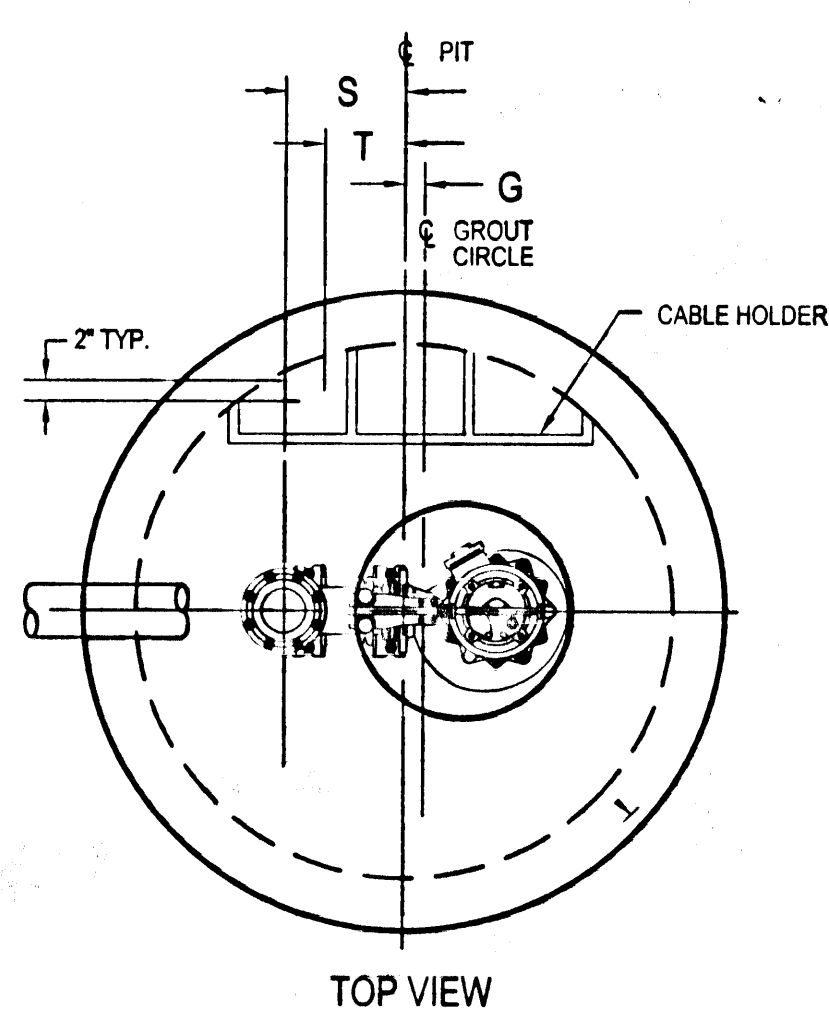
JUNCTION BOXES (NOT SHOWN) FOR THE PUMP AND CONTROL CABLES MUST BE LOCATED ABOVE THE FLOOD ELEVATION.



