

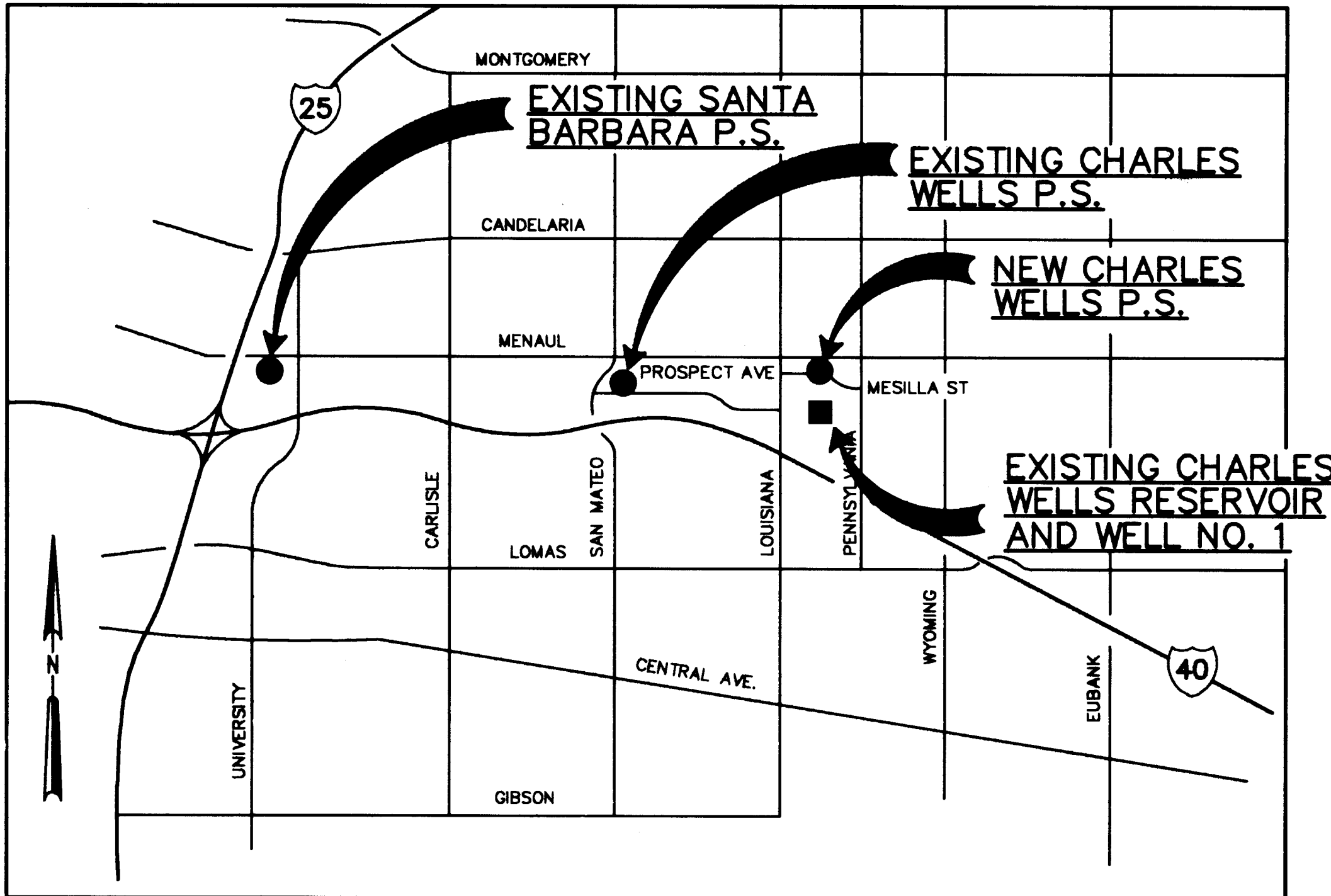
CITY OF ALBUQUERQUE

CHARLES WELLS PUMP STATION

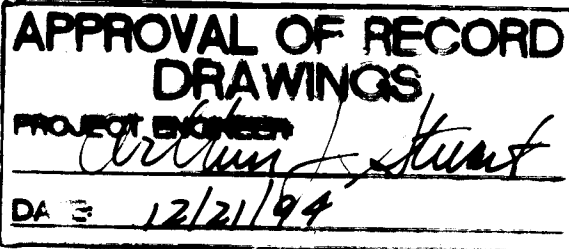


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VICINITY MAP
NTS



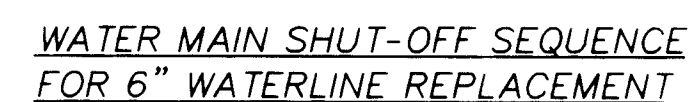
RECORD DRAWINGS

Revisions Drawn by *Michael Brown* Date *Nov. 15, 1994*

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
26 42 14 90 91 94

REV	SHEETS	CITY ENGINEER	DATE	USER DEPT	DATE	USER DEPT	DATE
APPROVAL OF REVISIONS							
						APPROVED FOR CONSTRUCTION	
				CH2M HILL 6121 Indian School Rd, NE Suite 122 Albuquerque, New Mexico 87110 (505) 884-5600		12-1-92 CE	
PROJECT NO.				4214.90		SHEET 1 OF 57	



CONSTRUCT CONCRETE THRUST COLLAR OVER
EXISTING 6" WATER MAIN AT STA. 8+90± AND
STA. 22+70±.

CLOSE EXISTING VALVES 881,871,821,772,771,672,
681,693 AND 692. (ALLOWS INSTALLATION OF THE
NEW 6" VALVES AT STA. 8+90± AND STA 22+70±)

INSTALL NEW 6" GATE VALVES AT STA. 8+90± AND STA. 22+70± AND RESTRAIN TO NEW CONCRETE THRUST COLLARS.

CLOSE NEW 6" GATE VALVES AT STA. 8+90± AND STA. 22+70±.

OPEN EXISTING VALVES 881,681,693 AND 692 AND 871.

CLOSE EXISTING VALVE 624.

CONSTRUCT NEW 6" WATER MAIN FROM STA. 5+55±
TO STA. 22+70±.

OPEN NEW 6" GATE VALVES AT STA. 8+73±, STA. 8+90±,
STA. 17+50±, STA. 18+05± AND STA. 22+70±.

OPEN EXISTING VALVES 821, 772, 771 AND 624.

NOTES:

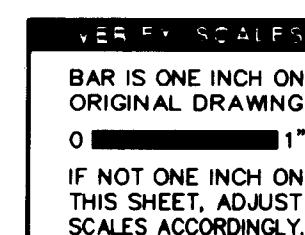
- 1 -SERVICE TO BE REPLACED (SAME SIZE AS EXISTING) FROM NEW WATER MAIN TO EXISTING WATER METER.
- 2 -SERVICE TO BE REPLACED (SAME SIZE AS EXISTING) FROM NEW WATER MAIN TO NEW WATER METER LOCATION.
- 3 -SERVICE TO BE TRANSFERRED FROM EXISTING WATER MAIN TO NEW WATER MAIN.
- 4 -WATER METER TO BE RELOCATED.
- 5 -WATER METER TO BE REHABILITATED.

WATER SERVICE REPLACEMENT SCHEDULE

SCANNED BY
BY LASON



Revisions Drawn by Michael Brewer Date Nov. 15, 1994
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CP NO. 4214.90

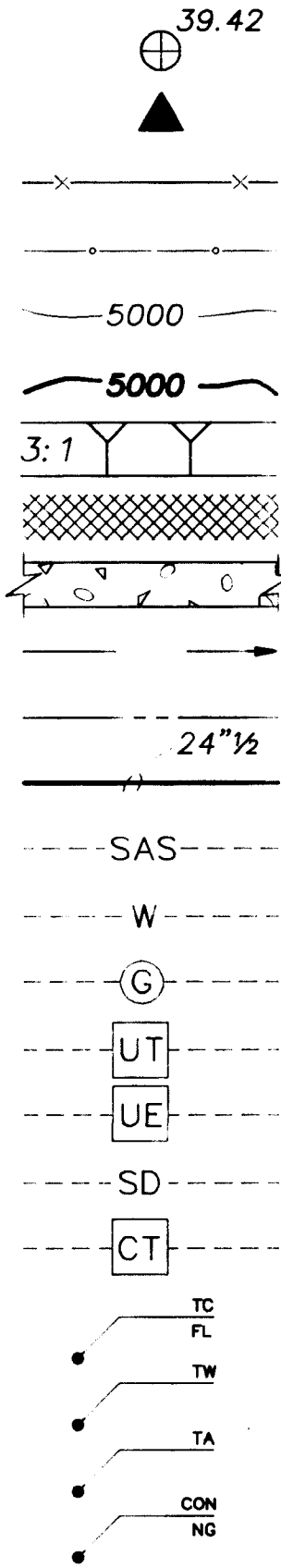
ABBREVIATIONS

⊙	AT	EWEF
A OR AHR	ANCHOR	EXIST OR EXST OR EXTG
AB	ANCHOR BOLT	EXP JT
AC	ASBESTOS CEMENT PIPE	FCA
AHP	AIR HIGH PRESSURE	FD
AL	ALUMINUM	FDN
ALTN	ALTERNATE	FF
AP	ANTENNA POLE	FG
APPROX	APPROXIMATELY	FH
APVD	APPROVED	FIG
BFV	BUTTERFLY VALVE	FL, F
BLDG	BUILDING	FLEX
BL	BASELINE	FLG
BOT	BOTTOM	FLG'D
BF	BOTTOM FACE	FTG OR FTNG
BM	BEAM	G-1
BRG	BEARING	GA
BSW	BACK OF SIDEWALK	GALV
BTWN	BETWEEN	GFP
C-2	CIVIL DRAWING 2ND SHEET	GI
CANT	CANTILEVER	GP
CCP	CONCRETE CYLINDER PIPE	GS
CI	CAST IRON	GUH
CFM	CUBIC FEET PER MINUTE	GV
CJ	CONSTRUCTION JOINT	GVL
CL, CL	CENTER LINE	HAS.
CLR	CLEAR, CLEARANCE	HDR
CMU	CONCRETE MASONRY UNIT	HDW
COL	COLUMN	HM
CONC	CONCRETE	HORIZ
CONN	CONNECTION	HT
CONT	CONTINUOUS	ICV
CONST	CONSTRUCTION	ID
COR	CORNER	IF.
CPLG	COUPLING	INST
C TO C	CENTER TO CENTER	JT
CTR	CENTER	KW
CTRD	CENTERED	LF
DBA	DEFORMED BAR ANCHOR	LNTL
DET	DETAIL	LONG.
DI OR DIP	DUCTILE IRON PIPE	LT
DIA	DIAMETER	M-4
DIAG	DIAGONAL	MANUF OR MFR OR MFG
DIR	DIRECTION	MAX
DISCH	DISCHARGE	MB
DISPL	DISPLACEMENT	MECH
DISTR	DISTRIBUTION	MH
DL	DROP LINE	MJ
DWG	DRAWING	MIL
E-5	ELECTRICAL DRAWING 5TH SHEET	MIN
EA	EACH	MPW
EC	EVAPORATIVE COOLER	NIC
EF	EACH FACE	NO
EL OR ELEV	ELEVATION	NOM
ELEC	ELECTRICAL	NTS
EOA	EDGE OF ASPHALT	OC
EQ	EQUAL	OD
EQL SP	EQUALLY SPACED	OF.
EQUIP	EQUIPMENT	OFE
EUH	ELECTRIC UNIT HEATER	O TO O
EVAP	EVAPORATIVE	OP
EW	EACH WAY	OPNG

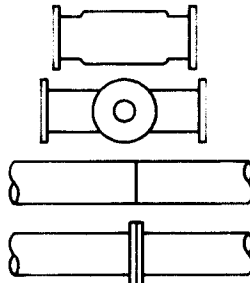
EACH WAY EACH FACE	P	PILASTER
EXISTING	PCV	PUMP CONTROL VALVE
EXPANSION JOINT	PE	PLAIN END
FLANGE COUPLING ADAPTER	PJF	PREMOLDED JOINT FILLER
FLOOR DRAIN	PL	PLATE
FOUNDATION	PLYWD	PLYWOOD
FINISH FLOOR	PNM	PUBLIC SERVICE COMPANY OF NEW MEXICO
FINISHED GRADE	POS	POSITIVE
FIRE HYDRANT	PP	POWER POLE
FIGURE	PRCST	PRECAST
FLOW LINE	PRV	PRESSURE REDUCING VALVE
FLEXIBLE	PS	PUMP STATION
FLANGE	PVC	POLYVINYL CHLORIDE
FLANGED	RC	REINFORCED CONCRETE
FOOTING	RCP	REINFORCED CONCRETE PIPE
GENERAL DRAWING 1ST SHEET	RDCR	REDUCER
GAUGE	REINF	REINFORCED
GALVANIZED (HOT DIP)	REQ'D	REQUIRED
GRAVEL FILL PIPE	RT	RIGHT
GALVANIZED IRON	RTU	REMOTE TERMINAL UNIT
GATE POST	R/W	RIGHT-OF-WAY
GALVANIZED STEEL	S	SPRINKLER
GAS UNIT HEATER	SAS	SANITARY SEWER
GATE VALVE	S-3	STRUCTURAL DRAWING 3RD SHEET
GRAVEL	SCH	SCHEDULE
HEADED ANCHOR STUD	SCV	SPRINKLER CONTROL VALVE
HEADER	SHT	SHEET
HARDWARE	SIM	SIMILAR
HOLLOW METAL	SPA OR SPG	SPACING
HORIZONTAL	SPEC'D	SPECIFIED
HEIGHT	SPECS	SPECIFICATIONS
IRRIGATION CONTROL VALVE	SQ	SQUARE
INSIDE DIAMETER	SS OR SST	STAINLESS STEEL
INSIDE FACE	STA	STATION
INSTRUMENTATION	STD	STANDARD
JOINT	STIF	STIFFENER
KILOWATT	STL OR ST	STEEL
LINEAR FEET	STRUCT	STRUCTURES
LINTEL	SYMM	SYMMETRICAL
LONGITUDINAL	TBM	TEMPORARY BENCH MARK
LEFT	T&B	TOP AND BOTTOM
MECHANICAL DRAWING 4TH SHEET	TC	TOP OF CURB/CONCRETE
MANUFACTURER	TCE	TEMPORARY CONSTRUCTION EASEMENT
MAXIMUM	TF	TOP FACE
MACHINE BOLT	THK	THICK
MECHANICAL	TO.	TOP OF
MANHOLE	TP	TRANSFORMER PAD
MECHANICAL JOINT	TRANS	TRANSITION
MILLIMETERS	TRANSV	TRANSVERSE
MINIMUM	TST	TOP OF STEEL
MAXIMUM PAVEMENT WIDTH	T-STAT	THERMOSTAT
NOT IN CONTRACT	TW	TOP OF WALL
NUMBER	TYP	TYPICAL
NOMINAL	VB	VACUUM BREAKER
NOT TO SCALE	VERT	VERTICAL
ON CENTER	VM	VALVE MARKER
OUTSIDE DIAMETER	WM	WATER METER
OUTSIDE FACE	WS	WELDED STEEL, WATERSTOP
OWNER FURNISHED EQUIPMENT		OR WATER SURFACE
OUT TO OUT		WELDED STEEL PIPE
OPPOSITE	WSP	WEIGHT
OPENING	WT	WATER VALVE
	WWF	WELDED WIRE FABRIC
	ZTV	ZONE TRANSFER VALVE

FINISH GRADE	○	LIGHT POLE
TEMPORARY BENCH MARK	GM	GAS METER
FENCE	WM	WATER METER
CHAIN LINK FENCE	○ WV	WATER VALVE
EXISTING CONTOURS	○ WF	WATER FAUCET
NEW CONTOURS	○ SCV	SPRINKLE CONTROL VALVE
EMBANKMENT SLOPE	○ AP	ANTENNA POLE
DEMOLITION (TO BE REMOVED)	○ CO	CLEAN OUT
CONCRETE	⊘	EXISTING SANITARY MANHOLE
DRAINAGE SWALE	⊗	EXISTING STORM DRAIN MANHOLE
PROPERTY LINE OR RIGHT-OF-WAY	●	NEW MANHOLE
PROPOSED PIPE	⊘	FIRE HYDRANT
EXIST SANITARY SEWER	● OR ⊘	POWER POLE
EXIST WATER LINE	⊘	ANCHOR
EXIST GAS LINE	* B	BUSH (EVERGREEN)
EXIST UNDERGROUND TELEPHONE	* E	TREE (EVERGREEN)
EXIST UNDERGROUND ELECTRIC	⊙	TREE (DECIDUOUS)
EXIST STORM SEWER	■ DI	DROP INLET
EXIST CABLE TELEVISION	⬡	FIRE EXTINGUISHER
TOP OF CURB/FLOW LINE	— P —	OVERHEAD POWER LINE
TOP OF WALL	S=0.005	PIPE SLOPE IN FT/FT
TOP OF ASPHALT	///	EDGE OF PAVEMENT
CONCRETE/NATURAL GROUND		

CIVIL LEGEND



MECHANICAL LEGEND



MAGNETIC FLOW METER	▷	REDUCER
CONTROL VALVE	⋈	GATE VALVE
WELD CONNECTION	⊞	BUTTERFLY VALVE
FLANGE CONNECTION	⋈	CHECK VALVE
	⊞	BALL VALVE
	⊞	GLOBE VALVE
	⊞	SOLENOID VALVE

REQUIRED SURFACE REMOVAL AND REPLACEMENT

RESIDENTIAL PAVEMENT SECTION	1
ARTERIAL PAVEMENT SECTION	2
CONCRETE CURB & GUTTER	3
CONCRETE SIDEWALK	4
CONCRETE PAVEMENT	5
MEDIAN	6

RECORD DRAWINGS

Revisions Drawn by: *Michael Branner* Date: *Nov. 15, 1994*

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VERIFIED BY: *Michael Branner*

BAR IS ONE INCH ON ORIGINAL DRAWING

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

APPROVAL OF RECORD DRAWINGS

PROJECT ENGINEER: *Arthur J. Stuart*

D: *12/21/94*



SCANNED BY LASON

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION ABBREVIATIONS AND LEGENDS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. G-2		MAP NO.	SHEET 3 OF 57		

CP NO. 4214.90

NOTES:

- LOCATION AND DIAMETER OF BURIED PIPING AND UTILITIES ARE APPROXIMATE AND MUST BE VERIFIED BY CONTRACTOR.
- CONTRACTOR SHALL MAKE NECESSARY PROVISIONS FOR WATER TO BE DRAINED FROM EXISTING WATERLINES. CONTRACTOR SHALL PROVIDE SANITARY, TEMPORARY CAP ON EXISTING LINES UNTIL READY TO MAKE FINAL CONNECTION.
- CONTRACTOR SHALL IMMEDIATELY REPLACE ALL DAMAGED IRRIGATION SYSTEM PARTS CAUSED BY CONSTRUCTION.
- REPLACE ALL DAMAGED LANDSCAPING TO MATCH APPEARANCE PRIOR TO CONSTRUCTION. RESTORE AND SEED ALL NATURAL GROUND AREAS DISTURBED DURING CONSTRUCTION.
- CONTRACTOR SHALL ENSURE THAT NO SOIL ERODES FROM THE SITE INTO PUBLIC RIGHT-OF-WAY OR INTO PRIVATE PROPERTY. THIS CAN BE ACHIEVED BY TEMPORARY BERMS AT PROPERTY LINES AND WETTING SOIL TO KEEP IT FROM BLOWING.
- THE CONTRACTOR SHALL PROMPTLY CLEAN UP ANY MATERIAL EXCAVATED SO THAT THE EXCAVATED MATERIAL IS NOT SUSCEPTIBLE TO BEING WASHED AWAY OR CREATE DUST.
- CONTRACTOR SHALL MAINTAIN DUST CONTROL AT ALL TIMES.
- CONTRACTOR SHALL VERIFY DEPTH, MATERIAL AND DIAMETER OF EXISTING PIPE.
- THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION COORDINATION DIVISION, A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION COORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (788-2551) PRIOR TO OCCUPYING AN INTERSECTION OR RIGHT-OF-WAY. SEE SECTION 19 OF SPECIFICATIONS.
- ALL STREET STRIPPING ALTERED OR DESTROYED SHALL BE REPLACED BY CONTRACTOR TO SAME LOCATION AND IN KIND AS EXISTING.
- CONTRACTOR SHALL REPLACE AND/OR RESTORE ALL PAVEMENT, CURBS, SIDEWALK, ROCK SURFACING, LANDSCAPING, AND OTHER SITE FIXTURES DAMAGED DIRECTLY OR INDIRECTLY BY CONTRACTOR TO SAME LOCATION AND IN KIND AS EXISTING.
- 48 HOURS PRIOR TO ANY EXCAVATION, CONTRACTOR SHALL CONTACT THE LINE LOCATING SERVICE (260-1990) FOR EXISTING UTILITIES (NEW MEXICO ONE CALL SYSTEM).
- REFERENCES MADE TO STANDARD DRAWINGS REFER TO CITY OF ALBUQUERQUE STANDARD DETAIL DRAWINGS.
- PRIOR TO CONSTRUCTION, CONTRACTOR SHALL EXCAVATE AND VERIFY THE HORIZONTAL AND VERTICAL LOCATION OF ALL OBSTRUCTIONS. SHOULD A CONFLICT EXIST, THE CONTRACTOR SHALL NOTIFY THE ENGINEER OR OWNER SO THAT THE CONFLICT CAN BE RESOLVED WITH A MINIMUM AMOUNT OF DELAY.
- BACKFILL COMPACTION SHALL BE ACCORDING TO SPECIFIED STREET USE. (EITHER RESIDENTIAL OR ARTERIAL STREET SECTION)
- THREE WORKING DAYS PRIOR TO ANY WORK ON EXISTING PUBLIC WATER UTILITIES, THE CONTRACTOR SHALL CONTACT THE WATER UTILITY DIVISION FOR THE VALVE SHUT OFF. SEE SECTION 18 OF THE SPECIFICATIONS.
- ALL UTILITIES SHOWN AND ANY OTHER UTILITIES THAT ARE NOT SHOWN ON THE PLANS BUT ARE WITHIN THE CONSTRUCTION AREA SHALL BE LOCATED, IDENTIFIED, AND PROTECTED AT ALL TIMES DURING CONSTRUCTION BY THE CONTRACTOR. SERVICE LATERALS ARE NOT SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF ALL LATERALS AND SHALL REINSTALL, REPAIR, OR REPLACE LATERALS AS NECESSARY FOR PIPELINE INSTALLATION.
- TRAFFIC CONTROL REQUIRED PER SPECIFICATIONS AND AS SHOWN ON SHEET 11.
- WIDTH LIMITS ON MEASUREMENT FOR PAVEMENT PAYMENT ESTABLISH MAXIMUM WIDTH FOR ESTIMATING THE COST OF THIS BID ITEM. THESE LIMITS ARE NOT PROVIDED TO SET A SAFE TRENCH EXCAVATION WIDTH. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRENCHING LAYOUT, METHODS, AND SAFETY.
- PAVEMENT WIDTH FOR DETERMINATION OF PAYMENT SHALL BE THE ACTUAL WIDTH AS MEASURED IN THE FIELD BY THE OWNER OR THEIR ENGINEER OR AS SHOWN ON THE DRAWINGS (MPW), WHICHEVER IS LESS.

DESIGN DETAIL DESIGNATION (NUMERAL)

DESIGN DETAIL DESIGNATION

SECTION (LETTER) OR DETAIL (NUMERAL) DESIGNATION

SHEET NUMBER (REPLACED WITH A LINE IF TAKEN AND SHOWN ON SAME SHEET)

DETAIL AND SECTION DESIGNATION

ON DRAWING WHERE SECTION OR DETAIL IS TAKEN:

SHEET NUMBER WHERE SHOWN

ON DRAWING WHERE SECTION OR DETAIL IS SHOWN:

SHEET NUMBER(S) WHERE TAKEN

STRUCTURAL NOTES

GENERAL

1. ALL DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS SHALL BE COORDINATED WITH OTHER DISCIPLINES. ANY CONFLICTS OR DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER FOR CLARIFICATION PRIOR TO THE START OF WORK.
2. COORDINATE SIZES AND LOCATIONS OF ALL OPENINGS THROUGH FLOORS, WALLS, AND ROOFS WITH MECHANICAL AND ELECTRICAL TO MINIMIZE IMPACT ON STRUCTURE. PROVIDE ADDITIONAL REINFORCEMENT AROUND OPENINGS IN ACCORDANCE WITH THE DESIGN DETAILS INCLUDED HEREIN AND THE DETAILS SHOWN ON THE DRAWINGS.
3. ALL OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER BEFORE PROCEEDING WITH ANY WORK INVOLVED. IN CASE OF CONFLICT, THE MOST STRINGENT REQUIREMENT AS DETERMINED BY THE ENGINEER GOVERNS.
4. THE STRUCTURES HAVE BEEN DESIGNED FOR THE FOLLOWING LIVE LOADS UNLESS OTHERWISE SHOWN ON THE DRAWINGS.

PUMP STATION FLOORS	200 PSF
STAIRWAYS/LANDINGS	100 PSF
UNRESTRICTED VEHICLE ACCESS	AASHTO HS20
ROOF	20 PSF
WIND	70 MPH
(1988 UNIFORM BLDG. CODE)	ZONE 2B
SEISMIC	50 PSF/FT
LATERAL EARTH PRESSURE	(AT REST CONDITIONS)

CONCRETE

1. ALL CAST IN PLACE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI.
2. CONCRETE FOR PRECAST DOUBLE TEE ROOF MEMBERS SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 5,000 PSI.
3. SOME LOGICAL LOCATIONS FOR CONSTRUCTION JOINTS HAVE BEEN SHOWN ON THE DRAWINGS. NO ATTEMPT HAS BEEN MADE TO REPRESENT THE LOCATIONS OF ALL OF THE CONSTRUCTION JOINTS THAT MAY BE REQUIRED. THE CONTRACTOR MAY ELECT TO PROVIDE ADDITIONAL CONSTRUCTION JOINTS TO THOSE SHOWN ON THE DRAWINGS, PROVIDING THEIR SPACING CONFORMS TO REQUIREMENTS OF THE SPECIFICATIONS, AND THEY DO NOT IMPAIR THE STRUCTURAL INTEGRITY OR APPEARANCE OF THE FINISHED CONCRETE.
4. SLAB THICKNESS WITH TOP SURFACES THAT ARE SLOPED ARE SHOWN AS MINIMUM THICKNESS WITH VARIABLE GREATER SLAB THICKNESS AS REQUIRED. AT CONTRACTORS OPTION BOTTOM OF SLAB MAY SLOPE ALONG WITH TOP FOR UNIFORM THICKNESS.

CONCRETE REINFORCING

1. UNLESS OTHERWISE SHOWN, CONCRETE WALLS AND SLABS SHALL BE REINFORCED AS FOLLOWS: #4 @ 12" EACH WAY CENTER OF 6" SECTIONS; #5 @ 12" EACH WAY CENTER OF 8" SECTIONS; #4 @ 12" EACH WAY EACH FACE OF 10" SECTIONS; #5 @ 12" EACH WAY EACH FACE OF 12" SECTIONS. SINGLE MAT REINFORCEMENT SHALL BE AT CENTER OF SECTION, UNLESS SHOWN OTHERWISE.
2. CLEARANCE FOR REINFORCEMENT BARS, UNLESS SHOWN OTHERWISE, SHALL BE 3" WHEN PLACED ON GROUND, FOR SURFACES EXPOSED TO WATER OR WEATHER--1-1/2" CLEARANCE FOR #5 BAR SMALLER AND 2" CLEARANCE FOR LARGER BARS. INTERIOR SLABS 3/4" CLEARANCE. INTERIOR BEAMS 1-1/2" CLEARANCE.
3. REFER TO WALL CORNER AND WALL INTERSECTION REINFORCING DETAIL. IN GENERAL, THE WALL CORNER REINFORCING SIZES AND SPACINGS WILL BE CALLED OUT ON THE PLANS AND REFERENCED TO THESE DESIGN DETAILS AND THE TYPICAL HORIZONTAL WALL REINFORCING SHALL LAP WITH THE CORNER REINFORCING.
4. ALL BENDS, UNLESS OTHERWISE SHOWN, SHALL BE A 90 DEGREE STANDARD HOOK AS DEFINED IN LATEST EDITION OF ACI 318.
5. FIELD BENDING: REINFORCING STEEL SHALL NOT BE BENT OR STRAIGHTENED IN A MANNER INJURIOUS TO THE CONCRETE OR STEEL.
6. UNLESS OTHERWISE NOTED, ALL WALL REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THROUGH COLUMNS OR PILASTERS. REINFORCEMENT SHALL BE EXTENDED INTO CONNECTING WALLS AND LAPPED ON THE OPPOSITE FACE OF THE CONNECTING WALLS, AS INDICATED ELSEWHERE IN THE DESIGN DETAILS. VERTICAL WALL BARS SHALL BE LAPPED WITH DOWELS FROM BASE SLABS AND EXTENDED INTO THE TOP FACE OF ROOF SLABS AND LAPPED WITH TOP SLAB REINFORCEMENT. UNLESS INDICATED OTHERWISE, CONTRACTOR MAY SPLICE CONTINUOUS SLAB OR LONGITUDINAL BEAM BARS AT LOCATIONS OF HIS CHOOSING. EXCEPT THAT TOP BAR SPLICES SHALL BE LOCATED AT MIDSPAN AND BOTTOM BAR SPLICES SHALL BE LOCATED AT SUPPORTS. ALL REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED, SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENT.

MINIMUM REINFORCEMENT LAP DISTANCE									
BAR SIZE	#3	#4	#5	#6	#7	#8	#9	#10	#11
SPACING <6"	TOP* BAR	1'-9"	2'-6"	3'-0"	3'-8"	4'-6"	6'-0"	7'-6"	9'-8"
	OTHER BAR	1'-3"	1'-8"	2'-2"	2'-8"	3'-3"	4'-3"	5'-6"	6'-10"
SPACING ≥6"	TOP* BAR	1'-6"	2'-0"	2'-6"	2'-10"	3'-8"	4'-9"	6'-0"	7'-8"
	OTHER BAR	1'-0"	1'-4"	1'-8"	2'-0"	2'-8"	3'-6"	4'-4"	5'-6"
HOOKS SHALL SATISFY ACI 318-89									

* TOP BARS SHALL BE DEFINED AS ANY HORIZONTAL BARS PLACED SUCH THAT MORE THAN 12" OF FRESH CONCRETE IS CAST IN THE MEMBER BELOW THE BAR, IN ANY SINGLE POUR. HORIZONTAL WALL BARS ARE CONSIDERED TOP BARS.

CONCRETE MASONRY

1. CONCRETE MASONRY SLUMP BLOCK, MORTAR, GROUT AND REINFORCING SHALL BE AS SPECIFIED. ALL UNITS SHALL BE LAID "RUNNING BOND."
2. CONCRETE MASONRY SLUMP BLOCK WALL REINFORCING SHALL BE AS SHOWN ON THE DRAWINGS.FOR ADDITIONAL VERTICAL AND HORIZONTAL REINFORCING REQUIREMENTS, SEE NOTES NO. 3 AND 4. HORIZONTAL JOINT REINFORCING IS REQUIRED IN ALL WALLS. SEE NOTE 5. LAP SPLICE ALL REINFORCING BARS A MINIMUM OF 2'-6" AS REQUIRED.
3. VERTICAL REINFORCING SHALL BE PLACED AT WALL CORNERS, EACH SIDE OF OPENINGS, ENDS OF WALLS (INCLUDING EACH SIDE OF COLUMNS INDICATED AS JAM REINFORCING HEREIN), AND AS SPECIFICALLY INDICATED ON THE DRAWINGS. BARS SHALL BE CONTINUOUS FROM FOUNDATION TO WALL TOP. BARS TO BE LAP SPICED 2'-6" TO DOWEL EMBEDDED 1'-0" INTO THE CONCRETE STRUCTURE AT THE WALL BOTTOM AND HOOKED WITH STANDARD 180 DEGREE HOOK AROUND THE TOP BOND BEAM REINFORCING BAR AT THE WALL TOP. CENTER REINFORCING BAR IN WALL CELLS. JAM REINFORCING, AT THE ENDS OF EACH WALL, SHALL CONSIST OF 2-#6 BARS IN A GROUTED CELL. PROVIDE VERTICAL DOWELS OF SAME NUMBER AND SIZE TO MATCH JAM REINFORCING.
4. HORIZONTAL REINFORCING SHALL BE PLACED AT THE BOTTOM OF WALLS, TOP OF WALLS, THE BOTTOM AND TOP OF OPENINGS AND AT THE MAXIMUM SPACING SPECIFICALLY INDICATED ON THE DRAWINGS. USE SPECIAL BOND BEAM UNITS WITH HORIZONTAL REINFORCING EXCEPT LINTEL UNITS TO BE USED AT ALL LINTELS. LINTEL REINFORCING MAY BE USED TO SATISFY THE REQUIRED SPACING PROVIDED IT IS MADE CONTINUOUS. LINTEL REINFORCING MADE CONTINUOUS TO SATISFY SCHEDULED SPACING CRITERIA SHALL CONSIST OF TYPICAL REINFORCING SHOWN ON THE DRAWINGS, OR REFERENCED LINTEL REINFORCING, WHICHEVER IS GREATER. ALL HORIZONTAL REINFORCING SHALL BE CONTINUOUS THROUGH COLUMNS.
5. IN ADDITION TO VERTICAL AND HORIZONTAL WALL REINFORCING REQUIRED, ALL WALLS SHALL HAVE HORIZONTAL JOINT REINFORCING AS SPECIFIED WITH A VERTICAL SPACING OF 16" ON CENTER, MAXIMUM. AT OPENINGS, ADD AN ADDITIONAL PIECE ABOVE AND BELOW OPENINGS FOR AN 8" SPACING. EXTEND ADDITIONAL PIECES 2'-0" BEYOND EDGES OF OPENINGS.
6. GROUT SOLID ALL CELLS, BOTH VERTICAL AND HORIZONTAL, THAT HAVE EITHER REINFORCING BARS OR ANCHOR BOLTS. DO NOT GROUT CELLS THAT DO NOT HAVE REINFORCING BARS UNLESS SPECIFICALLY INDICATED OTHERWISE ON THE DRAWINGS.

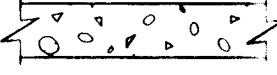
STEEL

1. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM A36.
2. ALL STRUCTURAL STEEL SHALL BE FABRICATED AND ERECTED IN CONFORMANCE WITH AISC MANUAL OF STEEL CONSTRUCTION, 9TH EDITION.
3. ALL BOLTS SHALL BE 3/4" DIAMETER HIGH STRENGTH BOLTS (HSB) CONFORMING TO ASTM A325(N) UNLESS OTHERWISE SHOWN. BOLTS INDICATED AS MACHINE BOLTS (MB) OR ANCHOR BOLTS (AB) SHALL CONFORM TO ASTM A307.
4. ANCHOR BOLTS FOR EQUIPMENT OR OTHER ANCHORAGE TO CONCRETE SHALL BE STAINLESS STEEL IN ACCORDANCE WITH THE SPECIFICATIONS.
5. ALL WELDS SHALL BE ACCOMPLISHED BY CERTIFIED WELDERS AND SHALL CONFORM TO THE STRUCTURAL WELDING CODE. (AWS D 1.1-88).

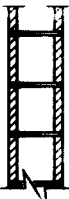
MATERIALS SYMBOLS



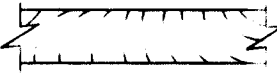
CMU PLAN



CONCRETE



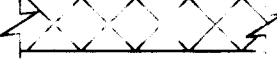
CMU SECTION



STUD WALL PLAN



GYPSUM WALLBOARD



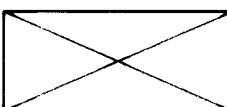
RIGID INSULATION



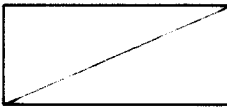
BATT INSULATION



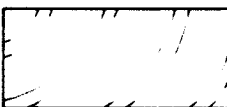
PLYWOOD



CONTINUOUS LUMBER



NONCONTINUOUS LUMBER



WOOD, FINISHED



METAL



ACOUSTICAL TILE



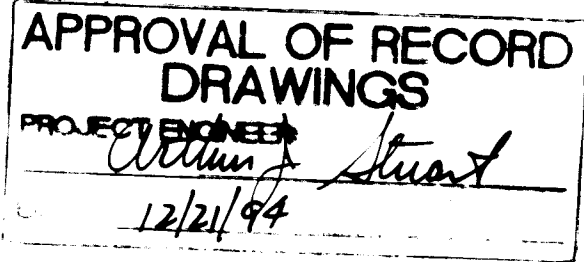
VINYL TILE



GRAVEL



EARTH



RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994

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VERIFY SCALES

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.



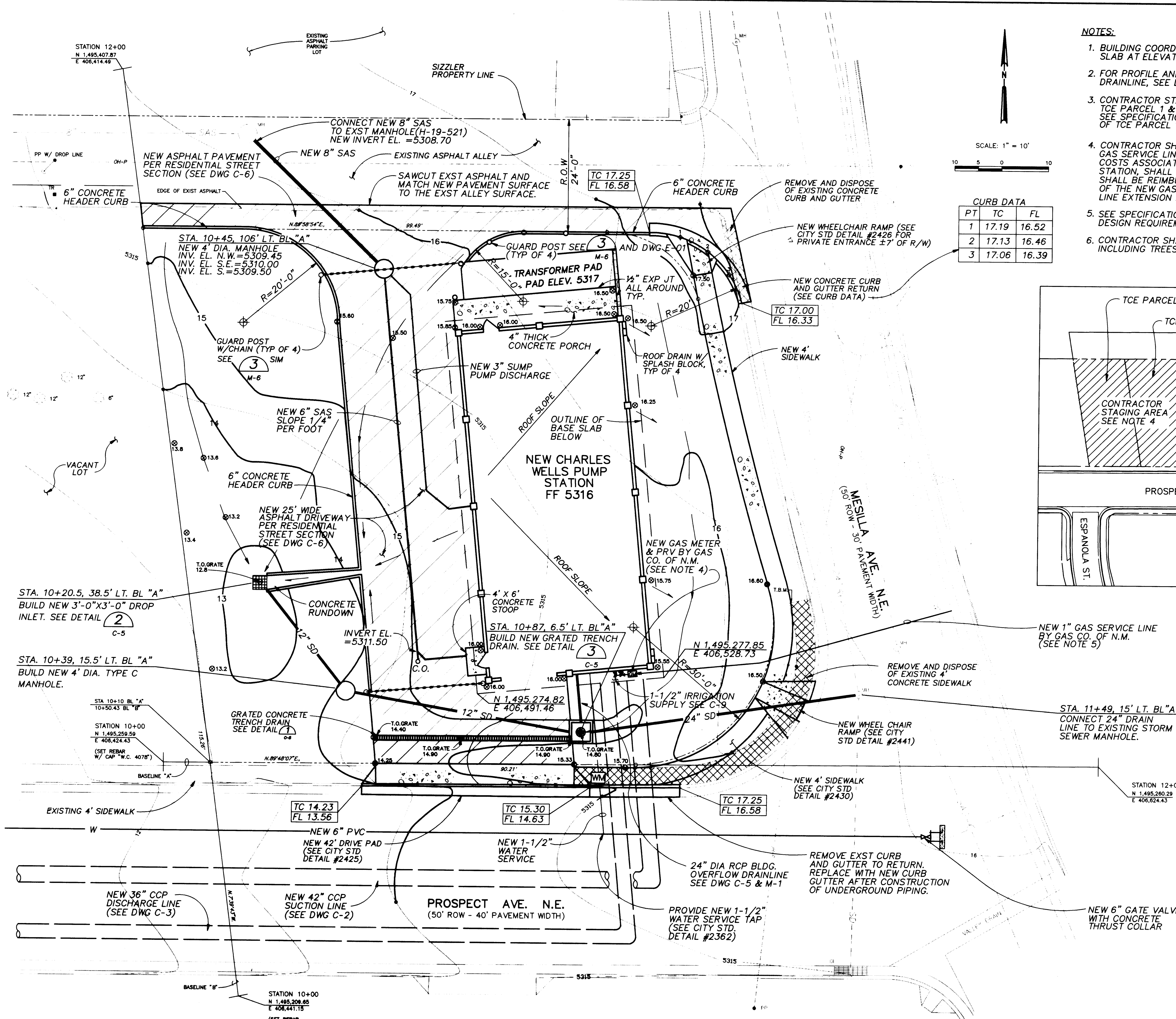
SCANNED BY
BY LASON

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION ARCHITECTURAL/STRUCTURAL LEGEND					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev			Waste Water		
Hydrology					
DRAWING NO. G-3		MAP NO.		SHEET 4 OF 57	

CP NO. 4214.90

POWER	INSTRUMENTATION & CONTROL	ONE-LINE DIAGRAMS	ONE-LINE DIAGRAMS	ABBREVIATIONS CONT.
LPA-5 EP DUPLEX RECEPTACLE EP - EXPLOSIONPROOF GFI - GRD FAULT INTERRUPTER WP - WEATHERPROOF PP1-2 SPECIAL RECEPTACLE JUNCTION BOX ON CEILING JUNCTION BOX ON WALL EQUIPMENT SEE ABBREVIATIONS SINGLE PHASE MOTOR THREE PHASE MOTOR THERMOSTAT PUSHBUTTON ESS - EMERGENCY STOP BUTTON S/S - START/STOP UNIT HEATER GAS HEATER EVAPORATIVE COOLER UNIT GROUND ROD GROUND CONDUCTOR EXOTHERMIC WELD FLOW CONTROL VALVE DISCONNECT SWITCH WATER HEATER	TSH TEMPERTURE SWITCH HIGH TSL TEMPERTURE SWITCH LOW FE FLOW OR NO-FLOW OR LEAK DETECTOR ELEMENT FT FLOW TRANSMITTER PSH PRESSURE SWITCH HIGH LE LEVEL ELEMENT (FLOOD DETECTOR) XT VIBRATION TRANSMITTER XE VIBRATION ELEMENT	240V XXKVA 120V TRANSFORMER 240V - PRIMARY VOLTAGE XXKVA- TRANSFORMER RATING 120V - SECONDARY VOLTAGE 3Ø GROUNDRED WYE 3Ø UNGROUNDRED DELTA 300:5 (2) CURRENT TRANSFORMER 300:5 - INDICATES CT RATIO (2) - INDICATES QUANTITY 480V 120V (2) FUSED POTENTIAL TRANSFORMER 480V - PRIMARY VOLTAGE 120V - SECONDARY VOLTAGE (2) INDICATES QUANTITY SWITCHBOARD METER, # INDICATES A - AMMETER ET - ELAPSED TIME KW - KILOWATT KWH - KILOWATT-HOUR KWHd - KILOWATT-HOUR-DEMAND V - VOLTMETER GROUND SURGE ARRESTER 100A DOUBLE THROW DISCONNECT 100 A - AMPERAGE RATING 60A 3P SINGLE THROW DISCONNECT 60A - AMPERAGE RATING 3P - NUMBER OF POLES DRAWOUT FUSE & RATING 100A 225A 3P CIRCUIT BREAKER 100A - TRIP RATING 225A - FRAME RATING (FOR ADJUSTABLE TRIP BREAKERS) 3P - NUMBER OF POLES M - MAGNETIC TRIP 1200AF 800AT LOW VOLTAGE AIR CIRCUIT BREAKER E - INDICATES ELECTRICAL SHUNT TRIP M - INDICATES MECHANICAL SHUNT TRIP 1200AF - FRAME RATING 800AT - TRIP RATING HP SINGLE PHASE MOTOR HP - RATED HORSEPOWER HP THREE PHASE MOTOR HP - RATED HORSEPOWER 60A 45A LTR # FUSED SWITCH COMBINATION STARTER 60A - INDICATES SWITCH RATING 45A - INDICATES FUSE SIZE # - NEMA STARTER SIZE LTR = TYPE FV2S - FULL VOLTAGE 2 SPEED FVR - FULL VOLTAGE REVERSING FVNR - FULL VOLTAGE NON-REVERSING 60AT 100A MCP ## # MOTOR CIRCUIT PROTECTOR COMBINATION STARTER 100A MCP - CONTINUOUS RATING 60AT - TRIP RATING # - NEMA STARTER SIZE # - TYPE DPA DISTRIBUTION PANELBOARD	GAS HEATER 15 20 PANEL BREAKER 1 & 2 INDICATE CIRCUIT NUMBER 15 & 20 INDICATE AMPERAGE POWER FACTOR CORRECTION CAPACITOR LIGHTNING ARRESTER TRANSIENT SUPPRESSOR	L LE LFMC LM LSH LTI M MFM MCU MOV N NC NEMA NIU NO N.T.S. OFE OL'S PBV PEC PF PFCC PNM PSH PSL PT PTT PVC RMC RTB RTU-TB RTD RTU SDIV SW SYM TB TE TSP TST TSH TSL TYP UH V VAC VDC VIBJB VLV VM WH WP WT XE XFMR XMTR Y ZTCV ZTIV Δ Ø FCV NIC PXXX CXXX LXXX LINE LEVEL ELEMENT (DRAW DOWN), (FLOOD DETECTOR) LIQUIDTIGHT FLEXIBLE METALLIC CONDUIT MOTORIZED LOUVER LEVEL SWITCH HIGH LEVEL TRANSMITTER/INDICATOR MAGNETIC TRIP MULTI-FUNCTION METER MOTOR CONTROL UNIT MOTOR OPERATED VALVE NEUTRAL NORMALLY CLOSED NATIONAL ELECTRICAL MANUFACTURER'S ASSOC NOT IN USE NORMALLY OPEN NOT TO SCALE OWNER FURNISHED EQUIPMENT OVERLOADS (THERMAL OVERLOAD CONTACTS) PUMP BYPASS CONTROL VALVE PHOTO-ELECTRIC CELL POWER FACTOR POWER FACTOR CORRECTION CAPACITOR PUBLIC SERVICE COMPANY OF NEW MEXICO PRESSURE SWITCH HIGH (HIGH DISC. PRESS. SWITCH) PRESSURE SWITCH LOW POTENTIAL TRANSFORMER PRESSURE TRANSDUCER TRANSMITTER POLYVINYL CHLORIDE RIGID METAL CONDUIT, GALVANIZED REMOTE TERMINAL BLOCK REMOTE TERMINAL UNIT TERMINAL BLOCK RESISTANCE TEMPERATURE DEVICE REMOTE TERMINAL UNIT STATION DISCHARGE ISOLATION VALVE SWITCH SYMMETRICAL TERMINAL BLOCK TEMPERTURE ELEMENT (MOTOR RTD) TWISTED SHIELED PAIR TWISTED SHIELED TRIAD TEMP. SWITCH HIGH (HIGH AMBIENT TEMP. SWITCH) TEMP. SWITCH LOW (LOW AMBIENT TEMP. SWITCH) TYPICAL UNIT HEATER VOLT VOLTS ALTERNATING CURRENT VOLTS DIRECT CURRENT VIBRATION SENSOR JUNCTION BOX VALVE LOCATED ITEM MOTORIZED VALVE WATER HEATER WEATHERPROOF WATERTIGHT VIBRATION ELEMENT TRANSFORMER TRANSMITTER WYE ZONE TRANSFER CONTROL VALVE ZONE TRANSFER ISOLATION VALVE DELTA PHASE SOLENOID VALVE (FLOW CONTROL VALVE) NOT IN CONTRACT POWER CONDUCTORS CONTROL CONDUCTORS LIGHTING & RECEPTACLE CONDUCTORS
TERMINALS	SCHEMATICS	CIRCUITING	ABBREVIATIONS	RECORD DRAWINGS
MCU, MCC, DP'S RTB FE, FTI MOV WJB RTU ZTCV	FUSE SELECTOR SWITCH A B C INDICATES SWITCH POSITION X INDICATES CLOSED CONTACT O INDICATES OPEN CONTACT NORMALLY OPEN PUSHBUTTON NORMALLY CLOSED PUSHBUTTON OPEN PRESSURE SWITCH NORMALLY OPEN LIMIT SWITCH NORMALLY CLOSED LIMIT SWITCH TORQUE SWITCH NORMALLY OPEN CONTACT R INDICATES COIL REFERENCE NORMALLY CLOSED CONTACT R INDICATES COIL REFERENCE OPEN TEMPERATURE SWITCH RELAY COIL R-RELAY DESIGNATION PILOT LIGHT R - INDICATES COLOR R-RED G-GREEN A-AMBER MOTOR SHIELD CONDUIT IDENTIFIER CXXX - CONTROL CONDUIT PXXX - POWER CONDUIT PC - POWER/CONTROL CONDUIT LXXX - LIGHTING & RECEPTACLE CONDUIT CIRCUIT BREAKER THERMAL OVERLOAD SWITCH	PHASE CONDUCTOR NEUTRAL CONDUCTOR SWITCHED CONDUCTOR GROUNDING CONDUCTOR HOMERUN INDICATION CONTROL CONDUCTOR 4 - INDICATES # OF COND. SHIELED PAIR 4 - INDICATES # OF PAIRS MANUFACTURER SUPPLIED SURFACE MOUNTED CONDUIT BURIED OR EMBEDDED CONDUIT GROUND WIRE		

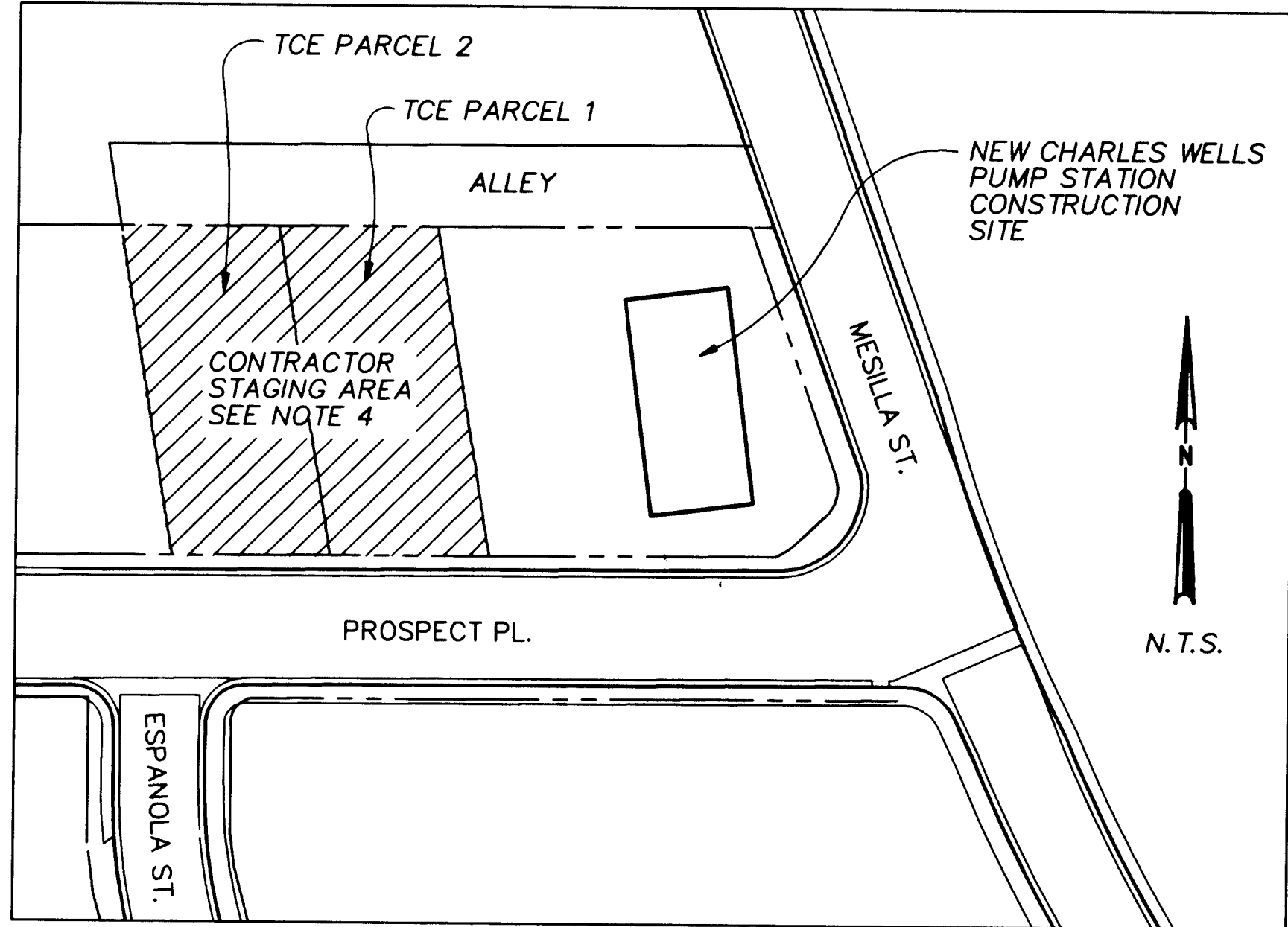
NOTE: SOME SYMBOLS SHOWN BUT NOT USED.



- NOTES:
- BUILDING COORDINATES SHOWN ON THIS SHEET REFERENCE EDGE OF SLAB AT ELEVATION 5291 ON DWG S-2.
 - FOR PROFILE AND ELEVATION DETAILS OF THE NEW 12" AND 24" DRAINLINE, SEE DWG C-5.
 - CONTRACTOR STAGING AREA SHALL BE LOCATED AND LIMITED TO TCE PARCEL 1 & 2 ADJACENT TO THE PROJECT SITE AS SHOWN. SEE SPECIFICATIONS SECTION 01500 FOR LEGAL DESCRIPTIONS OF TCE PARCEL 1 & 2.
 - CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE NEW GAS SERVICE LINE, PRV AND METER WITH THE GAS CO. OF N.M. ALL COSTS ASSOCIATED WITH THE NEW GAS SERVICE, TO THE PUMP STATION, SHALL BE PAID BY THE CONTRACTOR. THE CONTRACTOR SHALL BE REIMBURSED ALL COSTS ASSOCIATED WITH INSTALLATION OF THE NEW GAS SERVICE LINE, PRV, AND METER, FROM THE GAS LINE EXTENSION ALLOWANCE AS SPECIFIED IN THE BID PROPOSAL.
 - SEE SPECIFICATIONS SECTION 02200, "EARTHWORK" FOR EXCAVATION DESIGN REQUIREMENTS.
 - CONTRACTOR SHALL CLEAR AND PROPERLY DISPOSE OF ALL VEGETATION, INCLUDING TREES, FROM THE SITE.

CURB DATA

PT	TC	FL
1	17.19	16.52
2	17.13	16.46
3	17.06	16.39



APPROVAL OF RECORD DRAWINGS

PROJECT ENGINEER: *Michael Brown*

DATE: 12/21/94

RECORD DRAWINGS

Revisions Drawn by: *Michael Brown* Date: *Nov. 15, 1994*

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BAR IS ONE INCH ON ORIGINAL DRAWING

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26 4214.900694

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

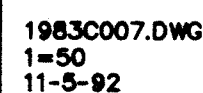
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: CHARLES WELLS PUMP STATION
SITE GRADING AND YARD PIPING PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					

DRAWING NO. C-1 MAP NO. H-19 SHEET 6 OF 57

CP NO. 4214.90



STA. 1+53±, 36" DISCHARGE LINE
INSTALL 1- 36" 90° BEND

TYPE 1 TEST
STATION

NEW CHARLES WELLS
PUMP STATION

NEW 2" PVC CONDUIT
SEE DWG C-2

NEW 42" SUCTION LINE
SEE DWG C-2.

STA. 3+46±, 36" DISCHARGE LINE
INSTALL 1- 36" 90° BEND

STA. 4+50±, 36" DISCHARGE LINE
INSTALL 1- 36" 33½° BEND

STA. 5+66±, 36" DISCHARGE LINE
INSTALL 1- 36" 45° BEND

STA. 5+95±, 36" DISCHARGE LINE
INSTALL 1- 36" 52° BEND

STA. 6+43, 22' LT. ± OF
36" DISCHARGE LINE
INSTALL 1- 24" 45° BEND
WITH BUTT STRAP. SEE
DETAIL DWG C-6.

STA. 5+98, 6' LT. ± OF
36" DISCHARGE LINE
INSTALL 1- 24" 52° BEND

STA. 5+67, 5' LT. ± OF
36" DISCHARGE LINE
INSTALL 1- 24" 45° BEND WITH BUTT
STRAP. SEE DETAIL DWG C-6.

STA. 5+55, 18' RT. ± OF
36" DISCHARGE LINE
BEGIN 6" WATERLINE
REPLACEMENT.
SEE NOTE 3.

NEW 24" WELL
COLLECTOR LINE
SEE NOTE 2.

NEW 8" SAS
SEE DWG C-2

INSTALL NEW WHEELCHAIR
RAMP AT JICARRILLA PL. AND
ESPANOLA ST. (SEE CITY
STD DETAIL #2441)

STA. 6+27, 5' LT. ± OF
36" DISCHARGE LINE
INSTALL 1- 24" 38° BEND

NEW BY-PASS VALVE VAULT
SEE DWG S-1 AND M-4

STA. 8+73, 4' RT. ±
OF 36" DISCHARGE LINE
INSTALL 1- 6" GATE
VALVE W/BOX

NEW 6" WATERLINE

STA. 8+00±, 36" DISCHARGE LINE
STALL 1- 1" AIR RELEASE VALVE
PER CITY STD DETAIL #2350
INSTALLATION SHALL BE AT THE
HIGH POINT OF THE LINE

STA. 8+90, 15' LT. ± OF 36" DISCHARGE LINE
INSTALL 1- 6" GATE VALVE W/BOX
SEE 2

EXST CONCRETE VALLEY GUTTER
TO BE REMOVED AND REPLACED
AFTER CONSTRUCTION OF THE
UNDERGROUND PIPING, PER CITY
STANDARD DETAIL #2420

STA. 8+93±, 36" DISCHARGE LINE
INSTALL 1- 36" 90° BEND

NEW 36" DISCHARGE LINE

TYPE T TEST
STATION

11'-0" FROM BACK
OF CURB (TYP.)

9. ALL STATIONING SHOWN ON
THIS SHEET IS REFERENCED
TO THE CENTERLINE OF CONSTRUCTION OF THE
NEW 36" DISCHARGE LINE.

SCALE

1"=50' HORIZONTAL
1"=10' VERTICAL

NOTES:

- SEE SPECIFICATIONS FOR THRUST RESTRAINT REQUIREMENTS.
- REMOVE EXST 24" WELL COLLECTOR LINE FROM STA. 5+59± TO STA. 6+40±. AFTER CONSTRUCTION OF THE NEW BY-PASS VALVE VAULT INSTALL NEW 24" CCP WELL COLLECTOR LINE AROUND VALVE VAULT AS SHOWN. NEW LINE SHALL BE SLOPED UNIFORMLY BETWEEN CONNECTIONS TO EXISTING PIPE.
- REMOVE EXST 6" WATERLINE FROM STA. 5+55± TO STA. 22+70±. INSTALL NEW 6" WATERLINE FROM STA. 5+55± TO STA. 22+70± AFTER CONSTRUCTION OF THE NEW 36" DISCHARGE LINE AND RECONNECT EXST SERVICES AND LATERALS. CONTRACTOR SHALL PROVIDE SHOEFLY WATER SERVICE TO ALL RESIDENCES AND BUSINESSES DURING CONSTRUCTION OF THE NEW 36" DISCHARGE LINE AND NEW 6" WATERLINE.
- THE EXST 6" WATERLINE FROM STA. 14+15± TO STA. 18+15± IS CONSTRUCTED OF ASBESTOS CEMENT PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER HANDLING AND DISPOSAL OF THIS MATERIAL.
- EXISTING ASPHALT PAVEMENT, CURB AND GUTTER AND SIDEWALK REMOVED SHALL BE RESTORED TO THEIR ORIGINAL LINES AND GRADES. SEE SPECIFICATION SECTION 02616-SURFACE RESTORATION FOR CURB AND GUTTER SURVEY DATA.
- FOR ASPHALT PAVEMENT REPLACEMENT SEE RESIDENTIAL AND ARTERIAL STREET SECTIONS ON DWG C-6.
- DEFLECT PIPE JOINTS AS REQUIRED TO MAINTAIN ALIGNMENT OF THE 36" DISCHARGE LINE. MAXIMUM DEFLECTION SHALL NOT EXCEED MANUFACTURERS RECOMMENDATIONS.
- SEE WATER SERVICE REPLACEMENT SCHEDULE DWG G-1A FOR SERVICE RECONNECTION AND WATER METER REHABILITATION.

AS BUILT INFORMATION				BENCH MARKS				SURVEY INFORMATION			
CONTRACTOR	DATE	INSPECTOR'S	DATE	NO.	DATE	BY	DATE	NO.	DATE	BY	DATE

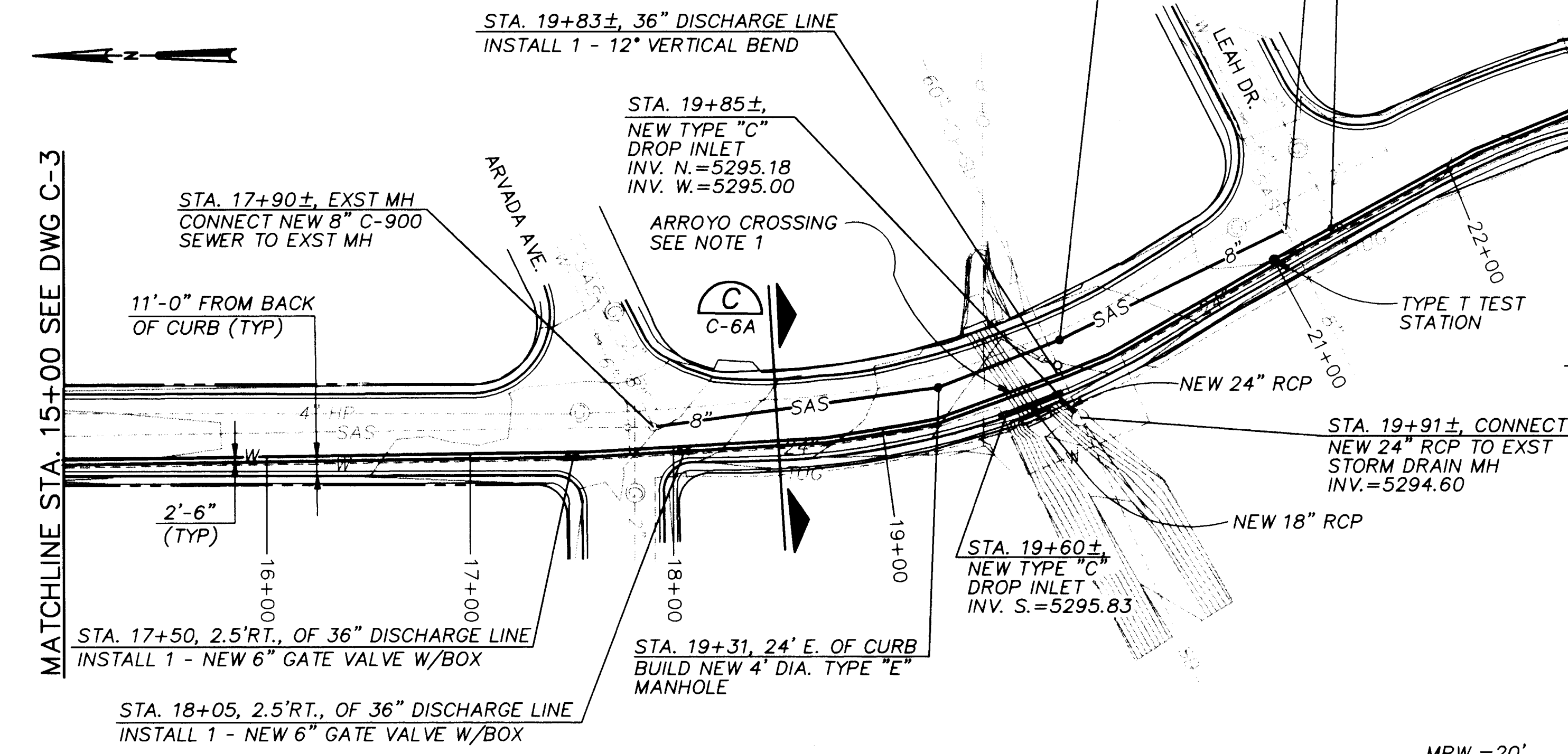
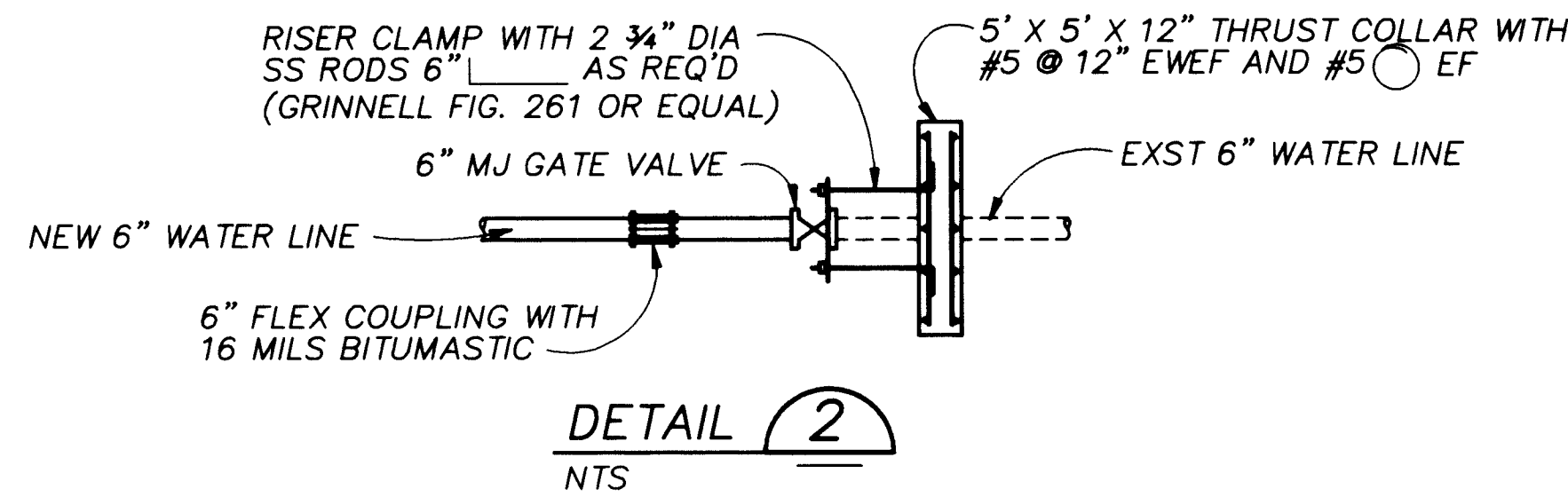
ENGINEER'S SEAL				REVISIONS			
THESE DRAWINGS WERE MODIFIED USING AUTOCAD AND RE-PLOTTED FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS.				NO.	DATE	BY	REMARKS

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION 36" DISCHARGE PIPELINE PLAN/PROFILE					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. C-3		MAP NO. H-19		SHEET 8 OF 57	

APPROVAL OF RECORD DRAWINGS	
PROJECT ENGINEER	DATE 12/21/94

RECORD DRAWINGS
Revisions Drawn by Michael Brewer Date Nov. 15, 1994
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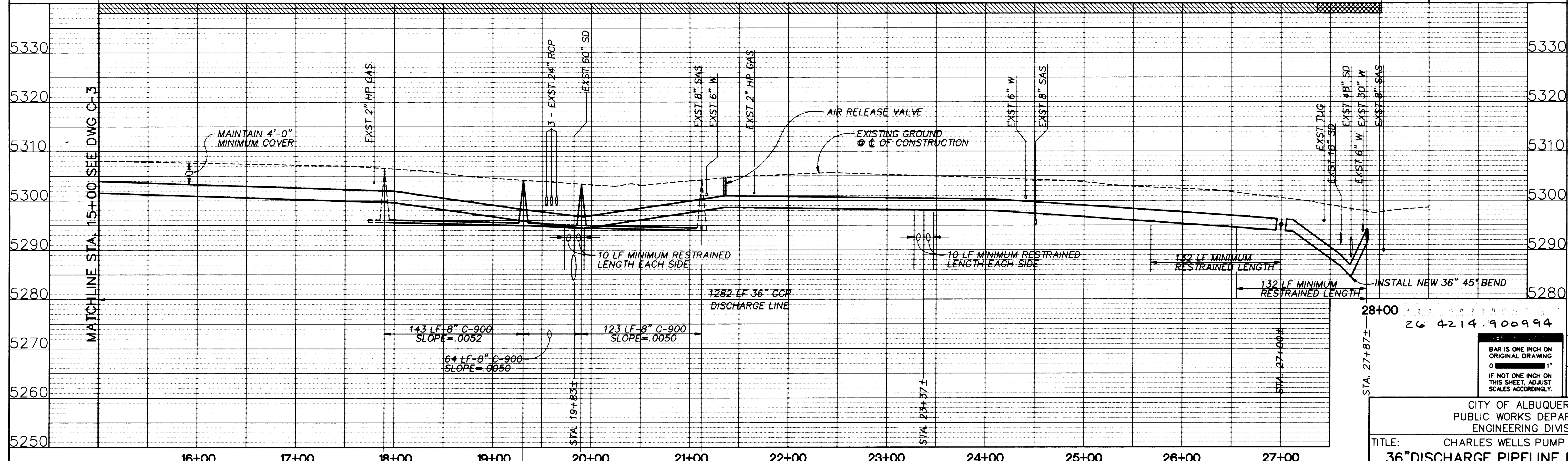




NOTES:

1. INSTALL NEW 36" DISCHARGE LINE BELOW EXISTING 24" RCP DRAIN LINES. REMOVE EXISTING 24" RCP TO ALLOW CONSTRUCTION OF THE NEW 36" DISCHARGE LINE. REPLACE SECTIONS OF 24" RCP REMOVED TO MATCH EXISTING GRADE AND PROFILE.
2. SEE SPECIFICATIONS FOR THRUST RESTRAINT REQUIREMENTS.
3. REMOVE EXST 6" WATERLINE FROM STA. 5+55± TO STA. 22+70±. INSTALL NEW 6" WATERLINE FROM STA. 5+55± TO STA. 22+70±. AFTER CONSTRUCTION OF THE NEW 36" DISCHARGE LINE, RECONNECT EXST SERVICES AND LATERALS. CONTRACTOR SHALL PROVIDE SHOEFLY WATER SERVICE TO ALL RESIDENCES AND BUSINESSES DURING CONSTRUCTION OF THE NEW 36" DISCHARGE LINE AND NEW 6" WATERLINE.
4. SEE WATER SERVICE REPLACEMENT SCHEDULE DWG G-1A FOR SERVICE RECONNECTION AND WATER METER REHABILITATION.
5. THE EXST 6" WATERLINE FROM STA. 14+15± TO STA. 18+15± IS CONSTRUCTED OF ASBESTOS CEMENT PIPE. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER HANDLING AND DISPOSAL OF THIS MATERIAL.
6. EXISTING ASPHALT PAVEMENT, CURB AND GUTTER AND SIDEWALK REMOVED SHALL BE RESTORED TO THEIR ORIGINAL LINES AND GRADES. SEE SPECIFICATION SECTION 02616-SURFACE RESTORATION FOR CURB AND GUTTER SURVEY DATA.
7. FOR ASPHALT PAVEMENT REPLACEMENT SEE RESIDENTIAL AND ARTERIAL STREET SECTIONS ON DWG C-6.
8. ALL STATIONING SHOWN ON THIS SHEET IS REFERENCED TO C OF CONSTRUCTION OF THE NEW 36" DISCHARGE LINE.

SCALE
1"=50' HORIZONTAL
1"=10' VERTICAL



BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION 36"DISCHARGE PIPELINE PLAN/PROFILE					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. C-4		MAP NO. H-19		SHEET 9 OF 57	

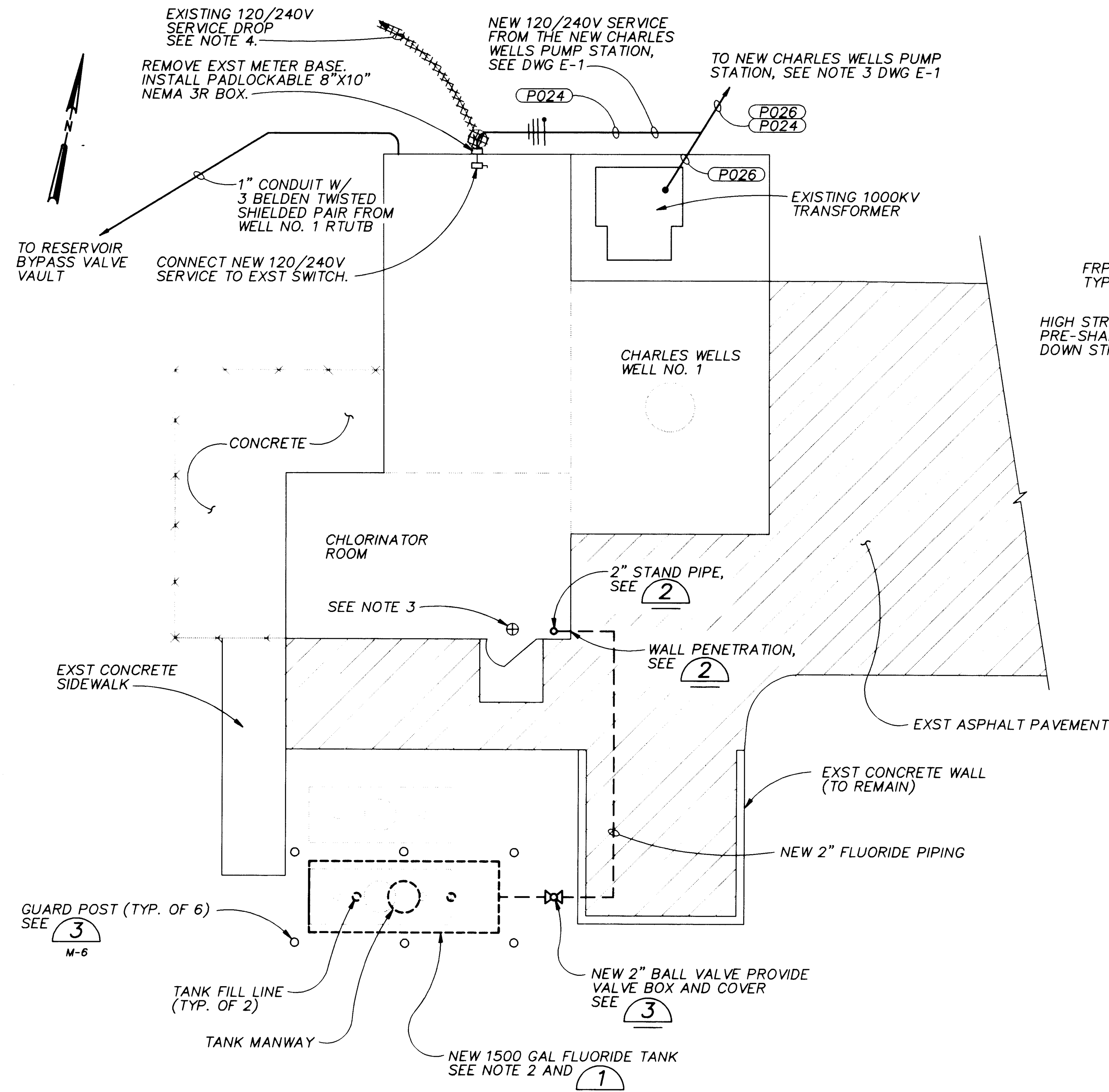
APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE 12/21/94

RECORD DRAWINGS
Revisions Drawn by Michael Brewer Date Nov. 15, 1994
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SCANNED BY LASON

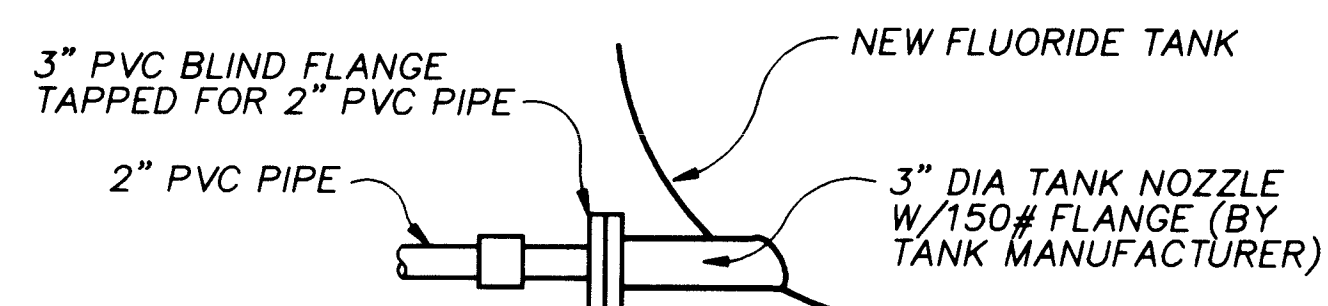
AS BUILT INFORMATION			BENCH MARKS			SURVEY INFORMATION			ENGINEER'S SEAL		
CONTRACTOR	DATE		NO.	BY	DATE	NO.	BY	DATE	NO.	BY	DATE
STAKED BY	DATE										
FIELD ADJUSTMENT BY	DATE										
DRAWN BY	DATE										
CHECKED BY	DATE										
MICRO-FILM INFORMATION			THESE DRAWINGS WERE MODIFIED USING AUTOCAD AND REPLOTTER FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS.			DESIGNED BY M. BREWER DATE 5-19-92			DRAWN BY M. BREWER DATE 6-15-92		
						CHECKED BY J. WINTERS DATE 9-11-92					



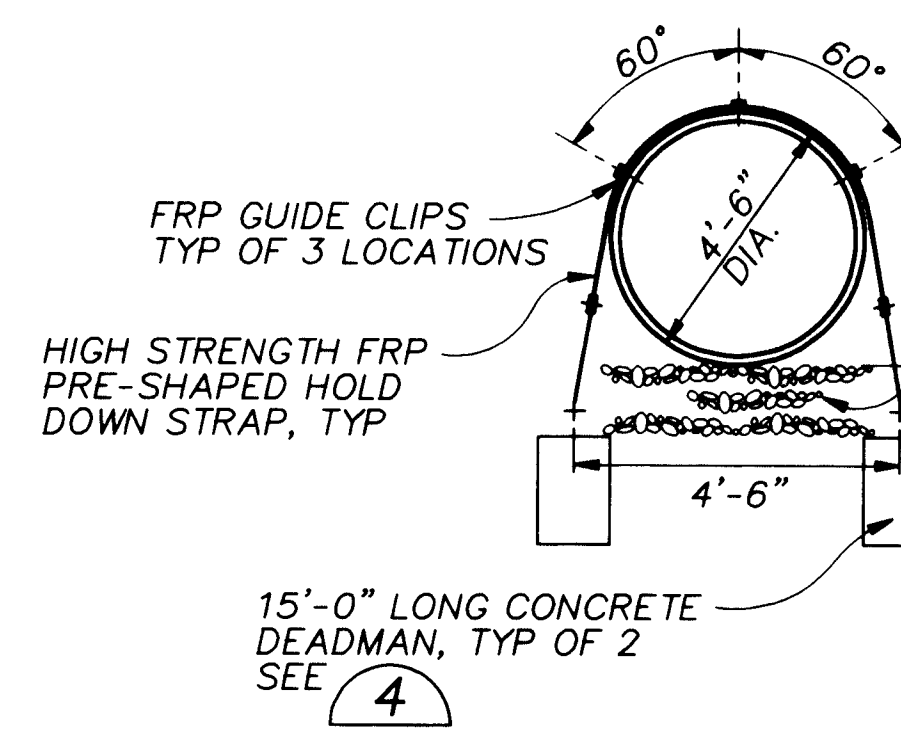
NOTES

- CONTRACTOR SHALL VERIFY ACTUAL LOCATION OF EXST BURIED FLUORIDE PIPING.
- CONTRACTOR SHALL REMOVE AND DISPOSE OF EXST 750 GAL. FLUORIDE TANKS, EXST FLUORIDE PIPING, VALVES AND APPURTENANCES. THE NEW 1500 GAL. FLUORIDE TANK SHALL BE INSTALLED AT THE SAME LOCATION AND BOTTOM OF TANK ELEVATION AS EXST TANKS TO BE REMOVED.
- REFERENCE ELEVATION 100.00 IS THE BASIS FOR ALL ELEVATIONS SHOWN ON THIS DWG AND IS LOCATED AT THE FINISH FLOOR OF THE CHLORINATOR ROOM OF THE EXST CHARLES WELLS WELL NO. 1.
- CONTRACTOR SHALL ARRANGE WITH PUBLIC SERVICE CO. OF N.M. TO HAVE THE EXISTING 120/240V SINGLE PHASE SERVICE DROP AND METER DISCONNECTED REMOVED.
- CONTRACTOR SHALL REPLACE ASPHALT PAVEMENT REMOVED FOR INSTALLATION OF NEW FLUORIDE PIPING TO MATCH DEPTH AND FINISH GRADE OF EXISTING PAVEMENT.
- AREA DISTURBED BY INSTALLATION OF THE NEW FLUORIDE TANK SHALL BE RESODDED TO MATCH SURROUNDING AREA.

CHARLES WELLS WELL NO. 1 - SITE PLAN
1" = 5'-0"



PIPE CONNECTION DETAIL 6
NTS

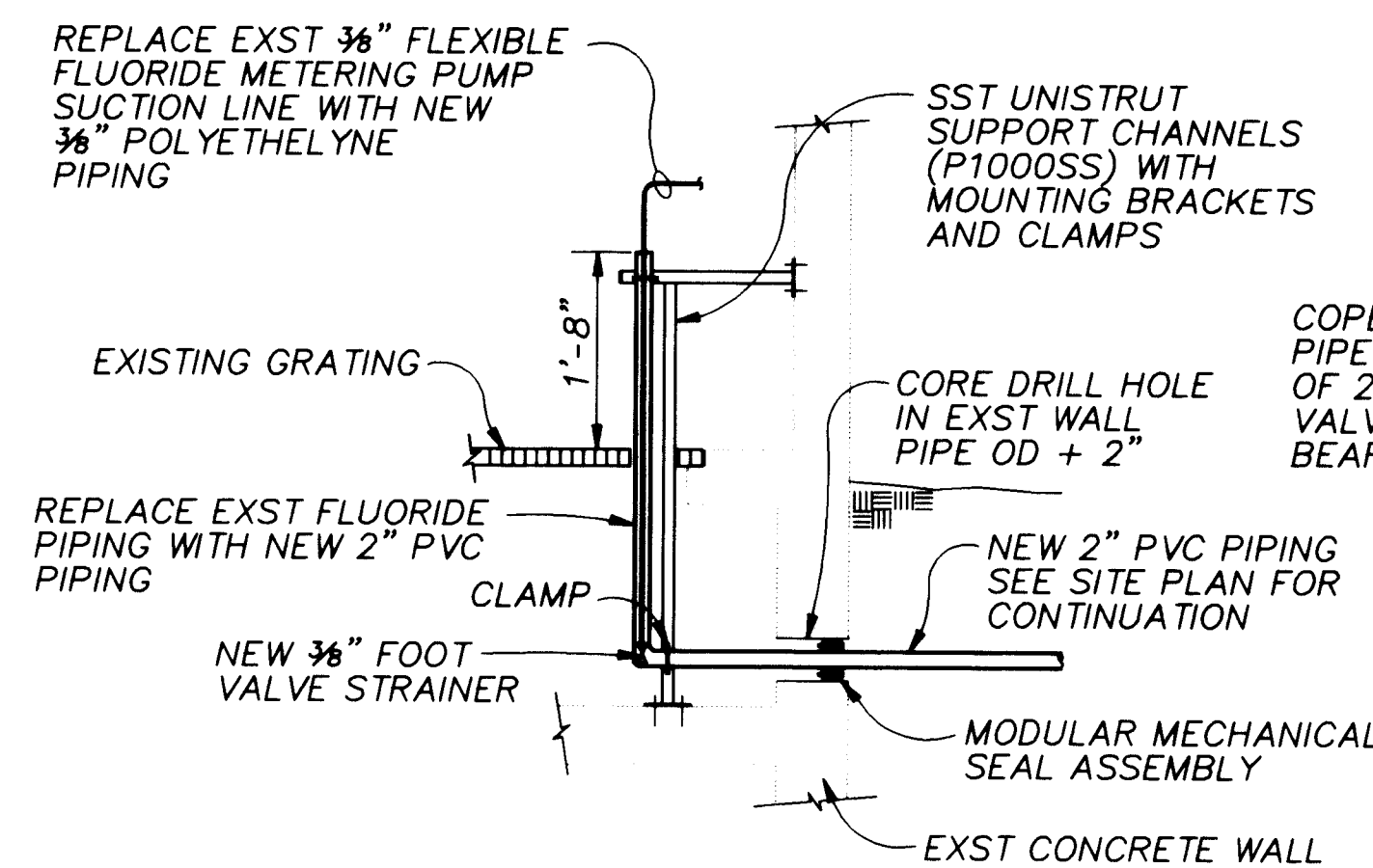


SECTION

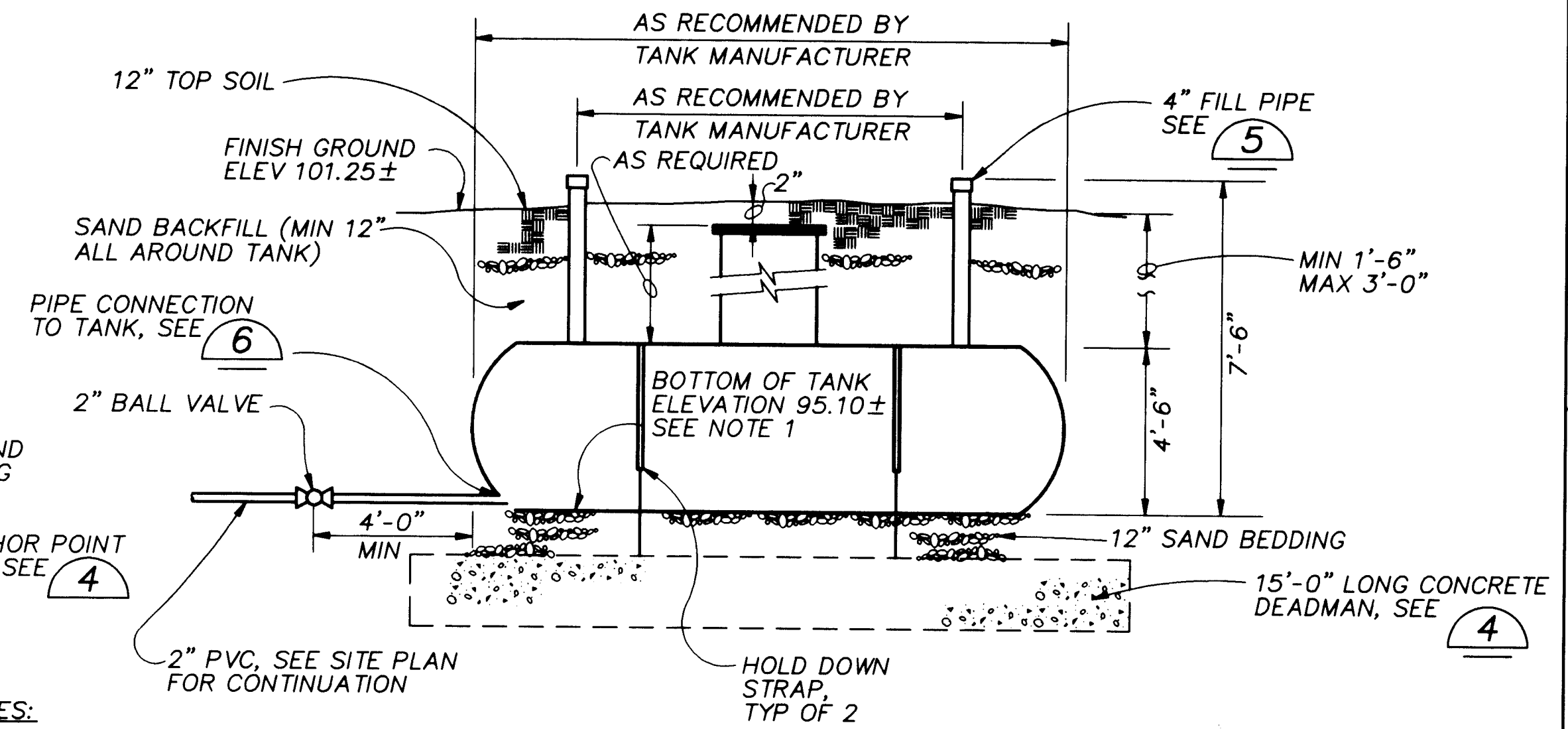
NOTES:

- CONTRACTOR SHALL VERIFY AND MATCH INVERT ELEVATION OF EXISTING TANKS.

