

# GROUNDWATER TREATMENT REMEDIAL ACTION



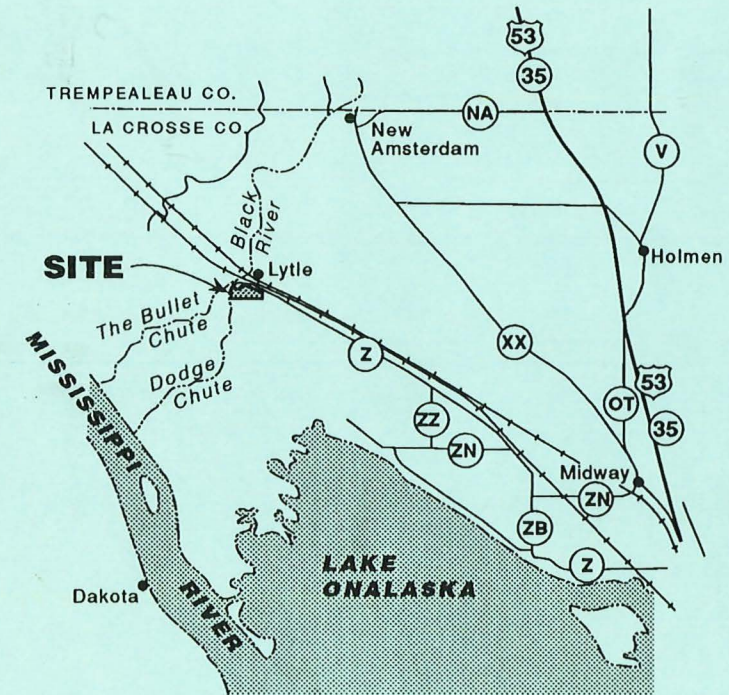
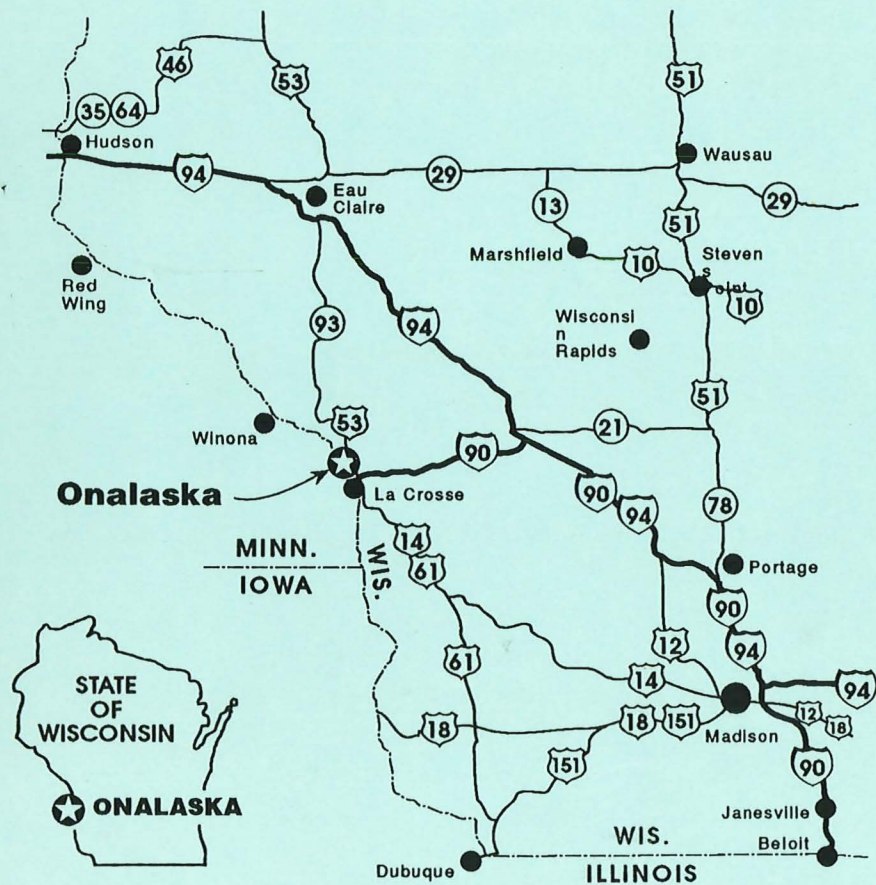
SI/6 3201336 0/RTS  
ASBT



**SITE VICINITY MAP**

## Onalaska Township, Wisconsin

**SITE LOCATION MAP**



**RECORD DRAWINGS**

Revisions Drawn By D.J. SCHAUER Date 10-21-94

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.



DSGN M.W. Paddeck  
DR M. Schuetz  
CHK S. Keith  
APVD S. Keith

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS	SMK

**REUSE OF DOCUMENTS**

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

**VERIFY SCALE**

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

LANDFILL CAP REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

ONALASKA LANDFILL, ONALASKA, WI  
**TITLE**  
LOCATION & VICINITY MAPS

SHEET	1
DWG NO.	01-G-01
DATE	JULY 1992
PROJ NO.	GLO65602

DRAWING #	SHEET #	DRAWING TITLE
<b>GENERAL</b>		
01-G-01	1	TITLE, LOCATION & VICINITY MAP
01-G-02	2	INDEX OF DRAWINGS
01-G-03	3	CIVIL LEGEND AND ABBREVIATIONS
01-G-04	4	ARCHITECTURAL / STRUCTURAL LEGEND & GENERAL NOTES
01-G-05	5	MECHANICAL LEGENDS & ABBREVIATIONS
01-G-06	6	ELECTRICAL LEGEND & ABBREVIATIONS
01-G-07	7	I & C LEGENDS
<b>CIVIL</b>		
01-C-01	8	GENERAL SITE PLAN
01-C-02	9	LAYOUT PLAN
01-C-03	10	GRADING PLAN
01-C-04	11	EXTRACTION WELL PIPING - PLAN & PROFILE
01-C-05	12	AIR INJECTION HEADER PIPING & WELL LOCATION PLAN
01-C-06	13	OUTFALL PIPE PLAN & PROFILE
01-C-07	14	EXTRACTION WELL DETAIL
01-C-08	15	AIR INJECTION WELL AND GAS MONITORING WELL CONSTRUCTION DETAILS
01-C-09	16	PIEZOMETER AND MONITORING WELL CONSTRUCTION DETAILS
01-C-10	17	YARD PIPING AND OUTFALL DETAILS
01-C-11	18	CIVIL DETAILS
<b>ARCHITECTURAL</b>		
01-A-01	19	PROCESS BUILDING - ARCHITECTURAL - GROUND FLOOR PLAN
01-A-02	20	PROCESS BUILDING - ARCHITECTURAL - PLANS AND WALL TYPES
01-A-03	21	PROCESS BUILDING - ARCH. - ELEVATIONS & SCHEDULES
01-A-04	22	PROCESS BUILDING - ARCH. - SECTIONS & ELEVATIONS
01-A-05	23	PROCESS BUILDING - ARCH. DETAILS
01-A-06	24	PROCESS BUILDING - ARCH. DETAILS
<b>STRUCTURAL</b>		
01-S-01	25	PROCESS BUILDING - STRUCTURAL - FOUNDATION / GROUND FLOOR PLAN
01-S-02	26	PROCESS BUILDING - STRUCTURAL - SECTIONS & DETAIL
01-S-03	27	PROCESS BUILDING - STRUCTURAL - FRAMING PLAN & SECTIONS
01-S-04	28	PROCESS BUILDING - STRUCTURAL - DETAILS
01-S-05	29	CLARIFIER STRUCTURAL FOUNDATION PLAN, SECTIONS AND DETAIL
01-S-06	30	AERATION TANK & STRIPPER TOWER, STRUCTURAL FOUNDATION PLANS AND SECTIONS
② 01-S-07	30A	ACID TANK - STRUCTURAL - PLAN, SECTIONS, AND DETAIL

DRAWING #	SHEET #	DRAWING TITLE
<b>MECHANICAL</b>		
01-M-01	31	PROCESS BUILDING - BUILDING SERVICES - PLAN AND DETAILS
② 01-M-02	32	PROCESS BUILDING - MECHANICAL - EQUIPMENT AND PIPING PLAN AND DETAIL
② 01-M-03	33	CLARIFIER, AERATION, AND ACID TANK - PLAN AND DETAILS
② 01-M-04	34	MECHANICAL SECTIONS AND DETAIL
01-M-05	35	PROCESS BUILDING - MECHANICAL - SECTIONS & DETAILS
01-M-06	36	PROCESS BUILDING - MECHANICAL - SECTIONS & DETAILS
01-M-07	37	PROCESS BUILDING - MECHANICAL - SECTIONS & DETAILS
01-M-08	38	PROCESS BUILDING - MECHANICAL - HVAC PLAN & DETAILS
01-M-09	39	PROCESS BUILDING - MECHANICAL - PIPE SUPPORT LOCATION PLAN
<b>ELECTRICAL</b>		
01-E-01	40	ELECTRICAL SITE PLAN
01-E-02	41	ELECTRICAL ONE - LINE DIAGRAM
01-E-03	42	ELECTRICAL CONTROL DIAGRAM
01-E-04	43	ELECTRICAL PROCESS PLAN
01-E-05	44	CLARIFIER AND AERATION - ELECTRICAL PLAN
01-E-06	45	ELECTRICAL - FACILITY PLAN
01-E-07	46	ELECTRICAL DETAILS
<b>INSTRUMENTATION &amp; CONTROL</b>		
01-N-01	47	SEE SPECIFICATIONS
01-N-02	48	SEE SPECIFICATIONS
01-N-03	49	PROCESS & INSTRUMENTATION DIAGRAM - WELL FIELD PUMPS & AERATION
01-N-04	50	PROCESS & INSTRUMENTATION DIAGRAM - CLARIFICATION & CAUSTIC SYSTEM
01-N-05	51	PROCESS & INSTRUMENTATION DIAGRAM - FILTRATION AND CLEARWELL
01-N-06	52	PROCESS & INSTRUMENTATION DIAGRAM - AIR STRIPPING / SERVICE WATER SYSTEM
01-N-07	53	PROCESS & INSTRUMENTATION DIAGRAM - SLUDGE DEWATERING
01-N-08	54	PROCESS & INSTRUMENTATION DIAGRAM - PLANT SUMP / COMPRESSED AIR SYSTEM
01-N-09	55	PROCESS INSTRUMENTATION AND CONTROL SYSTEM - MAIN CONTROL PANEL ELEVATION & DETAILS
01-N-10	56	PROCESS INSTRUMENTATION AND CONTROL SYSTEM - TYPICAL CONTROL SCHEMATICS
② 01-N-11	57	PROCESS & INSTRUMENTATION DIAGRAM -

ACID SYSTEM

**RECORD DRAWINGS**

Revisions Drawn By D.J. SCHAUER Date 10-21-94

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.



DSGN	P. Boersma
DR	M. Schuetz
CHK	D. Oxley
APVD	S. Keith

NO.	DATE	REVISION	BY	APVD
②	10-94	RECORD DRAWING	DJS	SMK
	1/93	ADDED SHEETS AND REVISED TITLE.	BRL	SMK

**REUSE OF DOCUMENTS**

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

**VERIFY SCALE**

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

ONALASKA LANDFILL, ONALASKA, WI

**INDEX OF DRAWINGS**

SHEET	2
DWG NO.	01-G-02
DATE	JULY 1992
PROJ NO.	GLO65602.FD

### CIVIL LEGEND

### ABBREVIATIONS

EXISTING	THIS CONTRACT	
		CONTOUR LINE
		SPOT ELEVATION
		GROUND SLOPE DESIGNATION
		ROAD CENTERLINE STATIONING
		GRAVEL ROAD
		PAVED ROADS
		CULVERT
		CATCH BASIN, STORMWATER INLET
		MANHOLE
		ELECTRICAL MANHOLE
		ELECTRICAL HANDHOLE
		AREA-LIGHTING BASE
		SURVEY BASE LINE MONUMENT
		STRUCTURE LOCATION POINT
		DRAINAGE WAY OR DITCH
		DRAWING MATCH LINE
		CENTERLINE, BUILDING, ROAD, ETC.
		STAGING, STOCKPILE, AND PLAN HOLDING AREA LIMITS
		STRUCTURE
		GRAVEL AREA
		FACILITY NUMBER
		STRUCTURE NUMBER
		FENCE
		GATE (SHOWN WITH FENCE TYPES ABOVE)
		POWER POLE WITH GUY SUPPORT
		OVERHEAD POWER LINE
		UNDERGROUND TELEPHONE LINE
		STAGING AREA
		SILT FENCE
		FOUND IRON PIPE
		HIGH WATER
		EXISTING TREES AND SHRUBS TO REMAIN
		EXISTING TREES AND SHRUBS TO BE REMOVED

	EARTH PATTERN		RAILROAD TRACKS
	DEMOLITION AREA		SIGN
	TOPSOIL		LIGHT STANDARD
	SAND		PROPERTY LINE/RIGHT OF WAY
	CLAY		EASEMENT LINE
	COVER SOIL		STREET CENTERLINE
	WORKING SURFACE		SURVEY OR SUBDIVISION BOUNDARY
	GRADING LAYER		
	LIMITS OF TOPSOIL AND SEEDING (UNLESS OTHERWISE NOTED)		
	PROJECT BENCHMARK		
	PI (POINT OF INTERSECTION)		
	VPI (VERTICAL POINT OF INTERSECTION) AND FINISH GRADE ELEVATION		
	HORIZONTAL CONTROL POINT		
	RADIAL POINT		
	MONITORING WELL LOCATION AND NUMBER		
	AIR WELL		
	GAS MONITORING WELL		
	LANDFILL GAS MONITORING WELL		
	PIEZOMETER / MONITORING WELL		
	LOCATION OF EFFLUENT OUTFALL PIPELINE INVESTIGATION BORINGS		
	EXTRACTION WELL		
	DI (DROP INLET)		
	1/2" IRON PIPE		
	SET PK NAIL		
	EXTRACTION WELL		
	DATA OF RECORD		
	DATA OF RECORD		
	BLOCK NUMBER		
<b>CURVE DATA</b>			
R = RADIUS		L = LENGTH	
Δ = DELTA		⊘ = SEMITANGENT	
PI = POINT OF INTERSECTION		PC = POINT OF CURVATURE	
PT = POINT OF TANGENT			

A	ABANDONED
AB	ANCHOR BOLT
ACCU	AIR-COOLED CONDENSING UNIT
AGG	AGGREGATE
AL	ALUMINUM
APPROX	APPROXIMATE
ASU	AIR-SUPPLY UNIT
BD	BUTTERFLY DAMPER
BF	BOTTOM FACE
BG	LOW WALL GRILLE
BM	BEAM
BM	BENCH MARK
BOT	BOTTOM
C	MALE CONNECTOR
CD	CEILING DIFFUSER
CG	CEILING GRILLE
CJ	CONSTRUCTION JOINT
CMP	CORRUGATED METAL PIPE
CONT	CONTINUOUS
C/L	CENTER LINE
±	CENTER LINE
CLR	CLEAR
CMP	CORRUGATED METAL PIPE
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CPLG	COUPLING
CTR	CENTER
CTRD	CENTERED
D	DEEP
DECON	DECONTAMINATION
DF	DUCT FURNACE
DIA	DIAMETER
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DWG	DRAWING
E	EXISTING
EA	EACH
EF	EACH FACE
EF	EXHAUST FAN
EL	ELEVATION
EW	EACH WAY
EXST	EXISTING
EXT	EXTENSION
FC	FEMALE CONNECTOR
FCTY	FACTORY
FMC	FLUSH MOUNT COVER
F. EXT	FIRE EXTINGUISHER
FD	FLOOR DRAIN
F.FL	FINISHED FLOOR

GALV.	GALVANIZED
GB	GRAB BAR
GW	GROUNDWATER
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HVAC	HEATING VENTILATING AND AIR CONDITIONING
I.D.	INSIDE DIAMETER
INV	INVERT
L	ANGLE
LBS	POUNDS
LLV	LONG LEG VERTICAL
M	MEDIUM
MAX	MAXIMUM
MD	MOTORIZED DAMPER
MECH	MECHANICAL
MFR	MANUFACTURER
MIN	MINIMUM
MIR	MIRROR
MTL	METAL
N	NORTHING
NA	NOT APPLICABLE
N.I.C.	NOT IN CONTRACT
NO.	NUMBER
NTS	NOT TO SCALE
OBSC	OBSCURED
OC	ON CENTER
OPNG	OPENING
PE	HIGH DENSITY POLYETHYLENE
PJF	PREMOLDED JOINT FILLER
PL	PLATE
PSF	POUNDS PER SQUARE FT.
PSI	POUNDS PER SQUARE INCH
PTD/WR	PAPER TOWEL DISPENSER/WASTE RECEPTACLE
PVC	POLYVINYL CHLORIDE
RAC	ROOM AIR CONDITIONER
RAD	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REINF	REINFORCEMENT
REQD	REQUIRED
R.I.	REMEDIAL INVESTIGATION
S	SHALLOW
SPEC'D	SPECIFIED
S.F	CEILING FAN OR SQUARE FEET
SH	SHEET
SIM	SIMILAR
SST	STAINLESS STEEL
STL	STEEL
STRUCT.	STRUCTURAL
T & B	TOP AND BOTTOM
T.O.	TOP OF
TPD	TOILET PAPER DISPENSER
TYP	TYPICAL
UH	UNIT HEATER
WSR	WALL SUPPLY REGISTER
WR GWB	WATER RESISTANT GYPSUM WALLBOARD
WRG	WALL REGISTER GRILL
W/	WITH
ZNAP	ZONE OF NONAQUEOUS PHASE CONTAMINATION

### RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

OSGN	MW PADDOCK
DR	PT KUTZ
CHK	MS SCHMIEGE
APVD	S. KEITH

10-94 RECORD DRAWING

DJS SMK

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

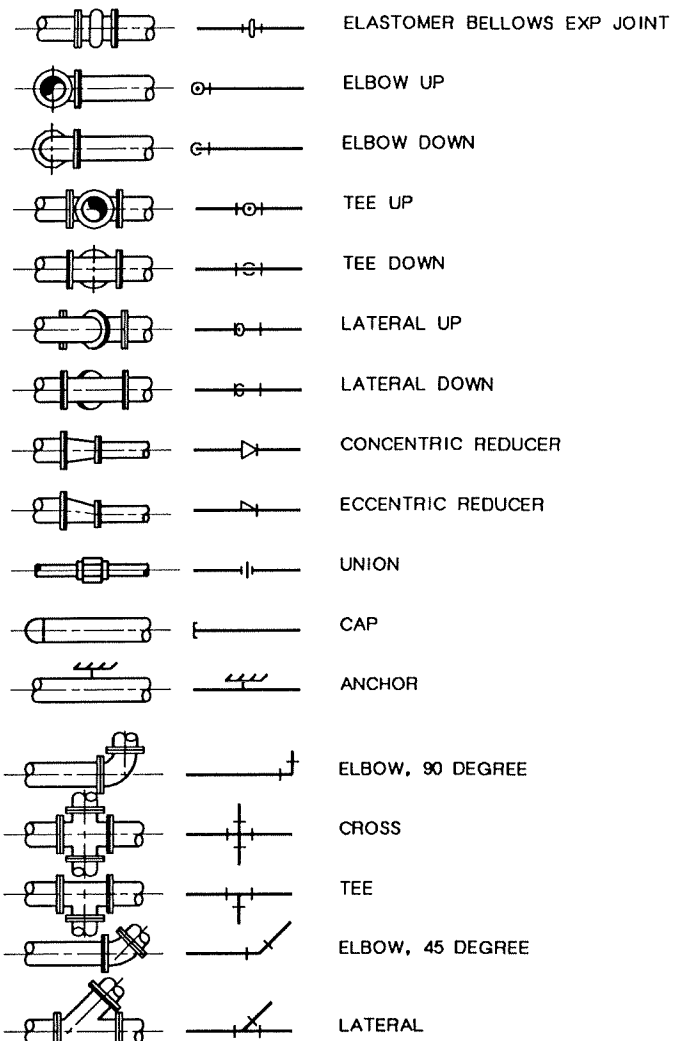
CIVIL  
LEGEND AND ABBREVIATIONS

SHEET	3
DWG NO.	01-G-03
DATE	OCT 1992
PROJ NO.	GL065602.FD



### PIPE AND FITTING SYMBOLS

DOUBLE LINE SINGLE LINE

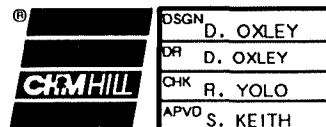


- NOTES:**
- ONLY FLANGED END CONNECTIONS ARE SHOWN HERE FOR DOUBLE LINE FITTINGS. FITTINGS WITH OTHER END PATTERNS ARE SHOWN SIMILARLY ON THE CONSTRUCTION DRAWINGS. ALSO SEE PIPING SPECIFICATIONS.
  - SYMBOLS SHOWN HERE FOR SINGLE LINE FITTINGS ARE GENERIC ONLY. REFER TO PIPING SPECIFICATIONS FOR SPECIFIC END CONNECTIONS FOR SINGLE LINE PIPE AND FITTINGS.

### RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.



DSGN	D. OXLEY				
OR	D. OXLEY				
CHK	R. YOLO	10-94	RECORD DRAWING	DJS	SMK
APVD	S. KEITH	NO.	DATE	BY	APVD

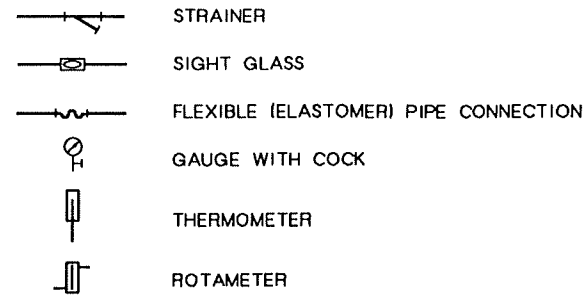
**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

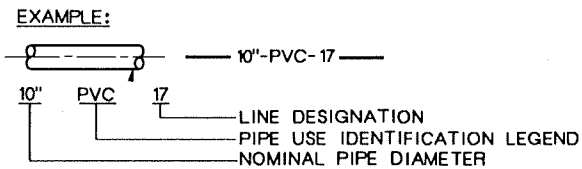
GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

SHEET 5  
DWG NO. 01-G-05  
DATE OCT 1992  
PROJ NO. GLO65602.FD

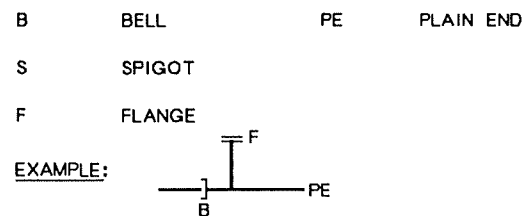
### MISCELLANEOUS PIPING SYMBOLS



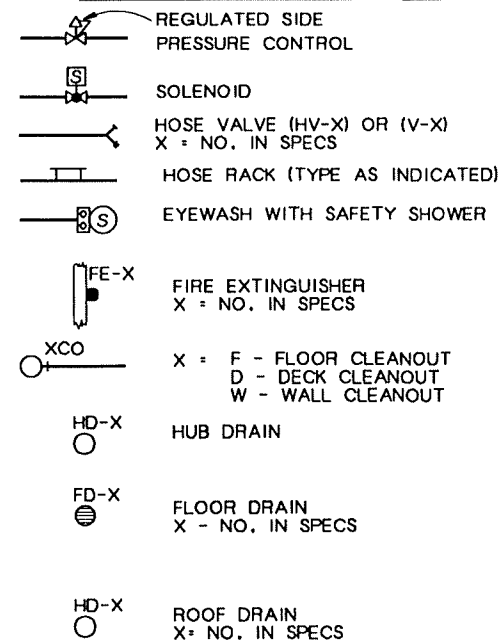
### PIPING DESIGNATION



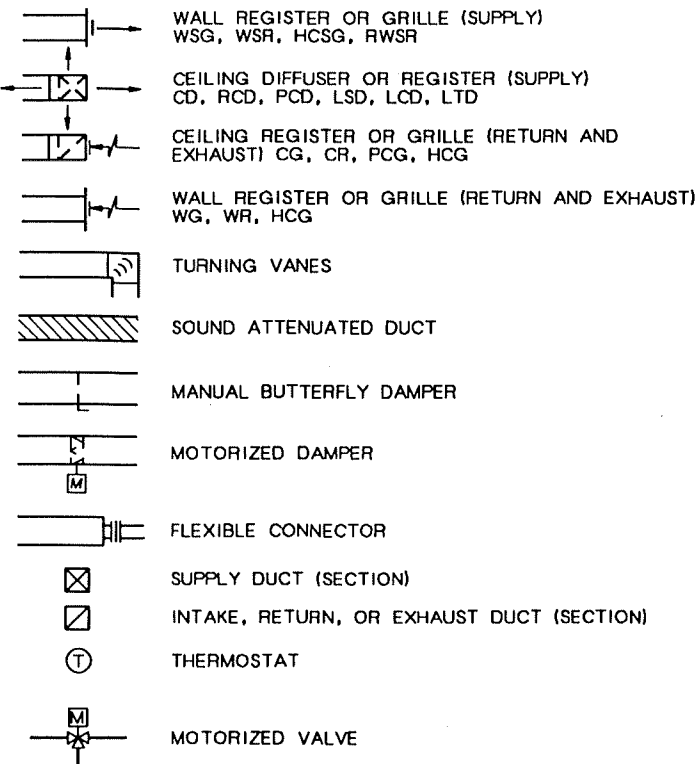
### PIPE AND FITTING END PATTERNS



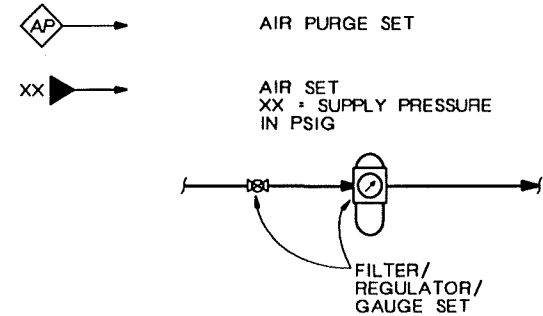
### MISCELLANEOUS SYMBOLS



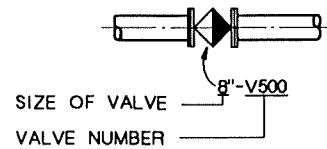
### HEATING, VENTILATING, AND AIR CONDITIONING SYMBOLS



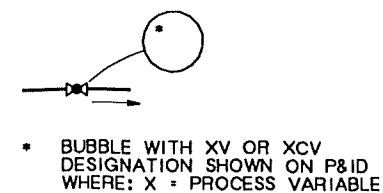
### PLANT AIR LEGEND



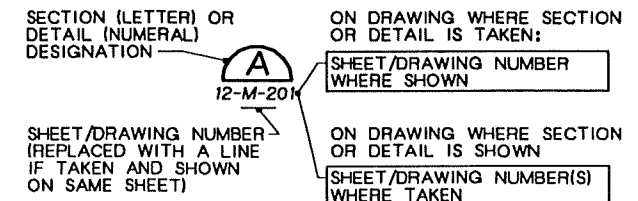
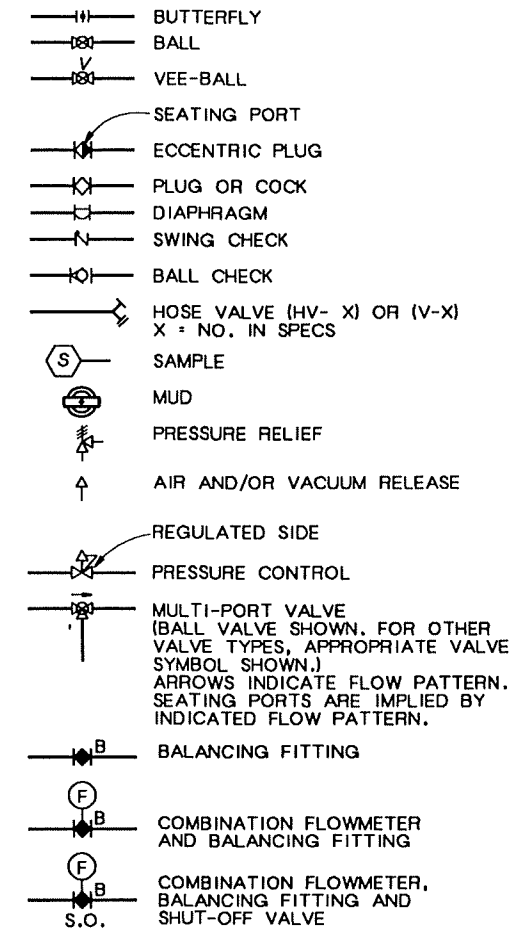
### VALVE DESIGNATIONS MANUAL VALVES AND CHECK VALVES



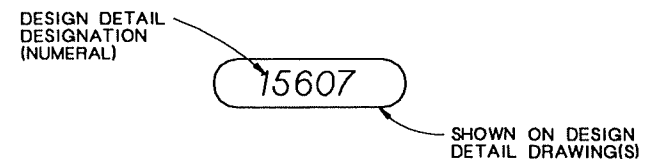
### CONTROL VALVES



### VALVE SYMBOLS



### DETAIL AND SECTION DESIGNATION



### DESIGN DETAIL DESIGNATION

**NOTE:**  
ALL DESIGN DETAILS ARE TYPICAL AND MUST BE USED IF DESIGN DETAIL DESIGNATION IS NOT SHOWN

### MECHANICAL LEGENDS AND ABBREVIATIONS

# ELECTRICAL LEGEND

# ABBREVIATIONS

SYMBOL	DESCRIPTION
	CONNECTION POINT TO EQUIPMENT SPECIFIED. FURNISHED AND INSTALLED UNDER OTHER SECTIONS. RACEWAY, CONDUCTOR AND CONNECTION IN THIS SECTION.
	INDICATES RACEWAYS AND CIRCUIT NUMBERS. FIRST NUMBER IS RACEWAY AND NUMBER AFTER DASH IS CIRCUIT NUMBER. 5-E(3) INDICATES THAT THERE ARE 3 EMPTY RACEWAY NO. 5, SEE SCHEDULE.
	MAJOR ELECTRICAL COMPONENT OR DEVICE - NAME OR IDENTIFYING SYMBOL AS SHOWN.
	BRANCH CIRCUIT PANEL BOARD
	UNIT HEATER NO. 1
	TERMINAL JUNCTION BOX
	WOUND-ROTOR MOTOR, HORSEPOWER INDICATED
	MOTOR, SQUIRREL CAGE INDUCTION, HORSEPOWER INDICATED
	LUMINAIRE, SEE SCHEDULE
	LUMINAIRE, SEE SCHEDULE
	LUMINAIRE AND POLE, SEE SCHEDULE
	WALL MOUNTED LUMINAIRE, SEE SCHEDULE
	FLOOD LIGHTS - AIM IN THE DIRECTION SHOWN
	EXIT LIGHTS, SEE SCHEDULE
	SMALL LETTER SUBSCRIPT AT SWITCH AND LUMINAIRE INDICATES SWITCHING. SUBSCRIPT NUMBER AT LUMINAIRE INDICATES CIRCUIT IN PANELBOARD.
	HOME RUN - DESTINATION SHOWN
	EXPOSED CONDUIT AND CONDUCTORS*
	CONCEALED CONDUIT AND CONDUCTORS*
<b>NOTE:</b> * ALL UNMARKED CONDUIT RUNS CONSIST OF TWO NO.12 CONDUCTORS IN CONDUIT. RUNS MARKED WITH CROSSHATCHES INDICATE NUMBER OF NO.12 CONDUCTORS. CROSSHATCH WITH SUBSCRIPT "G" INDICATES GREEN GROUND WIRE. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.	
	CROSSHATCHES WITH BAR INDICATE #10 CONDUCTOR. SIZE CONDUIT ACCORDING TO SPECIFICATIONS AND APPLICABLE CODE.
	CONDUIT DOWN
	CONDUIT UP
	CONDUIT, STUBBED AND CAPPED AS SHOWN
	CABLE TRAY, SEE SPECIFICATIONS
	BUS DUCT, SEE SPECIFICATIONS
	TRENCHING FOR UTILITY COMPANY PRIMARY POWER CKTS
	TRENCHING FOR TELEPHONE COMPANY CIRCUITS
	CONCRETE ENCASED CONDUIT
	DIRECT BURIED CONDUIT

SYMBOL	DESCRIPTION
	WALL SWITCH: 2- DOUBLE POLE P- PILOT LIGHT 3- THREE WAY K- KEY OPERATED 4- FOUR WAY D- DIMMER WP-WEATHERPROOF CRE-CORROSION RESISTANT
	MANUAL MOTOR STARTER SWITCH
	CONVENIENCE RECEPTACLE - DUPLEX UNLESS SPECIFIED OTHERWISE WP-WEATHERPROOF C- CLOCK HANGER TL- TWIST LOCK CRE-CORROSION RESISTANT
	CONVENIENCE RECEPTACLE, PEDESTAL, DUPLEX SINGLE FACE UNLESS INDICATED OTHERWISE
	RECEPTACLE - 240V., 10, AMPERAGE INDICATED
	RECEPTACLE, SPECIAL PURPOSE - AMPERAGE AS INDICATED
	DUPLEX CONVENIENCE RECEPTACLE - FLUSH IN FLOOR
	MULTI OUTLET ASSEMBLY
	TELEPHONE RECEPTACLE (OUTLET BOX ONLY)
	GENERAL CONTROL OR WIRING DEVICE. LETTER SYMBOLS OR ABBREVIATIONS INDICATE TYPE OF DEVICE.
	PUSH-BUTTON STATION. FOR TYPE PUSH BUTTON REQUIRED, SEE CONTROL DIAGRAMS.
	NONFUSED DISCONNECT SWITCH, SIZE INDICATED, 3 POLE UNLESS INDICATED OTHERWISE.
	FUSED DISCONNECT SWITCH, SIZE INDICATED (60/40, 60 = SWITCH RATING; 40 = FUSE RATING) 3 POLE UNLESS INDICATED OTHERWISE.
	CONTACTOR, MAGNETIC, NEMA SIZE INDICATED.
	STARTER MAGNETIC NEMA SIZE INDICATED, SEE CONTROL DIAGRAM.
	COMBINATION (FUSE OR CIRCUIT BREAKER AS INDICATED) MAGNETIC STARTER, NEMA SIZE INDICATED, SEE CONTROL DIAGRAM.
	METERING FACILITIES
	GROUND ROD
	FIRE ALARM STATION, MANUAL
	FIRE ALARM STATION, AUTOMATIC, HEAT DETECTOR
	FIRE ALARM BELL
	FIRE ALARM HORN
	FIRE ALARM IONIZATION DETECTOR
	AIR DUCT IONIZATION DETECTOR

SYMBOL	DESCRIPTION
	CONTACT - NORMALLY OPEN WITH NEMA SIZE INDICATED AS APPLICABLE
	CONTACT - NORMALLY CLOSED WITH NEMA SIZE INDICATED AS APPLICABLE
	OVERLOAD RELAY HEATER
	MAGNETIC STARTER WITH NEMA SIZE INDICATED
	CIRCUIT BREAKER, MAGNETIC TRIP ONLY, FRAME SIZE SHOWN, 3 POLE UNLESS INDICATED OTHERWISE.
	CIRCUIT BREAKER, THERMAL MAGNETIC TRIP SHOWN, 3 POLE UNLESS INDICATED OTHERWISE.
	SWITCH - CURRENT RATING INDICATED, 3 POLE UNLESS INDICATED OTHERWISE.
	FUSE - RATING INDICATED
	DRAWOUT CIRCUIT BREAKER, LOW VOLTAGE
	SURGE ARRESTER
	CAPACITOR - KVAR INDICATED
	METER WITH SWITCH - SCALE RANGE SHOWN
	GROUND
	TRANSFORMER, SECONDARY VOLTAGES, PHASE AND RATING INDICATED AS APPLICABLE
	PICK-UP SETTING TIME CURRENT CHARACTERISTIC } GROUND FAULT RELAY WITH C.T.
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY OPEN
	PUSH-BUTTON SWITCH, MOMENTARY CONTACT, NORMALLY CLOSED
	PUSH-BUTTON SWITCH, MAINTAINED CONTACTS WITH MECHANICAL INTERLOCK
	3 POSITION SELECTOR SWITCH MAINTAINED CONTACT
	TIME DELAY RELAY CONTACT (TIME ACTION INDICATED)
	TIME DELAY RELAY CONTACT (TIME ACTION INDICATED)
	REMOTE DEVICE
	SELECTOR SWITCH - MAINTAINED CONTACT - X IDENTIFIES OPERATION:
	CURRENT TRANSFORMER, NUMBER INDICATED
	INDICATING LIGHT, PUSH-TO-TEST, LETTER INDICATES COLOR
	INDICATING LIGHT - LETTER INDICATES COLOR

ABBREVIATIONS	DESCRIPTION	ABBREVIATIONS	DESCRIPTION
A	AMMETER, AMPERE, AMPERE	M	MAGNETIC CONTACTOR
AF	AMPERE FRAME	COIL	COIL
AFD	ADJUSTABLE FREQUENCY DRIVE	MCC	MOTOR CONTROL CENTER
AS	AMMETER SWITCH, AMPERE SENSOR	MERC	MERCURY VAPOR MANHOLE
ASU	AIR SUPPLY UNIT	MH	MANHOLE
AT	AMPERE TRIP	MS	MOTOR STARTER MOUNT
B	BELL, BLUE	MT	MOUNT
BC	BARE COPPER	MTD	MOUNTED
C	CONDUIT, CONTACTOR	N	NEUTRAL
CB	CIRCUIT BREAKER	NA	NON-AUTOMATIC
CC	CONTROL CABLE	NC	NORMALLY CLOSED
CKT	CIRCUIT	NL	NIGHT LIGHT
CPT	CONTROL POWER TRANSFORMER	NO	NORMALLY OPEN
CR	CONTROL RELAY	NP	NAMEPLATE
CRS	COATED RIGID STEEL CONDUIT	OL	OVERLOAD RELAY
CT	CURRENT TRANSFORMER	PB	PULL BOX, PUSH BUTTON SWITCH
DC	DIRECT CURRENT	PC	PHOTOCELL
DIV	DIVISION	PNL	PANEL
E	EMPTY	PS	PRESSURE SWITCH
EF	EXHAUST FAN	PT	POTENTIAL TRANSFORMER
EO	ELECTRIC OPERATOR	PVC	POLYVINYL CHLORIDE CONDUIT
ETM	ELAPSED TIME METER	R	RED
EXST	EXISTING	RCPT	RECEPTACLE
FDR	FEEDER	RS	RIGID STEEL CONDUIT
F, FU	FUSE	RVNR	REDUCED VOLTAGE NON-REVERSING
FLR	FLOOR	SA	SURGE ARRESTOR
FLUOR	FLUORESCENT	SC	SPEED CONTROL
FVNR	FULL VOLTAGE NON-REVERSING	SH	SPACE HEATER
FVR	FULL VOLTAGE REVERSING	S/N	SOLID NEUTRAL
G	GREEN, GROUND	SPD	SPEED
GALV	GALVANIZED	SST	STAINLESS STEEL
GFI	GROUND FAULT INTERRUPTER	SV	SOLENOID VALVE
GFR	GROUND FAULT RELAY	SW	SWITCH
GND	GROUND	T	THERMOSTAT
HH	HANDHOLE	TB	TERMINAL BOARD
HID	HIGH INTENSITY DISCHARGE	TC	TIME CLOCK, TIME CLOSE
HPS	HIGH PRESSURE SODIUM HEATING, VENTILATING & AIR CONDITIONING	TD	TEMPERATURE DETECTOR RELAY
HVAC	HIGH PRESSURE SODIUM HEATING, VENTILATING & AIR CONDITIONING	TDR	TIME DELAY RELAY
IC	INTERRUPTING CAPACITY	TJB	TERMINAL JUNCTION BOX
I & C	INSTRUMENTATION AND CONTROL	TM	TIMING RELAY
INCAND	INCANDESCENT	TO	TIME OPEN
J, J-BOX	JUNCTION BOX	TR	TIMER-REPEAT CYCLE
K	KEY INTERLOCK	TS	AUTO TRANSFORMER
L	LIGHTING CONTACTOR, LOW SPEED	TSF	TEMPERATURE SWITCH
LOS	LOCKOUT STOP PUSH BUTTON	TSP	TWISTED SHIELDED PAIR
LS	LIMIT SWITCH	TST	TWISTED SHIELDED TRIAD
LT FLEX	LIQUID TIGHT FLEX CONDUIT	TYP	TYPICAL
LR	LATCHING RELAY	UH	UNIT HEATER
		UVR	UNDER VOLTAGE RELAY
		V	VOLTMETER, VOLT
		VFD	VARIABLE FREQUENCY DRIVE
		VS	VOLTMETER SWITCH
		W	WATT
		WHD	WATT HOUR DEMAND METER
		WP	WEATHERPROOF
		XFMR	TRANSFORMER

## RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

### REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

**NOTE:**  
THIS IS A STANDARD LEGEND SHEET. SOME SYMBOLS OR ABBREVIATIONS MAY APPEAR ON THIS SHEET AND NOT ON THE PLANS.

CH2M HILL  
DSGN G. GEIGLER  
DR D. OXLEY  
CHK G. GEIGLER  
APVD S. KEITH

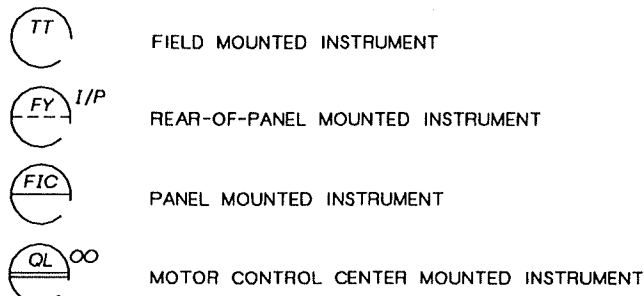
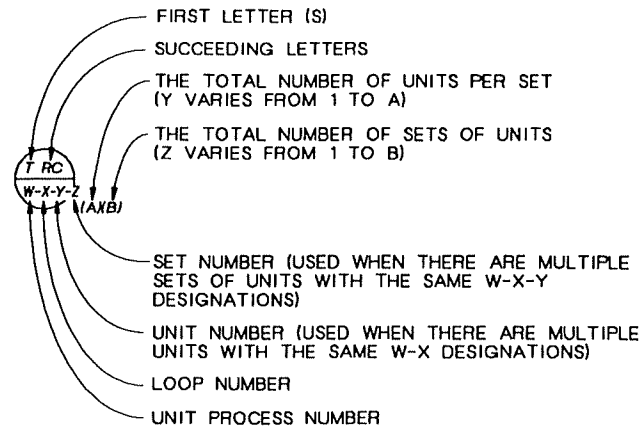
NO.	DATE	REVISION	BY
	10-94	RECORD DRAWING	DJS SMK

SHEET	6
DWG NO.	01-G-06
DATE	OCT 1992
PROJ NO.	GLO65602.FD

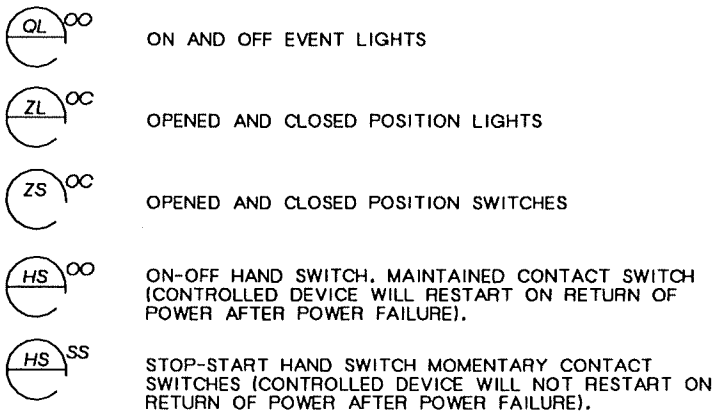
## ELECTRICAL LEGEND AND ABBREVIATIONS

# INSTRUMENT IDENTIFICATION

## EXAMPLE SYMBOLS



## SPECIAL CASES



## RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

## INSTRUMENT SOCIETY OF AMERICA TABLE

LETTER	FIRST LETTER (S)		SUCCEEDING LETTERS		
	PROCESS OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER
A	ANALYSIS (+)		ALARM		
B	BURNER FLAME		USERS CHOICE (+)	USERS CHOICE (+)	USERS CHOICE (+)
C	CONDUCTIVITY			CONTROL	
D	DENSITY (S,G)	DIFFERENTIAL			
E	VOLTAGE		PRIMARY ELEMENT		
F	FLOW RATE	RATIO			
G	GAUGE		GLASS	GATE	
H	HAND (MANUAL)				HIGH
I	CURRENT		INDICATE		
J	POWER	SCAN			
K	TIME OR SCHEDULE			CONTROL STATION	
L	LEVEL		LIGHT (PILOT)		LOW
M	MOTION				MIDDLE
N	USERS CHOICE (+)		USERS CHOICE (+)	USERS CHOICE (+)	USERS CHOICE (+)
O	USERS CHOICE (+)		ORIFICE		
P	PRESSURE (OR VACUUM)		POINT (TEST CONNECTION)		
Q	QUANTITY OR EVENT(+)	INTEGRATE	INTEGRATE		
R			RECORD OR PRINT		
S	SPEED OR FREQUENCY	SAFETY		SWITCH	
T	TEMPERATURE			TRANSMIT	
U	MULTIVARIABLE (+)		MULTIFUNCTION (+)	MULTIFUNCTION (+)	MULTIFUNCTION (+)
V	VISCOSITY			VALVE OR DAMPER	
W	WEIGHT OR FORCE		WELL		
X	UNCLASSIFIED (+)		UNCLASSIFIED (+)	UNCLASSIFIED (+)	UNCLASSIFIED (+)
Y	USERS CHOICE (+)			RELAY OR COMPUTE (+)	
Z	POSITION			DRIVE, ACTUATE OR UNCLASSIFIED FINAL CONTROL ELEMENT	

(+) WHEN USED, EXPLANATION IS SHOWN ADJACENT TO INSTRUMENT SYMBOL. SEE ABBREVIATIONS AND LETTER SYMBOLS.

## TRANSDUCERS

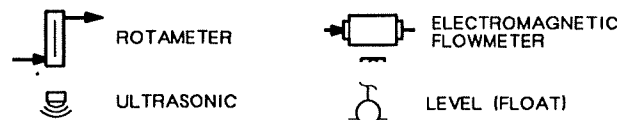
A ANALOG	I CURRENT
D DIGITAL	P PNEUMATIC
E VOLTAGE	PF PULSE FREQUENCY
F FREQUENCY	PD PULSE DURATION
H HYDRAULIC	R RESISTANCE

EXAMPLE: CURRENT TO PNEUMATIC TRANSDUCER (BACK OF PANEL, IN A FLOW LOOP)

## ACTUATOR SYMBOLS



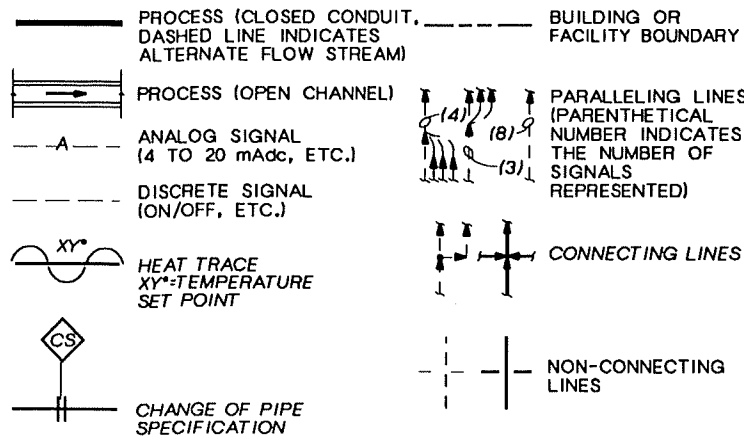
## PRIMARY ELEMENT SYMBOLS



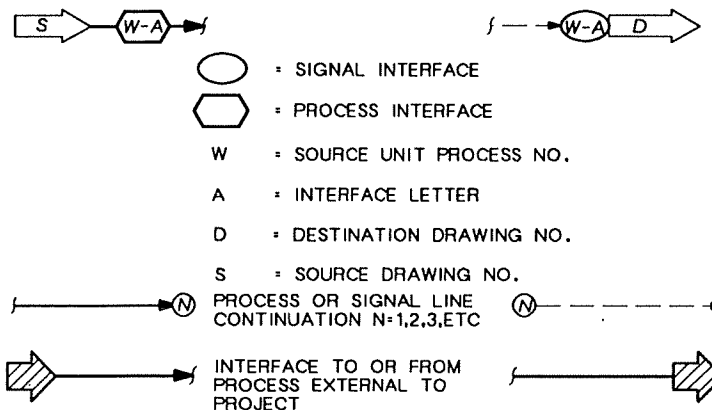
## GENERAL NOTES

- SHORT DASHED LINES ARE FUTURE.
- COMPONENTS SHOWN WITH A DOUBLE ASTERISK (\*\*) ARE FURNISHED IN THE MECHANICAL SPECIFICATION.
- COMPONENTS AND PANELS SHOWN WITH A SINGLE ASTERISK (\*) ARE TO BE PROVIDED AS PART OF A PACKAGE SYSTEM
- THIS IS A STANDARD LEGEND. THEREFORE, NOT ALL OF THIS INFORMATION MAY BE USED ON THIS PROJECT.

## LINE LEGEND

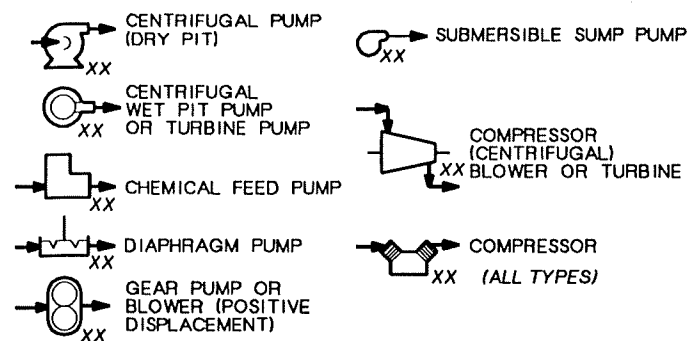


## INTERFACE SYMBOLS



## PUMP AND COMPRESSOR SYMBOLS

NOTE: XX: AS = ADJUSTABLE SPEED  
 CS-1 = CONSTANT SPEED (SINGLE SPEED)  
 CS-2 = CONSTANT SPEED (TWO SPEED)



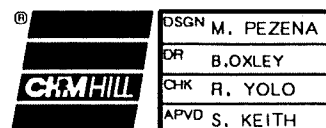
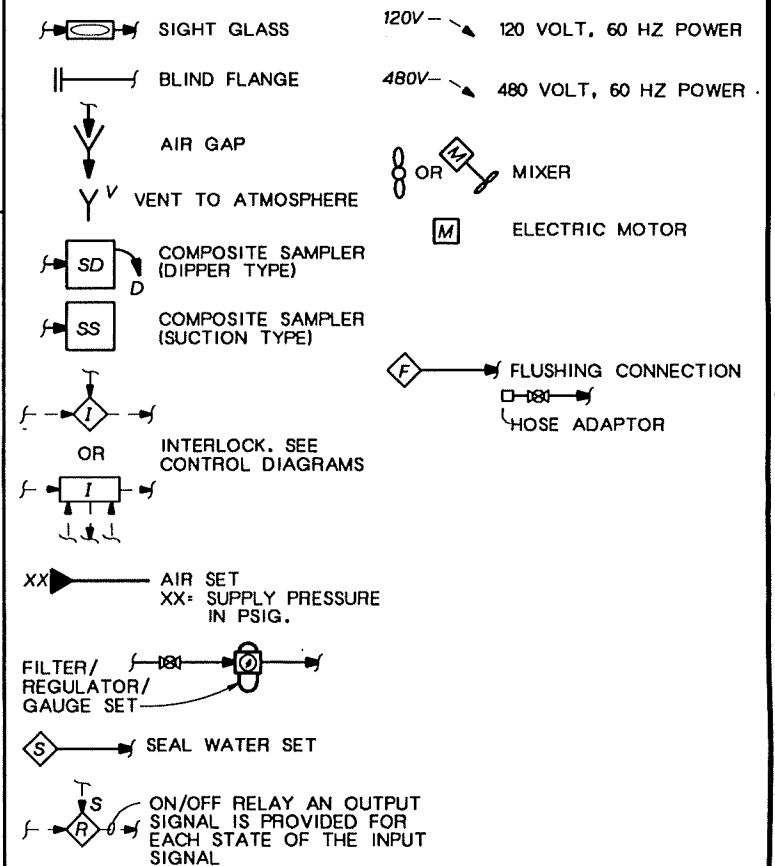
## FLOW STREAM IDENTIFICATION

- CISP- CAST IRON SOIL PIPE
- CU- COPPER
- FRP- FIBERGLASS REINFORCED PIPE
- GS- GALVANIZED STEEL
- PE- POLYETHYLENE
- PVC- POLY-VINYL-CHLORIDE
- SS- STAINLESS STEEL

## ABBREVIATIONS & LETTER SYMBOLS

A	ANALOG SIGNAL
AC	ALTERNATING CURRENT
AM	AUTO-MANUAL
CCS	CENTRAL CONTROL SYSTEM
DC	DIRECT CURRENT
FC	FAIL CLOSE
FLP	FAIL LAST POSITION
FO	FAIL OPEN
FP-X	FIELD PANEL NO. X
LR	LOCAL-REMOTE
MA	MANUAL-AUTO
MC	MODULATE-CLOSE
MCC-X	MOTOR CONTROL CENTER NO. X
MCP	MAIN CONTROL PANEL
OAH	OFF-AUTO-HAND
OC	OPEN-CLOSE (D)
OCR	OPEN-CLOSE-REMOTE
OCA	OPEN-CLOSE-AUTO
OO	OFF-ON
OOA	ON-OFF-AUTO
OOR	ON-OFF-REMOTE
OSC	OPEN-STOP-CLOSE
pH	HYDROGEN ION CONCENTRATION
SS	START-STOP
VIB	VIBRATION

## MISCELLANEOUS SYMBOLS



DSGN M. PEZENA  
 OR B. OXLEY  
 CHK R. YOLO  
 APVD S. KEITH

10-94 RECORD DRAWING  
 NO. DATE REVISION

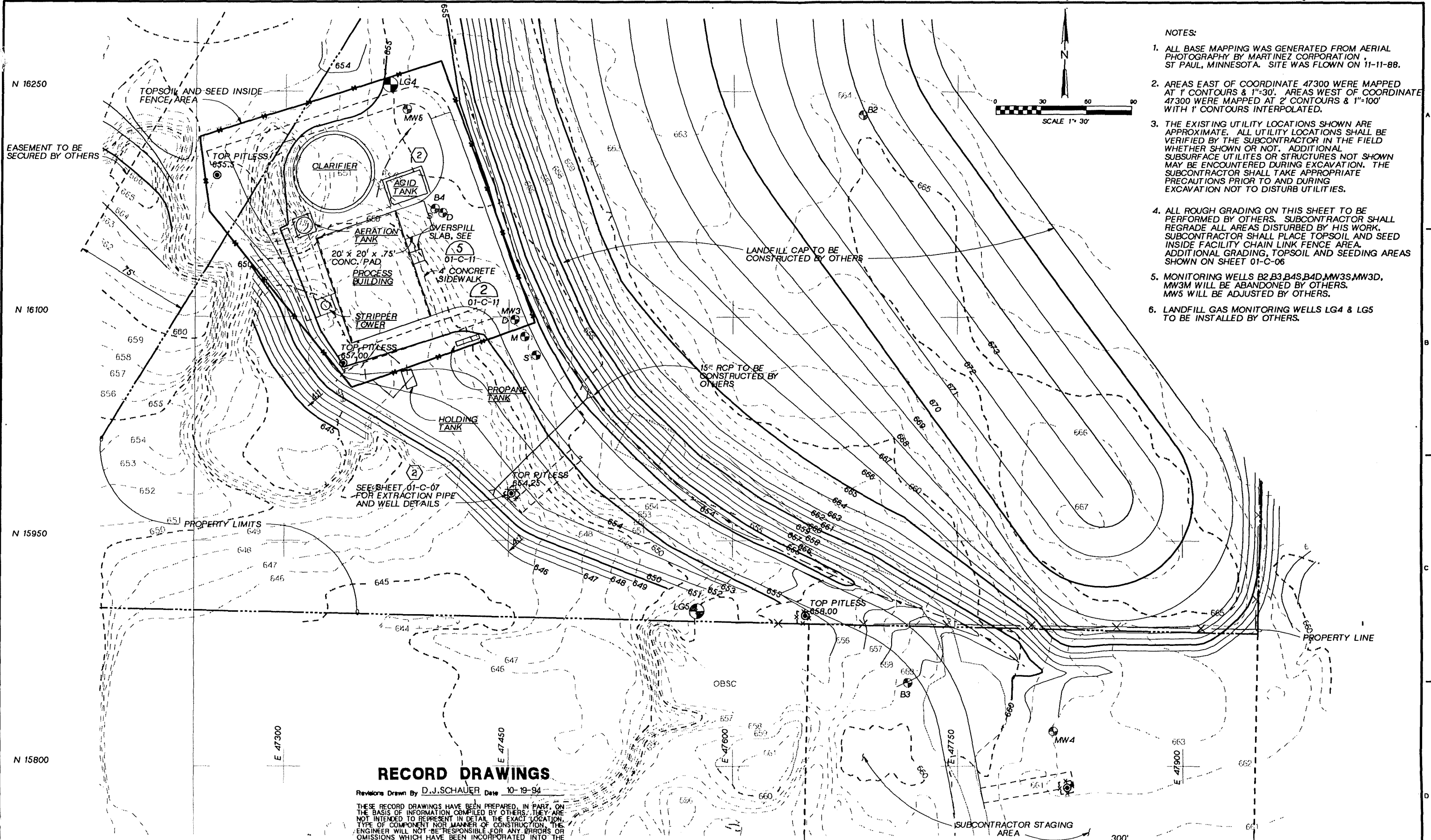
REUSE OF DOCUMENTS  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

I & C LEGENDS

SHEET 7  
 DWG NO. 01-G-07  
 DATE OCT 1992  
 PROJ NO. GLO65602.FD



- NOTES:
1. ALL BASE MAPPING WAS GENERATED FROM AERIAL PHOTOGRAPHY BY MARTINEZ CORPORATION, ST PAUL, MINNESOTA. SITE WAS FLOWN ON 11-11-88.
  2. AREAS EAST OF COORDINATE 47300 WERE MAPPED AT 1' CONTOURS & 1"=30'. AREAS WEST OF COORDINATE 47300 WERE MAPPED AT 2' CONTOURS & 1"=100' WITH 1' CONTOURS INTERPOLATED.
  3. THE EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. ALL UTILITY LOCATIONS SHALL BE VERIFIED BY THE SUBCONTRACTOR IN THE FIELD WHETHER SHOWN OR NOT. ADDITIONAL SUBSURFACE UTILITIES OR STRUCTURES NOT SHOWN MAY BE ENCOUNTERED DURING EXCAVATION. THE SUBCONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS PRIOR TO AND DURING EXCAVATION NOT TO DISTURB UTILITIES.
  4. ALL ROUGH GRADING ON THIS SHEET TO BE PERFORMED BY OTHERS. SUBCONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY HIS WORK. SUBCONTRACTOR SHALL PLACE TOPSOIL AND SEED INSIDE FACILITY CHAIN LINK FENCE AREA. ADDITIONAL GRADING, TOPSOIL AND SEEDING AREAS SHOWN ON SHEET 01-C-06
  5. MONITORING WELLS B2,B3,B4S,B4D,MW3S,MW3D, MW3M WILL BE ABANDONED BY OTHERS. MW5 WILL BE ADJUSTED BY OTHERS.
  6. LANDFILL GAS MONITORING WELLS LG4 & LG5 TO BE INSTALLED BY OTHERS.