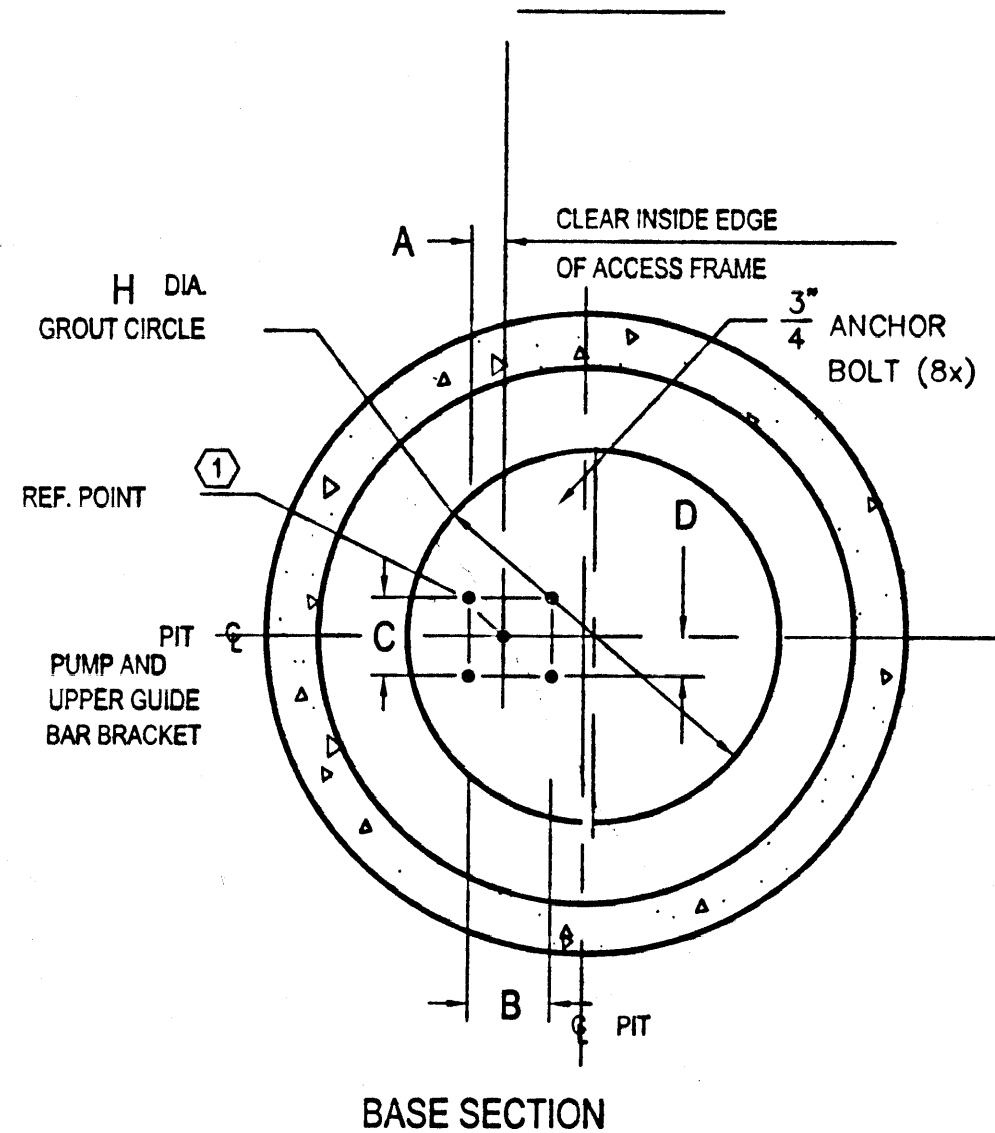
DIMENSIONAL CHART		STATION												
NOM. SIZE	VERSION	A	B	C	D	F	G	H	R	S	T	U	CV	MW
4"	STD	2 1/2	9 1/8	7 1/4	3 1/8	15 1/2	1	39	-	17 1/2	10 1/2	60	11 1/2	13