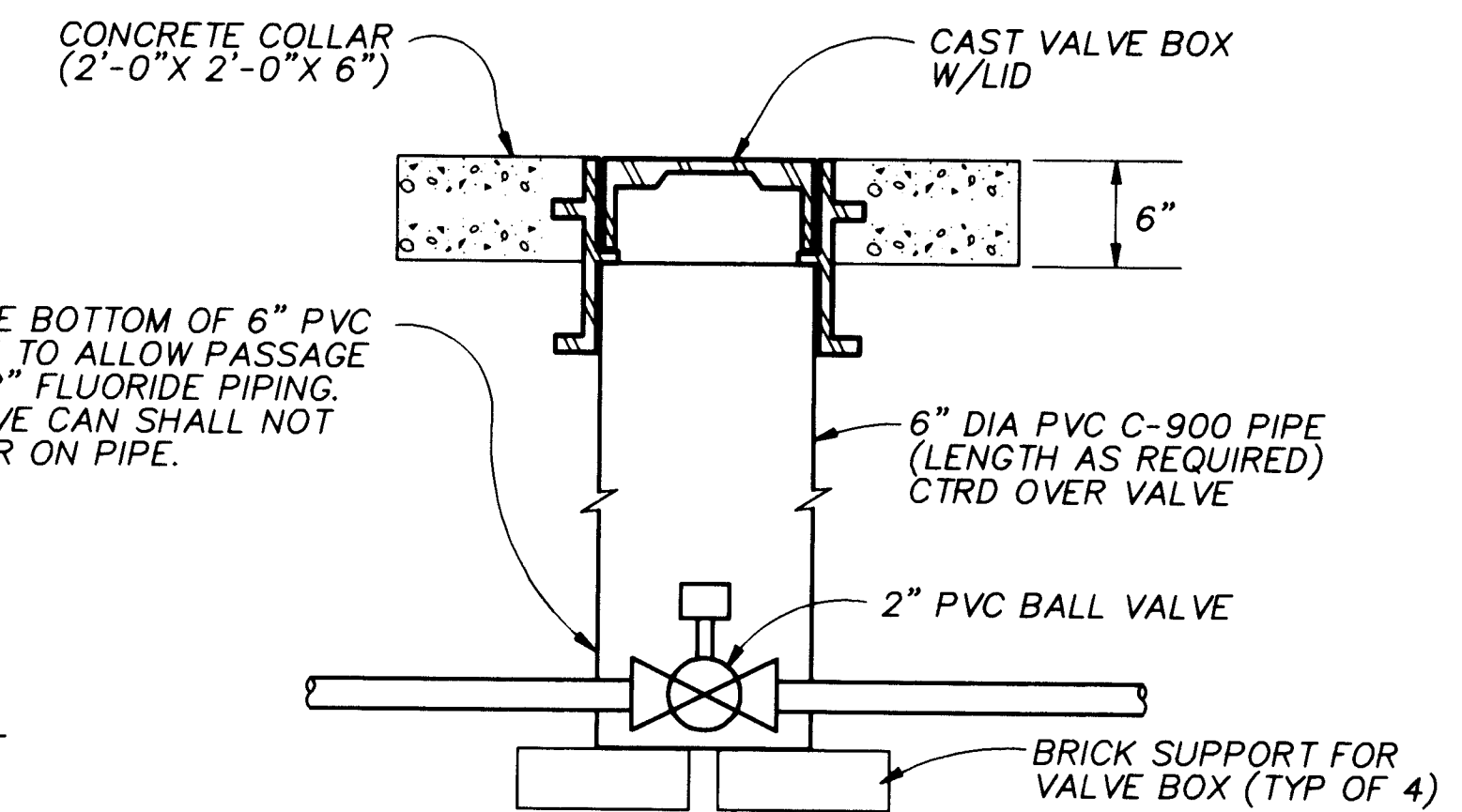
FLUORIDE TANK DETAIL 1
3/8" = 1'-0"



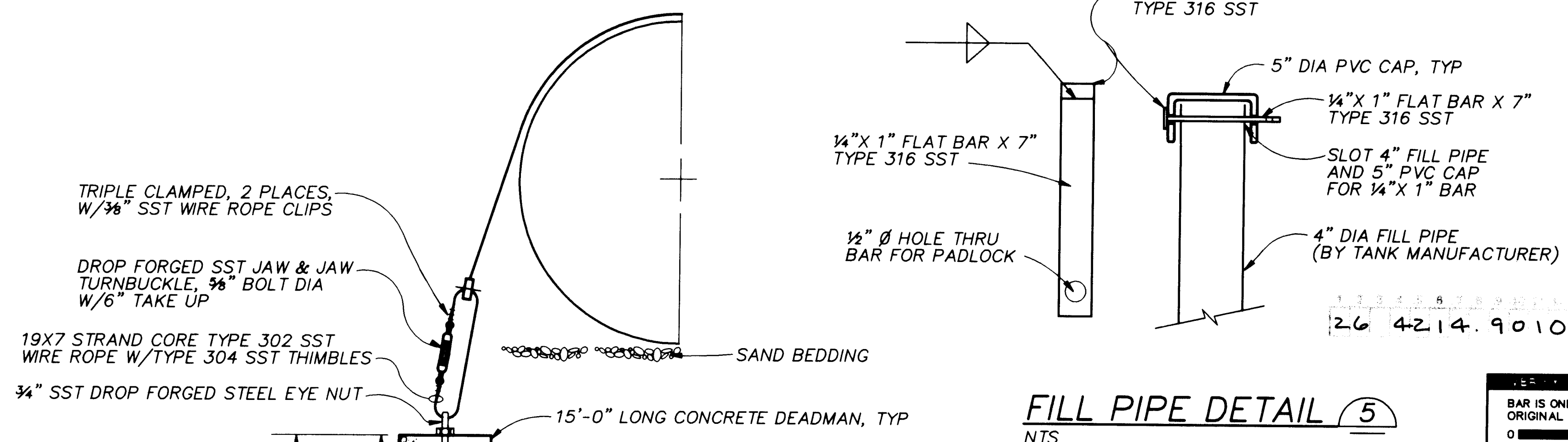
DETAIL 2
NTS



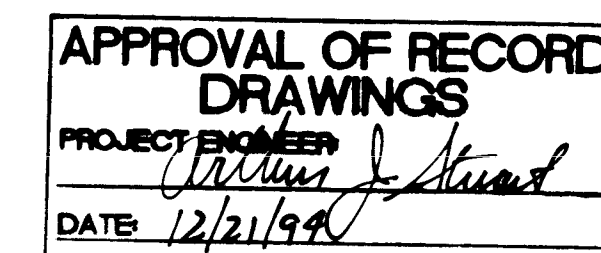
ELEVATION



VALVE BOX DETAIL 3
NTS



FILL PIPE DETAIL 5
NTS



RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994

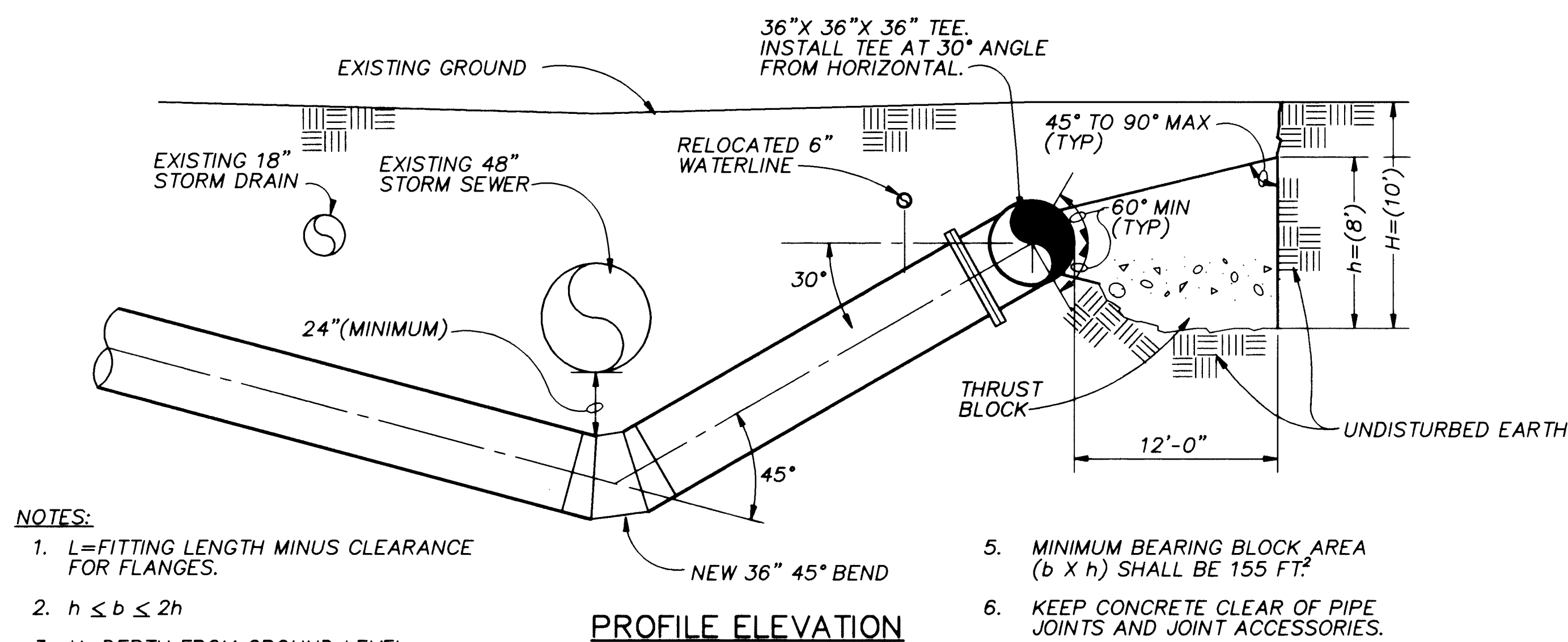
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SCANNED BY
BY LASON

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION CHARLES WELLS WELL NO.1					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. C-4A		MAP NO. H-19		SHEET 10 OF 57	

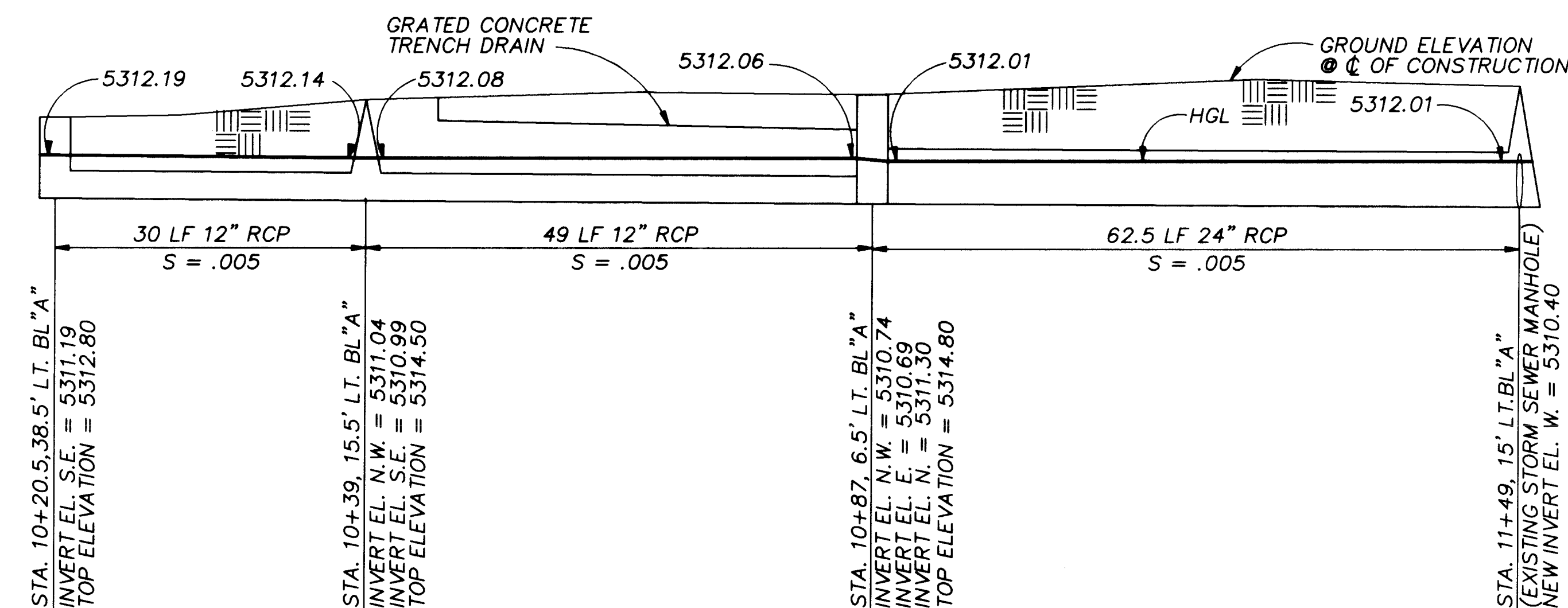


- NOTES:**

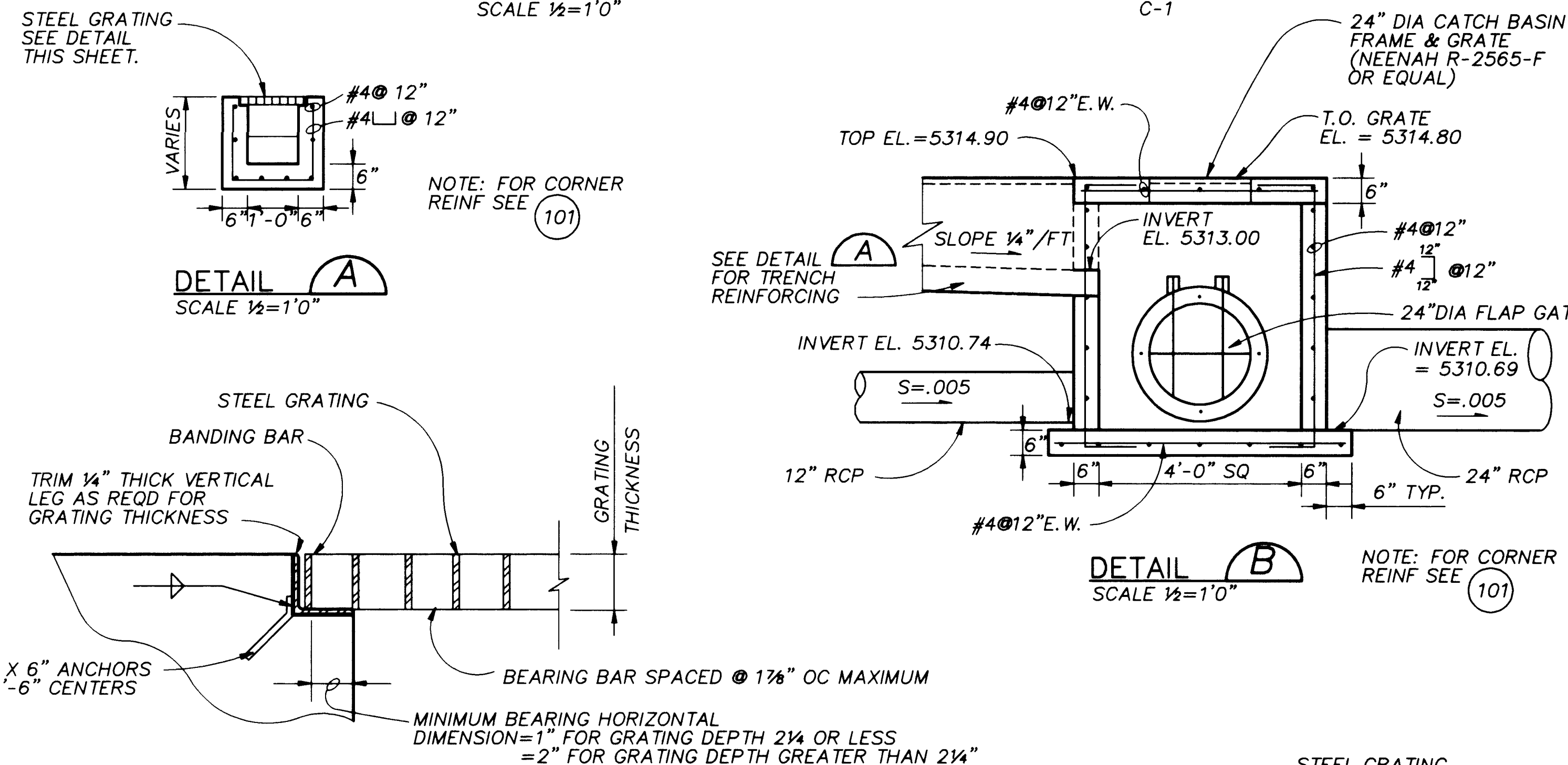
 1. L =FITTING LENGTH MINUS CLEARANCE FOR FLANGES.
 2. $h \leq b \leq 2h$
 3. H =DEPTH FROM GROUND LEVEL TO THE BOTTOM OF THE BLOCK.
 4. h =HEIGHT OF BLOCK SHALL BE GREATER THAN THE DIAMETER OF THE PIPE.

PROFILE ELEVATION

 5. MINIMUM BEARING BLOCK AREA ($b \times h$) SHALL BE 155 FT²
 6. KEEP CONCRETE CLEAR OF PIPE JOINTS AND JOINT ACCESSORIES.
 7. CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
 8. SEE SPECIFICATIONS FOR ADDITIONAL THRUST RESTRAINT REQUIREMENTS.



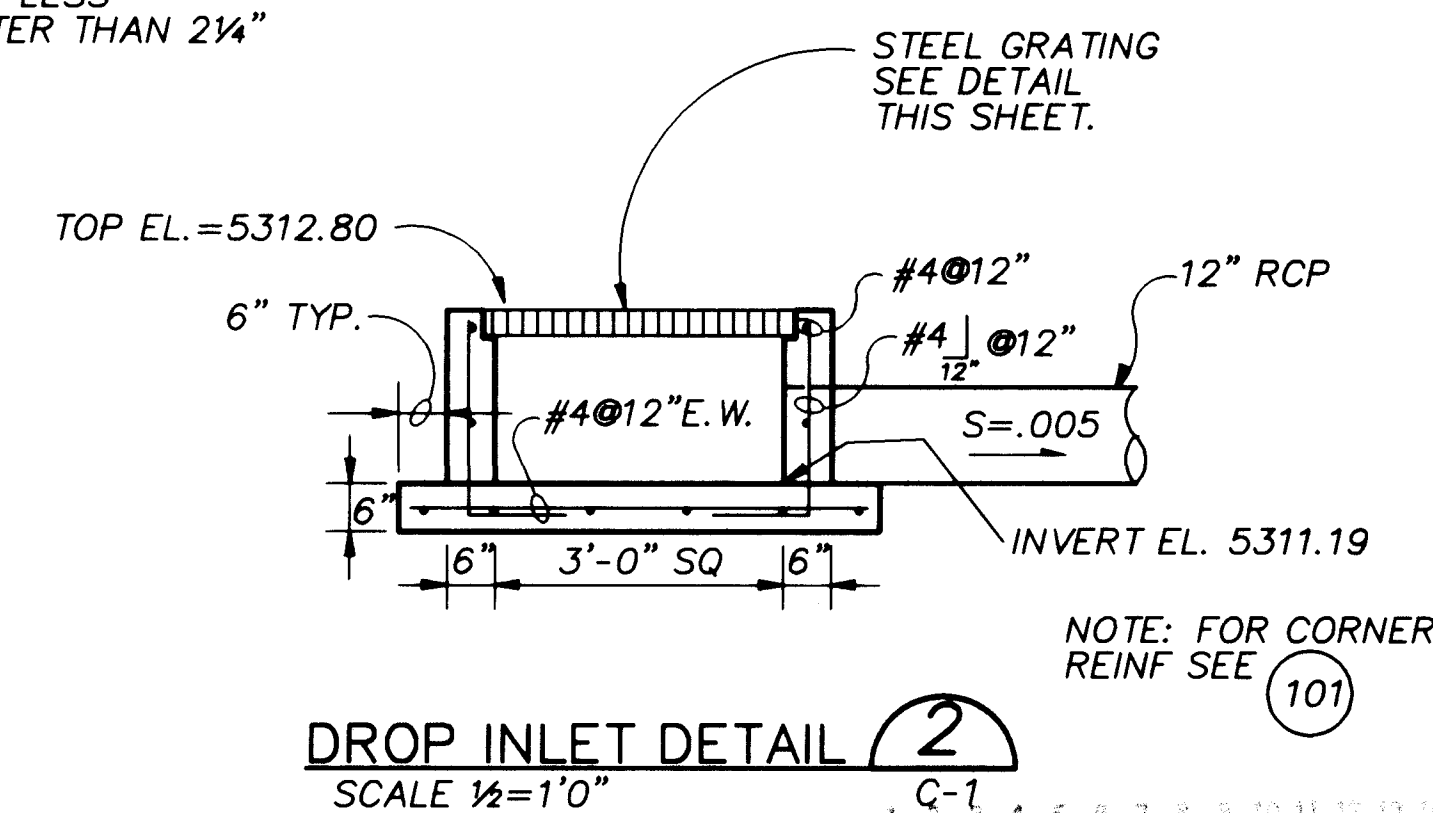
12" AND 24" DRAINLINE PROFILE
N.T.S.



GRATING NOTES

1. WIDTH OF GRATING SECTIONS SHALL NOT EXCEED 3'-0".
2. SHOP DRAWINGS BASED ON FIELD DIMENSIONS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FABRICATION.
3. MATERIAL FOR SUPPORTS OF STEEL AND ALUMINUM GRATING TO BE SAME AS GRATING, EXCEPT METAL SUPPORTS THAT ARE TO BE IMBEDDED IN CONCRETE SHALL BE TYPE 316 STAINLESS STEEL.
4. UNLESS NOTED OTHERWISE ON PLANS, GRATING THICKNESS SHALL BE AS TABULATED IN "GRATING THICKNESS TABLE".
5. BEARING BAR THICKNESS FOR GRATING SHALL BE $\frac{1}{16}$ " MINIMUM.
6. BAND ALL EDGES WITH $\frac{1}{16}$ " X DEPTH OF BEARING BAR.
7. PROVIDE MISCELLANEOUS GRATING FASTENERS AS REQUIRED.
8. TYPE OF MATERIAL USED SHALL BE AS SHOWN ON PLANS OR AS SPECIFIED.
9. THE HORIZONTAL CLEARANCE BETWEEN THE GRATING AND GRATING SUPPORTS SHALL NOT BE LESS THAN $\frac{1}{4}$ " NOR GREATER THAN $\frac{1}{2}$ " AND AS SPECIFIED.

VEHICULAR TRAFFIC (HS 20-44)		
GRATING THICKNESS TABLE		
MAXIMUM SPAN	STEEL (IN.)	ALUMINUM (IN.)
1'-0"	2" X 3/8"	DO NOT USE ALUMINUM GRATING
1'-8"	2 1/2" X 1/4"	
2'-0"	2 1/2" X 3/8" OR 3" X 1/4"	
2'-6"	3" X 3/8" OR 4" X 1/4"	
3'-3"	3 1/2" X 3/8"	
4'-0"	4" X 3/8"	
5'-0"	4 1/2" X 3/8"	



APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER *William J. Stuart*
DATE 12/21/94

RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994

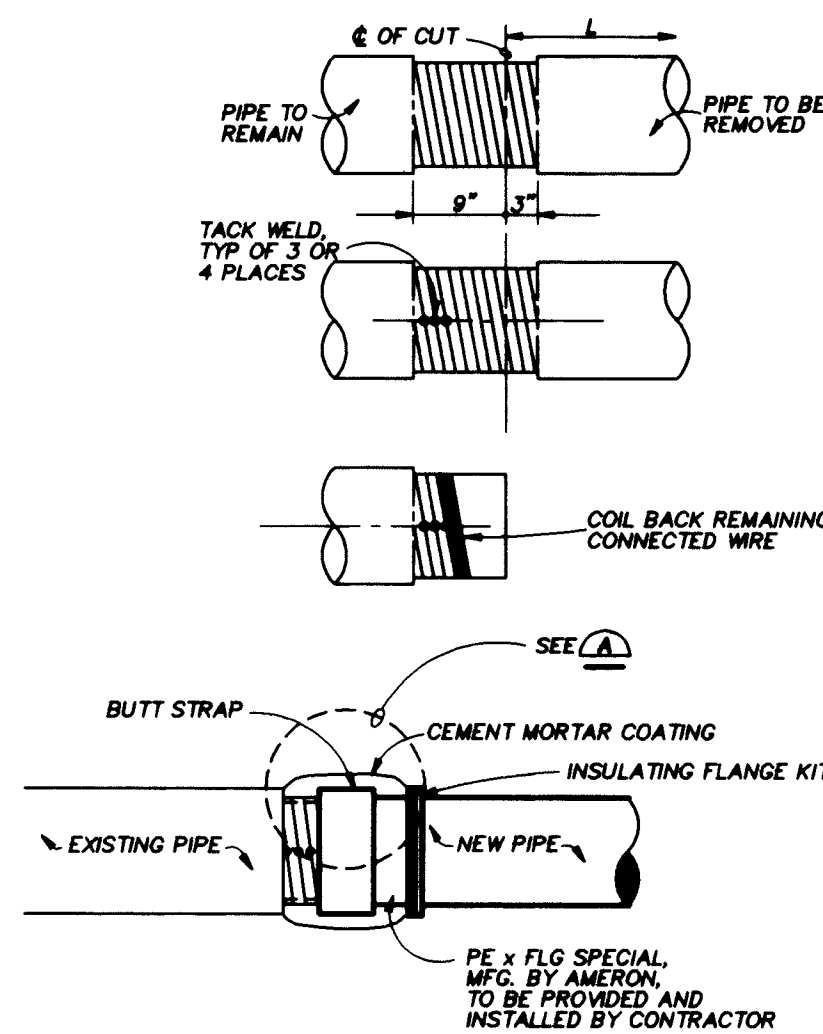
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SCANNED BY LASON

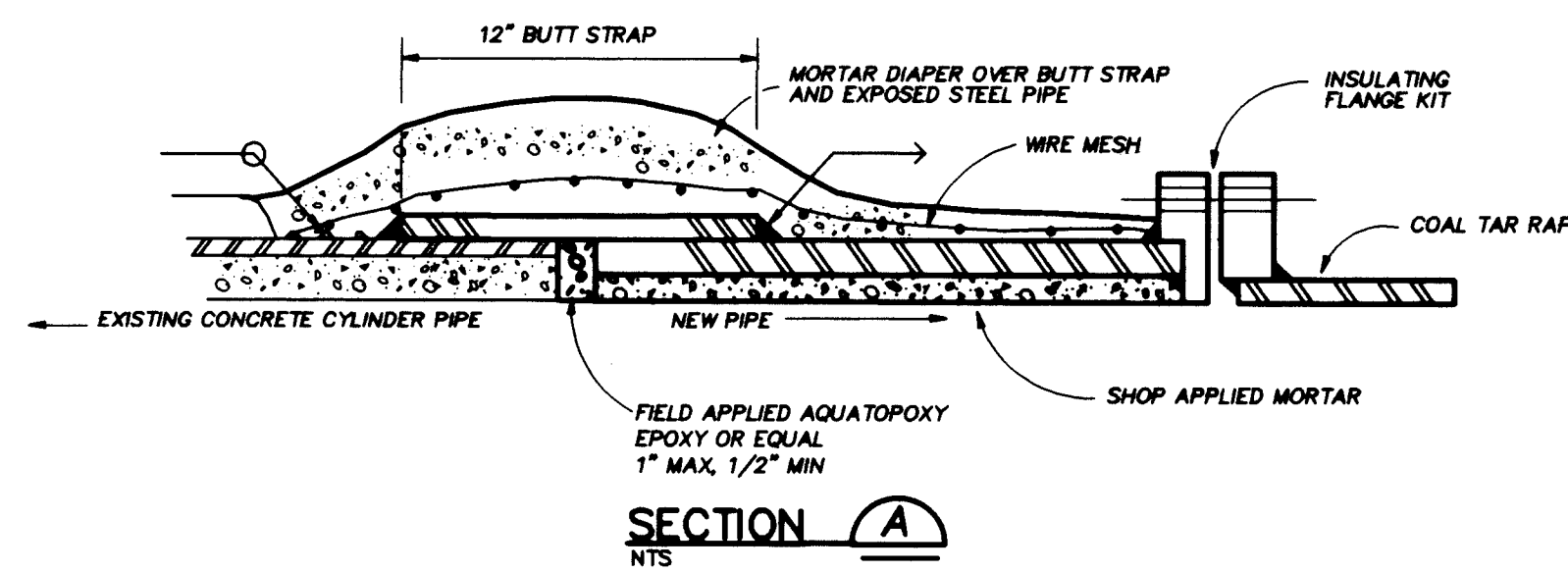
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION PIPELINE DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. C-5		MAP NO.	SHEET 11	OF 57	

CP NO. 4214.90

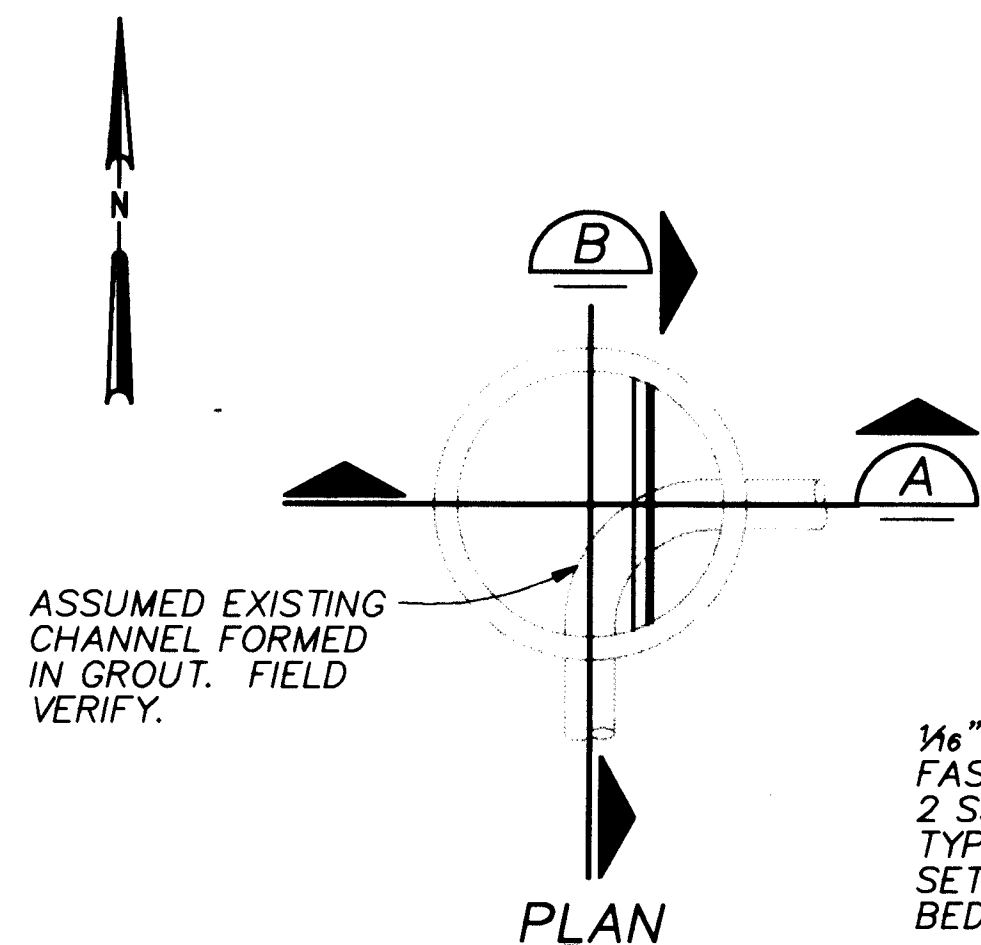
ENGINEER'S SEAL				SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION	
THESE DRAWINGS WERE MODIFIED USING AUTOCAD AND REPLOTTED FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS.				FIELD NOTES					
				NO.	BY DATE				
REVISIONS				DESIGN		CONTRACTOR STAMPED BY INSPECTOR'S ACCEPTANCE BY VERIFICATION BY DRAWINGS COORDINATED BY		DATE DATE DATE DATE DATE DATE	
DESIGNED BY M. BREWER				DATE 5-21-92		MICRO-FILM INFORMATION		RECORDED BY NO.	
DRAWN BY M. BREWER				DATE 6-17-92					
RECEIVED BY J. MANTON				DATE 6-24-92					



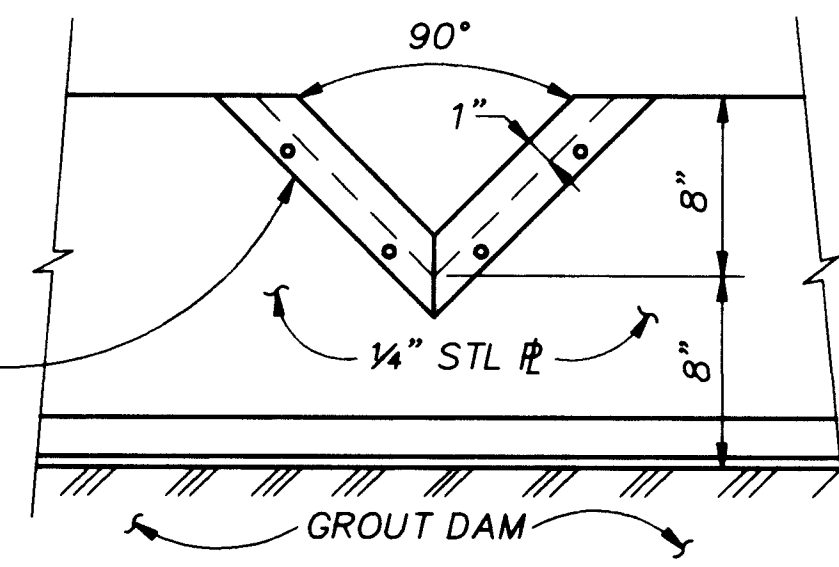
BUTTSTRAP DETAIL
NTS



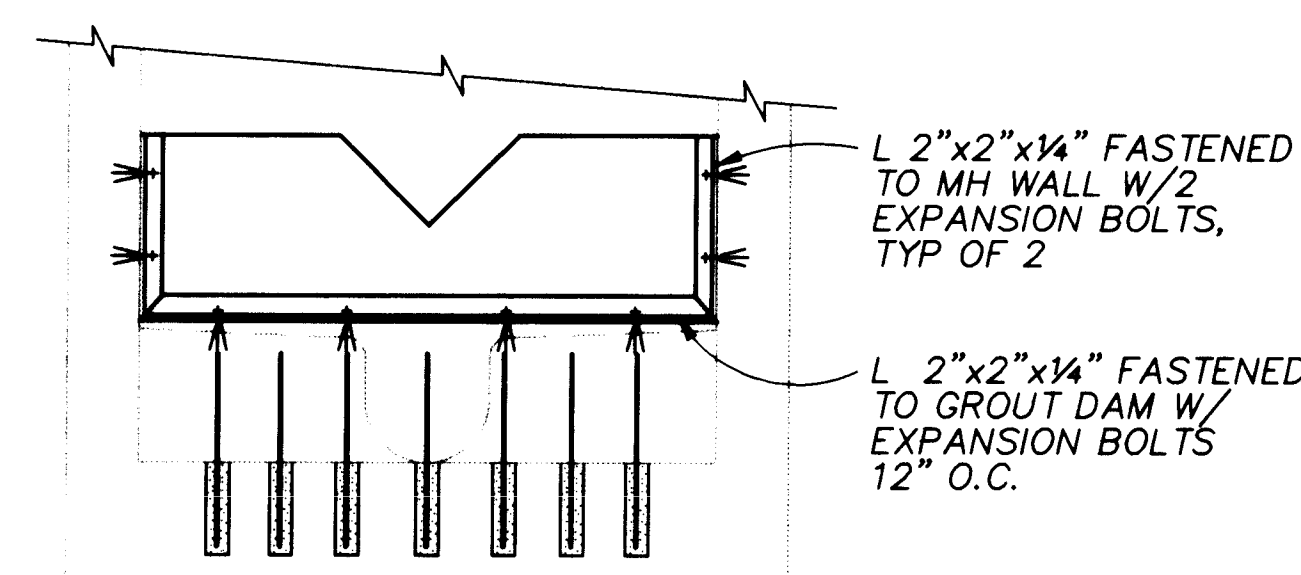
BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A



BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

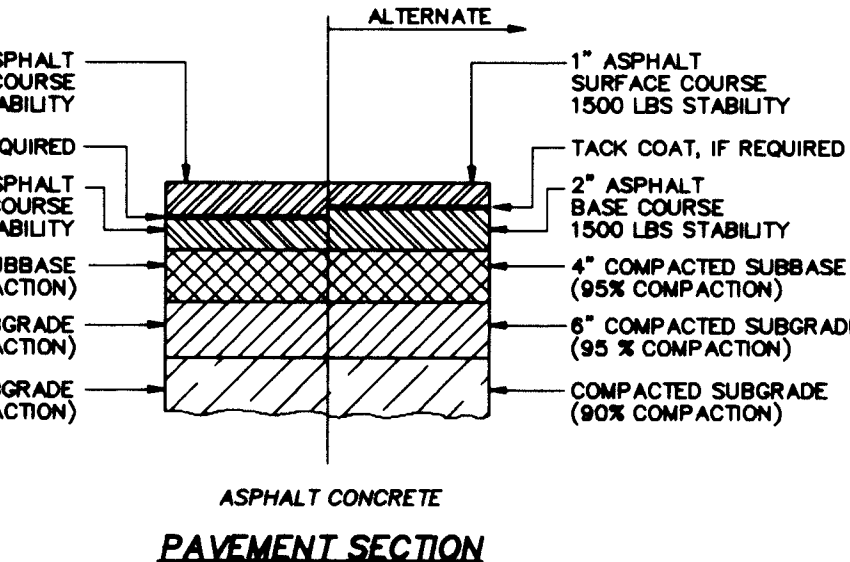


BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

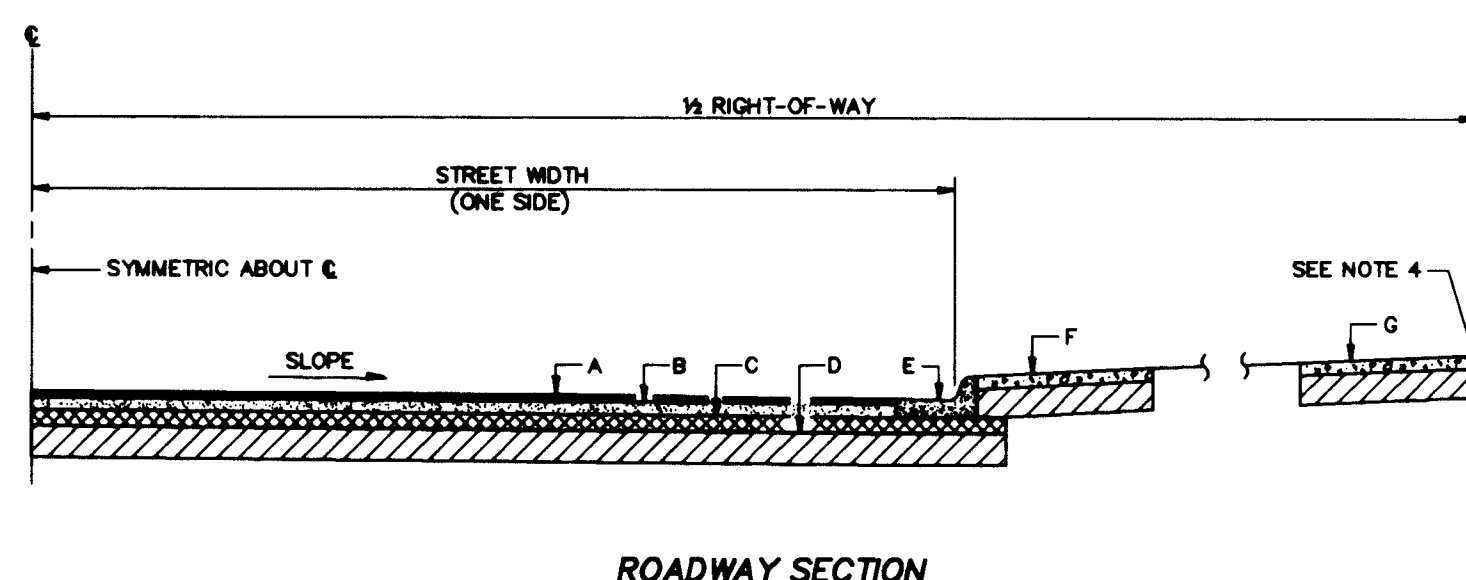


BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

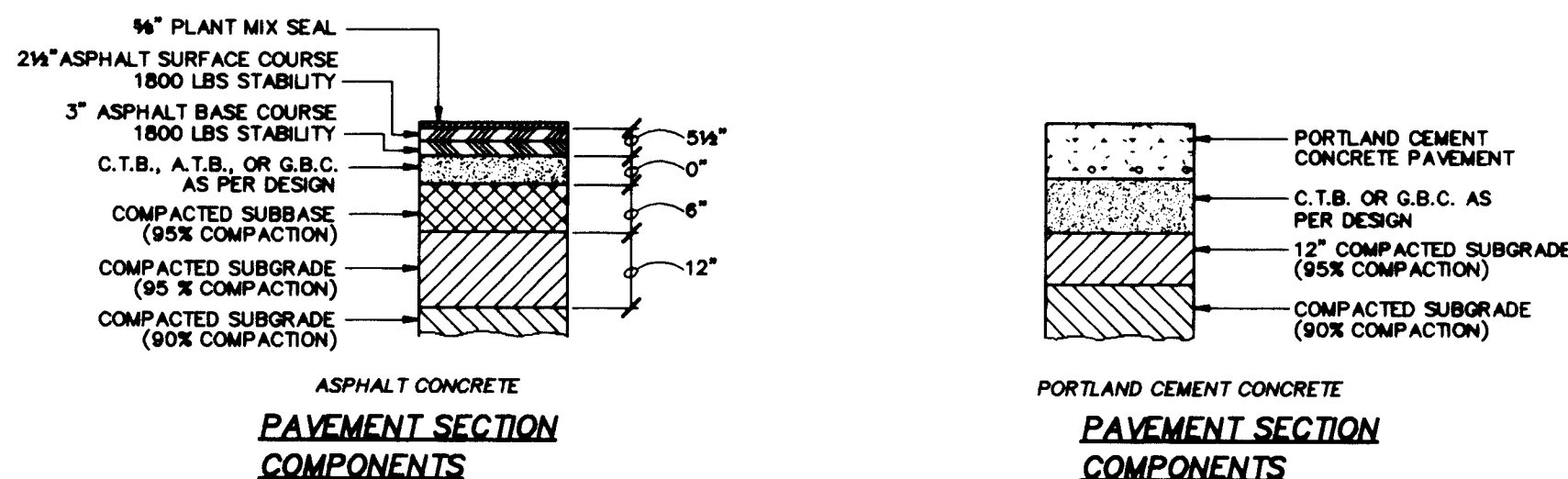
BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A



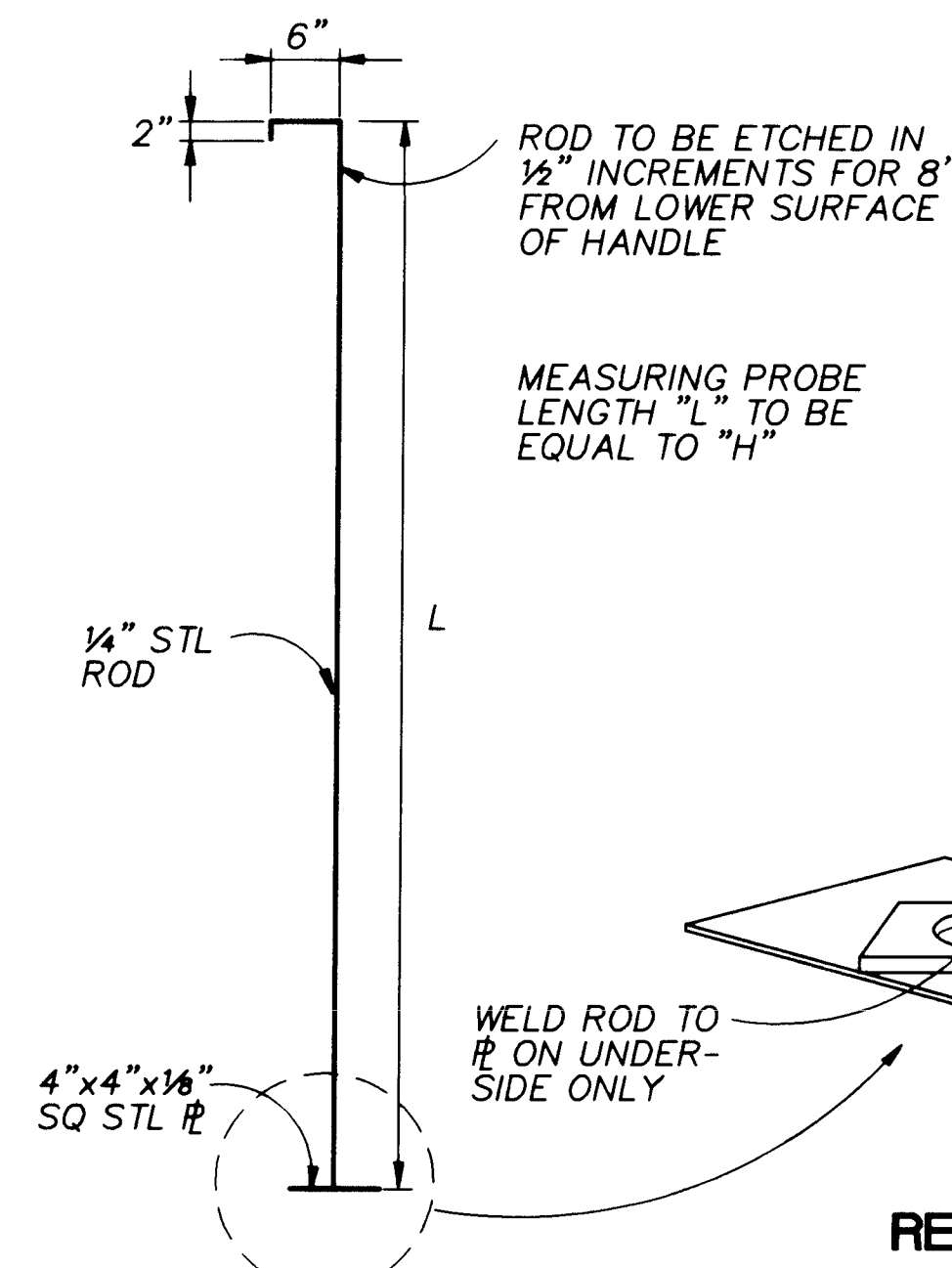
BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A



BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

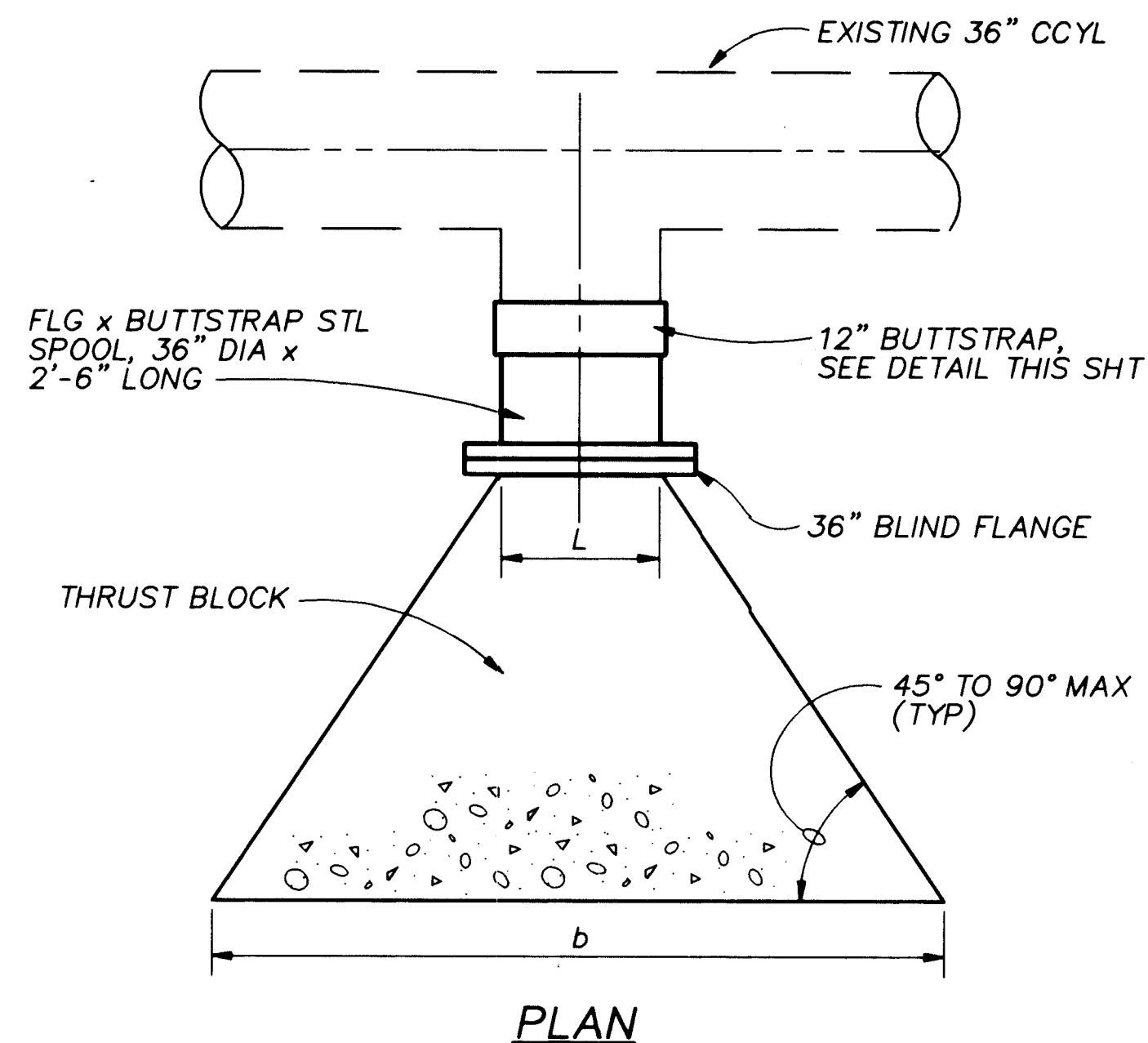


BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

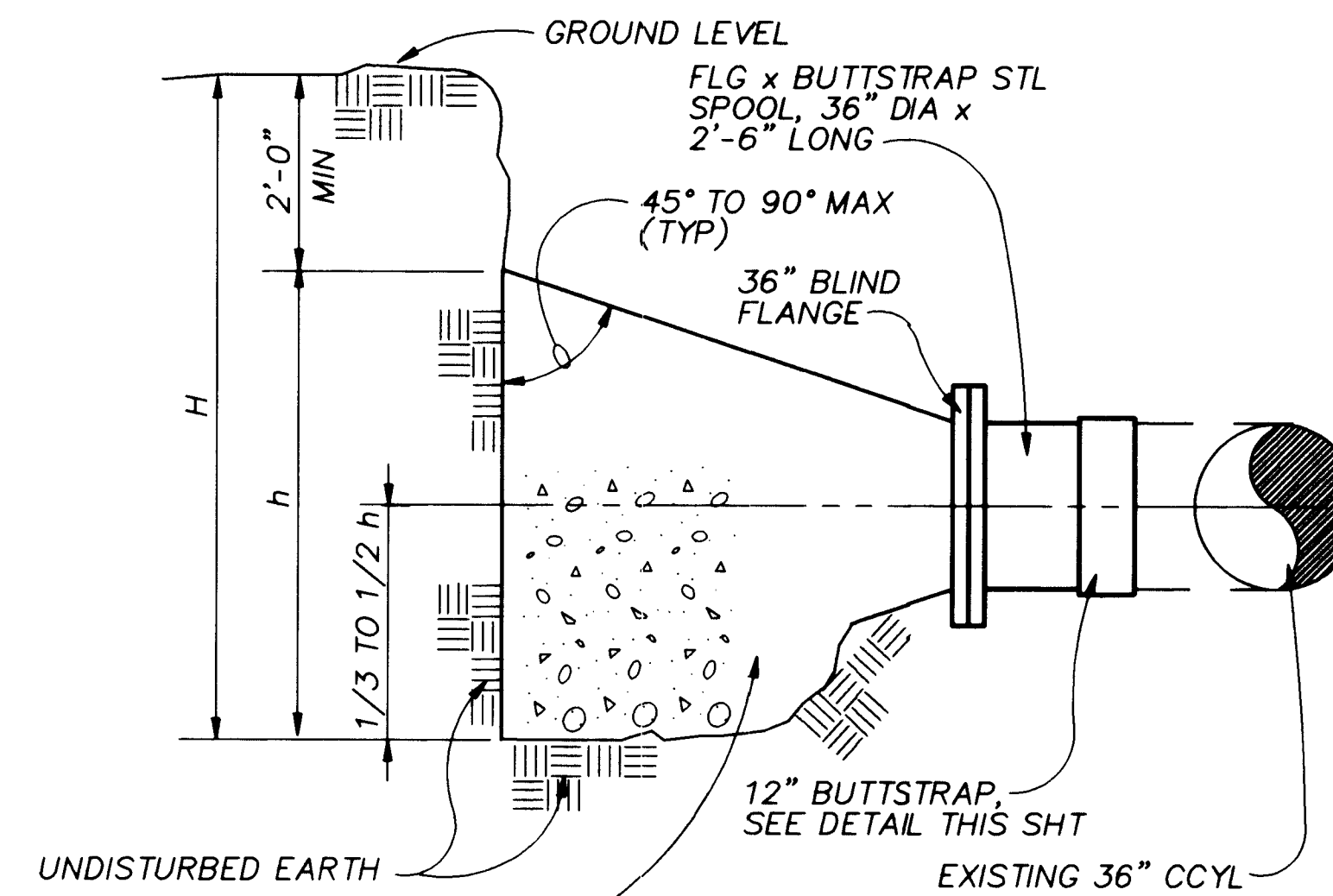


BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

- GENERAL NOTES:**
- CROWN ON STREET SHALL BE AS FOLLOWS:
a. 32" STREET = 4"
b. 40" STREET = 5"
c. LESS THAN 32" STREET, PAVEMENT SLOPE = 2%
SECTION
 - ALL SUBGRADE COMPACTION FOR C & G WILL EXTEND 12" MIN ON EITHER SIDE OF C & G OR CURB SECTION
 - SUBGRADE PREPARATION UNDER SIDEWALK AND DRIVEPADS SHALL BE INCLUDED WITH THE PARTICULAR ITEM.
 - FINISH GRADE AT PROPERTY LINE SHALL BE 0.33' MIN ABOVE TOP OF CURB.
- CONSTRUCTION NOTES:**
- SIDEWALK AT STANDARD SETBACK
 - SIDEWALK ADJACENT TO CURB, (NON-STANDARD, VARIANCE REQUIRED)
 - STANDARD C & G
 - A.C. OR P.C.C. PAVEMENT
 - 4" COMPACTED SUBGRADE
 - 6" COMPACTED SUBGRADE



BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A



BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

- NOTES:**
- L=DIAMETER OF THE PIPE
 - $h \leq b \leq 2H$
 - H=DEPTH FROM GROUND LEVEL TO THE BOTTOM OF THE BLOCK.
 - h=HEIGHT OF BLOCK SHALL BE GREATER THAN THE DIAMETER OF THE PIPE.

BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

- MINIMUM BEARING BLOCK AREA ($b \times h$) SHALL BE 110 ft^2
- KEEP CONCRETE CLEAR OF PIPE JOINTS AND JOINT ACCESSORIES.
- CONCRETE THRUST BLOCKING SHALL BE POURED AGAINST UNDISTURBED EARTH.
- SEE SPECIFICATIONS FOR ADDITIONAL THRUST RESTRAINT REQUIREMENTS.

BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

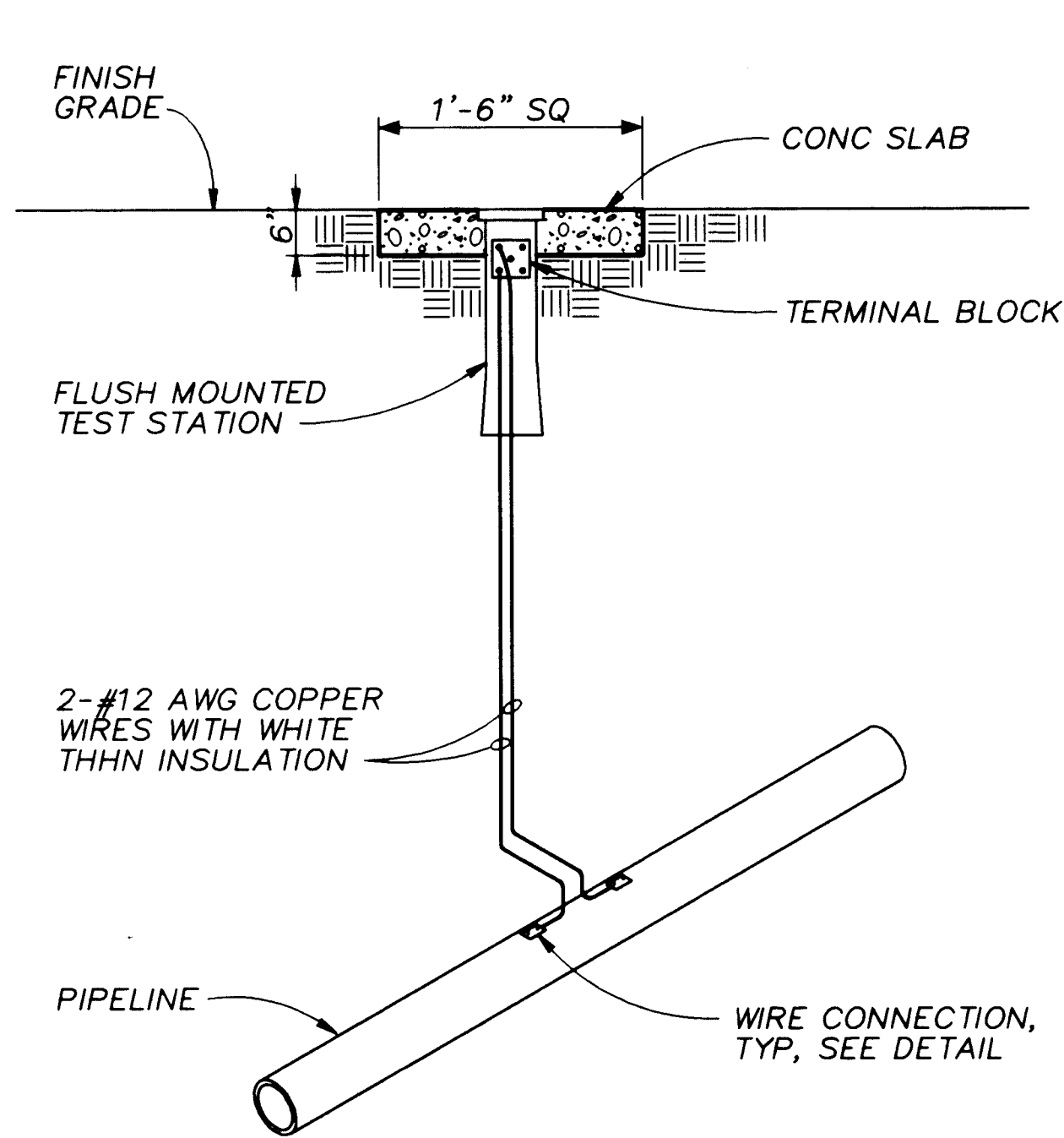
APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE 12/21/94

BUTTSTRAP JOINT FOR CONCRETE CYLINDER PIPE
SECTION A

Revisions Drawn by Michael Brewer Date Nov. 15, 1994
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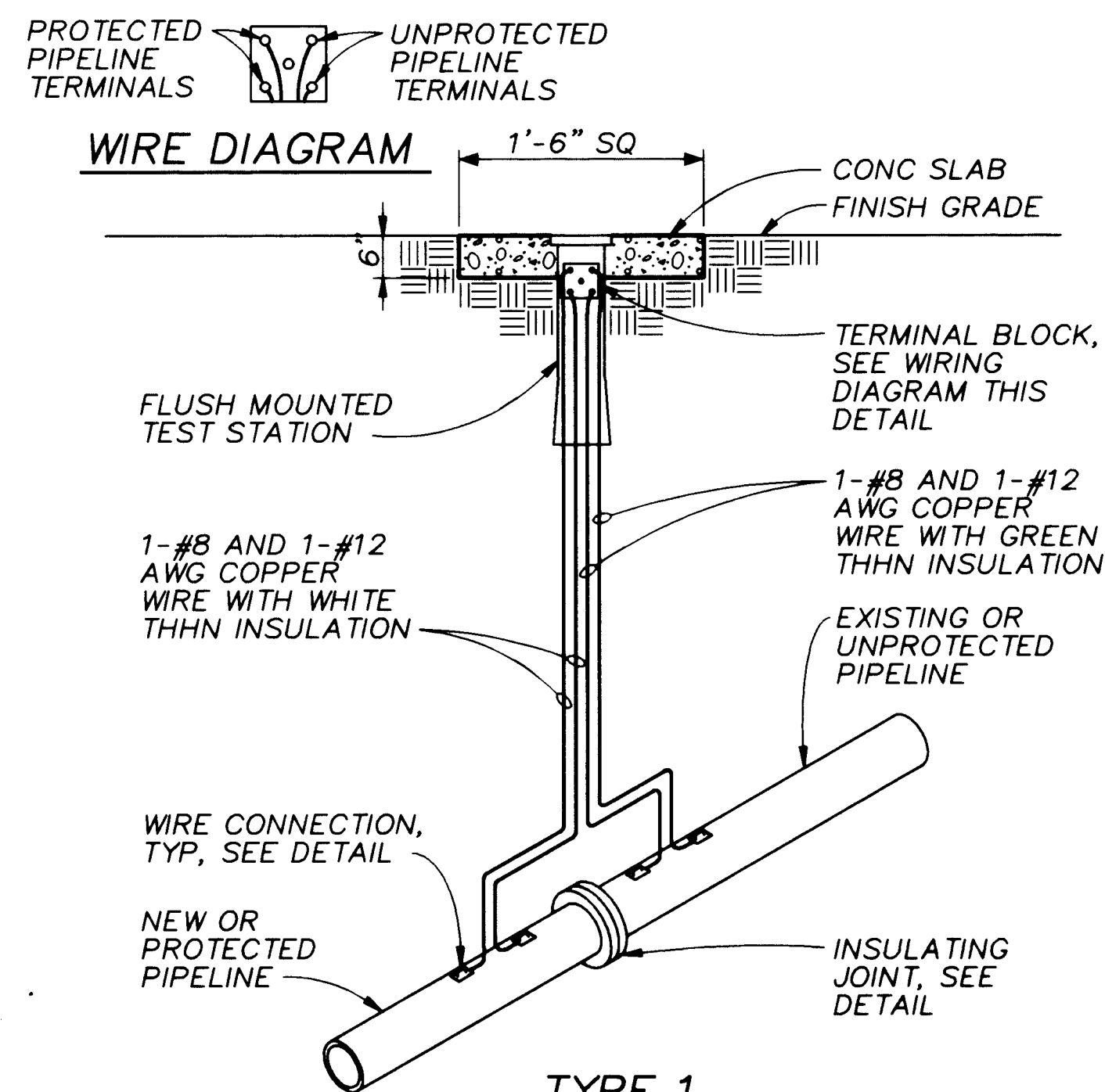
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION			
PIPELINE DETAILS			
APPROVALS	ENGINEER	DATE	APPROVALS
D.R.C. Chair			Water
Trans. Dev.			Waste Water
Hydrology			
DRAWING NO.	C-6	MAP NO.	SHEET 12 OF 57
CP NO. 4214.90			



TYPE T

FLUSH MOUNTED TEST STATION

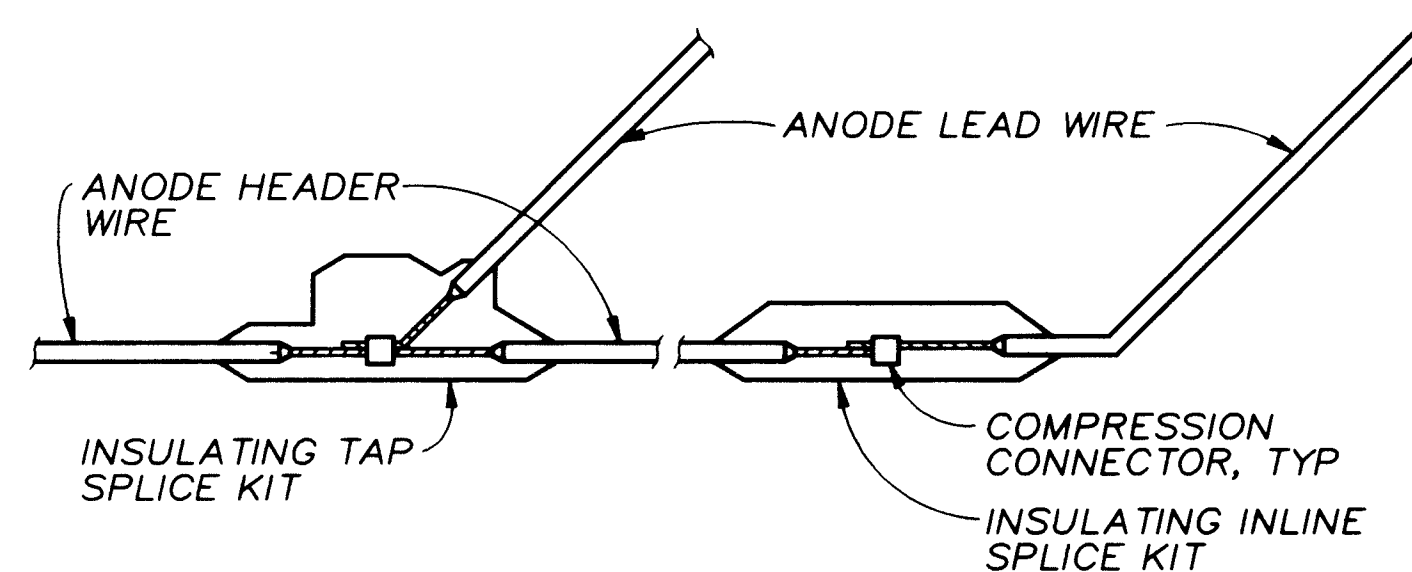
NTS



TYPE 1

FLUSH MOUNTED TEST STATION

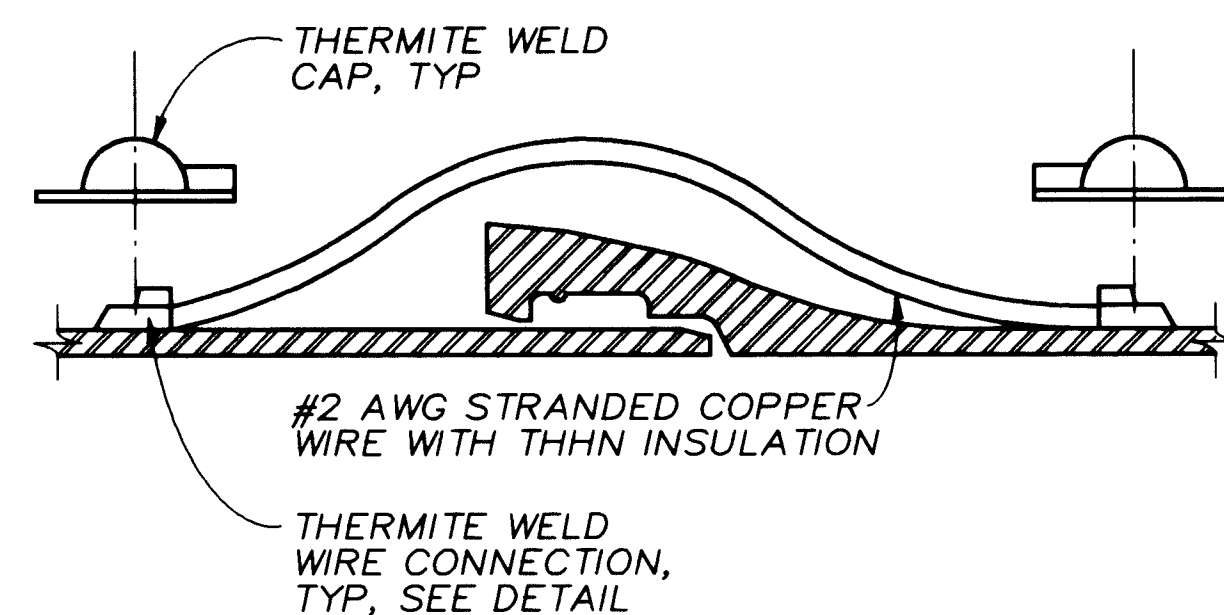
NTS



NOTE: EPOXY SPLICE KITS SHALL BE CURED A MINIMUM OF 2 HOURS AND HEAT SHRINK SPLICE KITS COOLED A MINIMUM OF 1 HOUR BEFORE BURIAL OR SUBMERSION.

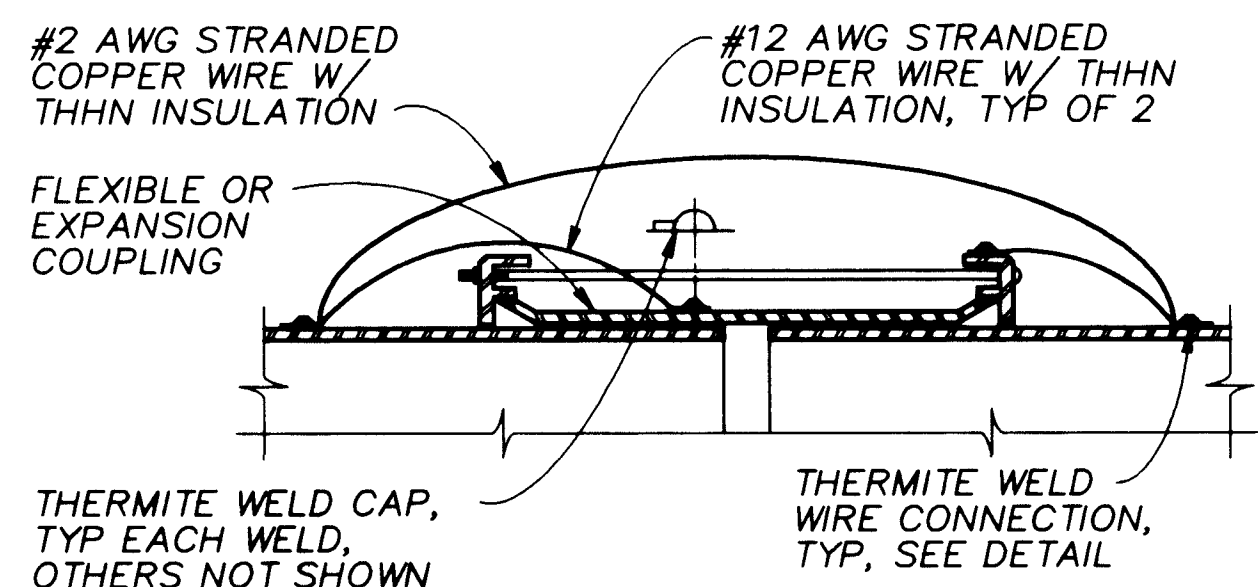
WIRE SPLICE

NTS



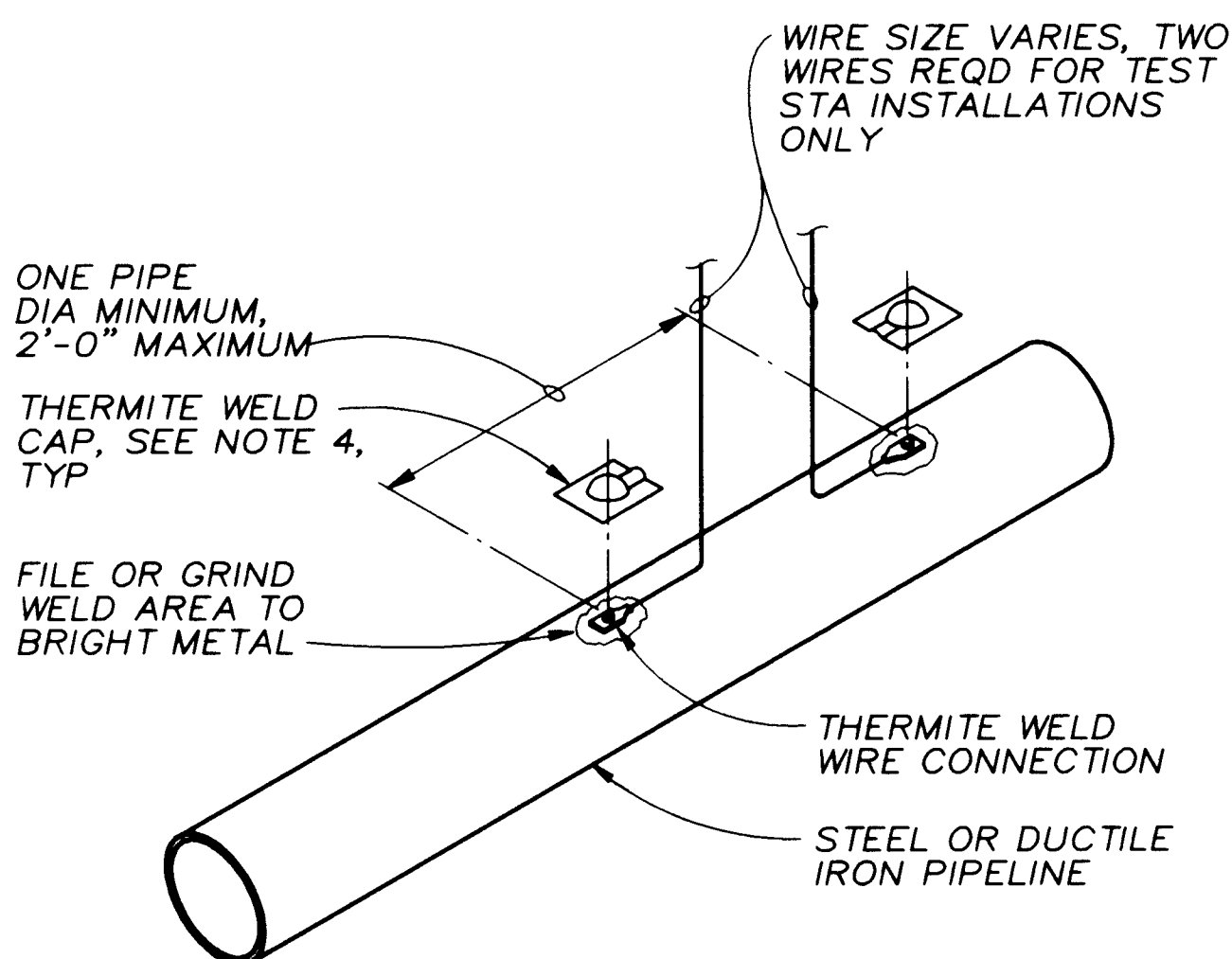
PUSH-ON JOINT BOND

NTS



FLEXIBLE JOINT BOND

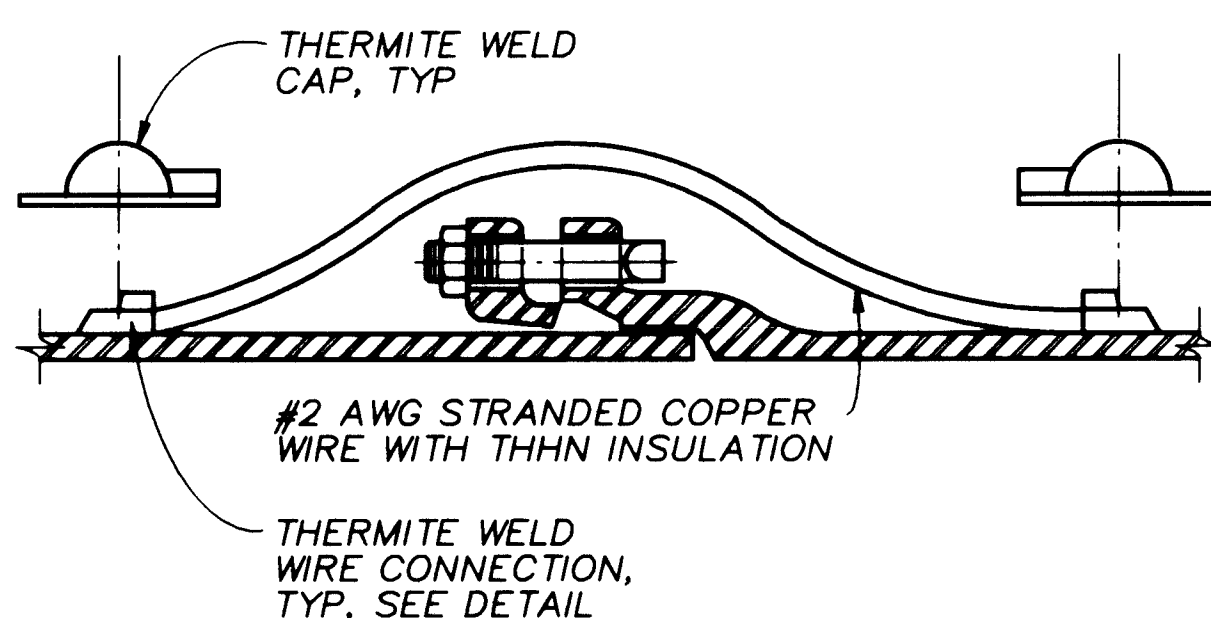
NTS



- NOTES:
1. COPPER SLEEVE REQUIRED FOR THERMITE WELDING OF #10 AWG AND SMALLER WIRE.
 2. USE COPPER SLEEVE ON #2 AWG JOINT BONDING WIRES.
 3. WELDER AND CARTRIDGE SIZE VARIES ACCORDING TO WIRE SIZE AND PIPE MATERIAL, CONSULT WELDER MANUFACTURER FOR RECOMMENDED WELDER AND CARTRIDGE.
 4. COAT WELD AREA AND FILL RECESS ON THERMITE WELD CAP WITH COLD APPLIED COAL TAR MASTIC AND APPLY CAP TO WELD.

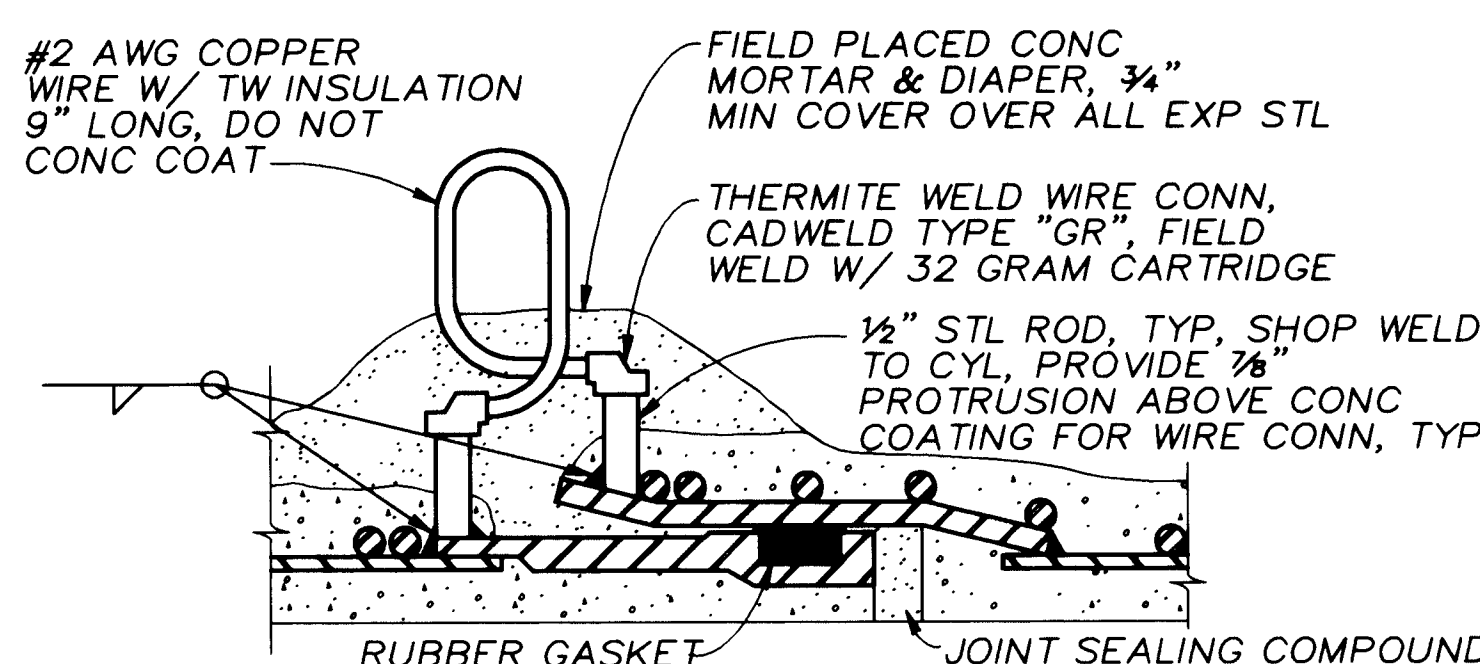
WIRE CONNECTION FOR STEEL AND DUCTILE IRON PIPE

NTS



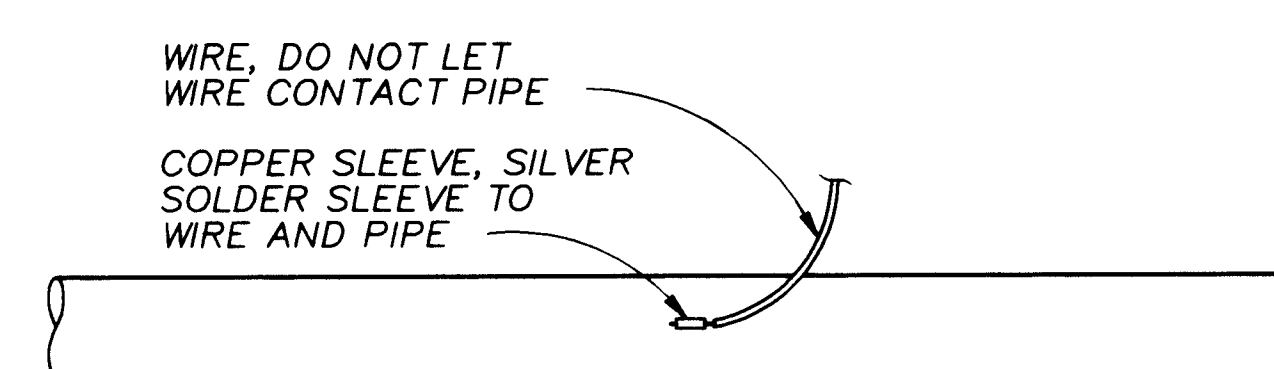
MECHANICAL JOINT BOND

NTS



CONCRETE CYLINDER PIPE JOINT BOND

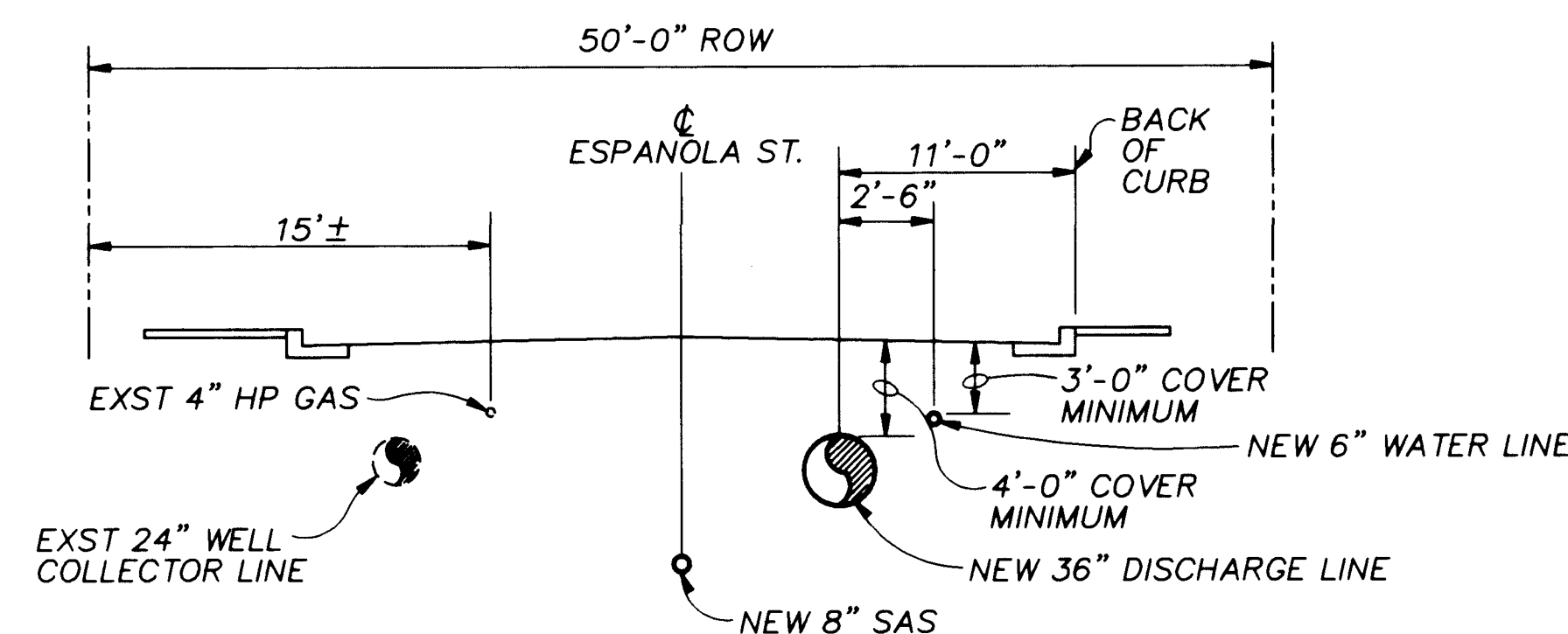
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NOTE: DO NOT COAT OR TAPE WIRE CONNECTION OR LEAVE CRACKS OR CREVICES AT CONNECTION.

WIRE CONNECTION TO STAINLESS STEEL PIPE

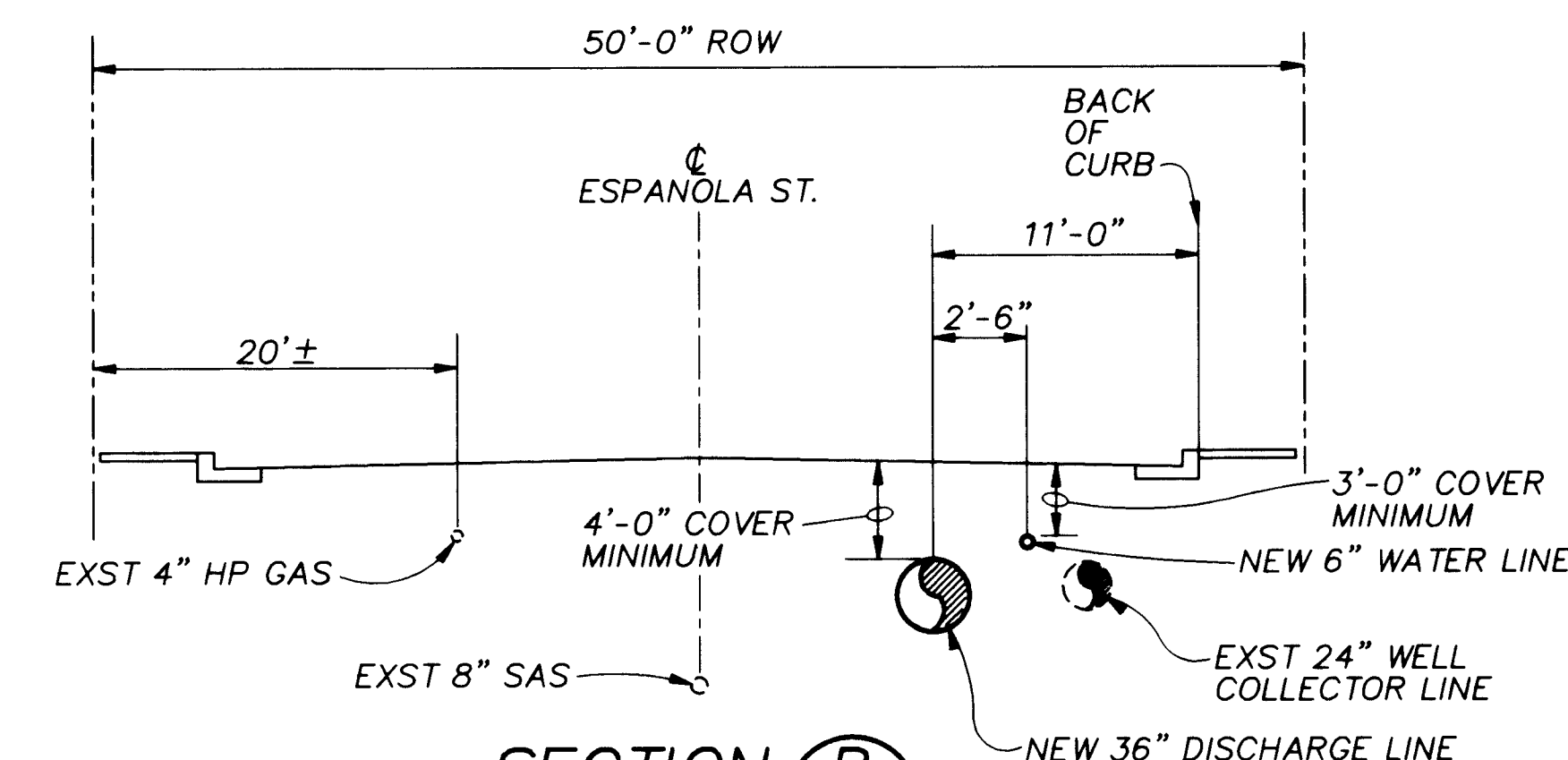
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SECTION A

NTS

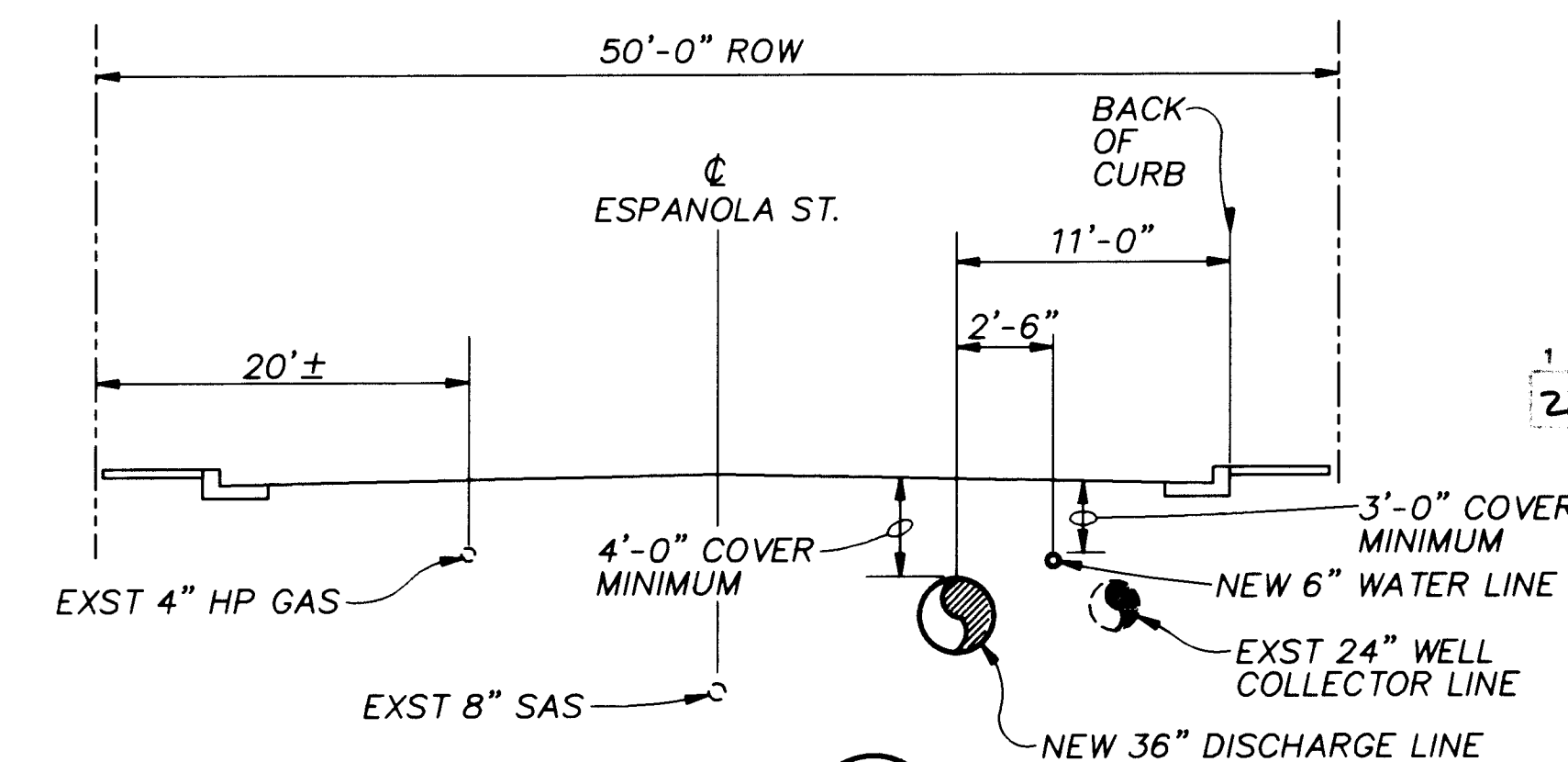
C-3



SECTION B

NTS

C-3



SECTION C

NTS

C-4

APPROVAL OF RECORD DRAWINGS

Arthur J. Steward

DATE: 12/2/94

RECORD DRAWINGS

Revisions Drawn by: Michael Brewer Date: Nov. 15, 1994

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1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

26 4214.901394

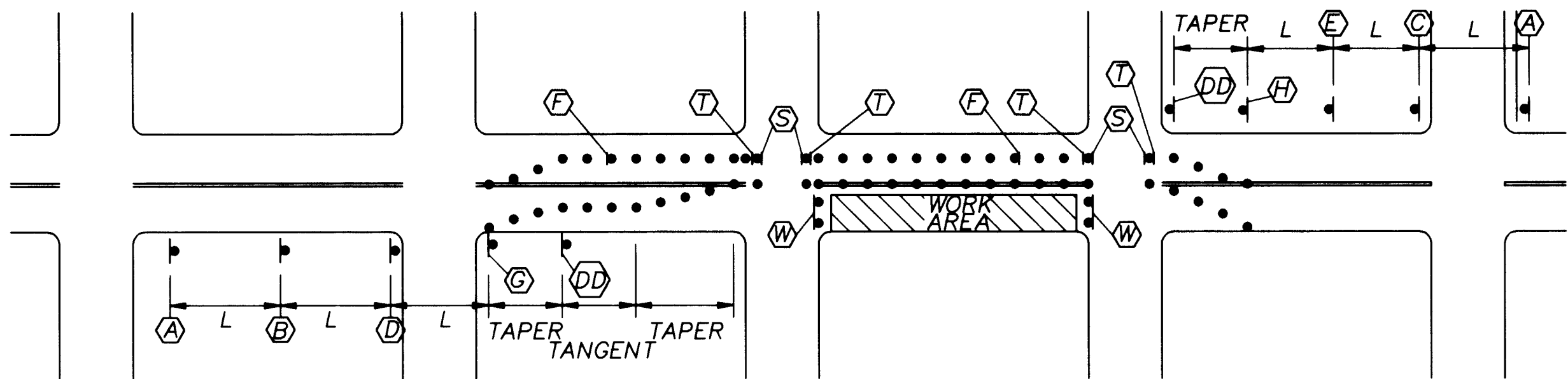
BAR IS ONE INCH ON ORIGINAL DRAWING

0 1"

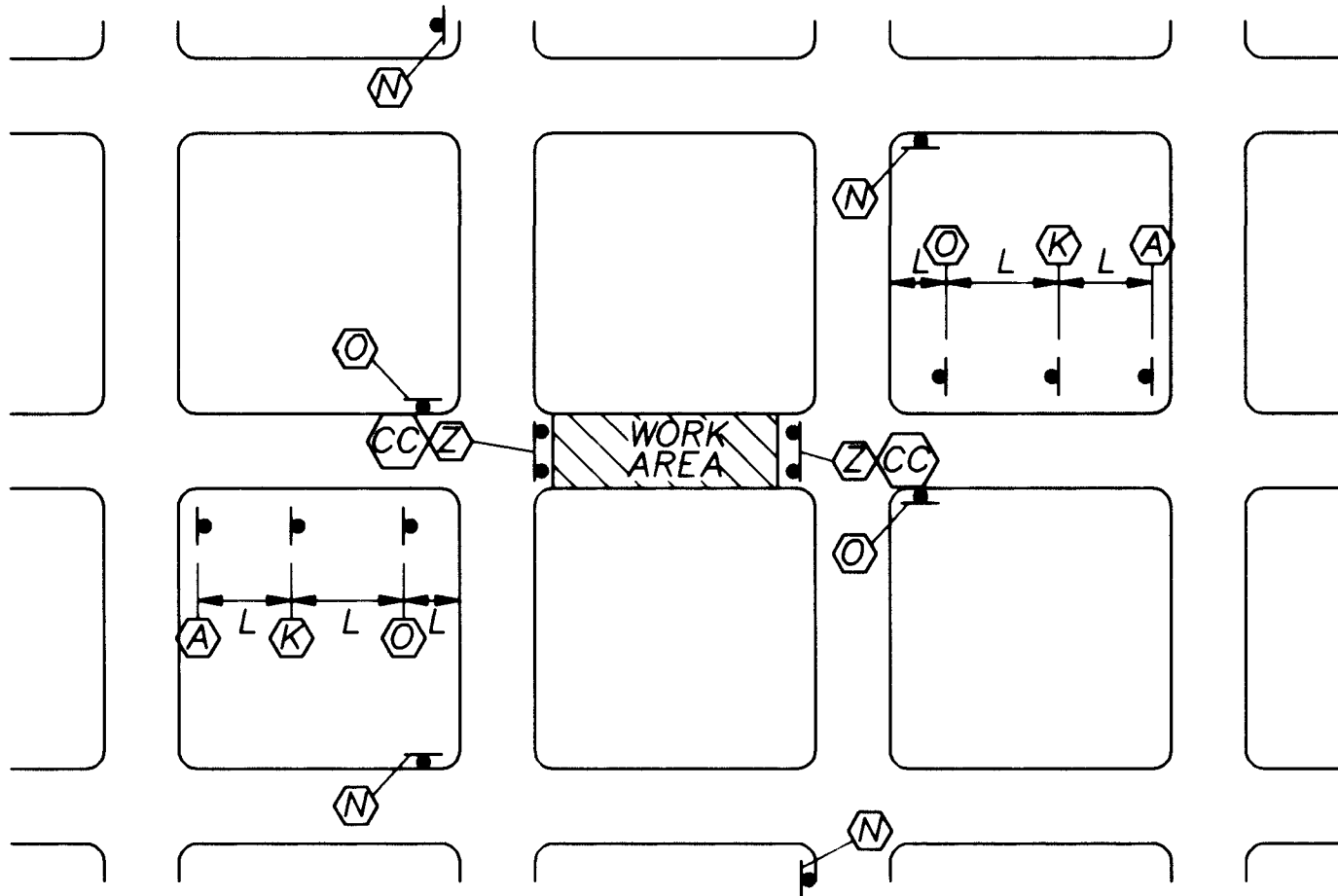
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION				
TITLE: CHARLES WELLS PUMP STATION PIPE BONDING&MISCELLANEOUS DETAILS				
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER
D.R.C. Chair			Water	
Trans. Dev.			Waste Water	
Hydrology				
DRAWING NO.	C-6A	MAP NO.	SHEET 13	OF 57

CP NO. 4214.90

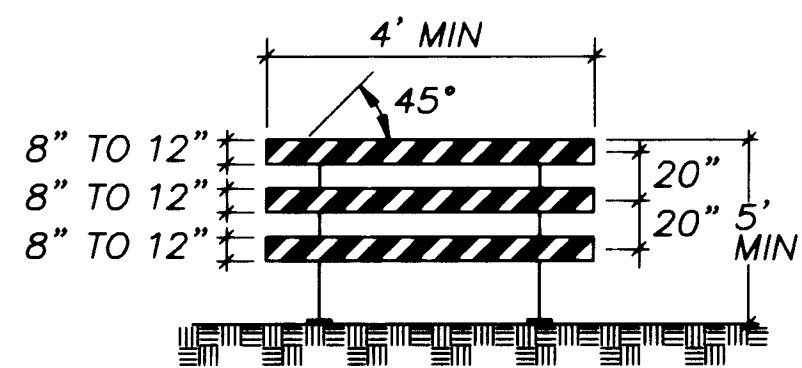
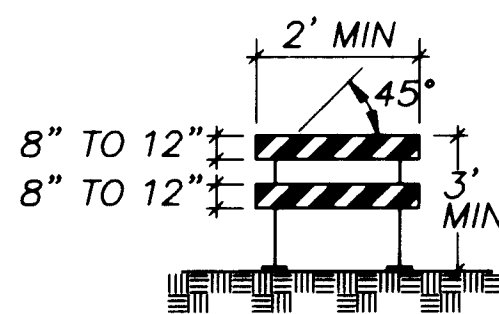
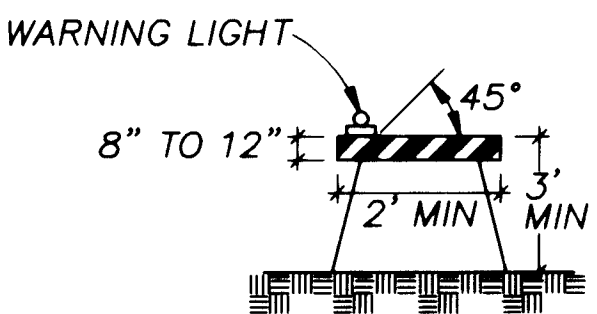
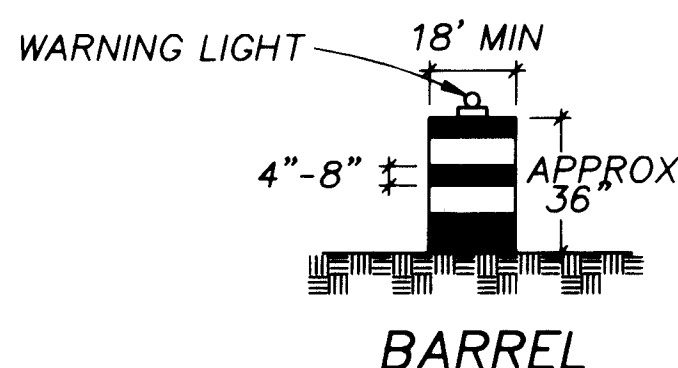


TYPICAL TRAFFIC SPLIT - MULTILANE UNDIVIDED ROADWAY
NTS



TYPICAL STREET CLOSURE - MINOR STREET ONLY
NTS

SPEED LIMIT MPH	TAPER LENGTH (feet)		MAXIMUM DISTANCE BETWEEN BARRICADING DEVICES (feet)	MINIMUM NUMBER OF DEVICES REQUIRED
	11 ft LANE	12 ft LANE		
25	115	125	25	6
30	165	180	30	7
35	225	245	35	8
40	293	320	40	9
45	495	540	45	13



W20-1
48" x 48"

W20-5R
48" x 48"

W20-5L
48" x 48"

W4-2R
36" x 36"

W4-2L
36" x 36"

W6-3
48" x 48"

W1-4L
30" x 30"

W1-4R
30" x 30"

W12-1
24" x 24"

W20-2
48" x 48"

M4-10L
48" x 18"

M4-10R
48" x 18"

M4-9L
30" x 24"

M4-9R
30" x 24"

R4-7a
24" x 30"

R3-2
24" x 24"

R3-7
30" x 30"

R11-2
48" x 30"

R11-4
60" x 30"

W13-1
18" x 18"

W1-6L
48" x 24"

W1-6R
48" x 24"

W1-7
48" x 24"

TRAFFIC SIGNS
NTS

LEGEND

- BARRICADE-BARREL
- SIGN
- VERTICAL PANEL
- BARRICADE-TYPE III
- L DISTANCE BETWEEN ADVANCE SIGNS- A distance measured in feet equal to ten times the speed limit.
- S SPACING BETWEEN BARRICADES- Maximum spacing to be a value measured in feet equal to the speed limit.

