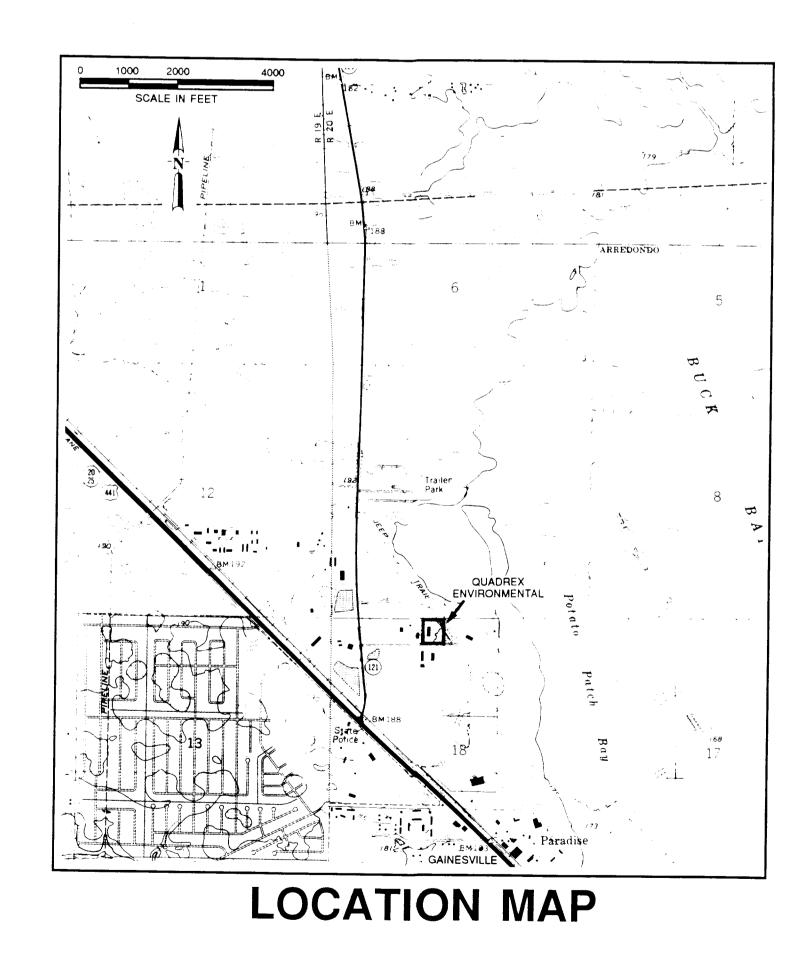
# QUADREX

## PROCESSING/STORAGE FACILITY

## GAINESVILLE, FLORIDA



### PREPARED BY:



	DP MING INDEX
DWG NO	DESCRIPTION
_	COVER SHEET
1 OF 12	GENERAL NOTES AND ABBREVIATIONS
2 OF 12	FACILITY PLAN AND DETAILS
3 OF 12	PROCESS FLOW DIAGRAM
4 OF 12	PROCESSING/STORAGE - FIRST FLOOR PLAN
5 OF 12	PROCESSING/STORAGE - SECOND FLOOR PLAN
6 OF 12	PROCESSING/STORAGE - THIRD FLOOR PLAN
7 OF 12	PROCESSING/STORAGE - PLAN AND SECTION
8 OF 12	PROCESSING/STORAGE - SECTIONS AND DETAILS
9 OF 12	FOUNDATION PLAN
10 OF 12	FOUNDATION SECTIONS AND DETAILS
11 OF 12	PROCESS AND INSTRUMENTATION DIAGRAM LEGEND
12 OF 12	PROCESS AND INSTRUMENTATION DIAGRAM

PROJECT No. 16820-778-01

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DECEMBER 1991

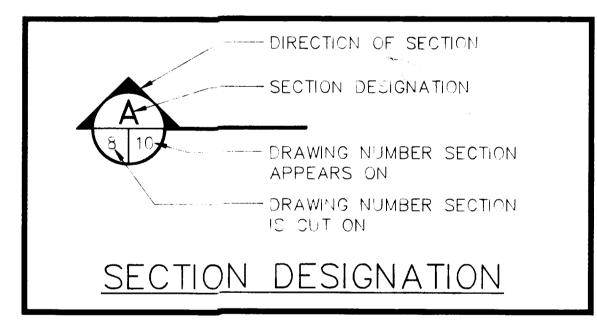
#### GENERAL NOTES

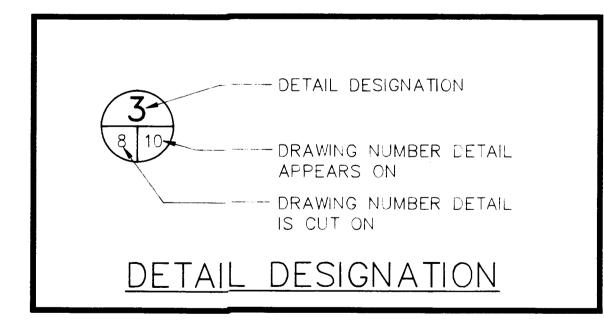
- 1. ALL ELEVATIONS ARE BASED ON U.S.G.S. MEAN SEA LEVEL DATUM OF 1929, UNLESS OTHERWISE NOTED.
- 2. SURVEY BASELINE AND ALL ELEVATIONS SHOWN WITHIN THE LIMITS OF CONSTRUCTION ARE PROVIDED BY TERRANCE BRANNAN LAND SURVEYOR DATED MAY 9, 1991.
- 3. ANY N.V.G.D. '29 MONUMENT WITHIN THE LIMITS OF CONSTRUCTION IS TO BE PROTECTED. IF IN DANGER OF DAMAGE, THE CONTRACTOR SHOULD NOTIFY:

MR. RONNIE TAYLOR FLORIDA DEPARTMENT OF NATURAL RESOURCES BUREAU OF SURVEYS AND MAPPING SUITE 309 3900 COMMONWEALTH BLVD. TALLAHASSEE, FLORIDA 32303 TELEPHONE # (904) 488-2427

- 4. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS BUT DO NOT PURPORT TO BE ABSOLUTELY CORRECT. THERE MAY BE OTHER IMPROVEMENTS, UTILITIES, ETC. WHICH ARE WITHIN THE PROJECT AREA AND WHICH HAVE BEEN INSTALLED AND CONSTRUCTED SINCE THE PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY, PRIOR TO CONSTRUCTION, THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES (WHETHER OR NOT SHOWN ON THE PLANS) AFFECTING HIS WORK.
- 5. THE INFORMATION PROVIDED IN THESE PLANS IS SOLELY TO ASSIST THE CONTRACTOR IN ASSESSING THE NATURE AND EXTENT OF THE CONDITIONS WHICH MAY BE ENCOUNTERED DURING THE COURSE OF WORK. ALL CONTRACTORS ARE DIRECTED, PRIOR TO BIDDING, TO CONDUCT WHATEVER INVESTIGATIONS THEY MAY DEEM NECESSARY TO ARRIVE AT THEIR OWN CONCLUSIONS REGARDING THE ACTUAL CONDITIONS THAT WILL BE ENCOUNTERED, AND UPON WHICH THEIR BIDS WILL BE BASED.
- 6. THE CONTRACTOR'S ATTENTION IS CALLED TO THE FACT THAT THERE MAY BE SOME UTILITY CONFLICTS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LOCATE AND PROTECT ANY AND ALL EXISTING UTILITIES ON THIS PROJECT WITHOUT INCREASE IN THE CONTRACT PRICE OR TIME.
- 7. FIELD CONDITIONS MAY NECESSITATE SLIGHT ALIGNMENT AND GRADE DEVIATION OF THE PROPOSED CONSTRUCTION TO AVOID OBSTACLES, AS ORDERED BY THE ENGINEER. THE CONTRACTOR SHALL CONSTRUCT THE PROPOSED FACILITIES TO THE ORDERED DEVIATION WITHOUT INCREASE IN THE CONTRACT PRICE OR TIME.
- 8. THE CONTRACTOR SHALL PROVIDE AT LEAST 48 HOURS NOTICE TO THE VARIOUS UTILITY COMPANIES IN ORDER TO PERMIT THE LOCATION OF EXISTING UNDERGROUND UTILITIES IN ADVANCE OF CONSTRUCTION. CONTACT UTILITIES NOTIFICATION CENTER AT 1-800-282-8881.
- 9. THE CONTRACTOR SHALL REPLACE ALL EXISTING PAVING, STABILIZED EARTH, CURBS, DRIVEWAYS, SIDEWALKS, FENCES, MAILBOXES, SIGNS, AND OTHER IMPROVEMENTS WITH THE SAME TYPE OF MATERIAL THAT WAS REMOVED DURING CONSTRUCTION OR AS DIRECTED BY THE ENGINEER WITHOUT INCREASE IN THE CONTRACT PRICE OR TIME.
- 10. THE CONTRACTOR SHALL MAINTAIN A CLEAR PATH FOR ALL SURFACE WATER DRAINAGE STRUCTURES AND DITCHES DURING ALL PHASES OF CONSTRUCTION.
- 11. THE CONTRACTOR SHALL PROVIDE ALL WARNING SIGNALS, SIGNS, LIGHTS, AND FLAGMEN AS REQUIRED BY DOT IN THE "MANUAL" ON TRAFFIC CONTROL & SAFE PRACTICES."
- 12. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY WHEN CONFLICTS BETWEEN DRAWINGS AND ACTUAL CONDITIONS ARE DISCOVERED.
- 13. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH EXISTING ALACHUA COUNTY DESIGN AND CONSTRUCTION STANDARDS UNLESS THOSE STANDARDS CONFLICT WITH THESE CONTRACT DOCUMENTS IN WHICH CASE THESE CONTRACT DOCUMENTS SHALL GOVERN. SUCH CONFLICTS SHALL BE BROUGHT TO THE ENGINEER'S ATTENTION IMMEDIATELY.

