

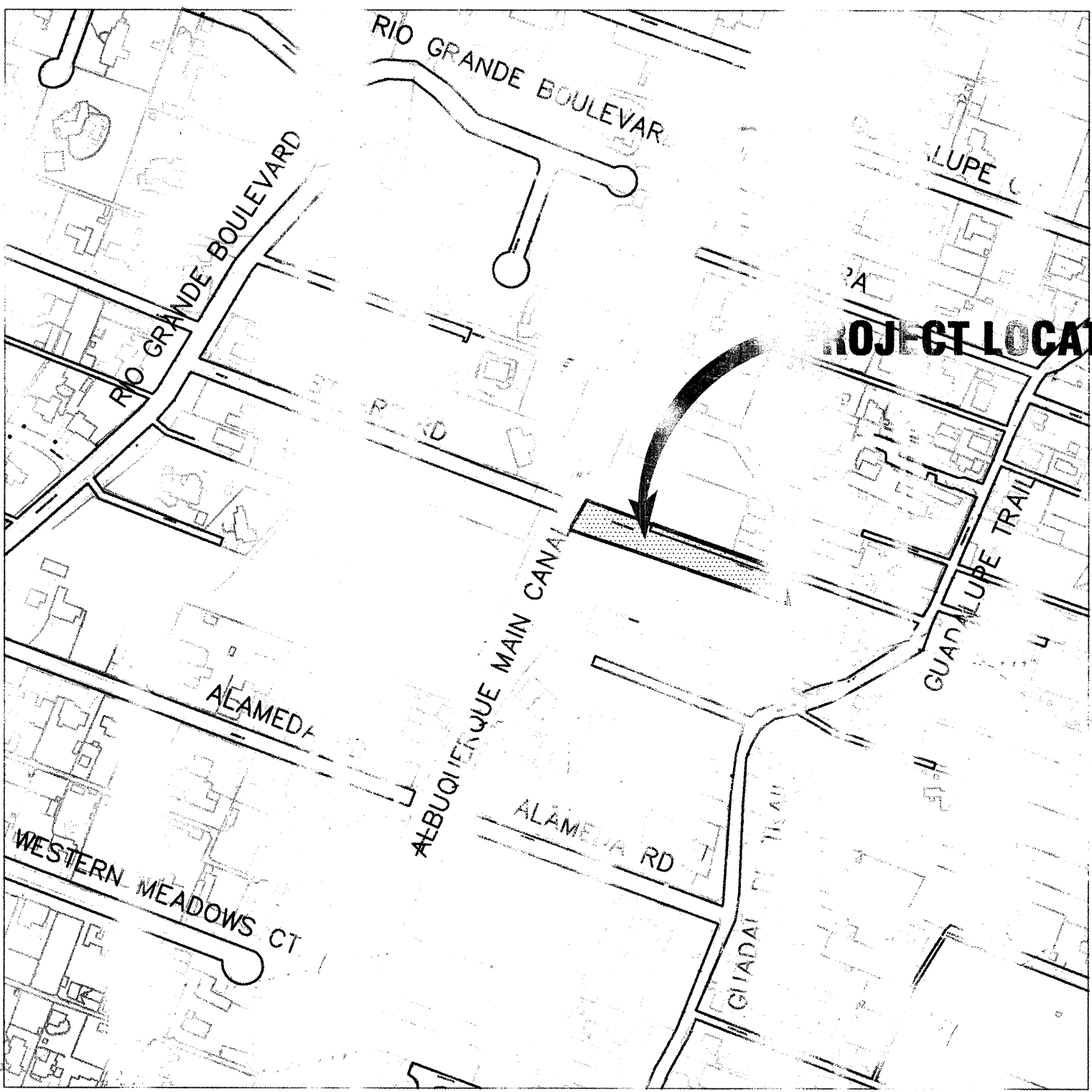
COUNTY OF BERNALILLO, NEW MEXICO
PUBLIC WORKS AND ENVIRONMENTAL HEALTH DEPARTMENTS

CONSTRUCTION PLANS FOR

NORTH VALLEY AREA D
VACUUM PUMP STATION

CITY PROJECT NUMBER
695981

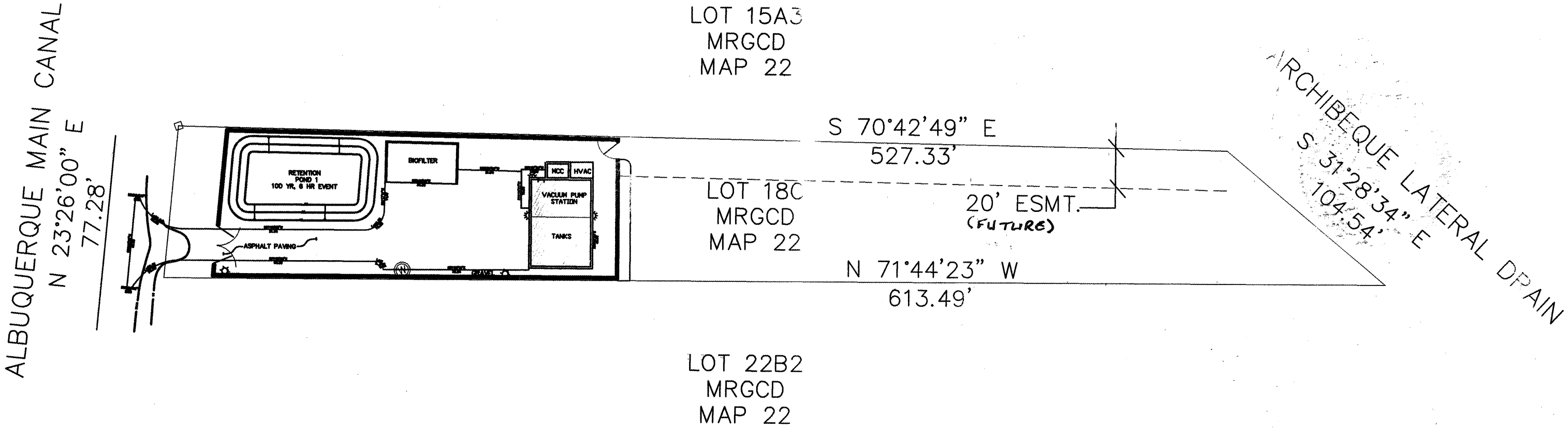
BERNALILLO COUNTY PROJECT NUMBER TS02-07



INDEX OF DRAWING SHEETS

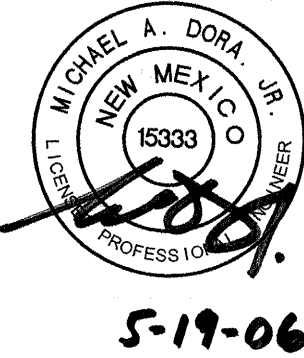
SHT	DWG	DESCRIPTION
1	G-01	COVER/VICINITY MAP/INDEX
2	G-02	GENERAL NOTES AND LEGEND
3	C-01	SITE LAYOUT GRADING AND DRAINAGE PLAN
4	C-02	SITE PIPING PLAN
5	S-01	STRUCTURAL PLANS
6	S-02	STRUCTURAL SECTIONS
7	S-03	STRUCTURAL SECTIONS AND DETAILS
8	S-04	STRUCTURAL DETAILS AND SECTIONS
9	S-05	STRUCTURAL SECTIONS AND DETAILS
10	S-06	MASONRY DETAILS
11	S-07	STRUCTURAL GENERAL NOTES
12	S-08	STRUCTURAL STANDARD DETAILS
13	A-01	FLOOR PLANS AND SECTIONS
14	A-02	ROOF PLAN AND DETAILS
15	A-03	EXTERIOR ELEVATIONS
16	A-04	SECTIONS & DETAILS
17	A-05	WINDOW AND DOOR SCHEDULES AND DETAILS
18	P-01	EQUIPMENT & SECTION PLAN BELOW AND AT GRADE LEVEL
19	P-02	MECHANICAL PLAN AND SECTIONS
20	P-03	MECHANICAL SCHEDULES & DETAILS
* 21	P-04	COMPOST FILTER PLAN, SECTIONS, & DETAILS
22	E-01	ELECTRICAL LEGEND, NOTES AND ABBREVIATIONS
23	E-02	ELECTRICAL SITE LAYOUT
24	E-03	POWER AND LIGHTING PLANS BELOW AND AT GRADE LEVEL
25	E-04	ONE LINE DIAGRAMS
26	E-05	DETAILS
27	E-06	CONTROL DIAGRAMS
28	V-01	VACUUM LINES & FM PROFILES

* = Sheets added or amended as part of Value Engineering during project



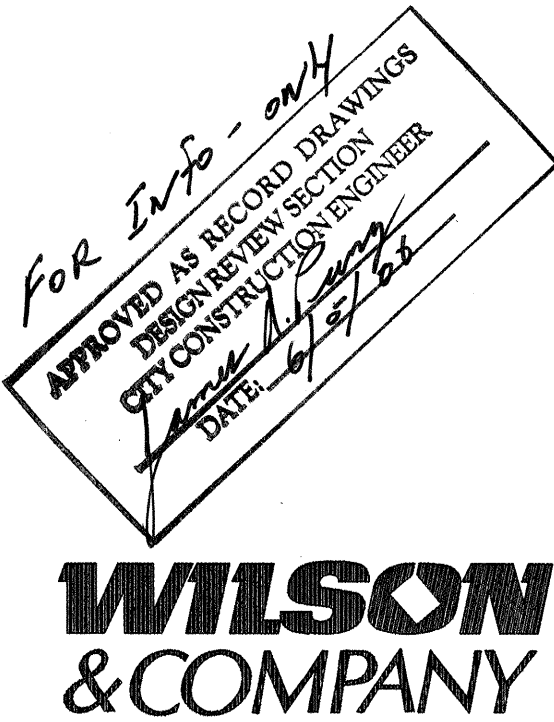
CERTIFICATE OF SUBSTANTIAL COMPLIANCE OF PLANS

I Michael A. Dora, Jr., of the firm Wilson & Company, Inc., a Licensed Professional Engineer in the State of New Mexico, do hereby certify, to the best of my knowledge and belief, that the infrastructure installed as part of this project has been inspected by me or by a qualified person under my direct supervision and has been constructed in accordance with the plans and specifications approved by the City Engineer and that the original design intent of the approved plans has been met, except as noted by me on the as-built construction drawings. This Certification is based on site inspections by me or personnel under my direction and survey information provided by ASCI.



LOT PLAN
SCALE: 1" = 50'

ELEVATIONS ARE IN INTERIM NAVD 88 DATUM. TO CONVERT FROM INTERIM NAVD 88 TO NGVD 29 SUBTRACT 2.74 FEET. ALL ELEVATIONS IN () ARE NGVD 29.



REV.	SHEETS	CITY ENGINEER	DATE	USER DEPARTMENT	DATE	USER DEPARTMENT	DATE
ENGINEERS STAMP & SIGNATURE				APPROVALS	ENGINEER	DATE	APPROVED FOR CONSTRUCTION
				DRC Chairman	<i>[Signature]</i>	3-19-03	<i>[Signature]</i> 3/6/03 COUNTY ENGINEER <i>[Signature]</i> 3/19/03 CITY ENGINEER DATE
				Transportation	N/A		
				Water/Wastewater	<i>[Signature]</i>	3-18-03	
				Hydrology	N/A		
				Parks			
				Const. Coord.			
				Record Drawing	N/A		
PROJECT NO. COA # 695981 WCEA # X0-210-024						DWG. G-01	SHEET 1

GENERAL — CIVIL

THE CONTRACTOR SHALL NOTIFY THE BERNALILLO COUNTY PUBLIC WORKS DIVISION TRAFFIC CONTROL MANAGER, FIRE DEPARTMENT AND SHERIFF'S DEPARTMENT IN WRITING A MINIMUM OF FIVE (5) WORKING DAYS PRIOR TO ANY STREET CLOSURES AND PRIOR TO ANY WORK WITHIN COUNTY RIGHT-OF-WAY.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATIONS OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.

THE CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING FROM BASELINES, GRADES AND BENCH MARKS SHOWN ON THE PLANS, OR AS DETERMINED IN THE FIELD BY THE ENGINEER. REESTABLISHMENT OF LOST, MISSING, OR DISTURBED REFERENCE POINTS SHALL BE PERFORMED BY THE ENGINEER AT THE CONTRACTOR'S EXPENSE.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TRENCHES IN A SAFE CONDITION.

THE CONTRACTOR SHALL COORDINATE HIS CONSTRUCTION ACTIVITIES WITH ALL OTHER CONTRACTORS AND UTILITY COMPANIES WORKING IN THE SAME AREA. THE CONTRACTOR MAY BE REQUIRED TO RESCHEDULE ACTIVITIES TO ALLOW UTILITY CREWS TO PERFORM THEIR REQUIRED WORK. NO ADDITIONAL COMPENSATION WILL BE ALLOWED FOR DELAYS OR INCONVENIENCE CAUSED BY UTILITY WORK CREWS.

LIMIT CONSTRUCTION ACTIVITIES TO WITHIN PERMANENT AND CONSTRUCTION EASEMENTS ON PRIVATE PROPERTY SHOWN ON DRAWINGS.

THE CONTRACTOR IS RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ALL DEMOLITION DEBRIS. SALVAGE OF ANY MATERIAL SHALL BE IDENTIFIED BY THE ENGINEER. WORK MATERIALS SHALL BE DISPOSED OF IN APPROVED WASTE AREAS SECURED BY AND AT THE EXPENSE OF THE CONTRACTOR.

PROJECT SIGN SHALL BE ERECTED, AND SHALL BE LOCATED AT A LOCATION DESIGNATED BY THE ENGINEER. SEE SPECIFICATIONS FOR SIGN REQUIREMENTS BY EPA.

IF CULTURAL RESOURCES, SUCH AS HISTORIC OR PREHISTORIC ARTIFACTS, OR HUMAN REMAINS ARE DISCOVERED DURING EXCAVATION OR CONSTRUCTION, WORK SHALL CEASE AND THE CONSTRUCTION ENGINEER WILL BE NOTIFIED. THE CONSTRUCTION ENGINEER SHALL NOTIFY THE STATE HISTORIC PRESERVATION OFFICER (SHPO) AT (505) 827-6320. WORK MAY PROCEED AFTER COORDINATION WITH SHPO IS COMPLETE.

UTILITIES

A MINIMUM OF TWO (2) WORKING DAYS, BUT NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO ANY EXCAVATION AT A PARTICULAR LOCATION, THE CONTRACTOR MUST CONTACT N.M. ONE-CALL SYSTEM, 260-1990, FOR LOCATION OF EXISTING UTILITIES.

IN ADVANCE OF CONSTRUCTION OPERATIONS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING WHETHER OVERHEAD UTILITY LINES, SUPPORT STRUCTURES, POLES, GUYS, ETC., ARE AN OBSTRUCTION TO CONSTRUCTION OPERATIONS. IF ANY OBSTRUCTION TO CONSTRUCTION OPERATIONS IS EVIDENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION.

THE CONTRACTOR SHALL COORDINATE ANY WATER VALVE SHUT-OFF OPERATION WITH THE WATER SYSTEMS DIVISION (857-8200) NOT LESS THAN FIVE (5) WORKING DAYS PRIOR TO INITIATING ANY WORK AFFECTING EXISTING WATER UTILITIES. WATER SERVICE SHALL BE MAINTAINED TO ALL CUSTOMERS DURING CONSTRUCTION.

CONTRACTOR IS TO SUPPORT AND MAINTAIN THE INTEGRITY OF ALL UNDERGROUND TELEPHONE, ELECTRIC, AND CABLE TELEVISION UTILITIES AT NO ADDITIONAL COST TO THE OWNER. EXPOSED CABLE IS TO BE SUPPORTED EVERY 15' (MIN.) CONTRACTOR SHALL COORDINATE WITH AND MAKE NECESSARY PAYMENT (IF ANY) TO UTILITY OWNER FOR DE-ENERGIZATION OF CABLES OR SUPPORT OF CABLES BY THE UTILITY OWNER. COST FOR SAID WORK WILL BE CONSIDERED INCIDENTAL TO ALL OTHER COSTS.

THE CONTRACTOR SHALL SUPPORT AND MAINTAIN THE INTEGRITY OF ALL GAS LINES. NO ADDITIONAL PAYMENT WILL BE MADE FOR THIS WORK. GAS LINES THAT MUST BE RELOCATED ARE TO BE COORDINATED WITH THE UTILITY OWNER FOR RELOCATION AND WILL BE CONSIDERED INCIDENTAL TO ALL OTHER COSTS.

ALL ABANDONED UTILITY LINES THAT ARE EXPOSED AS AS A RESULT OF CONSTRUCTION SHALL BE REMOVED AND DISPOSED OF BY THE CONTRACTOR. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

ALL TEMPORARY WATERLINE AND TEMPORARY CAPPING AND BLOCKING OF EXISTING WATERLINE REQUIRED FOR THE INSTALLATION OF ANY TEMPORARY WATERLINE SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT.

VACUUM MAIN LOCATIONS SHOWN ON THE PLANS ARE BEING CONSTRUCTED IN A SEPARATE CONTRACT. COORDINATE WITH OTHER CONTRACTORS FOR FINAL LOCATION.

In accordance with Section 9, County Technical Provisions, the Contractor shall repair and/or replace, at his own expense, any existing walls or fences damaged or removed by the Contractor during construction activities. Additionally, the Contractor shall provide temporary fencing of equivalent enclosure integrity to the adjacent property to the north of the vacuum station site. This temporary fencing must provide safe and adequate enclosure of the livestock that currently resides on this property.

Design Analysis

- Construction Type (Section 606, UBC): VN
- Allowable Building Area (Section 504 + Table 5-B, UBC):
Allowable Area: 12,000 SF
Two-side Separation Increase (+50%): 6,000 SF
Total Allowable Area: 18,000 SF

Actual Building Area:
Grade Level: 718 SF
Lower Level: 1,483 SF
Total Area: 2,201 SF
- Occupancy Group (Section 311, UBC): S2
- Occupant Load (Section 1003 + Table 10-A, UBC):
2201 SF/300 = 8 Occupants
- Automatic Sprinkler System: No
- Allowable Building Height (Section 506 + Table 5-B, UBC):
Basic Allowable Height: 2 Stories
Actual Height: 2 Stories
- Seismic Zone (Figure 16-2, UBC): 2B
- Egress Requirements (Section 1004, UBC):
Required Exits: 1 (Table 10-A, UBC)
Provided Exits: 1
- Exiting Travel Distance (Section 1004.2.5.2.1, UBC):
Maximum Travel Distance: 200 Ft
Actual Travel Distance: 130 Ft
- Applicable Codes:
1997 New Mexico Building Code
1997 Uniform Building Code
1997 New Mexico Plumbing + Mechanical Code
1997 Uniform Mechanical Code (IAPMO)
1997 Uniform Plumbing Code (IAPMO)
1996 New Mexico Electrical Code (1999 NMEC - June, 1999)
1996 National Electrical Code (1999 NEC - June, 1999)

SYMBOL LEGEND

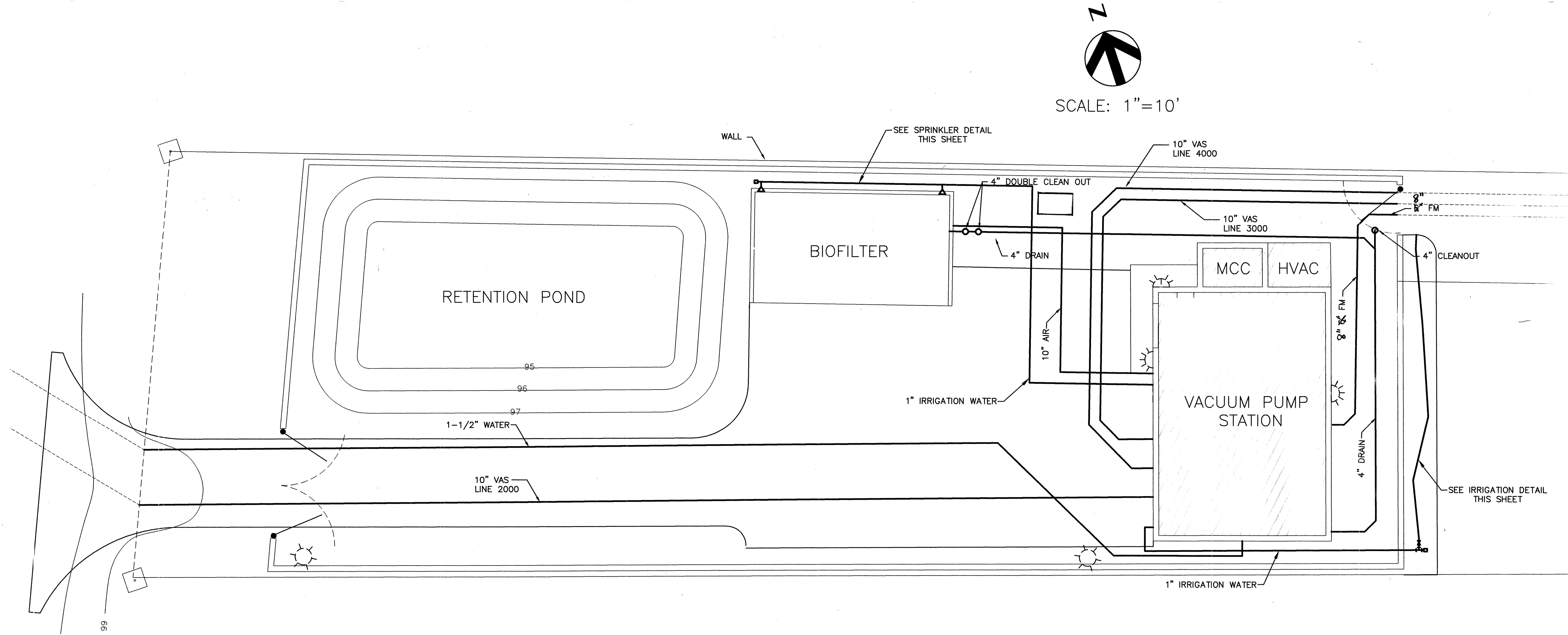
- POWER POLE
- CHAIN LINK WIRE FENCE
- GUARD RAIL
- TREE
- PIPE FENCE
- CABLE TV PEDASTAL
- GUARD POST
- IRON PIPE
- RAILROAD CROSSING
- FLOW
- IRRIGATION VALVE
- GUY WIRE
- CONTROL POINT
- VALVE PIT (4'-6" TO STUB)
- DEEP VALVE PIT (6'-6" TO STUB)
- EXTRA DEEP VALVE PIT (8' TO STUB)
- BT BUFFER TANK
- DBT DUAL BUFFER TANK
- DIVISION ISOLATION (VALVE)
- SIGNAL BOX
- DRAINAGE MANHOLE
- WATER METER
- WATER VALVE
- TELEPHONE RISER
- LOCATION MARKER
- FIRE HYDRANT
- CATCH BASIN
- T.V. RISER
- FOUND PROPERTY CORNERS
- SPRINKLER CONTROL BOX
- POWER PEDESTAL
- GAS VALVE
- ELECTRIC METER
- TELEPHONE MANHOLE
- VAULT
- CLEAN OUT
- DROP INLET
- ELECTRIC BOX
- WELL
- STUMP
- TRANSFORMER
- GAS METER
- SEPTIC TANK
- SANITARY MANHOLE
- CURB INLET
- WATER MANHOLE
- IRON PIN

WILSON & COMPANY

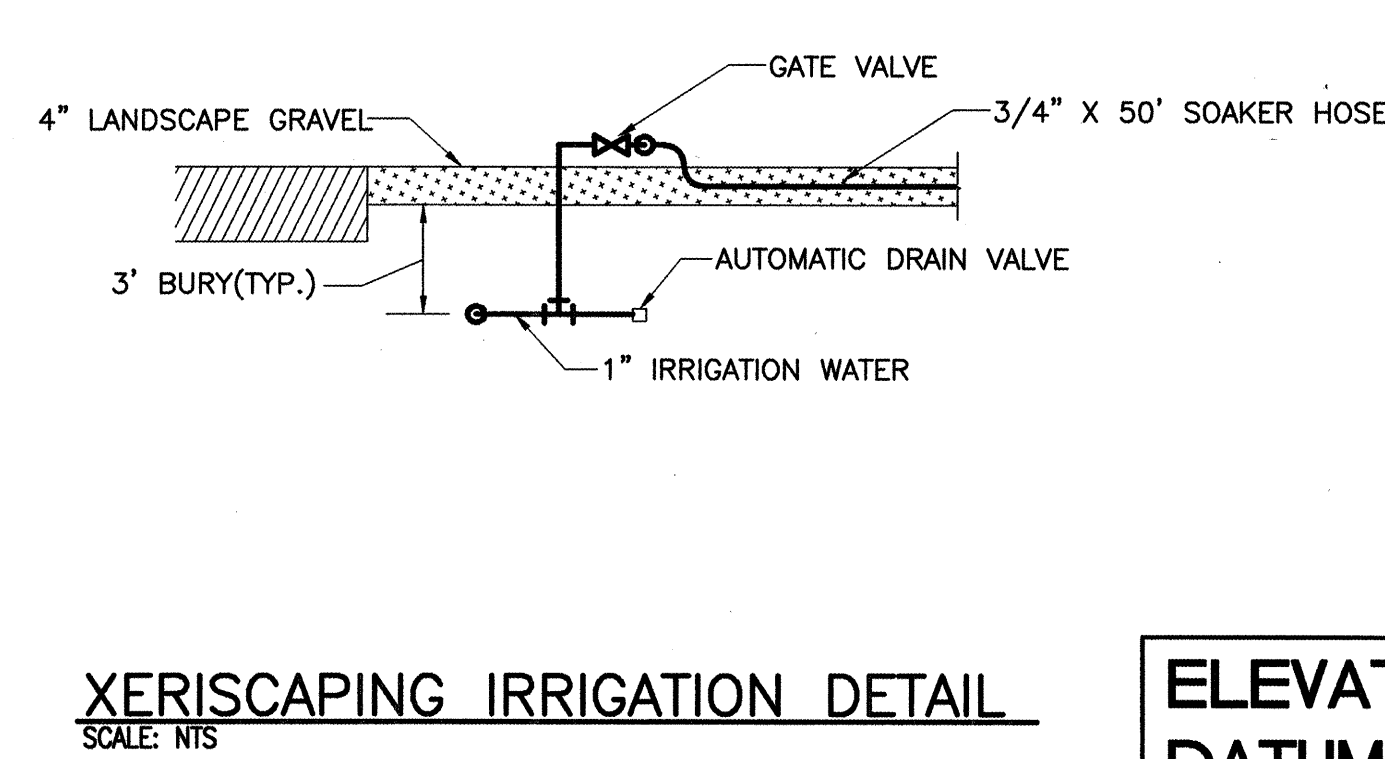
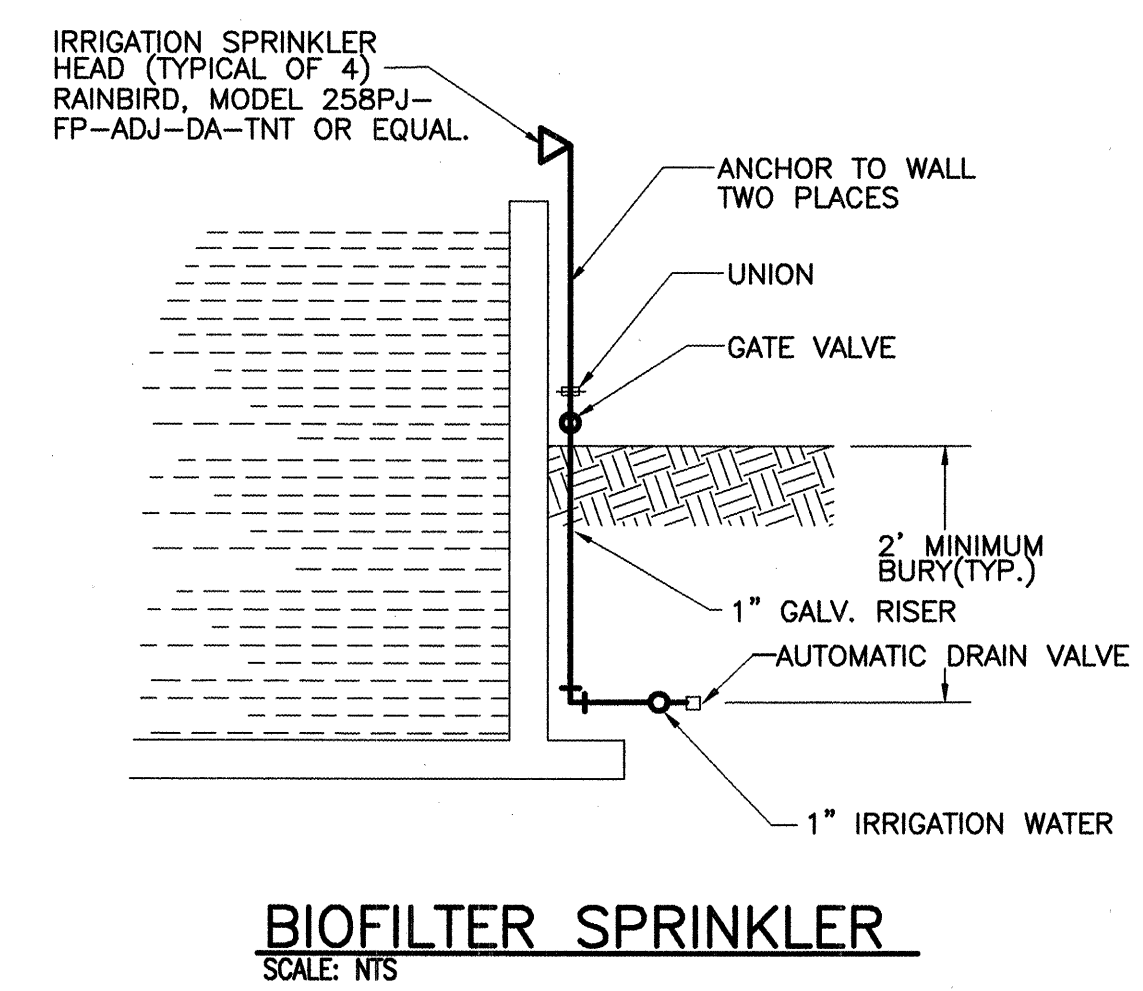
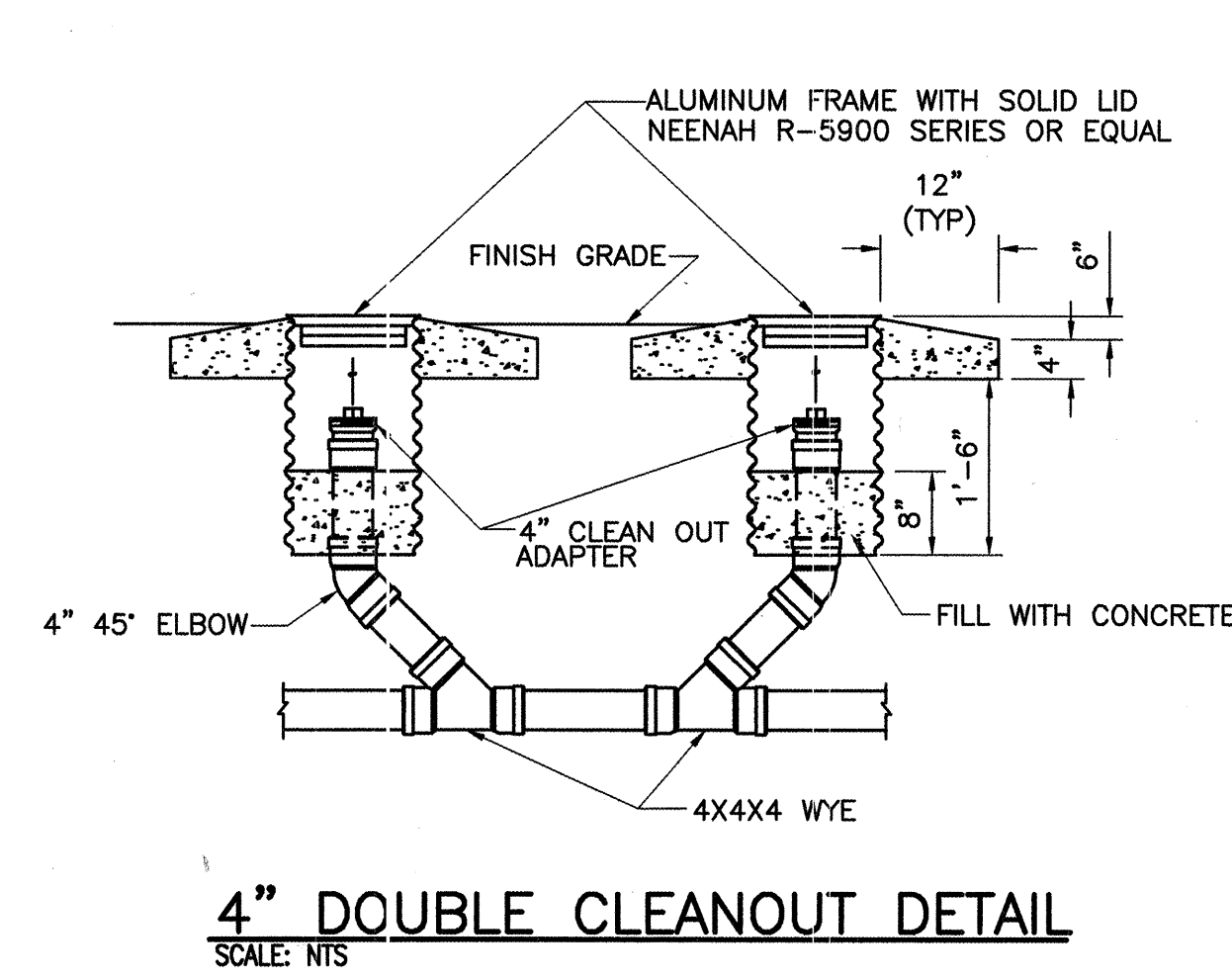
BERNALILLO COUNTY
PUBLIC WORKS DIVISION

TITLE: AREA D VACUUM PUMP STATION
GENERAL NOTES
AND LEGEND

Design Review Committee	City Engineer Approval	Map No./Rev./Pc	Map No./Rev./Pc
MAR 19 2003	MAR 19 2003		
PROJECT NO. WCEA # X0-210-024	COA # 695981	MAP NO. B-15	DWG. G-02
			SHEET 2



SCALE: 1"=10'



- NOTES:**
1. ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE LOCATIONS. VERIFY LOCATION OF ALL UNDERGROUND UTILITIES BEFORE COMMENCING WORK.
 2. VACUUM STATION & ASSOCIATED PIPING ARE CONNECTING TO SEWER LINES CONSTRUCTED BY OTHERS AND ARE ASSUMED TO BE COMPLETE PRIOR TO CONSTRUCTION OF THIS PROJECT. VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. PROTECT PLUGGED PIPES UNTIL FINAL CONNECTION IS MADE.
 3. FOR CONTINUATION OF PIPING INTO PUMP STATION SEE SHT. 18.

ELEVATIONS ARE IN INTERIM NAVD 88 DATUM. TO CONVERT FROM INTERIM NAVD 88 TO NGVD 29 SUBTRACT 2.74 FEET. ALL ELEVATIONS IN () ARE NGVD 29.

**BERNALILLO COUNTY
PUBLIC WORKS DIVISION**

**TITLE: AREA D VACUUM PUMP STATION
SITE PIPING
PLAN**

DESIGNED BY RJP	DATE SEPT 2002	DRAWN BY PAS	DATE SEPT 2002	CHECKED BY MAD	DATE OCT 2002								
<p>REVISIONS</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>REMARKS</th> <th>BY</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2-28-03</td> <td>Addendum #01</td> <td>MAD</td> </tr> </tbody> </table>						NO.	DATE	REMARKS	BY	1	2-28-03	Addendum #01	MAD
NO.	DATE	REMARKS	BY										
1	2-28-03	Addendum #01	MAD										

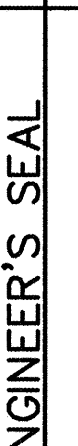
PROJECT NO. WCEA # X0-210-024

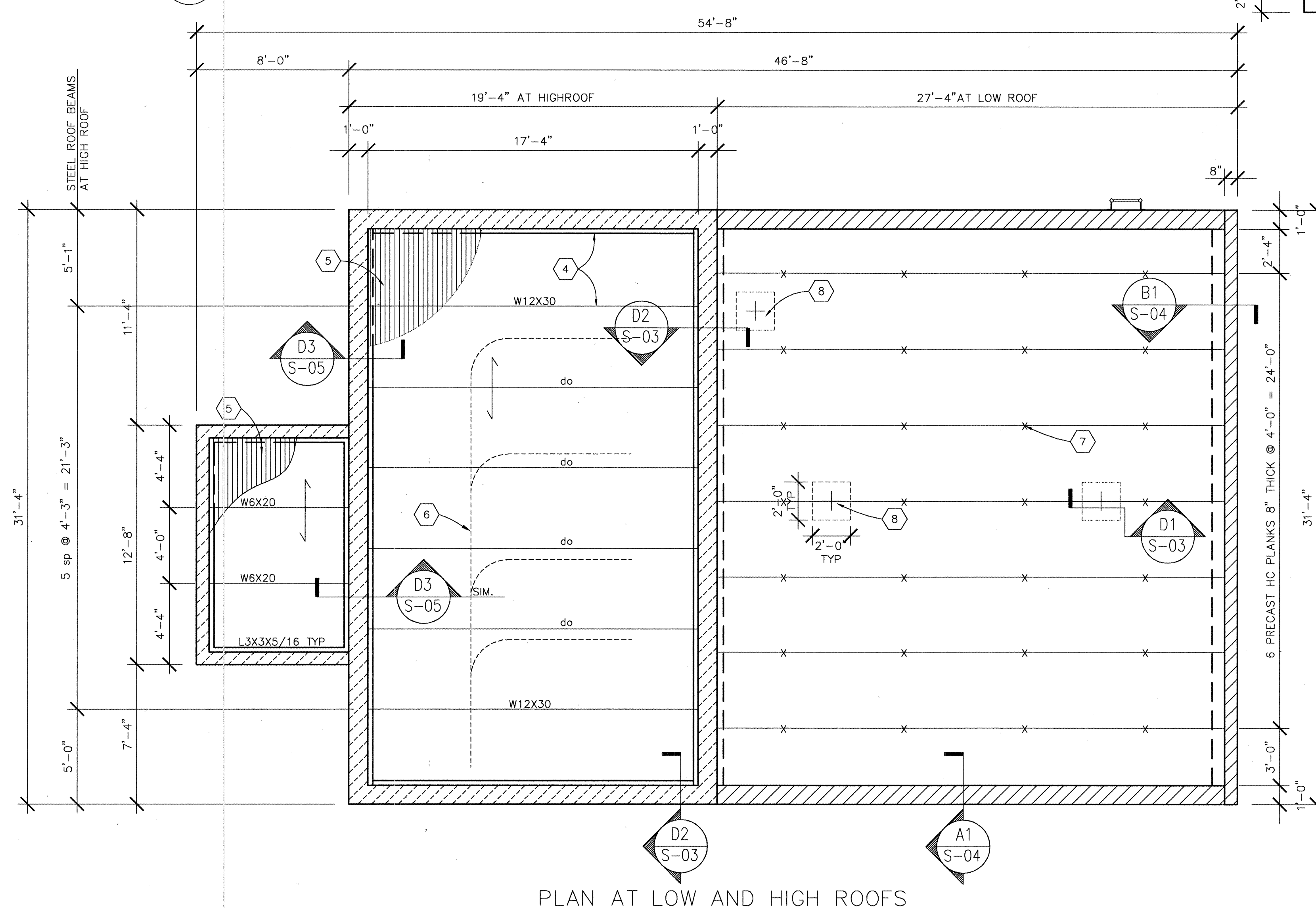
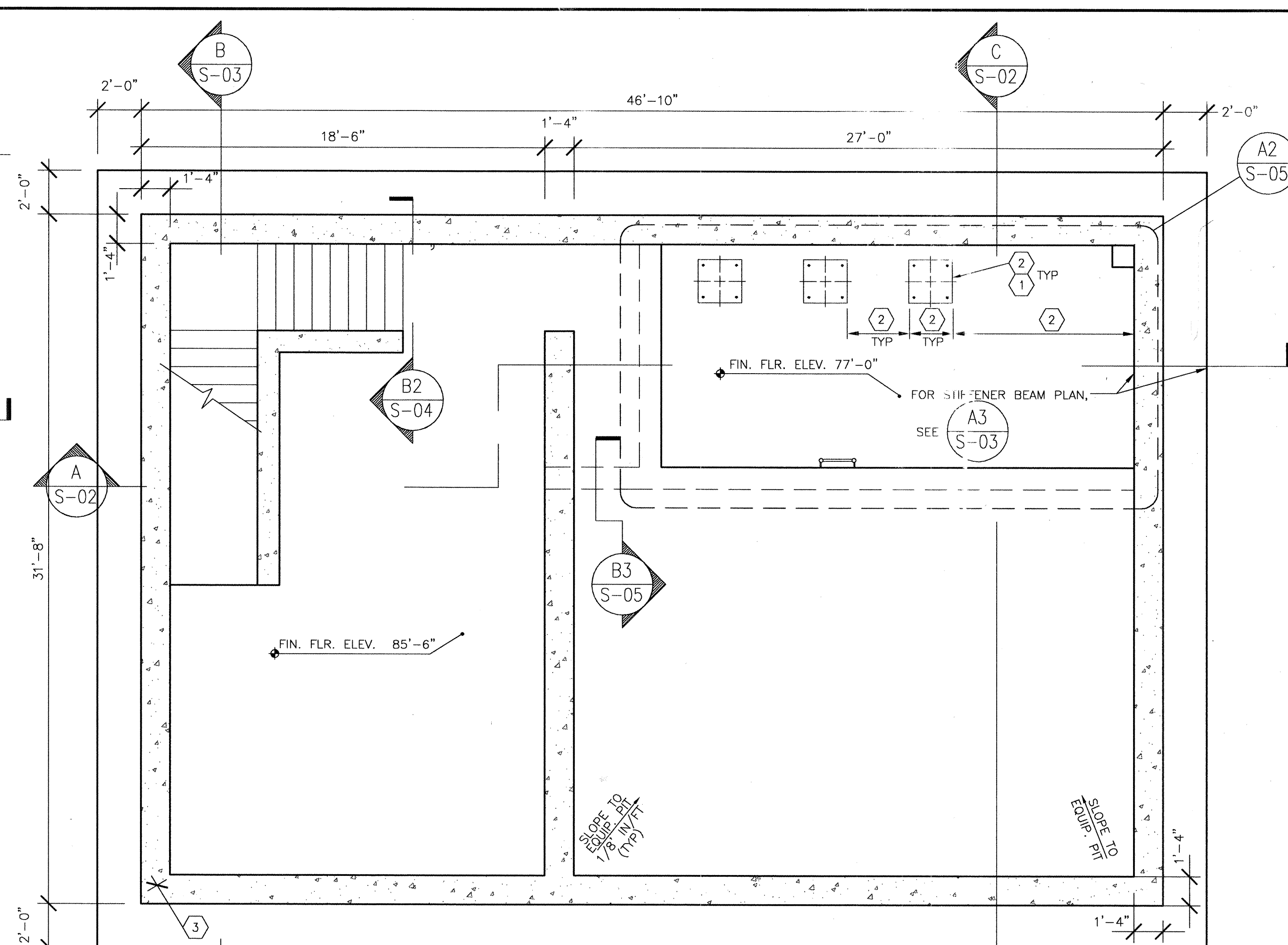
COA # 695981

MAP NO. B-15


DWG. C-02

SHEET 4

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
<div></div>	NO.	BY	DATE	USGS TRIANGULATION STATION DISK STAMPED "TIS 1988"		CONTRACTOR A.S. Harner	
				MILE WEST OF I-25 AND 124 th NORTH OF TRAMWAY		DRAWN BY A.S. CI	
				GEOGRAPHIC POS (NAD 27) 35-12-27.9924 N 106-35-34.83922 W		CHECKED BY Wilson + Co.	
				NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE)		FIELD BY Wilson + Co.	
				X= 397535.821, Y= 1531042.56		VERIFICATION BY	
				ELEVATION = 5081.92 NGVD29 IN FEET		CORRECTED BY Wilson + Co.	
				INTERIM NAVD 1983 IN FEET (X=1537761.373, Y=1531055.533)		MICRO-FILM INFORMATION	
				TRANSFORMED TO NAD27 BY CORPSON V5.008		RECORDED BY	
ELEVATION = 5084.660 INTERIM NAVD 86 IN FEET		NO.					

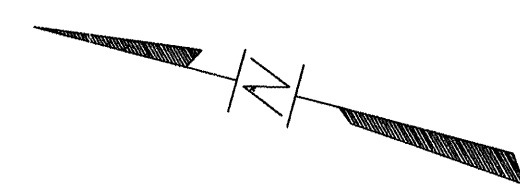


SCALE: $1/4" = 1'-0"$



0 1' 2' 3' 4' 8'

SCALE: $1/4" = 1'-0"$



- A) REFERENCE FINISH FLOOR ELEVATION 4999.5
= 100'-0" AND REFERENCES DATUM
C-01.
- B) FOR BOLLARDS AND HANDRAIL SIZES
AND LOCATIONS, SEE ARCHITECTURAL
DRAWINGS.
- C) EQUIPMENT DIMENSIONS ARE SUBJECT TO
MANUFACTURING VARIATIONS. VERIFY PRIOR
TO INITIATION OF CONSTRUCTION.
- G) FOR SHEET WATERPROOFING BELOW GRADE,
SEE ARCHITECTURAL DRAWINGS.
- H) FOR GENERAL NOTES SEE S-07.

- 1) LOCATION OF TANKS AND ANCHORING REQUIREMENTS SUBJECT TO EQUIPMENT SUPPLIED. GO TO COORDINATE WITH MANUFACTURER PRIOR TO FABRICATION
- 2) EQPT. PAD, t = 3 1/2", COORDINATE LOC-ATION AND SIZE WITH EQUIPMENT MANUF.
- 3) CORNER REINFOR. DETAIL, SEE SHEET S-08 TYP.
- 4) METAL DECK SHALL BE WELDED TO ALL SUPPORTING MEMBERS WITH 5/8" PUDDLE WELD @ EACH FLUTE. USE 5/8" PUDDLE WELD @ 12" AT PERIMETER SUPPORTS.
- 5) 1 1/2 X 20 GA. METAL DECK
- 6) GC TO COORDINATE THE DESIGN OF MONORAIL BEAM AND BRACKETS WITH HOIST AND GLIDE SWITCH SUPPLIER(S).
- 7) HC PLANK CONNECTORS BY PRECASTER. MINIMUM 3 CONNECTORS PER EACH PANEL. MINIMUM SHEAR CAPACITY=10K (EACH SERVICE).
- 8) CUTOUT TO BE CENTERED ON PLANK EDGE AS SHOWN. COORDINATE LOCATION AND SIZE WITH EQUIPMENT MANUFACTURER.

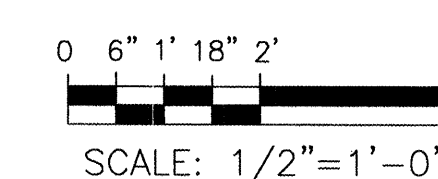


HDR Engineering, Inc.

