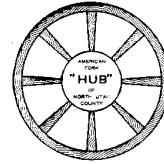
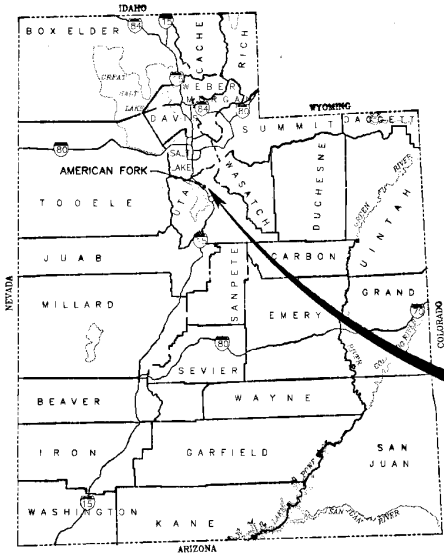


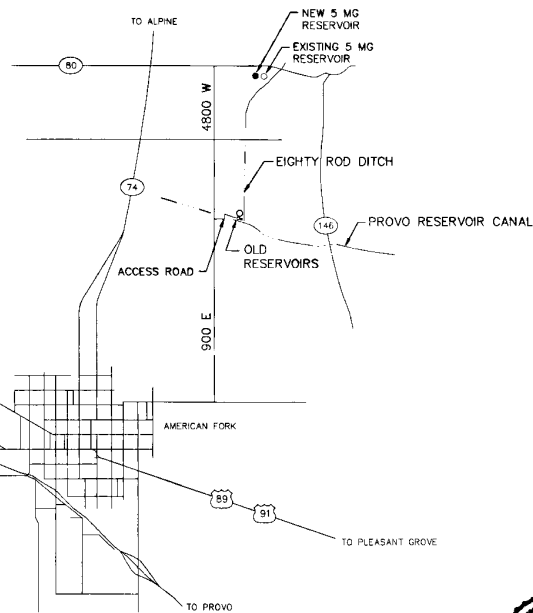
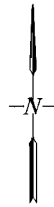
# AMERICAN FORK CITY



## 5,000,000 GALLON RESERVOIR - 1991



PROJECT  
LOCATION



VICINITY MAP OF AMERICAN FORK

### CITY COUNCIL

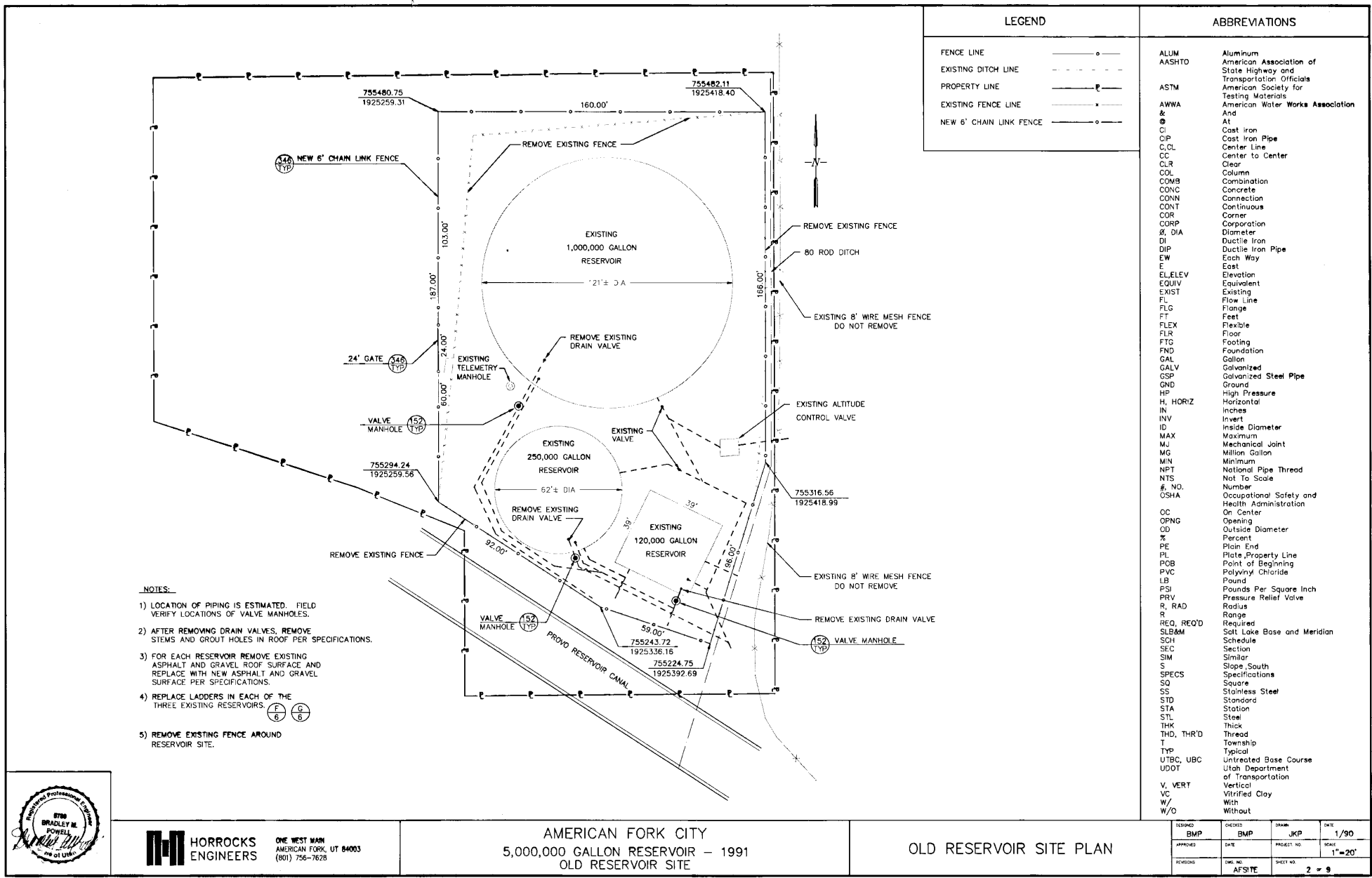
MAYOR            B. KAY HUTCHINGS  
COUNCIL         FRED ENGLAND  
                      CROSBY MECHAM  
                      GERALD LARSON  
                      LAWRENCE LASSEN  
                      GRANT PARKER

