

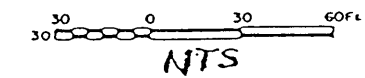
General NOTES

- Contractor shall field verify and coordinate all elevations, dimensions and locations necessary for completion of this contract. Contractor shall provide for necessary adjustments prior to installation of components.
- All above grade piping dimensions and elevations are to centerline of pipe. All below grade piping is dimensioned to the invert (inside bottom) elevation of pipe unless otherwise noted.
- All excavations into or through existing pavement shall be saw cut.
- Furnish and install a 7' wide, 25'-0" long by 6'-0" high completely self-contained skid-mounted chemical feed system, two fill ports, two 1,000 gallon tanks, piped, valved, two magnetic flowmeters, two level systems and two pumps. Furnish and install a concrete berm 12" high x 12'-0" wide x 30' long to serve as secondary containment.
- Remove existing chlorine evaporators and chlorine feed equipment and associated piping, valves and fittings. Replace with sodium hypochlorite metering pumps, CPVC piping, valves and fittings.
- Construct a sodium hypochlorite transfer station with 2 fill ports. Delivery area shall be of fiberglass composite for 15% sodium hypochlorite solution which shall be sloped to a trench and sump.
- Remove existing chlorinators, controls and two 8,000 F 60 x 45" floor scales, 4000 F manorail system and chlorine feed equipment and associated piping in the chlorine feed building salvage chlorine evaporators and feed equipment. Protect the salvaged items against damage and return to Owner. Remove existing concrete pads in the chlorine room. Existing header system including injectors is to be removed. The existing HVAC and lighting system shall also remain.
- Contractor shall install the prefabricated fiberglass composite truck containment area on existing paving in accordance with manufacturer's requirements.
- Cutting torches shall not be allowed in demolition or modification of chlorine piping.
- The Contractor shall coordinate cleaning activities with the Owner. Prior to the Contractor commencing work on existing facilities to be removed, the Owner's personnel will decommission the facilities and purge them of chemicals. It is possible, however, that some chemical residue may remain in the piping. Therefore, care shall be taken when disassembling and handling equipment and piping to be removed. Cutting torches shall not be used and removed items shall be protected from contact with water while indoors. (Water can cause small releases of chlorine gas when it comes into contact with solid residues in the piping and equipment. The small amount of gas released will not be a problem if it occurs out-of-doors, in the open air.)
- Tanks and piping shall be labeled in accordance with NYS bulk chemical storage regulations.
- 1" CPVC piping from the storage tank to the chemical feed area shall be sloped 1% (minimum).
- 2" CPVC piping from the storage tanks to the fill ports shall be sloped 1% (minimum).
- CPVC piping shall be vertically and horizontally every 3 feet, supported

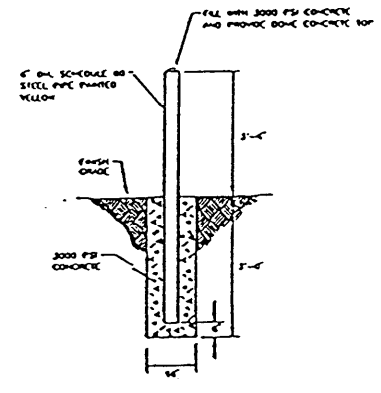
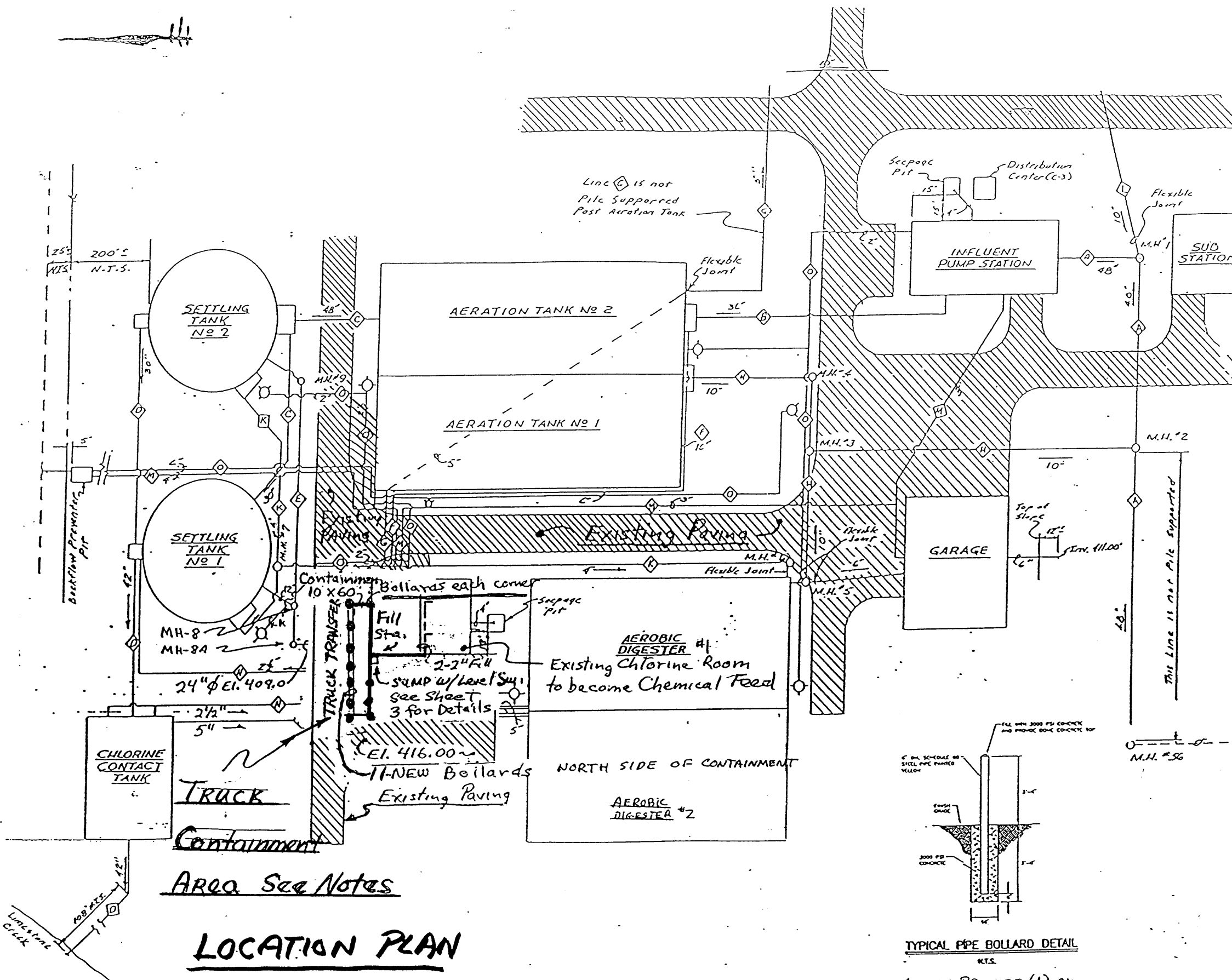
Legend:

- | | |
|------------------------|------------------------|
| ○ Manhole | ○ Digested Sludge |
| ● Existing Manhole | H Plant Sewer |
| ⊕ Fire Hydrant | I Digested Sludge |
| ⊖ Lawn Hydrant | J Waste Sludge |
| A Influent Sewer | K Scum Line |
| B Raw Sewage | L Drying Bed Drains |
| C Mixed Liquor | M Potable Water Supply |
| D Effluent | N Chlorine Solution |
| E Raw Sludge Sewer | O Plant Water |
| F Recirculation Sludge | P Chlorine Tank Drain |
-
- | |
|-----------------------|
| □ FLEXIBLE CONNECTION |
| ⊞ BALL VALVE |
| N BUTTERFLY VALVE |
| ● Bollards |