[illegible]

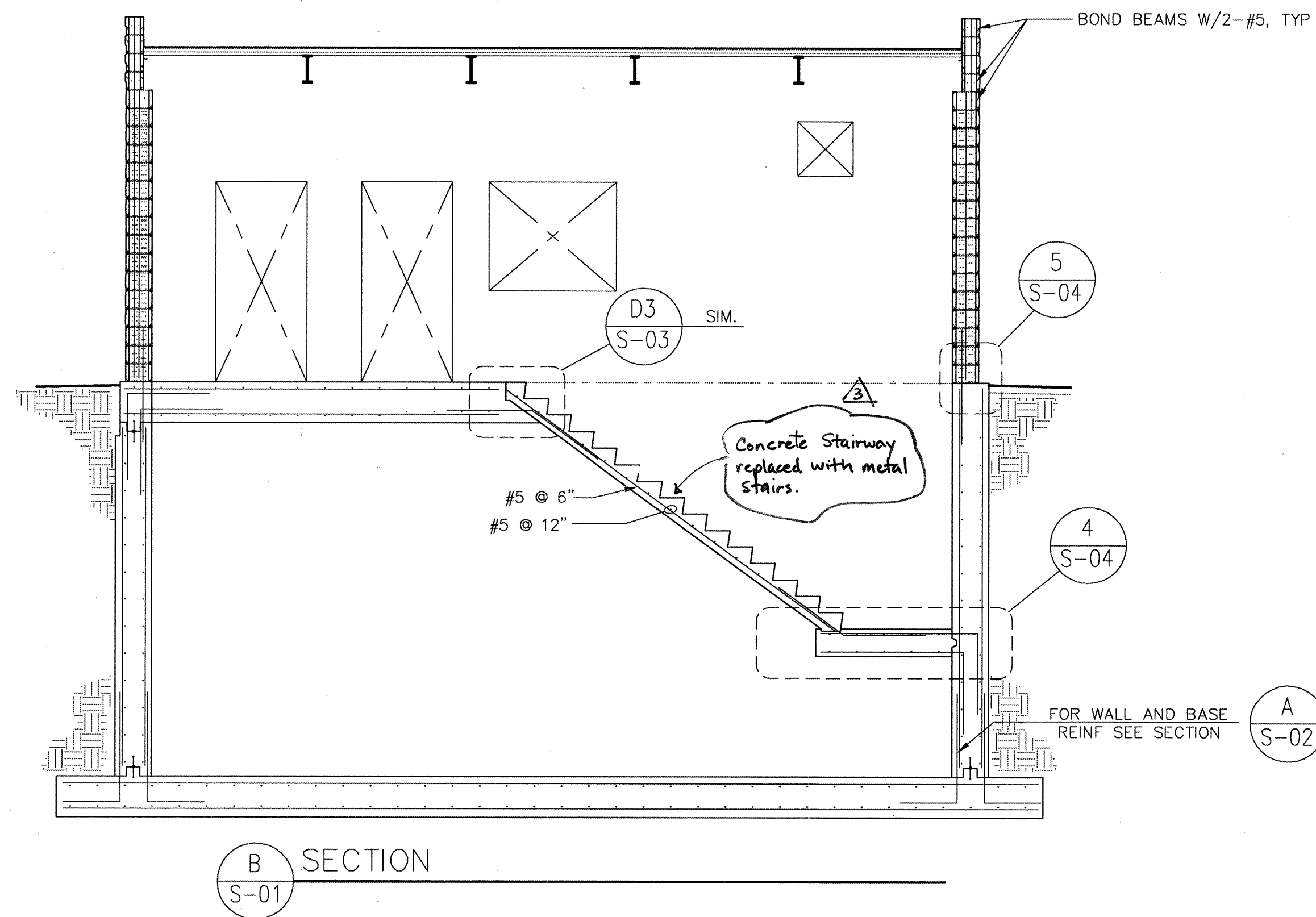
TITLE:	AREA D VACUUM PUMP STATION STRUCTURAL PLANS
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Design Review Committee		City Engineer Approval		Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
MAR 19 2011		MAR 19 2011				
CITY ENGINEER		CITY ENGINEER				
PROJECT NO.	COA # 6959.81 WCEA # XO-210-024	MAP NO. B-15			DWG. S-01	SHEET 5

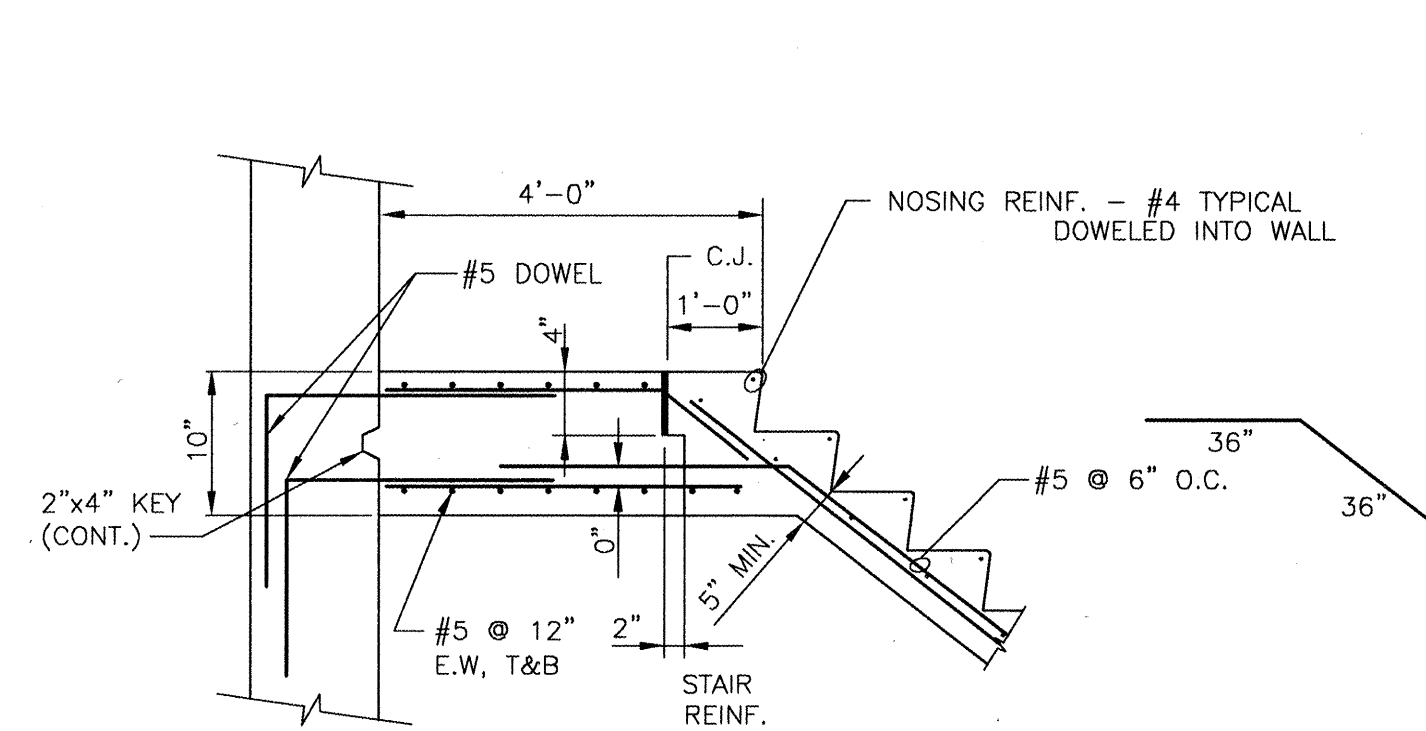


- 1) FOR WATER MEMBRANE, SEE ARCHITECTURAL SHEETS.
- 2) CENTER BEAM OVER CENTER OF PUMPS.

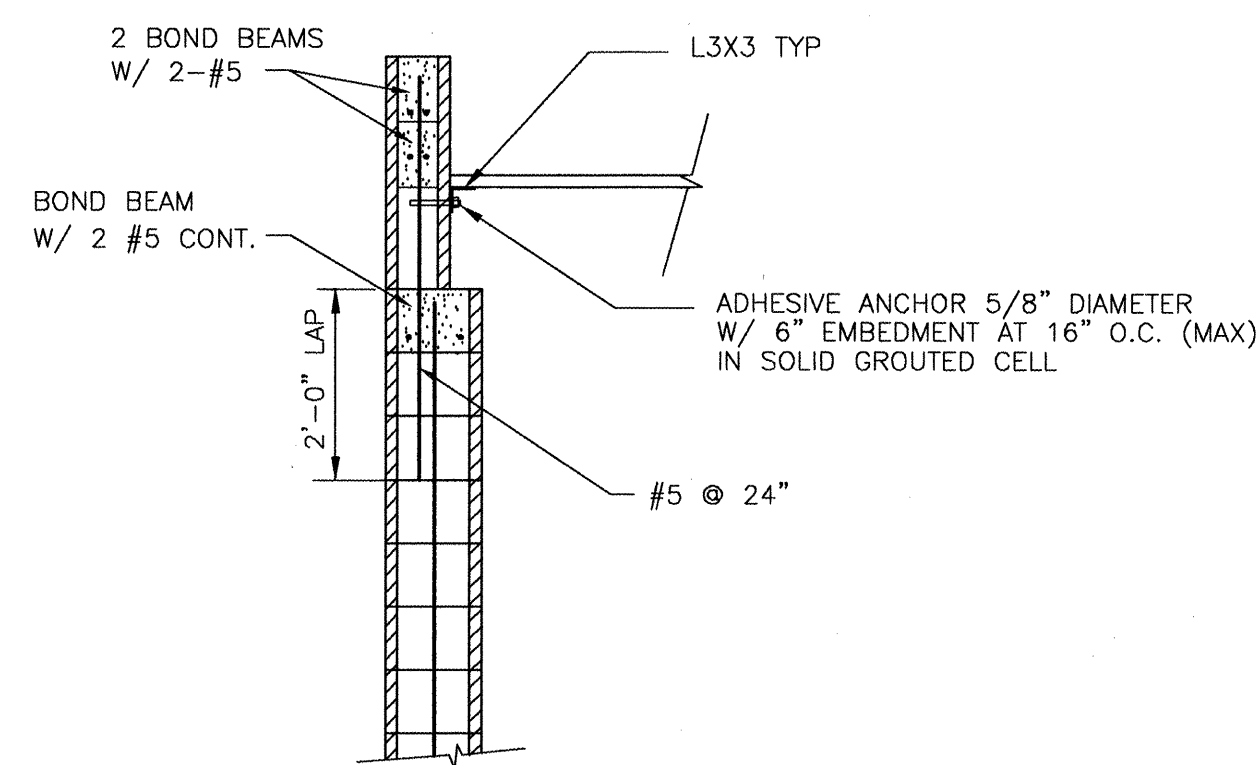
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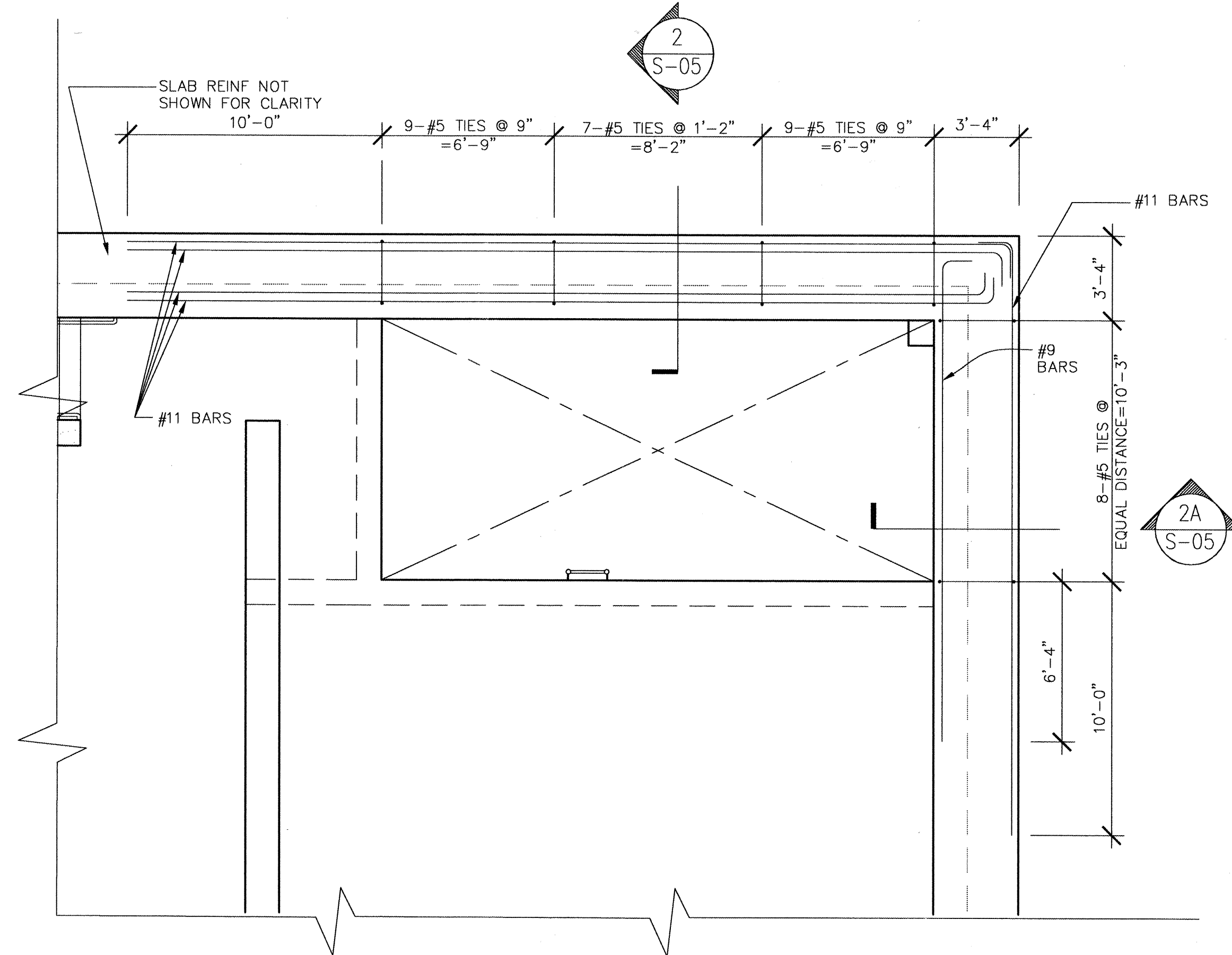
B
S-01 SECTION



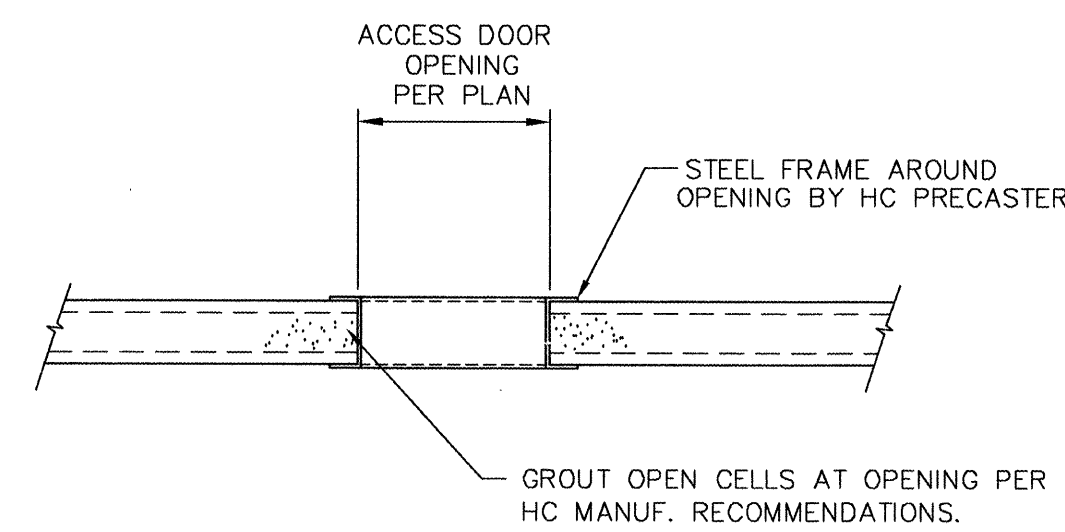
D3
S-01 SECTION AT STAIRS- LANDING



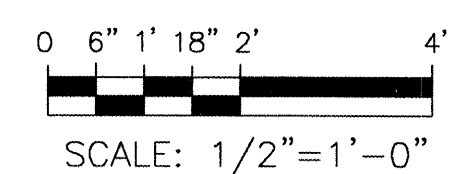
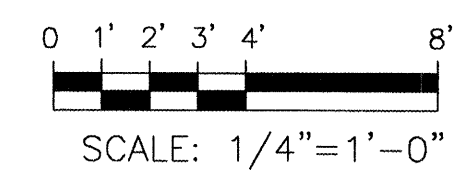
D2
S-01 SECTION AT LEDGER ANGLE
SCALE: 1/2" = 1'-0"



A3
S-03 STIFFENER BEAMS PLAN @ TOC ELEV 85'-6"
SCALE: 1/4" = 1'-0"



D1
S-01 DETAIL AT HOLLOW CORE PLANK OPENING
SCALE: 1/2" = 1'-0"

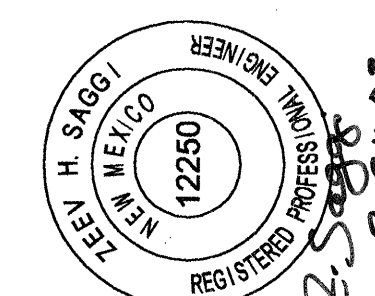
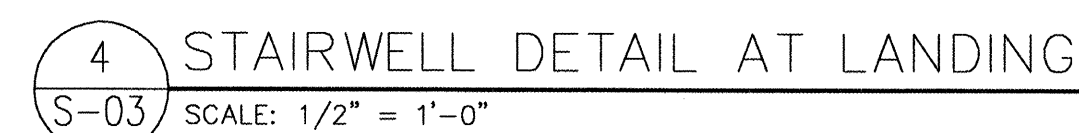
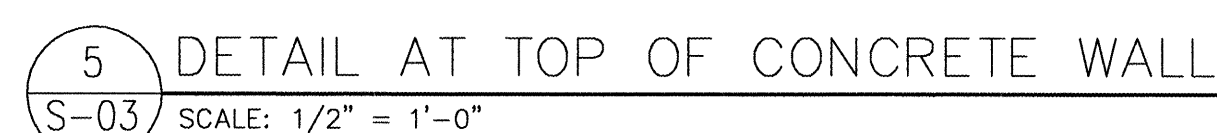
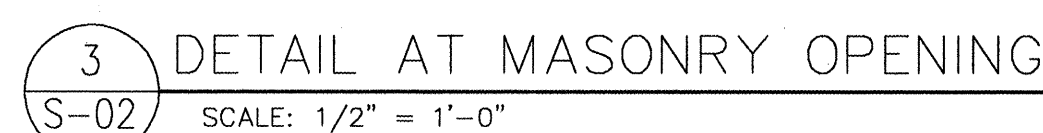
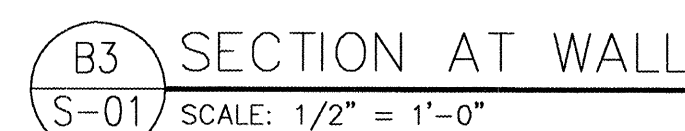


BERNALILLO COUNTY PUBLIC WORKS DIVISION			
TITLE: AREA D VACUUM PUMP STATION STRUCTURAL SECTIONS AND DETAILS			
Design Review Committee	City Engineer Approval	Ms. By: /	Ms. By: /
PROJECT NO. COA # 6959.81 WCEA # XO-210-024	MAP NO. B-15	DWG. S-03	SHEET 7


AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	BY	NO.	BY	NO.	BY
ASCE	4/03						
ACCEPTANCE BY	DATE						
WILSON & CO.	4/03						
VERIFICATION BY	DATE						
WILSON & CO.	4/03						
DRAWINGS	DATE						
WILSON & CO.	4/03						
CORRECTIONS BY	DATE						
WILSON & CO.	4/03						
MICRO-FILM INFORMATION							
RECORDED BY	DATE						



5
S-05



PROJECT NO.	COA # 6959.81 WCEA # XO-210-024	MAP NO. B-15	DWG. S-04	SHEET 8
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COUNTY DIVISION JUMP STATION AND SECTIONS	ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION		
			FIELD NOTES						
			NO.	BY	DATE				
	NO.	DATE	REMARKS	BY					
	REVISIONS								
	DESIGN								
	DESIGNED BY	ZS	DATE	8/09/02					
	DRAWN BY	DS	DATE	8/09/02					
Least Design Update		No./Day/Yr.		No./Day/Yr.					
DWG.		S-04		SHEET		8			

A1 SECTION AT SUMP PIT
S-05 SCALE: 1/2" = 1'-0"

A2 FOUNDATION PLAN AT PUMP EQUIPMENT PIT
S-01 SCALE: 1/4" = 1'-0"

A4 SECTION AT MCC
S-01 SCALE: 1/2" = 1'-0"

SHEET KEYED NOTES :

- 1) SUMP PIT - 12" x 12" x 12" DEEP,
CONSTRUCTION PER SECTION
- 2) PROVIDE (2) #5 x 4"-0" DIA. CORNER BARS
AT SUMP PIT, 2" AND 4" FROM CORNER
TOP FACE.
- 3) PREMOLDED JOINT FILLER
- 4) SEALANT
- 5) JOINT BACKER ROD
- 6) CAST GRADE BEAM AS AN INTEGRAL PART
OF WALL SHOWN ON SECTION C/SO2.
GRADE BEAM TO END UNDER CENTER WALL

B3 SECTION AT GRADE BEAM
S-01 SCALE: 1/2" = 1'-0"

D3 SECTION AT BEAM BEARING @ 8" & 12" CMU
S-01 SCALE: 1" = 1'-0"

1
S-02

DETAIL AT CMU WALL/ BUILDING INTERFACE

SCALE: 1/2" = 1'-0"

5
S-01

ADDITIONAL CORNER REINF.
SCALE: 1/2" = 1'-0"

SECTION AT PUMP EQUIPMENT PIT
SCALE: 3/4" = 1'-0"

3 TYPICAL JOINT SEALANT DETAIL
S-05 SCALE: 3" = 1'-0"

4 STEP THRU LADDER
S-05 N.I.S.

HDR

HDR Engineering, Inc.

BERNALILLO COUNTY
PUBLIC WORKS DIVISION

TITLE:	AREA D VACUUM PUMP STATION STRUCTURAL SECTIONS AND DETAILS
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Design Review Committee		City Engineer Approval		Last Design Update	Mo./Day/Yr.	Mo./Day/Yr.
PROJECT NO.	COA # 6959.81 WCEA # XO-210-024	MAP NO. B-15			DWG. S-05	SHEET 9

LIST OF ABBREVIATIONS

⊕	AT	K	KIPS
∇	GREATER THAN	KSF	KIPS PER SQ. FT.
=	LESS THAN		
	EQUALS	L	LENGTH OR STEEL ANGLE
AB	ANCHOR BOLTS	Ld	DEVELOPMENT LENGTH
ADDL	ADDITIONAL	LB	POUNDS
AECS	ARCHITECTURALLY EXPOSED STRUCTURAL STEEL	LE	LEFT END
		LF	LINEAR FEET
AFF	ABOVE FIN. FLOOR	LL	LIVE LOAD
AFG	ABOVE FIN. GRADE	LLH	LONG LEG HORIZ
ARCH	ARCHITECTURAL	LLV	LONG LEG VERT
		LWT	LONGITUDINAL LIGHTWEIGHT
B	BOTTOM		
BLDG	BUILDING	MAX	MAXIMUM
BKT	BRACKET	MECH	MECHANICAL
B.L.	BUILDING LINE	MFR	MANUFACTURER
BM	BEAM	MIN	MINIMUM
BOF	BOTTOM OF FOOTING	MISC	MISCELLANEOUS
BOT	BOTTOM	MO	MASONRY OPENING
BP	BASE PLATE	MTL	METAL
BRDG	BRIDGING		
BRG	BEARING	NOM	NOMINAL
BSMT	BASEMENT	NS	NEAR SIDE
BTWN	BETWEEN	NTS	NOT TO SCALE
		NWT	NORMALWEIGHT
C	STEEL CHANNEL		
CA	COLUMN ABOVE		
CANT	CANTILEVER	OD	OUTSIDE DIAMETER
CG	CENTER OF GRAVITY	OPNG	OPENING
CIP	CAST IN PLACE	OPP	OPPOSITE
CJ	CONST. JT. OR CONTROL JT.	OSL	OUTSTANDING LEG
CJP	COMPLETE JOINT PENETRATION		
CL	CENTERLINE	PCS	PIECES
CLR	CLEARANCE OR CLEAR	PL	PLATE
CMU	CONCRETE MASONRY UNIT	PLF	LBS. PER LINEAR FOOT
COL	COLUMN	PLBG	PLUMBING
CONC	CONCRETE	PR	PAIR
CONN	CONNECTION	PREFAB	PREFABRICATED
CONST	CONSTRUCTION	PRL	PARALLEL
CONT	CONTINUOUS OR CONTINUED	PSF	LBS. PER SQ. FT.
CTR	CENTER	PSI	LBS. PER SQ. IN.
C TO C	CENTER TO CENTER	PVMT	PAVEMENT
		QTY	QUANTITY
D	DIAMETER OR DEPTH		
DBA	DEFORMED BAR ANCHOR	R	RADIUS
DBL	DOUBLE	RD	ROOF DRAIN
DET	DETAIL	RE	RIGHT END
DIA	DIAMETER	REF	REFER TO
DIAG	DIAGONAL	REV	REVISION
DIM	DIMENSION	REINF	REINFORCEMENT
DL	DEAD LOAD	REQD	REQUIRED
DO	DITTO	RO	ROUGH OPENING
DWG	DRAWING		
DWL	DOWEL		
EA	EACH	SCH	SCHEDULE
EE	EACH END	SECT	SECTION
EF	EACH FACE	SF	SQUARE FEET
EJ	EXPANSION JOINT	SHT	SHEET
EL	ELEVATION	SM	SIMILAR
ELEC	ELECTRICAL	SOG	SLAB ON GRADE
EMB	EMBEDMENT	SPA	SPACING
ENGR	ENGINEER	SPEC	SPECIFICATION
EQ	EQUAL	SQ	SQUARE
E.S.	EACH SIDE	SSL	SHORT SLOTTED HOLES
E.W.	EACH WAY	STD	STANDARD
EXP	EXPANSION	STAG	STAGGERED
EXST	EXISTING	STIFF	STIFFENER
EXT	EXTERIOR	STRUC	STRUCTURAL
		SYM	SYMMETRICAL
FD	FLOOR DRAIN		
FDN	FOUNDATION	T	TOP
FL	FLOOR	T/	TOP OF
FP	FULL PENETRATION	T/C	TOP OF CONCRETE
FLG	FLANGE	T/J	TOP OF JOIST
FS	FAR SIDE	T/W	TOP OF WALL
FT	FEET	T & B	TOP AND BOTTOM
FTG	FOOTING	TEMP	TEMPERATURE
FUT	FUTURE	THK	THICKNESS
FV	FIELD VERIFY	TL	TOTAL LOAD
GA	GAUGE	TOF	TOP OF FOOTING
GB	GRADE BEAM	TOS	TOP OF STEEL
GALV.	GALVANIZED	TP	TYPICAL
GC	GENERAL CONTRACTOR	UNO	UNLESS NOTED OTHERWISE
G.F.	GRANULAR FILL		
GR	GRADE	V	SHEAR FORCE
		VERT	VERTICAL
HC	HOLLOW CORE PLANK		
HK	HOOK	W/	WITH
HORIZ	HORIZONTAL	W	WIDE FLANGE
HS	HEADED STUD	WLD	WELD
HSB	HIGH STRENGTH BOLT	W/O	WITHOUT
		WT	WEIGHT
ID	INSIDE DIAMETER	WWF	WELDED WIRE FABRIC
IF	INSIDE FACE		
IN	INCHES		
INFO	INFORMATION		
INT	INTERIOR		
JT	JOINT		

GENERAL CONSTRUCTION NOTES

- ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE 1997 UNIFORM BUILDING CODE (UBC).
- STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR LOCATION AND SIZE OF OPENINGS, BLOCKOUTS, FLOOR DEPRESSIONS, CURBS, DIMENSIONS, ETC. NOT SHOWN ON THE STRUCTURAL DRAWINGS. THE LOCATION AND SIZE OF MECHANICAL AND ELECTRICAL OPENINGS IN SLABS, WALLS, AND DECKS SHALL BE COORDINATED BY THE CONTRACTOR. PROVIDE ALL ADDITIONAL FRAMING OR REINFORCING TO ACCOMMODATE OPENINGS AS REQUIRED BY THE APPLICABLE STANDARD DETAILS SHOWN OR NOTED ON THE STRUCTURAL DRAWINGS.
- STRUCTURAL DRAWINGS SHALL NOT BE SCALED.
- CONTRACTOR SHALL VISIT SITE AND FAMILIARIZE HIMSELF WITH EXISTING CONDITIONS. CHECK AND VERIFY EXISTING DIMENSIONS AND TAKE ADDITIONAL MEASUREMENTS AS NEEDED. NOTIFY ARCHITECT OF ANY DISCREPANCY BETWEEN ACTUAL DIMENSIONS AND DIMENSIONS ASSUMED IN DESIGN.
- CONTINUOUS REINFORCEMENT IN WALLS AND FOOTINGS MAY BE SPLICED AS REQUIRED, PROVIDED THAT BARS ARE OF THE LONGEST PRACTICAL LENGTH AND ALL SPLICES ARE SHOWN ON THE REINFORCING BAR SHOP DRAWINGS. SPLICES ARE TO BE STAGGERED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATE DESIGN AND CONSTRUCTION OF ALL FORMS, SHORING, AND TEMPORARY BRACING.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO PLACE OR STORE CONSTRUCTION MATERIALS ON THE STRUCTURE IN A MANNER THAT DOES NOT EXCEED THE ALLOWABLE LIVE LOAD. PROVIDE COMPLETE AND ADEQUATE SHORING, BRACING, OR ADDITIONAL FRAMING WHEN OVERLOAD IS ANTICIPATED.
- TYPICAL SECTIONS AND DETAILS ON SHEET S-08 SHALL BE USED WHENEVER THE APPLICABLE SITUATION OCCURS UNLESS NOTED OTHERWISE.
- DO NOT BACKFILL AROUND STRUCTURE UNTIL GROUND LEVEL CONCRETE FLOOR IS CAST IN PLACE AND GAINED A MINIMUM OF 50% OF ITS STRENGTH AND HOLLOW CORE ROOF IS IN PLACE.
- WHEN INSTALLING POST INSTALLED ANCHORS, USE CARE TO AVOID DRILLING INTO EXISTING REINFORCING BARS.
- STRUCTURES HAVE BEEN DESIGNED FOR OPERATIONAL LOADS ON THE COMPLETED STRUCTURES. DURING CONSTRUCTION, THE STRUCTURES SHALL BE PROTECTED BY BRACING AND BALANCING WHEREVER EXCESSIVE CONSTRUCTION LOADS MAY OCCUR.

STRUCTURAL STEEL

- ALL FIELD BOLTED SHEAR CONNECTIONS SHALL BE MADE WITH 3/4" INCH DIAMETER A325-N BOLTS, UNLESS NOTED OTHERWISE. ALL BOLTS SHALL BE FULLY PRETENSIONED AND INSPECTED USING TENSION CONTROL FASTENERS WITH TWIST-OFF SPLINE TIPS.
- PLACE NON-SHRINK GROUT UNDER ALL COLUMN BASEPLATES BEFORE ADDING ANY VERTICAL LOADS.
- WHEN THE FILLET WELD SIZE IS NOT INDICATED ON A WELD SYMBOL, PROVIDE SIZE ACCORDING TO THE MINIMUM FILLET WELD PER AISC.
- FIELD WELDS INDICATED ON THE DRAWINGS ARE NOT INTENDED TO LIMIT THE WELD FROM BEING MADE IN THE SHOP.
- ALL WELDING SHALL BE PERFORMED BY PROPERLY QUALIFIED WELDERS, AS PRECIBED UNDER "STANDARD QUALIFICATION PROCEDURE" OF THE AMERICAN WELDING SOCIETY.
- THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE SPECIFICATIONS AND THE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS. THE CONTRACTOR SHALL VERIFY THE REQUIREMENTS OF OTHER TRADES AS TO SLEEVES, CHASES, HANGERS, INSERTS, ANCHORS, HOLES, ETC. TO BE PLACED OR SET IN THE STRUCTURAL WORK.
- WHERE THE WORK OF OTHER TRADES REQUIRES CUTS OR HOLES TO BE MADE IN STRUCTURAL STEEL MEMBERS, APPROVAL SHALL BE OBTAINED FROM THE ENGINEER. SUCH OPENINGS SHALL BE MADE IN THE SHOP AND CLEARLY INDICATED ON THE SHOP DRAWINGS.
- THE CONTRACTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING REQUIRED TO ERECT AND HOLD THE STEEL FRAME IN PROPER ALIGNMENT UNTIL ALL FLOOR AND ROOF DECK, DIAGONAL BRACING, FLOOR SLABS, WELDED CONNECTIONS, ETC. ARE IN PLACE AND THE CONCRETE HAS DEVELOPED A STRENGTH OF 3000 PSI MIN.

CONCRETE MASONRY CONSTRUCTION (CMU)

- ALL CMU SHALL BE 2-CELL, MODULAR NORMAL WEIGHT UNIT PER ASTM C90, GRADE-N, TYPE I.
- INSTALL UNITS IN RUNNING BOND.
- COMPRESSIVE STRENGTH PER ASTM C90 TABLE 3.
- USE TYPE S MORTAR PER ASTM C270. MINIMUM COMPRESSIVE STRENGTH - 1800 PSI AT 28 DAYS.
- MASONRY CELLS CONTAINING REINFORCING STEEL SHALL BE FILLED SOLID WITH GROUT, INCLUDING BOND BEAMS, INTELS AND PILASTERS.
- TOOL EXPOSED JOINTS CONCAVE.
- HORIZONTAL AND VERTICAL REINFORCEMENT SHALL BE PROVIDED AS SHOWN.
- VERTICAL REINFORCING SHALL EXTEND CONTINUOUSLY FROM THE TOP OF FOOTING AND 6 INCHES INTO THE UPPERMOST BOND BEAM.
- BOND BEAM REINFORCING STEEL SHALL BE CONTINUOUS THROUGHOUT.
- HORIZONTAL WALL REINFORCING STEEL SHALL BE 9 GAGE COLD DRAWN GALVANIZED STEEL WIRE CONFORMING TO ASTM A82. GALVANIZED FINISH CONFORMING TO ASTM A153.
- GROUT FOR MASONRY: USE PORTLAND CEMENT TYPE I OR II PER ASTM C150. MIX TO COMPLY WITH ASTM C476. MINIMUM 28-DAY COMPRESSIVE STRENGTH SHALL BE 3000 PSI.
- CLEAN CONCRETE MASONRY AS THE WALL IS BEING CONSTRUCTED. DO NOT USE ACID-BASE CLEANING SOLUTION.
- NO PIPES OR DUCTS SHALL BE EMBEDDED (VERTICALLY) IN MASONRY UNLESS NOTED OR DETAILED SPECIFICALLY.

FOUNDATION DESIGN

- THE FOUNDATION DESIGN IS BASED UPON THE RECOMMENDATIONS PRESENTED IN THE GEOTECHNICAL INVESTIGATION REPORT PREPARED BY GEO-TEST, 204 RICHARDS LANE, SANTA FE, NM 87505, (505) 471-2245.
- FOOTINGS ARE DESIGNED TO BEAR UPON NATIVE UNDISTURBED SOIL WITH AN ALLOWABLE BEARING CAPACITY OF 2000 PSF.

CONCRETE

- ALL REINFORCEMENT SHALL BE DETAILED, FABRICATED, AND PLACED IN ACCORDANCE WITH ACI 315-95.
- SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR LOCATION OF OPENINGS AND SLEEVES. SPREAD REINFORCEMENT AT OPENINGS AND SLEEVES UNLESS NOTED OTHERWISE. DO NOT CUT REINFORCEMENT UNLESS INDICATED BY SECTION OR DETAIL. CONTRACTOR SHALL VERIFY THE SIZE AND LOCATION OF ALL OPENINGS, SLEEVES, INSERTS, ETC. WITH SHOP DRAWINGS FOR THE EQUIPMENT TO BE PROVIDED.
- PROVIDE CONCRETE EQUIPMENT PADS AND INERTIAL BASES FOR MECHANICAL AND ELECTRICAL INSTALLATIONS. CONSTRUCT PADS AND BASES IN ACCORDANCE WITH THE TYPICAL PAD DETAILS. SEE MECHANICAL AND ELECTRICAL DRAWINGS FOR LIMITS AND LOCATIONS.
- SEE ADDITIONAL NOTES ON S-08.

ALUMINUM NOTES

- ALL ALUMINUM MEMBERS SHALL BE ALUMINUM ALLOY 6061-T6.
- ALUMINUM SHALL BE CONNECTED TO ALUMINUM WITH ALUMINUM BOLTS CONFORMING TO ALLOY 2024-T4. PROVIDE 3/4" DIA BOLTS.
- ALUMINUM SHALL BE WELDED WITH ELECTRODES OF FILLER ALLOY 4043.
- ALUMINUM SHALL NOT BE ALLOWED TO COME INTO DIRECT CONTACT WITH CONCRETE. COAT THE ALUMINUM SURFACE AS REQUIRED IN SPECIFICATION SECTION "PAINTING".

POST INSTALLED ANCHORS

A. EXPANSION ANCHORS

- EXPANSION ANCHORS SHALL BE A SINGLE-END EXPANSION SHIELD ANCHOR WHICH COMPLIES WITH THE DESCRIPTIVE PART OF FEDERAL SPECIFICATION FF-S-325 GROUP II, TYPE 2, CLASS 2, STYLE 2 FOR CONCRETE EXPANSION ANCHORS. ANCHORS SHALL BE HILTI HSLB HEAVY-DUTY ANCHOR WITH TORQUE CAP BY HILTI FASTENING SYSTEMS OF TULSA, OK. (ICBO REPORT No. 3987, SBCCI REPORT No. 8913).
- ANCHORS TO BE INSTALLED IN HOLES DRILLED WITH HILTI CARBIDE TIPPED DRILL BITS. INSTALL AND TORQUE ANCHORS IN COMPLETE ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ANCHORS SHALL BE ZINC PLATED UNLESS SPECIFICALLY NOTED AS STAINLESS STEEL ON THE PLAN DETAILS.
- WHEN DETAILS OR SECTIONS INDICATE EXPANSION ANCHORS BUT NO SIZE, PROVIDE HILTI HSLB M 20/30 ANCHORS.
- PROVIDE THE FOLLOWING MINIMUM EMBEDMENT DEPTHS UNLESS NOTED OTHERWISE:

ANCHOR TYPE	DEPTH
HSLB M 12/25	3 1/4"
HSLB M 20/30	5 1/8"

B. ADHESIVE ANCHOR SYSTEM

- REINFORCING, BAR DOWELS, REINFORCING BARS, THREADED RODS, BOLTS, ETC. WHICH ARE INDICATED TO BE ADHESIVE DOWELS SET INTO CONCRETE OR SOLID MASONRY SHALL BE ACCOMPLISHED USING HIT HY150 ADHESIVE BY HILTI FASTENING SYSTEMS OF TULSA, OK (ICBO REPORT No. 5193 OR ASTM E-1512).
- DRILL AND CLEAN ALL HOLES, AND INSTALL ALL ANCHORS IN COMPLETE ACCORDANCE WITH MANUFACTURER'S PUBLISHED RECOMMENDATIONS, AS WELL AS ALL APPLICABLE BUILDING CODES OR ENGINEERING REPORTS. COMPLY WITH MANUFACTURER'S DRILL BIT RECOMMENDATIONS.
- PROVIDE THE FOLLOWING MINIMUM ANCHOR EMBEDMENT DEPTHS UNLESS SPECIFICALLY NOTED OTHERWISE ON PLAN DETAILS:

REINFORCING BARS	
BAR SIZE	EMBEDMENT DEPTH
#3	4"
#4	5"
#5	6"
#6	7"
#7	8"
#8	9"
#9	10"
#10	12"

HILTI HAS HIF ANCHOR RODS	
DIAMETER	EMBEDMENT DEPTH
3/8"	5"
1/2"	6"
5/8"	7"
3/4"	8"
7/8"	9"
1"	10"

HILTI HIS OR HIS-R INSERTS	
DIAMETER	EMBEDMENT DEPTH
3/8"	4-1/4"
1/2"	5"
5/8"	6-3/8"
3/4"	8-1/4"

C. UNDERCUT ANCHORS

- POST INSTALLED OVER HUNG ANCHORS SUBJECTED TO DYNAMIC LOAD SHALL BE HILTI HDA UNDERCUT ANCHORS OR EQUAL.

HEADED STUDS AND DEFORMED BAR ANCHORS

- HEADED STUDS SHALL BE TYPE B PER THE AWS CODE WITH A MINIMUM YIELD STRENGTH OF 50 KSI.
- DEFORMED BAR ANCHORS SHALL COMPLY WITH ASTM A-106 WITH A MINIMUM YIELD STRENGTH OF 70 KSI.
- UNLESS NOTED OTHERWISE, ANCHOR LENGTH SHALL BE:

DIAMETER	LENGTH
3/8"	24" MIN.
1/2"	24" MIN.
5/8"	30" MIN.

DESIGN CODE

- 1997 UNIFORM BUILDING CODE. (UBC)

MATERIALS OF CONSTRUCTION

- NORMALWEIGHT CONCRETE 28 DAY COMPRESSIVE STRENGTH
ALL CONCRETE f'c = 4000 PSI
- STRUCTURAL STEEL
STRUCTURAL SHAPES AND PLATES - ASTM A36 Fy = 36 KSI
(ASTM A572 GRADE 50 MAY BE SUBSTITUTED FOR THE ABOVE SHAPES.)
TUBES - ASTM A500 GRADE B Fy = 46 KSI
PIPES - ASTM A53 GRADE B Fy = 35 KSI
BOLTS - ASTM A325-N
ANCHOR BOLTS - ASTM A307
WELDING ELECTRODES - REFER TO SPECIFICATION
- REINFORCING STEEL
REINFORCING STEEL - ASTM A615 GR 60 Fy = 60 KSI
REINFORCING STEEL TO BE WELDED - ASTM A706 GR 60 Fy = 60 KSI

DESIGN LOADS

- DESIGN DEAD LOAD - ACTUAL WEIGHT OF MATERIALS USED
- DESIGN LIVE LOADS:
ROOF 20 PSF (REDUCIBLE)
LATERAL FORCE AT TOP OF HAND RAIL 50 PLF OR 200 LB. APPLIED IN ANY DIRECTION
- WIND LOAD:
BASIC WIND VELOCITY = 80 MPH.
IMPORTANCE FACTOR = 1.0
EXPOSURE FACTOR C
WIND STAGNATION PRESSURE Qs = 16.4 PSI

WIND APPLIED TO STRUCTURE AND COMPONENTS IN ACCORDANCE WITH 1997 UBC CHAPTER 16.
ROOF UPLIFT : 16 PSF
- SNOW LOAD:
GROUND SNOW (Pg) = 20 PSF
EXPOSURE FACTOR (Ce)= 1.0
IMPORTANCE FACTOR = 1.0
- SEISMIC LOAD:
SEISMIC ZONE = 1.0
OCCUPANCY IMPORTANCE FACTOR= 1.0

QUALITY ASSURANCE

- THE OWNER WILL PROVIDE QUALIFIED SPECIAL INSPECTORS TO PERFORM INSPECTIONS IN ACCORDANCE WITH CHAPTER 17 OF THE 1997 UBC, AS A MINIMUM. THE FOLLOWING ITEMS REQUIRING SPECIAL INSPECTION WILL INCLUDE:
A. CONCRETE: ALL CONCRETE WORK SHALL REQUIRE CONTINUOUS INSPECTION.
B. REINFORCING STEEL: ALL REINFORCING STEEL, EXCEPT SLAB ON GRADE REINFORCING.
C. SOIL: DURING EXCAVATION, DURING PLACEMENT OF ENGINEERED FILL, EVALUATION OF IN PLACE DENSITY AND APPROVAL OF FOOTING SUBGRADES.
D. WELDING: ALL STRUCTURAL WELDING, INCLUDING REINFORCING STEEL. 50% NDT OF ALL COMPLETE AND PARTIAL PENETRATION WELDS.
E. BOLTS INSTALLED IN CONCRETE: DURING INSTALLATION OF BOLTS AND PLACING OF CONCRETE AROUND BOLTS.
F. HIGH-STRENGTH BOLTING: DURING BOLT INSTALLATIONS AND TIGHTENING.
G. SPECIAL CASES: THOSE CASES INDICATED BY THE BUILDING OFFICIAL
H. CMU CONSTRUCTION.
I. POST INSTALLED ANCHORS
- SPECIAL INSPECTORS WILL BE QUALIFIED BY TRAINING AND EXPERIENCE FOR THE REQUIRED INSPECTIONS AND WILL BE ACCEPTABLE TO THE BUILDING OFFICIAL. INSPECTORS SHALL PERFORM ALL DUTIES AND RESPONSIBILITIES AS REQUIRED BY 1997 UBC, CHAPTER 17.

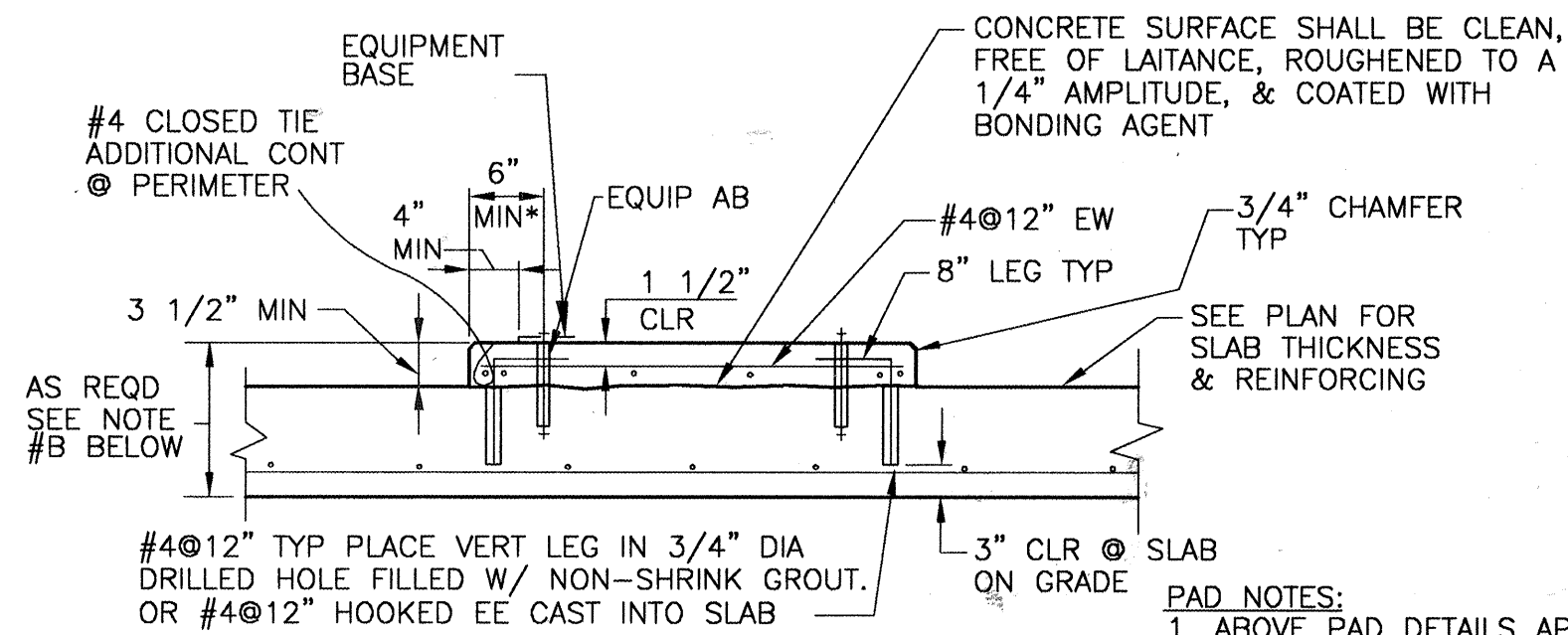
HDR

HDR Engineering, Inc.

BERNALILLO COUNTY
PUBLIC WORKS DIVISION

TITLE: AREA D VACUUM PUMP STATION
STRUCTURAL GENERAL NOTES

Design Review Committee	City Engineer Approval	Mr. Gary H.	Mr. Gary H.
PROJECT NO.	COA # 6959.81 WCEA # XO-210-024	MAP NO. B-15	DWG. S-07
			SHEET 11

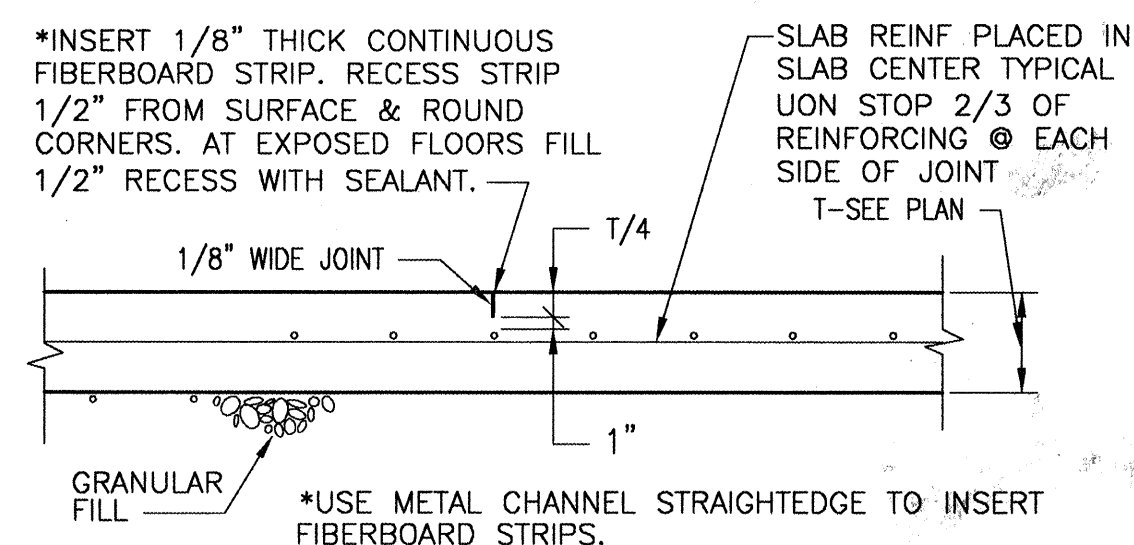


MINIMUM PAD THICKNESS TABLE		
AB DIA	MIN PAD THK	
1/4" DIA.	5"	
3/8" DIA.	6 1/2"	
1/2" DIA.	8"	
5/8" DIA.	9 1/2"	
3/4" DIA.	11"	
7/8" DIA.	12 1/2"	
1" DIA.	14"	

- NOTES:
- PROVIDE ABOVE PAD UNDER ALL ELECTRICAL AND MECHANICAL EQUIPMENT SUPPORTED ON STRUCTURAL SLABS. ALSO PROVIDE FOR EQUIPMENT WEIGHING LESS THAN 5000 POUNDS WHICH ARE SUPPORTED ON GRADE, OR WHERE SPECIFICALLY NOTED ON PLANS.
 - PAD THICKNESS SHALL BE THE LARGER OF SLAB THICKNESS PLUS 3 1/2" OR MINIMUM PAD THICKNESS FROM TABLE. PROVIDE AN ADDITIONAL LAYER OF #4@12" EACH WAY WITH 1 1/2" CLEAR TOP AND BOTTOM FOR EACH 8" ADDITIONAL PAD THICKNESS EXCEEDING THE 3 1/2" MINIMUM THICKNESS.

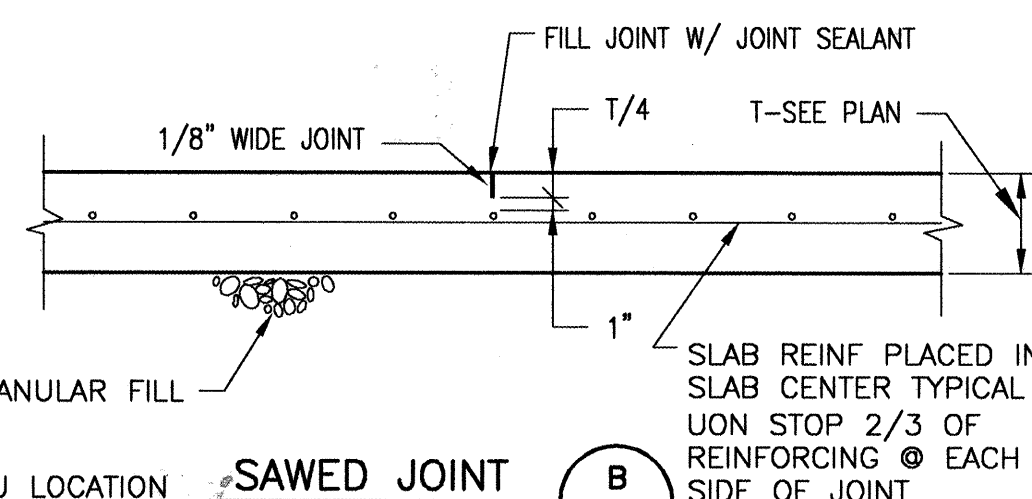
TYPICAL EQUIPMENT SUPPORT PAD DETAIL

NTS



FORMED JOINT

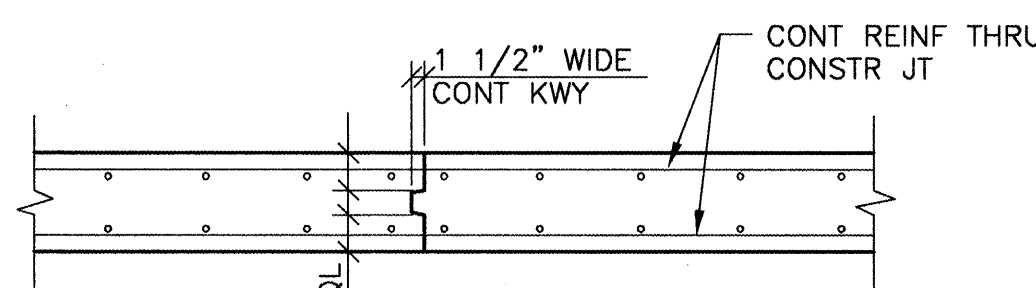
- NOTES:
- PROVIDE DCJ AT CLJ LOCATION IN LIEU OF CLJ IF APPROVED BY ENGINEER.