- 14. PREVENT DISTURBANCE TO AND UNDERMINING OF ADJACENT STRUCTURES, SLABS, PIPING, AND OTHER UTILITIES/FACILITIES DURING CONSTRUCTION.
- 15. VERIFY ALL CLEARANCES PRIOR TO CONSTRUCTION.
- 16. DEWATERING SHALL BE PROVIDED BY CONTRACTOR IN ACCORDANCE WITH PROJECT SPECIFICATIONS AS NECESSARY TO INSTALL/CONSTRUCT THE WORK PROPERLY. DEWATERING DISCHARGE SHALL BE IN ACCORDANCE WITH APPLICABLE REGULATIONS AND REQUIREMENTS OF AGENCIES HAVING JURISDICTION.
- 17. ALL PIPING SHALL BE PROPERLY SUPPORTED. ALL PIPING WHICH WILL BE PRESSURIZED DURING OPERATION SHALL BE PROPERLY RESTRAINED.
- 18. CONSTRUCTION MONUMENTS FOR VERTICAL AND HORIZONTAL CONTROL HAVE BEEN PROVIDED AT THE PROJECT SITE. THE CONTRACTOR SHALL VERIFY THE ACCURACY OF THESE MONUMENTS TO HIS SATISFACTION. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR PROPER VERTICAL AND HORIZONTAL ALIGNMENT OF CONSTRUCTED FACILITIES AND FINISHED GRADE.
- 19. IT IS THE REPONSIBILITY OF THE CONTRACTOR TO BECOME FAMILIAR WITH THE OSHA EXCAVATION SAFETY STANDARDS AND TO ABIDE BY THEM AS COVERED UNDER THE FLORIDA TRENCH SAFETY ACT (LAWS OF FLORDIA 90-96) EFFECTIVE OCTOBER 1, 1990.
- 20. THE CONTRACTOR SHALL STATE IN WRITING PRIOR TO BEGINNING WORK THAT HE WILL COMPLY WITH APPLICABLE TRENCH SAFETY STANDARDS.





#### **ABBREVIATIONS**

<u>GE</u>	NERAL	MECHANIC		
G	BUILDING BENCH MARK BOTTOM	BLD BSJ BV	BLIND BELL AND BALL VAL	
С	CONCRETE	BWJ	BUTT-WE	
Τ	CONTINUOUS	CMP	CORRUGA	
	CONSTRUCTION MONUMENT	CON	CONCENT	
D	CENTERED	CV	CHECK V	

DET DETAIL DIA DIAMETER FLORIDA DEPARTMENT OF TRANSPORTATION DWG DRAWING EΑ EACH ELEVATION EXISTING FINISHED FLOOR FLEXIBLE FLEX GALVANIZED GRADE

GALVANIZED STEEL HIGH DENSITY POLYETHYLENE INSIDE DIAMETER INVERT ELEVATION LIMEROCK BEARING RATIO MAXMAXIMUM

MANUFACTURER MANHOLE MIN MINIMUM MISCELLANEOUS N/A NOT APPLICABLE NOT IN CONTRACT

ВМ

BTM

CONC

CONT

C/M

NOT TO SCALE OUTSIDE DIAMETER REQUIRED SLOPE

SCHEDULE SHEET STAINLESS STEEL STA STATION STD STANDARD

STEEL THK THICK TYP TYPICAL

#### STRUCTURAL

<u>311</u>	RUCTURAL
AA STD	ALUMINUM ASSOCIATION STANDARD
ACI	AMERICAN CONCRETE INSTITUTE
ALUM ASTM	ALUMINUM AMERICAN SOCIETY FOR TESTING
ASTM	AND MATERIALS
В/	BOTTOM OF
BOTT	BOTTOM
	CENTERLINE
Ф СС	CENTER TO CENTER
CLR	CLEAR
CONC	CONCRETE
DN	DOWN
DWG	DRAWING
EF	EACH FACE
EQ	EQUAL, EQUALLY
EW	EACH WAY
GRTG	GRATING
HK	HOOK
HORIZ	HORIZONTAL
L	ANGLE
LG A	LONG
ø OC	DIAMETER
P	ON CENTER(S) PLATE
PSI	POUNDS PER SQUARE INCH
REINF	REINFORCEMENT, REINFORCING
SP	SPACING, SPACED
SQ	SQUARE
T/	TOP OF
UNO	UNLESS NOTED OTHERWISE
VERT	VERTICAL
W /	\MITH