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

OSGN M.W. PADDOCK  
 OR M.W. PADDOCK  
 P.A. LLANAS  
 CHK M.S. SCHMIEGE  
 APVD S. KEITH

NO.	DATE	REVISION
10-94		RECORD DRAWING
2	1-93	ACID TANK ADDITION AND REVISED DWG NO.

DJS SMK  
 TP SMK  
 BY APVD

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF C.R. HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF C.R. HILL.

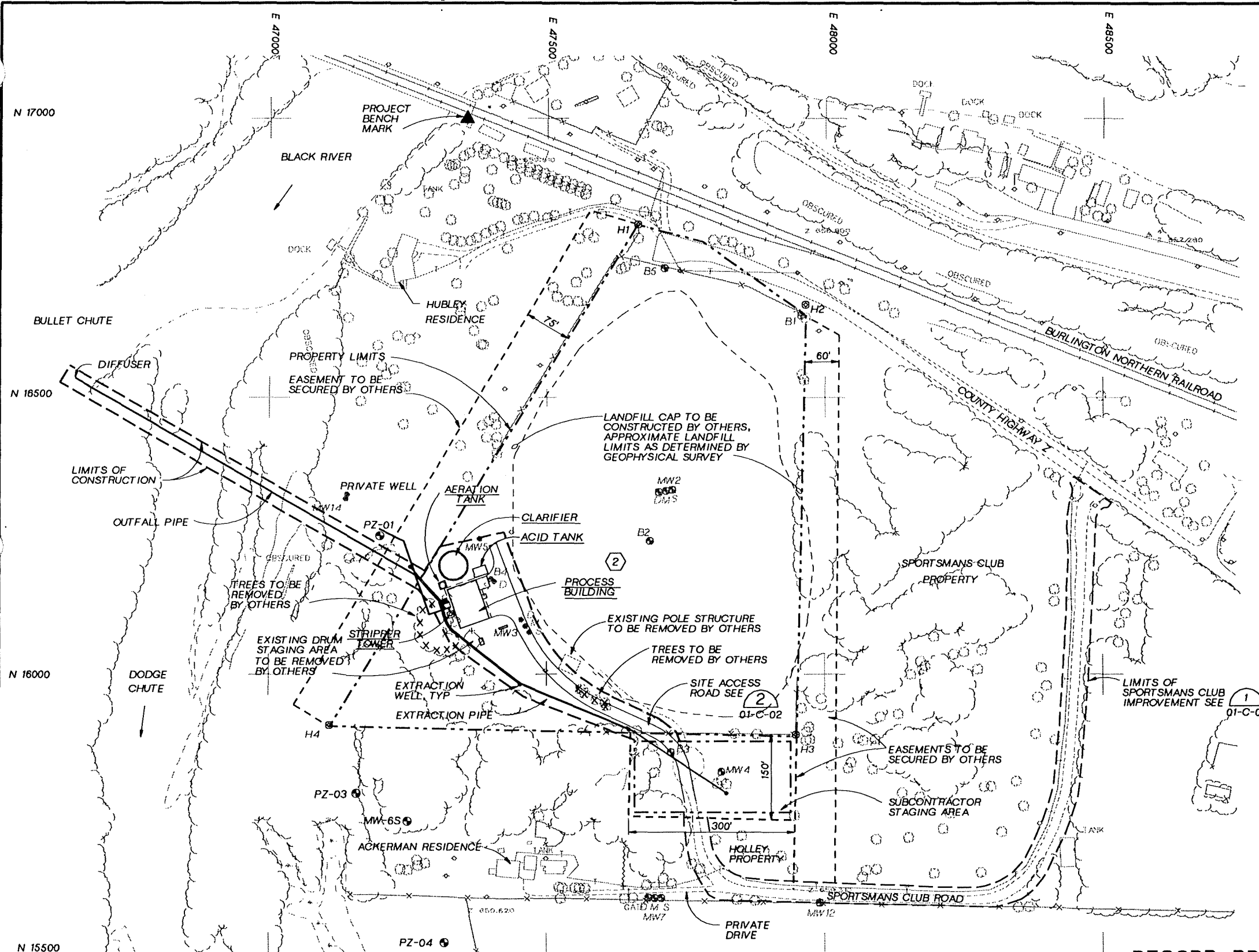
BAR IS ONE INCH ON ORIGINAL DRAWING.  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

GRADING PLAN	
SHEET	10
DWG NO.	01-C-03
DATE	OCT 1992
PROJ NO.	GLO65602.FD

OVERLAY SCREEN





**VERTICAL CONTROL**

**PROJECT BENCHMARK:**

CHISELED "X" IN THE SOUTHEAST WINGWALL ON THE RAILROAD TRESTLE, ELEVATION = 657.09

VERTICAL DATUM BASIS IS USGS 1929. ELEVATION ESTABLISHED BY OTHERS FROM THE FOLLOWING LA CROSSE COUNTY BENCHMARKS:

1. PK NAIL IN FRONT OF MARY JANE FRITZ COTTAGE W8602 LYTLE ROAD, ELEVATION 660.02.
2. CHISELED SQUARE IN SE CORNER OF CURBING AROUND ONALASKA TOWNSHIP HONOR ROLL MEMORIAL AT INTERSECTION OF COUNTY ROAD ZN AND COUNTY ROAD OT, ELEVATION 653.03.

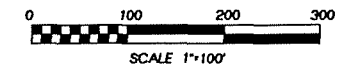
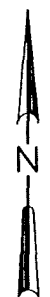
**HORIZONTAL CONTROL**

POINT	NORTHING	EASTING	DESCRIPTION
H1	16809.40	47660.98	1" IRON PIPE
H2	16665.53	47965.52	1" IRON PIPE
H3	15887.77	47950.28	1" IRON PIPE
H4	15906.08	47109.21	1" IRON PIPE

HORIZONTAL DATUM BASIS IS ASSUMED PROJECT COORDINATE GRID SYSTEM. TRANSFORMATION TO WISCONSIN STATE PLANE 2 ZONE COORDINATES CAN BE ACCOMPLISHED BY ADDING 700,000 TO THE NORTHING AND 1,600,000 TO THE EASTING.

**NOTES:**

1. CONSTRUCTION LIMITS COINCIDE WITH PROPERTY LINE AND/OR EASEMENTS UNLESS OTHERWISE NOTED.
2. SUBCONTRACTOR SHALL SHARE THE SITE, INCLUDING THE STAGING AREA WITH OTHER SUBCONTRACTORS. SCHEDULING OF WORK IS CRITICAL. SEE SPECIFICATIONS.
3. BASE MAPPING BY MARTINEZ CORPORATION. SITE WAS FLOWN ON 11-11-88. ORIGINAL MAPPING WAS PREPARED AT A SCALE OF 1"=100'.
4. PZ-01, PZ-03, PZ-04, AND MW-65 ARE ALL TO BE INSTALLED UNDER THIS CONTRACT. SEE DETAILS, DWG 01-C-09.
5. FOR ACID TANK DETAILS SEE DRAWING 01-S-07 AND 01-M-03.



**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

	DSGN	MW PADDOCK
	DR	BT KUTZ PA LLANAS
	CHK	MS SCHMIEGE
	APVD	S KEITH

NO.	DATE	REVISION
10-94		RECORD DRAWING
1-93		ACID TANK ADDITION AND REVISED NOTE.

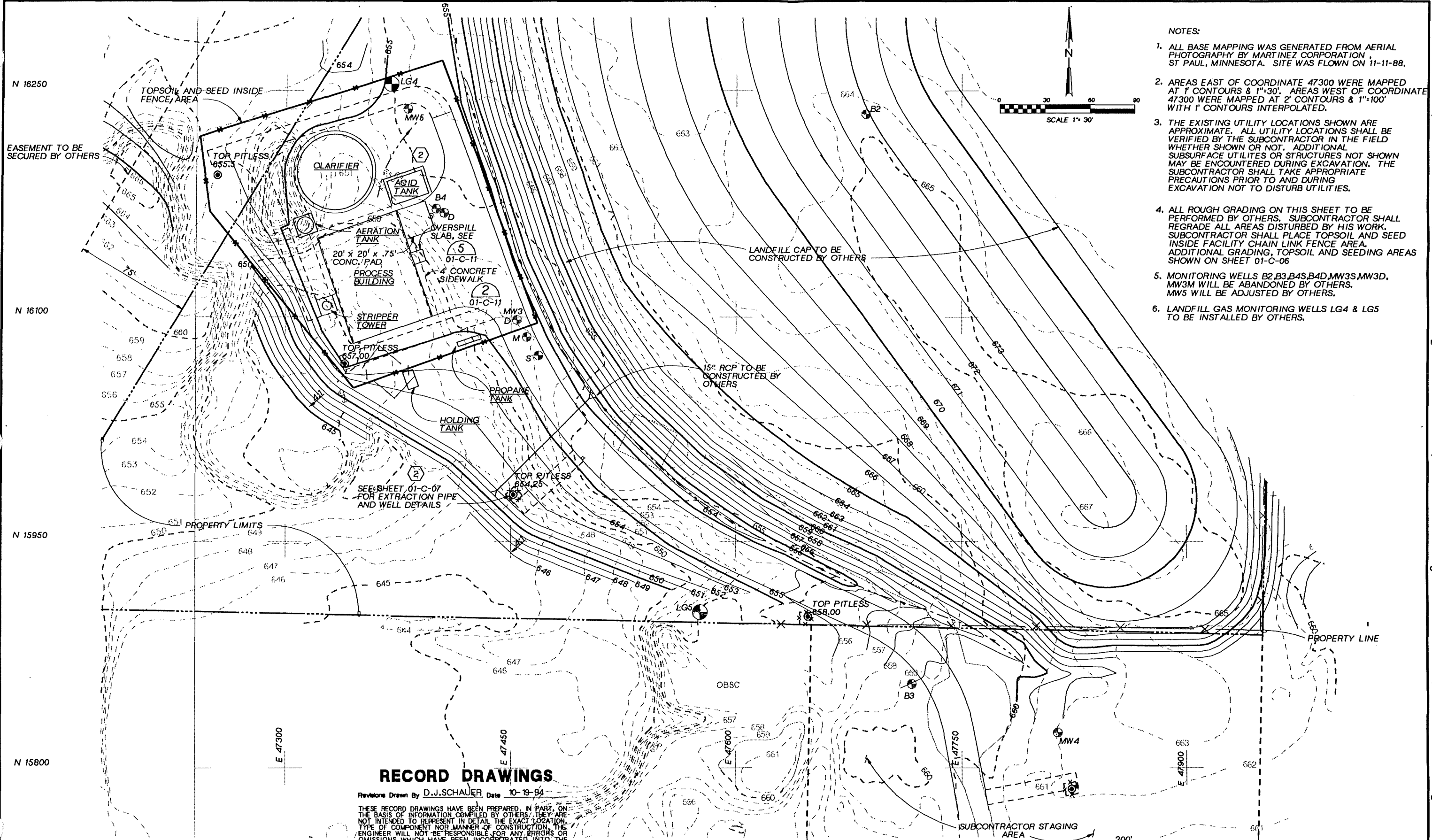
DJS	SMK	BY	APVD
TP	SMK		
<p><b>REUSE OF DOCUMENTS</b> THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF C&amp;M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF C&amp;M HILL.</p>			

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

GENERAL SITE PLAN

SHEET	8
DWG NO.	01-C-01
DATE	OCT 1992
PROJ NO.	GLO65602.FD



- NOTES:
1. ALL BASE MAPPING WAS GENERATED FROM AERIAL PHOTOGRAPHY BY MARTINEZ CORPORATION, ST PAUL, MINNESOTA. SITE WAS FLOWN ON 11-11-88.
  2. AREAS EAST OF COORDINATE 47300 WERE MAPPED AT 1' CONTOURS & 1"=30'. AREAS WEST OF COORDINATE 47300 WERE MAPPED AT 2' CONTOURS & 1"=100' WITH 1' CONTOURS INTERPOLATED.
  3. THE EXISTING UTILITY LOCATIONS SHOWN ARE APPROXIMATE. ALL UTILITY LOCATIONS SHALL BE VERIFIED BY THE SUBCONTRACTOR IN THE FIELD WHETHER SHOWN OR NOT. ADDITIONAL SUBSURFACE UTILITIES OR STRUCTURES NOT SHOWN MAY BE ENCOUNTERED DURING EXCAVATION. THE SUBCONTRACTOR SHALL TAKE APPROPRIATE PRECAUTIONS PRIOR TO AND DURING EXCAVATION NOT TO DISTURB UTILITIES.
  4. ALL ROUGH GRADING ON THIS SHEET TO BE PERFORMED BY OTHERS. SUBCONTRACTOR SHALL REGRADE ALL AREAS DISTURBED BY HIS WORK. SUBCONTRACTOR SHALL PLACE TOPSOIL AND SEED INSIDE FACILITY CHAIN LINK FENCE AREA. ADDITIONAL GRADING, TOPSOIL AND SEEDING AREAS SHOWN ON SHEET 01-C-06
  5. MONITORING WELLS B2, B3, B4S, B4D, MW3S, MW3D, MW3M WILL BE ABANDONED BY OTHERS. MW5 WILL BE ADJUSTED BY OTHERS.
  6. LANDFILL GAS MONITORING WELLS LG4 & LG5 TO BE INSTALLED BY OTHERS.

**RECORD DRAWINGS**

Revised Drawn By D.J.SCHAUER Date 10-19-94

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.

**REUSE OF DOCUMENTS**

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

**GRADING PLAN**

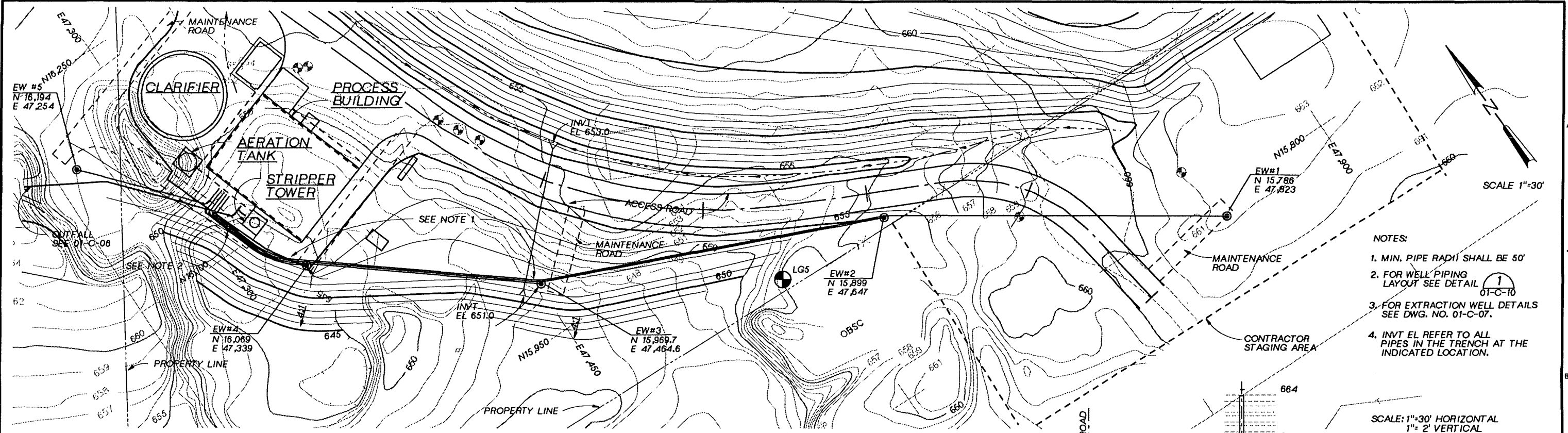
	DSGN M.W. PADDOCK
	DR M.W. PADDOCK P.A. LLANAS
	CHK M.S. SCHMIEGE
	APVD S. KEITH

NO.	DATE	REVISION
10-94		RECORD DRAWING
1-93		ACID TANK ADDITION AND REVISED DWG NO.

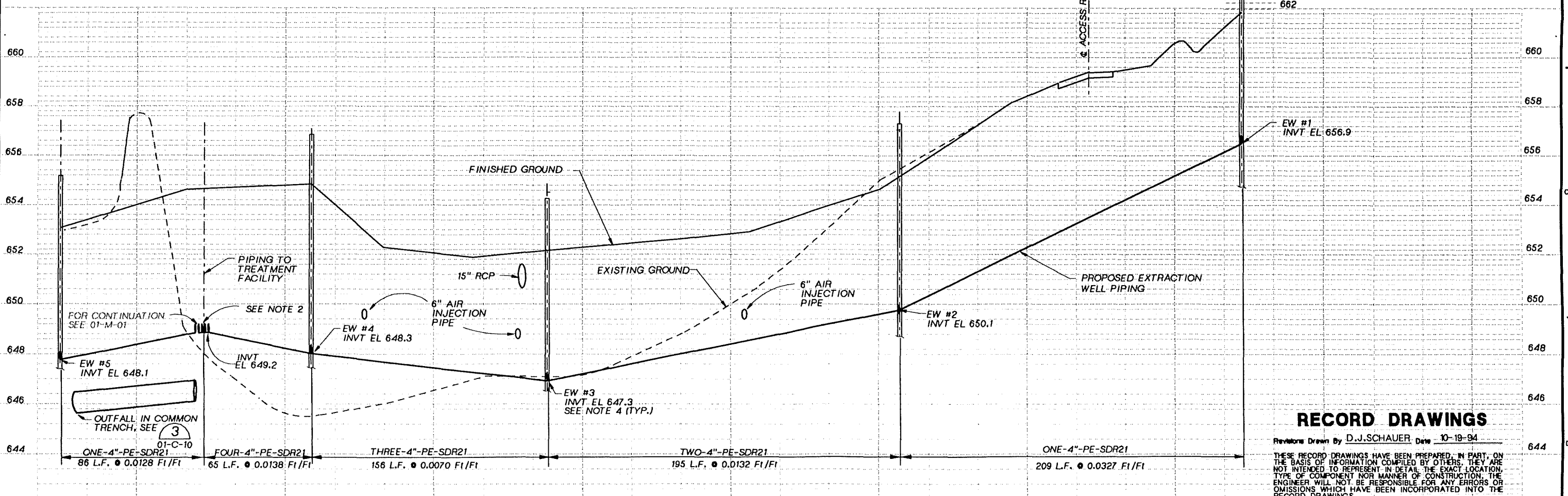
BY	APVD
DJS	SMK
TP	SMK
	APVD

SHEET	10
DWG NO.	01-C-03
DATE	OCT 1992
PROJ. NO.	GLO65602.FD

OVERLAY SCREEN



- NOTES:
1. MIN. PIPE RADI( SHALL BE 50'
  2. FOR WELL PIPING LAYOUT SEE DETAIL 01-C-10
  3. FOR EXTRACTION WELL DETAILS SEE DWG. NO. 01-C-07.
  4. INVT EL REFER TO ALL PIPES IN THE TRENCH AT THE INDICATED LOCATION.



**RECORD DRAWINGS**

Revised Drawn By D.J.SCHAUER Date 10-19-94  
 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.

**CH2M HILL**  
 DSGN G. MURPHY  
 DR P.A. LLANAS  
 M. CAMPBELL  
 CHK M. SCHMIEGE  
 APVD S. KEITH

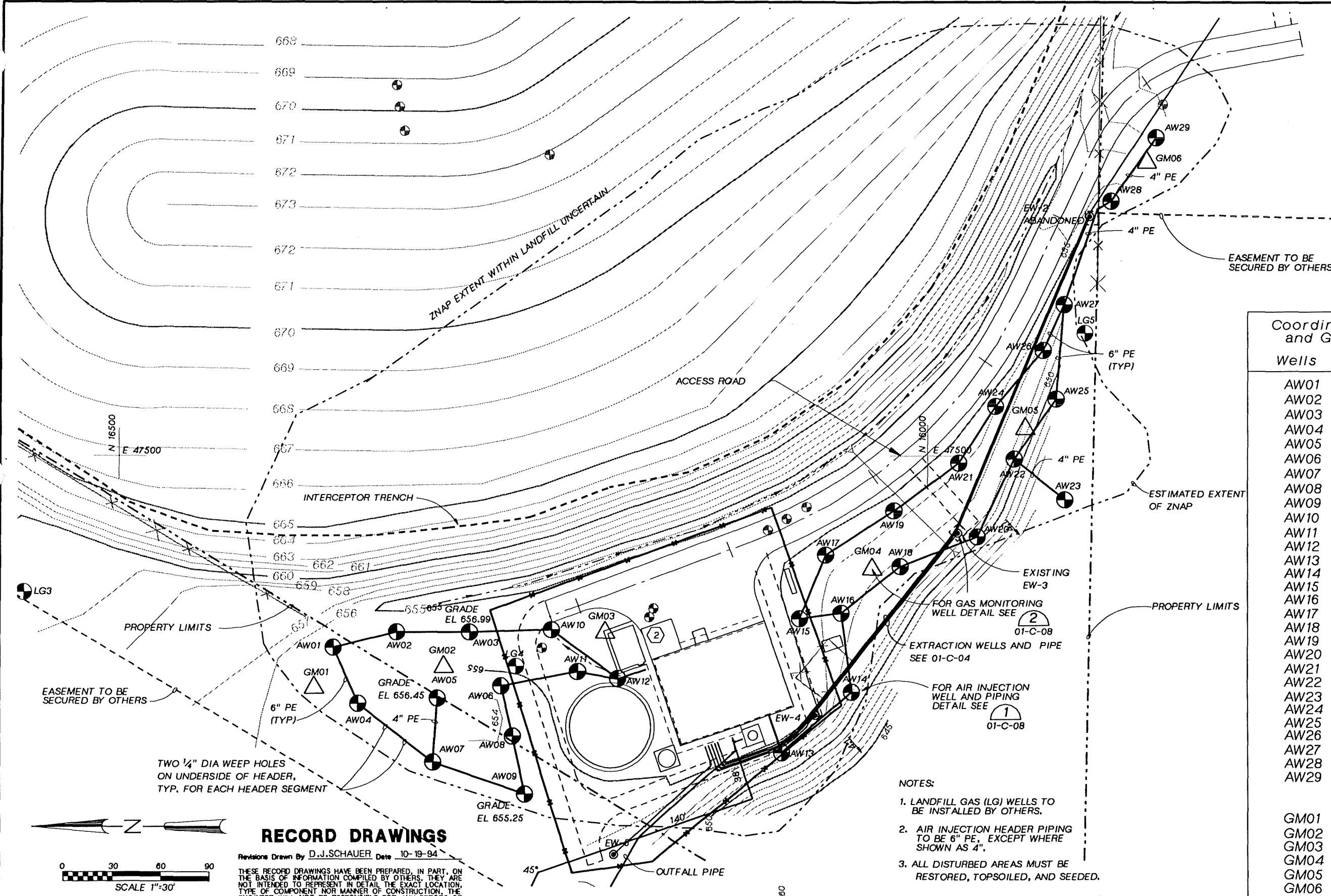
NO.	DATE	REVISION	BY	APVD
0-94		RECORD DRAWING	DJS SMK	

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

SHEET	11
DWG NO.	01-C-04
DATE	OCT 1992
PROJ NO.	GLO65602.FD



Coordinates for Air Injection and Gas Monitoring Wells

Wells	Northing	Easting
AW01	16367	47380
AW02	16327	47390
AW03	16282	47390
AW04	16351	47346
AW05	16302	47349
AW06	16263	47357
AW07	16305	47310
AW08	16256	47326
AW09	16248	47290
AW10	16232	47391
AW11	16216	47366
AW12	16191	47361
AW13	16089	47316
AW14	16046	47353
AW15	16078	47398
AW16	16052	47402
AW17	16062	47437
AW18	16016	47431
AW19	16020	47465
AW20	15969	47449
AW21	15980	47495
AW22	15946	47498
AW23	15915	47472
AW24	15957	47530
AW25	15920	47535
AW26	15928	47565
AW27	15915	47593
AW28	15886	47657
AW29	15859	47696
GM01	16379	47357
GM02	16298	47370
GM03	16199	47392
GM04	16033	47431
GM05	15939	47518
GM06	15864	47683

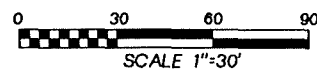
**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

**NOTES:**

1. LANDFILL GAS (LG) WELLS TO BE INSTALLED BY OTHERS.
2. AIR INJECTION HEADER PIPING TO BE 6" PE, EXCEPT WHERE SHOWN AS 4".
3. ALL DISTURBED AREAS MUST BE RESTORED, TOPSOILED, AND SEEDED.



DSGN	E.K. RUSSELL	10-94	RECORD DRAWING	DJS	SMK
DR	P.A. LLANAS	(2)	1-93	TP	SMK
CHK	P. BOERSMA				
APVD	S.M. KEITH				
		NO.	DATE	BY	APVD

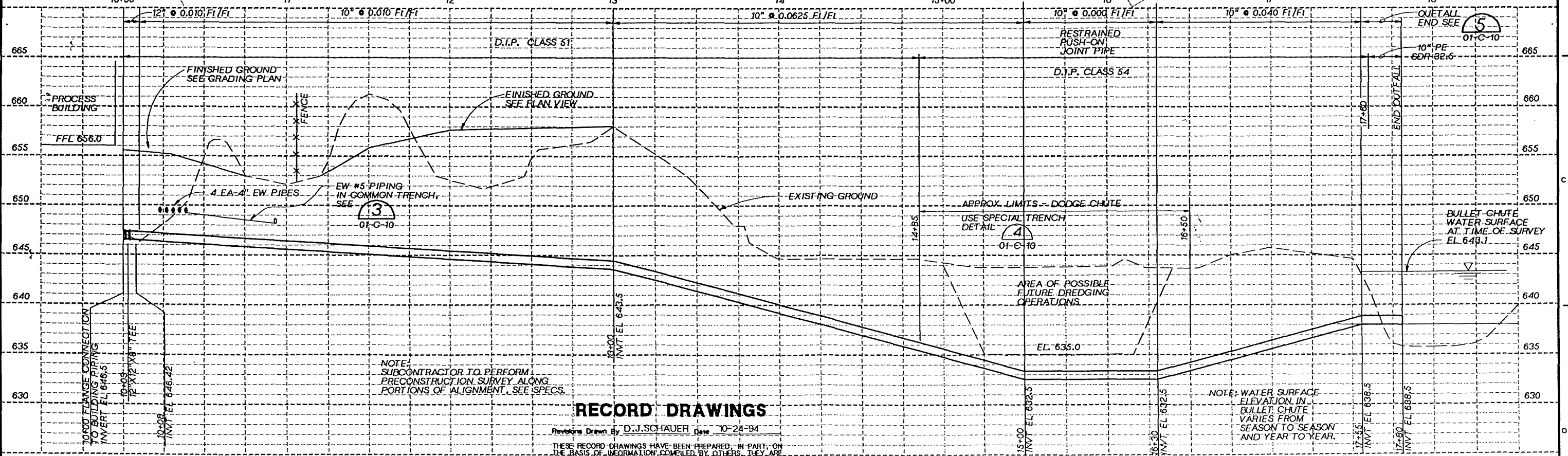
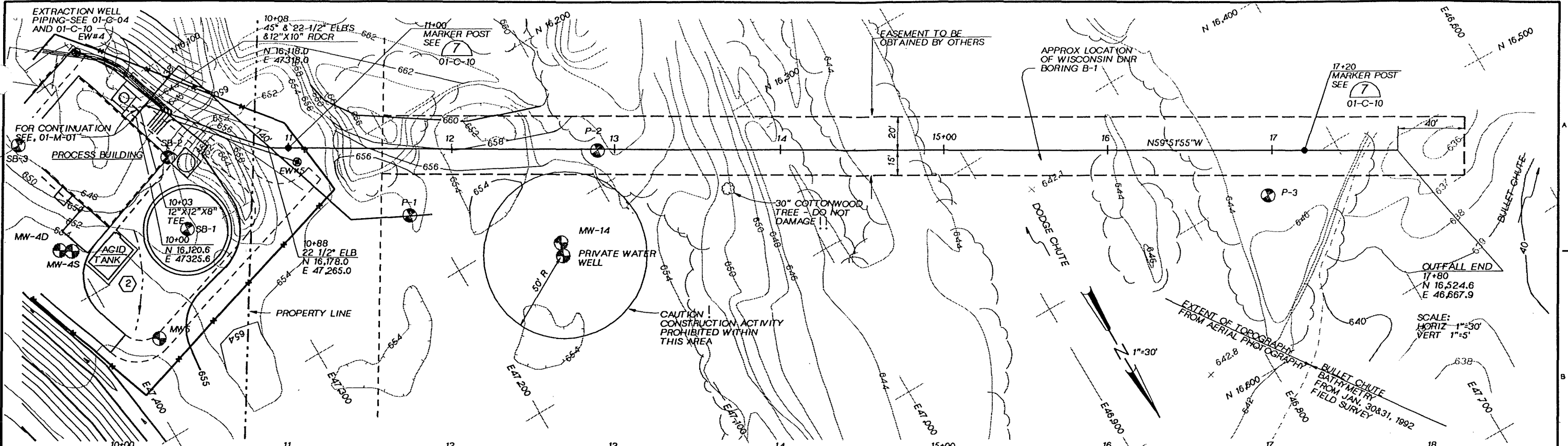
**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**AIR INJECTION HEADER PIPING AND WELL LOCATION PLAN**

SHEET	12
DWG NO.	01-C-05
DATE	OCT 1992
PROJ NO.	GLO65602.FD



### RECORD DRAWINGS

Revisions Drawn By D.J. SCHAUER Date 10-24-94

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.

	DSGN	M. SCHMIEGE
	DR	P.A. LLANAS M. CAMPBELL
	CHK	V. RYBELL
	APVD	S. KEITH

NO.	DATE	REVISION
10-94		RECORD DRAWING
1-93		ACID TANK ADDITION

DJS	SMK
MWP	SMK
BY	APVD

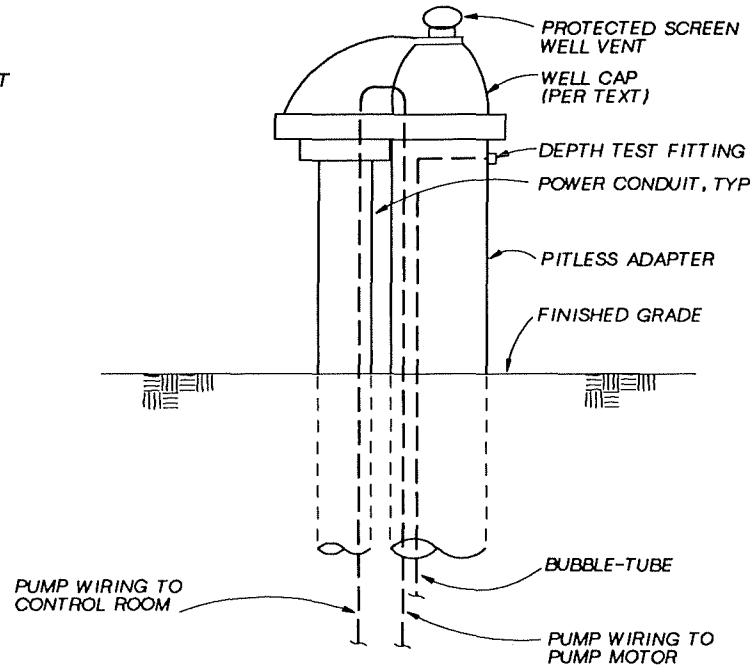
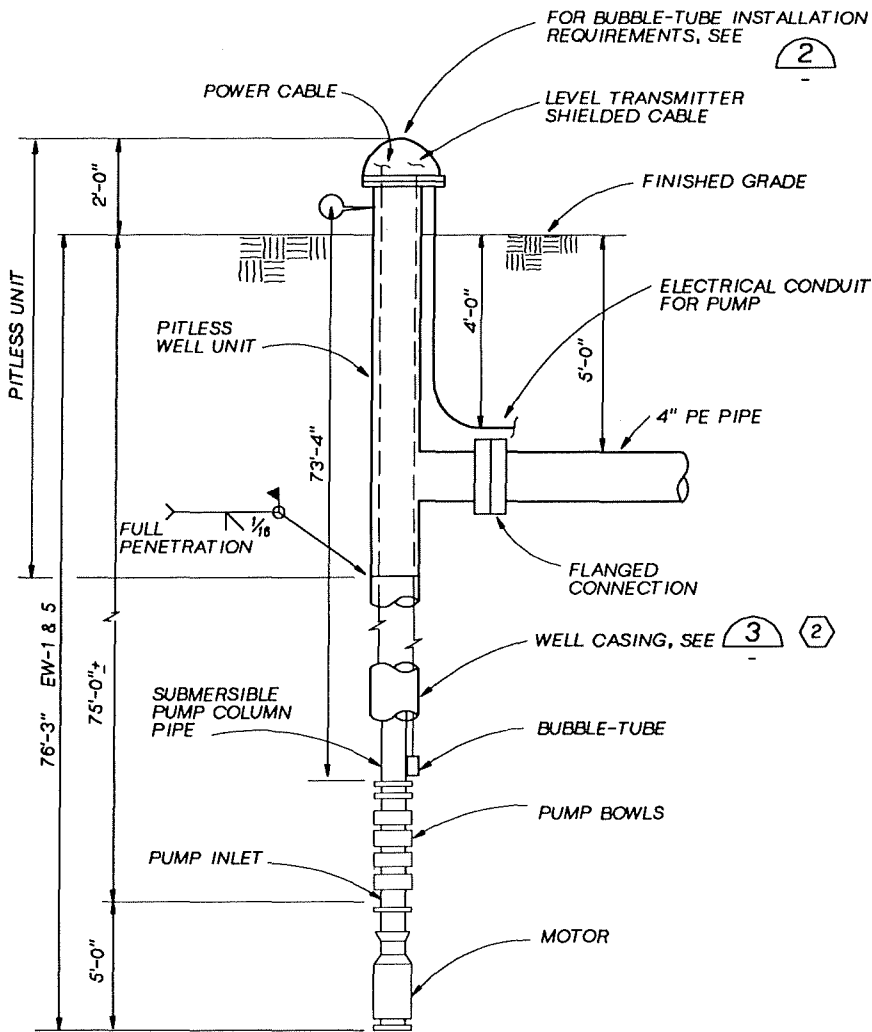
#### REUSE OF DOCUMENTS

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

### OUTFALL PIPE PLAN AND PROFILE

SHEET	13
DWG NO.	01-C-06
DATE	OCT 1992
PROJ NO.	GLO66602.FD



TYPICAL WELL PUMP LEVEL  
BUBBLE TUBE AND POWER - DETAIL (2)

NTS

NOTE: LEVEL PROBE SIGNAL CABLE, SUPPLIED BY MANUFACTURER.

WELL AND PITLESS WELL UNIT DETAIL (1)

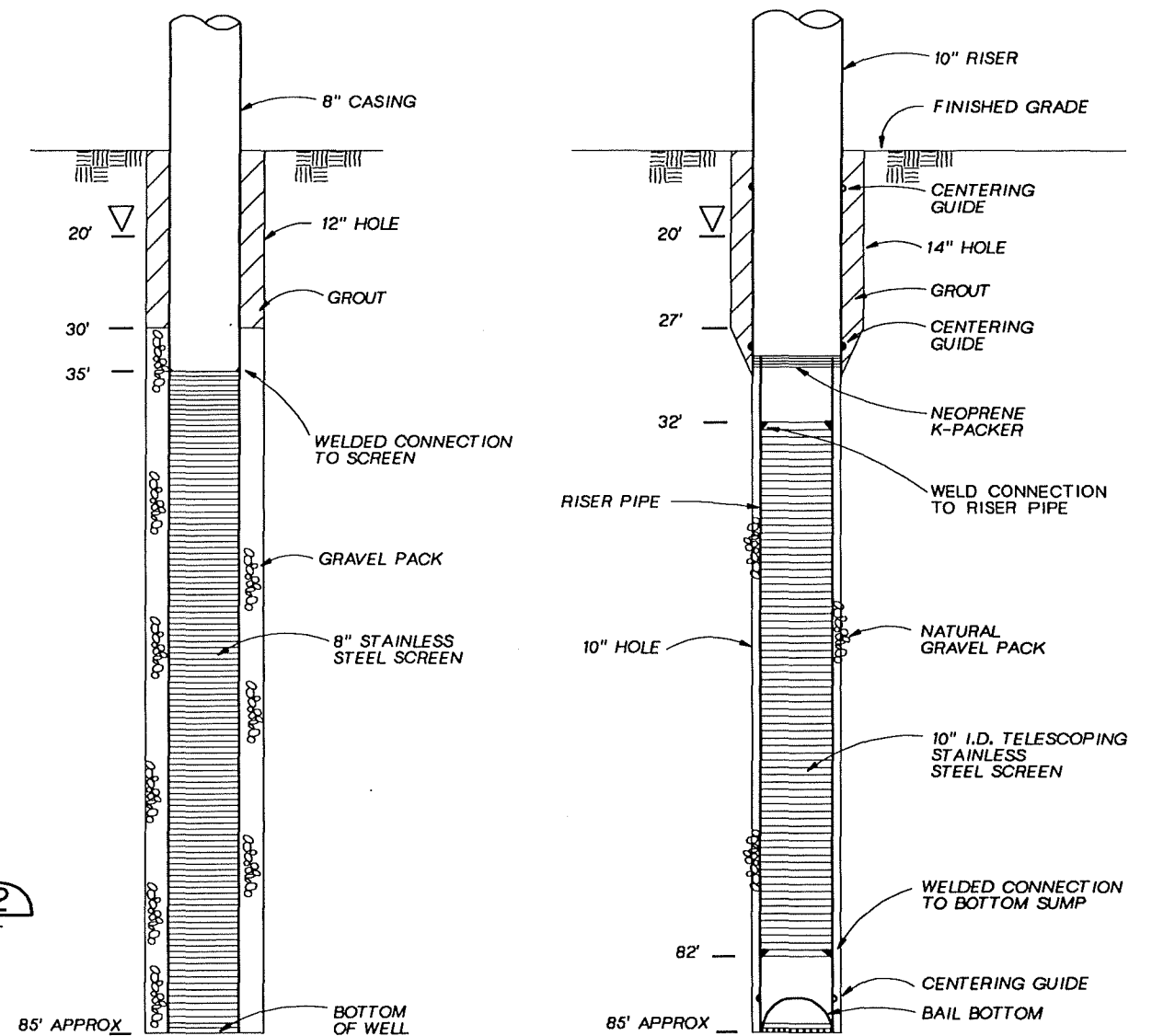
NTS

01-C-03

TABLE 1

WELL NO.	MAX PUMP MOTOR DIA (IN)	SUBMERSIBLE PUMP COLUMN PIPE DIA (IN)	WELL HOLE DIA (IN)	WELL CASING DIA (IN)	WELL SCREEN DIA (IN)	APPROX GROUND ELEVATION (FT)
1	6	3	14	10	8 5/8	662.0
2	6	3	14	10	8 5/8	655.5
*3	6	3	12	8	8	652.5
4	6	3	14	10	8 5/8	655.0
5	6	3	14	10	8 5/8	653.5

\* NOTE: EXTRACTION WELL NO.3 INSTALLED 1990. EXTEND EXISTING CASING TO MATCH PITLESS WELL UNITS AS NEEDED.



WELL NO. 3

WELL NO. 1,2,4,5

WELL CONSTRUCTION DETAIL (3)

NTS

RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.



DSGN J.LAMONT  
DR P.A. LLANAS  
CHK D. FLOMB  
APVD S.KEITH

10-94 RECORD DRAWING  
1-93 ADDED DETAIL AND DWG REF.  
NO. DATE REVISION

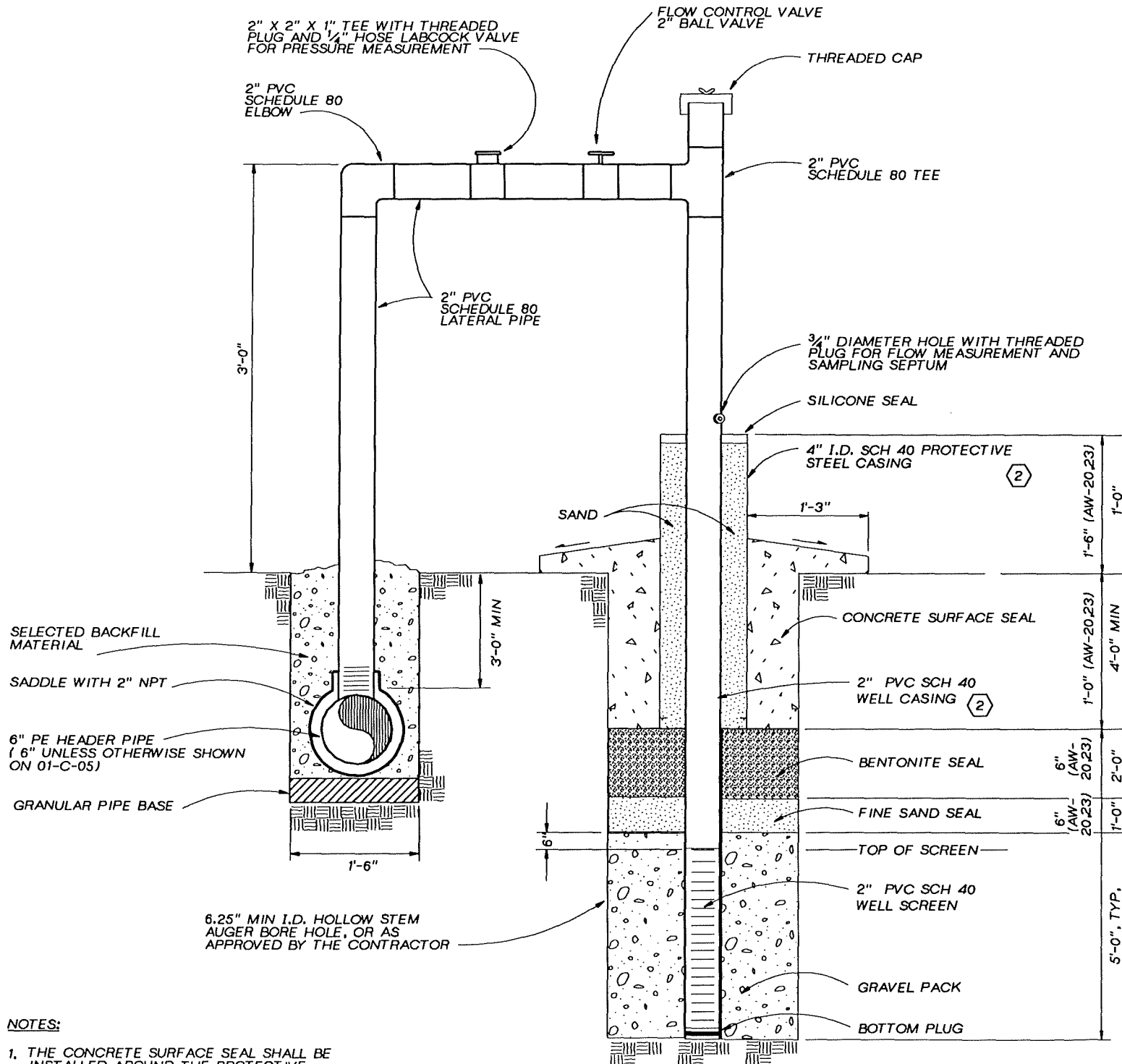
DJS SMK  
TP SMK  
BY APVD  
REUSE OF DOCUMENTS  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

EXTRACTION WELL DETAIL

SHEET 14  
DWG NO. 01-C-07  
DATE OCT 1992  
PROJ NO. GLO65602.FD



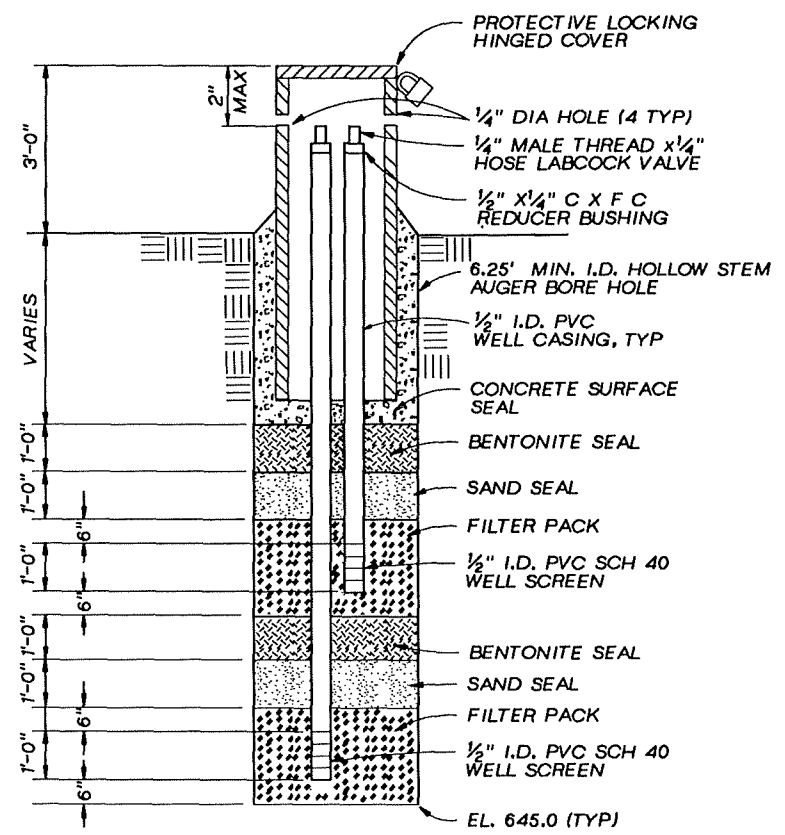
**NOTES:**  
 1. THE CONCRETE SURFACE SEAL SHALL BE INSTALLED AROUND THE PROTECTIVE STEEL CASING AND MAY NOT BE PLACED BETWEEN THE PROTECTIVE STEEL CASING AND THE WELL CASING.

**TYPICAL AIR INJECTION WELL SECTION DETAIL (1)**  
 NTS 01-C-05

**AIR INJECTION AND GAS MONITORING WELL DEPTHS AND INSTALLATION DETAILS**

AIR INJECTION WELL/ GAS MONITORING WELL	APPROXIMATE TOTAL DEPTH (FT)	APPROXIMATE WELL CASING LENGTH (FT)	WELL SCREEN LENGTH (FT)
AW01 THROUGH AW29	12	10	5
GM01 THROUGH GM06	7-9	8-10	1
	11-13	12-14	1

**NOTE:**  
 1. AIR INJECTION AND GAS MONITORING WELL DEPTHS AND INSTALLATION DETAILS SHOWN ARE APPROXIMATE AND/OR ESTIMATED. ACTUAL DEPTHS AND FINAL INSTALLATION DETAILS WILL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.



**TYPICAL GAS MONITORING WELL (2)**  
 NTS 01-C-05

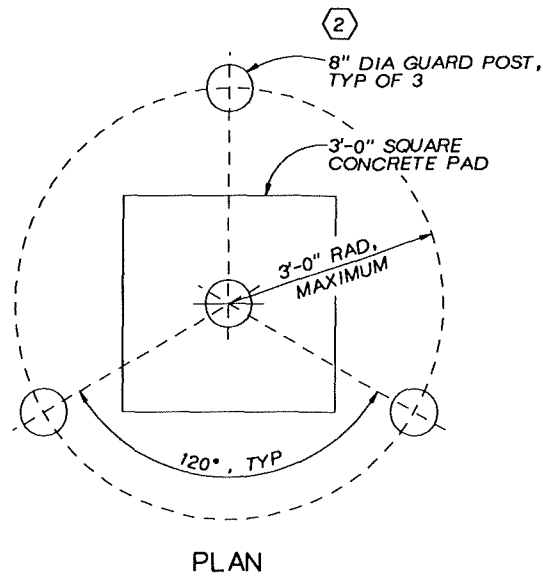
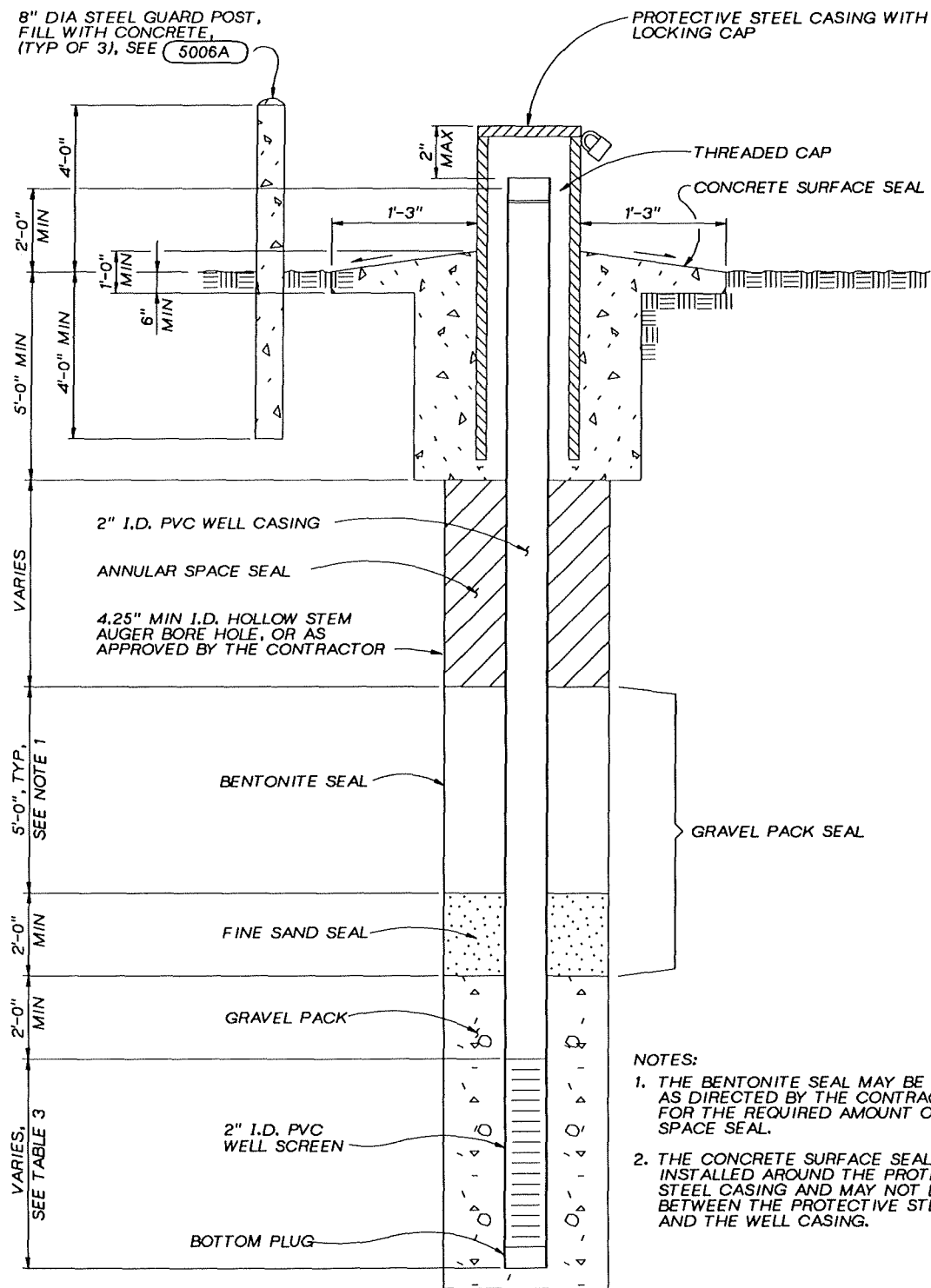
**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94  
 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.