SHEET INDEX	
DESCRIPTION	SHEET NUMBER
COVER SHEET	1
OLD RESERVOIR SITE PLAN	2
5,000,000 GALLON RESERVOIR SITE PLAN	3
VALVE BOX PLAN AND SECTIONS	4
RESERVOIR PLAN AND DETAILS	5
RESERVOIR DETAILS	6
RESERVOIR INLET / OUTLET DETAILS	7
TYPICAL DETAIL SHEET	8
TYPICAL DETAIL SHEET	9



**HORROCKS  
ENGINEERS**

ONE WEST MAIN  
AMERICAN FORK, UT 84003  
(801) 756-7828



- NOTES:**
- 1) LOCATION OF PIPING IS ESTIMATED. FIELD VERIFY LOCATIONS OF VALVE MANHOLES.
  - 2) AFTER REMOVING DRAIN VALVES, REMOVE STEMS AND GROUT HOLES IN ROOF PER SPECIFICATIONS.
  - 3) FOR EACH RESERVOIR REMOVE EXISTING ASPHALT AND GRAVEL ROOF SURFACE AND REPLACE WITH NEW ASPHALT AND GRAVEL SURFACE PER SPECIFICATIONS.
  - 4) REPLACE LADDERS IN EACH OF THE THREE EXISTING RESERVOIRS. (F) (G) (B)
  - 5) REMOVE EXISTING FENCE AROUND RESERVOIR SITE.

LEGEND	
FENCE LINE	—○—
EXISTING DITCH LINE	- - - - -
PROPERTY LINE	— —
EXISTING FENCE LINE	— — —
NEW 6' CHAIN LINK FENCE	—○—

ABBREVIATIONS	
ALUM	Aluminum
AASHTO	American Association of State Highway and Transportation Officials
ASTM	American Society for Testing Materials
AWWA & A	American Water Works Association
CI	Cast Iron
CIP	Cast Iron Pipe
C/L	Center Line
CC	Center to Center
CLR	Clear
COL	Column
COMB	Combination
CONC	Concrete
CONN	Connection
CONT	Continuous
COR	Corner
CORP	Corporation
Ø DIA	Diameter
DI	Ductile Iron
DIP	Ductile Iron Pipe
EW	Each Way
E	East
EL,ELEV	Elevation
EQUIV	Equivalent
EXIST	Existing
FL	Flow Line
FLG	Flange
FT	Feet
FLEX	Flexible
FLR	Floor
FTG	Footing
FND	Foundation
GAL	Gallon
GALV	Galvanized
GSP	Galvanized Steel Pipe
GND	Ground
HP	High Pressure
H, HORIZ	Horizontal
IN	Inches
IN	Invert
ID	Inside Diameter
MAX	Maximum
MJ	Mechanical Joint
MG	Million Gallon
MIN	Minimum
NPT	National Pipe Thread
NTS	Not To Scale
#, NO.	Number
OSHA	Occupational Safety and Health Administration
OC	On Center
OPNG	Opening
OD	Outside Diameter
%	Percent
PE	Plain End
PL	Plate, Property Line
POB	Point of Beginning
PVC	Polyvinyl Chloride
LB	Pound
PSI	Pounds Per Square Inch
PRV	Pressure Relief Valve
R, RAD	Radius
R	Range
REQ, REQ'D	Required
SLB&M	Salt Lake Base and Meridian
SCH	Schedule
SEC	Section
SIM	Similar
S	Slope, South
SPECS	Specifications
SQ	Square
SS	Stainless Steel
STD	Standard
STA	Station
STL	Steel
THK	Thick
THD, THRD	Thread
T	Township
TYP	Typical
UTBC, UBC	Untreated Base Course
UDOT	Utah Department of Transportation
V, VERT	Vertical
VC	Vitrified Clay
W/	With
W/O	Without