Onondaga County
Department of Drainage and Sanitation
Meadowbrook Limestone STP
Sodium Hypochloride System
Sheet 1



Drawn by Wally Arnold
of OGDOS



TYPICAL PIPE BOLLARD DETAIL
NTS

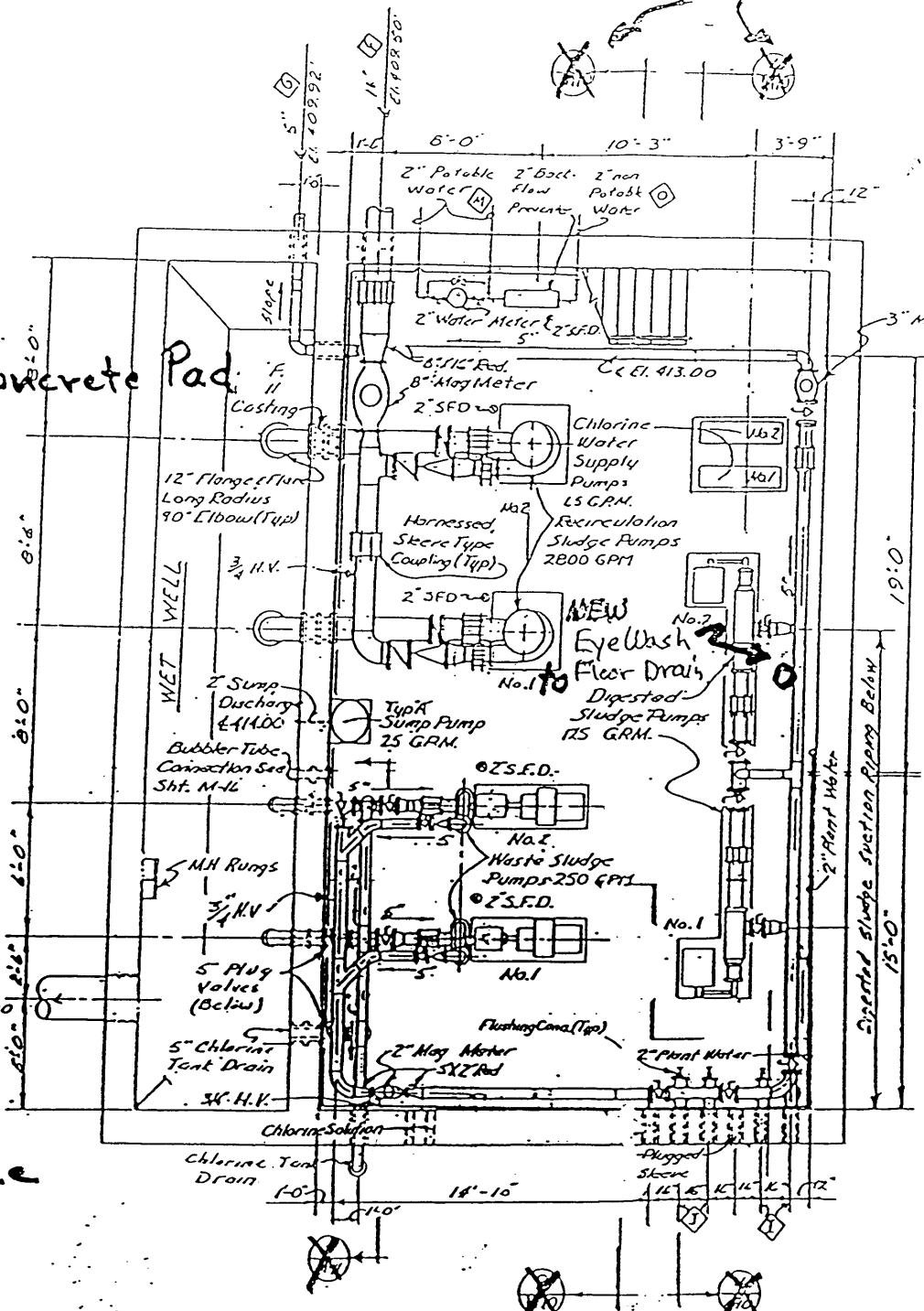
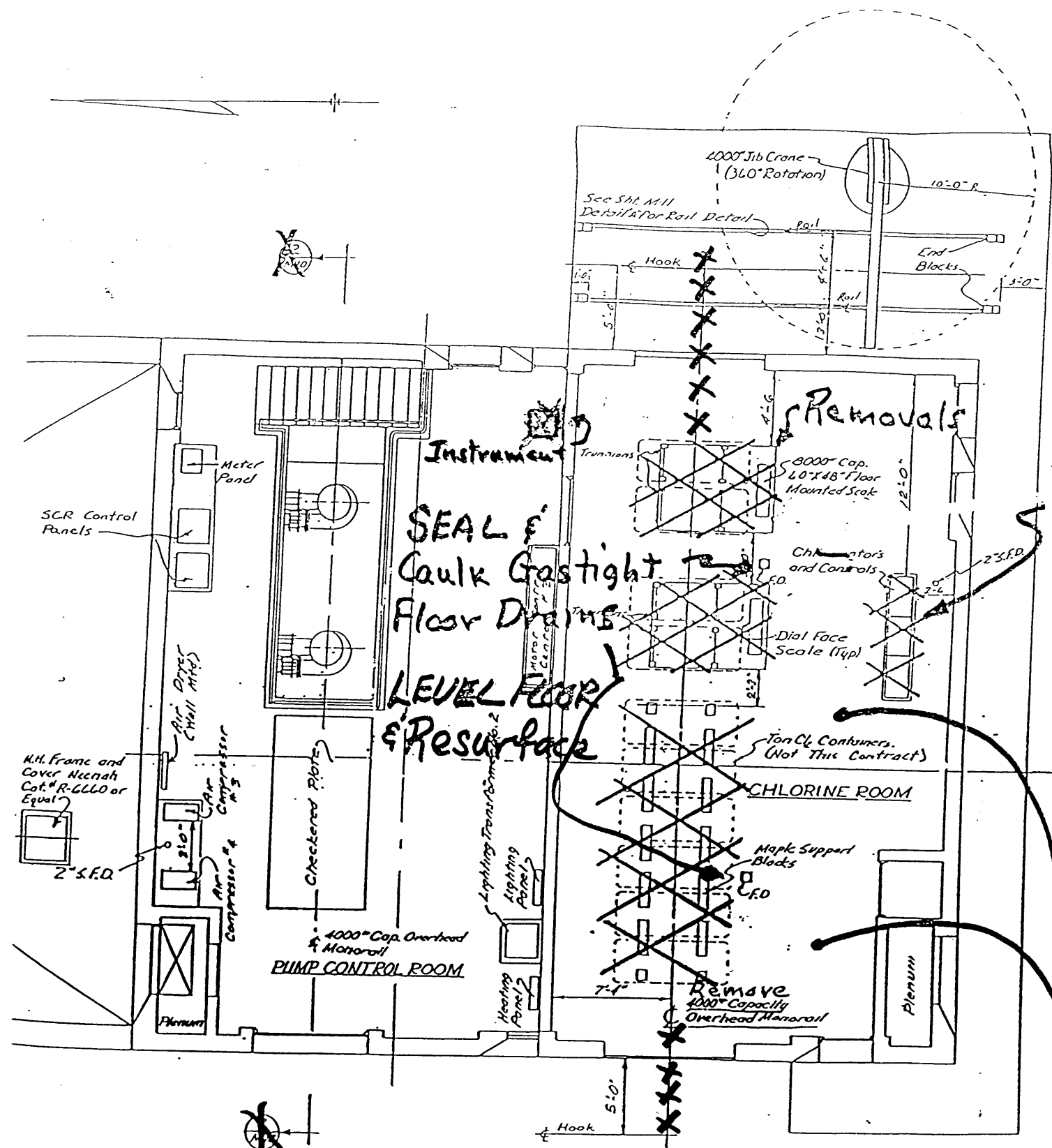
NOTE: PROVIDE (1) on each corner of TRANSFER STATION plus (5) on Northside and (2) on South Side (11 TOTAL)