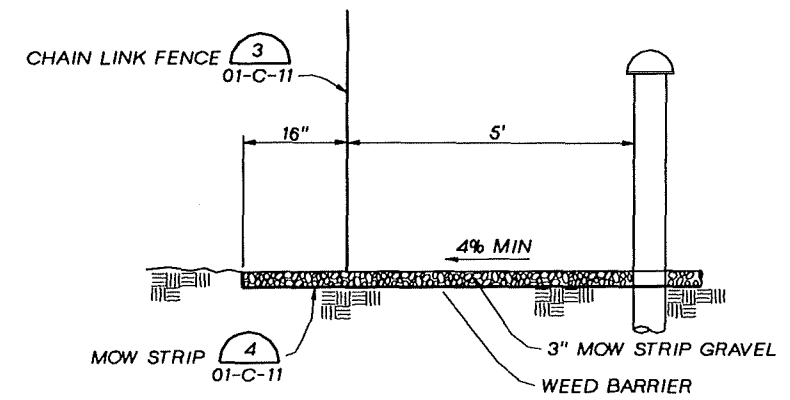
**NOTE:**  
 1. DRILL ONE 1/4" DIA. HOLE ON EACH SIDE (4 TYP) OF THE PROTECTIVE LOCKING HINGED COVER AS SHOWN TO ALLOW FOR VENTING.  
 2. THE PROTECTIVE LOCKING HINGED COVER SHALL BE PAINTED SAFETY YELLOW AS SPECIFIED IN THE SPECIFICATIONS.

	DSGN P. BOERSMA OR P.A. LLANAS CHK E.K. RUSSELL APVD S.M. KEITH	10-94 RECORD DRAWING 1-93 REVISED NOTES	DJS SMK TP SMK	BY APVD	REUSE OF DOCUMENTS THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.	BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	GROUNDWATER REMEDIAL ACTION ONALASKA MUNICIPAL LANDFILL SITE ONALASKA TOWNSHIP, WISCONSIN	AIR INJECTION WELL AND GAS MONITORING WELL CONSTRUCTION DETAILS	SHEET 15 DWG NO. 01-C-08 DATE OCT 1992 PROJ NO. GLO65602.FD
	NO. DATE REVISION		BY APVD		© CH2M HILL				

OVERLAY SCREEN  
 PROUD FILE



**CONCRETE PAD AND GUARD DETAIL 2**  
NTS



- NOTES:  
 1. FENCING REQUIRED FOR WELLS 1, 2 AND 3.  
 2. 1, 3'-8" PEDESTRIAN GATE SHALL BE PLACED IN EACH WELL FENCE AS DIRECTED BY CONTRACTOR

**EXTRACTION WELL FENCING DETAIL 3**  
NTS

**TABLE 3  
PIEZOMETER AND MONITORING WELL DEPTHS AND INSTALLATION DETAILS**

MONITORING WELL NUMBER	APPROXIMATE TOTAL DEPTH (FT)	APPROXIMATE WELL CASING LENGTH (FT)	WELL SCREEN LENGTH (FT)	TYPE OF PROTECTIVE COVER
PZ-01	30	20	10	PSC
PZ-02	30	20	10	PSC
PZ-03	30	20	10	PSC
PZ-04	30	20	10	PSC
PZ-05	30	20	10	PSC
PZ-06	30	20	10	PSC
MW-6S	30	20	10	PSC

ABBREVIATIONS  
 PSC = PROTECTIVE STEEL CASING

NOTE:  
 1. MONITORING WELL DEPTHS AND INSTALLATION DETAILS SHOWN ARE APPROXIMATE AND/OR ESTIMATED. ACTUAL DEPTHS AND FINAL INSTALLATION DETAILS WILL BE DETERMINED BY THE CONTRACTOR IN THE FIELD.

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94  
 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.

**REUSE OF DOCUMENTS**

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**PIEZOMETER AND MONITORING WELL CONSTRUCTION DETAILS**

SHEET 16  
 DWG NO. 01-C-09  
 DATE OCT 1992  
 PROJ NO. GLO65602.FD

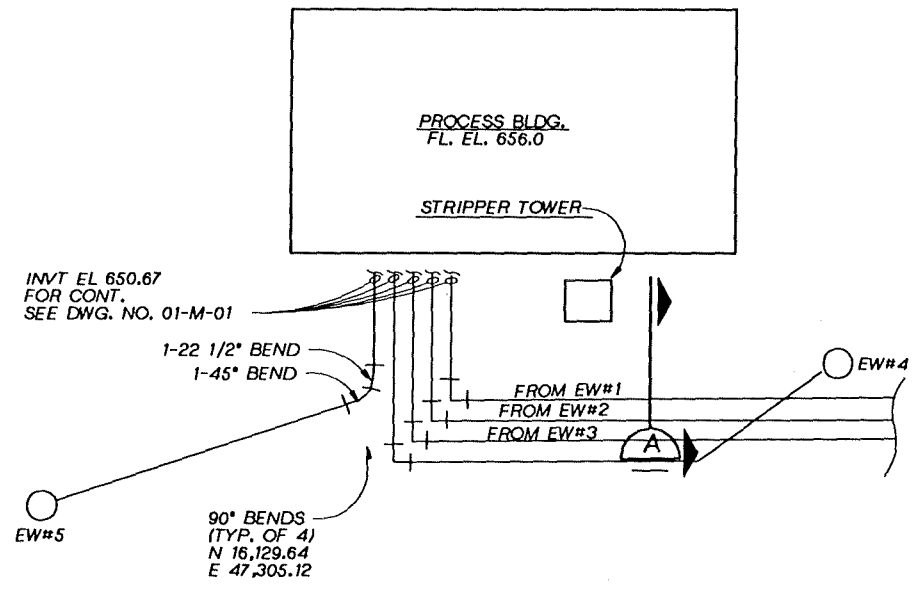
**TYPICAL MONITORING WELL SECTION DETAIL 1**  
NTS

CH2M HILL  
 DSGN J. LAMONT  
 DR B.R. LEHMAN  
 P.A. LLANAS  
 CHK J. LAMONT  
 APVD S. KEITH

NO.	DATE	REVISION
2	10-94	RECORD DRAWING
	1-93	ADDED DRAWING REF.

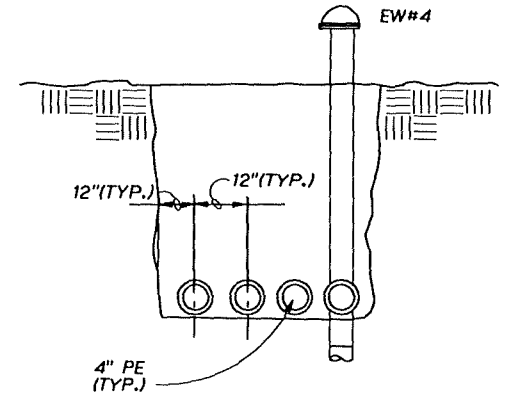
DJS	SMK
TP	SMK
BY	APVD
	CH2M HILL



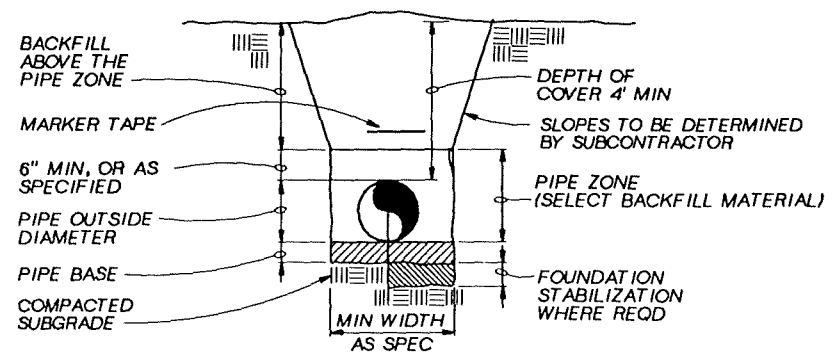


**WELL PIPING LAYOUT DETAIL (4)**  
NTS 01-C-04

- NOTES:
- SEE (2) FOR TRENCH EXCAVATION AND BACKFILL REQUIREMENTS.
  - PIPING BETWEEN EW#1 AND EW#4 SIMILAR.

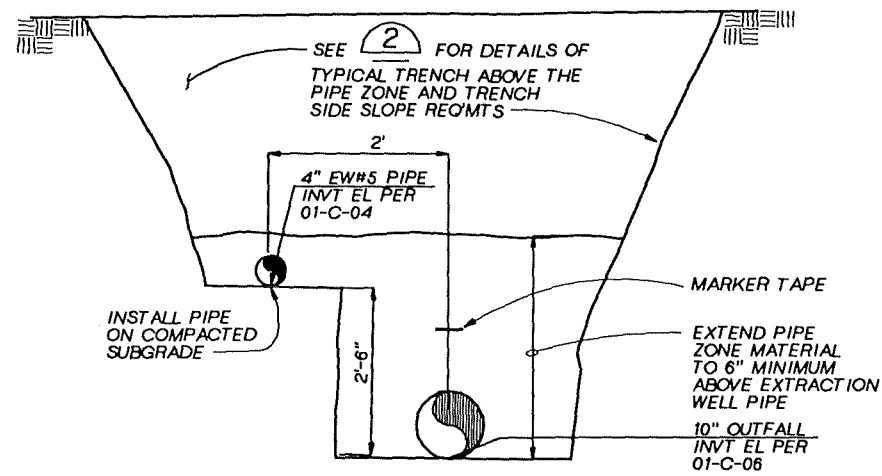


**TRENCH SECTION (A)**  
NTS

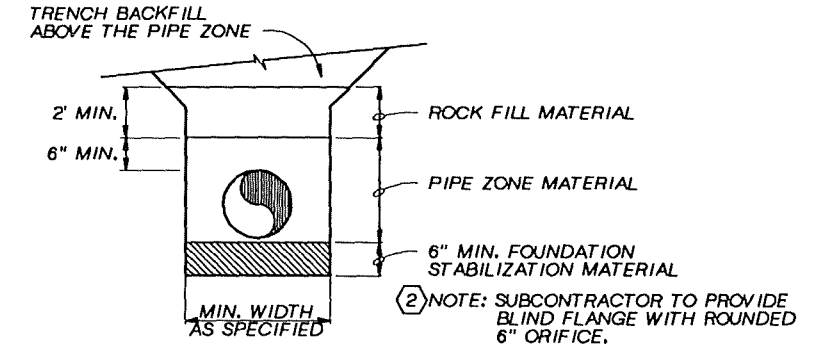


**TYPICAL TRENCH DETAIL (2)**  
NTS FOR ALL PIPE TRENCHES UNLESS OTHERWISE NOTED. (2)

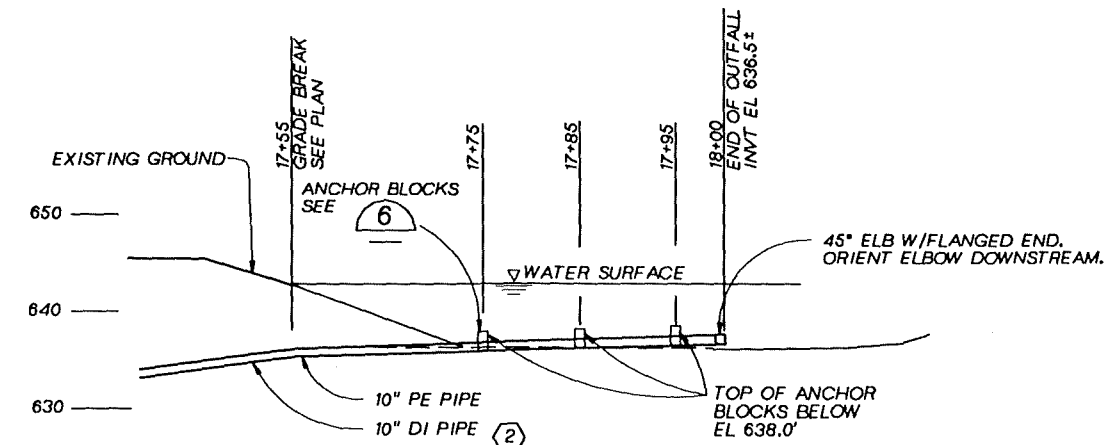
- NOTES:
- LOOKING DOWNSTATION
  - APPLIES TO APPROX OUTFALL STA 10+25 TO STA 10+90



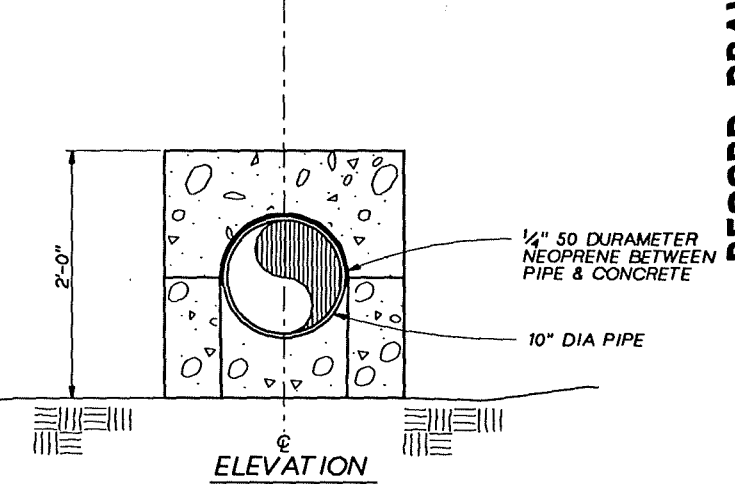
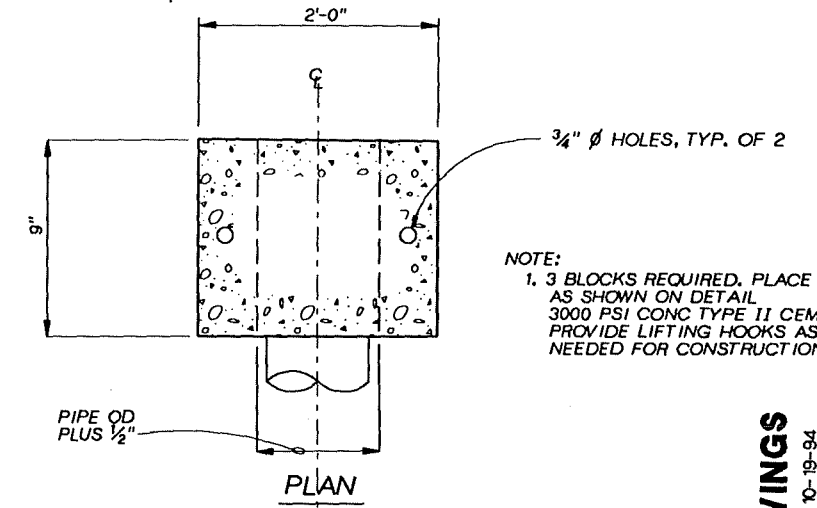
**TYPICAL DETAIL (3)**  
PIPES IN COMMON TRENCH  
NTS 01-C-06 01-C-04



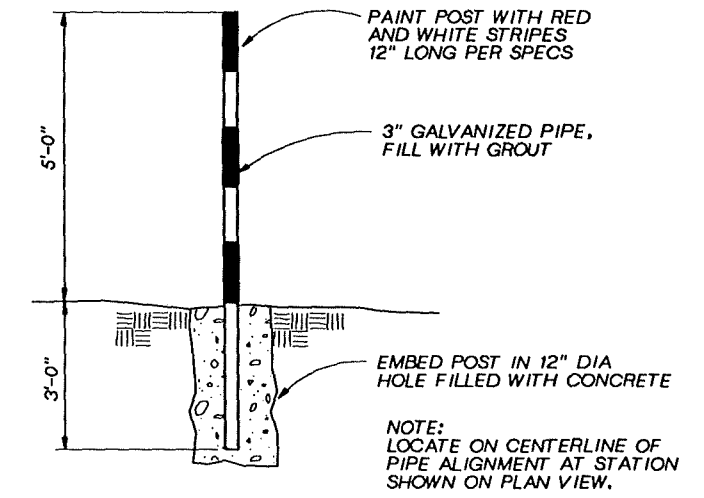
**SPECIAL TRENCH DETAIL (4)**  
NTS 01-C-06



**OUTFALL END DETAIL (5)**  
HORIZ 1"=10'  
VERT 1"=10'  
01-C-06



**PRECAST ANCHOR BLOCK DETAIL (6)**  
NTS



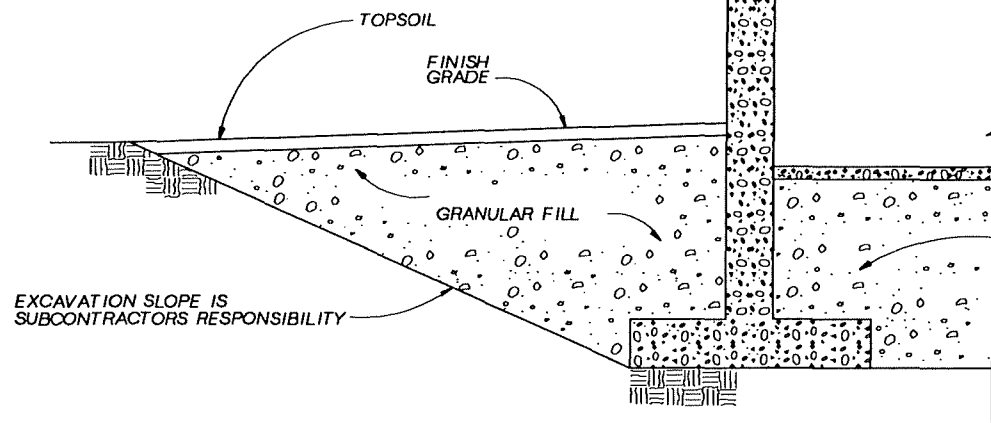
**MARKER POST DETAIL (7)**  
NTS 01-C-06

- NOTE:
- 3 BLOCKS REQUIRED. PLACE AS SHOWN ON DETAIL. 3000 PSI CONC TYPE II CEMENT. PROVIDE LIFTING HOOKS AS NEEDED FOR CONSTRUCTION.

RECORD DRAWINGS

Revised Drawn By D.J. SCHAUER Date 10-19-94  
THESE RECORD DRAWINGS HAVE BEEN PREPARED IN PART OR IN FULL ON THE BASIS OF INFORMATION SUPPLIED BY OTHERS. THE ENGINEER HAS 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 IN THESE RECORD DRAWINGS.

	DSGN G. MURPHY	10-94 RECORD DRAWING 1-93 ADDED NOTES.	NO. DATE REVISION	BY APVD C&M HILL	<b>REUSE OF DOCUMENTS</b> THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF C&M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF C&M HILL.	BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	GROUNDWATER REMEDIAL ACTION ONALASKA MUNICIPAL LANDFILL SITE ONALASKA TOWNSHIP, WISCONSIN	SHEET 17 DWG NO. 01-C-10 DATE OCT 1992 PROJ NO. GLO65602.FD
	DR M. CAMPBELL							
	CHK V. RYBELL							
	APVD S. KEITH							

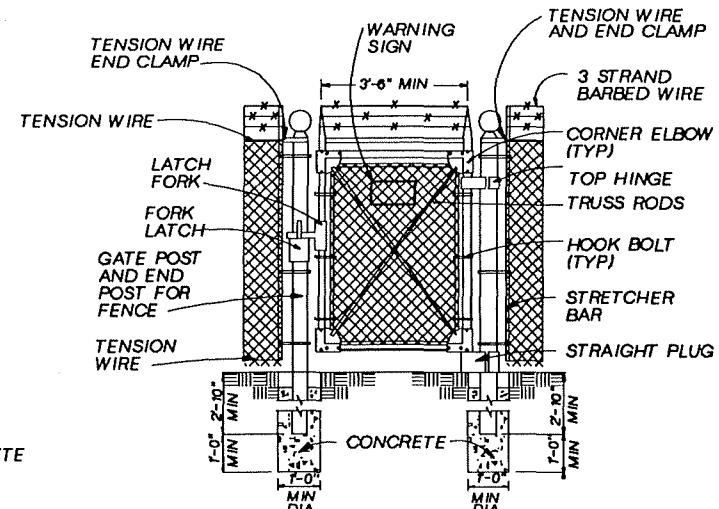
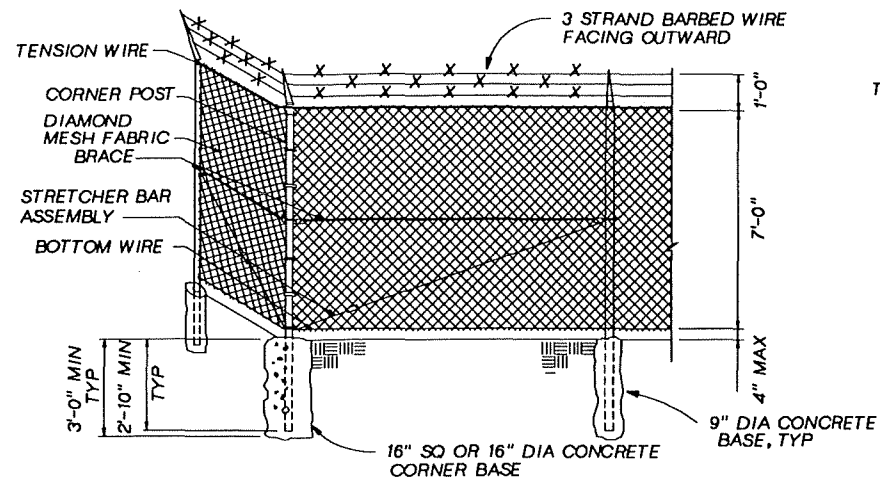


**EXCAVATION FOR STRUCTURES 1**

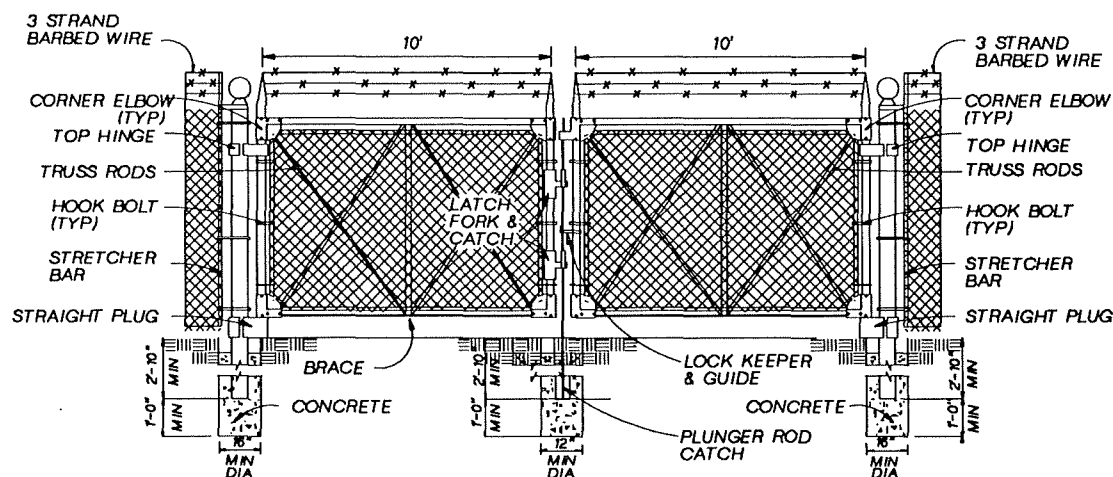
NTS

01-S-01  
01-S-02  
01-S-03

GRANULAR FILL BELOW SLABS UNLESS OTHERWISE SHOWN.



NOTES:  
1. WARNING SIGN TO READ "WATER FROM THIS WELL SHALL NOT BE USED FOR HUMAN CONSUMPTION OR FOR THE PREPARATION OF FOOD PRODUCTS".



NOTES:

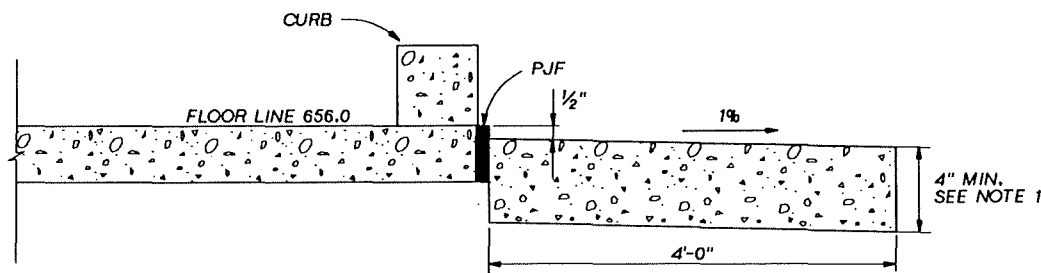
1. ALL NEW FENCING MATERIALS SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION.

**CANTILEVER SLIDE GATE**

**TYPICAL CHAIN LINK FENCE DETAIL 3**

NTS

01-C-02

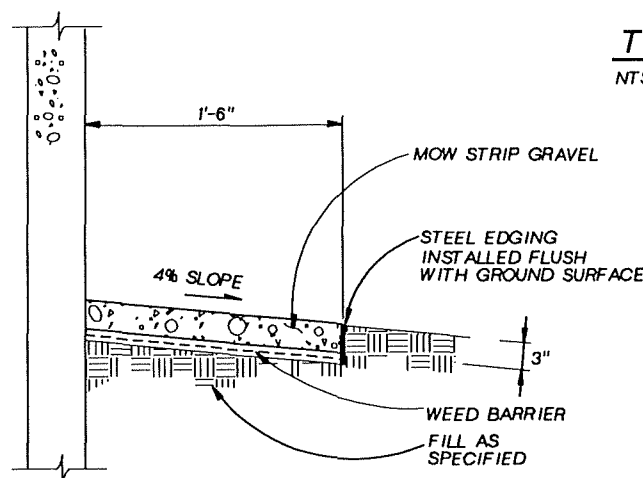


**SIDEWALK DETAIL 2**

NTS

01-C-02  
01-C-03

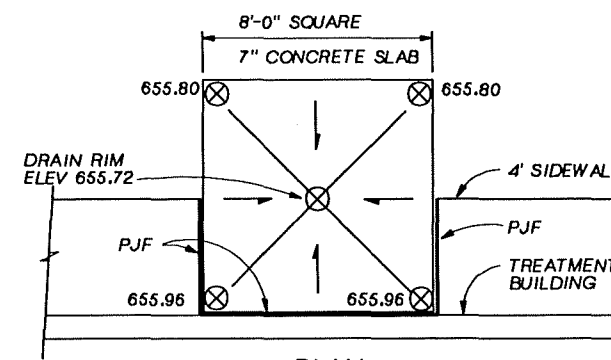
NOTES:  
1. IN FRONT OF ROLLUP DOORS, SIDEWALK DEPTH SHALL BE 7" MIN.



**MOW STRIP DETAIL 4**

NTS

01-C-02



**PLAN**

**OVERSPILL SLAB DETAIL 5**

NTS

01-C-02  
01-C-03

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

**REUSE OF DOCUMENTS**

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

CIVIL DETAILS

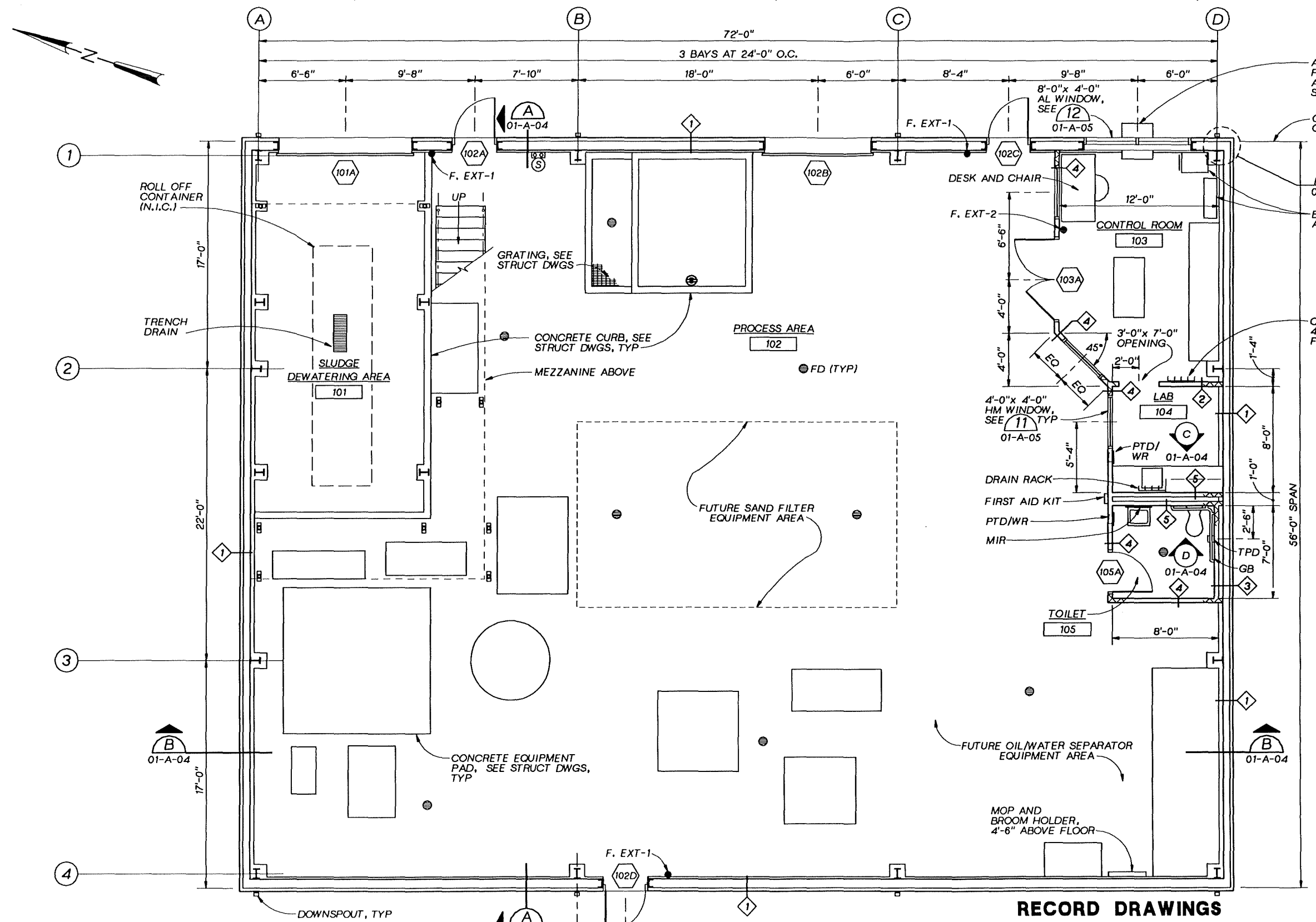
SHEET 18  
DWG NO. 01-C-11  
DATE OCT 1992  
PROJ. NO. GLO65602.FD



DSGN M.W. PADDOCK  
DR P.A. LLANAS  
P.T. RUTZ  
CHK M.S. SCHMIEGE  
APVD S. KEITH

NO.	DATE	REVISION	BY	APVD
			DJS SMK	APVD

10-94 RECORD DRAWING  
BY APVD



AIR CONDITIONER, PROVIDE SEALANT AND FLASHING AROUND, SEE HVAC DWGS

OUTSIDE FACE OF GIRT, TYP

20 TYP 01-A-06

BOOKCASE AND FILE

COAT RACK, 4'-6" ABOVE FLOOR

- NOTES:**
- COORDINATE GIRT AND STUD LAYOUT TO PROVIDE SUPPORT FOR ALL WALL MOUNTED ITEMS.
  - SEE DRAWING NUMBER 01-G-02 FOR GENERAL ARCHITECTURAL NOTES.

**BUILDING CODE DATA:**  
 OCCUPANCY: ILHR 54  
 GROSS GROUND FLOOR AREA: 74'-0" x 56'-0" = 4144 S.F.  
 NET MEZZANINE AREA: 321 S.F.  
 ACTUAL OCCUPANT LOAD: 2 OCCUPANTS  
 BUILDING AVERAGE HEIGHT: ONE STORY, 25'-6"  
 TYPE OF CONSTRUCTION: TYPE NUMBER 8

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

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

**CH2M HILL**  
 DSGN K.HARGREAVES  
 DR R.G.SIEBERS  
 CHKT .GLAWTSCHEW  
 APVD S.M.KEITH

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS SMK	

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

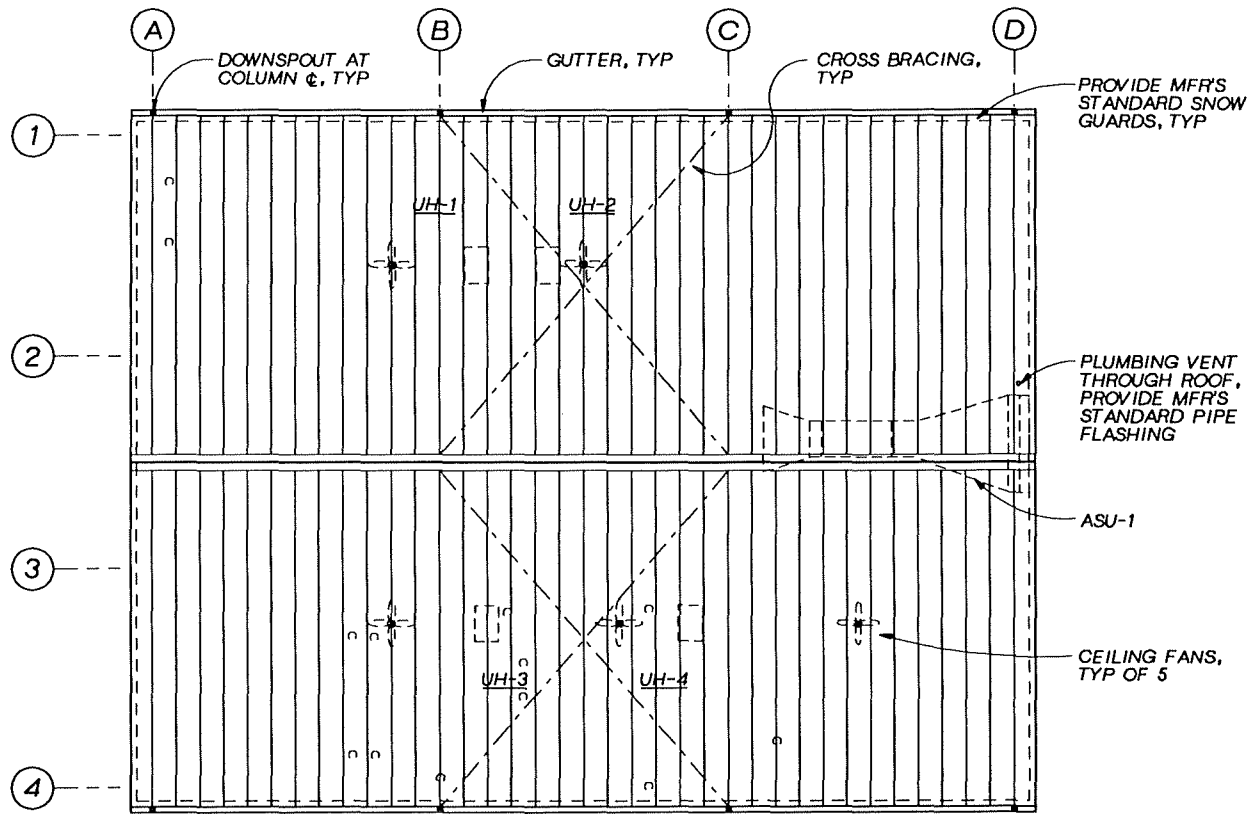
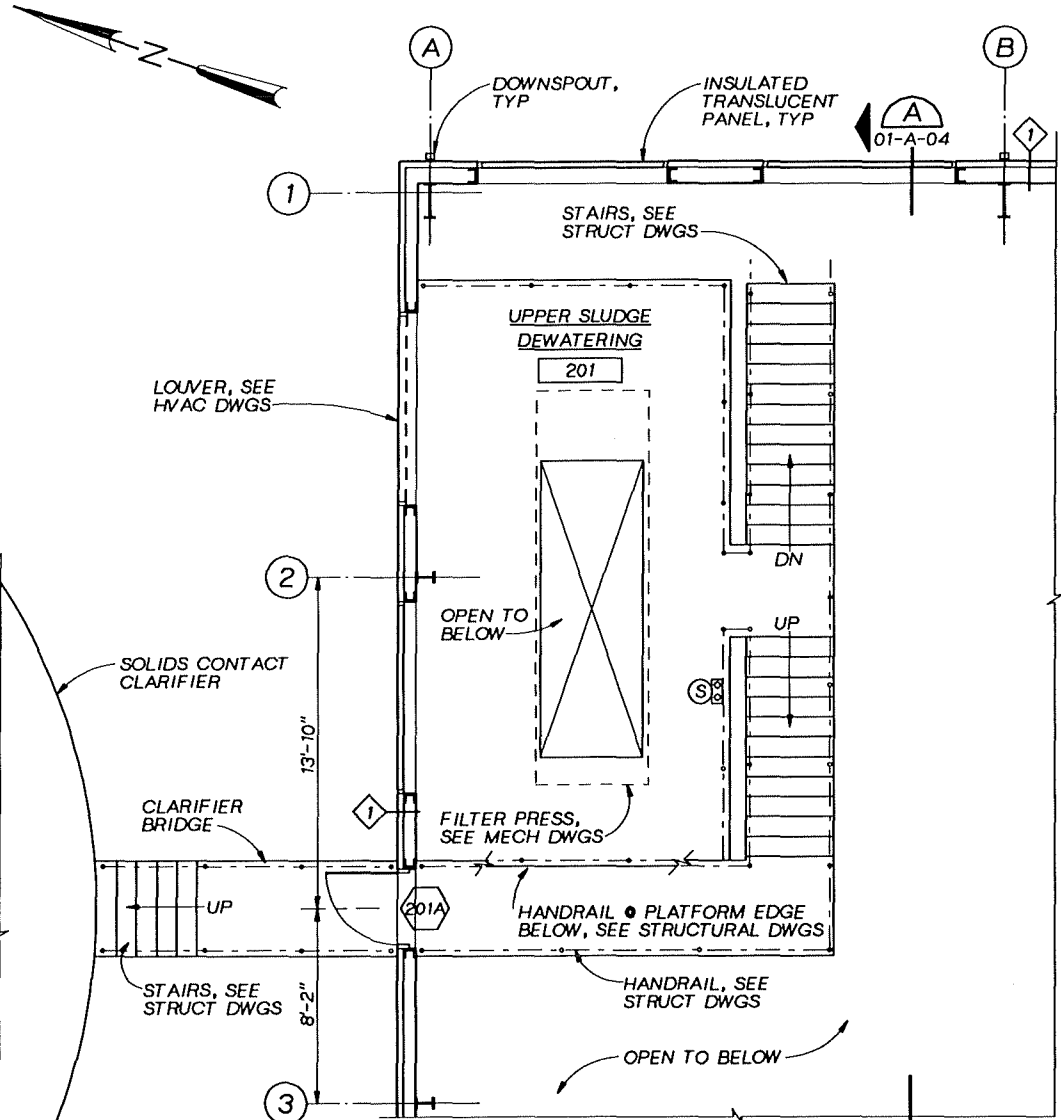
BAR IS ONE INCH ON ORIGINAL DRAWING.  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
 ARCHITECTURAL  
 GROUND FLOOR PLAN

SHEET	19
DWG NO.	01-A-01
DATE	OCT 1992
PROJ NO.	GL065602.FD

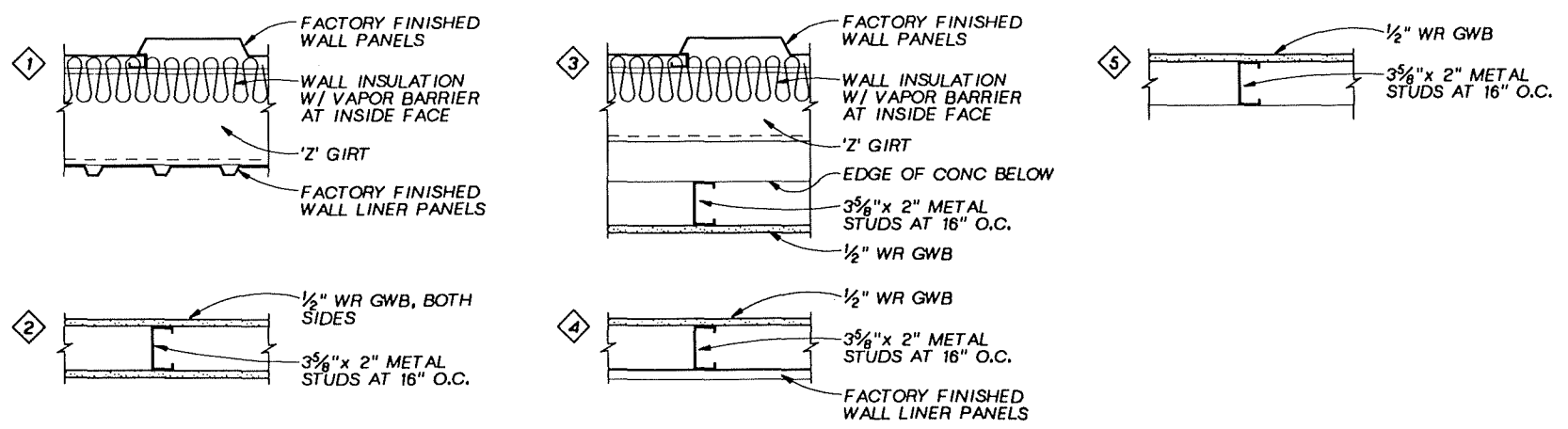
PROJID OVERLAY SCREEN FILE



- EQUIPMENT SUPPORT NOTES:**
1. ROOF FRAMING SHALL BE DESIGNED TO SUPPORT EQUIPMENT SHOWN AND ADDITIONAL ROOFING CONCENTRATED LOAD SPECIFIED.
  2. BUILDING MANUFACTURER TO PROVIDE ADDITIONAL FRAMING AS REQUIRED TO SUPPORT EQUIPMENT SHOWN. COORDINATE WITH MANUFACTURER OF EQUIPMENT TO BE FURNISHED.
  3. SEE DRAWINGS 01-M-01 THRU 01-M-08 FOR LOCATIONS OF EQUIPMENT SHOWN.
  4. EQUIPMENT SUPPORT LOADS:  

ASU-1	800 lbs
UH-1 THRU 4	250 lbs
PIPE HANGERS	250 lbs
CEILING FANS	100 lbs

**WALL TYPES**



**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

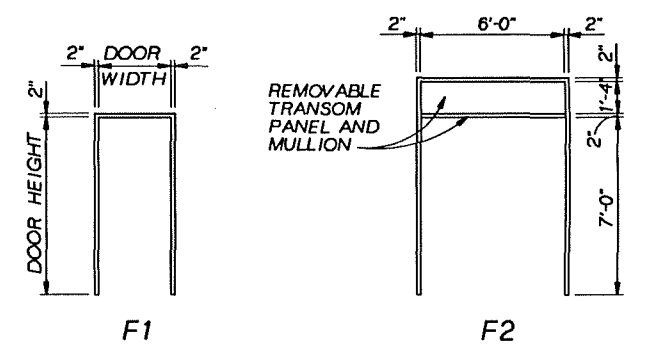
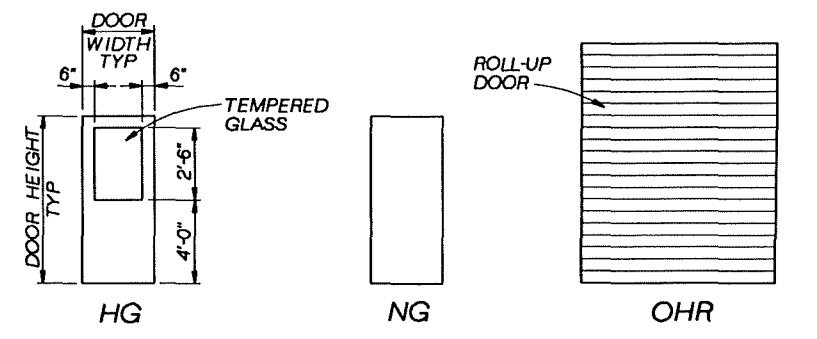
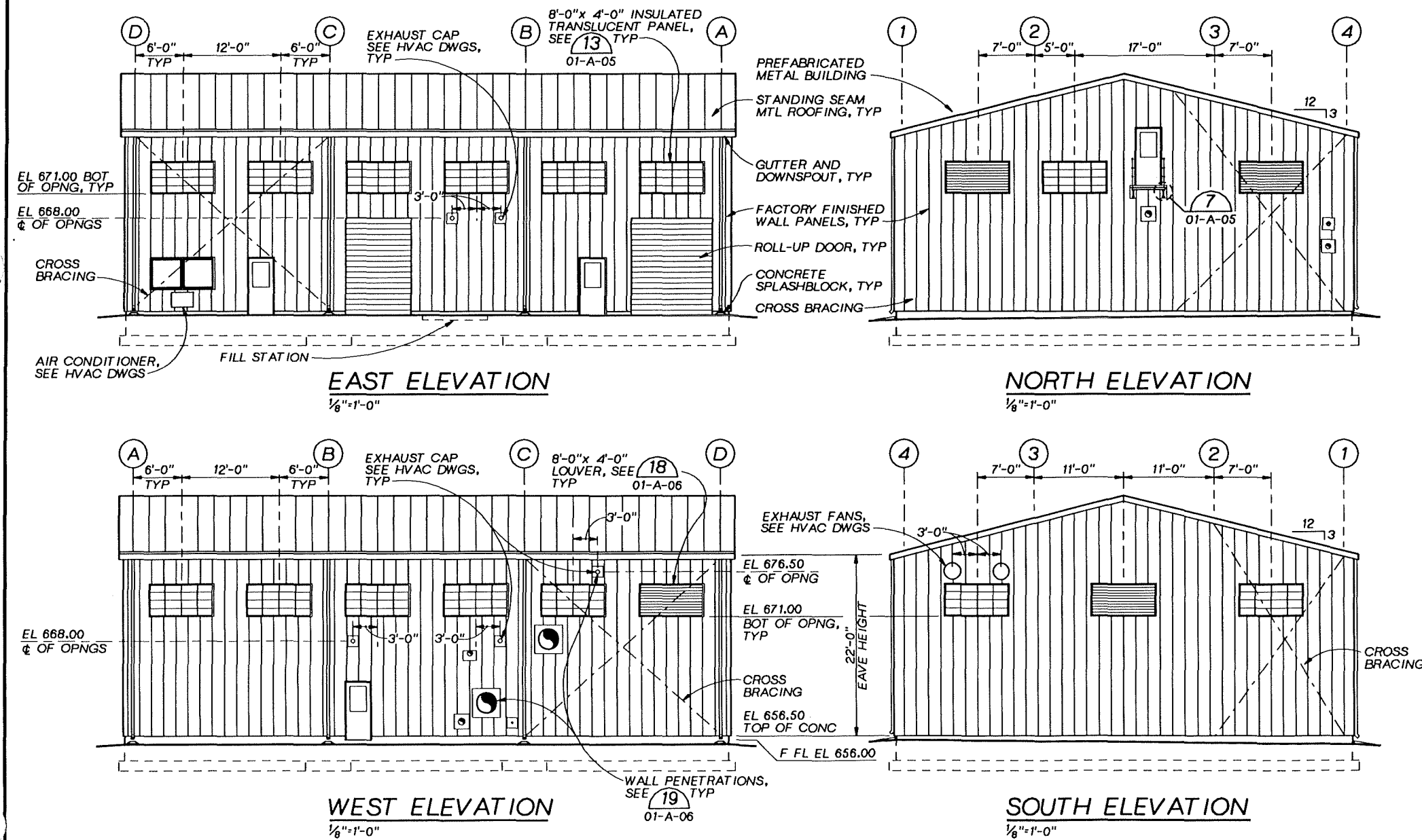
	DSGN. K.HARGREAVES	10-94 RECORD DRAWING NO. DATE REVISION	DJS SMK BY APVD	<b>REUSE OF DOCUMENTS</b> THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.	BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	GROUNDWATER REMEDIAL ACTION ONALASKA MUNICIPAL LANDFILL SITE ONALASKA TOWNSHIP, WISCONSIN	PROCESS BUILDING ARCHITECTURAL PLANS AND WALL TYPES	SHEET 20
	OR R.G.SIEBERS							DWG NO. 01-A-02
	CHKT. GLAWTSCHIEW							DATE OCT 1992
	APVD S.M.KEITH							PROJ NO. GLO65602.FD

### INTERIOR FINISH SCHEDULE

NO.	SPACE	FLOOR		BASE		TYP WALL		OTHER WALL		CEILING		MISCELLANEOUS		REMARKS			
		SUBFL	FINISH	HEIGHT	FINISH	MATL	FINISH	MATL	FINISH	HEIGHT	MATL	FINISH	ITEM		MATL	FINISH	
101	SLUDGE DEWATERING AREA	CONC	SEAL	—	—	MTL	FCTY	—	—	VARIES	EXPOSED STRUCT	5					
102	PROCESS AREA	CONC	SEAL*	—	—	MTL	FCTY	—	—	VARIES	EXPOSED STRUCT	5		* SEE 09900 FOR SUMPS			
103	CONTROL ROOM	CONC	SEAL	6"	VINYL	WR	GWB	116	MTL	FCTY	VARIES	WR	GWB	116			
104	LAB	CONC	SEAL	6"	VINYL	WR	GWB	116	MTL	FCTY	VARIES	WR	GWB	116	CASEWORK	MTL	FCTY
105	TOILET	CONC	SEAL	6"	VINYL	WR	GWB	116	—	—	VARIES	WR	GWB	116	TOILET ACCESSORIES	SST	FCTY
201	UPPER SLUDGE DEWATERING	STL	GALV	—	—	MTL	FCTY	—	—	VARIES	EXPOSED STRUCT	5					

### DOOR SCHEDULE

DOOR NO.	DOOR SIZE			DOOR		FRAME		DETAILS			HARDWARE GROUP	REMARKS
	WIDTH	HEIGHT	THKNS	MATL	TYPE	MATL	TYPE	HEAD	JAMB	SILL		
101A	10'-0"	12'-0"	—	STL	OHR	STL	—	5/01-A-05	4/01-A-05	6/01-A-05	—	PAINT DOORS & FRAMES PER 09900
102A	3'-0"	7'-0"	1 3/4"	HM	HG	HM	F1	2/01-A-05	1/01-A-05	3/01-A-05	HW-1	"
102B	8'-0"	12'-0"	—	STL	OHR	STL	—	5/01-A-05	4/01-A-05	6/01-A-05	—	"
102C	3'-0"	7'-0"	1 3/4"	HM	HG	HM	F1	2/01-A-05	1/01-A-05	3/01-A-05	HW-1	"
102D	3'-0"	7'-0"	1 3/4"	HM	HG	HM	F1	2/01-A-05	1/01-A-05	3/01-A-05	HW-1	"
103A	(2)3'-0"	7'-0"	1 3/4"	HM	(2)HG	HM	F2	9/01-A-05	8/01-A-05	10/01-A-05	HW-2	"
105A	3'-0"	7'-0"	1 3/4"	HM	NG	HM	F1	9/01-A-05	8/01-A-05	10/01-A-05	HW-3	"
201A	3'-0"	7'-0"	1 3/4"	HM	HG	HM	F1	2/01-A-05	1/01-A-05	7/01-A-05	HW-4	"



### RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

CH2M HILL  
 DSGN K. HARGREAVES  
 OR R.G. SIEBERS  
 CHKT. GLAWTSCHIEW  
 APVD S.M. KEITH

10-94	RECORD DRAWING	DJS	SMK
NO.	DATE	BY	APVD
	REVISION		

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

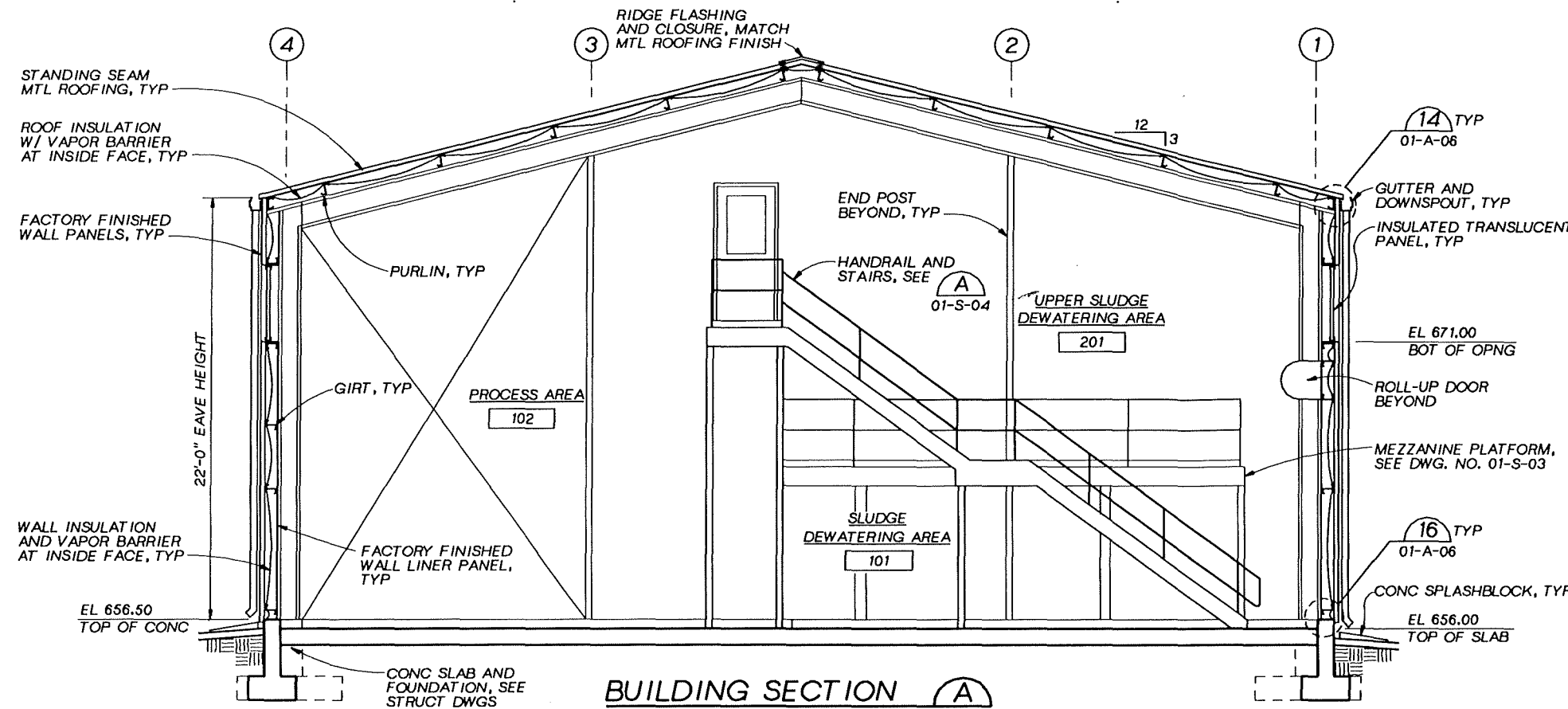
PROCESS BUILDING  
 ARCHITECTURAL  
 ELEVATIONS AND SCHEDULES

SHEET	21
DWG NO.	01-A-03
DATE	OCT 1992
PROJ. NO.	GL065602.FD

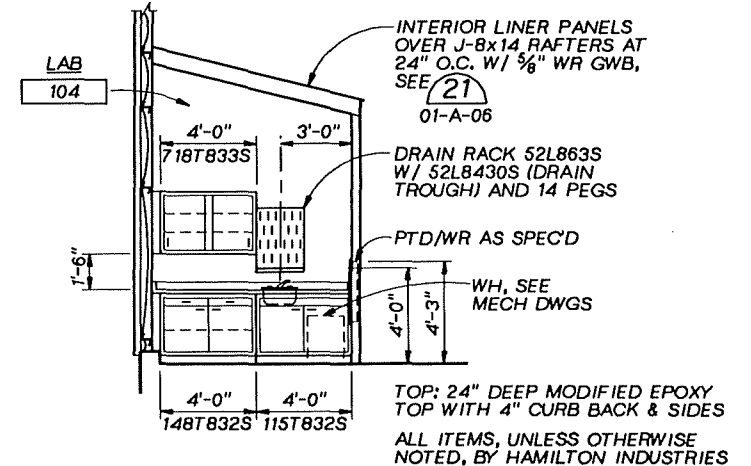
# RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-19-94