GENERAL NOTES

- ALL TRAFFIC CONTROL DEVICES SHALL COMPLY WITH CHAPTER VI OF THE LATEST EDITION OF "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES."
- THREE (3) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION THE CONTRACTOR SHALL SUBMIT TO THE CONSTRUCTION CO-ORDINATION DIVISION A DETAILED CONSTRUCTION SCHEDULE. TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL OBTAIN A BARRICADING PERMIT FROM THE CONSTRUCTION CO-ORDINATION DIVISION. CONTRACTOR SHALL NOTIFY BARRICADE ENGINEER (768-2551) PRIOR TO OCCUPYING AN INTERSECTION. SEE SECTION 19 OF THE CITY STANDARD SPECIFICATIONS.
- ALL STREET STRIPING ALTERED OR DESTROYED SHALL BE REPLACED IN KIND BY CONTRACTOR TO LOCATION AND IN KIND AS EXISTING OR AS INDICATED BY THIS PLAN SET.
- SIGN HEIGHTS SHALL BE 7 FEET ABOVE THE SIDEWALK LEVEL TO THE BOTTOM OF THE SIGN.
- ALL SIGNS, BARRICADES AND BARRELS SHALL BE REFLECTORIZED. ALL BARRELS MAY HAVE SAND OR WATER BALLAST LIMITED TO 100 LBS.. NO ROCKS OR OTHER WEIGHTING IS PERMITTED.
- ALL SIGN LOCATIONS SHALL BE SELECTED IN THE FIELD AND APPROVED BY THE CITY. DISTANCES MAY BE ADJUSTED FOR LOCAL CONDITIONS WITH THE APPROVAL OF THE CONSTRUCTION COORDINATOR OF THE PUBLIC WORKS DEPARTMENT.
- ALL APPLICABLE SIGNS SHALL BE MOVED AS THE CONSTRUCTION PROGRESSES.
- ALL EXISTING REGULATORY SIGNS THAT NEED TO BE REMOVED, RELOCATED OR REINSTALLED SHALL BE DONE BY THE CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT CONSTRUCTION COORDINATOR. THE CONTRACTOR SHALL NOTIFY THE CITY CONSTRUCTION COORDINATOR THREE (3) WORKING DAYS IN ADVANCE OF ANY REQUIRED WORK.
- THE CONTRACTOR SHALL PROVIDE AND MAINTAIN A SAFE AND ADEQUATE MEANS OF CHANNELING PEDESTRIAN TRAFFIC AROUND ALL WORK AREAS DURING THE CONSTRUCTION PERIOD. ALL SUCH CHANNELIZATION SHALL BE ARRANGED TO PREVENT PEDESTRIAN TRAFFIC FROM HAVING TO ENTER THE ROADWAY IN ORDER TO PASS AROUND THE WORK AREA.
- ALL CONSTRUCTION SIGNING SHALL BE BLACK ON A REFLECTORIZED ORANGE FIELD UNLESS OTHERWISE SPECIFIED. ALL CONSTRUCTION BARRICADES AND CHANNELIZATION DEVICES SHALL BE ORANGE ON A REFLECTORIZED WHITE FIELD UNLESS OTHERWISE SPECIFIED.
- ALL ADVANCE WARNING SIGNS NOT DIRECTLY APPLICABLE SHALL BE REMOVED, COVERED OR TURNED AWAY FROM ONCOMING TRAFFIC.
- BARRICADES AND BARRELS SHALL BE OF THE SAME TYPE AND NOT INTERMIXED IN THE SAME SERIES OF CHANNELIZATION.
- A MINIMUM WIDTH OF 11 FEET FOR ONE LANE TRAFFIC SHALL BE MAINTAINED AT ALL TIMES.
- THE CONTRACTOR SHALL SUBMIT A SEQUENCE OF CONSTRUCTION TO THE CITY CONSTRUCTION COORDINATOR FOR APPROVAL PRIOR TO STARTING ANY WORK THAT WILL IMPACT TRAFFIC FLOW.
- ALL EXCAVATIONS MUST BE PATCHED PRIOR TO OPENING THE ROADWAY TO TRAFFIC.
- THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL RESIDENCES AND BUSINESSES AT ALL TIMES. PROVIDE ACCESS SIGNAGE AS DIRECTED BY ENGINEER. PROGRESSIVE LANE OR STREET CLOSURES SHALL BE LIMITED TO A MINIMUM OF 150 FEET.

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE 12/21/94

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CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION TRAFFIC CONTROL PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. C-7		MAP NO.		SHEET 14 OF 57	

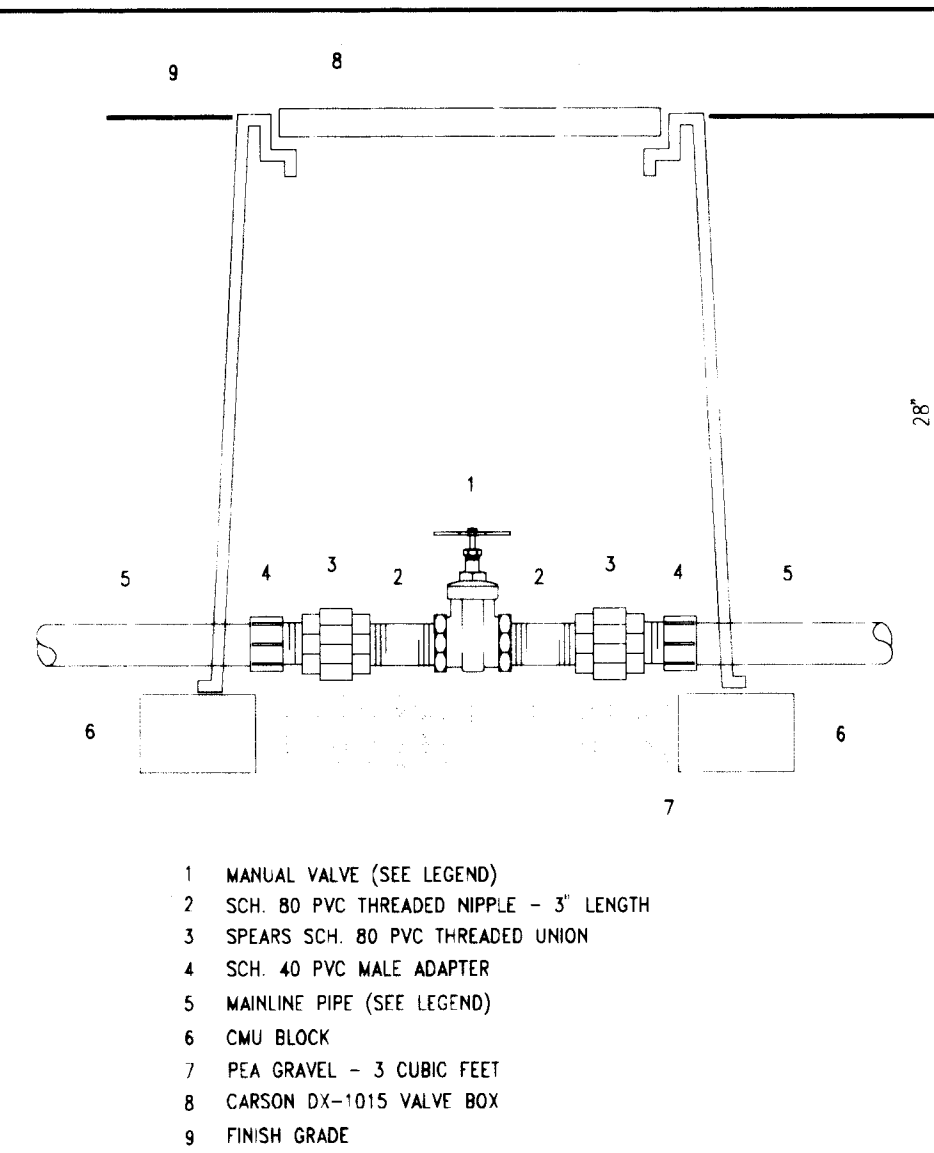
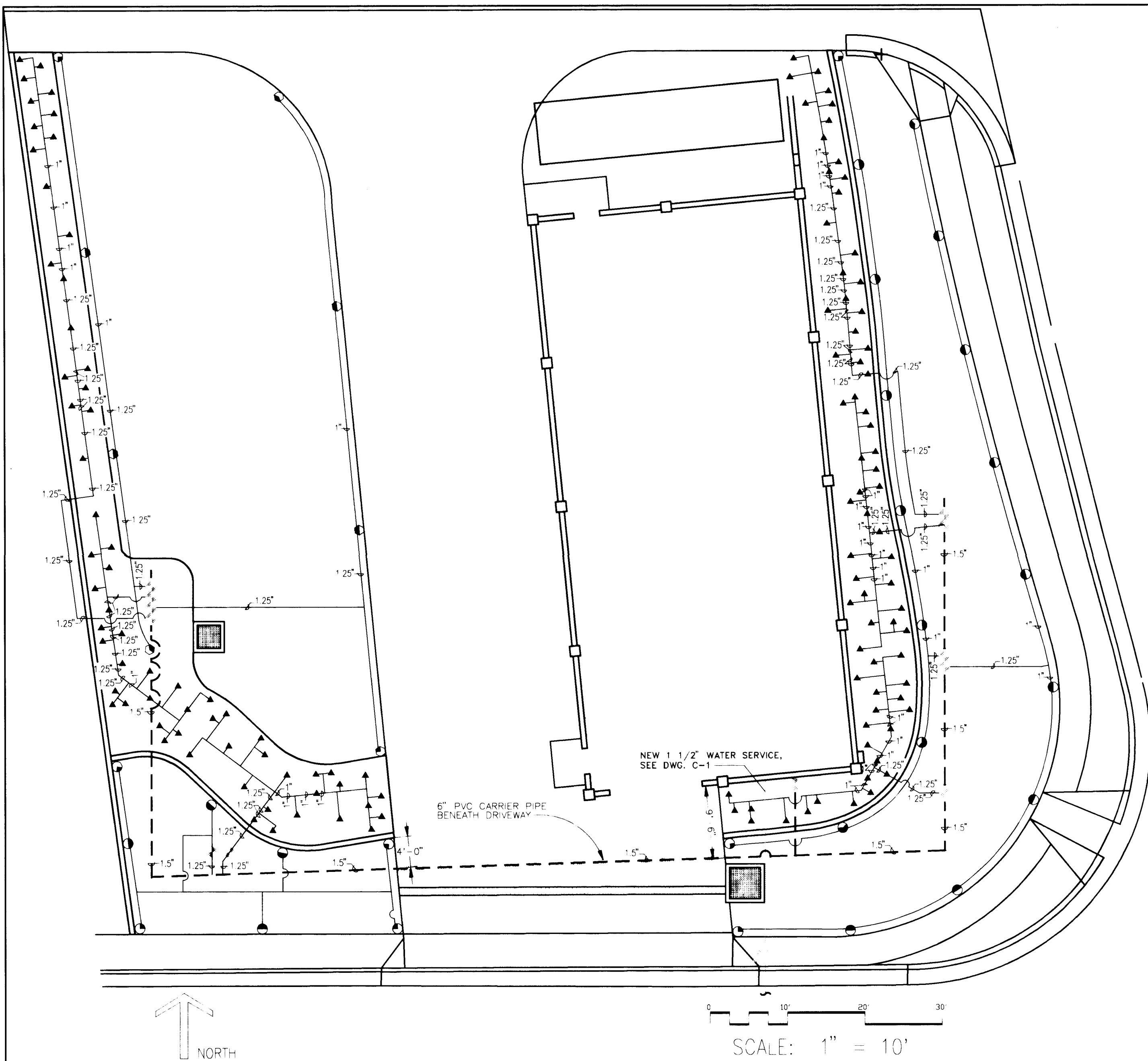
CP NO. 4214.90

RECORD DRAWINGS
Revisions Drawn by Michael Brewer Date Nov. 15, 1994

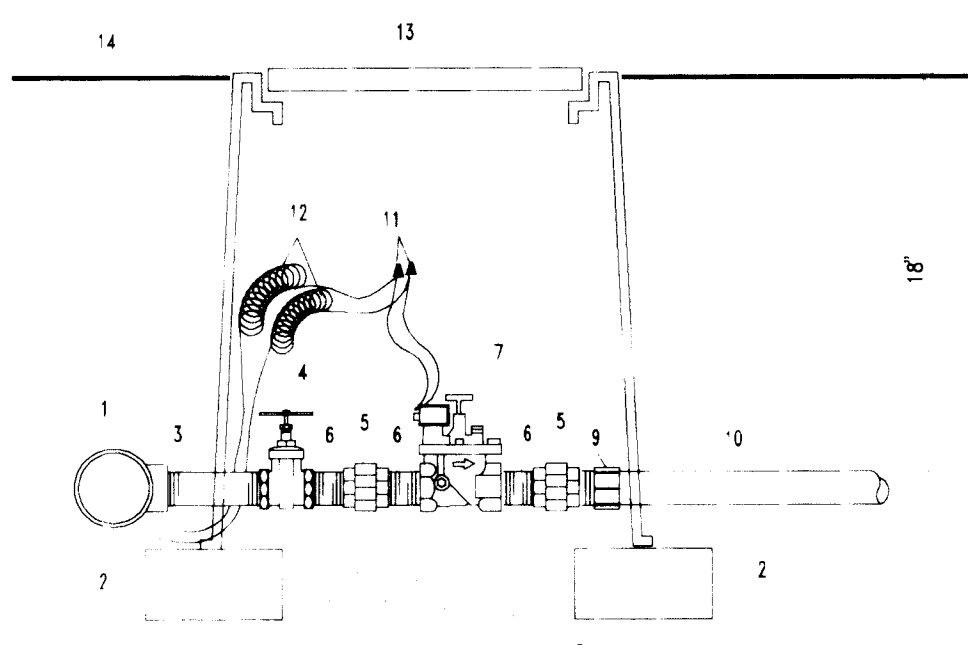
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



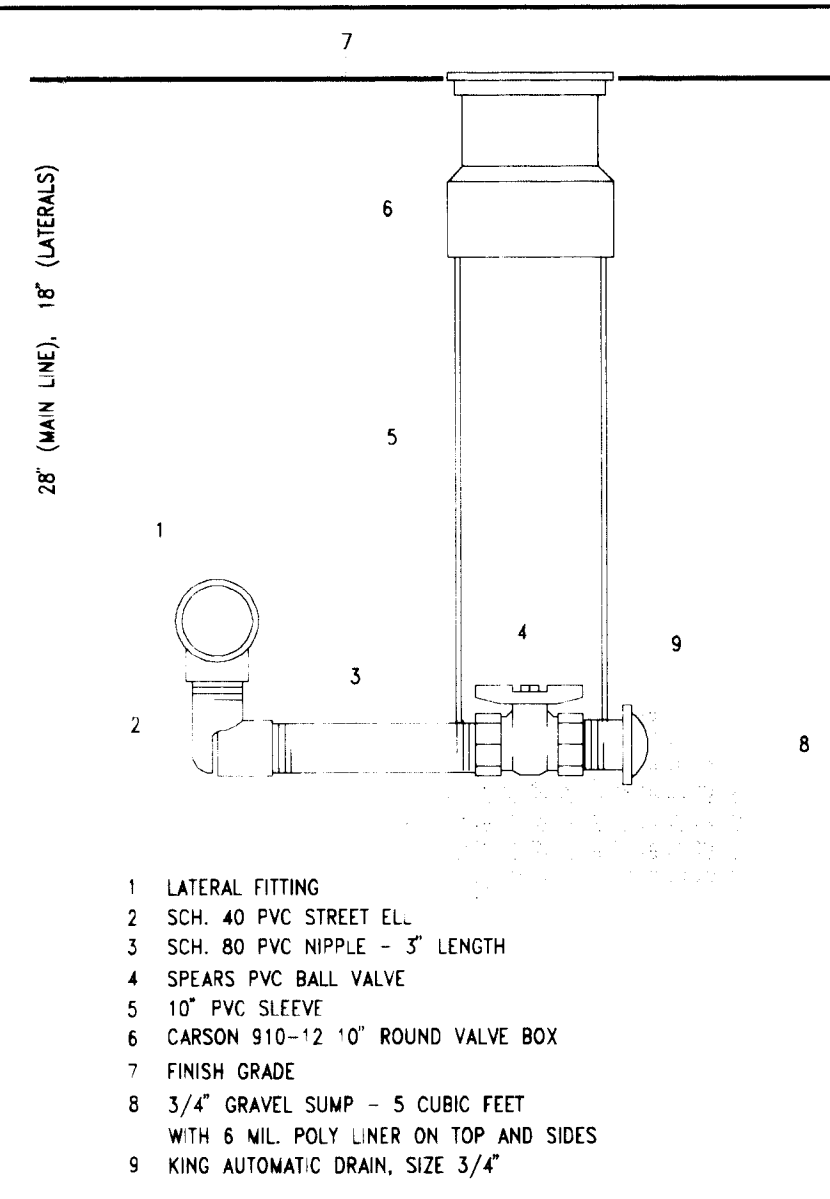
SCANNED BY LASON



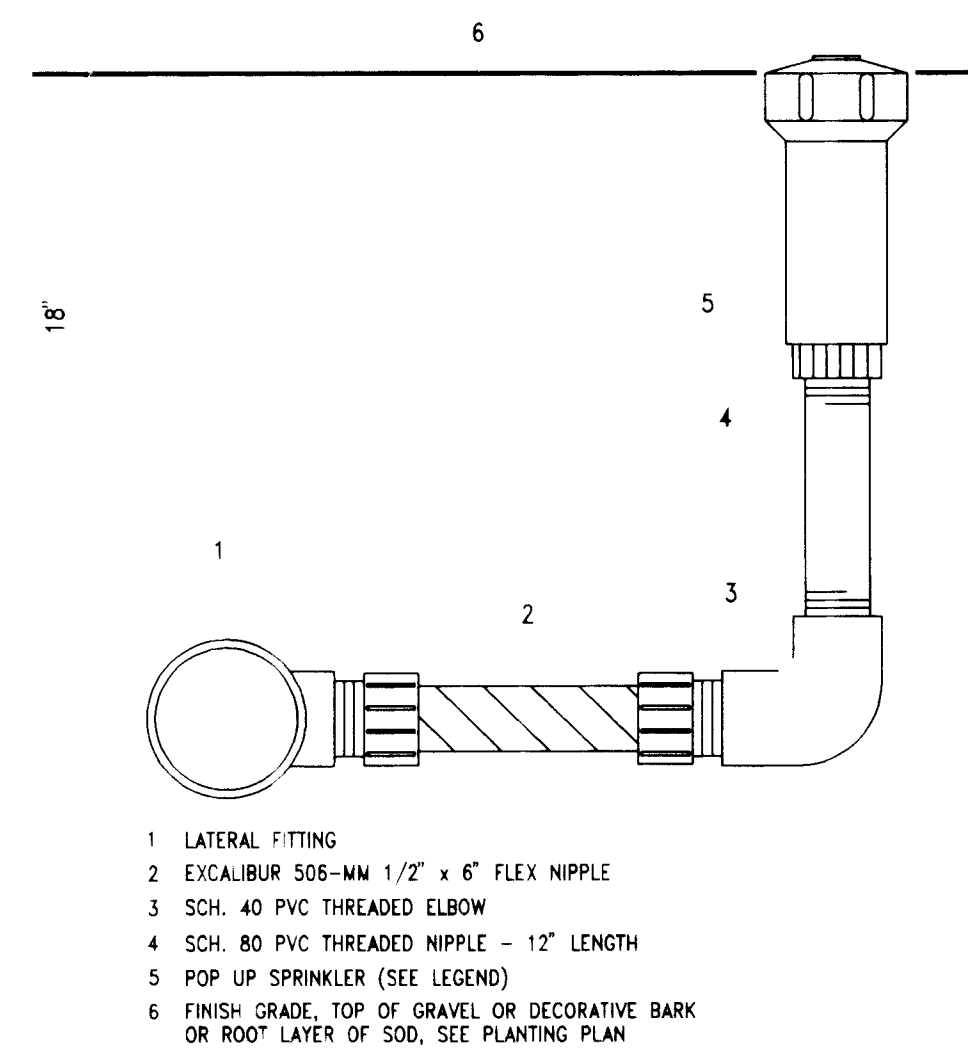
MANUAL VALVE ASSEMBLY
N.T.S.



AUTOMATIC VALVE ASSEMBLY
N.T.S.



MANUAL DRAIN ASSEMBLY
N.T.S.



POP UP BUBBLER + SPRINKLER ASSEMBLY
N.T.S.

IRRIGATION LEGEND

NOTE:, FOR WATER METER AND BACKFLOW PREVENTER SEE SITE UTILITY AND PLUMBING PLANS

- POINT OF CONNECTION, SEE SITE UTILITY AND PLUMBING PLANS FOR PROPOSED LOCATION, MANUAL VALVE ASSEMBLY, SIZE 1.25", SEE DETAIL A
- IRRIGATION MAIN LINE, SCH. 40 PVC, SIZE 1.50", DEPTH OF BURY 28"
- SOLLENT WELD CAP, SIZE 1.25"
- MANUAL DRAIN ASSEMBLY, SIZE 3/4", SEE DETAIL B
INSTALL AT LOWEST POINTS OF MAIN AND LATERAL PIPING, ONE PER VALVE AND TWO ON MAIN
- AUTOMATIC VALVE ASSEMBLY, TORO 216-26-04, BRASS BODY WITH FLOW CONTROL AND MANUAL BLEED, SIZE 1", SEE DETAIL C
- LATERAL PIPING, SCH. 40 PVC, SIZES NOT SHOWN SHALL BE 3/4", DEPTH OF BURY 18"
- POP-UP BUBBLER ASSEMBLY, TORO 570C-3P WITH FB-.50-PC NOZZLE, SEE DETAIL D

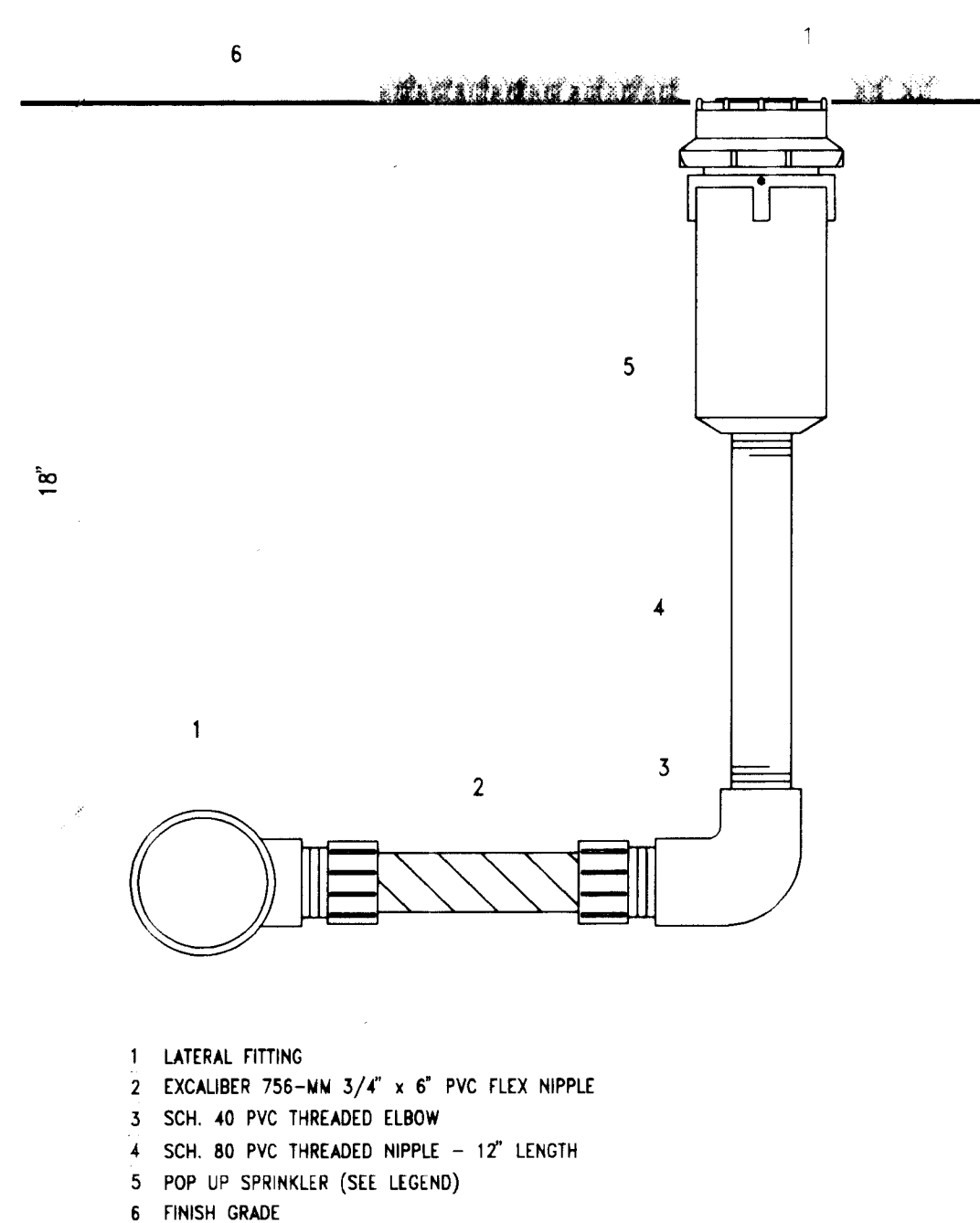
FIXED SPRAY POP-UP LAWN SPRINKLER ASSEMBLIES, TORO 570C-3P WITH NOZZLES AS FOLLOWS; SEE DETAIL D

NOZZLE	RADIUS	GPM	PSI
15-Q	15'	1.00	30
15-H	15'	2.00	30
15-240	15'	2.60	30

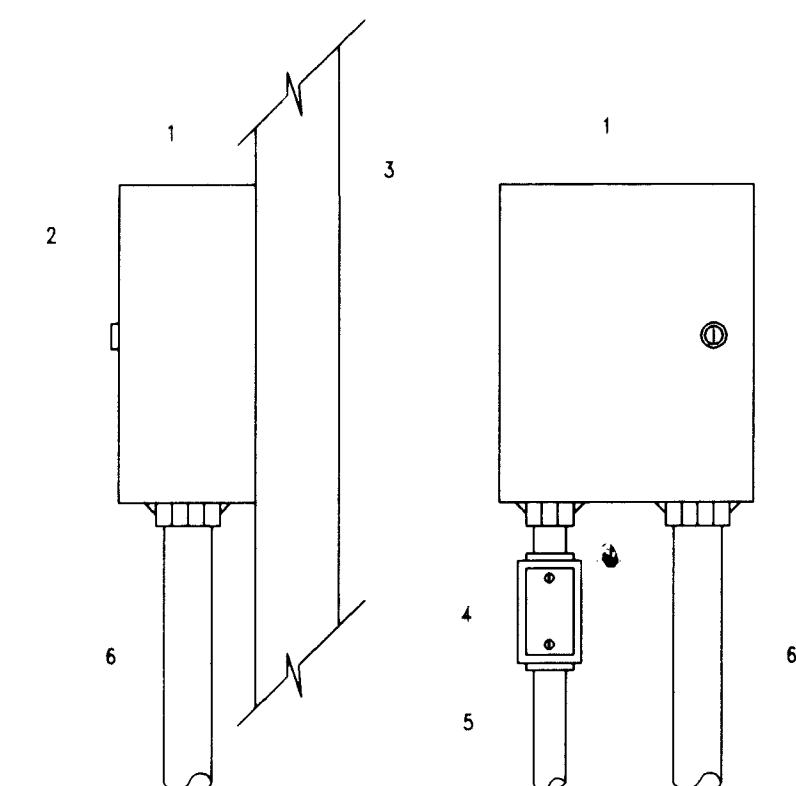
GEAR DRIVE SPRINKLER ASSEMBLIES, TORO SUPER 700 SERIES AS FOLLOWS; SEE DETAIL E

MODEL NO.	RADIUS	GPM	PSI
5700C-PC-3.0-LA	34'	2.66	30
5700C-PC-6.0-LA	36'	4.63	30

- AUTOMATIC CONTROLLER, TORO VISION II, MODEL NO. 189-06-01, DUAL PROGRAM, WALL MOUNT CONTROLLER WITH INTERNAL TRANSFORMER AND METAL CABINET, INSTALL UNIT TO CITY OF ALBUQUERQUE STANDARDS, SEE DETAIL F
THE CONTRACTOR SHALL LOCATE CONTROLLER AND RELATED ELECTRICAL AS DIRECTED BY THE ENGINEER. SEE ELECTRICAL PLANS



GEAR DRIVE SPRINKLER ASSEMBLY
N.T.S.



NOTES:
CONTROLLER SHALL BE MOUNTED SECURELY TO WALL USING APPROPRIATE FASTENERS FOR WALL TYPE.
ALL EXPOSED CONDUIT SHALL BE E.M.T. OR EQUAL AND APPROVED BY LOCAL CODES.
ALL CONDUIT CONNECTIONS SHALL BE MADE USING WATERTIGHT FITTINGS.

CONTROLLER DETAIL
N.T.S.

NOTE:
AS A PART OF THE BASE BID, THE CONTRACTOR SHALL MAINTAIN THE IRRIGATION SYSTEM FOR A PERIOD OF ONE YEAR BEGINNING FROM DATE OF SUBSTANTIAL COMPLETION.

APPROVAL OF
DRAWING
Arthur J. Stuart
12/21/94

26 4214.901694

RECORD DRAWINGS
Revisions Drawn by *Michael Brewer* Date *Nov. 15, 1994*
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SCANNED BY
BY LASON

VERIFY SCALES
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MOLZEN-CORBIN & Associates

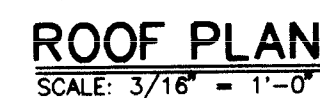
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: **CHARLES WELLS PUMP STATION IRRIGATION PLAN**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					

DESIGNED BY ARU DATE 9-92
DRAWN BY ARU DATE 9-2-92
CHECKED BY ARU DATE 9-92

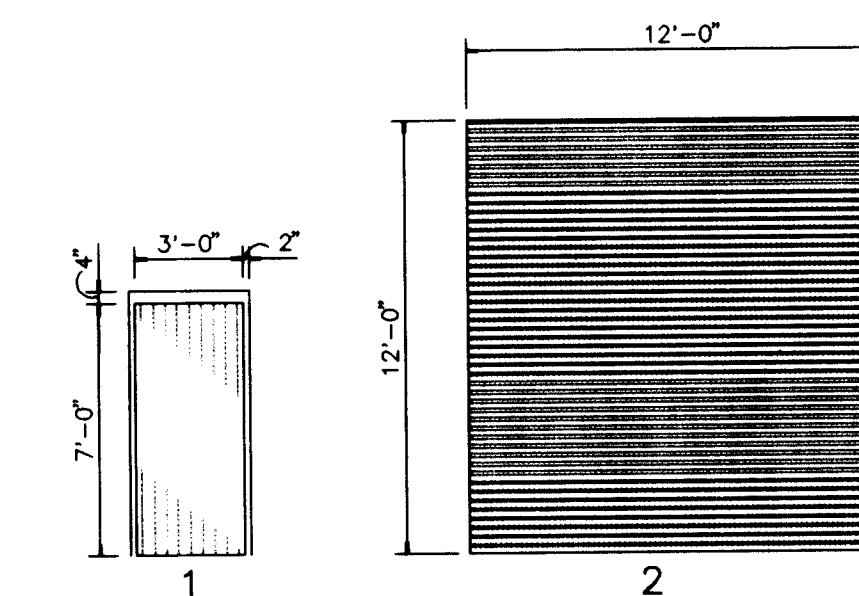
DRAWING NO. **C-9** MAP NO. SHEET **16** OF **57**



Reviewed by: Michael Brewer Date: Nov. 15, 1994



DOOR ELEVATIONS



1. ALL DIMENSIONS ARE TO FACE OF CMU OR STUD, UNLESS OTHERWISE SHOWN

 SINGLE THICKNESS REINFORCED 8x4x16 INTEGRAL
COLORED SLUMP BLOCK INFILL PANELS

 3 5/8" METAL STUD & 5/8" GYP. BD.
INTERIOR PARTITION

 LOUVER, SEE DETAILS, SHEET A-5

PROJECT ENGINEER *Arthur J. Stuart*
DATE: *12/21/94*

Revisions Drawn by Michael Brewer Date Nov. 15, 1994

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MOLZEN-CORBIN & Associates

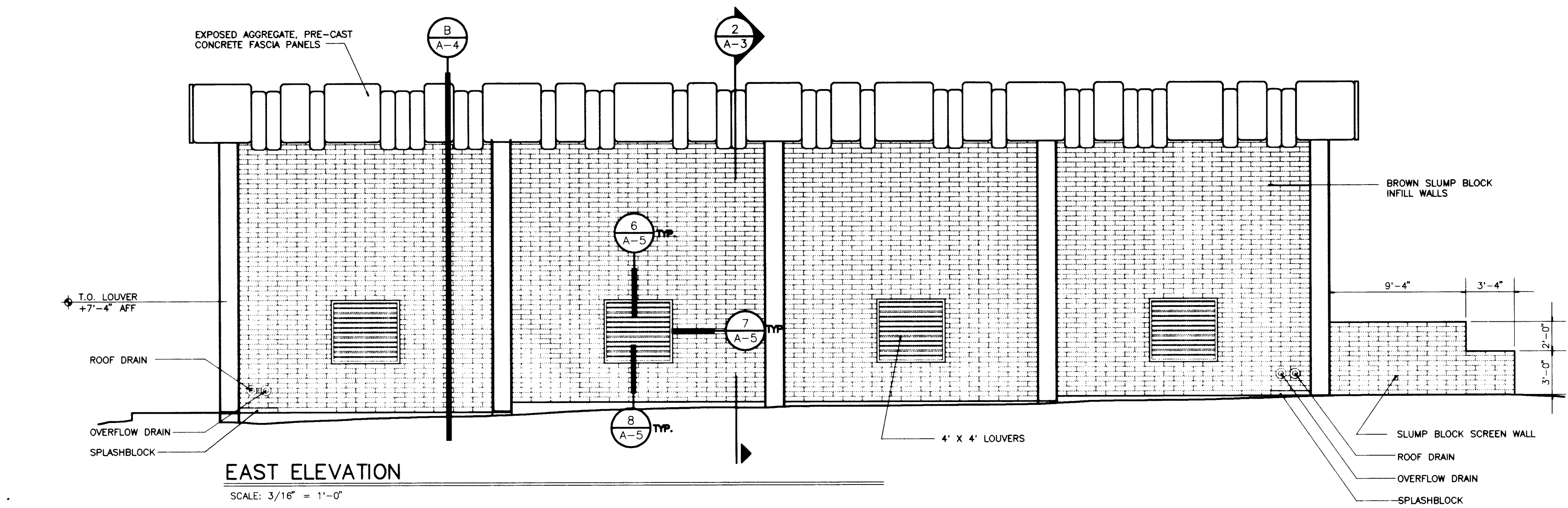
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: CHARLES WELLS
FLOOR PLAN & ROOF PLAN

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					

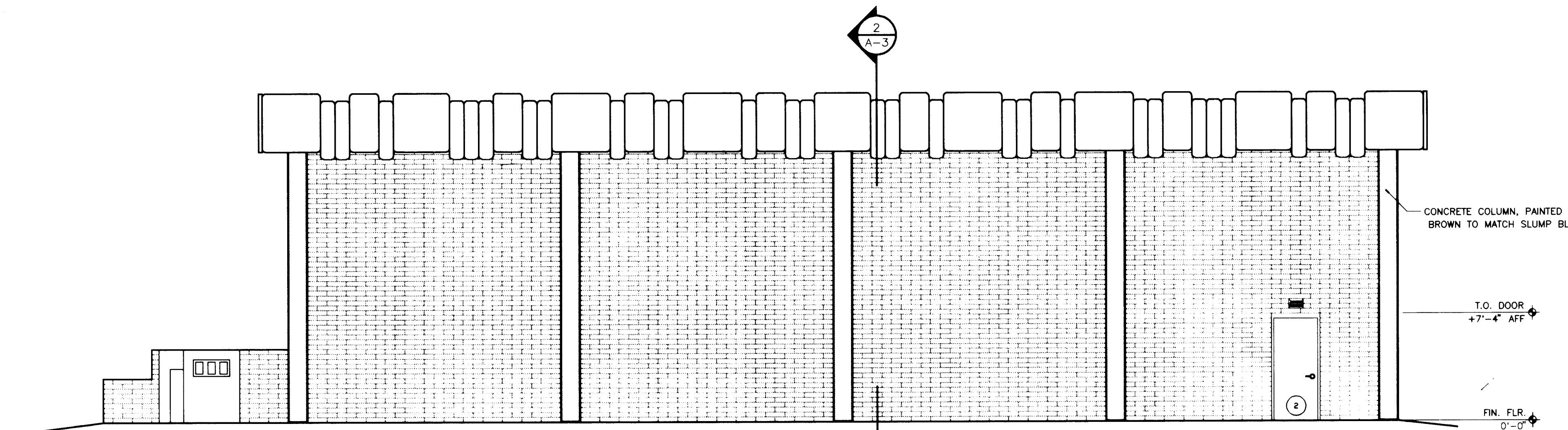
DRAWING NO.	A - 1	MAP NO.	SHEET 17 OF 57
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CP NO. 4214.90



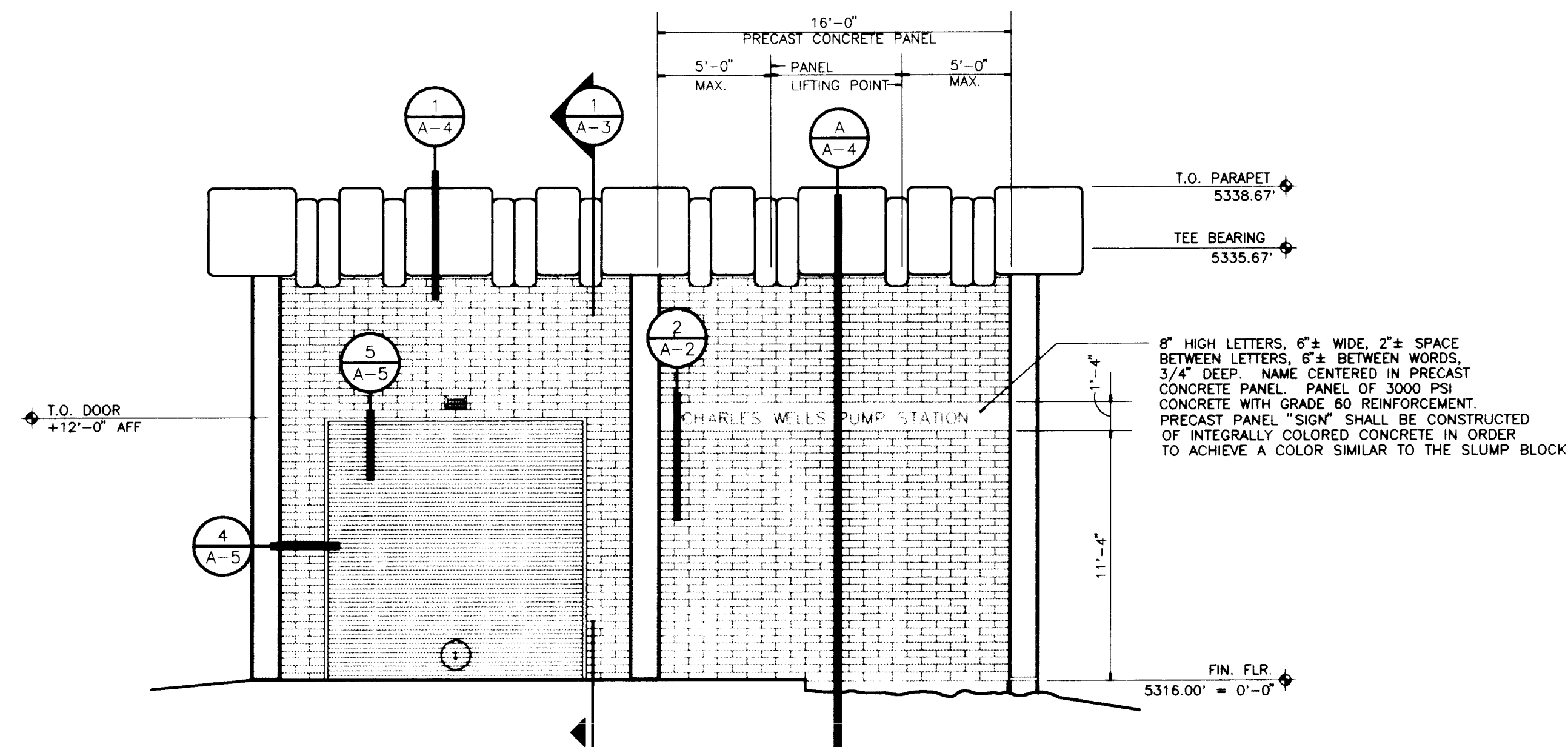
EAST ELEVATION

SCALE: 3/16" = 1'-0"



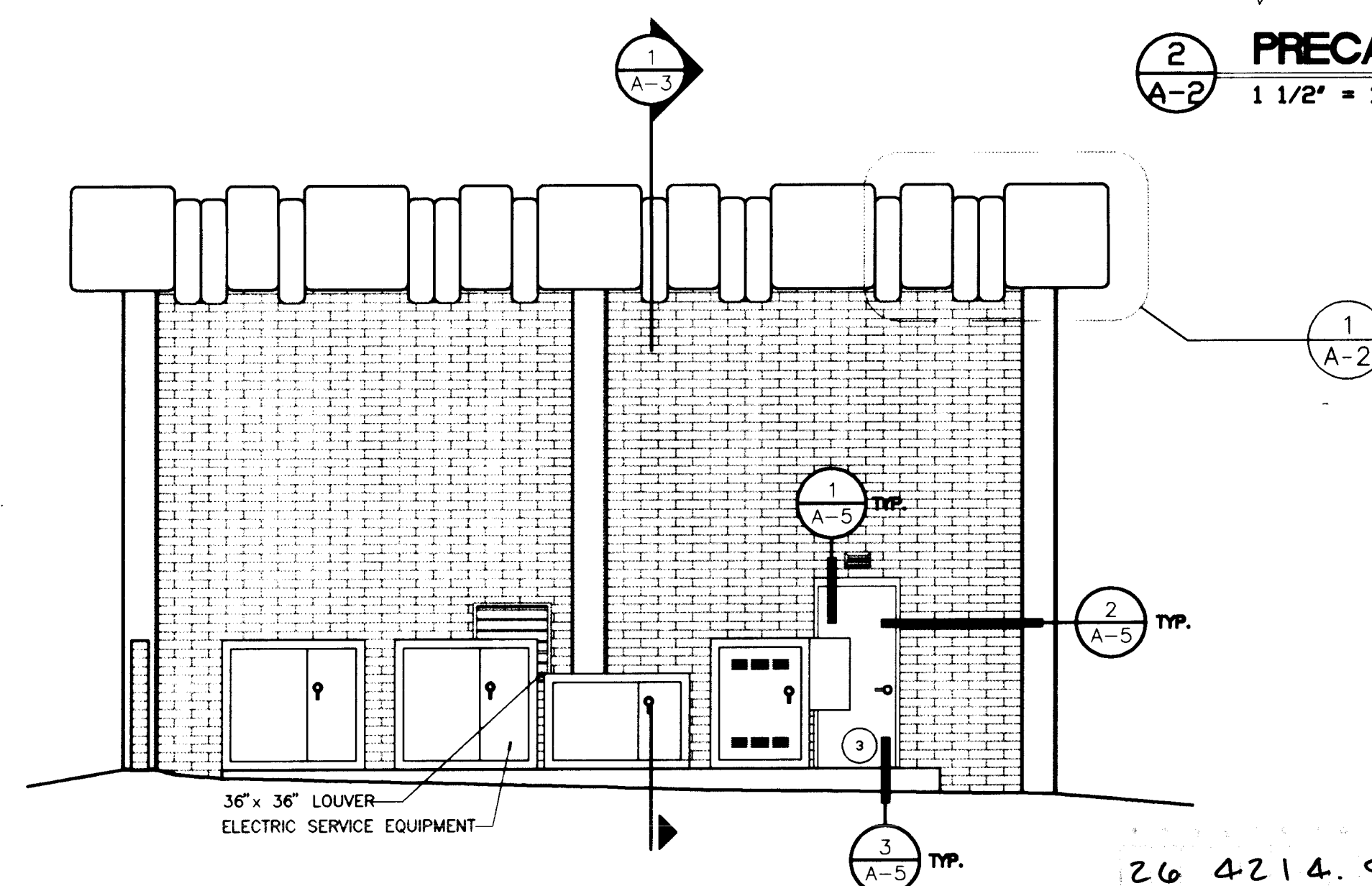
WEST ELEVATION

SCALE: 3/16" = 1'-0"



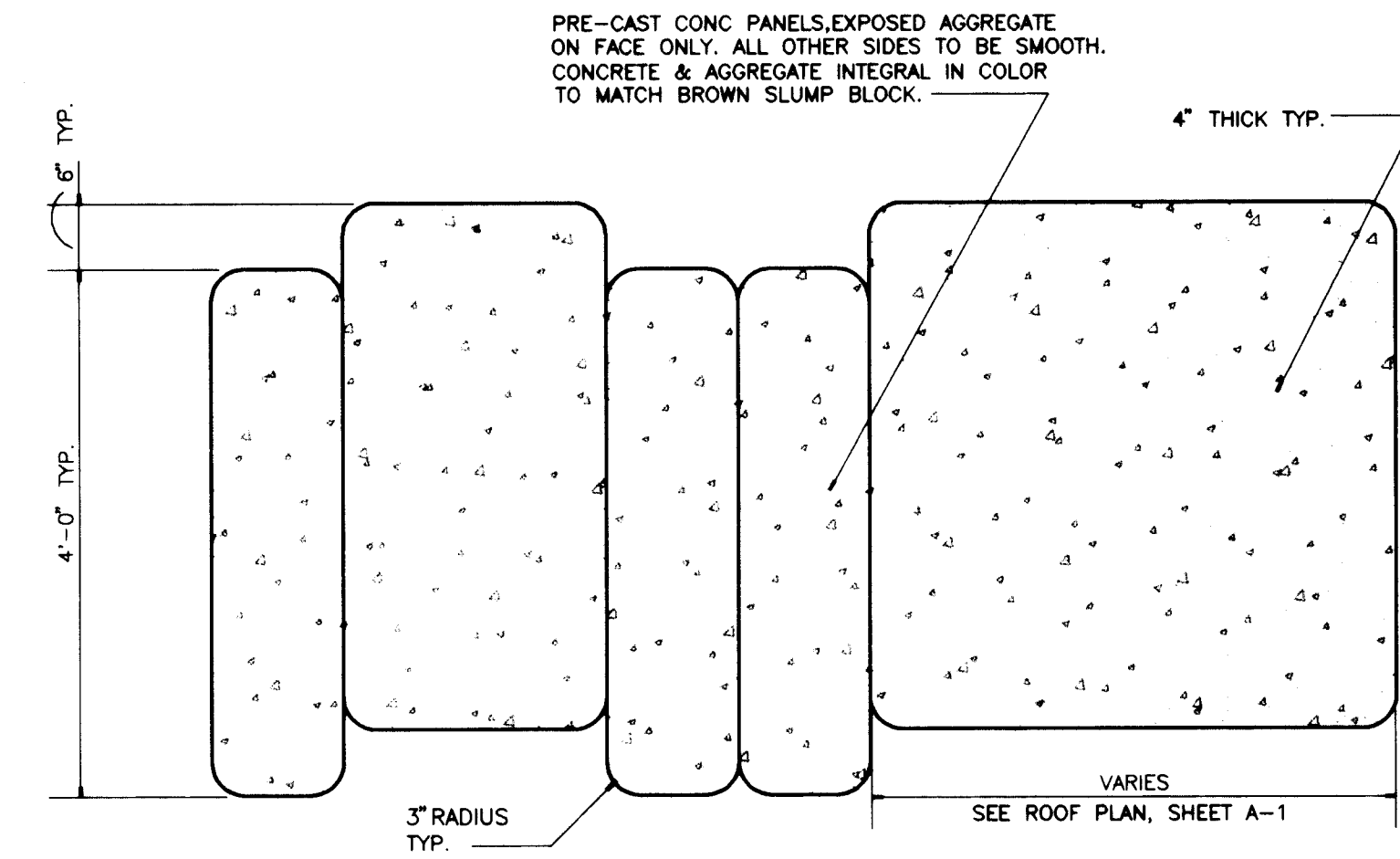
SOUTH ELEVATION

SCALE: 3/16" = 1'-0"



NORTH ELEVATION

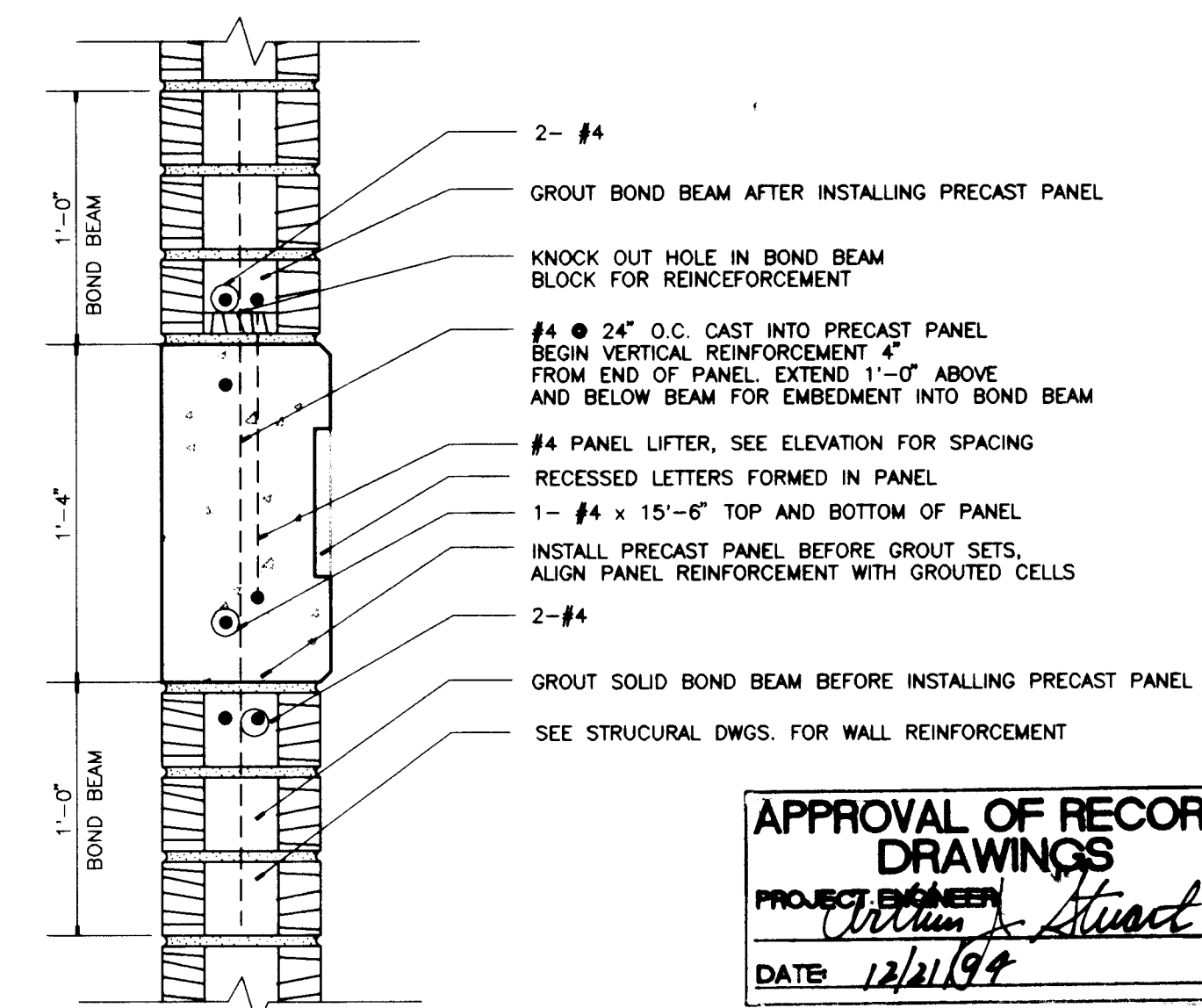
SCALE: 3/16" = 1'-0"



1 FASCIA PANEL DETAIL

A-2 3/4"=1'-0"

THE PRECAST CONCRETE PANELS SHALL BE CONSTRUCTED OF INTEGRALLY COLORED CONCRETE AND BROWN STONE AGGREGATE IN ORDER TO ACHIEVE A COLOR SIMILAR TO THE SLUMP BLOCK.



2 PRECAST CONC. PANEL DETAIL

A-2 1 1/2" = 1'-0"

RECORD DRAWINGS

Revisions Drawn by: *Michael Brewer* Date: *Nov. 15, 1994*

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VERIFICATION
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MOLZEN-CORBIN & Associates

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS ELEVATIONS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					
DRAWING NO.	A - 2		MAP NO.	SHEET 18 OF 57	



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CP NO. 4214.90



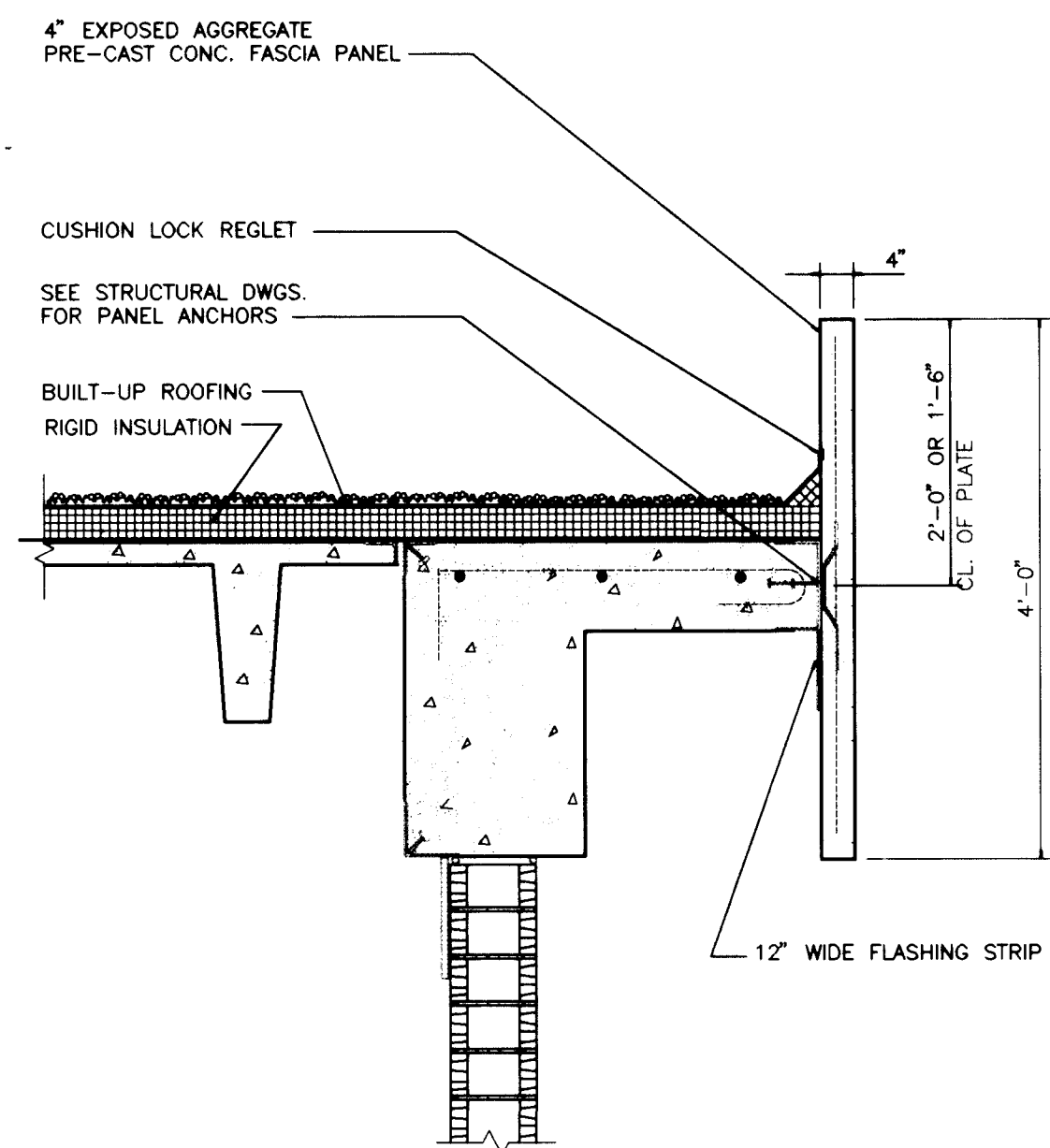
APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER *Arthur J. Stuart*
DATE 12/21/94

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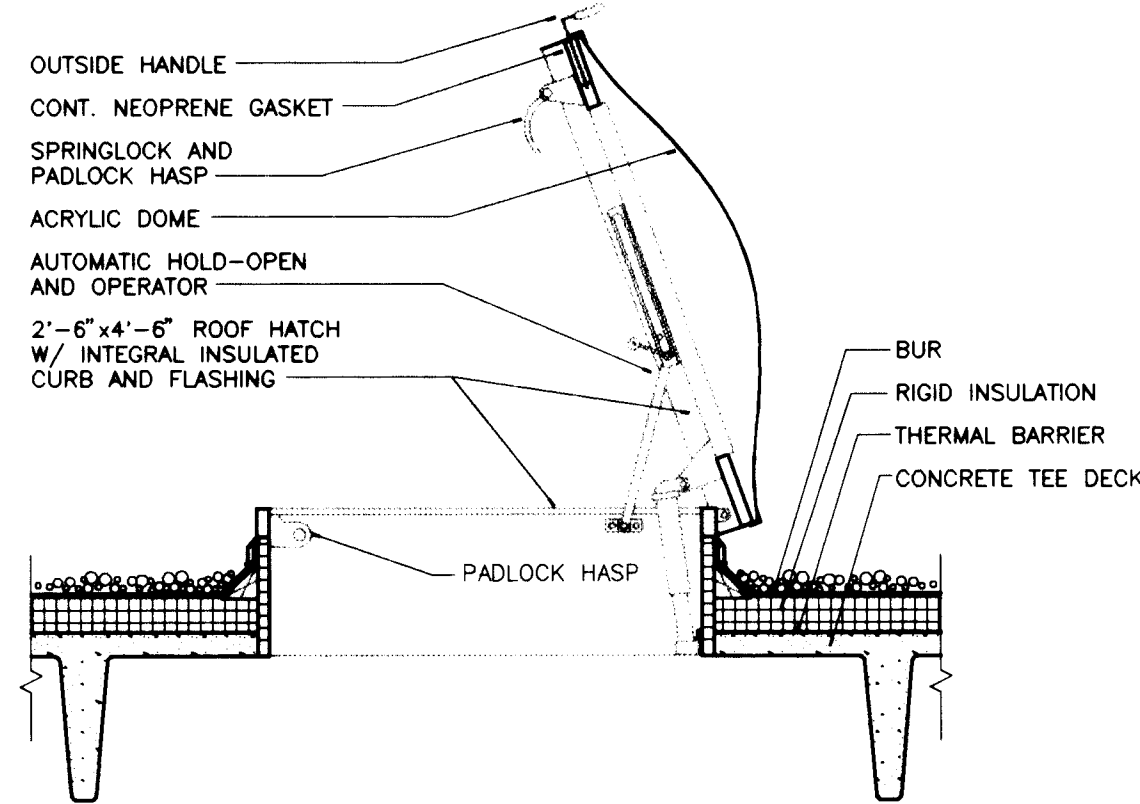


SCANNED BY LASON

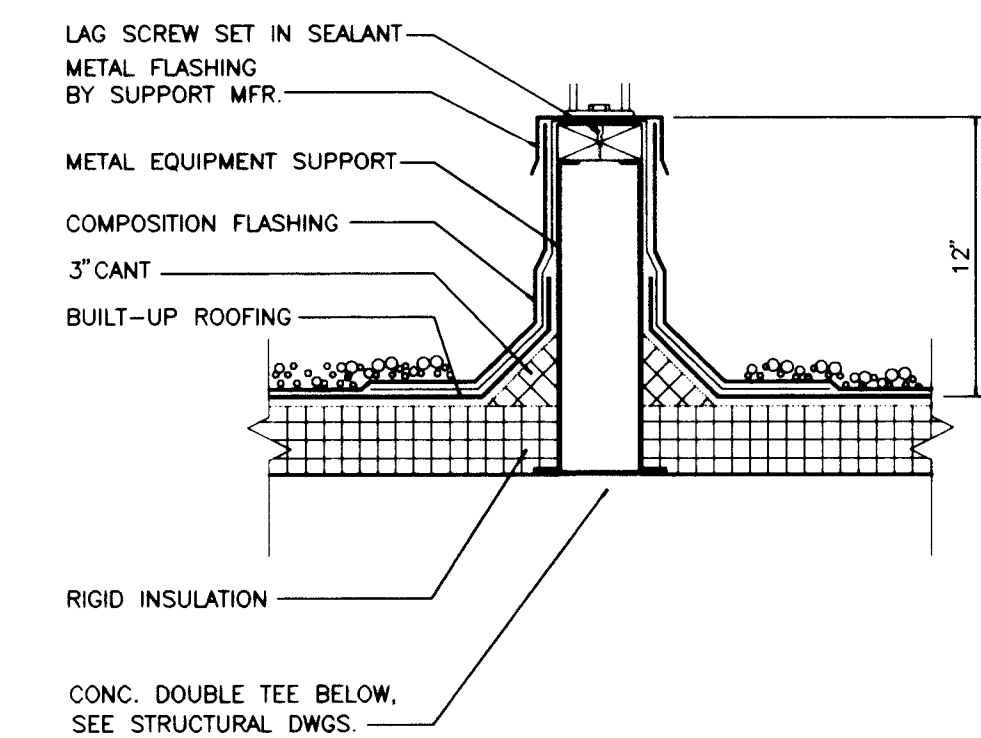
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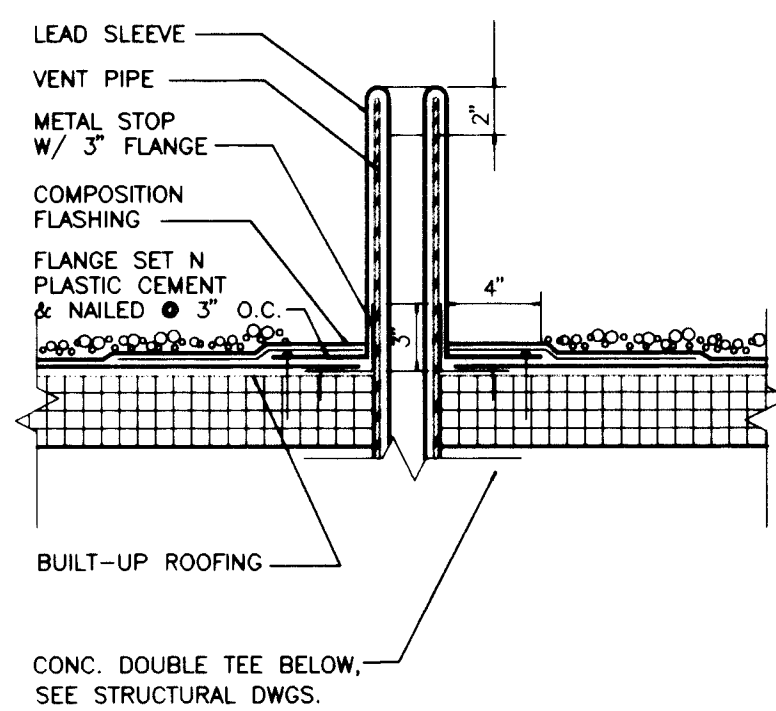
1 PARAPET
3/4" = 1'-0"



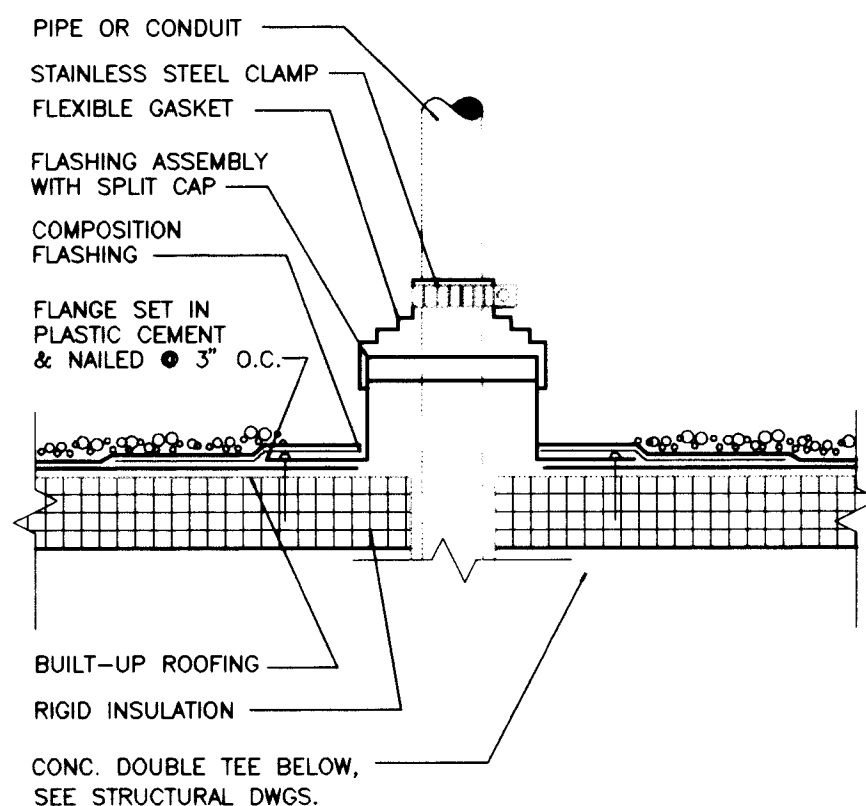
2 ROOF HATCH
3/4" = 1'-0"



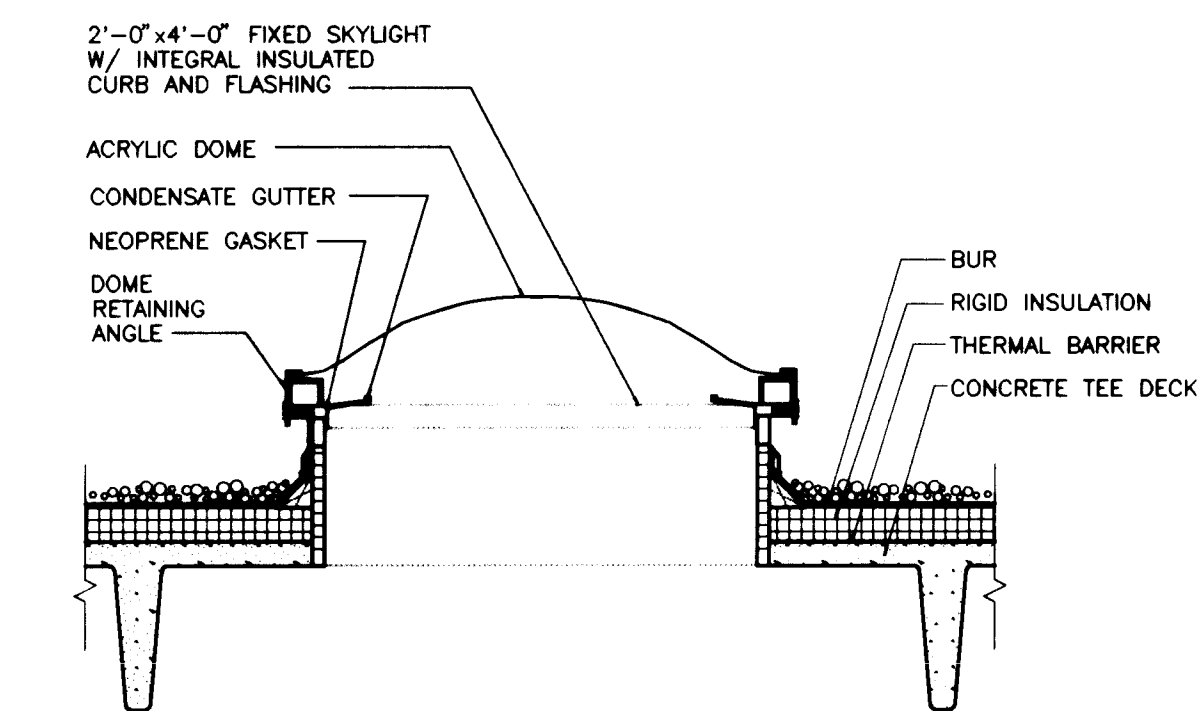
3 EQUIPMENT SUPPORT DETAIL
1 1/2" = 1'-0"



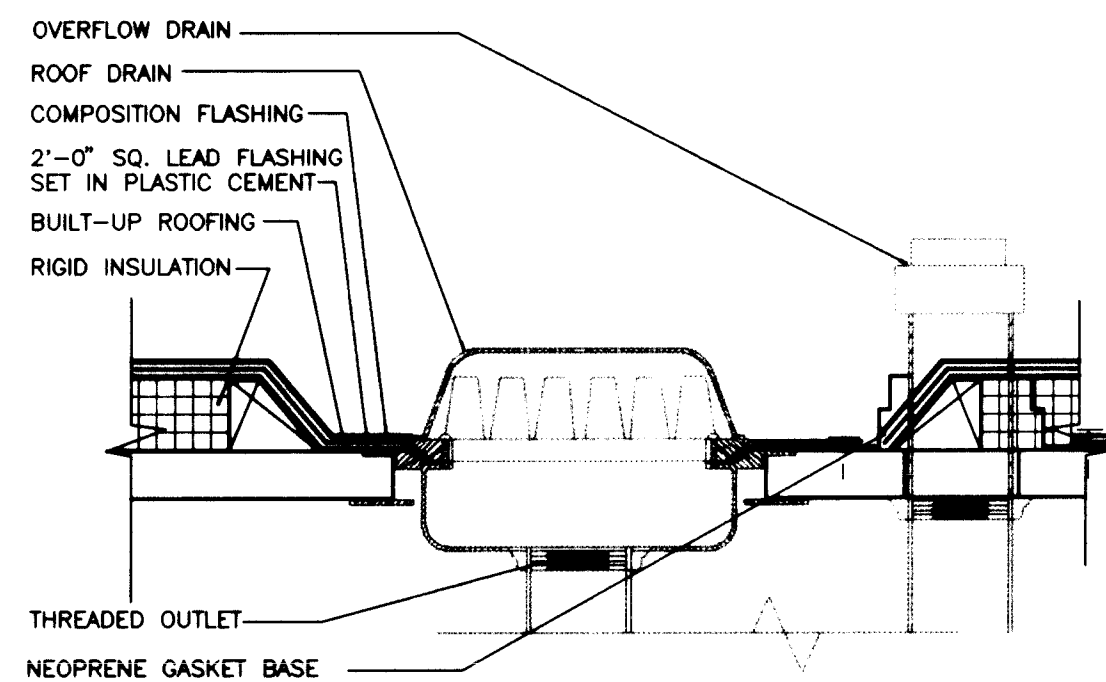
4 VENT PIPE DETAIL
1 1/2" = 1'-0"



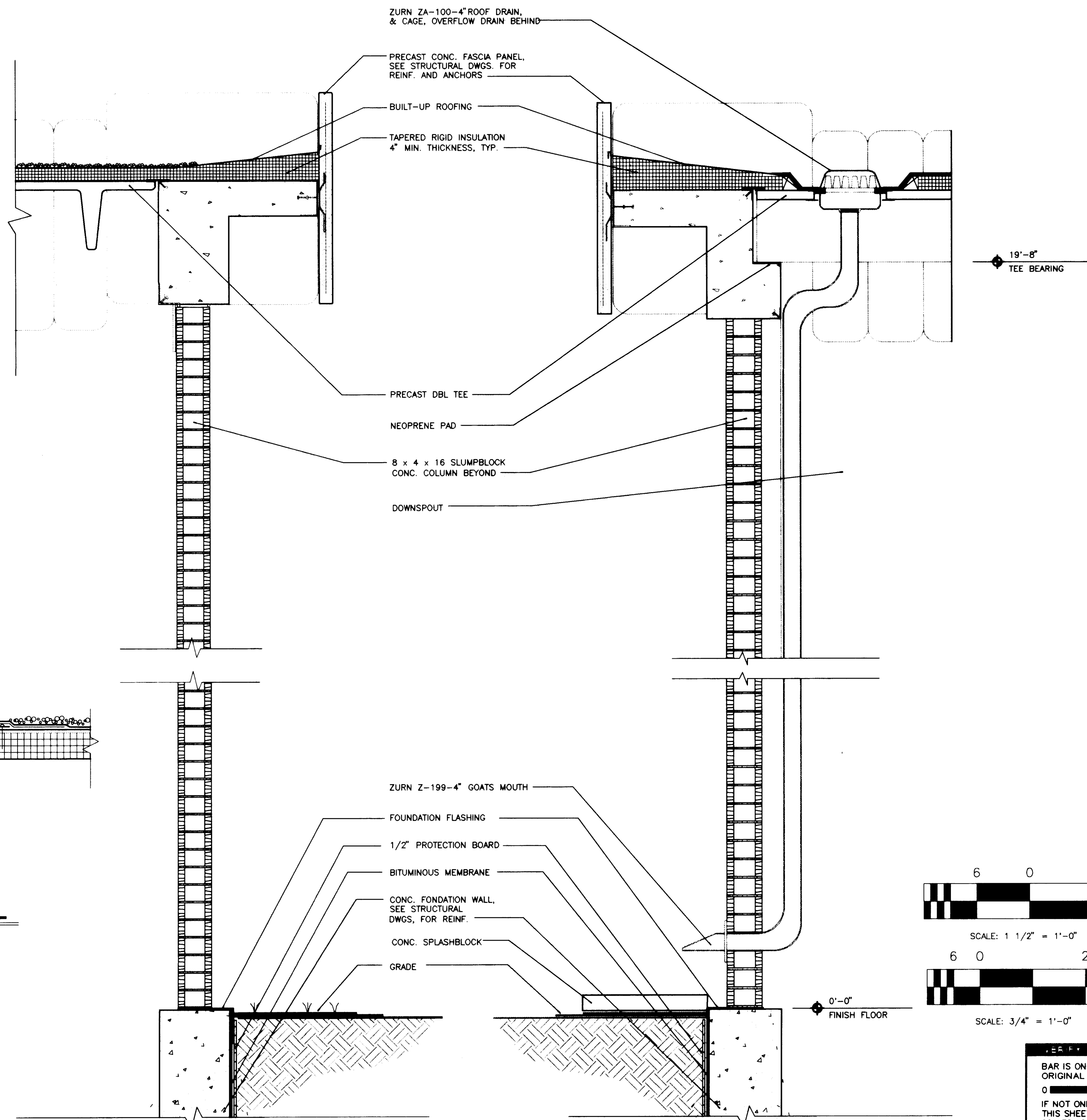
5 PIPE OR CONDUIT DETAIL
1 1/2" = 1'-0"



6 SKYLIGHT
1 1/2" = 1'-0"



7 ROOF DRAIN + OVERFLOW DRAIN
1 1/2" = 1'-0"



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

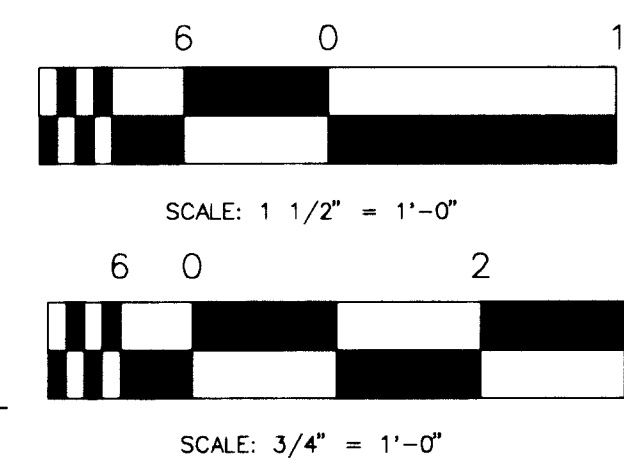
B WALL SECTION
3/4" = 1'-0"

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
Michael Brown
DATE 12/21/94

RECORD DRAWINGS 26 4214.902094

Revisions Drawn by *Michael Brown* Date *Nov. 15, 1994*

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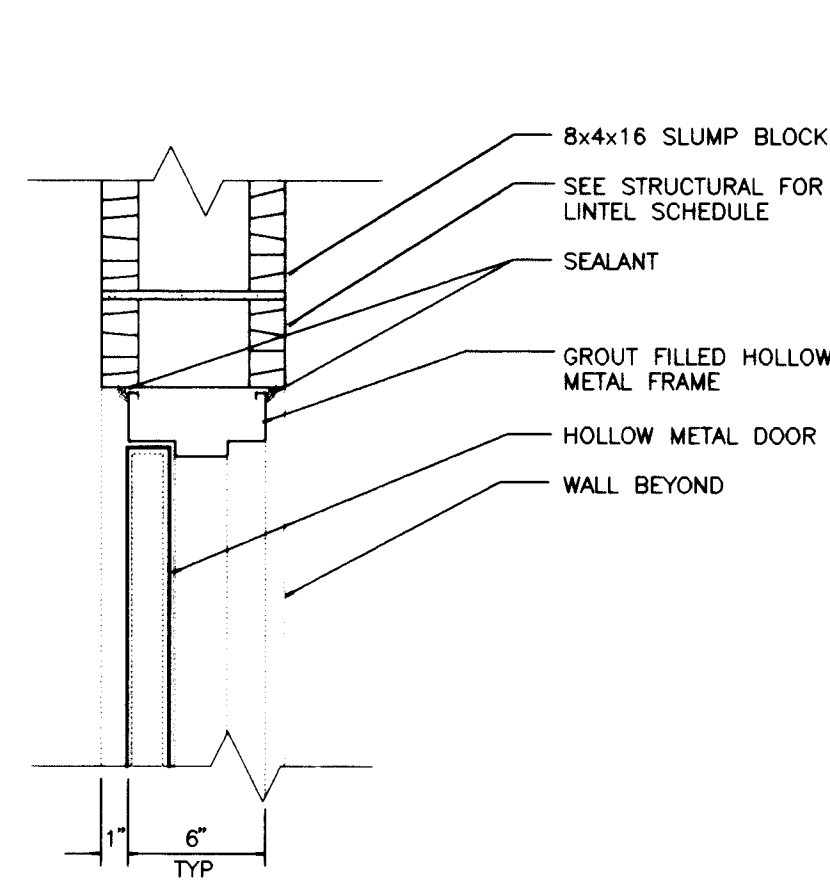
VERIFICATION
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MOLZEN-CORBIN & Associates

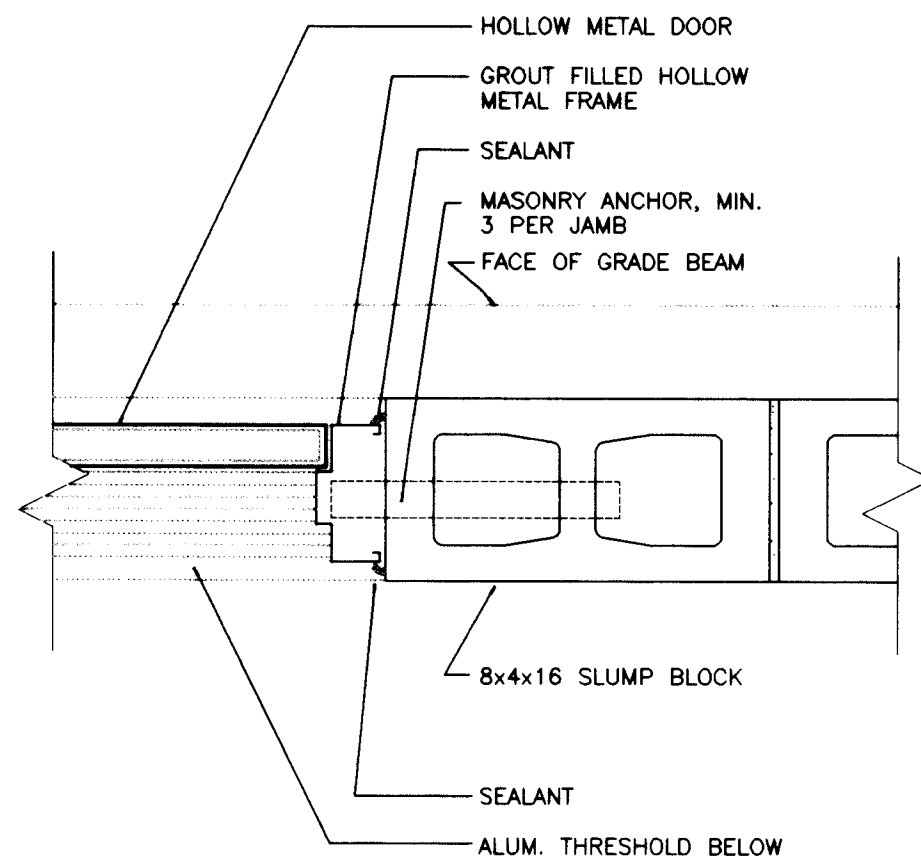
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION				
CHARLES WELLS MISCELLANEOUS DETAILS				
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER
D.R.C. Chair			Water	
Trans. Dev.			Wastewater	
Hydrology				
DRAWING NO.	A-4		MAP NO.	
			SHEET	20 OF 57

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BY LASON

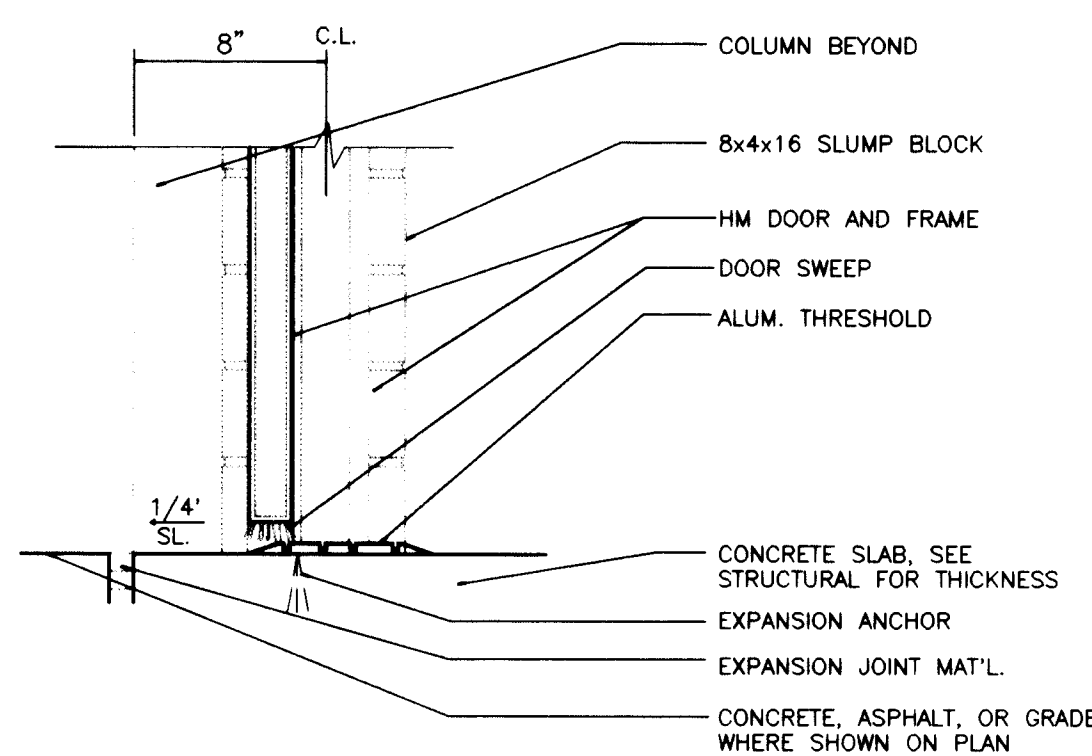
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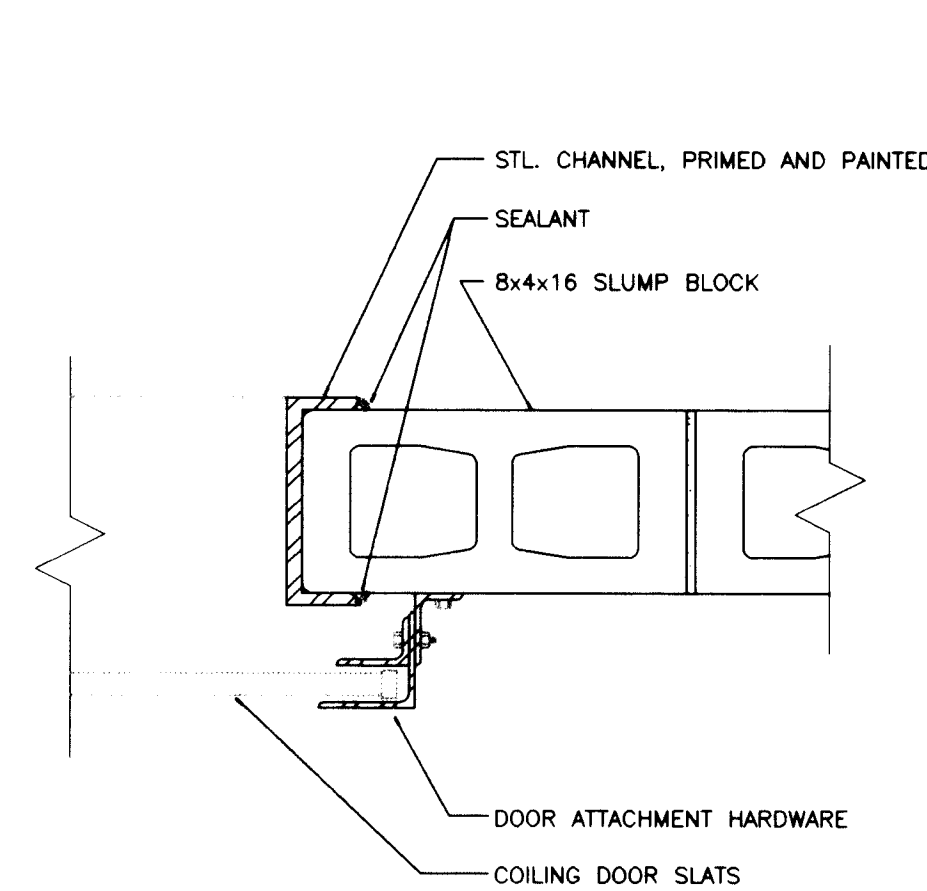
1 DOOR HEAD
A-2 1 1/2" = 1'-0"



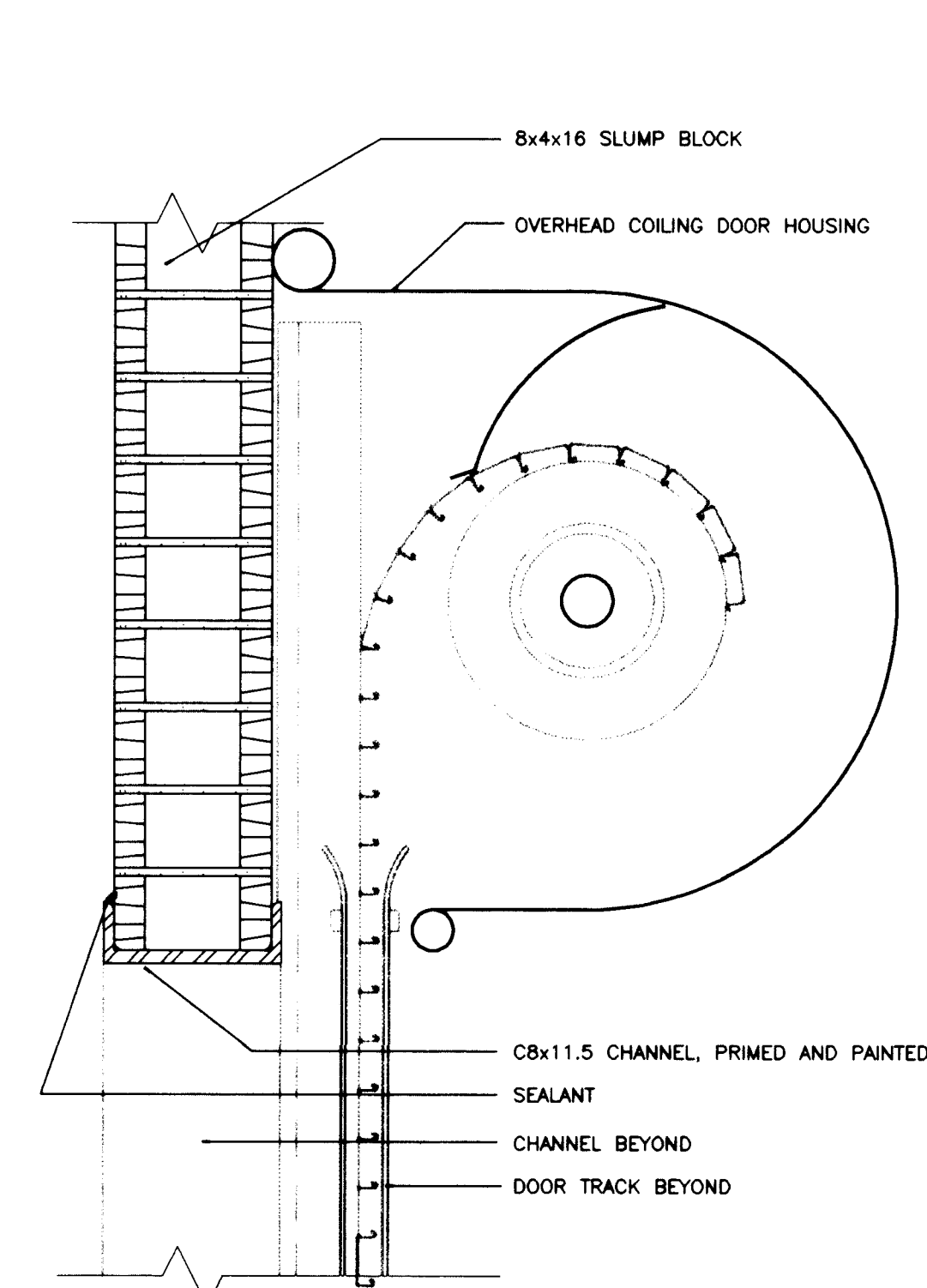
2 DOOR JAMB
A-2 1 1/2" = 1'-0"



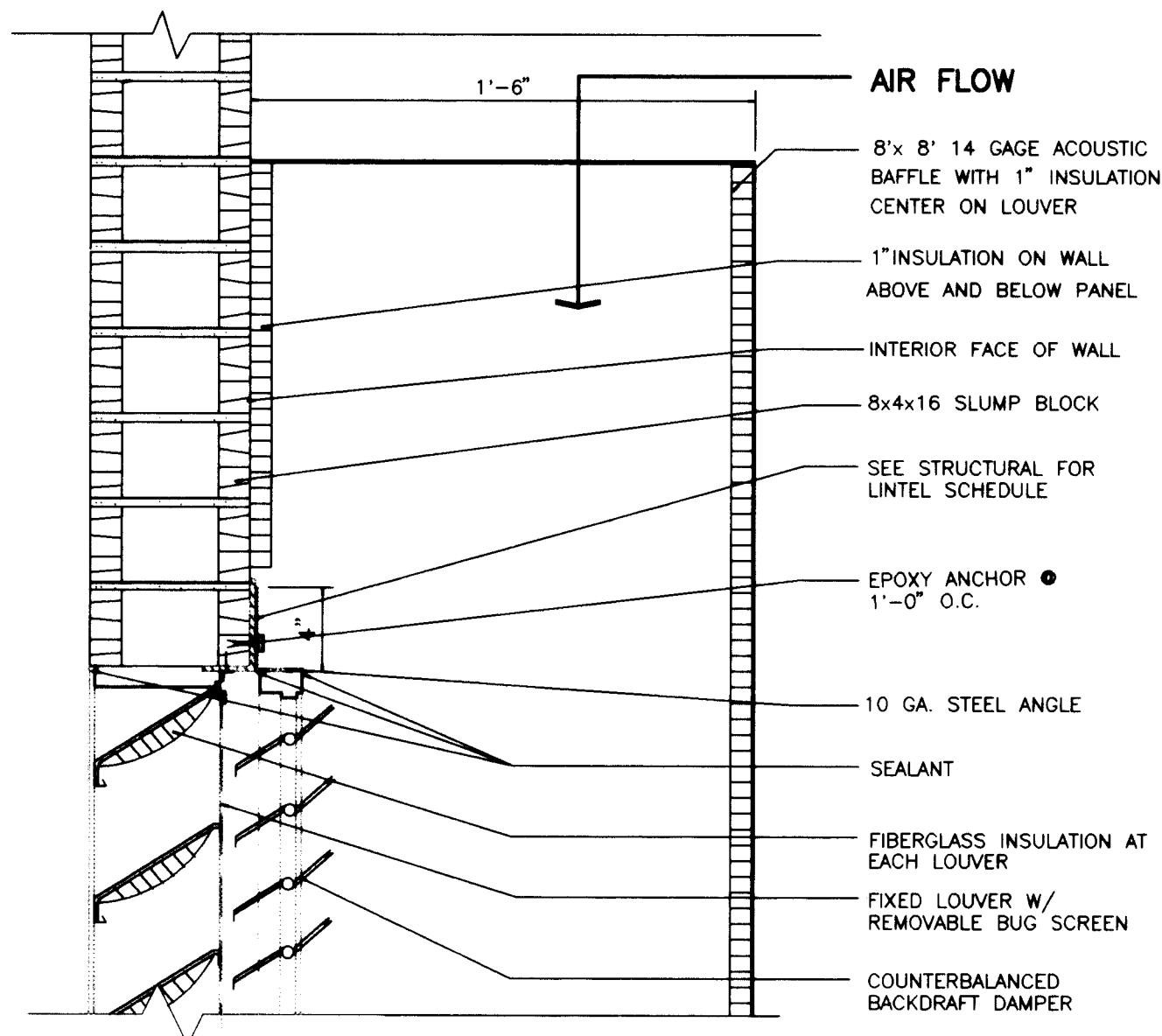
3 DOOR THRESHOLD
A-2 1 1/2" = 1'-0"