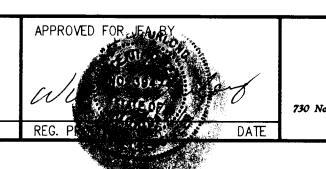
WELDED WIRE FABRIC

POUNDS PER INCH

### MECHANICAL

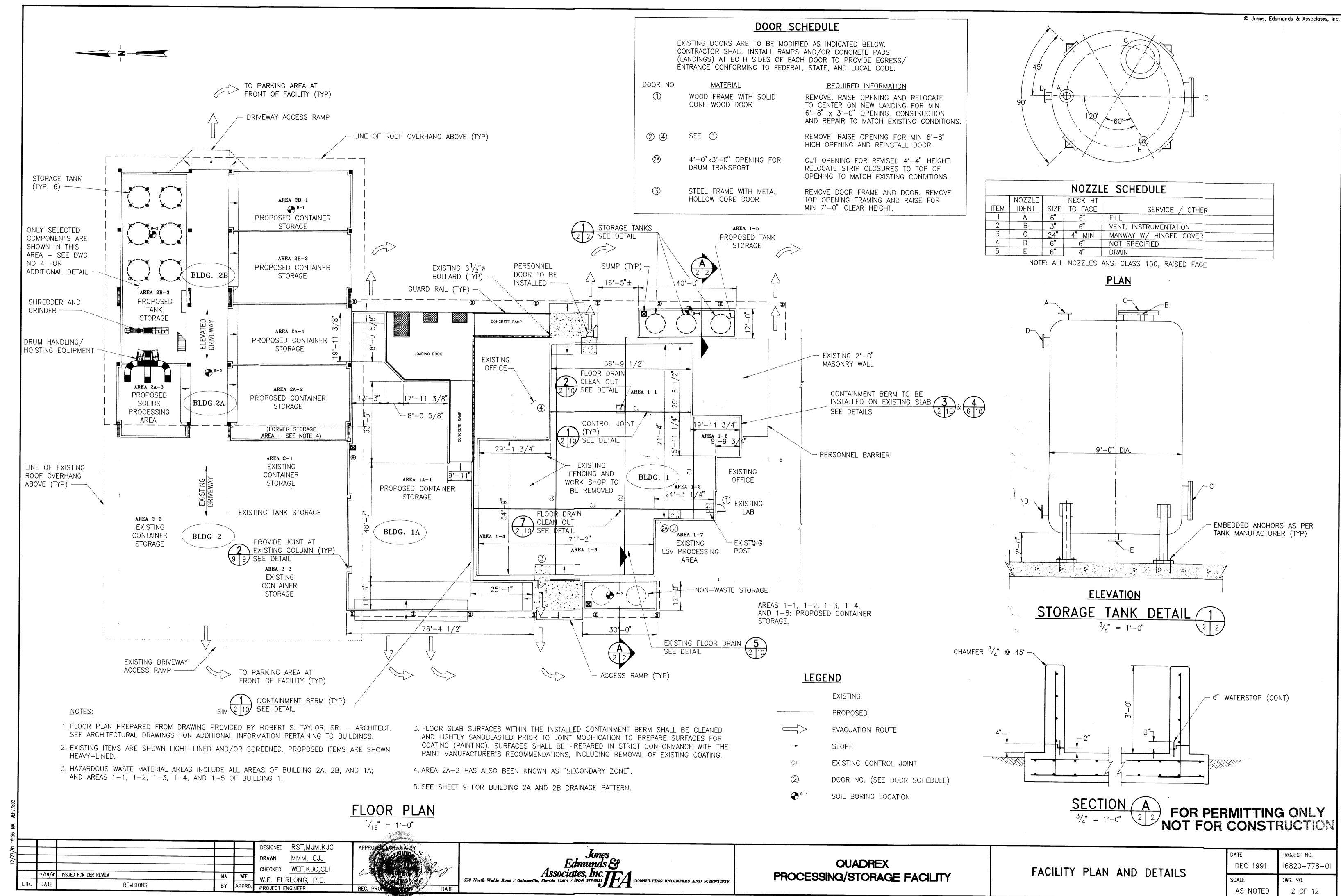
BLD	BLIND
BSJ	BELL AND SPIGOT JOINT
BV	BALL VALVE
BWJ	BUTT-WELDED JOINT
CMP	CORRUGATED METAL PIPE
CON	CONCENTRIC
CV	CHECK VALVE
ECC	ECCENTRIC
ELL	ELBOW
FF	FLAT FACE
FJ	FLANGED JOINT
FLG(D)	FLANGE(D)
FRP	FIBERGLASS REINFORCED PLASTIC
GV	GATE VALVE
LR	LONG RADIUS
NPT	AMER. STD. TAPER PIPE THREAD
PE	PLAIN END
PV	PLUG VALVE
PVC	POLYVINYL CHLORIDE
RED	REDUCER
RF	RAISED FACE
RTR(P)	REINFORCED THERMOSETTING RESIN (PIPE)
SOF	SLIP-ON FLANGE
SR	SHORT RADIUS
SWJ	SOLVENT WELD JOINT
THRD	THREAD(ED)
WJ	WELDED JOINT

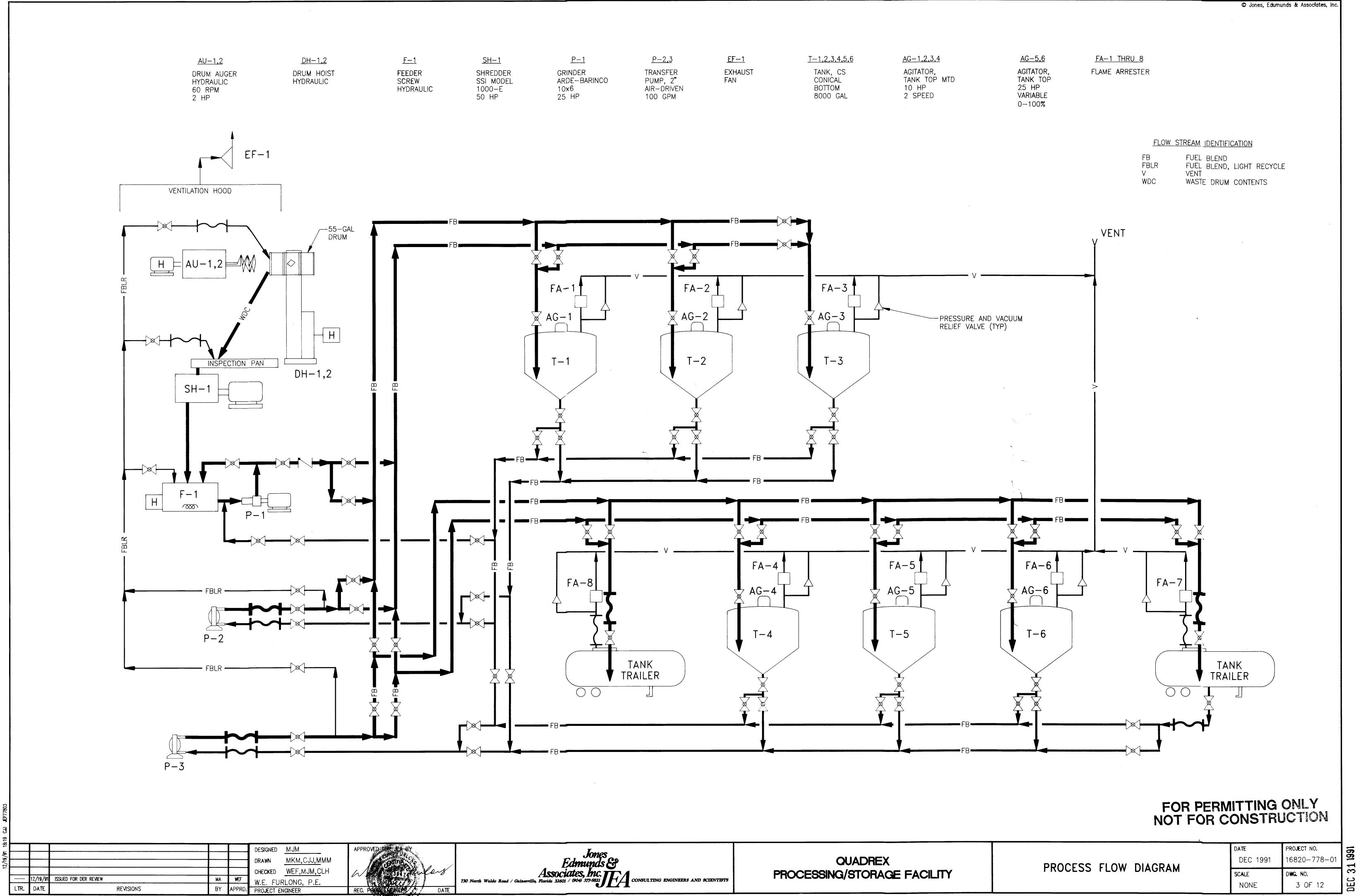
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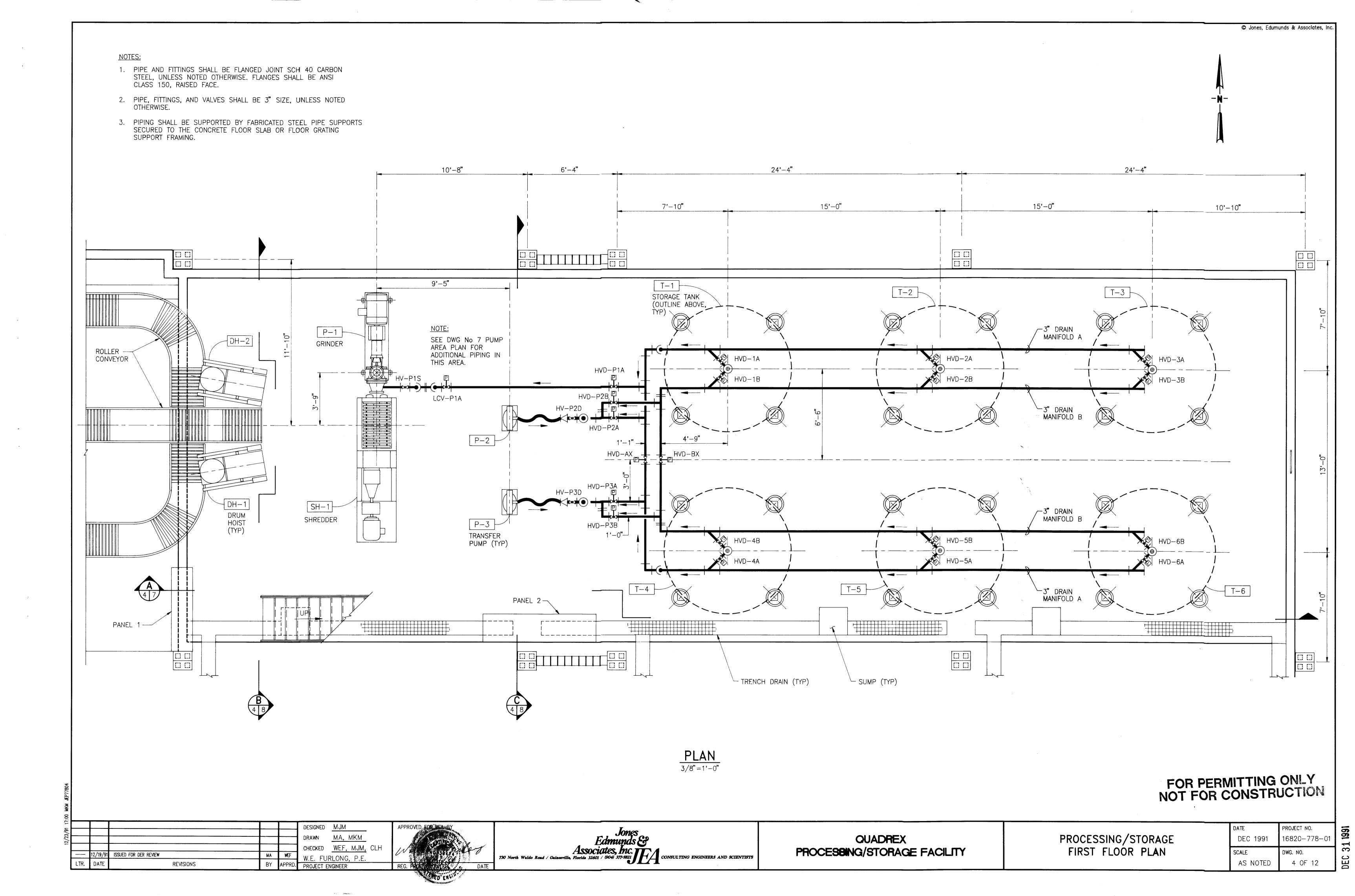