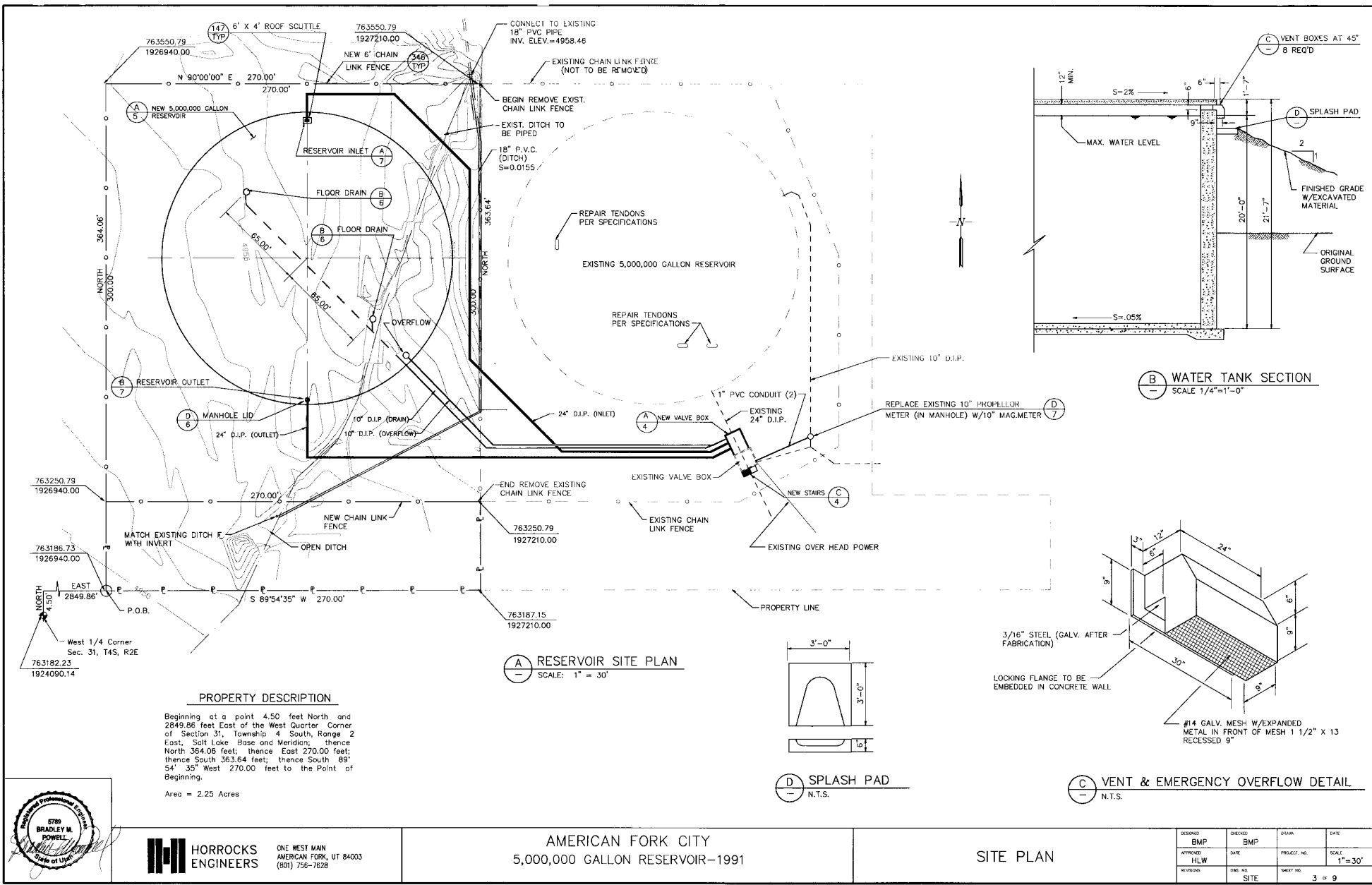
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 ONE WEST MAIN  
 AMERICAN FORK, UT 84003  
 (801) 756-7628