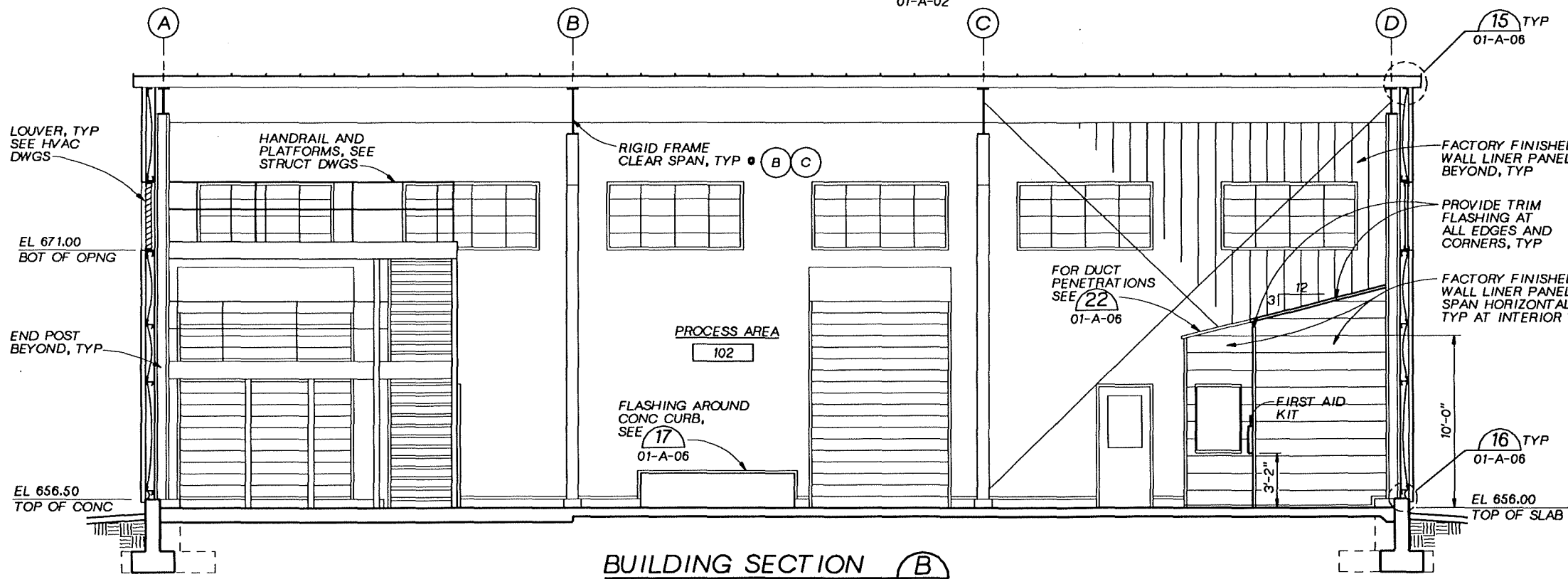
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED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



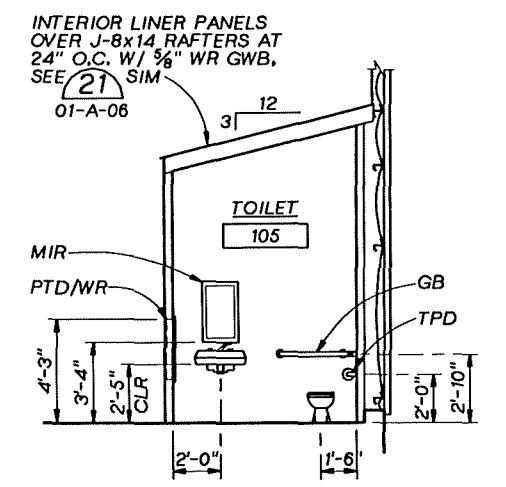
**BUILDING SECTION A**  
1/4"=1'-0" 01-A-01 01-A-02



**LAB ELEVATION C**  
1/4"=1'-0" 01-A-01



**BUILDING SECTION B**  
1/4"=1'-0" 01-A-01



**TOILET ELEVATION D**  
1/4"=1'-0" 01-A-01

DSGY R. HARGREAVES  
 DR R. G. SIEBERS  
 CHKT. GLAWTSCHW  
 APVD S.M. KEITH

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS SMK	

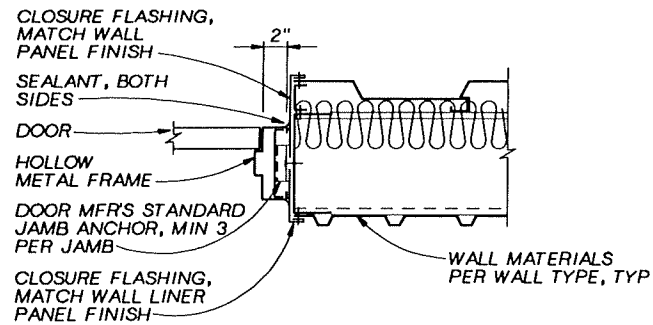
**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

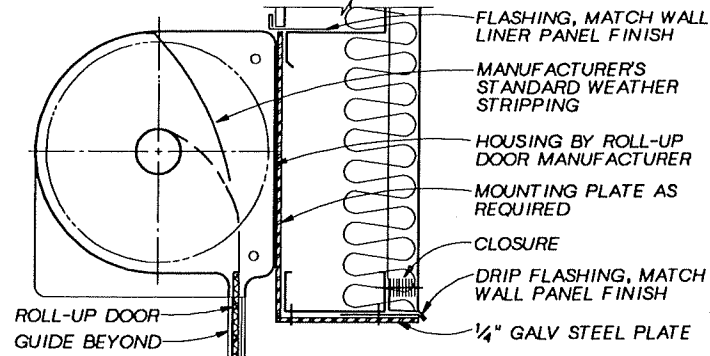
GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
 ARCHITECTURAL  
 SECTIONS AND ELEVATIONS

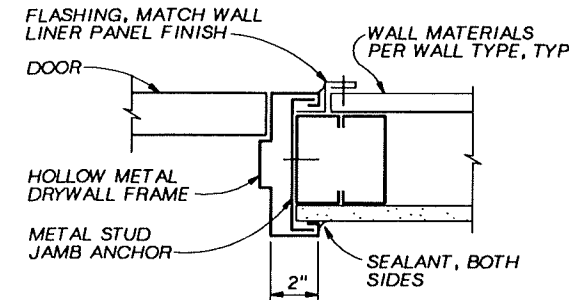
SHEET	22
DWG NO.	01-A-04
DATE	OCT 1992
PROJ NO.	GLO65602.FD



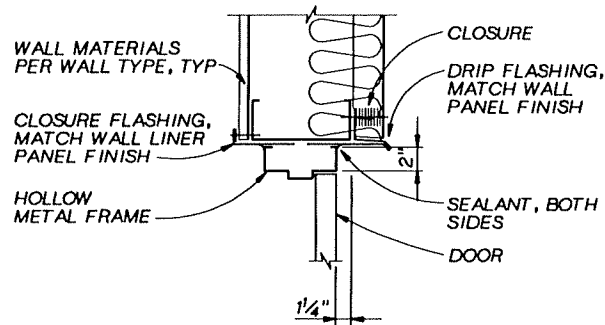
**DOOR DETAIL - JAMB** (1)  
1 1/2"=1'-0" 01-A-03



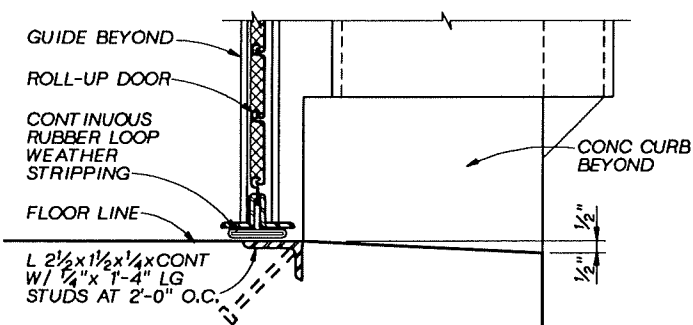
**DOOR DETAIL - HEAD** (5)  
1 1/2"=1'-0" 01-A-03



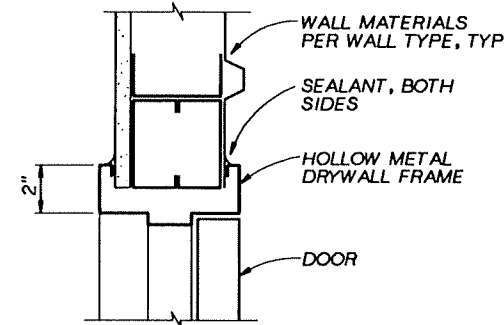
**DOOR DETAIL - JAMB** (8)  
3"=1'-0" 01-A-03



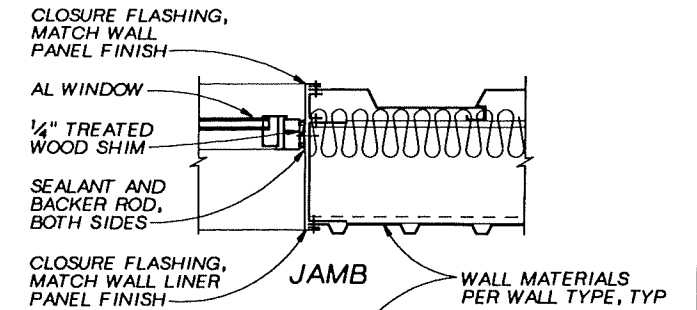
**DOOR DETAIL - HEAD** (2)  
1 1/2"=1'-0" 01-A-03



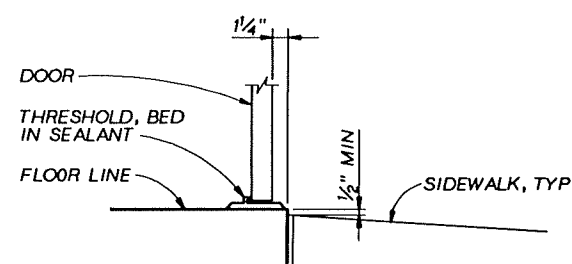
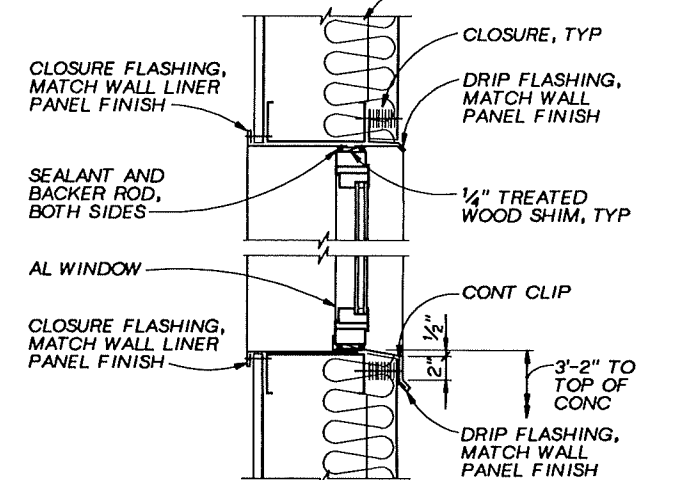
**DOOR DETAIL - SILL** (6)  
3"=1'-0" 01-A-03



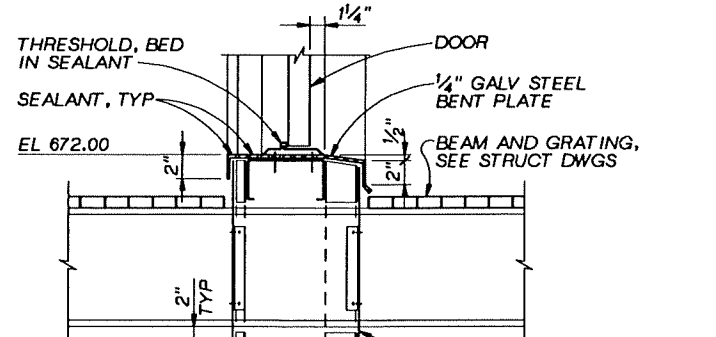
**DOOR DETAIL - HEAD** (9)  
3"=1'-0" 01-A-03



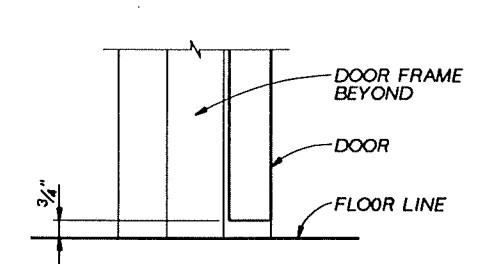
**EXTERIOR WINDOW DETAIL** (12)  
1 1/2"=1'-0" 01-A-01



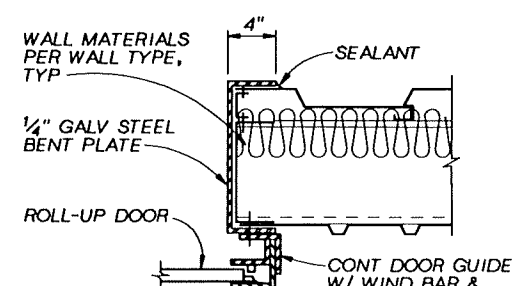
**DOOR DETAIL - SILL** (3)  
1 1/2"=1'-0" 01-A-03



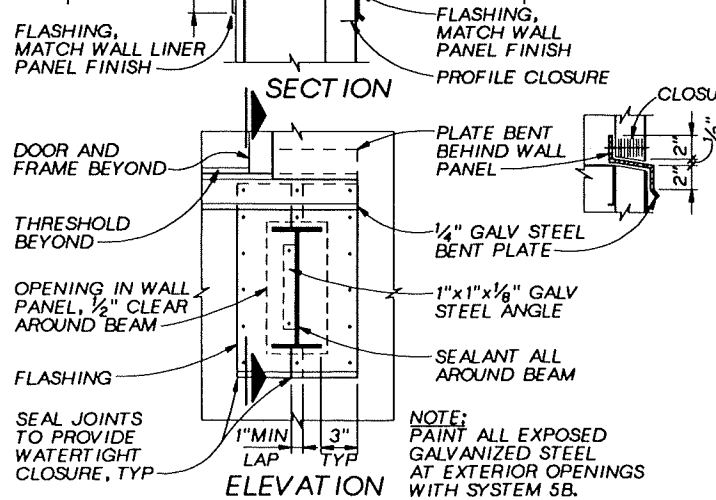
**DOOR DETAIL - SILL** (7)  
1 1/2"=1'-0" 01-A-03



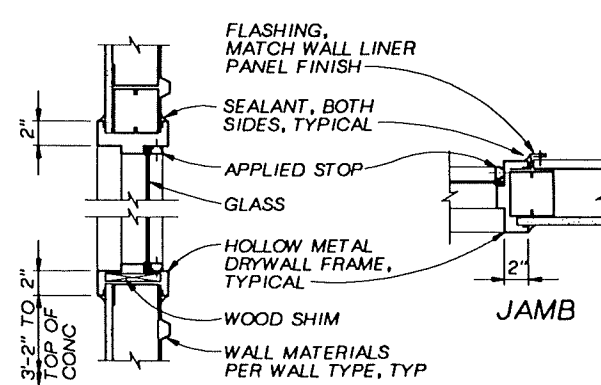
**DOOR DETAIL - SILL** (10)  
3"=1'-0" 01-A-03



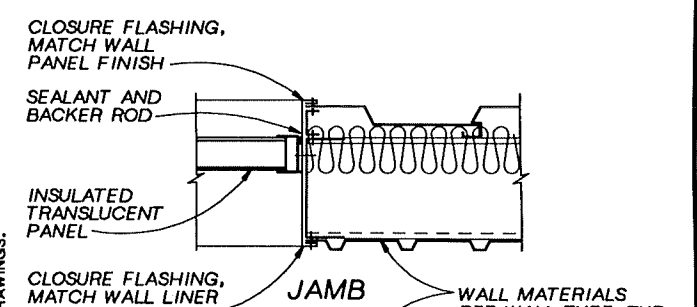
**DOOR DETAIL - JAMB** (4)  
1 1/2"=1'-0" 01-A-03



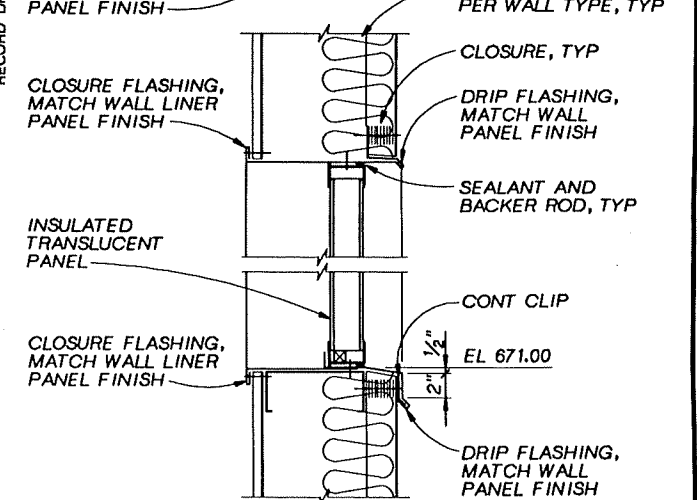
**DOOR DETAIL - SILL** (7)  
1 1/2"=1'-0" 01-A-03



**INTERIOR WINDOW DETAIL** (11)  
1 1/2"=1'-0" 01-A-01



**TRANSLUCENT PANEL DETAIL** (13)  
1 1/2"=1'-0" 01-A-03



**RECORD DRAWINGS**

Revised By D.J.SCHAUER Date 10-19-94  
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, EXTENT, OR CHARACTER OF ANY UNDERGROUND UTILITIES OR CONDITIONS WHICH MAY NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

NOTE: PAINT ALL EXPOSED GALVANIZED STEEL AT EXTERIOR OPENINGS WITH SYSTEM 5B.

OSGN R.G.SIEBERS  
DR R.G.SIEBERS  
CHK T.GLAWTSCHEW  
APVD S.M.KEITH

10-94 RECORD DRAWING  
NO. DATE REVISION

DJS SMK  
BY APVD

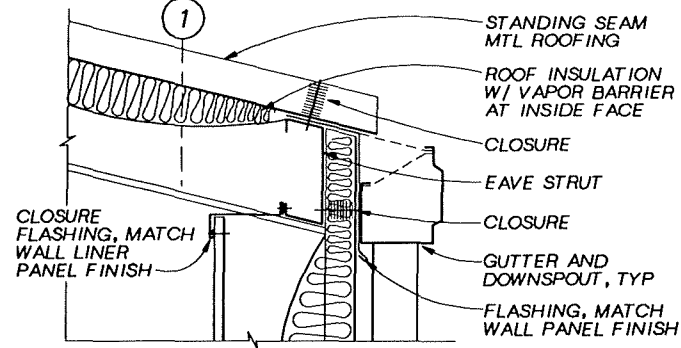
**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

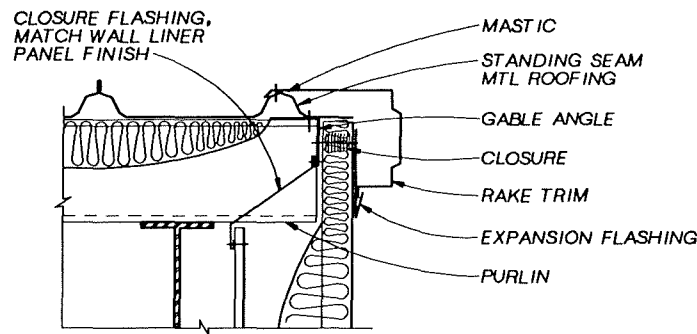
GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
ARCHITECTURAL  
DETAILS

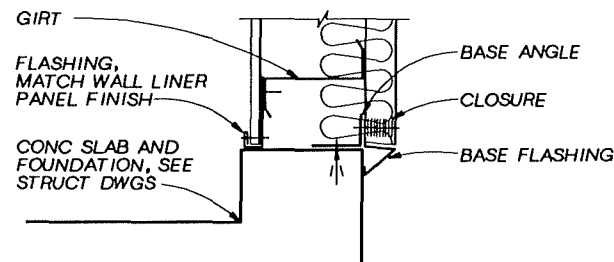
SHEET 23  
DWG NO. 01-A-05  
DATE OCT 1992  
PROJ. NO. GLO65602.FD



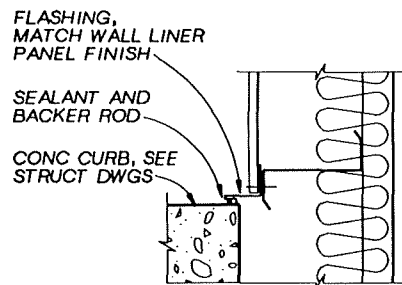
**TYP EAVE DETAIL (14)**  
1 1/2"=1'-0" 01-A-04



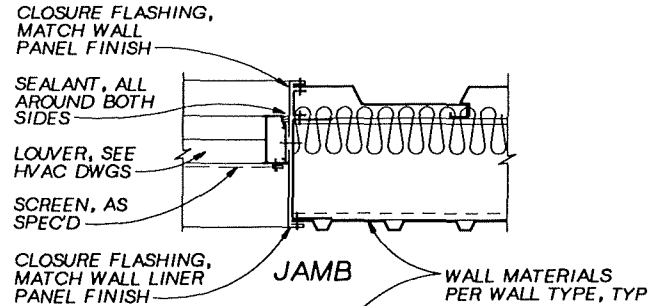
**TYP RAKE DETAIL (15)**  
1 1/2"=1'-0" 01-A-04



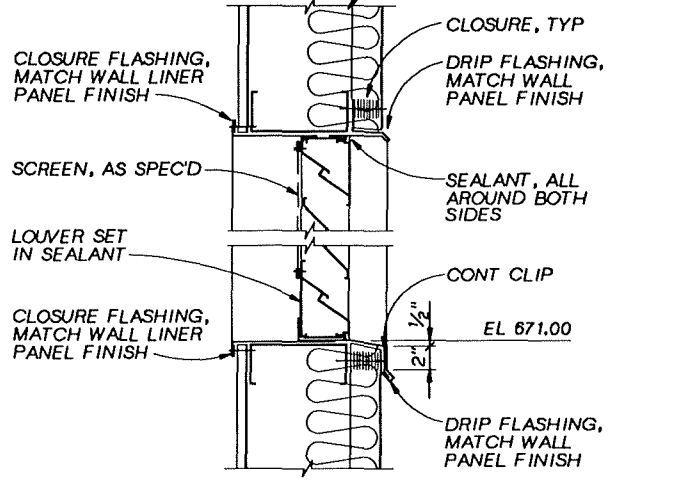
**TYP BASE DETAIL (16)**  
1 1/2"=1'-0" 01-A-04



**CURB AT EXT WALL (17)**  
1 1/2"=1'-0" 01-A-04

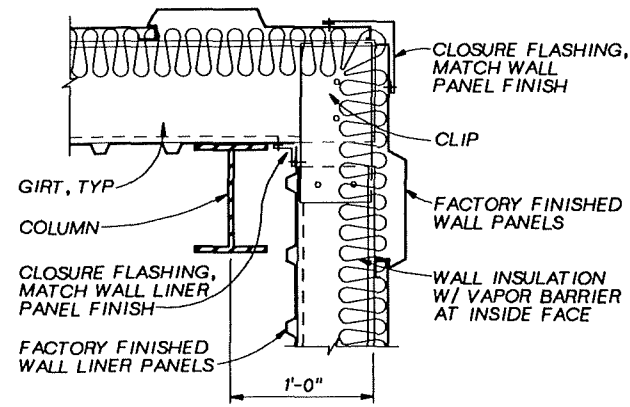


**LOUVER DETAIL (18)**  
1 1/2"=1'-0" 01-A-03

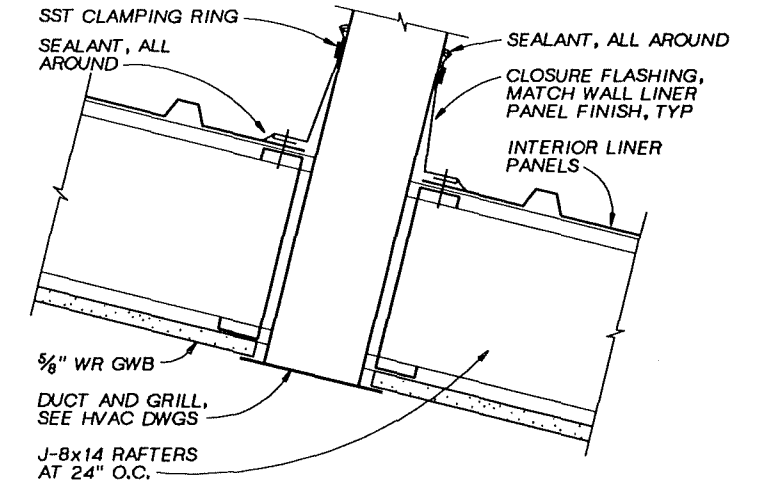


**WALL PENETRATION DETAIL (19)**  
1 1/2"=1'-0" 01-A-03

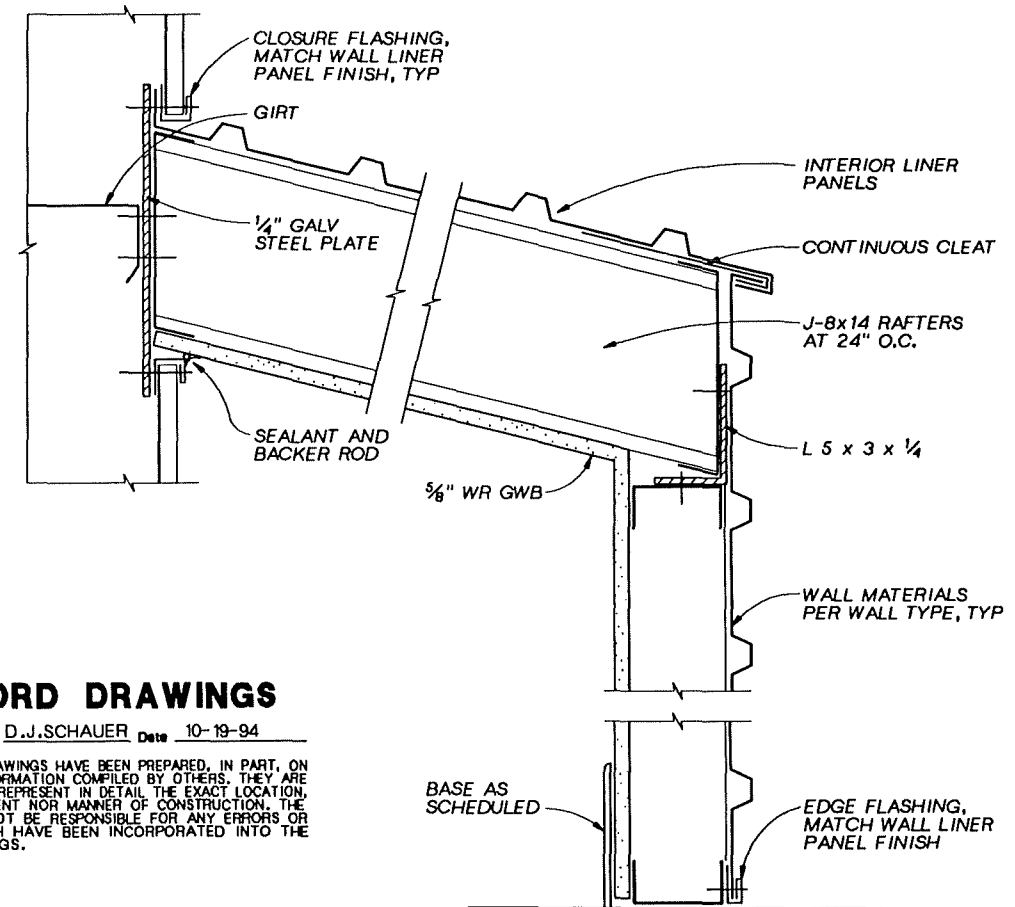
NOTE: DETAIL 19 APPLIES TO PIPES GREATER THAN 2" DIA. PROVIDE SEALANT ALL AROUND PIPE, BOTH SIDES OF WALL.



**TYP CORNER DETAIL (20)**  
1 1/2"=1'-0" 01-A-01



**DUCT PENETRATION DETAIL (22)**  
3"=1'-0" 01-A-04



**INTERIOR ENCLOSURE DETAIL (21)**  
3"=1'-0" 01-A-04

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

OSGN H.G.SIEBERS  
OR R.G.SIEBERS  
CHKT. GLAWTSCHIEW  
APVD S.M.KEITH

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS SMK	

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

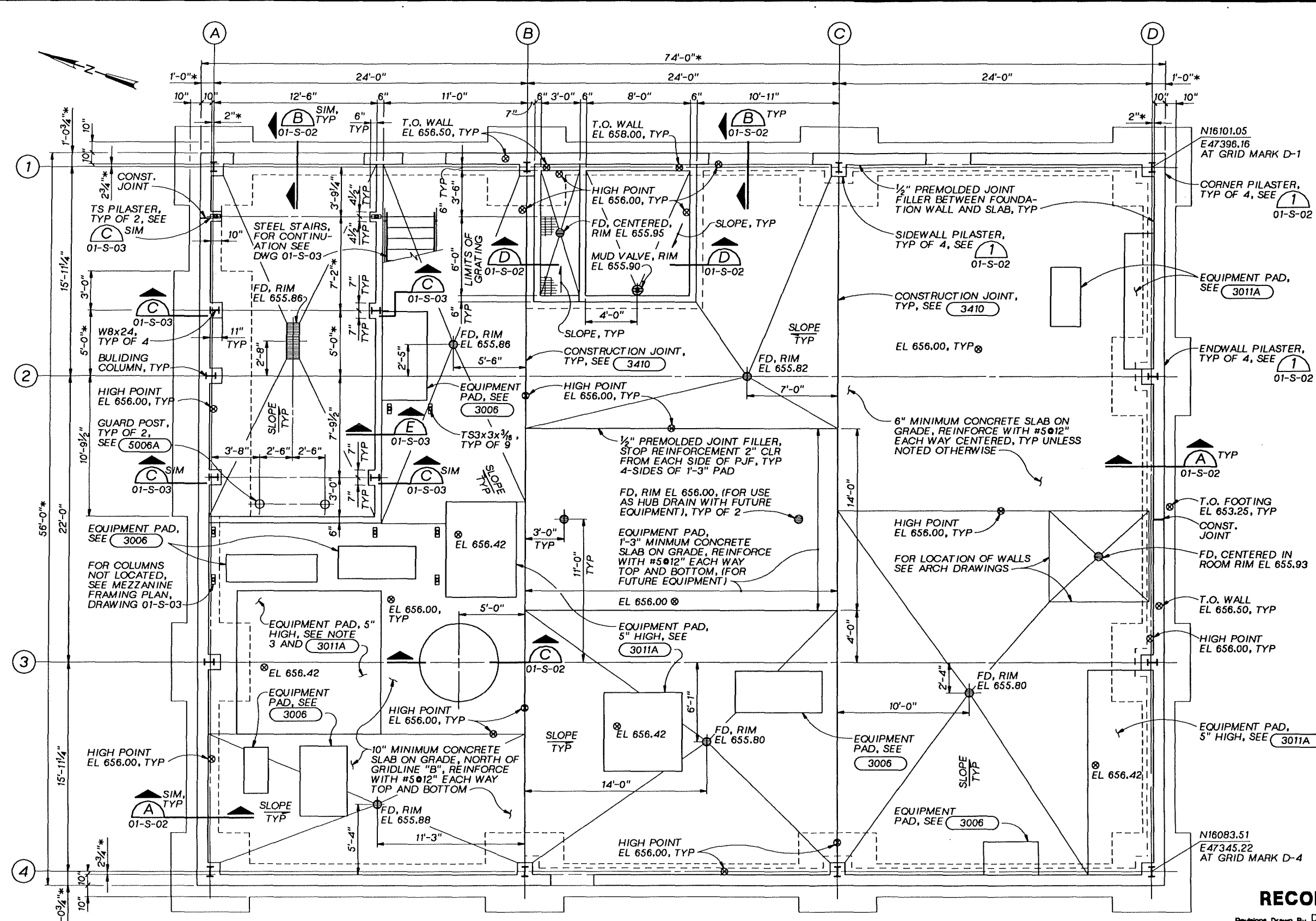
GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
ARCHITECTURAL  
DETAILS

SHEET 24  
DWG NO. 01-A-06  
DATE OCT 1992  
PROJ. NO. GLO65602.FD

OVERLAY SCREEN





ASSUMED COLUMN REACTIONS (AT RIGID FRAMES)		
LOAD	VERTICAL	HORIZONTAL
DEAD	1.6K	0.6K (OUTWARD)
LIVE	21.2K	7.4K (OUTWARD)
WIND	-13.8K	7.8 (INWARD)
	-7.8K	1.2 (OUTWARD)

- NOTES:**
- ALL DIMENSIONS MARKED "\*", SHALL BE COORDINATED AND VERIFIED WITH METAL BUILDING MANUFACTURER PRIOR TO PLACEMENT OF CONCRETE.
  - FOR GENERAL STRUCTURAL NOTES, SEE DRAWING 01-G-02.
  - BLOCKOUT CONCRETE TANK PAD FOR 3" DRAIN, SET TANK, AND FILL WITH GROUT. COORDINATE SIZE AND DEPTH OF BLOCKOUT WITH TANK PROVIDED.
  - FOR LOCATION OF INTERIOR WALLS, SEE ARCHITECTURAL DRAWINGS.
  - FOR WALL AND FLOOR PENETRATIONS, SEE MECHANICAL DRAWINGS
  - FOR ADDITIONAL REINFORCING AROUND OPENINGS SEE (3302).
  - FOR EXCAVATION, SEE (1) 01-C-11

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-20-94

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.

**FOUNDATION/GROUND FLOOR PLAN**  
1/4"=1'-0"

	DSGNK.E.SCHMID
	DR B.R.LEHMAN
	CHK S.E.DOHELEMAN
	APVD S.E.KIETH

10-94	RECORD DRAWING	DJS SMK
NO.	DATE	BY
	REVISION	APVD

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

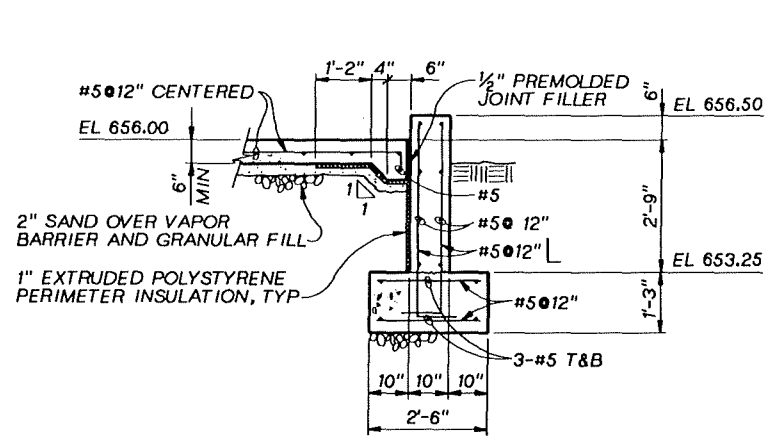
PROCESS BUILDING  
STRUCTURAL  
FOUNDATION/GROUND FLOOR PLAN

SHEET 25
DWG NO. 01-S-01
DATE OCT 1992
PROJ. NO. GLO65602.FD

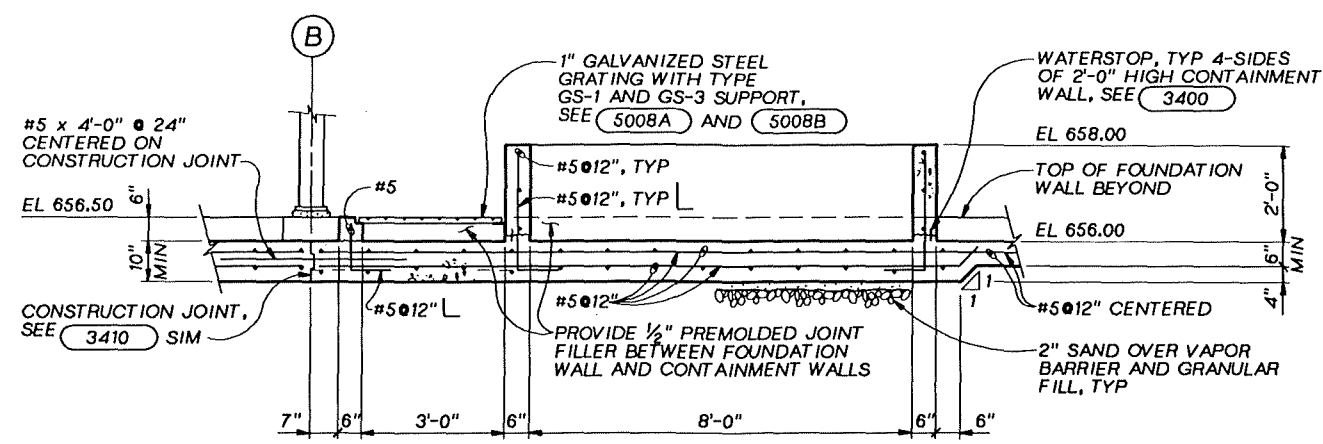
# RECORD DRAWINGS

Revisions Drawn By D.J.SCHAUER Date 10-20-94

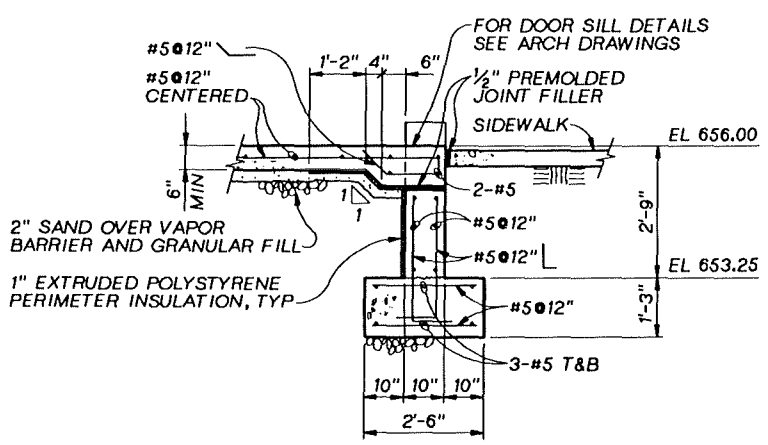
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED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



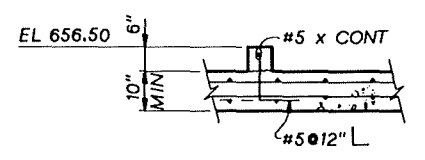
**SECTION A**  
1/2"=1'-0" 01-S-01



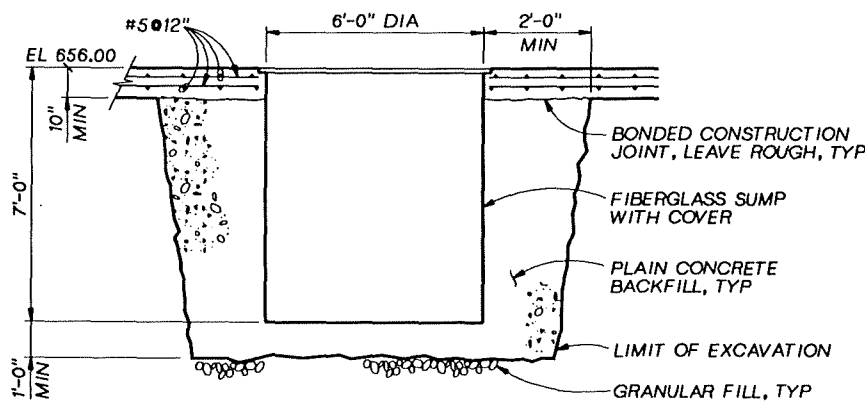
**SECTION D**  
1/2"=1'-0" 01-S-01



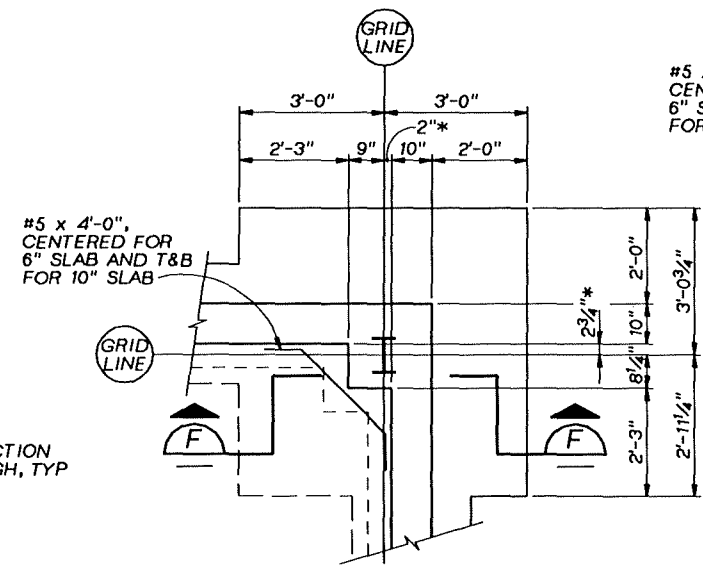
**SECTION B**  
1/2"=1'-0" 01-S-01



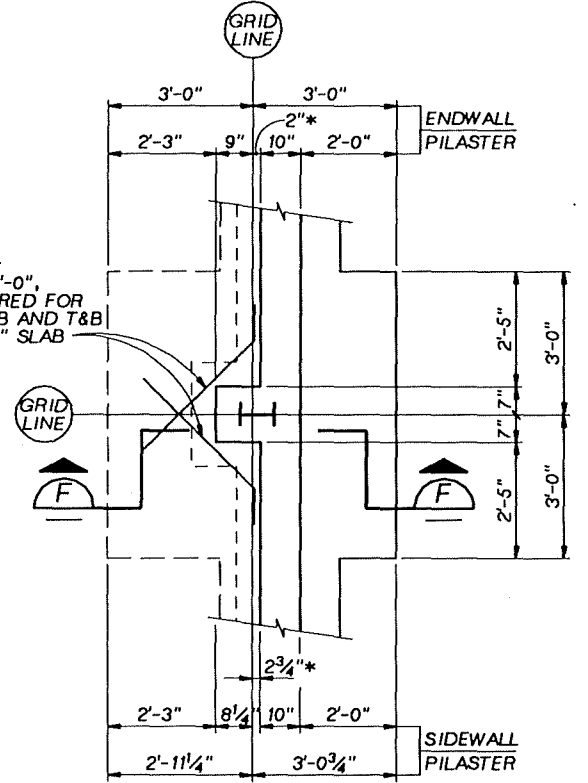
**SECTION E**  
1/2"=1'-0" 01-S-01



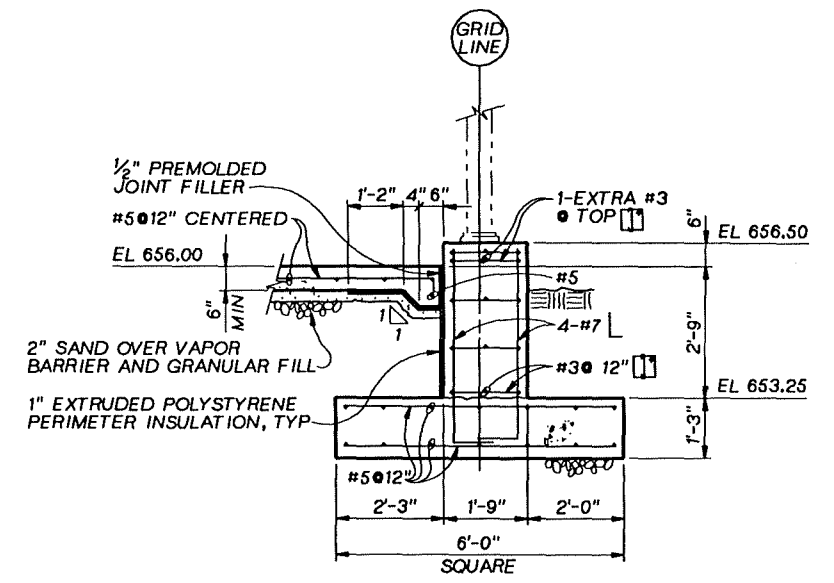
**SECTION C**  
3/8"=1'-0" 01-S-01



**CORNER PILASTER PLAN**



**ENDWALL/SIDEWALL PILASTER PLAN**



**SECTION F**

**NOTE:**  
1. ALL DIMENSIONS MARKED "\*" SHALL BE COORDINATED AND VERIFIED WITH METAL BUILDING MANUFACTURER PRIOR TO PLACEMENT OF CONCRETE.

**PILASTER DETAIL 1**  
1/2"=1'-0" 01-S-01

**GENERAL NOTE:**  
1. FLOOR HIGH POINT ELEVATIONS SHOWN. SEE FLOOR PLAN FOR SLOPES TO DRAINS.

	DSGN K.E.SCHMID
	DR B.R.LEHMAN
	CHK S.E.DOHELMAN
	APVD S.E.KEITH

NO.	DATE	REVISION

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CKM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CKM HILL.

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

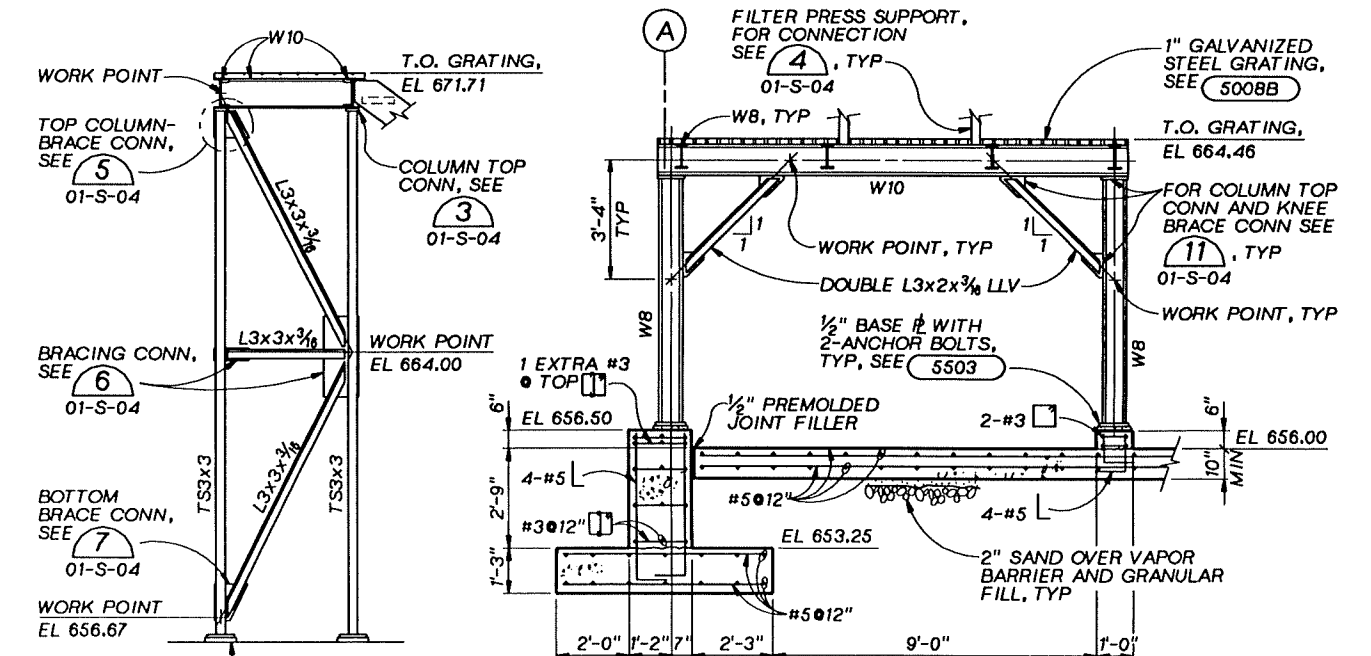
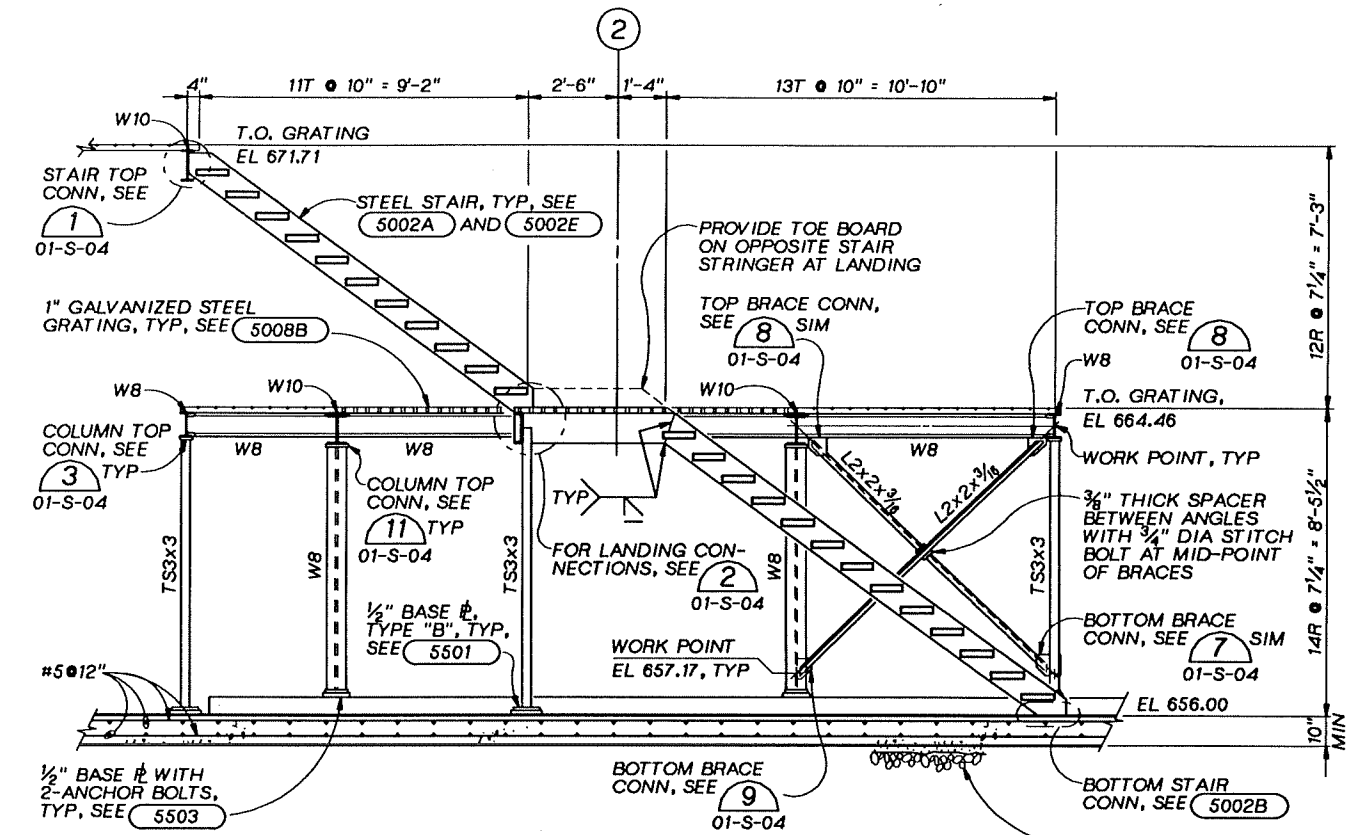
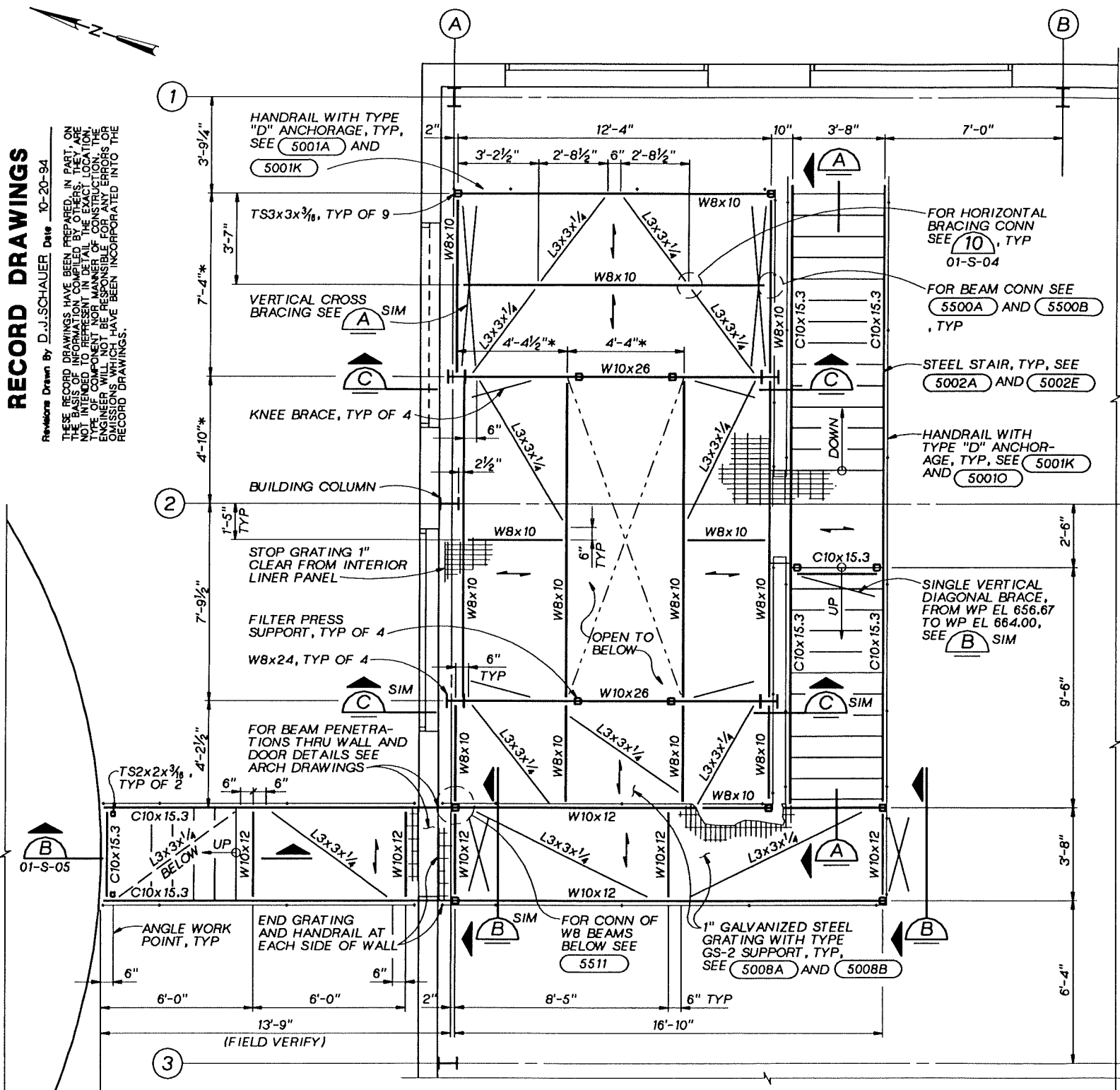
GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
STRUCTURAL  
SECTIONS AND DETAIL

SHEET	26
DWG NO.	01-S-02
DATE	OCT 1992
PROJ NO.	GLO65602.FD

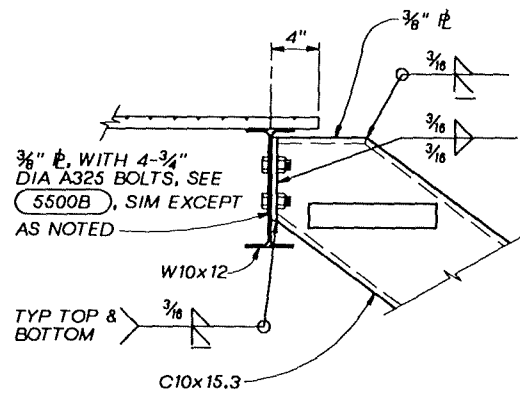
**RECORD DRAWINGS**

Revised Drawn By D.J.SCHAUER Date 10-20-94  
 THESE RECORD DRAWINGS HAVE BEEN PREPARED IN PART, ON THE BASIS OF RECORD DRAWINGS AND/OR SPECIFICATIONS. THE ENGINEER HAS NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OR COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

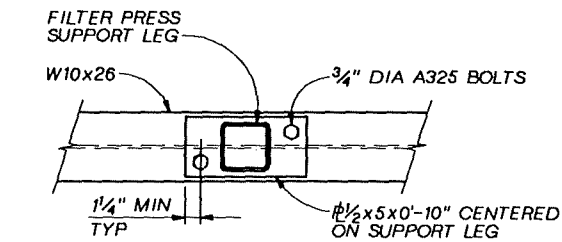


**GENERAL NOTES:**  
 1. HANDRAIL NOT SHOWN IN SECTIONS, SEE PLAN.  
 2. FLOOR HIGH POINT ELEVATION SHOWN. SEE FLOOR PLAN FOR SLOPES TO DRAINS.