Area See Notes

LOCATION PLAN

see sheet No. 6
for Sump details

Existing Drawing
Sections & Details
NOT Applicable



XXX-Existing Clz Equipment
to be removed by
this contract. The
OWNER WILL TAG
Equipment to be
turned over to owner.
CONTRACTOR TO REMOVE ALL OTHERS FROM SITE

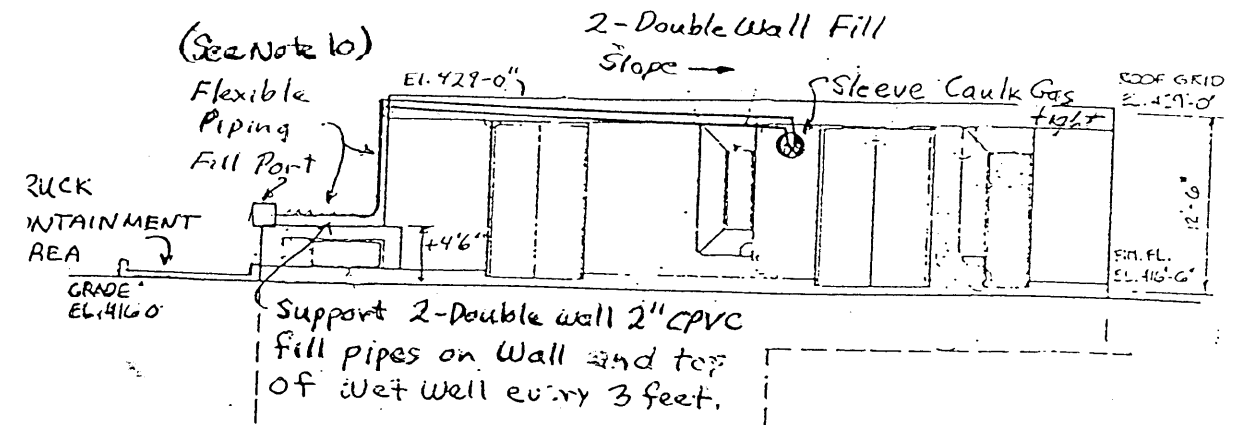
NOTE: See Sheet 1
General Notes
for removals

Onondaga County
Department of Drainage and San
Meadowbrook Limestone SI
Sodium Hypochloride Syste
Sheet 2

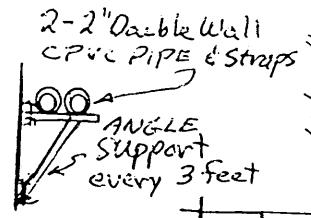
FIRST FLOOR PLAN
SLUDGE PUMP STATION

BASEMENT PLAN
SLUDGE PUMP STATION

← CALLED NORTH



WEST ELEVATION

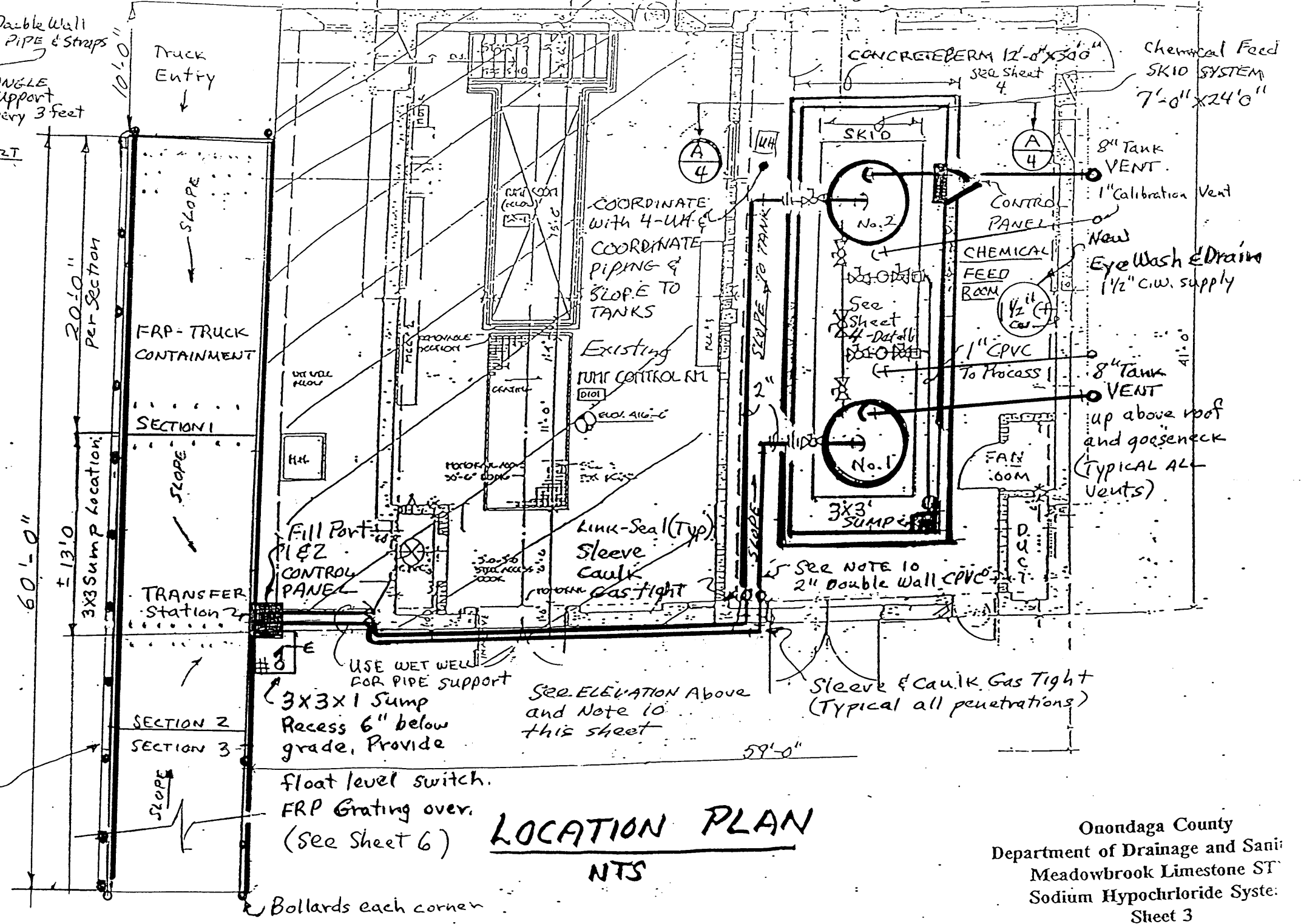


WALL SUPPORT DETAIL

Notes:

1. 2" CPVC pipe running vertically along side the chemical storage tank shall be supported off the tank.
2. Discharge from the pressure relief valve shall be piped back to the pump suction line.
3. Calibration tube shall be vented outside the chemical feed building at an elevation greater than the elevation of the top of the tank.
4. All joints cemented even if screwed joints are made. The only exceptions are mating surfaces of unions.
5. All piping to be Schedule 80 CPVC.
6. All piping shall be braced and supported horizontally and vertically every 3'-0".
7. Seal and caulk floor drains. Resurface floor to make level for skid. Roughen floor for berm and apply bonding agent.
8. Pulsation dampers shall be installed not more than three feet from pump discharge.
9. All valves shall be ball type unless otherwise noted.
10. The piping system exterior to the containment area in the Chemical Feed Room shall be 100 psi Perma-Flex and Containtech Double Wall Flexible Piping System by Containment Technologies Corp.