AMERICAN FORK CITY  
 5,000,000 GALLON RESERVOIR - 1991  
 OLD RESERVOIR SITE

OLD RESERVOIR SITE PLAN

DESIGNED	BMP	CHECKED	BMP	DRAWN	JKP	DATE	1/90
APPROVED		DATE		PROJECT NO.		SCALE	1"=20'
REVISIONS		DATE		SHEET NO.	2	TOTAL SHEETS	9

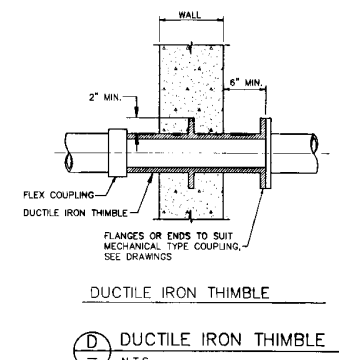
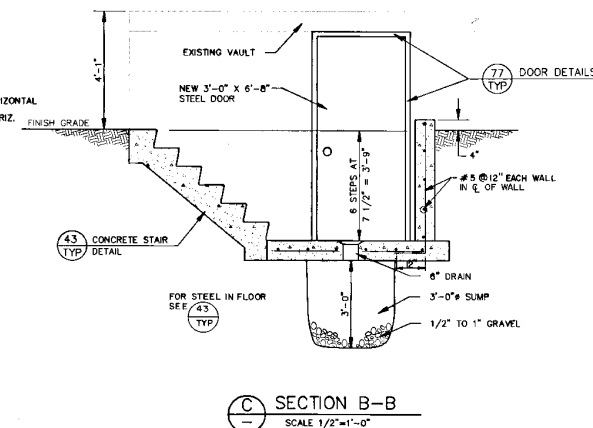
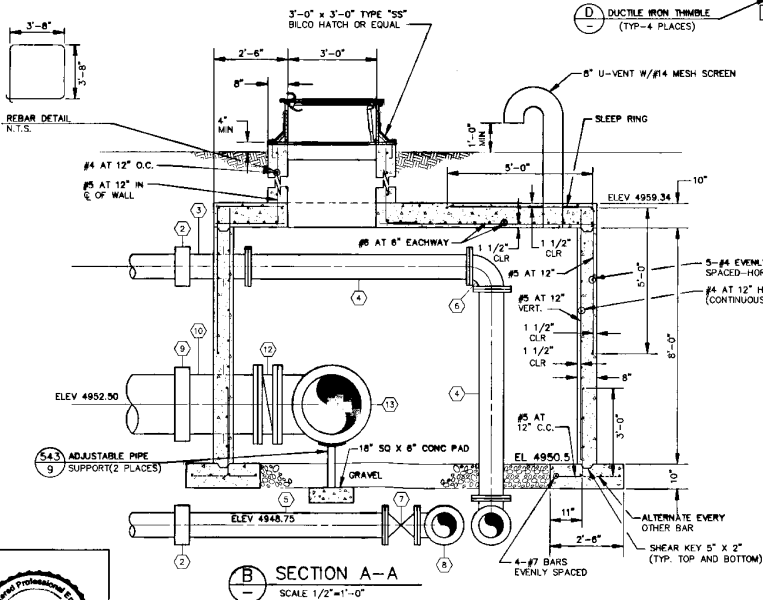
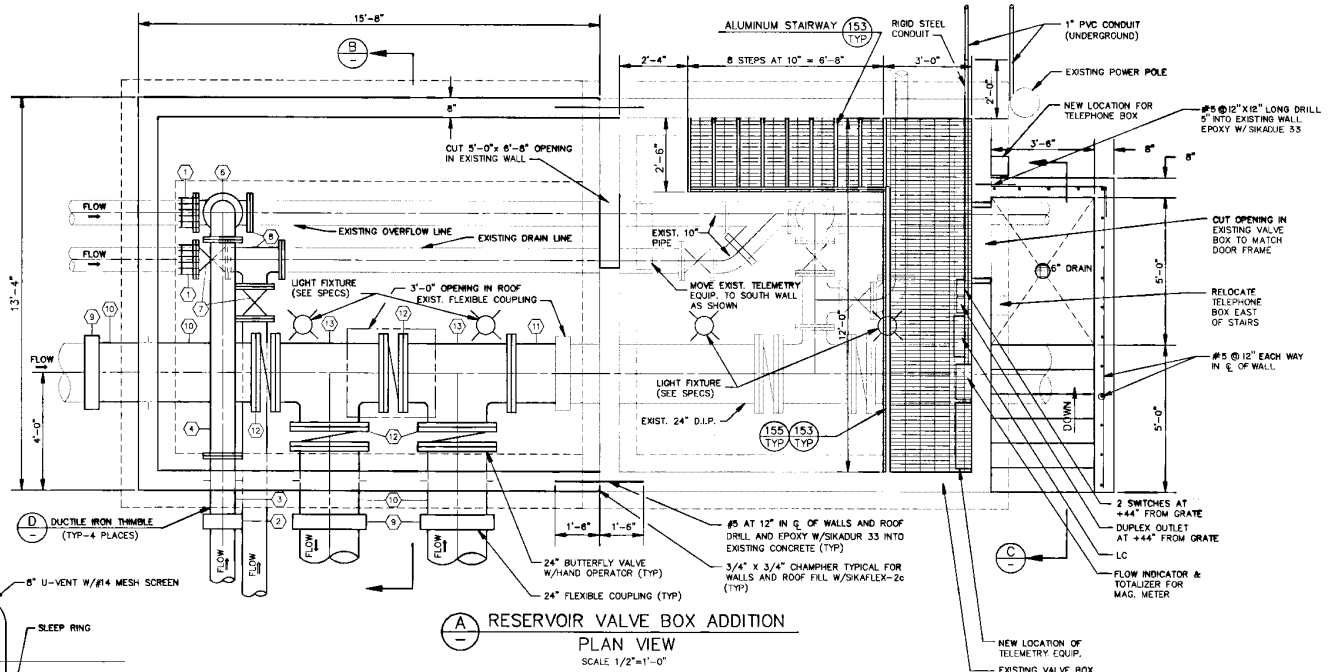
A # - D - 018