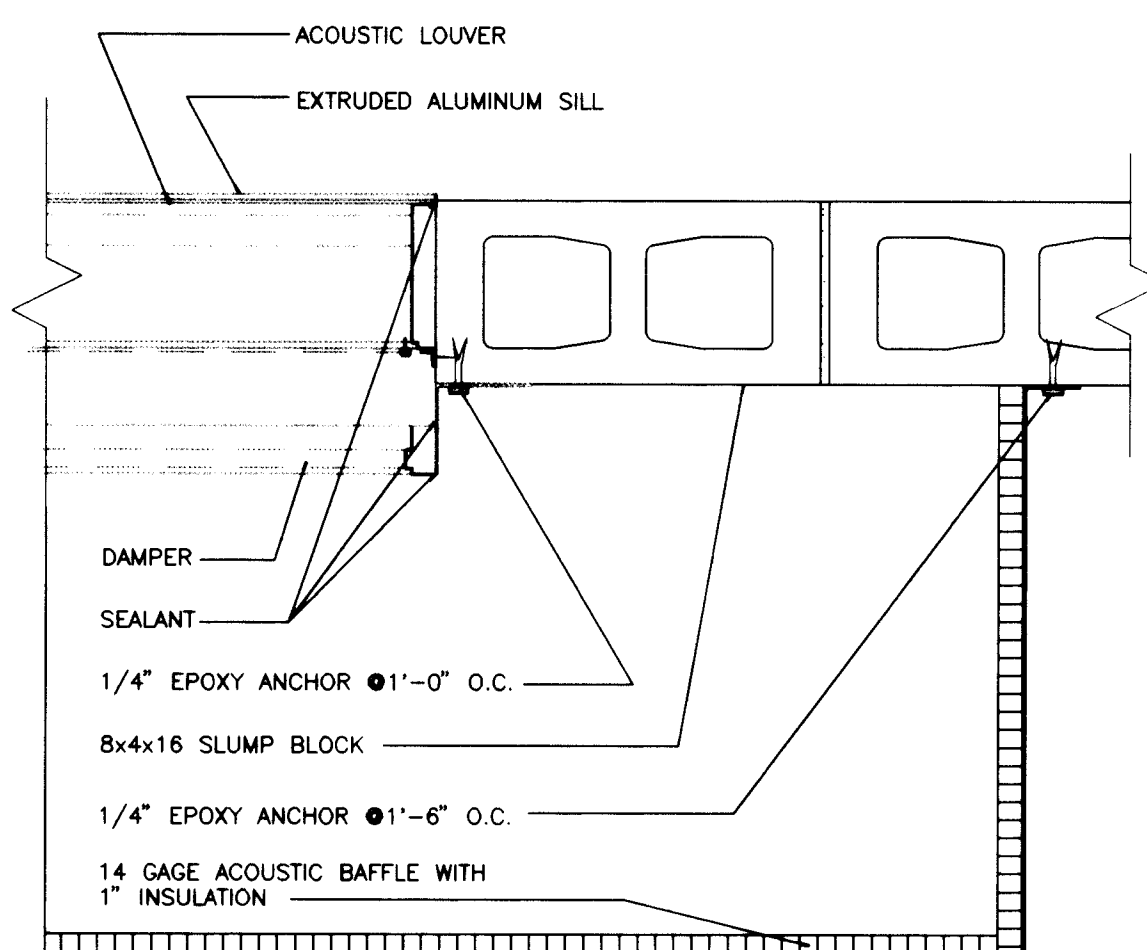
4 OH COILING DOOR JAMB
A-2 1 1/2" = 1'-0"



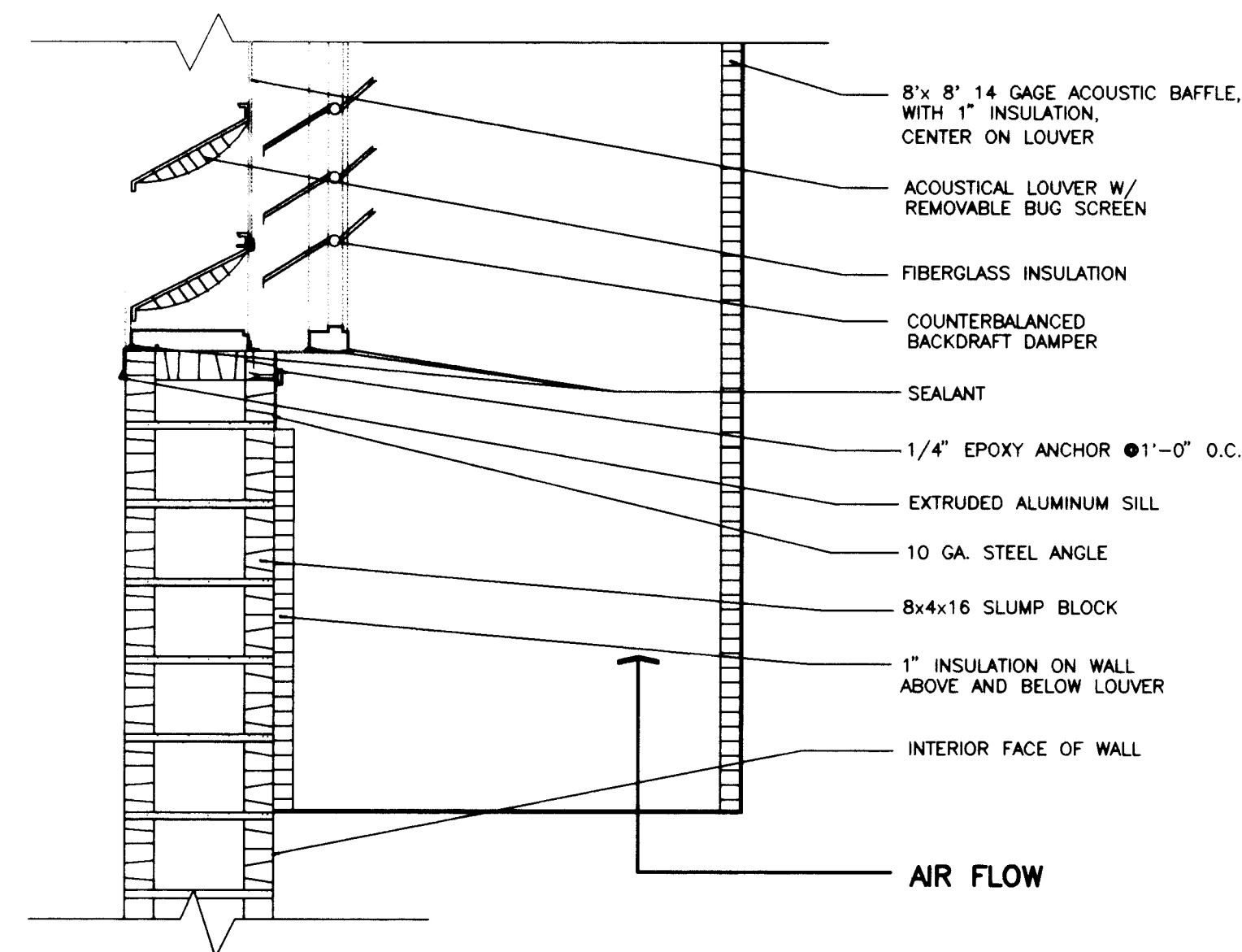
5 OH COILING DOOR HEAD
A-2 1 1/2" = 1'-0"



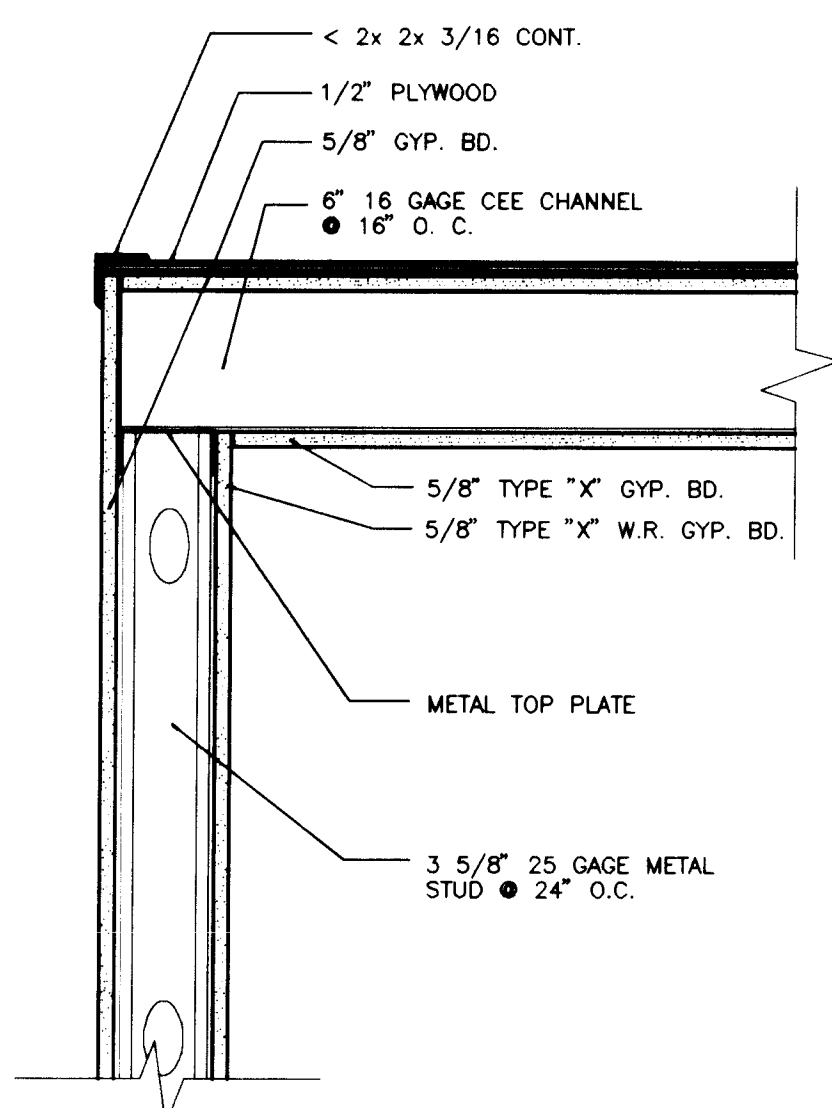
6 LOUVER HEAD
A-2 1 1/2" = 1'-0"



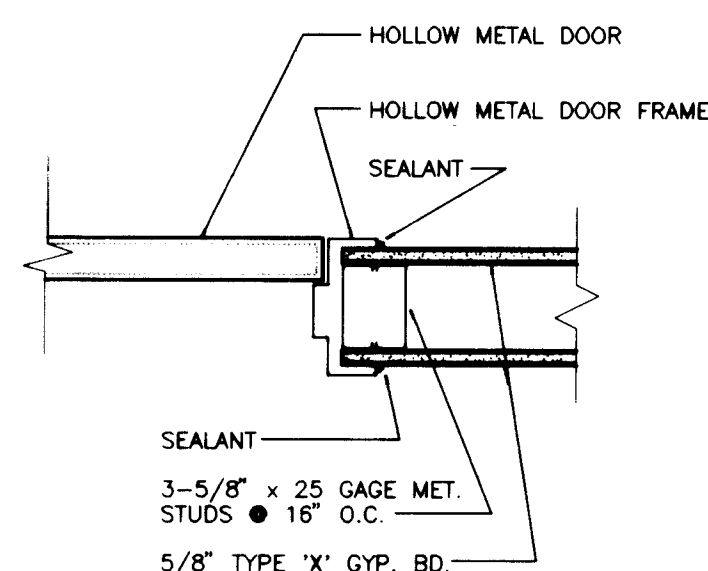
7 LOUVER JAMB
A-2 1 1/2" = 1'-0"



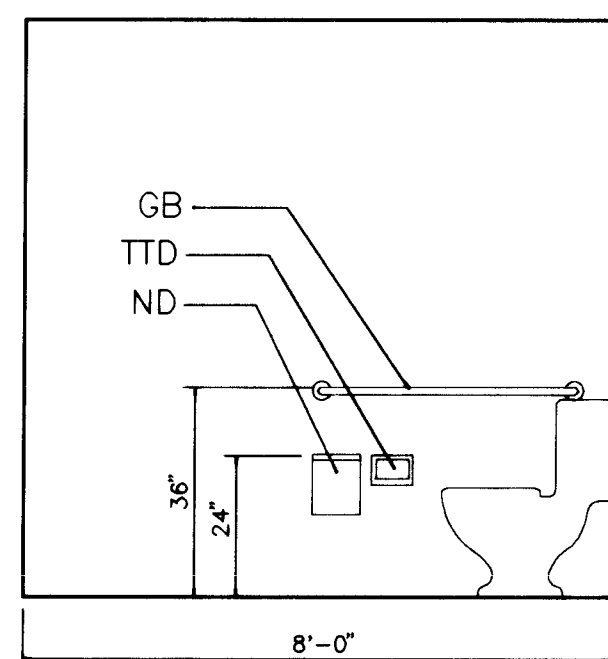
8 LOUVER SILL
A-2 1 1/2" = 1'-0"



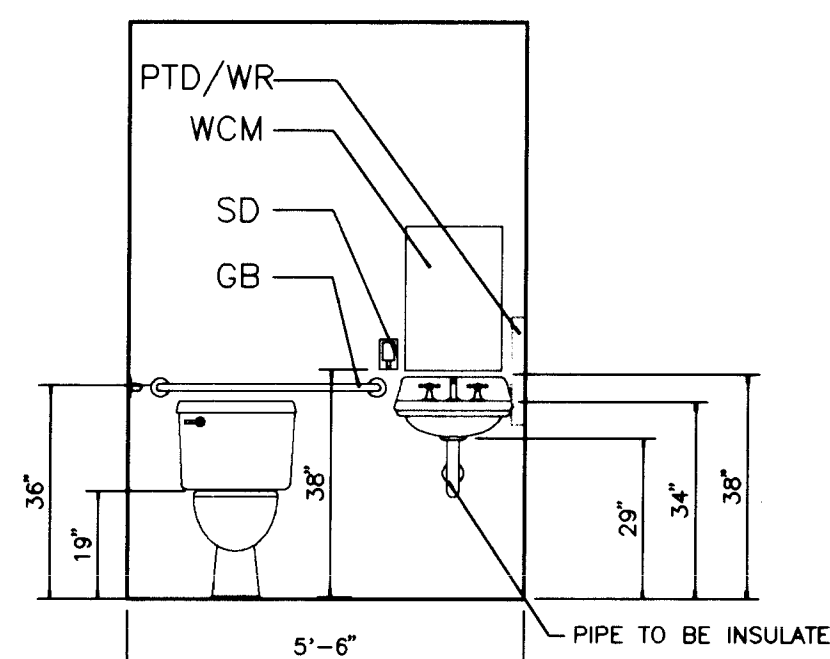
9 INT. WALL AND CEILING
A-1 1 1/2" = 1'-0"



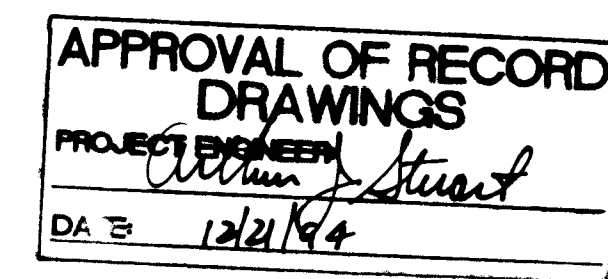
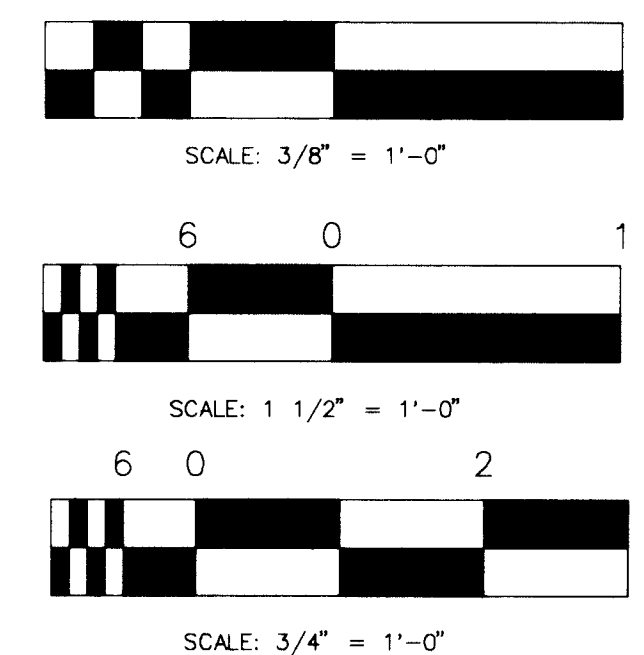
10 INT. DOOR JAMB
A-1 1 1/2" = 1'-0"



11 RESTROOM ELEVATION
A-1 3/8" = 1'-0"



12 RESTROOM ELEVATION
A-1 3/8" = 1'-0"



RECORD DRAWINGS

Revisions Drawn by: Michael Brewer Date: Nov. 15, 1994

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VERIFIED SCALES
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MOLZEN-CORBIN & Associates

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: CHARLES WELLS
MISCELLANEOUS DETAILS

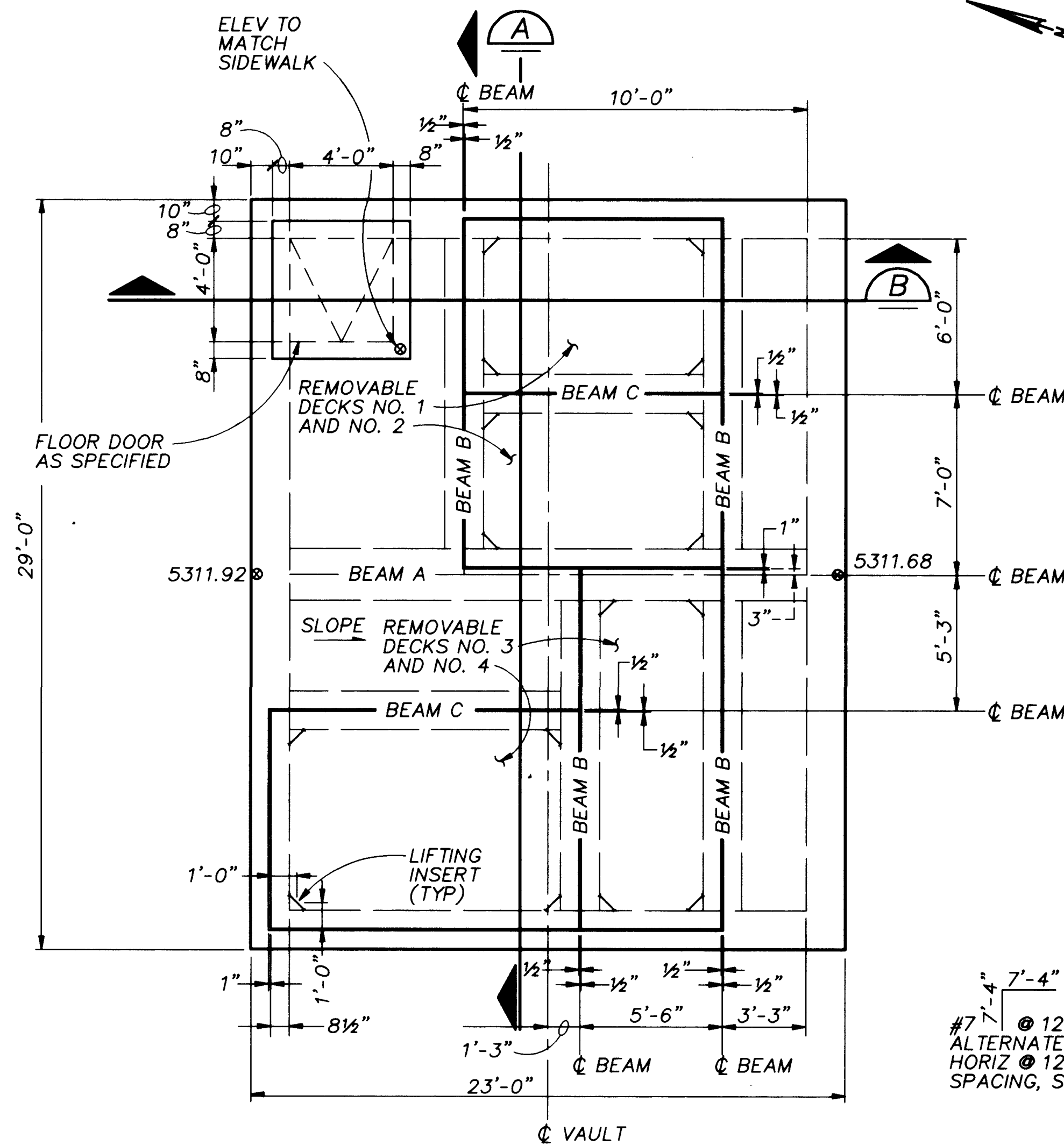
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					

DRAWING NO. A - 5 MAP NO. SHEET 21 OF 57

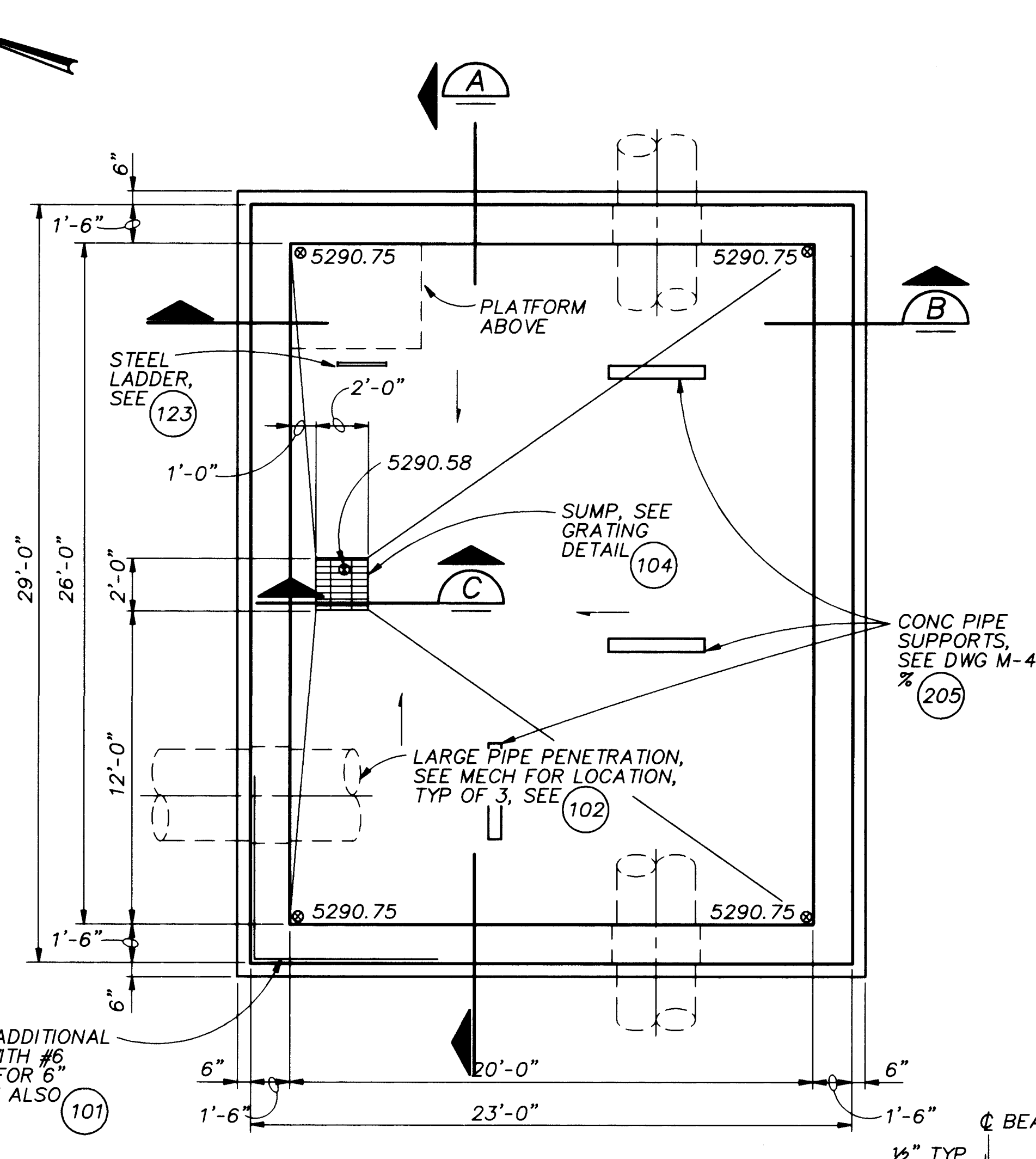


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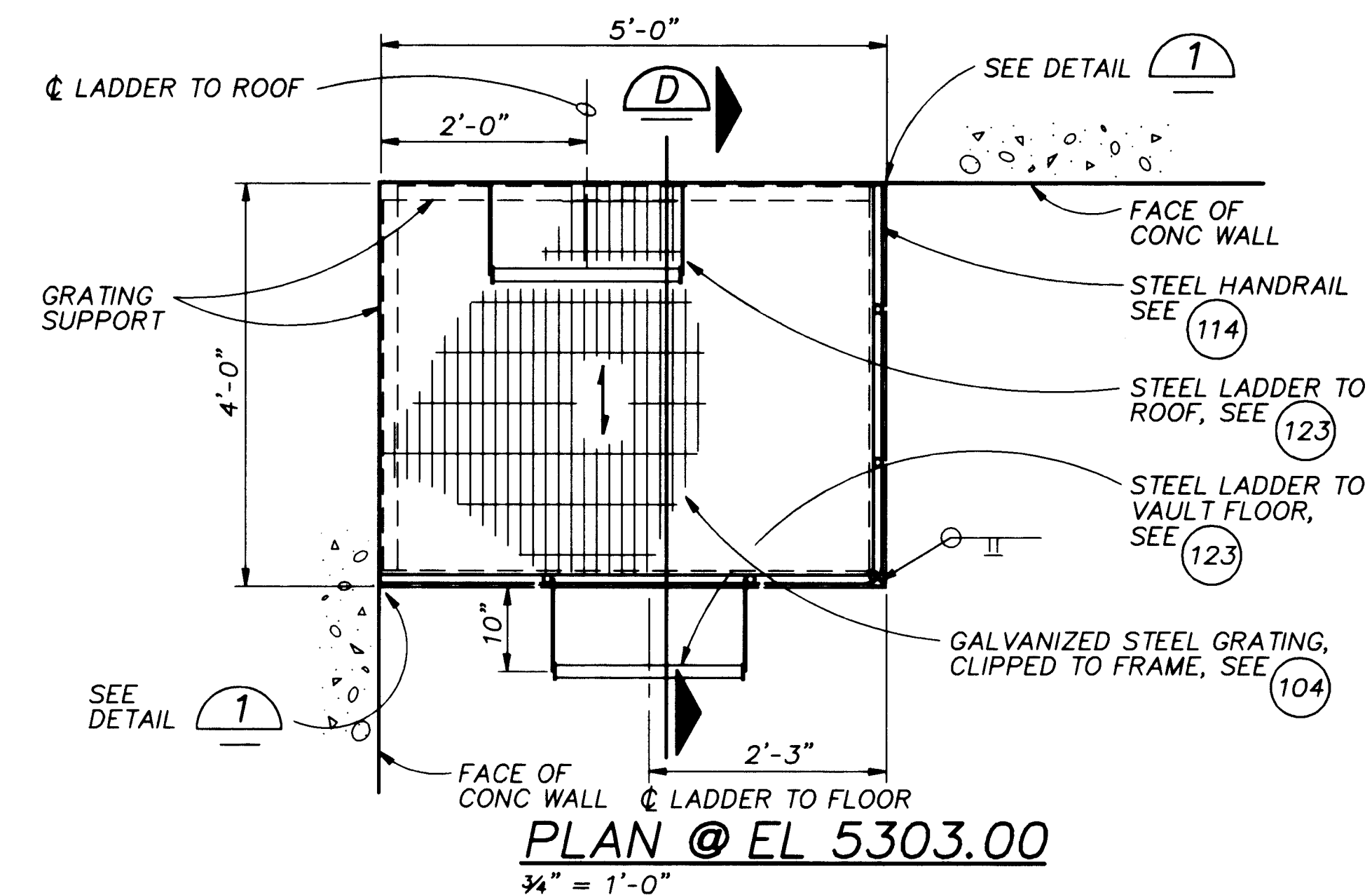
CP NO. 4214.90



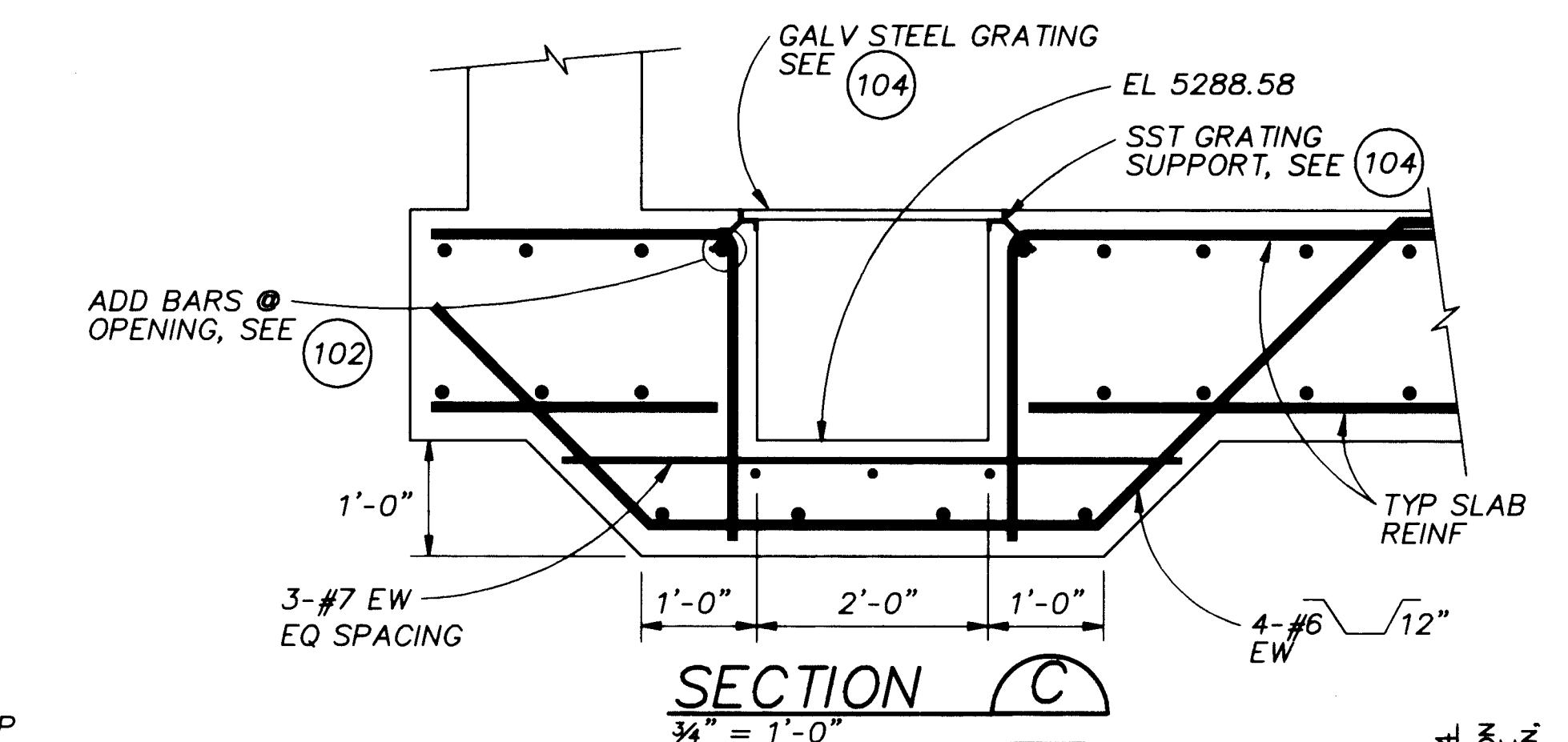
ROOF PLAN
1/4" = 1'-0"



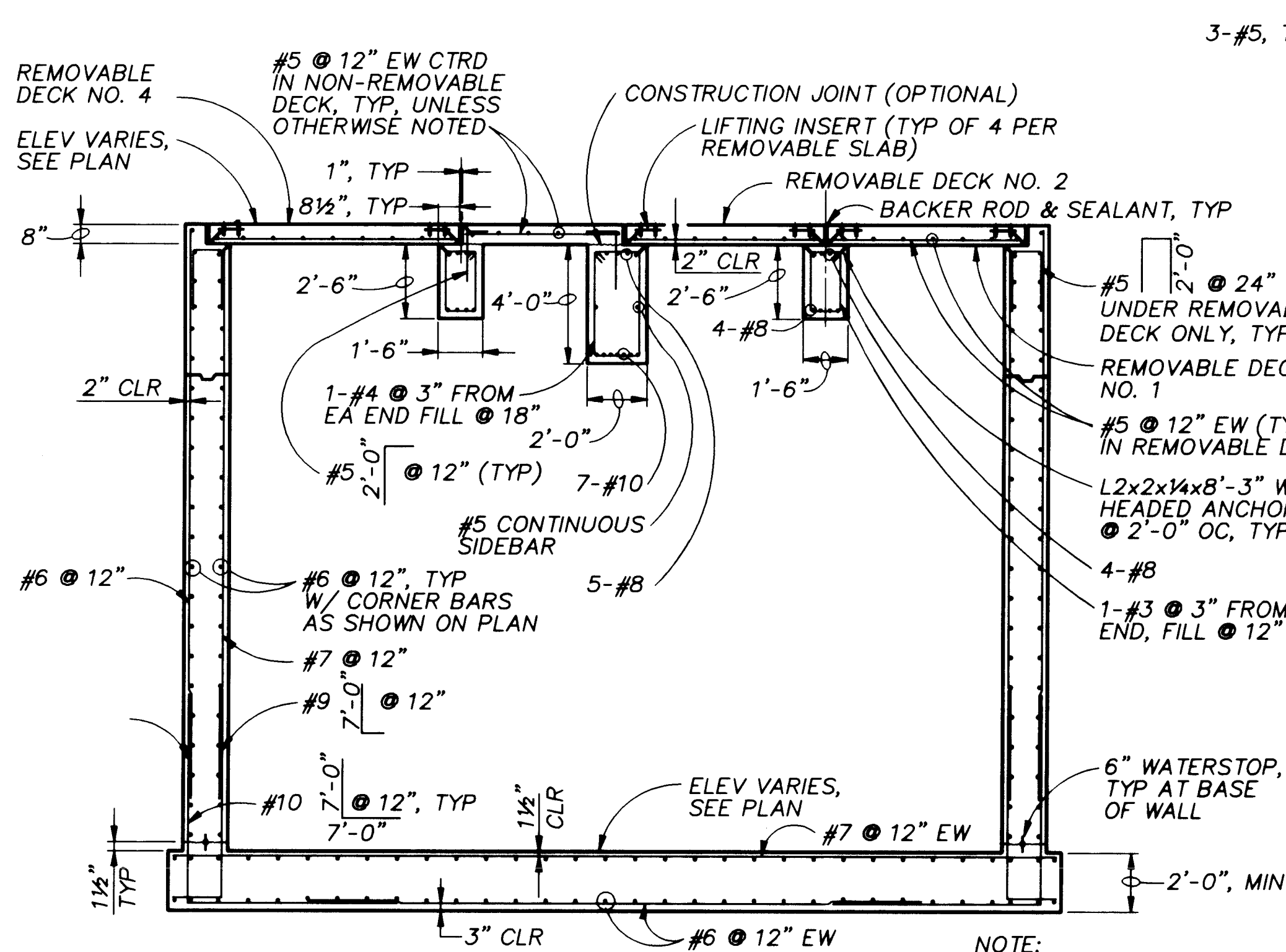
FLOOR PLAN
1/4" = 1'-0"



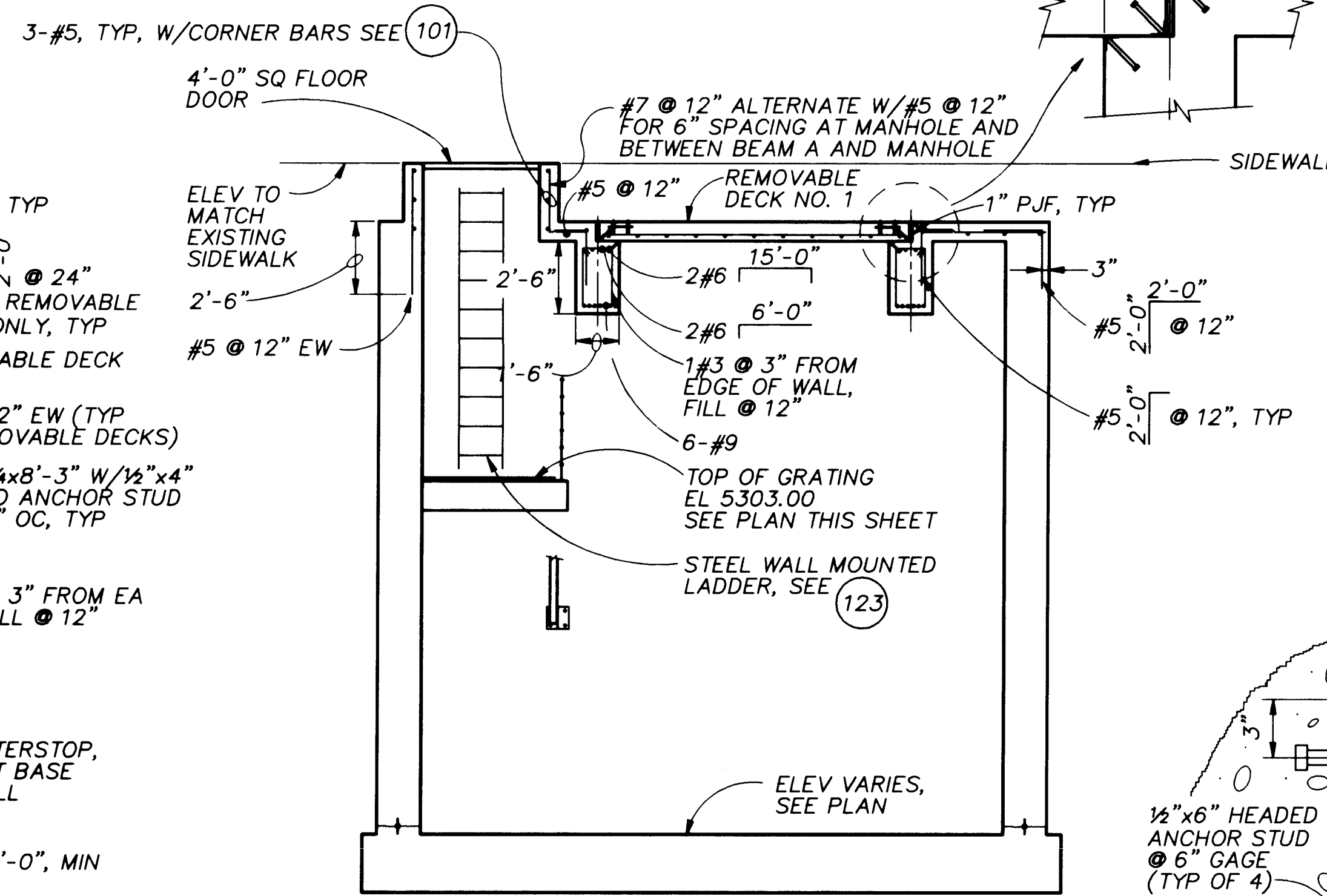
PLAN @ EL 5303.00
3/4" = 1'-0"



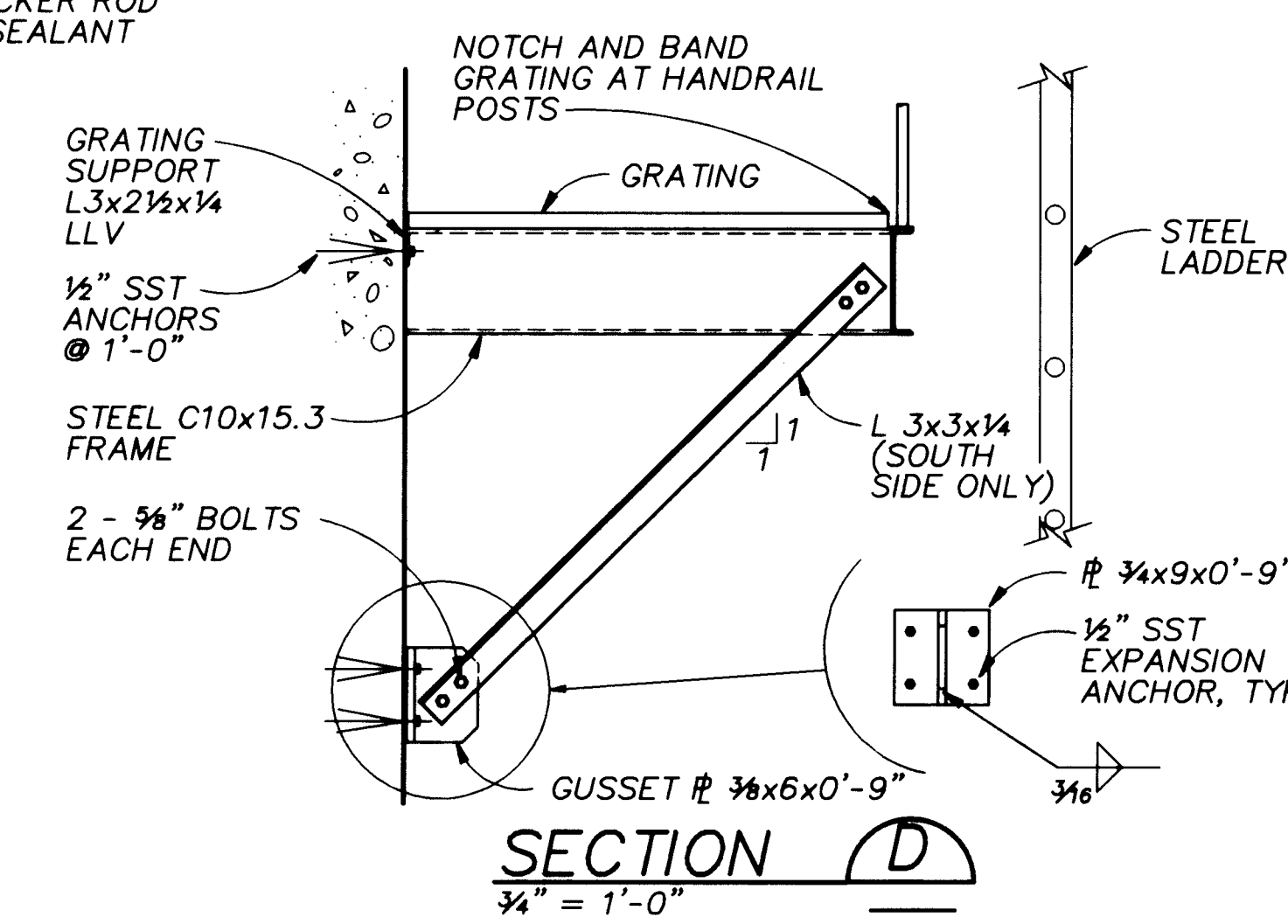
SECTION C
3/4" = 1'-0"



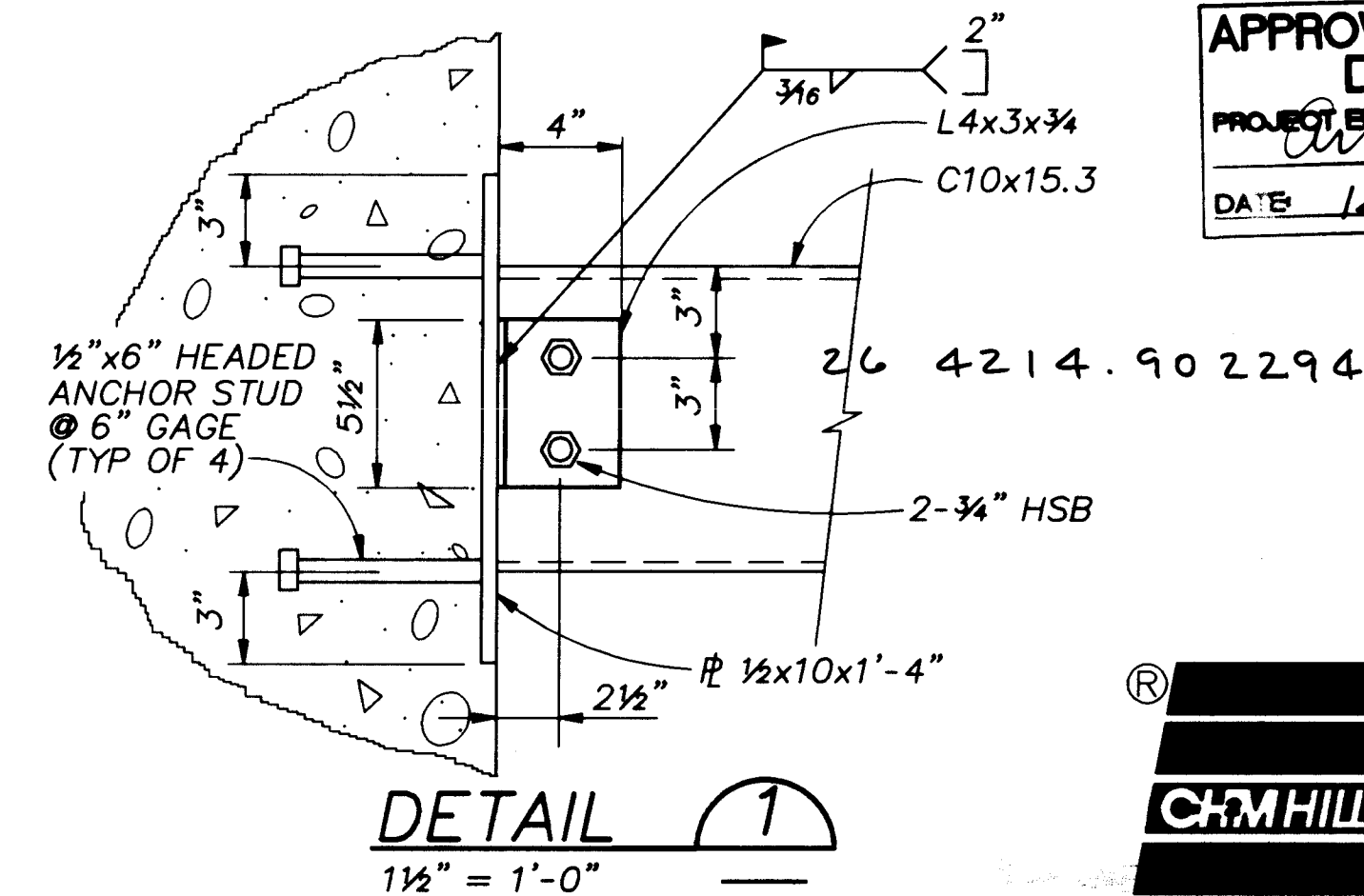
SECTION A
1/4" = 1'-0"



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



SECTION D
3/4" = 1'-0"



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

NOTE:
LIFTING INSERT SHALL BE BY RICHMOND SCREW ANCHOR CO., FT. WORTH TX, CATALOG NO. 1/4" LEL-DH, OR EQUAL. PROVIDE ENOUGH LIFT LAG BOLTS AND BRACKETS TO LIFT ONE REMOVABLE DECK. AFTER INSTALLATION AND AT LEAST 24 HOURS BEFORE BACKFILLING, THOROUGHLY GREASE ALL THREADS, PLUG HOLES, AND COAT EXPOSED STEEL WITH BITUMINOUS PAINT. GIVE LIFT LAG BOLTS AND BRACKETS TO OWNER.

RECORD DRAWINGS
These drawings have been prepared in part on the basis of information furnished by the City of Albuquerque. THESE RECORD DRAWINGS ARE NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. THE TYPE OF COMPONENT NOT SHOWN IN DETAIL SHALL BE OF THE TYPE MOST COMMONLY USED IN THE INDUSTRY OR THE TYPE WHICH HAS BEEN INCORPORATED INTO THE RECORD DRAWINGS.

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE 12/21/94

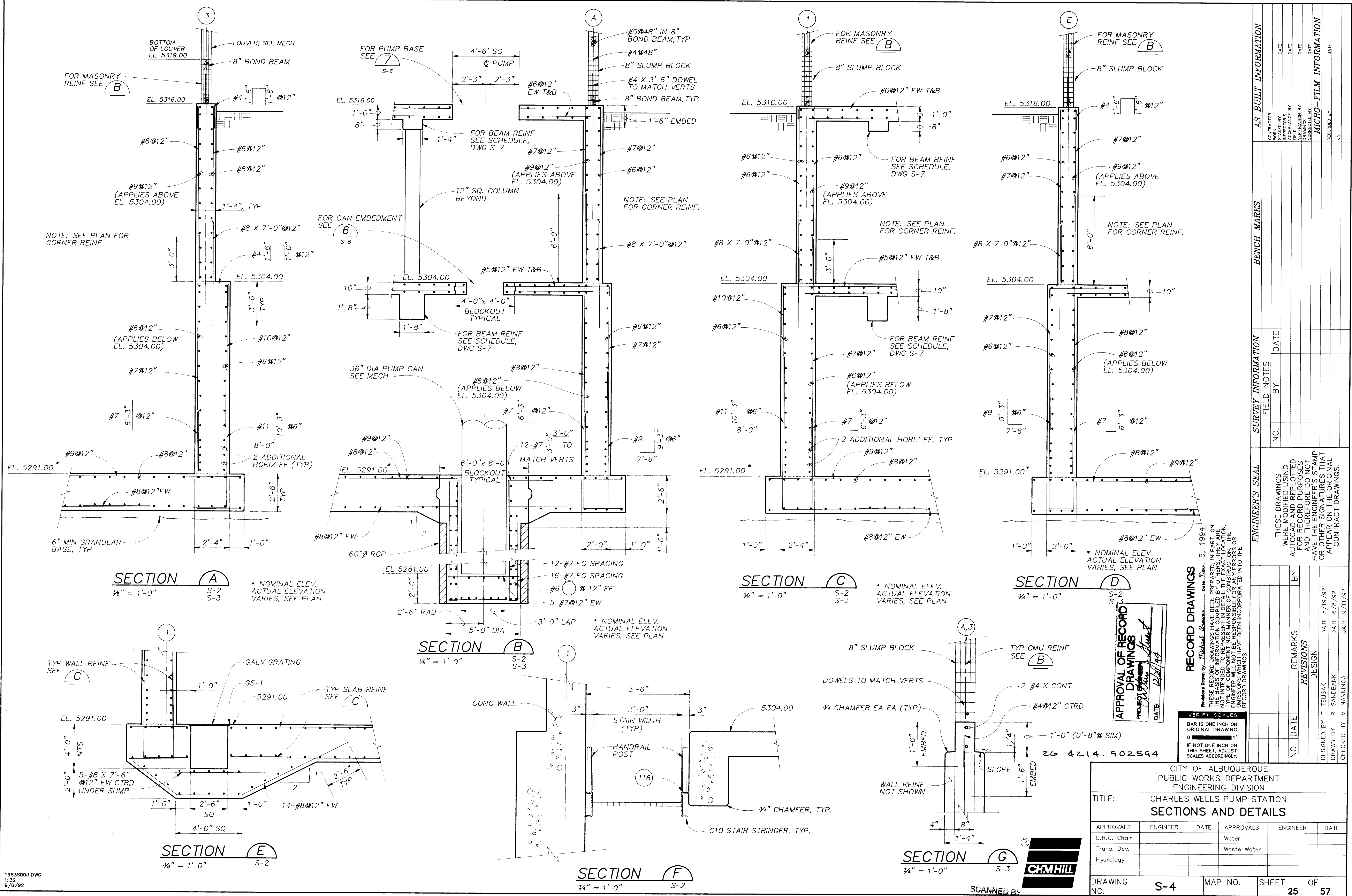
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION BYPASS VAULT STRUCTURAL					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. S-1		MAP NO.		SHEET 22 OF 57	



BAR IS ONE INCH ON
ORIGINAL DRAWING
0 1
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION					
STRUCTURAL PLANS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. S-3		MAP NO.	SHEET 24 OF 57		

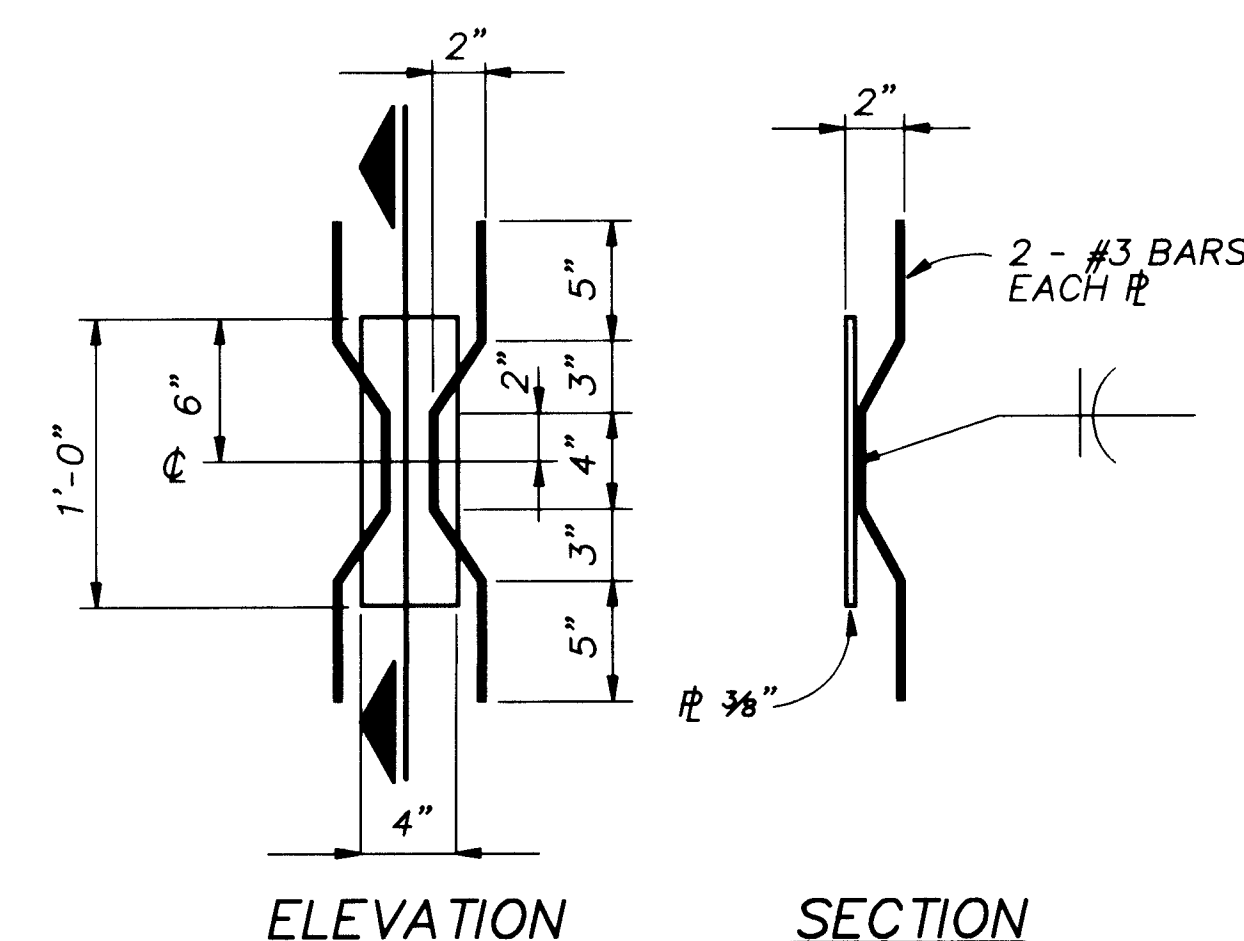
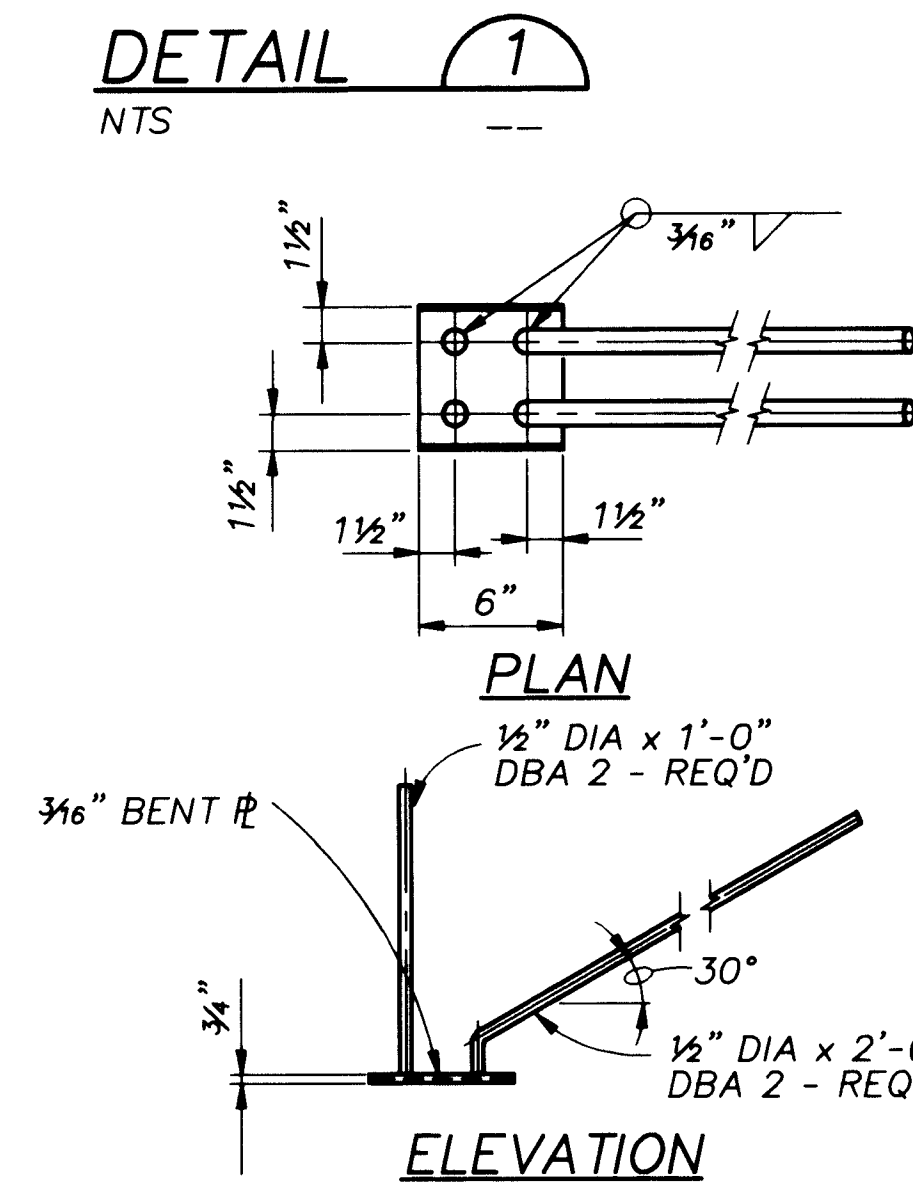
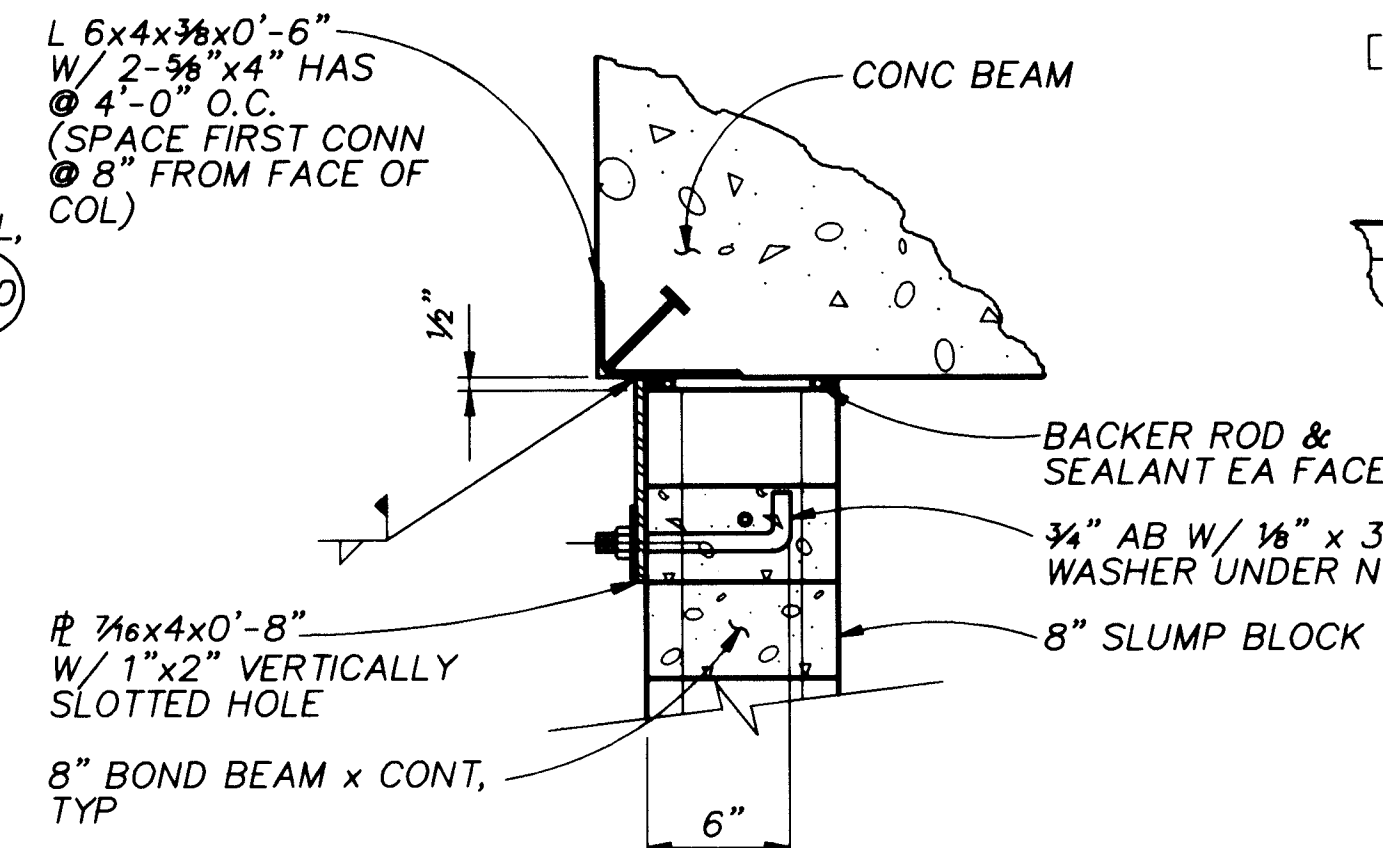
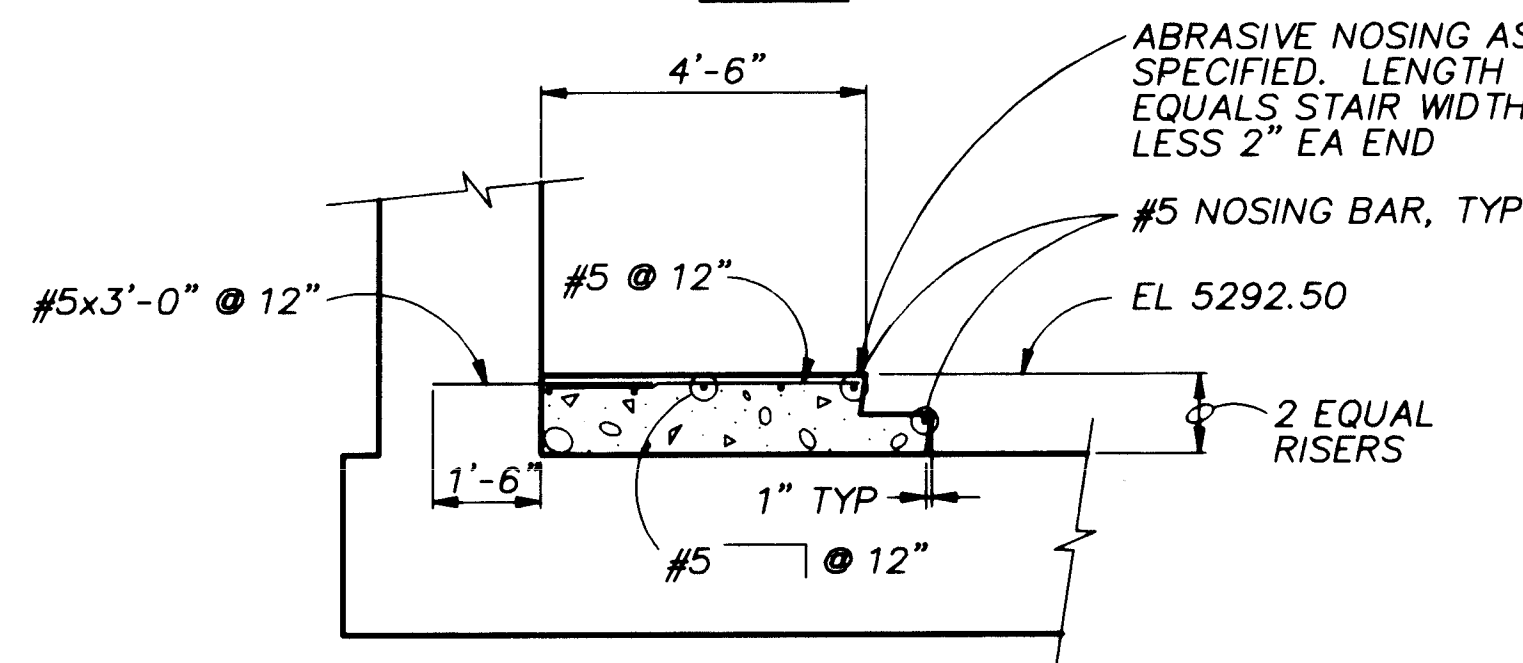
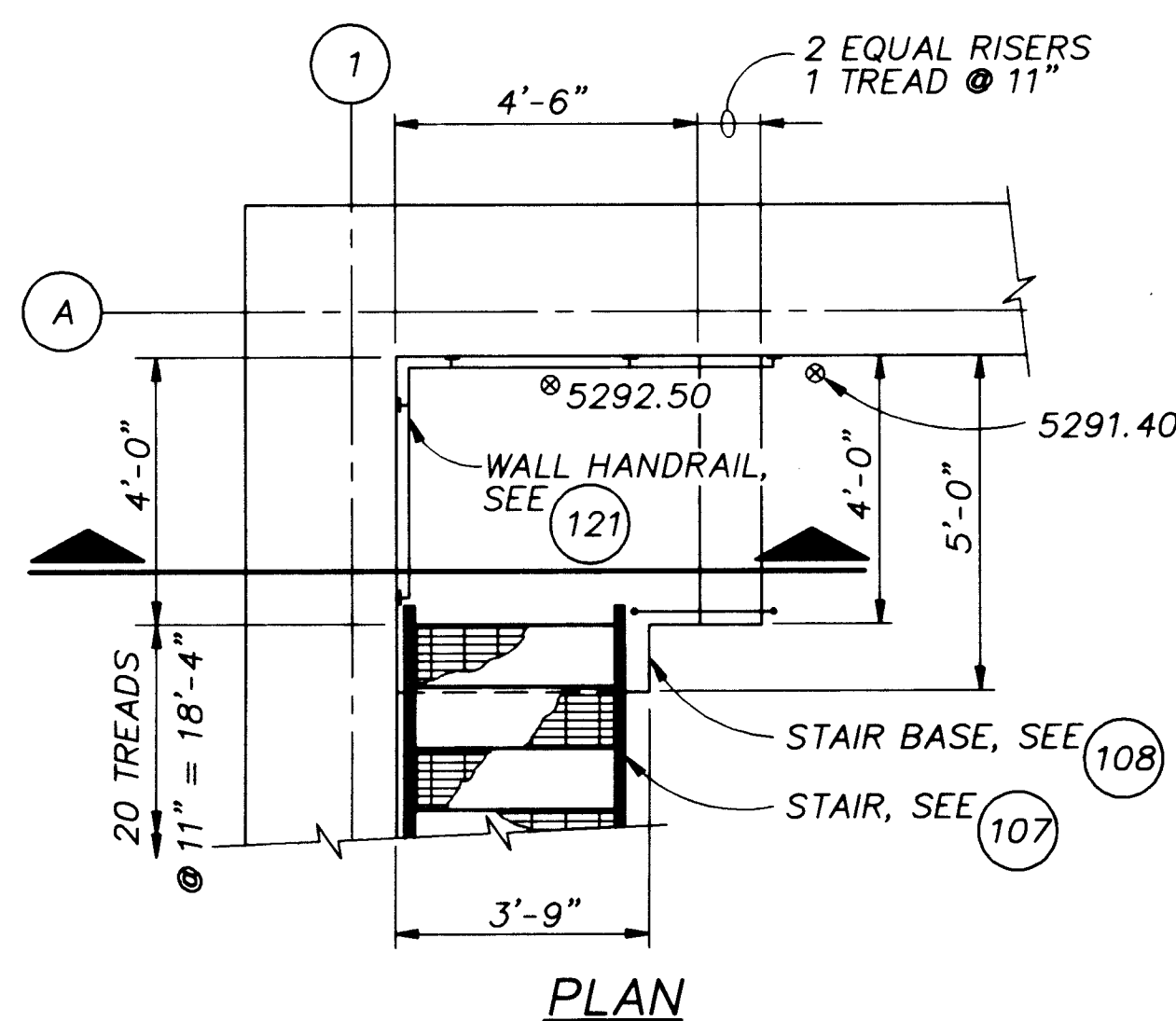
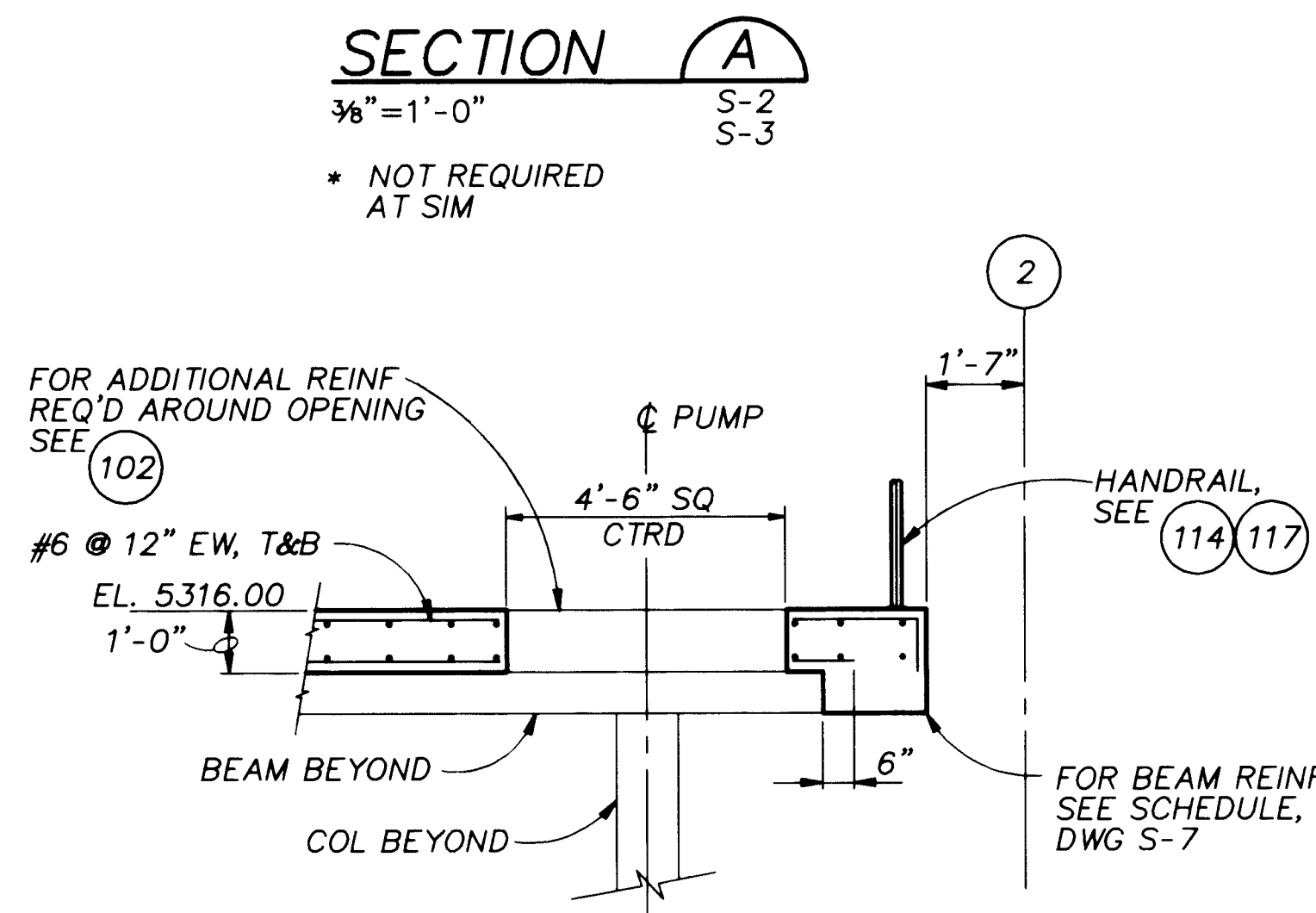
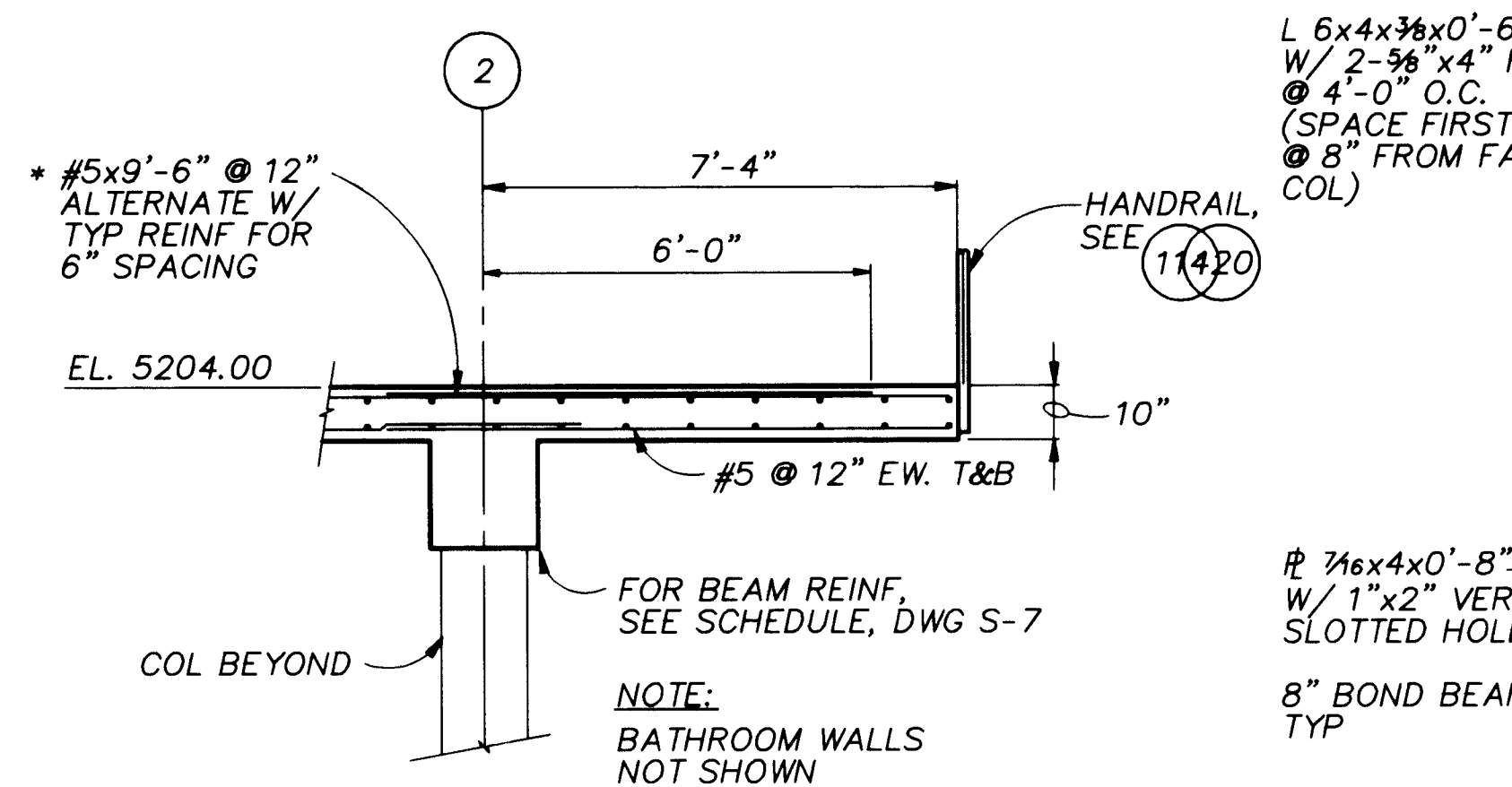
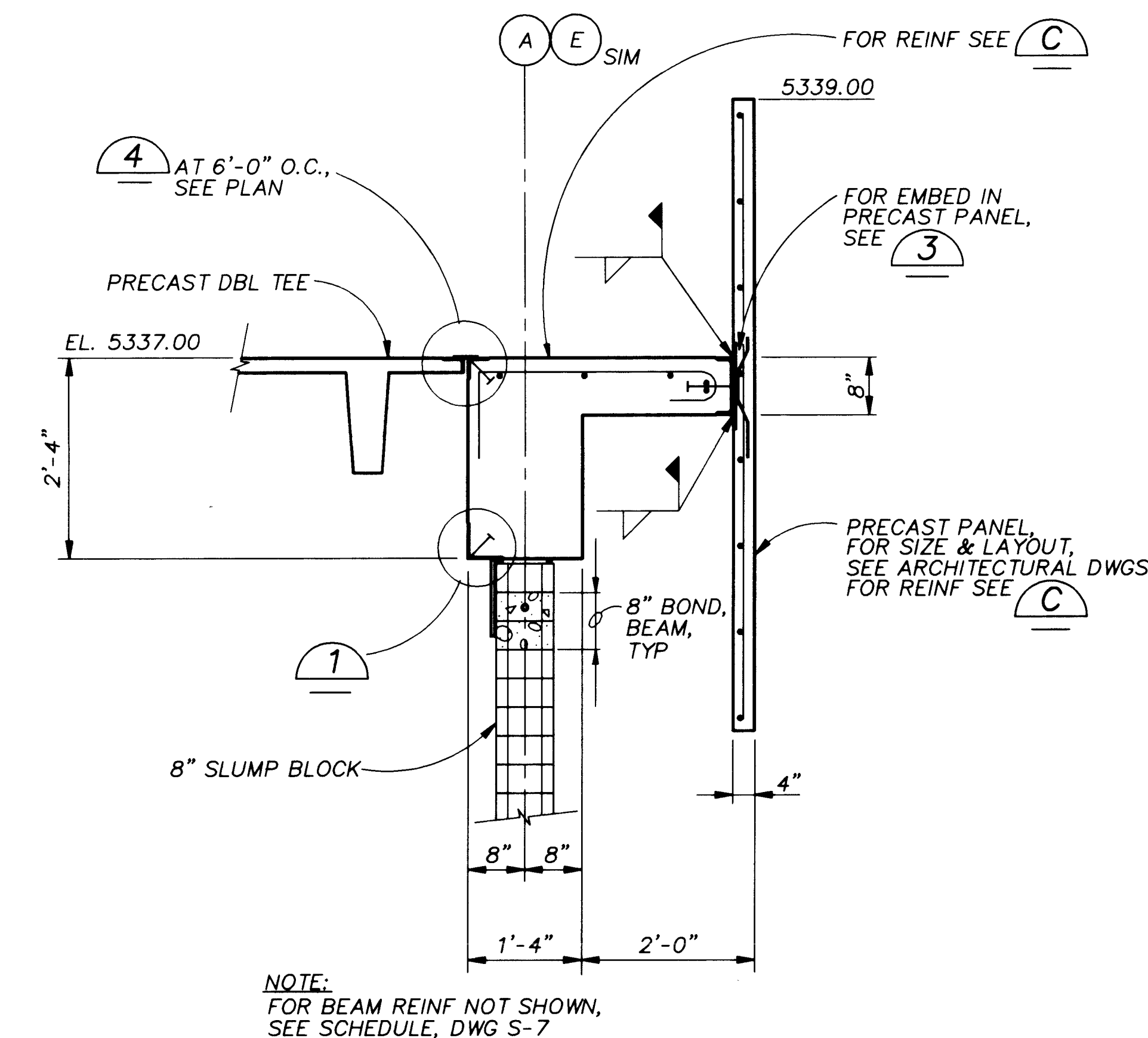
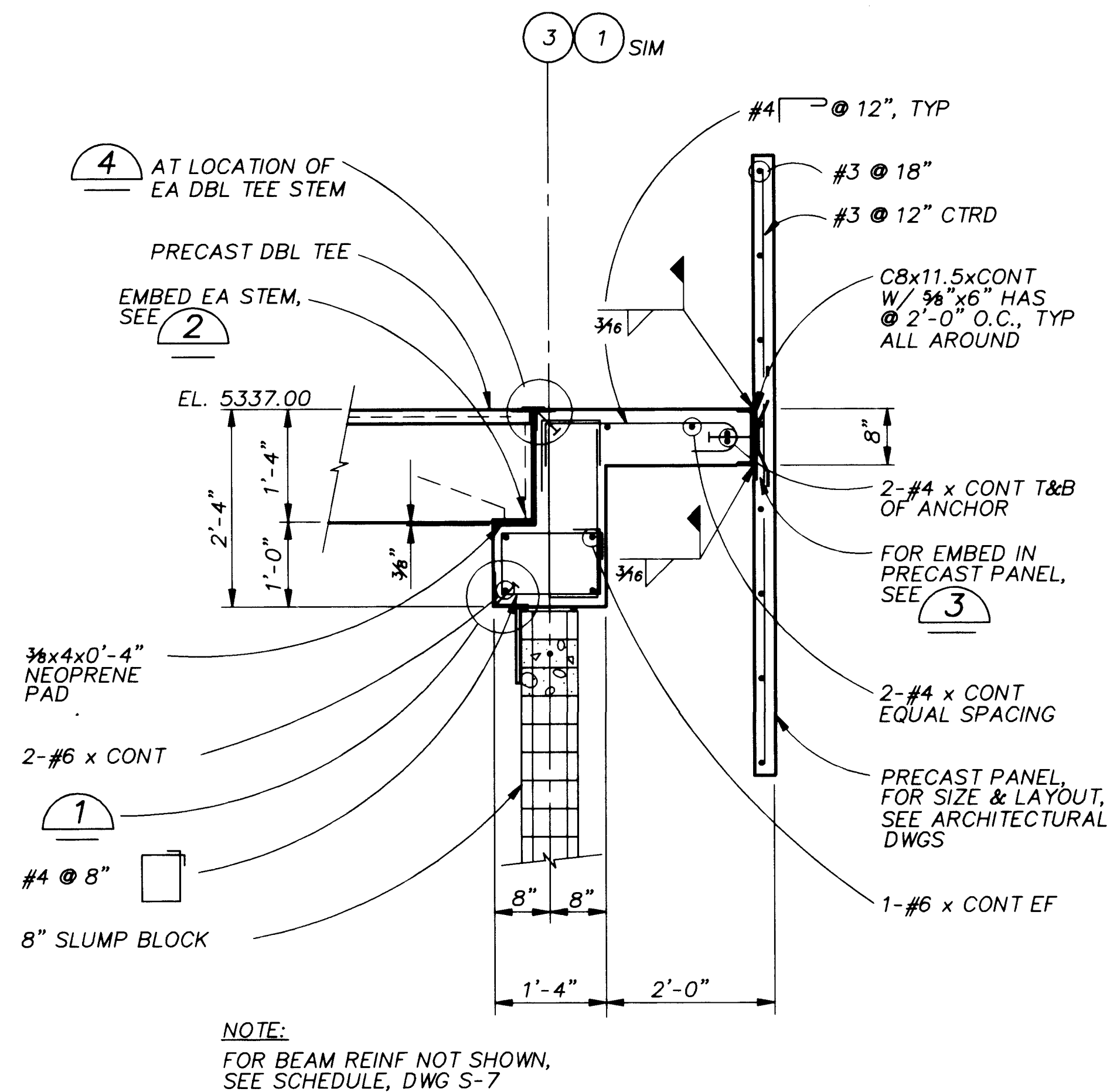


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1:32
9/6/92

SCANNED BY
BY LASON



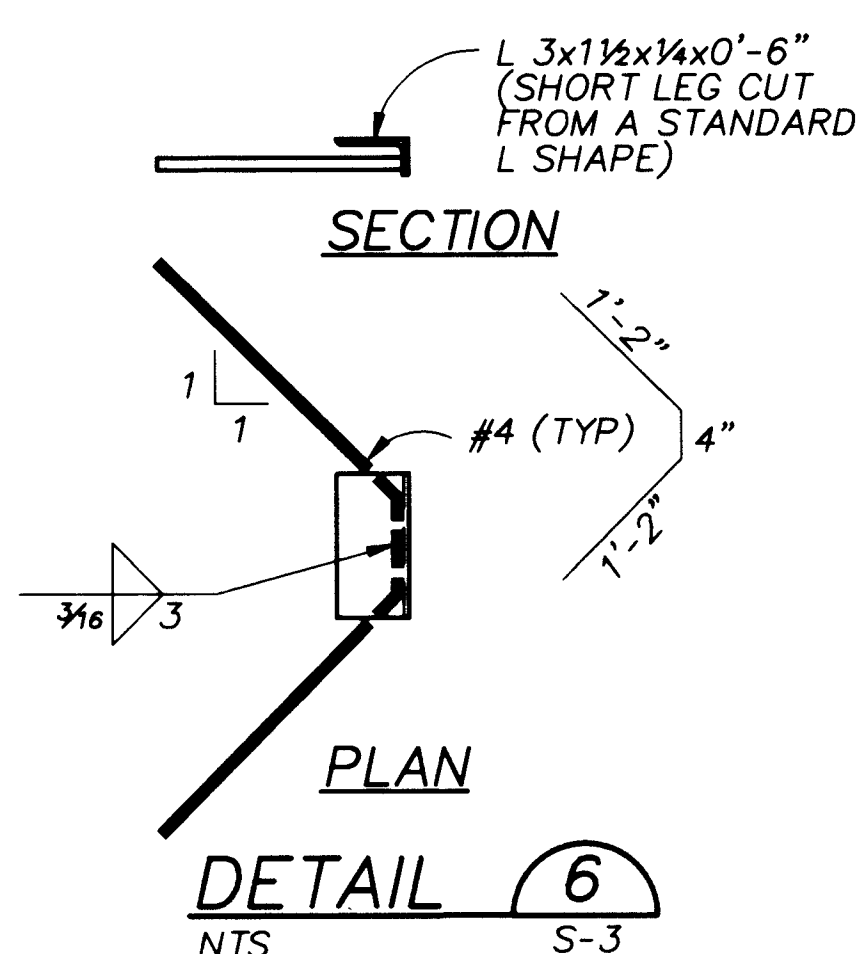
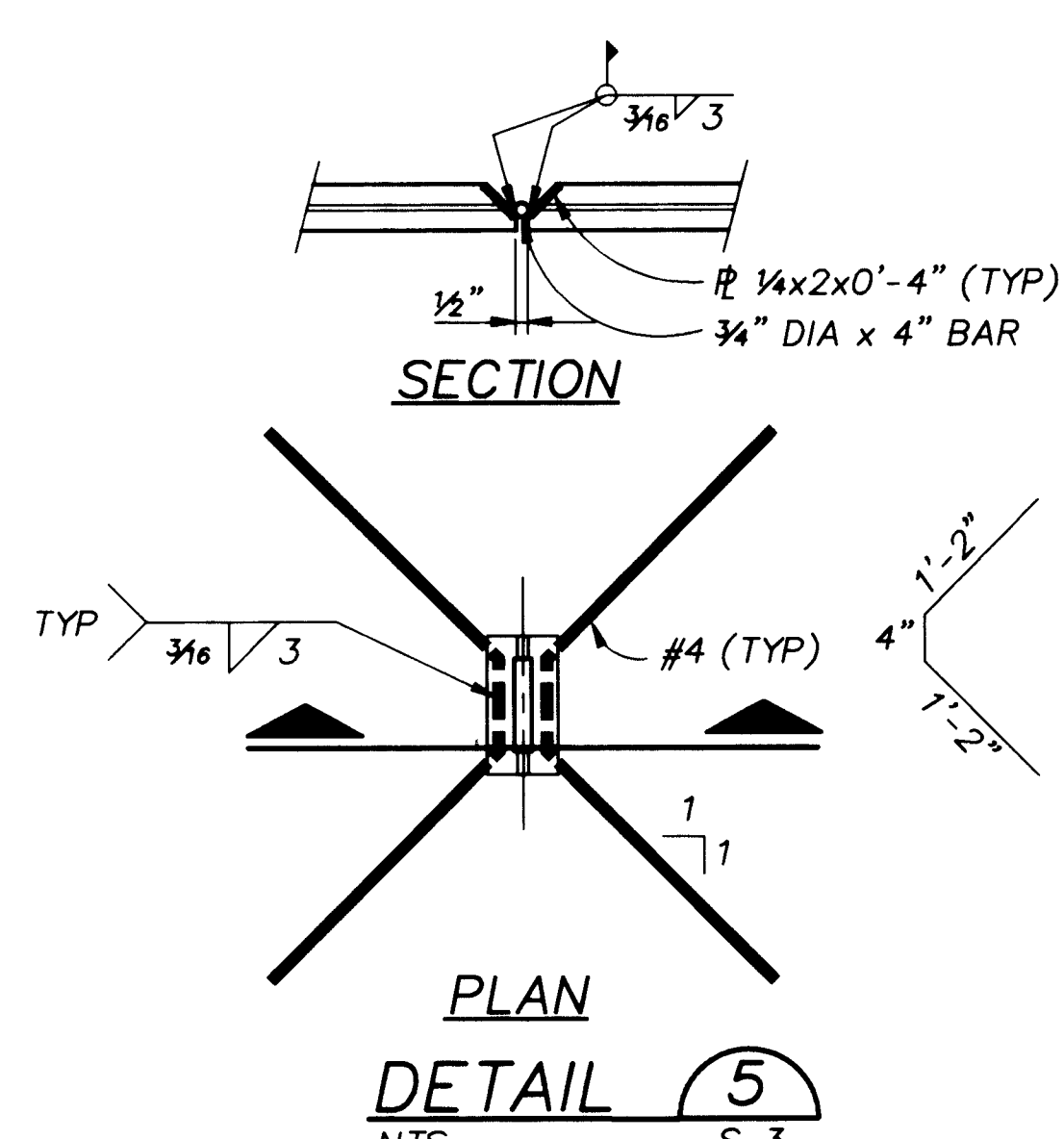
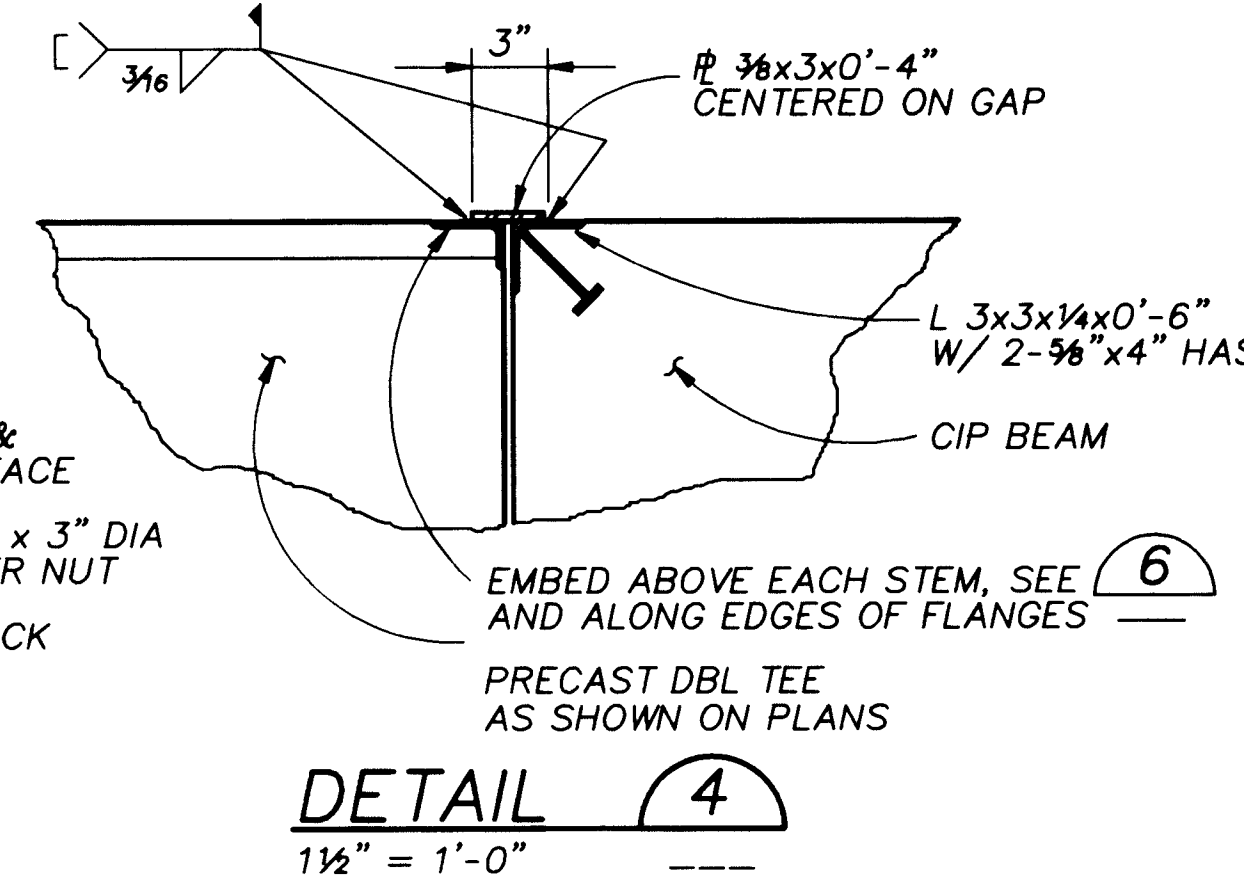
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION SECTIONS AND DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. S-4		MAP NO.		SHEET 25 OF 57	
CP NO. 4214.90					



APPROVAL OF RECORD
DRAWINGS
12/2/94

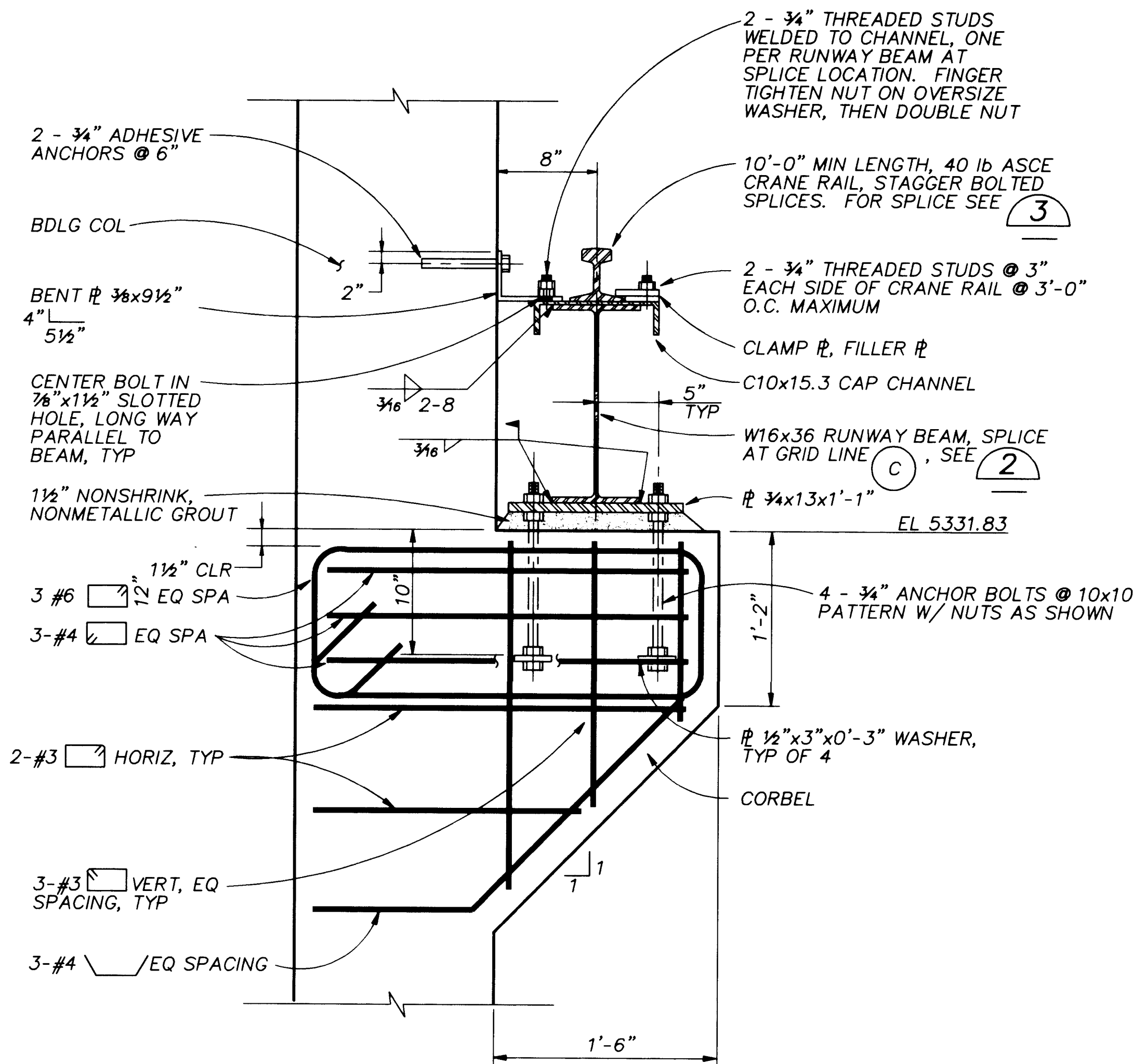
RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