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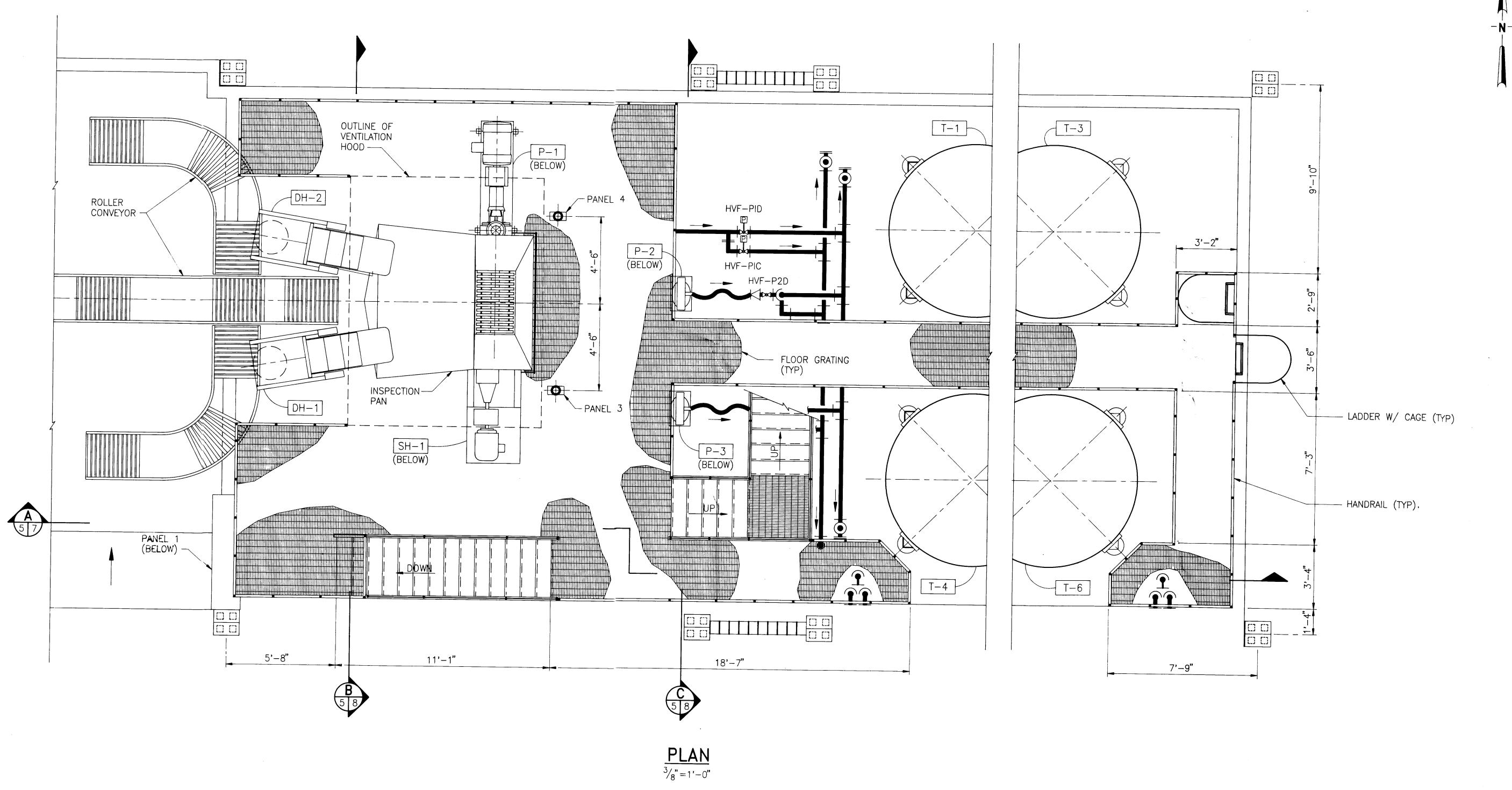


NONE 3 OF 12



NOTES:

- PIPE AND FITTINGS SHALL BE FLANGED JOINT SCH 40 CARBON STEEL, UNLESS NOTED OTHERWISE. FLANGES SHALL BE ANSI CLASS 150, RAISED FACE.
- 2. PIPE, FITTINGS, AND VALVES SHALL BE 3" SIZE, UNLESS NOTED OTHERWISE.
- PIPING SHALL BE SUPPORTED BY FABRICATED STEEL PIPE SUPPORTS SECURED TO THE CONCRETE FLOOR SLAB OR FLOOR GRATING SUPPORT FRAMING.