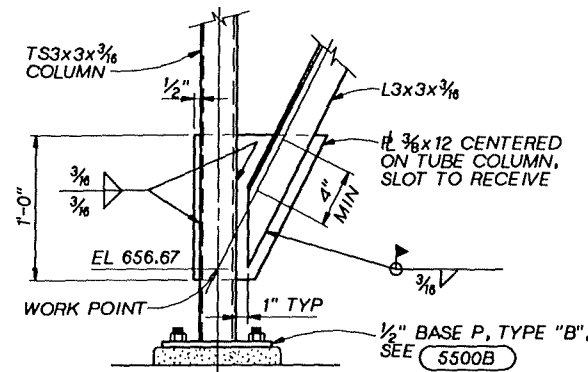
	DSGN K.E.SCHMID DR B.R.LEHMAN CHK S.E.DOEHLEMAN APVD S.E.KEITH	10-94 RECORD DRAWING NO. DATE REVISION	DJS SMK BY APVD © CRM HILL	<b>REUSE OF DOCUMENTS</b> THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CRM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CRM HILL.	BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	GROUNDWATER REMEDIAL ACTION ONALASKA MUNICIPAL LANDFILL SITE ONALASKA TOWNSHIP, WISCONSIN	PROCESS BUILDING STRUCTURAL FRAMING PLAN AND SECTIONS	SHEET 27 DWG NO. 01-S-03 DATE OCT 1992 PROJ NO. GLO65602.FD
	OVERLAY SCREEN PROJ FILE							



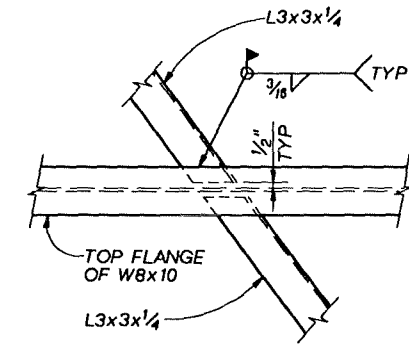
**STAIR TOP CONNECTION DETAIL** (1)  
1 1/2" = 1'-0" 01-S-03



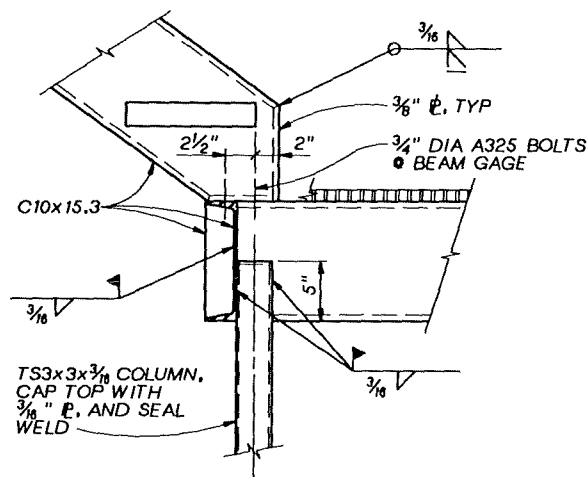
**FILTER PRESS SUPPORT CONNECTION DETAIL** (4)  
1 1/2" = 1'-0" 01-S-03



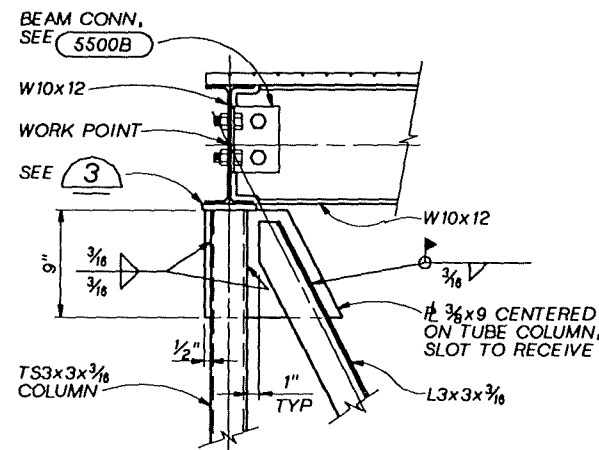
**BOTTOM BRACE CONNECTION DETAIL** (7)  
1 1/2" = 1'-0" 01-S-03



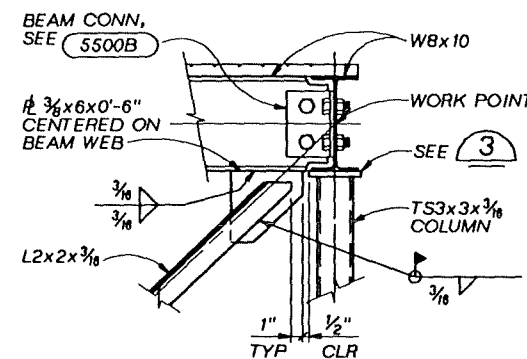
**HORIZONTAL BRACING CONNECTION DETAIL** (10)  
1 1/2" = 1'-0" 01-S-03



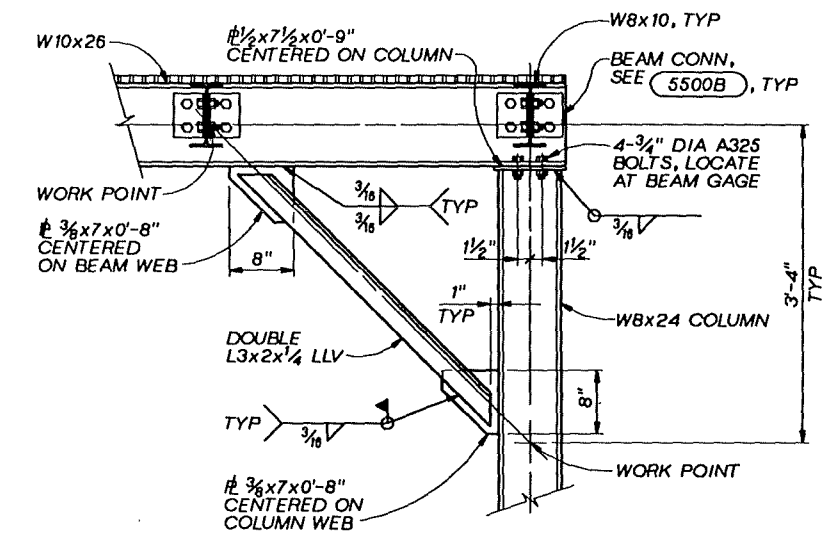
**LANDING CONNECTION DETAIL** (2)  
1 1/2" = 1'-0" 01-S-03



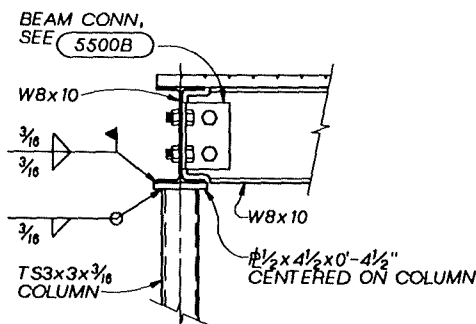
**TOP COLUMN-BRACE CONNECTION DETAIL** (5)  
1 1/2" = 1'-0" 01-S-03



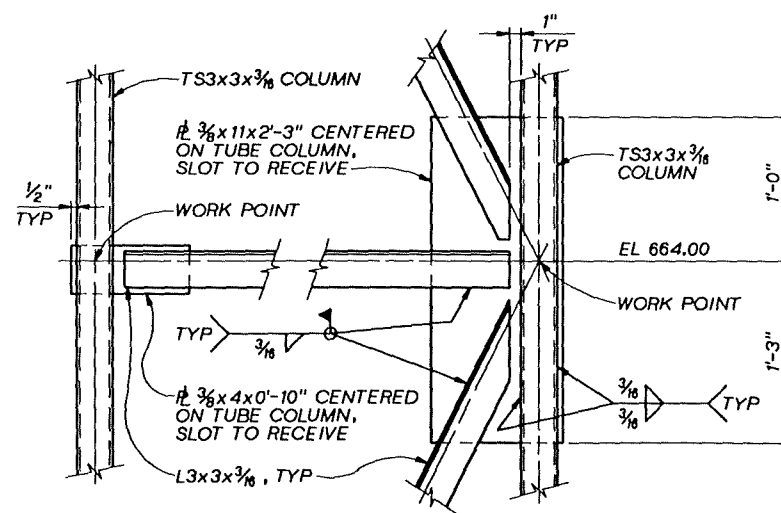
**TOP BRACE CONNECTION DETAIL** (8)  
1 1/2" = 1'-0" 01-S-03



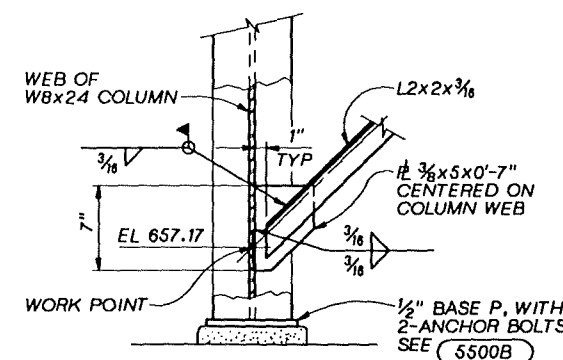
**COLUMN TOP AND KNEE BRACE CONNECTION DETAIL** (11)  
1" = 1'-0" 01-S-03



**COLUMN TOP CONNECTION DETAIL** (3)  
1 1/2" = 1'-0" 01-S-03



**BRACING CONNECTION DETAIL** (6)  
1 1/2" = 1'-0" 01-S-03



**BOTTOM BRACE CONNECTION DETAIL** (9)  
1 1/2" = 1'-0" 01-S-03

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-20-94

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.



DSGN: E.SCHMID  
DR: B.R.LEHMAN  
CHK: S.E.DOHLEMAN  
APVD: S.E.KEITH

NO.	DATE	REVISION	BY
	10-94	RECORD DRAWING	DJS SMK
			APVD

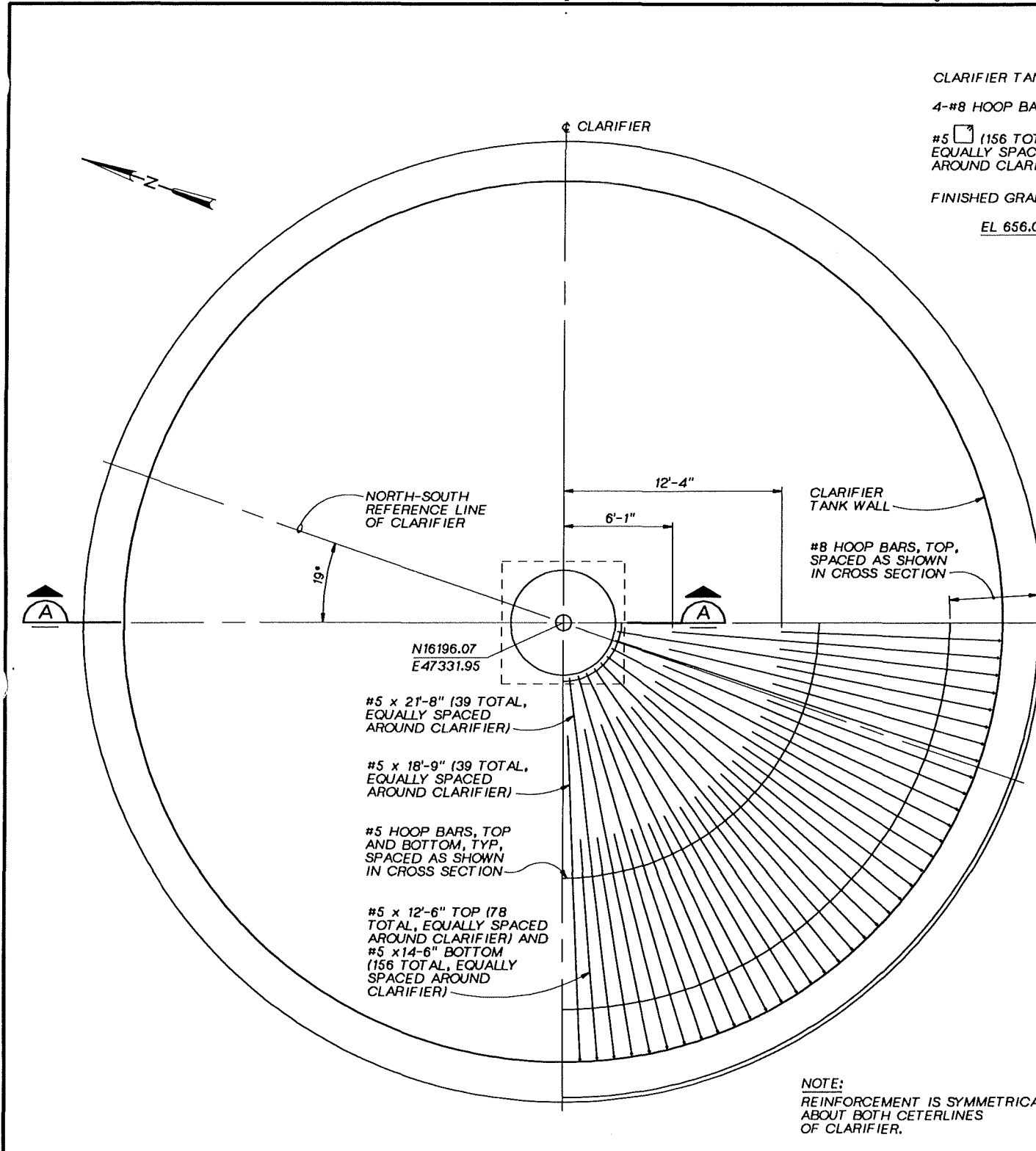
**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

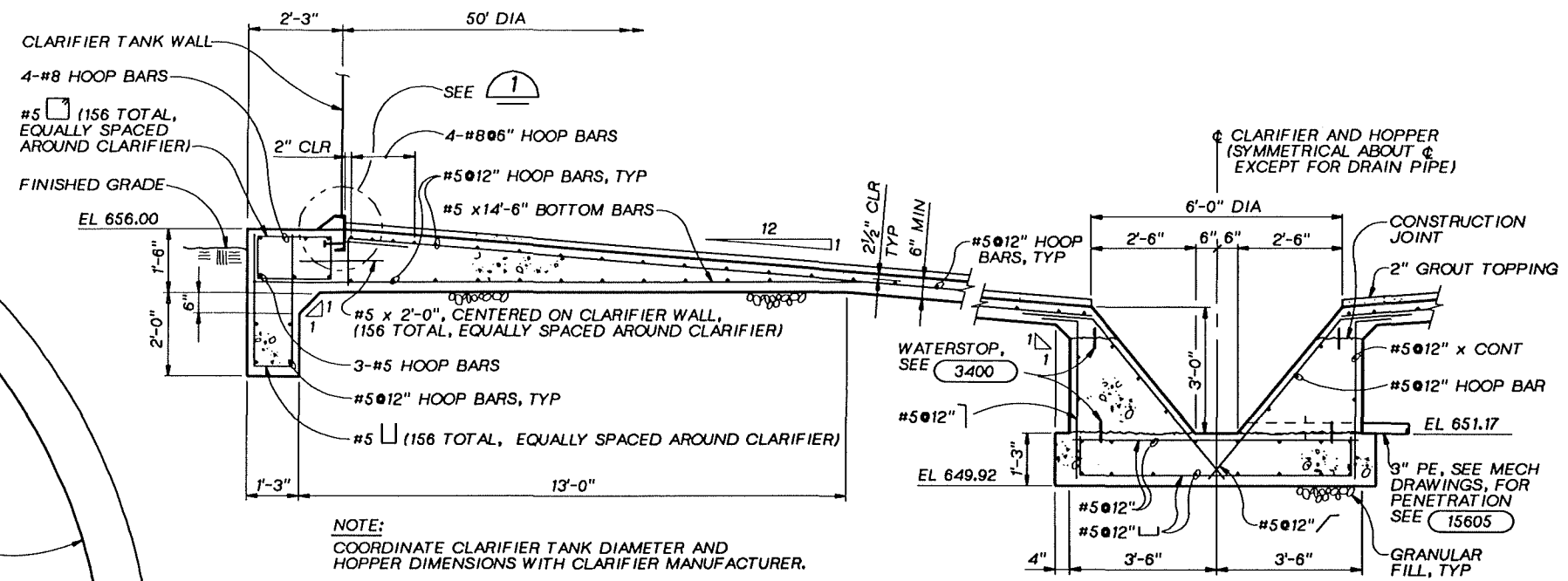
GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
STRUCTURAL  
DETAILS

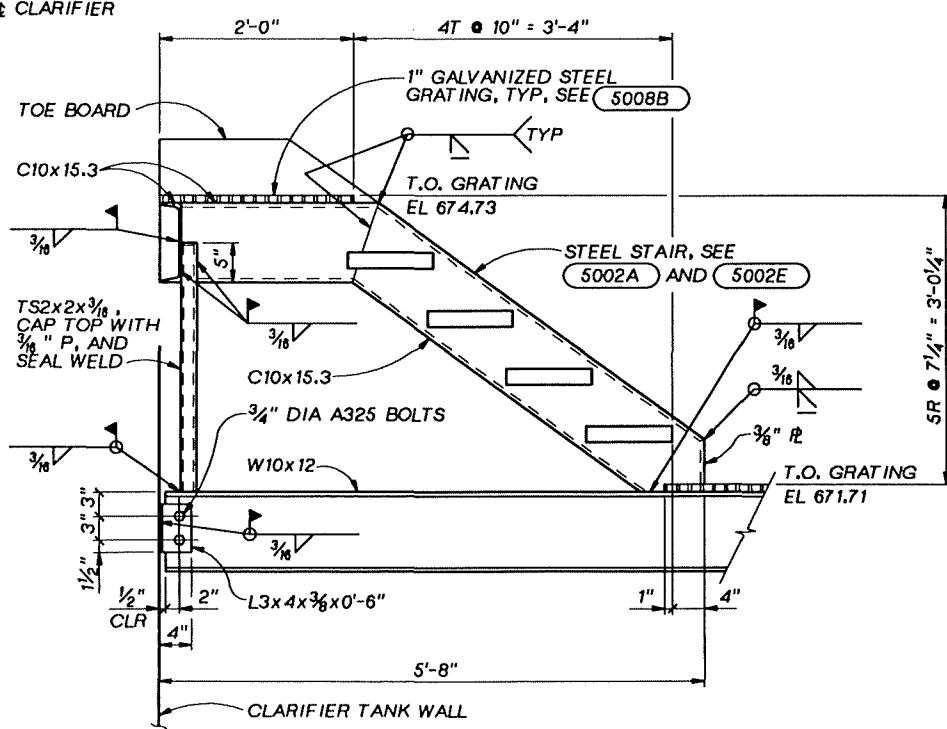
SHEET 28  
DWG NO. 01-S-04  
DATE OCT 1992  
PROJ NO. GLO65602.FD



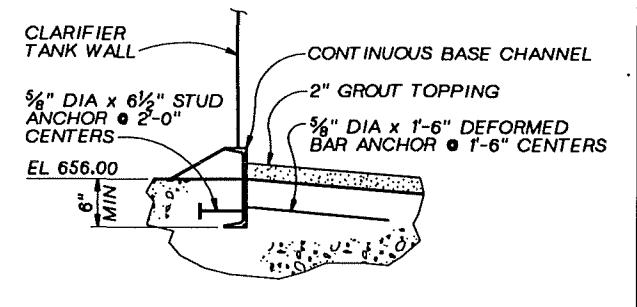
**FOUNDATION PLAN**  
1/4"=1'-0"



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



**SECTION B**  
1"=1'-0"



**CHANNEL DETAIL 1**  
1"=1'-0"

- NOTES:**
1. PROVIDE HORIZONTAL SLOTTED HOLES IN THIS END OF W10x12 WITH DOUBLE NUT FINGER TIGHT CONNECTION, PEEN END OF BOLTS TO PREVENT LOOSENING OF BOLTS AT SLOTTED HOLES. TIGHTEN BOLTS AT OTHER END.
  2. HANRAIL NOT SHOWN, SEE PLAN, DRAWING 01-S-03.

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-20-94

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.

<b>CKM HILL</b>	DSGN <u>K.E.SCHMID</u>
	DR <u>B.R.LEHMAN</u>
	CHK <u>S.E.DOHLEMAN</u>
	APVD <u>S.M.KEITH</u>

NO.	DATE	REVISION	BY	APVD
			DJS SMK	

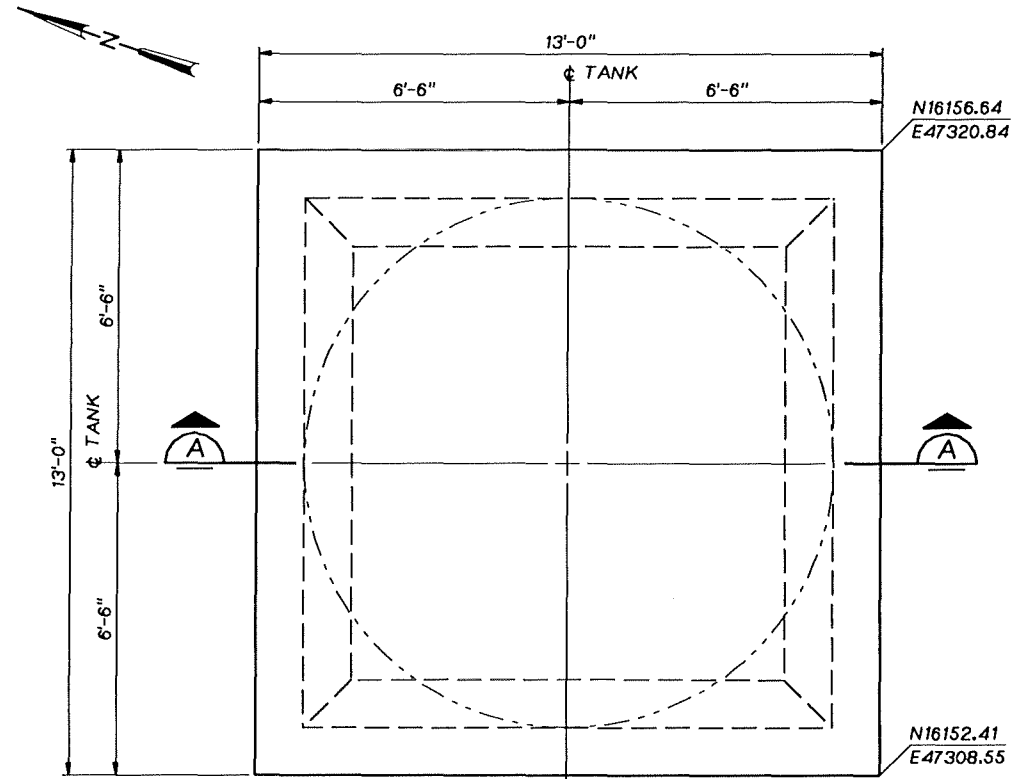
**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CKM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CKM HILL.

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

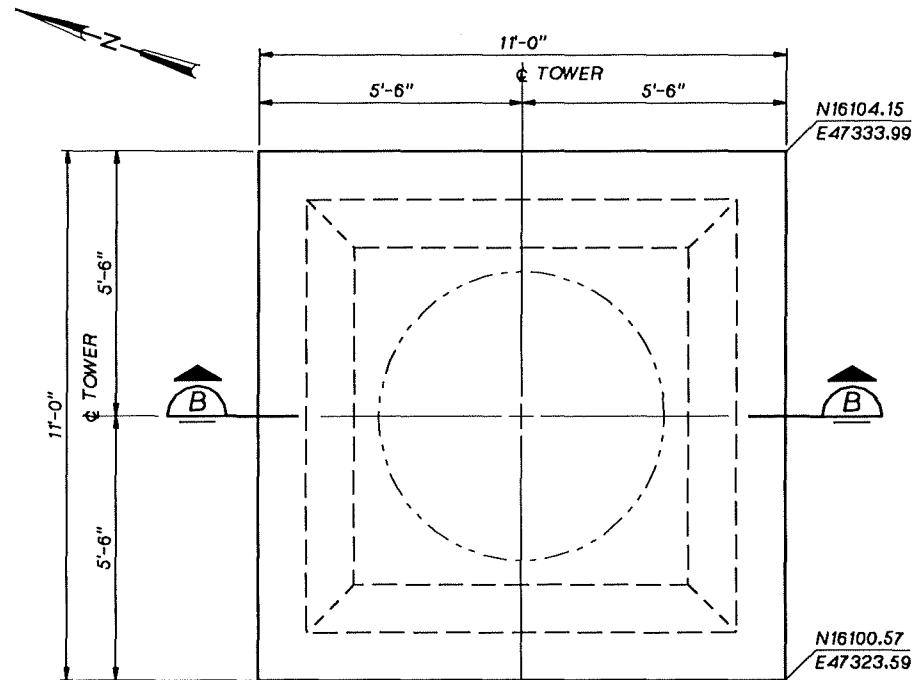
GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

**CLARIFIER  
STRUCTURAL FOUNDATION PLAN,  
SECTIONS AND DETAIL**

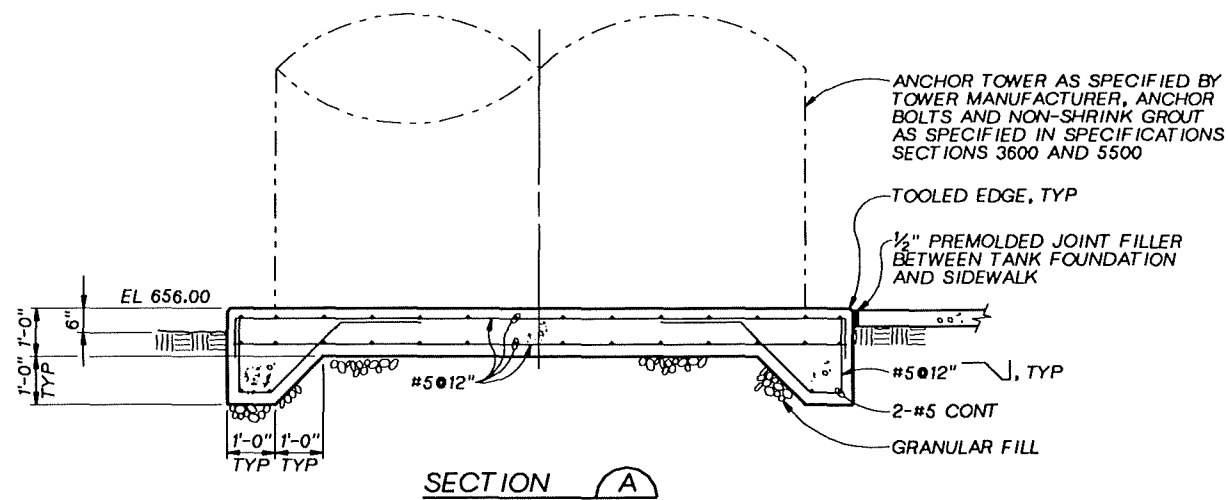
SHEET	29
DWG NO.	01-S-05
DATE	OCT 1992
PROJ NO.	GLO65602.FD



PLAN

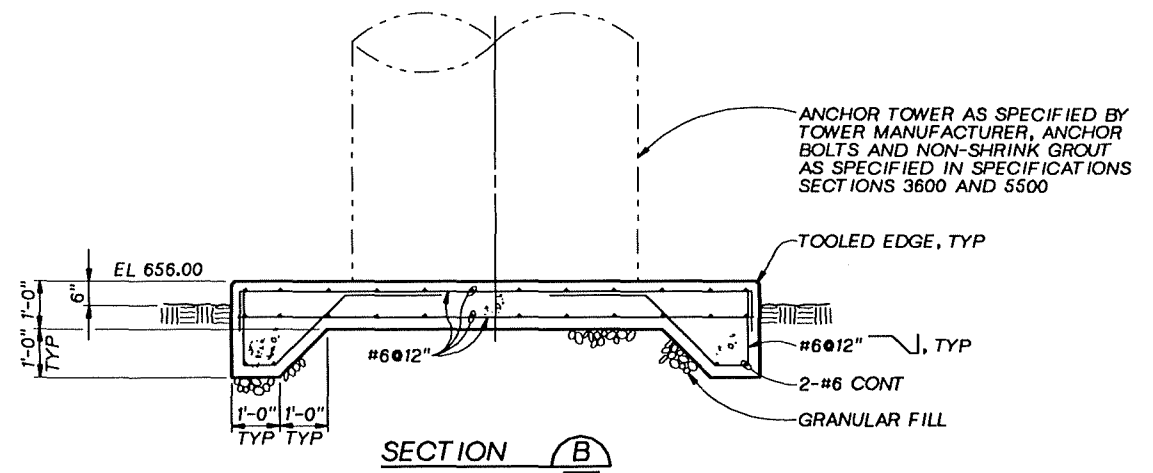


PLAN



SECTION A

AERATION TANK FOUNDATION DETAIL (1)  
1/2"=1'-0"



SECTION B

STRIPPER TOWER FOUNDATION DETAIL (2)  
1/2"=1'-0"

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-20-94

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.

GENERAL NOTE:  
FOR EXCAVATION, SEE (1)  
01-C-11



DSGN	E.SCHMID				
DR	B.R.LEHMAN				
CHK	S.E.DOHELMAN	10-94	RECORD DRAWING	DJS	SMK
APVD	S.E.KEITH	NO.	DATE	REVISION	BY

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

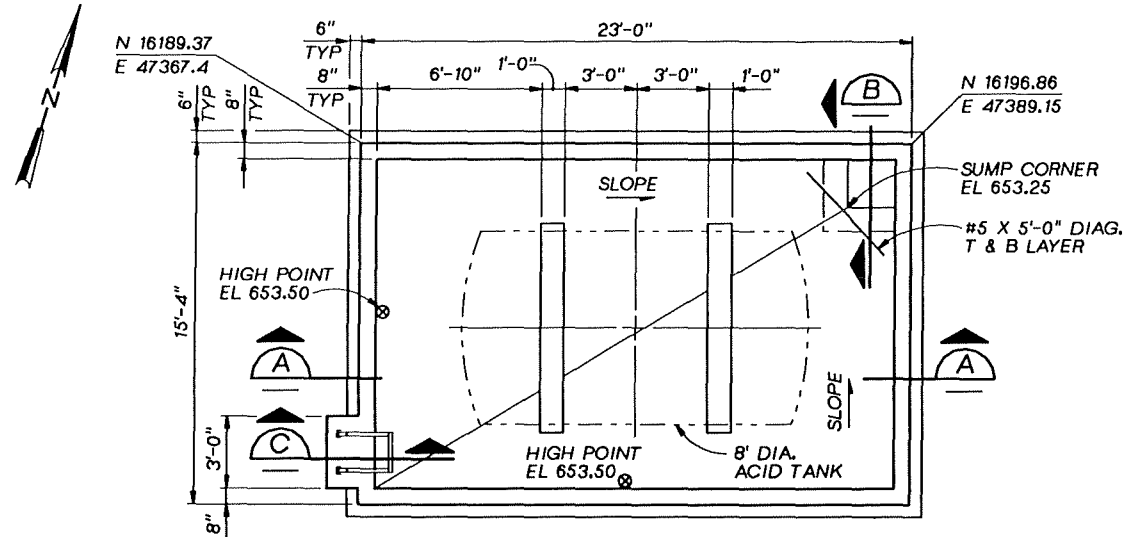
BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

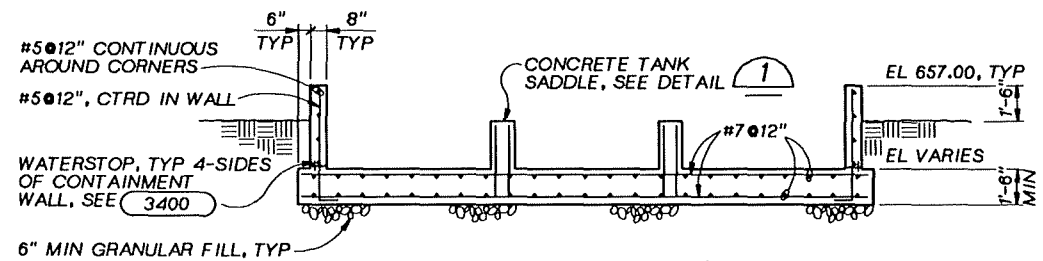
AERATION TANK & STRIPPER TOWER  
STRUCTURAL  
FOUNDATION PLANS AND SECTIONS

SHEET	30
DWG NO.	01-S-06
DATE	OCT 1992
PROJ NO.	GLO65602.FD

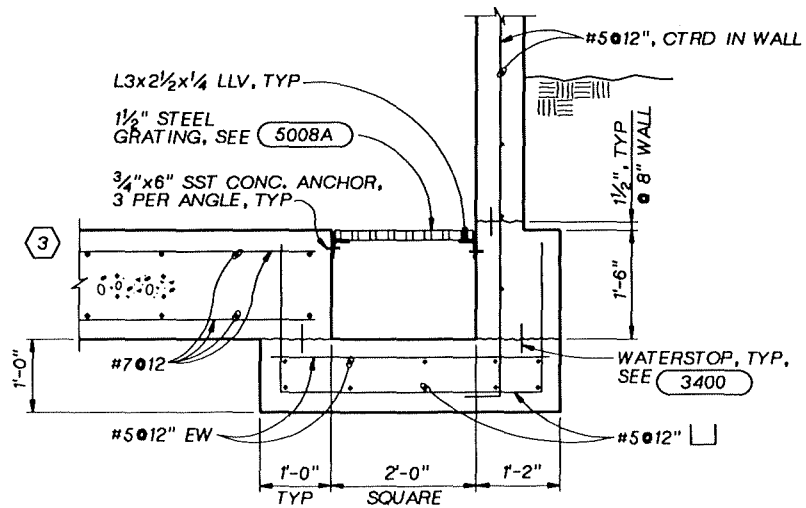
OVERLAY SCREEN



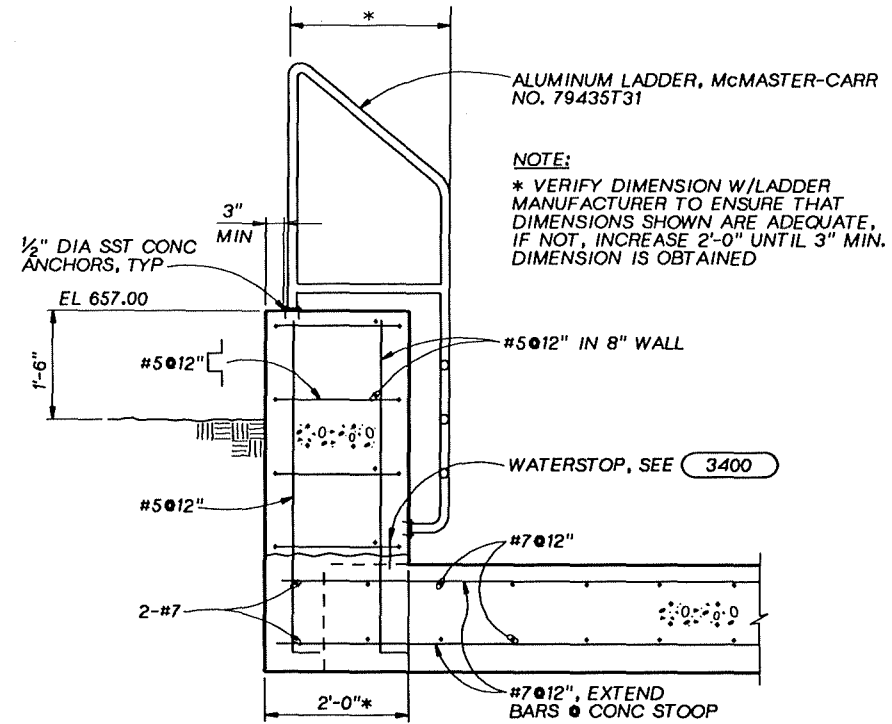
**ACID TANK PLAN**  
1/4"=1'-0"



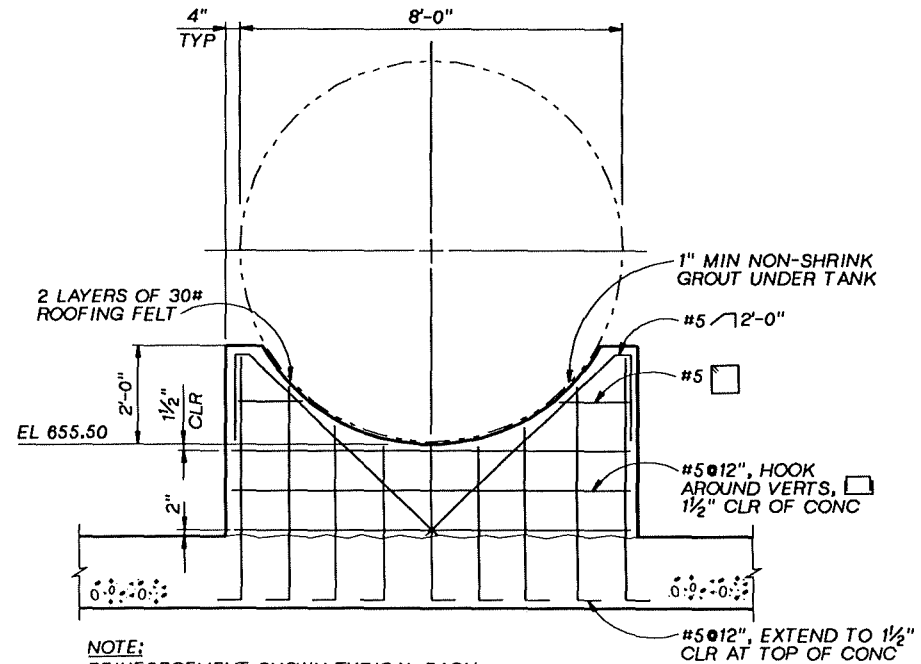
**SECTION A**  
1/4"=1'-0"



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



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



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

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-20-94  
 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.

**REUSE OF DOCUMENTS**

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

ACID TANK  
 STRUCTURAL  
 PLAN, SECTIONS, AND DETAIL

SHEET 30A  
 DWG NO. 01-S-07  
 DATE JAN 1993  
 PROJ NO. GLO65602.FD



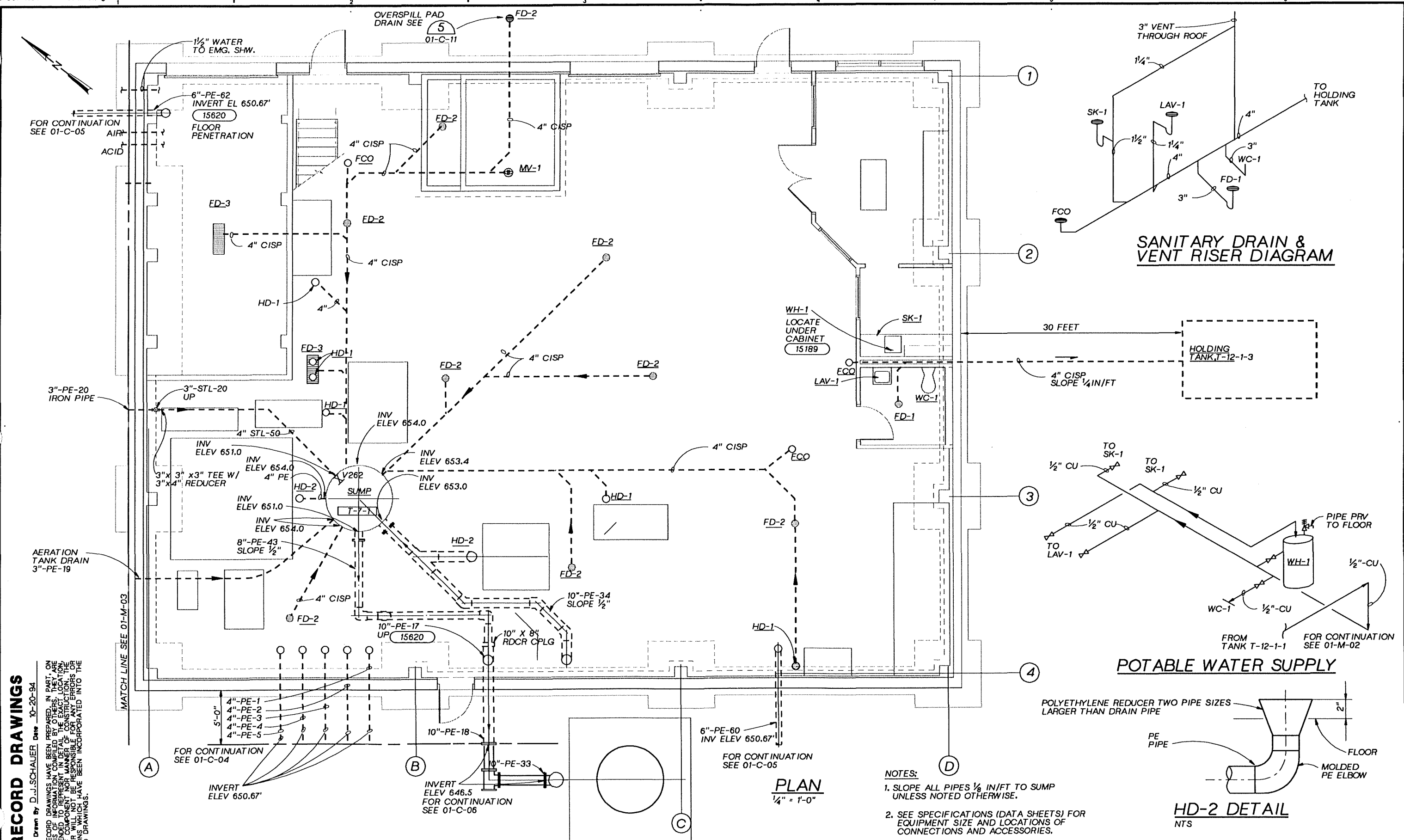
DSGN K.E.SCHMID  
 DR R.D.WILKENING  
 CHK S.E.DOHELEMAN  
 APVD S.E.KEITH

NO.	DATE	REVISION
10-94		RECORD DRAWING
1-93		ADDED #7 #12" REINFORCEMENT BAR.
1-93		NEW SHEET.

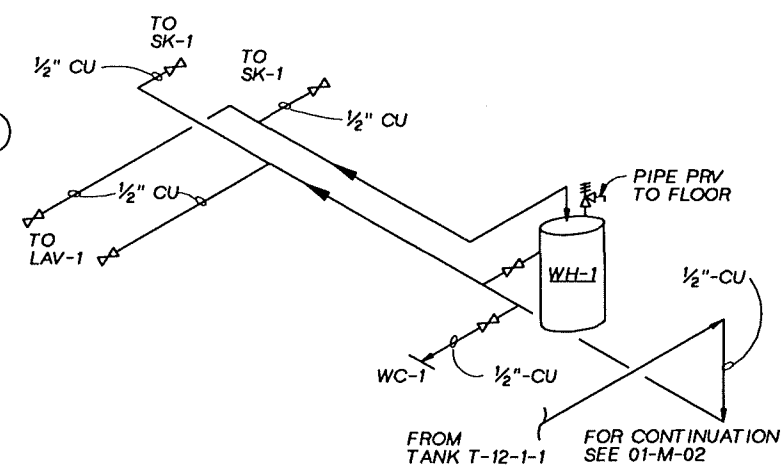
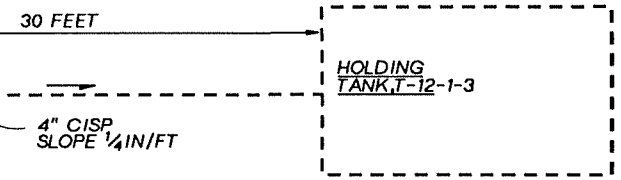
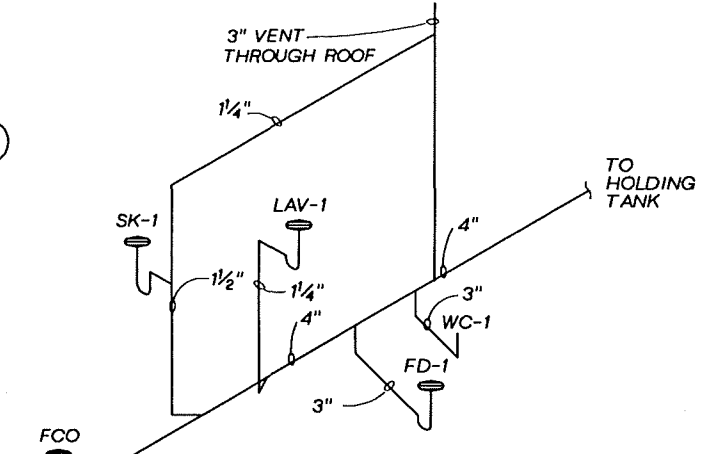
DJS SMK  
 BRL SMK  
 KES SMK  
 BY APVD

CH2M HILL

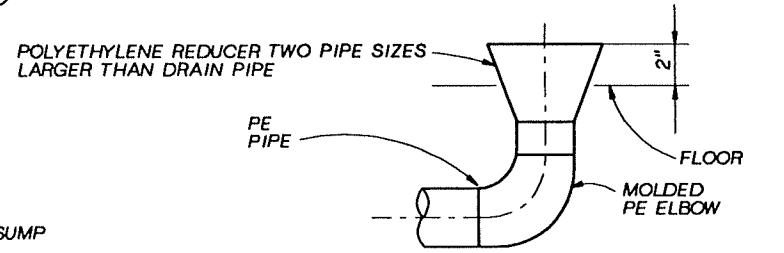
OVERLAY  
 SCREEN  
 PROJ  
 FILE



**SANITARY DRAIN & VENT RISER DIAGRAM**



**POTABLE WATER SUPPLY**



**HD-2 DETAIL**  
NTS

- NOTES:**
1. SLOPE ALL PIPES 1/8 IN/FT TO SUMP UNLESS NOTED OTHERWISE.
  2. SEE SPECIFICATIONS (DATA SHEETS) FOR EQUIPMENT SIZE AND LOCATIONS OF CONNECTIONS AND ACCESSORIES.

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

**RECORD DRAWINGS**

Revised Drawn By D.J.SCHAUER Date 10-20-94  
 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, OR COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH MAY BE PRESENT OR INCORPORATED INTO THE RECORD DRAWINGS.