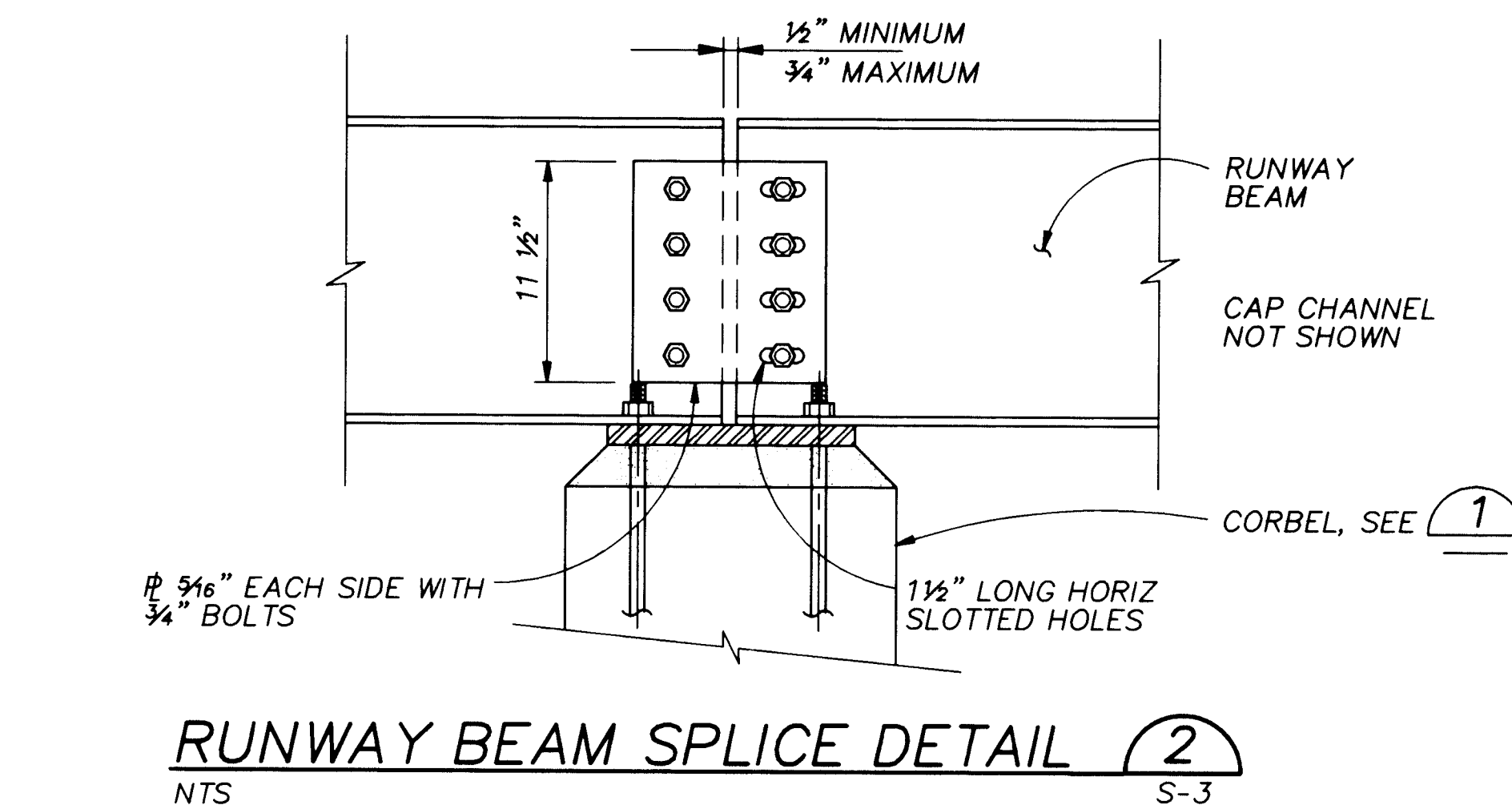


26 4214.902694

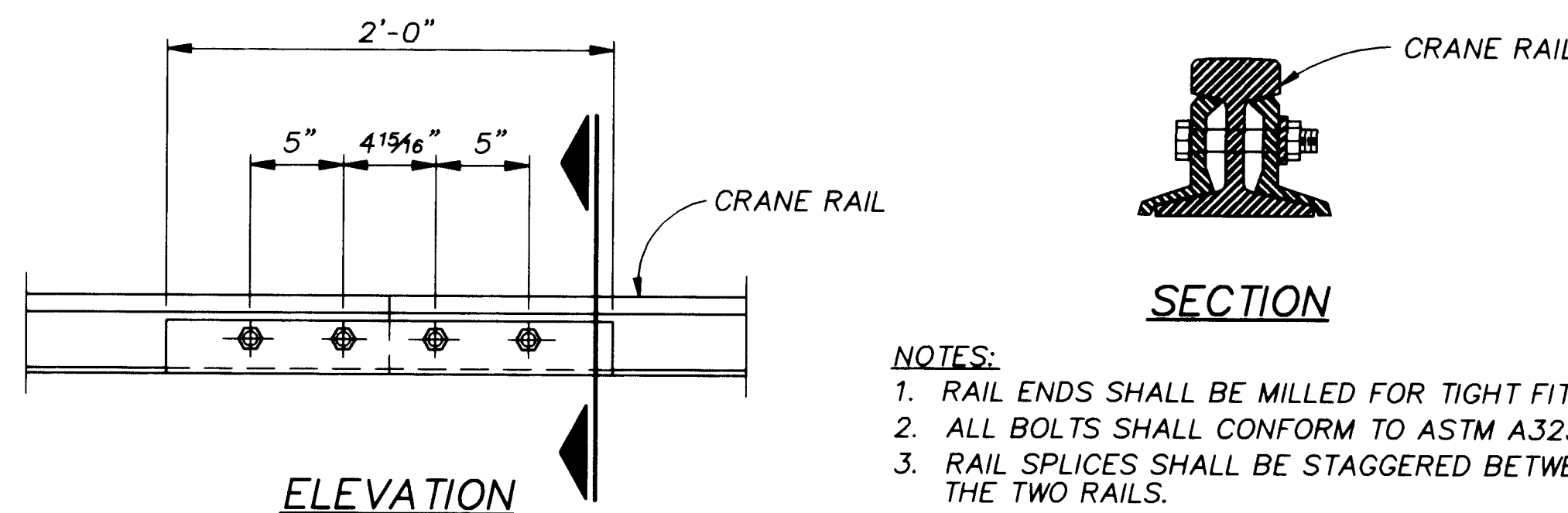
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION SECTIONS AND DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	S-5	MAP NO.		SHEET 26	OF 57
CP NO. 4214.90					



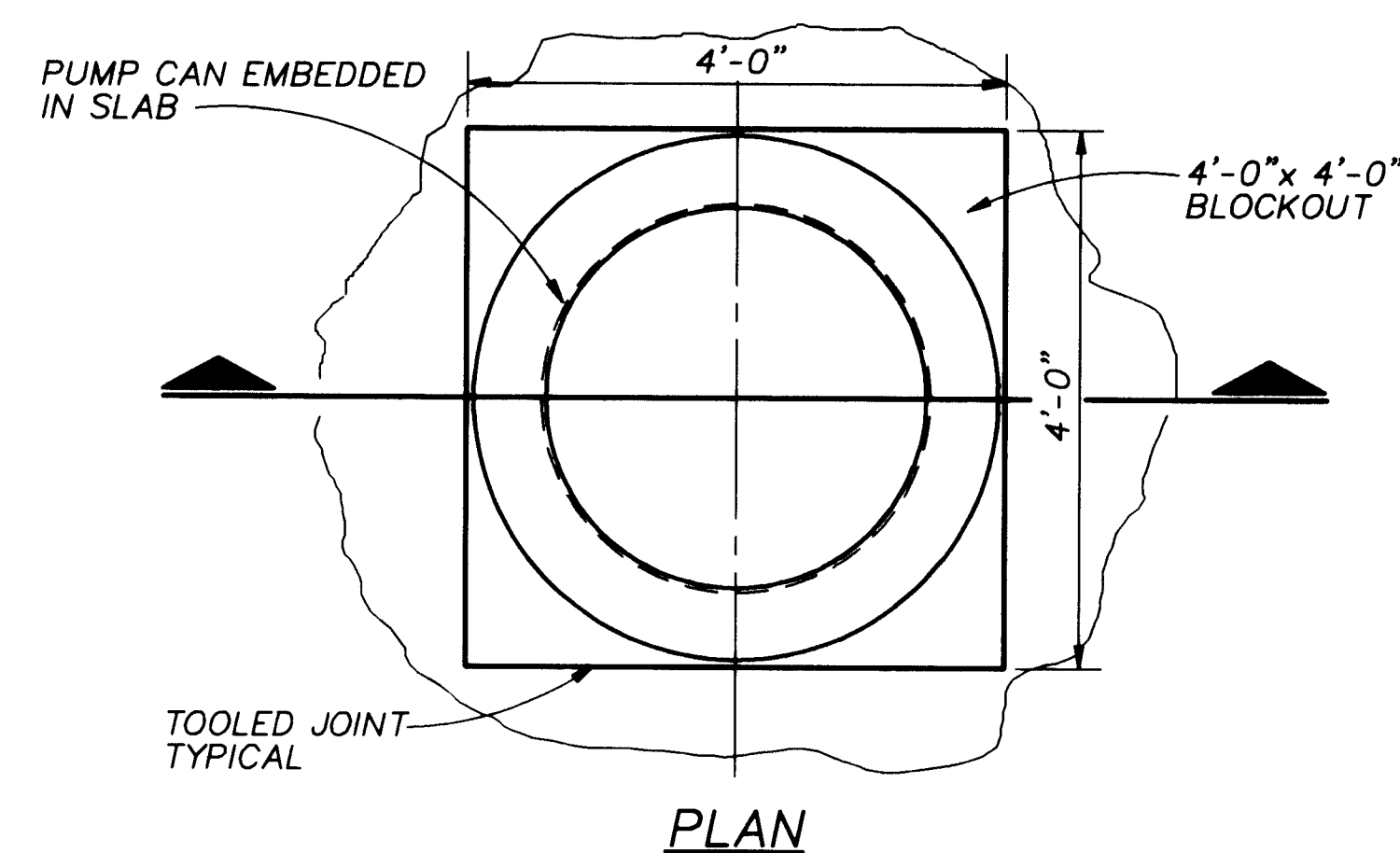
CORBEL AND RUNWAY BEAM DETAIL 1
1 1/2" = 1'-0" S-3



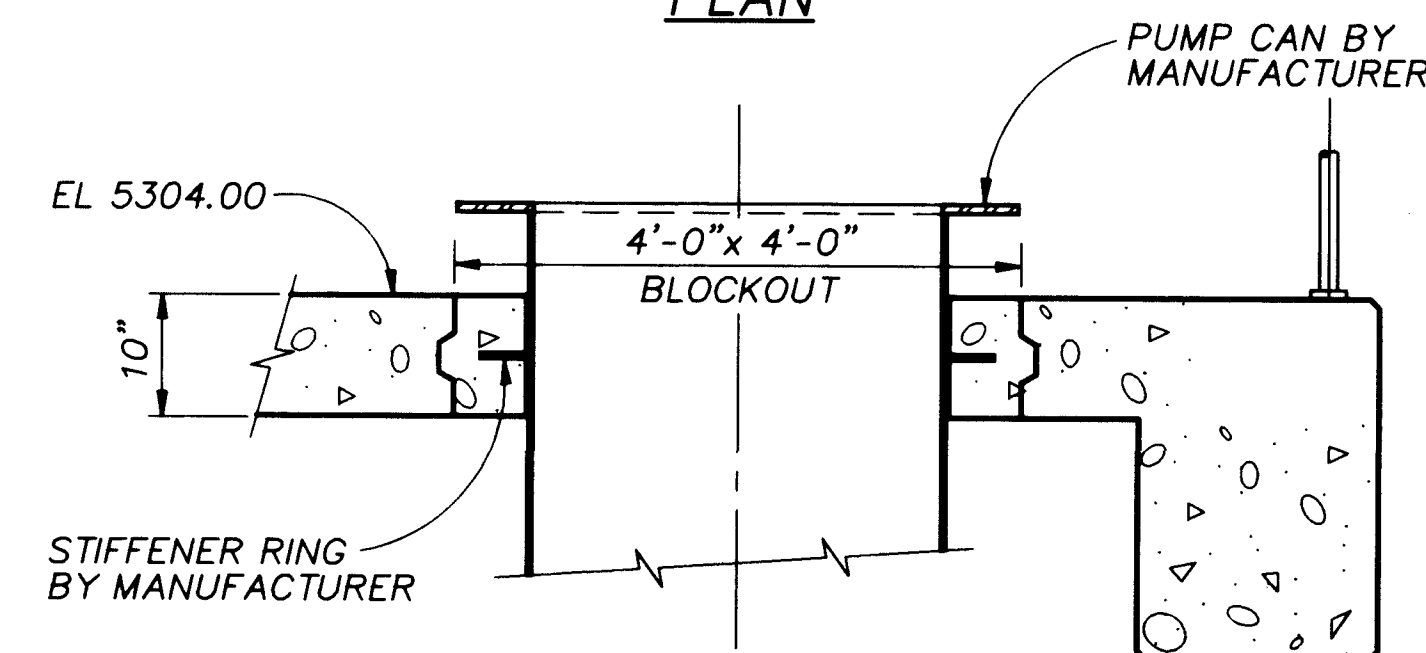
RUNWAY BEAM SPLICE DETAIL 2
NTS S-3



RAIL SPLICE DETAIL 3
NTS S-3

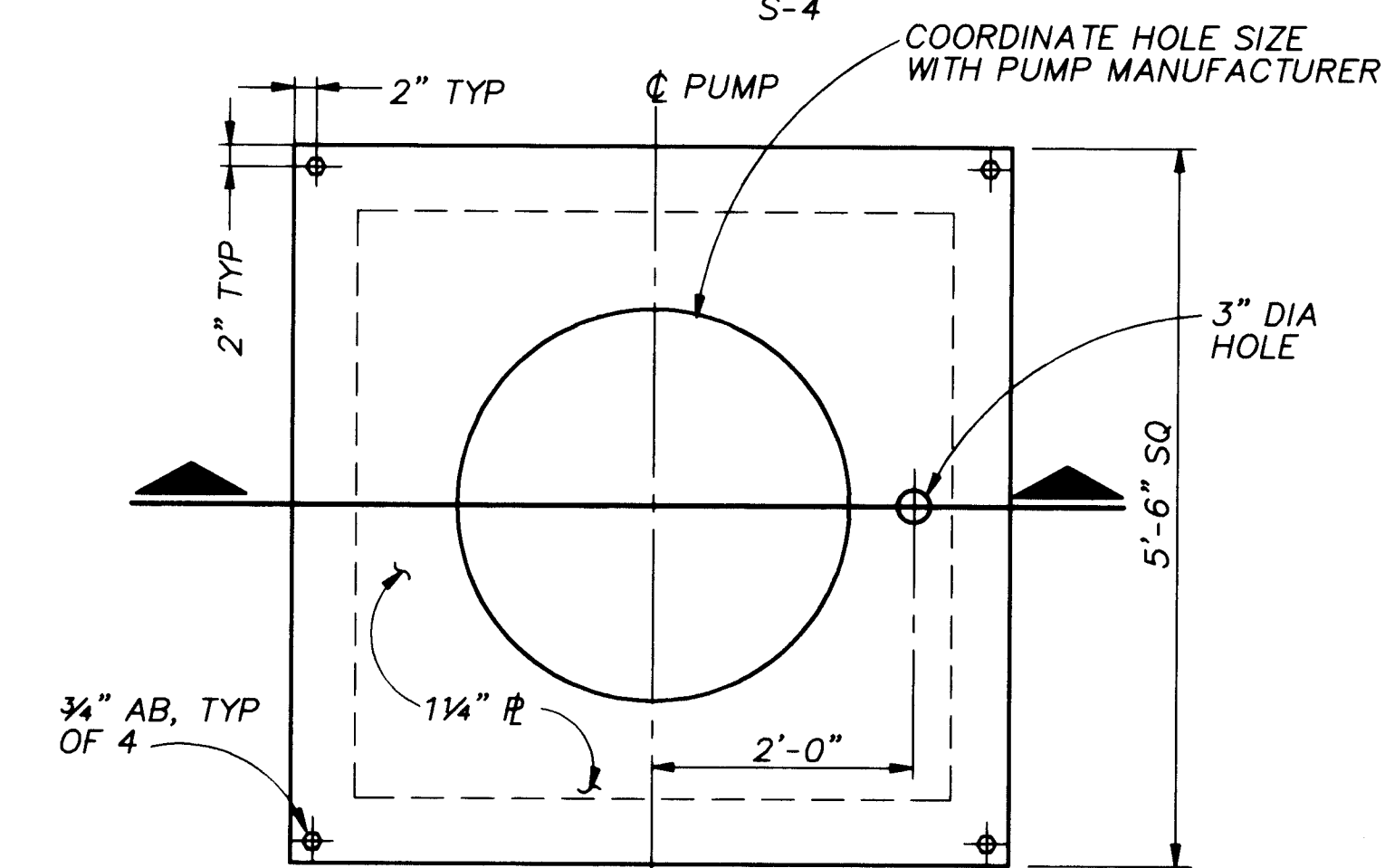


PLAN

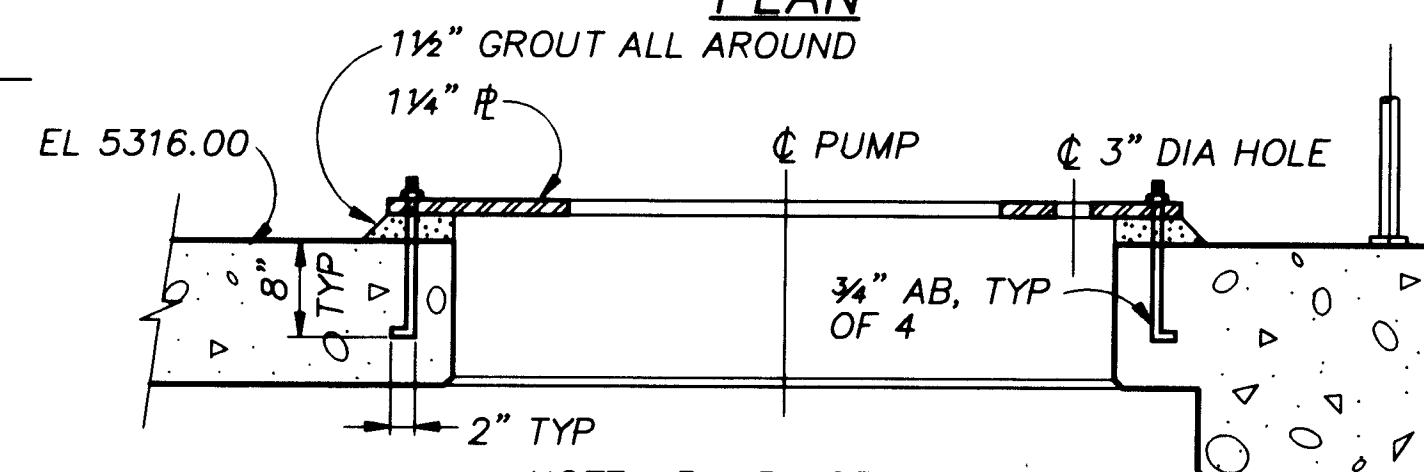


SECTION

DETAIL 6
3/4" = 1'-0" S-2 S-4

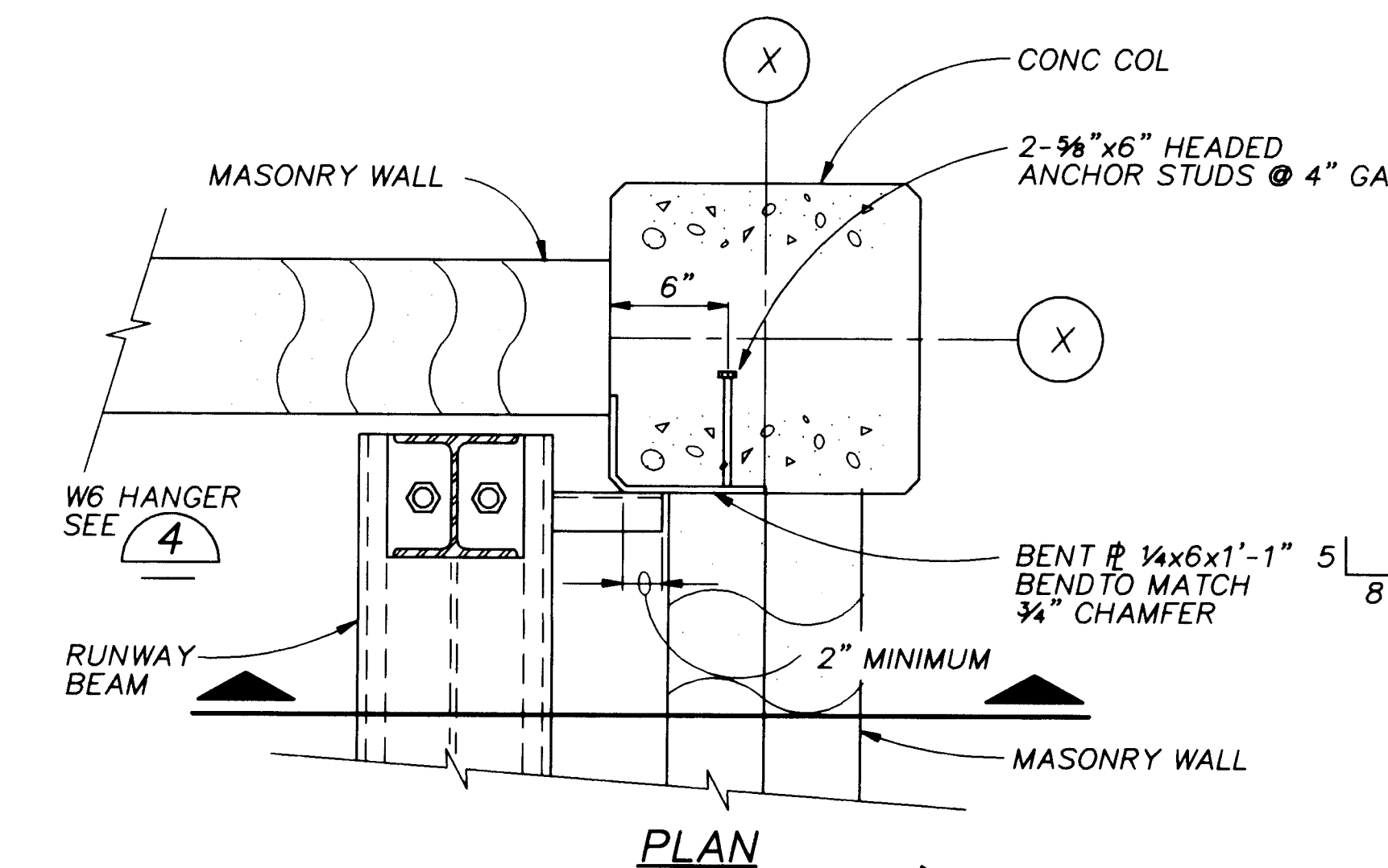


PLAN

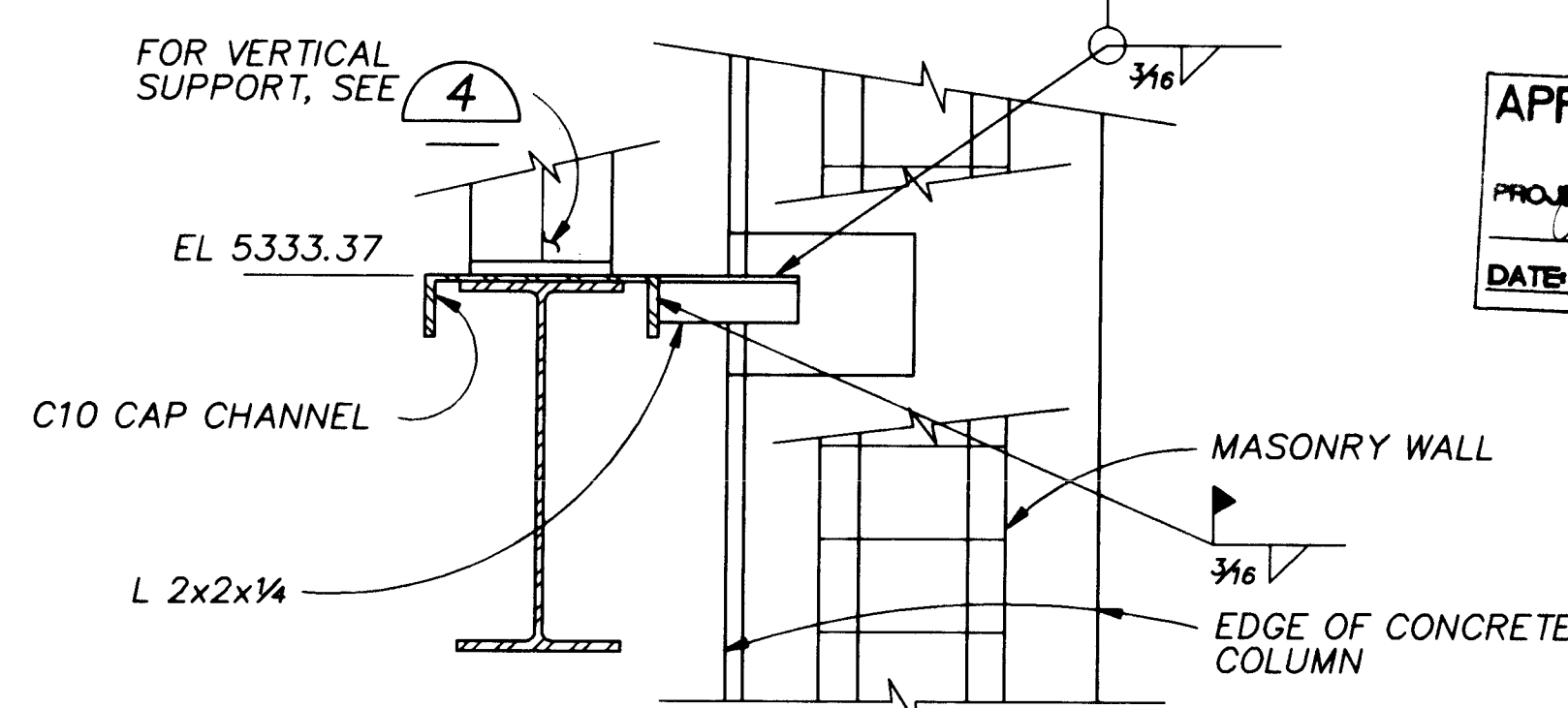


SECTION

DETAIL 7
3/4" = 1'-0" S-3 S-4

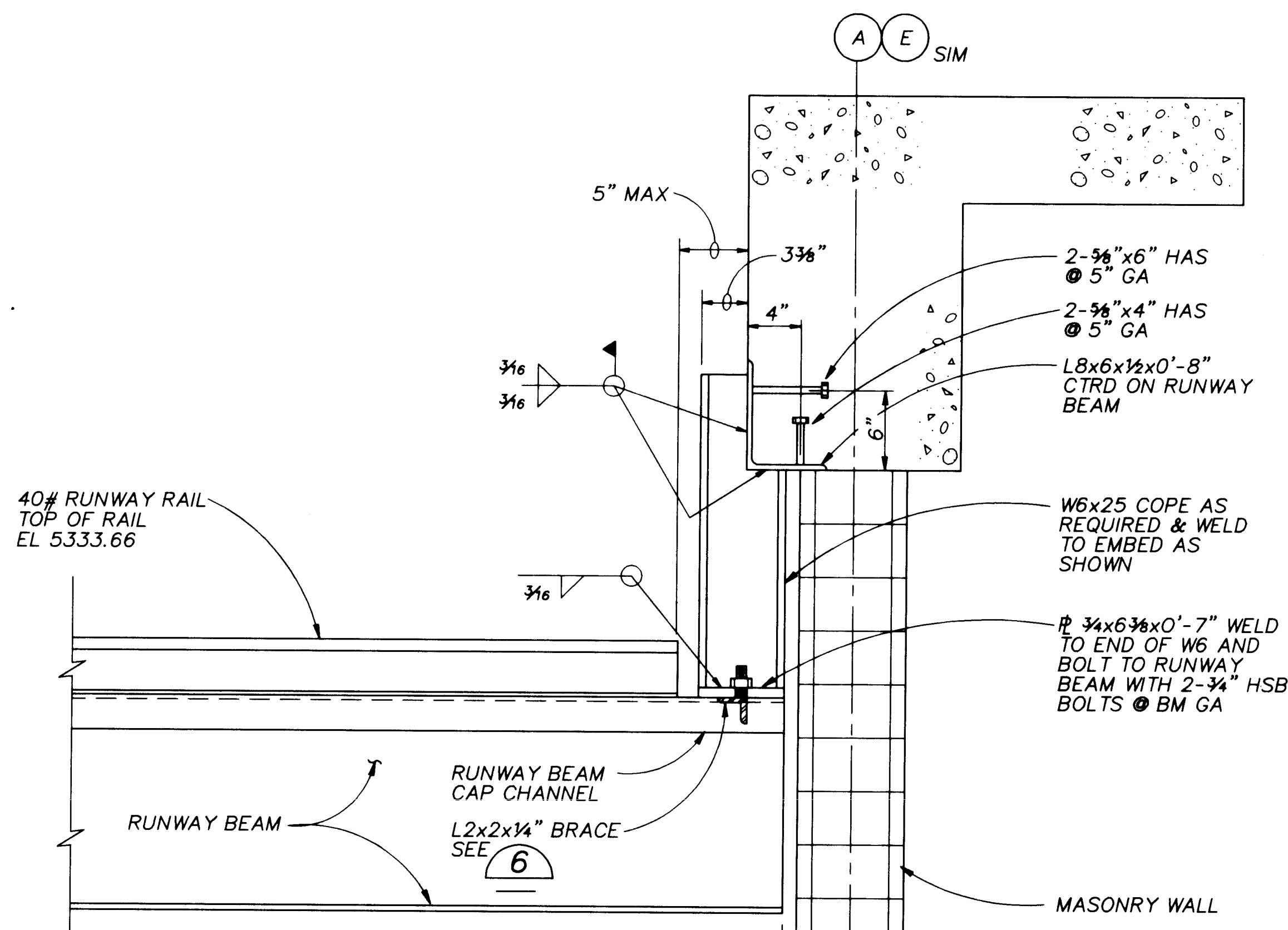


PLAN



SECTION

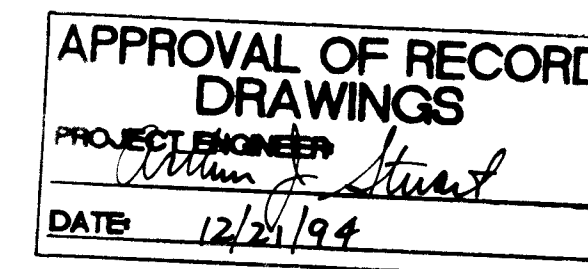
DETAIL 6
1 1/2" = 1'-0" S-3



DETAIL 4
1 1/2" = 1'-0" S-3

NOTES:

1. RAIL ENDS SHALL BE MILLED FOR TIGHT FIT.
2. ALL BOLTS SHALL CONFORM TO ASTM A325.
3. RAIL SPLICES SHALL BE STAGGERED BETWEEN THE TWO RAILS.
4. RAIL SPLICE SHALL BE MINIMUM 3'-0" FROM RUNWAY BEAM SPLICE.



RECORD DRAWINGS

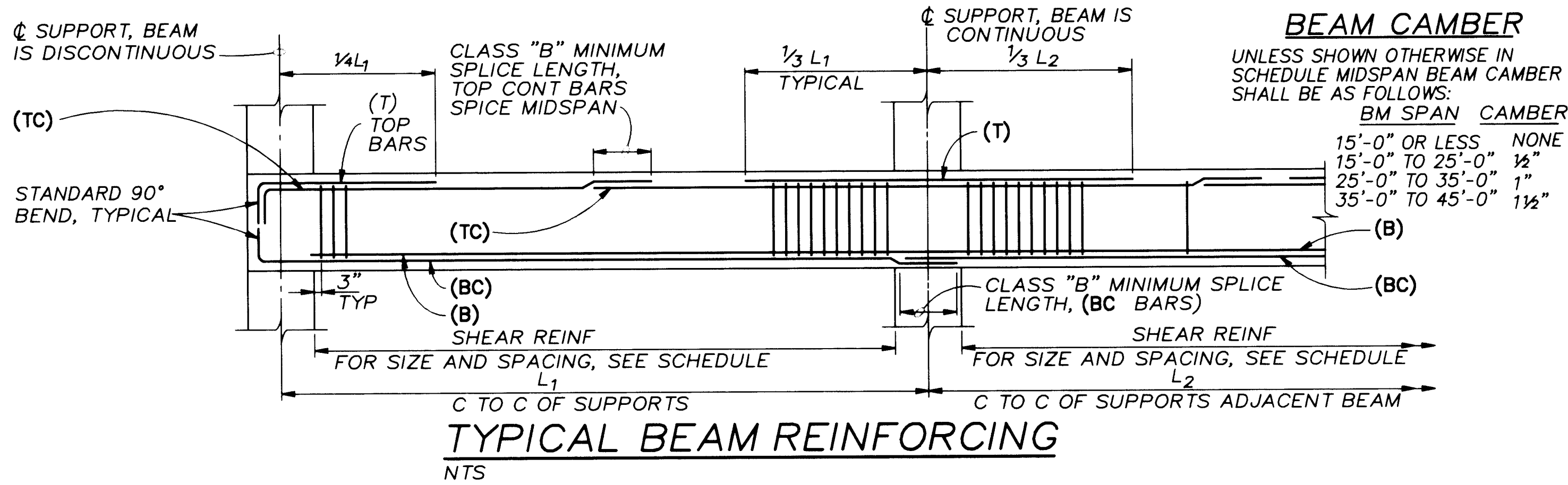
Revisions Drawn by Michael Bowers Date Nov. 15, 1994
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



SCANNED BY: LASON

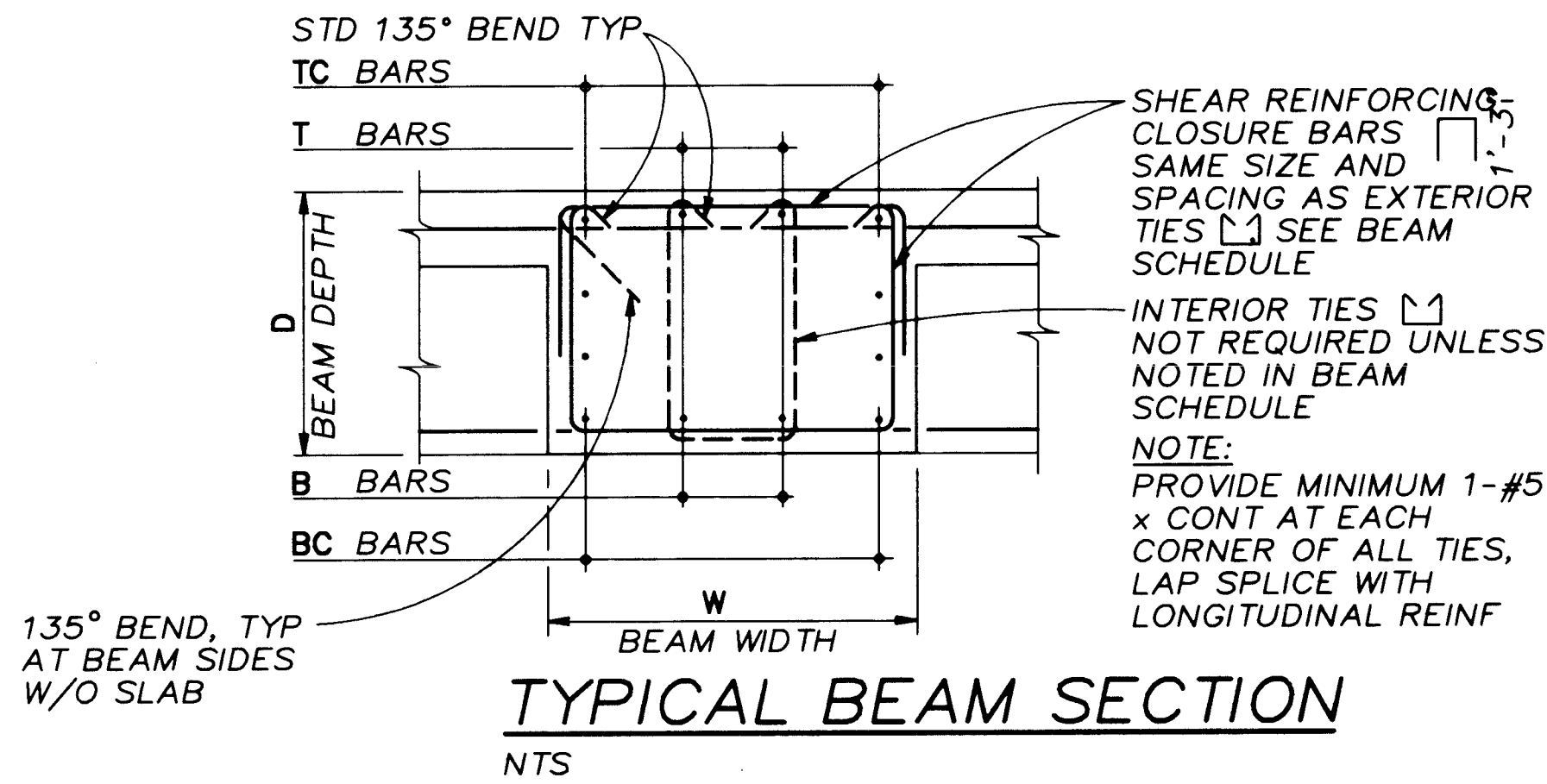
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION BRIDGE CRANE & DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. S-6		MAP NO.		SHEET 27 OF 57	

CP NO. 4214.90

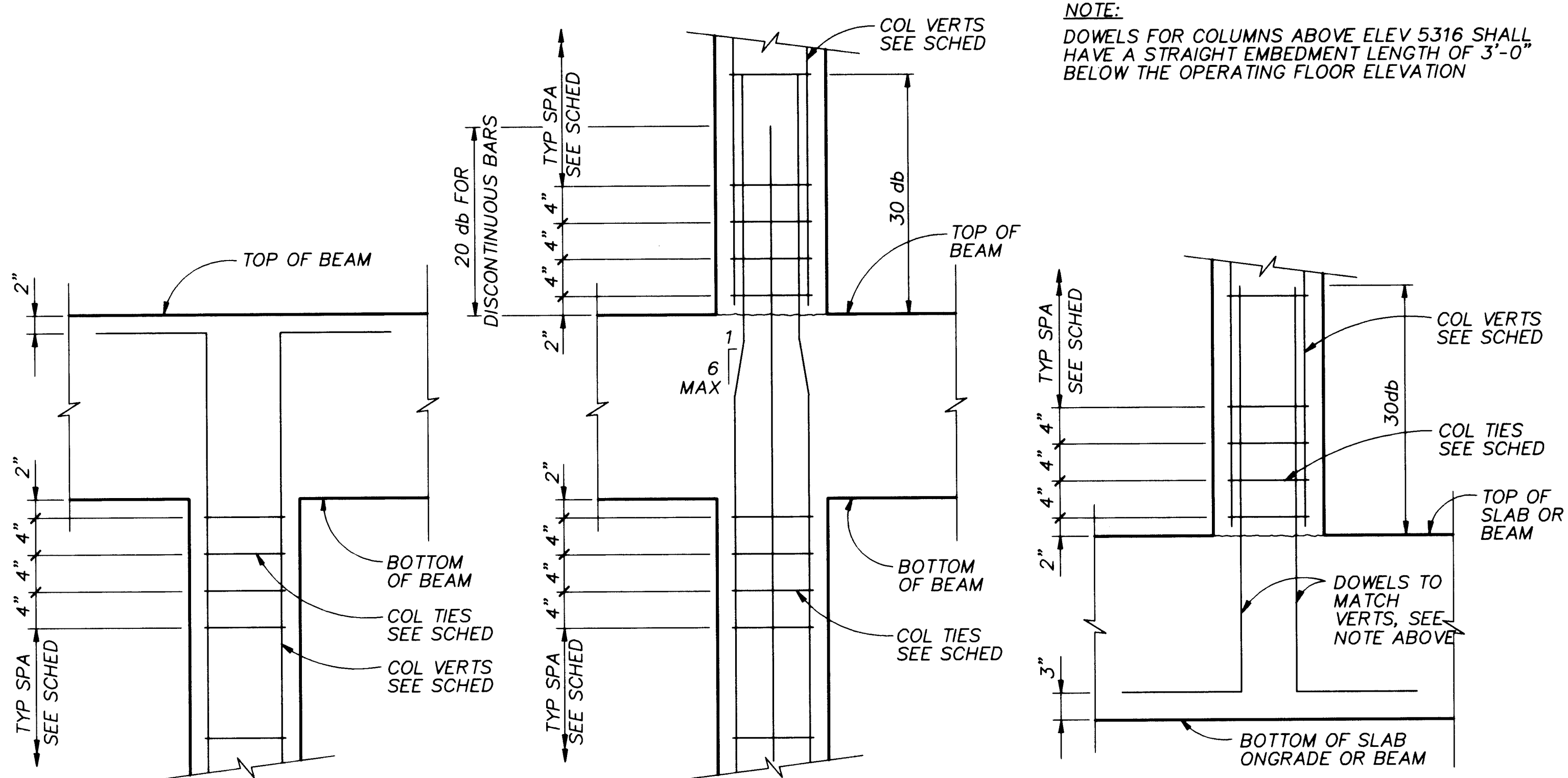


BEAM SCHEDULE										
BEAM	SIZE (INCHES)		TOP REINF AT		BOTTOM REINF	TOP REINF AT		SHEAR REINFORCING		COMMENTS
MARK NO.	WIDTH "B"	WIDTH "D"	LEFT SUPPORT "T"	RIGHT SUPPORT "TC"	"B"	RIGHT SUPPORT "T"	RIGHT SUPPORT "TC"	NO.	SPACING FROM FACE OF EACH SUPPORT	
101	16"	30"	1-#5	2-#5	3-#6	1-#6	2-#6	#3 STIRRUPS	10'3", 4'09"	INTERIOR TIES REQ'D (SEE SECTION) INTERIOR TIES REQ'D (SEE SECTION)
102	16"	30"	SEE BM101		3-#6	1-#6	2-#6	#3 STIRRUPS	10'3", 4'09", 1'018"	
103	16"	30"	SEE BM102		3-#6	1-#6	2-#6	#3 STIRRUPS	10'3", 2'09", 1'018"	
104	20"	30"	1-#7	2-#7	3-#6	2-#10	3-#10	#4 STIRRUPS	10'3", 1'06", 6'012"	
105	20"	30"	SEE BM104		4-#9	2-#10	3-#10	2-#4 STIRRUPS	10'3", 1'106", 4'012"	
106	20"	30"	SEE BM105		3-#8	2-#9	3-#9	2-#4 STIRRUPS	10'3", 8'012", 1'012"	
107	20"	30"	SEE BM106		4-#9	2-#8	2-#8	#4 STIRRUPS	10'3", 1'406", 1'012"	
108	20"	30"	1-#7	2-#7	5-#9	1-#7	2-#7	#3 STIRRUPS	10'3", 6'06", 2'012"	
109	20"	30"	1-#7	2-#7	4-#9	1-#7	2-#7	#3 STIRRUPS	10'3", 6'06", 2'012"	
110	20"	30"	2-#8	3-#8	5-#10	1-#7	2-#7	#4 STIRRUPS	10'3", 7'08", 2'012"	
111	20"	30"	4-#8	2-#8	6-#10	1-#7	2-#7	#4 STIRRUPS	10'3", 9'08", 1'012"	
112	20"	30"	4-#8	2-#8	6-#10	1-#7	2-#7	#4 STIRRUPS	10'3", 7'08", 2'012"	
201	16"	20"	2-#5		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 4'09"	SEE NOTES 3 AND 4 BELOW SEE NOTES 3 AND 4 BELOW SEE NOTES 3 AND 4 BELOW SEE NOTES 3 AND 4 BELOW
202	16"	20"	SEE BM201		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 2'09", 1'018"	
203	16"	20"	SEE BM202		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 4'09", 1'018"	
204	20"	20"	1-#6	2-#6	3-#6	3-#8	2-#8	#3 STIRRUPS	10'3", 8'09", 1'018"	
205	20"	20"	3-#6		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 5'09", 1'018"	
206	20"	20"	SEE BM205		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 2'012", 1'018"	
207	20"	20"	SEE BM206		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 2'012", 1'018"	
208	20"	20"	SEE BM207		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 2'012", 1'018"	
209	20"	20"	SEE BM208		3-#5	1-#5	2-#5	#3 STIRRUPS	10'3", 3'012", 1'018"	
210	16"	20"	2-#6		3-#5	4-#8	3-#8	#3 STIRRUPS	10'3", 6'08"	
211	16"	20"	2-#6		3-#5	4-#8	3-#8	#3 STIRRUPS	10'3", 6'08"	
212	16"	20"	1-#5	2-#5	3-#5	4-#7	3-#7	#3 STIRRUPS	10'3", 2'06", 8'008"	
213	16"	20"	1-#5	2-#5	3-#5	5-#8	3-#8	#3 STIRRUPS	10'3", 1'306"	
214	20"	20"	1-#6	2-#6	3-#6	3-#8	3-#8	#3 STIRRUPS	10'3", 2'06", 8'008"	
301	10"	28"	1-#5	2-#5	3-#6	1-#6	2-#6	#3 STIRRUPS	10'3", 8'012"	
302	10"	28"	SEE BM301		3-#6	1-#6	2-#6	#3 STIRRUPS	10'3", 8'012"	
303	10"	28"	SEE BM302		3-#6	1-#6	2-#6	#3 STIRRUPS	10'3", 8'012"	
304	10"	28"	SEE BM303		3-#6	1-#5	2-#5	#3 STIRRUPS	10'3", 8'012"	
305	16"	28"	1-#5	2-#5	3-#6	1-#6	2-#6	#3 STIRRUPS	10'3", 4'012", 2'018"	
306	16"	28"	SEE BM305		3-#6	1-#5	2-#5	#3 STIRRUPS	10'3", 4'012", 2'018"	

- NOTES:**
- FOR REINFORCING LAYOUT SEE TYPICAL BEAM REINFORCING THIS SHEET.
 - LEFT SUPPORT IS DEFINED AS THE END OF THE BEAM CLOSEST TO THE LEFT SIDE OR BOTTOM OF THE SHEET AS SHOWN ON THE PLANS.
 - CONTINUE "TC" BARS FROM RIGHT END TO 3'-0" PAST CENTERLINE OF COLUMN.
 - FACE TO FACE OF SUPPORTS FOR BEAM 210 THRU 214 STIRRUP SPACING IS FACE OF WALL ON LEFT TO FACE OF BEAMS 205 THRU 209 ON THE RIGHT.

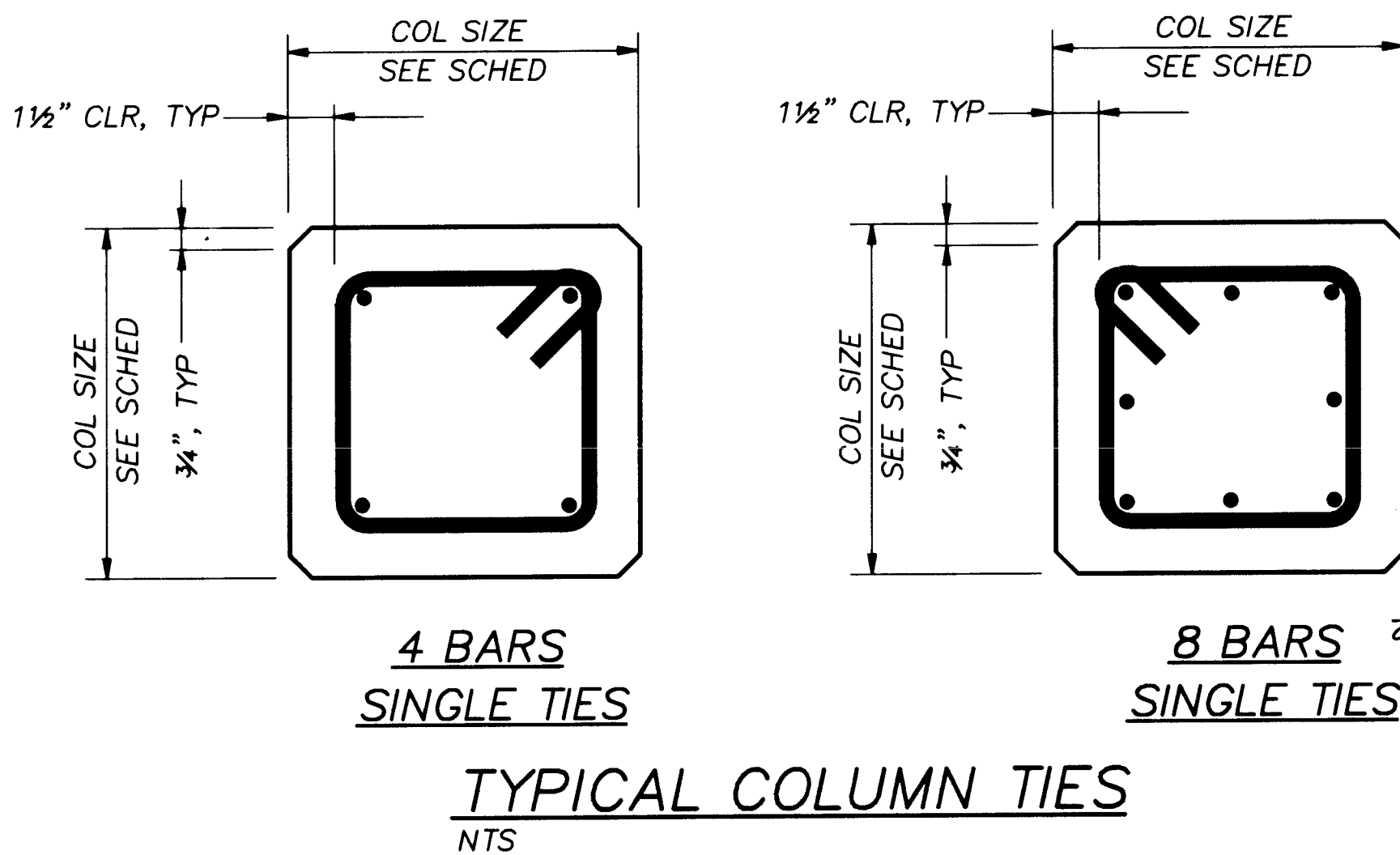


PUMP STATION COLUMN SCHEDULE							
COLUMN MARK NO. AND LOCATION	B,2 C,2	D,2,2	A,7,1,3 B,2,1,3	A,7,1,6 B,2,1,6 C,7,1,6 D,1,6	A,1 A,3 E,1 E,3	A,2 E,2	B,1 B,3 C,1 C,3 D,1 D,3
NUMBER OF COLUMNS	2	1	2	5	4	2	6
ROOF ELEV. 5337.00							
COLUMN SIZE					16" x 16"	16" x 16"	16" x 16"
VERTICALS					8-#8 BARS	8-#8 BARS	8-#6 BARS
TIES					#3 @ 16"	#3 @ 16"	#3 @ 12"
FLOOR ELEV. 5316.00							
COLUMN SIZE		12" x 12"	12" x 12"	12" x 12"			
VERTICALS		4-#6 BARS	4-#6 BARS	4-#6 BARS			
TIES		#3 @ 12"	#3 @ 12"	#3 @ 12"			
FLOOR ELEV. 5304.00							
COLUMN SIZE	16" x 16"	16" x 16"	12" x 12"				
VERTICALS	4-#8 BARS	4-#8 BARS	4-#6 BARS				
TIES	#3 @ 16"	#3 @ 16"	#3 @ 12"				
BASEMENT FLOOR ELEV. 5291.00							



TYPICAL COLUMN ELEVATIONS

db - REINF BAR DIAMETER



RECORD DRAWINGS
Revisions Drawn by: Michael Brown Date: Nov. 15, 1994
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APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER: [Signature]
DATE: 12/21/94

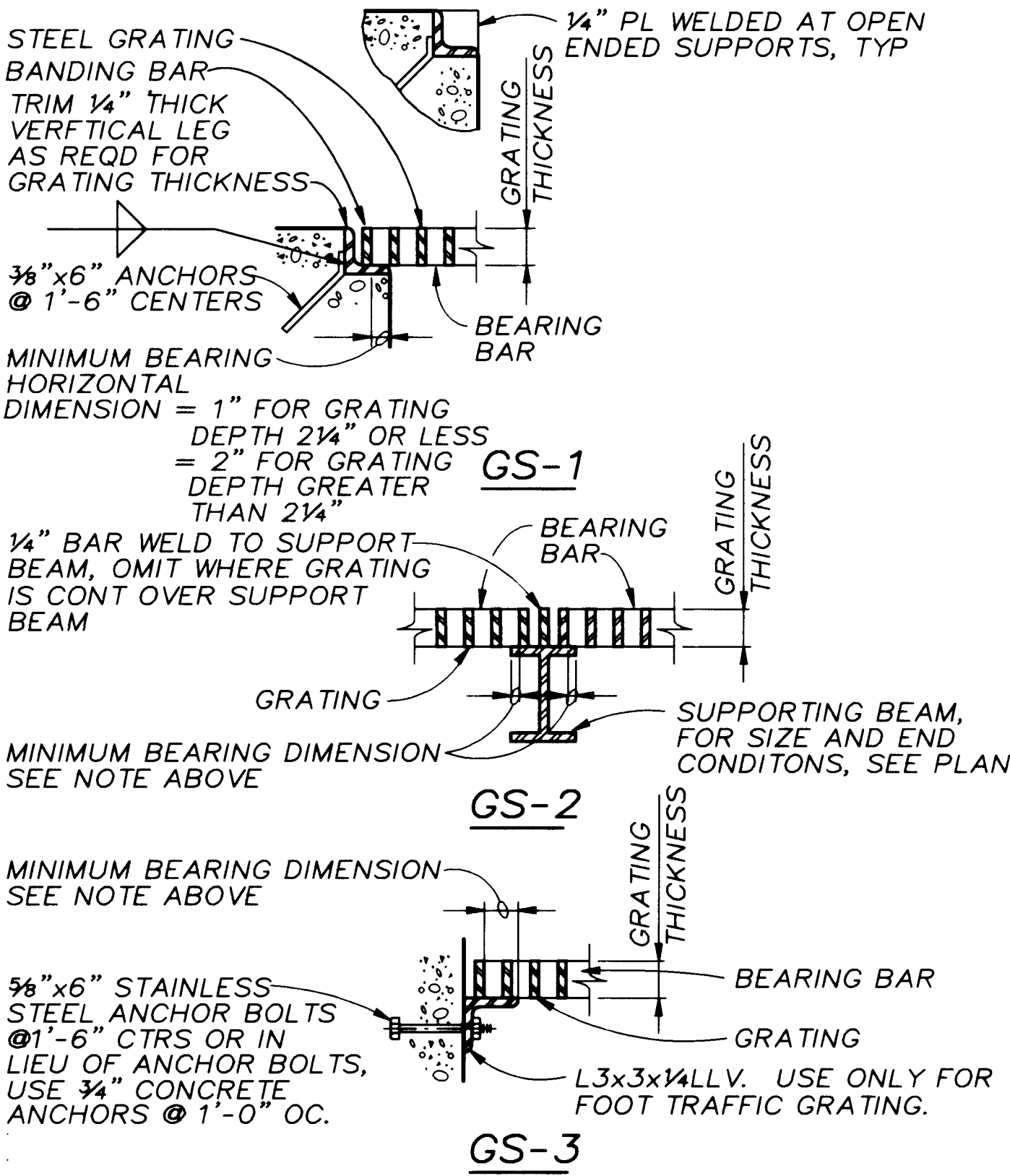
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION STRUCTURAL DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. S-7		MAP NO.		SHEET 28 OF 57	

CP NO. 4214.90

GRATING NOTES

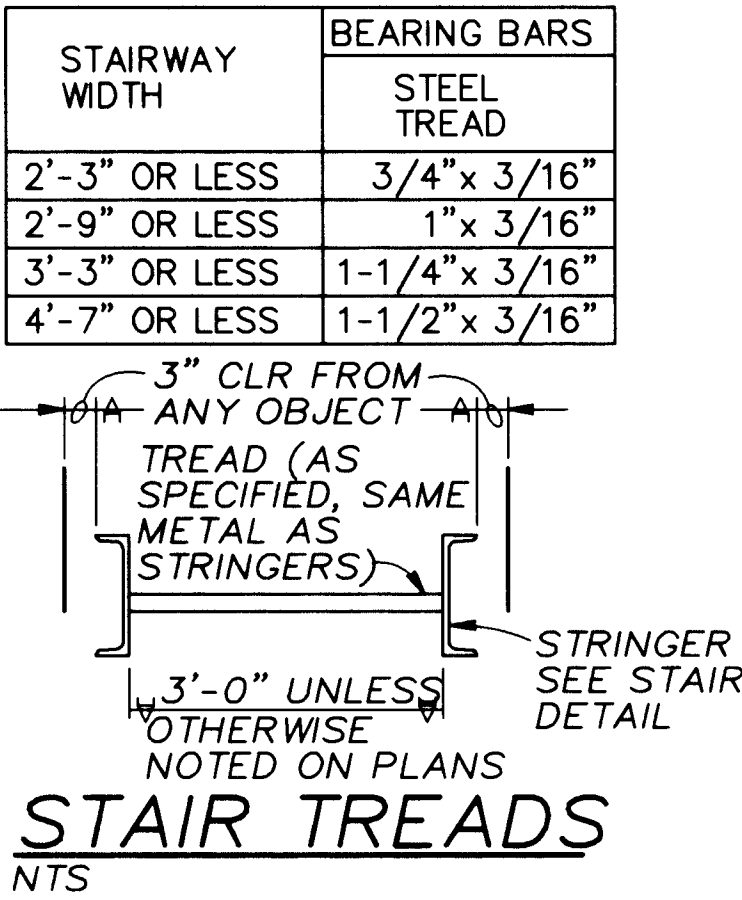
1. EXTEND GRATING CONTINUOUSLY OVER GATE GUIDES AND GATES.
2. NOTCH GRATING SUPPORTS AT GATES AS REQUIRED.
3. GRATING SPAN → SEE PLAN.
4. WIDTH OF GRATING SECTIONS SHALL NOT EXCEED 3'-0".
5. SHOP DRAWINGS BASED ON FIELD DIMENSIONS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FABRICATION.
6. MATERIAL FOR SUPPORTS OF STEEL GRATING TO BE SAME AS GRATING, EXCEPT METAL SUPPORTS THAT ARE TO BE EMBEDDED IN CONCRETE SHALL BE TYPE 316 STAINLESS STEEL.
7. UNLESS NOTED OTHERWISE ON PLANS, GRATING THICKNESS SHALL BE AS TABULATED IN "GRATING THICKNESS TABLE" FOR APPLICABLE TRAFFIC.
8. BEARING BAR THICKNESS FOR GRATING TO BE 3/16" MINIMUM.
9. BAND ALL EDGES WITH 3/16" x DEPTH OF BEARING BAR.
10. PROVIDE MISCELLANEOUS GRATING FASTENERS AS REQUIRED.
11. TYPE OF MATERIAL USED SHALL BE AS SHOWN ON PLANS OR AS SPECIFIED. THIS STANDARD DETAIL INCLUDES 3 TYPES, ALTHOUGH ALL 3 MAY NOT BE INCLUDED IN PROJECT.
12. THE HORIZONTAL CLEARANCE BETWEEN THE GRATING AND GRATING SUPPORTS SHALL NOT BE LESS THAN 1/4" NOR GREATER THAN 1/2" AND AS SPECIFIED.
13. ALL GRATING SECTIONS, WHEN IN PLACE, SHALL ALWAYS BE FIRMLY ANCHORED TO THEIR SUPPORTS AS SPECIFIED.

FOOT TRAFFIC GRATING THICKNESS TABLE			
MAXIMUM SPAN	ALUMINUM (IN.)	STEEL (IN.)	FIBERGLASS (IN.)
3'-6"	1 1/4"	1"	1 1/2"
4'-0"	1 1/2"	1"	1 1/2"
4'-6"	1 3/4"	1"	1 1/2"
5'-0"	1 3/4"	1 1/4"	
5'-6"	2"	1 1/4"	MAXIMUM ALLOWABLE SPAN IS 4'-6"
6'-0"	2 1/4"	1 1/2"	SPAN LIMIT
6'-6"	2 1/4"	1 1/2"	DEFLECTION TO 1/4" MAX
7'-0"	2 1/2"	1 3/4"	

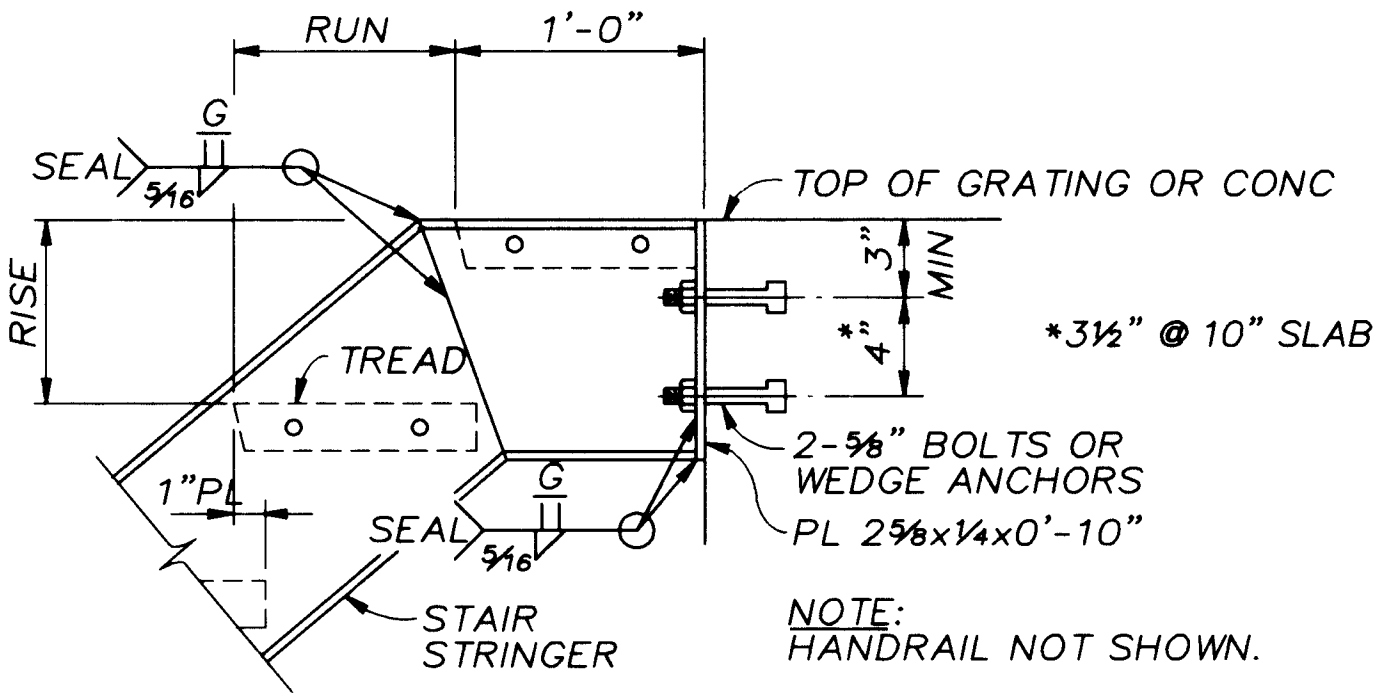


GRATING SUPPORT
NTS

104

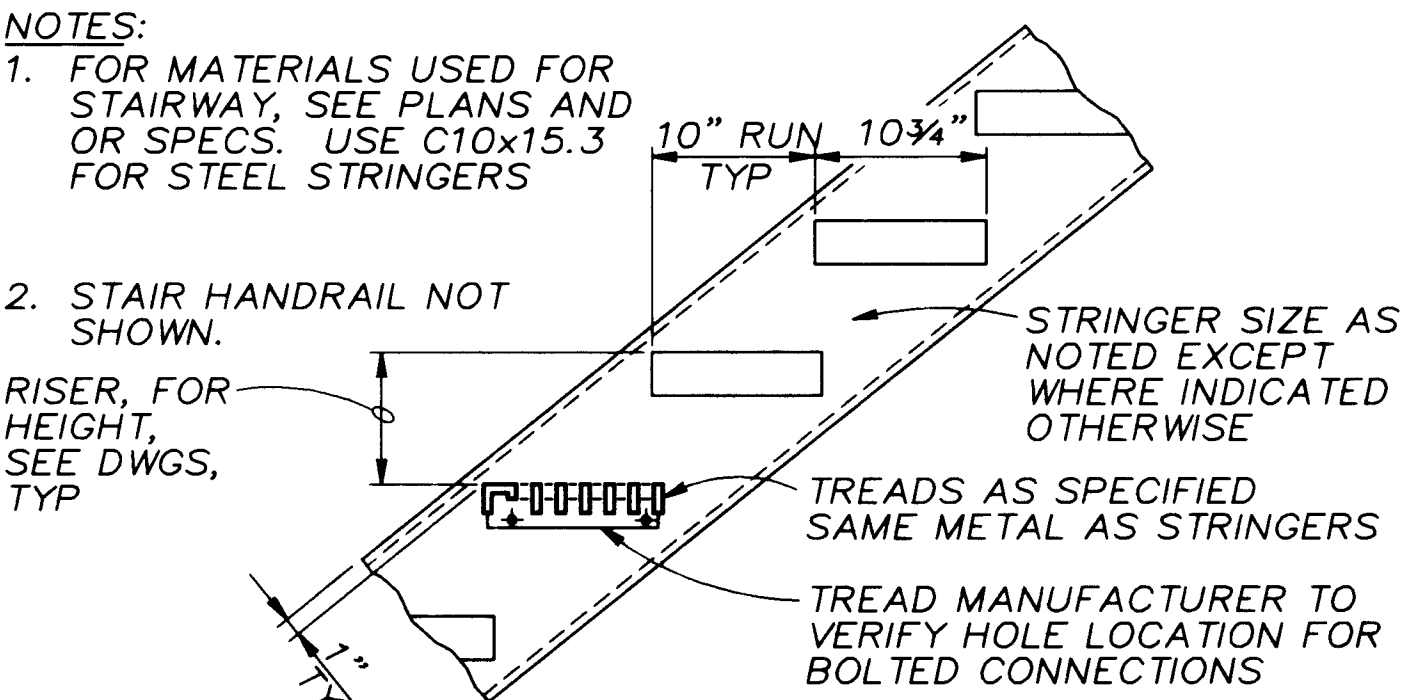


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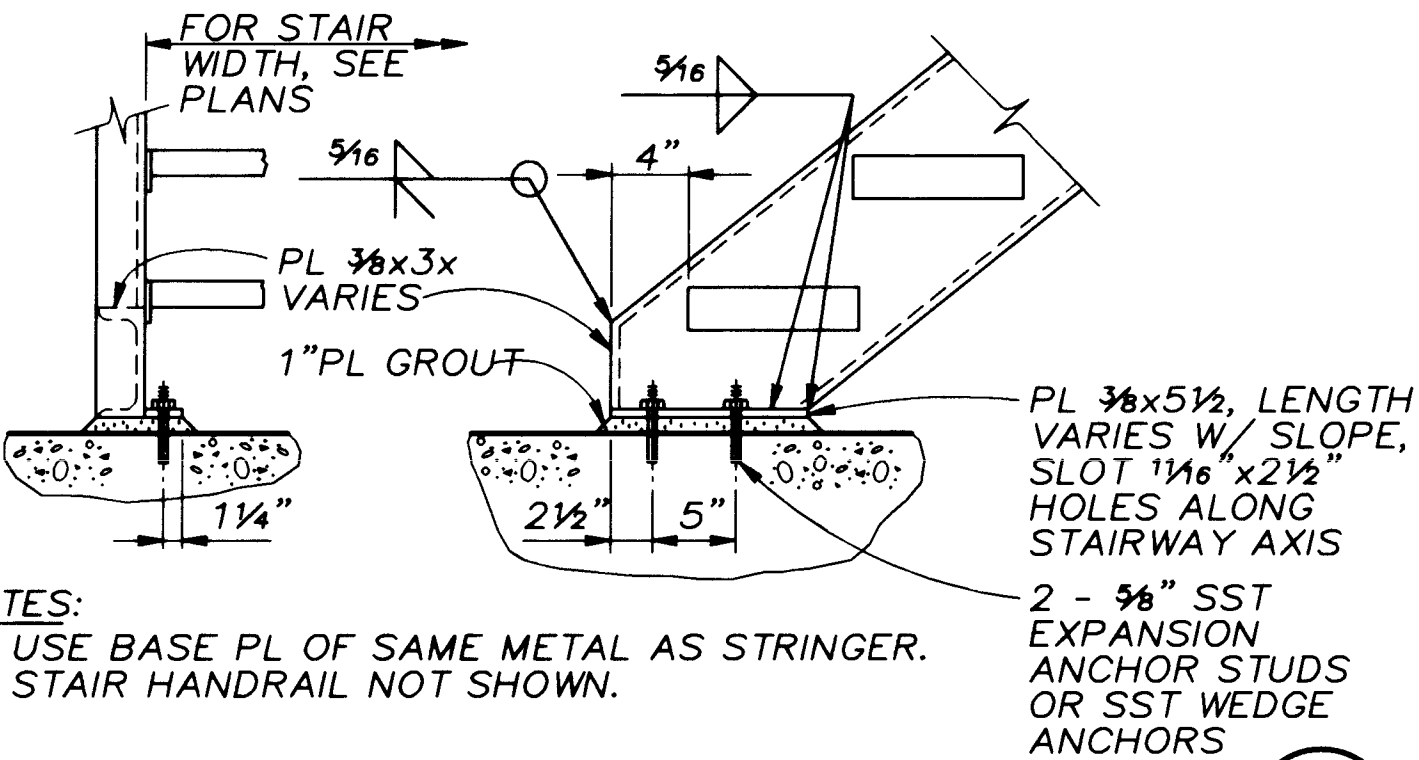
STAIR TOP CONNECTION
NTS

106



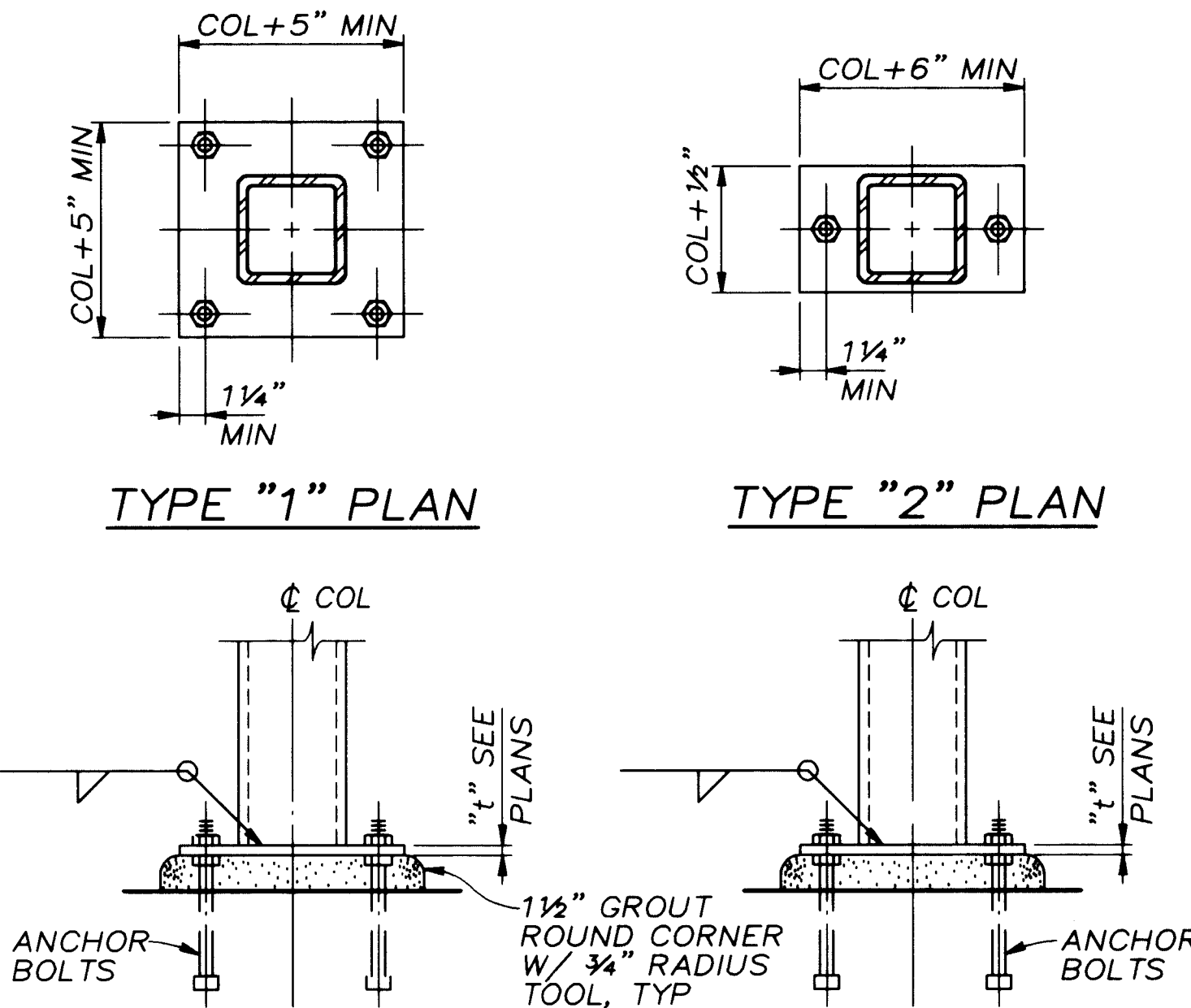
STAIR DETAIL
NTS

107



STAIR BOTTOM CONN
NTS

108



TYPE "A" ELEVATION TYPE "B" ELEVATION

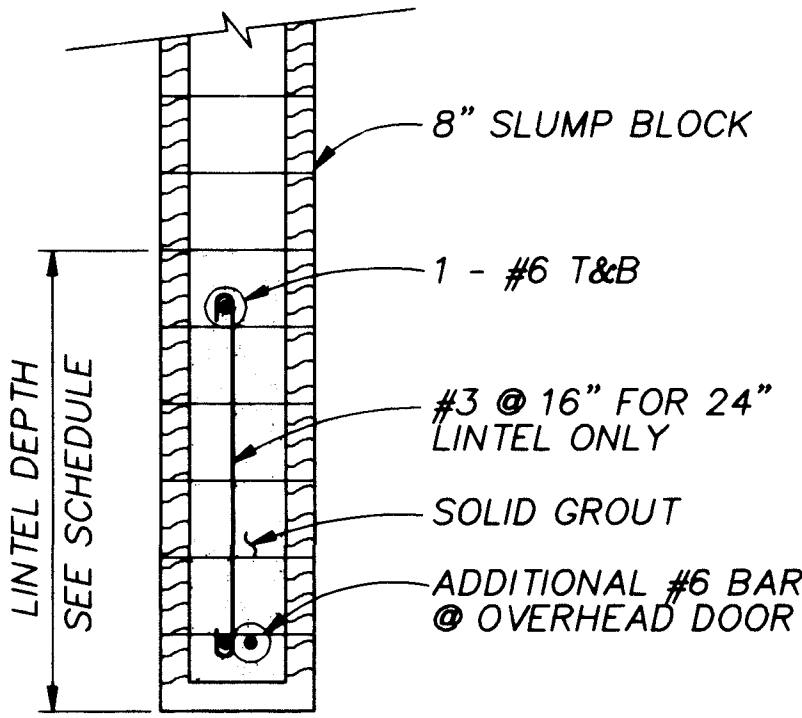
- NOTES:
1. ANCHOR BOLTS SHALL BE 3/4" DIA x 1'-0" W/ LEVELING NUTS UNLESS OTHERWISE SHOWN.
2. GROUT SHALL BE NONSHRINK AS PER SPECIFICATIONS, FLOWABLE.

TUBE COLUMN BASE
NTS

110

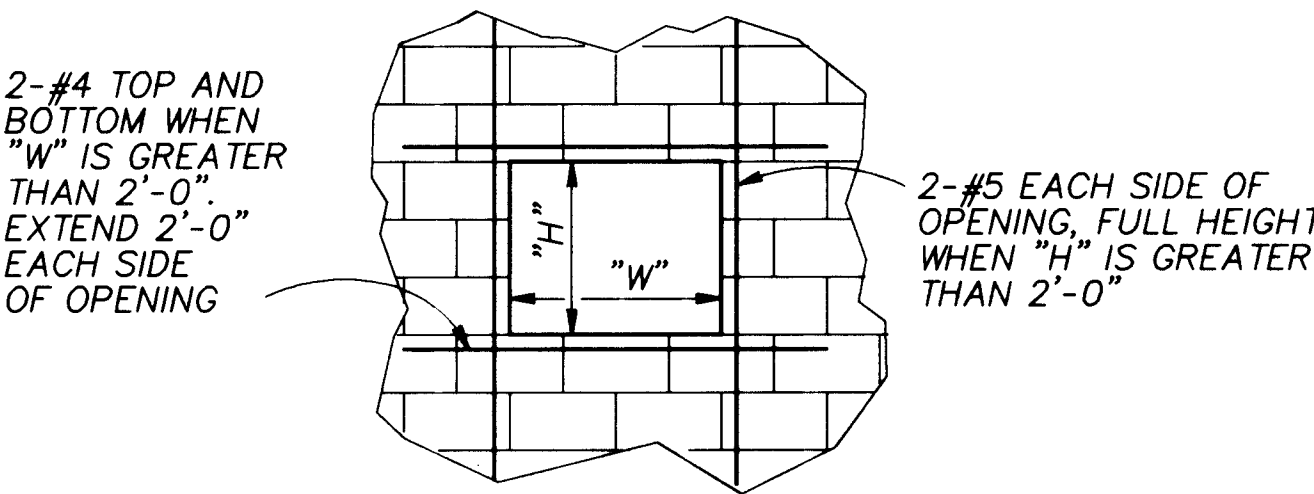
LINTEL SCHEDULE			
SPAN	DEPTH	TYPE	LOCATION
4'-0" & LESS	16"	I	MANDOORS & MISC
GREATER THAN 4'-0" THRU 8'-0"	24"	I	LOUVERS
GREATER THAN 8'-0" THRU 12'-0"	24"	I	OVERHEAD DOOR

- NOTES:
1. EXTEND REINFORCING MIN 2'-0" BEYOND EDGE OF OPENING
2. COORDINATE THESE DETAILS WITH THE ARCHITECT



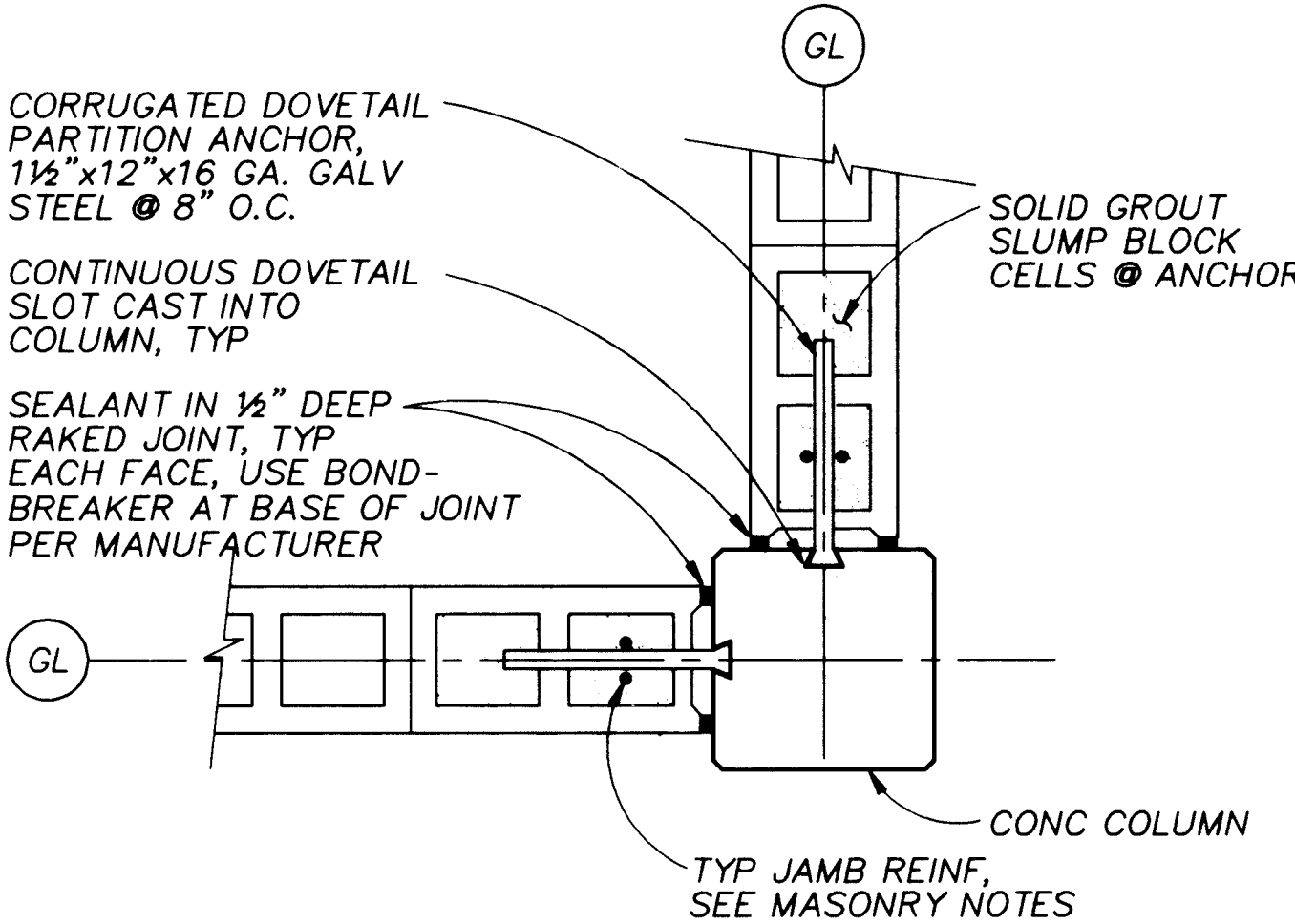
TYPE 1
LINTEL DETAIL
NTS

112



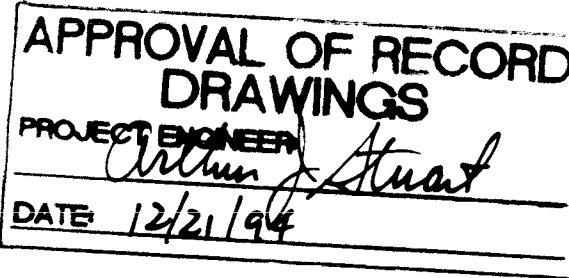
CMU OPENING REINFORCING
NTS

111



MASONRY WALL/
COLUMN CONNECTION
NTS

113

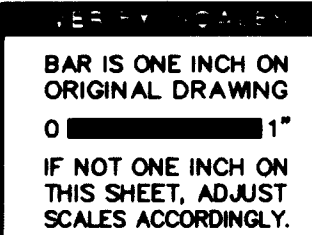


RECORD DRAWINGS

Revisions Drawn by: Michael Brewer Date: Nov. 15, 1994. THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS, THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

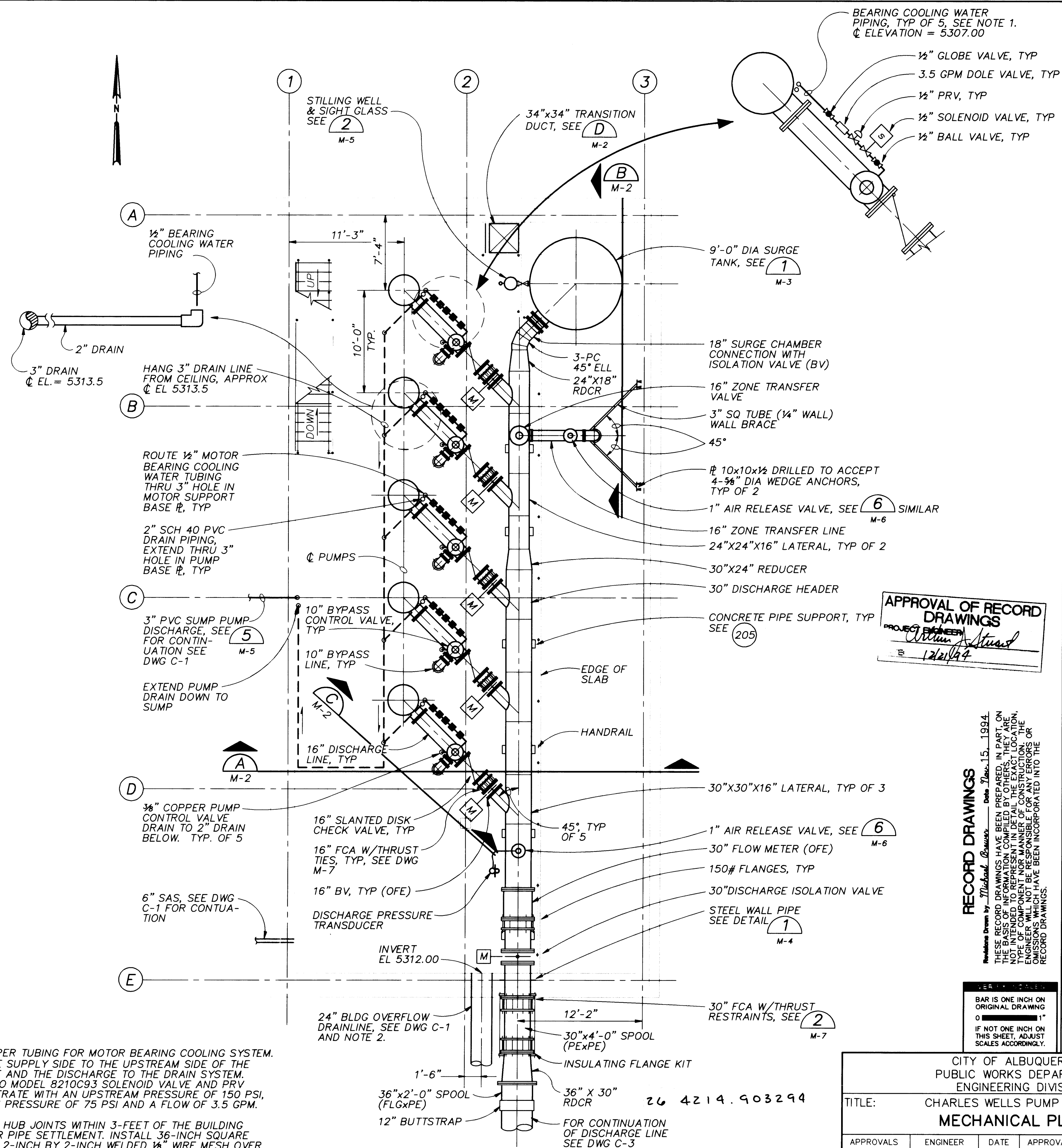
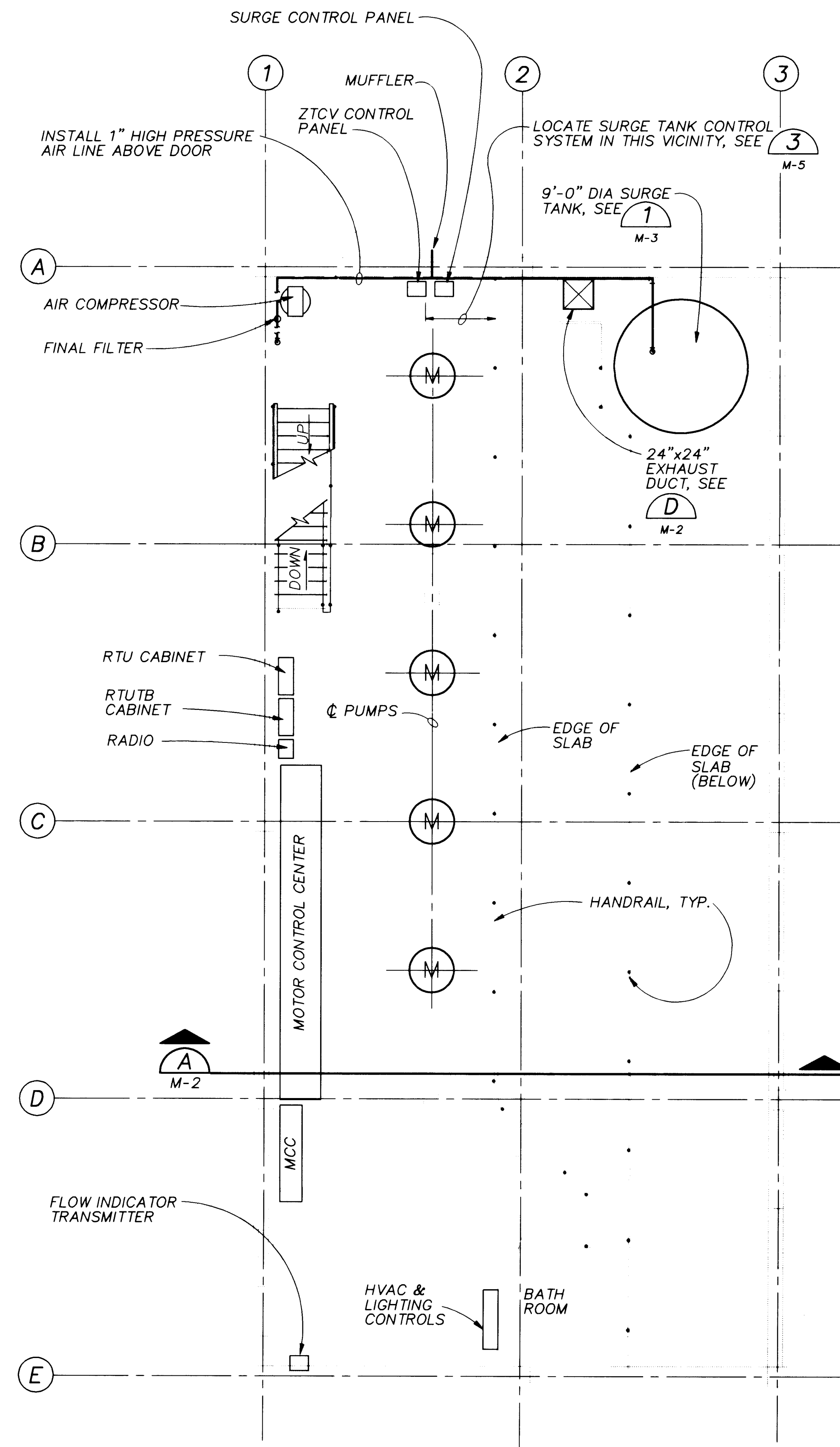


SCANNED BY
BY LAGON



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION STRUCTURAL DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	S-9	MAP NO.	SHEET	OF	
			30	57	

CP NO. 4214.90



NOTE:

1. USE 1/2" COPPER TUBING FOR MOTOR BEARING COOLING SYSTEM. CONNECT THE SUPPLY SIDE TO THE UPSTREAM SIDE OF THE CHECK VALVE AND THE DISCHARGE TO THE DRAIN SYSTEM. PROVIDE ASCO MODEL 8210C93 SOLENOID VALVE AND PIVY SIZED TO OPERATE AT AN UPSTREAM PRESSURE OF 150 PSI, DOWNSTREAM PRESSURE OF 75 PSI AND A FLOW OF 3.5 GPM.
2. PROVIDE TWO HUB JOINTS WITHIN 3- FEET OF THE BUILDING EXTERIOR FOR PIPE SETTLEMENT. INSTALL 36-INCH SQUARE SCREEN WITH 2-INCH BY 2-INCH WELDED 1/4" WIRE MESH OVER THE INTERIOR OPENING. MOUNT SCREEN TO WALL USING CONCRETE ANCHORS BOLTED THROUGH WASHERS WELDED TO THE SCREEN AND PAINT IN ACCORDANCE WITH THE SPECIFICATIONS.