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	12/19/91	ISSUED FOR DER REVIEW	MA	WEF	CHECKED WEF,MJM,CLH	William Constitution	Ledmunds &
LTR.	DATE	REVISIONS		APPRD.	W.E. FURLONG, P.E. PROJECT ENGINEER	REG. PRO CAPER DATE	Associates, Inc. 730 North Waldo Road / Gainesville, Florida 32601 / (904) 377-5821 CONSULTING ENGINEERS AND SCIE

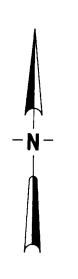
QUADREX
PROCESSING/STORAGE FACILITY

PROCESSING/STORAGE SECOND FLOOR PLAN

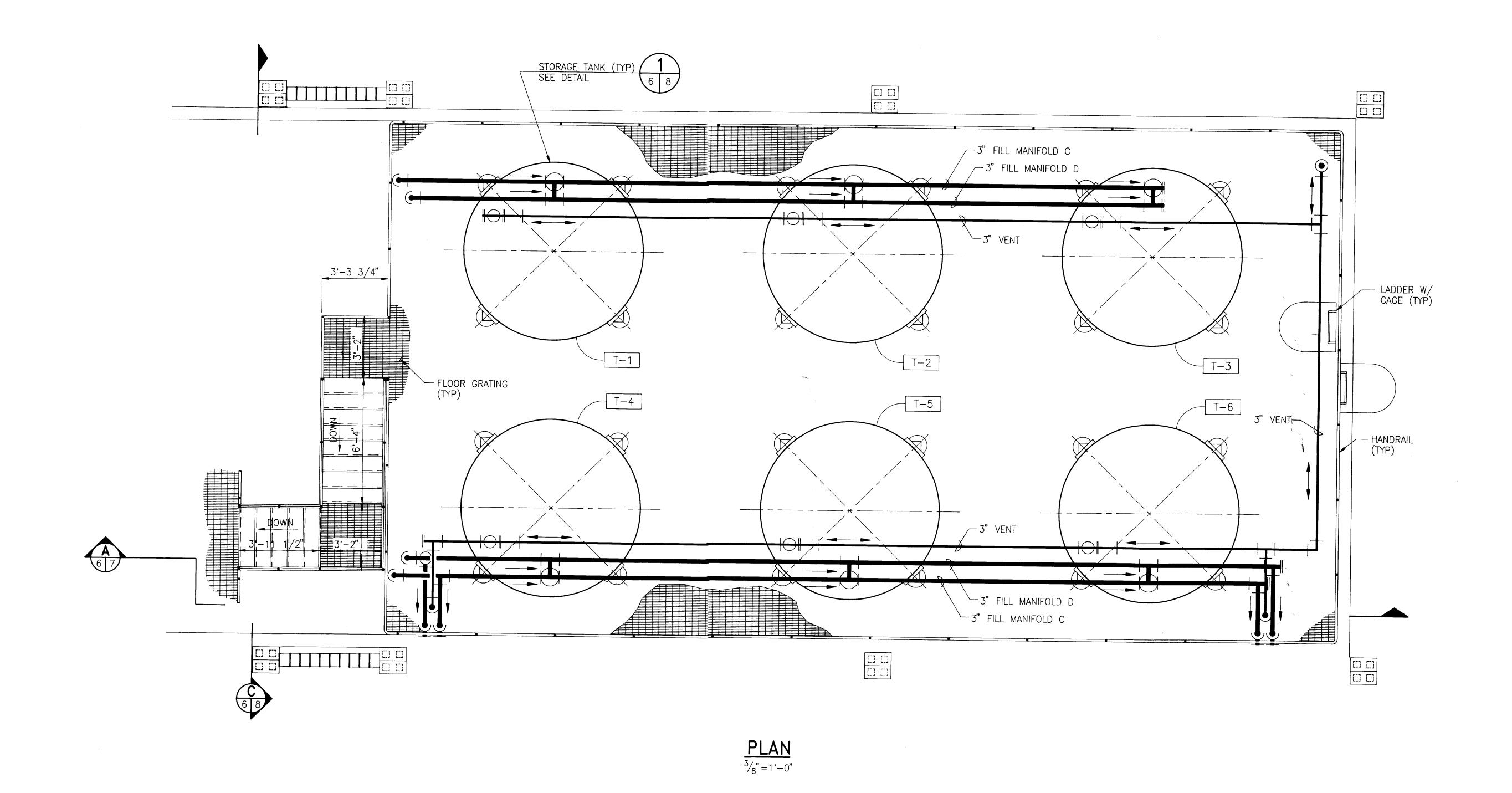
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O Jones, Edumunds & Associates, Inc

- PIPE AND FITTINGS SHALL BE FLANGED JOINT SCH 40 CARBON STEEL, UNLESS NOTED OTHERWISE. FLANGES SHALL BE ANSI CLASS 150, RAISED FACE.
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O Jones, Edumunds & Associates, Inc



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Jones
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Associates, Inc.

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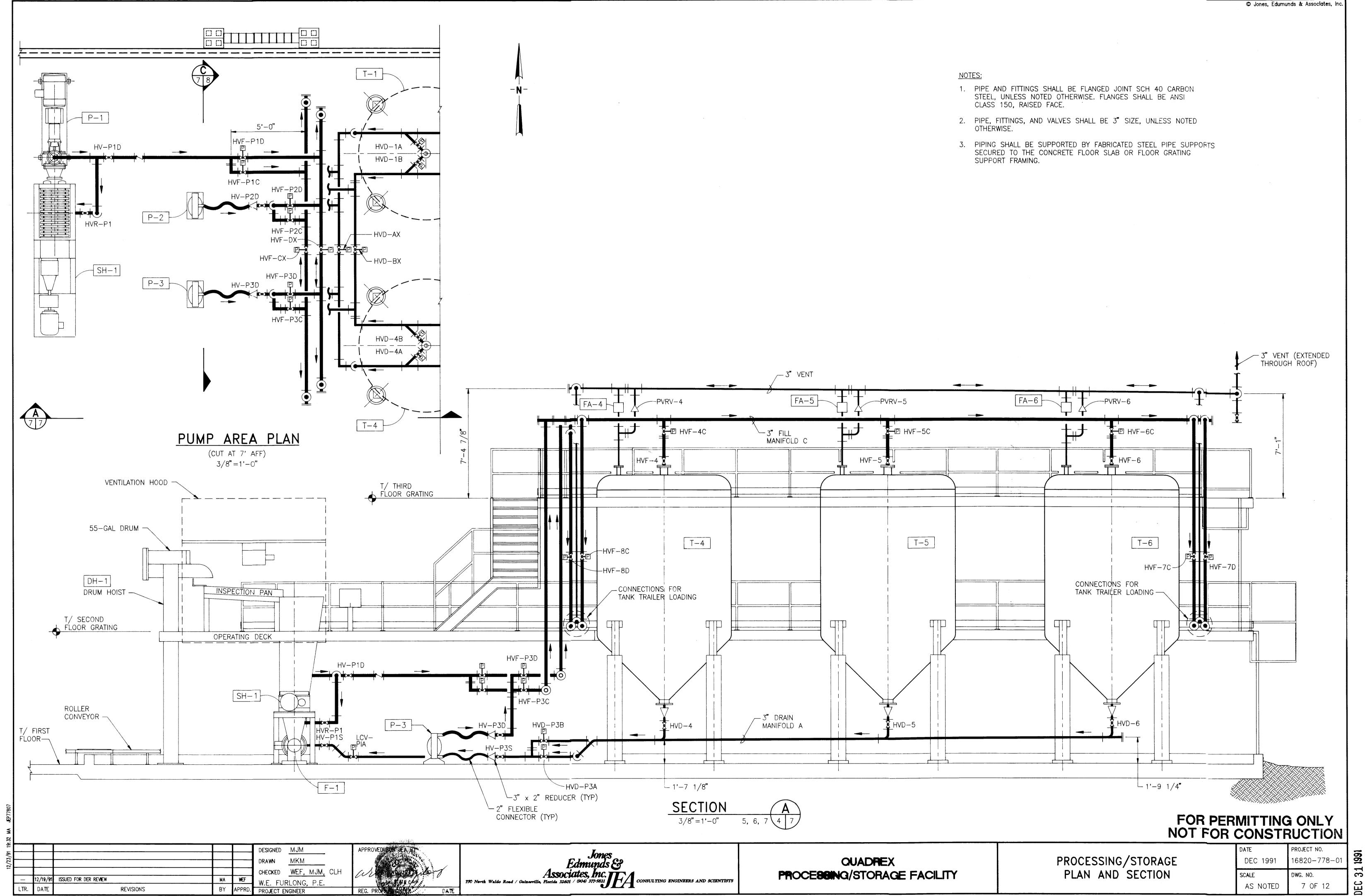
According Florida 32601 / (904) 377-5821