SAWED JOINT

CONTROL JOINT DETAILS (CLJ)

NTS

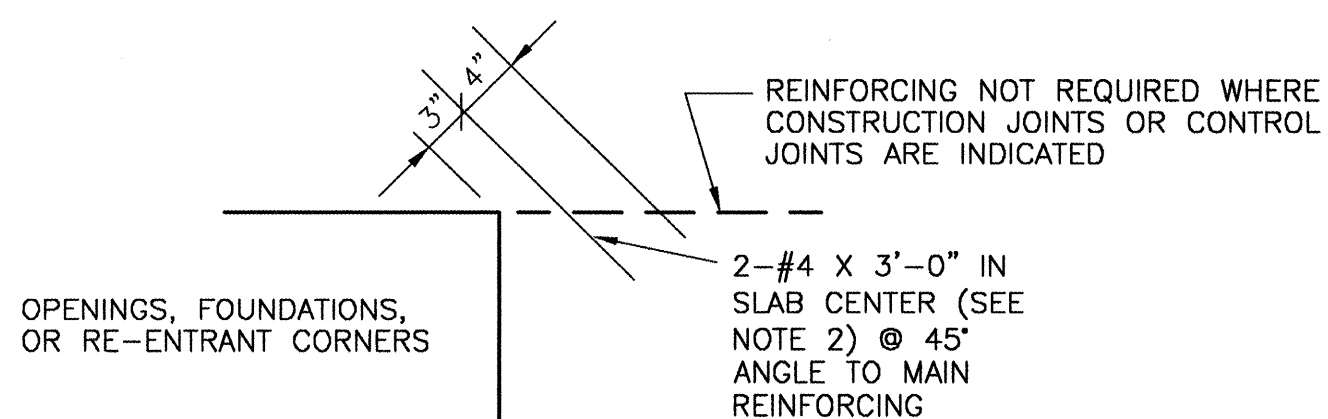


KEYED CONSTRUCTION JOINT (KCJ)

- NOTES:
- SEE NOTE 1 CLJ DETAIL 3/G-10.
 - FURNISH ROUGHEN CONSTRUCTION JOINT WITH SURFACE ROUGHEN TO 1/4" AMPLITUDE AT ALL WALL TO SLAB CONSTRUCTION JOINTS.
 - FURNISH KEYED CONSTRUCTION JOINTS AT ALL WALL VERTICAL AND SLAB CONSTRUCTION JOINTS WITH DIMENSIONS SHOWN.

CONSTRUCTION JOINT DETAILS (CJ)

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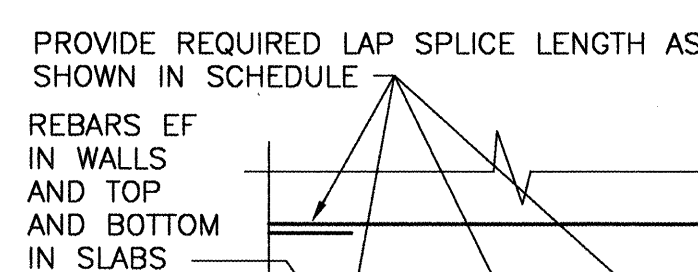


- NOTES:
- STRAIGHT BARS SHOWN, PROVIDE BENT BARS WHERE SHOWN ON PLANS.
 - PROVIDE #4 @ TOP AND BOTTOM FOR SLAB W/TOP AND BOTTOM REINFORCEMENT.

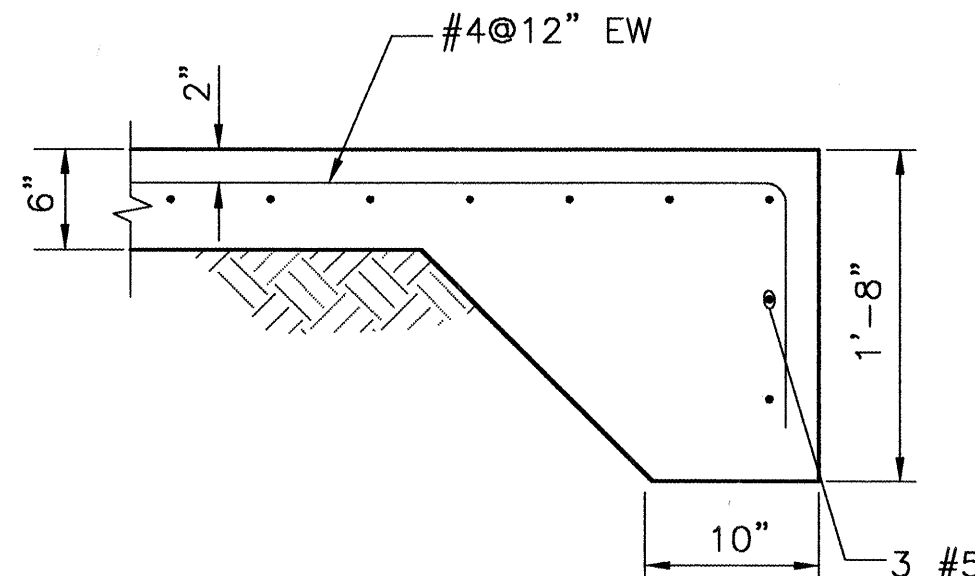
TYPICAL SLAB ON GRADE RE-ENTRANT CORNER DETAIL

NTS

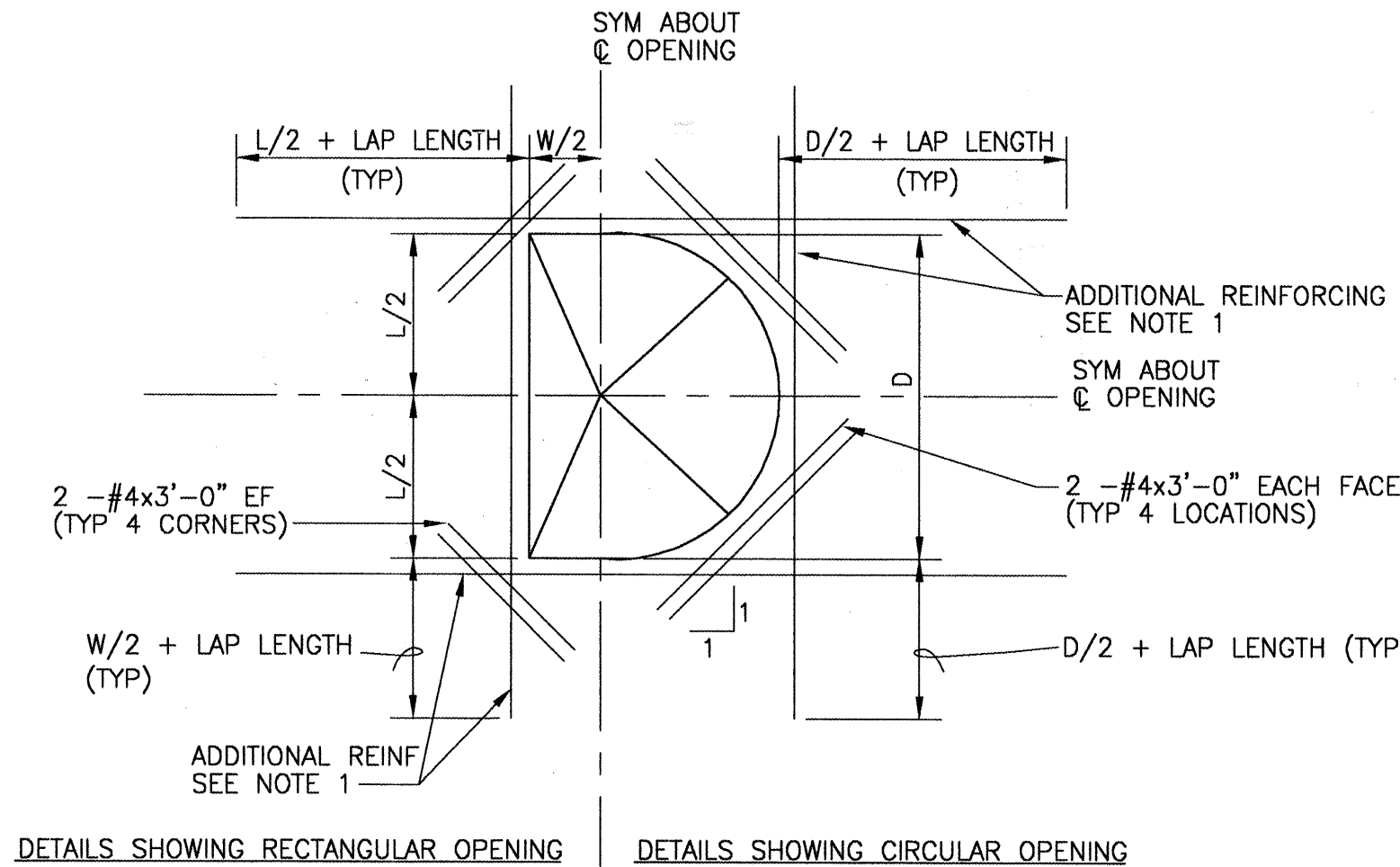
DOWELED CONSTRUCTION JOINT (DCJ)



CIRCULAR HORIZONTAL SLAB & WALL REINFORCING



TYPICAL EXTERIOR SLAB



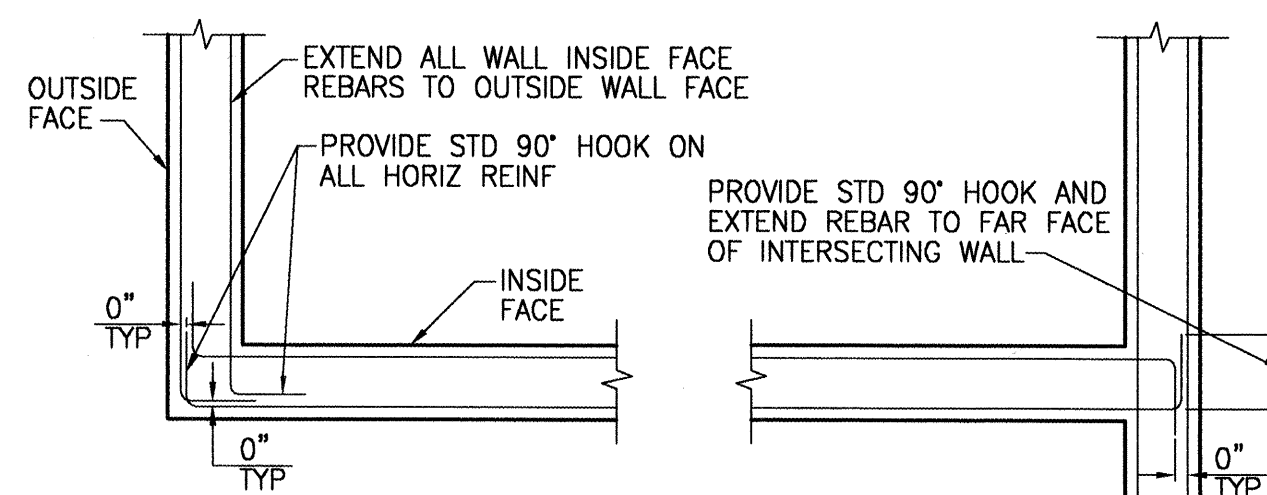
DETAILS SHOWING RECTANGULAR OPENING

DETAILS SHOWING CIRCULAR OPENING

DETAIL EXTRA REBARS AROUND OPENINGS IN SLABS & WALLS

NTS

- NOTES:
- ADDITIONAL REINFORCING SHALL BE THE SAME SIZE AS DISCONTINUOUS REINFORCEMENT AT OPENING. QUANTITY OF REINFORCING IN EACH DIRECTION SHALL BE EQUAL TO OR ONE GREATER THAN THE NUMBER OF DISCONTINUOUS BARS. PLACE 1/2 OF ADDITIONAL REINFORCING BARS EACH SIDE OF OPENING. PLACE ADDITIONAL REINFORCEMENT AT 3" O.C. (TYPICAL BOTH DIRECTIONS AND ALL LAYERS OF REINFORCEMENT).
 - ADDITIONAL REINFORCING SHALL EXTEND BEYOND EDGE OF OPENING AS SHOWN ABOVE. ADDITIONAL BARS MAY TERMINATE AT THE END OF THE WALL WITH A STANDARD HOOK WHERE THE LENGTH OF THE WALL WILL NOT PERMIT BARS TO EXTEND AS SHOWN ABOVE.
 - TYPICAL WALL OR SLAB REINFORCING NOT SHOWN FOR CLARITY. TERMINATE TYPICAL REINFORCING 2" CLEAR TO OPENING.
 - OPENINGS 12" OR LESS IN SLABS & OPENINGS 18" OR LESS IN WALLS, NO EXTRA REBARS ARE REQUIRED UNLESS SHOWN OTHERWISE. TYPICAL REINFORCING SHALL BE SPREAD (NOT CUT) TO ALLOW FOR OPENINGS TO BE MADE.
 - UNLESS SHOWN OTHERWISE ON DRAWINGS, PROVIDE EXTRA REINFORCING AROUND OPENINGS AS SHOWN AND INDICATED ABOVE.



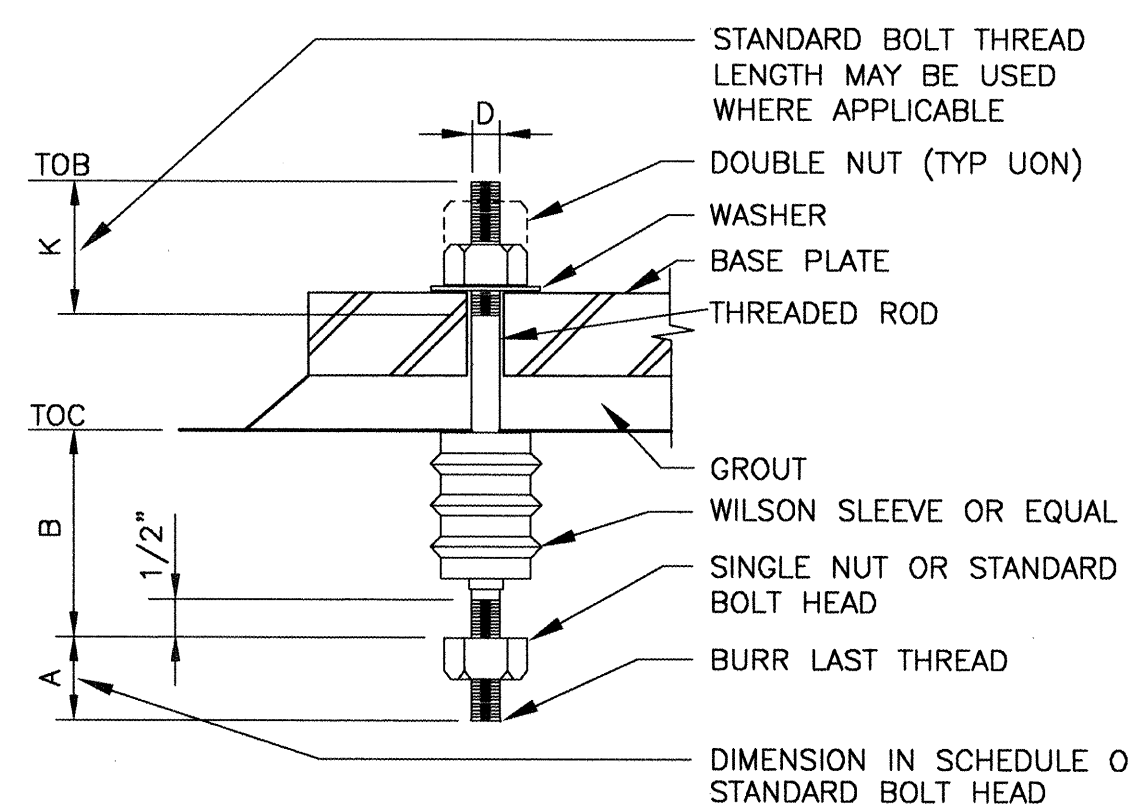
- NOTES:
- SEE INDIVIDUAL STRUCTURES FOR EXTRA HORIZONTAL REBARS AT CORNERS & WALL INTERSECTIONS.
 - WALL VERTICAL REBARS NOT SHOWN FOR CLARITY.
 - SEE CONCRETE NOTE 11 FOR STD 90° HOOK LENGTHS.

PLAN "A" WALL CORNER

PLAN "B" WALL INTERSECTION

TYPICAL WALL HORIZ REINFORCING DETAILS

NTS



- NOTE:
- ALL MATERIALS STAINLESS STEEL PER SPECIFICATION.

EMBEDDED ANCHOR BOLT TYPE A DETAIL

NTS

SCHEDULE-ANCHOR BOLT TYPE A				
D	A	B	K	REMARKS
3/8"	1"	6"	2 3/4"	
1/2"	1 1/4"	8"	3"	
5/8"	1 1/2"	10"	3 1/4"	
3/4"	1 3/4"	12"	3 1/2"	
7/8"	2"	14"	3 3/4"	
1"	2 1/4"	16"	4"	
1 1/8"	2 1/2"	18"	4 1/4"	
1 1/4"	2 3/4"	20"	4 1/2"	
1 3/8"	3"	22"	4 3/4"	
1 1/2"	3 1/4"	24"	5"	
1 3/4"	3 3/4"	28"	5 1/2"	
2"	4 1/4"	32"	6"	
2 1/2"	5 1/2"	48"	7"	
3"	6 1/4"	66"	8"	

CONCRETE NOTES:

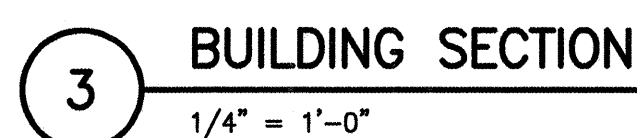
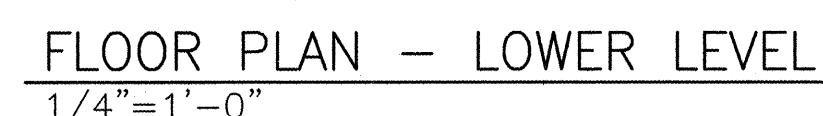
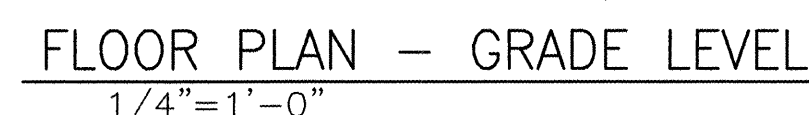
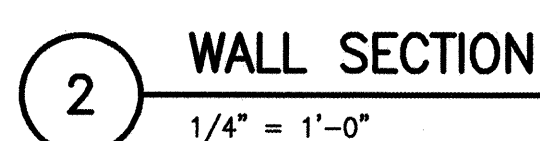
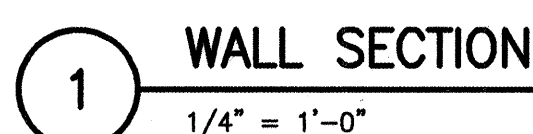
- MINIMUM BAR SPLICE: PER TABLE UNLESS OTHERWISE NOTED.
- ALL REBAR SPLICES SHALL BE AS SHOWN UNDER HEADING "VERTICAL" EXCEPT IF SPLICED BARS ARE HORIZONTAL BARS WITH 12" OR MORE CONCRETE BELOW. THEN SPLICE LENGTH SHALL BE AS SHOWN UNDER HEADING "OTHER".
- * AT SPLICES THE BAR SPACING IS THE CENTER TO CENTER DISTANCE BETWEEN ADJACENT REBARS.
- ALL SPLICES SHALL BE CONTACT SPLICES AND WIRED TOGETHER.
- NO WELDED OR MECHANICAL SPLICES ARE PERMITTED UNLESS INDICATED OTHERWISE.
- TACK WELDING OF REINFORCING OR ANCHOR BOLTS IS NOT PERMITTED.
- UNLESS OTHERWISE NOTED PROVIDE COVERING FOR REINFORCING AS FOLLOWS:
 - CONCRETE DEPOSITED AGAINST EARTH: 3 INCHES
 - ALL OTHER REINFORCING: 2 INCHES
- ALL BARS INDICATED AS BEING HOOKED SHALL HAVE STANDARD 90° HOOKS, UON.

STANDARD 90° HOOKS

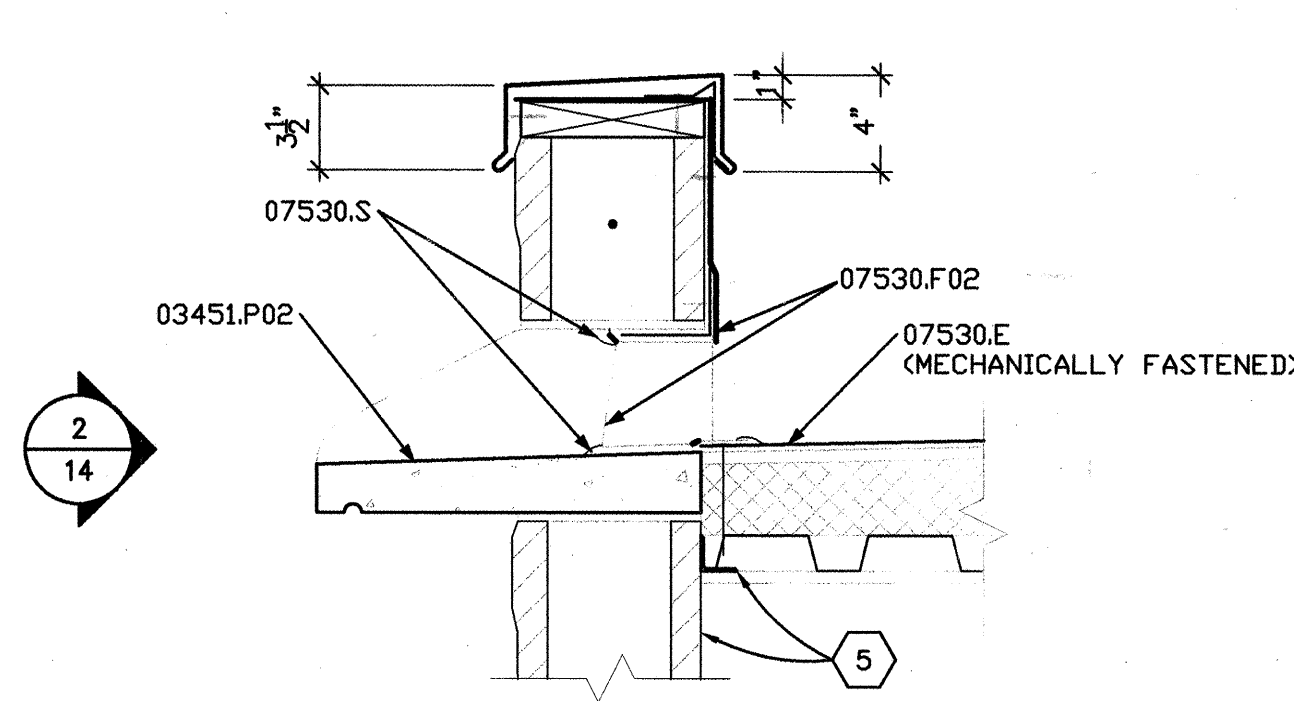
HOOK LENGTH

#3	#4	#5	#6	#7	#8	#9	#10	#11
6"	8"	10"	1'-0"	1'-2"	1'-4"	1'-7"	1'-10"	2'-0"

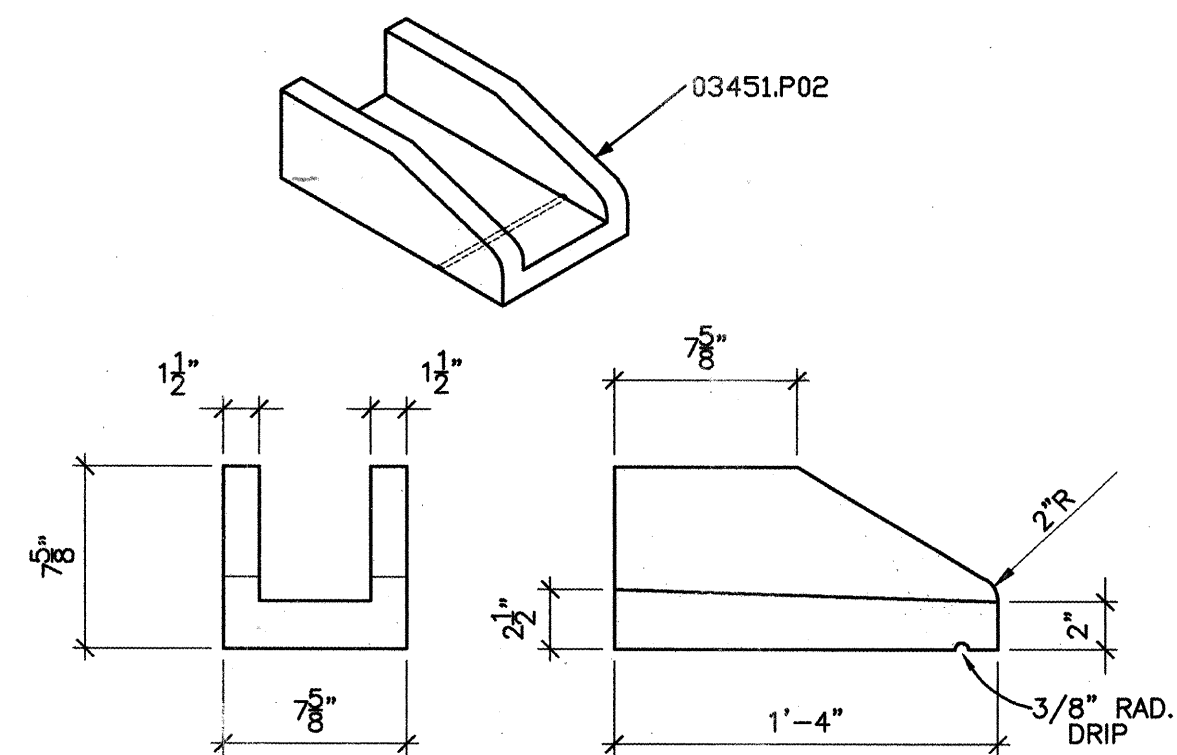
AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR A.S. Horner	DATE 6/6/03	WORK BY A.S. Horner	DATE 6/6/03	FIELD NOTES NO.	DATE	NO.	DATE
DESIGNED BY Wilson + Co.	DATE 6/6/03	CHECKED BY Wilson + Co.	DATE 6/6/03	REVISIONS NO.	DATE	REMARKS BY	DATE
DESIGNED BY Wilson + Co.		DATE 6/6/03		DESIGNED BY ZS		DATE 8/09/02	
DRAWN BY ZS		DATE 8/09/02		CHECKED BY HDR		DATE 12/09/02	
<div style="text-align: center;"> <p>HDR Engineering, Inc.</p> </div>							
<div style="text-align: center;"> <p>BERNALILLO COUNTY PUBLIC WORKS DIVISION</p> <p>TITLE: AREA D VACUUM PUMP STATION STRUCTURAL STANDARD DETAILS</p> </div>							
Design Review Committee		City Engineer Approval		Last Design Update		No. of Updates	
PROJECT NO. COA # 6959.81		MAP NO. B-15		DWG. S-08		SHEET 12	



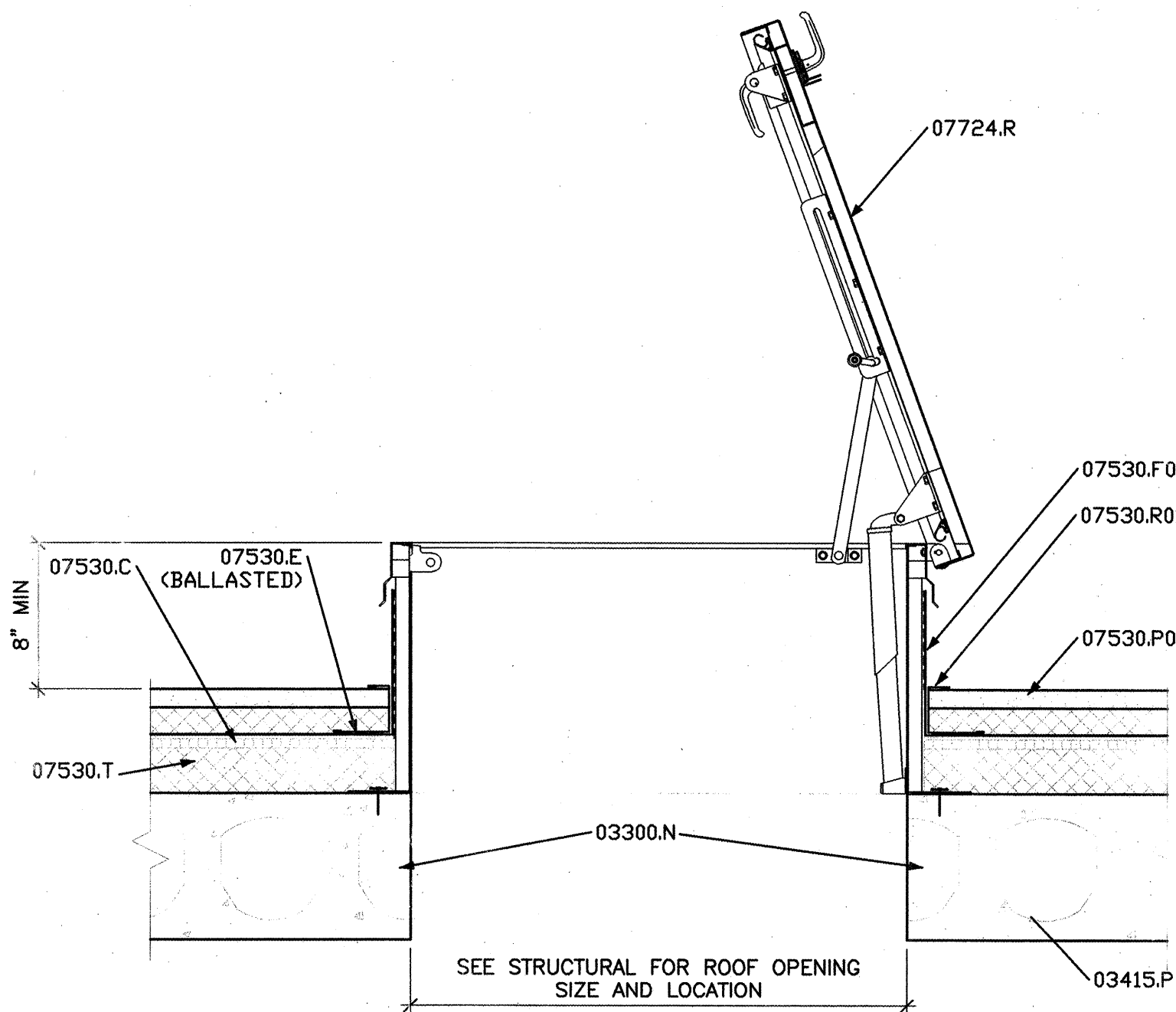
X:\Public\PROJECTS\X0024\E\VACSTA\AREA-D-PSTA\X0024-A1-FLOOR.dwg 02/24/2003 09:43:47 AM MST



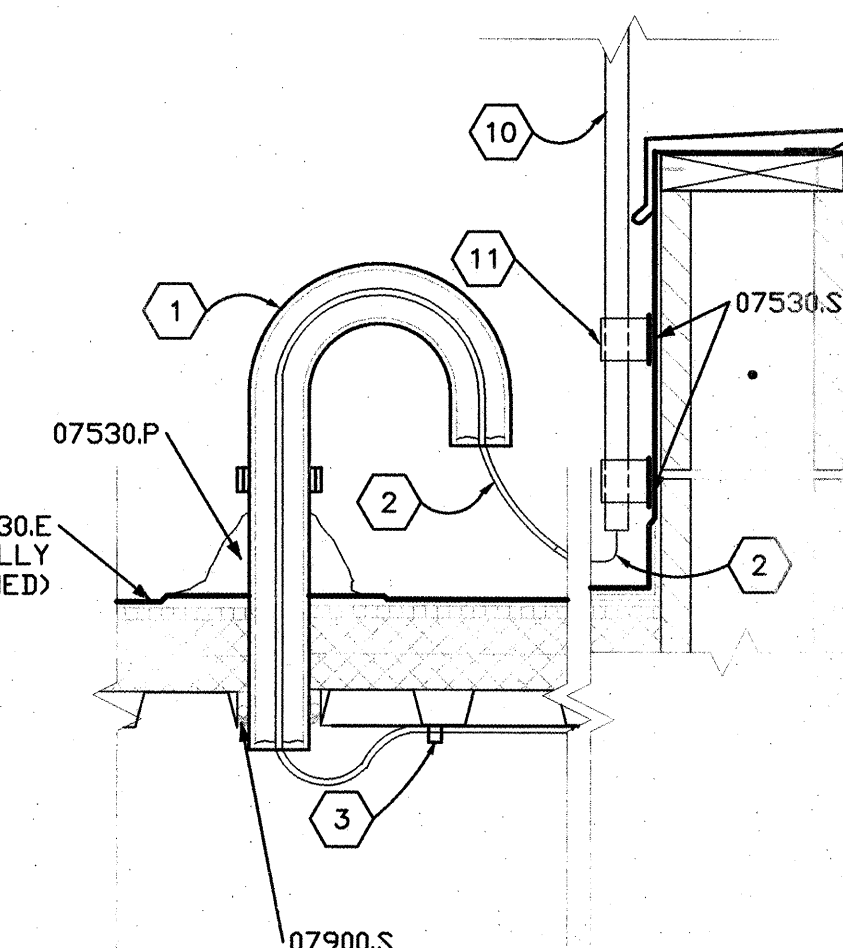
1 SECTION AT SCUPPER
1 1/2" = 1'-0"



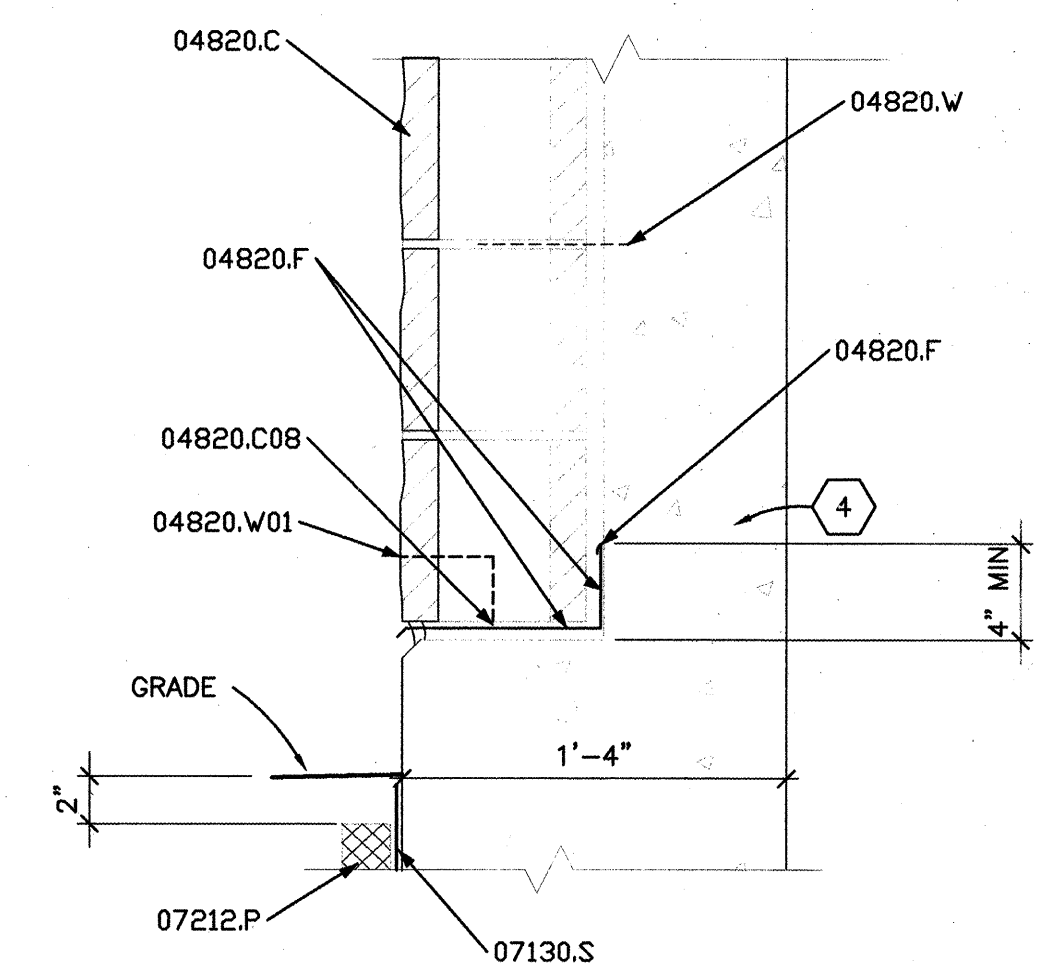
2 SCUPPER DETAIL
1 1/2" = 1'-0"



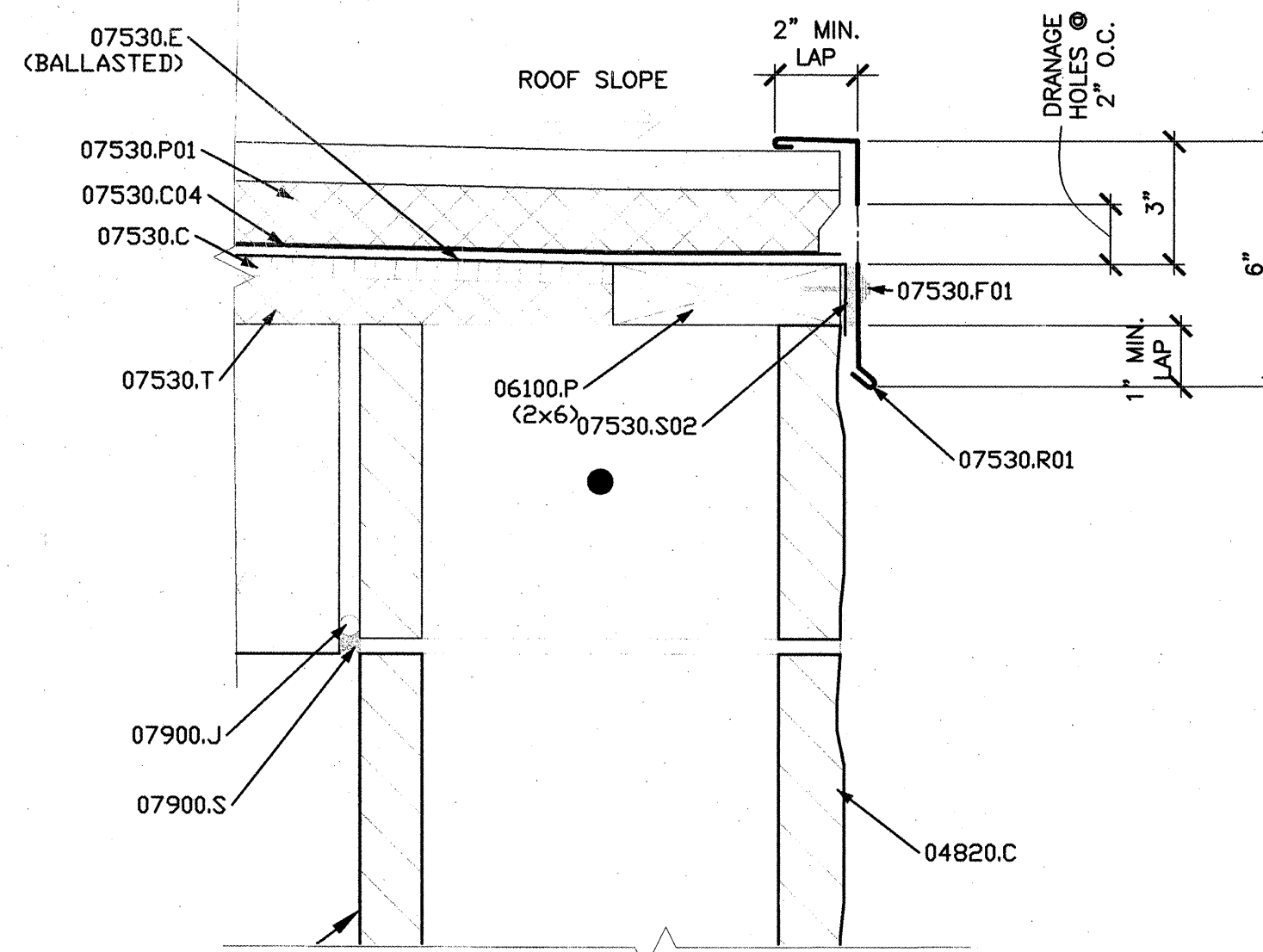
5 ROOF HATCH DETAIL
1 1/2" = 1'-0"



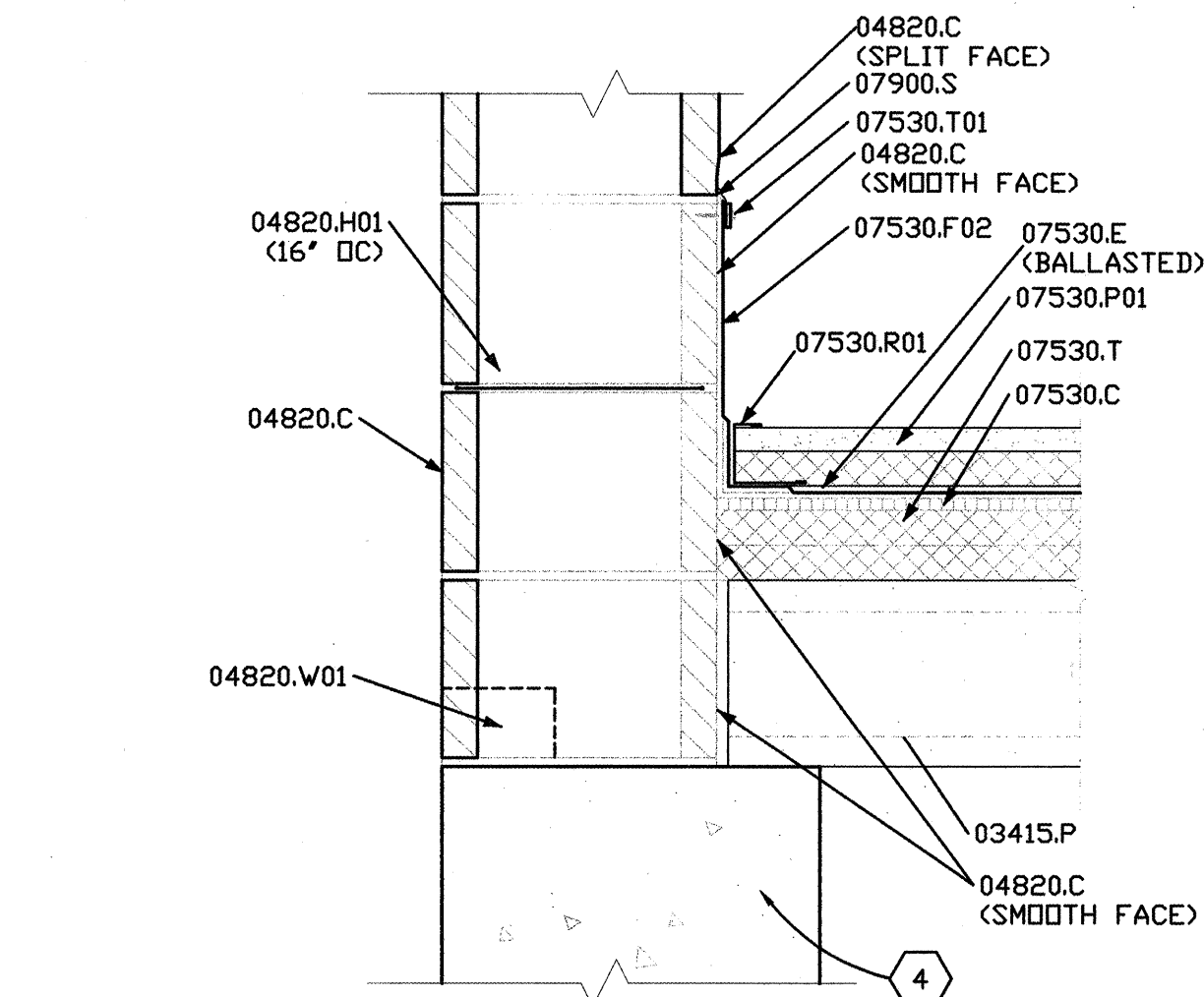
8 ROOF PENETRATION DETAIL
1 1/2" = 1'-0"



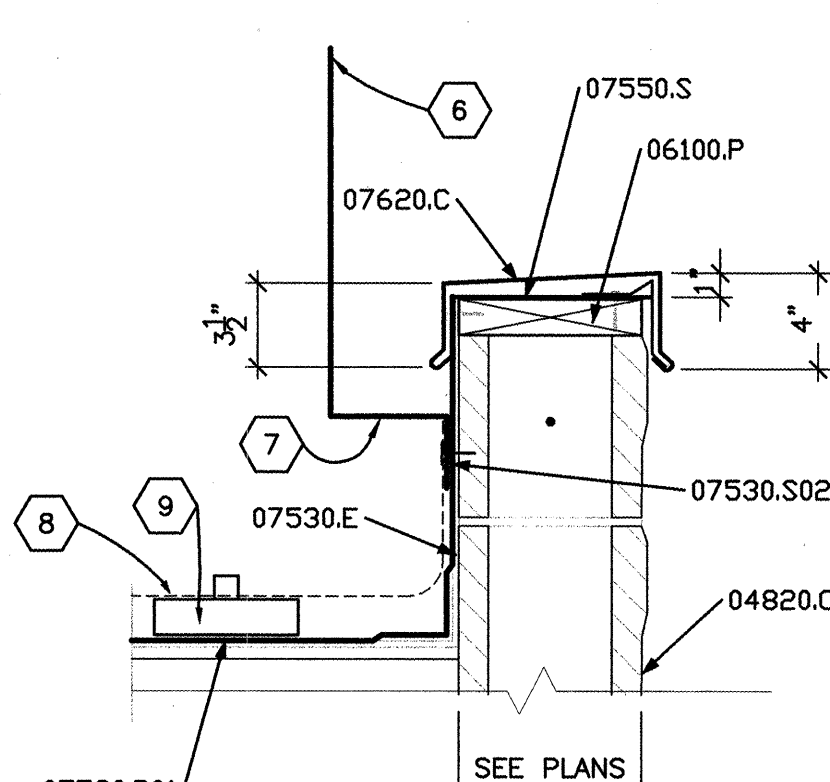
3 WALL SECTION
1 1/2" = 1'-0"



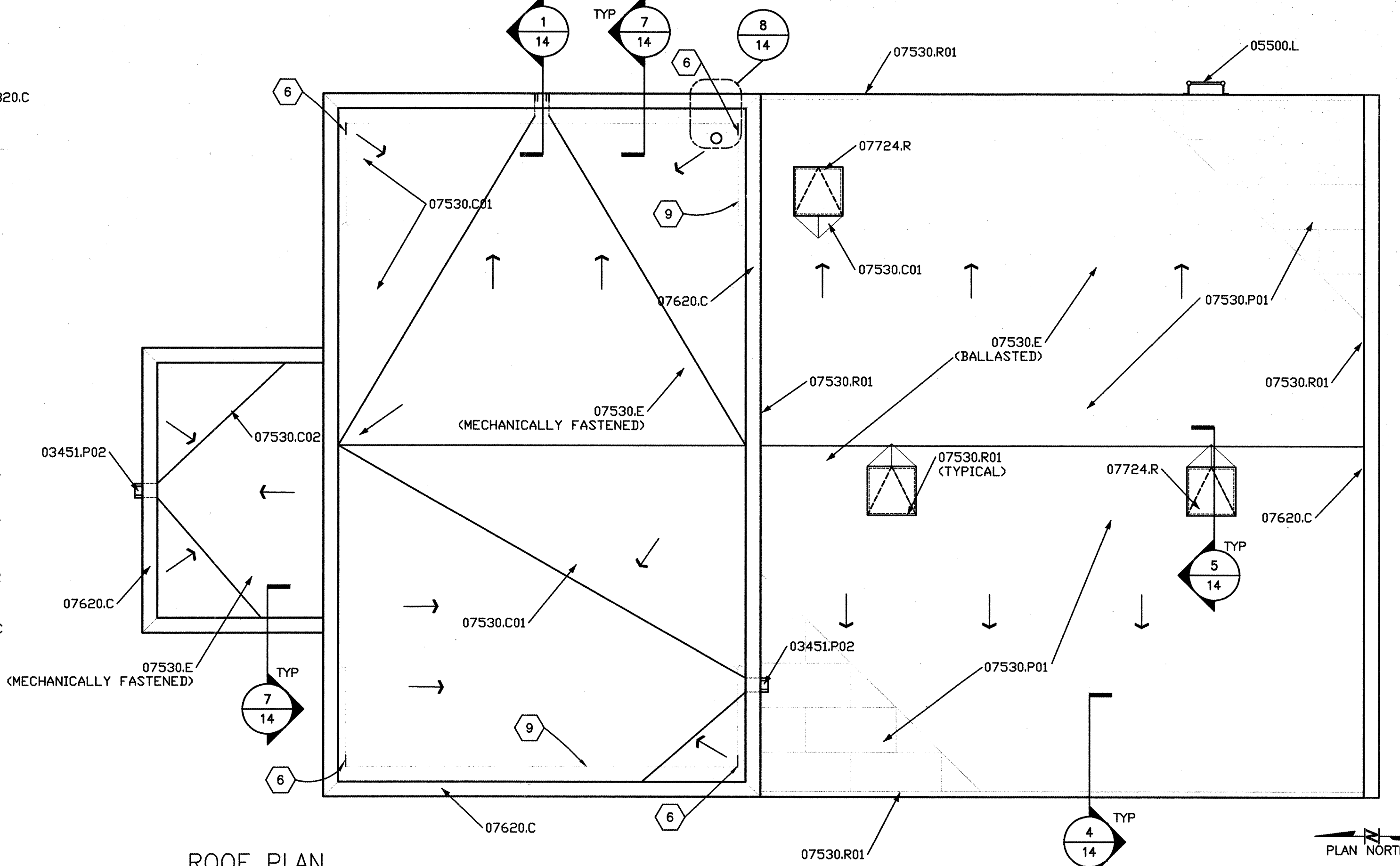
4 WALL SECTION
3" = 1'-0"



6 WALL SECTION
1 1/2" = 1'-0"



7 PARAPET SECTION
1 1/2" = 1'-0"



ROOF PLAN
1/4" = 1'-0"

GENERAL SHEET NOTES:

- REFERENCE FINISH FLOOR ELEVATION = 100'-0" AND REFERENCES DATUM ELEVATION, SEE CIVIL DRAWINGS FOR DATUM.
- SOLID GROUT ALL CMU CELLS WITH REINFORCING- SEE STRUCTURAL.
- COORDINATE VERTICAL LOCATION OF ROOF SCUPPER WITH ROOFING SYSTEM COMPONENTS PRIOR TO INSTALLATION.