RECORD DRAWINGS

Drawings Drawn by Michael Bower Date Nov. 15, 1994

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPLIED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OR COMPONENT NOR MANNER OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

BAR IS ONE INCH ON
ORIGINAL DRAWING
0  1"
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: CHARLES WELLS PUMP STATION
MECHANICAL PLANS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		

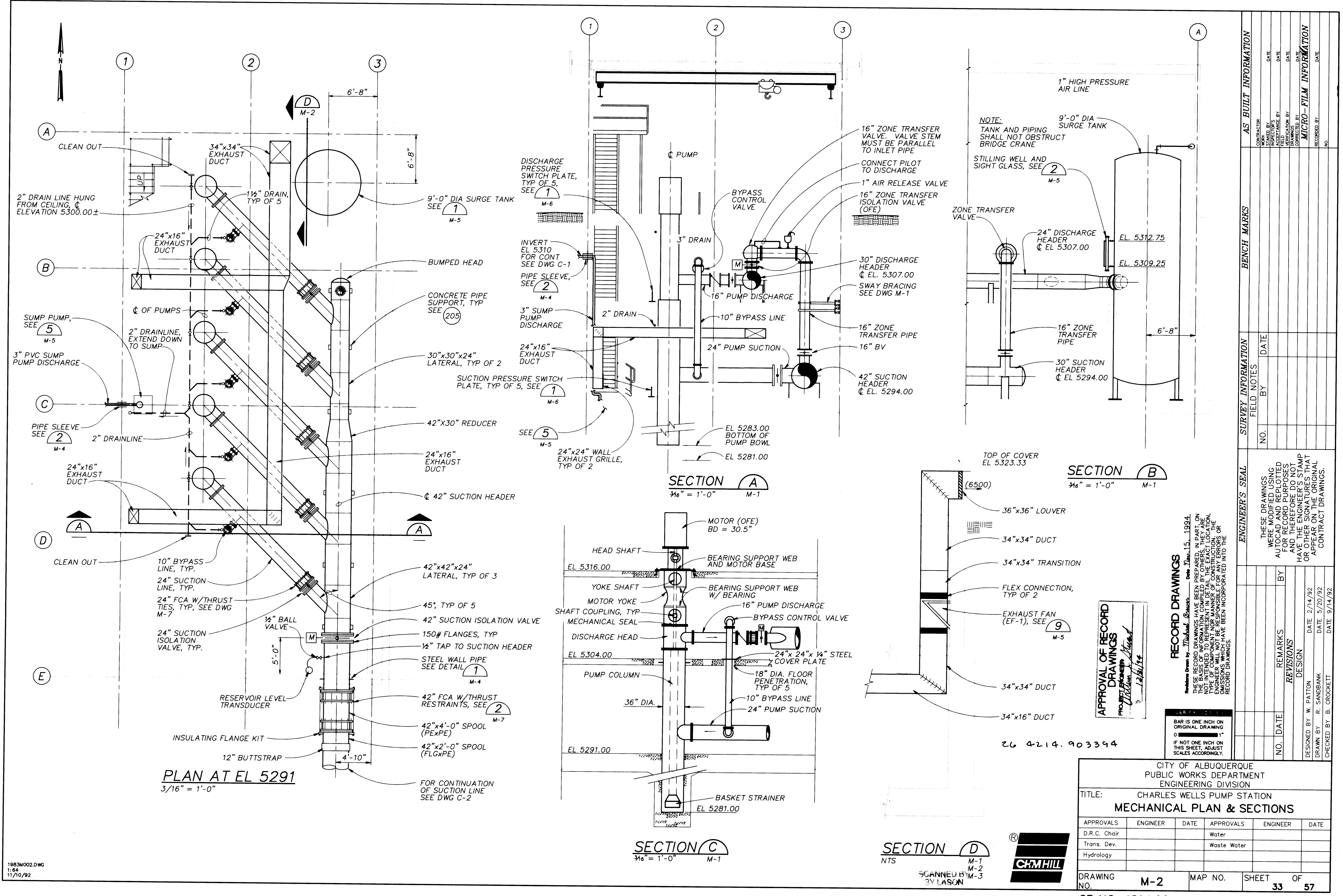
DRAWING NO.	M-1	MAP NO.	SHEET 32 OF 57
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CP NO. 4214.90

1983M001.DWG
1:64
11/10/92

SCANNED BY
BY LASON





1983M002.DWG
1:64
11/10/92

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION MECHANICAL PLAN & SECTIONS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. M-2		MAP NO.		SHEET 33 OF 57	
CP NO. 4214.90					

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL	
CONTRACTOR	DATE	NO.	DATE	NO.	DATE	THESE DRAWINGS WERE MODIFIED USING AUTOCAD AND REPLOTTER FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS.	
WORK BY	DATE	NO.	DATE	NO.	DATE		
INSPECTED BY	DATE	NO.	DATE	NO.	DATE		
ACCEPTANCE BY	DATE	NO.	DATE	NO.	DATE		
VERIFICATION BY	DATE	NO.	DATE	NO.	DATE		
DRAWN BY	DATE	NO.	DATE	NO.	DATE		
DESIGNED BY	DATE	NO.	DATE	NO.	DATE		
RECORDED BY	DATE	NO.	DATE	NO.	DATE		



SECTION D
NTS
M-1
M-2
M-3
SCANNED BY ELSON

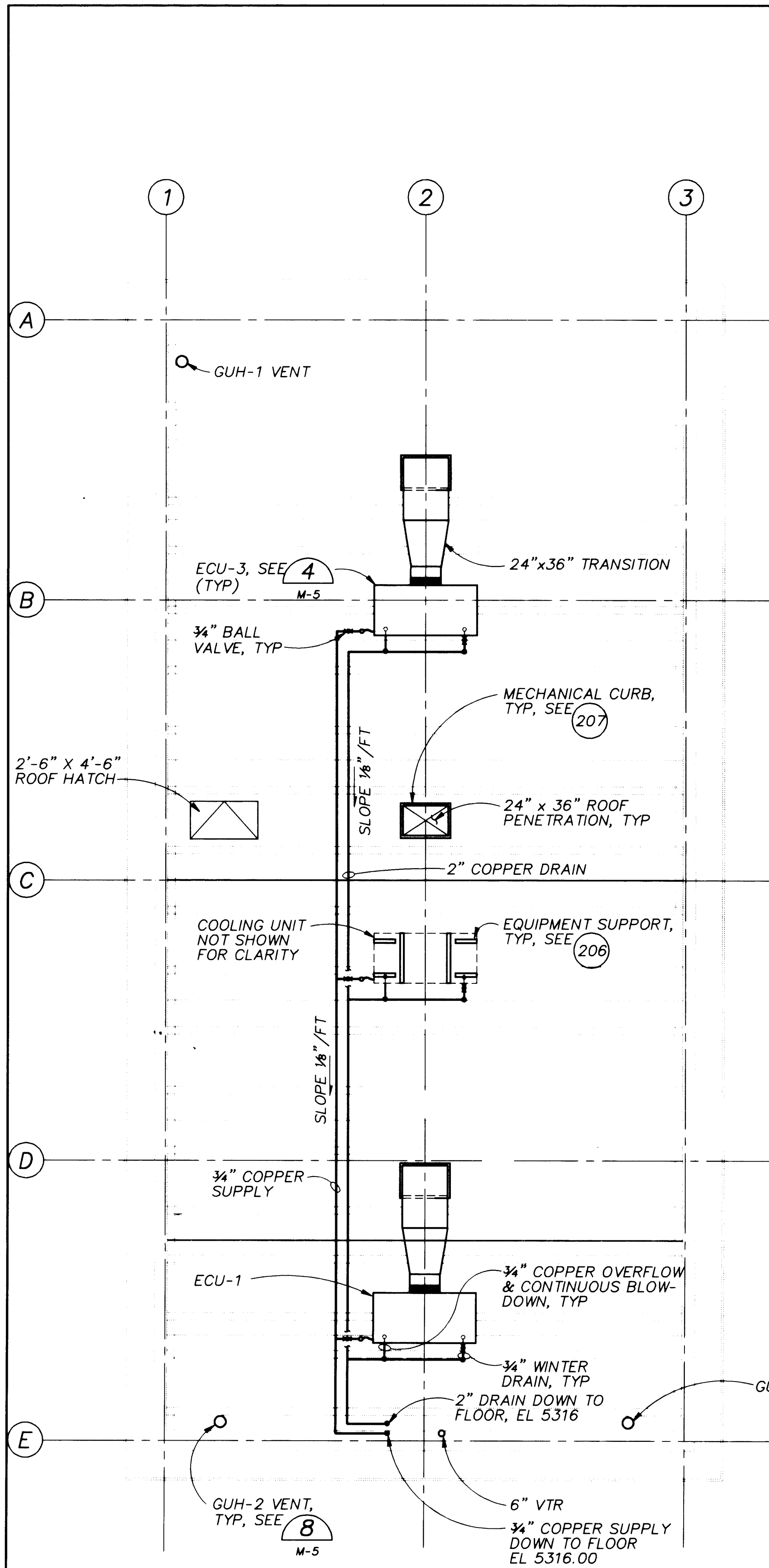
SECTION C
3/16" = 1'-0"
M-1

PLAN AT EL 5291
3/16" = 1'-0"

RECORD DRAWINGS
Date: Dec. 15, 1994
These record drawings have been prepared, in part, on the basis of information furnished by others. THE ENGINEER HAS NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT OR MANNER OF CONSTRUCTION. THE OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

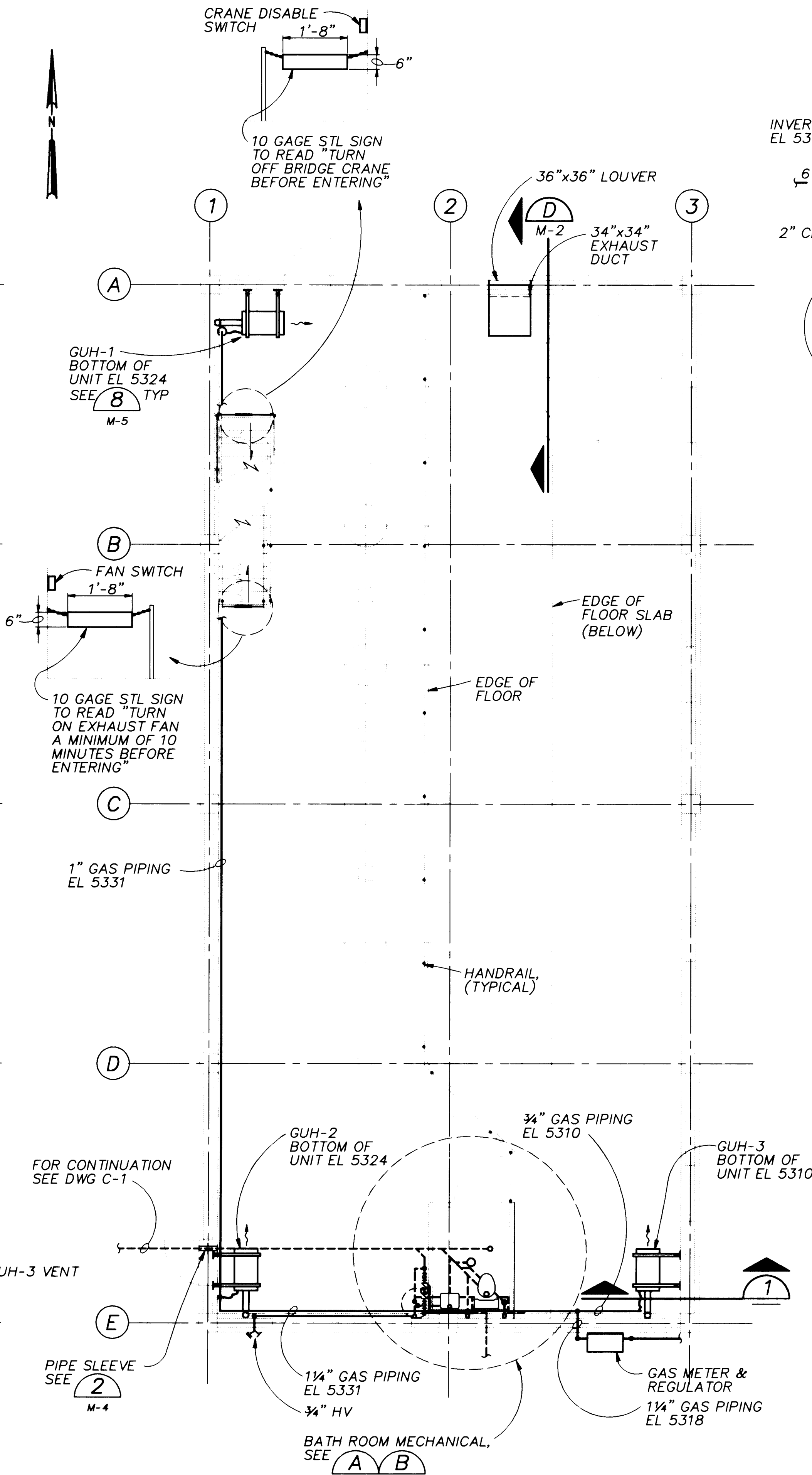
APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
12/15/94

VERIFICATION
BAR IS ONE INCH ON ORIGINAL DRAWING
0" = 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

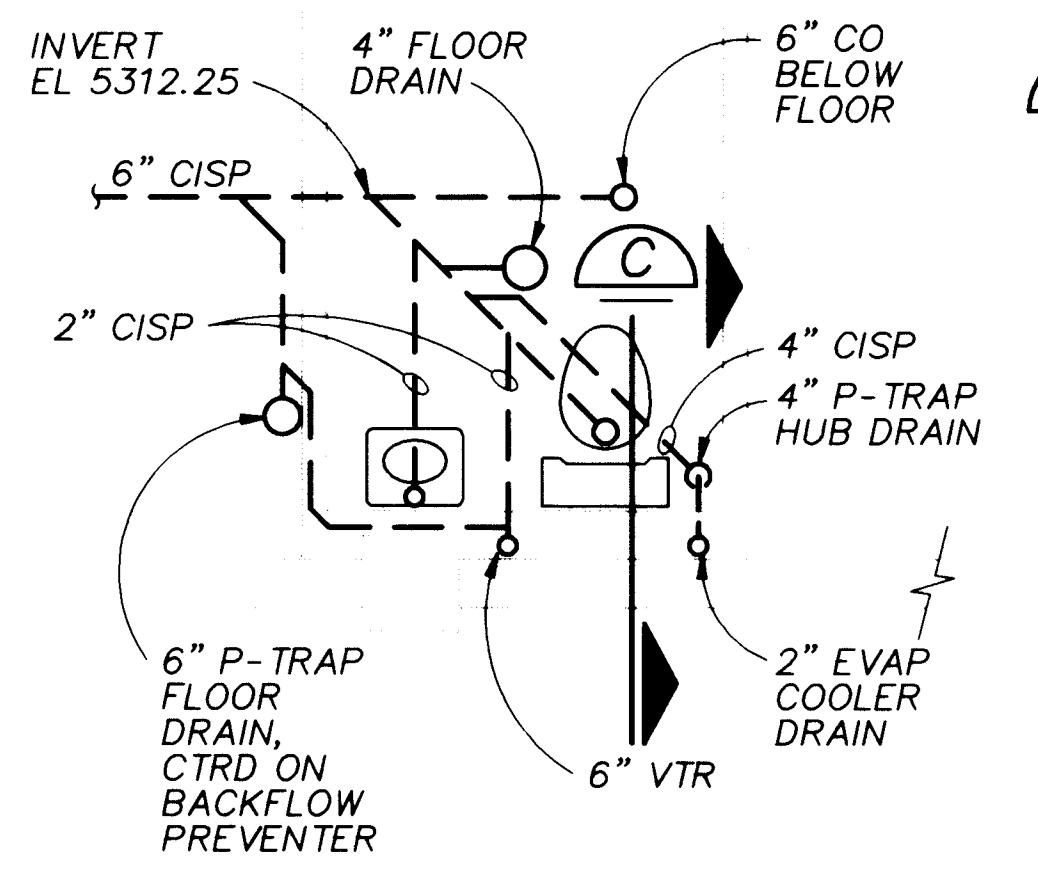


ROOF PLAN
3/16" = 1'-0"

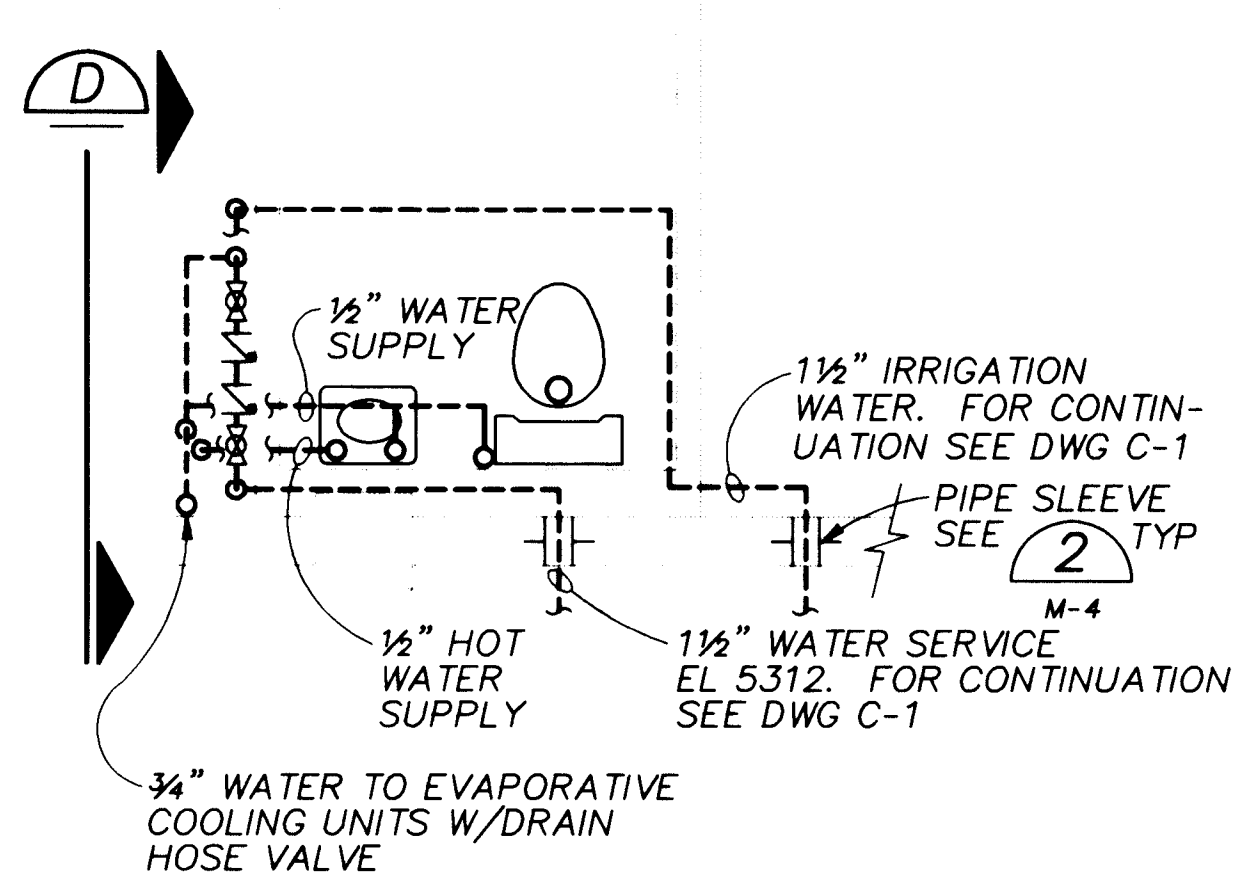
- NOTES:**
1. INSTALL GAS UNIT HEATER GAS SUPPLY AND FLUE GAS PIPING IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS AND APPLICABLE CODES.
 2. PROVIDE OFFSET BLOCKING TO ALLOW FOR STRAIGHT RUNS OF PIPING BETWEEN COLUMNS.
 3. ALL BATHROOM DRAINAGE PIPING SHALL BE HUNG FROM THE CEILING OF FLOOR EL 5310.



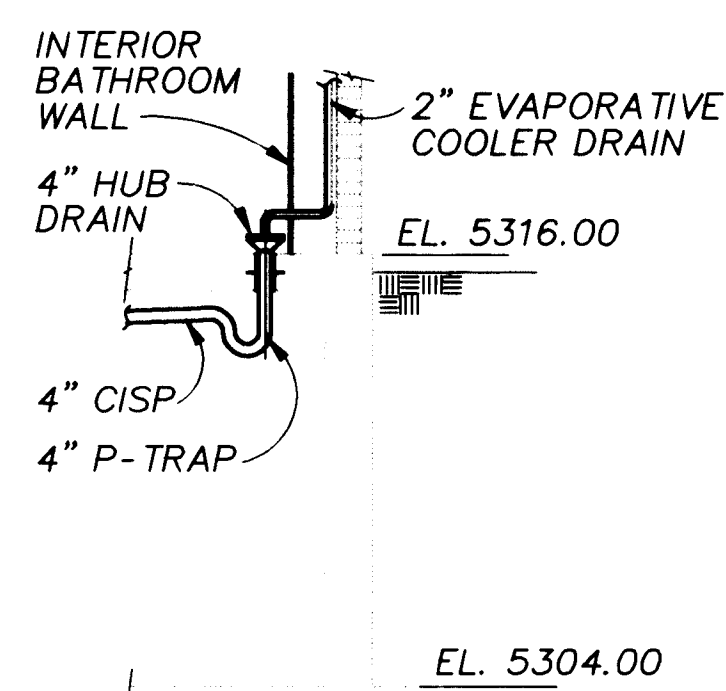
PLAN AT EL 5316
3/16" = 1'-0"



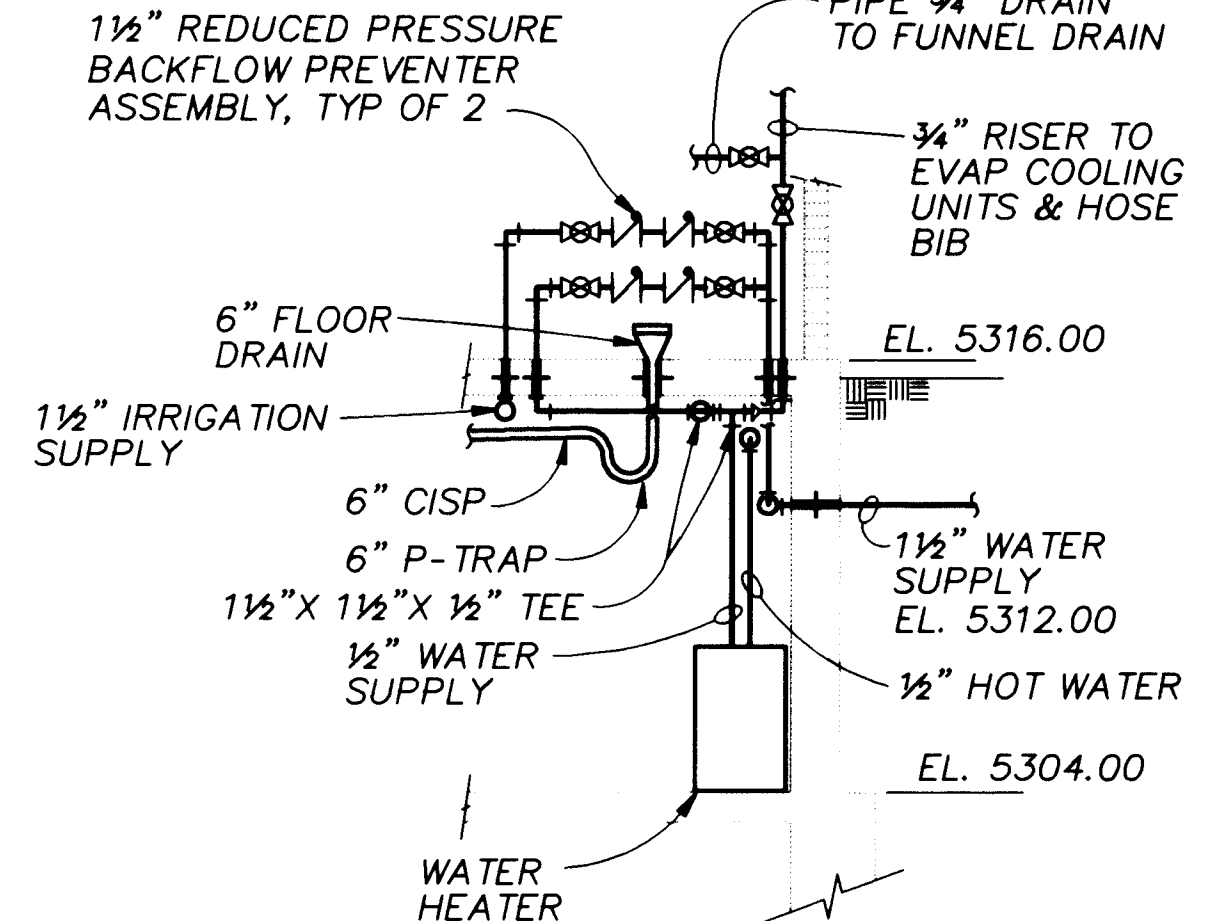
SANITARY DRAINAGE RESTROOM PLAN A
3/8" = 1'-0"



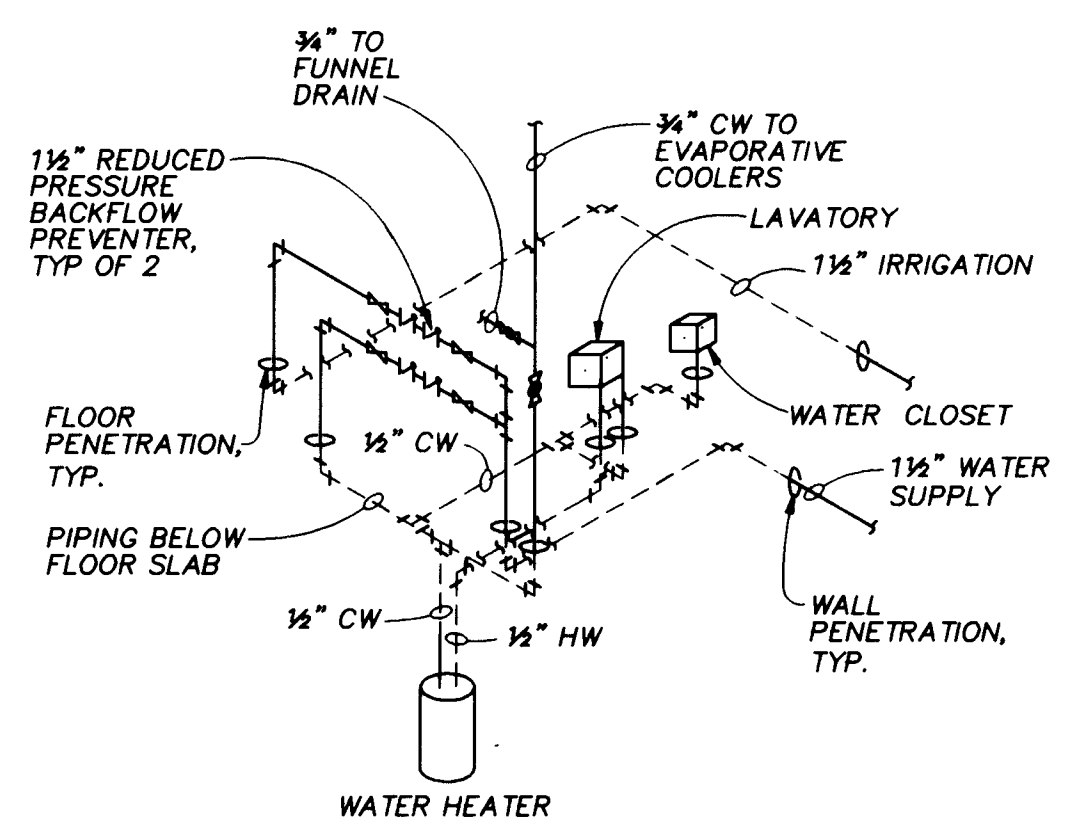
WATER PIPING RESTROOM PLAN B
3/8" = 1'-0"



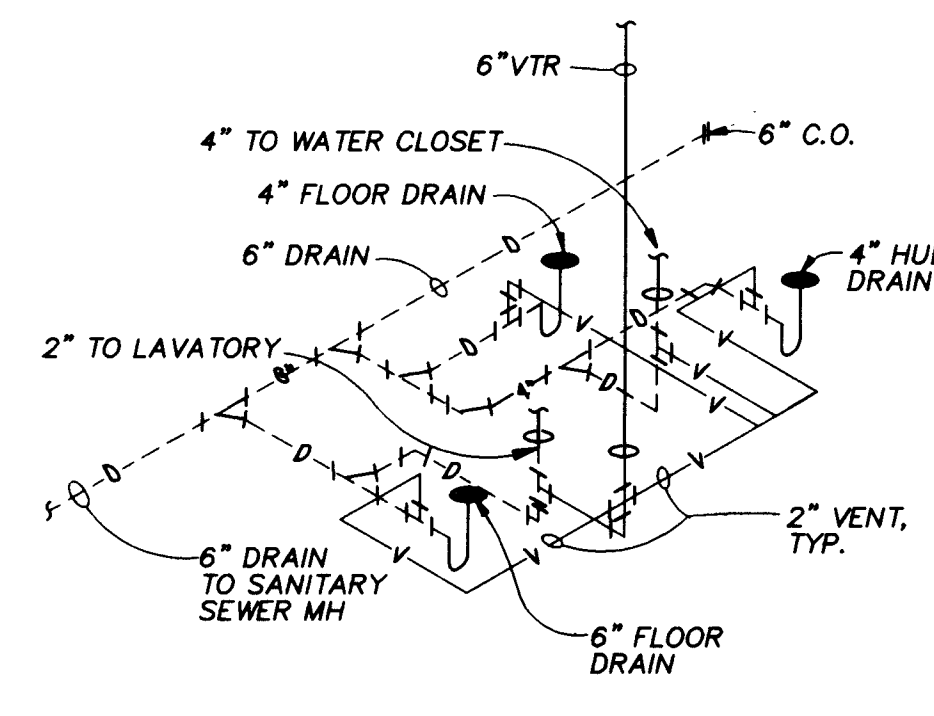
SECTION C
3/8" = 1'-0"



SECTION D
3/8" = 1'-0"



WATER PIPING ISOMETRIC
NTS



SANITARY DRAINAGE ISOMETRIC
NTS

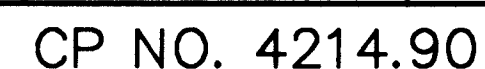
APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER: [Signature]
DATE: 12/21/94

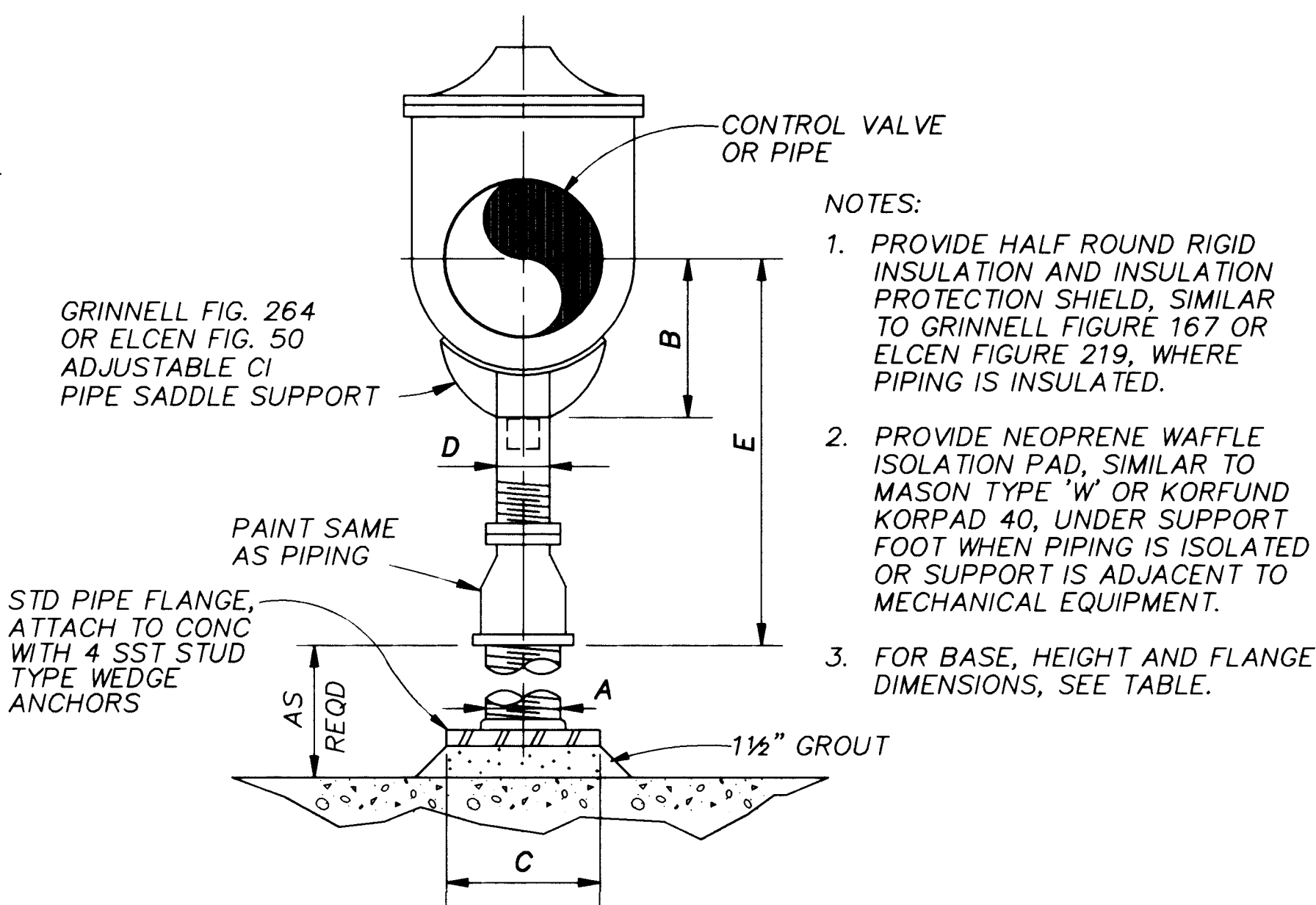
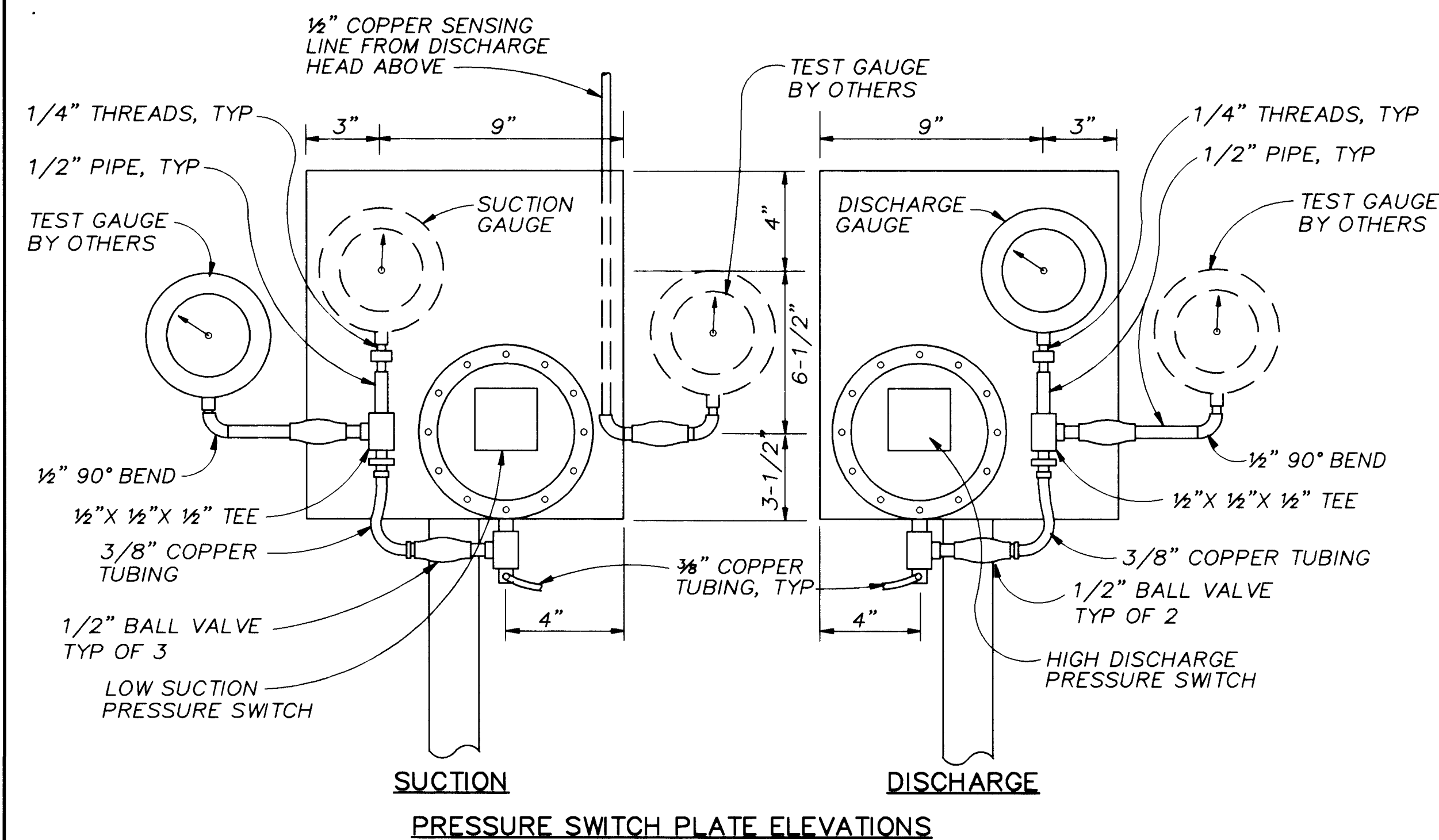
RECORD DRAWINGS
Revisions Drawn by: Michael Brown Date: Nov. 15, 1994
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



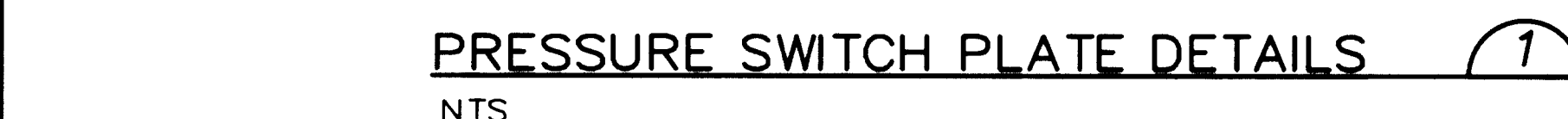
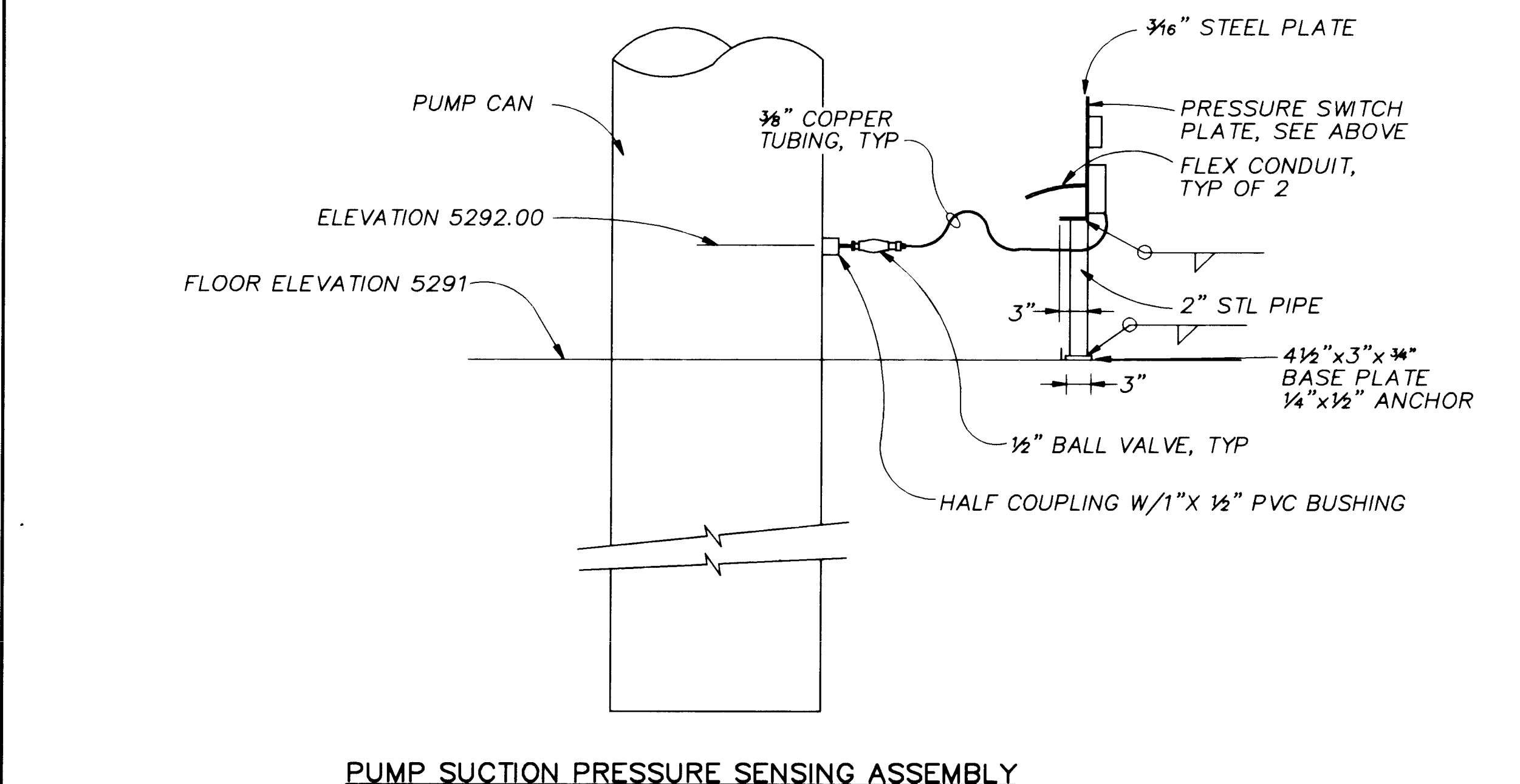
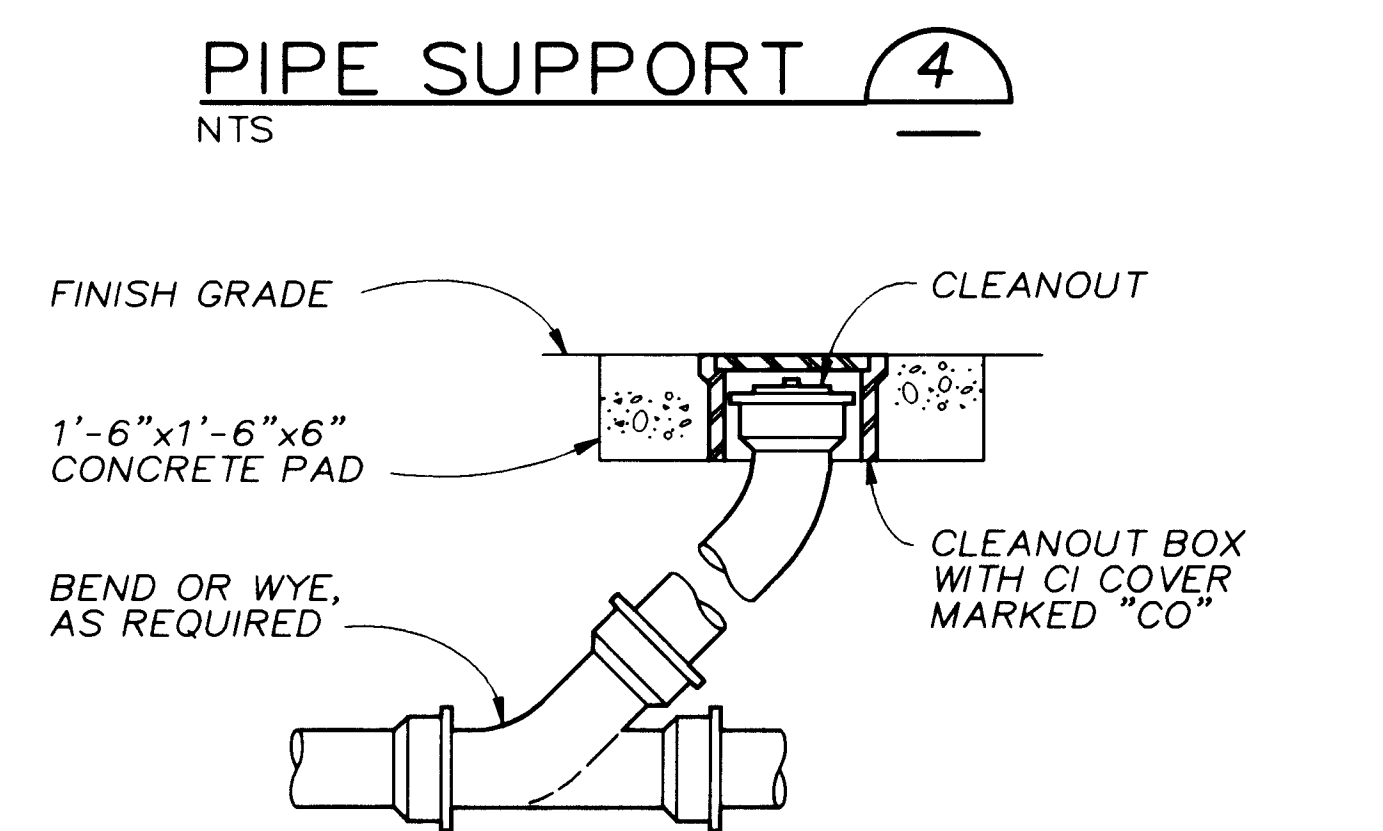
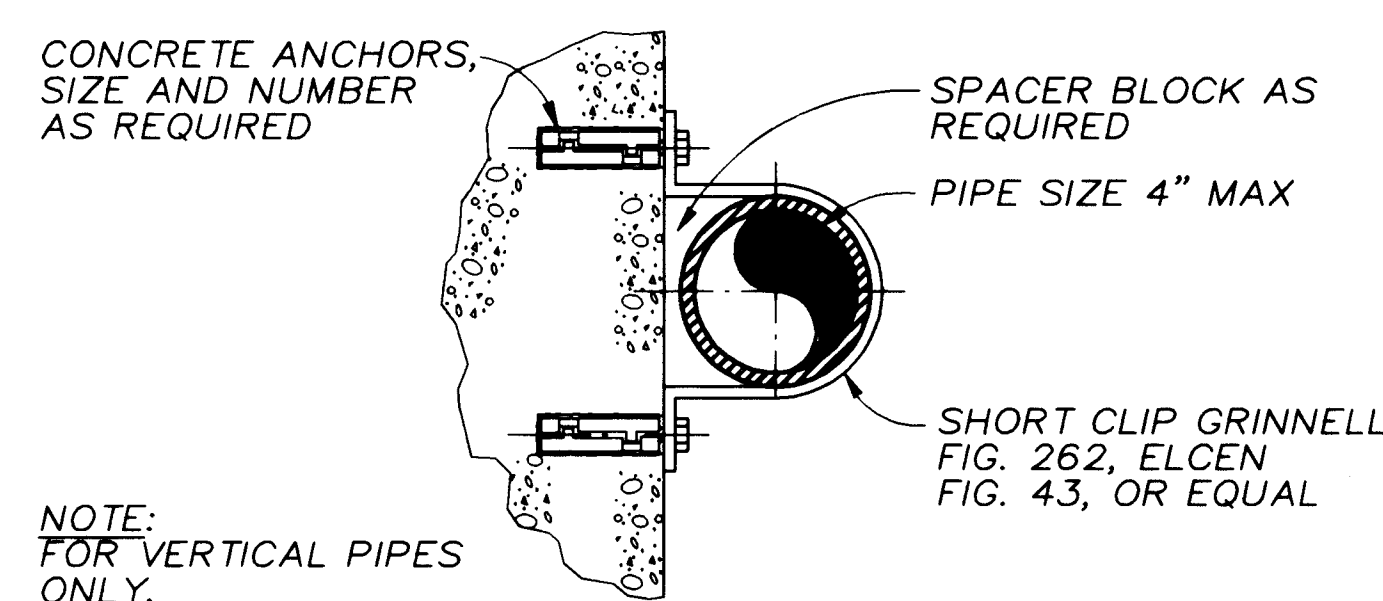
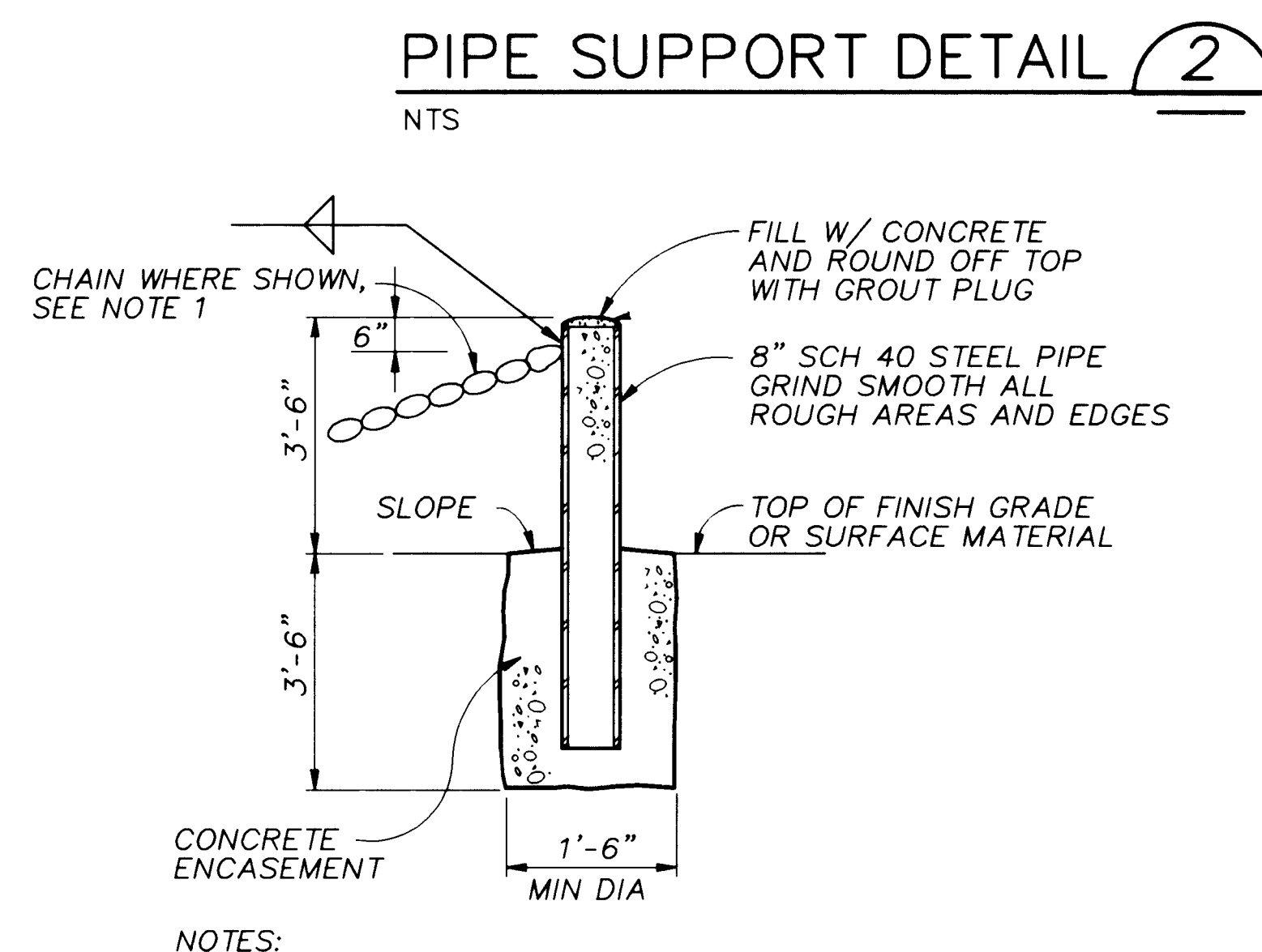
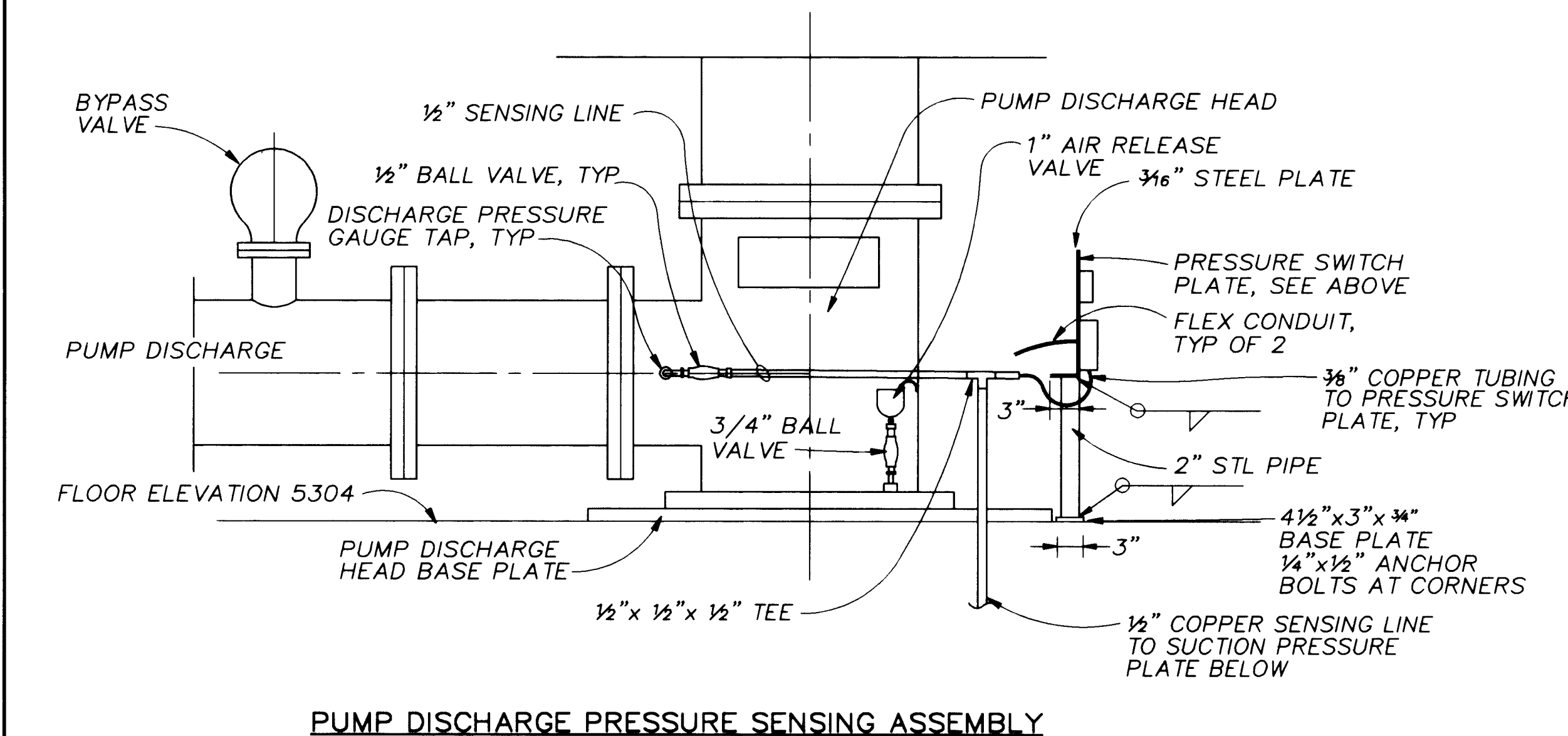
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION HVAC AND PLUMBING PLANS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO. M-3		MAP NO.		SHEET 34 OF 57	

CP NO. 4214.90





PIPE SIZE	A	B	C	D	E	
					MIN	MAX
2-1/2"	2-1/2"	3-1/2"	9"	1-1/2"	8"	13"
3"	2-1/2"	3-3/4"	9"	1-1/2"	8-1/4"	13-1/4"
3-1/2"	2-1/2"	4"	9"	1-1/2"	8-1/2"	13-1/2"
4"	3"	4-1/4"	9"	2-1/2"	9-1/4"	14"
5"	3"	4-7/8"	9"	2-1/2"	10"	14-3/4"
6"	3"	5-1/2"	9"	2-1/2"	10-1/2"	15-1/4"
8"	3"	6-7/8"	9"	2-1/2"	11-3/4"	16-1/2"
10"	3"	8-1/2"	9"	2-1/2"	13-1/2"	18-1/4"
12"	3"	9-15/16"	9"	2-1/2"	15"	19-3/4"
14"	4"	10-15/16"	11"	3"	16-1/4"	20-3/4"
16"	4"	12-3/8"	11"	3"	17-3/4"	22-1/4"
18"	6"	13-7/8"	13-1/2"	3-1/2"	19-1/2"	24"
20"	6"	15-3/8"	13-1/2"	3-1/2"	21"	25-1/2"
24"	6"	17-15/16"	13-1/2"	4"	23-3/4"	28-1/4"
30"	6"	21-5/16"	13-1/2"	4"	27"	31-1/2"
32"	6"	22-1/2"	13-1/2"	4"	28-1/4"	32-3/4"
36"	6"	24-1/2"	13-1/2"	4"	30-1/4"	34-3/4"



RECORD DRAWINGS

Revisions Drawn by *Michael Brower* Date *Nov. 15, 1994*

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APPROVAL OF RECORD DRAWINGS

PROJECT ENGINEER *William J. Stuart*

DATE *12/21/94*

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

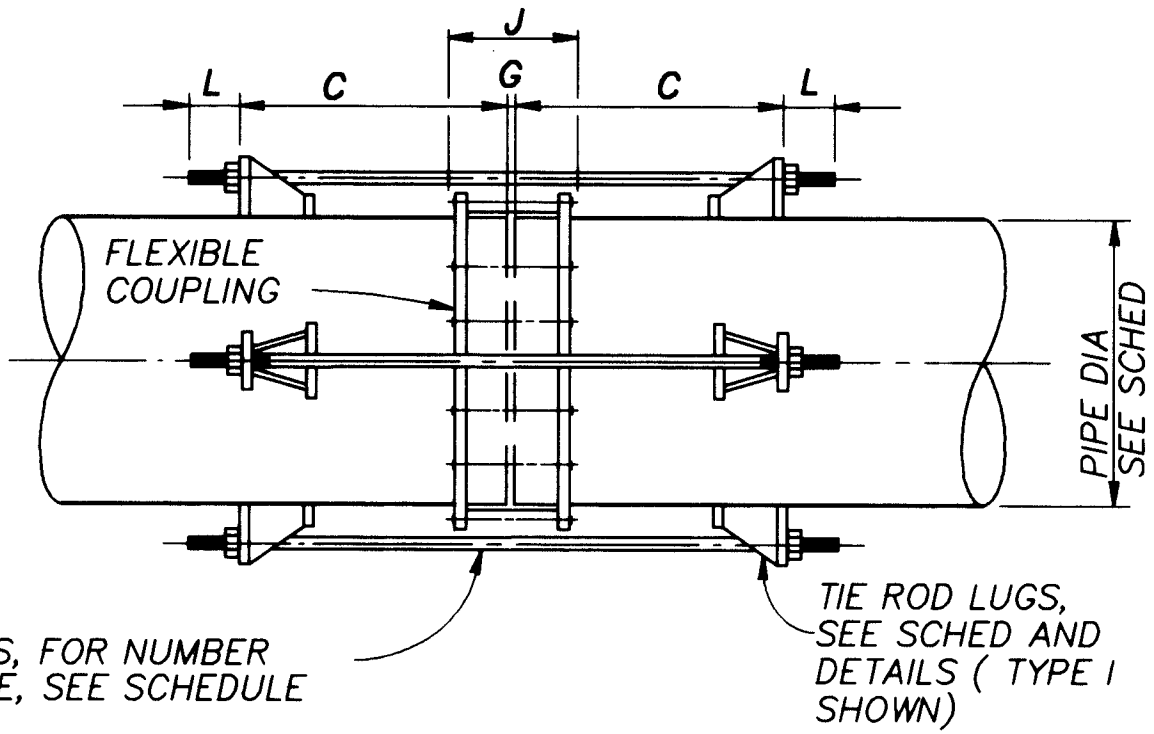
TITLE: **CHARLES WELLS PUMP STATION MECHANICAL DETAILS**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					

DESIGNED BY *BILL PATTON* DATE *5/8/92*
DRAWN BY *RON SANDBANK* DATE *5/12/92*
CHECKED BY *BARBARA CROCKETT* DATE *9/10/92*

DRAWING NO. **M-6** MAP NO. SHEET **37** OF **57**

CP NO. 4214.90



NOTES:

1. THE MIDDLE RING LENGTH OF THE FLEXIBLE COUPLING SHALL BE AS SPECIFIED.
2. THE CONTRACTOR SHALL DETERMINE THE LENGTH "J" (COUPLING BOLT LENGTH) FROM MANUFACTURER'S CATALOGS USING THE SPECIFIED MIDDLE RING LENGTH.
3. "G" = MANUFACTURER'S RECOMMENDED SPACE BETWEEN ENDS OF PIPE.
4. "C" = J+Z+1 INCH, (ROUND THIS VALUE UP TO NEXT EVEN INCH), MINIMUM. (FOR Z DIMENSIONS, SEE LUG SCHEDULE.)
5. TIE ROD LENGTH = 2L+2C+G.

TYPICAL THRUST TIE DETAIL FOR STEEL PIPE 1

PIPE DIA. (IN.)	TEST PRESSURE (PSI)	THRUST RODS (#-DIA)	FLANGE CLASS	FLANGE BOLTS		LUG PLATE	
				NO.	DIA.	TL	TE
10"	100						
	150	3 - 5/8"	AWWA CL E	12	7/8"	A193-B7	3/4"
	225	6 - 5/8"	AWWA CL E	12	7/8"	A307	5/8"
	375	8 - 5/8"	ANSI 300	16	1"	A307	1"
12"	100						
	150	3 - 5/8"	AWWA CL E	12	7/8"	A193-B7	7/8"
	225						
	375						
16"	100						
	150	8 - 5/8"	ANSI 150	16	1"	A307	7/8"
	225						
	375						
18"	100						
	150	8 - 5/8"	ANSI 150	16	1 1/8"	A307	1"
	225						
	375						
24"	100						
	150	10 - 5/8"	ANSI 150	20	1 1/4"	A307	7/8"
	225	10 - 3/4"	ANSI 150	20	1 1/4"	A307	1 1/8"
	375	12 - 7/8"	ANSI 300	24	1 1/2"	A307	1"
30"	100						
	150	14 - 5/8"	AWWA CL E	28	1 3/4"	A307	3/4"
	225						
	375						
36"	100						
	150	16 - 3/4"	AWWA CL E	32	2"	A307	1 1/4"
	225						
	375						
42"	100						
	150	18 - 3/4"	AWWA CL E	36	2"	A307	1 1/2"
	225						

THRUST ROD AND LUG PLATE SCHEDULE

NOTES:

1. THRUST RODS SHALL CONFORM TO ASTM A193 GRADE B7.
2. NUTS FOR THRUST RODS SHALL CONFORM TO ASTM A194 GRADE 7.
3. LUG PLATES SHALL CONFORM TO ASTM A-36.
4. THRUST ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES TO PREVENT UNEVEN ALIGNMENT AND TO ALLOW EQUAL STRESS ON ALL RODS UNDER PRESSURE. TIGHTEN UNTIL SNUG. THREADS SHALL PROTRUDE FROM NUTS. PEEN THREADS AFTER TIGHTENING NUTS.

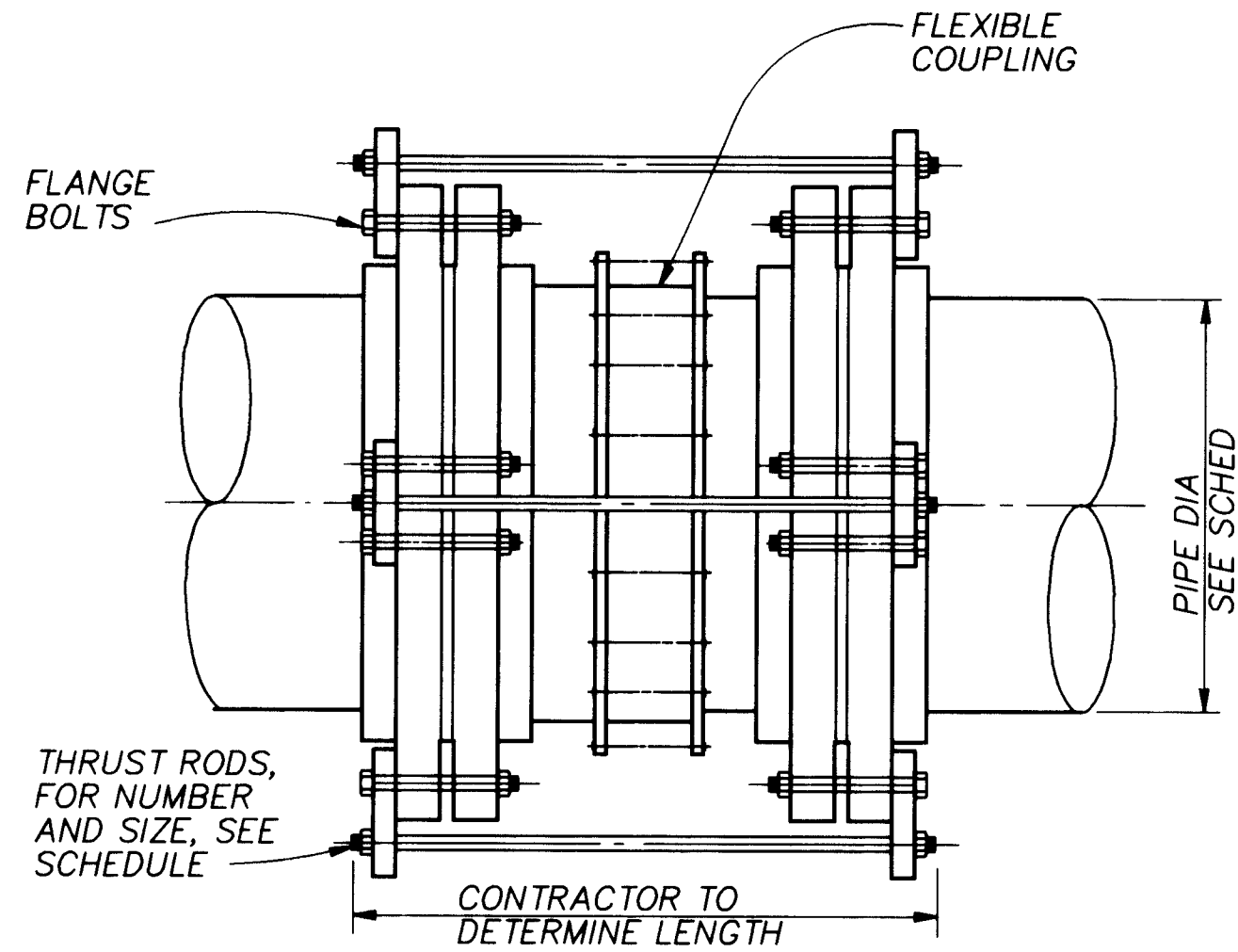
5. LUG PLATES SHALL BE EQUALLY SPACED AROUND PIPE.
6. PROVIDE CATHODIC PROTECTION FOR COUPLINGS AS NOTED ON PLANS OR IN THE SPECIFICATIONS.
7. CONTRACTOR SHALL USE SCHEDULE DATA FOR ONLY THOSE PIPE SIZES AND TEST PRESSURES SPECIFIED IN THIS CONTRACT.
8. SEE NOTE 13 DETAIL 1

FLANGE LUG DETAIL/SCHEDULE 2

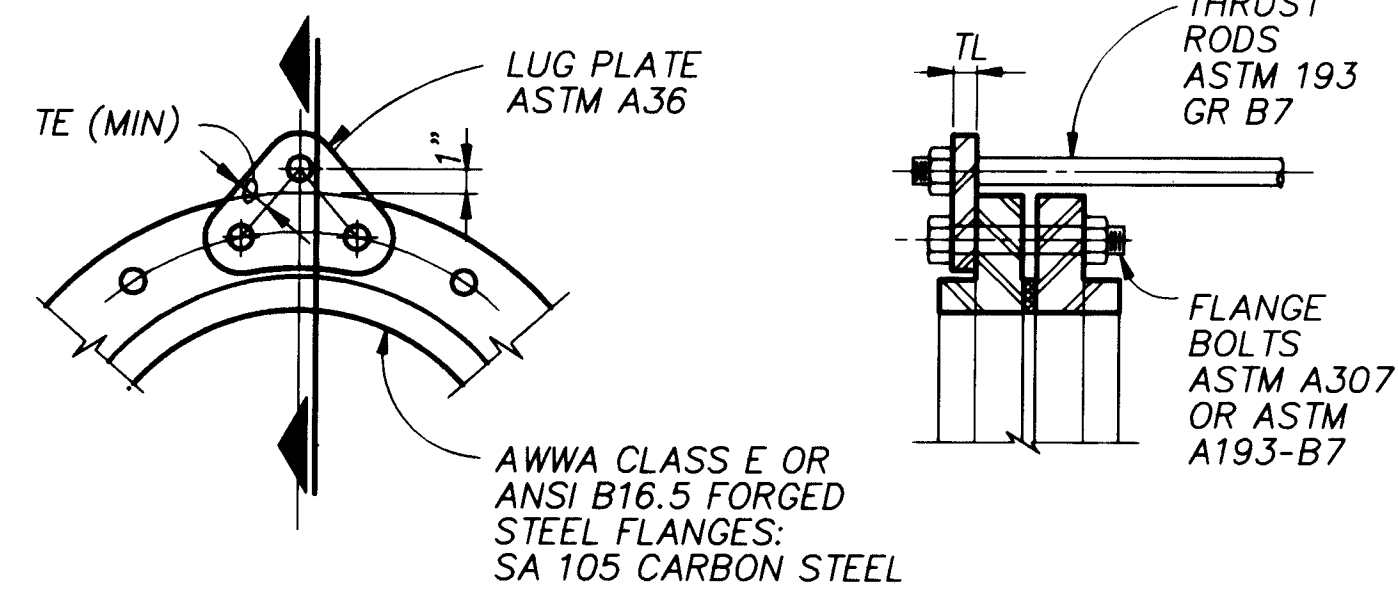
1983M005.DWG
11/11/92

NOTES:

1. LUG SCHEDULE DIMENSIONS IN INCHES.
2. TIE RODS SHALL CONFORM TO ASTM A193 GRADE B7.
3. NUTS SHALL CONFORM TO ASTM A194 GRADE 2H.
4. PLATE SHALL CONFORM TO ASTM A283 GRADE D.
5. TIE ROD NUTS SHALL BE TIGHTENED GRADUALLY AND EQUALLY IN STAGES TO PREVENT UNEVEN ALIGNMENT AND TO ALLOW EQUAL STRESS ON ALL TIE RODS UNDER PRESSURE. TIGHTEN UNTIL SNUG. THREADS SHALL PROTRUDE FROM NUTS. PEEN THREADS AFTER TIGHTENING NUTS.
6. TIE ROD LUGS SHALL BE SPACED EQUALLY AROUND PIPE.
7. FILLET WELDS SHALL MEET THE MINIMUM REQUIREMENTS OF THE AISC SPECIFICATION EXCEPT AS FOLLOWS: FILLET WELDS SHALL BE 1/4-INCH MINIMUM EXCEPT WHEN WELDING 3/16-INCH PLATE WHERE THEY SHALL BE 3/16-INCH.
8. CATHODIC PROTECTION FOR FLEXIBLE COUPLINGS REQUIRED WHERE NOTED ON PLANS OR IN THE SPECIFICATIONS.
9. CONTRACTOR SHALL USE DATA FOR ONLY THOSE PIPE SIZES AND TEST PRESSURES SPECIFIED IN THIS CONTRACT.
10. LUG TYPE I IS AS SHOWN IN DETAIL. LUG TYPE II HAS A CONTINUOUS BACK PLATE AROUND PIPE. LUG TYPE III HAS CONTINUOUS FRONT AND BACK PLATES AROUND PIPE.
11. TIE RODS SHALL NOT BE ATTACHED TO A PIPE WHEN THE WALL THICKNESS IS LESS THAN THE MINIMUM SHOWN ON THE TIE ROD SCHEDULE.
12. THE MINIMUM PIPE WALL THICKNESSES SHOWN ARE TO ENSURE PROPER PERFORMANCE OF THE THRUST TIE LUG. PIPE WALL THICKNESSES GREATER THAN SHOWN IN THE TABLE MAY BE REQUIRED AND MAY BE SHOWN ELSEWHERE OR SPECIFIED ELSEWHERE TO RESIST INTERNAL PRESSURES.
13. FOR ALL BURIED ASSEMBLIES, COAT ALL TIE RODS AND EXPOSED STEEL WITH 16 MILS OF BITUMASTIC.



TYPICAL THRUST TIE DETAIL FOR STEEL PIPE



FRONT ELEVATION

SECTION

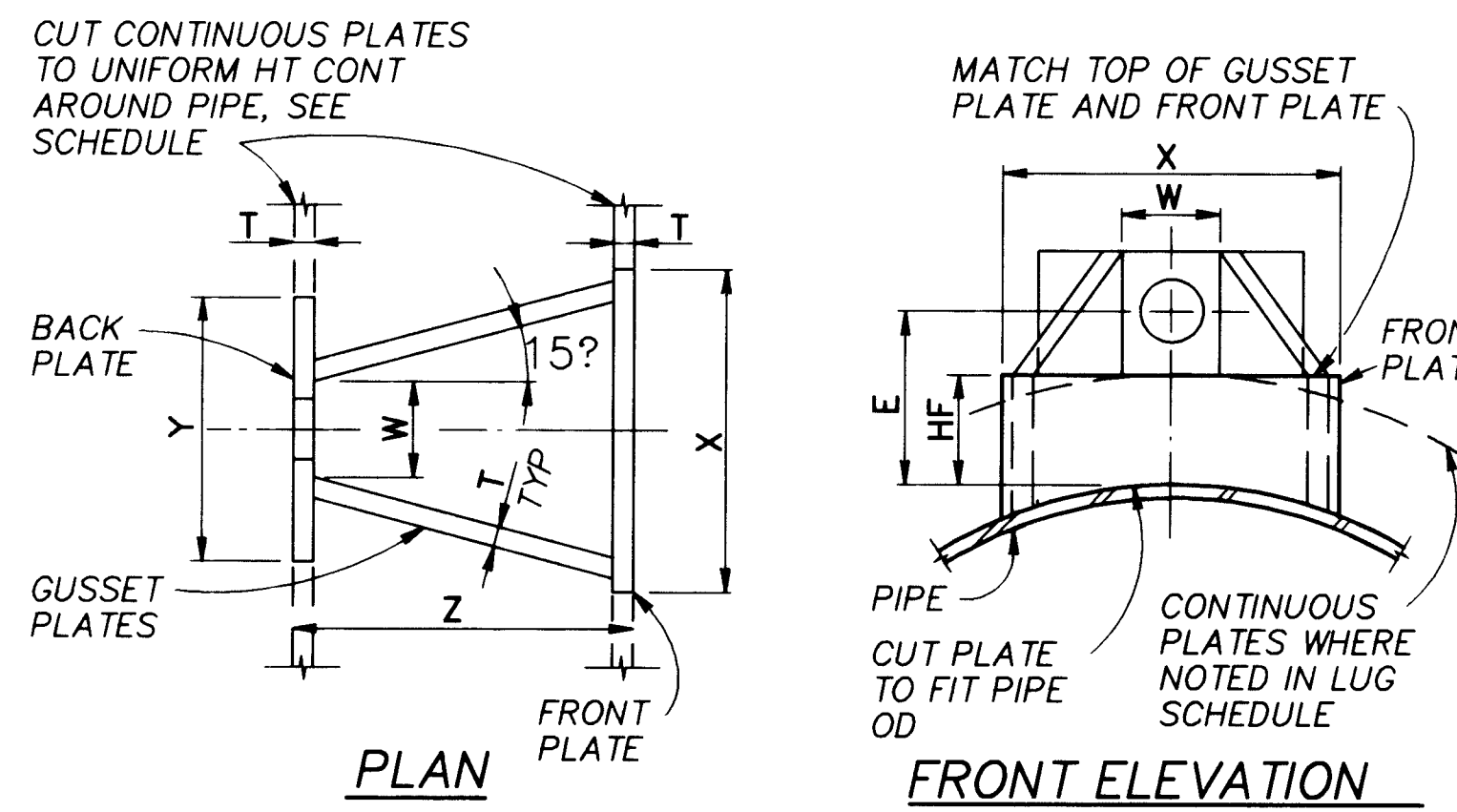
LUG

RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

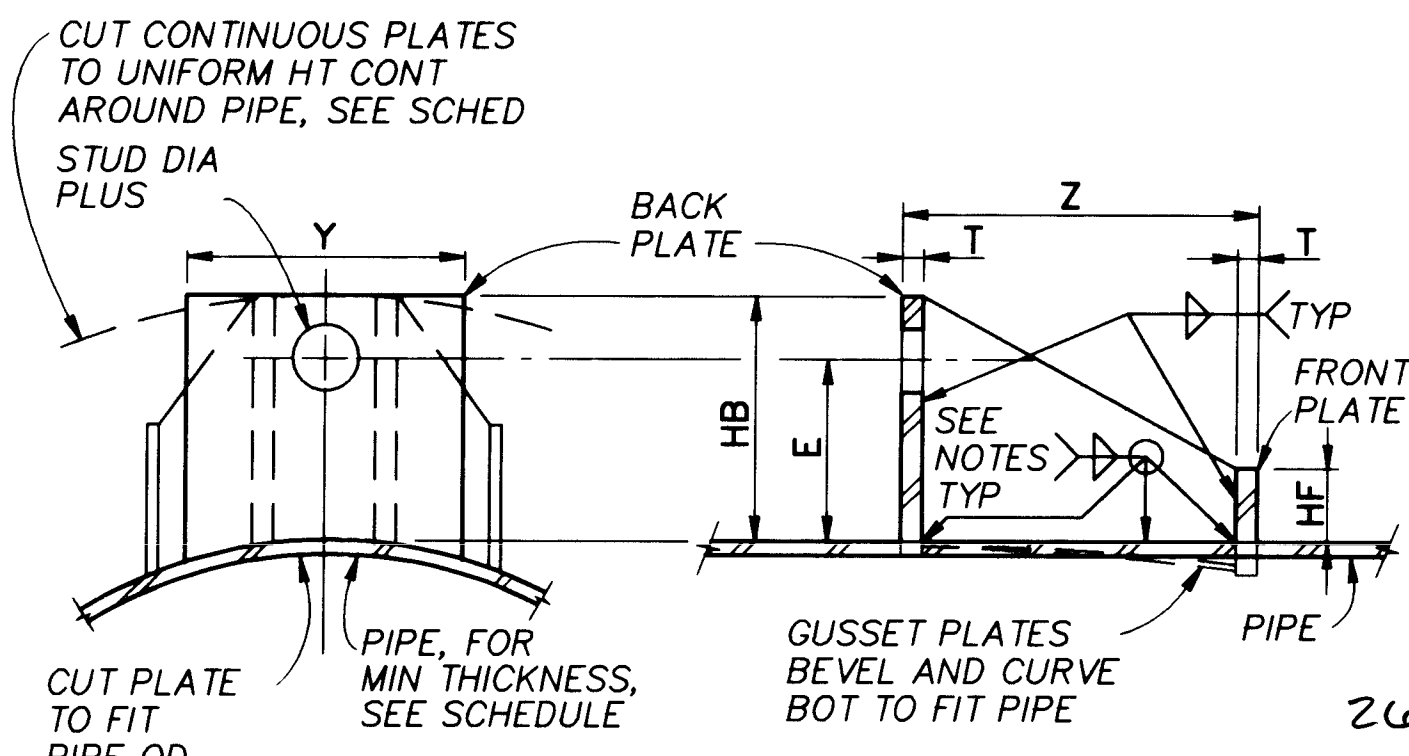
*SEE NOTES		TIE ROD SCHEDULE									
PIPE DIA. (IN.)	MINIMUM PIPE WALL THICKNESS (IN.)*	25 PSI		50 PSI		100 PSI		150 PSI		225 PSI	
		TIE RODS	TIE RODS	TIE RODS	TIE RODS	TIE RODS	TIE RODS	TIE RODS	TIE RODS	TIE RODS	TIE RODS
		DIA. (IN.)	NO. REQ'D	DIA. (IN.)	NO. REQ'D	DIA. (IN.)	NO. REQ'D	DIA. (IN.)	NO. REQ'D	DIA. (IN.)	NO. REQ'D
6	3/16	—	—	—	—	5/8	2	5/8	2	5/8	2
8	3/16	—	—	—	—	5/8	2	5/8	2	5/8	2
10	3/16	—	—	—	—	5/8	2	5/8	2	3/4	2
12	3/16	5/8	2	5/8	2	5/8	2	5/8	2	3/4	2
14	3/16	5/8	2	5/8	2	3/4	2	3/4	2	3/4	4
16	3/16	5/8	2	5/8	2	3/4	2	7/8	2	7/8	4
18	1/4	5/8	2	5/8	2	7/8	2	1	2	1	4
20	1/4	5/8	2	3/4	2	7/8	2	7/8	4	1	4
22	1/4	5/8	2	3/4	2	3/4	4	7/8	4	1	4
24	1/4	5/8	2	3/4	2	7/8	4	1	4	1	6
30	1/4	5/8	4	3/4	4	7/8	6	1	6	1	8
36	1/4	3/4	4	7/8	4	1	6	1	8	1-1/4	8
42	1/4	3/4	4	1	4	1	8	1-1/4	8	1-1/2	8

LUG SCHEDULE										
STUD DIA	LUG TYPE	T	W	X	Y	Z	HB	E	HF	L
5/8	I	3/8	1-3/8	4-1/16	4-1/2	3-3/8	3-7/8	3	1-3/4	3
3/4	I	3/8	1-1/2	5	4-1/2	5	4-1/8	3-1/8	1-3/4	3
7/8	I	1/2	1-5/8	5-1/2	4-1/2	5-1/8	4-1/4	3-1/8	1-3/4	4
1	II	1/2	1-3/4	5-3/4	Cont	6	4-1/2	3-1/4	2	4
1-1/4	II	5/8	2	7-1/4	Cont	7-5/8	5	3-3/4	2	4
1-1/2	II	3/4	2-1/4	9	Cont	10-1/8	5-1/2	3-7/8	2	4
1-3/4	III	1	2-1/2	Cont	Cont	11-7/8	5-7/8	4	2-1/4	4
2	III	1	2-3/4	Cont	Cont	13-7/8	6-1/4	4-1/4	2-1/2	4



PLAN

FRONT ELEVATION

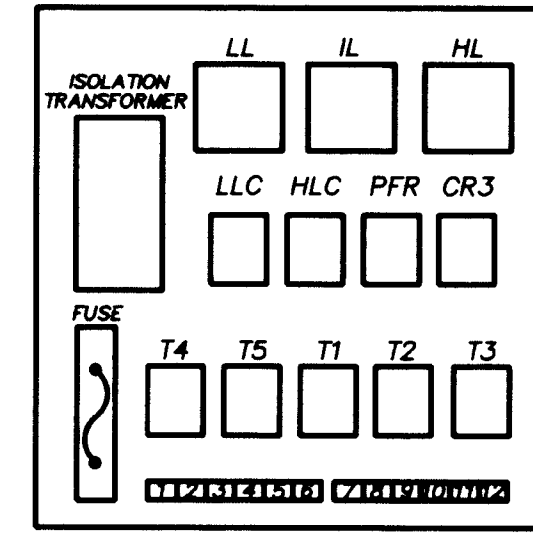


BACK ELEVATION

SECTION

TIE ROD LUG 3

NTS

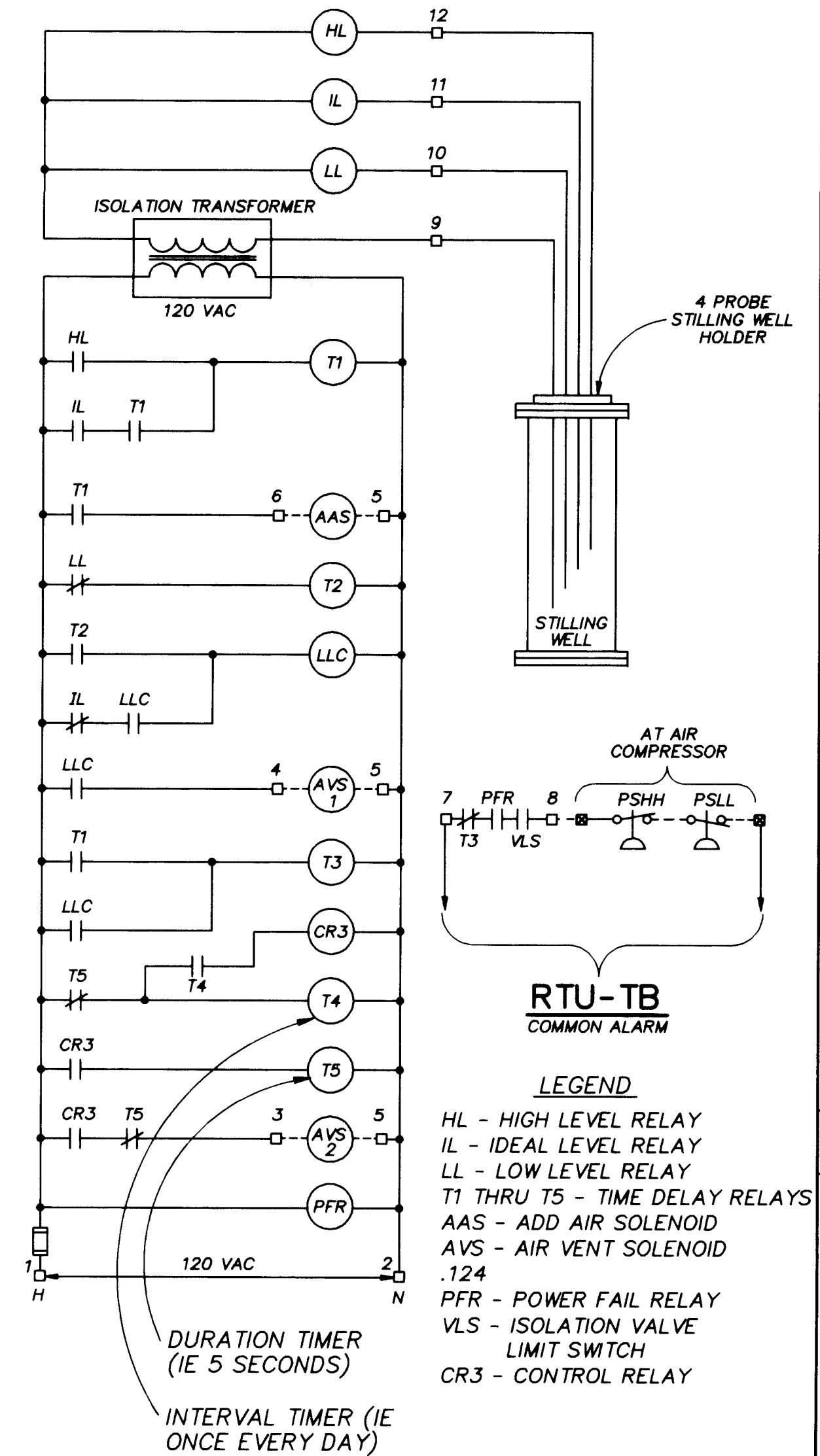


NOTES:

1. USE 18" X 18" X 6" HOFFMAN ENCLOSURE
2. PROVIDE 1 1/2" X 3" BLACK LAMINATED TAG ON FRONT OF DOOR WHICH READS "SURGE CONTROL PANEL"
3. IDENTIFY ALL DEVICES

SURGE CONTROL PANEL LAYOUT 4

NTS



SURGE SYSTEM CONTROL PANEL LADDER DIAGRAM 5

APPROVAL OF RECORD DRAWINGS
CHECKED BY Michael Brewer Date 12/21/94

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

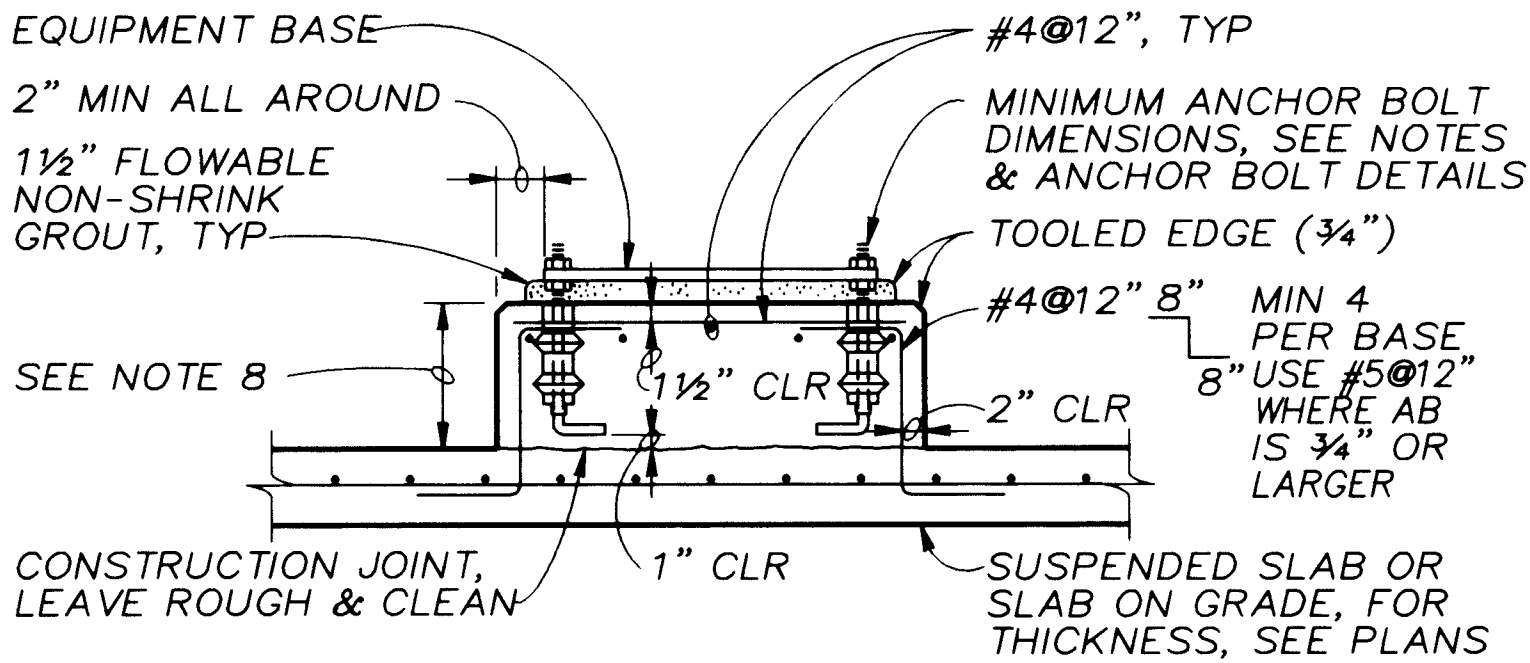
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION MECHANICAL DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	M-7	MAP NO.		SHEET	OF
				38	57

CP NO. 4214.90

EQUIPMENT BASE NOTES

- 1. PAD SIZE SHALL BE MINIMUM INDICATED OR AS SHOWN ON THE PLANS OR AS INDICATED BY THE MANUFACTURER AND APPROVED BY THE ENGINEER.
- 2. THE SIZE, NUMBER, TYPE, LOCATION, AND THREAD PROJECTION OF THE ANCHOR BOLTS SHALL BE DETERMINED BY THE EQUIPMENT MANUFACTURER, AND SHALL BE AS APPROVED BY THE ENGINEER. ANCHOR BOLTS SHALL BE HELD IN POSITION WITH A ONE PEICE TEMPLATE, MATCHING THE BASE PLATE, WHILE PAD IS BEING POURED.
- 3. ANCHOR BOLT SLEEVES SHALL BE USED TO PROVIDE THE ANCHOR BOLT A MINIMUM MOVEMENT OF 1/2" IN ALL DIRECTIONS. THE MINIMUM SLEEVE LENGTH SHALL BE 8 TIMES THE BOLT DIAMETER. SLEEVES SHALL BE FILLED WITH NON-SHRINK GROUT.
- 4. ANCHOR BOLT SLEEVES SHALL HAVE A MINIMUM INTERNAL DIAMETER 1" GREATER THAN BOLT DIAMETER AND A MAXIMUM INTERNAL DIAMETER 3" GREATER THAN ANCHOR BOLT DIAMETER. SLEEVES SHALL BE FILLED WITH NON-SHRINK GROUT.
- 5. EQUIPMENT BASES SHALL BE INSTALLED LEVEL UNLESS SPECIFIED OTHERWISE.
- 6. TYPE "D" DETAIL SHALL BE USED ONLY FOR SLABS ON GRADE AND AT GRADE. THE SURROUNDING FLOOR SLAB SHALL NOT BE PLACED UNTIL THE EXACT SIZE AND LOCATION OF THE PAD IS KNOWN.
- 7. WEDGES OR SHIMS SHALL BE USED TO SUPPORT THE BASE WHILE THE NON-SHRINK GROUT IS PLACED. TEMPORARY LEVELING NUTS SHALL BE BACKED OFF. IF LEFT IN, THE WEDGES OR SHIMS SHALL NOT BE EXPOSED TO VIEW.
- 8. HEIGHT OF PADS SHALL BE MINIMUM REQUIRED FOR ANCHOR BOLT CLEARANCE TO KEEP ANCHOR BOLT OUT OF SLAB (SEE TABLE BELOW). WHERE EQUIPMENT OR PIPING ELEVATION REQUIRE A PAD HEIGHT LESS THAN THE MINIMUM SHOWN, USE TYPE B WITH BLOCKOUT.

AB DIA (IN.)	1/2	5/8	3/4	7/8	1	1 1/4	1 3/8	1 1/2	2
MIN PAD HT (IN.)	7	8 1/2	10	12 1/2	15	16 1/2	18	21	24

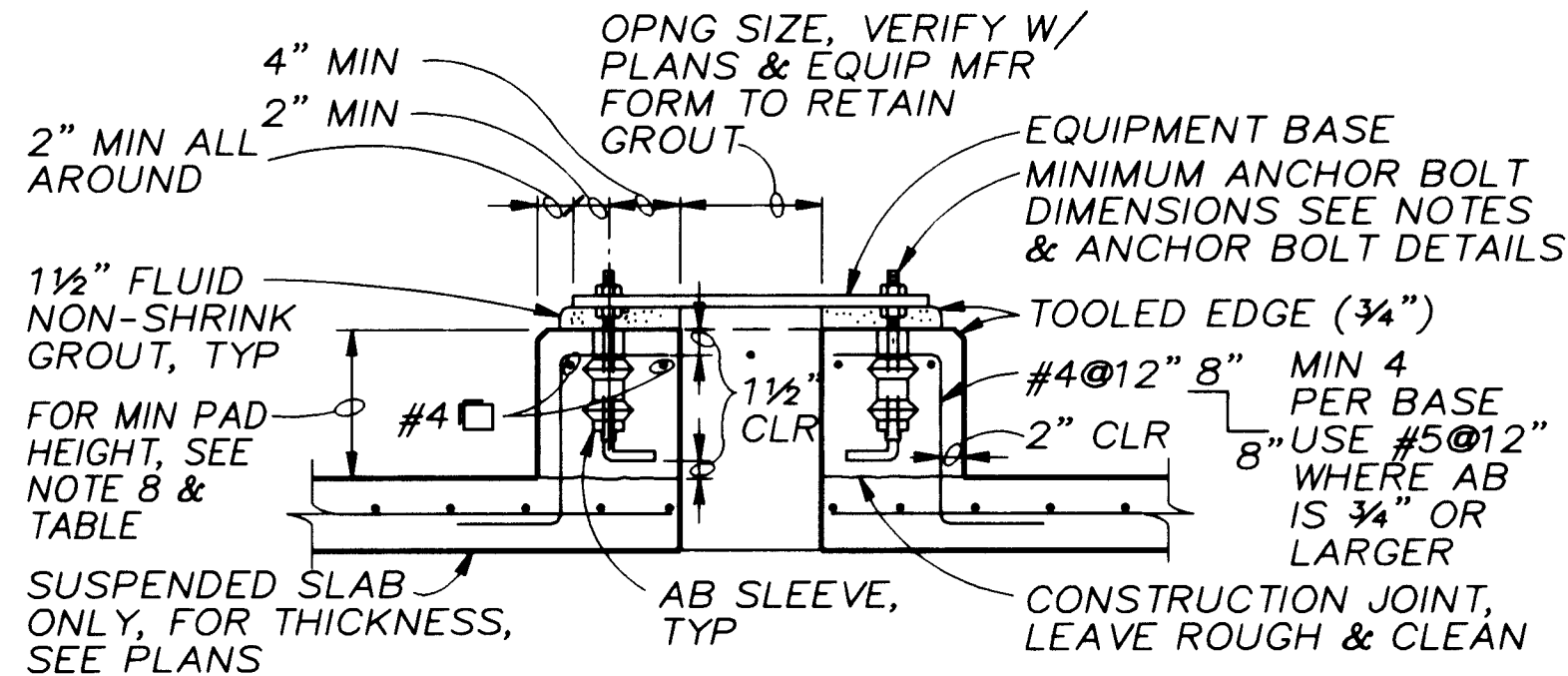


NOTE: SEE EQUIPMENT BASE NOTES.

TYPE A

EQUIPMENT PAD

201

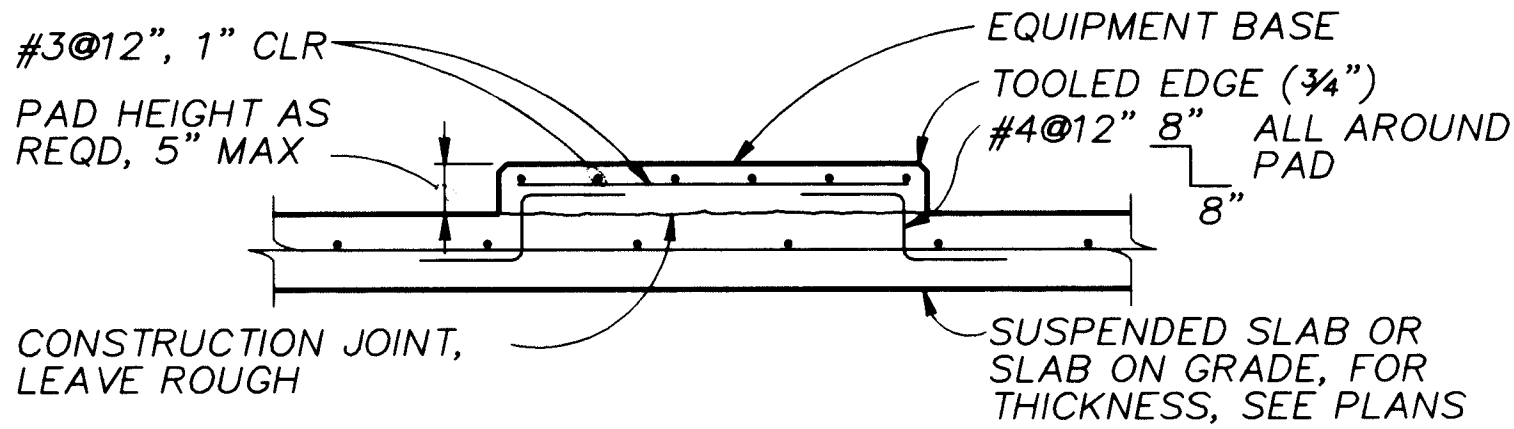


NOTE: SEE EQUIPMENT BASE NOTES.