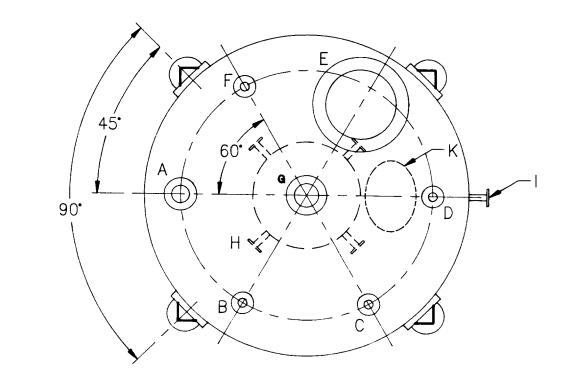
CONSULTING ENGINEERS AND SCIENTISTS

QUADREX
PROCESSING/STORAGE FACILITY

PROCESSING/STORAGE THIRD FLOOR PLAN

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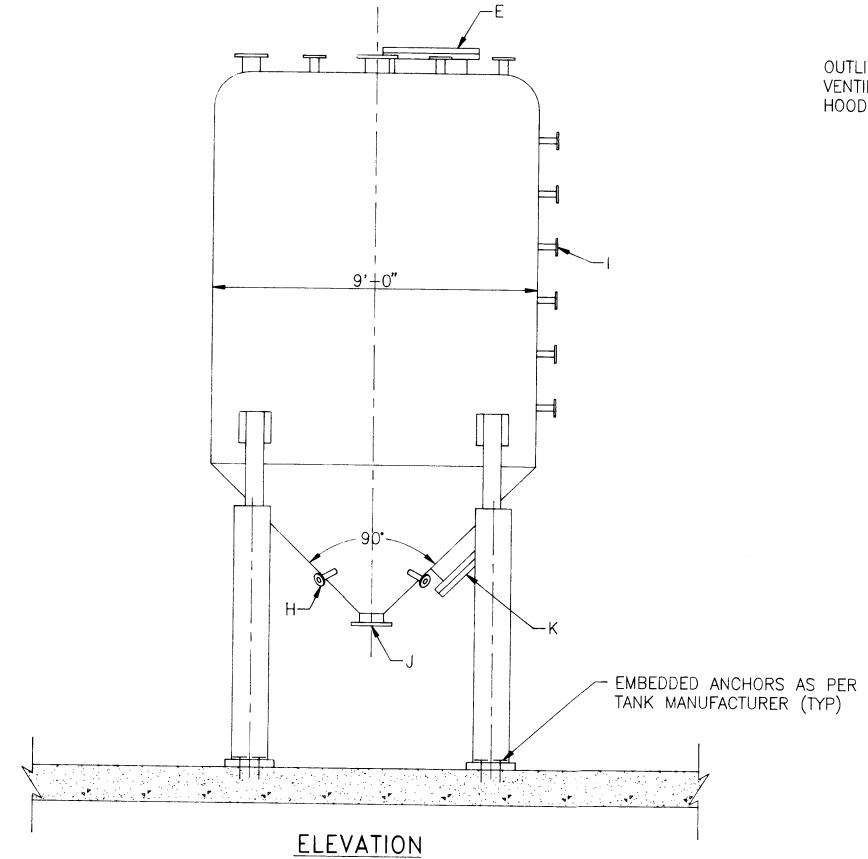


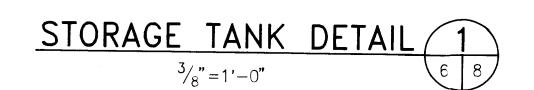


#### PLAN

NOZZLE SCHEDULE								
	NOZZLE		NECK HT					
ITEM	IDENT	SIZE	TO FACE	SERVICE / OTHER				
11	Α	6 <b>"</b>	6 <b>"</b>	FILL DIP PIPE				
2	B,C,D,F	3 <b>"</b>	6 <b>"</b>	VENT, INSTRUMENTATION  MANWAY W/ HINGED COVER				
3	E,K	24"	4" MIN					
4	G	10"	6 <b>"</b>	AGITATOR MOUNT (FOR LOADS SEE TABLE III.)				
5	Н	2"	4"	(4 REQD)				
6		2"	4"	EQUALLY SPACED (6 REQD) SAMPLING				
7 .	J	8"	4"	DRAIN				

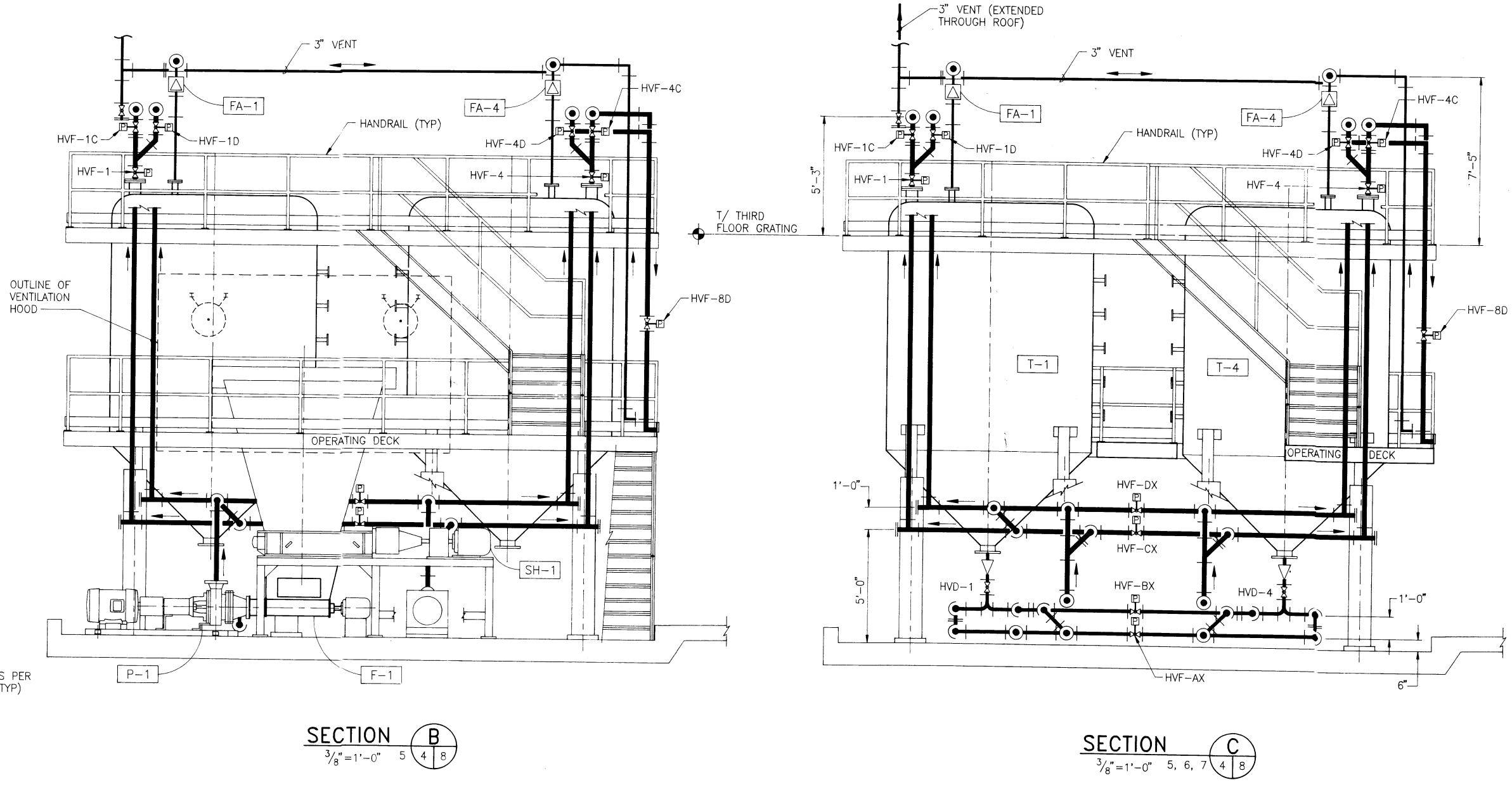
NOTE: ALL NOZZLES ANSI CLASS 150, RAISED FACE





#### NOTES:

- PIPE AND FITTINGS SHALL BE FLANGED JOINT SCH 40 CARBON STEEL, UNLESS NOTED OTHERWISE. FLANGES SHALL BE ANSI CLASS 150, RAISED FACE.
- 2. PIPE, FITTINGS, AND VALVES SHALL BE 3" SIZE, UNLESS NOTED OTHERWISE.
- 3. PIPING SHALL BE SUPPORTED BY FABRICATED STEEL PIPE SUPPORTS SECURED TO THE CONCRETE FLOOR SLAB OR FLOOR GRATING SUPPORT FRAMING.