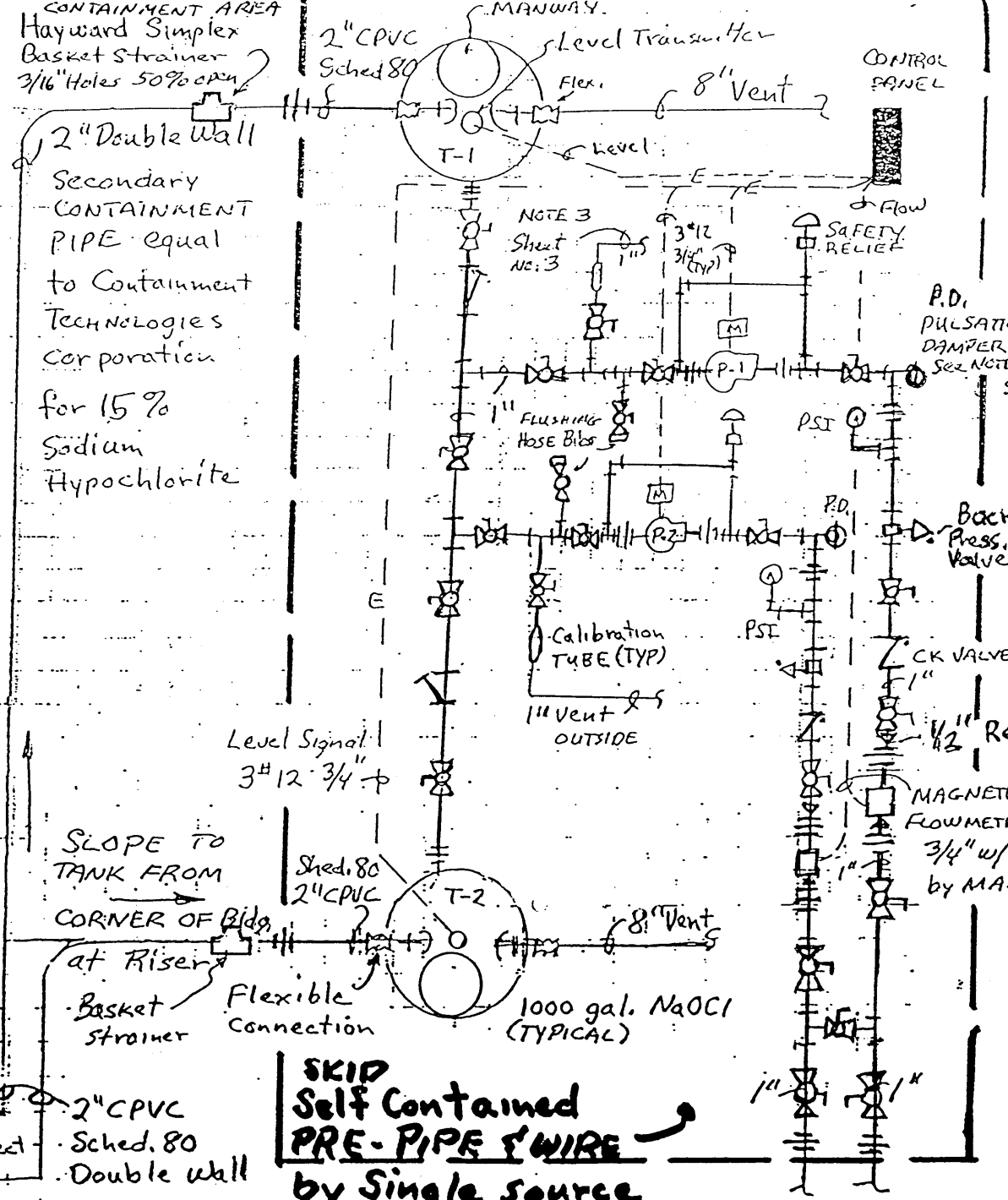
• Pipe Bollards provide on North Side and South Side every 5 feet,



Existing Pump Station
This area is not part of this project

LOCATION PLAN
NTS

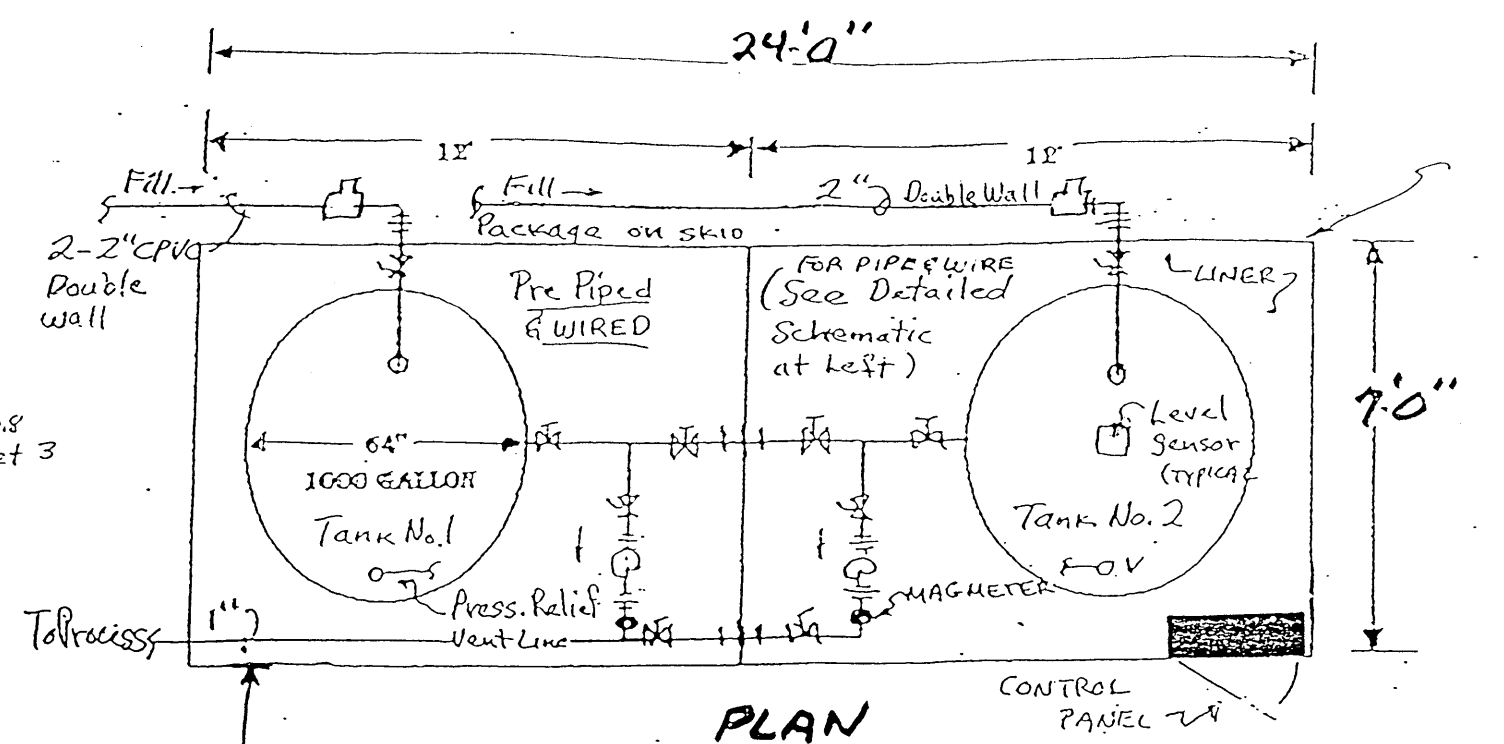
MOUNT WITHIN CONTAINMENT AREA
 Hayward Simplex
 Basket Strainer
 3/16" Holes 50% OPEN