TYPE C

EQUIPMENT PAD

202



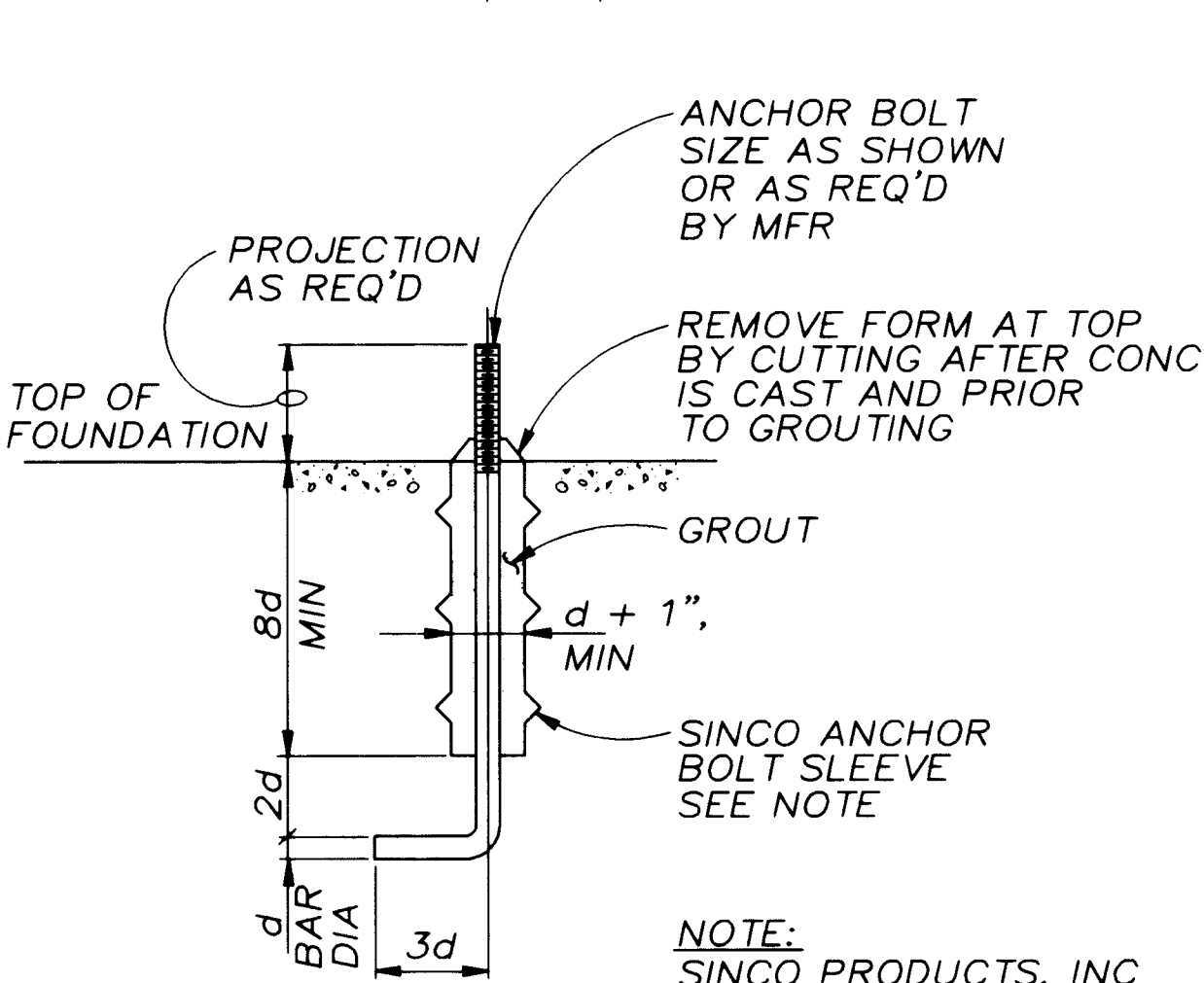
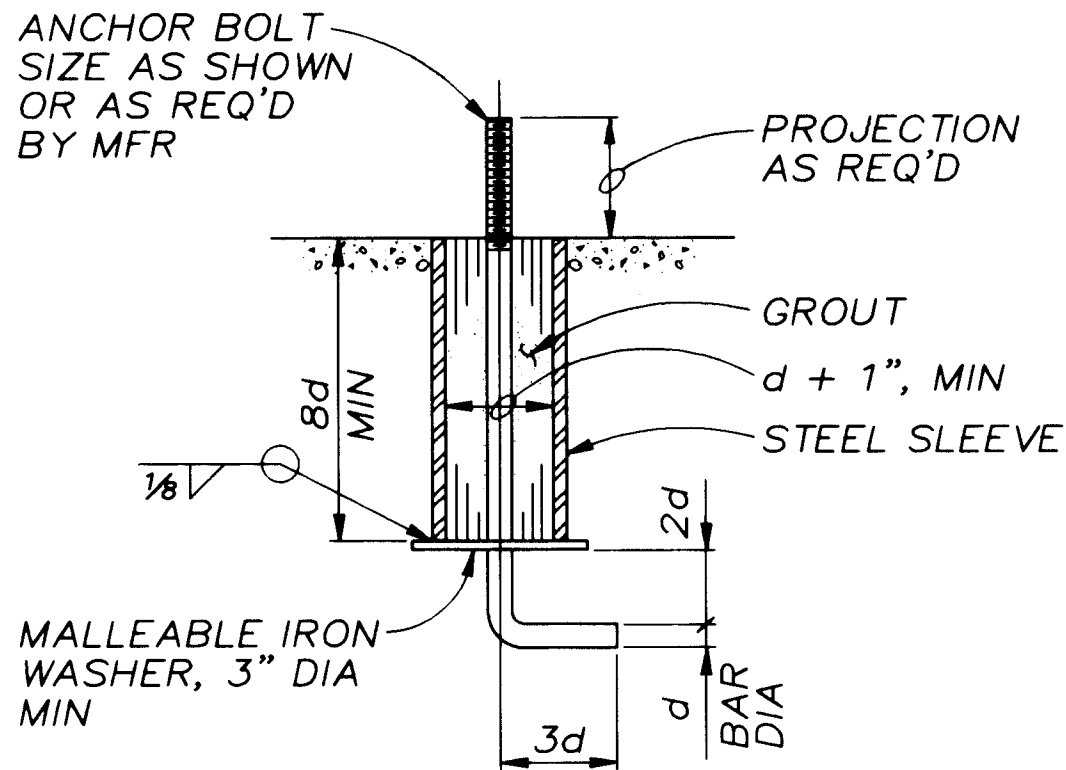
NOTES:

- 1. SEE EQUIPMENT BASE NOTES.
- 2. WHEN ANCHORAGE OF EQUIPMENT TO SLAB IS REQUIRED, USE SST WEDGE ANCHORS SPECIFIED.

TYPE F

EQUIPMENT PAD

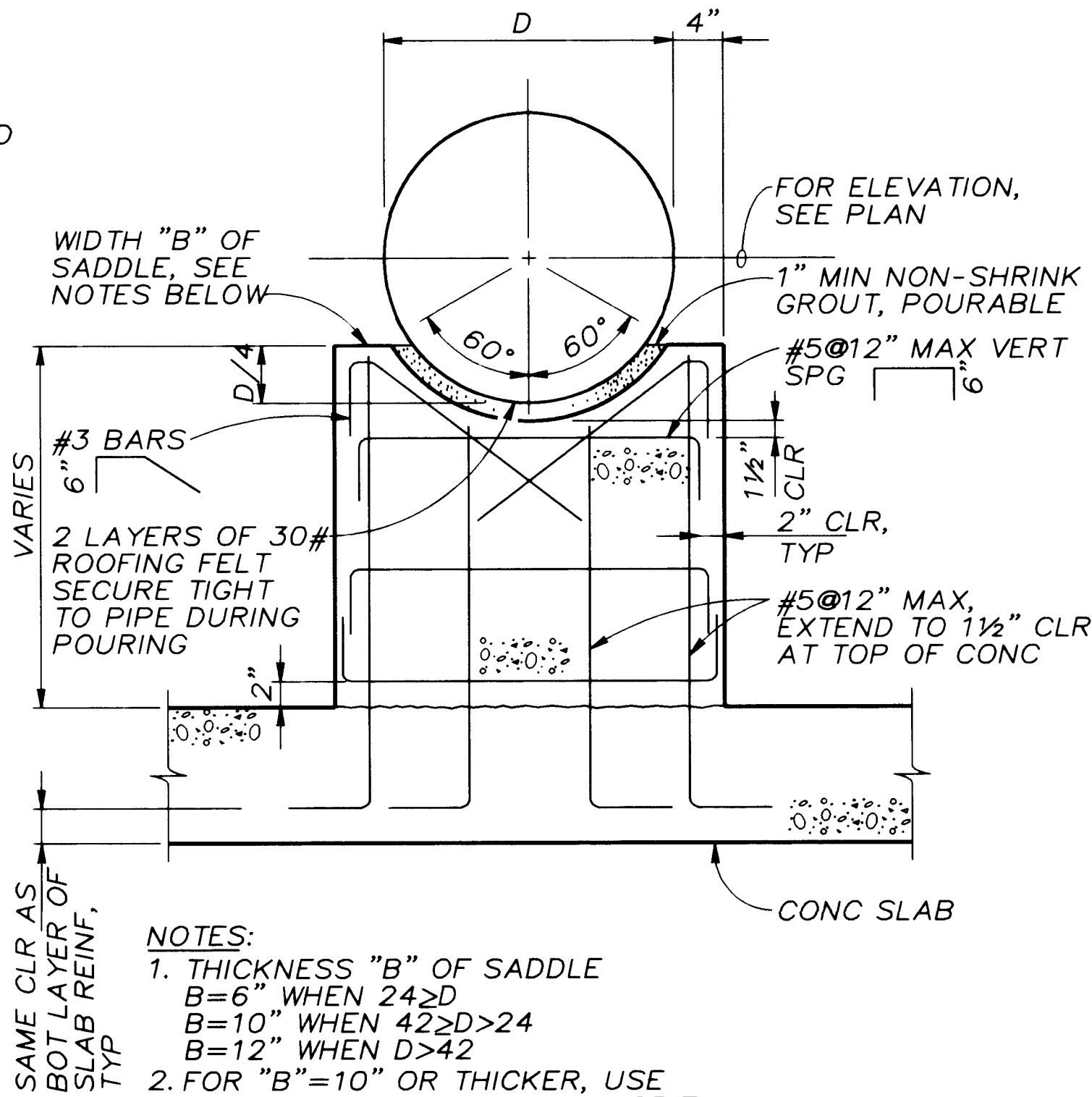
203



NOTE: SINCO PRODUCTS, INC EAST HAMPTON, CT 1-800-6753

ALTERNATE MACHINERY ANCHOR BOLT

204

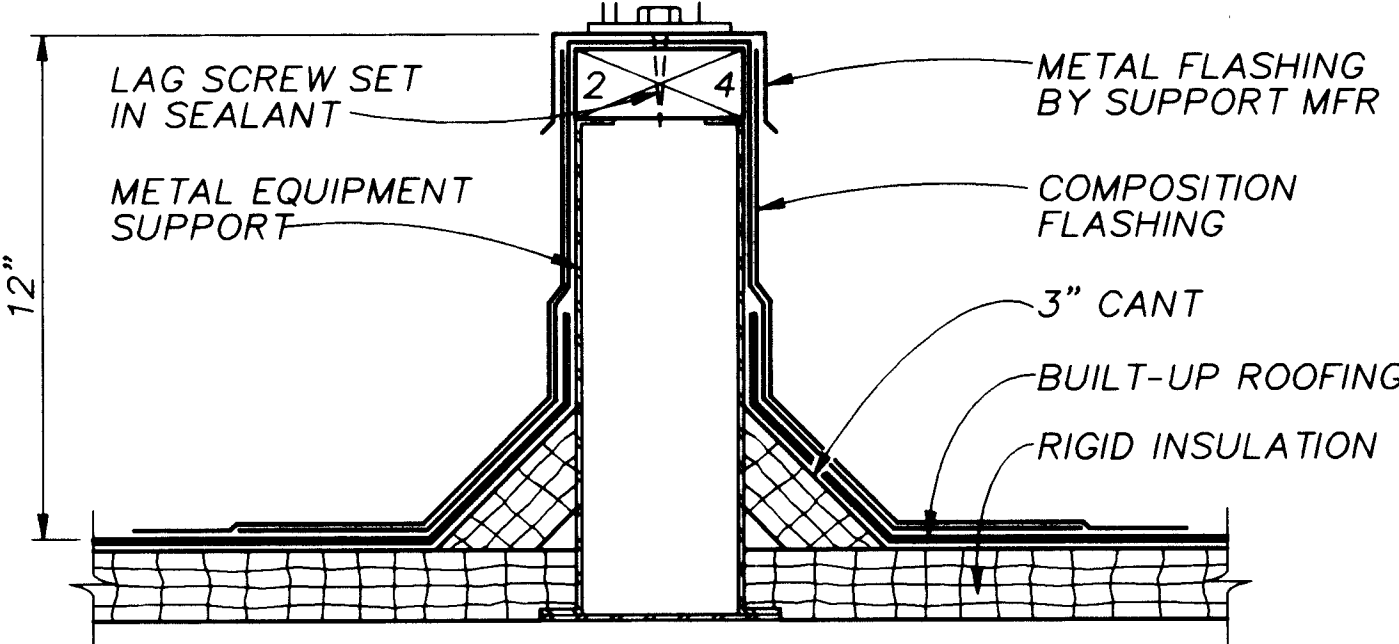


NOTES:

- 1. THICKNESS "B" OF SADDLE B=6" WHEN 24>D B=10" WHEN 42>D>24 B=12" WHEN D>42
- 2. FOR "B"=10" OR THICKER, USE 2 LAYERS OF REINF, TURN HORIZ BARS 90° TO HOOK AROUND VERTS, 1 1/2" CLR OF CONCRETE

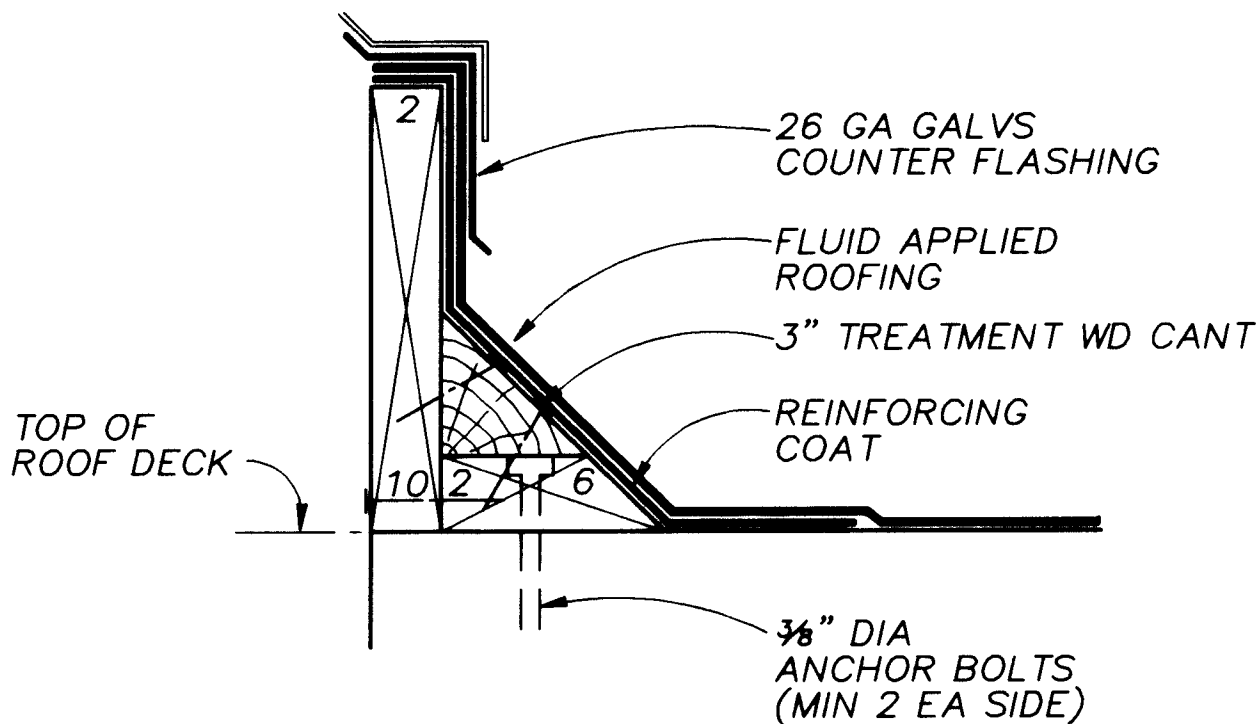
CONCRETE PIPE SUPPORT

205



EQUIPMENT SUPPORT DETAIL

206

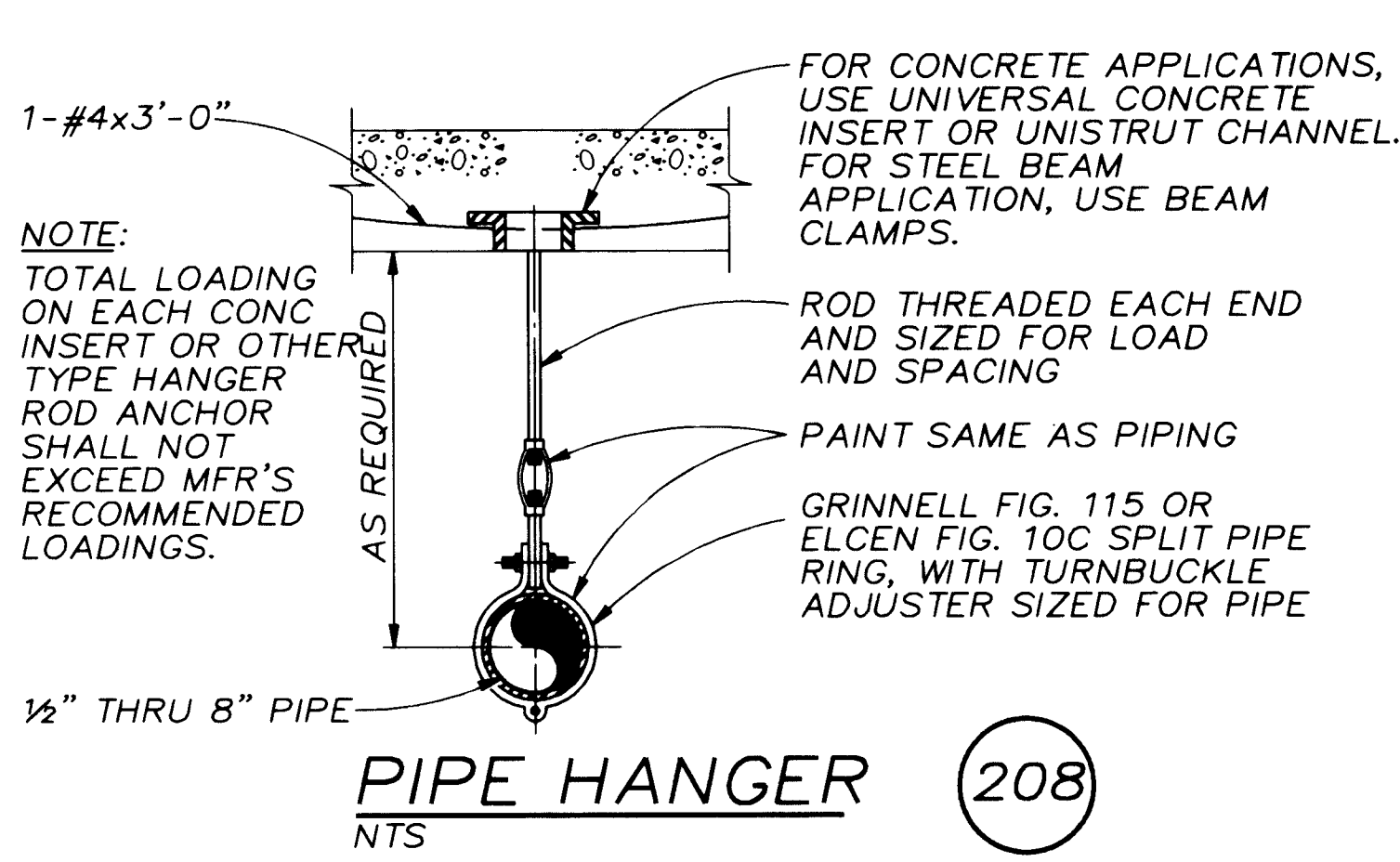


MECHANICAL CURB DETAIL

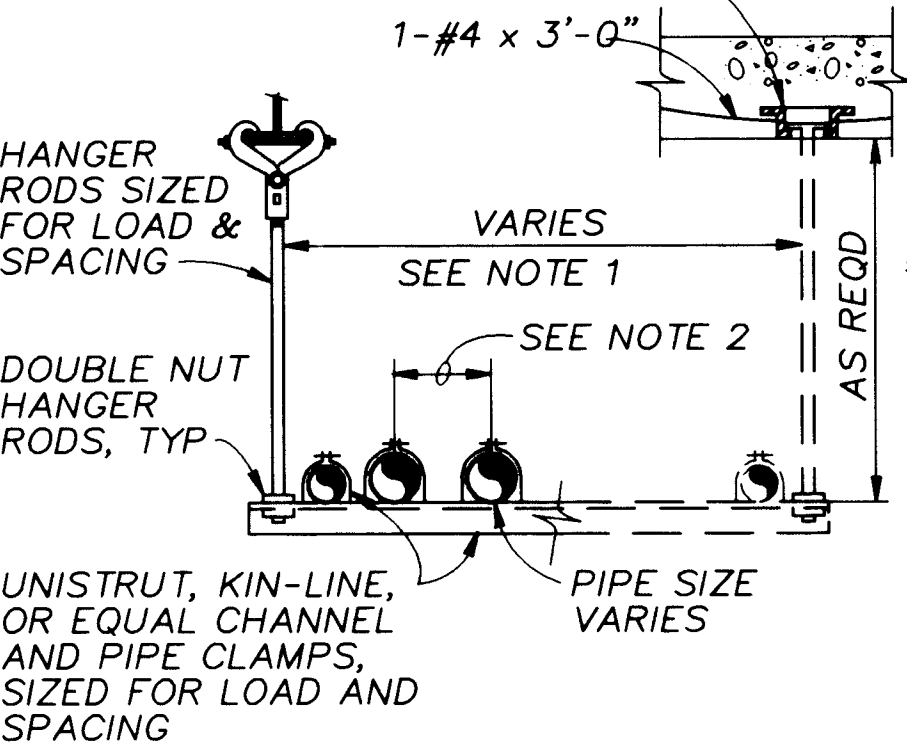
207

NOTE:

- 1. ALL WOOD IN DETAILS (206) AND (207) TO BE PRESSURE TREATED.

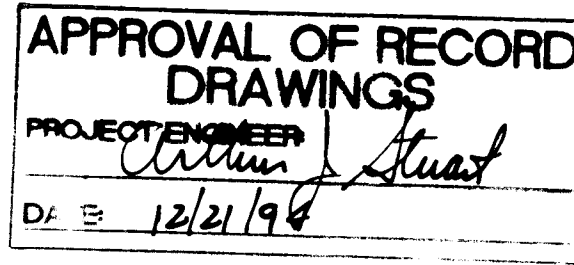


FOR CONCRETE APPLICATIONS, USE UNIVERSAL CONCRETE INSERT OR UNISTRUT CHANNEL. FOR STEEL BEAM APPLICATION, USE BEAM CLAMPS.



TRAPEZE PIPE HANGER

209



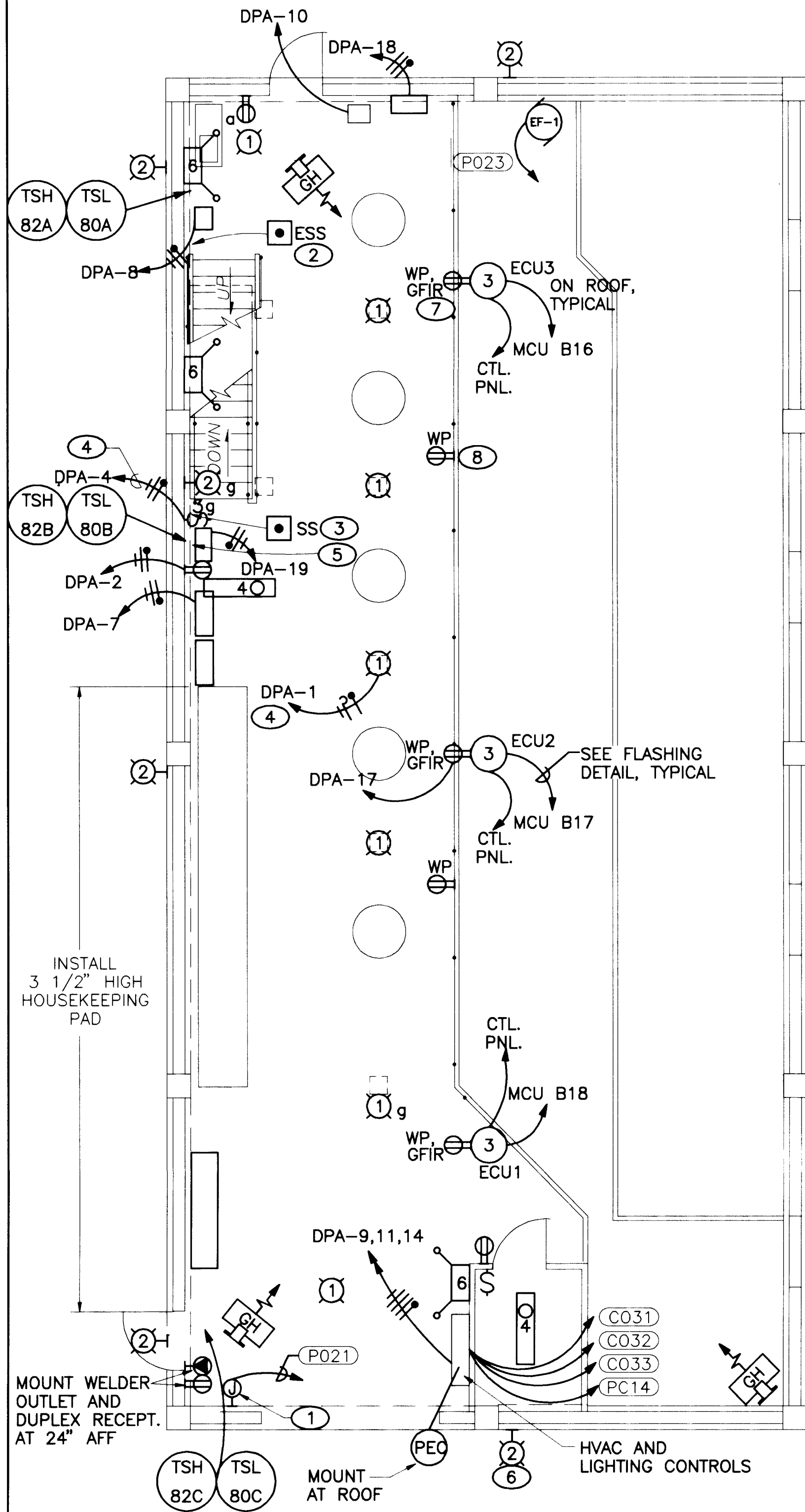
RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994. THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS, WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

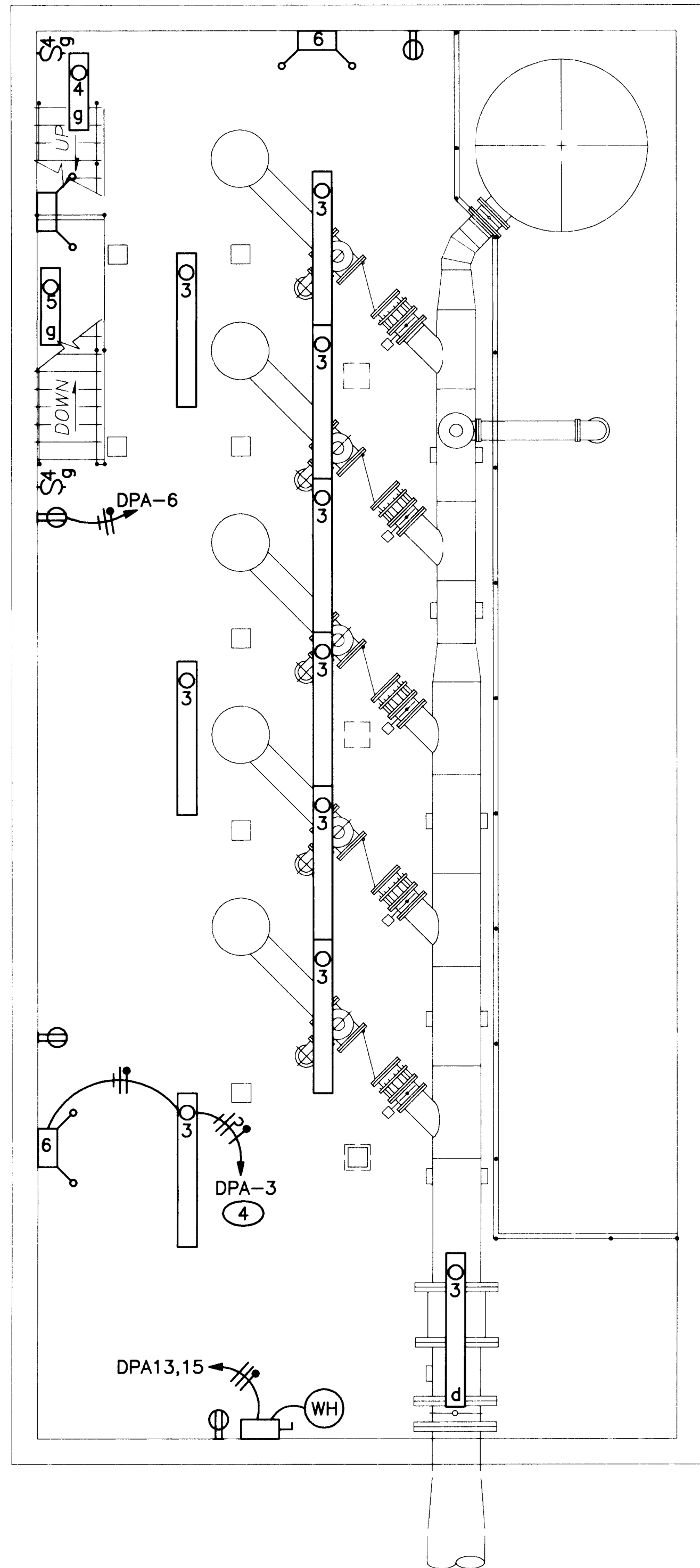
VERIFICATION: BAR IS ONE INCH ON ORIGINAL DRAWING 0 1" IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION MECHANICAL DETAILS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	M-8	MAP NO.	SHEET 39	OF 57	

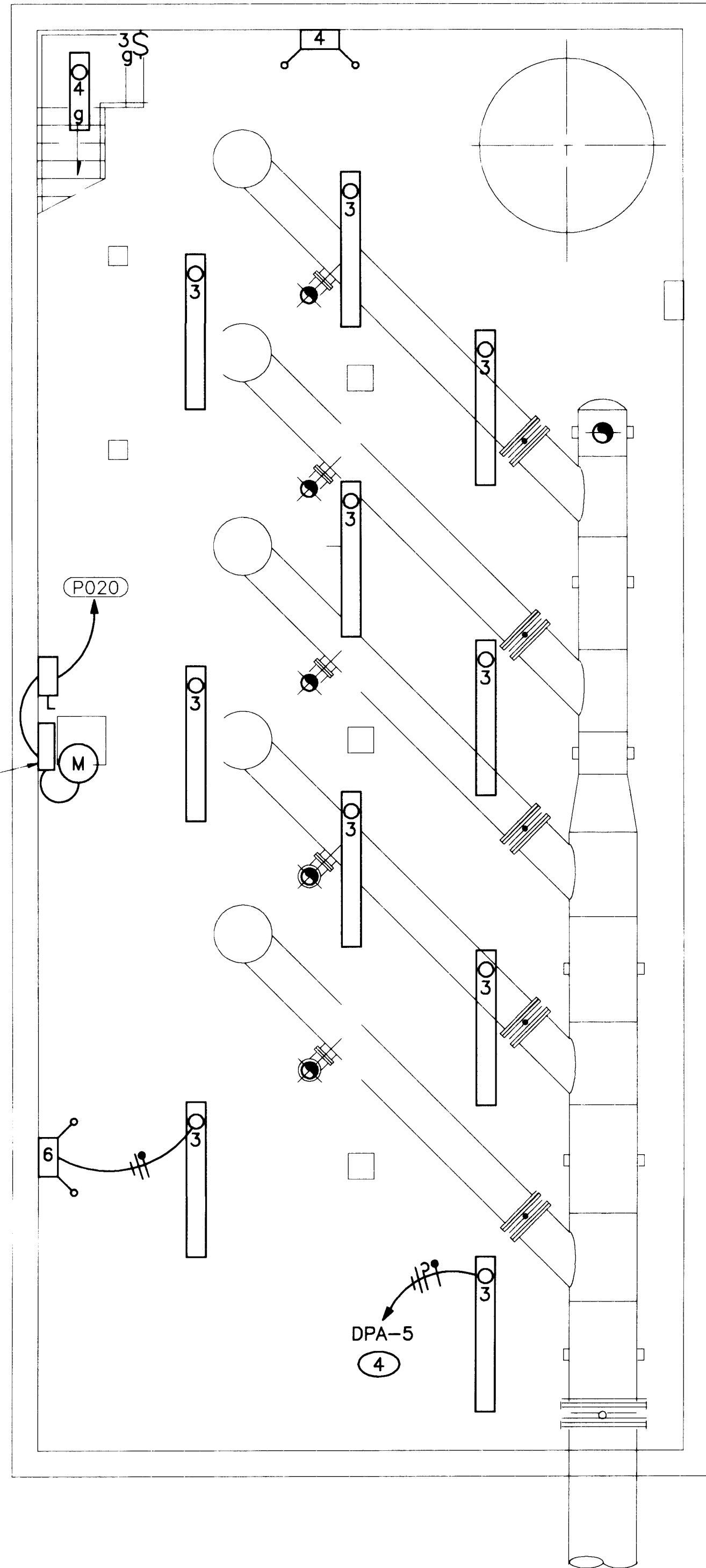
CP NO. 4214.90



PLAN AT EL 5316
3/16" = 1'-0"



PLAN AT EL 5304
3/16" = 1'-0"



PLAN AT EL 5291
3/16" = 1'-0"

NOTES

- POWER CONNECTIONS TO OVERHEAD CRANE CONTACT RAILS. SET 4" X 4" X 4" JUNCTION BOX. EXTEND EACH CONDUCTOR THROUGH SEPARATELY BUSHED OPENING AND CONNECT TO CRANE CONTACT RAILS. NO SPLICES ALLOWED IN THIS BOX.
- MOUNT MUSHROOM HEAD EMERGENCY STOP SWITCH AT INDICATED LOCATION. INSTALL NP OVER SWITCH. LEGEND: "CRANE DISABLE. PRESS BEFORE GOING UP STAIRS." CONNECT SWITCH TO CRANE CONTROLS. SEE SCHEMATICS.
- MOUNT EXHAUST FAN START/STOP SWITCH IN INDICATED LOCATION. INSTALL NP OVER SWITCH. LEGEND "RUN FAN FOR MINIMUM 10 MINUTES BEFORE GOING DOWN THE STAIRS."
- ROUTE HOME RUN CONDUCTORS THROUGH LIGHTING/HVAC CONTROL PANEL AS SHOWN IN THE LIGHTING SCHEMATIC.
- INSTALL 100A, 30 CIRCUIT PANELBOARD, DPA, IN NEMA 12 ENCLOSURE AT INDICATED LOCATION.
- HPS SHARP CUTOFF WALL PACK, TYPICAL 5. MOUNT ON OUTSIDE WALL 3" BELOW LOWER EDGE OF PARAPET.
- MOUNT WEATHER PROOF GFIR ON SIDE OF EACH EVAPORATIVE COOLER.
- MOUNT WP RECEPTACLE ON CROSS MEMBER OF RAILING. TYPICAL OF 2.

LUMINAIRE SCHEDULE

TYPE	MFG.	CATALOG #	LAMPS-VOLTS-MOUNT
1 HID	HALOPHANE	ENDR 175MH 12A418	1 120 CEILING
2 HID	HALOPHANE	WL2K 100HP 12B2	1 120 WALL
3 FLOURES.	METALUX	8TIA 240 120V	4 120 CEILING
4 FLOURES.	METALUX	IA 24 120V	2 120 CEILING
5 FLOURES.	METALUX	BC 240 120V	2 120 WALL
6 EMERG.	EMERGI-LITE	24ILSC 72-2 1E AUC	2 120 WALL

ALLOW 12V 72W WITH 2-12V 9W LAMPS.

APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER
DATE 12/21/94

RECORD DRAWINGS

Revisions Drawn by: Michael Brewer Date Nov. 15, 1994

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VERIFY SCALES
BAR IS ONE INCH ON ORIGINAL DRAWING
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

MOLZEN-CORBIN & Associates

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
TITLE: CHARLES WELLS PUMP STATION
POWER, RECEPTACLES, & LIGHTING

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					
DRAWING NO.	E-2	MAP NO.		SHEET 41 OF 57	

CP NO. 4214.90

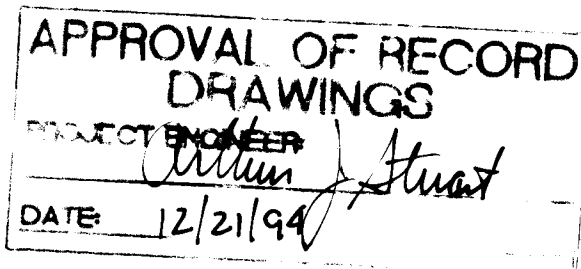
CONTROL SCHEDULE					
TAG	SIZE	CONDUCTOR	FROM	TO	REMARKS
C001	1 1/4"	1 TYPE 1, 14 #14	RTB	MCU H1	
C002	1 1/4"	1 TYPE 1, 14 #14	RTB	MCU H2	
C003	1 1/4"	1 TYPE 1, 14 #14	RTB	MCU H3	
C004	1 1/4"	1 TYPE 1, 14 #14	RTB	MCU H10	
C005	1 1/4"	1 TYPE 1, 14 #14	RTB	MCU H11	
C006	2"	2 TYPE 1, 9 TYPE 2, 2 #12, #12 GND	MCU H1	BOOSTER PUMP 1	
C007	2"	2 TYPE 1, 9 TYPE 2, 2 #12, #12 GND	MCU H2	BOOSTER PUMP 2	
C008	2"	2 TYPE 1, 9 TYPE 2, 2 #12, #12 GND	MCU H3	BOOSTER PUMP 3	
C009	2"	2 TYPE 1, 9 TYPE 2, 2 #12, #12 GND	MCU H10	BOOSTER PUMP 4	
C010	2"	2 TYPE 1, 9 TYPE 2, 2 #12, #12 GND	MCU H11	BOOSTER PUMP 5	
C011	1"	14 #14, #12 GND	RTB	PBV1 PS11,12 ZS12 KWH	
C012	1"	14 #14, #12 GND	RTB	PBV2 PS21,22 ZS22 KWH	
C013	1"	14 #14, #12 GND	RTB	PBV3 PS31,32 ZS12 KWH	
C014	1"	14 #14, #12 GND	RTB	PBV4 PS41,42 ZS12 KWH	
C015	1"	14 #14, #12 GND	RTB	PBV5 PS51,52 ZS12 KWH	
C016	1 1/4"	4 TYPE 1	RTB	MCU E	
C017	3/4"	MANUFACTURER'S CABLE & #6 GND	FLOW RELAY	FLOW TRANSMITTER	
C018	1/4"	1 TYPE 1, 4 #14, #12 GND	RTB	FLOW TRANSMITTER	
C019	3/4"	5 #14	ZTCV	ZTCV CONTROL BOX	
C020	3/4"	4 #14	RTB	ZTCV CONTROL BOX	
C021	3/4"	1 TYPE 1	RTB	LEVEL TRANSMITTER	
C022	3/4"	2 #14, #12 GND	RTB	LSH	
C023	3/4"	2 #14, #12 GND	SURGE CONTROL PANEL		RTB
C024	3/4"	2 #14, #12 GND	SURGE CONTROL PANEL		ZSC
C025	3/4"	8 #14, #12 GND	AIR COMPRESSOR CNTRLS		SURGE CONTROL PANEL
C026	3/4"	2 #14, #12 GND	PT/CT KWH METER		RTB
C027	3/4"	4 #14, #12 GND	SURGE CONTROL PANEL		STILLING WELL
C028	3/4"	4 #14, #12 GND	SURGE CONTROL PANEL		AVS-1, AAS
C029	3/4"		RTU	RADIO	OWNER PROVIDES CONDUCTORS
C030	2 1/2"		RTU	RTB	
C031	3/4"	5 #14	HEAT/COOL CTRL PANEL		
C032	3/4"	5 #14	HEAT/COOL CTRL PANEL		
C033	3/4"	5 #14	HEAT/COOL CTRL PANEL		

POWER/CONTROL (PC) SCHEDULE					
TAG	SIZE	CONDUCTOR	FROM	TO	REMARKS
PC01	1 1/4"	15 #12, 1 #12 GND	MCU E3	DV-1	PULL ZSO AND ZSC SWITCH CONDUCTORS THROUGH MCU B WITHOUT TERMINATIONS TO RTB. CONCRETE ENCASED WHEN CONDUIT PASSES UNDERNEATH STREET.
PC02	1 1/4"	15 #12, 1 #12 GND	MCU E4	DV-2	
PC03	1 1/4"	15 #12, 1 #12 GND	MCU E5	DV-3	
PC04	1 1/4"	15 #12, 1 #12 GND	MCU E6	DV-4	
PC05	1 1/4"	15 #12, 1 #12 GND	MCU E7	DV-5	
PC06	1 1/4"	15 #12, 1 #12 GND	MCU E8	SUS	
PC07	1"	7 #12, 1 #12 GND	JAN-RTB	AIR COMP. CONTROL PANEL	
PC08	1 1/4"	15 #12, 1 #12 GND	MCU E14	ZTV	
PC09	1 1/4"	15 #12, 1 #12 GND	MCU E15	BYPASS VAULT JUNCTION BOX	
PC10	2"	25 #12, 4 #5, 1 #10 GND	HYDRA. VAULT LF.	HYDRA. VAULT	
PC11	3/4"	1 TYPE 1, 2 #14, 1 #12 GND	RTB	PT	
PC12	1 1/4"	15 #12, 1 #12 GND	MCU B8	SSIV	
PC13	3/4"	2 #12	POWER SUPPLY	RTB	
PC14	3/4"	6 #12	H/C CONTROL PANEL	MCU-16,17,18	

NOTES

1. GROUND WIRES IN CONDUITS TO BE EGGV INSULATION.

POWER SCHEDULE					
TAG	SIZE	CONDUCTOR	FROM	TO	REMARKS
P001	4"	HY PNM	RISER POLE	CT/PT ENCLOSURE	CONDUIT CONCRETE ENCASED PNM WILL TERMINATE IN PT/CT ENCLOSURE
P002	4"	3 #2, 15KV CABLE	CT/PT ENCLOSURE	15 KV PRIMARY SWITCH	CONDUIT CONCRETE ENCASED
P003	4"	3 #2, 15KV CABLE	15 KV PRIMARY SWITCH	15 KVA PAD MOUNT TRANSFORMER	CONDUIT CONCRETE ENCASED
P004	4"	3 #2, 15KV CABLE	15 KV PRIMARY SWITCH	15 KVA PAD MOUNT TRANSFORMER	CONDUIT CONCRETE ENCASED
P005	3"	3 #4/0, 5KV SHIELDED CABLE, 1 #2/0 GND	15 KVA PAD MOUNT TRANSFORMER	4160V MCU MAIN H5	
P006	3"	3 #4/0, 5KV SHIELDED CABLE, 1 #2/0 GND	15 KVA PAD MOUNT TRANSFORMER	4160V MCU MAIN H6	
P007	2"	3 #6 5KV CABLE, #5 GND	MCU H4	MCU H9	
P008	2"	3 #6 5KV CABLE, #5 GND	MCU H3	75 KVA TRANSFORMER	
P009	2 1/2"	3 #4 5KV CABLE, #4 GND	MCU H1	BOOSTER PUMP 1	
P010	2 1/2"	3 #4 5KV CABLE, #4 GND	MCU H2	BOOSTER PUMP 2	
P011	2 1/2"	3 #4 5KV CABLE, #4 GND	MCU H3	BOOSTER PUMP 3	
P012	2 1/2"	3 #4 5KV CABLE, #4 GND	MCU H10	BOOSTER PUMP 4	
P013	2 1/2"	3 #4 5KV CABLE, #4 GND	MCU H11	BOOSTER PUMP 5	
P014	3"	4 #4/0, #2 GND	75 KVA TRANSFORMER	MCU B2	
P015	1 1/4"	3 #6, 1 #6 GND	MCU B10	DPA	
P016	1 1/4"	3 #4, 1 #6 GND	MCU B11	WELDER OUTLET	
P017	3/4"	3 #10, 2 #12, #12 GND	MCU B16	EC1	
P018	3/4"	3 #10, 2 #12, #12 GND	MCU B17	EC2	
P019	3/4"	3 #10, 2 #12, #12 GND	MCU B18	EC3	
P020	3/4"	4 #12, #12 GND	MCU B19	SUMP PUMP	
P021	1"	4 #8, #10 GND	MCU B21	OVERHEAD CRANE	
P022	3/4"	3 #12, #12 GND	DPA	BYPASS VAULT JUNCTION BOX	
P023	3/4"	4 #10, #12 GND	MCU B13	EXHAUST FAN	
P024	1"	2 #6, 1 #8, #8 GND	MCU B20	WELL 1 JUNCTION BOX	CONCRETE ENCASED WHEN CONDUIT PASSES UNDERNEATH STREET
P025	3/4"	3 #8, #10 GND	MCU B12	BYPASS VAULT JUNCTION BOX	
P026	4"	3 #2, 15KV CABLE	15 KV PRIMARY SWITCH	1000 KV PAD MOUNT TRANSFORMER AT CHARLES WELLS WELL NO. 1	CONDUIT CONCRETE ENCASED



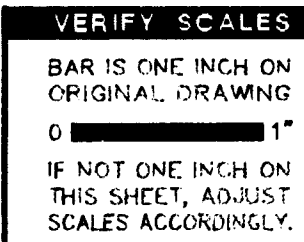
26 4214.904394

RECORD DRAWINGS

Revisions Drawn by: *Michael Brewer* Date: *Nov 15, 1994*

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SCANNED BY LASON

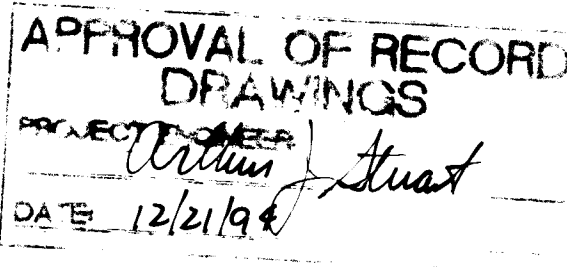


CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STA. -ELECTRICAL CONDUIT SCHEDULE					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					
DRAWING NO.	E-4	MAP NO.		SHEET 43 OF 57	

CP NO. 4214.90

SOME CONDUITS AND CONDUCTORS ON THE ONE-LINE ARE NOT SHOWN ON THE PLAN VIEWS. INSTALL AS IF FULLY DETAILED.

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VERIFY SCALE
BAR IS ONE INCH
ORIGINAL DRAWING
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SCALES ACCORDINGLY

MOLZEN-CORBIN & Associates 

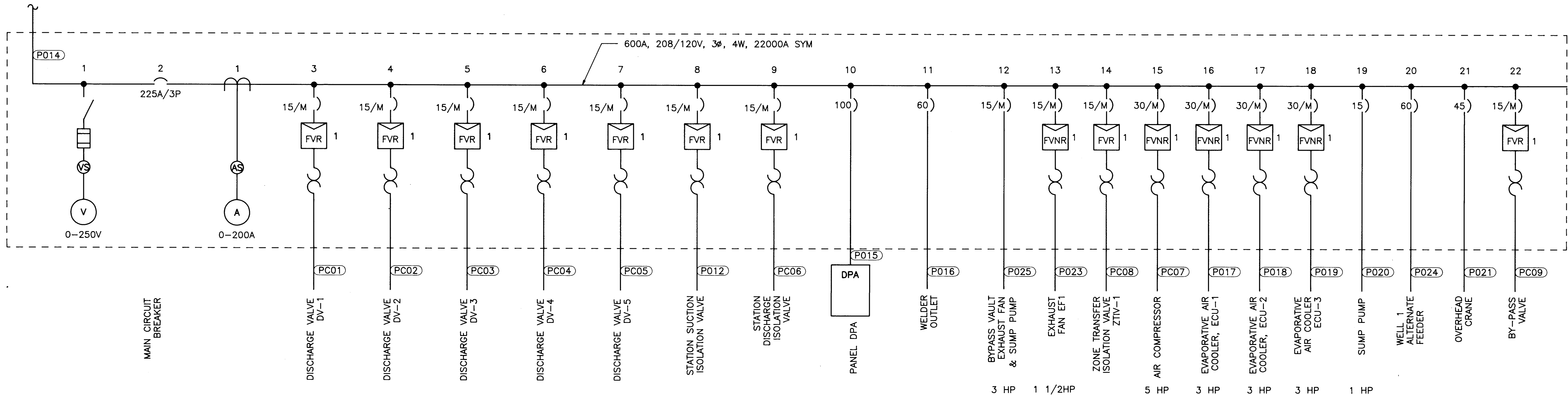
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	
TITLE:	CHARLES WELLS PUMP STATION MEDIUM VOLTAGE ONE LINE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					

DRAWING NO.	E-5	MAP NO.	SHEET 44 OF 57
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CP NO. 4214.90



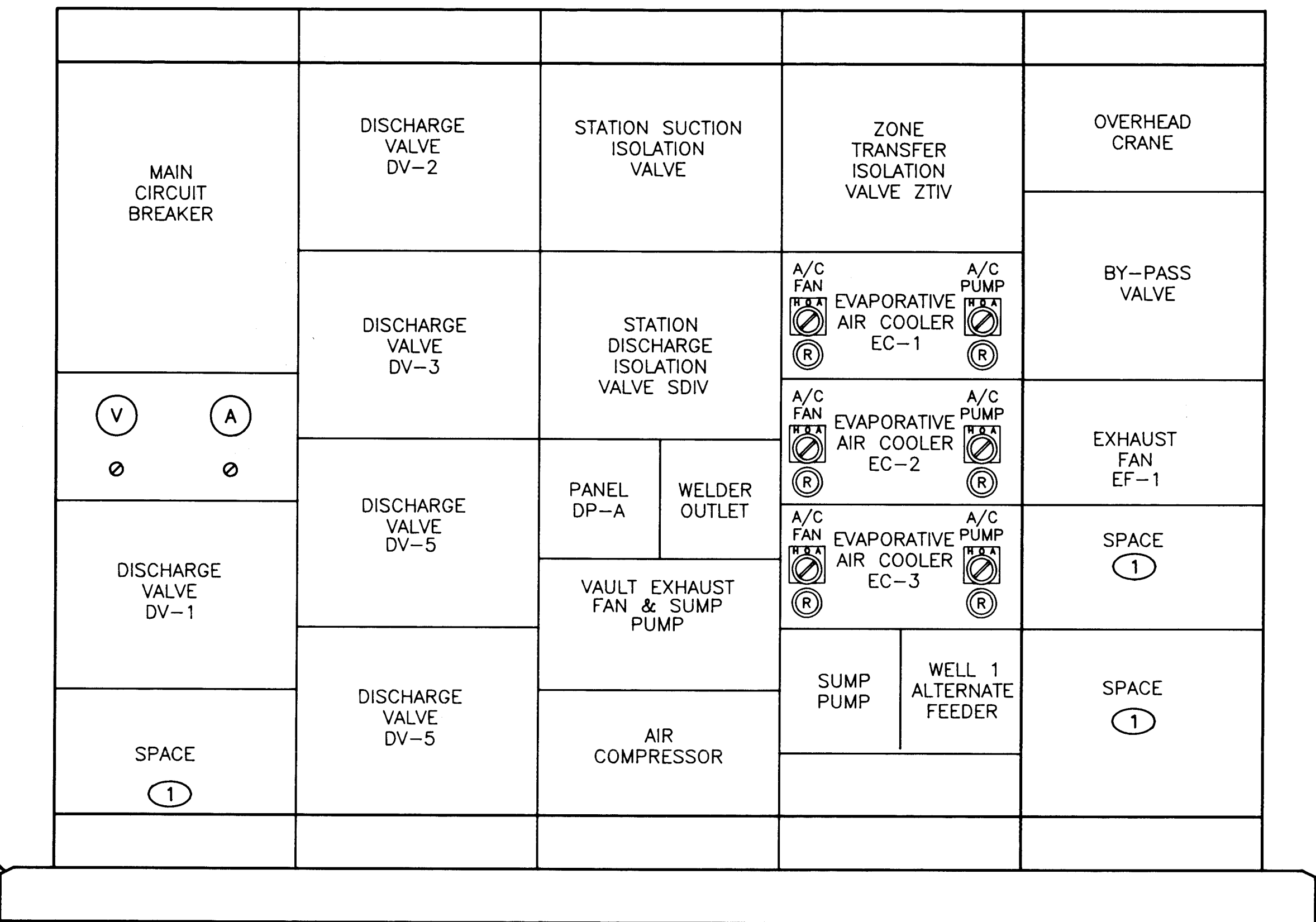


208 MOTOR CONTROL CENTER MCU-B ONE-LINE DIAGRAM

N.T.S.

NOTES

- 1 FULL HEIGHT 300A VERTICAL BUS BEHIND COMPARTMENT FOR FUTURE USE.



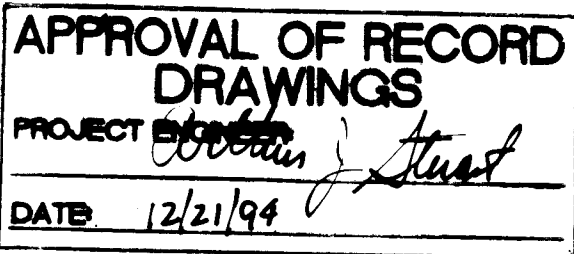
MOTOR CONTROL CENTER MCU-B ELEVATION

N.T.S.

PANEL DPA											
DESCRIPTION	CB	NO	#	NO	CB	DESCRIPTION	CB	NO	#	NO	CB
LIGHTS - GROUND LEVEL	20	1	A	2	20	RECEPTS. GROUND LEVEL	20	1	A	2	20
LIGHTS - MID. LEVEL	20	3	B	4	20	LIGHTS, STAIRS	20	3	B	4	20
LIGHTS - BASEMENT LEVEL	20	5	C	6	20	RECEPTS. MID. LEVEL	20	5	C	6	20
RTU	20	7	A	8	20	RADIO	20	7	A	8	20
OUTSIDE LIGHTS	20	9	B	10	20	ZTCV CONTROL PANEL	20	9	B	10	20
LIGHTING/HVAC CONTROL PANEL	20	11	C	12	20	BY PASS VAULT LIGHTS	20	11	C	12	20
WATER HEATER	20	13	A	14	20	GAS UNIT HEATER	20	13	A	14	20
RECEPTS. ON ROOF	20	17	C	18	20	BY PASS VAULT RECEPTS.	20	17	C	18	20
POWER SUPPLY	20	19	A	20	20	SPARE	20	19	A	20	20
SPARE	20	21	B	22	20	EMERGENCY LIGHTS	20	21	B	22	20
SPARE	20	23	C	24	20	SPRINKLER CONTROL	20	23	C	24	20
SPACE		25	A	26		SPACE		25	A	26	
		27	B	28				27	B	28	
		29	C	30				29	C	30	

120/208V
3 PHASE, 4 WIRE, 30 CIRCUIT
100 AMP, MLO
ENCLOSURE: LOCKABLE NEMA 12

N G



RECORD DRAWINGS

Revisions Drawn by *Michael Brown* Date *Nov. 15, 1994*

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

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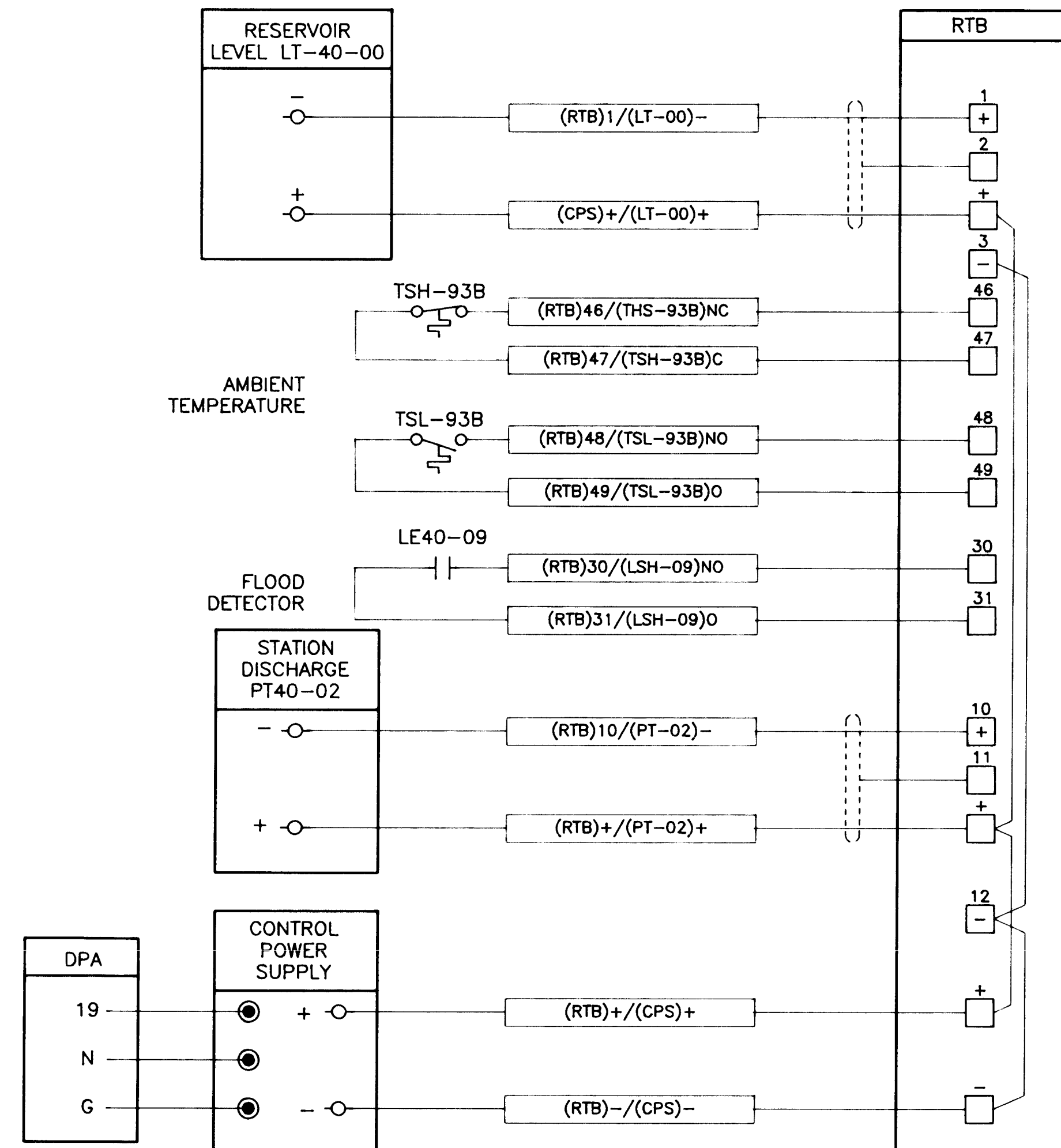
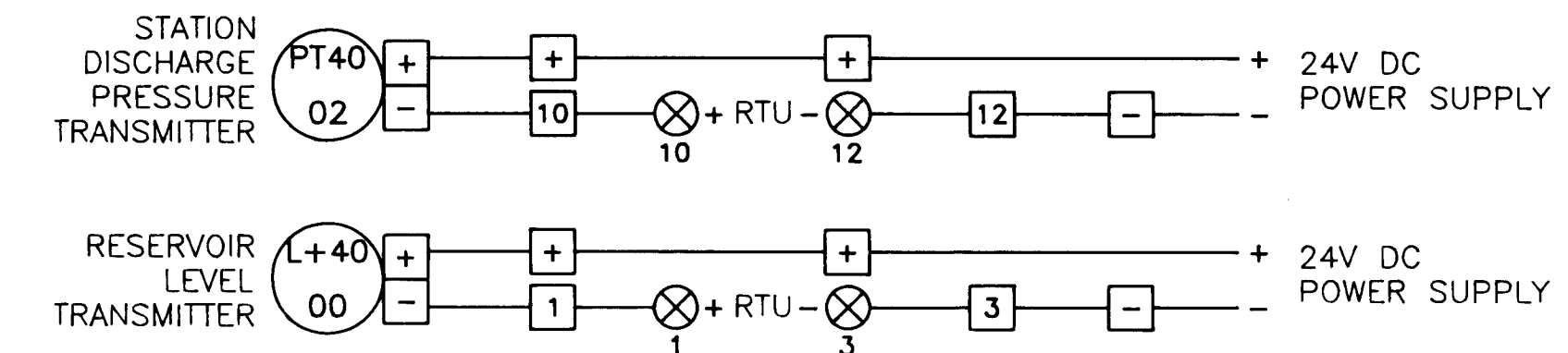
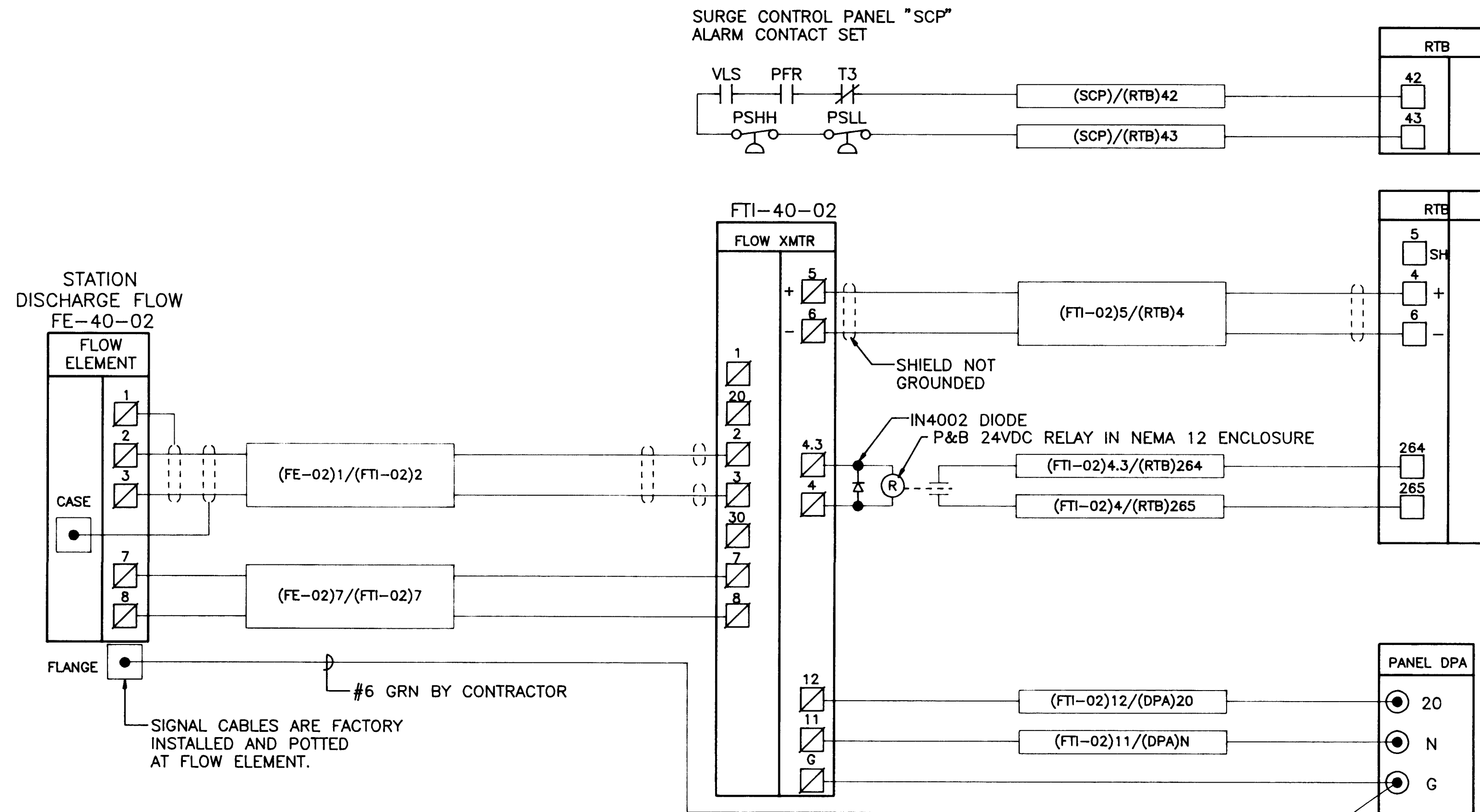
MOLZEN-CORBIN & Associates

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: CHARLES WELLS PUMP STATION
208V ONE-LINE AND MCC ELEVATION

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					
DRAWING NO.	E-6	MAP NO.		SHEET 45 OF 57	

CP NO. 4214.90



APPROVAL OF RECORD
DRAWINGS

PROJECT ENGINEER

DATE 12/21/94

RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994

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MOLZEN-CORBIN
& Associates

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION

TITLE: CHARLES WELLS PUMP STATION
CONNECTION DIAGRAMS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					

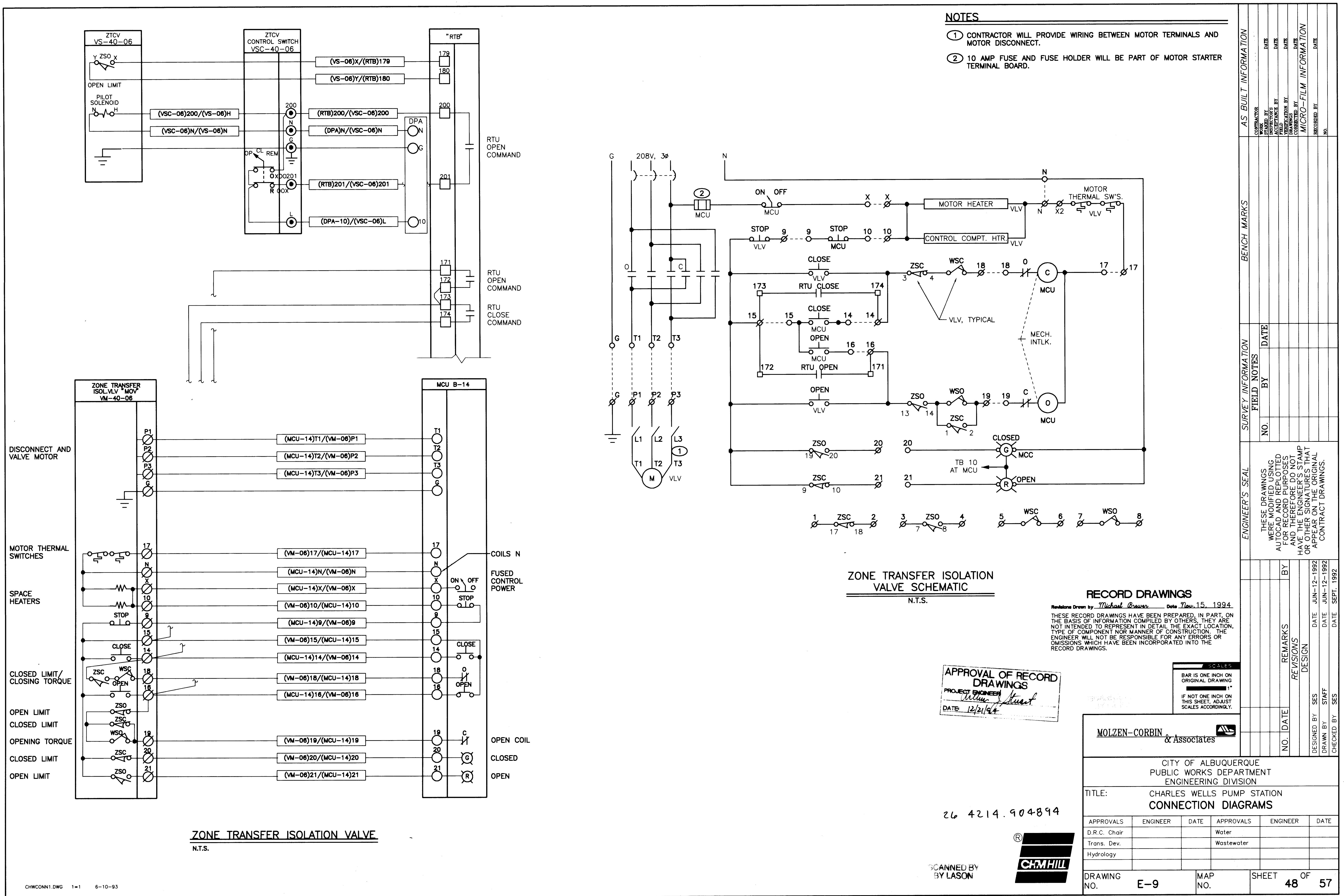
DRAWING NO. E-8 MAP NO. SHEET 47 OF 57

CP NO. 4214.90

26 4214.904794



SCANNED BY
BY LASON



NOTES

- 1 CONTRACTOR WILL PROVIDE WIRING BETWEEN MOTOR TERMINALS AND MOTOR DISCONNECT.
- 2 10 AMP FUSE AND FUSE HOLDER WILL BE PART OF MOTOR STARTER TERMINAL BOARD.

ZONE TRANSFER ISOLATION VALVE SCHEMATIC
N.T.S.

RECORD DRAWINGS

Revisions Drawn by: Michael Brown Date: Nov. 15, 1994
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APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE 12/21/94

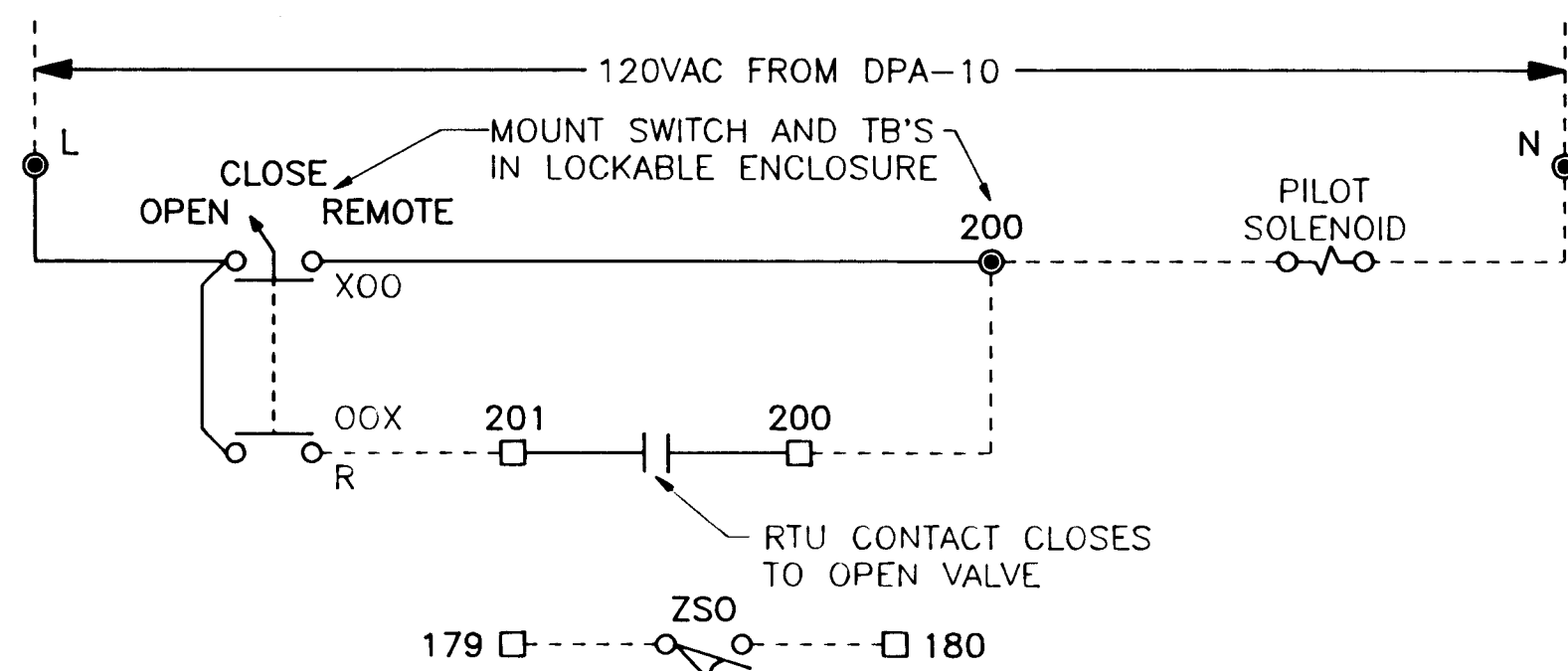
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MOLZEN-CORBIN & Associates

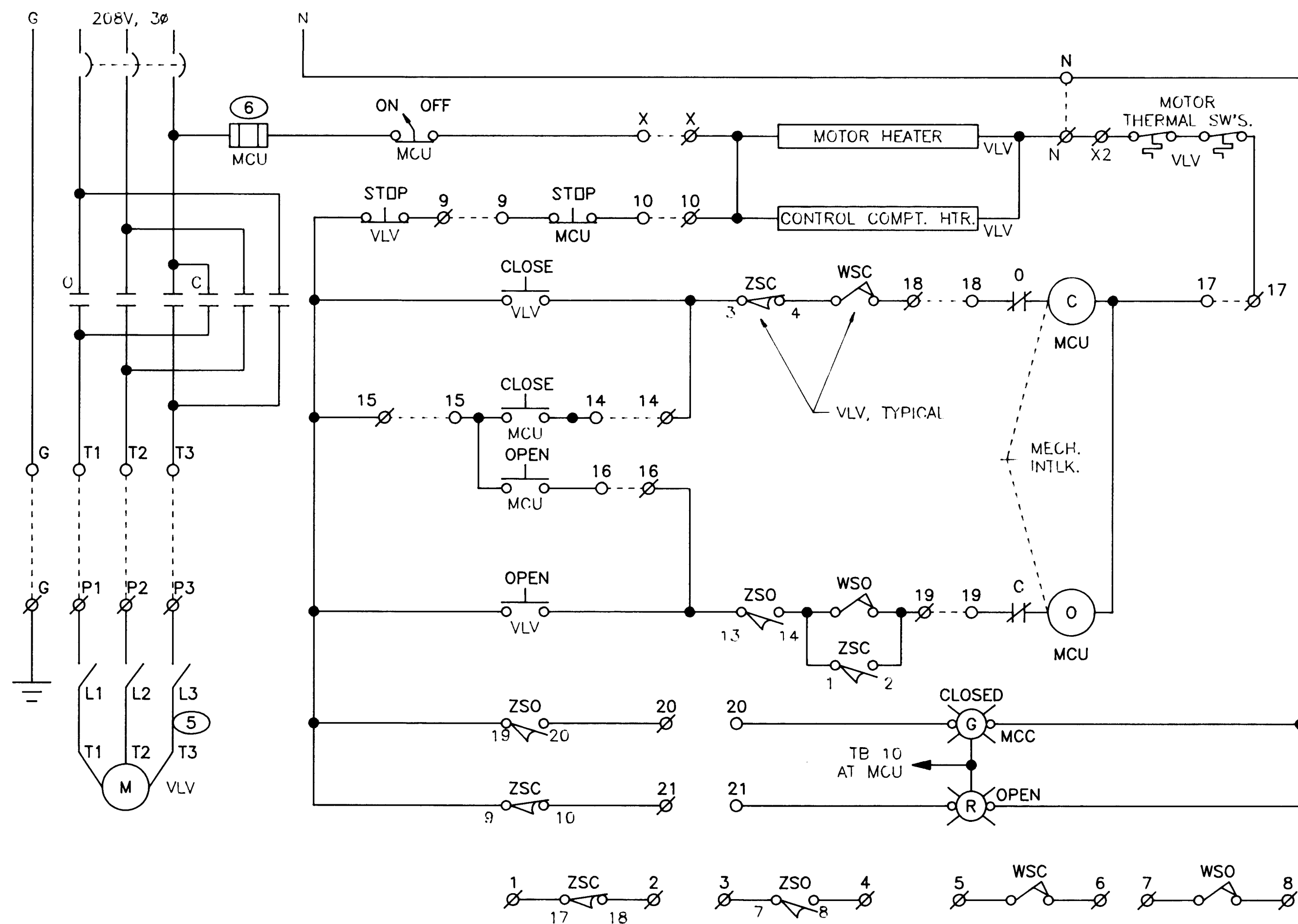
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION CONNECTION DIAGRAMS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					
DRAWING NO. E-9		MAP NO.		SHEET 48 OF 57	

SCANNED BY
BY LASON





ZONE TRANSFER CONTROL VALVE (ZTCV) SCHEMATIC
N.T.S.



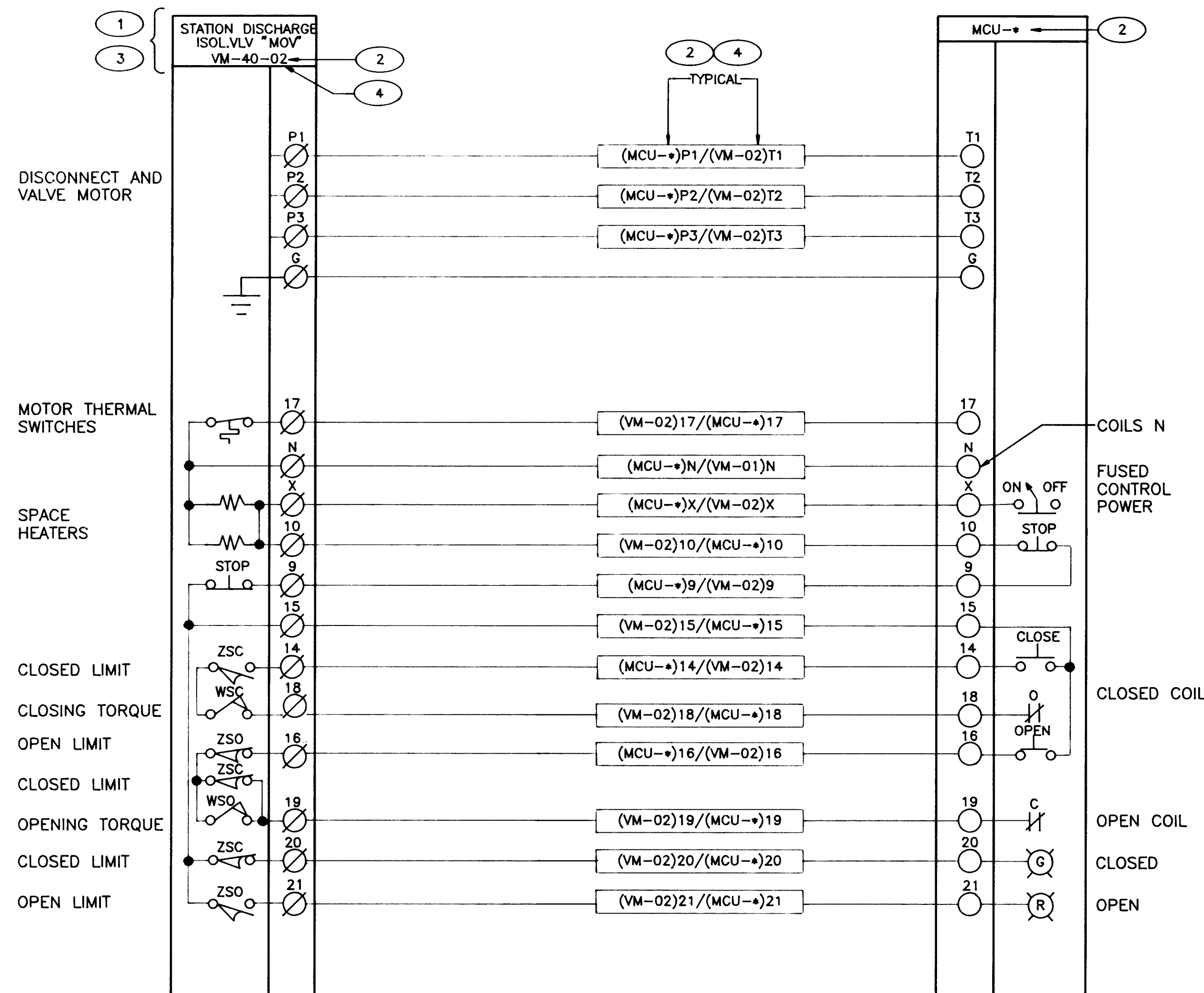
**STATION DISCHARGE ISOLATION VALVE,
STATION SUCTION ISOLATION VALVE,
AND PUMP DISCHARGE VALVE SCHEMATIC**

N.T.S.

NOTE: WIRING IN VALVES AND WIRING IN MCU IS SHOWN SOLID.
FIELD WIRING IS SHOWN DASHED.

NOTES

- FOR 5 PUMPS, CHANGE TITLE TO PUMP DISCHARGE VALVE "MOV".
- CHANGE "02" TO "12", "22", ETC.. FOR PUMP 1, PUMP 2, ETC.
- FOR STATION SUCTION ISOLATION VALVE CONNECTION, CHANGE TITLE TO "STATION SUCTION ISOL. VLV. 'MOV'".
- FOR STATION SUCTION ISOLATION VALVE NUMBER, CHANGE 02 TO 01.
- CONTRACTOR WILL PROVIDE WIRING BETWEEN MOTOR TERMINALS AND MOTOR DISCONNECT.
- 10 AMP FUSE AND FUSE HOLDER WILL BE PART OF MOTOR STARTER TERMINAL BOARD.



THIS DIAGRAM IS TYPICAL OF 6

**STATION DISCHARGE ISOLATION VALVE,
STATION SUCTION ISOLATION VALVE,
AND PUMP DISCHARGE VALVE
CONNECTIONS**

N.T.S.

EQUIPMENT NAME	REPLACE * WITH
DISCHARGE VALVE DV-1	03
DISCHARGE VALVE DV-2	04
DISCHARGE VALVE DV-3	05
DISCHARGE VALVE DV-4	06
DISCHARGE VALVE DV-5	07
STATION SUCTION ISOLATION VALVE	08
STATION DISCHARGE ISOLATION VALVE	09

RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov-15, 1994

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APPROVAL OF RECORD
DRAWINGS
12/21/94

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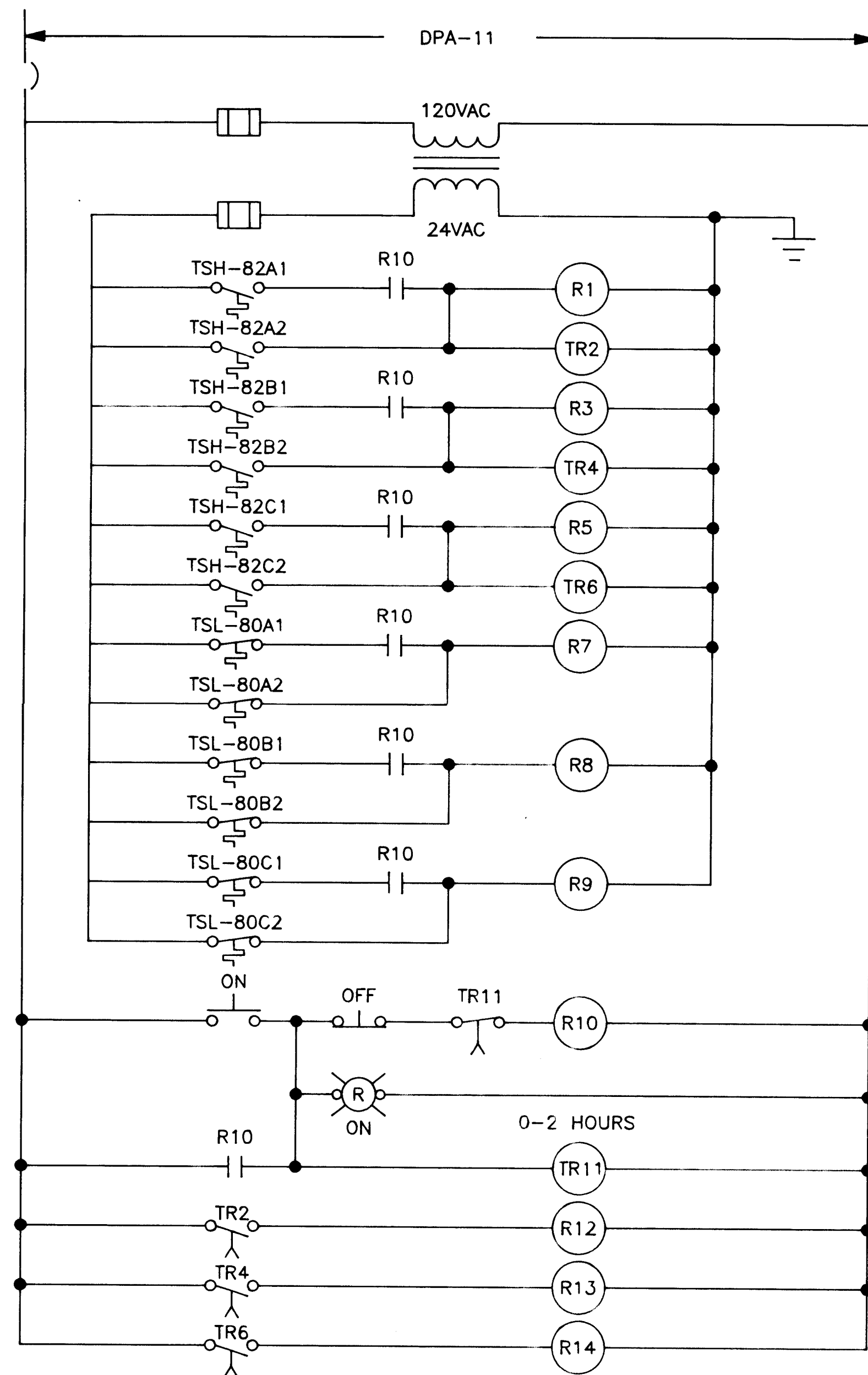
MOLZEN-CORBIN
& Associates

CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
TITLE: CHARLES WELLS PUMP STATIONS
SCHEMATICS

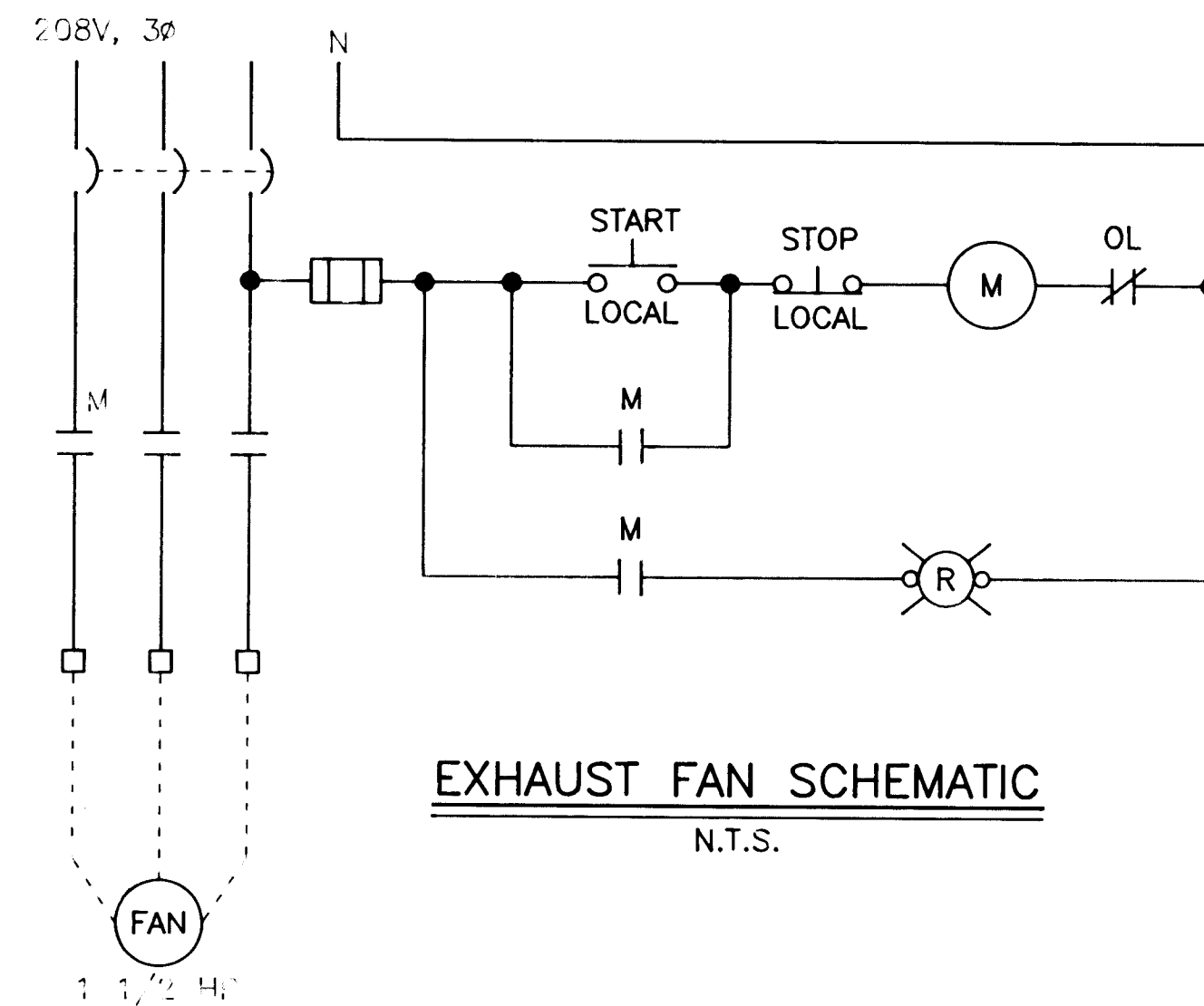
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					

DRAWING NO. E-10 MAP NO. SHEET 49 OF 57

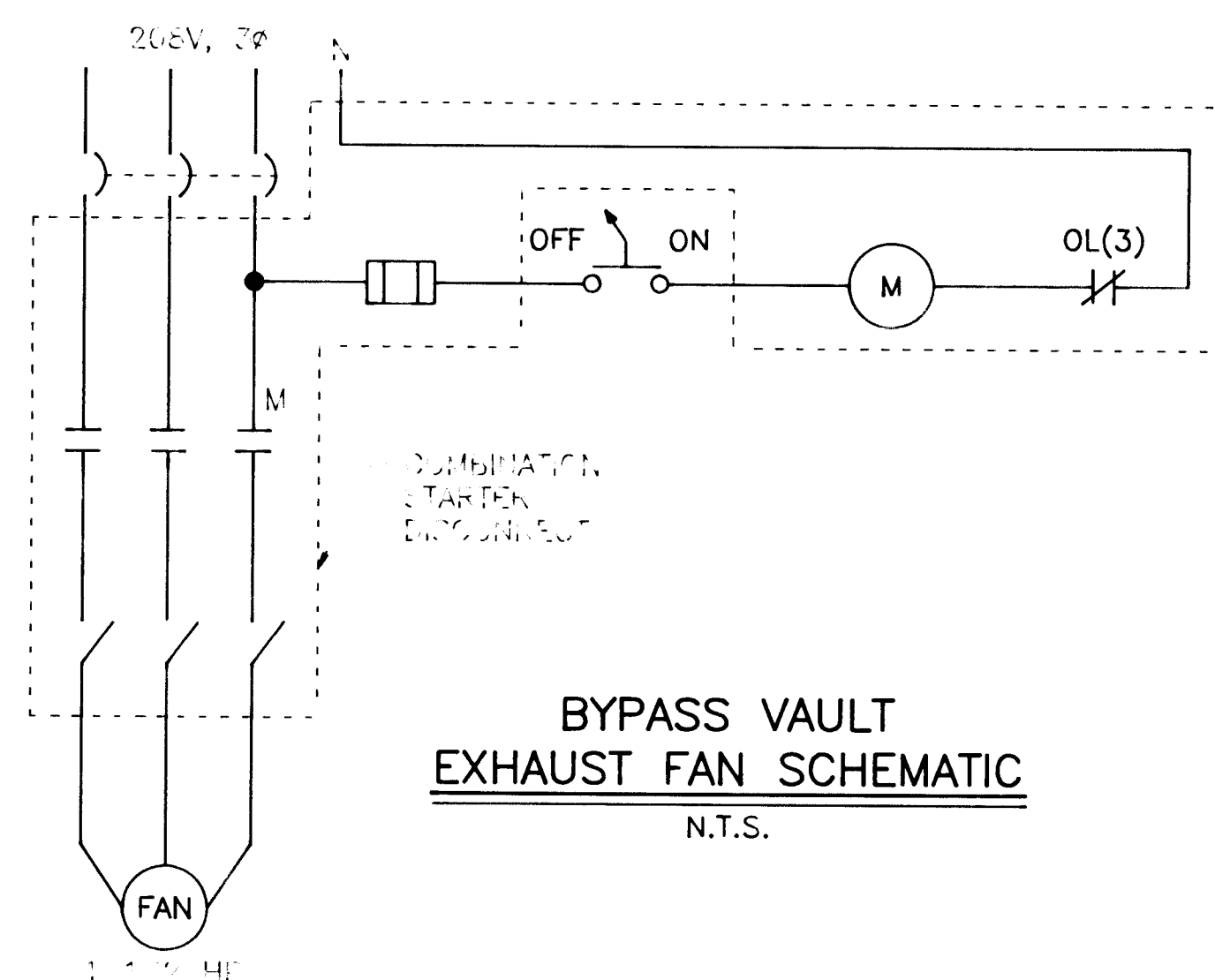
CP NO. 4214.90



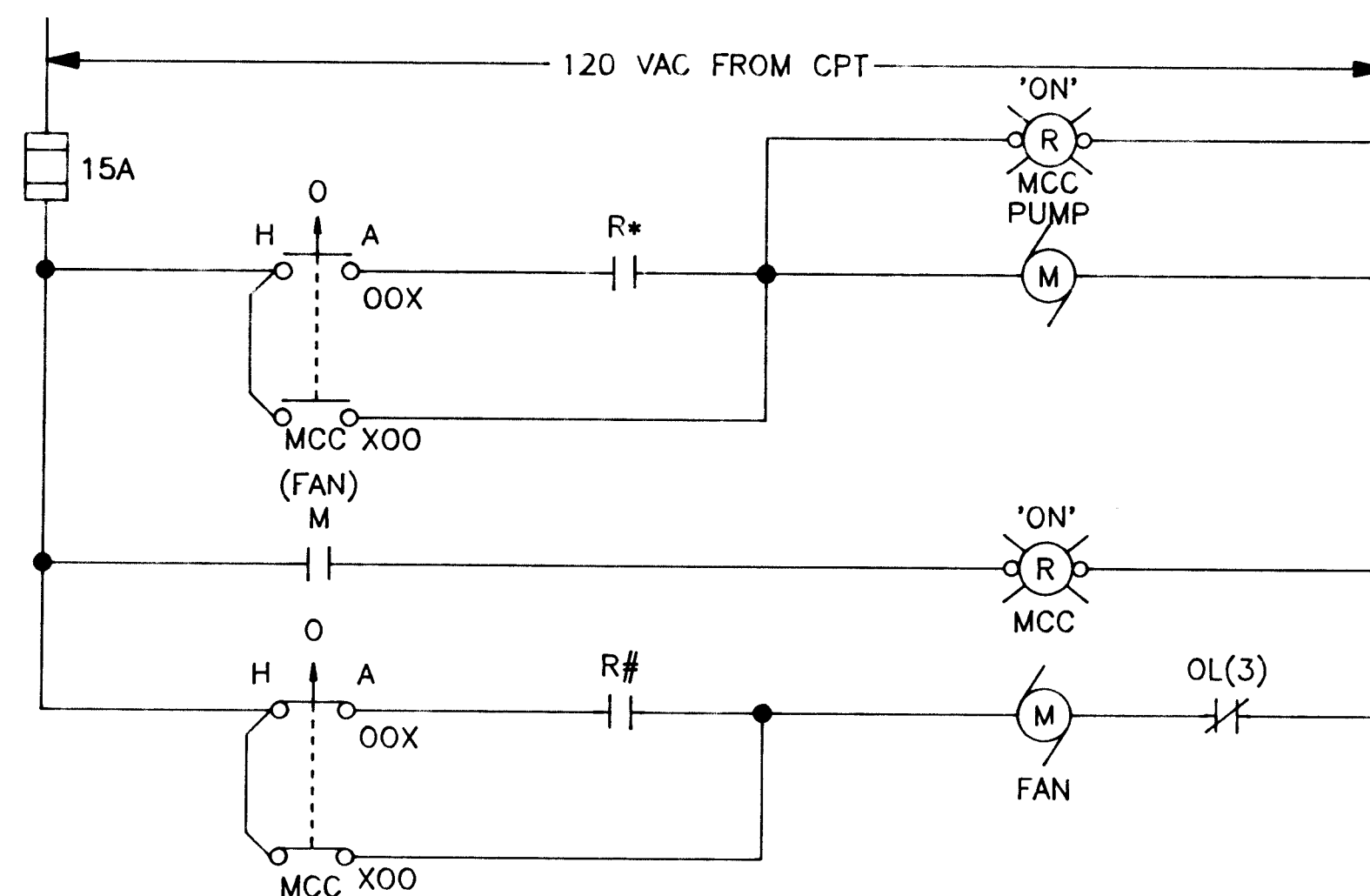
R1 82A PUMP MOTOR	R3 82B PUMP MOTOR	R5 82C PUMP MOTOR
R7 82A FOR HEATER	R8 82B FOR HEATER	R9 82C FOR HEATER
R12 82A FAN MOTOR	R13 82B FAN MOTOR	R14 82C FAN MOTOR



EXHAUST FAN SCHEMATIC
N.T.S.