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DESIGNED MJM

APPROVED F

DRAWN MA, MKM

CHIECKED WEF,MJM,CLH

W.E. FURLONG, P.E.

PROJECT ENGINEER

REG. PROF.

DESIGNED MJM

APPROVED F

W.E. FURLONG, P.E.

PROJECT ENGINEER

REG. PROF.

DESIGNED MJM

APPROVED F

W.E. FURLONG, P.E.

DATE

Jones
Edmunds &

Associates, Inc.

Associates, Inc.

Accounting Engineers and Scientists

Accounting Engineers and Scientists

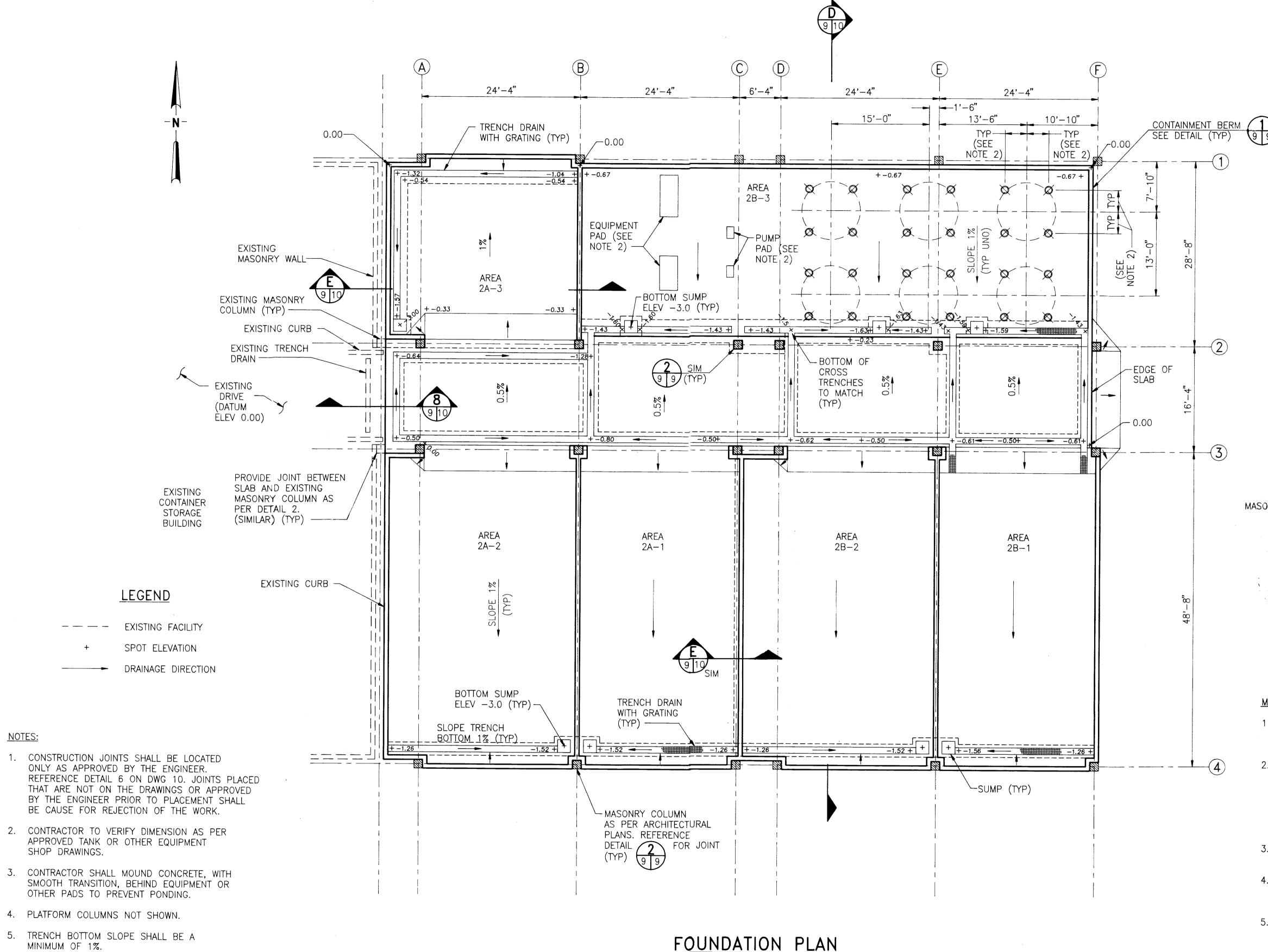
QUADREX
PROCESSING/STORAGE FACILITY

PROCESSING/STORAGE SECTIONS AND DETAILS DATE PROJECT NO.

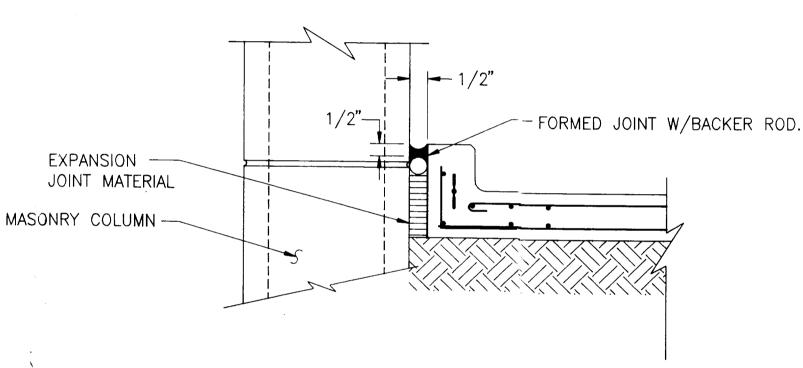
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SCALE DWG. NO.

AS NOTED 8 OF 12



CONTINUOUS 6" WATERSTOP — CONTAINMENT BERM DETAIL  $1^{1/2}$ "=1'-0"



COLUMN TO SLAB JOINT DETAIL

#### MATERIALS SPECIFICATIONS

- 1. WATERSTOPS SHALL BE MANUFACTURED OF THERMOPLASTIC RUBBER AND SHALL PROVIDE A CONTINUOUS SEAL. SPLICES SHALL BE WELDED, NOT LAPPED. WATERSTOPS SHALL BE GREENSTREAK TPE-R OR EQUAL, AS APPROVED BY THE ENGINEER.
- JOINT SEALANT SHALL BE 2 PART, POLYSULFIDE BASED, SYNTHETIC RUBBER INTENDED FOR SUBMERGENCE. SEALANT SHALL BE SYNTHACALK GC-2 AS MANUFACTURED BY PECORA, OR EQUAL AS APPROVED BY THE ENGINEER. BACKER ROD SHALL BE ROUND, CLOSED CELL AS PROVIDED BY THE SEALANT MANUFACTURER AND SHALL BE OVERSIZED BY AT LEAST 1.25 TIMES THE JOINT WIDTH. JOINT AND SEALANT DIMENSIONS SHALL BE IN STRICT CONFORMANCE WITH THE SEALANT MANUFACTURER'S RECOMMENDATIONS.
- 3. EXPANSION JOINT MATERIAL SHALL BE PREFORMED BITUMOUS TYPE, CONFORMING TO ASTM D994.
- 4. BONDING AGENT SHALL BE REWETTABLE TYPE SUITABLE FOR THE APPLICATION AND SHALL BE APPLIED TO SURFACES PREPARED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
- 5. EPOXY GROUT SHALL BE 5,000 psi NON-SHRINK, NCN-METALLIC, POURABLE, 100 PERCENT SOLIDS GROUT CONSISTING OF RESIN, HARDENER, AND SPECIALLY-BLENDED AGGREGATE. EPOXY GROUT SYSTEM SHALL BE PREMEASURED BY THE MANUFACTURER AND PACKAGED SUCH THAT HAND MIXTURE IS NOT REQUIRED IN THE FIELD. EPOXY GROUT SHALL BE DESIGNED FOR THE INTENDED PURPOSE AND SHALL BE INSTALLED IN STRICT CONFORMANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