	DSGN L. AMUNDSON
	DR P.A. LLANAS
	CHK R. YOLO
	APVD S. KEITH

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS SMK	

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

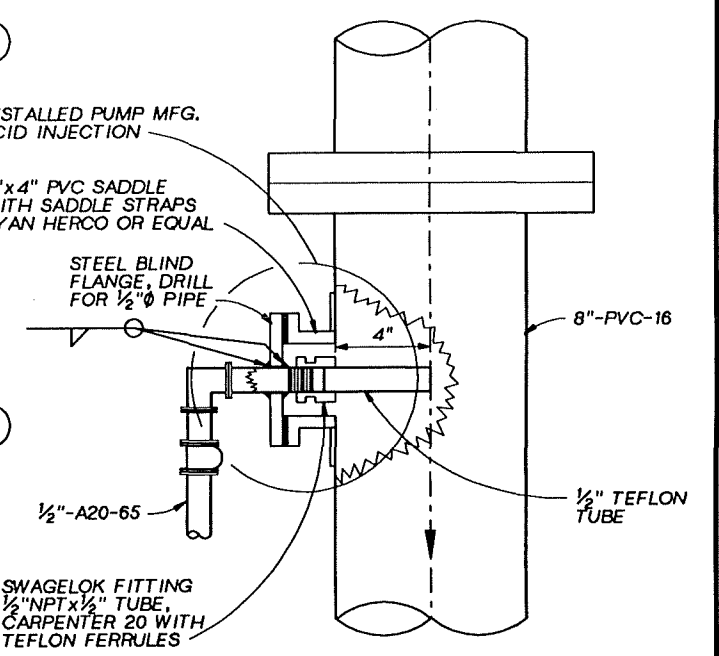
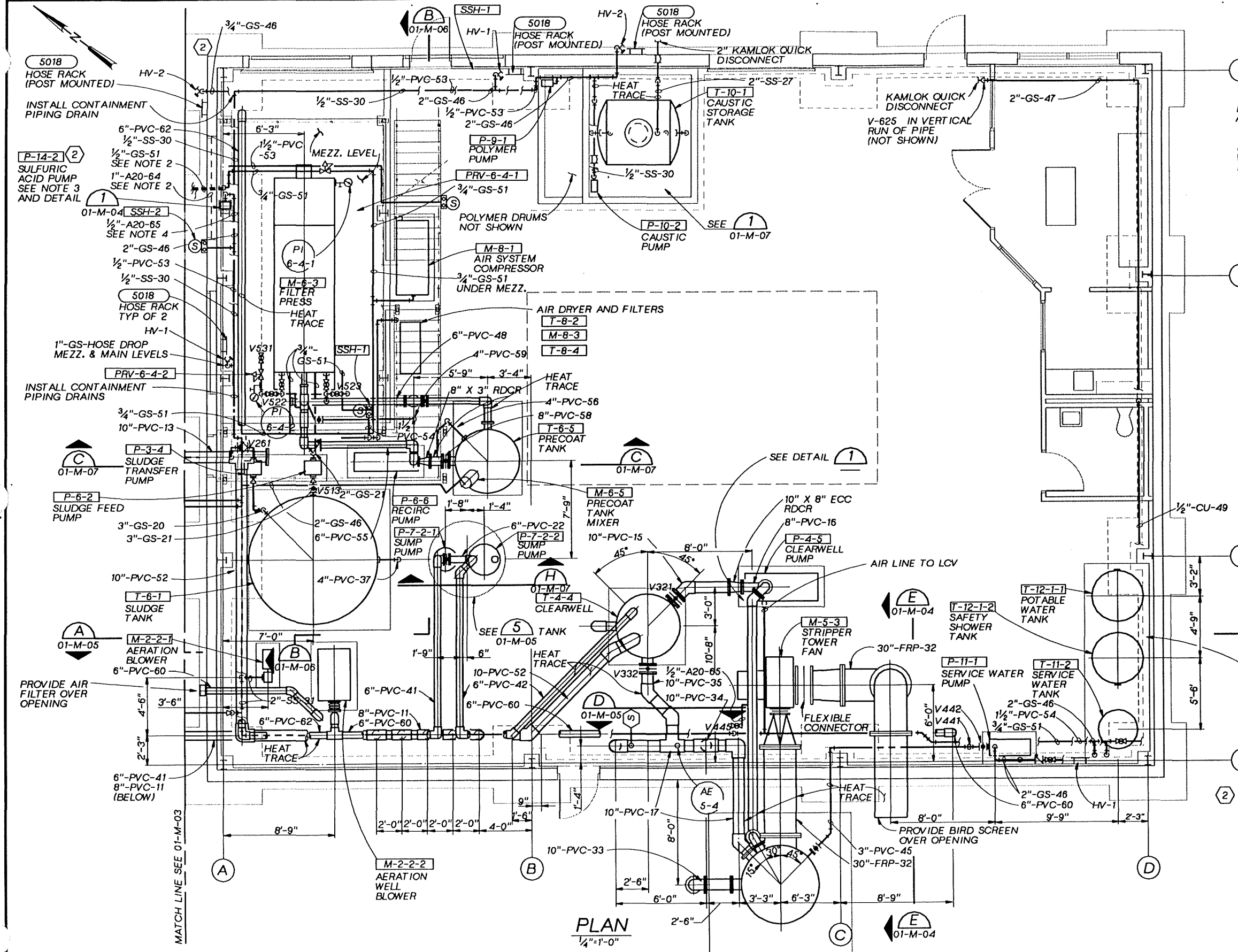
BAR IS ONE INCH ON ORIGINAL DRAWING.  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
 BUILDING SERVICES  
 PLAN & DETAILS

SHEET	31
DWG NO.	01-M-01
DATE	OCT 1992
PROJ NO.	GL065602.FD





**ACID INJECTION DETAIL**  
NTS

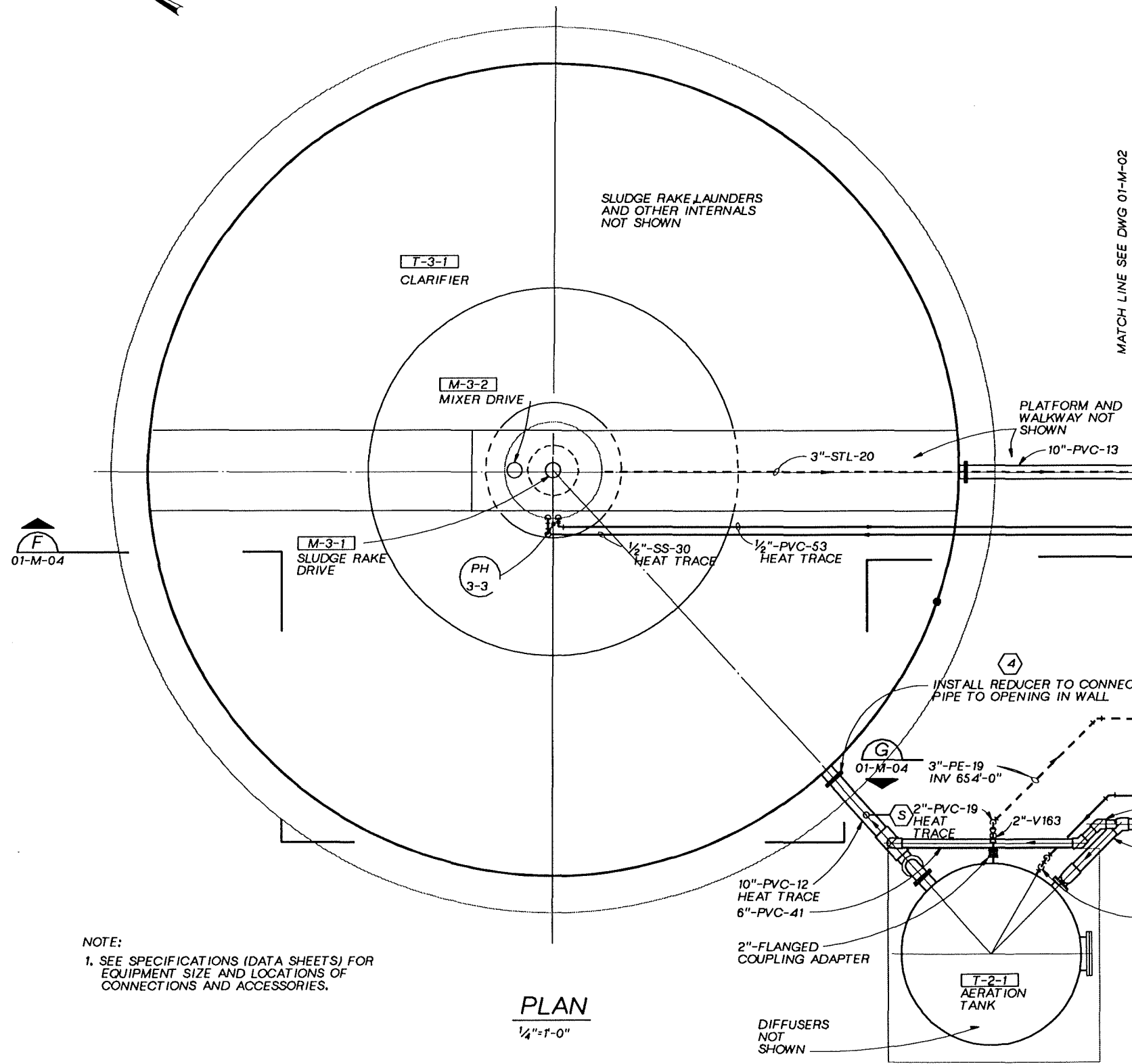
**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-20-94  
 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.

- (2) NOTES:
1. SEE SPECIFICATIONS (DATA SHEETS) FOR EQUIPMENT SIZE AND LOCATIONS OF CONNECTIONS AND ACCESSORIES.
  2. FIELD ROUTE TO SULFURIC ACID TANK.
  3. CALIBRATION COLUMN NOT SHOWN.
  4. FIELD ROUTE SULFURIC ACID PIPING ALONG BUILDING PERIMETER. ROUTE PIPING AT AN ELEVATION LESS THAN 4'-0" ABOVE FLOOR WHEREVER FEASIBLE. WHERE NOT FEASIBLE, PIPING MUST BE ROUTED IN CONTAINMENT PIPING. SIMILAR TO DETAIL (4) 01-M-07

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

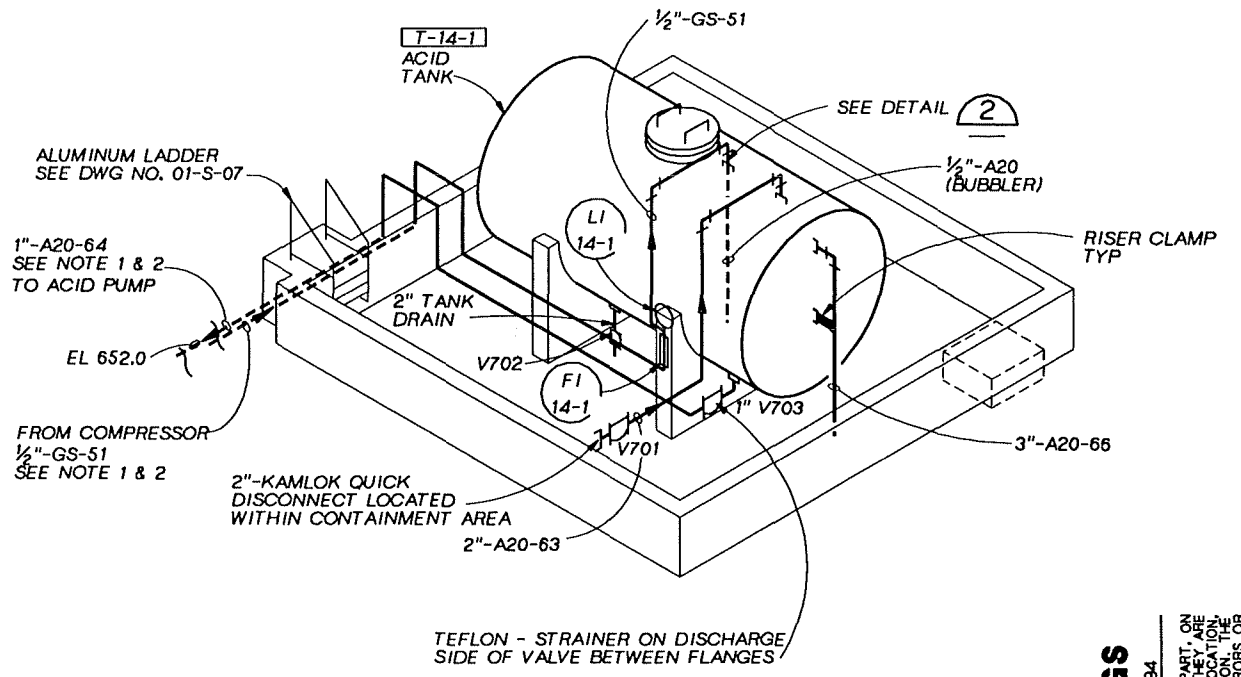
	DSGN P. BOERSMA	10-94 RECORD DRAWING 1-93 ADDED ACID FEED SYSTEM AND DETAIL. NO. DATE REVISION	DJS SMK LAA SMK BY APVD CKM HILL	THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CKM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CKM HILL.	BAR IS ONE INCH ON ORIGINAL DRAWING. IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	GROUNDWATER REMEDIAL ACTION ONALASKA MUNICIPAL LANDFILL SITE ONALASKA TOWNSHIP, WISCONSIN	PROCESS BUILDING MECHANICAL EQUIPMENT AND PIPING PLAN & DETAIL	SHEET 32
	DR D. OXLEY							DWG NO. 01-M-02
	CHK R. YOLO							DATE OCT 1992
	APVD S. KEITH							PROJ. NO. GLO65602.FD



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

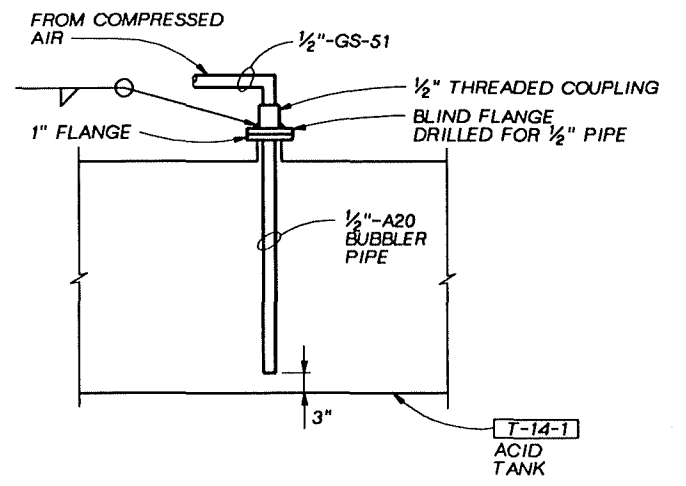
NOTE:  
1. SEE SPECIFICATIONS (DATA SHEETS) FOR EQUIPMENT SIZE AND LOCATIONS OF CONNECTIONS AND ACCESSORIES.

MATCH LINE SEE DWG 01-M-02



- NOTES:
1. FIELD ROUTE ACID & COMPRESSED AIR PIPING.
  2. SEE DWG NO. 01-M-02 FOR LOCATION OF ACID PUMP. ACID PIPING SHALL BE CONTAINED IN 4" PVC WHERE BURIED.
  3. FOR CAUSTIC CONTAINMENT PIPING SEE DETAIL 4 01-M-07
  4. PIPE CLAMPS & SUPPORTS NOT SHOWN
  5. SEE DWG NO. 01-S-07 FOR CONCRETE CONTAINMENT AREA
- CONTRACTOR NOTE:  
ALL DRAWINGS HAVE NOT BEEN MODIFIED TO REFLECT THE ADDITION OF THE SULFURIC ACID SYSTEM.

**ACID TANK DETAIL 1**  
NTS 01-C-01



**BUBBLER DETAIL 2**  
NTS

**RECORD DRAWINGS**  
Reviewed Drawn By D.J. SCHAUER Date 10-20-94  
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 MAY HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

	OSGN P. BOERSMA	10-94	RECORD DRAWING	DJS SMK	SMK
	DR D. OXLEY		ADDED ACID FEED SYSTEM DETAILS.		
	CHK R. YOLO				
	APVD S. KEITH				

NO.	DATE	REVISION
2	1-93	ADDED ACID FEED SYSTEM DETAILS.

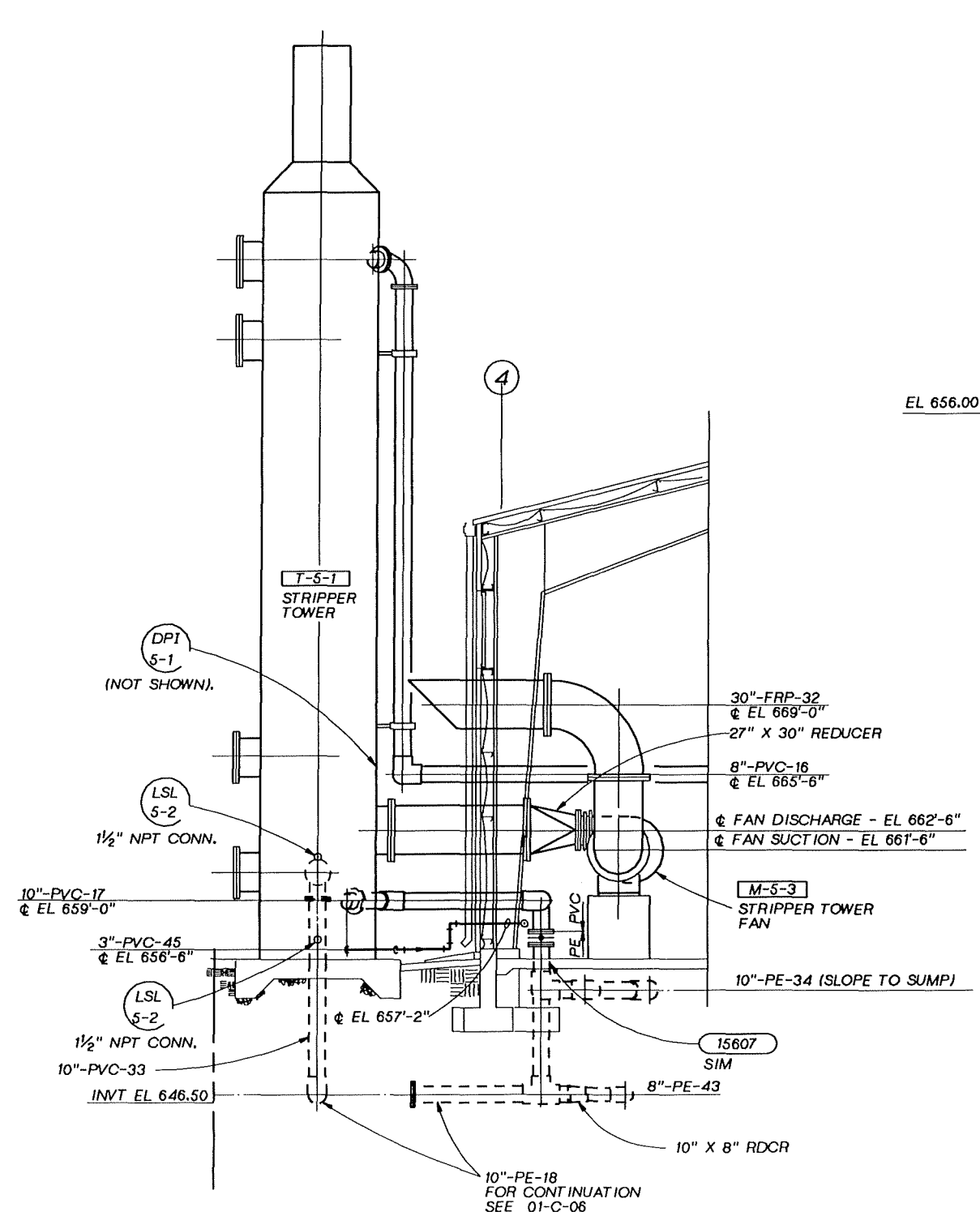
**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF C&M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF C&M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

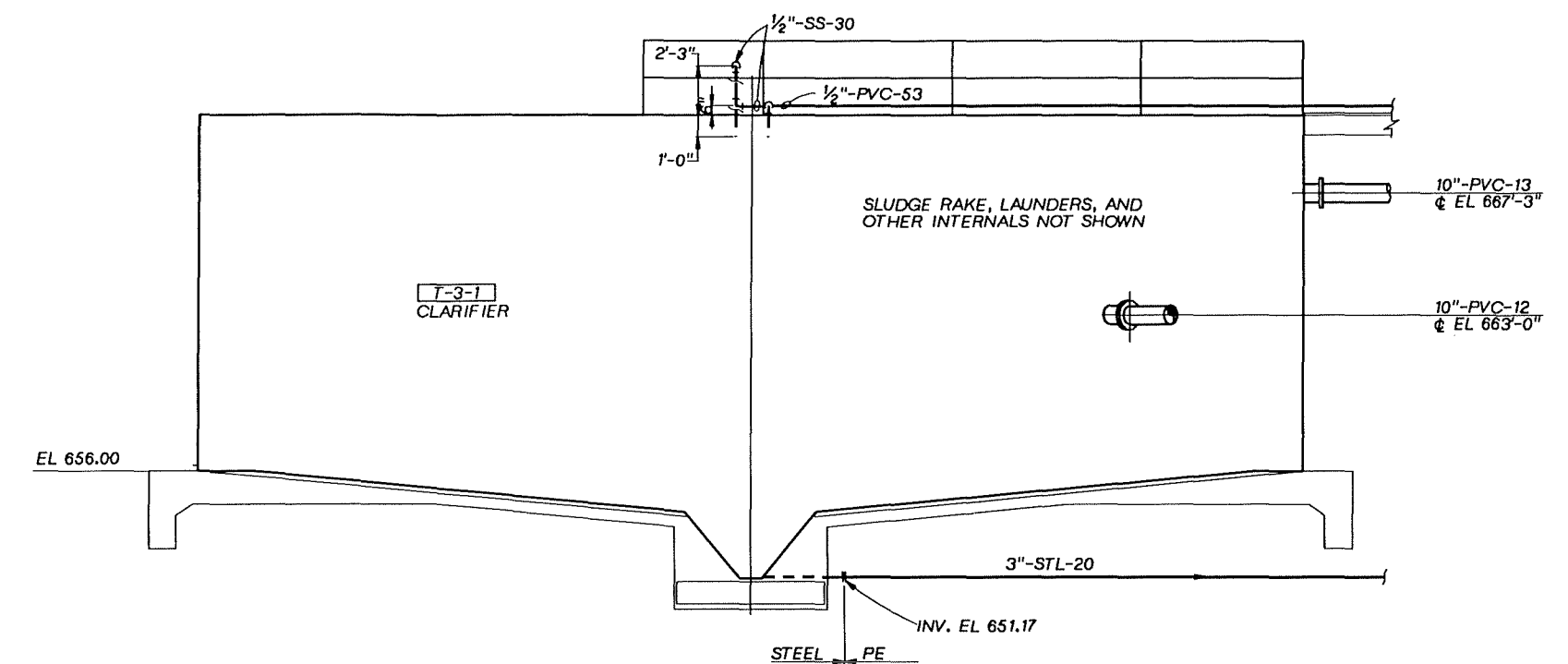
CLARIFIER, AERATION AND ACID TANK  
PLAN AND DETAILS

SHEET 33
DWG NO. 01-M-03
DATE OCT 1992
PROJ NO. GLO65602.FD

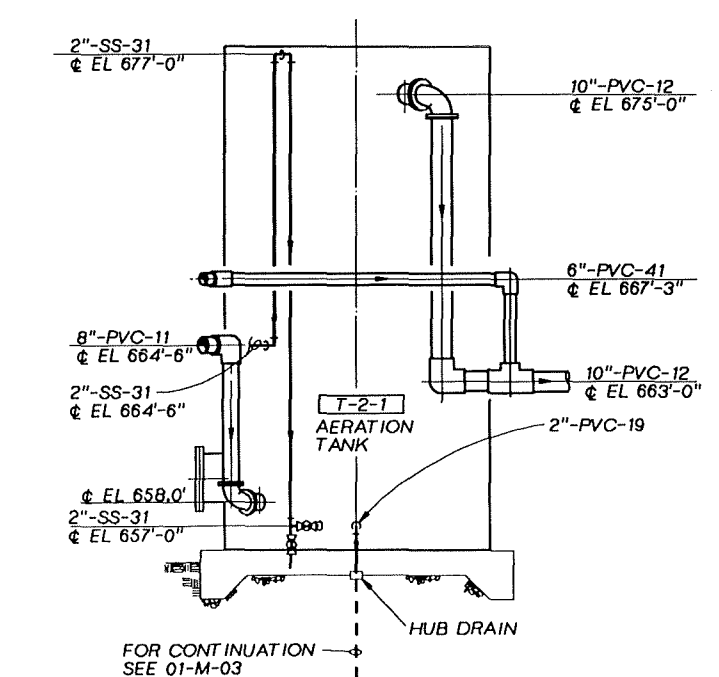


**SECTION E**  
1/4"=1'-0" 01-M-02

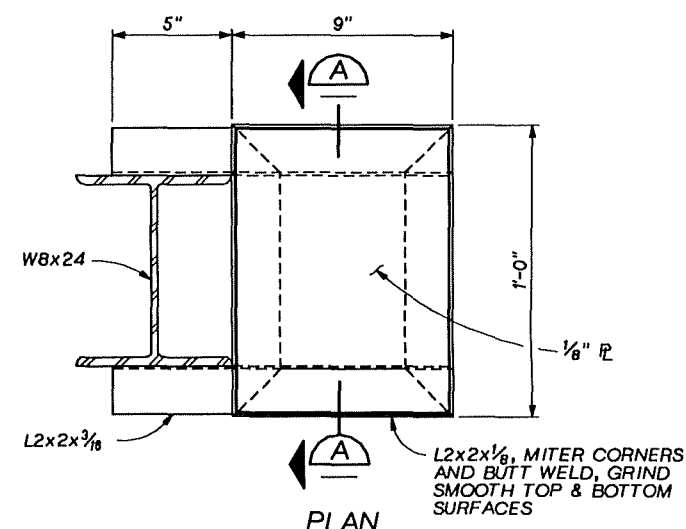
1. SEE SPECIFICATIONS (DATA SHEETS) FOR EQUIPMENT SIZE AND LOCATIONS OF CONNECTIONS AND ACCESSORIES.



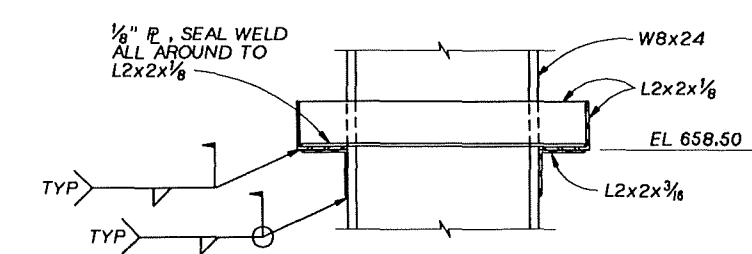
**SECTION F**  
1/4"=1'-0" 01-M-03



**SECTION G**  
1/4"=1'-0" 01-M-03



**PLAN**



**SECTION A**

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

**SULFURIC ACID PUMP SUPPORT DETAIL**

3"=1'-0" 01-M-02

	DSGN	P. BOERSMA
	DR	D. OXLEY
	CHK	R. YOLO
	APVD	S. KEITH

NO.	DATE	REVISION
10-94		RECORD DRAWING
②	1-93	ADDED ACID PUMP SUPPORT DETAIL.

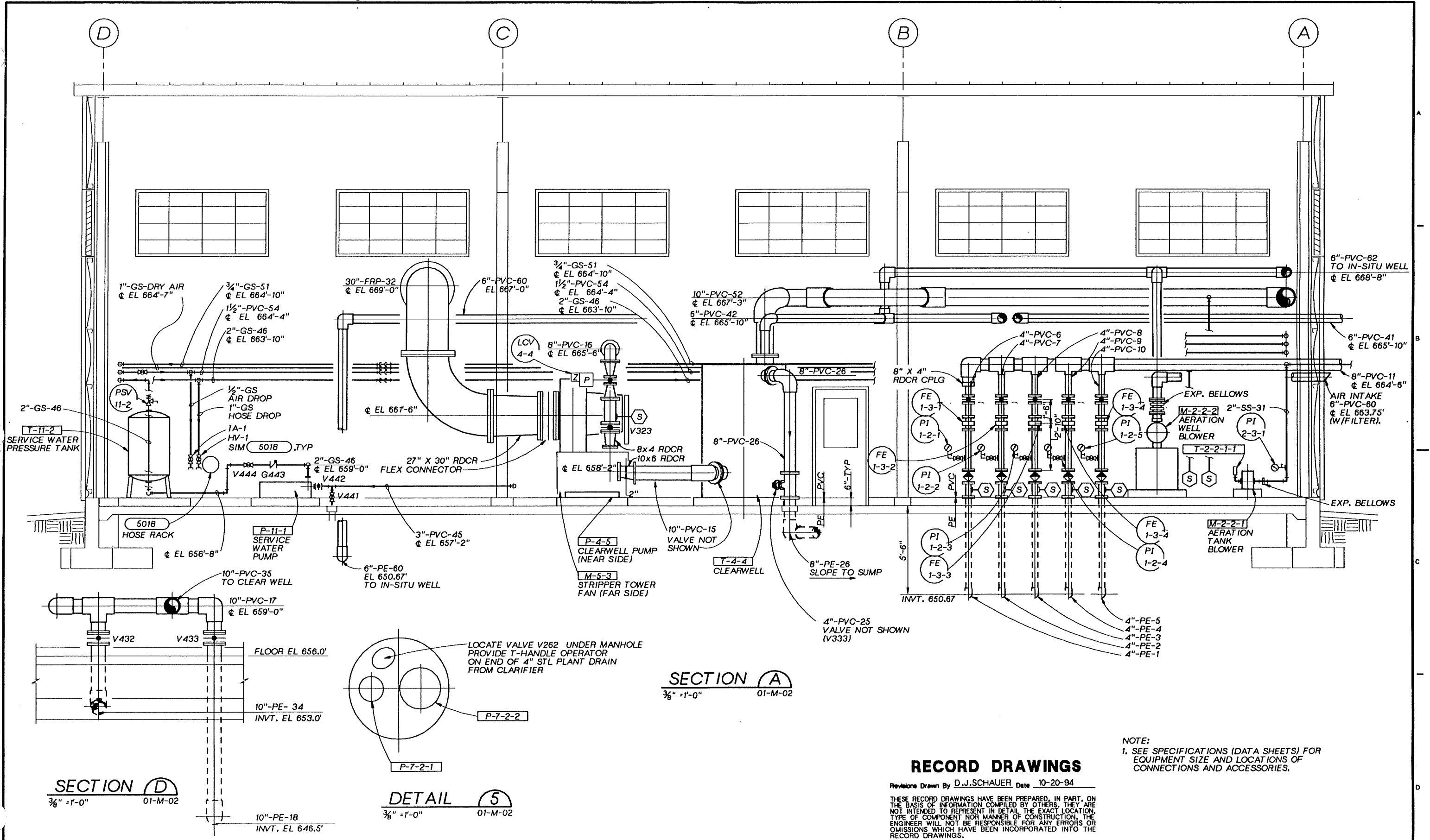
BY	APVD	CH2M HILL
DJS	SMK	
LAA	SMK	

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

MECHANICAL  
SECTIONS AND DETAIL

SHEET	34
DWG NO.	01-M-04
DATE	OCT 1992
PROJ NO.	GLO65602.FD



**SECTION D**  
3/8" = 1'-0"  
01-M-02

**SECTION A**  
3/8" = 1'-0"  
01-M-02

**DETAIL 5**  
3/8" = 1'-0"  
01-M-02

**NOTE:**  
1. SEE SPECIFICATIONS (DATA SHEETS) FOR EQUIPMENT SIZE AND LOCATIONS OF CONNECTIONS AND ACCESSORIES.

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-20-94

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.

	DSGN P. BOERSMA
	DR D. OXLEY
	CHK R. YOLO
	APVD S. KEITH

NO.	DATE	REVISION	BY	APVD
			DJS SMK	
		10-94 RECORD DRAWING		

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

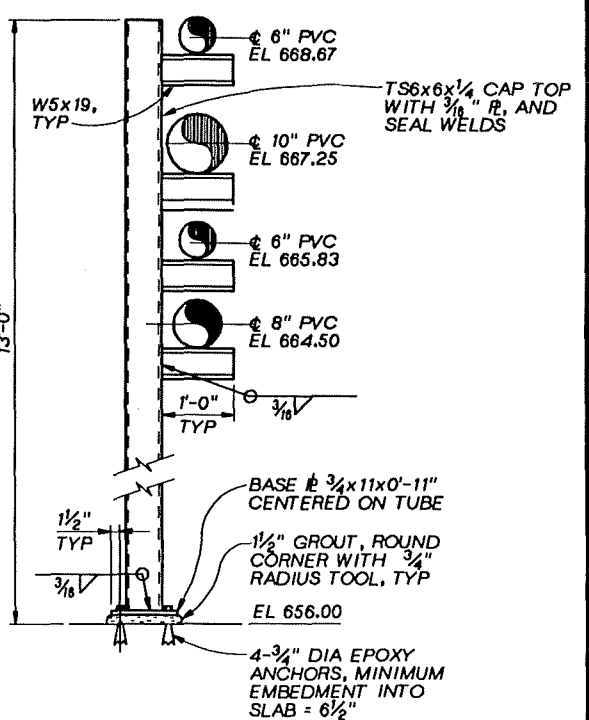
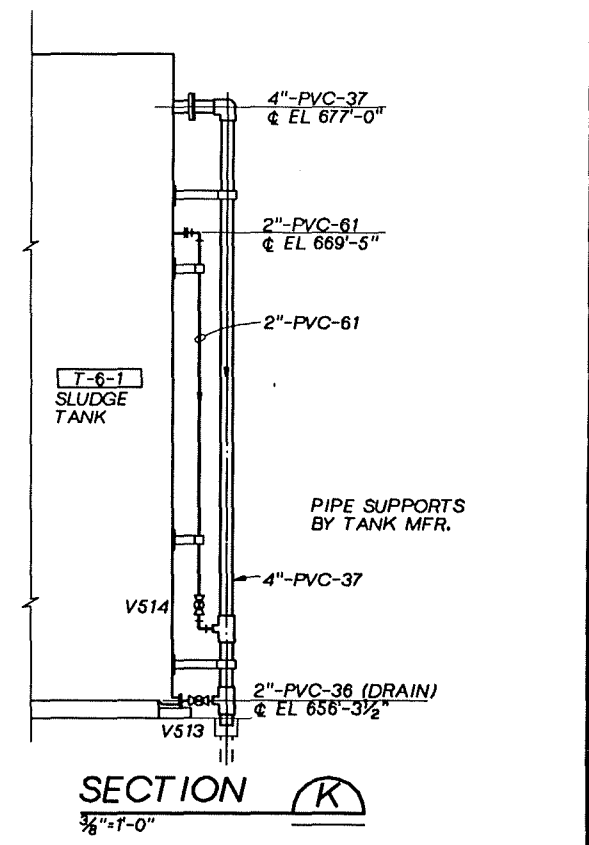
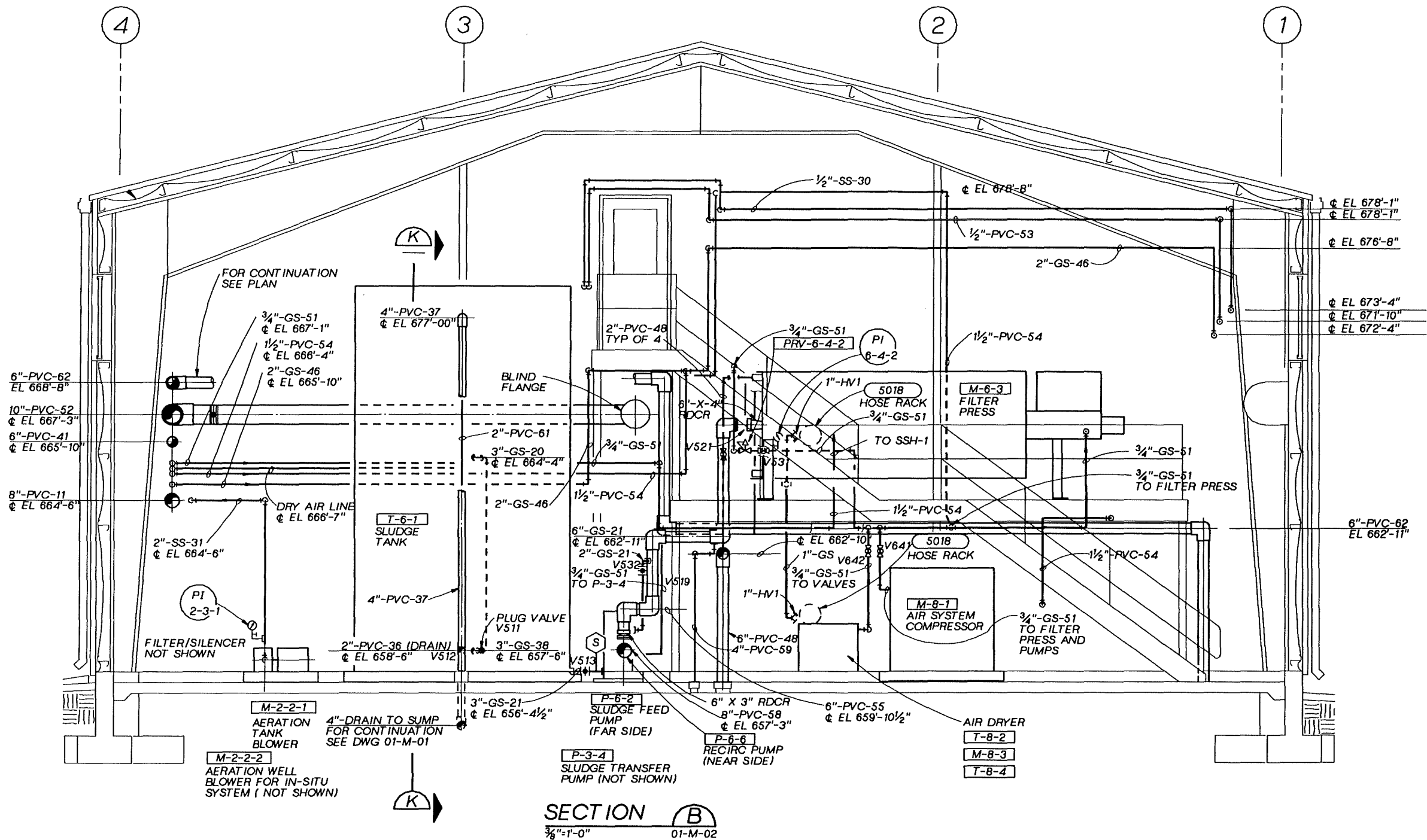
BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

**PROCESS BUILDING  
MECHANICAL  
SECTIONS AND DETAILS**

SHEET	35
DWG NO.	01-M-05
DATE	OCT 1992
PROJ NO.	GLO65602.FD

OVERLAY SCREEN



**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-21-94

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.

**PIPE SUPPORT DETAIL** 3

3/8" = 1'-0" 01-M-09

	DSGN P. BOERSMA
	OR D.OXLEY
	CHK R.YOLO
	APVD S. KEITH

10-94	RECORD DRAWING	DJS	SMK
NO.	DATE	BY	APVD
	REVISION		

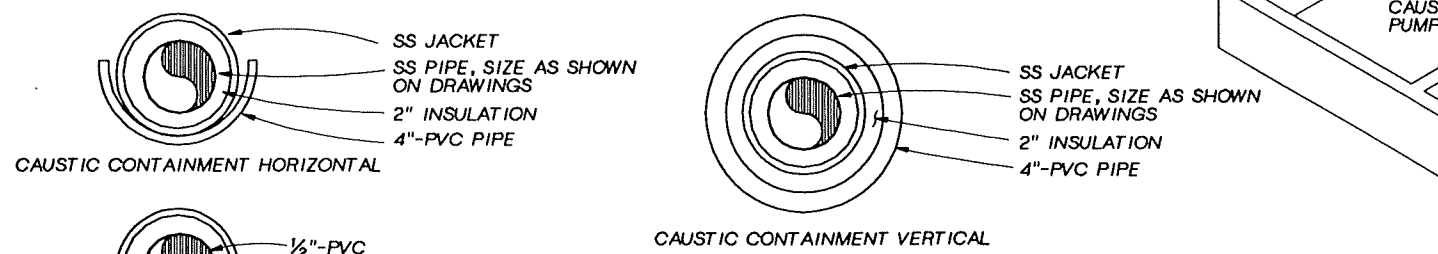
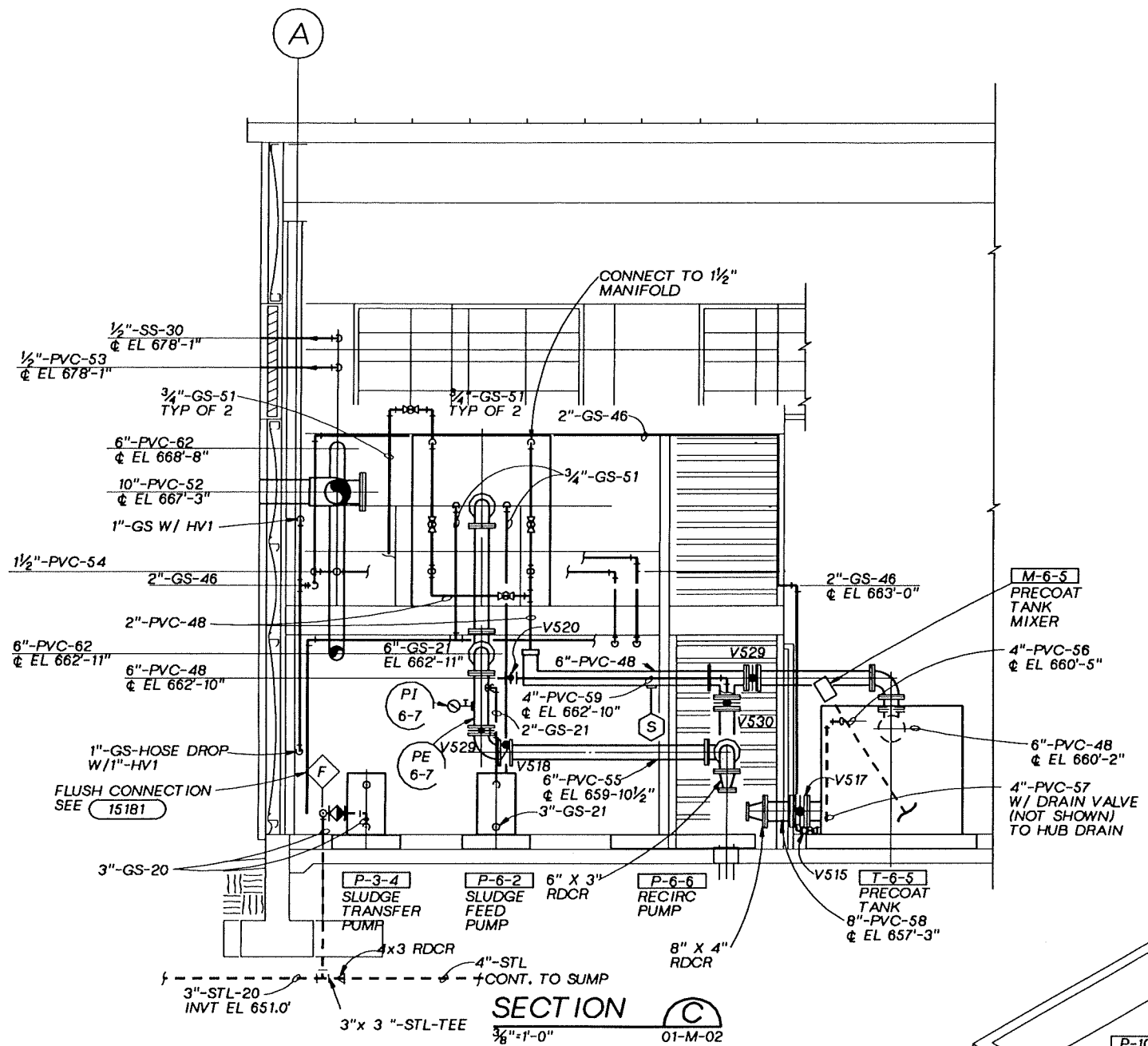
**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

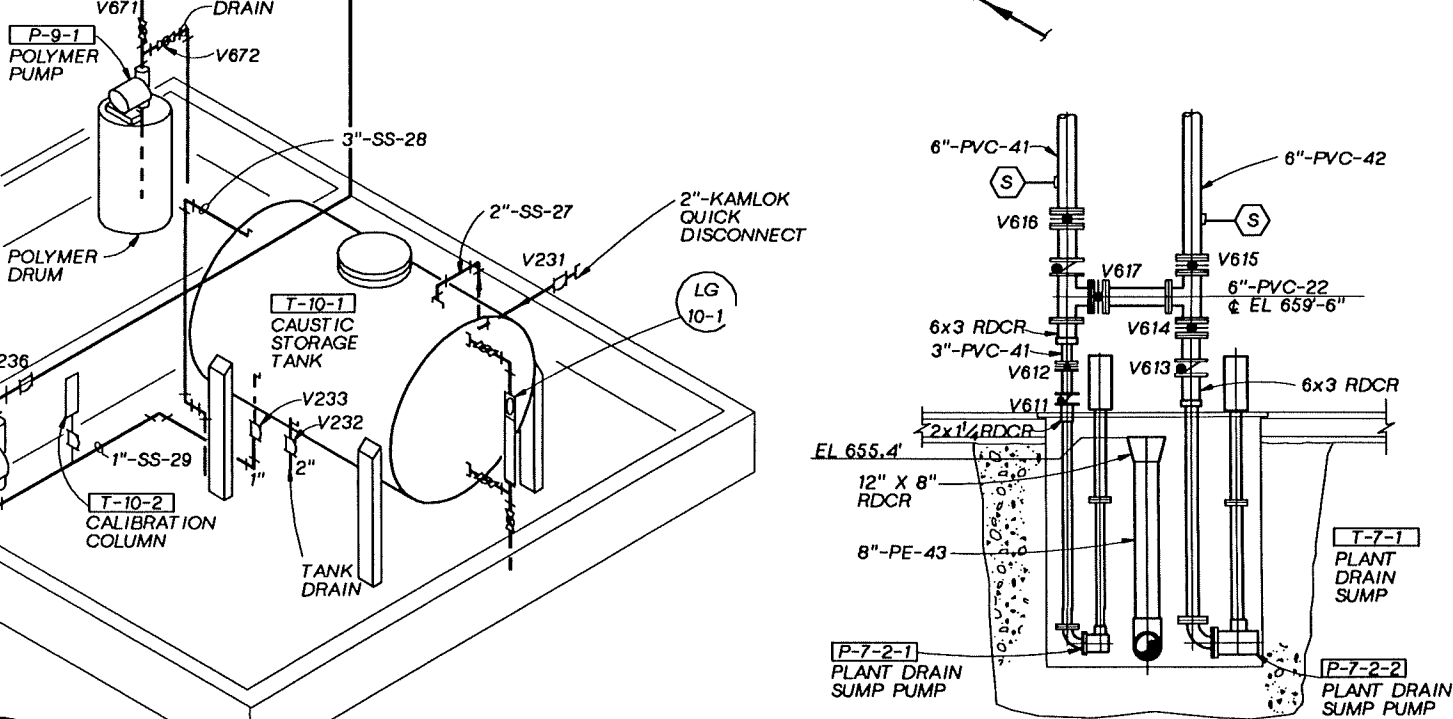
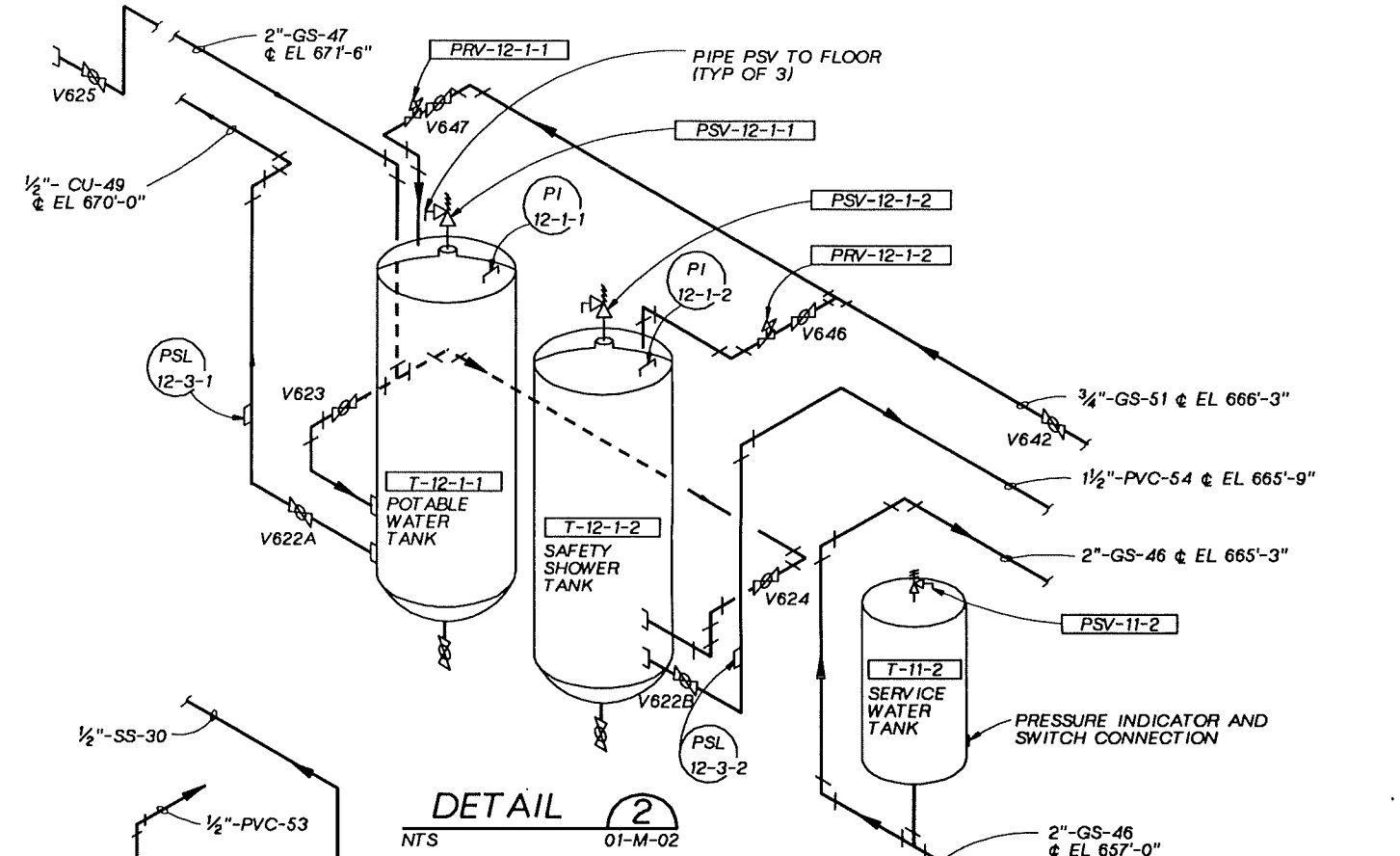
PROCESS BUILDING  
 MECHANICAL  
 SECTIONS AND DETAILS

SHEET	36
DWG NO.	01-M-06
DATE	OCT 1992
PROJ NO.	GL065602.FD



**RECORD DRAWINGS**  
 Revisions Drawn By D.J.SCHAUER Date 10-21-94  
 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.

DSGN P. BOERSMA DR D. OXLEY CHK R. YOLO APVD S. KEITH	NO. DATE REVISION 10-94 RECORD DRAWING	BY APVD DJS SMK
--	---	--------------------



**DETAIL 1**  
 NTS 01-M-02

**DETAIL 2**  
 NTS 01-M-02

NOTE: FOR POLYMER AND CAUSTIC CONTAINMENT PIPING SEE 4

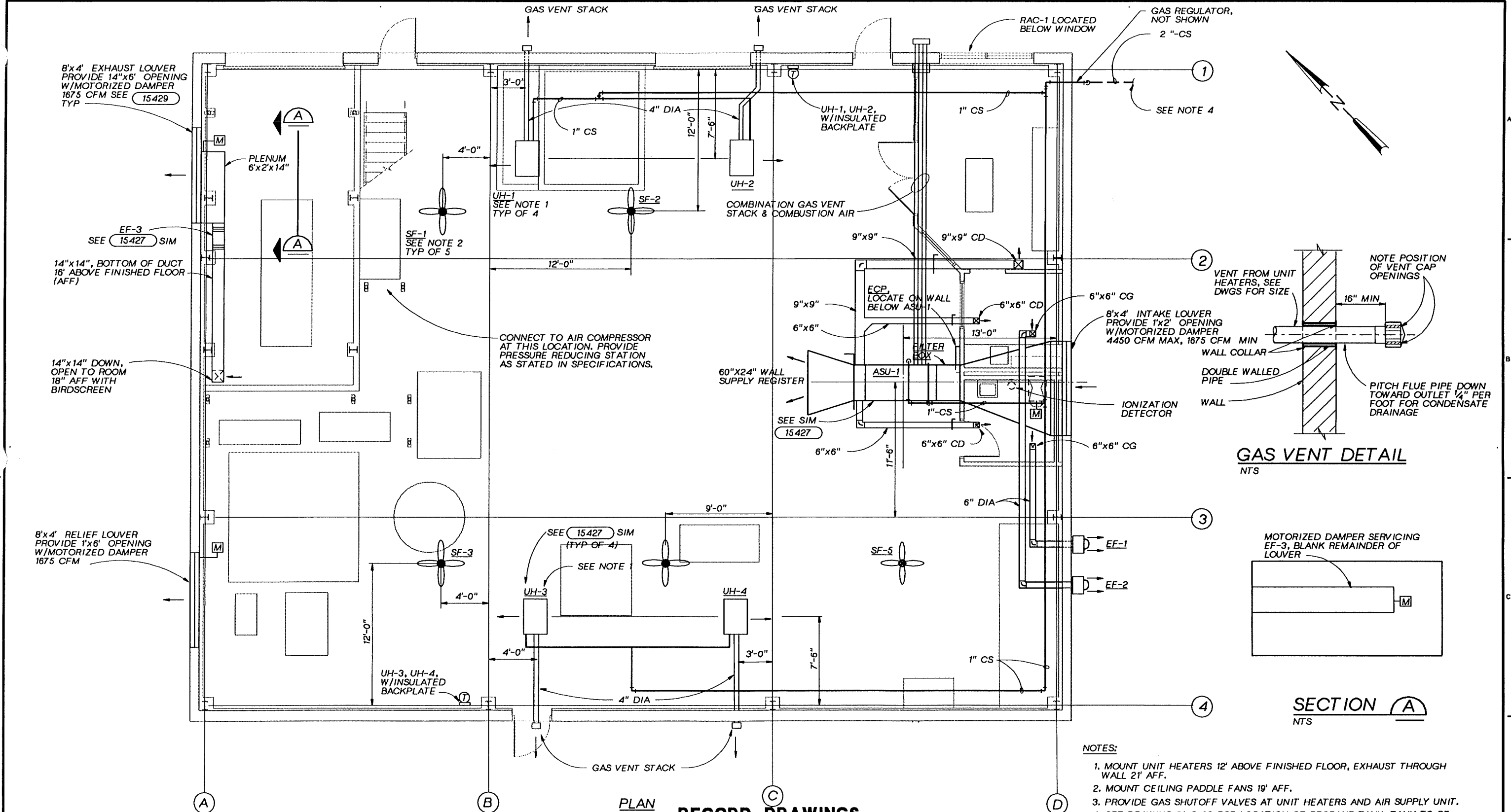
DSGN P. BOERSMA DR D. OXLEY CHK R. YOLO APVD S. KEITH	NO. DATE REVISION 10-94 RECORD DRAWING	BY APVD DJS SMK
--	---	--------------------

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
 MECHANICAL  
 SECTIONS AND DETAILS

SHEET 37
DWG NO. 01-M-07
DATE OCT 1992
PROJ NO. GLO65602.FD



**PLAN RECORD DRAWINGS**  
 1/4" = 1'-0"

Revisions Drawn By D.J.SCHAUER Date 10-21-94

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.

- NOTES:**
1. MOUNT UNIT HEATERS 12' ABOVE FINISHED FLOOR, EXHAUST THROUGH WALL 21' AFF.
  2. MOUNT CEILING PADDLE FANS 19' AFF.
  3. PROVIDE GAS SHUTOFF VALVES AT UNIT HEATERS AND AIR SUPPLY UNIT.
  4. SEE DRAWING 01-C-02 FOR LOCATION OF PROPANE TANK. TANK TO BE LOCATED 20'-0" OFF BUILDING. TAPE WRAP BURIED GAS PIPING. FIELD ROUTE PIPING INSIDE BUILDING. MIN 8" AFF, MIN 3FT BURIED DEPTH.
  5. COORDINATE LOCATIONS OF EQUIPMENT WITH BUILDING SUPPLIER.
  6. COORDINATE LOCATION OF GAS VENT STACK WALL PENETRATIONS WITH ARCHITECTURAL.