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MARK	QTY	CONNECTION	SIZE	DESCRIPTION
1	2	FLG x M.J	10"	FLANGE ADAPTOR
2	2	MJ	10"	FLEX COUPLING
3	1	FLG x PE	10"	DUCTILE IRON THIMBLE W/THRUST RING
4	2	FLG	10"	CLASS 50 D.I.P.
5	1	FLG x PE	10"	CLASS 50 D.I.P.
6	1	FLG	10"	90° BEND
7	2	FLG	10"	GATE VALVE W/HAND OPERATOR
8	2	FLG	10"x10"x10"	TEE
9	3	MJ	24"	FLANGE ADAPTOR
10	3	FLG x PE	24"	DUCTILE IRON THIMBLE W/THRUST RING
11	1	FLG x PE	24"	CLASS 50 D.I.P.
12	4*	FLG x PE	24"	BUTTERFLY VALVE W/HAND OPERATOR
13	2	FLG	24"x24"x24"	TEE W/PIPE SUPPORT

\* TO BE FURNISHED BY CITY



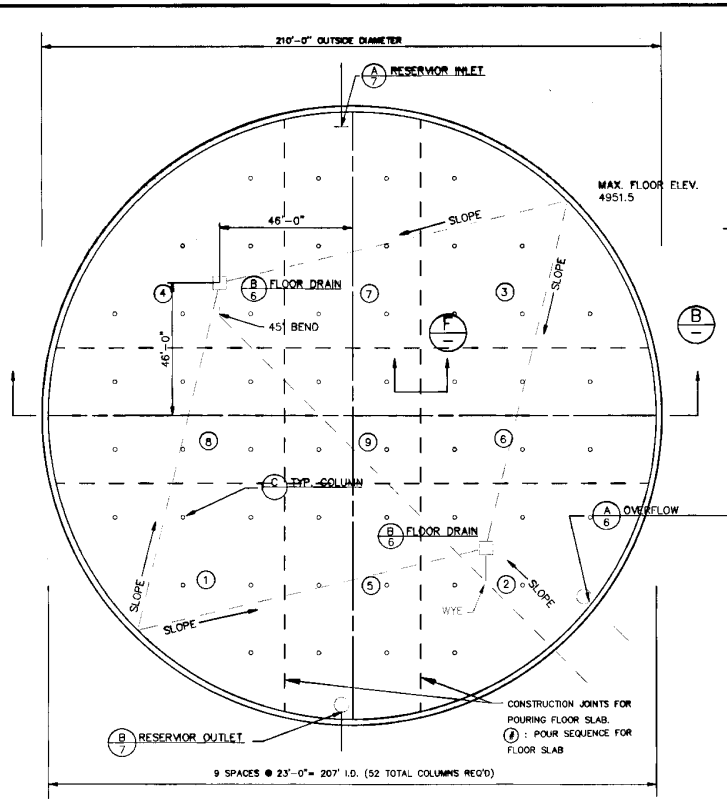
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AMERICAN FORK CITY  
5,000,000 GALLON RESERVOIR - 1991