Fill Piping - Es Supported and braced every 3'-0"
 Fill Port at Sump w/Level Sw.
 Quick Disconnect Couplers
 2" CPVC Sched. 80 Double wall

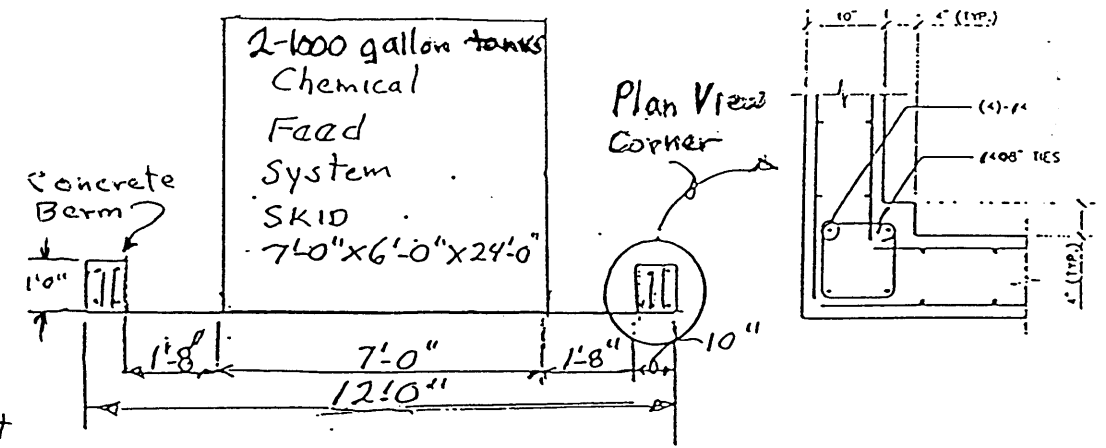
SODIUM HYPOCHLORITE
FEED SYSTEM SCHEMATIC
 N.T.S.

- NOTE: 1. Provide double wall piping system outside SKID containment area in accordance with NYCRR Part 599 for Chemical Bulk Storage.
 2. All Ball Valves shall CPVC with teflon seats and Viton O-Rings
 3. All Hardware shall be teflon, nylon, Viton or FRP including nuts, bolts, straps, hangers, etc.



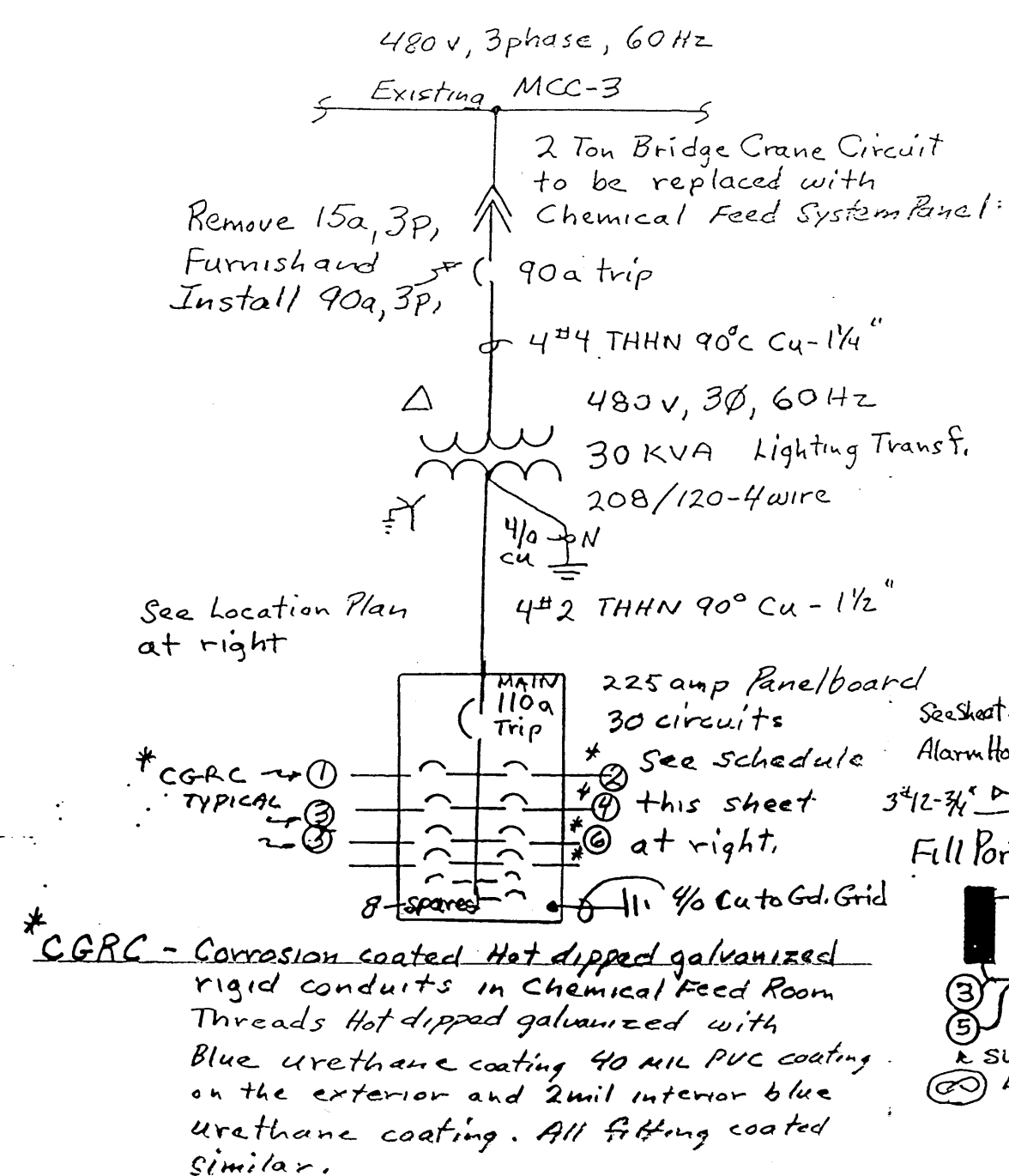
SKID MOUNTED CHEMICAL FEED SYSTEM SELF CONTAINED

NOTE: THIS DETAIL ONLY USED FOR DIMENSIONS AND LAYOUT
 SEE SCHEMATIC AT LEFT FOR COMPLETE SYSTEM COMPONENTS.