DSGN	L. SCHULTZ
DR	P.A. LLANAS
CHK	R. YOLO
APVD	S. KEITH

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS SMK	

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

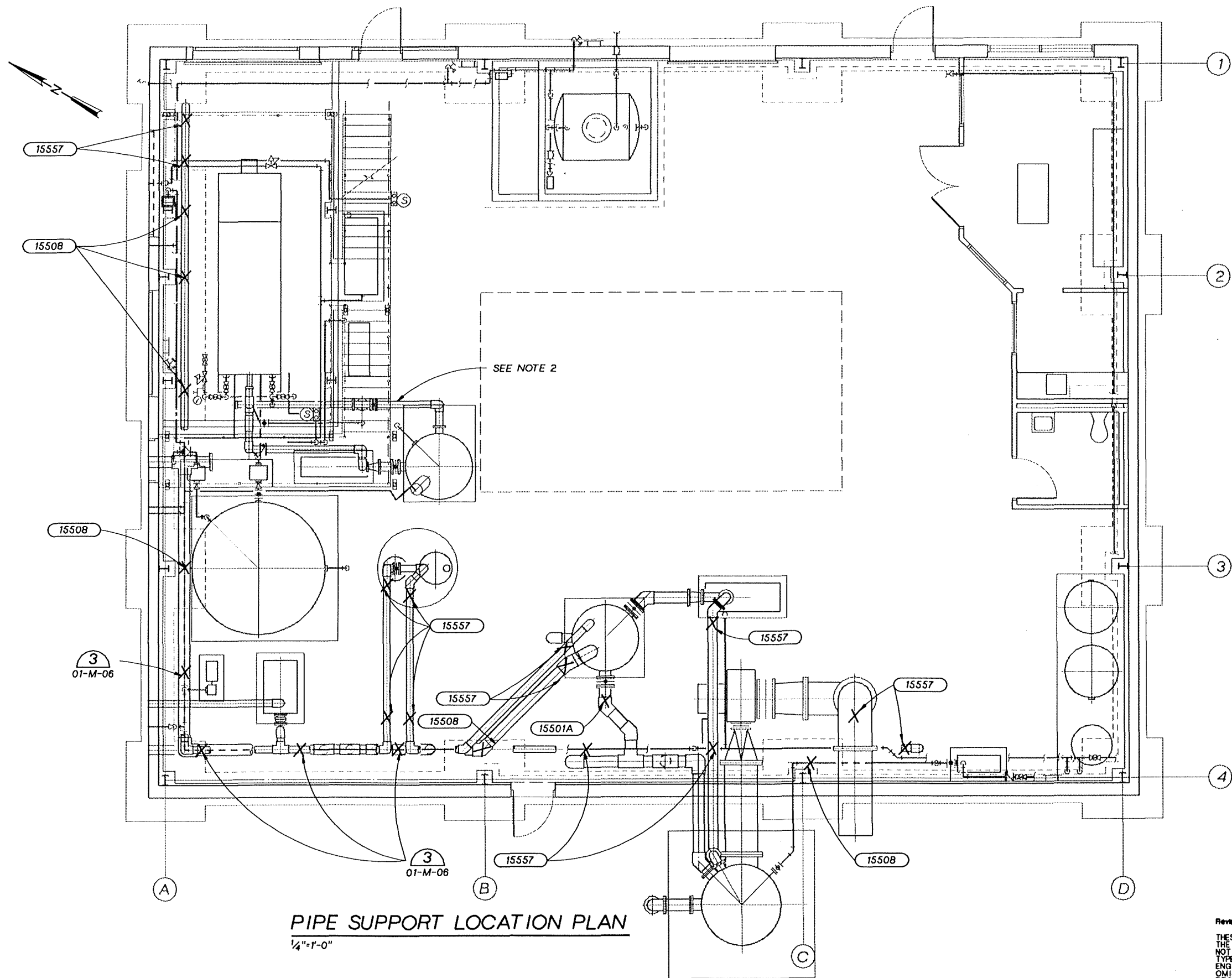
BAR IS ONE INCH ON ORIGINAL DRAWING.  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**PROCESS BUILDING  
 MECHANICAL  
 HVAC PLAN & DETAILS**

SHEET	38
DWG NO.	01-M-08
DATE	OCT 1992
PROJ NO.	GLO65602.FD

OVERLAY SCREEN  
 PROJ FILE



- NOTES:**
1. PIPE 2" OR SMALLER TO BE SUPPORTED OFF BUILDING AT INTERVALS STATED IN THE SPECIFICATIONS, THIS AREA.
  2. SUPPORT PIPING OFF MEZZANINE FRAMEWORK OR STAIRWAY.
  3. X DENOTES PIPE SUPPORT LOCATION. LOCATIONS FOR PIPE SUPPORTS FROM FLOOR NOT SHOWN.

**PIPE SUPPORT LOCATION PLAN**  
1/4"=1'-0"

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-21-94

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.

	DSGN L. AMUNDSON
	DR D. OXLEY
	CHK R. YOLO
	APVD S. KEITH

NO.	DATE	REVISION
	10-94	RECORD DRAWING

BY	DJS SMK
APVD	

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

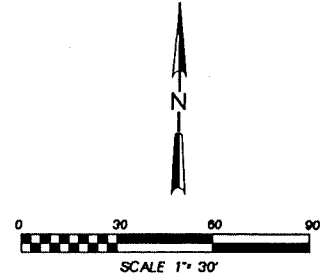
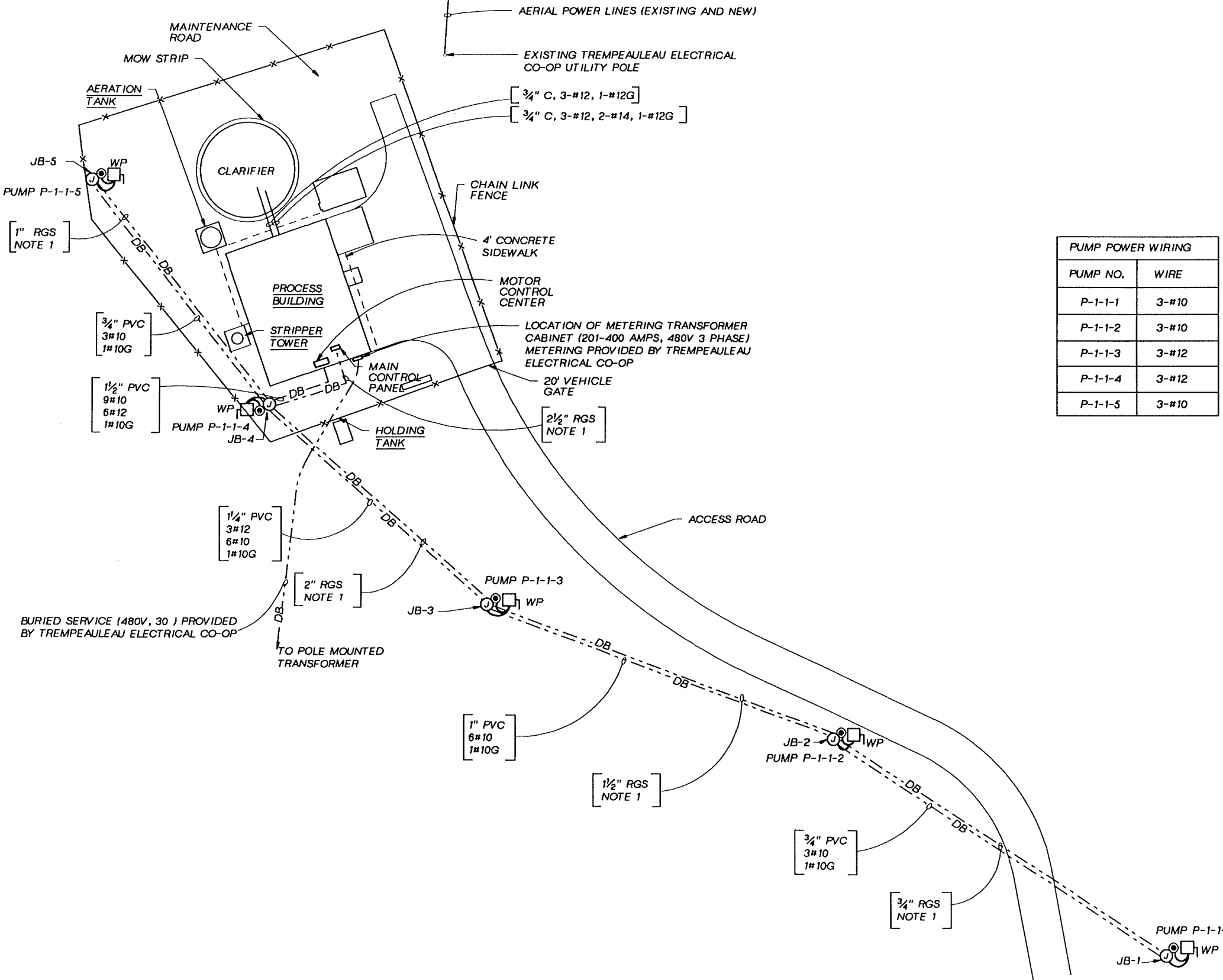
GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

PROCESS BUILDING  
MECHANICAL  
PIPE SUPPORT LOCATION PLAN

SHEET	39
DWG NO.	01-M-09
DATE	OCT 1992
PROJ. NO.	GLO65602.FD

OVERLAY SCREEN





NOTES:


1. SPARE RGS CONDUIT TO BE INSTALLED IN DUCT BANK FOR FUTURE WELL INSTRUMENTATION.
2. THE DISCONNECT SWITCHES FOR THE WELL PUMPS SHALL BE ATTACHED TO CONCRETE POSTS LOCATED ADJACENT TO EACH PITLESS ADAPTOR.
3. WIRING TO AND FROM EACH OF THE 5 DISCONNECTS SHOWN ON THIS DRAWING ARE TO BE DIRECT BURIED (DB).

PUMP POWER WIRING	
PUMP NO.	WIRE
P-1-1-1	3-#10
P-1-1-2	3-#10
P-1-1-3	3-#12
P-1-1-4	3-#12
P-1-1-5	3-#10

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-28-94

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.


 DSGN G.GEIGLER  
 OR B.OXLEY  
 CHK T.VEGA  
 APVD S.M.KEITH

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS SMK	APVD

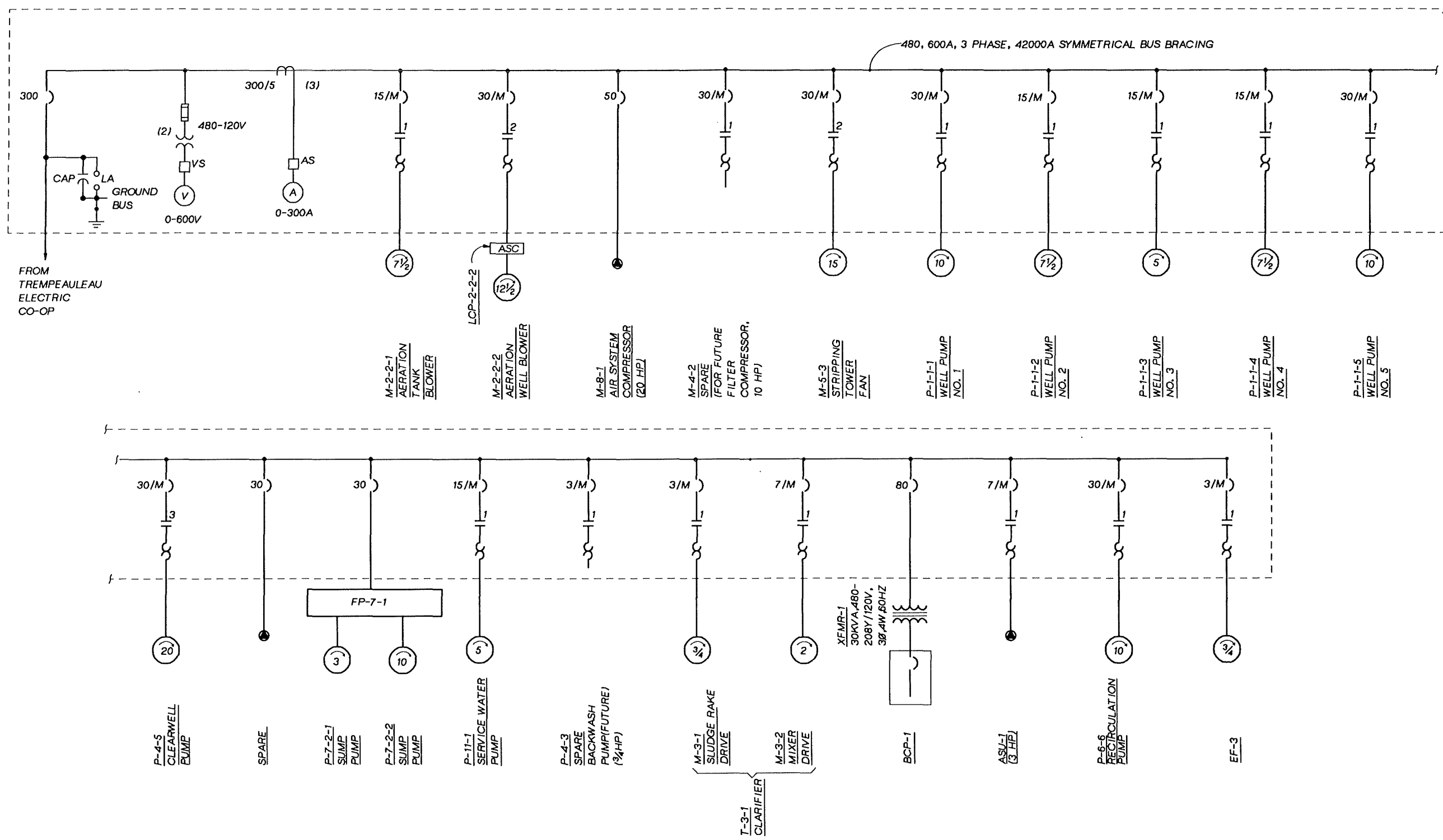
**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CKM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CKM HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**ELECTRICAL SITE PLAN**

SHEET	40
DWG NO.	01-E-01
DATE	OCT 1992
PROJ NO.	GLO65602.FD



**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-28-94

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.



DSGN G. GEIGLER  
 DR B. OXLEY  
 CHK T. VEGA  
 APVD S.M. KEITH

NO.	DATE	REVISION	BY	APVD
	10-94	RECORD DRAWING	DJS SMK	

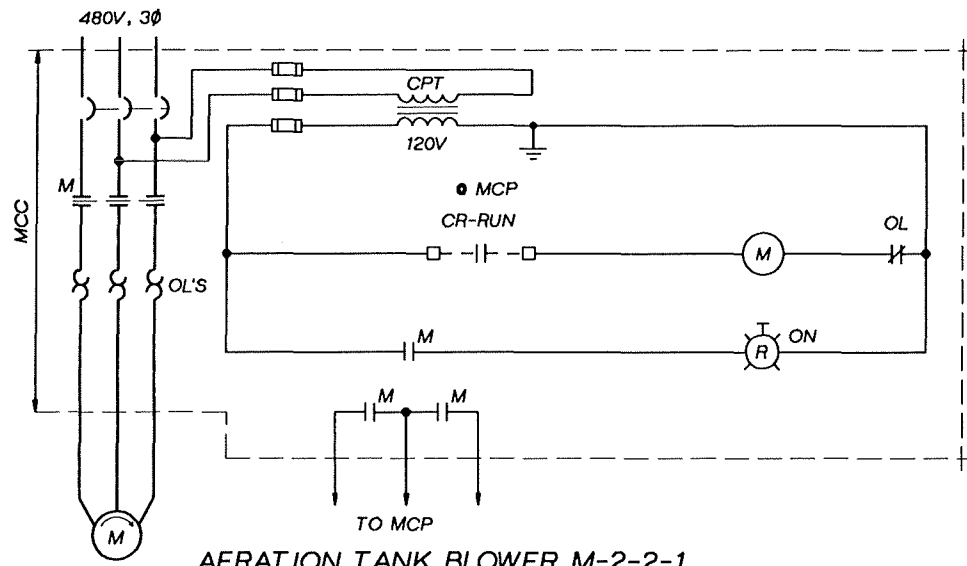
**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CKM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CKM HILL.

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

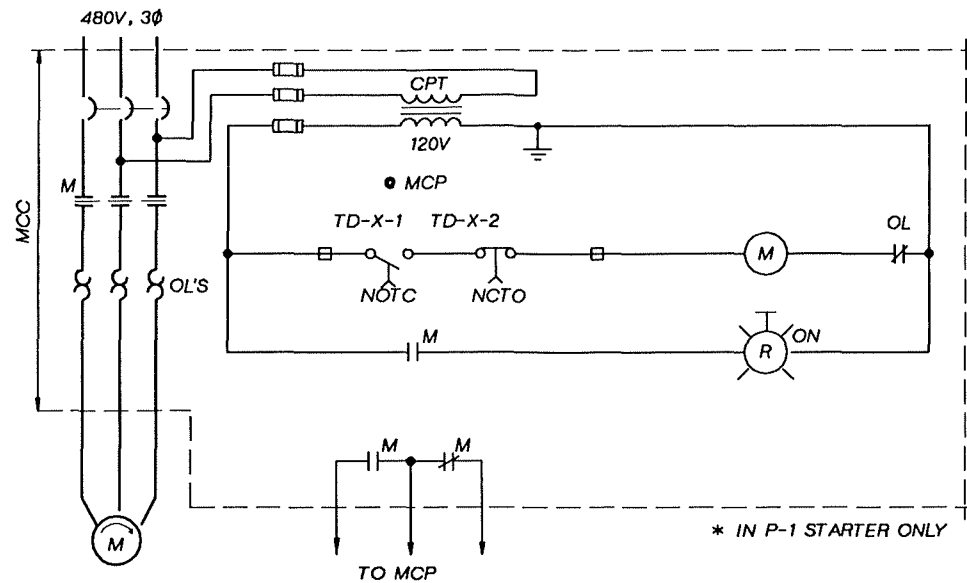
GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**ELECTRICAL ONE-LINE DIAGRAM**

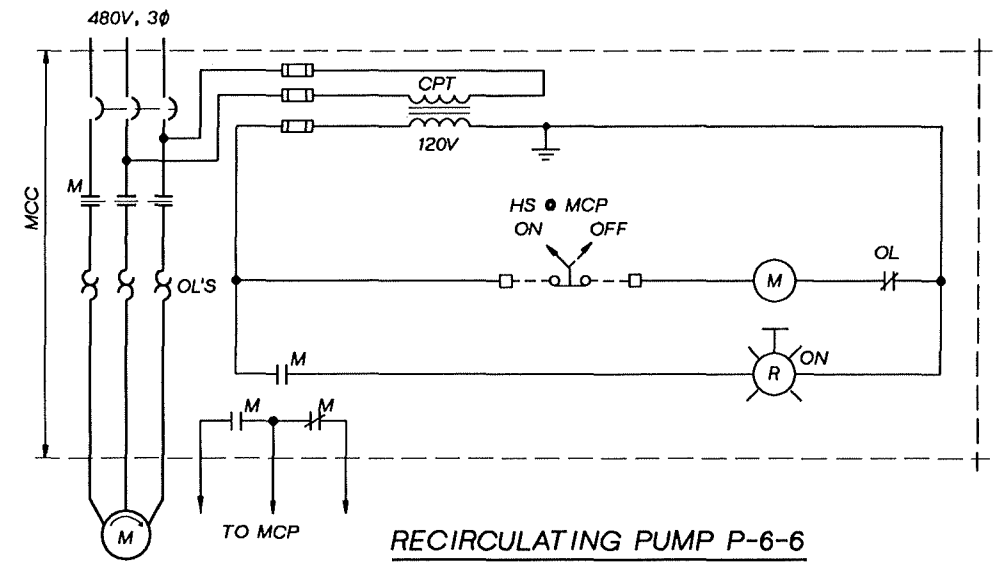
SHEET	41
DWG NO.	01-E-02
DATE	OCT 1992
PROJ NO.	GLO65602.FD



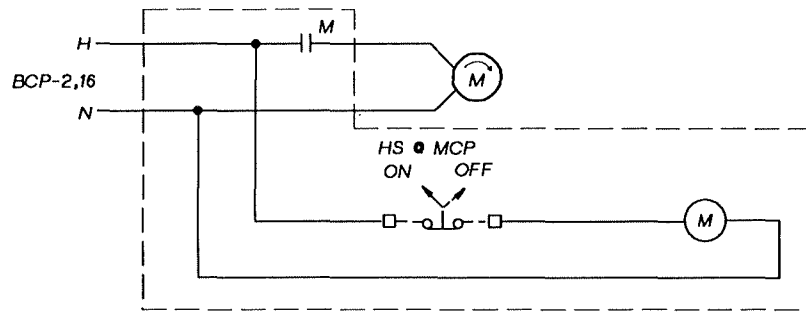
**AERATION TANK BLOWER M-2-2-1**  
**STRIPPER TOWER FAN M-5-3**  
**AERATION WELL BLOWER M-2-2-2**  
**SERVICE WATER PUMP P-11-1**  
**CLEAR WELL PUMP P-4-5**  
**MIXER DRIVE M-3-2**  
 NTS



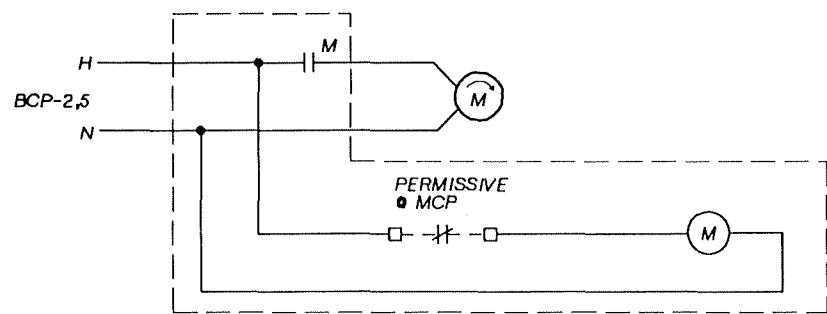
**WELL PUMP P-1-1-X**  
 X = 1-5  
 NTS



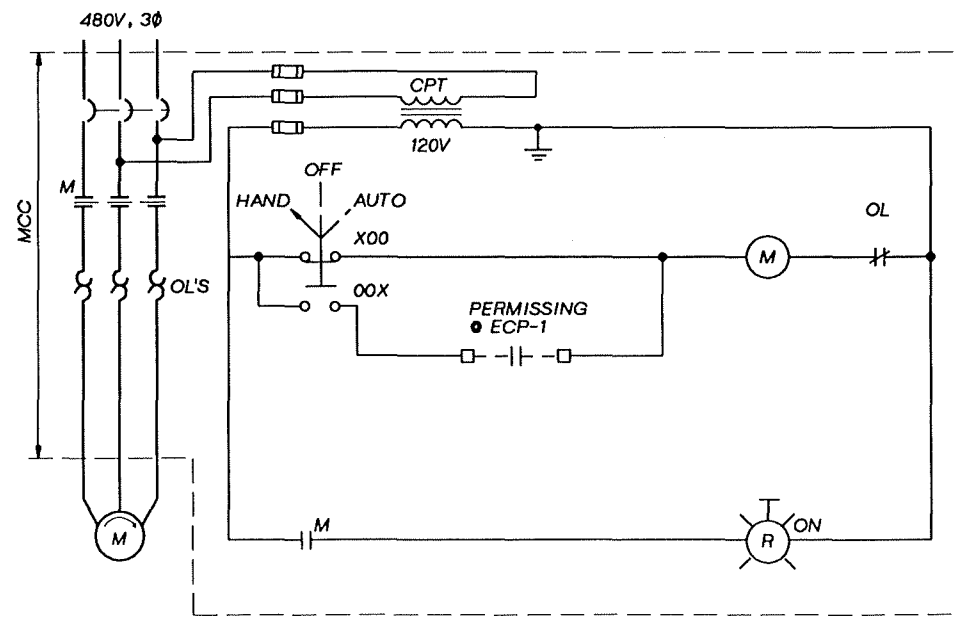
**RECIRCULATING PUMP P-6-6**  
 NTS



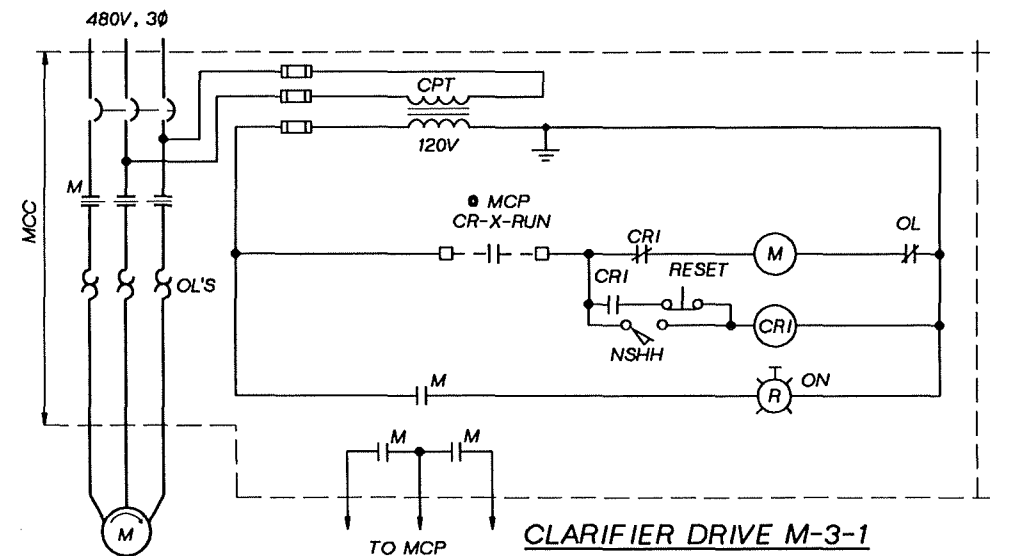
**PRECOAT MIXER M-6-5**  
 NTS



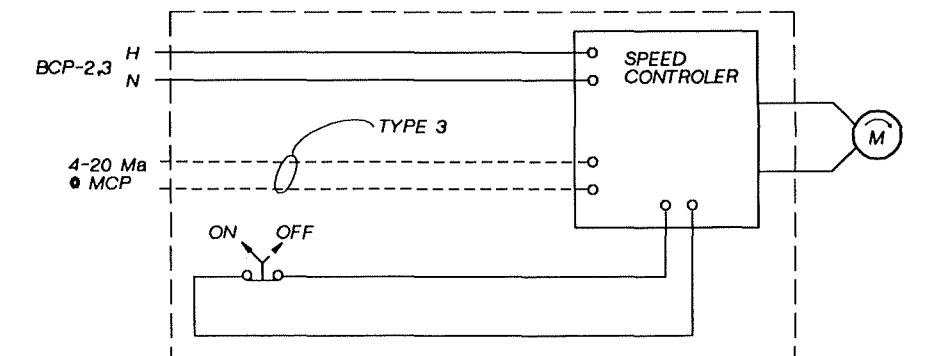
**POLYMER PUMP P-9-1**  
 NTS



**EXHAUST FAN EF-3**



**CLARIFIER DRIVE M-3-1**



**CAUSTIC PUMP P-10-2**  
 NTS  
 \*\* FP-10-2  
 ● MOTOR

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-28-94  
 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.

CH2M HILL  
 DSGN G. GEIGLER  
 DR B. OXLEY  
 CHK R. NAGEL  
 APVD S.M. KEITH

NO.	DATE	REVISION	BY	APVD
		10-94 RECORD DRAWING	DJS SMK	APVD

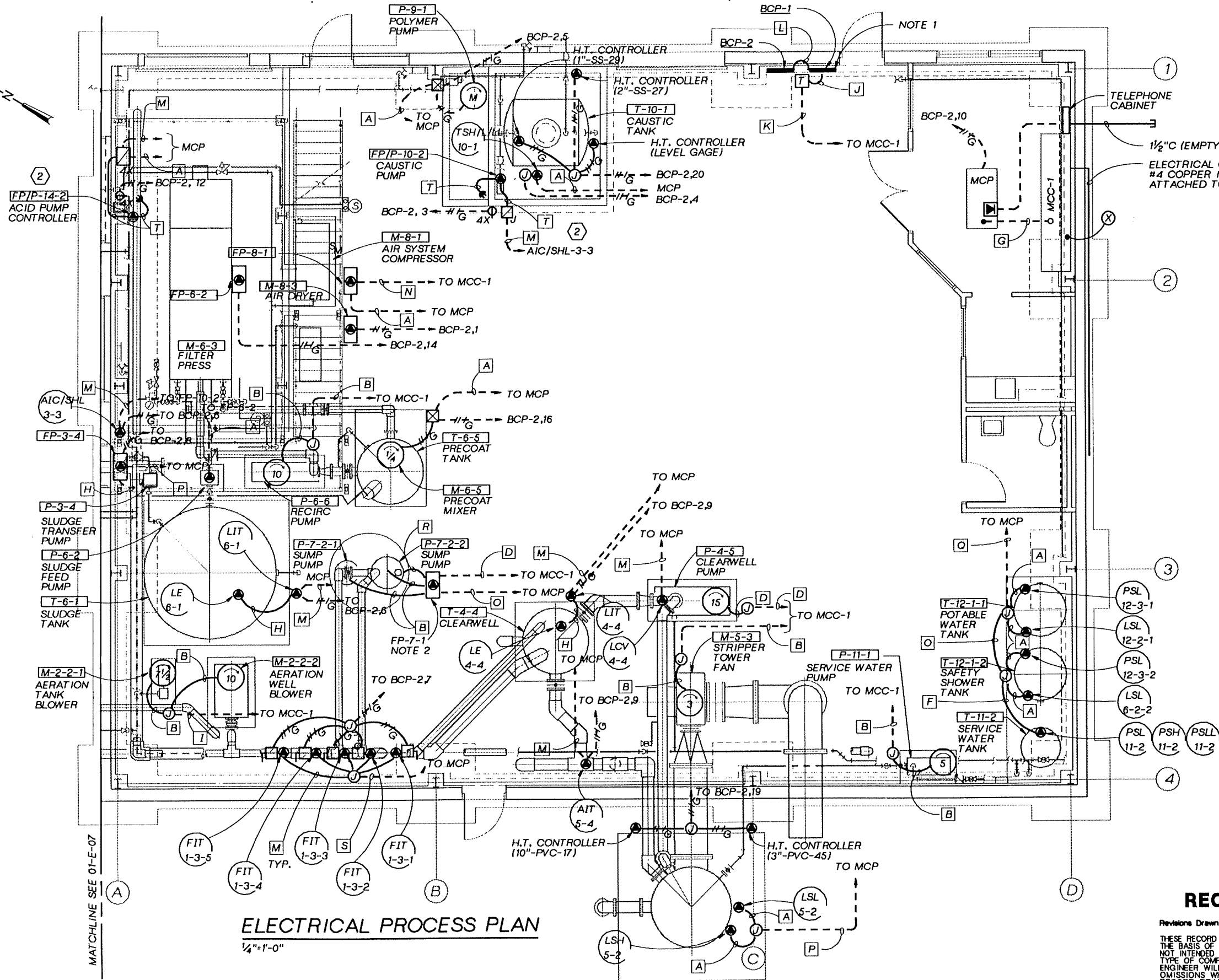
**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**CONTROL DIAGRAM ELECTRICAL**

SHEET	42
DWG NO.	01-E-03
DATE	OCT 1992
PROJ NO.	GLO65602.FD



- NOTES:
1. MOUNT 30KVA TRANSFORMER ON WALL ABOVE PANEL BOARDS.
  2. SEAL CONDUITS TO WET WELL WITH DUCT SEAL IN PUMP PANEL.

- A = 3/4" C, 2-#14, 1-#14G
- B = 3/4" C, 3-#12, 1-#12G
- C = 3/4" C, 3-#12, 2-#14, 1-#12G
- D = 3/4" C, 3-#10, 1-#10G
- E = 3/4" C, 3-#10, 2-#14, 1-#10G
- F = 3/4" C, 6-#14, 1-#14G
- G = 1/4" C, 62-#14, 1-#14G
- H = 3/4" C, MFG'S CABLE
- I = 1" C, 6-#12, 1-#12G
- J = 1/4" C, 4-#3, 1-#8G
- K = 1" C, 3-#4, 1-#8G
- L = 3/4" C, 4-#8, 1-#10G
- M = 3/4" C, 1-TYPE 3
- N = 3/4" C, 3-#8, 1-#10G
- O = 3/4" C, 10-#14, 1-#14G
- P = 3/4" C, 4-#14, 1-#14G
- Q = 1" C, 14-#14, 1-#14G
- R = 1 1/2" C, 6-MFG'S CABLES
- S = 1/4" C, 5-TYPE 3
- T = MFG'S CABLE(S)

**ELECTRICAL PROCESS PLAN**  
1/4"=1'-0"

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-28-94

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.

**CKM HILL**

DSGN G. GEIGLER  
 DR B. OXLEY/J.A. PIERON  
 CHK R. NAGEL  
 APVD S.M. KEITH

NO.	DATE	REVISION
2	1/93	CHEMICAL SYSTEM REVISED.
10-94		RECORD DRAWING

**REUSE OF DOCUMENTS**

THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CKM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CKM HILL.

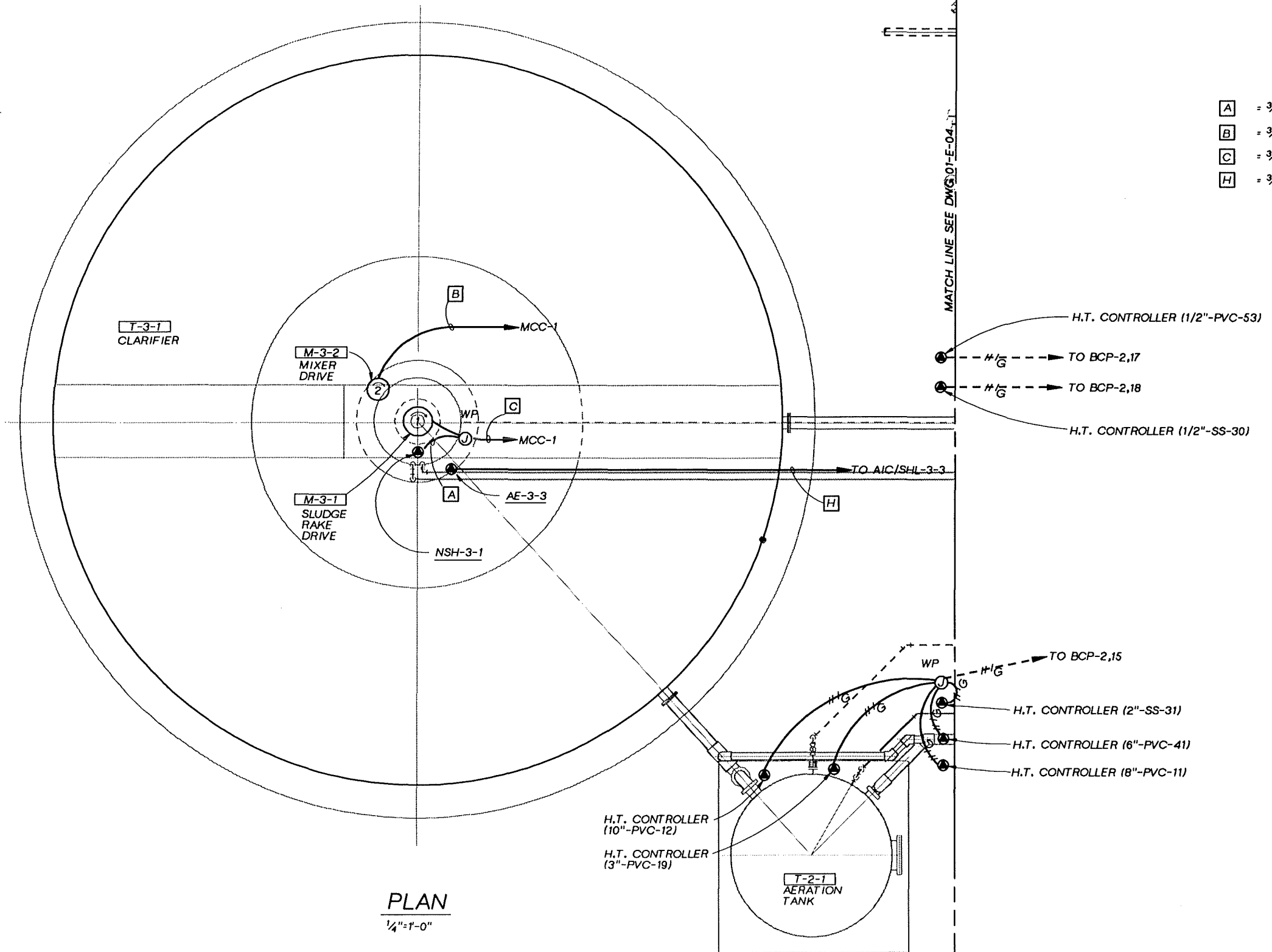
BY APVD  
 DJM SMK  
 BMW SMK  
 ©CKM HILL

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**ELECTRICAL PROCESS PLAN**

SHEET	43
DWG NO.	01-E-04
DATE	OCT 1992
PROJ. NO.	GLO65602.FD



- A** = 3/4" C, 2-#14, 1-#14G
- B** = 3/4" C, 3-#12, 1-#12G
- C** = 3/4" C, 3-#12, 2-#14, 1-#12G
- H** = 3/4" C, MFG'S CABLE

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

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-28-94

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.

	DSGN G. GEIGLER
	DR B. OXLEY
	CHK N. NAGEL
	APVD S. KEITH

NO.	DATE	REVISION
	10-94	RECORD DRAWING

BY	APVD	DATE
DJS	SMK	

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

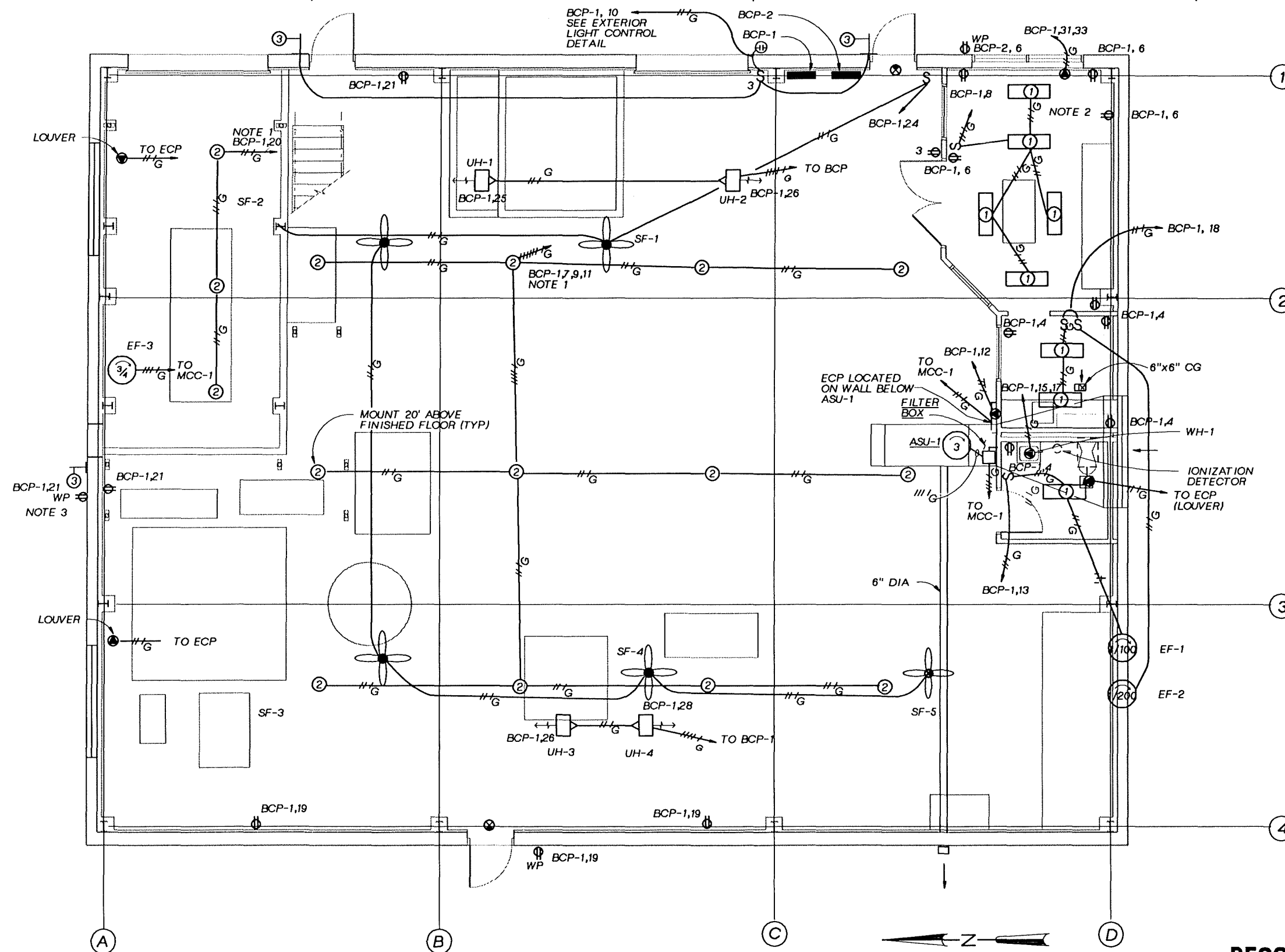
BAR IS ONE INCH ON ORIGINAL DRAWING.  
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

**CLARIFIER AND AERATION  
ELECTRICAL  
PLAN**

SHEET	44
DWG NO.	01-E-05
DATE	OCT 1992
PROJ NO.	GL065602.FD

PROVIDE COVERLAY SCREEN



- NOTES:
1. PROVIDE SWITCHING DUTY BREAKERS IN PANEL BOARD.
  2. UP TO FIVE RECEPTACLES MAY BE COMBINED ON ONE CIRCUIT.
  3. LOCATE SO RECEPTACLE IS ACCESSIBLE FROM CLARIFIER BRIDGE.
  4. UH-1 AND UH-2 ARE CONTROLLED BY ONE REMOTE THERMOSTAT. UH-3 AND UH-4 ARE CONTROLLED BY A DIFFERENT REMOTE THERMOSTAT. SEE SHEET 38 FOR LOCATIONS.

**ELECTRICAL FACILITY PLAN**  
1/4"=1'-0"

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-19-94

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.

DSGN G.,GEIGLER  
 DR B.OXLEY  
 CHK R.NAGEL  
 APVD S.M.KEITH

NO.	DATE	REVISION
	10-94	RECORD DRAWING

**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF G&M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF G&M HILL.

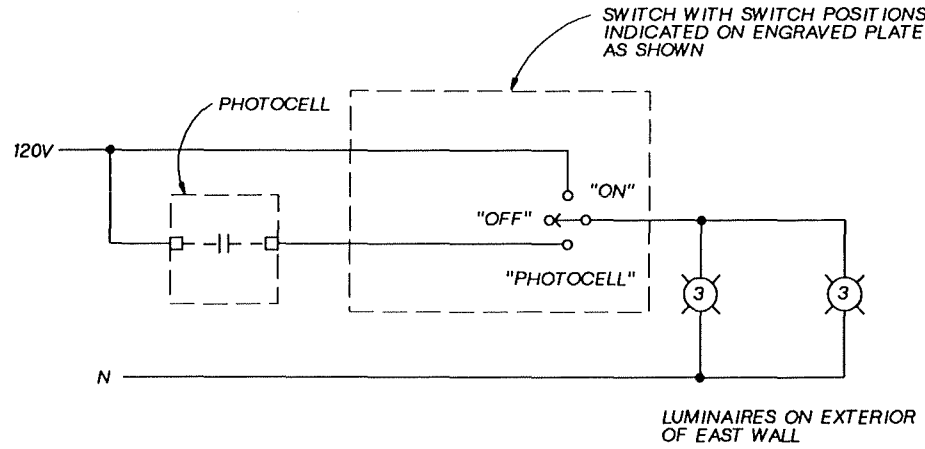
BAR IS ONE INCH ON ORIGINAL DRAWING.  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**ELECTRICAL FACILITY PLAN**

SHEET	45
DWG NO.	01-E-06
DATE	OCT 1992
PROJ. NO.	GLO65602.FD

OVERLAY SCREEN  
 PLOTTED FILE



**EXTERIOR LIGHT CONTROL  
DETAIL, EAST WALL**  
NTS

PANEL BCP-1 LOCATION:  
SERVICE-VOLTAGE: 208Y/120 3 PHASE 4 WIRE  
MAIN: 100A TYPE: CB100AT  
FULL NEUTRAL FEEDER SIZE: SEE CIRCUIT SCHEDULE  
SURFACE MOUNTING POWER SOURCE: XFMR-1

CIRCUIT TITLE	BKR	CKT NO.	CKT NO.	BKR	CIRCUIT TITLE
MAIN		1	2	20/1	EMERGENCY LIGHTS
MAIN	100/3	3	4	20/1	BATHROOM LAB RECEPTS
MAIN		5	6	20/1	CONTROL ROOM RECEPTS
INTERIOR LIGHTS	20/1	7	8	20/1	LIGHTS, CONTROL ROOM
INTERIOR LIGHTS	20/1	9	10	20/1	LIGHTS, PHOTOCELL
INTERIOR LIGHTS	20/1	11	12	30/1	ECP
TOILET LIGHT, FAN(EF-1)	20/1	13	14	30/2	LIGHT
WH-1 WATER HTR	20/1	15	16		SPACE
SPACE	20/1	17	18	20/1	LAB LIGHT, FAN(EF-2)
WEST RECEPTS	20/1	19	20	20/1	SPARE
NORTH RECEPTS	20/1	21	22	20/1	SPARE
SEPTIC TANK ALARM	20/1	23	24	20/1	SF-1 THRU 5 (1/6 HP EA)
UH-1 (1/3 HP)	20/1	25	26	20/1	UH-3 (1/3 HP)
UH-2 (1/3 HP)	20/1	27	28	20/1	UH-4 (1/3 HP)
ASU-1 (CONTROL)	20/1	29	30	20/1	SPARE
RAC-1	45/2	31	32	40/3	BCP-2
SPACE		33	34		
SPACE		35	36		
SPACE		37	38		SPACE
SPACE		39	40		SPACE
SPACE		41	42		SPACE

PANEL BCP-2 LOCATION:  
SERVICE-VOLTAGE: 208Y/120 3 PHASE 4 WIRE  
MAIN: 100A TYPE: MAIN LUGS ONLY  
NEUTRAL FEEDER SIZE: SEE CURCUIT SCHEDULE  
SURFACE MOUNTING: POWER SOURCE: BCP-1

CIRCUIT TITLE	BKR	CKT NO.	CKT NO.	BKR	CIRCUIT TITLE
FP-8-3 AIR DRYER	15/1	1	2	15/1	T-8-2 PRE-FILTER
FP-10-2 CAUSTIC PUMP CONTROLLER	15/1	3	4	20/1	TSH/LL-10-1 PIPING HT TRACE
P-9-1 POLYMER PUMP	15/1	5	6	15/1	AIC/SHL-3-3 (OUTSIDE 1/2-SS)
FIT-1-3-(5) ( W.P. FLOWMETERS)	20/1	7	8	15/1	FP-3-4
LIT-4-4 CLEARWELL	15/1	9	10	30/1	MCP MAIN CNTL PNL
AIT-5-4	15/1	11	12	15/1	MCP
LIT-6-1 (SLUDGE TANK)	15/1	13	14	20/1	FP-6-2 (FILTER PRESS)
HEAT TRACE (CAUSTIC TANK)	15/1	15	16	20/1	M-6-5 PRECOAT MIXER
HEAT TRACE (CAUSTIC TANK PIPING)	15/1	17	18	20/1	HEAT TRACE (STRIPPING TOWER & 1/2"-PVC-P53)
HEAT TRACE (OUTSIDE CAUSTIC VALVE)	15/1	19	20	20/1	HEAT TRACE (AERATION TANK)
ACID PUMP	15/1	21	22		
		23	24		
		25	26		

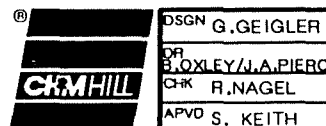
**LUMINAIRE SCHEDULE**

SYMBOL	TYPE	VOLTAGE	DISCRIPTION	MANUFACTURER	CATALOG NO.	LAMPS	MOUNTING
①	FLUOR	120	LOW PROFILE WRAPAROUND: 10"W X 3"H X 48"L. ACRYLIC PRISMATIC DIFFUSER. SURFACE OR STEM MOUNTING. ENERGY SAVING BALLASTS.	LITHONIA	LB240120ES	(2) 40W T12	PENDANT
②	HID	120	LOW BAY PRISMATIC REFRACTOR. OVERALL HEIGHT 21 3/8", DIAMETER 21 1/4". 250W METAL HALIDE. DIECAST ALUMINUM HOUSING.	LITHONIA	TXL-250M-A20-120	(1) A20	SEE STANDARD DETAIL 16206
③	HPS	120	WALL-PACK, ALUMINUM HOUSING WITH SS HARDWARE. 15 3/4"H X 16 1/4"W 8" D.	LITHONIA	TWH-100S-120	(1) 100W HIGH PRESSURE SODIUM	BACKWIRE ACCESS ON 3" OR 4" OUTLET BOX
⊗	HALOGEN	120	EMERGENCY LIGHTING UNIT WITH LEAD CALCIUM BATTERY PACK (12 V). 50 WATT OUTPUT FOR 1 1/2 HOURS.	LITHONIA	ELU4-H	(2) 8-WATT HALOGEN	WALL-MOUNT

**RECORD DRAWINGS**

Revisions Drawn By D.J.SCHAUER Date 10-28-94

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.



DSGN G. GEIGLER					
OR B. OXLEY/J.A. PIERONI					
CHK R. NAGEL	10-94	RECORD DRAWING	DJS	SMK	
APVD S. KEITH	NO.	DATE	REVISION	BY	APVD

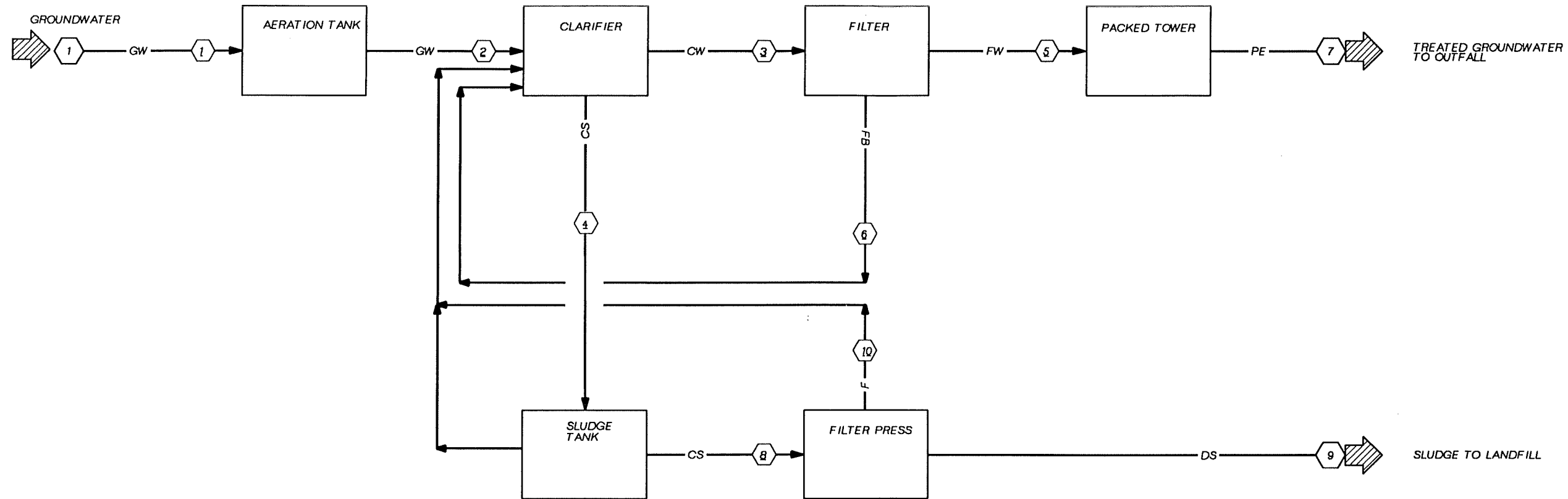
**REUSE OF DOCUMENTS**  
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
ONALASKA MUNICIPAL LANDFILL SITE  
ONALASKA TOWNSHIP, WISCONSIN

**ELECTRICAL DETAILS**

SHEET	46
DWG NO.	01-E-07
DATE	OCT 1992
PROJ NO.	GLO65602.FD



**LEGEND**

- GW GROUNDWATER
- PE PLANT EFFLUENT
- FB FILTER BACKWASH
- CS CLARIFIER SLUDGE
- DS DEWATERED SLUDGE
- F FILTRATE
- CW CLARIFIED WATER
- FW FILTERED WATER
- OF OVERFLOW

**RECORD DRAWINGS**

Revisions Drawn By P.A. LLANAS Date 10-20-94

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.



DSGN S.M. KEITH  
 DR B. OXLEY  
 CHK S.M. KEITH  
 APVD S.M. KEITH

NO.	DATE	REVISION
	10-94	RECORD DRAWING

PAL SMK  
 BY APVD

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CKM HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CKM HILL.

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

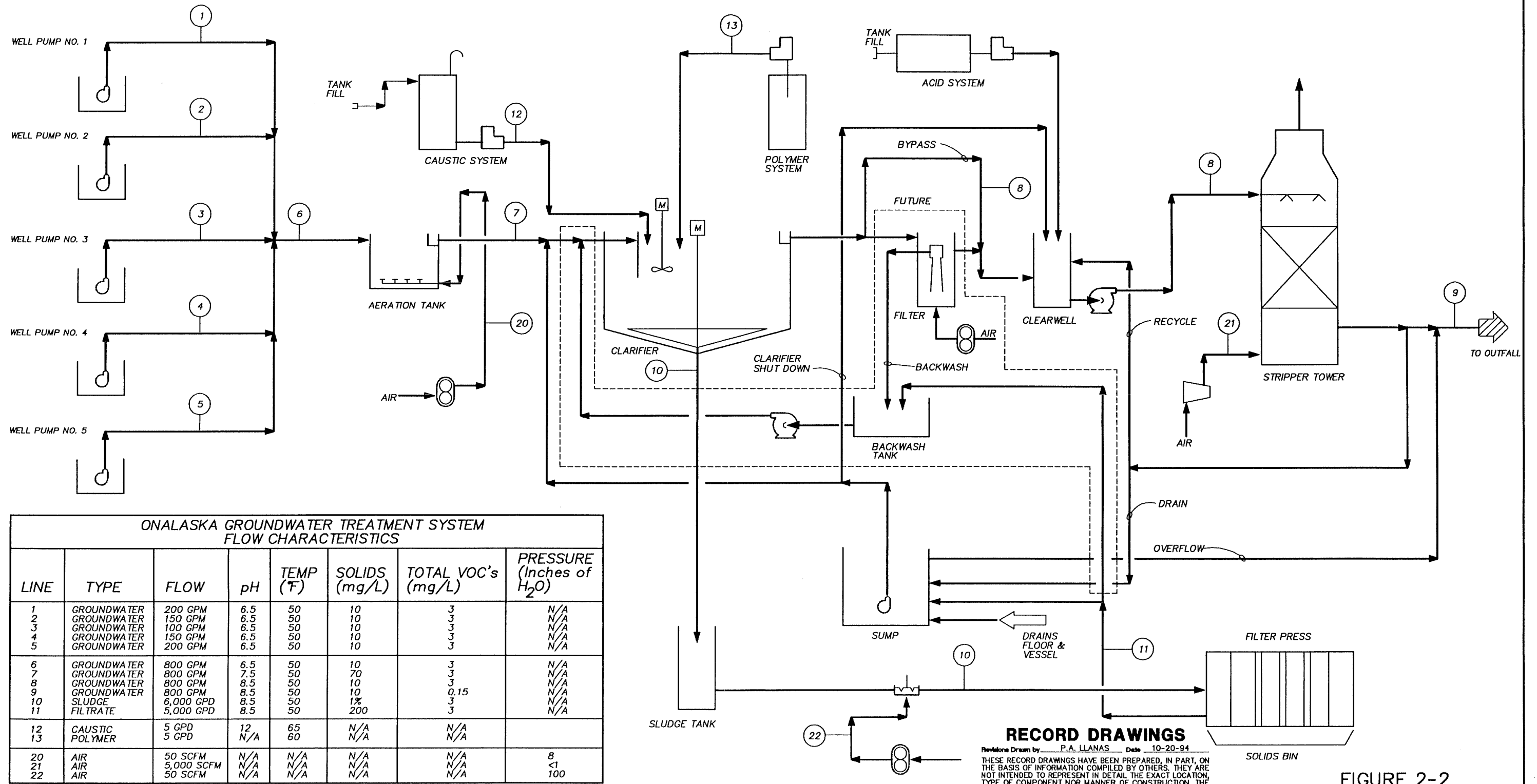
GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

BLOCK FLOW DIAGRAM

SHEET 47  
 DWG NO. 01-N-01  
 DATE OCT 1992  
 PROJ NO. GLO65602.FD

OVERLAY SCREEN





ONALASKA GROUNDWATER TREATMENT SYSTEM  
FLOW CHARACTERISTICS

LINE	TYPE	FLOW	pH	TEMP (°F)	SOLIDS (mg/L)	TOTAL VOC's (mg/L)	PRESSURE (Inches of H <sub>2</sub> O)
1	GROUNDWATER	200 GPM	6.5	50	10	3	N/A
2	GROUNDWATER	150 GPM	6.5	50	10	3	N/A
3	GROUNDWATER	100 GPM	6.5	50	10	3	N/A
4	GROUNDWATER	150 GPM	6.5	50	10	3	N/A
5	GROUNDWATER	200 GPM	6.5	50	10	3	N/A
6	GROUNDWATER	800 GPM	6.5	50	10	3	N/A
7	GROUNDWATER	800 GPM	7.5	50	70	3	N/A
8	GROUNDWATER	800 GPM	8.5	50	10	3	N/A
9	GROUNDWATER	800 GPM	8.5	50	10	0.15	N/A
10	SLUDGE	6,000 GPD	8.5	50	1%	3	N/A
11	FILTRATE	5,000 GPD	8.5	50	200	3	N/A
12	CAUSTIC	5 GPD	N/A	65	N/A	N/A	
13	POLYMER	5 GPD	N/A	60	N/A	N/A	
20	AIR	50 SCFM	N/A	N/A	N/A	N/A	8
21	AIR	5,000 SCFM	N/A	N/A	N/A	N/A	<1
22	AIR	50 SCFM	N/A	N/A	N/A	N/A	100

**RECORD DRAWINGS**

Revisions Drawn by: P.A. LLANAS Date: 10-20-94  
 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.