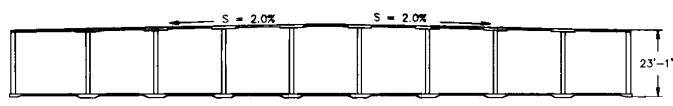
VALVE BOX PLAN AND SECTIONS

DESIGNED	BMP	CHECKED		DRAWN	JKP	DATE	1/91
APPROVED		DATE		PROJECT NO.	9009-33	SCALE	AS SHOWN
REVISED				DWG. NO.	AFVBOX	SHEET NO.	4 of 9

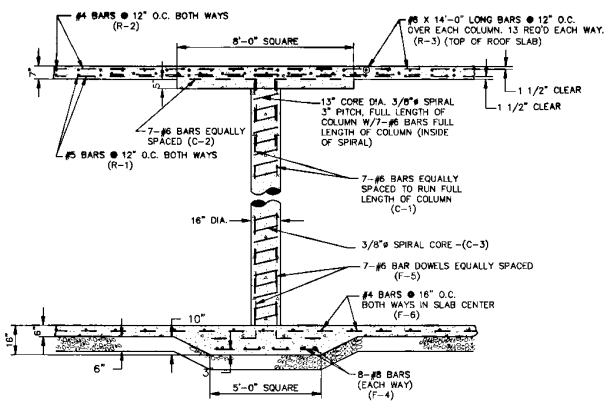
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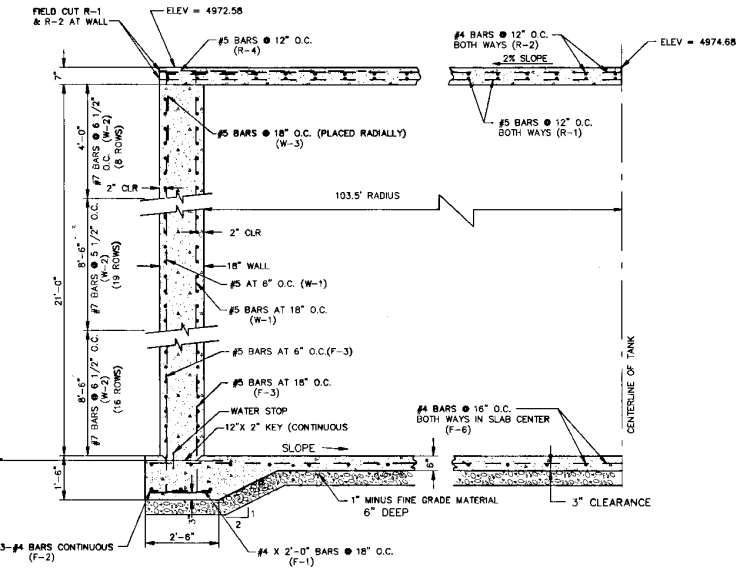
**A RESERVOIR TANK FLOOR PLAN**  
SCALE: 1" = 20'-0"



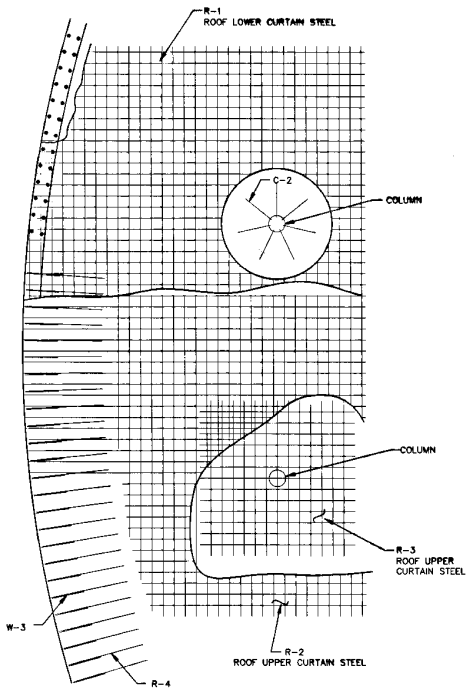
**B CROSS SECTION RESERVOIR TANK**  
SCALE: 1" = 20'-0"



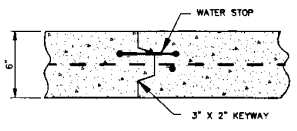
**C TYPICAL COLUMN DETAIL**  
SCALE: 1/2" = 1'-0"