REFERENCE KEYNOTES:

DIVISION 3 - CONCRETE

- 03300.N NON-SHRINK GROUT
- 03415.P PRECAST PLANK
- 03451.P02 PRECAST CONCRETE SCUPPER

DIVISION 4 - MASONRY

- 04820.C CONCRETE MASONRY UNITS
- 04820.C08 CAVITY DRAINAGE MATERIAL
- 04820.F FLASHING
- 04820.H01 HORIZONTAL JOINT REINFORCEMENT
- 04820.W WALL TIES
- 04820.W01 WEEP HOLES

DIVISION 5 - METALS

- 05500.L LADDER

DIVISION 6 - WOOD & PLASTICS

- 06100.P PRESSURE TREATED DIMENSION LUMBER

DIVISION 7 - THERMAL & MOISTURE PROTECTION

- 07130.S SHEET WATERPROOFING
- 07212.P PERIMETER INSULATION
- 07530.B01 BONDING ADHESIVE
- 07530.C COVER BOARD
- 07530.C01 CRICKET
- 07530.C02 CANT STRIP
- 07530.C04 CUSHION SHEET
- 07530.E ELASTOMERIC MEMBRANE ROOFING
- 07530.F01 FASTENER
- 07530.F02 FLEXIBLE FLASHING
- 07530.P PIPE BOOT
- 07530.P01 PAVERS
- 07530.R01 ROOF PAVES TERMINATION
- 07530.S SEAM CAULK
- 07530.S02 SEALANT
- 07530.T TAPERED BOARD INSULATION
- 07530.T01 TERMINATION BAR
- 07550.S SEPARATION SHEET
- 07620.C COPING
- 07724.R ROOF HATCH
- 07900.J JOINT BACKING
- 07900.S SEALANT TYPE ES-1

SHEET KEYNOTES:

- 1" DIA. METAL CONDUIT
- ANTENNA CABLE
- WIRING CLAMP
- SEE STRUCTURAL FOR WALL CONSTRUCTION AND REINFORCING.
- SEE STRUCTURAL FOR WALL AND ROOF CONSTRUCTION.
- LIGHTNING PROTECTION AIR TERMINAL- SEE ELECTRICAL.
- LIGHTNING PROTECTION OFFSET TERMINAL BRACKET- SEE ELECTRICAL.
- LIGHTNING PROTECTION CONDUCTOR- SEE ELECTRICAL.
- LIGHTNING PROTECTION CABLE HOLDER - SEE ELECTRICAL.
- ANTENNAE- SEE ELECTRICAL.
- ANTENNAE MOUNTING BRACKET- SEE ELECTRICAL.

LEGEND:

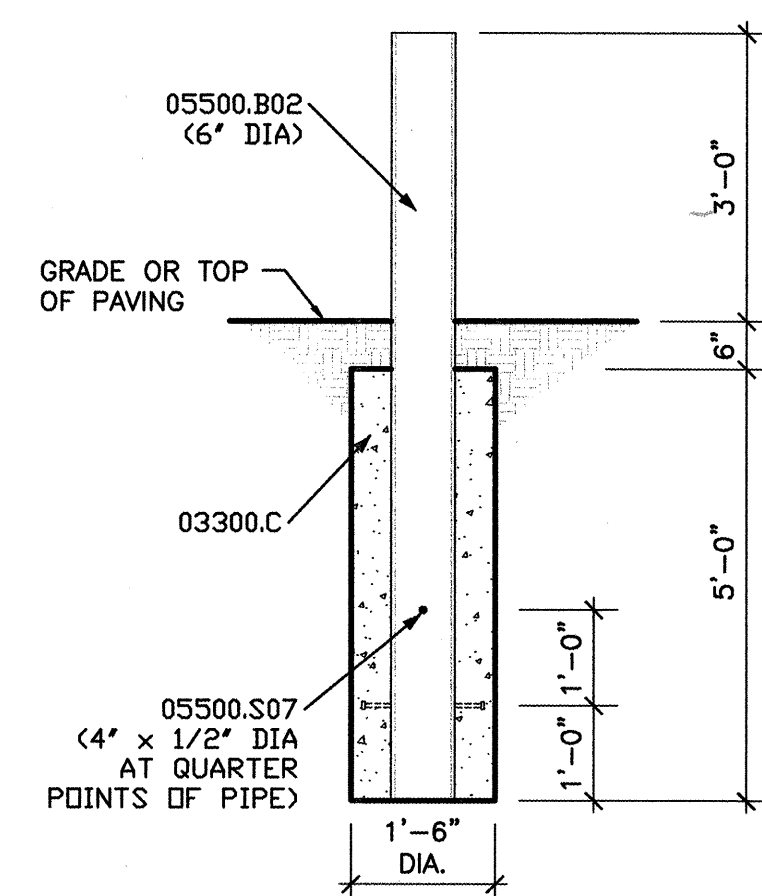
- INDICATES SLOPE OF ROOF

WILSON & COMPANY

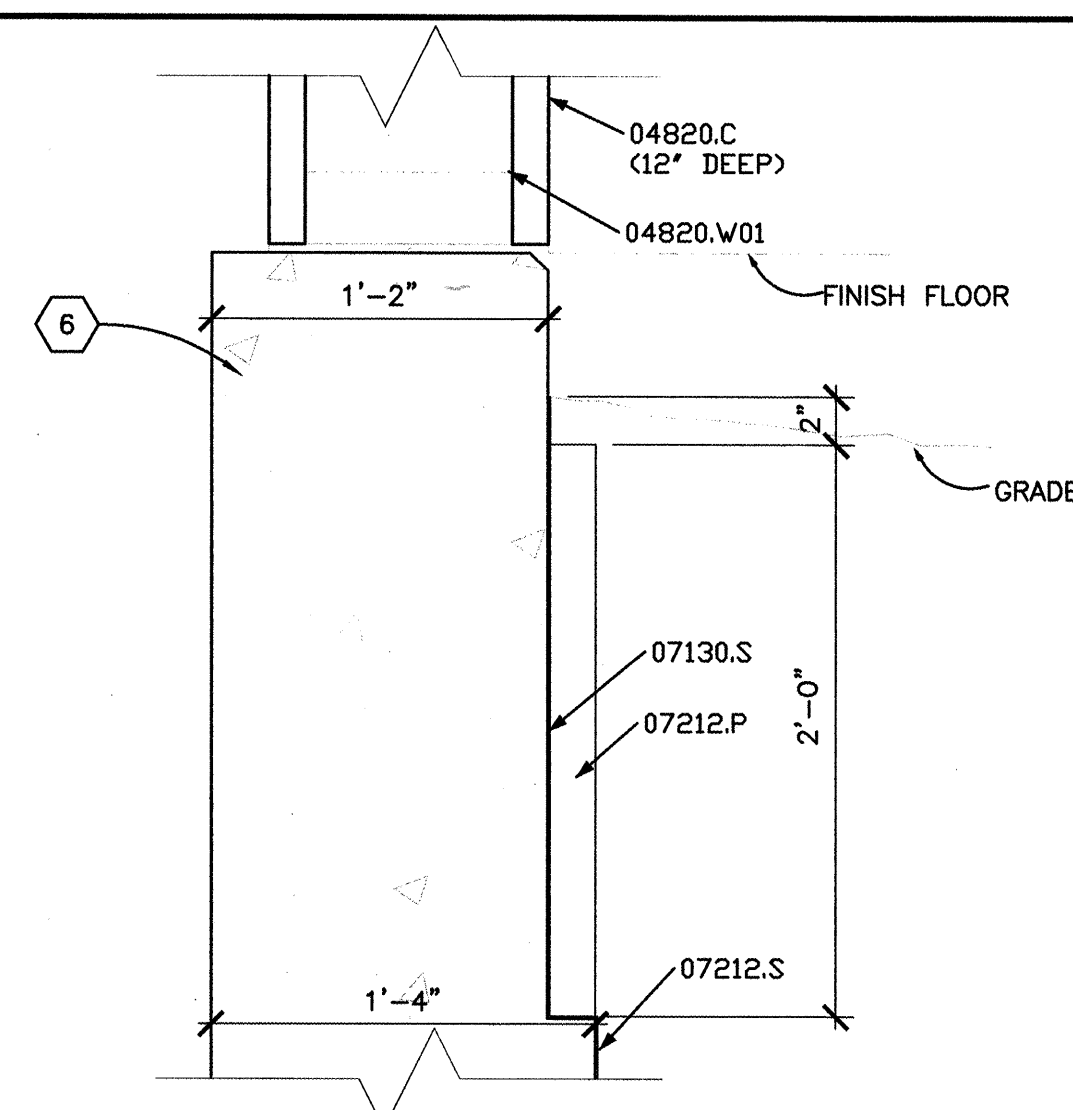
BERNALILLO COUNTY
PUBLIC WORKS DIVISION

TITLE: AREA D VACUUM PUMP STATION
ROOF PLAN AND DETAILS

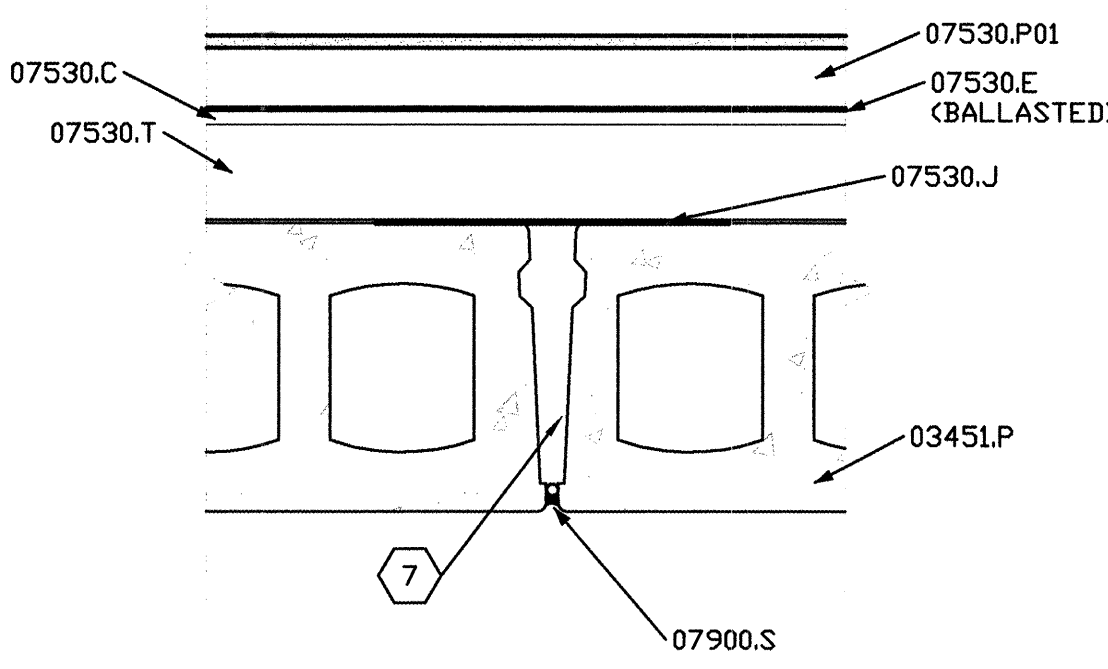
DESIGN	REVIEW	DATE	BY	REMARKS
DESIGNED BY RJP	DESIGNED BY RJP	2002	2002	2002
DRAWN BY PAS	DRAWN BY PAS	2002	2002	2002
CHECKED BY CRG	CHECKED BY CRG	2002	2002	2002



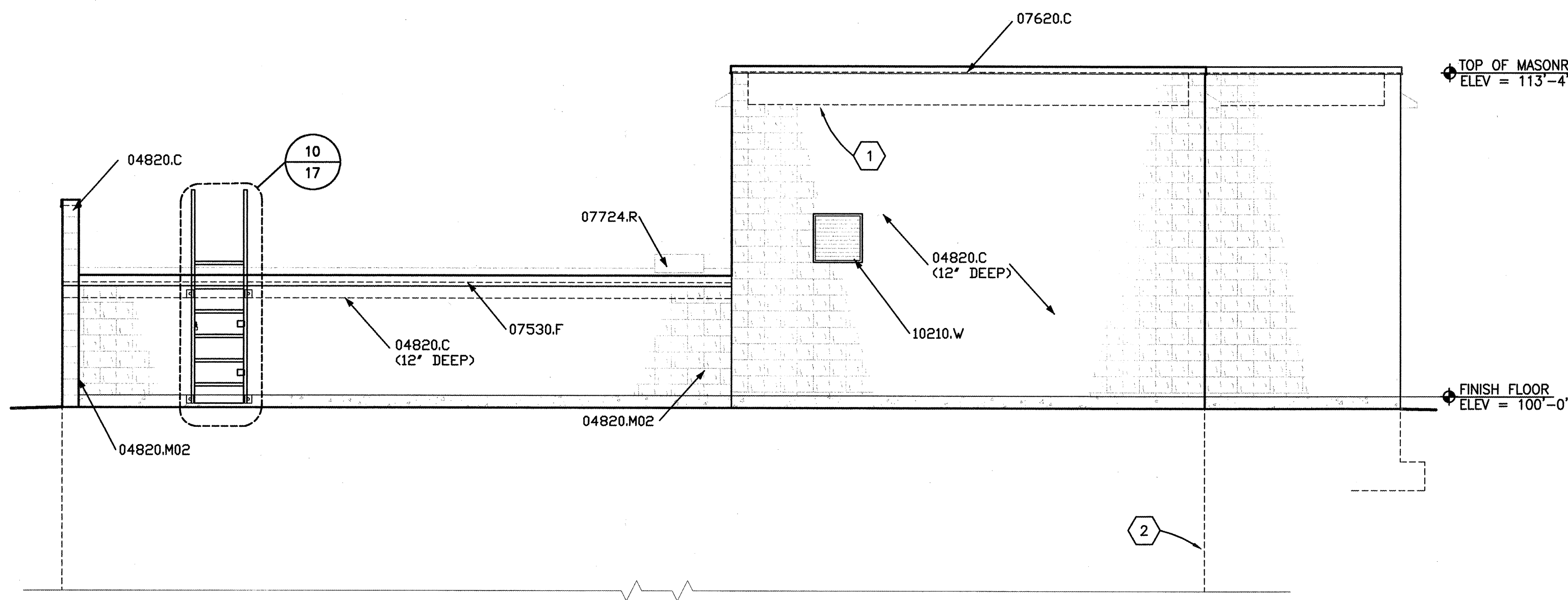
1 BOLLARD DETAIL
1/2" = 1'-0"



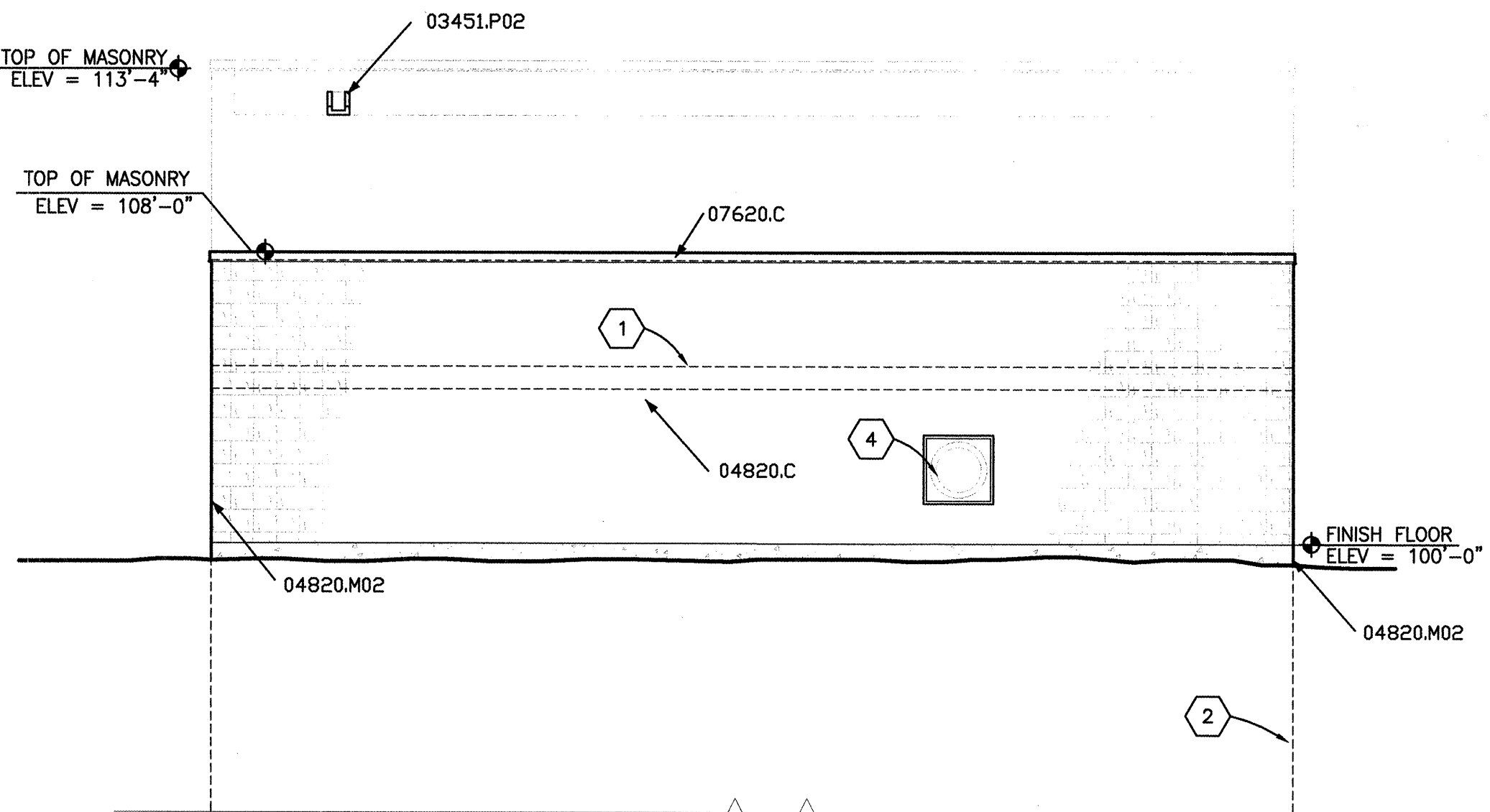
2 WALL SECTION
3/4" = 1'-0"



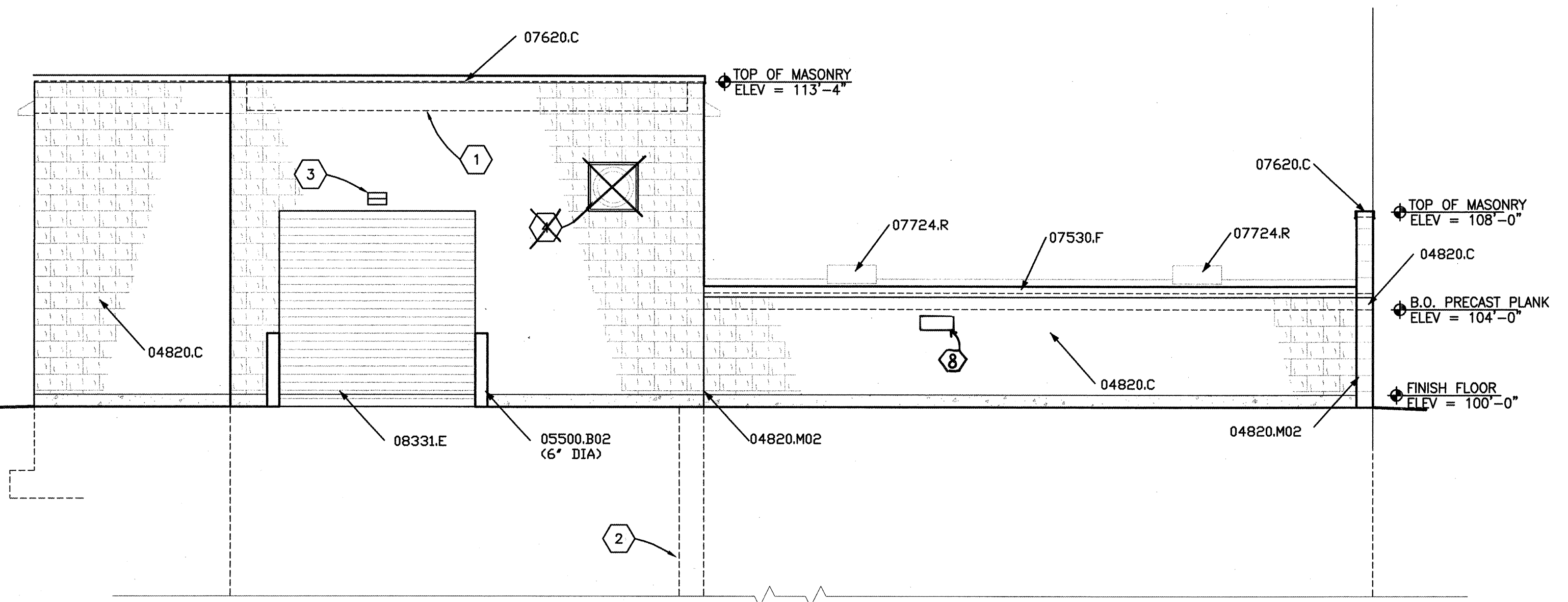
3 TYPICAL JOINT DETAIL @ LOWER LEVEL
1/2" = 1'-0"



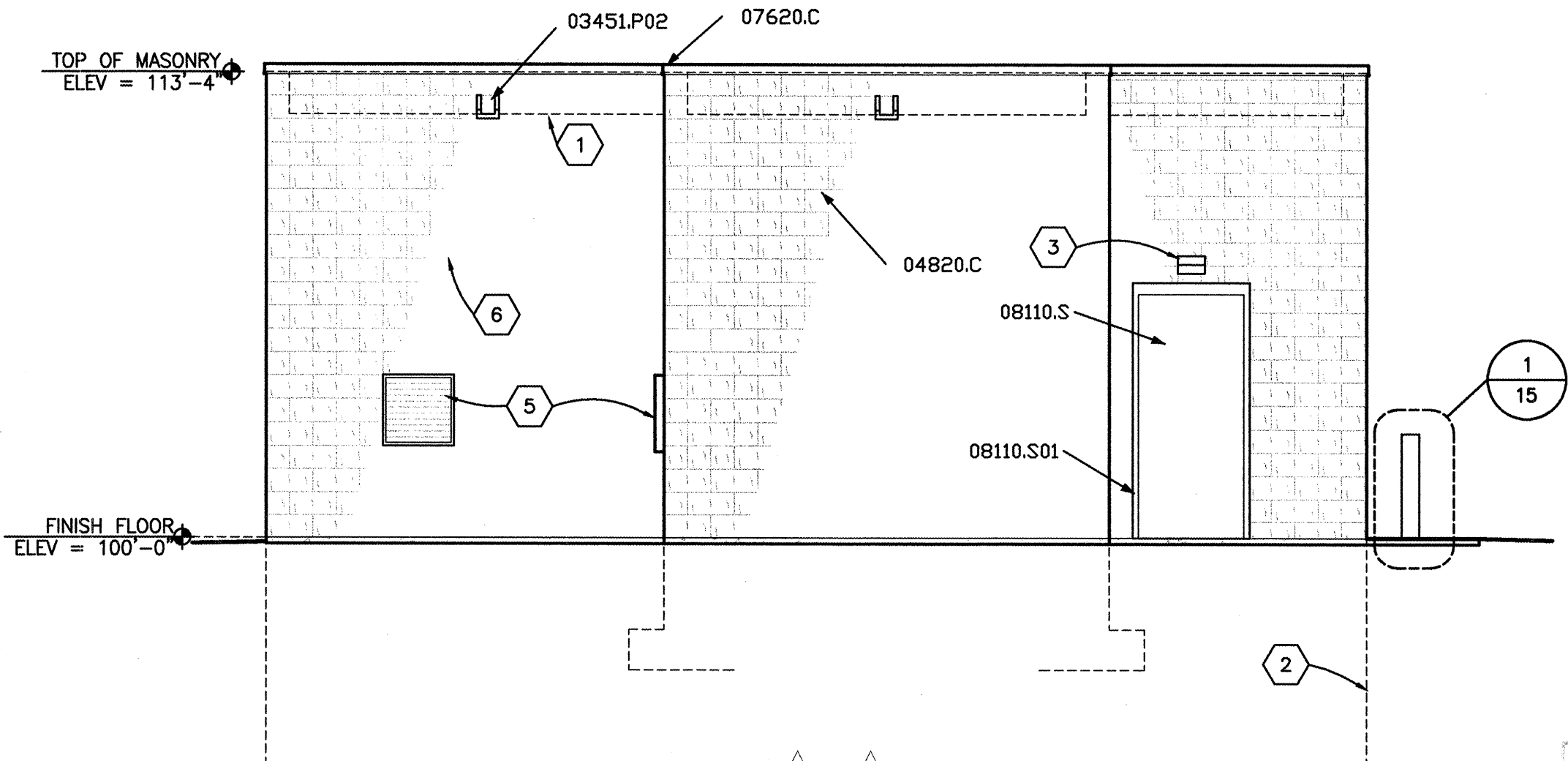
EAST ELEVATION
1/4" = 1'-0"



SOUTH ELEVATION
1/4" = 1'-0"



WEST ELEVATION
1/4" = 1'-0"



NORTH ELEVATION
1/4" = 1'-0"

GENERAL SHEET NOTES:

A) REFERENCE FINISH FLOOR ELEVATION = 100'-0" AND REFERENCES DATUM ELEVATION, SEE CIVIL DRAWINGS FOR DATUM.

REFERENCE KEYNOTES :

DIVISION 3 - CONCRETE

03300.C CAST-IN-PLACE CONCRETE
03451.P PRECAST CONCRETE SILL
03451.P02 PRECAST CONCRETE SCUPPER

DIVISION 4 - MASONRY

04820.C CONCRETE MASONRY UNITS
04820.M02 MASONRY CONTROL JOINT
04820.W01 WEEP HOLES

DIVISION 5 - METALS

05500.B02 BOLLARD
05500.S07 STUD ANCHOR

DIVISION 7 - THERMAL & MOISTURE PROTECTION

07130.S SHEET WATERPROOFING
07212.P PERIMETER INSULATION
07212.S SHEET VAPOR RETARDER
07530.C COVER BOARD
07530.E ELASTOMERIC MEMBRANE ROOFING
07530.F FASCIA
07530.P01 PAVERS
07530.T TAPERED BOARD INSULATION
07620.C COPING
07724.R ROOF HATCH
07900.S SEALANT TYPE ES-1

DIVISION 8 - DOORS & WINDOWS

08110.S STEEL DOOR
08110.S01 STEEL FRAME
08331.E EXTERIOR COILING DOOR

DIVISION 10 - SPECIALTIES

10210.W WALL LOUVER

SHEET KEYNOTES :

1. LINE OF ROOF BEYOND
2. LINE OF FOUNDATION BELOW
3. WALL MOUNTED FIXTURE - SEE ELECTRICAL
4. EXHAUST FAN - SEE MECHANICAL
5. AIR CONDITIONER UNIT - SEE MECHANICAL
6. SEE PLANS FOR WALL CONSTRUCTION
7. DO NOT FILL WITH GROUT.
8. Pressure gauge assembly and box (wall mounted)

WILSON & COMPANY

BERNALILLO COUNTY PUBLIC WORKS DIVISION

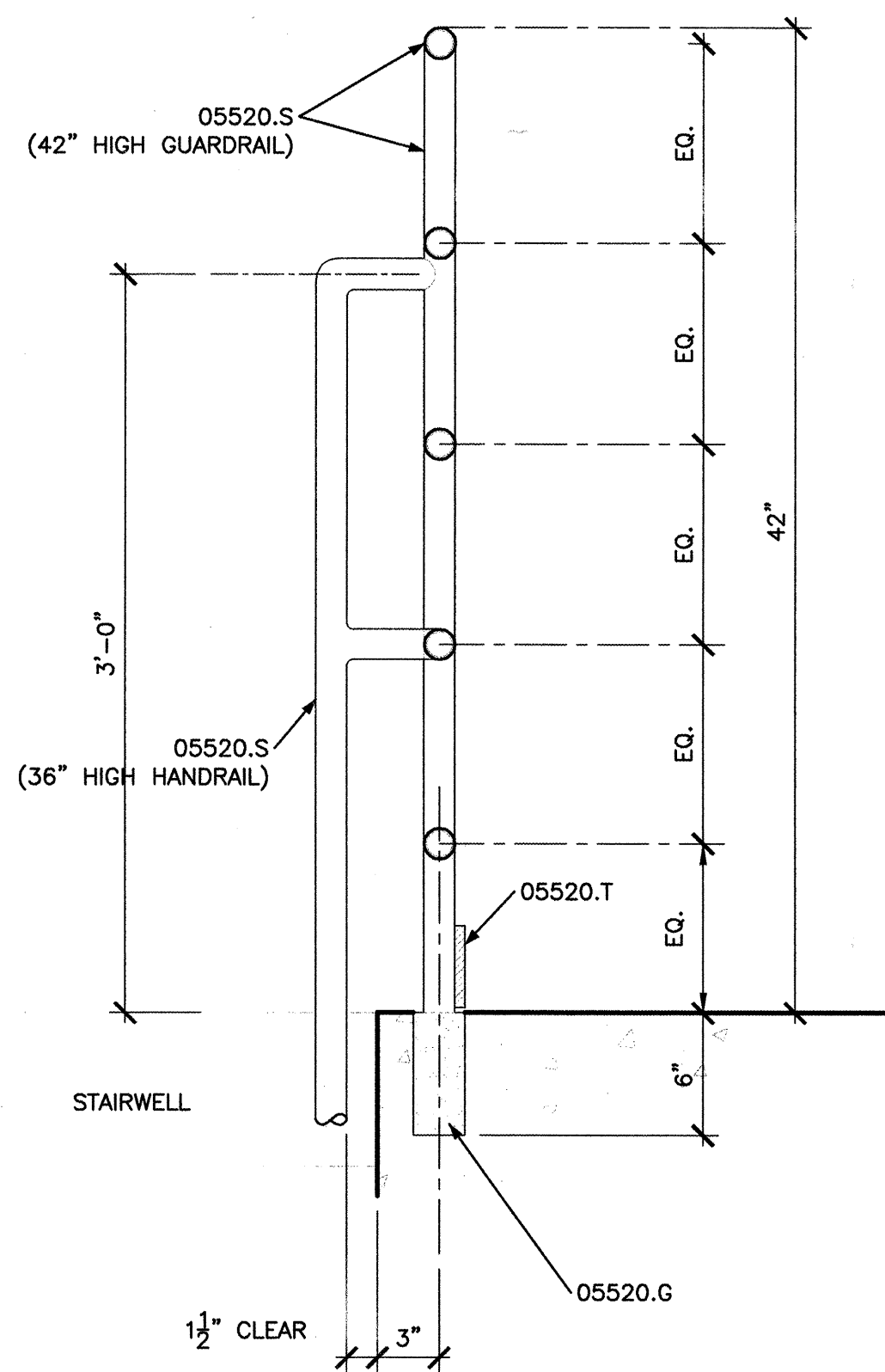
TITLE: AREA D VACUUM PUMP STATION EXTERIOR ELEVATIONS

Design Review Committee **City Engineer Approval**

PROJECT COA # 695981 **MAP NO.** X0-210-024 **DWG.** A-03 **SHEET** 15

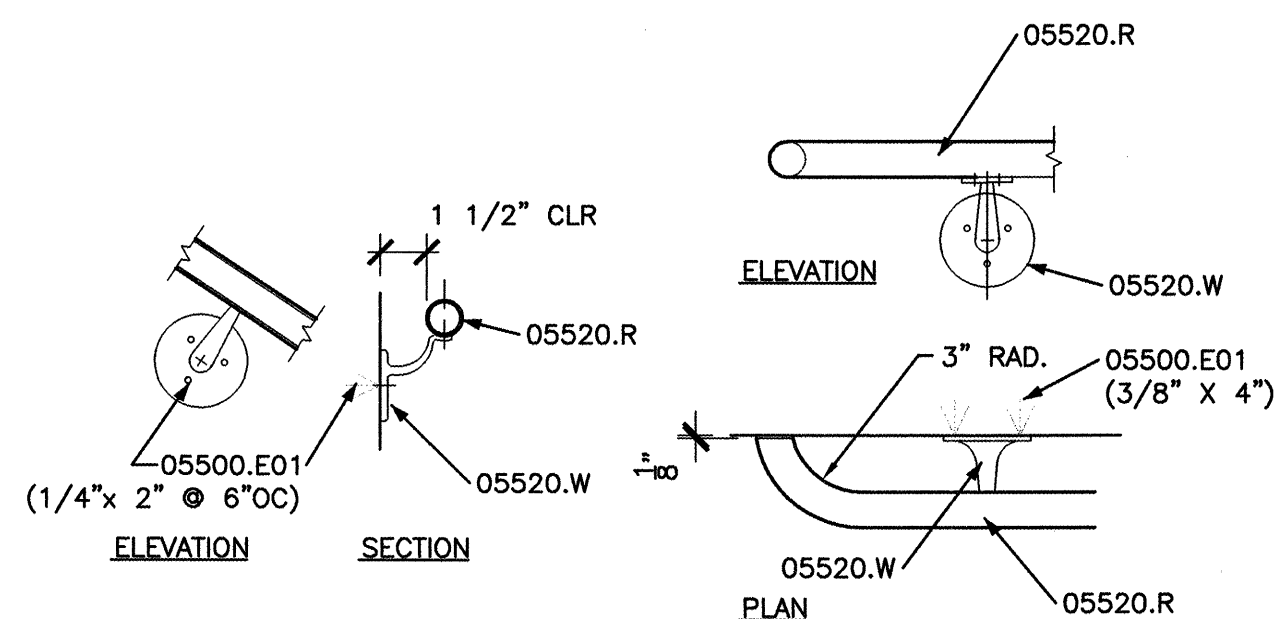
NO. DATE **REVISIONS** **DESIGN** **DATE** **BY** **DATE** **BY** **DATE** **BY**

DESIGNED BY RJP **DATE** SEPT 2002 **DRAWN BY** PAS **DATE** SEPT 2002 **CHECKED BY** CRG **DATE** OCT 2002

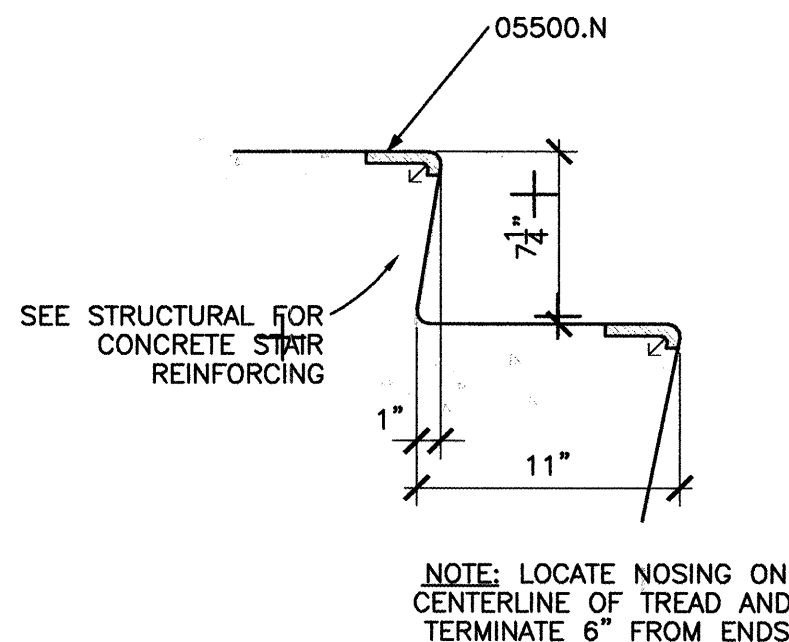


1 RAILING DETAIL
1 1/2" = 1'-0"

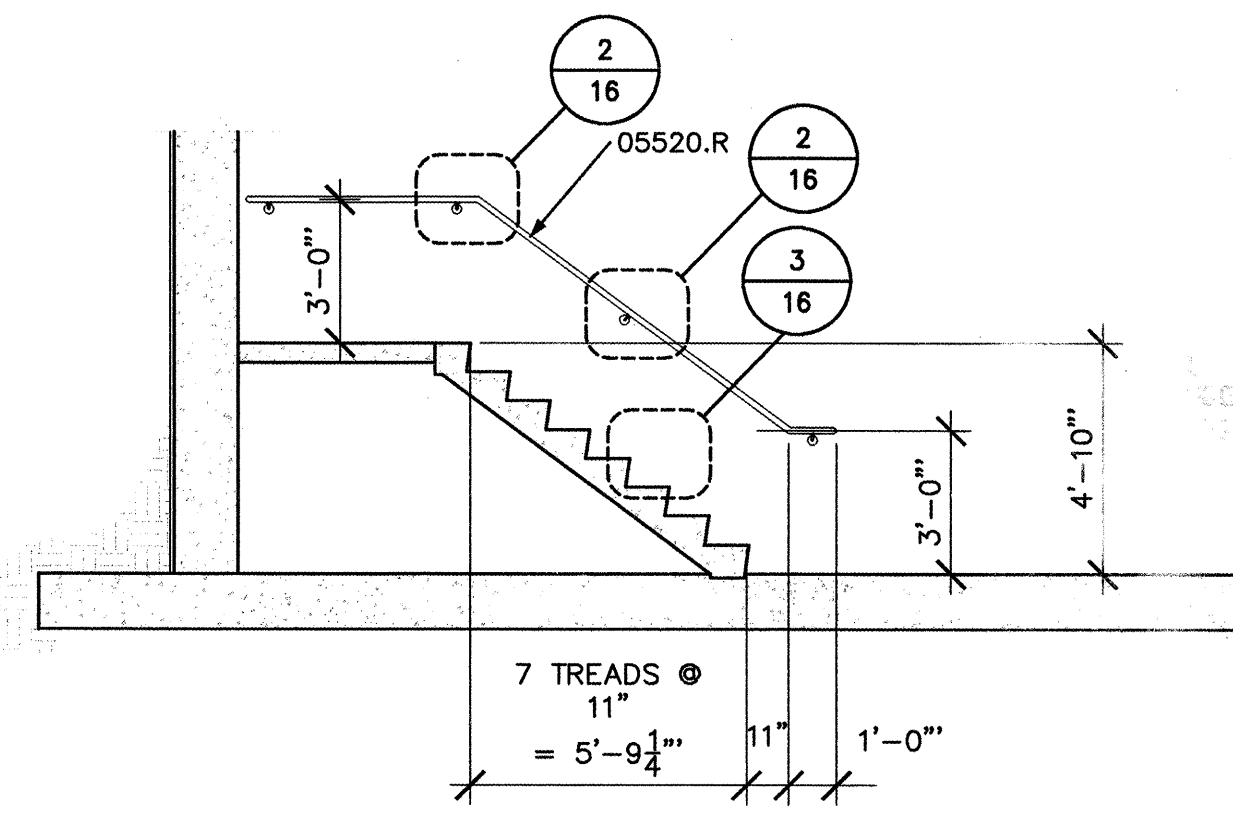
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS				CEILING		NOTES
				NORTH	SOUTH	EAST	WEST	FINISH	HEIGHT	
101	UPPER LEVEL	SEALED CONCRETE	-	PAINT	PAINT	PAINT	PAINT	PAINT	11' +/-	PAINT EXPOSED METAL DECK & STRUCTURAL STEEL
102	MCC	SEALED CONCRETE	-	PAINT	PAINT	PAINT	PAINT	PAINT	11' +/-	PAINT EXPOSED METAL DECK & JOISTS
103	LOWER LEVEL	SEALED CONCRETE	-	PAINT	PAINT	PAINT	PAINT	PAINT	18'-6"	-
104	BASEMENT	SEALED CONCRETE	-	PAINT	PAINT	PAINT	PAINT	PAINT	12'-10"	-
105	PUMP EQUIP. PIT	SEALED CONCRETE	-	PAINT	PAINT	PAINT	PAINT	PAINT	-	-



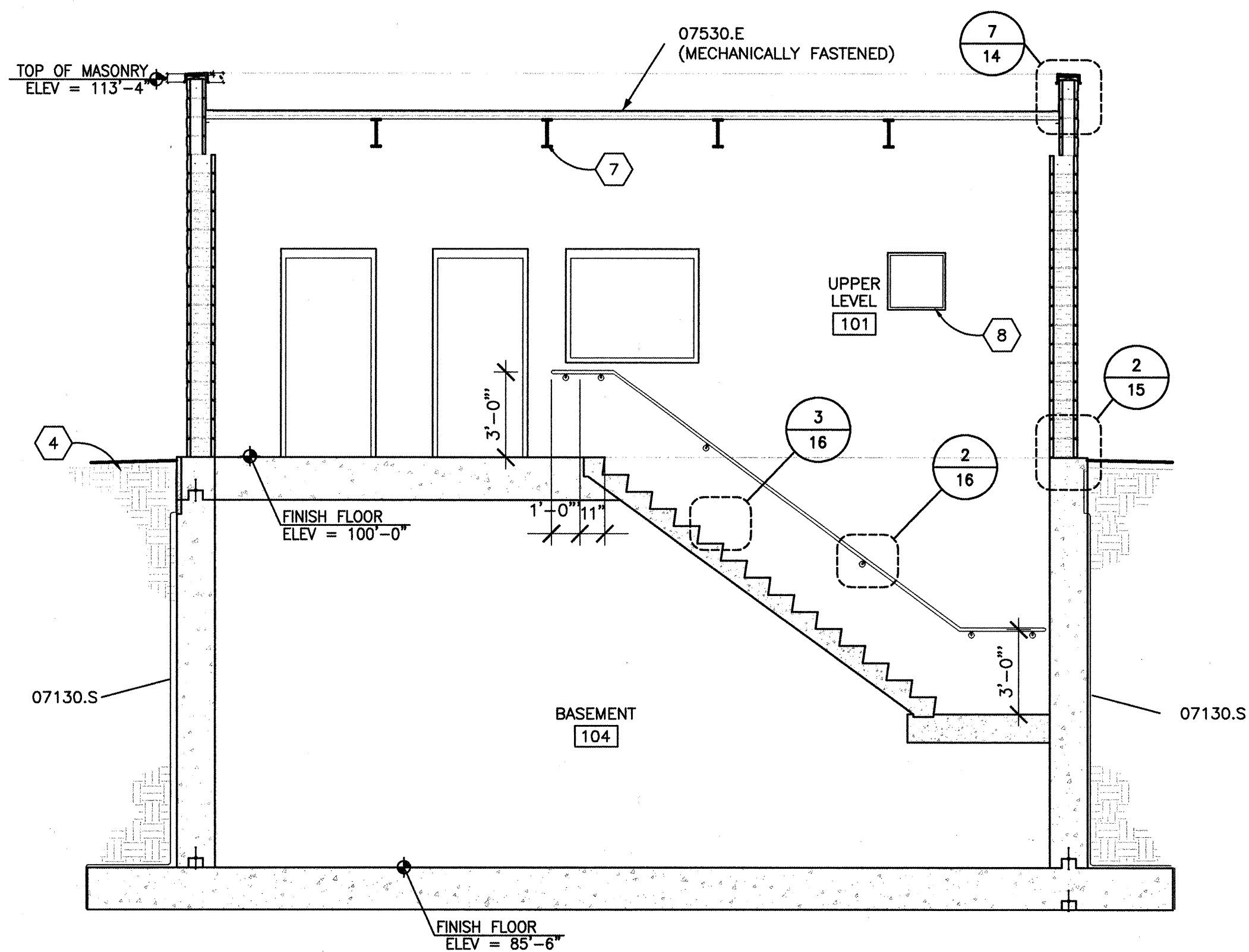
2 HANDRAIL CONNECTION DETAILS
1 1/2" = 1'-0"



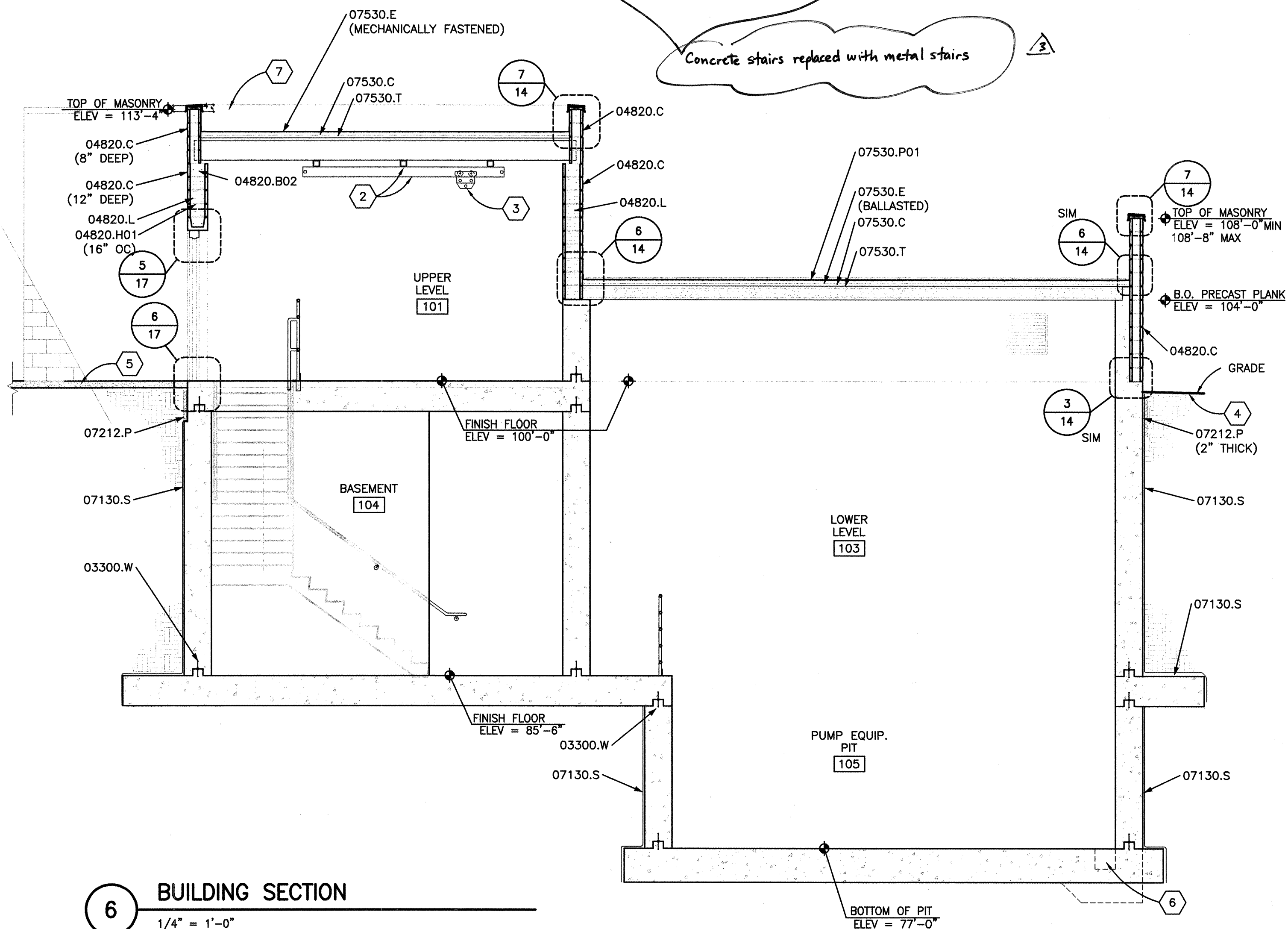
3 STAIR RISER DETAIL
1 1/2" = 1'-0"