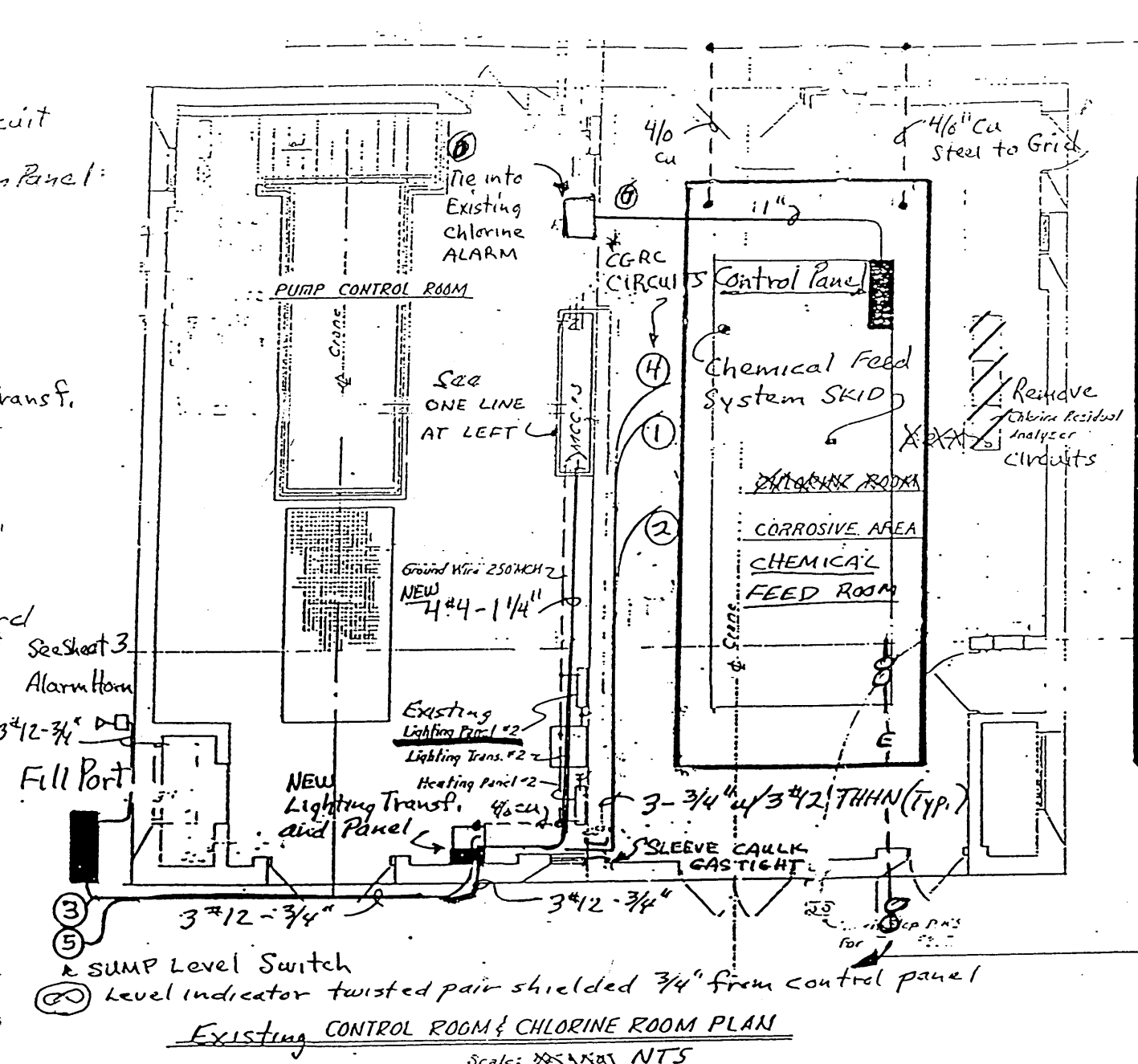


SECTION A-3

1/4" = 1'-0"



ONE LINE DIAGRAM
NTS



NEW PANEL Schedule

225 amp MAINS
208/120-3Ø circuit
MAIN CB 110 a 3P
PROVIDE 8-15a 1p spare
① 20a 1 pole Metering Pump #1
② 20a 1 pole Metering Pump #2
③ 15a 1 pole Fill Port & Heater
④ 20a 1 pole CONTROL PANEL
⑤ 15a 1 pole SUMP Float Switch

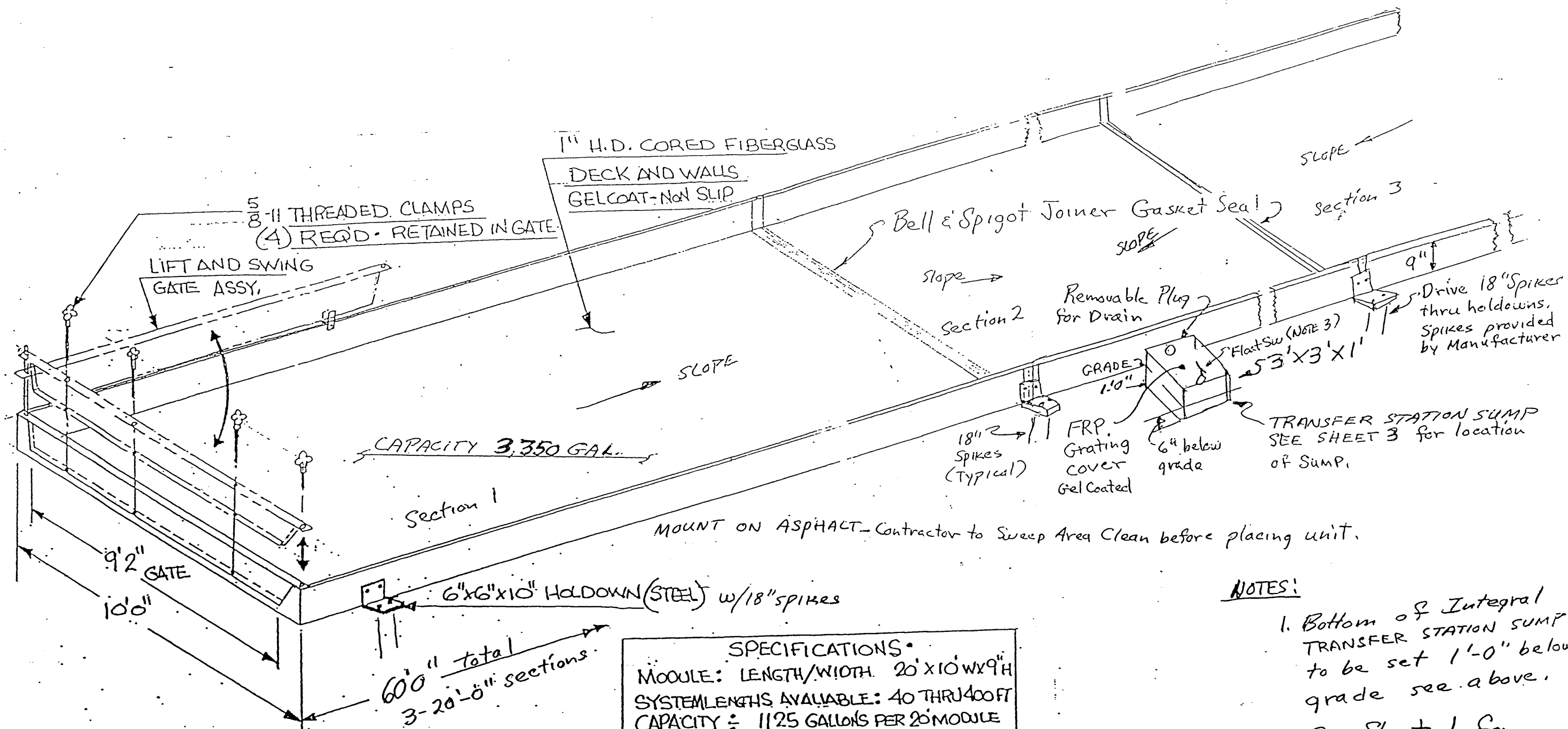
See sheet 7 and sheet 1

MIX. WIRE & CONDUIT

⑥ - 12#14-1" Alarms to Plant Control System (See Sheet 7)

NOTE 2.