**D TYPICAL EXTERIOR WALL DETAIL**  
SCALE: 1/2" = 1'-0"



**E ROOF STEEL PLAN**  
N.T.S.



**F FLOOR SLAB JOINT DETAIL**  
N.T.S.

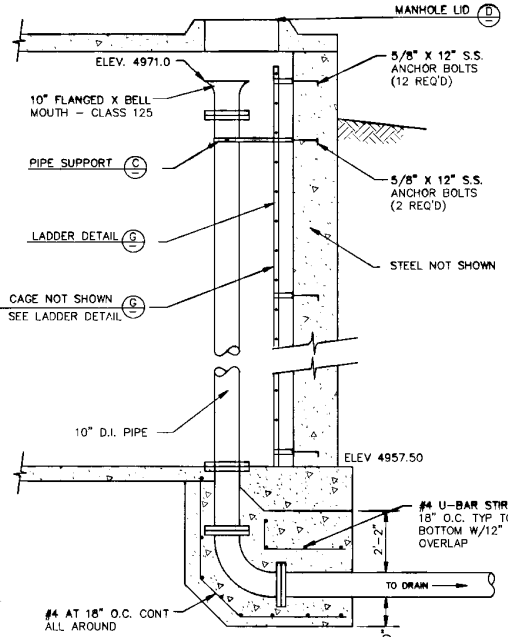


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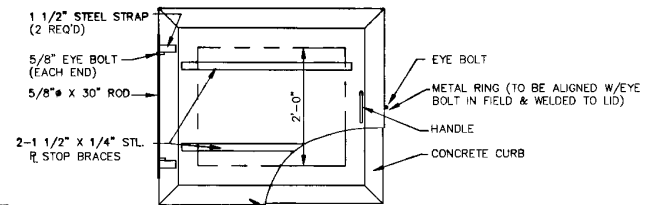
AMERICAN FORK CITY  
5,000,000 GALLON RESERVOIR - 1991

RESERVOIR PLAN & DETAILS

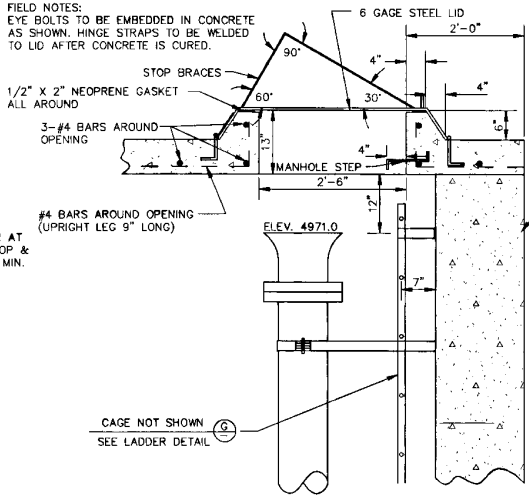
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APPROVED	DATE	PROJECT NO. 9009-33	SCALE AS SHOWN
REVISIONS	CHG. NO. SMGPLN	SHEET NO. 5 of 9	



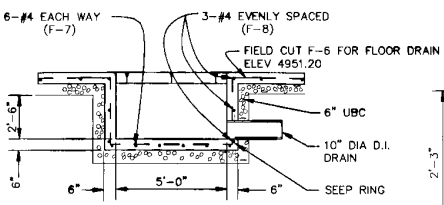
**(A) OVERFLOW DETAIL**  
SCALE: 1/2" = 1'-0"



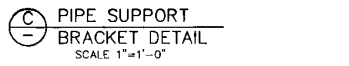
**SHOP NOTE:**  
HINGE UNIT TO BE ASSEMBLED WITH ROD THREADED THRU BOTH EYE BOLTS & WELDED TO 1 1/2" STRAPS. STRAPS TO BE SPACED AT 24" O.C.  
**FIELD NOTES:**  
EYE BOLTS TO BE EMBEDDED IN CONCRETE AS SHOWN. HINGE STRAPS TO BE WELDED TO LID AFTER CONCRETE IS CURED.  
ALL WELDED CONSTRUCTION HOT DIP GALVANIZE AFTER FABRICATION



**(C) PIPE SUPPORT BRACKET DETAIL**  
SCALE: 1" = 1'-0"

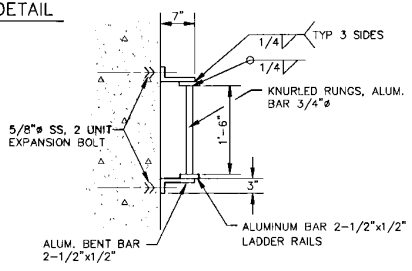


**(B) FLOOR DRAIN**  
SCALE: NTS

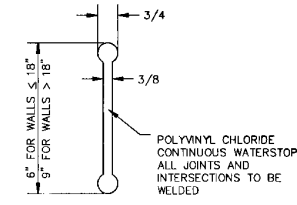


**(C) PIPE SUPPORT BRACKET DETAIL**  
SCALE: 1" = 1'-0"

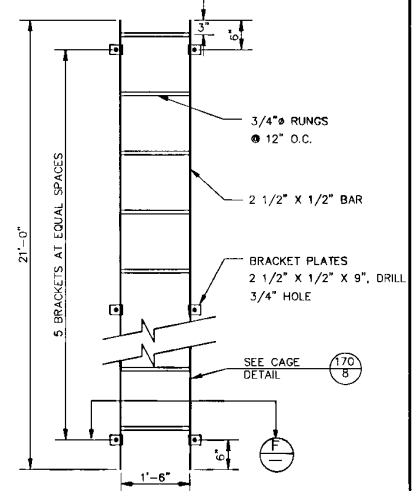
**(D) MANHOLE LID DETAIL**  
SCALE: 1" = 1'-0"