4 STAIR SECTION
1/4" = 1'-0"

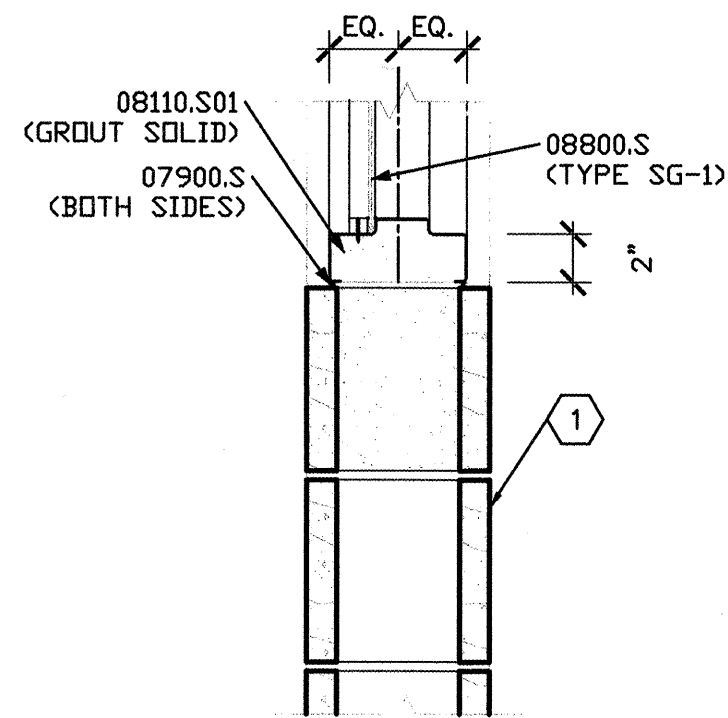


5 BUILDING SECTION
1/4" = 1'-0"

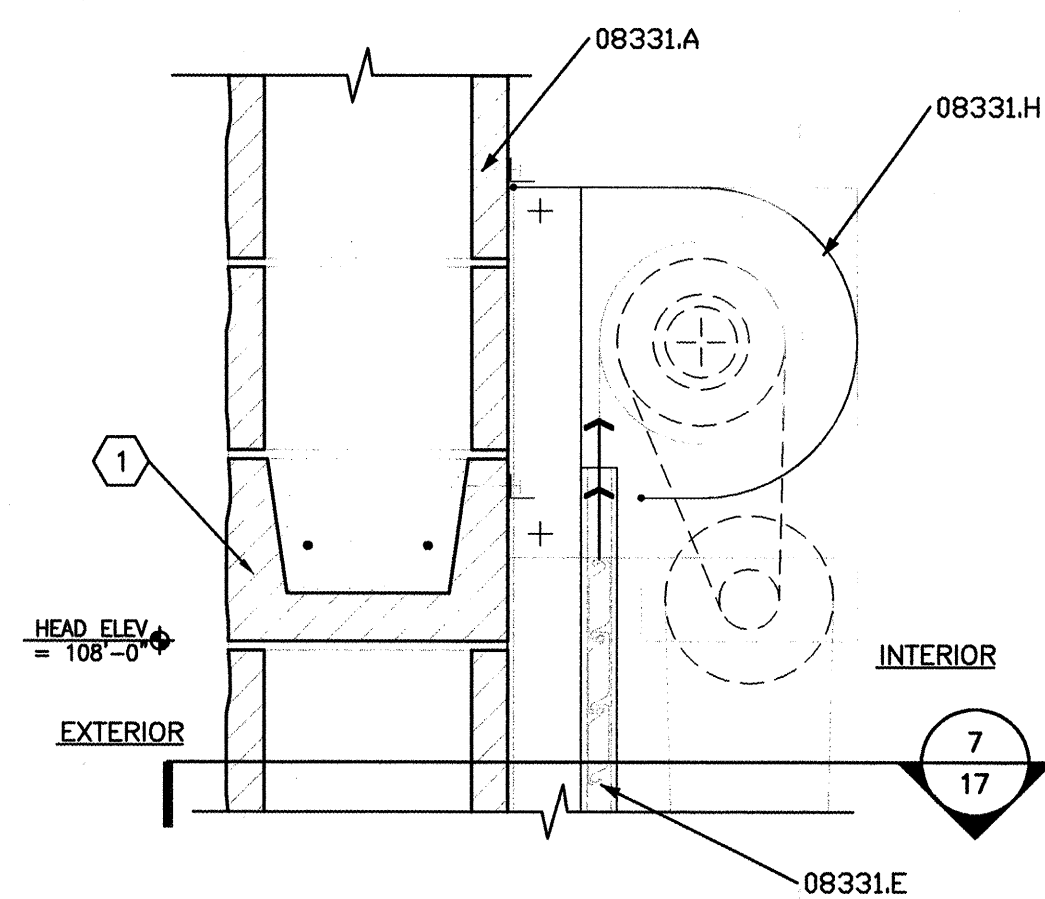


6 BUILDING SECTION
1/4" = 1'-0"

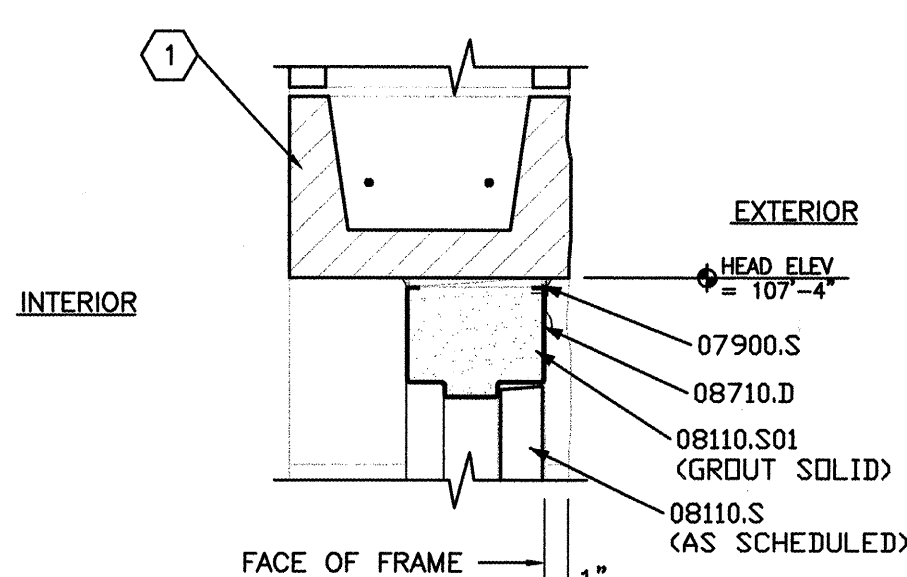
GENERAL SHEET NOTES:		AS BUILT INFORMATION	
A) REFERENCE ELEVATIONS ARE BASED ON FINISH FLOOR ELEVATION OF 100'-0". SEE CIVIL SHEETS FOR ACTUAL FINISH FLOOR ELEVATION.		CONTRACTOR: A.S. Horner DATE: 12/03 INSPECTOR: A.S. Horner DATE: 12/03 VERIFICATION BY: Wilson & Co. DATE: 12/03 CORRECTED BY: Wilson & Co. DATE: 12/03 MICRO-FILM INFORMATION NO.	
REFERENCE KEYNOTES:		BENCH MARKS	
DIVISION 3 - CONCRETE		SURVEY INFORMATION	
03300.W WATERSTOP		FIELD NOTES	
DIVISION 4 - MASONRY		DATE	
04820.B02 BOND BEAM		BY	
04820.C CONCRETE MASONRY UNITS		NO.	
04820.H01 HORIZONTAL JOINT REINFORCEMENT		DATE	
04820.L LOOSE FILL INSULATION		BY	
DIVISION 5 - METALS		NO.	
05500.E01 EXPANSION ANCHOR		DATE	
05500.N NOSING		BY	
05520.G GROUT POCKET		NO.	
05520.R RAILING		DATE	
05520.S STEEL RAILING SYSTEM		BY	
05520.T TOE BOARD		NO.	
05520.W WALL BRACKET		DATE	
DIVISION 7 - THERMAL & MOISTURE PROTECTION		BY	
07130.S SHEET WATERPROOFING		NO.	
07212.P PERIMETER INSULATION		DATE	
07530.C COVER BOARD		BY	
07530.E ELASTOMERIC MEMBRANE ROOFING		NO.	
07530.P01 PAVERS		DATE	
07530.T TAPERED BOARD INSULATION		BY	
X SHEET KEYED NOTES:		REVISIONS	
1. SEE PLANS FOR WALL CONSTRUCTION		DESIGN	
2. STEEL FRAMING FOR MONORAIL - SEE STRUCTURAL		NO. DATE	
3. HOIST TROLLEY COFFING ET-20-A OR EQUAL		REMARKS	
4. ASPHALT PAVING SEE SHEET C01.		NO. DATE	
5. CONCRETE DRIVE PAD SEE SHEET C01.		REVISIONS	
6. SUMP - SEE STRUCTURAL		DESIGN	
7. SEE SHEET S-05 FOR STRUCTURAL STEEL		NO. DATE	
8. SEE MECHANICAL FOR DUCTWORK		REMARKS	
WILSON & COMPANY		NO. DATE	
BERNALILLO COUNTY PUBLIC WORKS DIVISION		DESIGNED BY RJP	
TITLE: AREA D VACUUM PUMP STATION SECTIONS & DETAILS		DATE SEPT 2002	
Design Review Committee		DATE SEPT 2002	
City Engineer Approval		DATE SEPT 2002	
MAR 19 2003		DATE OCT 2002	
PROJECT COA # 695981		DWG. A-04	
NO. WCEA # X0-210-024		SHEET 16	
MAP NO. B-15		NO. DATE	
DRAWN BY PAS		NO. DATE	
CHECKED BY CRG		NO. DATE	



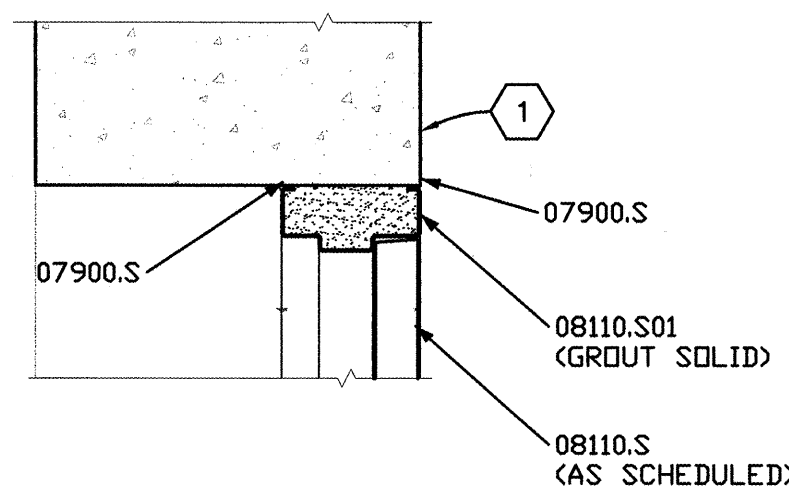
1 WINDOW SILL DETAIL (HEAD SIMILAR)
1 1/2" = 1'-0"



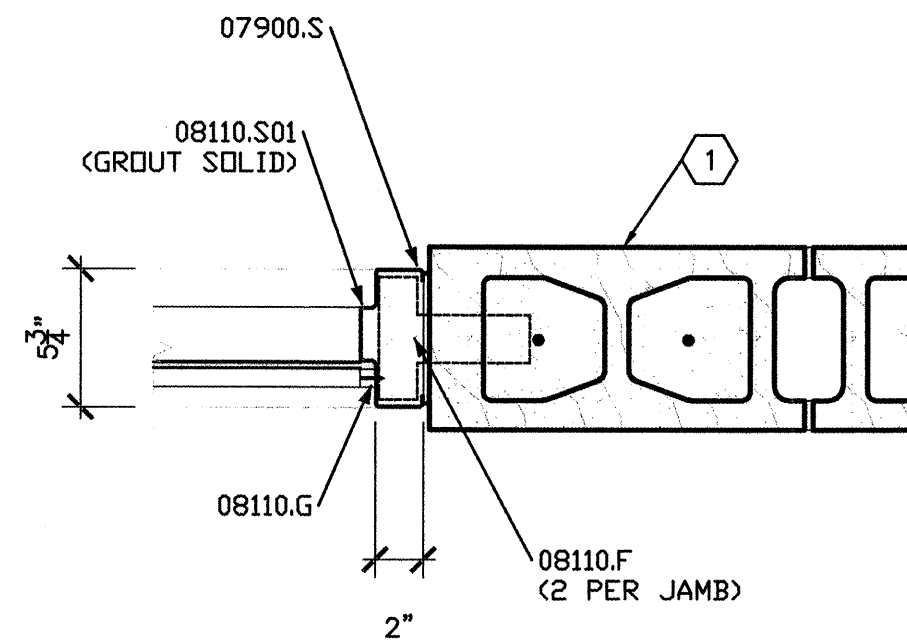
3 HEAD DETAIL
1 1/2" = 1'-0"



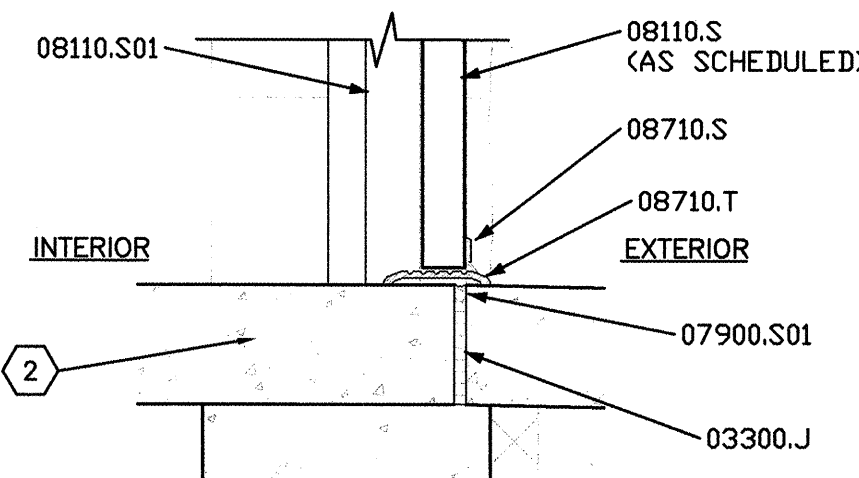
5 HEAD DETAIL
1 1/2" = 1'-0"



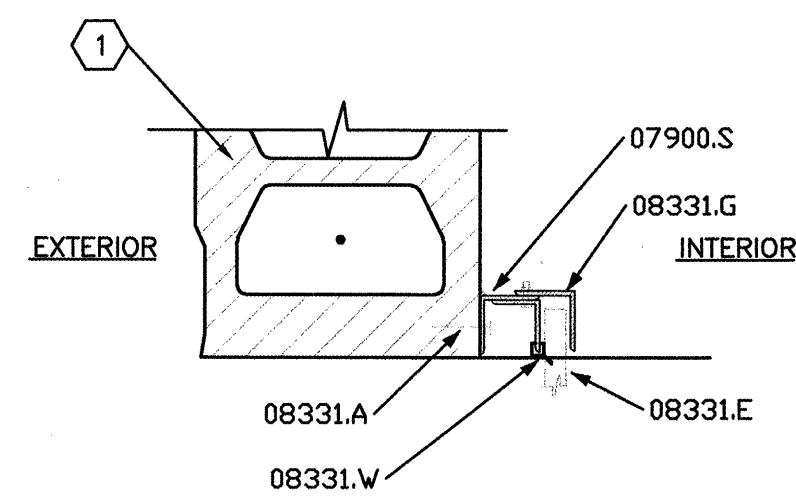
4 HEAD DETAIL
1 1/2" = 1'-0"



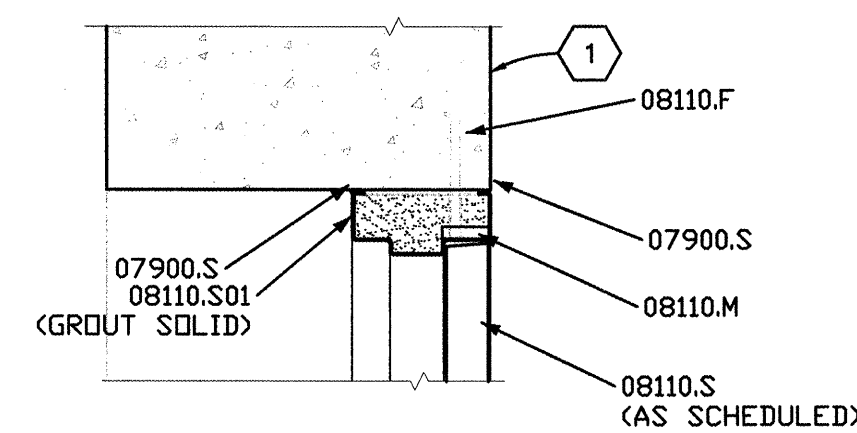
2 JAMB WINDOW DETAIL (HEAD SIMILAR)
1 1/2" = 1'-0"



4 SILL DETAIL
1 1/2" = 1'-0"



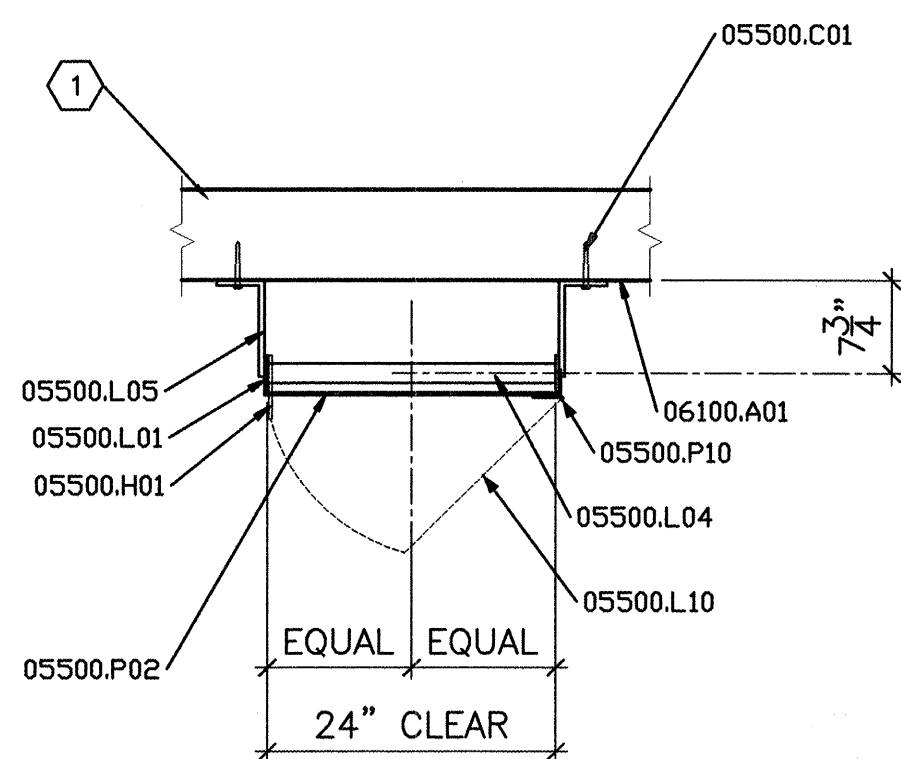
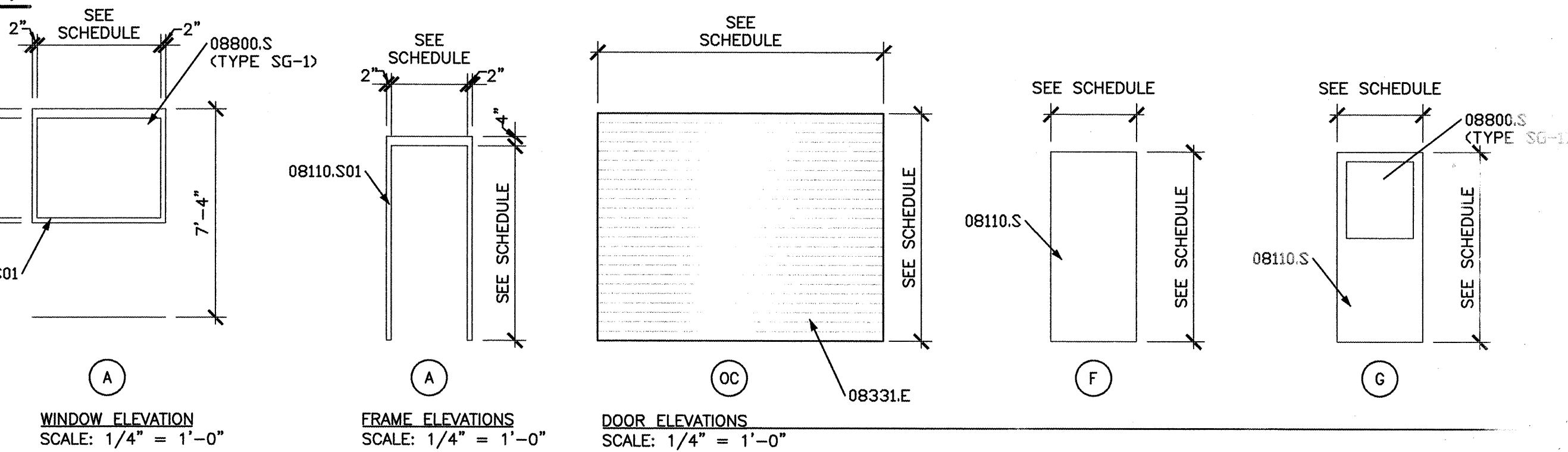
7 HEAD DETAIL
1 1/2" = 1'-0"



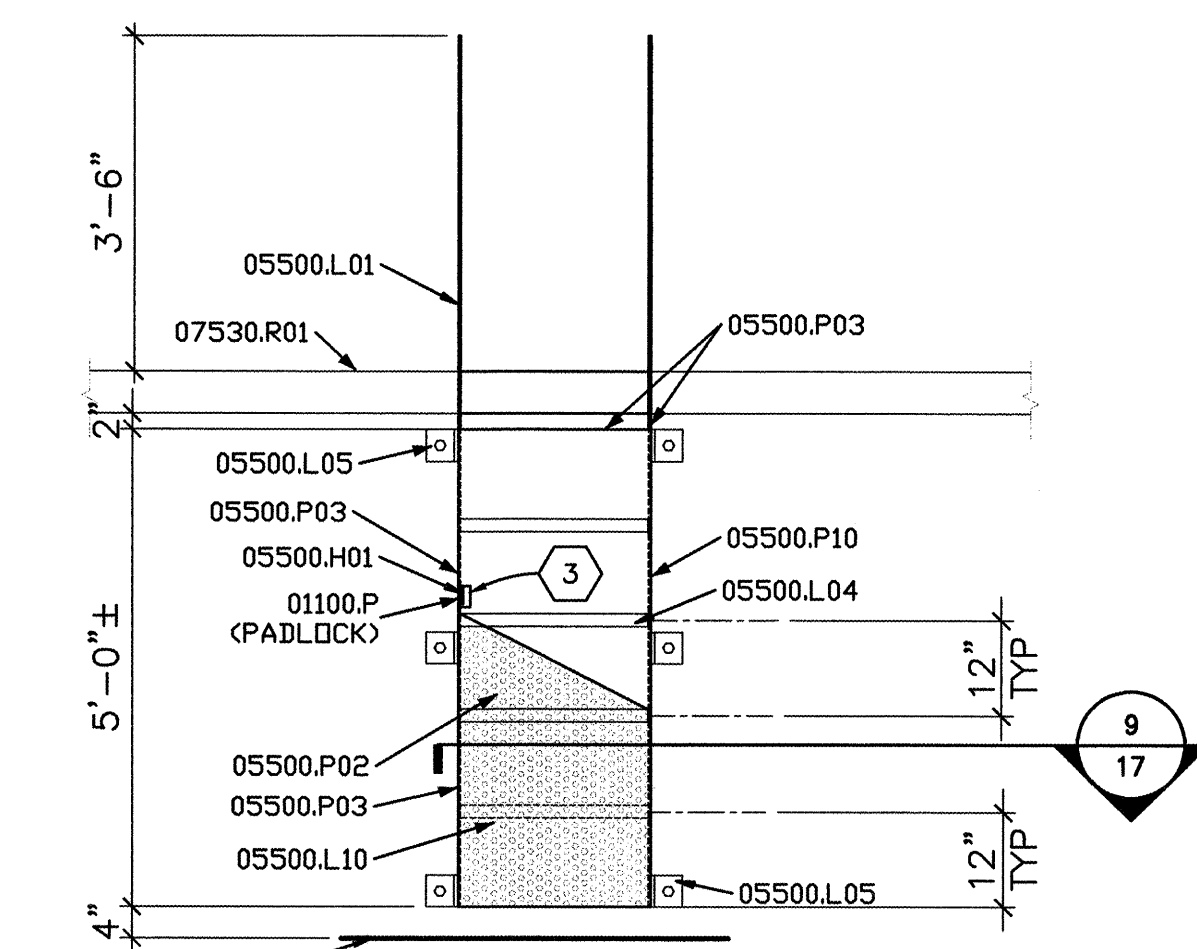
8 HEAD DETAIL
1 1/2" = 1'-0"

DOOR AND FRAME SCHEDULE																	
DOOR								FRAME						FIRE RATING LABEL	HARDWARE		NOTES
MARK	QTY	SIZE			EL	MATL	LOUVER		EL	MATL	DETAILS				SET NO	KEYSIDE ROOM NO	
		W	H	THK			W	HGT			HEAD	JAMB	SILL				
101	1	3'-0"	7'-0"	1 3/4"	F	HM	-	-	A	HM	5/15	5/15 SIM	6/15	-	HW-1	EXTERIOR	
101A	1	8'-0"	8'-0"		OC	STL	-	-	-	STL	3/15	7/15	-	-	-	EXTERIOR	
102	1	3'-0"	7'-0"	1 3/4"	G	HM	-	-	A	HM	4/15	8/15	-	-	HW-2	101	WITH 2'-4" WIDE x 2'-8" HIGH GLAZING

WINDOW SCHEDULE										
MARK	SIZE		EL	MATL	FINISH	DETAILS			FIRE RATING LABEL	NOTES
	WIDTH	HEIGHT				HEAD	JAMB	SILL		
A	4'-8"	4'-0"	A	HM	PAINT	1/15	2/15	1/15	-	-



9 PLAN VIEW SECTION AT LADDER
3/4" = 1'-0"



10 ELEVATION AT LADDER
1/2" = 1'-0"

GENERAL SHEET NOTES:

A) REFERENCE FINISH FLOOR ELEVATION = 100'-0" AND REFERENCES DATUM ELEVATION, SEE CIVIL DRAWINGS FOR DATUM.

B) SOLID GROUT ALL CMU CELLS WITH REINFORCING - SEE STRUCTURAL.

REFERENCE KEYNOTES :

DIVISION 1 - GENERAL DATA

01100.P OWNER FURNISHED, OWNER INSTALLED ITEM

DIVISION 3 - CONCRETE

03300.J JOINT FILLER

DIVISION 5 - METALS

05500.C01 CHEMICAL ANCHOR

05500.H01 HASP

05500.L01 LADDER SIDE RAILS

05500.L04 LADDER RUNGS

05500.L05 LADDER WALL BRACKET

05500.L10 LADDER SECURITY DOOR

05500.P02 PERFORATED METAL SHEET

05500.P03 PERFORATED METAL EDGING

DIVISION 6 - WOOD & PLASTICS

06100.A01 APA RATED WALL SHEATHING

DIVISION 7 - THERMAL & MOISTURE PROTECTION

07530.R01 ROOF PAVEMENT TERMINATION

07900.S SEALANT TYPE ES-1

07900.S01 SEALANT TYPE ES-2

DIVISION 8 - DOORS & WINDOWS

08110.F FRAME ANCHOR

08110.G GLAZING STOP

08110.M MORTAR GROUT GUARD

08110.S STEEL DOOR

08110.S01 STEEL FRAME

08331.A ANCHOR

08331.E EXTERIOR COILING DOOR GUIDES

08331.H HOOD ENCLOSURE

08331.W WEATHERSTRIPPING

08710.D DRIP WEATHERSTRIP

08710.S SWEEP

08710.T THRESHOLD

08800.S SAFETY GLASS

SHEET KEYNOTES :

1. SEE STRUCTURAL FOR WALL CONSTRUCTION AND REINFORCING

2. SEE STRUCTURAL FOR SLAB AND FOUNDATION CONSTRUCTION

3. OWNER FURNISHED, OWNER INSTALLED PADLOCK.

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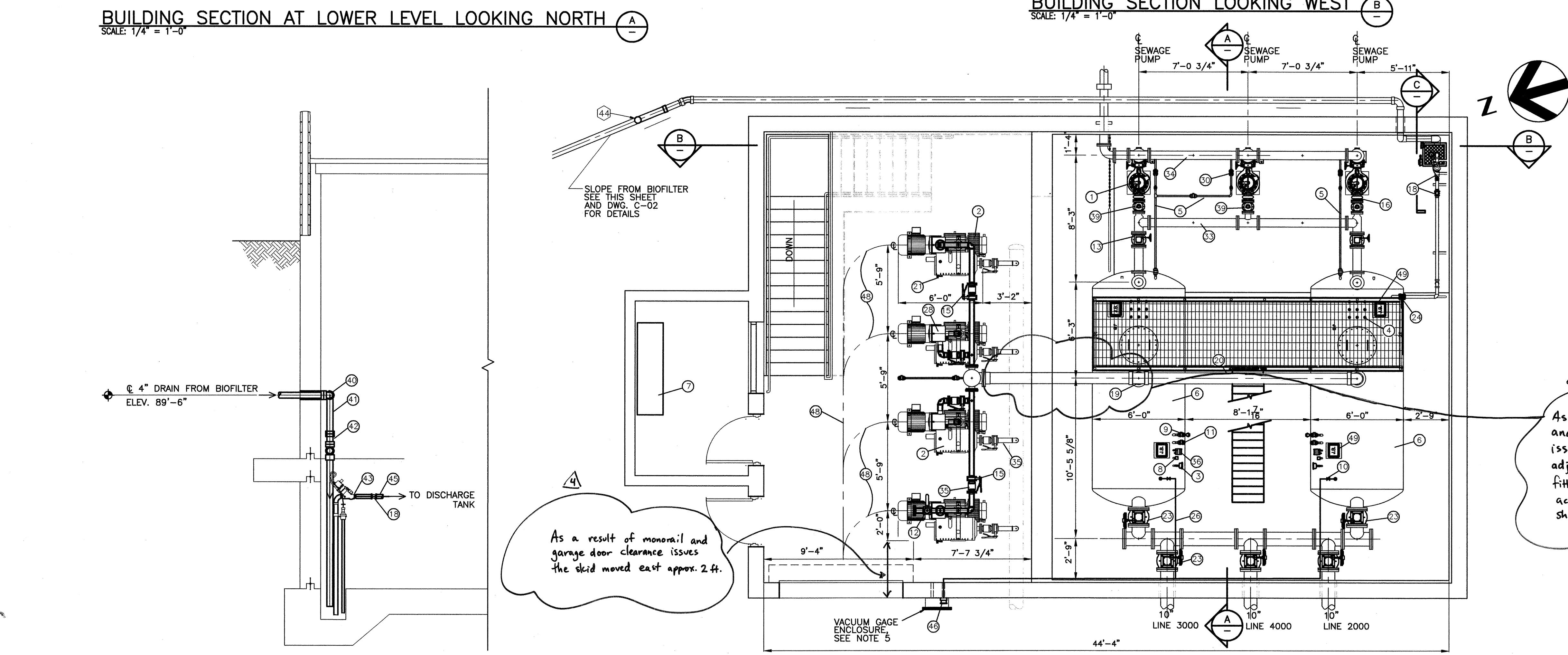
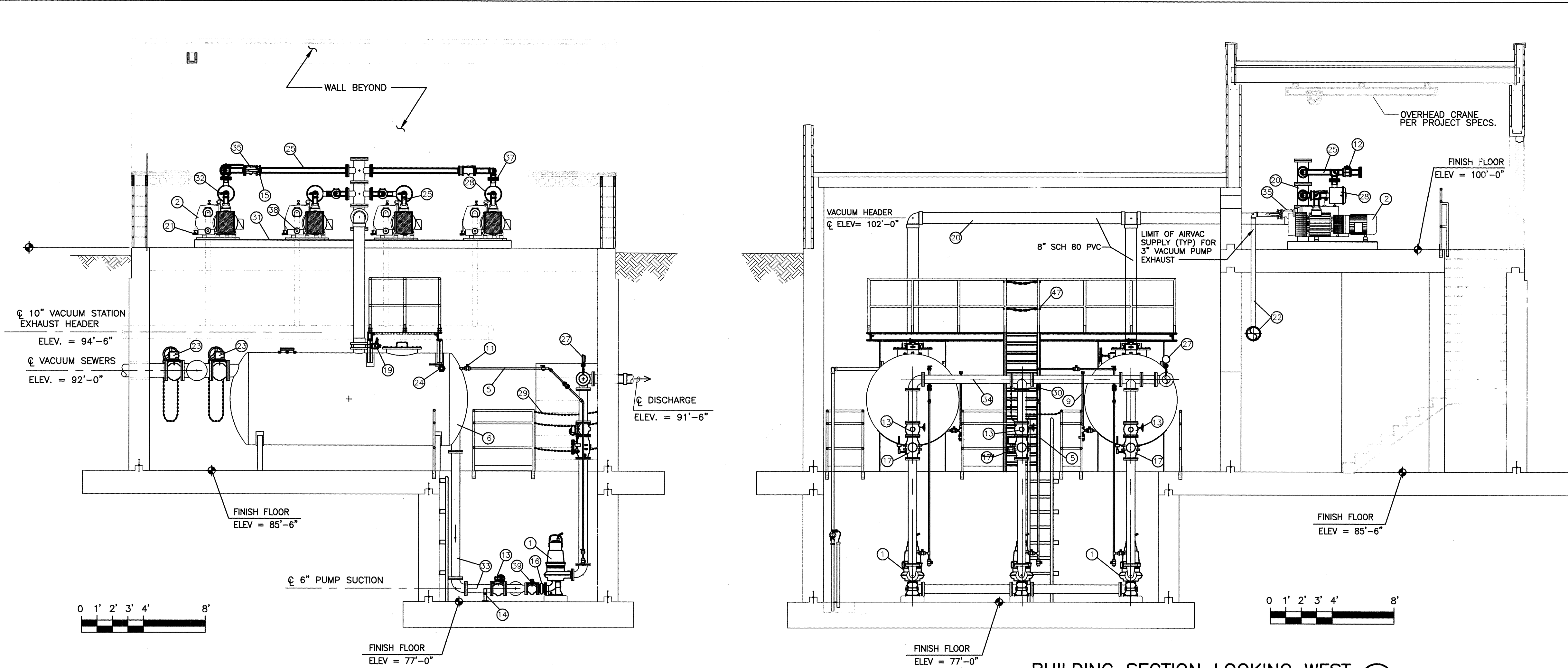
BERNALILLO COUNTY PUBLIC WORKS DIVISION

TITLE: AREA D VACUUM PUMP STATION WINDOW AND DOOR SCHEDULES AND DETAILS

Design Review Committee City Engineer Approval

PROJECT COA # 695981 MAP NO. NO. WCEA # X0-210-024 B-15

DWG. A-05 SHEET 17



- GENERAL SHEET NOTES:**
- REFERENCE FINISH FLOOR ELEVATION 4999.50 = 100'-0" AND REFERENCES DATUM ELEVATION SHOWN ON SHEET 3.
 - VACUUM GAGE LINES TO SLOPE TO COLLECTION TANK.
 - SPECIFIC LOCATIONS AND ANCHORAGE OF VACUUM EQUIPMENT AND SEWER PIPING INTO STATION SUBJECT TO EQUIPMENT SUPPLIED. SUBMIT DIMENSIONAL PLAN OF ALL EQUIPMENT PRIOR TO CONSTRUCTION.
 - VAS PIPING ELEVATIONS SUBJECT TO EQUIPMENT FURNISHED. COORDINATED ELEVATION W/MANUFACTURER PRIOR TO CONSTRUCTION.
 - VACUUM GAGE ENCLOSURE - 1'-6"x 1'-6"x 9" DEEP, 12 GA. STEEL, W/ BULLET-PROOF GLASS FRONT BOLTED TO 2" FLANGE LIP, ANCHOR TO WALL W/ CHEMICAL ANCHORS, 3" MIN. EMBEDMENT. PROVIDE 8" DIAM. (0" - 30") VACUUM GAGE AND CONVENIENCE OUTLET WITHIN ENCLOSURE. PROVIDE 2 - 2" SLEEVES THROUGH WALL FOR PIPING AND ELECTRICAL WIRING.
 - PROVIDE VALVED AND BLIND FLANGED CONNECTION FOR PORTABLE VACUUM PUMP CONNECTION DURING POWER FAILURES. CONNECTION TYPICAL FOR ONE VACUUM DISCHARGE LINE ONLY.

SHEET KEYED NOTES : (X)

#	DESCRIPTION	QTY
1	CENTRIFUGAL SEWAGE PUMP	W.E. 3
2	VACUUM PUMP	W.E. 4
3	0-30" HG. VACUUM GAUGE	W.E. 2
4	LEVEL SENSING PROBES	W.E. 14
5	1" STAINLESS STEEL EQUALIZING LINE ASSEMBLY	W.E. 3
6	3000 GALLON STEEL COLLECTION TANK	W.E. 2
7	MOTOR CONTROL PANEL	W.E. 1
8	0-30" VACUUM SWITCH #B36-C60A	W.E. 2
9	1" CLEAR PVC SITE TUBE ASSEMBLY	W.E. 2
10	1/2" PVC FULL PORT PLUG VALVE	W.E. 2
11	1" PVC FULL PORT PLUG VALVE	W.E. 15
12	3" FULL PORT PLUG VALVE	W.E. 1
13	6" FLANGED FULL PORT PLUG VALVE	W.E. 5
14	PIPE SUPPORT AS REQUIRED	
15	3" BUTTERFLY VALVE, LEVER OPERATED	W.E. 4
16	4" RUBBER VIBRATION ISOLATORS	W.E. 3
17	6" FLANGED CHECK VALVE	W.E. 3
18	2" SUMP VALVE WITH 2" CHECK VALVE	W.E. 1
19	8" MANUALLY OPERATED BUTTERFLY VALVE	W.E. 2
20	8" D.I.P./SCH 80 PVC VACUUM HEADER ASSEMBLY	W.E. 1
21	1/2" BRASS BALL VALVES	W.E. 4
22	3" VAC. PUMP & 10" HEADER EXHAUST ASSEMBLY	1
23	10" FLANGED FULL PORT PLUG VALVE	W.E. 3
24	2" FULL PORT PLUG VALVE	W.E. 2
25	3" PUMP INLET AND OUTLET ASSEMBLIES	W.E. 4
26	1/2" VACUUM GAUGE LINE ASSEMBLY	W.E. 1
27	COMPOUND GAUGE ASSEMBLY	W.E. 1
28	VACUUM PUMP INLET FILTER CANISTER	W.E. 4
29	GUARDRAIL CHAIN	3
30	1" PVC SIGHT GLASS/ FLOW INDICATOR	W.E. 3
31	STRUCTURAL STEEL SKID DECK	W.E. 1
32	1/4" CHROME PLATED BALL VALVES	W.E. 4
33	4" X 6" D.I. PUMP SUCTION ASSEMBLY	W.E. 2
34	D.I. SEWAGE PUMP DISCHARGE ASSEMBLY	W.E. 3
35	3" FLANGED SWING CHECK VALVE	W.E. 8
36	ALPHALINE PRESSURE TRANSMITTER	W.E. 2
37	3" CAST IRON COMPANION FLANGE	W.E. 12
38	CRANKCASE HEATERS	W.E. 4
39	4" FLANGED FULL PORT PLUG VALVE	W.E. 3
40	4" COMPOST FILTER DRAIN	1
41	4" DRAIN TRAP	1
42	4" COUPLING	2
43	2" SUMP VALVE	W.E. 2
44	4" CLEAN OUT	1
45	VACUUM VALVE PIPING	W.E. 1
46	VACUUM GAGE	W.E. 1
47	CAT WALK	W.E. 1
48	OVERHEAD CRANE/HOIST PATH	
49	ELECTRICAL JUNCTION BOX	W.E. 4

NOTE: W.E. - WITH EQUIPMENT PROVIDED BY AIRVAC

As a result of monorail and garage door clearance issues the header was adjusted with additional fittings (45° bends) to account for the 2-foot shift in skid to the east.

As a result of monorail and garage door clearance issues the skid moved east approx. 2 ft.

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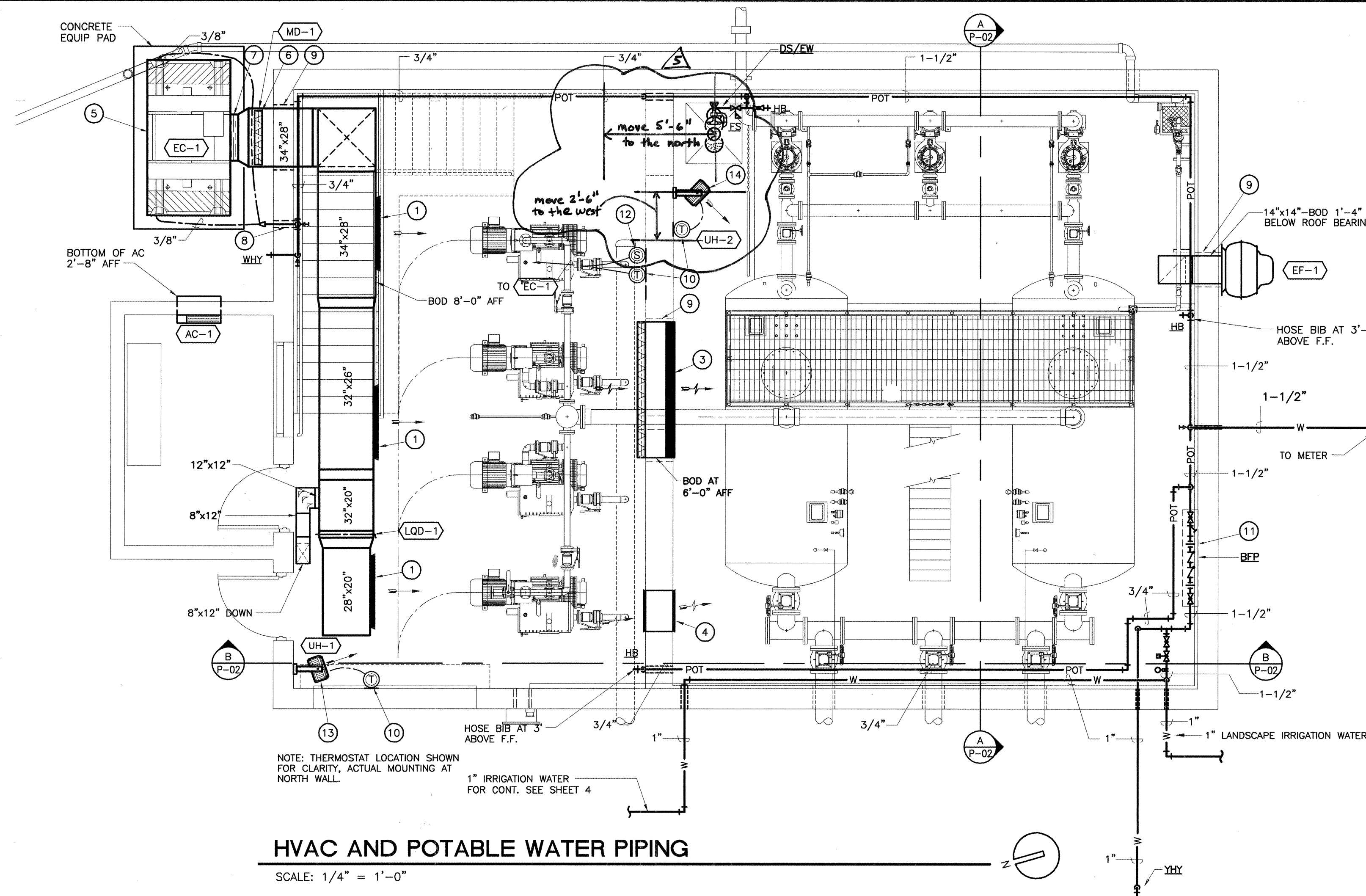
TITLE: AREA D VACUUM PUMP STATION EQUIPMENT & SECTION PLAN BELOW AND AT GRADE LEVEL

Design Review Committee	City Engineer Approval	Mr. [Signature]	Mr. [Signature]
PROJECT NO. COA # 695981 WCEA # X0-210-024	MAP NO. B-15	DWG. P-01	SHEET 18

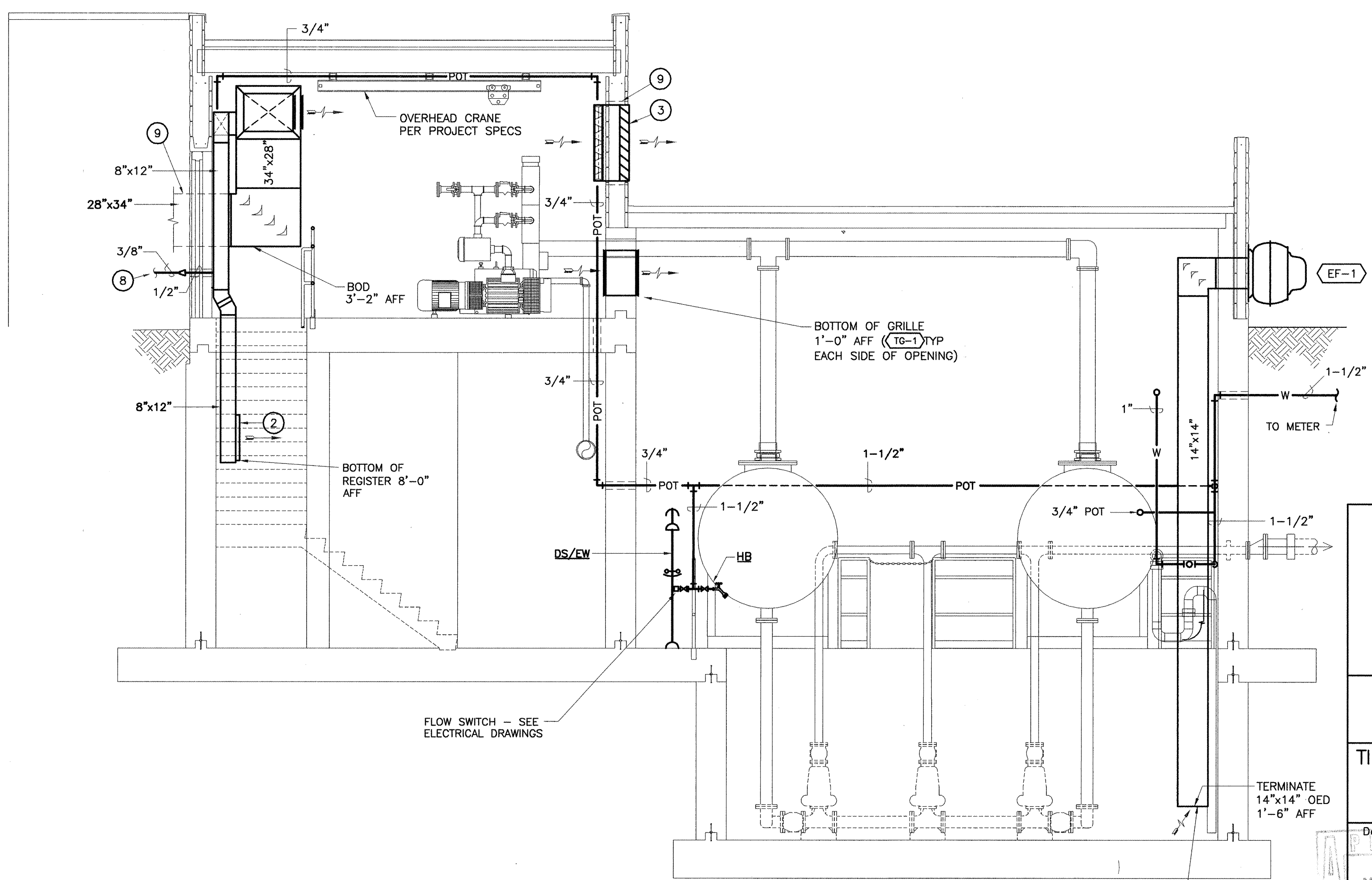
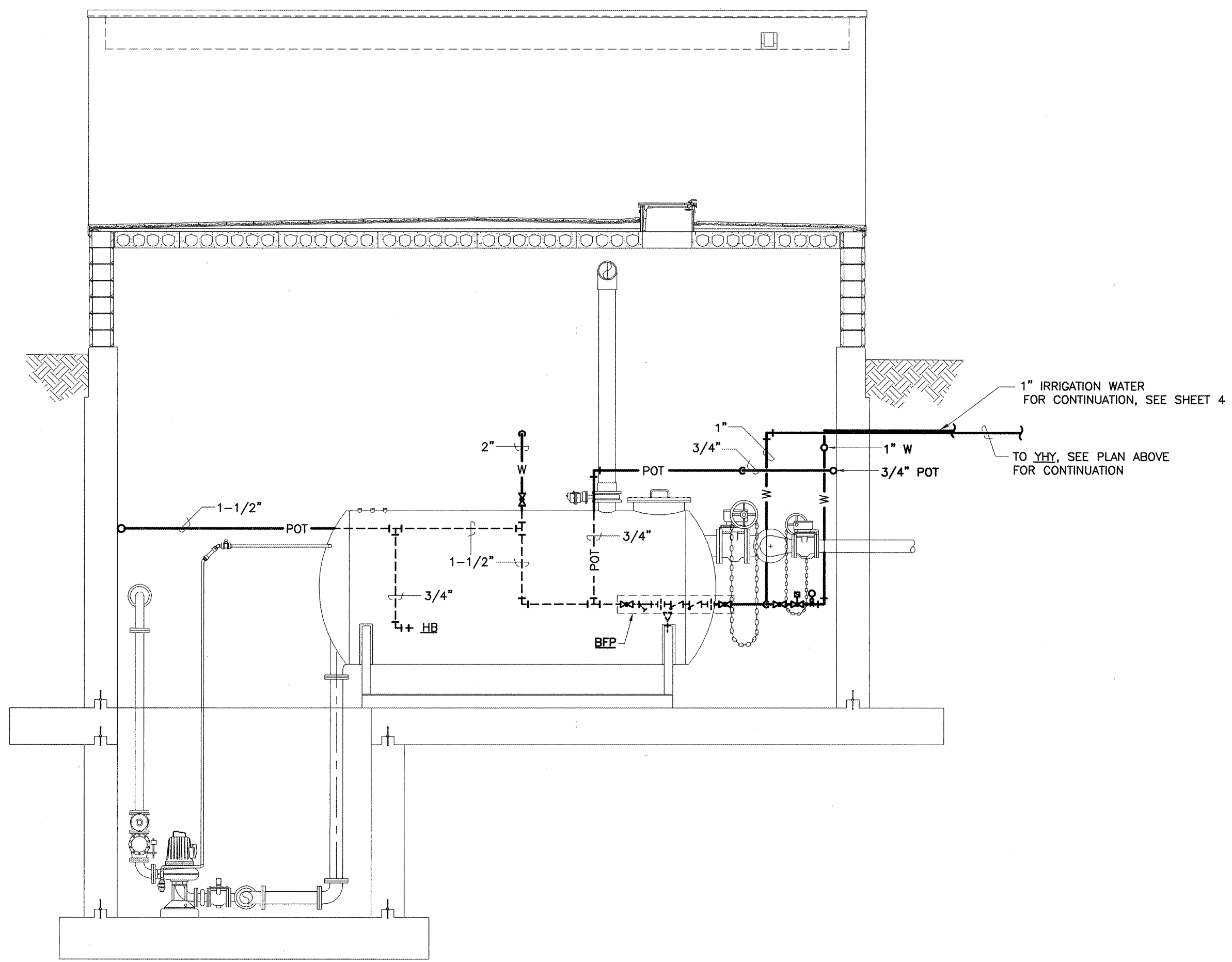
DESIGNED BY: RJP
DRAWN BY: PAS
CHECKED BY: MAD

DATE: SEPT 2002
DATE: SEPT 2002
DATE: OCT 2002

BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	A.S. Horner	NO.	DATE	NO.	DATE
STATION	1-1/2 MILE WEST OF I-25 AND 124 th NORTH OF TRAMWAY	BY	DATE	REVISIONS	DATE
INSPECTOR	ASCI	NO.	DATE	DESIGN	DATE
DATE	11/03	NO.	DATE	CHECKED	DATE
STATION	1-1/2 MILE WEST OF I-25 AND 124 th NORTH OF TRAMWAY	NO.	DATE	REVISIONS	DATE
DATE	11/03	NO.	DATE	CHECKED	DATE
STATION	1-1/2 MILE WEST OF I-25 AND 124 th NORTH OF TRAMWAY	NO.	DATE	REVISIONS	DATE
DATE	11/03	NO.	DATE	CHECKED	DATE



- General Notes**
- ALL PIPES PENETRATING THE WALLS BELOW GRADE AND ANY FLOOR SLAB SHALL BE SEALED WITH LINK-SEAL.
 - INSTALL TURNING VANES IN ALL DUCT ELBOWS.
 - ALL PIPES PENETRATING BUILDING WALL, NOT ADJACENT TO EARTH, SHALL BE RUN IN A SLEEVE AND SEALED AROUND THE PIPE AND SLEEVE.
- Keyed Notes**
- DL-1 3,670 CFM, 42"x15" NECK.
 - SR-1 500 CFM, 8"x24" NECK
 - L-1 10,510 CFM, 80"x40" NECK. INTERLOCK DAMPER WITH EC-1
 - TG-1 24"x24" NECK.
 - INSTALL THE EVAPORATIVE COOLER ON AN EQUIPMENT SUPPORT PER DETAIL 1/P-02A.
 - INTERLOCK THE MOTORIZED DAMPER WITH THE EVAPORATIVE COOLER BLOWER.
 - INSTALL A FLEXIBLE CONNECTOR WITH SUN SHIELD PER DETAIL 2/P-02A.
 - RUN A 1/2" WATER MAKE-UP LINE THRU THE WALL AT 24" ABOVE FINISHED GRADE, INSTALL A REDUCER AND RUN 3/8" WATER MAKE-UP LINES TO THE EVAPORATIVE COOLER FLOAT VALVE.
 - RUN THE DUCT THRU THE WALL IN A SLEEVE. SEAL AROUND THE DUCT AND SLEEVE.
 - MOUNT THERMOSTAT ON A 1" THICK, WOOD INSULATED BLOCK.
 - INSTALL THE BACK FLOW PREVENTER ON THE WALL AT 4'-0" ABOVE FINISHED FLOOR TO CENTER LINE OF THE ASSEMBLY.
 - INSTALL THE EVAPORATIVE COOLER PUMP SWITCH ON THE WALL WITH A "SUMMER" PLAQUE ABOVE AND A "WINTER" PLAQUE BELOW
 - MOUNT UNIT HEATER ON WALL AT 8'-0" AFF TO BOTTOM OF UNIT.
 - MOUNT UNIT HEATER ON WALL AT 10'-6" AFF TO BOTTOM OF UNIT.