7 STORM WATER PUMP STATION

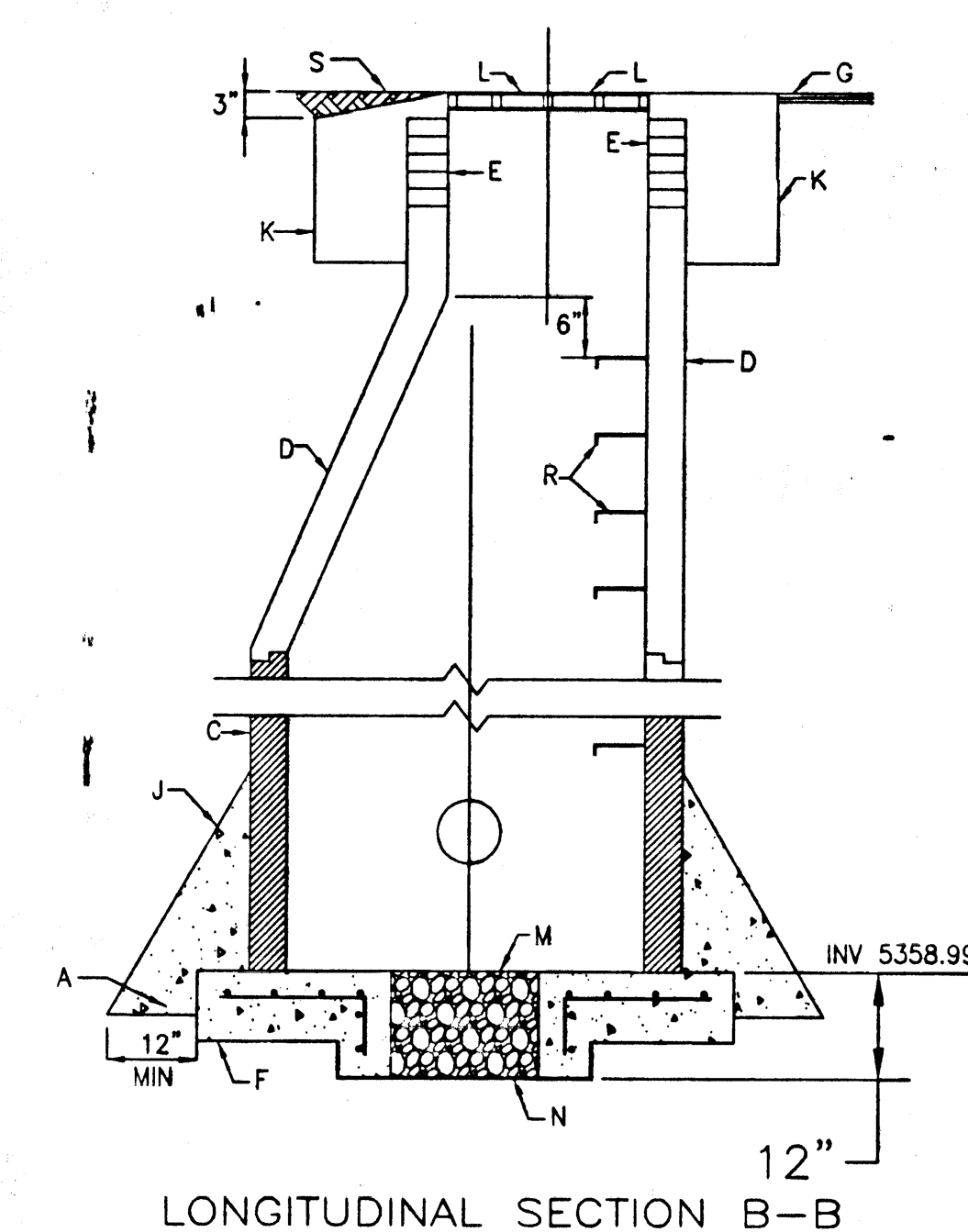
NTS



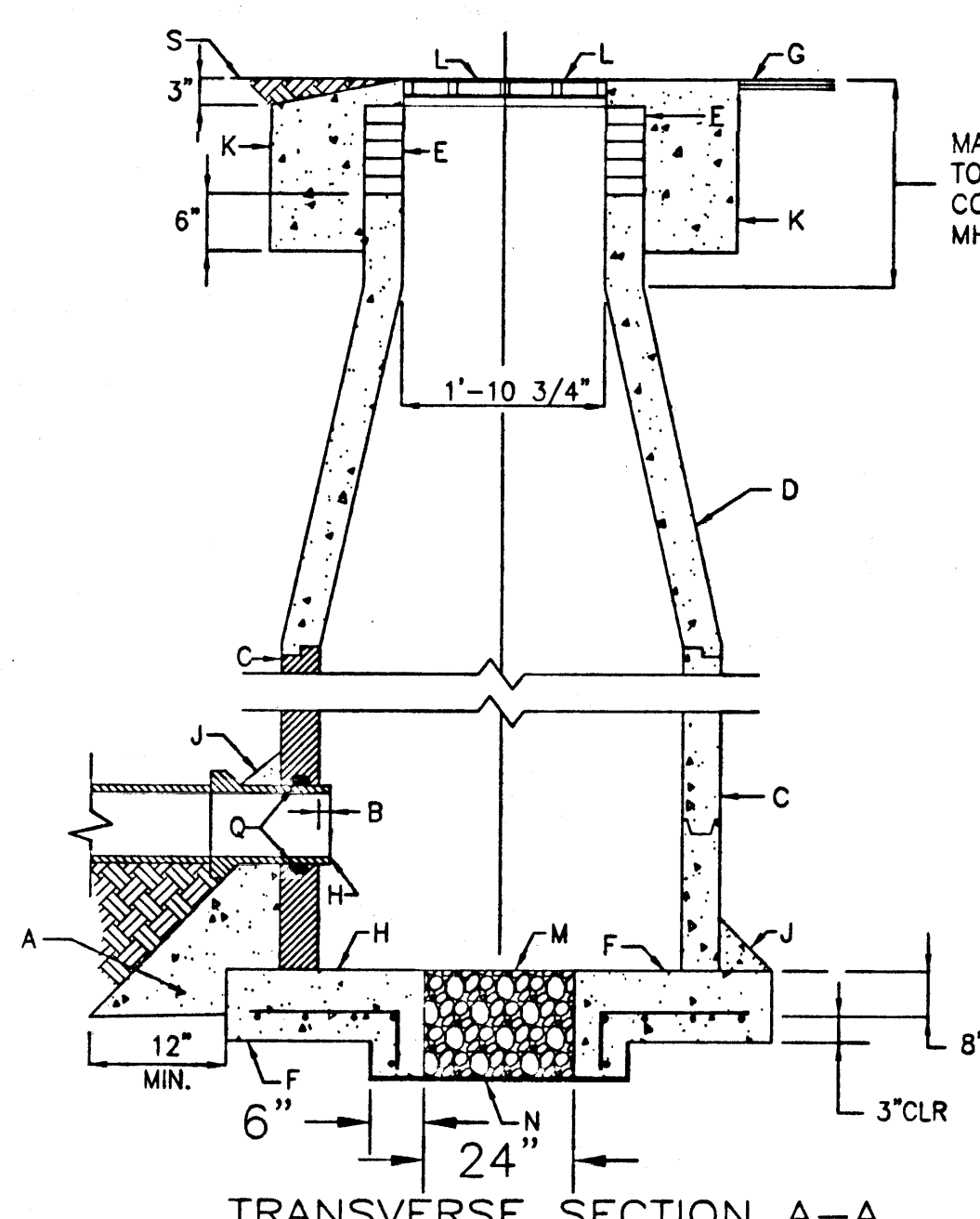
TOP VIEW



BASE SECTION



LONGITUDINAL SECTION B-B



TRANSVERSE SECTION A-A

8 TYPE "E" MANHOLE

NTS

GENERAL NOTES:

1. USE NON-SHRINK GROUT FOR JOINTS, FILLETS, 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. TOP OF PAVEMENT.
- H. INVERT ELEVATION AS SHOWN.
- J. 6" GROUT FILLET ON UPPER HALF OF PIPE AND AROUND BASE.
- K. 5'X5' SQUARE OR 5' DIA. CIRCULAR CONCRETE PAD (COLLAR), 4000 PSI PCC.
- L. HEAVY DUTY FRAME AND LID COVER.
- M. 3/4" GRAVEL TO FILL DRAIN AREA.
- N. FILTER FABRIC.
- P. NOT USED.
- Q. APPROVED WATERSTOP TO BE COMPATIBLE WITH TYPE OF PIPE.
- R. NON-CORROSIVE ALUMINUM OR POLYPROPYLENE STEPS.
- S. IN UNPAVED AREAS SET FRAME TO GRADE AND SLOPE TO TOP OF PAD.
- V. "STORM" OR "SEWER" CAST ON LID AS APPROPRIATE.

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

DESIGNED BY	TS	BPLW Architects & Engineers, Inc.	Job No.	21003.02	No. of Sheets	6
CHECKED BY	JP	6200 UPTOWN BOULEVARD NE - SUITE 400	DATE	10/31/02		
DATE	10/31/02	ALBUQUERQUE, NEW MEXICO 87110 (505) 881-2759				

ALBUQUERQUE, NM
ACADEMY
BUILDING ADDITION
CIVIL DETAILS

Manager - Real Estate Engineering

WEST COMMUNICATIONS
Business Resource - Real Estate
Albuquerque, New Mexico

5A202-AC-SKC06

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 BPLW