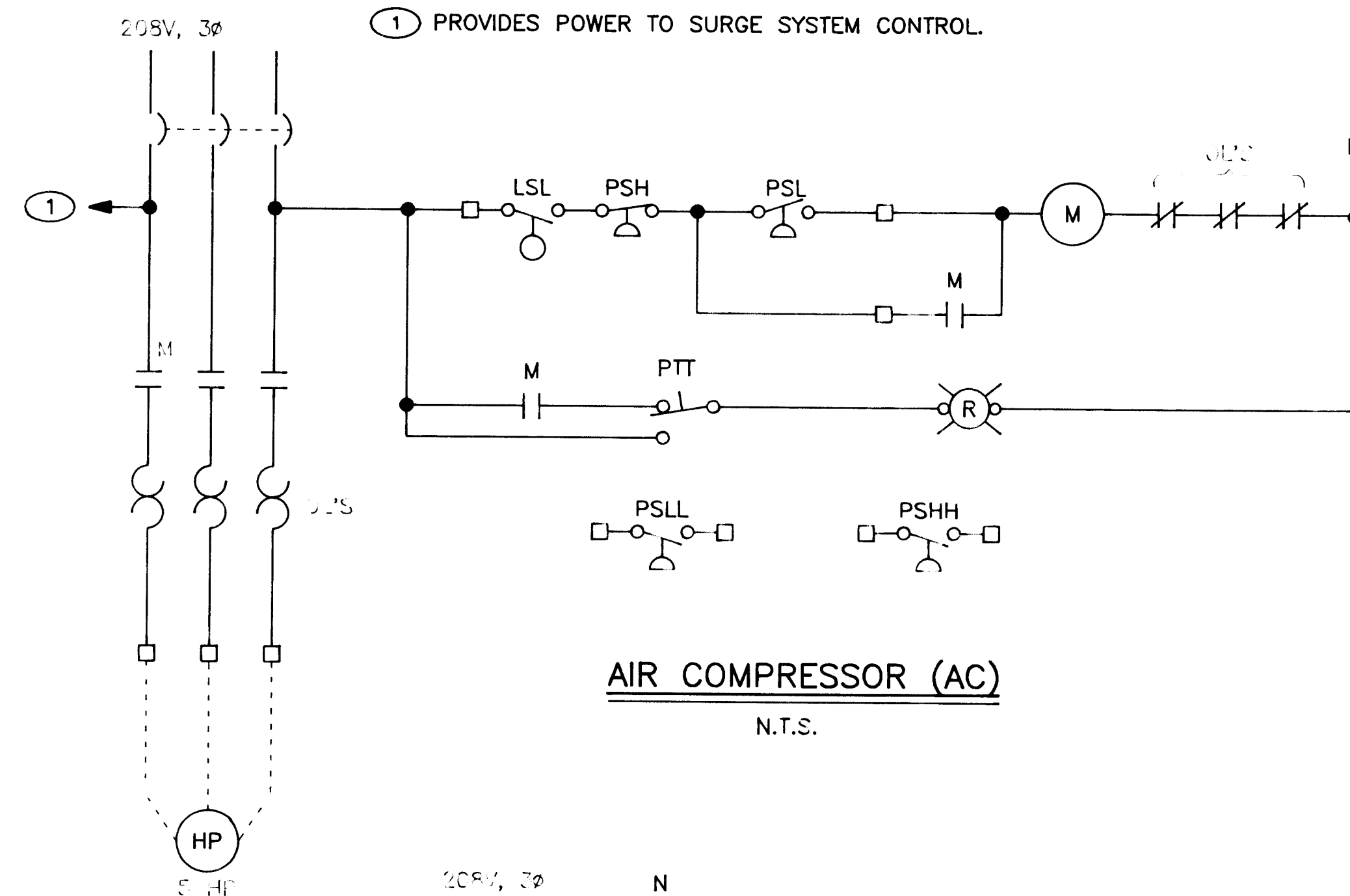


BYPASS VAULT
EXHAUST FAN SCHEMATIC
N.T.S.

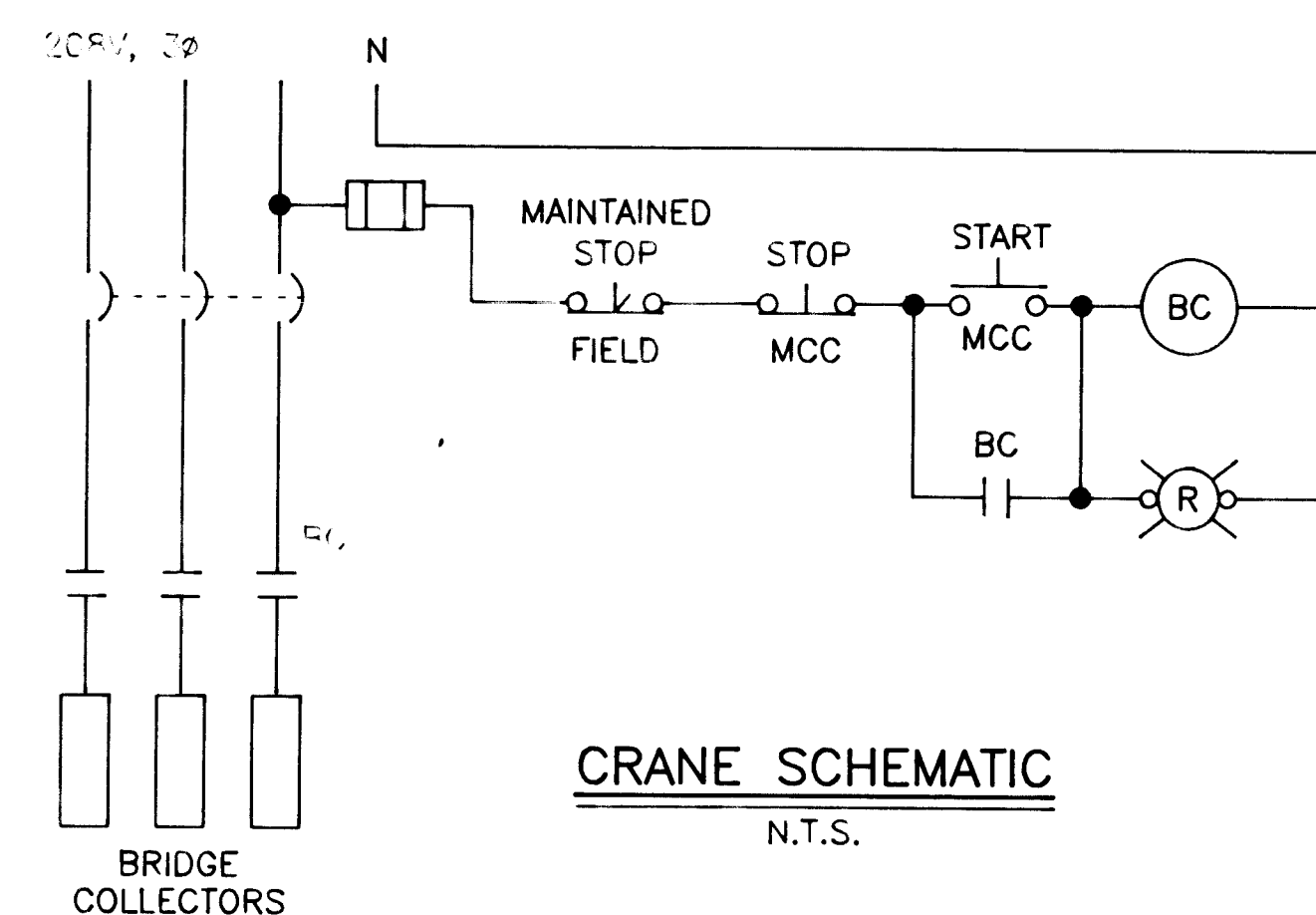


EQUIPMENT NAME	T-STAT	REPLACE R* WITH	REPLACE R# WITH
EVAPORATIVE COOLER 1 (NORTH)	TSH-82A	R1	R12
EVAPORATIVE COOLER 2 (CENTER)	TSH-82B	R3	R13
EVAPORATIVE COOLER 3 (SOUTH)	TSH-82C	R5	R14

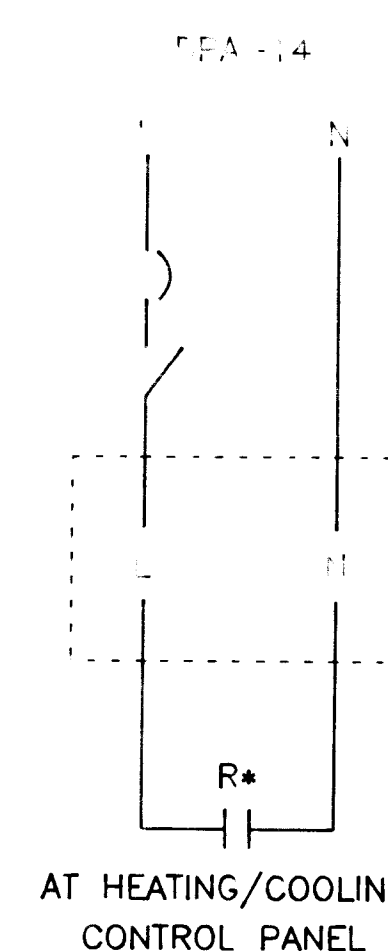
EVAPORATIVE COOLER SCHEMATIC
N.T.S.



AIR COMPRESSOR (AC)
N.T.S.



CRANE SCHEMATIC
N.T.S.



EQUIPMENT NAME	REPLACE R* WITH
GAS HEATER (TSH-80A1)	R7
GAS HEATER (TSH-80A2)	R8
GAS HEATER (TSH-80A3)	R9

UNIT HEATER BLOCK DIAGRAM
N.T.S.

APPROVAL OF RECORD
DRAWINGS
DATE 12/21/99

RECORD DRAWINGS
Revisions Drawn by: Michael J. Jones Date: 12/21/99
THESE RECORD DRAWINGS HAVE BEEN FREE-MAILED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE, OR COMPONENT FOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

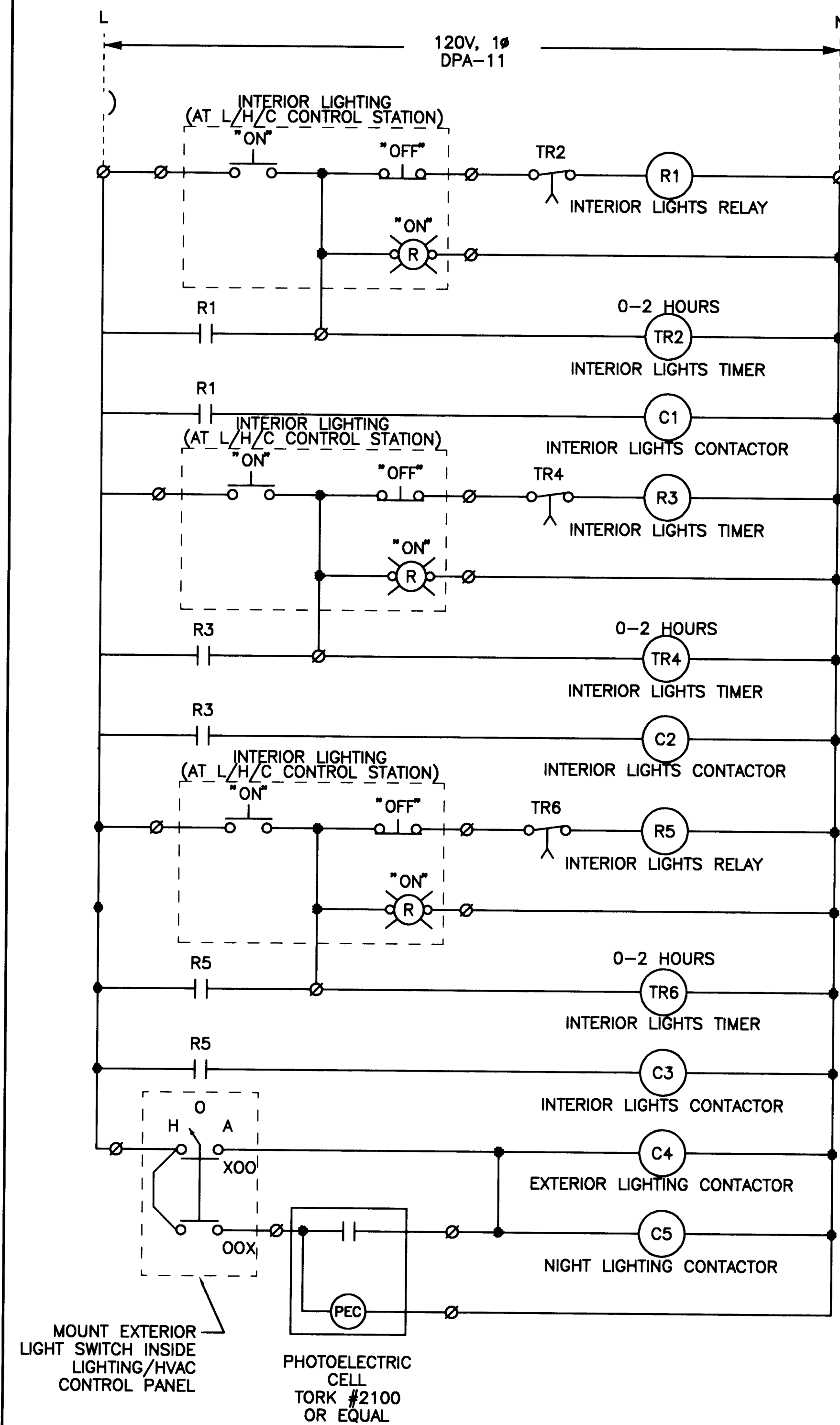
SCANNED BY
BY LASON

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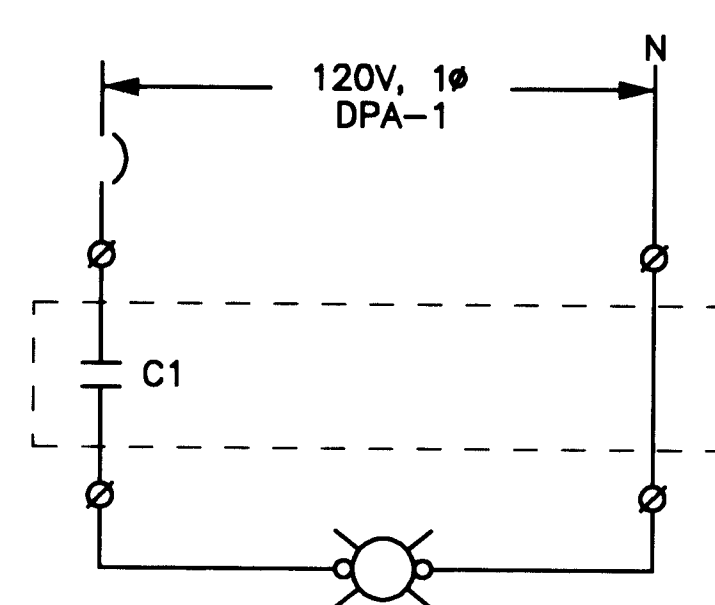
MOLZEN-CORBIN & Associates

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION SCHEMATICS					
APPROVAL	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
Water			Water		
Trans. & Hydr.			Whetwater		
DRAWING NO.	E-11	MAP NO.		SHEET	50 OF 57

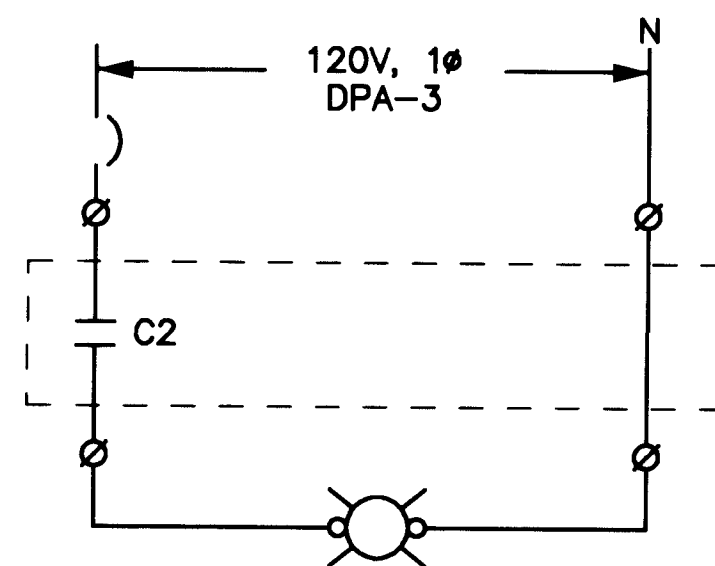
CP NO. 4214.90



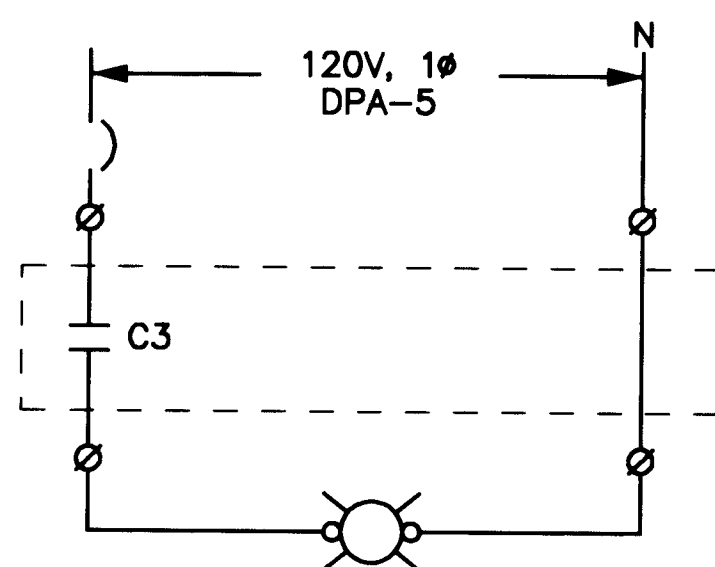
LIGHTING SCHEMATIC



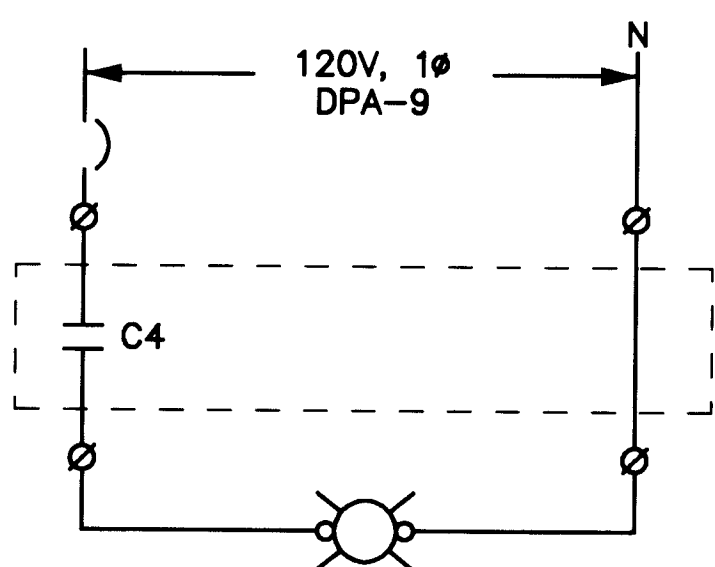
LIGHTS, GROUND LEVEL



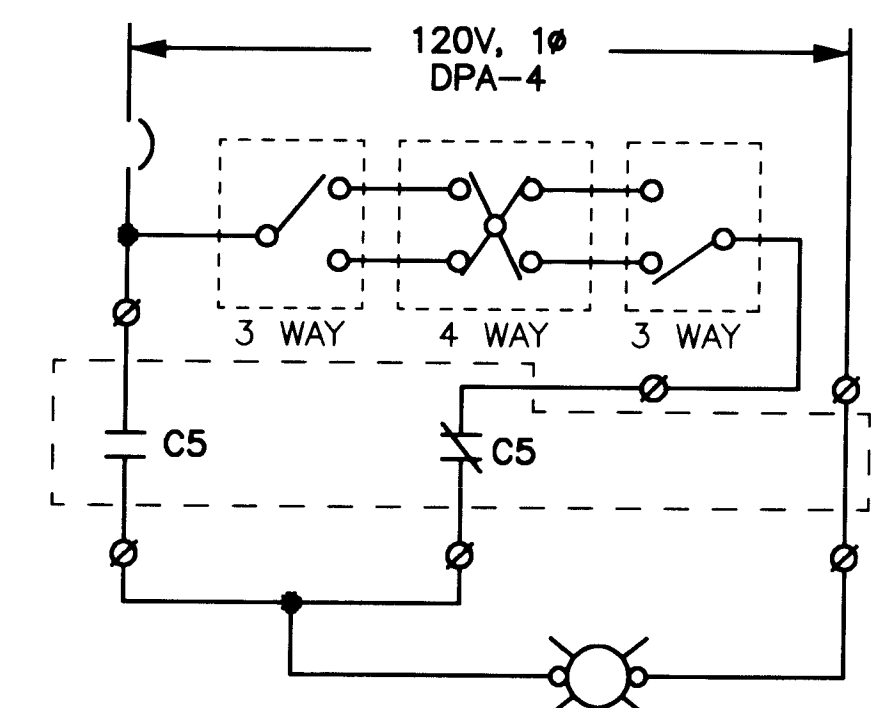
LIGHTS, MID LEVEL



LIGHTS, SUCTION PIT



EXTERIOR LIGHTS



SELECTED MH AND FLUORESCENT INTERIOR LIGHTING

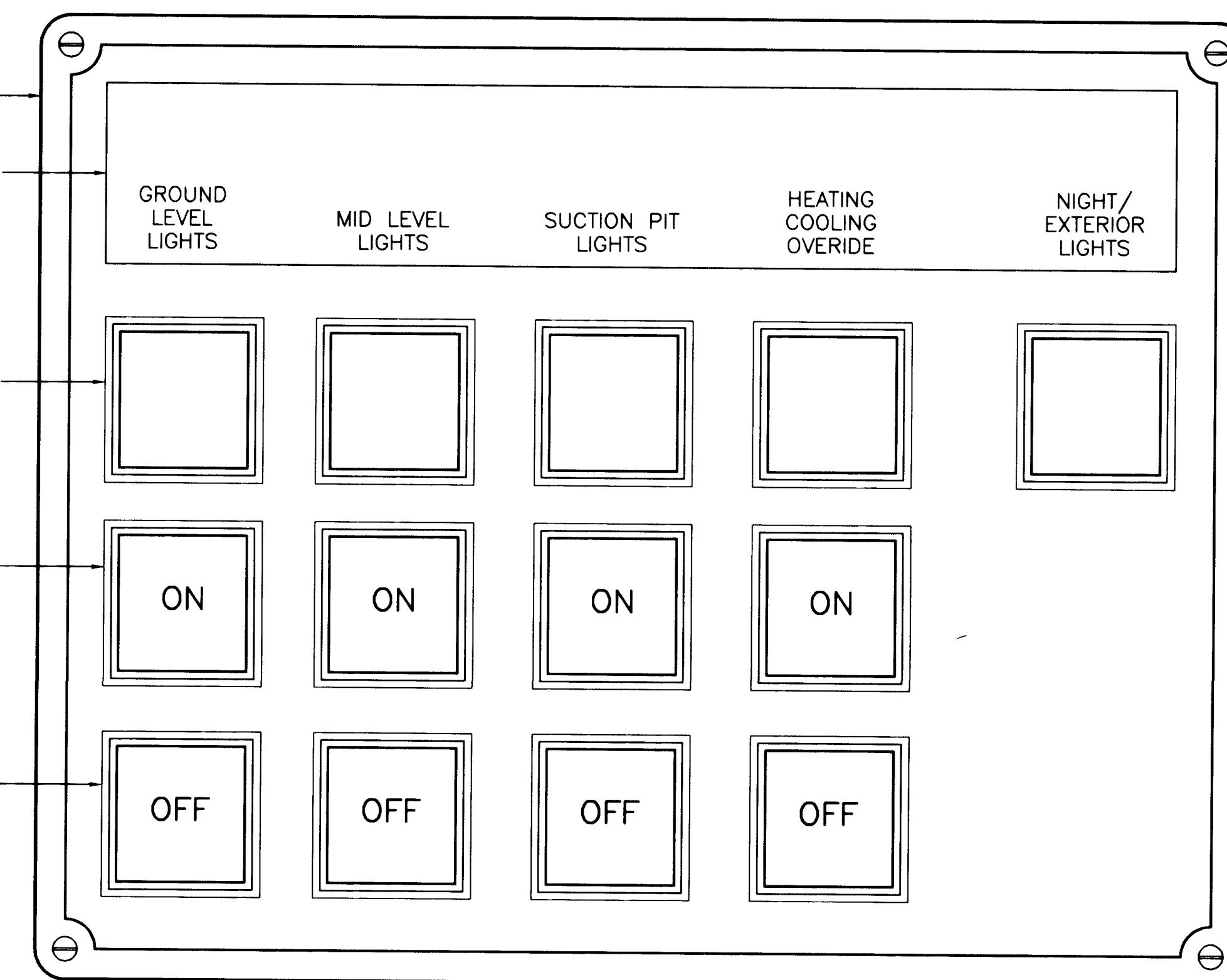
HEAVY DUTY OILTIGHT/WATERTIGHT CONTROL STATION

ENGRAVED NAMEPLATE

RECTANGULAR PILOT LIGHT RED LENS (TYP OF 5)

RECTANGULAR MOMENTARY PUSHBUTTON SWITCH RED BUTTON COLOR "ON" LEGEND MARKING (TYP OF 4)

RECTANGULAR MOMENTARY PUSHBUTTON SWITCH GREEN BUTTON COLOR "OFF" LEGEND MARKING (TYP OF 4)



LIGHTING/HEATING/COOLING (H/C) CONTROL STATION DETAIL

N.T.S.

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE 12/21/94

RECORD DRAWINGS

Revisions Drawn by Michael Brewer Date Nov. 15, 1994
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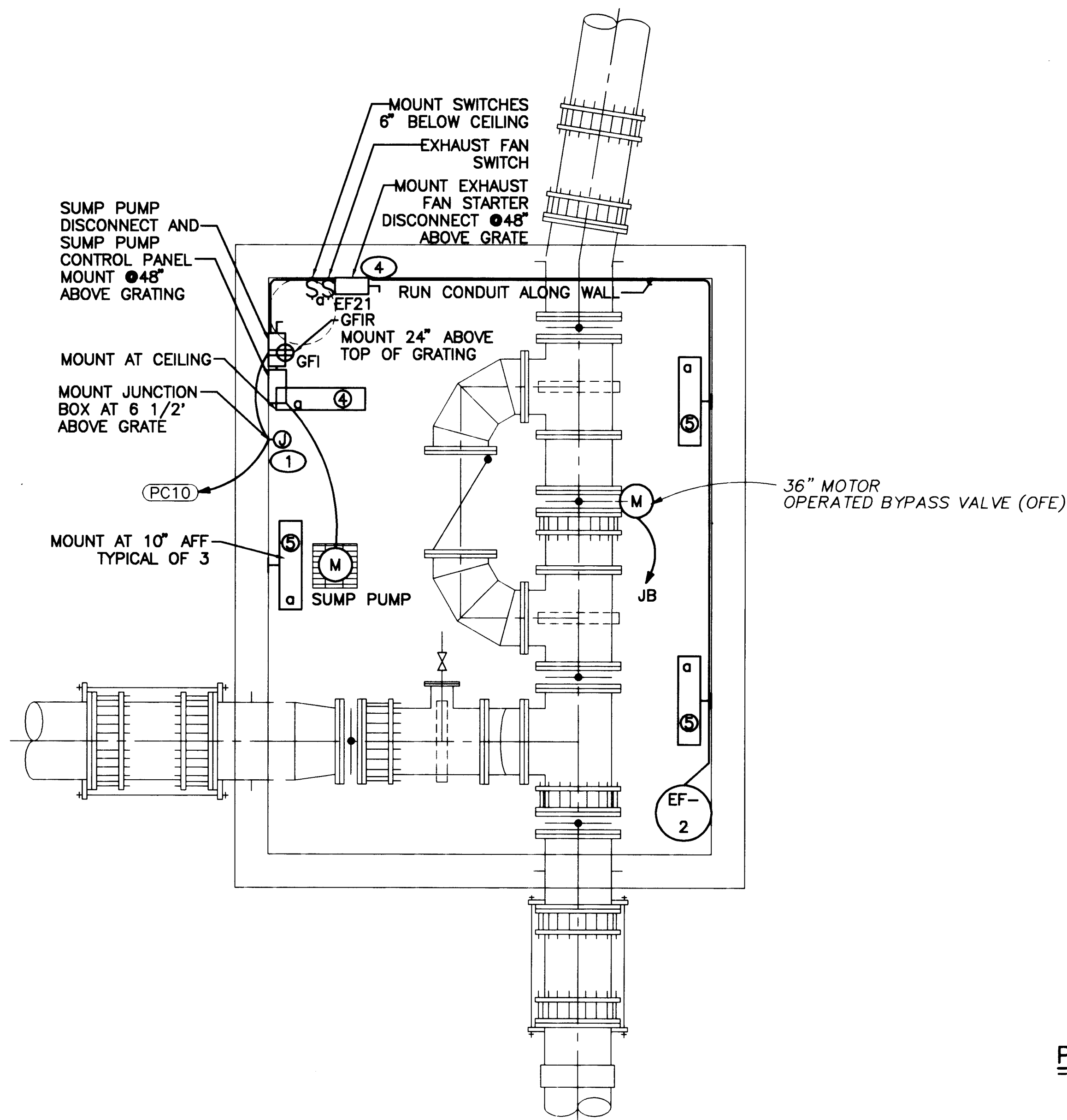
CITY OF ALBUQUERQUE
PUBLIC WORKS DEPARTMENT
ENGINEERING DIVISION
TITLE: CHARLES WELLS PUMP STATION SCHEMATICS

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					

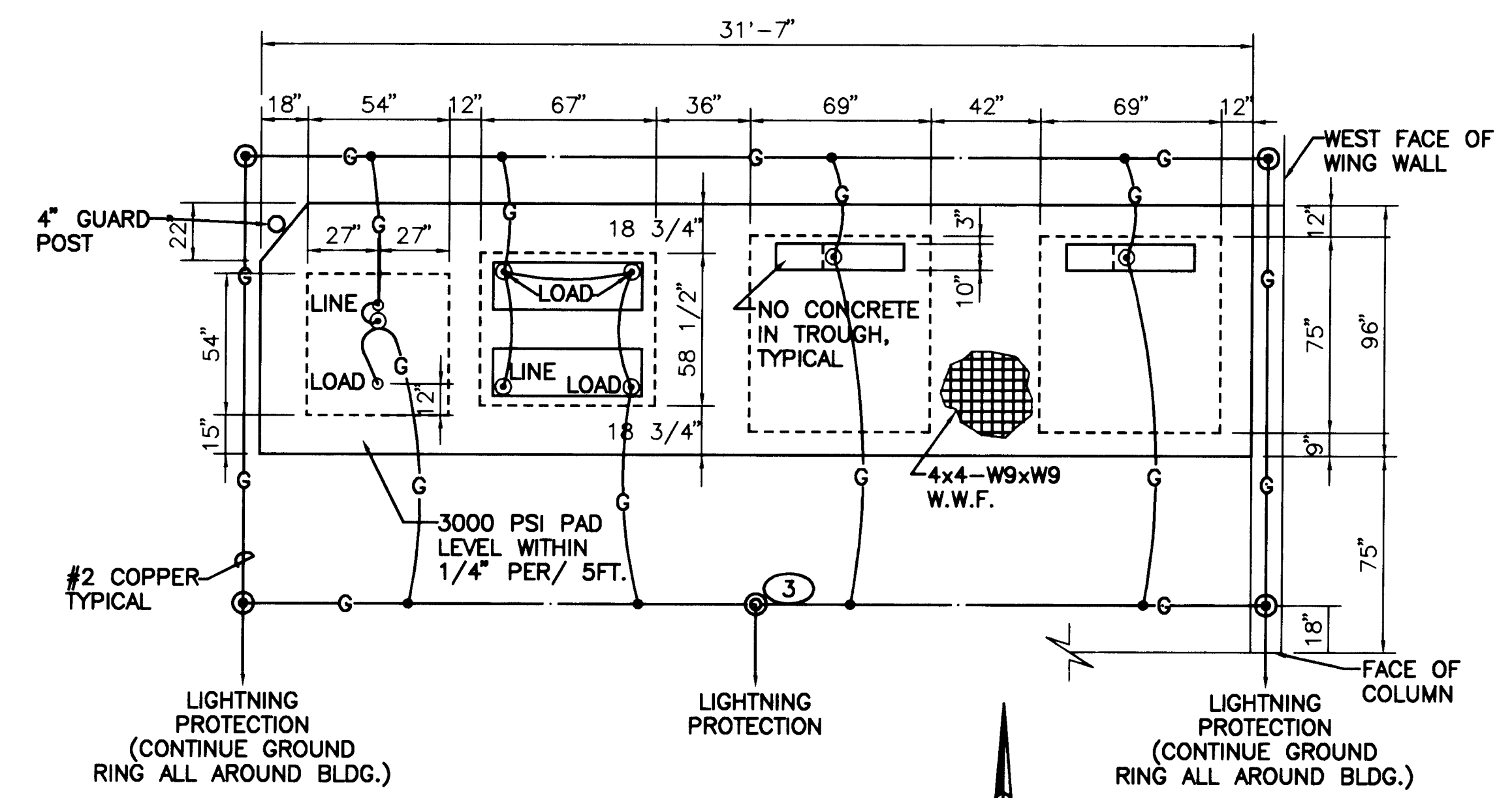
DRAWING NO. E-13 MAP NO. SHEET 52 OF 57

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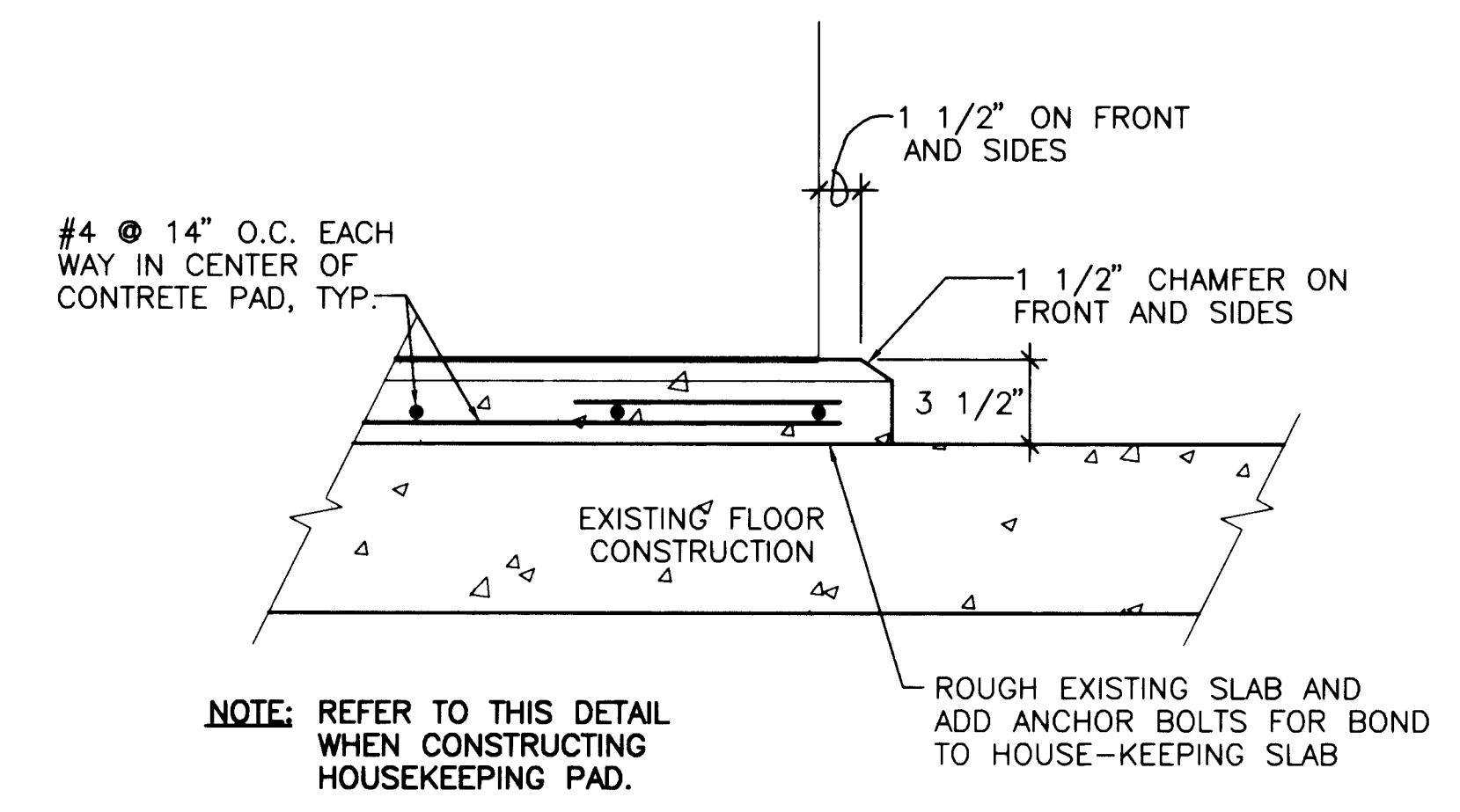




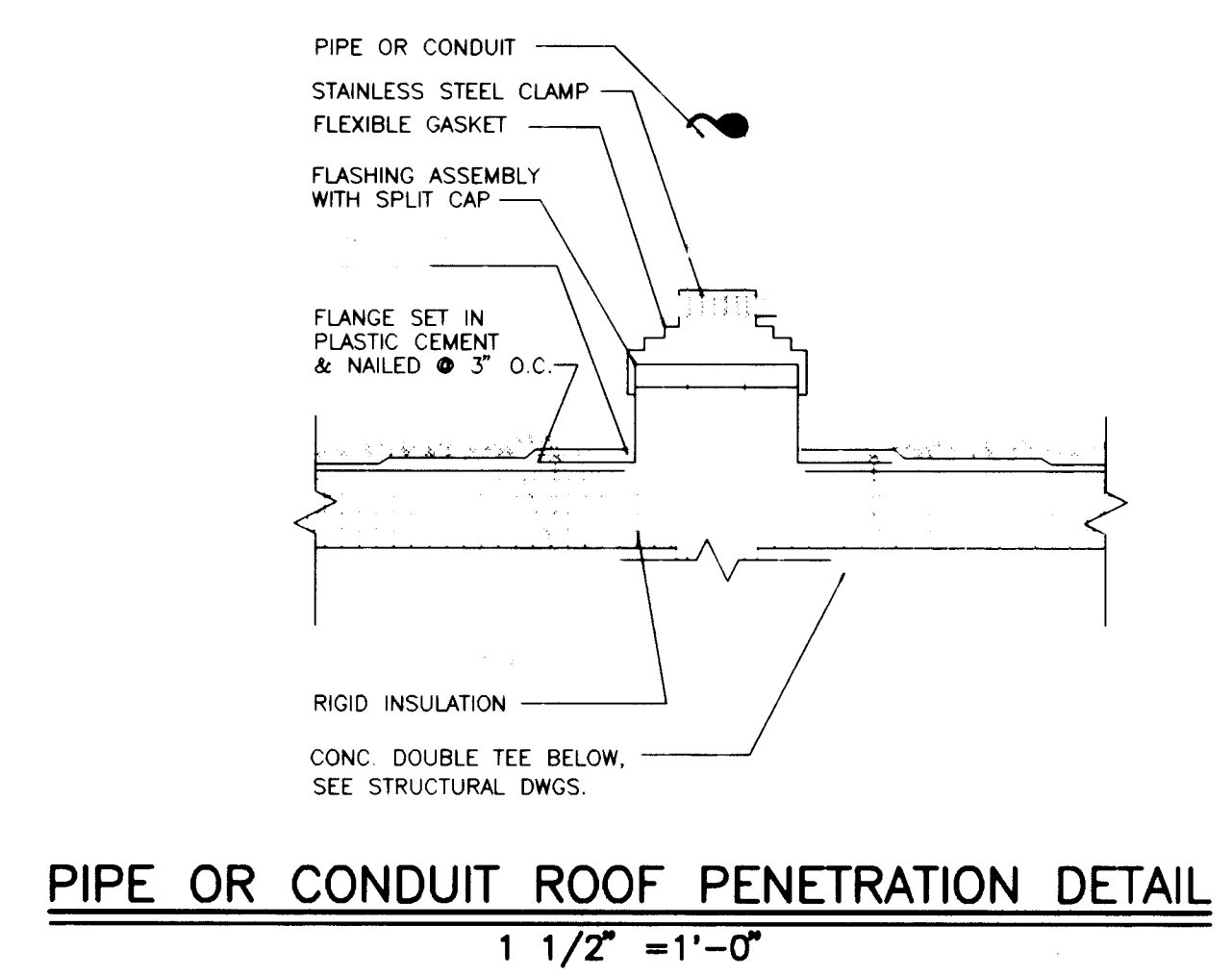
FLOOR PLAN
1/4" = 1'-0"



PRIMARY EQUIPMENT PAD
SCALE: 1/4" = 1'-0"



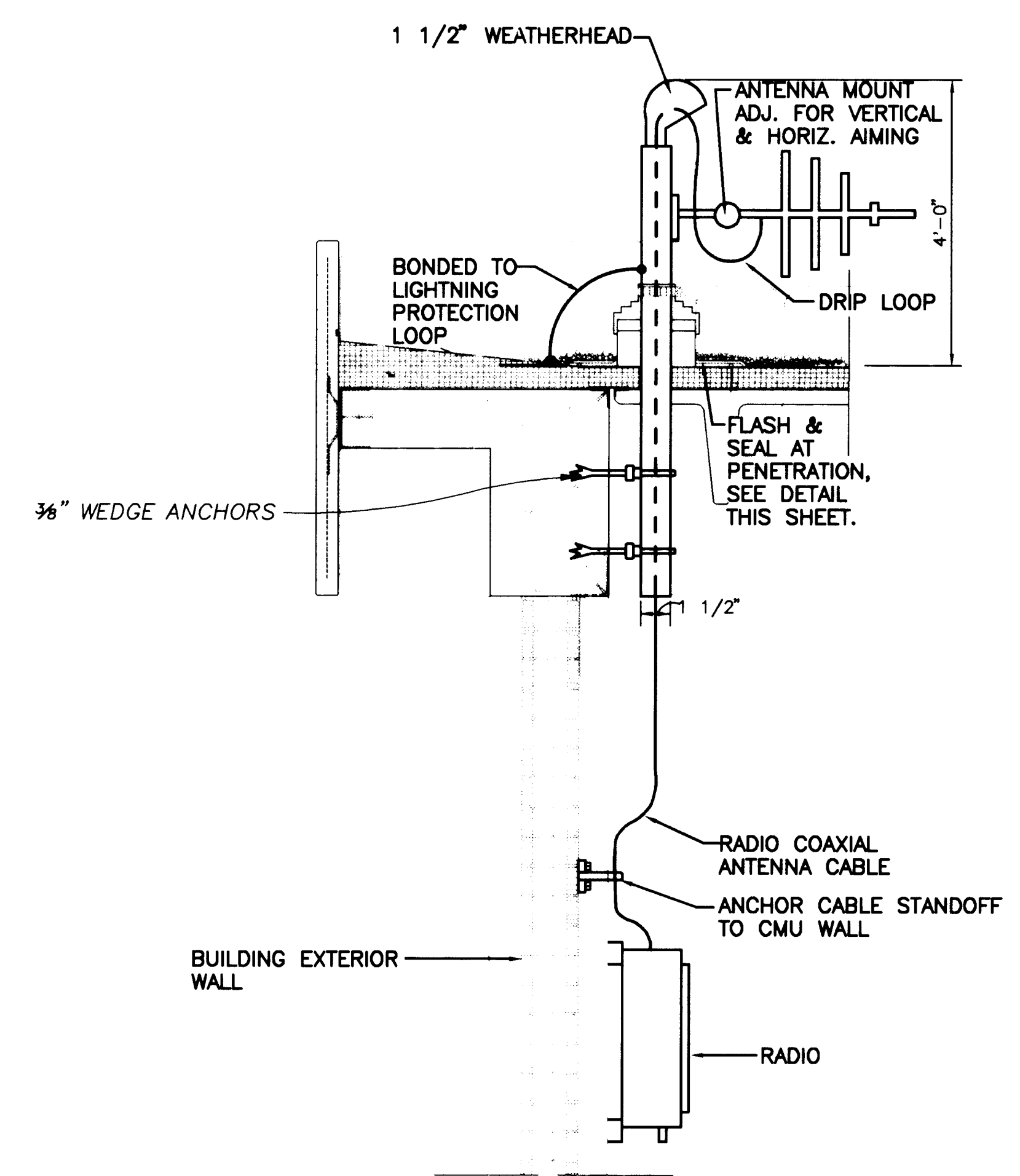
CONCRETE PAD SECTION
N.T.S.



PIPE OR CONDUIT ROOF PENETRATION DETAIL
1 1/2" = 1'-0"

NOTES

- 1 PENETRATE VAULT WALL AND SET 8" X 8" X 4" JUNCTION BOX. EXTEND CIRCUITS FOR LIGHTING, RECEPTACLE, AND BYPASS VALVE THROUGH CONDUIT AND JUNCTION BOXES BACK TO THE PUMP HOUSE. SEE ELECTRICAL SITE PLAN FOR ROUTING.
- 2 NOT USED.
- 3 CHEMICAL-FILLED GROUND ROD. INSTALL ONE AT S.E. CORNER, ONE AT S.W. CORNER, AND ONE AT NORTH. LYNCOLE OR EQUAL.
- 4 COMBINATION DISCONNECT - STARTER NEMA 4X ENCLOSURE. RUN 120V CONTROL FROM SWITCH AT HATCH.



ANTENNA AND MAST DETAIL
N.T.S.

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE: 12/21/94

RECORD DRAWINGS

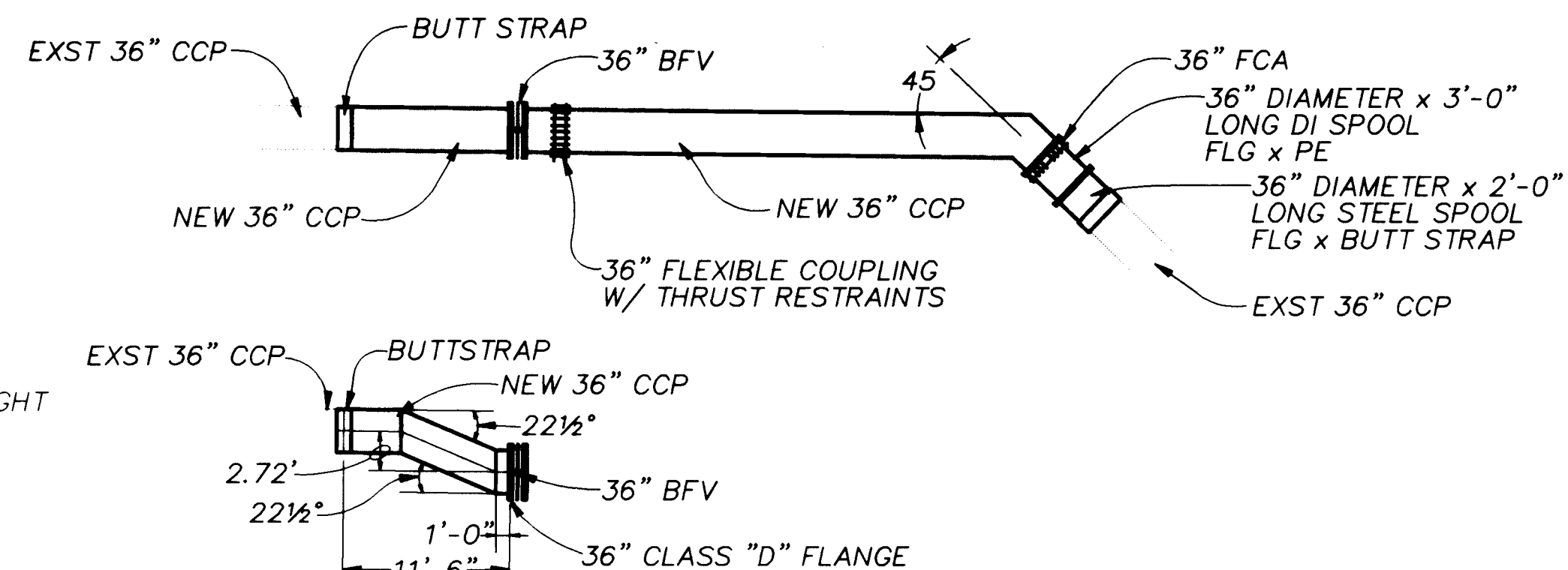
Revisions Drawn by: Michael Brown Date: Nov. 15, 1994
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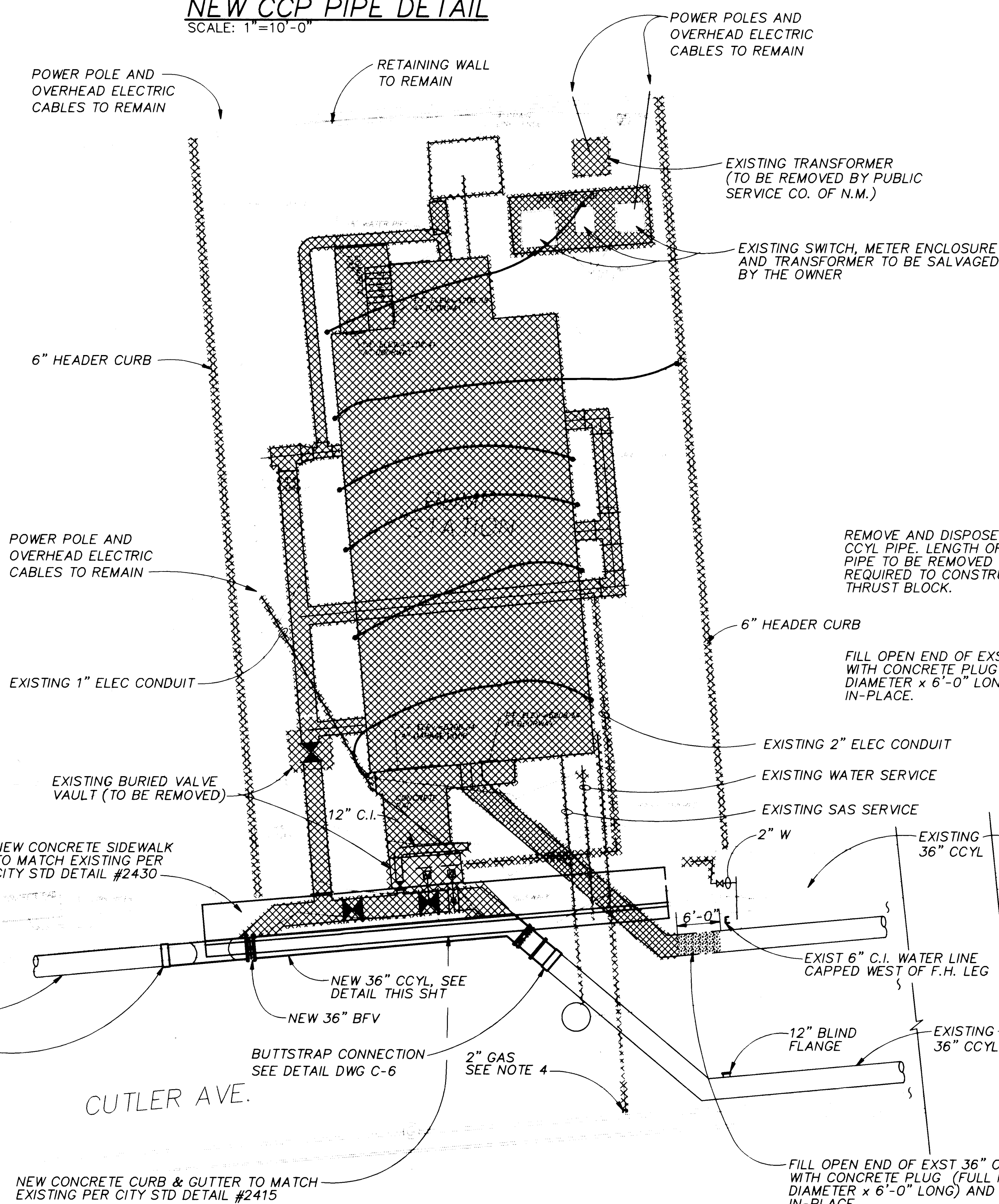
SCANNED BY
BY LASON

MOLZEN-CORBIN & Associates					
CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION ELECTRICAL DETAILS & BYPASS VAULT					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Wastewater		
Hydrology					
DRAWING NO. E-14		MAP NO.		SHEET 53 OF 57	

SPRINKLER HEAD
MANHOLE
WATER VALVE
GAS RISER
WATER RISTER
ELECTRIC RISER
TELEPHONE RISER
POWER POLE WITH LIGHT
POWER POLE
FIRE HYDRANT
DECIDUIUS TREE
CONIFEROUS TREE
BUSH
OVERHEAD LINE



NEW CCP PIPE DETAIL
SCALE: 1"=10'-0"

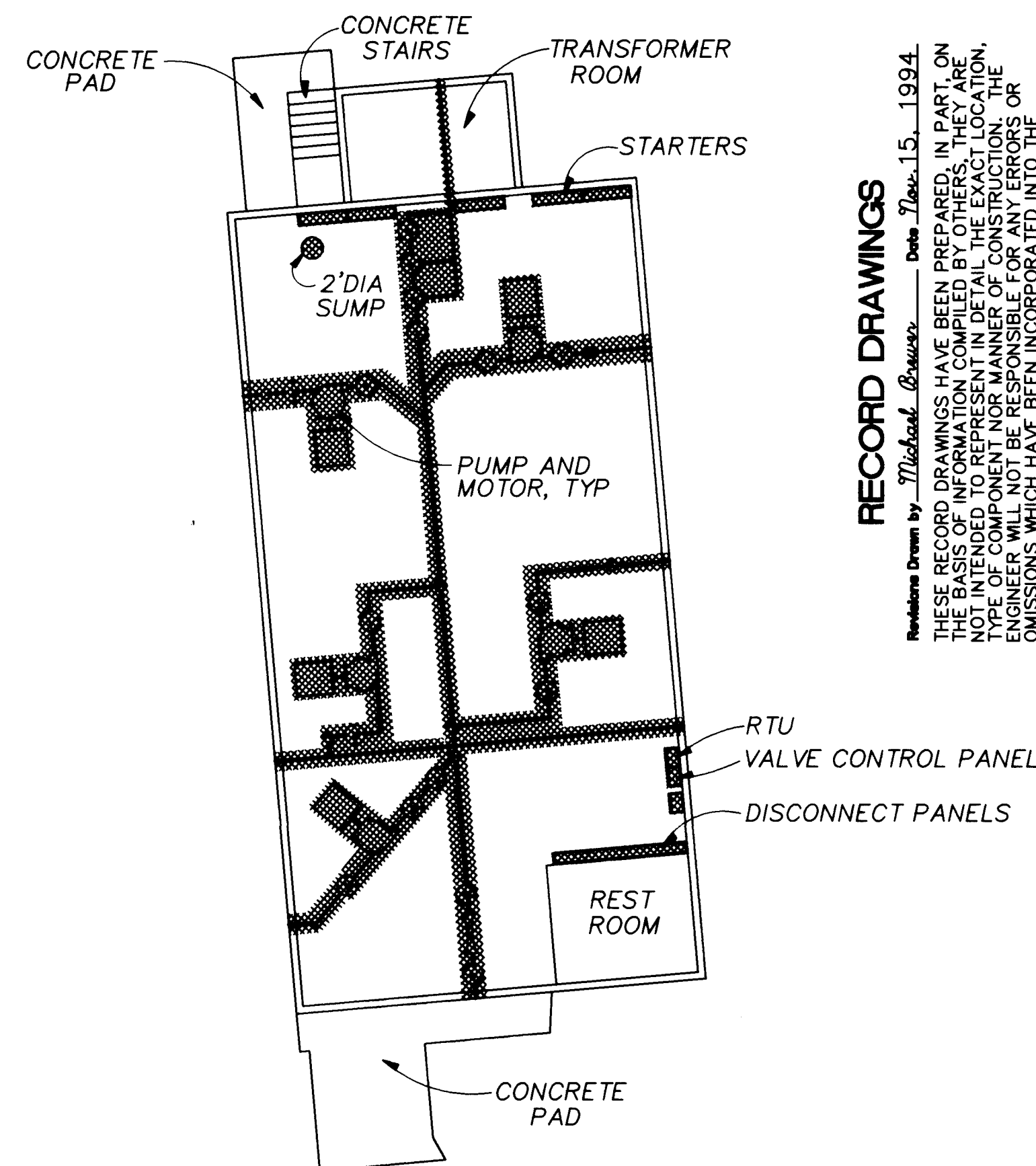


SITE DEMOLITION PLAN

SCALE: 1"=10'-0"

 INDICATES STRUCTURES AND FACILITIES
TO BE DEMOLISHED.

1. ALL EXISTING TREES AND VEGETATION 10'-0" OUTSIDE THE BUILDING LIMITS SHALL REMAIN.
2. ALL STRUCTURES AND PIPING SHOWN TO BE DEMOLISHED SHALL BE REMOVED IN THEIR ENTIRETY. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED MATERIAL AND DEBRIS OFF THE SITE.
3. ALL EXISTING UTILITIES SHALL BE REMOVED AND CAPPED 5'-0" OUTSIDE THE PROPERTY LINES.
4. EXISTING 2" GAS SERVICE LINE SHALL BE CAPPED AT THE MAIN BY THE GAS CO. OF NEW MEXICO.
5. CONTRACTOR SHALL MAINTAIN DUST CONTROL AT ALL TIMES.
6. CONTRACTOR SHALL REPLACE EXISTING CURB & GUTTER, SIDEWALK AND PAVEMENT DISTURBED BY THIS CONSTRUCTION TO MATCH EXISTING.
7. UPON COMPLETION OF THE DEMOLITION WORK THE SITE SHALL BE BACKFILLED AND GRADED AS SHOWN AND LEFT FREE OF ALL TRASH AND DEBRIS. BACKFILL AND GRADING OF THE SITE SHALL BE IN ACCORDANCE WITH SPECIFICATION SECTION 02200.
8. PAVEMENT REPLACEMENT ON CUTLER AVENUE SHALL BE PER THE TYPICAL RESIDENTIAL STREET SECTION ON DWG C-6.
9. ALL CURB AND GUTTER ELEVATIONS WERE TAKEN AT THE FLOWLINE.
10. THE CONTOUR INTERVAL IS 1 FOOT.
11. ALL TOPOGRAPHIC INFORMATION TAKEN FROM CITY OF ALBUQUERQUE DEPT. OF PUBLIC WORKS SURVEY DATED JAN. 30, 1992



MECHANICAL / ELECTRICAL DEMOLITION PLAN

SCALE: 1"=1'-0"

1. THIS PLAN IS INTENDED TO SHOW DEMOLITION OF EQUIPMENT WITHIN THE PUMP STATION STRUCTURE, ONLY.
2. THE EXISTING CHARLES WELLS PUMP STATION IS A REINFORCED CONCRETE / CONCRETE MASONRY STRUCTURE. CONTRACTOR SHALL REMOVE THE EXISTING PUMP STATION STRUCTURE, IN IT'S ENTIRETY, AND BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL DEMOLISHED MATERIAL AND DEBRIS.

RECORD DRAWINGS.													
ENGINEER'S SEAL				SURVEY INFORMATION		BENCH MARKS		AS BUILT INFORMATION					
THESE DRAWINGS WERE MOORED USING AUTOCAD AND RE-PLOTTED FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS.				FIELD NOTES									
				NO.		BY		DATE					
NO.		DATE		REMARKS				CONTRACTOR					
REVISIONS													
DESIGN													
DESIGNED BY				M. BREWER		DATE		2-18-92					
DRAWN BY				R. SANDBANK		DATE		5-20-92					
								RECORDED BY		DATE			
								NO.					

BAR IS ONE INCH ON
ORIGINAL DRAWING
0 1
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER *William J. Stuart*
DATE: 12/21/94

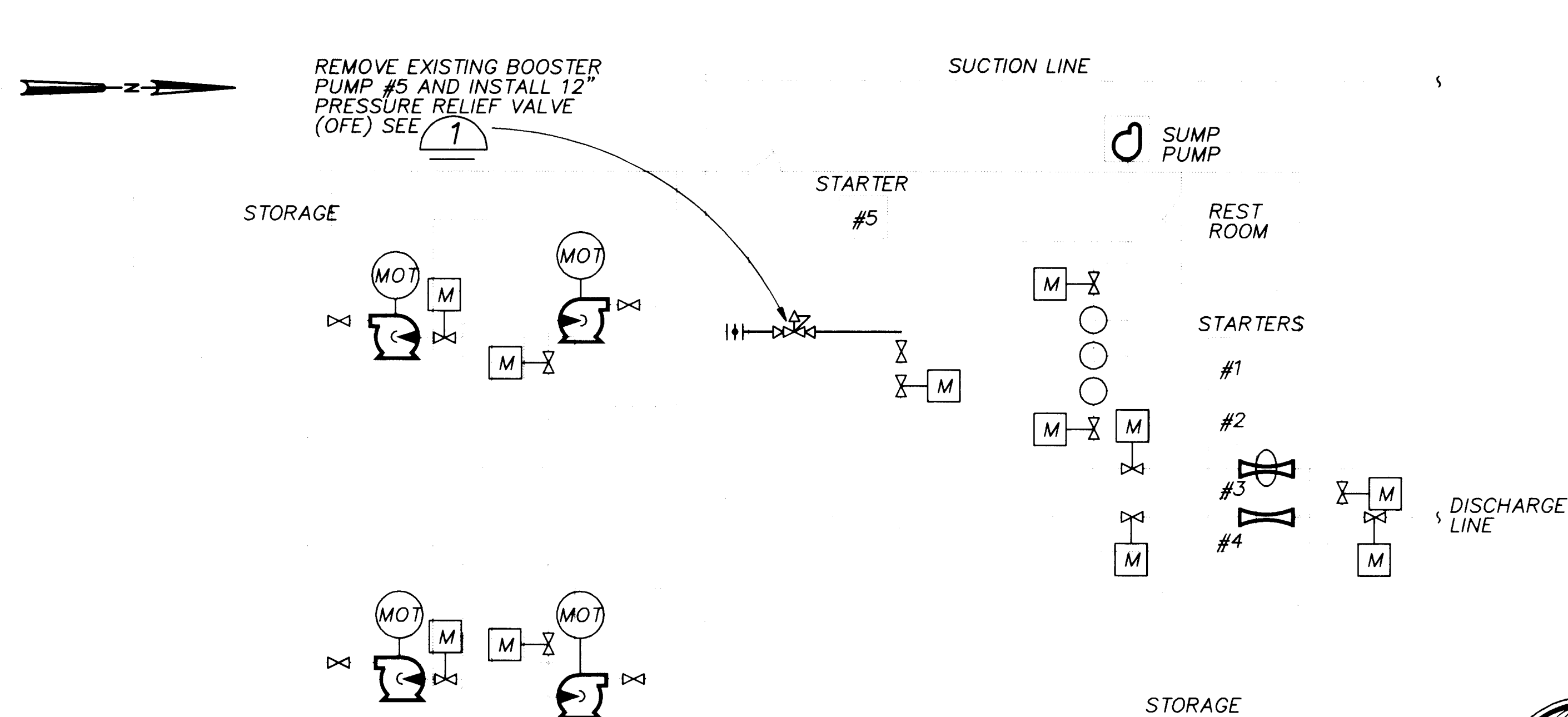


CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION	
TITLE:	CHARLES WELLS PUMP STATION SITE CIVIL DEMOLITION

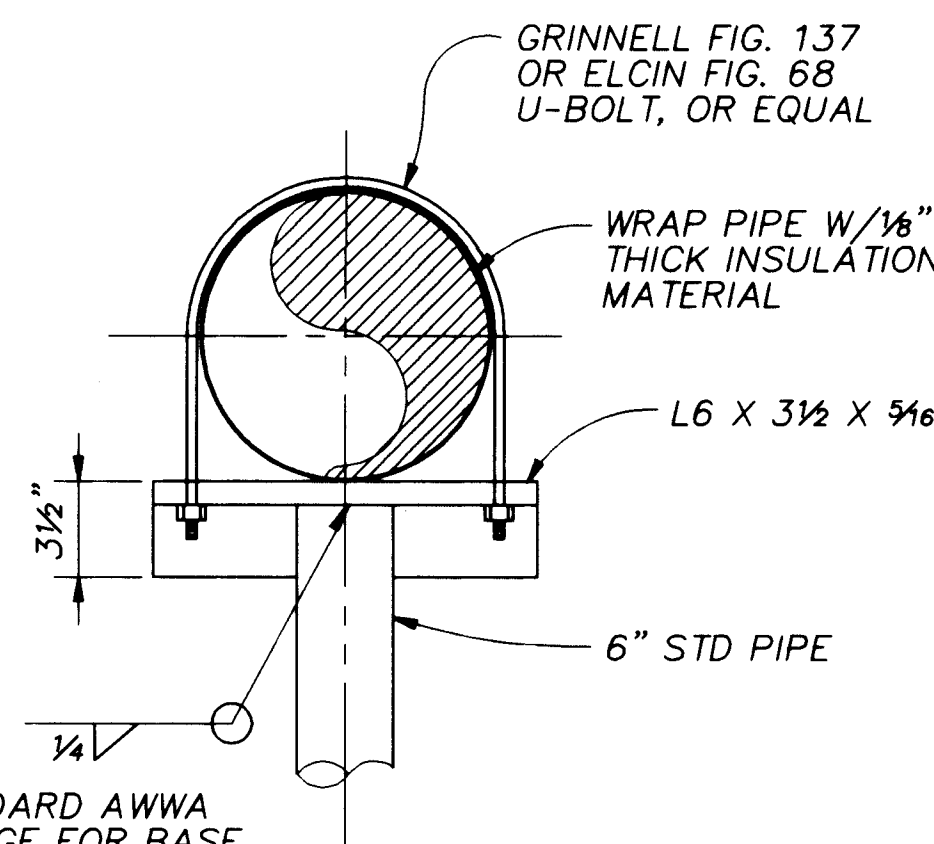
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					

DRAWING NO.	D-1	MAP NO.	H-17	SHEET	54	OF	57
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CP NO. 4214.90

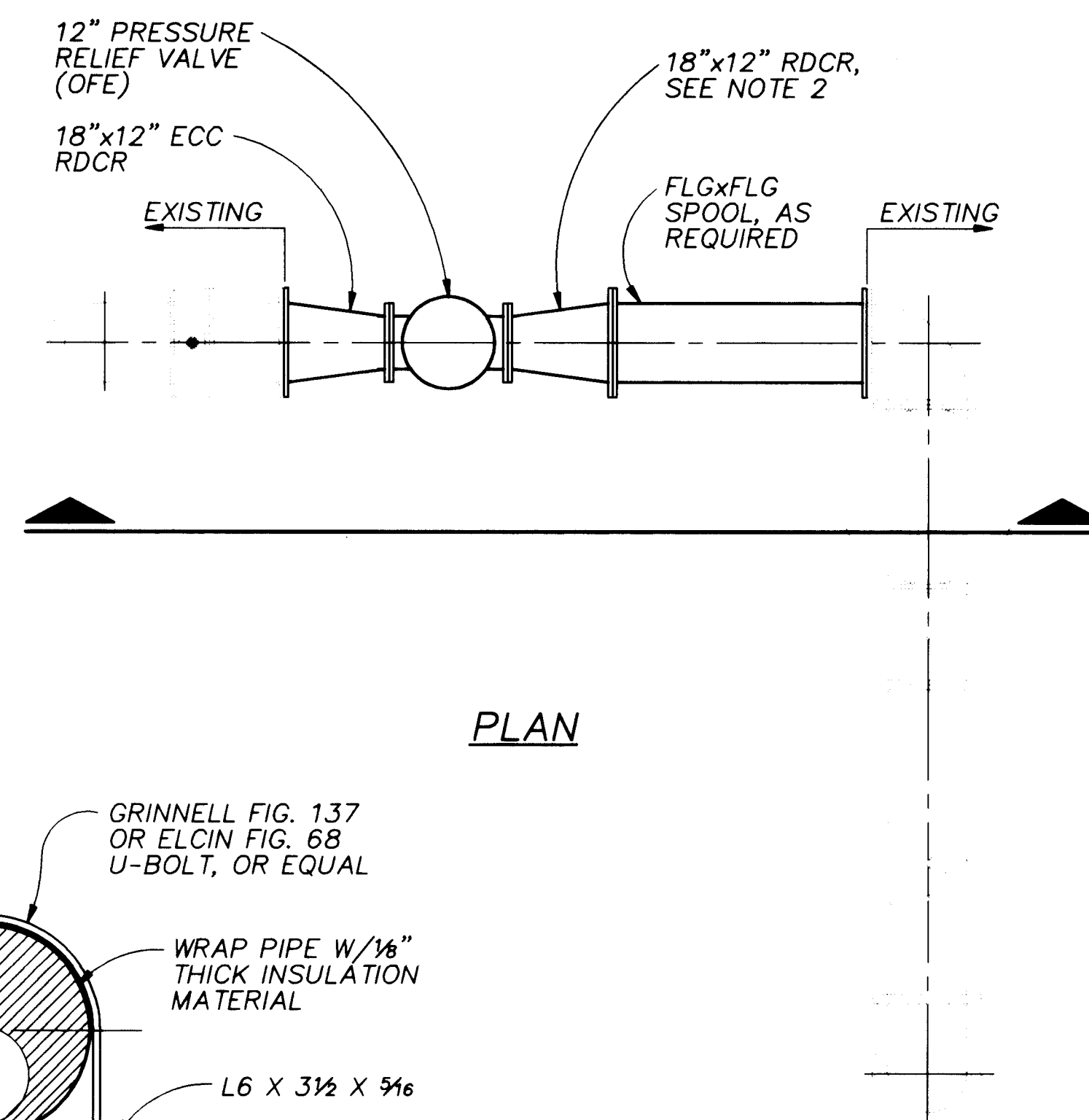


SANTA BARBARA PUMP STATION PLAN
NTS

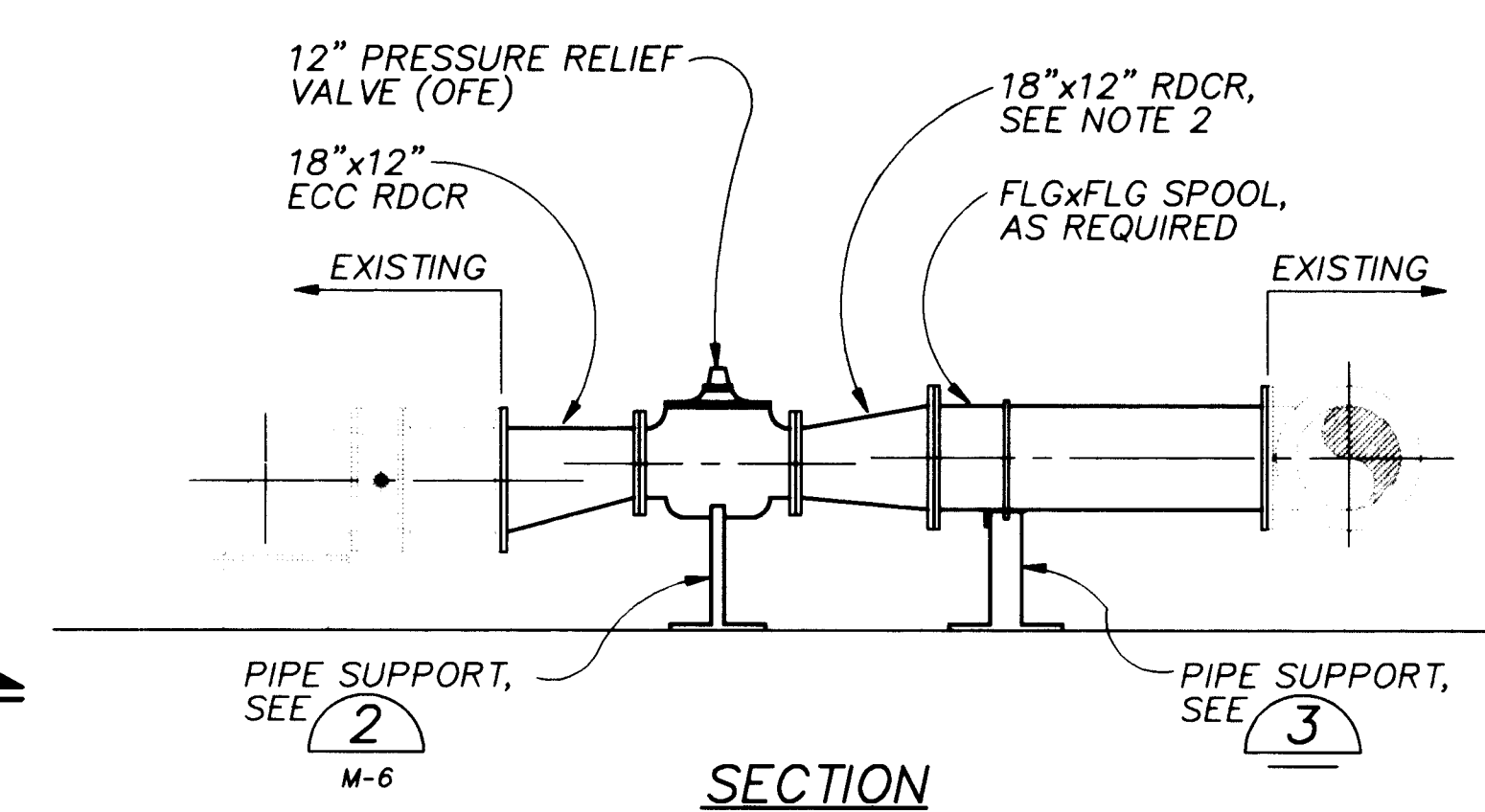


NOTE:
USE STANDARD AWWA
RING FLANGE FOR BASE.
ATTACH TO CONCRETE
WITH 4 SST STUD TYPE
WEDGE ANCHORS.

PIPE SUPPORT DETAIL (3)
NTS



PLAN

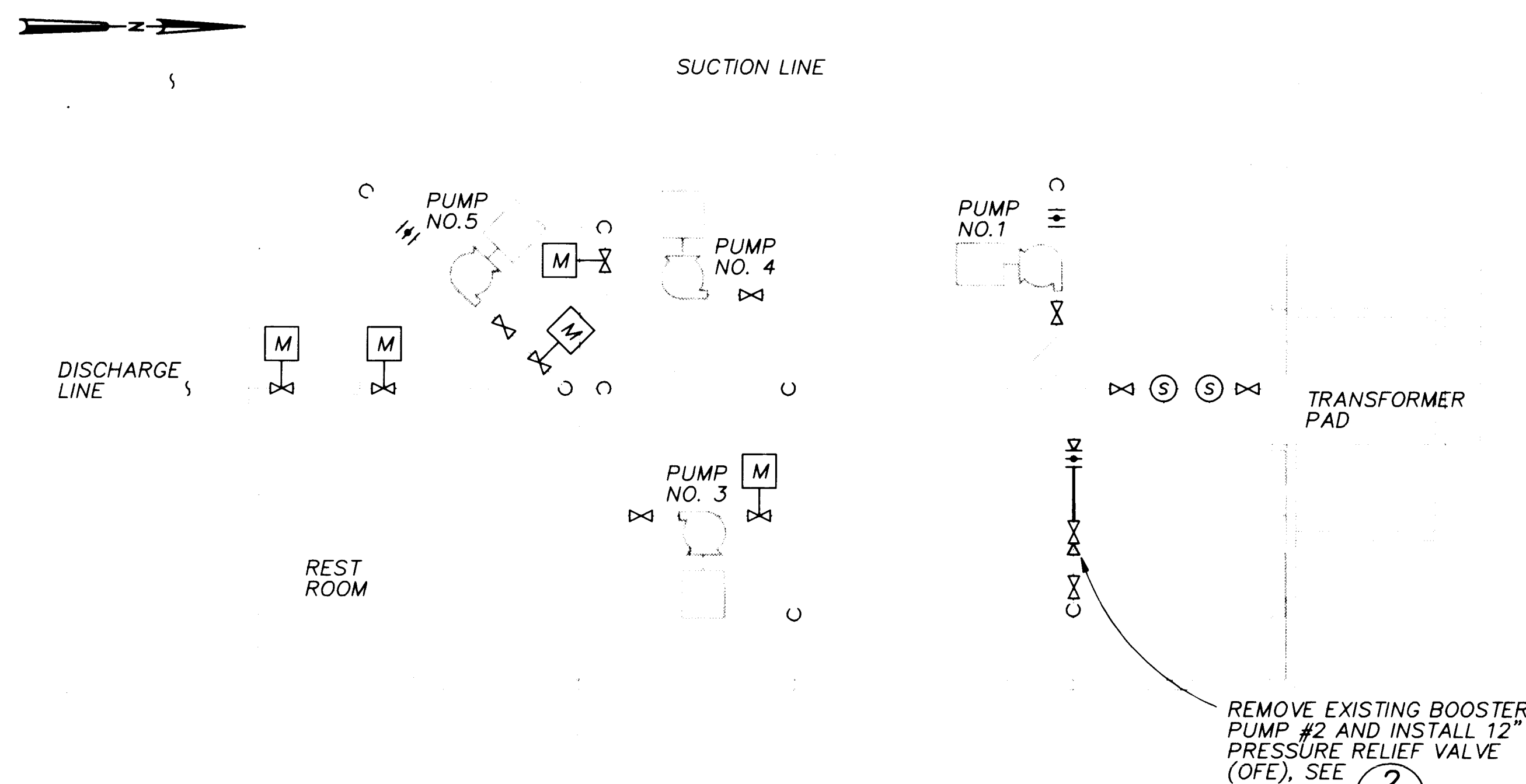


SECTION

NOTES:

- CONTRACTOR SHALL REMOVE EXISTING BOOSTER PUMP #5 AND STORE AS DIRECTED BY THE ENGINEER.
- 18"x12" REDUCER ON NORTH SIDE OF THE PRESSURE RELIEF VALVE SHALL BE FABRICATED SPECIALLY TO MAKE UP DIFFERENCE IN EXISTING PIPE & ELEVATIONS. CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO FABRICATION OF PIPING COMPONENTS.

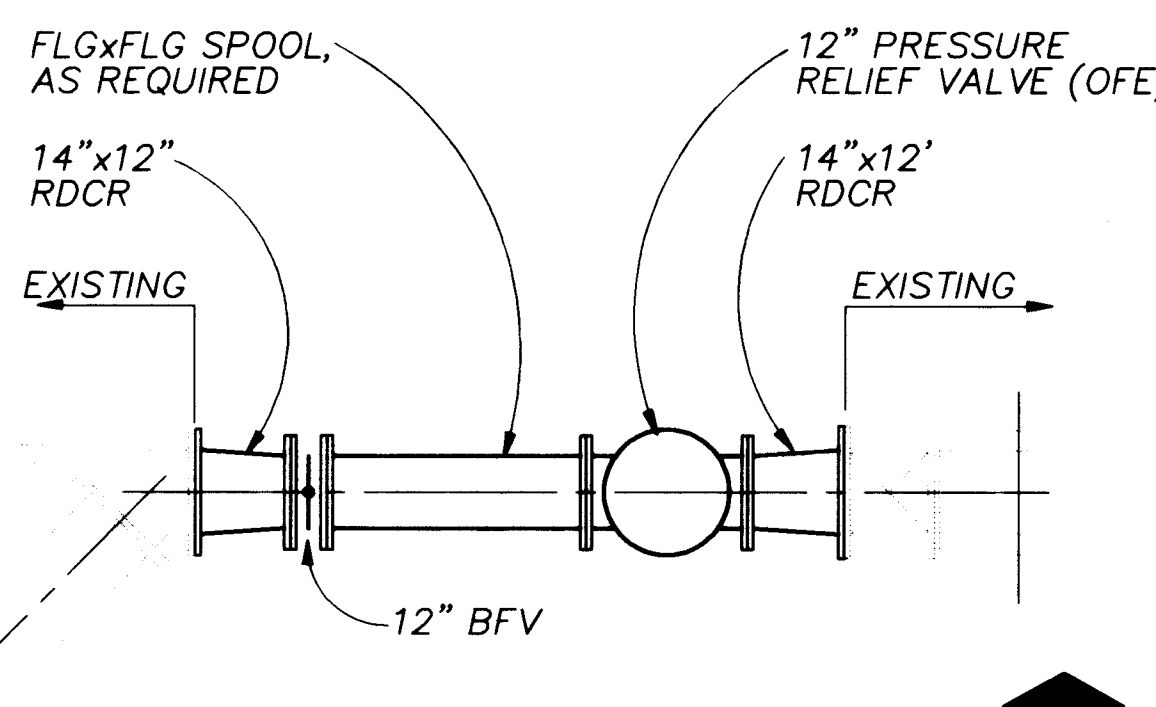
**SANTA BARBARA PUMP STATION
TEMPORARY PIPING MODIFICATIONS (1)**
3/8" = 1'-0"



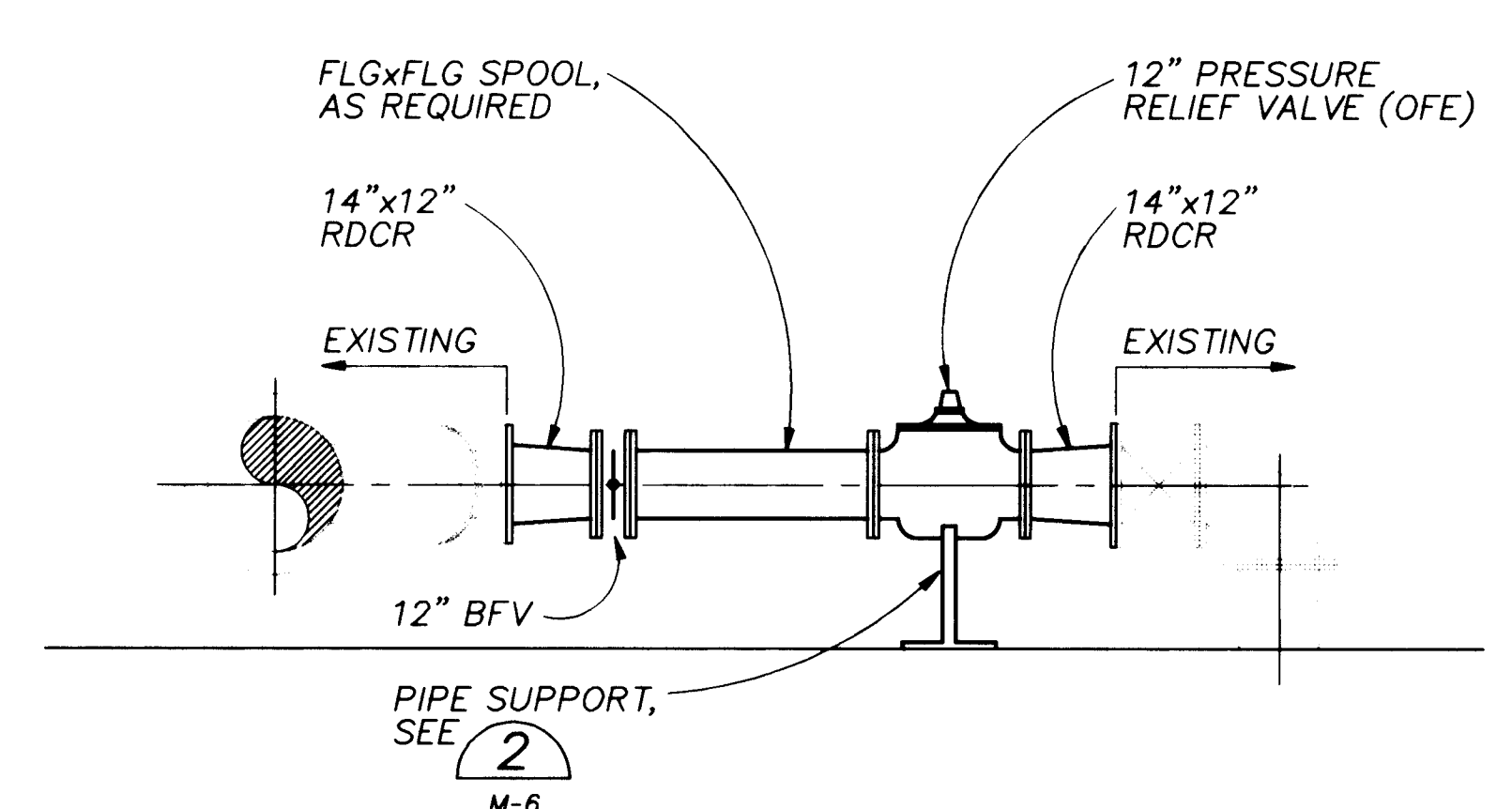
CHARLES WELLS PUMP STATION PLAN
NTS

RECORD DRAWINGS

Revisions Drawn by: *Michael Brewer* Date: *Nov. 15, 1994*
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



PLAN



SECTION

NOTES:

- CONTRACTOR SHALL REMOVE EXISTING BOOSTER PUMP #2.
- CONTRACTOR SHALL FIELD VERIFY EXISTING CONDITIONS PRIOR TO FABRICATION OF PIPING COMPONENTS.
- ALL PIPING, VALVES, AND ACCESSORIES ASSOCIATED WITH THESE TEMPORARY MODIFICATIONS SHALL BE REMOVED AND TURNED OVER TO THE OWNER PRIOR TO DEMOLITION OF THE EXISTING CHARLES WELLS PUMP STATION.

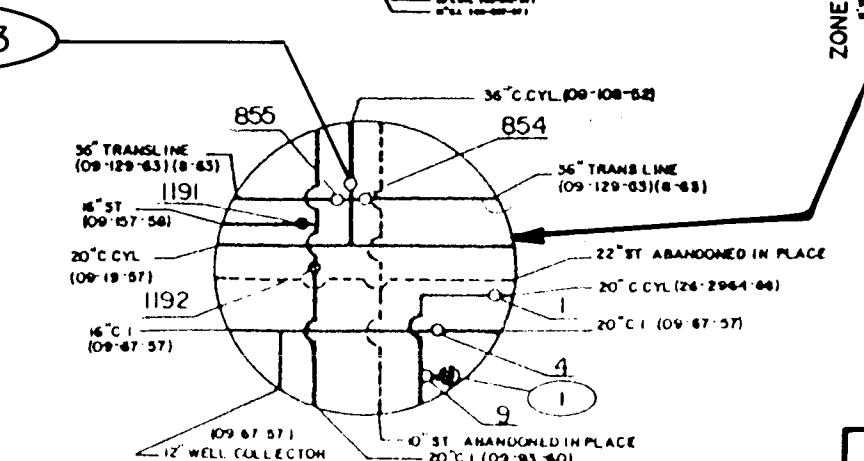
**EXISTING CHARLES WELLS PUMP STATION
TEMPORARY PIPING MODIFICATIONS (2)**
3/8" = 1'-0"

**APPROVAL OF RECORD
DRAWINGS**
PROJECT ENGINEER
William J. Stuart
DATE: *12/21/94*

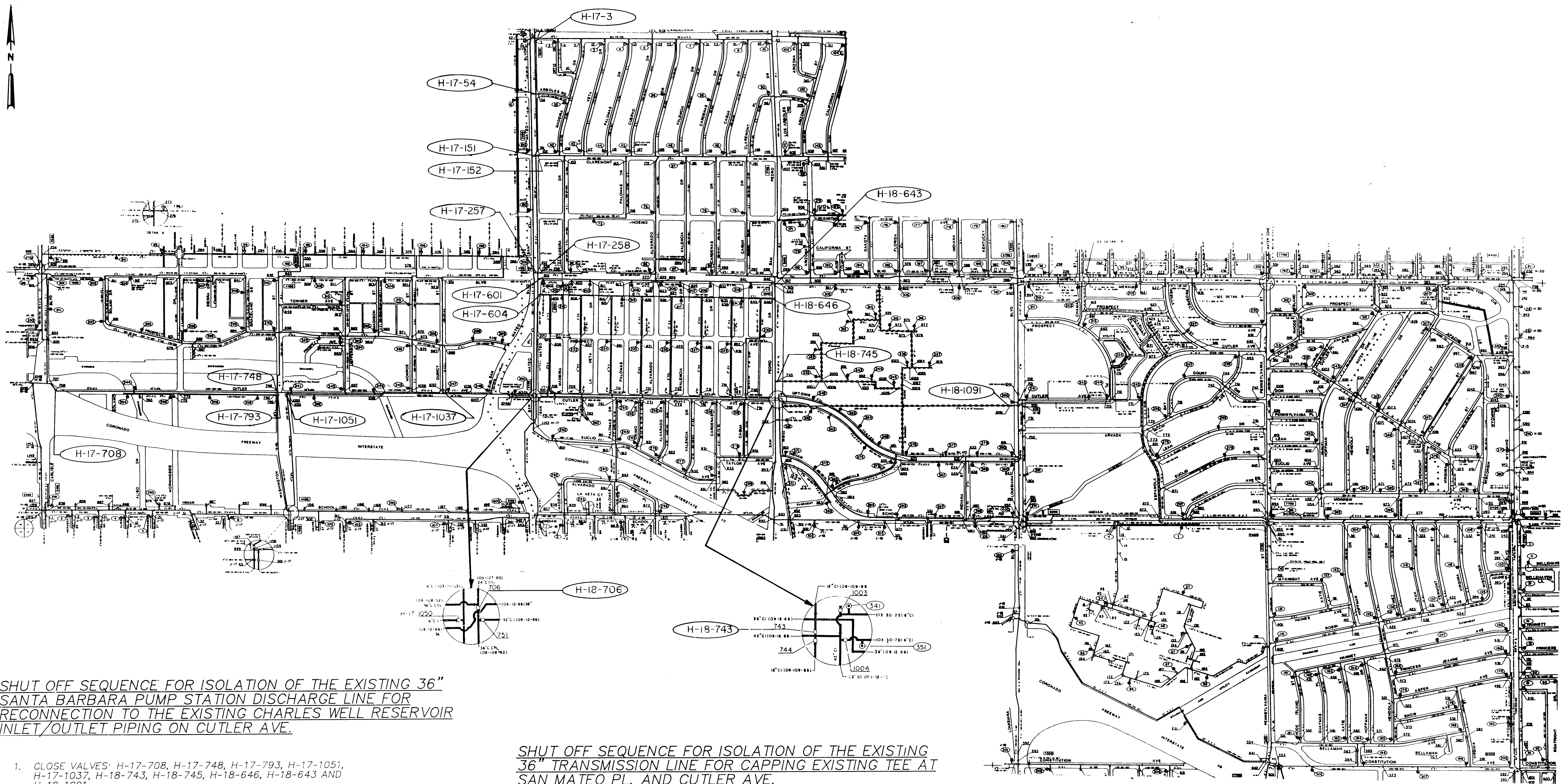
VERIFIED
BAR IS ONE INCH ON
ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION DEADHEADING					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair			Water		
Trans. Dev.			Waste Water		
Hydrology					
DRAWING NO.	D-2	MAP NO.	H-16/H-17	SHEET	OF 57

CP NO. 4214.90



CP No. 4214.90



SHUT OFF SEQUENCE FOR ISOLATION OF THE EXISTING 36" SANTA BARBARA PUMP STATION DISCHARGE LINE FOR RECONNECTION TO THE EXISTING CHARLES WELLS RESERVOIR INLET/OUTLET PIPING ON CUTLER AVE.

1. CLOSE VALVES: H-17-708, H-17-748, H-17-793, H-17-1051, H-17-1037, H-18-743, H-18-745, H-18-646, H-18-643 AND H-18-1091.
2. COMPLETE WORK TO RECONNECT EXISTING 36" SABA BARBARA PUMP STATION DISCHARGE LINE TO EXISTING 36" CHARLES WELLS RESERVOIR INLET/OUTLET PIPING ON CUTLER AVE. AT THE EXISTING CHARLES WELLS PUMP STATION.
3. OPEN VALVES: H-18-1091, H-18-643, H-18-646, H-18-745, H-18-743, H-17-1037, H-17-1051, H-17-793, H-17-748 AND H-17-708.

SHUT OFF SEQUENCE FOR ISOLATION OF THE EXISTING 36" TRANSMISSION LINE FOR CAPPING EXISTING TEE AT SAN MATEO PL. AND CUTLER AVE.

1. CLOSE VALVES: H-17-3, H-17-54, H-17-151, H-17-152, H-17-257, H-17-258, H-17-601, H-17-604 AND H-18-706.
2. COMPLETE WORK TO CAP THE EXISTING TEE ON THE 36" TRANSMISSION LINE AT SAN MATEO PL. AND CUTLER AVE.
3. OPEN VALVES: H-18-706, H-17-604, H-17-601, H-17-258, H-17-257, H-17-152, H-17-151, H-17-54 AND H-17-3.

WATER SHUT OFF PLAN FOR THE EXISTING 36" TRANSMISSION LINES AT CUTLER AND SAN MATEO

LEGEND	LEGEND	LEGEND
DISTRIBUTION/TRANS. LINE	FIRE HYDRANT	FIRE HYDRANT NO.
THRU TRANSMISSION LINE	GATE VALVE WITH BY-PASS	VALVE NO.
WELL LINE	PRESSURE RELIEF VALVE	DRAIN LINE
GATE VALVE	AIR RELIEF VALVE	PRESSURE ZONE LINE
CLOSED VALVE	CHECK VALVE	BUTTERFLY VALVE
SHUT VALVE	MOTORIZED GATE VALVE	STREET NO.
LINE SIZE REDUCTION	END OF PROJECT	

RECORD DRAWINGS

Revisions Drawn by *Michael Brown* Date *Dec 15, 1994*
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION					
TITLE: CHARLES WELLS PUMP STATION WATER SHUT OFF PLAN					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
D.R.C. Chair	<i>34.5</i>	<i>12-1-92</i>	Water		
Trans. Dev.	<i>12-1-92</i>	<i>12-1-92</i>	Waste Water		
Hydrology					
DRAWING NO. WS-2		MAP NO. H17-19, J19-20		SHEET 57 OF 57	

AS BUILT INFORMATION		BENCH MARKS		SURVEY INFORMATION		ENGINEER'S SEAL		REVISIONS		DESIGN	
CONTRACTOR	DATE			NO.	BY	DATE		NO.	DATE	DESIGNED BY	DATE
STAKED BY	DATE									M. BREWER	11/12/92
FIELD ACCEPTANCE BY	DATE									DRAWN BY	DATE
FIELD DRAWINGS	DATE									CHECKED BY	DATE
CORRECTED BY	DATE									J. WINTERS	11/12/92
MICRO-FILM INFORMATION											
RECORDED BY	DATE										
NO.											