AS BUILT INFORMATION			BENCH MARKS			SURVEY INFORMATION			ENGINEER'S SEAL		
CONTRACTOR	DATE	BY	USGS TRIANGULATION STATION DISK STAMPED "PITS 1969"	DATE	BY	NO.	FIELD NOTES	DATE	NO.	REVISIONS	REMARKS
INSPECTOR	DATE	BY	1-MILE WEST OF I-25 AND 124-NORTH OF TRAMWAY	DATE	BY						
ACCEPTANCE BY	DATE	BY	GEOGRAPHIC POS (NAD 27) 35-12-27.99284 N, 106-35-34.63922 W	DATE	BY						
VELOCITY BY	DATE	BY	NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE)	DATE	BY						
DRAWINGS	DATE	BY	X = 975358.851, Y = 1531042.862	DATE	BY						
CORRECTED BY	DATE	BY	ELEVATION = 5081.92 NGVD28 IN FEET	DATE	BY						
MICRO-FILM INFORMATION	DATE	BY	INTERIM NAD 1983, IN FEET [X=1537781.373, Y=1531055.573]	DATE	BY						
	DATE	BY	TRANSFORMED TO NAD27 BY CORPSON VS.108	DATE	BY						
	DATE	BY	ELEVATION = 5084.660 INTERIM NAD 83, IN FEET	DATE	BY						

WILSON & COMPANY

BERNALILLO COUNTY
PUBLIC WORKS DIVISION

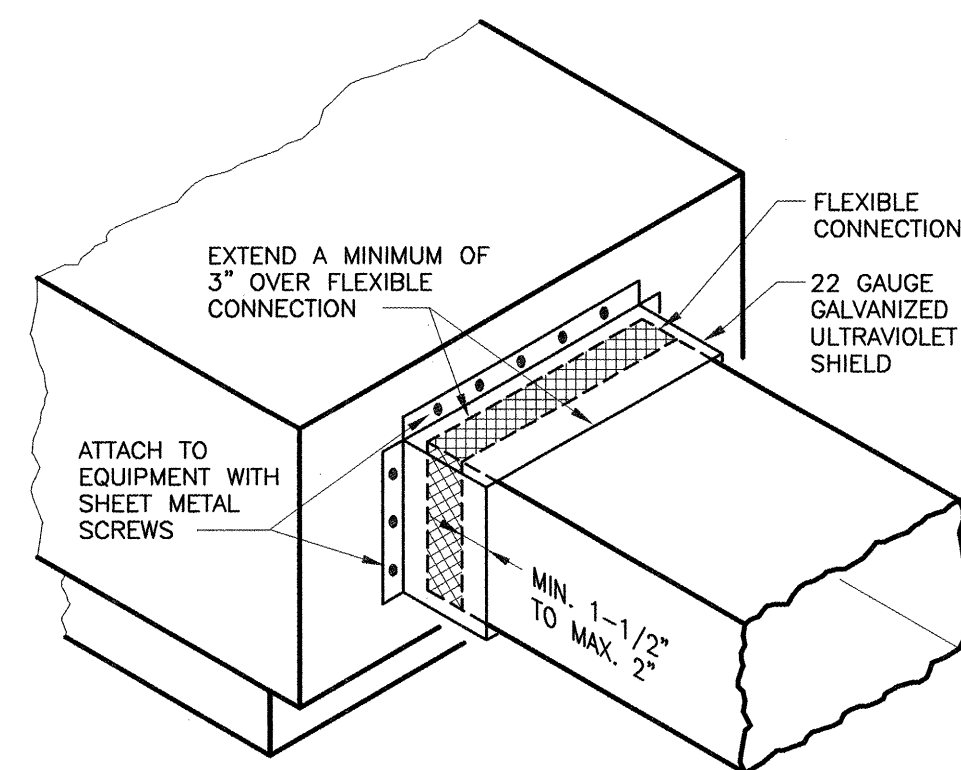
TITLE: AREA D VACUUM PUMP STATION
MECHANICAL PLAN
AND SECTIONS

Design Review Committee	City Engineer Approval	Mr./Boy/Tr.	Mr./Boy/Tr.
MAR 19 2003	MAR 19 2003		
PROJECT NO. COA 695981	MAP NO. B-15	DWG. P-02	SHEET 19

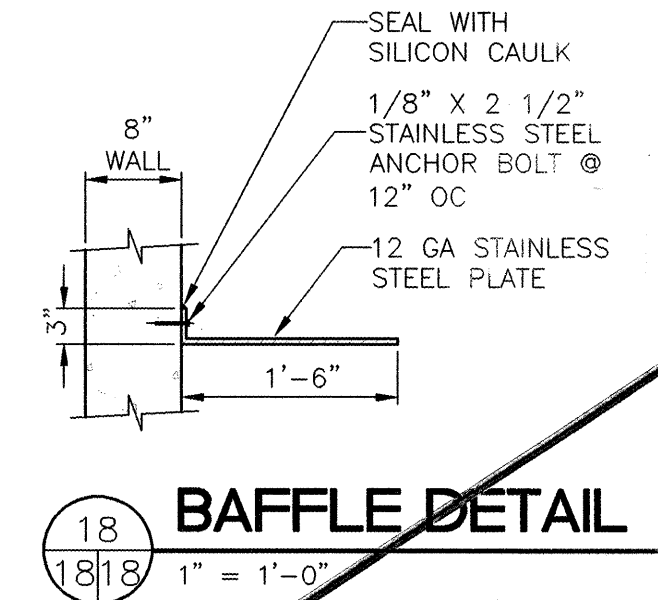
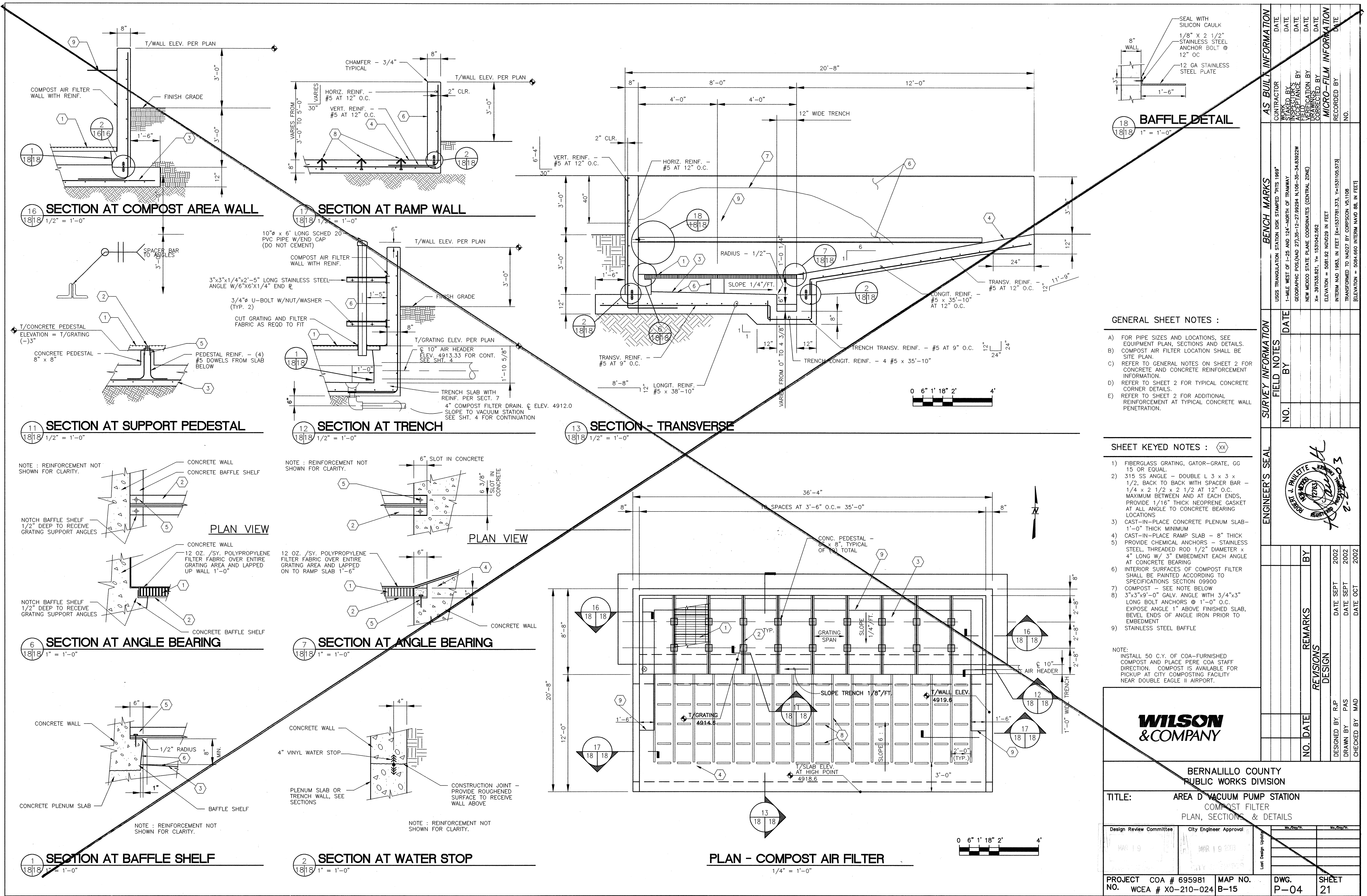
EQUIPMENT SCHEDULE			
SYMBOL	DESCRIPTION		
MD-1	<p><u>MOTORIZED DAMPER:</u> Extruded aluminum parallel blade dampers with tight seal package, bronze bearing, external linkage and two position normally closed, outdoor installed, motor operator. Dowco model ARM. Power is 24 VAC Phase.</p>		
LOD-1	<p><u>MANUAL DAMPER:</u> Extruded aluminum opposed blade dampers with bronze bearing, external linkage and locking quadrant. Dowco model ARM.</p>		
DS/EW	<p><u>DRENCH SHOWER/EYEWASH:</u> Floor mounted, drench shower/eyewash. Shower shall have a 10"ø plastic shower hood and a 1" IPS stay-open ball valve operated by a stainless steel push flag handle. Eyewash shall come complete with 11"ø stainless steel bowl, chrome plated brass yoke assembly with twin aerated heads and chrome plated 1" IPS stay-open ball valve, operated by a stainless steel push flag handle. HAWS model 8309WC.</p>		
	Trop ----	Vent ----	CW 1-1/4" HW ----
YHY	<p><u>YARD HYDRANT:</u> Zurn model Z-1385 exposed, non-freeze yard hydrant with bronze casting, cast aluminum casing guard all bronze interior parts and non-turning operating rod with free-floating compression closure valve with 1" connection. Furnish complete with operating key lock.</p>		
	Trop ----	Vent ----	CW 1" HW ----
HB	<p><u>HOSE BIBB:</u> 3/4" flanged female inlet, 3/4" hose thread outlet, lock shield cap, tee handle and rough or polished chrome plate finish. Chicago Faucet No. 387. Furnish with vacuum breaker.</p>		
	Trop ----	Vent ----	CW 1/2" HW ----
BFP	<p><u>BACKFLOW PREVENTER:</u> Reduced pressure principle backflow preventer with pressure differential relief valve located between two position seating check valves. The assembly shall consist of two full port ball valves before and after the device, two unions, test cocks and an up-stream protective strainer. The unit shall have a bronze body, stainless steel check seats and stainless steel relief valve seats. Watts model U909-S-QT rated for 140° F and 175 psi pressure. The 1-1/2" unit shall be capable of flowing 48 gpm with a 10 psi pressure drop. Furnish with a model 909AG series air gap.</p>		
<p><i>Note: Electrical contractor coordinated the various power requirements for the evaporative cooler, exhaust fan, louver, and motorized damper in order to provide a functional system.</i></p>			

Note:

MODEL NUMBERS GIVEN ARE TO ESTABLISH THE MINIMUM REQUIREMENTS OF THE EQUIPMENT SPECIFIED. IF, IN THE OPINION OF THE CONTRACTOR, AN ALTERNATE ITEM EQUALS OR EXCEEDS THE ITEM SPECIFIED, LITERATURE AND/OR SAMPLES SUBSTANTIATING THIS CLAIM SHALL BE SUBMITTED TO THE ARCHITECT AND ENGINEER FOR APPROVAL.

[illegible]

<i>WILSON & COMPANY</i>								R
								DESIGNED BY EF
								DRAWN BY FPD
								CHECKED BY CB
BERNALILLO COUNTY PUBLIC WORKS DIVISION								
TITLE: AREA D VACUUM PUMP STATION MECHANICAL PLAN AND SECTIONS								
Design Review Committee		City Engineer Approval		Last Design Update	Mr./Boy/Mr.		Mr./Boy/Mr.	
MAR 18 2008		MAR 19 2008						
PROJECT COA 695981 NO. WCEA X0-210-024		MAP NO. B-15		DWG. P-03		SHEET 20		



- GENERAL SHEET NOTES :**
- A) FOR PIPE SIZES AND LOCATIONS, SEE EQUIPMENT PLAN, SECTIONS AND DETAILS.
 - B) COMPOST AIR FILTER LOCATION SHALL BE SITE PLAN.
 - C) REFER TO GENERAL NOTES ON SHEET 2 FOR CONCRETE AND CONCRETE REINFORCEMENT INFORMATION.
 - D) REFER TO SHEET 2 FOR TYPICAL CONCRETE CORNER DETAILS.
 - E) REFER TO SHEET 2 FOR ADDITIONAL REINFORCEMENT AT TYPICAL CONCRETE WALL PENETRATION.

- SHEET KEYED NOTES :** (XX)
- 1) FIBERGLASS GRATING, GATOR-GRATE, GG 15 OR EQUAL.
 - 2) 315 SS ANGLE - DOUBLE L 3 x 3 x 1/2, BACK TO BACK WITH SPACER BAR - 1/4 x 2 1/2 x 2 1/2 AT 12" O.C. MAXIMUM BETWEEN AND AT EACH END, PROVIDE 1/16" THICK NEOPRENE GASKET AT ALL ANGLE TO CONCRETE BEARING LOCATIONS.
 - 3) CAST-IN-PLACE CONCRETE PLENUM SLAB - 1'-0" THICK MINIMUM.
 - 4) CAST-IN-PLACE RAMP SLAB - 8" THICK PROVIDE CHEMICAL ANCHORS - STAINLESS STEEL, THREADED ROD 1/2" DIAMETER x 4" LONG W/ 3" EMBEDMENT EACH ANGLE AT CONCRETE BEARING.
 - 5) INTERIOR SURFACES OF COMPOST FILTER SHALL BE PAINTED ACCORDING TO SPECIFICATIONS SECTION 09900.
 - 6) COMPOST - SEE NOTE BELOW.
 - 7) 3"x3"x9'-0" GALV. ANGLE WITH 3/4"x3" LONG BOLT ANCHORS @ 1'-0" O.C. EXPOSE ANGLE 1" ABOVE FINISHED SLAB, BEVEL ENDS OF ANGLE IRON PRIOR TO EMBEDMENT.
 - 8) STAINLESS STEEL BAFFLE.
- NOTE: INSTALL 50 C.Y. OF COA-FURNISHED COMPOST AND PLACE PER COA STAFF DIRECTION. COMPOST IS AVAILABLE FOR PICKUP AT CITY COMPOSTING FACILITY NEAR DOUBLE EAGLE II AIRPORT.

WILSON & COMPANY

BERNALILLO COUNTY PUBLIC WORKS DIVISION			
TITLE: AREA D VACUUM PUMP STATION COMPOST FILTER PLAN, SECTIONS & DETAILS			
Design Review Committee	City Engineer Approval	Mo./Day/Yr.	Mo./Day/Yr.
PROJECT NO. COA # 695981 WCEA # X0-210-024	MAP NO. B-15	DWG. P-04	SHEET 21

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS	
CONTRACTOR	DATE	USGS TRANSLATION STATION DISK STAMPED "PIS 1987"	DATE	NO.	BY	NO.	BY	NO.	DATE
WORKED BY	DATE	1-MILE WEST OF I-25 AND 124-NORTH OF TRAMWAY	DATE						
INSPECTED BY	DATE	GEOGRAPHIC POS (NAD 27) 35-12-27.99294 N 108-35-34.83922W	DATE						
FIELD CHECKED BY	DATE	NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE)	DATE						
VERIFICATION BY	DATE	X = 397535.621, Y = 1531042.552	DATE						
CORRECTED BY	DATE	ELEVATION = 5081.92 NGD029 IN FEET	DATE						
RECORDED BY	DATE	INTERM NAD 1983, IN FEET (X=1537761.373, Y=1531105.573)	DATE						
NO.		TRANSFORMED TO NAD27 BY CORPSON V5.106	DATE						
		ELEVATION = 5084.660 INTERM NAD 86, IN FEET	DATE						

NOTE: This sheet has been replaced with Sheet #21 as part of Value Engineering during project.

FILTER LINER

USE: LINER SHALL SERVE AS AN IMPENETRABLE OR IMPERVIOUS BARRIER BETWEEN THE BIOFILTER AND SURROUNDING SOIL.

TYPE: HIGH DENSITY POLYETHYLENE

MINIMUM MATERIAL PROPERTIES:

THICKNESS:	60 MILS
DENSITY:	0.94 G/CC
TEAR RESISTANCE:	47 POUNDS
PUNCTURE RESISTANCE:	260 POUNDS, MINIMUM
TENSILE STRENGTH AT YIELD:	150 POUNDS/INCH WIDTH
TENSILE STRENGTH AT BREAK:	250 POUNDS/INCH WIDTH
MODULUS OF ELASTICITY:	100,000 PSI

MANUFACTURER: GUNDEL LINING SYSTEMS, INC.; NATIONAL SEAL COMPANY; POLY-FLEX, INC., OR APPROVED EQUAL.

FILTER FABRIC

FUNCTION: FABRIC SERVES AS A BARRIER LAYER BETWEEN BIOFILTER MEDIA AND STONE MEDIA TO PREVENT MIGRATION OF FINES INTO THE STONE MEDIA.

TYPE: GEOTEXTILE

MINIMUM MATERIAL PROPERTIES:

WEIGHT:	6 OUNCES/SQUARE YARD
THICKNESS:	60 MILS
GRAB STRENGTH:	120 POUNDS
BURST STRENGTH:	210 POUNDS PER SQUARE INCH
AIR FLOW RATE:	225 CUBIC FEET/MINUTE/SQUARE FEET
WATER FLOW RATE:	85 GALLONS/MINUTE/SQUARE FEET

MANUFACTURER: AMOCO, STYLE 4506, MIRAFIL 140N, OR EQUAL.

STONE MEDIA

FUNCTION: PROVIDE FIRM, UNIFORM AND CONTINUOUS SUPPORT FOR PIPING AND MAINTAIN PROPER AIR DISTRIBUTION TO THE BIOFILTER MEDIA.

TYPE AND MATERIAL: VOLCANIC STONE, NOMINAL DIAMETER OF 1-INCH TO 3-INCH.

LEACHATE UNDERDRAIN SYSTEM

FUNCTION: COLLECT EXCESS WATER ACCUMULATION ABOVE THE LINER MATERIAL.

TYPE AND MATERIAL: POLYVINYL CHLORIDE (PVC) PIPE, SCHEDULE 80, ASTM D1785.

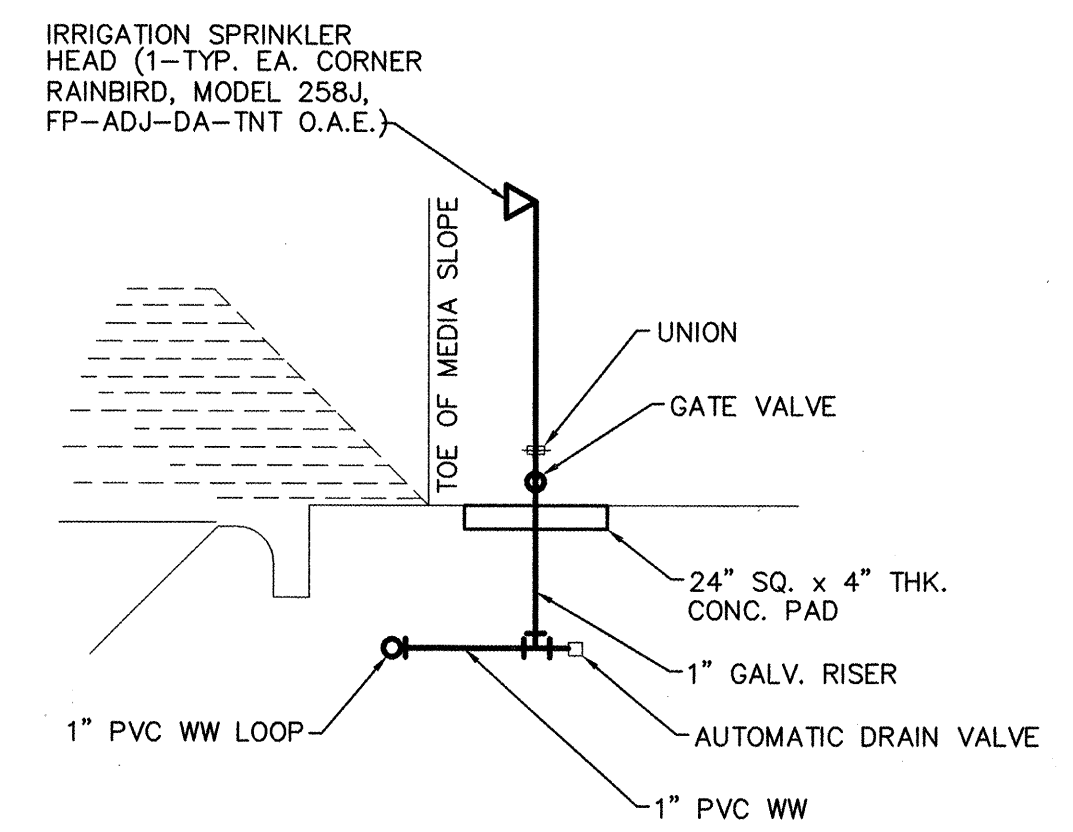
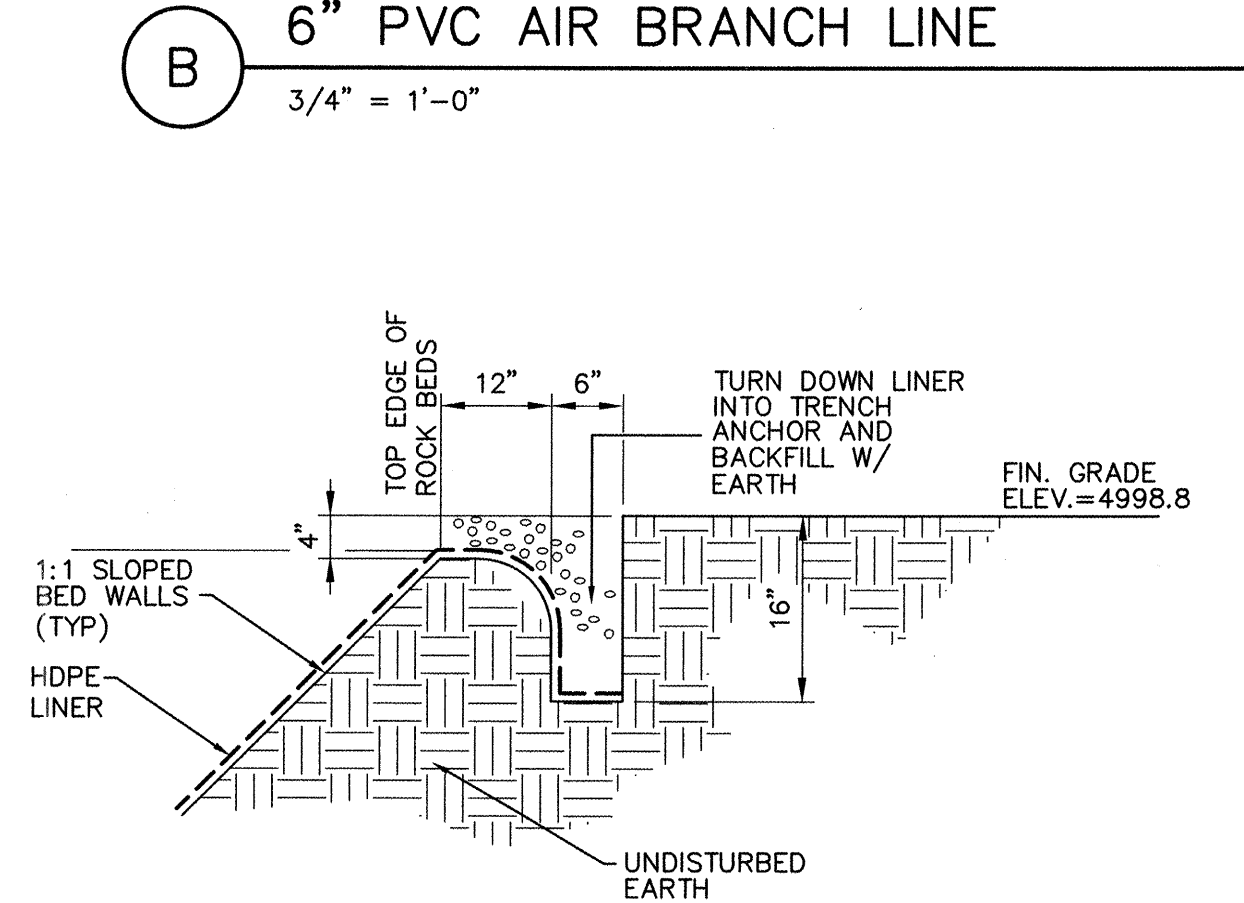
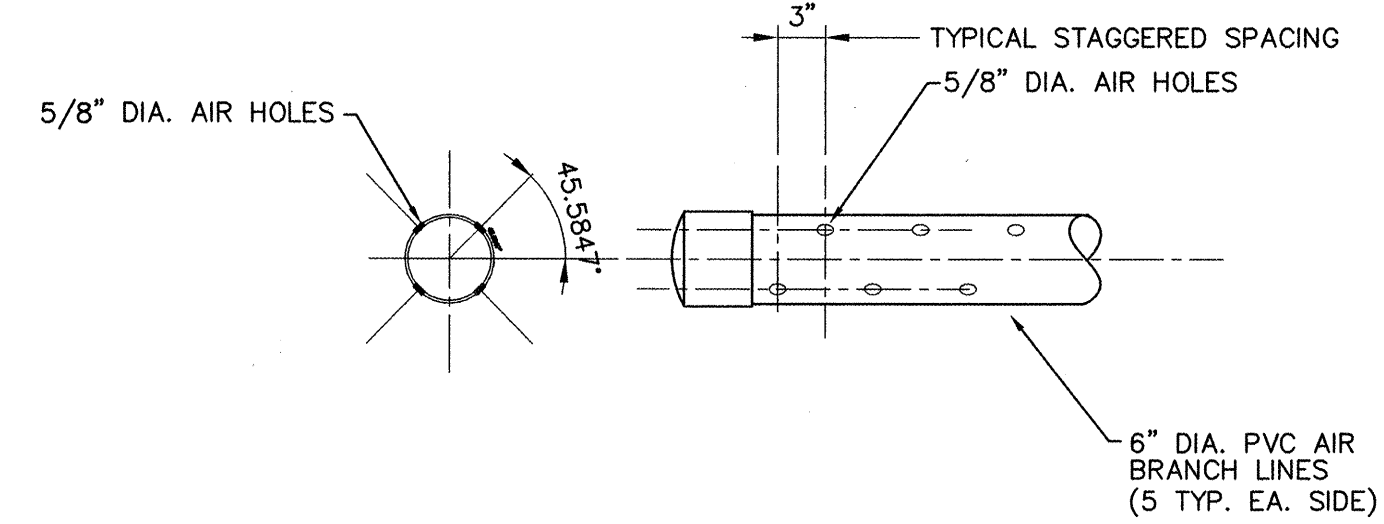
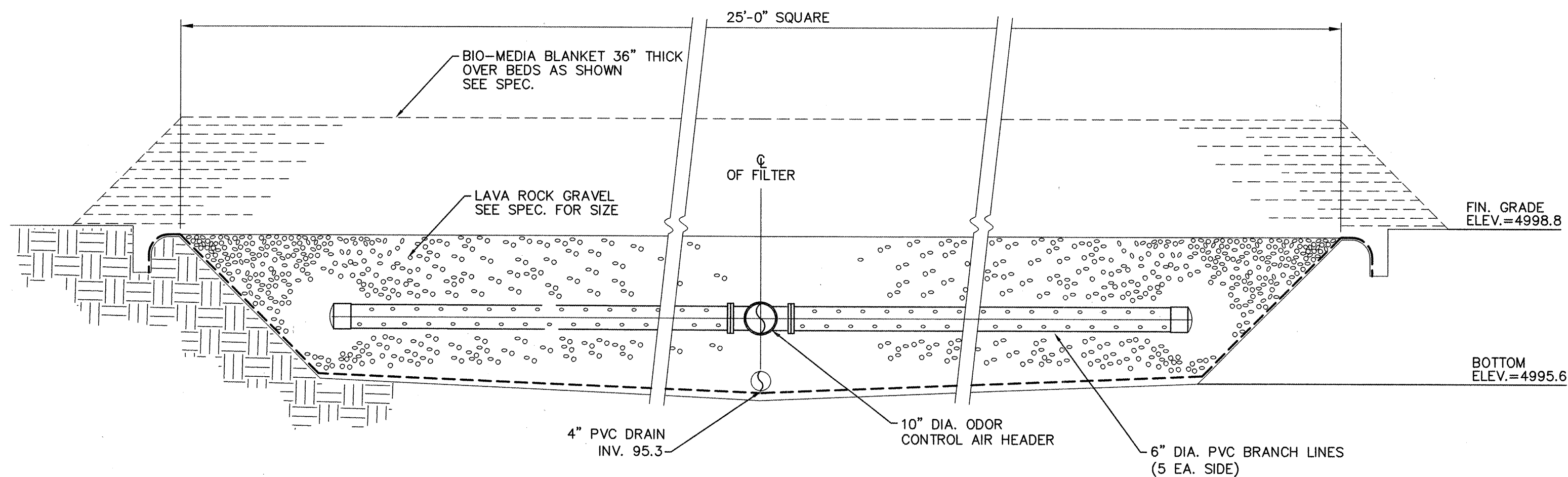
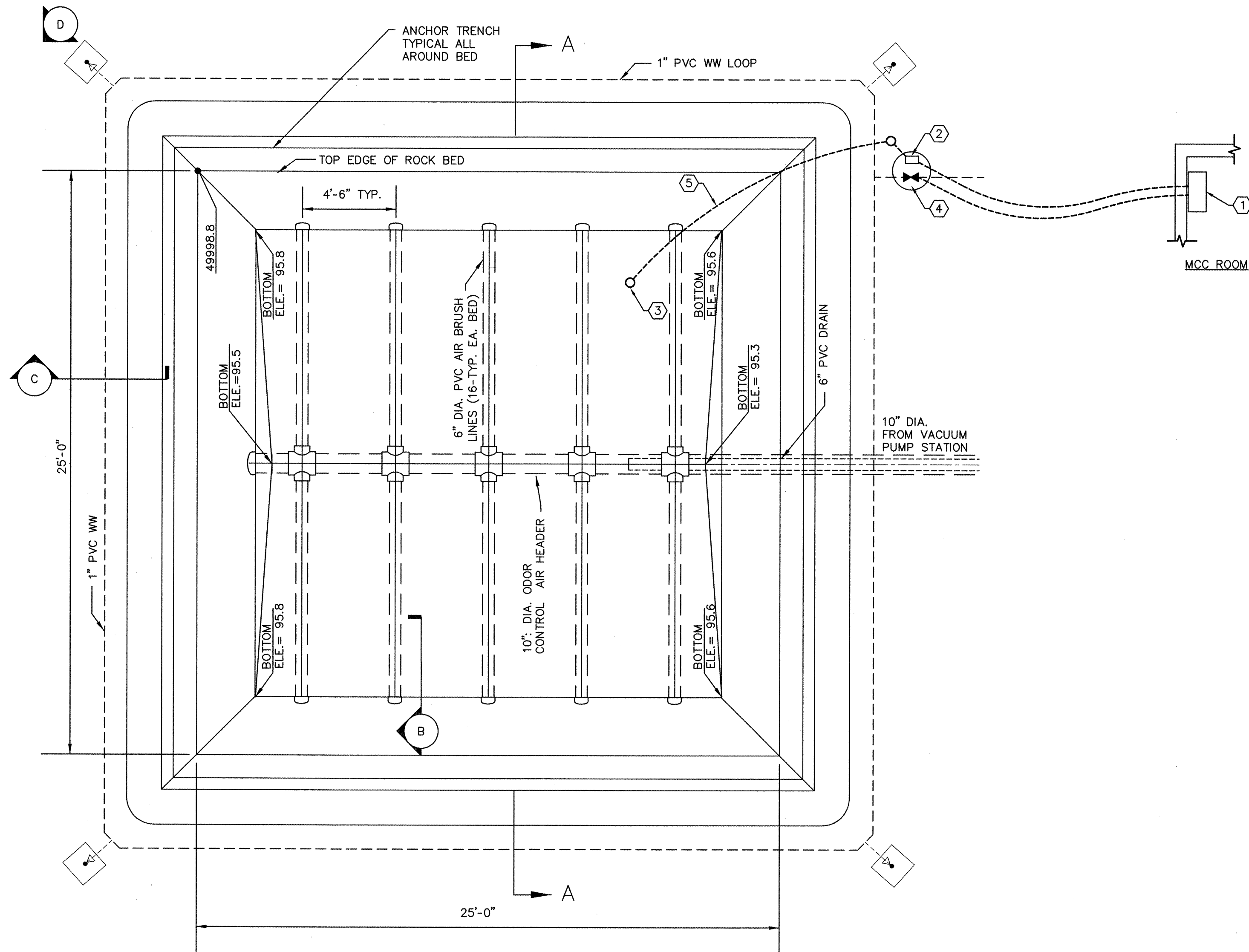
AIR DISTRIBUTION SYSTEM

FUNCTION: DISTRIBUTE AIR INTO THE BIOFILTER BED.

TYPE AND MATERIAL:

NON-PERFORATED LATERALS: POLYVINYL CHLORIDE (PVC) PIPE, SCHEDULE 80, ASTM D1785.

PERFORATED LATERALS: POLYVINYL CHLORIDE (PVC) PIPE, SCHEDULE 80, ASTM D1785, WITH 5/8-INCH DIAMETER PERFORATIONS. SEE DRAWINGS FOR SPACING AND LOCATIONS OF PERFORATIONS.



- KEYED NOTES**
- THE BIOMASS SPRINKLER CONTROLLER SHALL BE EQUAL TO A: RAINBIRD MODEL ESP-6LX-PLUS SIX STATION CONTROL LOCATED IN MCC ROOM.
 - THE MOISTURE SENSOR SHALL BE EQUAL TO A: RAINBIRD INTELLISENSOR MODEL 100 ADJUSTABLE MOISTURE SENSOR WITH DUAL PROBES.
 - MOISTURE SENSOR PROBE
 - SOLENOID VALVE CONTROLLED BY RAINBIRD ESP-6LX-PLUS OR EQUAL
 - 15' LONG DIRECT BURY CABLE FROM MOISTURE SENSOR

WILSON & COMPANY

BERNALILLO COUNTY PUBLIC WORKS DIVISION

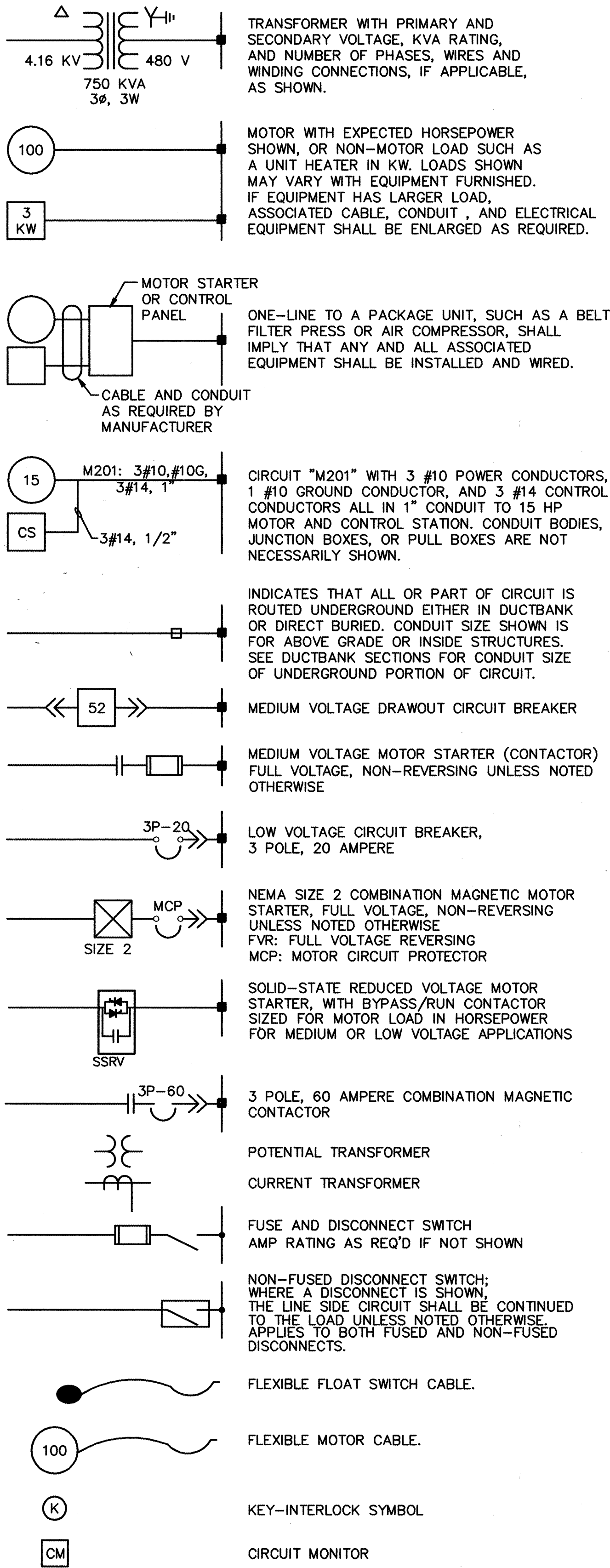
TITLE: AREA D VACUUM PUMP STATION COMPOST FILTER PLAN, SECTIONS, & DETAILS

Design Review Committee	City Engineer Approval	Ms./Day/Yr.	Ms./Day/Yr.

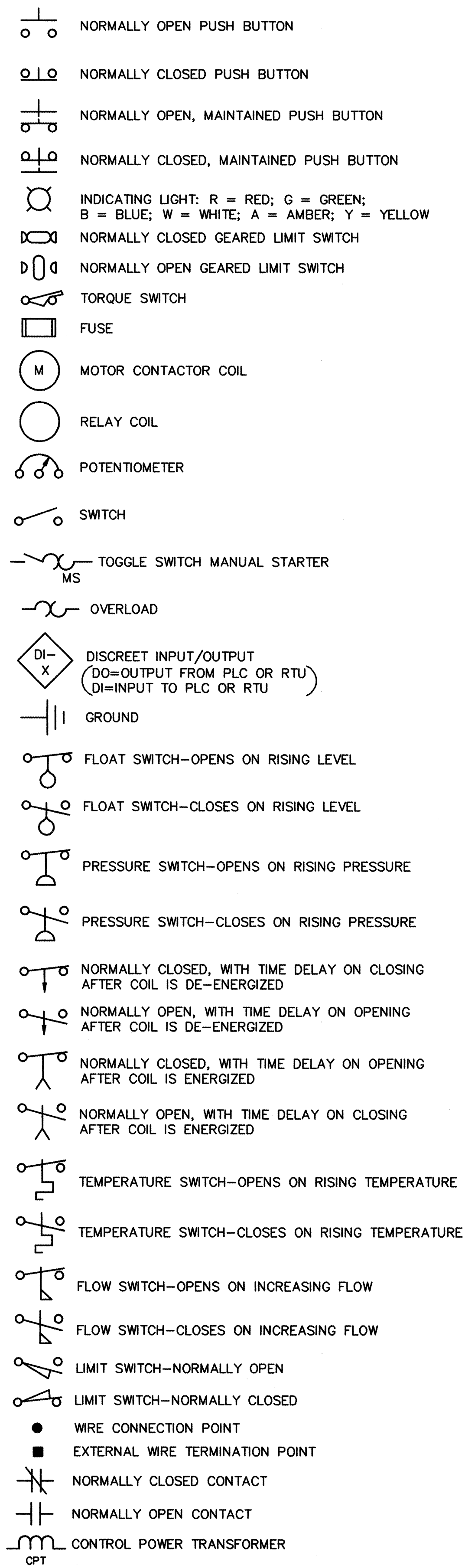
PROJECT COA # 695981 MAP NO. DWG. SHEET
NO. WCEA # X0-210-024 B-15 P-04 21

AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION				ENGINEER'S SEAL			
CONTRACTOR	A.S. Harner	DATE	10/10/03	WORK	NEW BIOFILTER LAYOUT	DATE	7/03	NO.	1	BY		NO.	1	BY	
DESIGNED BY	PAS	DATE	7/03	DRAWN BY	PAS	DATE	7/03	NO.	2	BY		NO.	2	BY	
CHECKED BY	MAD	DATE	7/03	REVISIONS	DESIGN	DATE	7/03	NO.	3	BY		NO.	3	BY	
RECORDED BY		DATE		REVISIONS	DESIGN	DATE	7/03	NO.	4	BY		NO.	4	BY	
DATE				REVISIONS	DESIGN	DATE	7/03	NO.	5	BY		NO.	5	BY	