FIGURE 2-2



DSGN P.M. BOERSMA  
 DR PFD-1 D.OXLEY  
 CHK S.M. KEITH  
 APVD S.M. KEITH

10/94 RECORD DRAWING  
 NO. DATE REVISION  
 PAL SMK  
 BY APVD

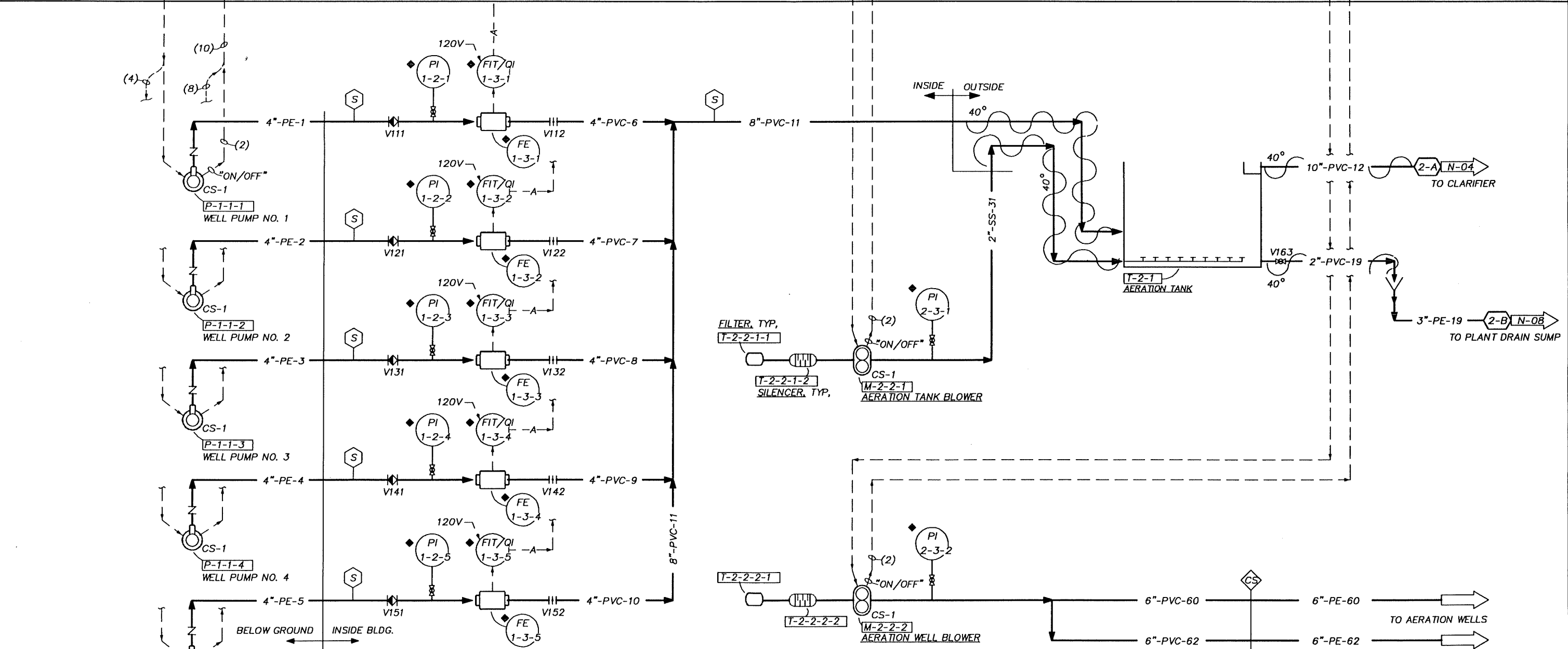
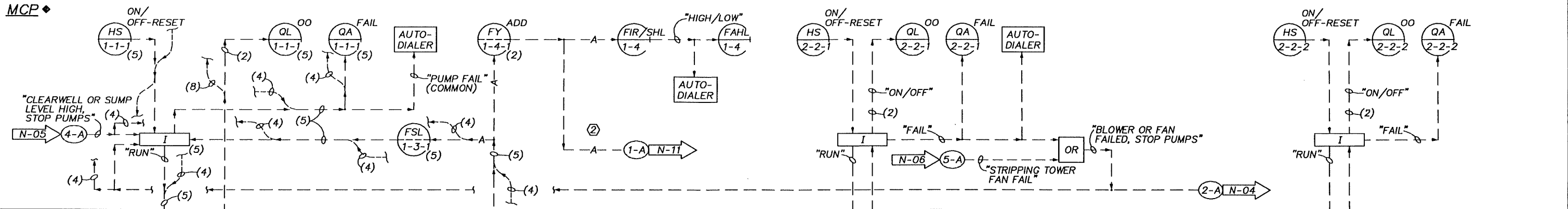
**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.  
 © CH2M HILL

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS FLOW DIAGRAM

SHEET 48  
 DWG NO. 01-N-02  
 DATE OCT 1992  
 PROJ NO. GL065602.FD



**RECORD DRAWINGS**

Revisions Drawn by P.A. LLANAS Date 10-20-94  
 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.

CH2M HILL  
 DSGN KEITH/OHLSSON  
 DR PD-1 OXLEY/OHLSSON  
 CHK R.NAGEL  
 APVD S.M.KEITH

NO.	DATE	REVISION
10/94		RECORD DRAWING
1/93		ADDED PACING SIGNAL TO ACID FEED SYSTEM

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

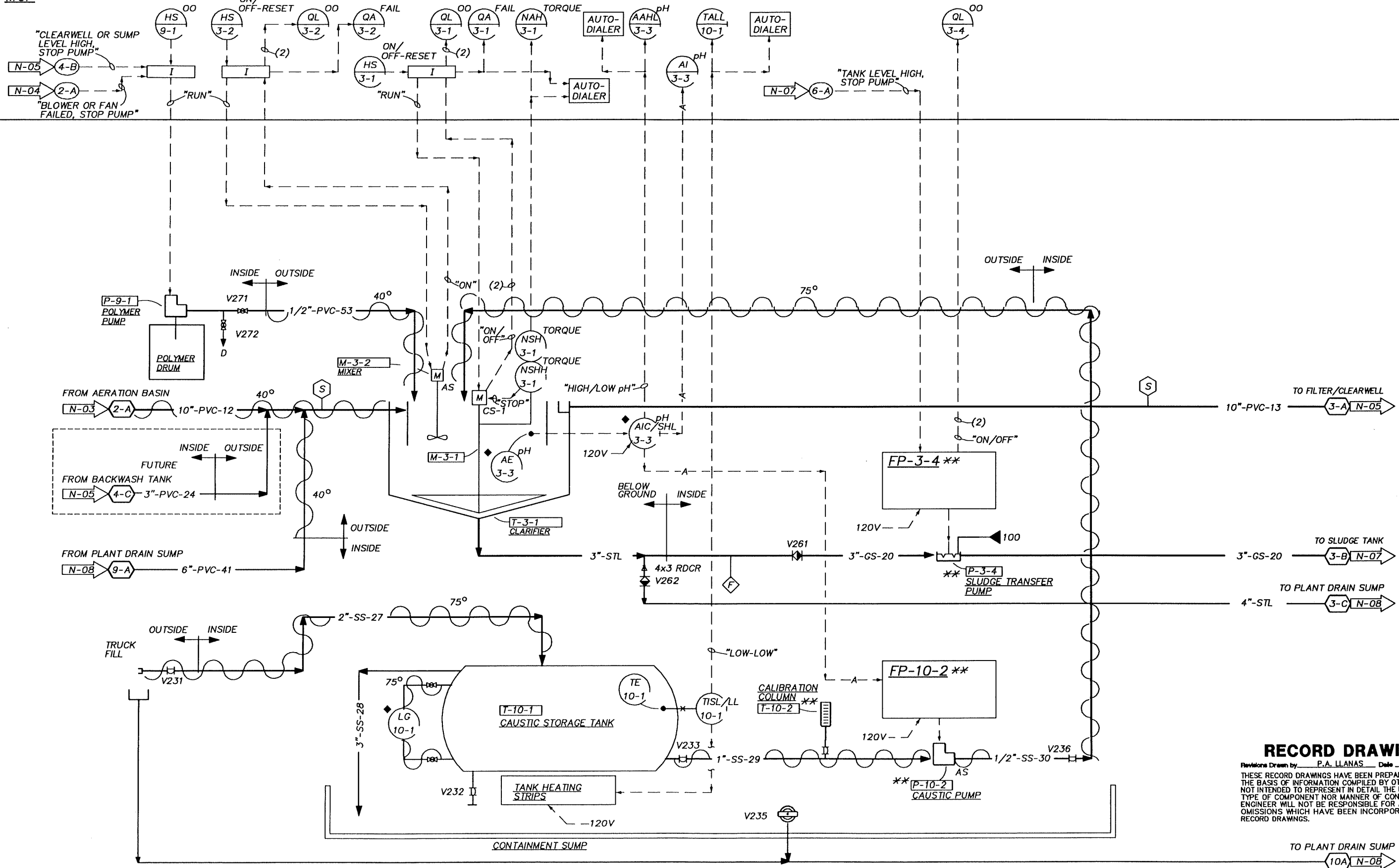
BAR IS ONE INCH ON ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**PROCESS & INSTRUMENTATION DIAGRAM**  
**WELL FIELD PUMPS & AERATION**

SHEET 49  
 DWG NO. 01-N-03  
 DATE OCT 1992  
 PROJ NO. GLO65602.FD

MCP



**RECORD DRAWINGS**

Revisions Drawn by P.A. LLANAS Date 10-20-94  
 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.

	DSGN KEITH/OHLSSON
	DR NO. 2 OXLEY/OHLSSON
	CHK R.NAGEL
	APVD S.M.KEITH

NO.	DATE	REVISION
	10/94	RECORD DRAWING

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

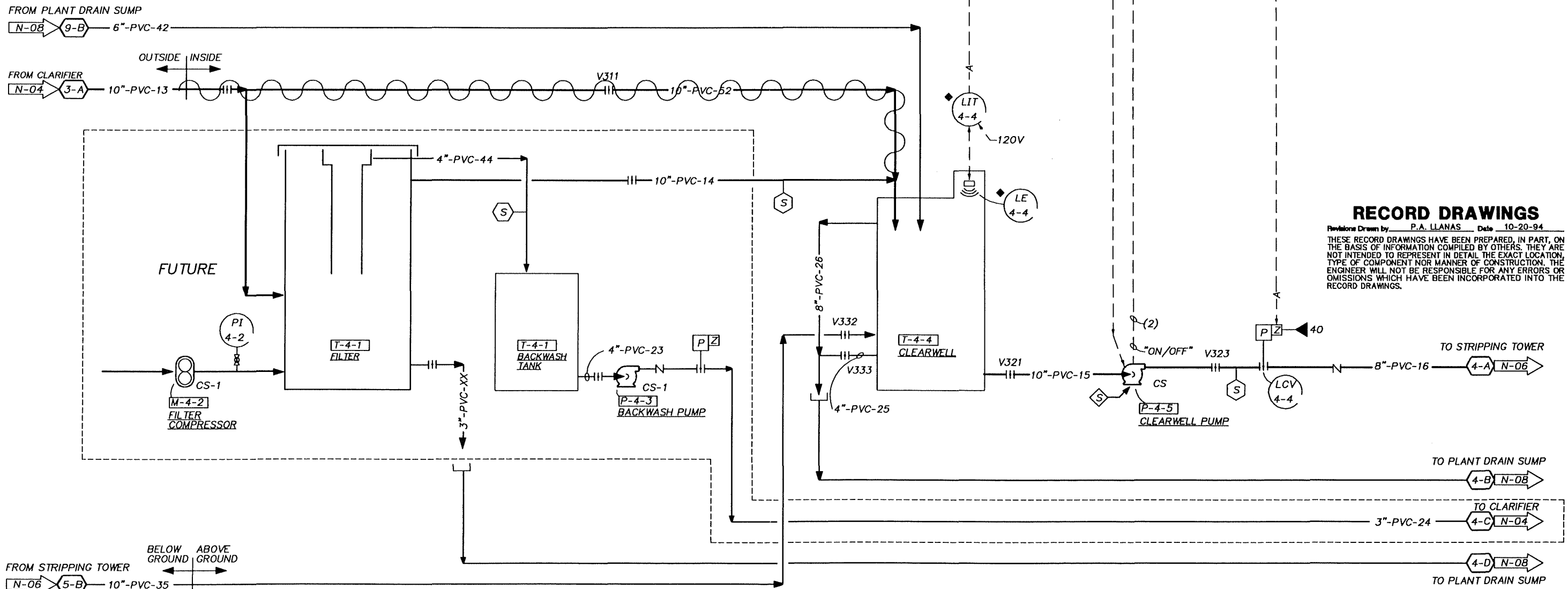
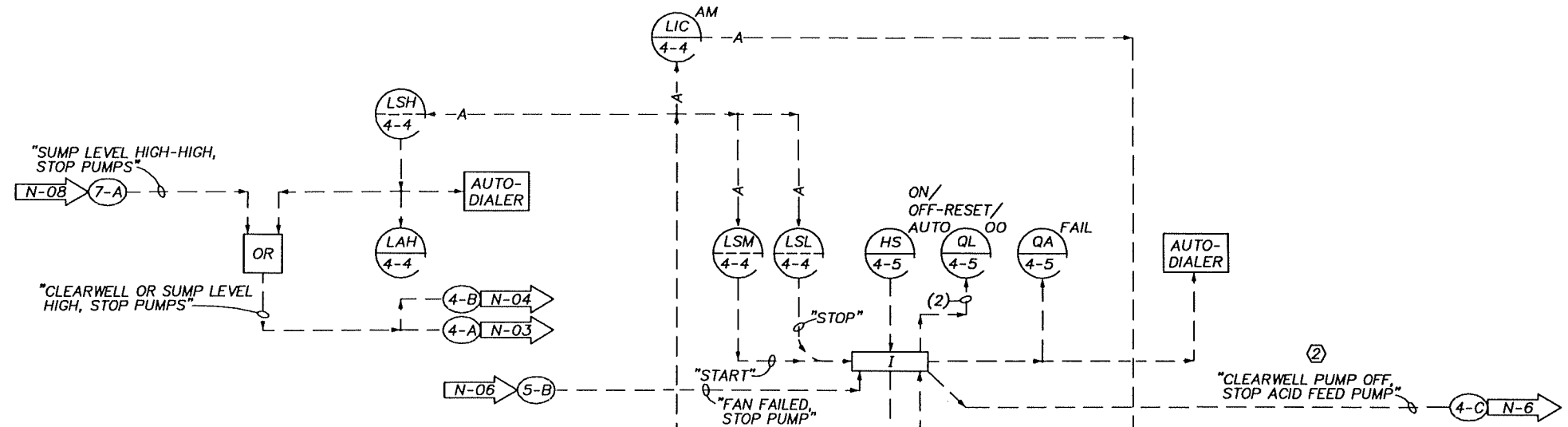
**SCALE**  
 BAR IS ONE INCH ON ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**PROCESS & INSTRUMENTATION DIAGRAM  
 CLARIFICATION & CAUSTIC SYSTEM**

SHEET	50
DWG NO.	01-N-04
DATE	OCT 1992
PROJ NO.	GL065602.FD

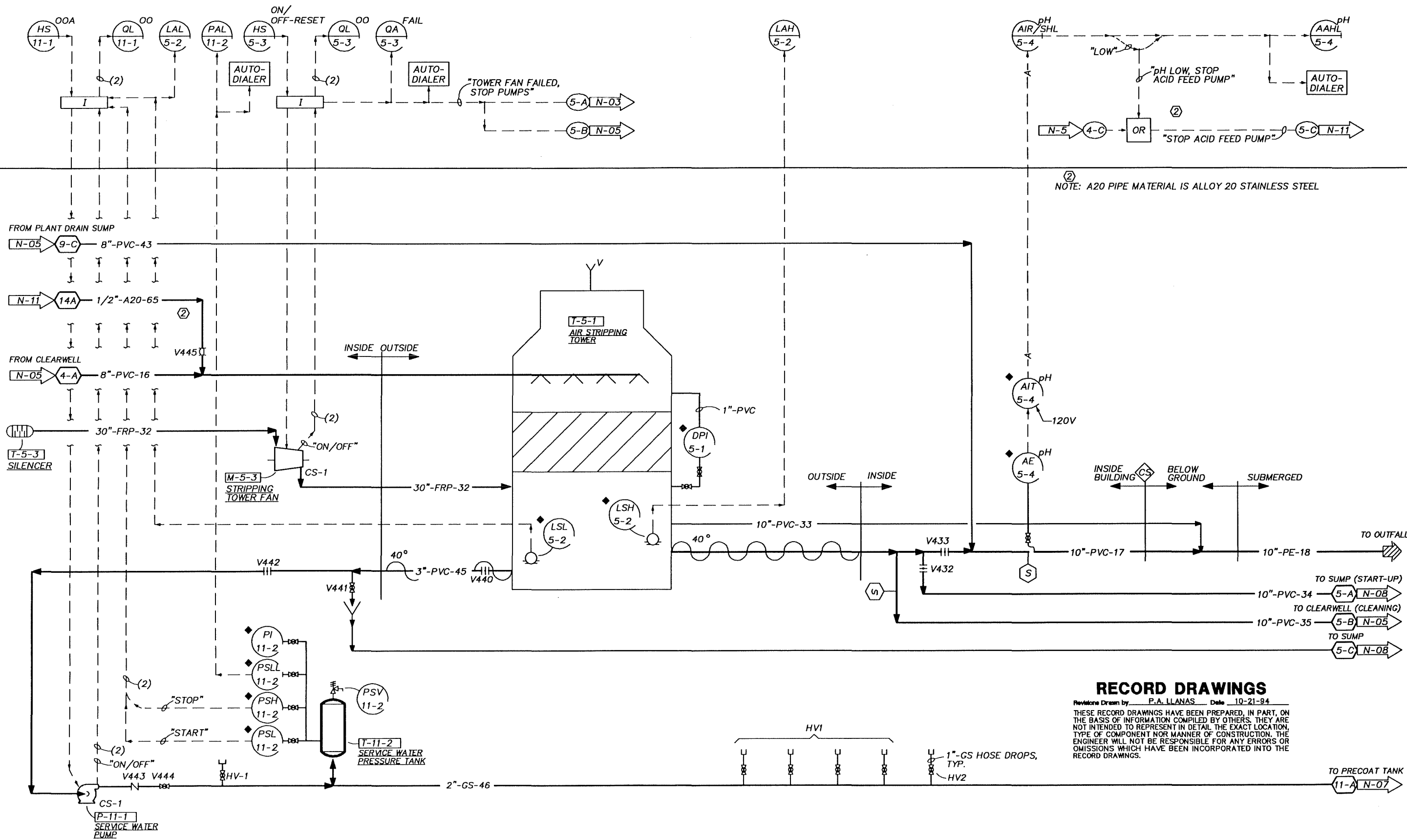
MCP ♦



**RECORD DRAWINGS**  
 Revisions Drawn by P.A. LLANAS Date 10-20-94  
 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.

	DSGN KEITH/OHLSSON DR NO. 3 OXLEY/OHLSSON CHK R.NAGEL APVD S.M.KEITH	NO. 1/93 DATE 1/93	REVISION 1/93 ADDED CONTROL INTERLOCK TO ACID FEED PUMP FROM CLEARWELL PUMP.	PAL BO SMK SMK BY APVD	<b>REUSE OF DOCUMENTS</b> THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.	BAR IS ONE INCH ON ORIGINAL DRAWING IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.	GROUNDWATER REMEDIAL ACTION ONALASKA MUNICIPAL LANDFILL SITE ONALASKA TOWNSHIP, WISCONSIN	PROCESS & INSTRUMENTATION DIAGRAM FILTRATION AND CLEARWELL	SHEET 51 DWG NO. 01-N-05 DATE OCT 1992 PROJ NO. GL065602.FD
--	---	-----------------------	---	------------------------------	---	--	---	---	--

MCP



NOTE: A20 PIPE MATERIAL IS ALLOY 20 STAINLESS STEEL

**RECORD DRAWINGS**

Revisions Drawn by P.A. LLANAS Date 10-21-94  
 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.

	DSGN	KEITH/OHLSSON
	DR NO.	OXLEY/OHLSSON
	CHK	R.NAGEL
	APVD	S.M.KEITH

NO.	DATE	REVISION
②	1/93	ADDED ACID FEED PIPING AND CONTROL INTERLOCK FROM LOW pH ALARM.

PAL	SMK
BO	SMK
BY	APVD

**REUSE OF DOCUMENTS**

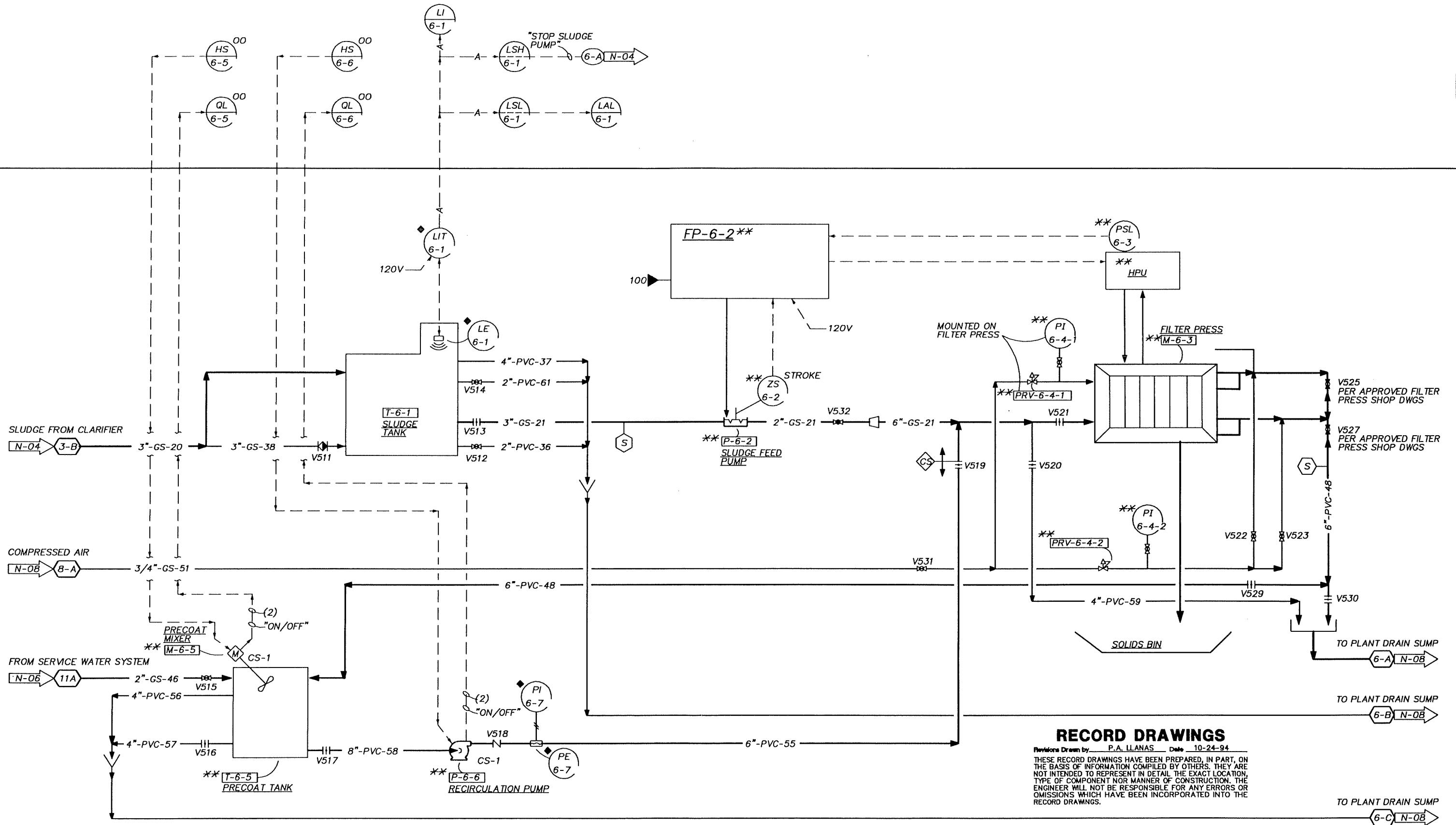
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

SHEET	52
DWG NO.	01-N-06
DATE	OCT 1992
PROJ NO.	GL065602.FD

MCP ♦



**RECORD DRAWINGS**

Revisions Drawn by P.A. LLANAS Date 10-24-94  
 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.



DSGN	KEITH/OHLSSON				
DR	OXLEY/OHLSSON				
CHK	R.NAGEL	10/94	RECORD DRAWING	PAL	SMK
APVD	S.M.KEITH	NO.	DATE	BY	APVD

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

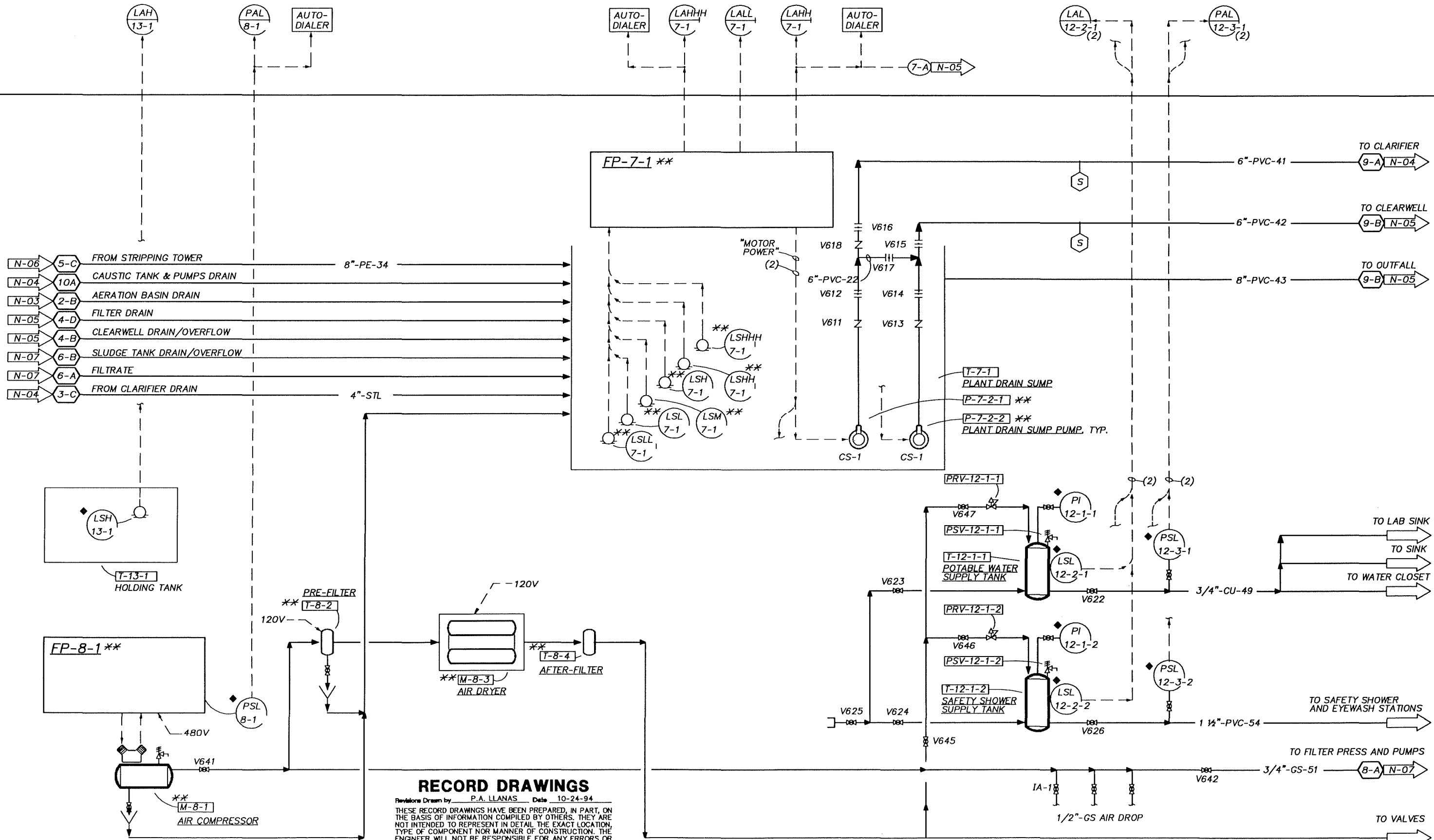
**GRAPHIC SCALES**  
 BAR IS ONE INCH ON ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**PROCESS & INSTRUMENTATION DIAGRAM**  
 SLUDGE DEWATERING

SHEET	53
DWG NO.	01-N-07
DATE	OCT 1992
PROJ NO.	GL065602.FD

MCP ♦



**RECORD DRAWINGS**  
 Revisions Drawn by P.A. LLANAS Date 10-24-94  
 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.

	DSGN	KEITH/OHLSSON
	DR	OXLEY/OHLSSON
	CHK	R.NAGEL
	APVD	S.M.KEITH

NO.	DATE	REVISION
	10/94	RECORD DRAWING

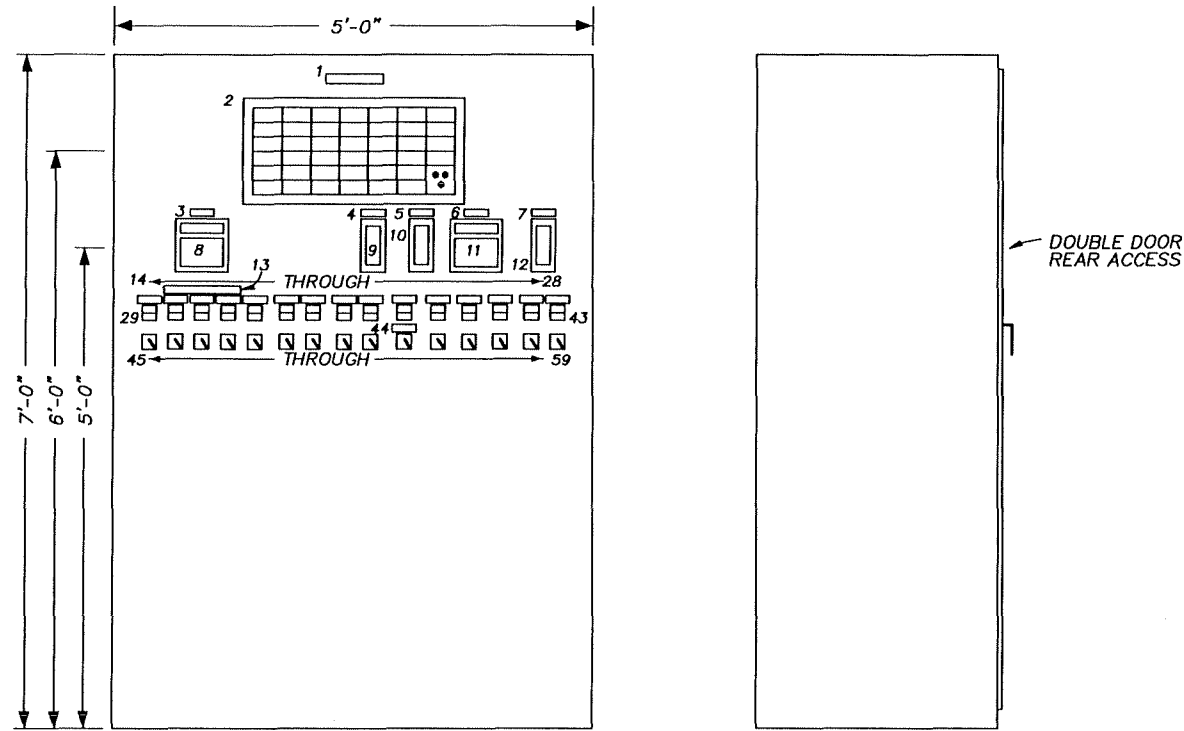
BY	SMK
APVD	

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

**PROCESS & INSTRUMENTATION DIAGRAM**  
**PLANT SUMP/COMPRESSED AIR SYSTEM**

SHEET	54
DWG NO.	01-N-08
DATE	OCT 1992
PROJ NO.	GL065602.FD



FRONT SIDE  
**MAIN CONTROL PANEL (MCP) PANEL ELEVATION**  
 NTS

ROW-COLUMN	TAG NUMBER	WINDOW INSCRIPTION
1-1	QA-1-1-1 (FAIL)	WELL PUMP NO. 1 FAILED
1-2	QA 2-2-1 (FAIL)	AERATION TANK BLOWER FAILED
1-3	(FUTURE)	(FUTURE FILTER-LEAVE BLANK)
1-4	LAH-5-2	STRIPPING TOWER SUMP LEVEL HIGH
1-5	LALL-7-1	PLANT DRAIN SUMP LEVEL LOW-LOW
1-6	PAL-8-1	COMPRESSED AIR PRESSURE LOW
2-1	QA-1-1-2 (FAIL)	WELL PUMP NO. 2 FAILED
2-2	QA-2-2-2 (FAIL)	AERATION WELL BLOWER FAILED
2-3	(FUTURE)	(FUTURE FILTER-LEAVE BLANK)
2-4	QA-5-3 (FAIL)	STRIPPING TOWER FAN FAILED
2-5	LAHH-7-1	PLANT DRAIN SUMP OVERFLOW
2-6	LAH-13-1	WASTEWATER HOLDING TANK LEVEL HIGH
3-1	QA-1-1-3 (FAIL)	WELL PUMP NO. 3 FAILED
3-2	NAH-3-1 (TORQUE)	CLARIFIER DRIVE TORQUE HIGH
3-3	(FUTURE)	(FUTURE FILTER-LEAVE BLANK)
3-4	AAHL-5-4 (pH)	STRIPPING TOWER DISCHARGE pH HIGH/LOW
3-5	LAHHH-7-1	PLANT DRAIN SUMP OVERFLOW
3-6	SPARE	SPARE-UNINSCRIBED
4-1	QA-1-1-4 (FAIL)	WELL PUMP NO. 4 FAILED
4-2	QA-3-1 (FAIL)	CLARIFIER DRIVE FAILED
4-3	LAH-4-4	CLEARWELL LEVEL HIGH
4-4	LAL-12-2-1	POTABLE WATER SUPPLY TANK LEVEL LOW
4-5	LAL-12-2-2	SAFETY SHOWER SUPPLY TANK LEVEL LOW
4-6	SPARE	SPARE-UNINSCRIBED
5-1	QA-1-1-5 (FAIL)	WELL PUMP NO. 5 FAILED
5-2	QA-3-2 (FAIL)	CLARIFIER MIXER FAILED
5-3	LAH-4-4	CLEARWELL LEVEL HIGH
5-4	PAL-12-3-1	POTABLE WATER HEADER PRESSURE LOW
5-5	PAL-12-3-2	SAFETY SHOWER HEADER PRESSURE LOW
5-6	---	TEST-RESET-ACKNOWLEDGE
6-1	FAHL-1-4	WELL FIELD FLOWRATE HIGH/LOW
6-2	AAHL-3-3 (pH)	CLARIFIER pH HIGH/LOW
6-3	QA-4-5 (FAIL)	CLEARWELL PUMP FAILED
6-4	PAL-11-2	SERVICE WATER PRESSURE LOW
6-5	TAL-10-1	CAUSTIC TANK TEMPERATURE LOW

MCP PANEL SCHEDULE		
ITEM NO.	INSTRUMENT ITEM/TAG NUMBER	NAMEPLATE INSCRIPTION (SERVICE LEGEND)
1	NAMEPLATE	MAIN CONTROL PANEL (MCP)
2	ANNUNCIATOR	(SEE ANNUNCIATOR SCHEDULE)
3	NAMEPLATE	TOTAL WELL FIELD FLOWRATE
4	NAMEPLATE	CLARIFIER FEED pH
5	NAMEPLATE	CLEARWELL LEVEL CONTROL
6	NAMEPLATE	STRIPPING TOWER DISCHARGE pH
7	NAMEPLATE	SLUDGE TANK LEVEL
8	FIR/SHL-1-4	(NONE REQUIRED)
9	AI-3-3 (pH)	(NONE REQUIRED)
10	LIC-4-4 (AM)	(NONE REQUIRED)
11	AIR/SHL-5-4 (pH)	(NONE REQUIRED)
12	LI-6-1	(NONE REQUIRED)
13	NAMEPLATE	WELL FIELD PUMP STATUS/CONTROL
14	NAMEPLATE	WELL PUMP NO. 1
15	NAMEPLATE	WELL PUMP NO. 2
16	NAMEPLATE	WELL PUMP NO. 3
17	NAMEPLATE	WELL PUMP NO. 4
18	NAMEPLATE	WELL PUMP NO. 5
19	NAMEPLATE	AERATION TANK BLOWER STATUS/CONTROL
20	NAMEPLATE	AERATION WELL BLOWER STATUS/CONTROL
21	NAMEPLATE	CLARIFIER MECHANISM STATUS/CONTROL
22	NAMEPLATE	CLARIFIER MIXER STATUS/CONTROL
23	NAMEPLATE	SLUDGE TRANSFER PUMP STATUS
24	NAMEPLATE	CLEARWELL PUMP STATUS/CONTROL
25	NAMEPLATE	STRIPPING TOWER FAN STATUS/CONTROL
26	NAMEPLATE	SERVICE WATER PUMP STATUS/CONTROL
27	NAMEPLATE	PRECOAT TANK MIXER STATUS/CONTROL
28	NAMEPLATE	RECIRCULATION PUMP STATUS/CONTROL
29	QL-1-1-1 (OO)	(ON/OFF)
30	QL-1-1-2 (OO)	(ON/OFF)
31	QL-1-1-3 (OO)	(ON/OFF)
32	QL-1-1-4 (OO)	(ON/OFF)
33	QL-1-1-5 (OO)	(ON/OFF)
34	QL-2-2-1 (OO)	(ON/OFF)
35	QL-2-2-2 (OO)	(ON/OFF)
36	QL-3-1 (OO)	(ON/OFF)
37	QL-3-2 (OO)	(ON/OFF)
38	QL-3-4 (OO)	(ON/OFF)
39	QL-4-5 (OO)	(ON/OFF)
40	QL-5-3 (OO)	(ON/OFF)
41	QL-11-1 (OO)	(ON/OFF)
42	QL-6-5 (OO)	(ON/OFF)
43	QL-6-6 (OO)	(ON/OFF)
44	NAMEPLATE	POLYMER PUMP CONTROL
45	HS-1-1-1 (O/O-R)	(ON/OFF-RESET)
46	HS-1-1-2 (O/O-R)	(ON/OFF-RESET)
47	HS-1-1-3 (O/O-R)	(ON/OFF-RESET)
48	HS-1-1-4 (O/O-R)	(ON/OFF-RESET)
49	HS-1-1-5 (O/O-R)	(ON/OFF-RESET)
50	HS-2-2-1 (O/O-R)	(ON/OFF-RESET)
51	HS-2-2-2 (O/O-R)	(ON/OFF-RESET)
52	HS-3-1 (O/O-R)	(ON/OFF-RESET)
53	HS-3-2 (O/O-R)	(ON/OFF-RESET)
54	HS-9-1 (OO)	(ON/OFF)
55	HS-4-5 (O/O-R/A)	(ON/OFF-RESET/AUTO)
56	HS-5-3 (O/O-R)	(ON/OFF-RESET)
57	HS-11-1 (OOA)	(ON/OFF/AUTO)
58	HS-6-5 (OO)	(ON/OFF)
59	HS-6-6 (OO)	(ON/OFF)

NOTE: PROVIDE HOUSEKEEPING PAD UNDER MCP SAME AS PROVIDED FOR MCC.

**RECORD DRAWINGS**

Revisions Drawn by: P.A. LLANAS Date: 10-24-94

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.



DSGN OHLSSON  
 DR WCP OHLSSON  
 CHK R.NAGEL  
 APVD S.M.KEITH

NO.	DATE	REVISION	BY	APVD
	10/94	RECORD DRAWING	PAL	SMK

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

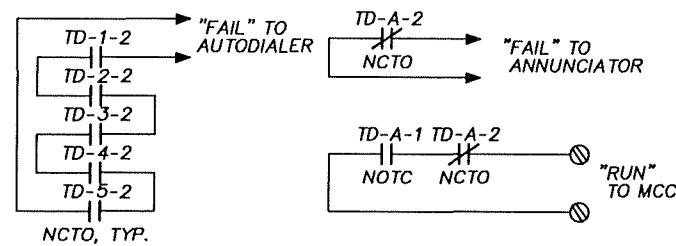
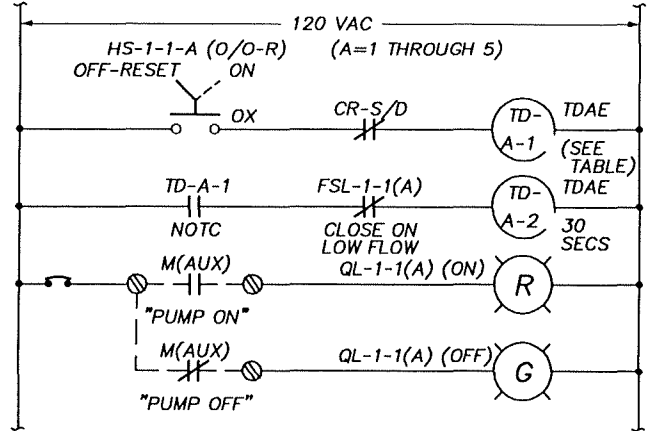
BAR IS ONE INCH ON ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS INSTRUMENTATION AND CONTROL SYSTEM  
 MAIN CONTROL PANEL ELEVATION/DETAILS

SHEET 55  
 DWG NO. 01-N-09  
 DATE OCT 1992  
 PROJ NO. GL065602.FD

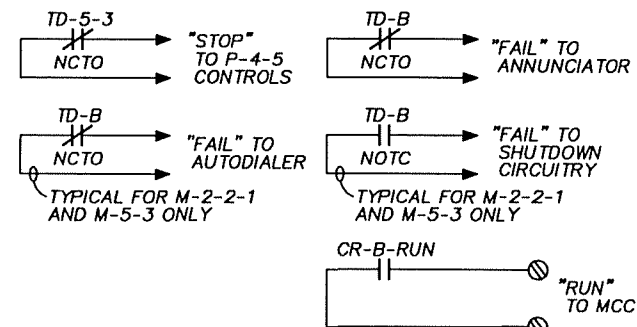
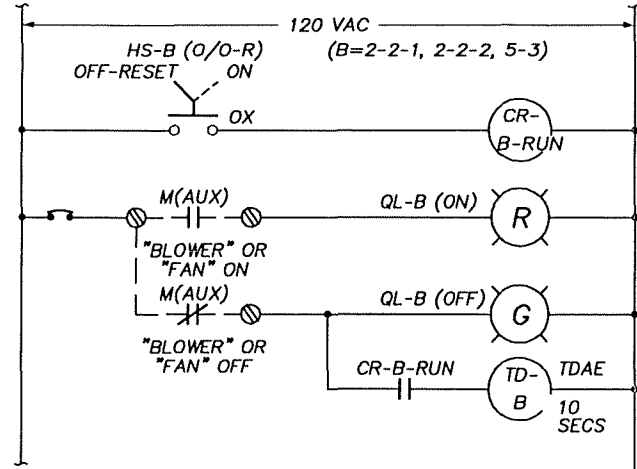




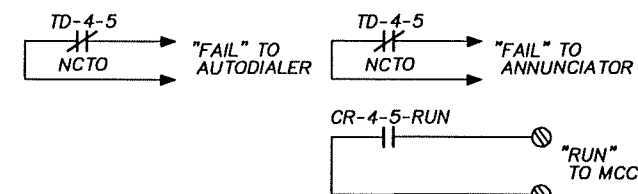
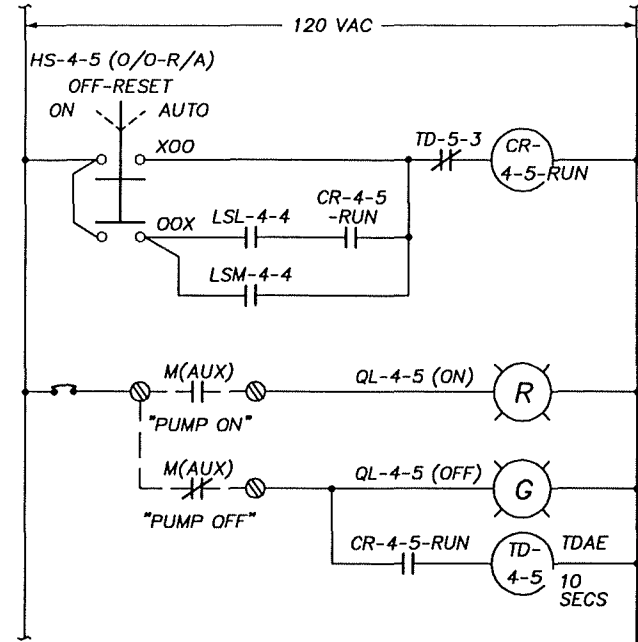
**PUMP "START" DELAY SETTINGS:**

TD-1-1	10 SECONDS
TD-2-1	15 SECONDS
TD-3-1	20 SECONDS
TD-4-1	25 SECONDS
TD-5-1	30 SECONDS

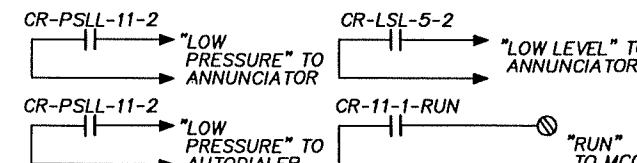
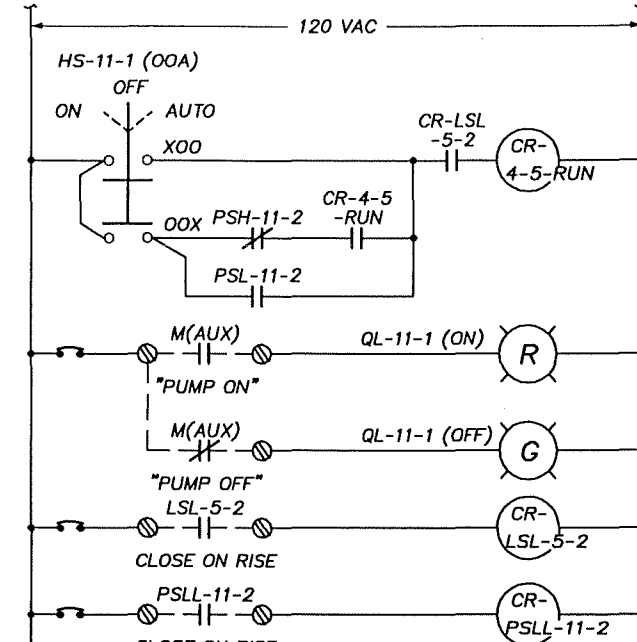
TYPICAL CONTROL SCHEMATIC WELL PUMPS P-1-1-(5)



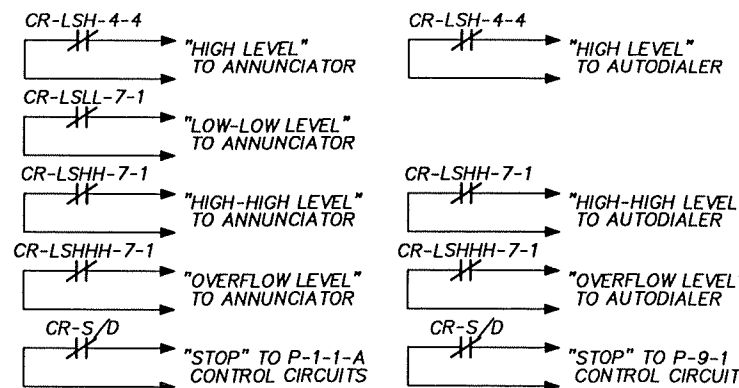
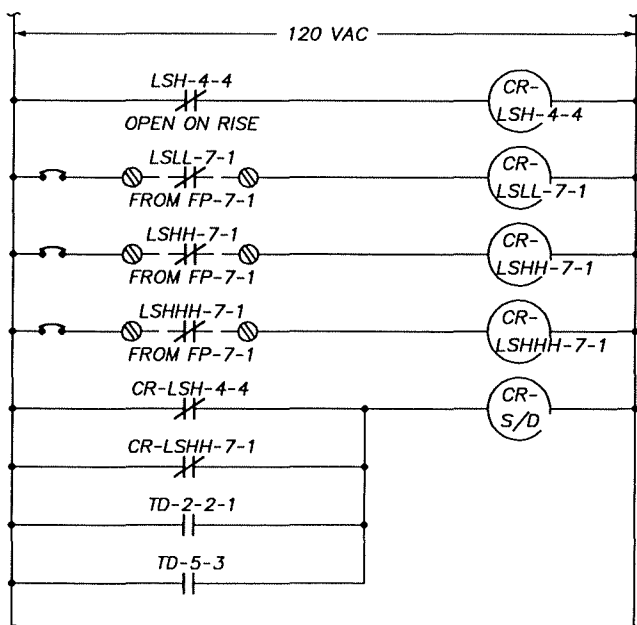
TYPICAL CONTROL SCHEMATIC BLOWERS AND FAN



TYPICAL CONTROL SCHEMATIC CLEARWELL PUMP P-4-5



TYPICAL CONTROL SCHEMATIC SERVICE WATER PUMP P-11-1



TYPICAL CONTROL SCHEMATIC SHUTDOWN CIRCUITRY

(THIS SECTION INTENTIONALLY BLANK)

**RECORD DRAWINGS**

Revisions Drawn by: P.A. LLANAS Date: 10-24-94  
 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.



DSGN OHLSSON  
 OR LOGIC OHLSSON  
 CHK R.NAGEL  
 APVD S.M.KEITH

NO.	DATE	REVISION	PAL	SMK
	10/94	RECORD DRAWING		

**REUSE OF DOCUMENTS**

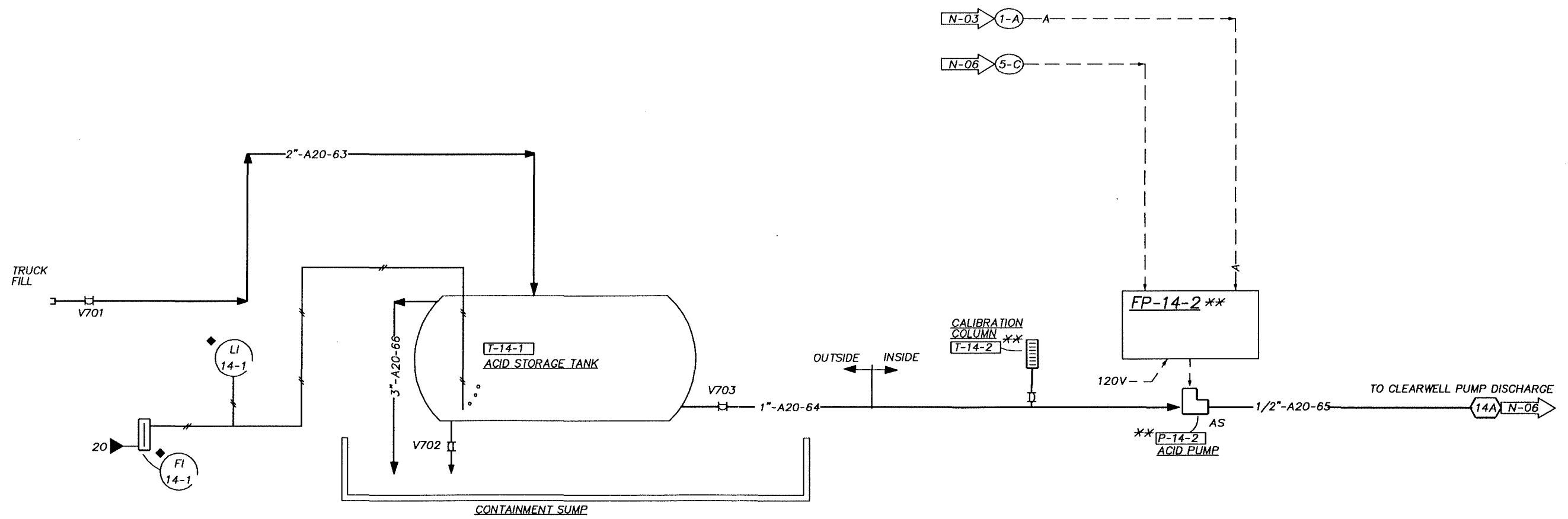
THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL, AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS INSTRUMENTATION AND CONTROL SYSTEM  
 TYPICAL CONTROL SCHEMATICS

SHEET 56  
 DWG NO. 01-N-10  
 DATE OCT 1992  
 PROJ NO. GLO65602.FD



**RECORD DRAWINGS**

Revisions Drawn by P.A. LLANAS Date 10-24-94  
 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.



DSGN	B.OHLSSON						
DR	B.OHLSSON	10-94	RECORD DRAWING				
CHK	R.NAGEL	② 1-93	NEW SHEET				
APVD	S.M.KEITH	NO.	DATE	REVISION	BY	APVD	

**REUSE OF DOCUMENTS**  
 THIS DOCUMENT, AND THE IDEAS AND DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF CH2M HILL AND IS NOT TO BE USED, IN WHOLE OR IN PART, FOR ANY OTHER PROJECT WITHOUT THE WRITTEN AUTHORIZATION OF CH2M HILL.

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

GROUNDWATER REMEDIAL ACTION  
 ONALASKA MUNICIPAL LANDFILL SITE  
 ONALASKA TOWNSHIP, WISCONSIN

PROCESS & INSTRUMENTATION DIAGRAM  
 ACID SYSTEMM

SHEET	57
DWG NO.	01-N-11
DATE	JAN 1993
PROJ NO.	GL065602.FD