New Electrical



1" H.D. CORED FIBERGLASS
DECK AND WALLS
GELCOAT-NON SLIP

5/8" THREADED CLAMPS
(4) REQ'D - RETAINED IN GATE

LIFT AND SWING
GATE ASSY.

Bell & Spigot Joiner Gasket Seal

CAPACITY 3,350 GAL.

Removable Plug
for Drain

Drive 18" Spikes
thru holdowns.
Spikes provided
by Manufacturer

GRADE 1'-0"

Float Sw (NOTE 3)

5'3" X 3' X 1'

FRP
Grating
Cover
Gel Coated

TRANSFER STATION SUMP
SEE SHEET 3 for location
of Sump.

MOUNT ON ASPHALT - Contractor to Sweep Area Clean before placing unit.

6"x6"x10" HOLD-DOWN (STEEL) w/18" SPIKES

60'0" total
3-20'-0" sections

SPECIFICATIONS
MODULE: LENGTH/WIDTH 20' X 10' W X 9" H
SYSTEM LENGTHS AVAILABLE: 40 THRU 400 FT
CAPACITY: 1125 GALLONS PER 20' MODULE
MODULE WEIGHT: - 1000# w/o GATE
GATE WEIGHT: 53# FRAME WEIGHT: 110#

FORM SINGLE CONTINUOUS PAN

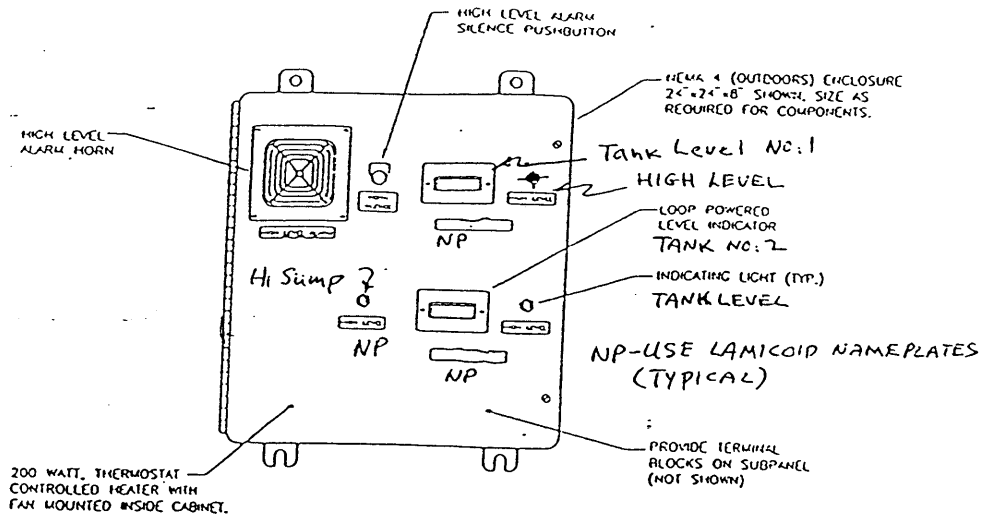
TANK TRUCK CONTAINMENT SYSTEM

Not to SCALE

GATE ASSY - STEEL (COATED FOR CORROSION PROTECTION)
GASKET SEAL ALL AROUND - HAND TIGHTEN CLAMPS
LIFT AND SWING AWAY TO STORAGE BRACKET
360° SWING CIRCLE
DECK MATL: CORED FIBERGLASS LAMINATE

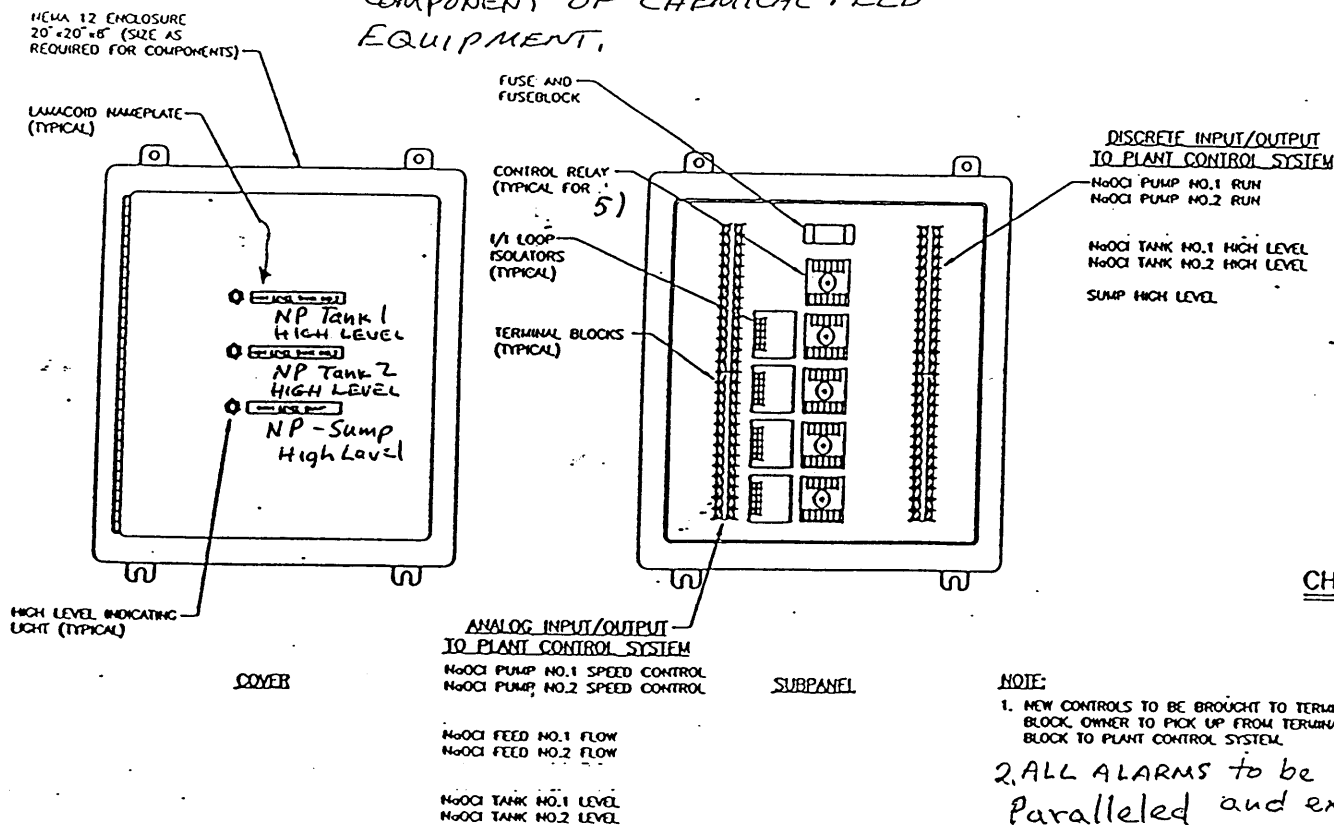
NOTES:

1. Bottom of Integral TRANSFER STATION SUMP to be set 1'-0" below grade see above.
2. See Sheet 1 for Sump Layout Plan
3. The Float switch shall be supplied by Chemical Feed SKID Manufacturer.
4. Installation shall be on clean level blacktop, which has been previously prepared by the owner.