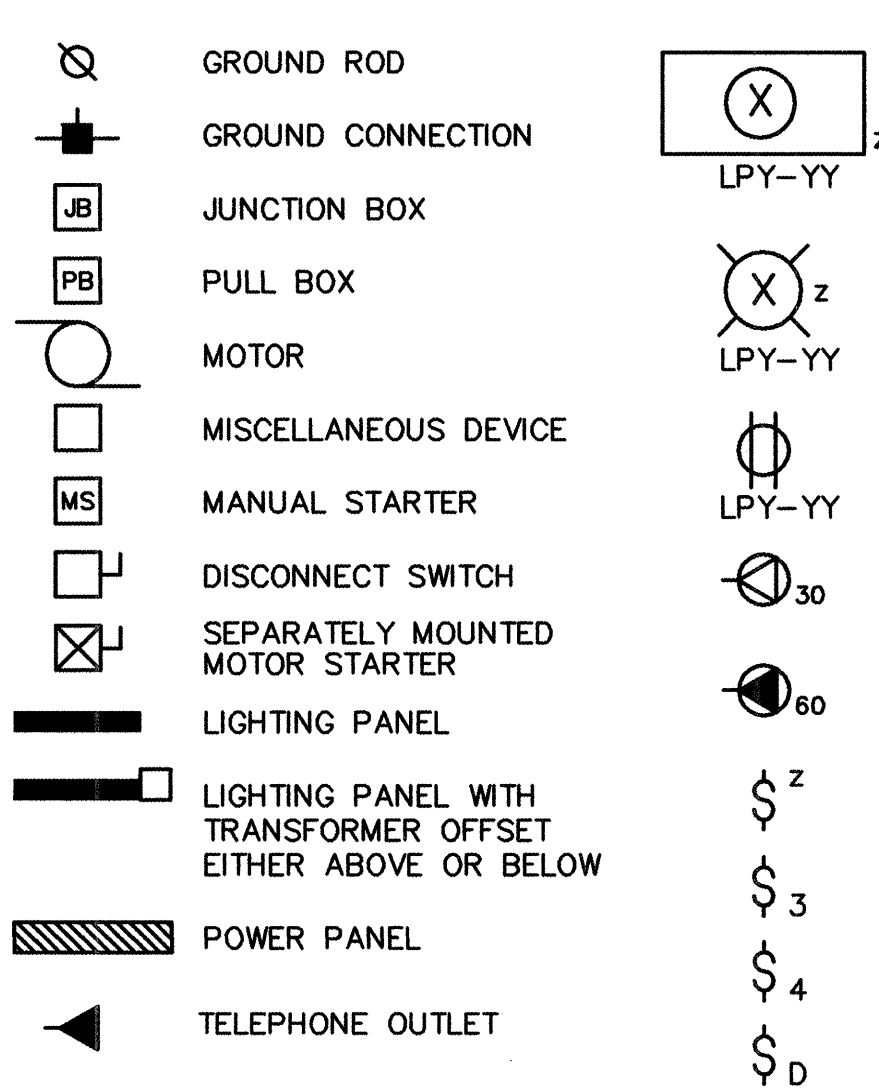
ONE-LINE DIAGRAM LEGEND



SCHEMATIC SYMBOLS



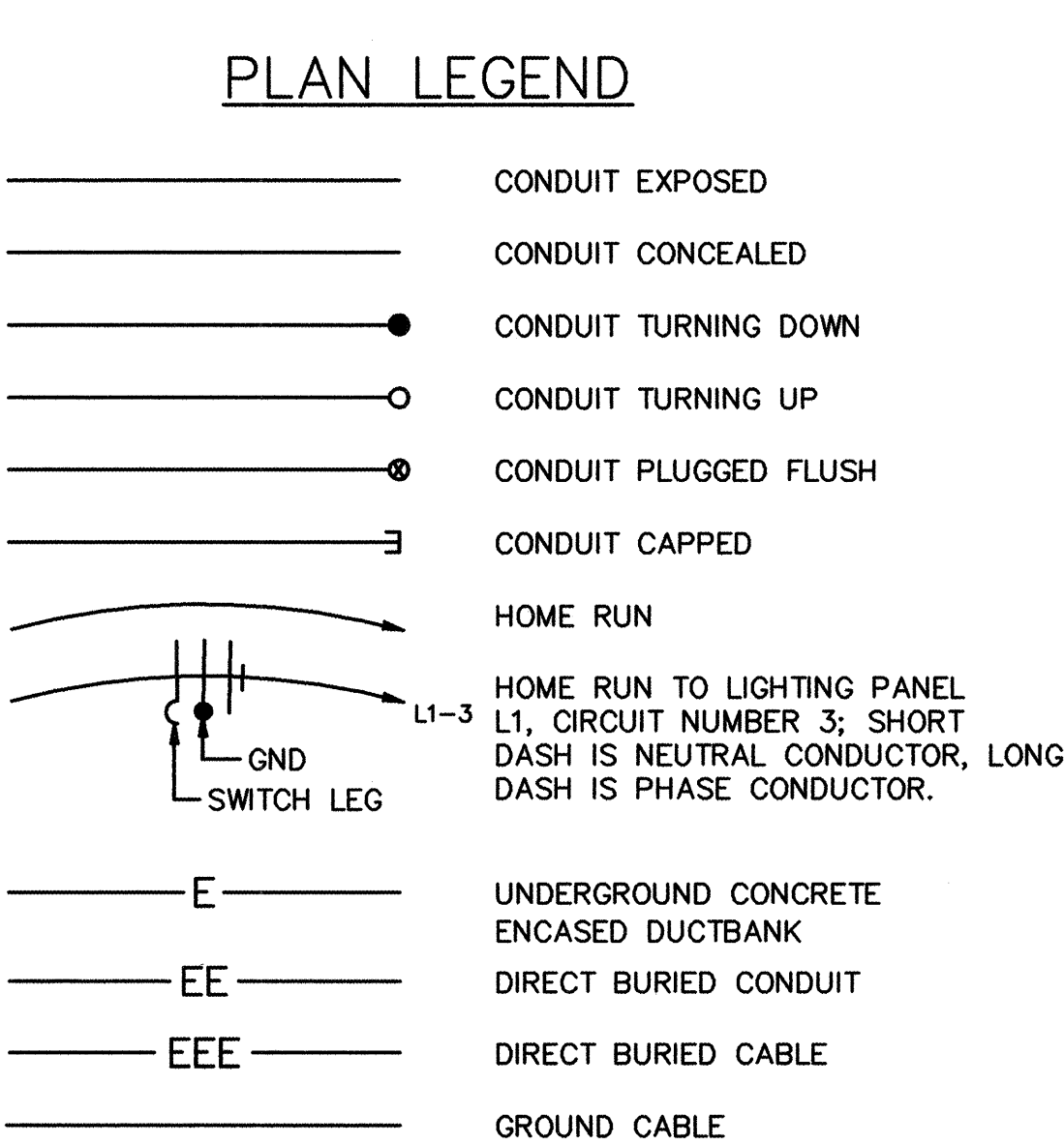
MISCELLANEOUS PLAN SYMBOLS



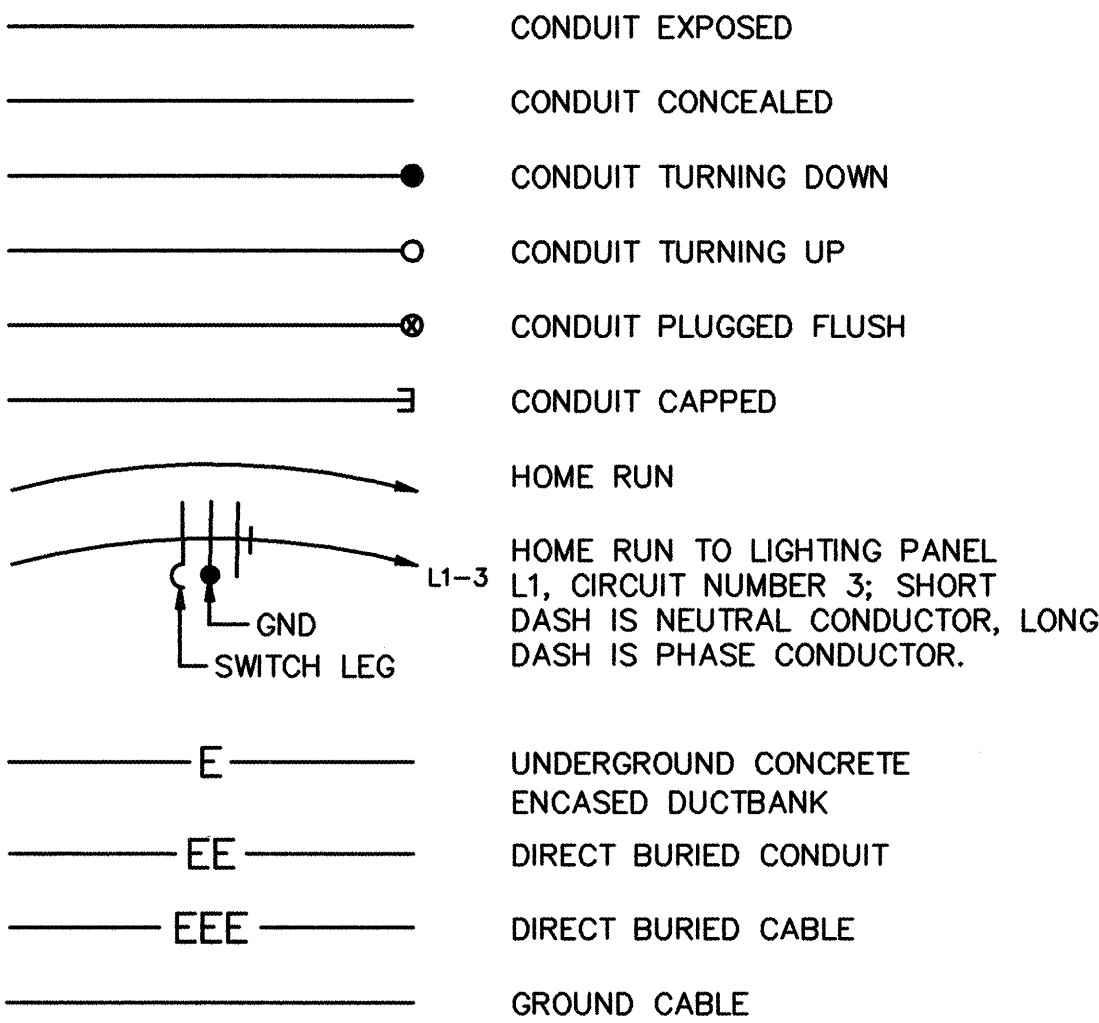
ABBREVIATIONS

A	AMPERE, ALARM	KVA	KILOVOLT AMPERE
AC	ALTERNATING CURRENT	KVAR	KILOVARR
ANN	ANNUNCIATOR	KW	KILOWATT
AR	ALARM RELAY	KWH	KILOWATT HOUR
ATS	AUTO TRANSFER SWITCH	L	LOW, LEVEL
AWG	AMERICAN WIRE GAGE	LA	LIGHTNING ARRESTER
BT	BEARING TEMPERATURE	LC	LIGHTING CONTACTOR
C	CLOSE, COUNTER OR CONTACTOR	LOR	LOCAL-OFF-REMOTE
CAP	CAPACITOR	LP	LIGHTING PANEL
CB	CIRCUIT BREAKER	LS	LIMIT OR LEVEL SWITCH
CB"a"	CIRCUIT BREAKER AUXILIARY CONTACT (OPEN WHEN BREAKER IS OPEN AND CLOSED WHEN BREAKER IS CLOSED OR TRIPPED)	LWCO	LOW WATER CUTOFF
CB"b"	CIRCUIT BREAKER AUXILIARY CONTACT (CLOSED WHEN BREAKER IS OPEN AND OPEN WHEN BREAKER IS CLOSED OR TRIPPED)	M	MAGNETIC MOTOR STARTER
CI	CELL INTERLOCK	MA	MILLIAMPERE
CKT	CIRCUIT	MCC	MOTOR CONTROL CENTER
CL2	CHLORINE	MCLU	MOTOR CONTROL LINEUP
COS	CABLE OPERATED SWITCH	MCM	THOUSAND CIRCULAR MIL
CP	CONTROL PANEL	MCP	MOTOR CIRCUIT PROTECTOR
CPT	CONTROL POWER TRANSFORMER	MD	MOISTURE DETECTOR
CR	CONTROL RELAY	MFM	MAGNETIC FLOW METER
CS	CONTROL STATION	MFR	MANUFACTURER
CT	CYCLE TIMER OR CURRENT TRANSFORMER	MH	MANHOLE OR MOUNTING HEIGHT
CTC	CYCLE TIMER CLUTCH	MOG	MOTOR OPERATED GATE
CTM	CYCLE TIMER MOTOR	MOV	MOTOR OPERATED VALVE
2/C	2 CONDUCTOR	MS	MANUAL MOTOR STARTER
4"C	4" CONDUIT	MSH	MOTOR SPACE HEATER
DC	DIRECT CURRENT	MV	MILLIVOLT
DI	DOOR INTERLOCK	MVA	MEGAVOLT AMPERE
DM	DAMPER MOTOR OR DEMAND METER	N	NEUTRAL
DPDT	DOUBLE POLE DOUBLE THROW	NATS	NON-AUTO TRANSFER SWITCH
DPST	DOUBLE POLE SINGLE THROW	NC	NORMALLY CLOSED
DS	DISCONNECT SWITCH	NO	NORMALLY OPEN, NUMBER
EC	EMPTY CONDUIT	O	OPEN
EL	ELEVATION OR EMERGENCY LIGHT	OL	OVERLOAD
EMH	ELECTRICAL MANHOLE	P	PRIMARY
ER	ELECTRODE RELAY	PB	PUSH BUTTON OR PULL BOX
ES	END SWITCH	PE	PHOTOELECTRIC
ETM	ELAPSED TIME METER	PF	POWER FACTOR METER
EHH	ELECTRICAL HANDHOLE	PH	PHASE, CHEMICAL TERM
F	FORWARD	PLC	PROGRAMMABLE LOGIC CONTROLLER
FS	FLOW SWITCH	PRV	POWER ROOF VENTILATOR
G	GROUND	PRXS	PROXIMITY SWITCH
GEN	GENERATOR	PS	PRESSURE SWITCH
GFI	GROUND FAULT INTERRUPTER	PT	POTENTIAL TRANSFORMER, PROGRAM TIMER
GLS	GEARED LIMIT SWITCH	2P	2 POLE
#8G	#8 GROUND WIRE	R	RAISE, RELAY OR REVERSE
H	HIGH	RECP	RECEPTACLE
HC	HOT CIRCUIT	RT	REPEATING TIMER
HOA	HAND-OFF-AUTO	RTD	RESISTANCE TYPE TEMP DETECTOR
HOR	HAND-OFF-REMOTE	RTU	REMOTE TERMINAL UNIT
HP	HORSEPOWER	S2	SIZE 2 STARTER
HWCO	HIGH WATER CUTOFF	SH	SPACE HEATER
HZ	HERTZ (CYCLE)	SO	SOLENOID OILER
I/O	INPUT/OUTPUT	SP	SINGLE POLE
JB	JUNCTION BOX	SPDT	SINGLE POLE DOUBLE THROW
K	KEY INTERLOCK	SPST	SINGLE POLE SINGLE THROW
KV	KILOVOLT	SS	SELECTOR SWITCH
		SSRV	SOLID-STATE REDUCED VOLTAGE
		SV	SOLENOID VALVE
		SWBD	SWITCHBOARD
		SWGR	SWITCHGEAR
		SW	SWITCH

CONDUIT AND WIRING INSTALLATION



PLAN LEGEND



GENERAL NOTES

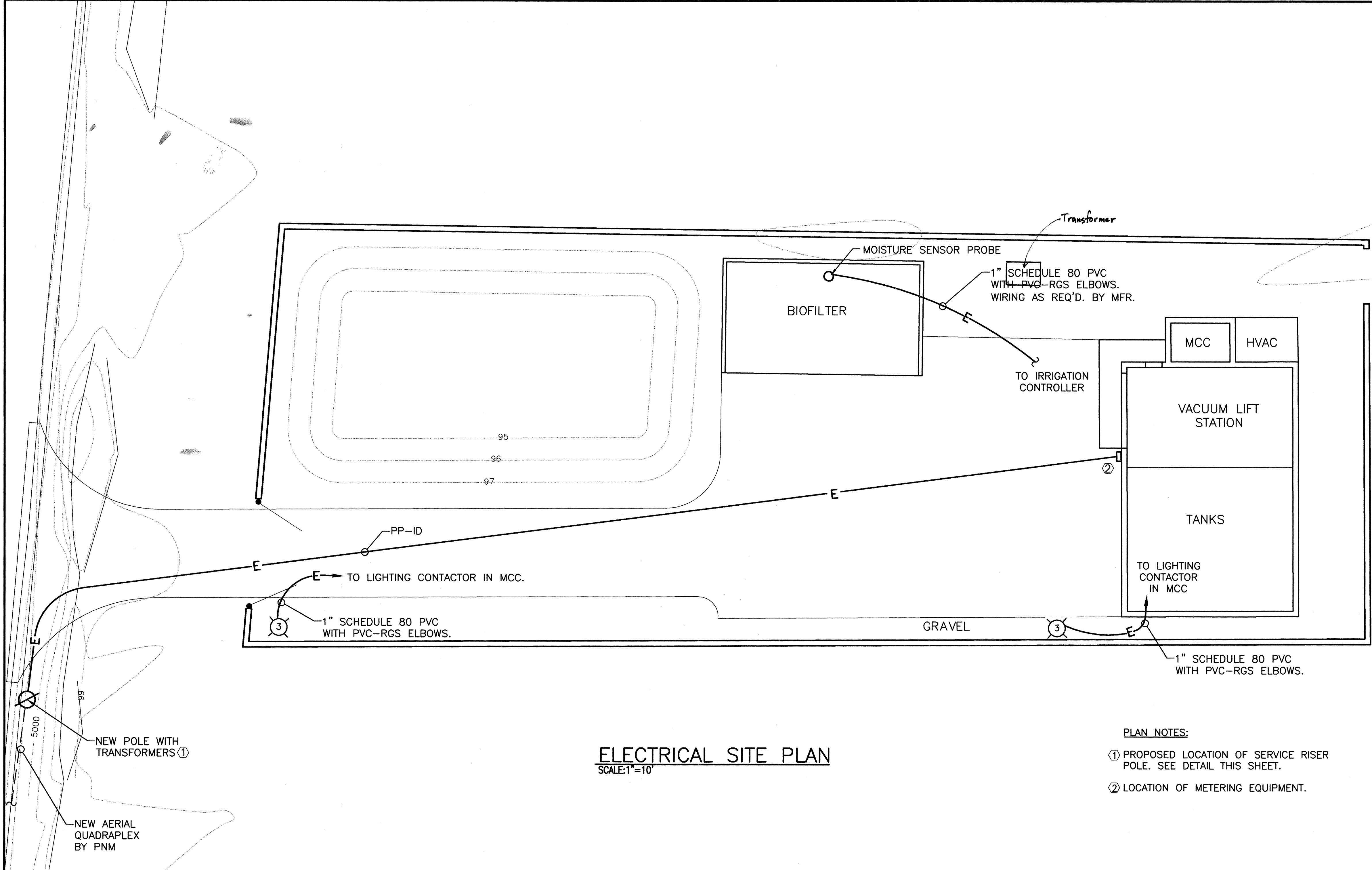
- IN GENERAL CONDUIT ROUTING IS NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ROUTING ALL CONDUITS INCLUDING THOSE INDICATED ON ONE-LINES AND HOME-RUNS. SEE SPECIFICATIONS FOR CONDUIT INSTALLATION REQUIREMENTS. CONDUIT ROUTINGS AND STUB-UP LOCATIONS THAT ARE INDICATED ARE APPROXIMATE. EXACT ROUTINGS SHALL BE AS REQUIRED FOR EQUIPMENT FURNISHED.
- SOLID LINES INDICATE NEW WORK OR EQUIPMENT FOR THIS CONTRACT. SHADED LINES INDICATE EXISTING EQUIPMENT OR WORK UNDER ANOTHER CONTRACT.
- THIS IS A GENERAL LEGEND AND ABBREVIATIONS SHEET. SOME SYMBOLS AND ABBREVIATIONS MAY NOT BE UTILIZED ON THIS SPECIFIC PROJECT.

WILSON & COMPANY

BERNALILLO COUNTY
PUBLIC WORKS DIVISION

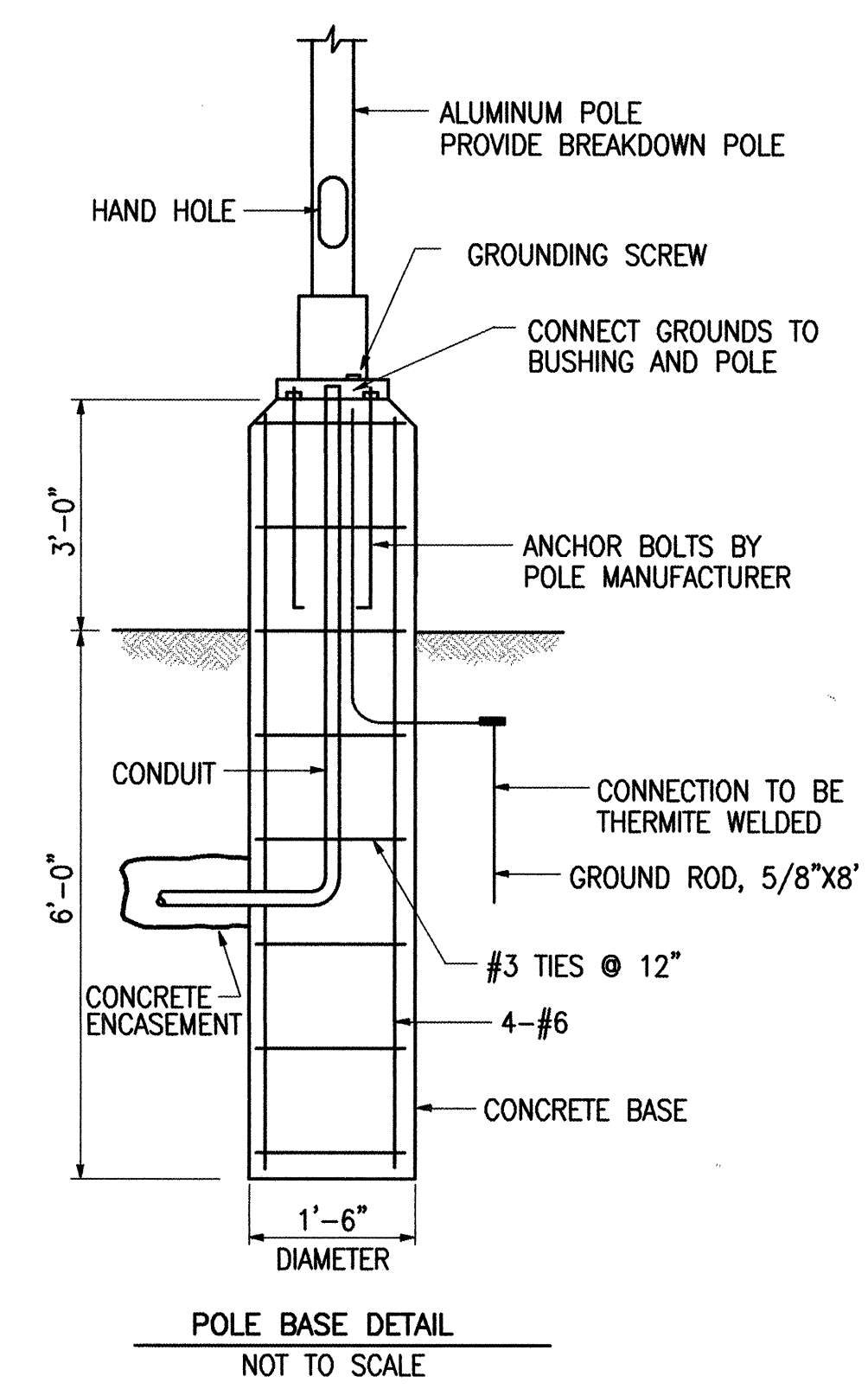
TITLE: AREA D VACUUM STATION
ELECTRICAL LEGEND, NOTES
AND ABBREVIATIONS

Design Review Committee	City Engineer Approval	DATE	DATE
MAR 19 2003	MAR 19 2003	DATE	DATE
PROJECT NO. WCEA # 695981	COA # 695981	MAP NO. B-15	DWG. E-01
SHEET 22			



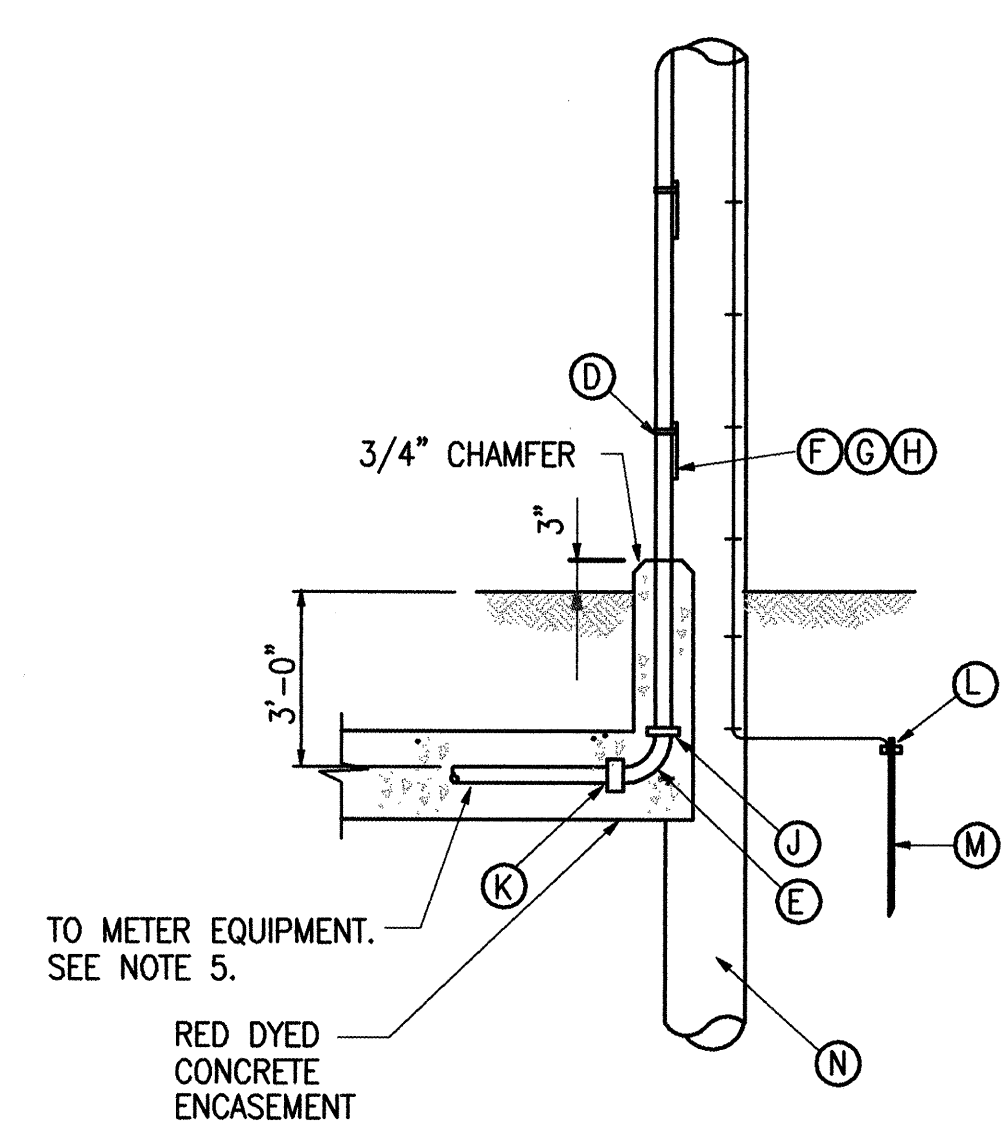
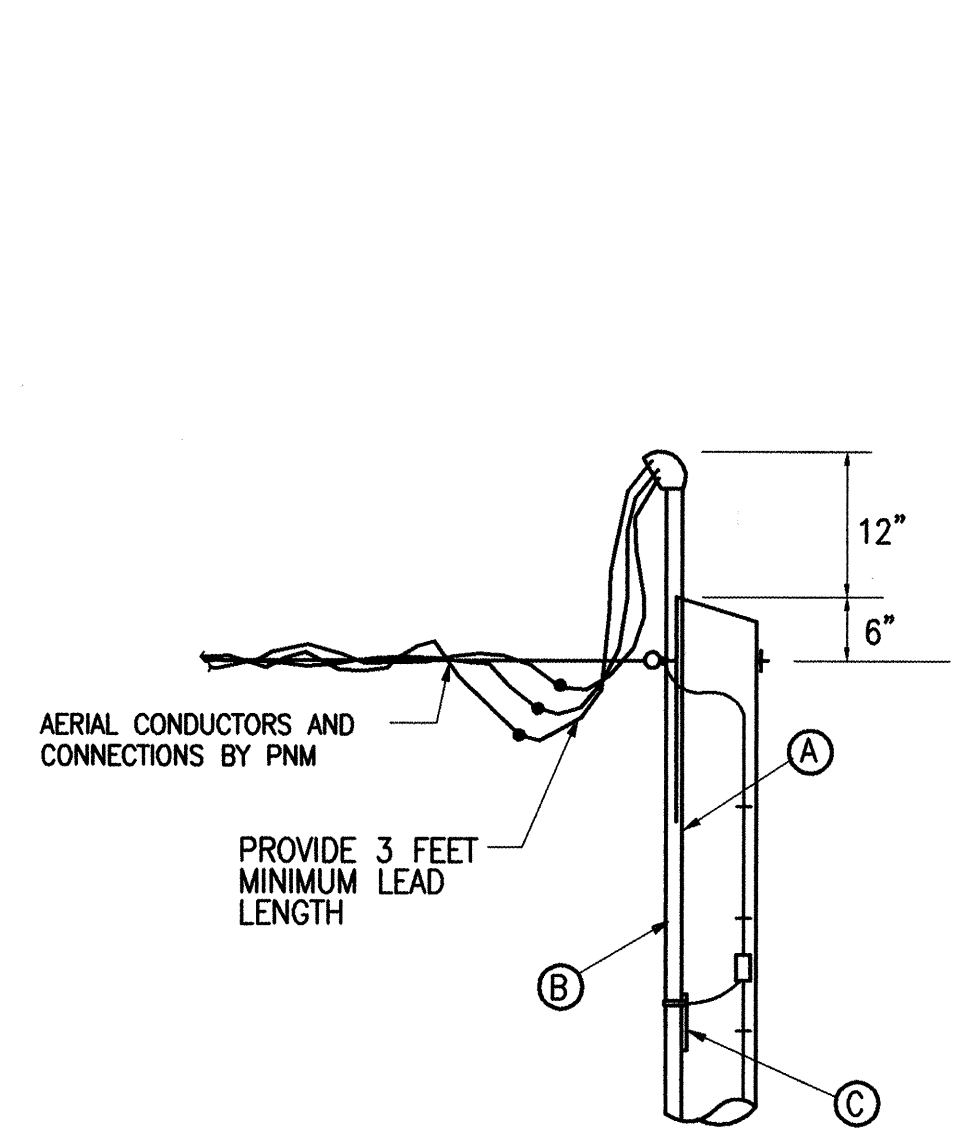
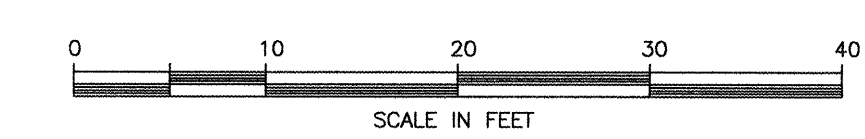
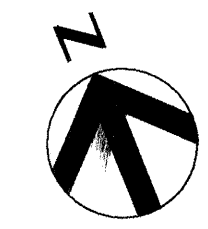
ELECTRICAL SITE PLAN
SCALE: 1"=10'

- PLAN NOTES:
- ① PROPOSED LOCATION OF SERVICE RISER POLE. SEE DETAIL THIS SHEET.
 - ② LOCATION OF METERING EQUIPMENT.



Addendum #02 Note: Contractor to pay line extension fees including all construction costs.

Addendum #03 Note: Contractor to set up electrical service account with PNM, for transfer to City of Albuquerque after project completion. Contractor to pay for all fees for account set-up and transfer. Bernalillo County will pay line extension fees including all construction costs paid directly to PNM.



SERVICE RISER POLE DETAIL
NOT TO SCALE

MATERIAL LIST	
ITEM	DESCRIPTION
A	CLAMP TYPE WH
B	GALVANIZED CONDUIT
C	UNIVERSAL SUPPORT BRACKET
D	PIPE STRAP KIT
E	PVC COATED RIGID METAL ELBOW
F	5/8" X MACHINE BOLT
G	5/8" LOCK NUT
H	2-1/4" SQ. WASHER
J	COUPLING
K	STEEL TO PLASTIC ADAPTOR
L	#10-#2 GROUND LUG
M	3/4" X 10' COPPERCLAD GROUND ROD
N	WOOD POLE, 35' CLASS 5

- NOTES:
- WEATHERHEAD SHALL BE 3" ABOVE NEUTRAL.
 - RISER BRACKET ASSEMBLY MUST HAVE PROVISIONS FOR GROUNDING.
 - CONTACT PNM CUSTOMER SERVICE FOR POLE QUADRANT.
 - ALL ABOVE-GRADE CONDUIT SHALL BE RIGID GALVANIZED OR IMC.
 - CONTRACTOR PROVIDES AND INSTALLS: POLES, CONDUIT, BRACKET, WEATHERHEAD, CONDUCTORS, METER BASE(S), METERING INSTRUMENT TRANSFORMER ENCLOSURE AND ALL MINOR FITTINGS.

REFERENCES TO PNM STANDARDS
(1) SEE DS-4-95 UNDERGROUND COMMERCIAL CUSTOMER OWNED SERVICE.
SEE DS-18-13.0 UNIVERSAL SUPPORT BRACKET.
SEE DS-18-20.1 GROUND ASSEMBLY.


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PUBLIC WORKS DIVISION

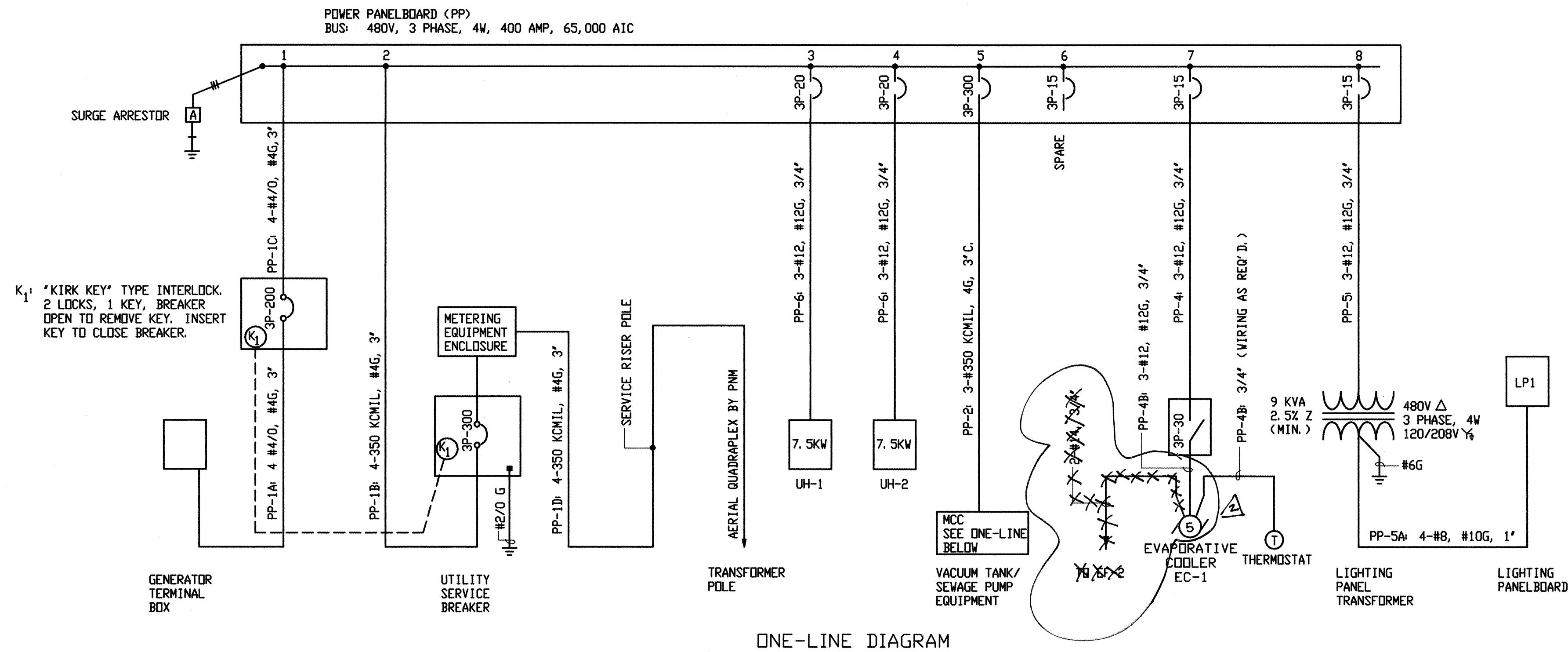
TITLE: AREA D VACUUM STATION
ELECTRICAL SITE LAYOUT

Design Review Committee	City Engineer Approval	Ms. B. J. / J. /	Ms. B. J. / J. /
MAR 19 2003	MAR 19 2003		
DESIGN REVIEW COMMITTEE	CITY ENGINEER		

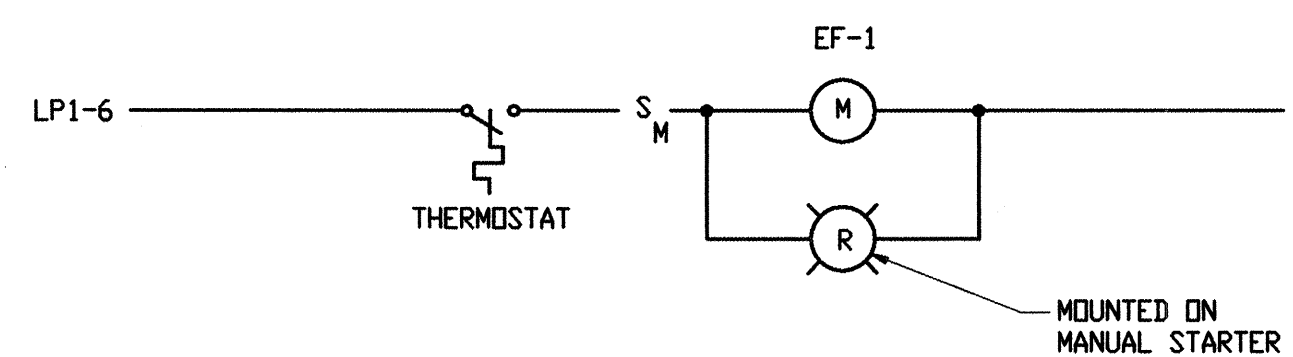
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WCEA # X0-210-024	B-15	E-02	23	

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						FIELD NOTES				CONTRACTOR A.S. Horner DATE 12/03	
						NO.		BY DATE		WORKMAN ASCEI DATE 12/03	
										INSPECTOR'S FIELD NO. 12/03	
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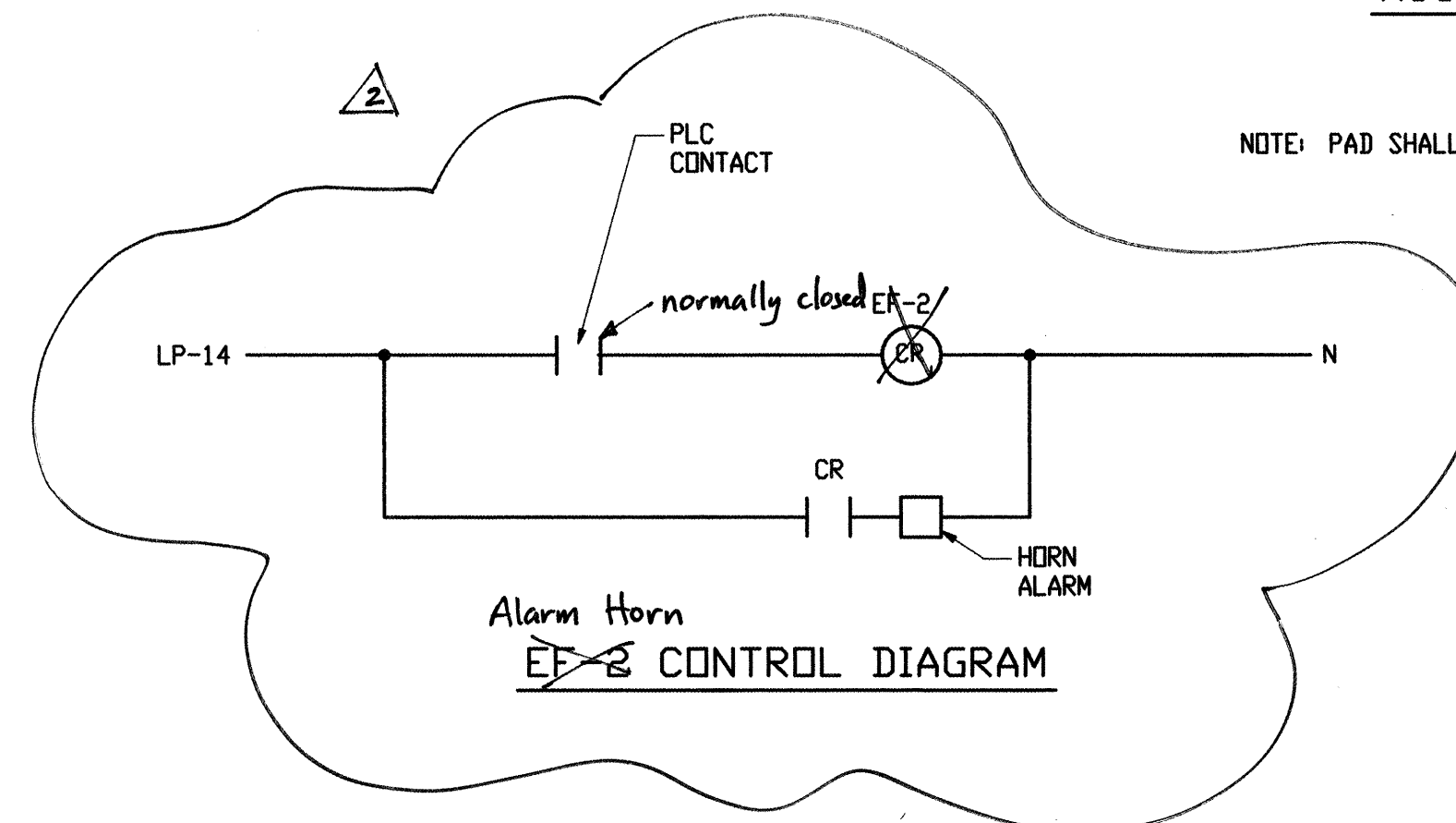
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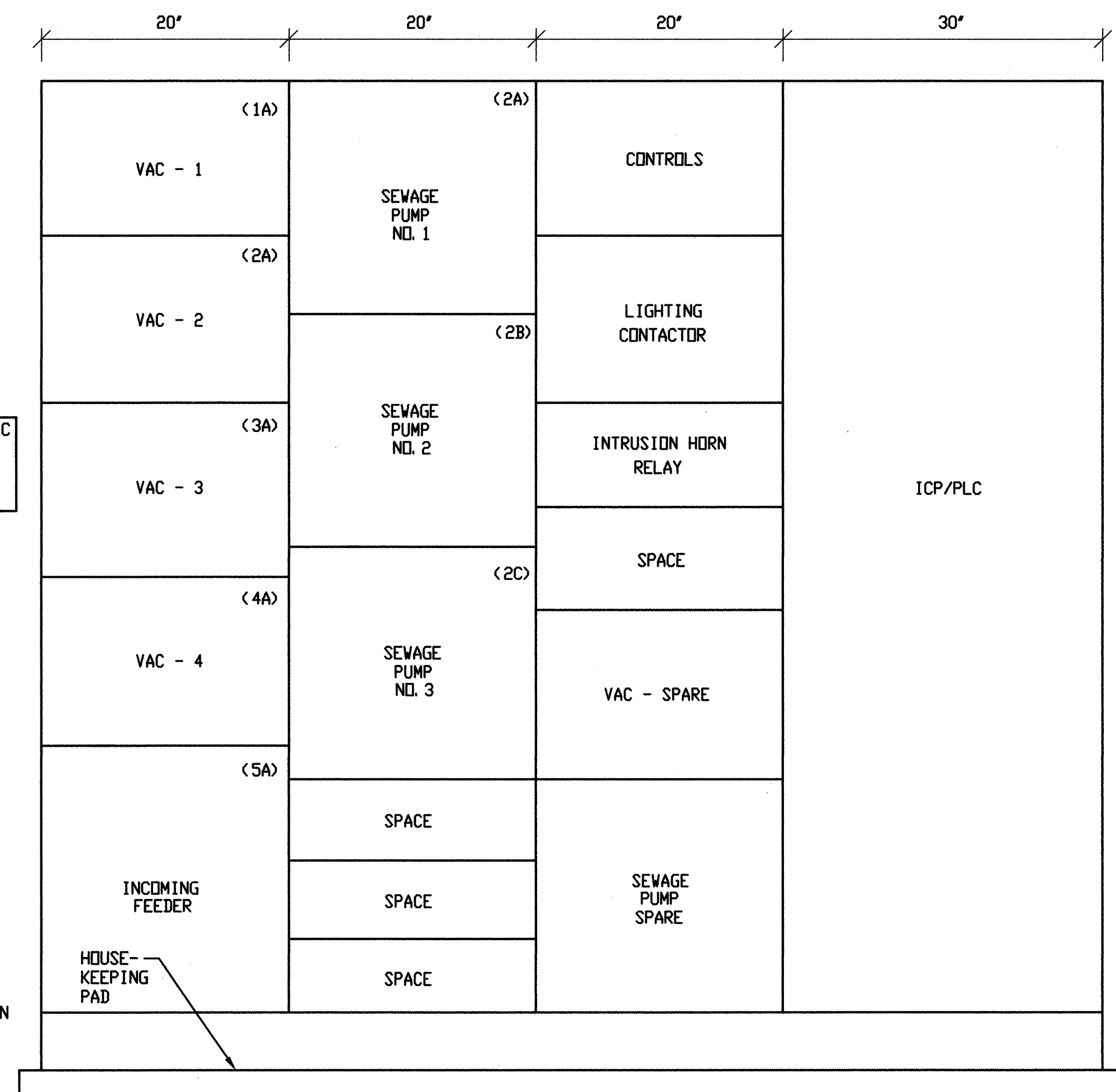
NOTE: SEE AIRVAC DRAWING FOR DETAILED WIRING.
MISCELLANEOUS ONE-LINE DIAGRAMS



EF-1 CONTROL DIAGRAM



PANEL DESIGNATION: LP1				LOCATION: VACUUM PUMP ROOM			
VOLTAGE: 120/208V, 3PH, 4W				MAIN: 30/3 MCB			
AMPERES: 100, 10,000 AIC				PANEL MOUNTING: WALL			
LOAD SERVED	CONNECTED LOAD (KVA)			CIRCUIT BREAKER	CTK NO.	CONNECTED LOAD (KVA)	LOAD SERVED
	A	B	C				
PUMP STATION LIGHTS	.60			20	1		SPARE
INDOOR RECEPTACLES	1.08			20*	1		OUTSIDE LIGHTS
OUTDOOR RECEPTACLES		.36		20*	1		SPARE
MCC ROOM LIGHTS	.14			20	1		SPARE
IRRIGATION CONTROLLER	0.2			20	1		SPARE
RTU				20	1		EF-1
A/C UNIT				20	1		INTRUSION HORN
SPARE				20	1		SPARE
SPARE				20	1		SPARE
SUB-TOTAL						0.53	SUB-TOTAL
L1: .74 KVA= 6.2 AMPS				TOTAL CONNECTED LOAD= 3.41 KVA:			
L2: 1.78 KVA= 14.8 AMPS							
L3: .89 KVA= 7.4 AMPS							



MCC (BY AIRVAC) - ELEVATION
NOT TO SCALE

NOTE: PAD SHALL EXTEND 2' BEYOND EDGE OF EQUIPMENT

WILSON & COMPANY

BERNALILLO COUNTY
PUBLIC WORKS DIVISION

TITLE: AREA D VACUUM STATION
ONE LINE DIAGRAMS

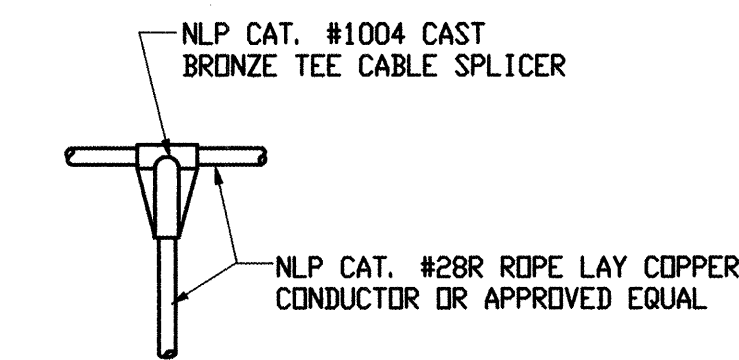
Design/Review/Committee	City/Engineer/Approval	DATE	DATE
MAR 19 2003	MAR 19 2003		
PROJECT COA # 695981	MAP NO. B-15	DWG. E-04	SHEET 25
NO. WCEA # X0-210-024			

AS BUILT INFORMATION			
CONTRACTOR	A.S. Hermer	DATE	03/03
WORK	ASCI	DATE	03/03
DESIGNED BY	Wilson & Co.	DATE	03/03
ACCEPTANCE BY	Wilson & Co.	DATE	03/03
VERIFICATION BY	Wilson & Co.	DATE	03/03
DRAWINGS	Wilson & Co.	DATE	03/03
CORRECTED BY	Wilson & Co.	DATE	03/03
MICRO-FILM INFORMATION			
RECORDED BY		DATE	
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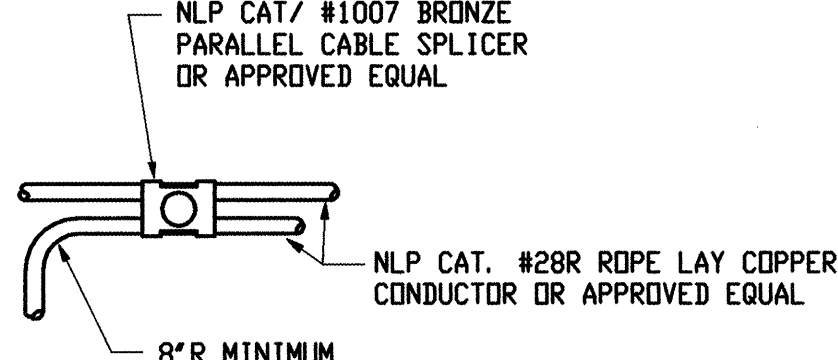
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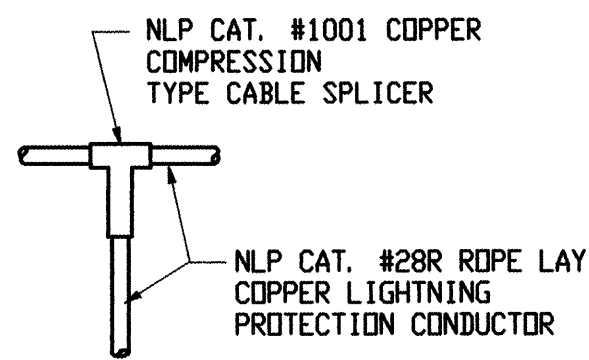
REVISIONS		REMARKS	
NO.	DATE	BY	DATE
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DESIGNED BY	SRB/JNH	DATE	DEC 2002
DRAWN BY	SRB	DATE	DEC 2002
CHECKED BY	JNH	DATE	DEC 2002