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	<u> </u>					
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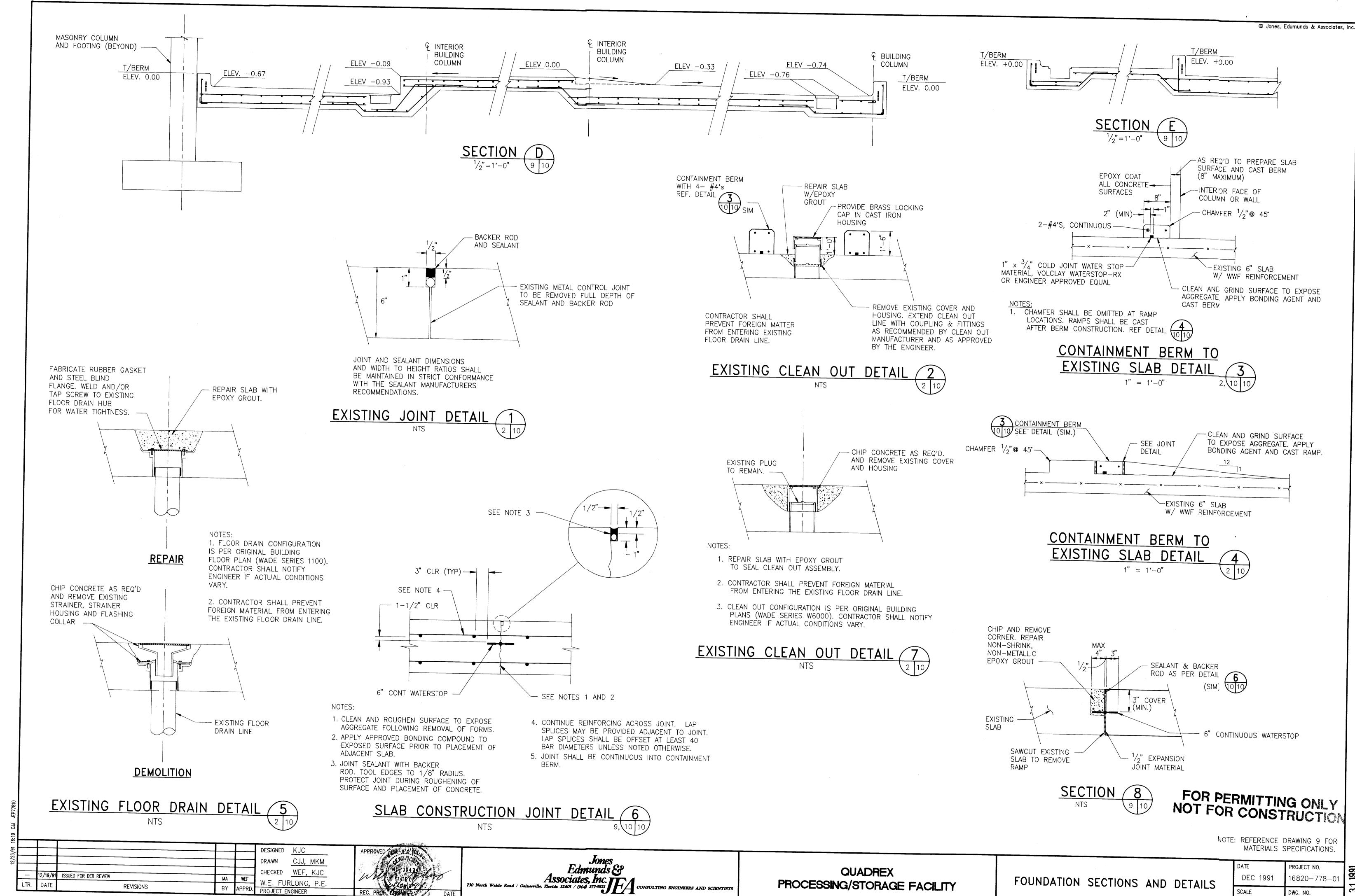
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 $\frac{1}{8}$ " = 1'-0"

**QUADREX** PROCESSING/STORAGE FACILITY

FOUNDATION PLAN AND DETAILS

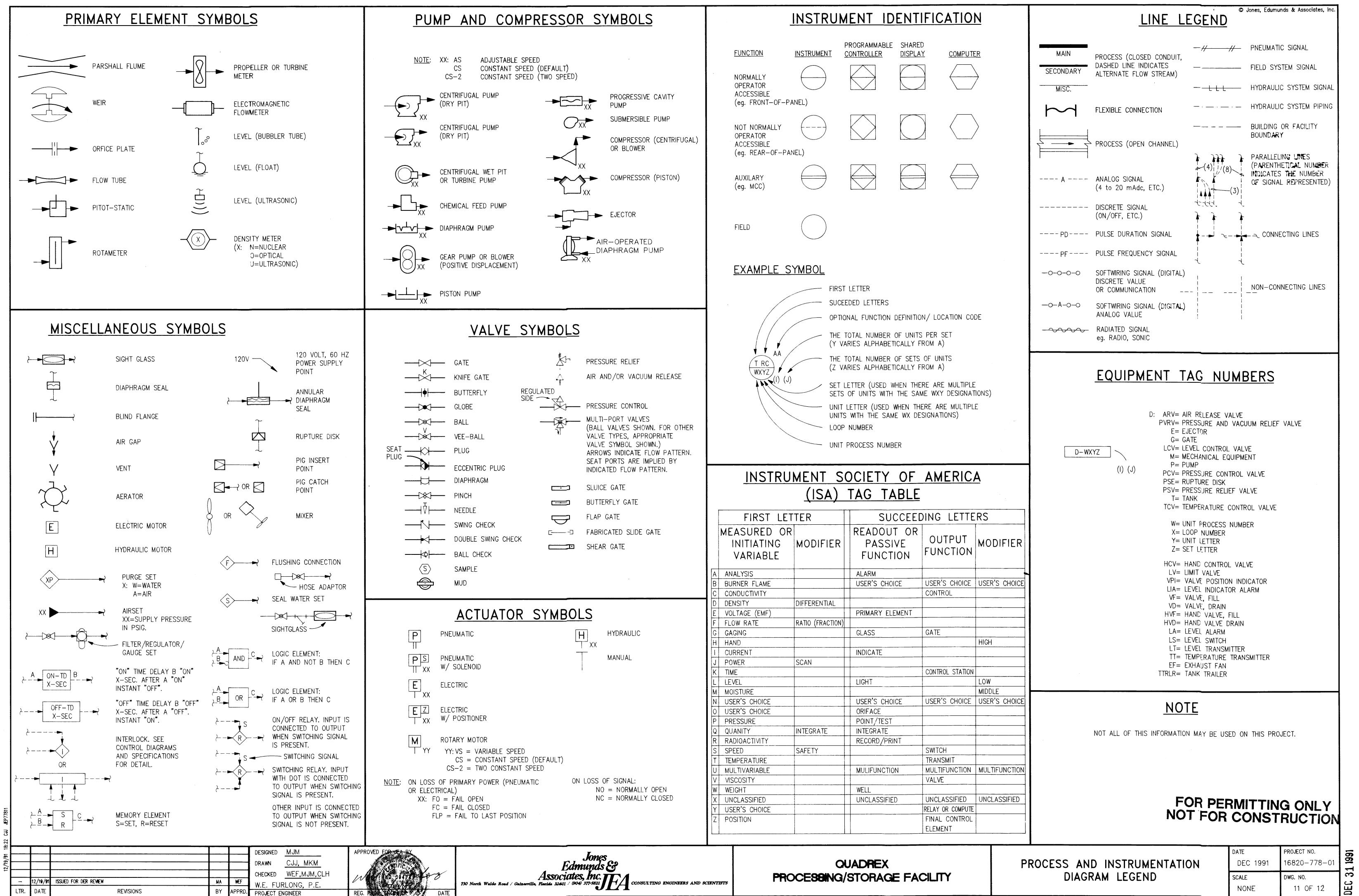
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