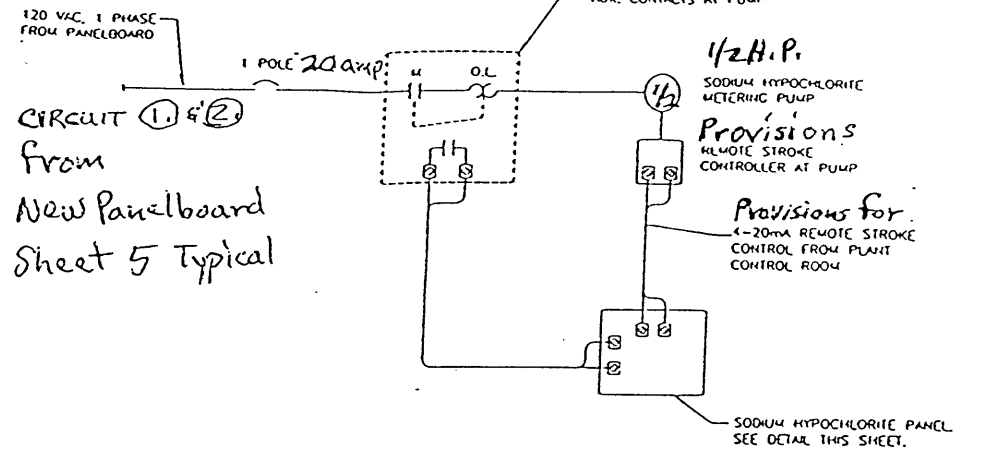
FILL PORT ALARM PANEL DETAIL
NOT TO SCALE

NOTE: NEMA 4 MOUNTED ON PIPE STAND AT TRANSFER STATION. FURNISHED AS COMPONENT OF CHEMICAL FEED EQUIPMENT.



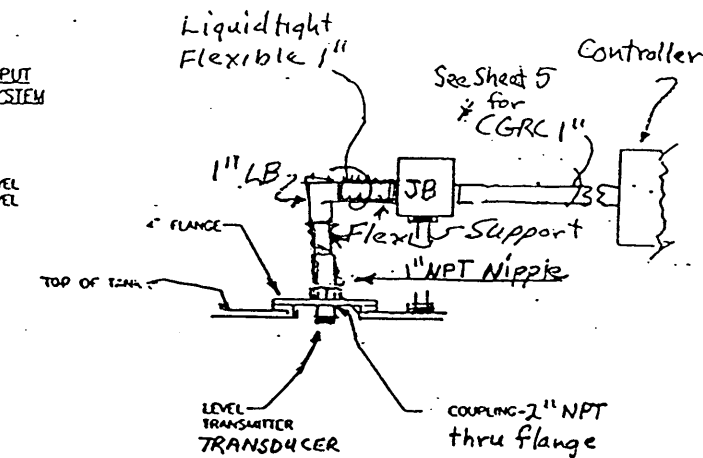
SODIUM HYPOCHLORITE PANEL DETAIL
NOT TO SCALE

NOTE: FURNISHED AND INSTALLED AS INTEGRAL COMPONENT OF CHEMICAL FEED CONTROLS PRE-WIRED.



SODIUM HYPOCHLORITE METERING PUMP ONE-LINE DIAGRAM
(TYP. FOR T.W.G. PUMPS)

NOTE: 1. ALL ELECTRICAL WORK IS NEW UNLESS INDICATED OTHERWISE.



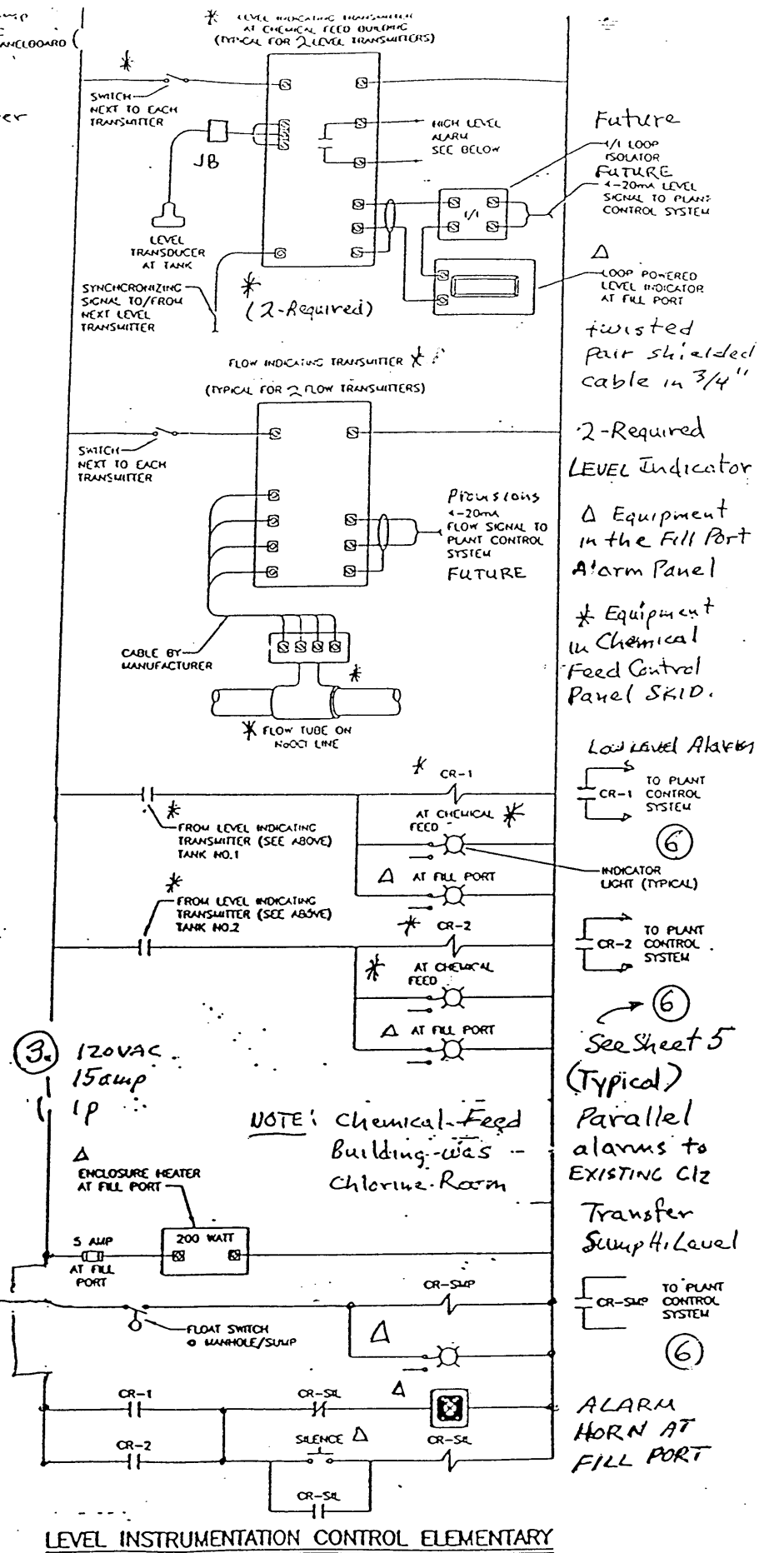
CHEMICAL STORAGE TANK LEVEL TRANSMITTER
NOT TO SCALE

NOTE: 1. NEW CONTROLS TO BE BROUGHT TO TERMINAL BLOCK OWNER TO PICK UP FROM TERMINAL BLOCK TO PLANT CONTROL SYSTEM.

2. ALL ALARMS to be paralleled and existing Chlorine alarm used.
3. See Sheet 5 for New Electric Panel

NOTE: Transducer must be mounted using 2" NPT threaded for Corrosive Chemical applications.
TRANSMIT TO Influent P.S., CR-1, CR-2, & CR-SMP via existing Chlorine alarm circuit.

Circuit (4.) 20 amp 120 VAC FROM PANELBOARD



LEVEL INSTRUMENTATION CONTROL ELEMENTARY