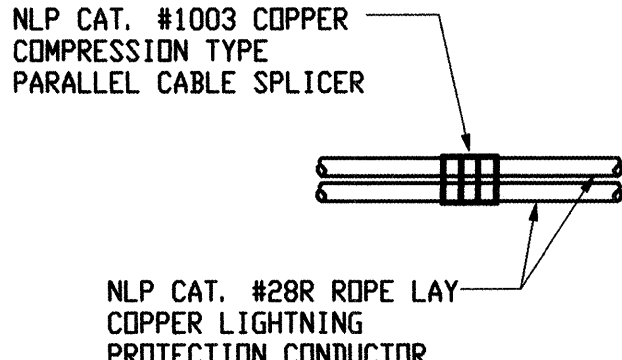
TYPICAL TEE CABLE SPLICE
NOT TO SCALE



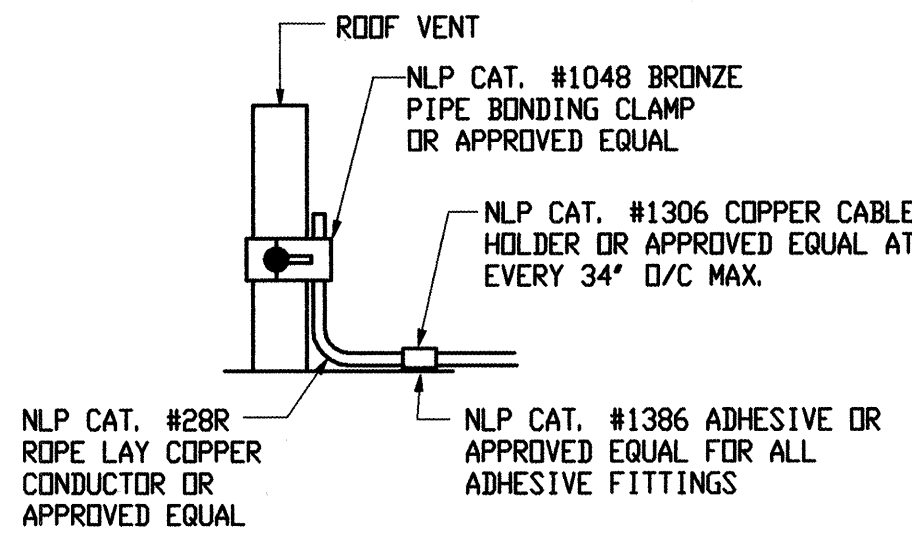
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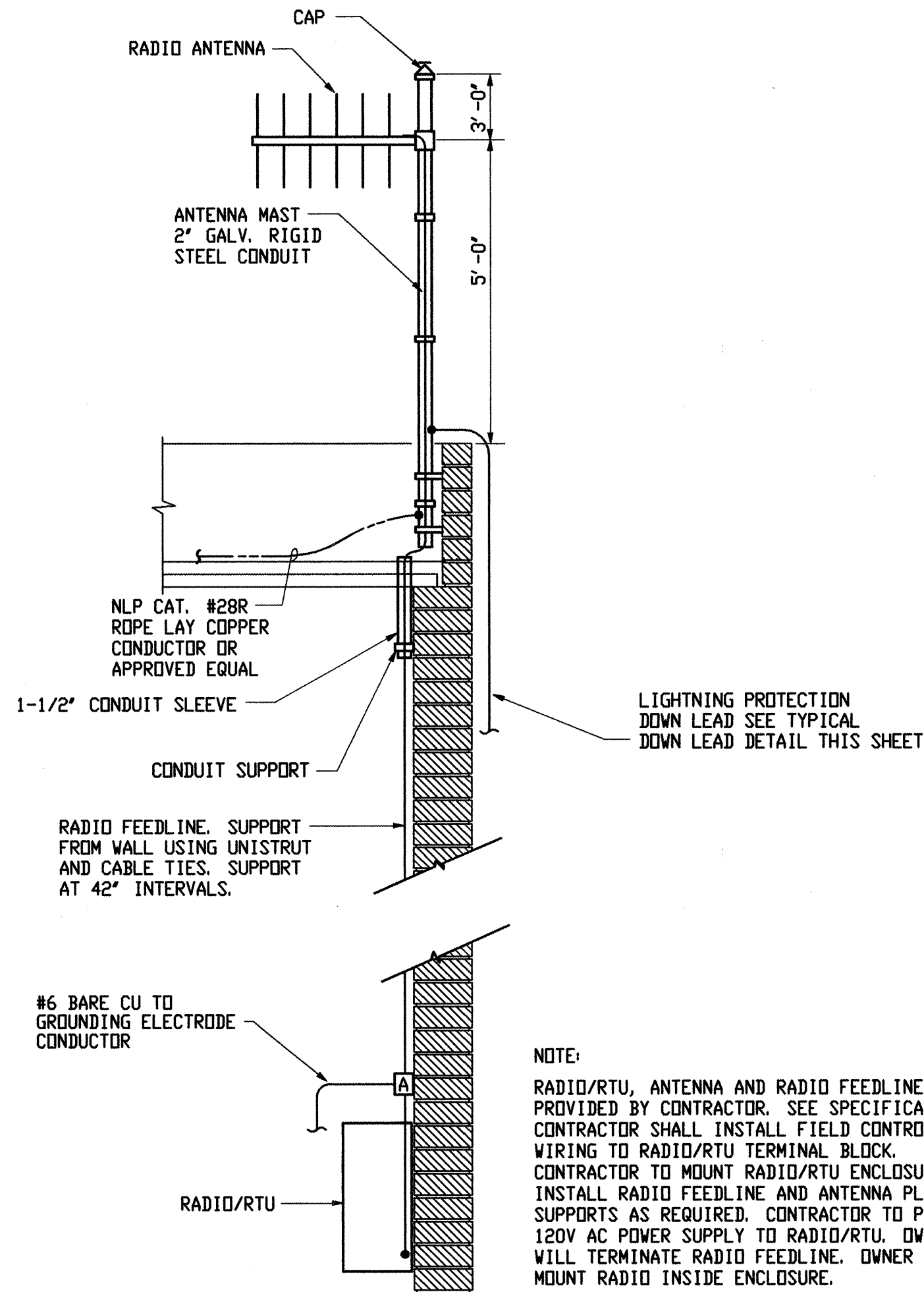
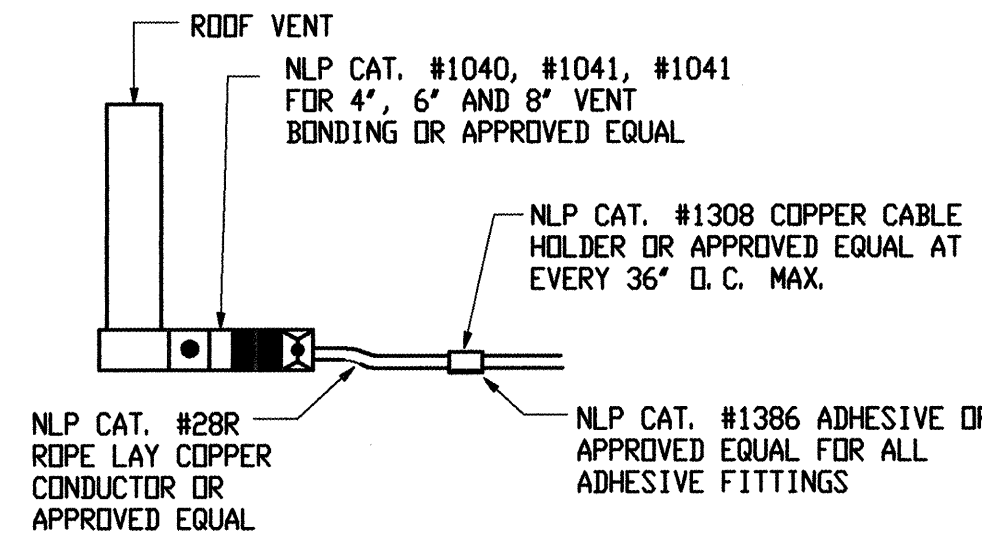
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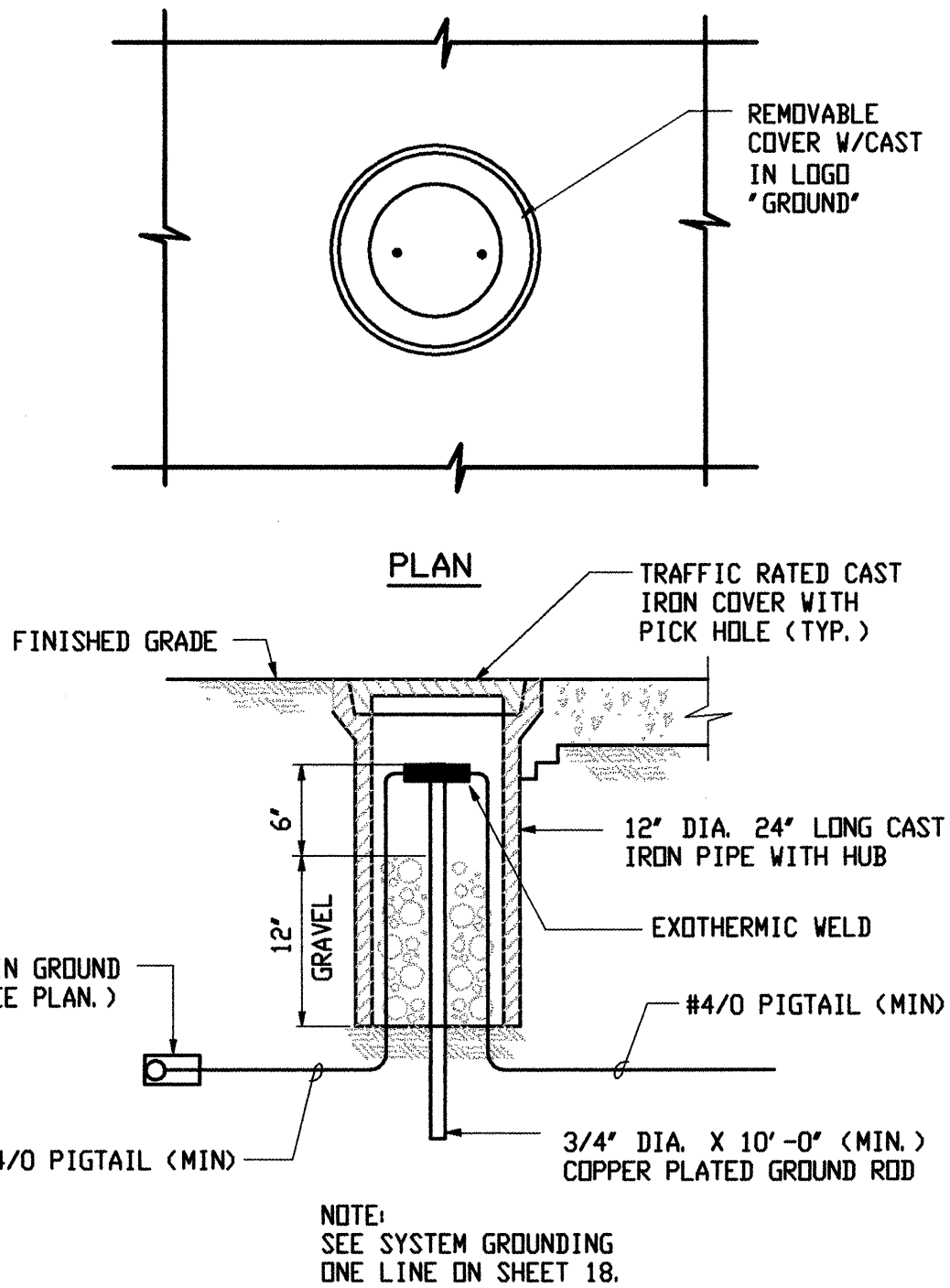
TYPICAL PARALLEL CABLE SPLICE DETAIL
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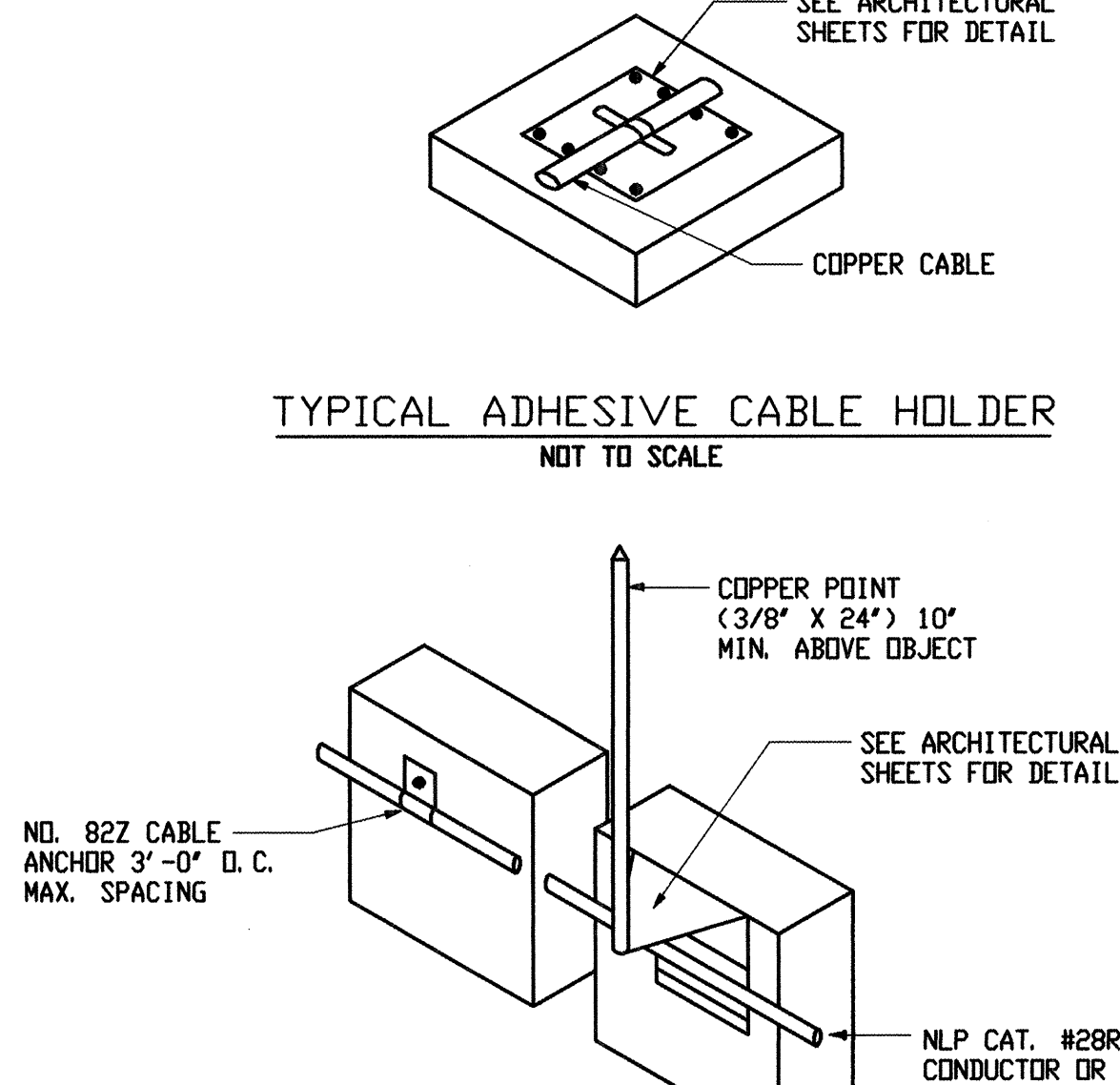
TYPICAL ROOF VENT BONDING DETAIL
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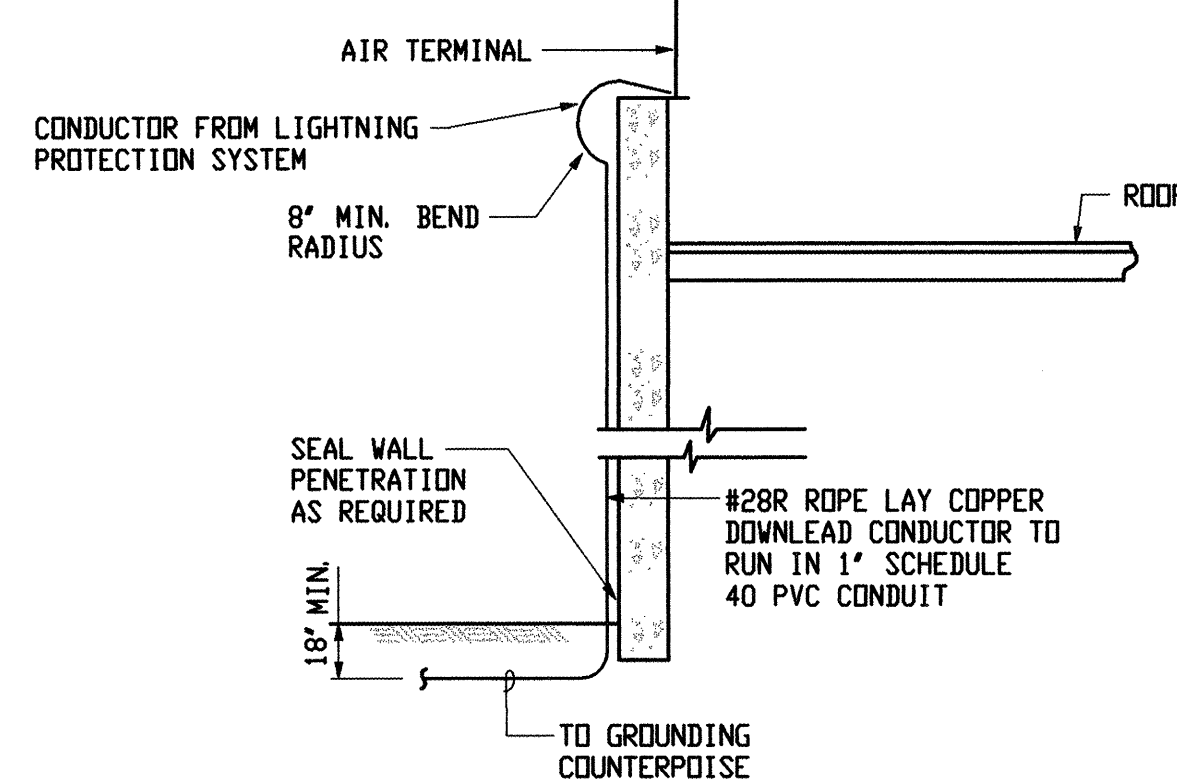
ANTENNA MOUNTING DETAIL
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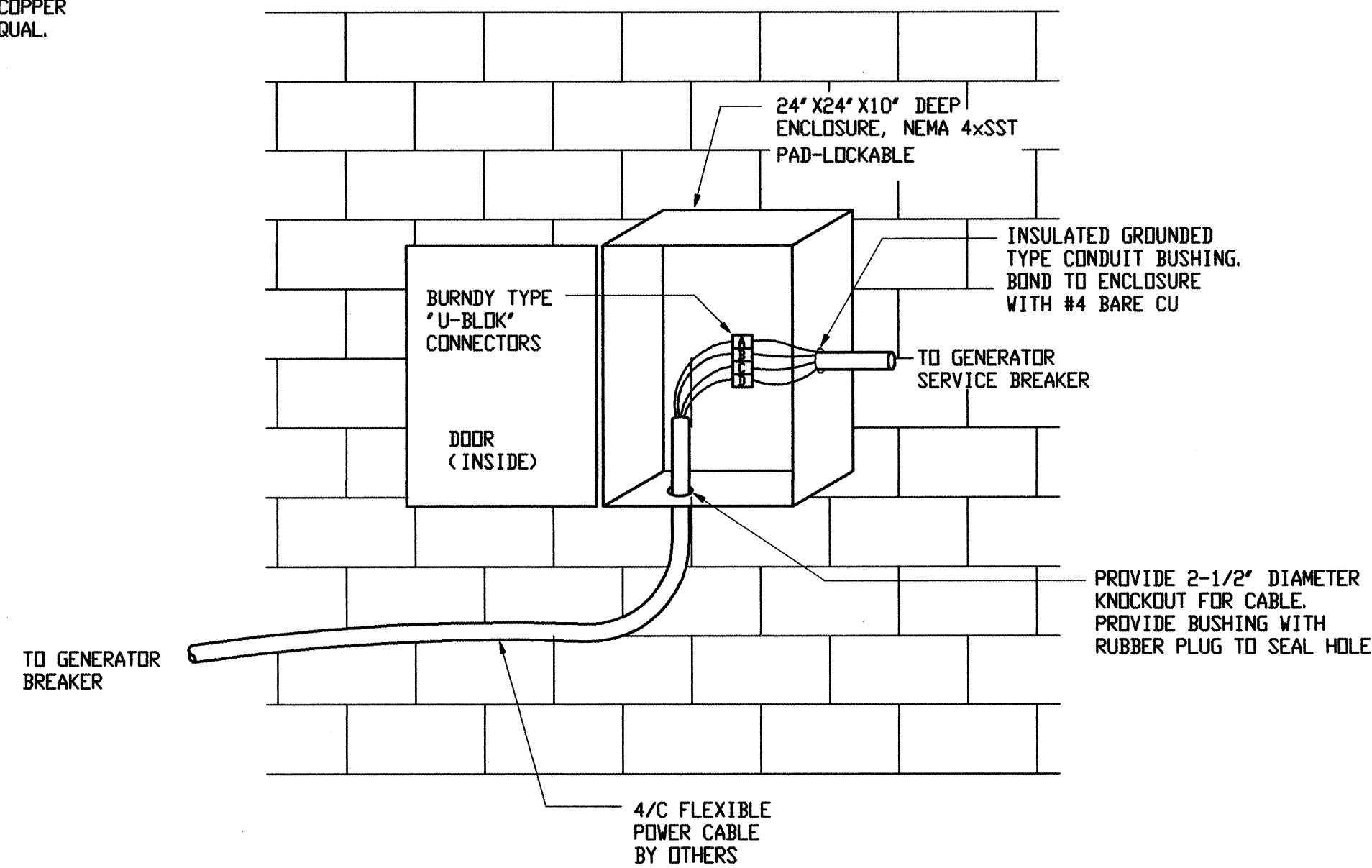
ELECTRICAL GROUND WELL DETAIL
NOT TO SCALE
(PROVIDE AT EACH GROUND ROD LOCATION)



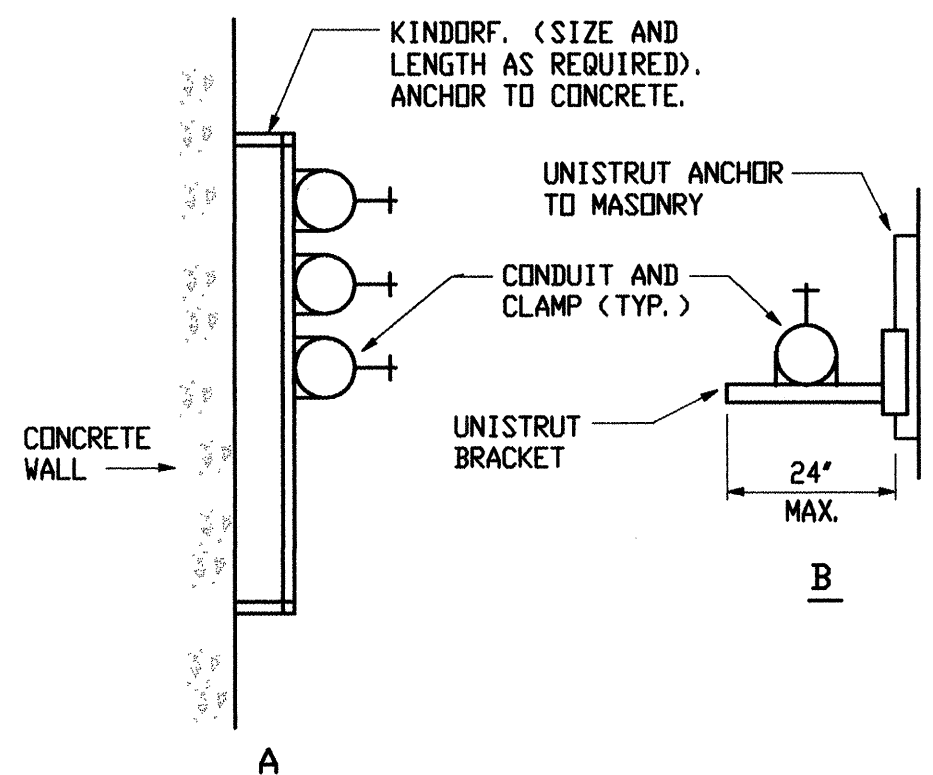
TYPICAL OFFSET AIR TERMINAL
NOT TO SCALE



TYPICAL DOWNLEAD DETAIL
NOT TO SCALE



GENERATOR TERMINAL BOX CONNECTION DETAIL
NOT TO SCALE



CONDUIT SUPPORT FROM WALL
NOT TO SCALE

- GENERAL NOTES ON LIGHTNING PROTECTION
1. DEVICE AND COMPONENT NUMBERS CALLED OUT ARE SPECIFIC TO NATIONAL LIGHTNING PROTECTION CORPORATION, UNLESS OTHERWISE NOTED.
 2. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
 3. CONDUCTOR BEND SHALL NOT FORM A SHARPER ANGLE THAN 90 DEGREES OR HAVE A RADIUS LESS THAN 8 INCHES.
 4. METAL BODIES OF INDUCTANCE LOCATED WITHIN 6' OF MAIN LIGHTNING CONDUCTORS SHALL BE BONDED TO THE LIGHTNING PROTECTION SYSTEMS.
 5. CONNECTIONS TO GROUND AND COUNTERPOISE SHALL BE MADE AT A POINT NOT LESS THAN 2'-0" BELOW GRADE, AND 3'-0" AWAY FROM FOUNDATION WALL.
 6. JOB CONDITIONS MAY DICTATE SLIGHT VARIATIONS IN AIR TERMINAL AND GROUND LOOP LOCATIONS.
 7. CONDUCTORS SHALL MAINTAIN A HORIZONTAL OR DOWNWARD PATH FREE FROM 'U' AND 'V' POCKETS. ANY RISE IN HORIZONTAL CONDUCTOR SHALL NOT EXCEED 6 INCHES.
 8. AIR TERMINAL SHALL BE PLACED AT THE LOCATIONS INDICATED. NOT MORE THAN 2'-0" FROM THE ENDS OF RIDGES, OUTSIDE CORNERS OR OUTSIDE EDGES OF MAIN ROOFS AND MUST EXTEND A MINIMUM OF 10" ABOVE THE OBJECT TO BE PROTECTED.
 9. COPPER LIGHTNING PROTECTION MATERIALS SHALL NOT BE PLACED ON ALUMINUM SURFACES, NOR SHALL ALUMINUM MATERIALS BE PLACED ON COPPER SURFACES.
 10. ALL STRUCTURAL STEEL SHALL BE MADE ELECTRICALLY CONTINUOUS THROUGH CONSTRUCTION.
 11. ELECTRIC AND ANTENNA SYSTEM GROUNDS SHALL BE CONNECTED WITH #4/0 COPPER CONDUCTOR TO ONE LIGHTNING PROTECTION GROUND.
 12. A LIGHTNING ARRESTOR, PROTECTOR OR ANTENNA-DISCHARGE UNIT MUST BE INSTALLED ON EACH ELECTRIC SERVICE ENTRANCE AND RADIO ANTENNA LEAD IN.
 13. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MAKING ALL REBAR ELECTRICALLY CONTINUOUS.
 14. ALL ADHESIVE FIXTURES SHALL BE SET WITH AN ADHESIVE COMPOUND COMPATIBLE WITH THE ROOFING MATERIAL. ADHESIVES SHALL BE APPROVED IN ADVANCE BY THE ROOFING CONTRACTOR.
 15. SEAL THE ENDS OF CONDUIT MOISTURE TIGHT WITH DUCT SEAL, SILICONE OR LEAD WEDGES.
 16. ALL EXOTHERMIC WELDS MUST BE INSPECTED BY THE OWNER'S REPRESENTATIVE OR THE INSPECTOR AND THE ENGINEER.
 17. SEE ARCHITECTURAL FOR ROOF PENETRATIONS AND PARAPET MOUNTING DETAILS.

LIGHTING FIXTURE SCHEDULE						
SYMBOL	LAMP	MOUNTING/ HEIGHT	DESCRIPTION	MANUF./MODEL NO.	MANUF./MODEL NO.	STYLE
	F32TB-CW	PENDANT/ 10'-0" AFF	2-LAMP, 120V, HEAVY DUTY INDUSTRIAL FLUORESCENT, 10W UPLIGHT, RAPID START, ENERGY SAVING ELECTRONIC BALLAST.	METALUX/DIMM-232-120V-EB81-POR-CEP	LITHONIA/ AF10-232-PO-120-GE8	
	70W CLEAR HPS	WALL/ AS NOTED	120V, SHOEBOX TYPE SHARP CUTOFF LUMINAIRE; DARK BRONZE POLYESTER POWDER COAT, SPECULAR ALUMINUM REFLECTOR; ONE-PIECE DIE-CAST ALUMINUM DOOR WITH CLEAR FLAT TEMPERED GLASS LENS.	LUMARK/ HPHR-AC-70-120V-PER-VS/HR	KIM/ WD140/ 70HPS/DB/P/A/30/SF	
	100W CLEAR HPS	12FT POLE/ ALUMINUM SQUARE, NON-TAPERED (SEE NOTE 1)	120V, SHOEBOX TYPE SHARP CUTOFF LUMINAIRE; DARK BRONZE POLYESTER POWDER COAT, SPECULAR ALUMINUM REFLECTOR; ONE-PIECE DIE-CAST ALUMINUM DOOR WITH CLEAR FLAT TEMPERED GLASS LENS.	LUMARK/ HPHR-AC-100-120V-PER-VS/HR	KIM/ EXG401/ 100HPS/120/DB-A/A-25	
	8 WATT HALOGEN	WALL 8'-0" AFF	MAINTENANCE FREE LEAD CALCIUM BATTERY EMERGENCY LIGHT COMPLYING WITH NEMA 4K AND NEMA 12 RATINGS. 12 V OUTPUT; 120 VAC INPUT POWER SUPPLY.	EXIDE/LIGHTGUARD LTC125XW2ACF1		

- NOTES FOR LIGHTING FIXTURES
1. PROVIDE BREAKOVER POLE, KW INDUSTRIES THSP-30-6.25-11-P-DM-BC. ARROW INDICATES DIRECTION THE POLE SHALL BREAK FOR LOWERING.
 2. LIGHTING FIXTURE DENOTED BY "PE" SHALL BE OPERATED BY A PHOTO-CELL.

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		BY		DATE		DATE		DATE	
CONTRACTOR	A.S. Horner	DATE	6/03	NO.				NO.		DATE		DATE		DATE		DATE	
WORK	ASCI	DATE	6/03	BY				REMARKS		DESIGNED BY	SRB/JNH	DATE	DEC 2002	DRAWN BY	SRB	DATE	DEC 2002
INSPECTOR'S		DATE	6/03	NO.				DESIGN		CHECKED BY	JNH	DATE	DEC 2002				
ACCEPTANCE BY	Wilson & Co.	DATE	6/03														
VERIFICATION BY	Wilson & Co.	DATE	6/03														
DRAWINGS	Wilson & Co.	DATE	5/06														
CORRECTED BY	Wilson & Co.	DATE	5/06														
MICRO-FILM INFORMATION		DATE															
RECORDED BY		DATE															
NO.																	

BERNALILLO COUNTY
PUBLIC WORKS DIVISION

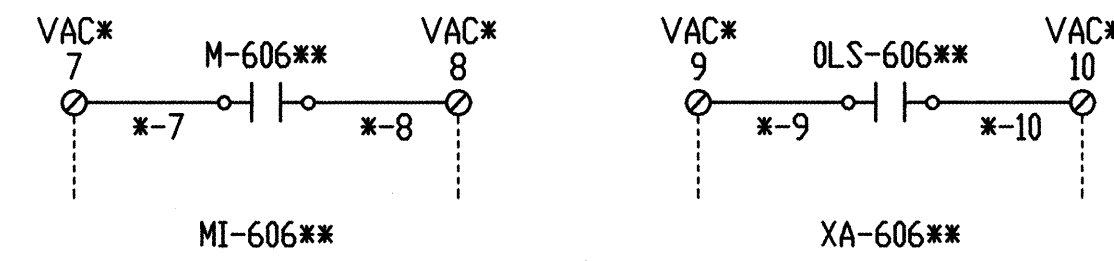
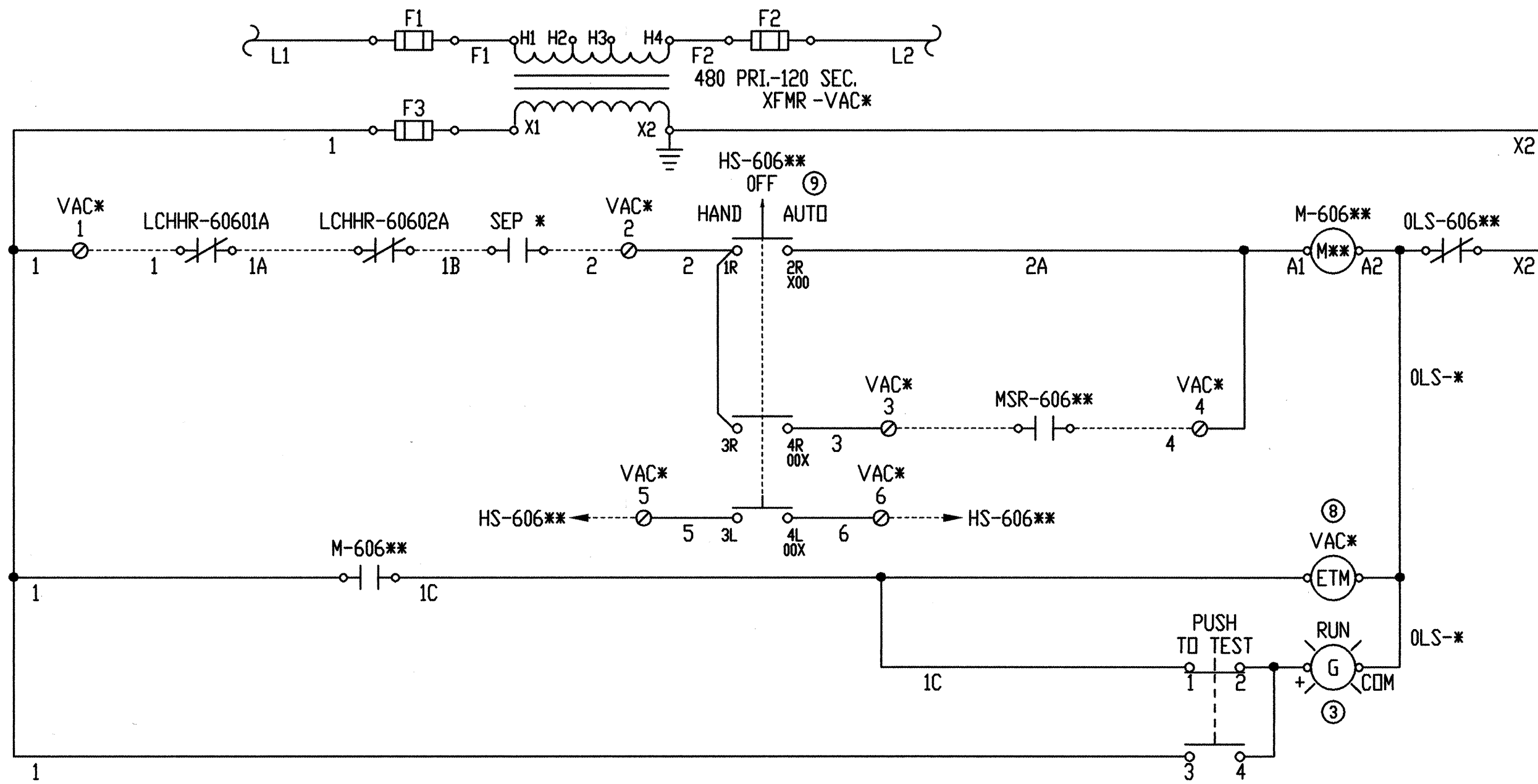
TITLE: AREA D VACUUM STATION
DETAILS

Design/Review/Committee City Engineer Approval

MAR 19 2003 MAR 19 2003

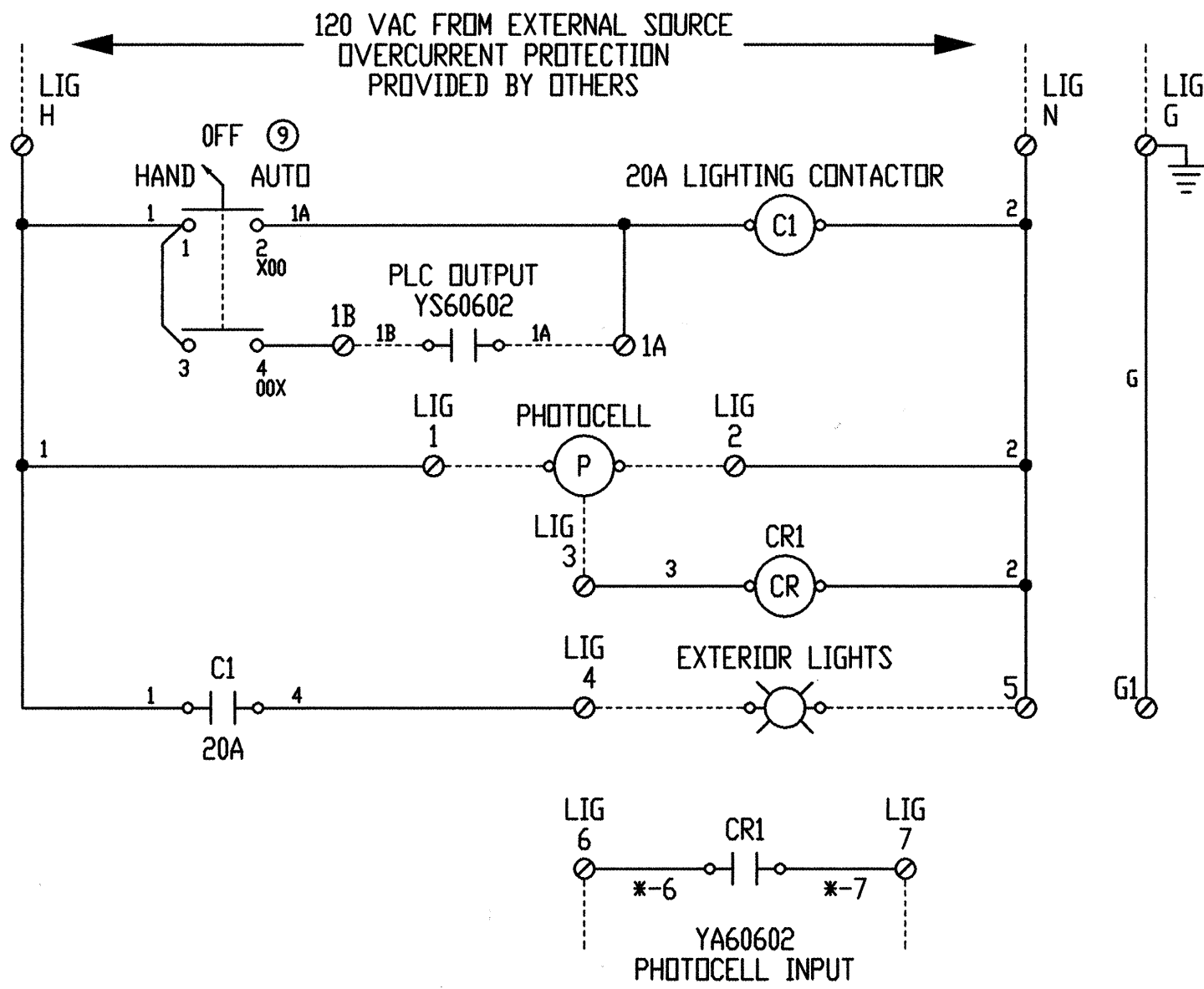
PROJECT COA # 695981 MAP NO. B-15

NO. WCEA # X0-210-024 DWG. E-05 SHEET 26

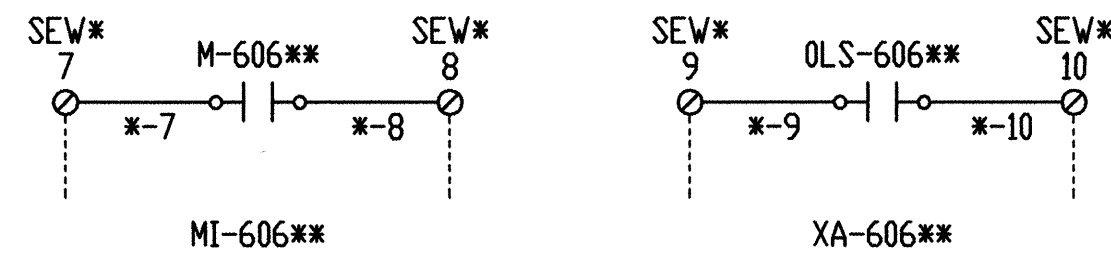
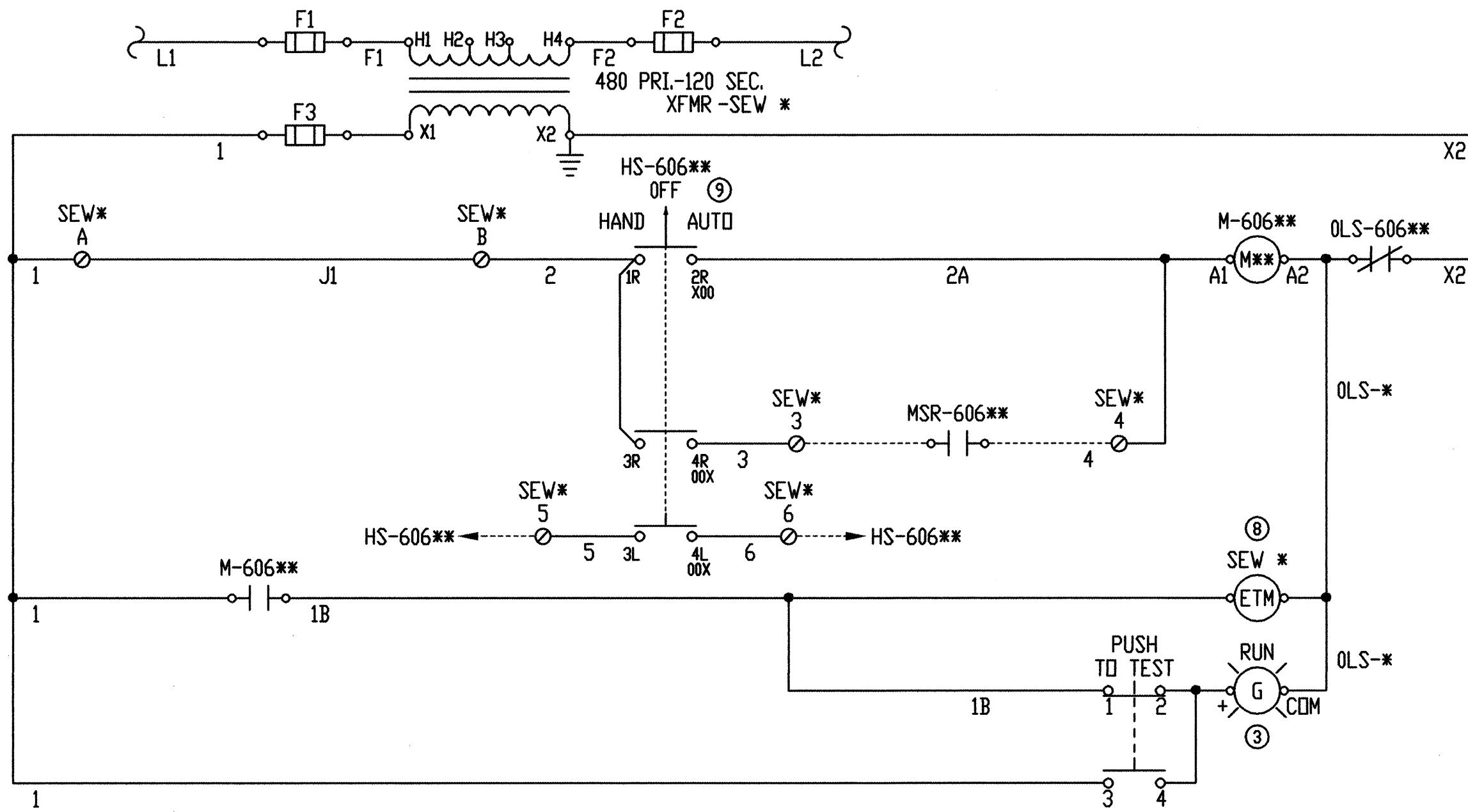


TYPICAL VACUUM PUMP SCHEMATIC

REPLACE * WITH APPROPRIATE VACUUM PUMP NUMBER (IE: VAC 1)
REPLACE ** WITH APPROPRIATE PUMP TAG NUMBER (IE: 60611 FOR VAC 1)
TAG NUMBER WILL PRECEDE WIRE NUMBER (IE: 60611-1 WILL BE WIRE #1 OF VAC 1)



EXTERIOR LIGHTING CONTROLS



TYPICAL SEWAGE PUMP SCHEMATIC

REPLACE * WITH APPROPRIATE SEWAGE PUMP NUMBER (IE: SEW 1)
REPLACE ** WITH APPROPRIATE SEWAGE PUMP TAG NUMBER (IE: 60621 FOR SEW 1)
TAG NUMBER WILL PRECEDE WIRE NUMBER (IE: 60621-1 WILL BE WIRE #1 OF SEW 1)

LEGEND

- TERMINAL BLOCK IN MOTOR STARTER CUBICLES
- TERMINAL BLOCK IN DIGITAL INPUT STRIP OF PC
- TERMINAL BLOCK IN DIGITAL OUTPUT STRIP OF PC
- ⊗ TERMINAL BLOCK IN ANALOG INPUT STRIP OF PC
- TERMINAL BLOCK IN AC STRIP OF PC

**WILSON
& COMPANY**

BERNALILLO COUNTY
PUBLIC WORKS DIVISION

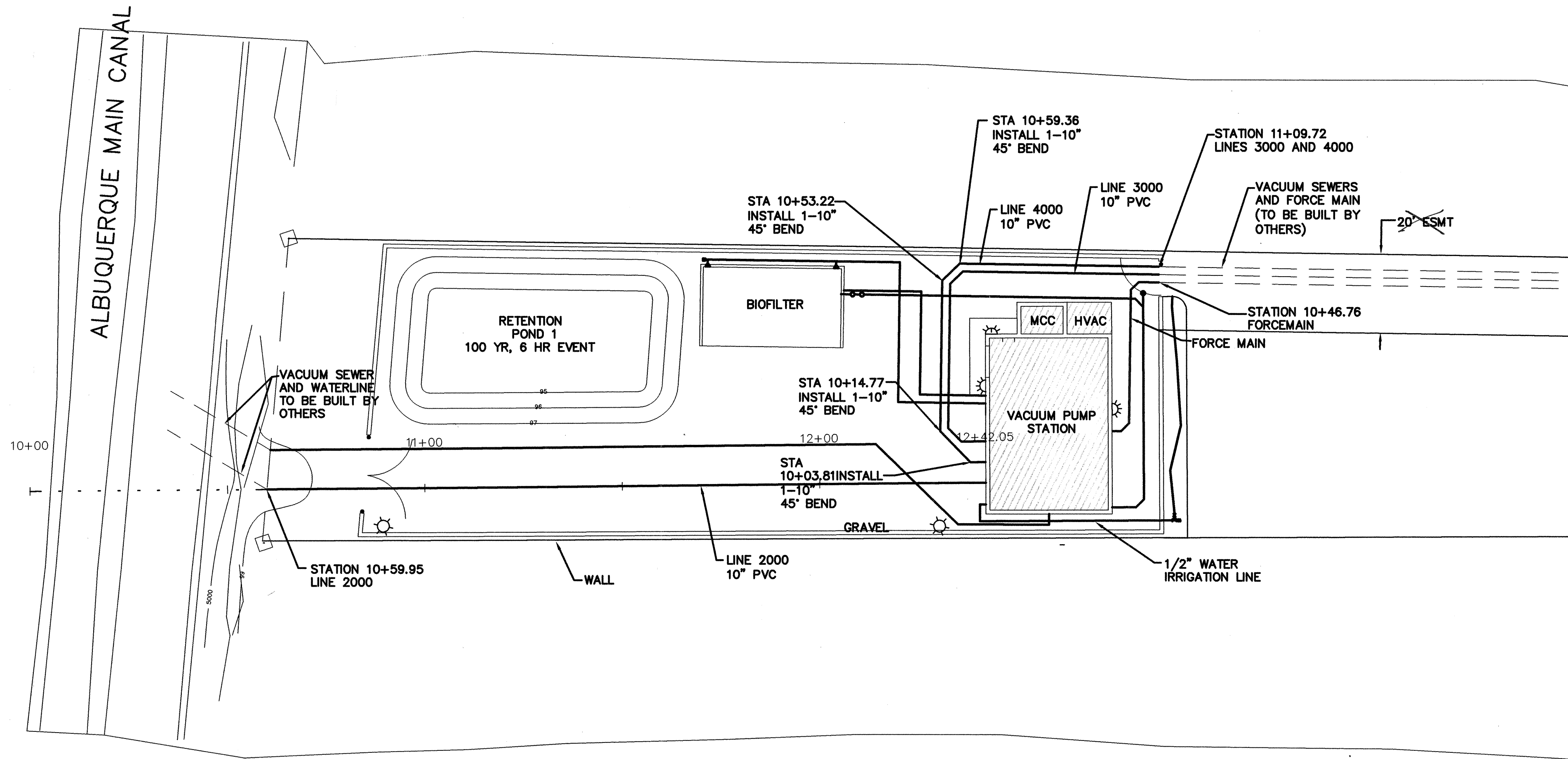
TITLE: AREA D VACUUM PUMP STATION
CONTROL DIAGRAMS

Design Review Committee	City Engineer Approval	City Engineer	City Engineer	City Engineer
MAR 19 2003	MAR 19 2003	MAR 19 2003	MAR 19 2003	MAR 19 2003
DESIGN REVIEW COMMITTEE	CITY ENGINEER	CITY ENGINEER	CITY ENGINEER	CITY ENGINEER
PROJECT COA # 695981	MAP NO. B-15	DWG. E-06	SHEET 27	
NO. WCEA # X0-210-024				

SURVEY INFORMATION			BENCH MARKS		AS BUILT INFORMATION	
NO.	DATE	BY	DATE	WORK	CONTRACTOR	DATE
				USGS TRIANGULATION STATION DISK STAMPED "PITS 1969"	INSPECTED BY: A.S.C.T.	DATE 6/03
				1-MILE WEST OF L-25 AND 124-NORTH OF TRINITY	ACCEPTANCE BY: W/15:04 + Co.	DATE 6/03
				GEODATUM POS (NAD 27) 35-12-27.9929 N, 108-35-34.8322 W	PERFORMED BY: W/15:04 + Co.	DATE 6/03
				NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE)	DRAWINGS	DATE 6/03
				X= 397535.821, Y= 1531042.582	DATE 6/03	DATE 6/03
				ELEVATION = 6081.92 NOV29 IN FEET	DATE 6/03	DATE 6/03
				INTERM NAD 1983 IN FEET (X=1537781.573, Y=1531055.573)	DATE 6/03	DATE 6/03
				TRANSFORMED TO NAD27 BY CORPSON 15.1108	DATE 6/03	DATE 6/03
				ELEVATION = 5084.860 INTERM NAD 88 IN FEET	DATE 6/03	DATE 6/03

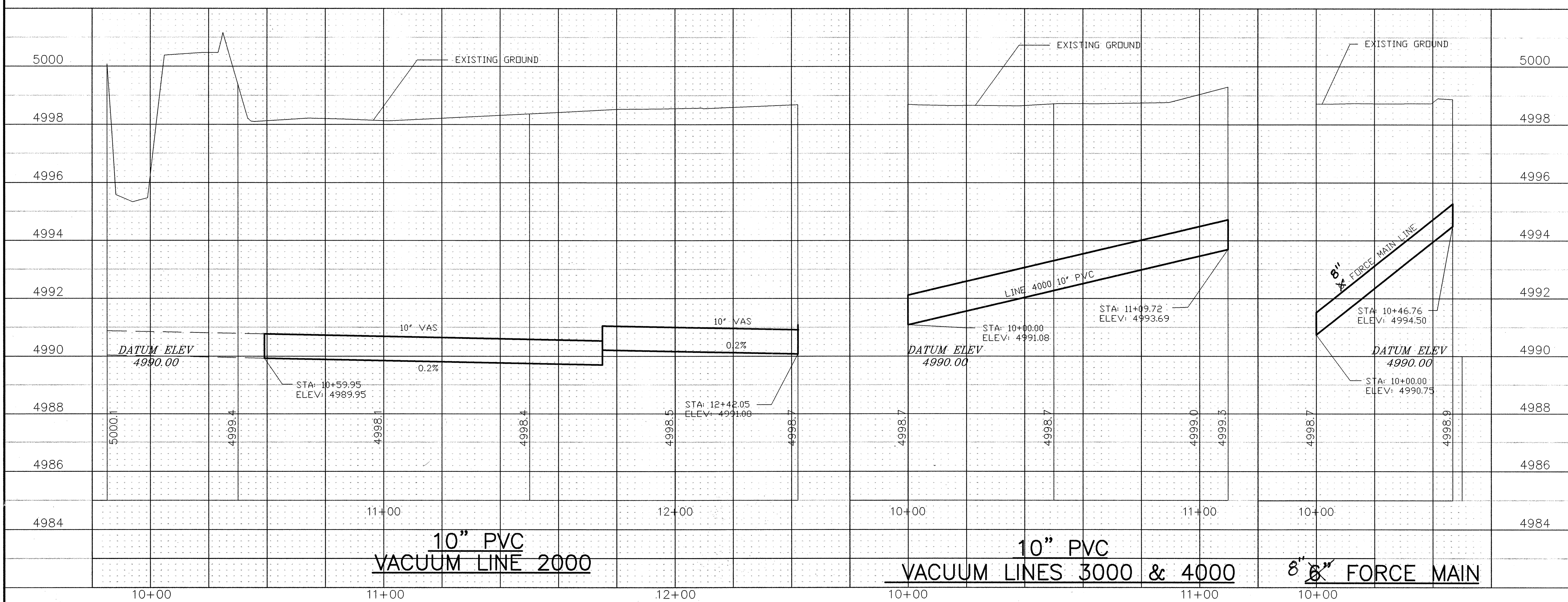


NO.	DATE	REVISIONS	BY
		DESIGN	
		DESIGNED BY SRB/JNH	DATE DEC 2002
		DRAWN BY SRB	DATE DEC 2002
		CHECKED BY JNH	DATE DEC 2002



PLAN
SCALE: 1"=50'

PROFILE
SCALE: 1"=20'
1"=5'



WILSON & COMPANY

BERNALILLO COUNTY PUBLIC WORKS DIVISION	
TITLE: AREA D VACUUM PUMP STATION VACUUM LINES & FM PROFILES	
Design Review Committee MAR 19 2003	City Engineer Approval MAR 19 2003
PROJECT COA # 695981 NO. WCEA # X0-210-024	MAP NO. B-15
DWG. V-01	SHEET 28

ENGINEER'S SEAL		SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
NO. DATE		FIELD NOTES		USGS TRIANGULATION STATION 4 DISK STAMPED "PITS 1969"		CONTRACTOR A.S. Horner	
BY		NO. BY DATE		1-MILE WEST OF J. 25 AND 124" OF TRAMWAY		STAINED BY ASCI	
REMARKS				GEOGRAPHIC POS (NAD 27): 35°-12'-27.89294 N, 106°-35'-34.83922 W		INSPECTOR'S DATE 11/03	
REVISIONS				NEW MEXICO STATE PLANE COORDINATES (CENTRAL ZONE)		FIELD DANCE BY Wilson & Co. DATE 11/03	
DESIGN				X= 397536.821, Y= 1531042.562		DESCRIPTION BY Wilson & Co. DATE 11/03	
DESIGNED BY		RJP		ELEVATION = 5081.92 NGVD29 IN FEET		CORRECTED BY	
DRAWN BY		PAS		INTERIM NAD 1983, IN FEET (X=1537761.373, Y=1531105.573)		RECORDED BY	
CHECKED BY		MAD		"TRANSFORMED TO NAD27 BY CORPSSON V5.1.06"		NO.	
				ELEVATION = 5084.660 INTERIM NAD 86, IN FEET		DATE	