**(F) LADDER PLAN DETAIL**  
SCALE: NTS



**(E) JOINT WATERSTOP**  
SCALE: NTS



**(G) LADDER DETAIL**  
SCALE: NTS

REBAR SCHEDULE						
MARK	BAR	DESIGN		LENGTH	LOCATION	REQ'D
		SHAPE	DIMENSION			
F-1	4	STRAIGHT	2'-0"	2'-0"	WALL-FTG	438
F-2	4	STRAIGHT	40'-0"	40'-0"	WALL-FTG	54
F-3	5	BEND	4'-0" X 1'-6"	5'-6"	WALL-FTG	1749
F-4	8	STRAIGHT	4'-6"	4'-6"	COL-FTG	832
F-5	6	BEND	4'-0" X 2'-0"	6'-0"	COL-FTG	364
F-6	4	STRAIGHT	40'-0"	40'-0"	FLR-SLB	1,560
F-7	4	BEND	2'-0" X 2'-6" X 5'-6"	14'-6"	FLR-DRN	24
F-8	4	BEND	5'-6" X 5'-6"	22'-0"	FLR-DRN	6
W-1	5	STRAIGHT	21'-4"	21'-4"	WALL	1749
W-2	7	CIRCULAR RAD. = 104'-6"	40'-0"	40'-0"	WALL	1,620
W-3	5	BEND	3'-0" X 3'-0"	6'-0"	WALL	438
C-1	6	STRAIGHT	22'-4" ± *	22'-4"	COLUMN	364
C-2	6	BEND	3'-0" X 3'-0"	6'-0"	COLUMN	364
C-3	13	SPIRAL, 13" CORE DIA. W/3" PITCH	22'-0" ± *	300'-0"	COLUMN	52
R-1	5	STRAIGHT	40'-0"	40'-0"	ROOF	2,484
R-2	4	STRAIGHT	40'-0"	40'-0"	ROOF	2,484
R-3	5	STRAIGHT	14'-0"	14'-0"	ROOF	1,352
R-4	5	STRAIGHT	7'-0"	7'-0"	ROOF	438

\* VARIES PER COLUMN LOCATION

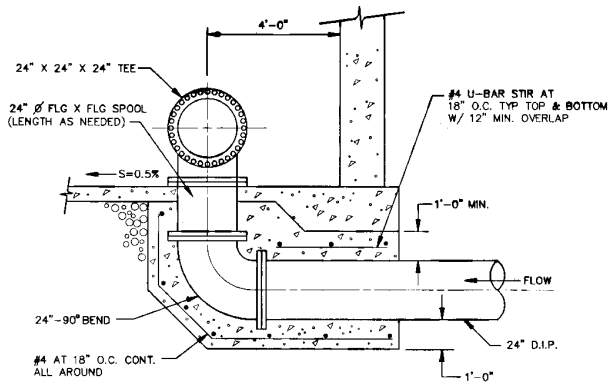


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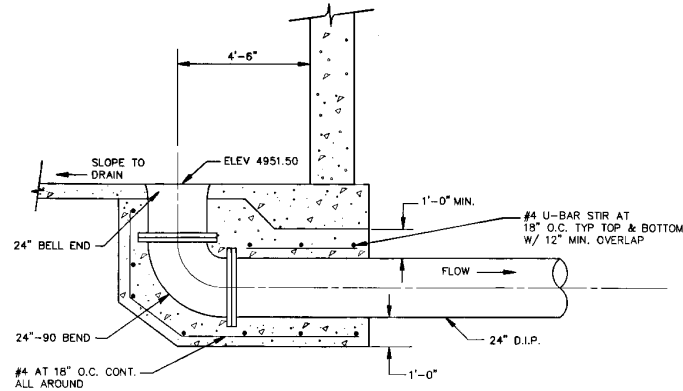
AMERICAN FORK CITY  
5,000,000 GALLON RESERVOIR - 1991

RESERVOIR MISC. DETAILS

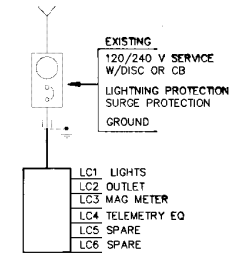
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APPROVED		DATE		PROJECT NO.		SCALE	AS SHOWN
REVISED		DATE		SHEET NO.			



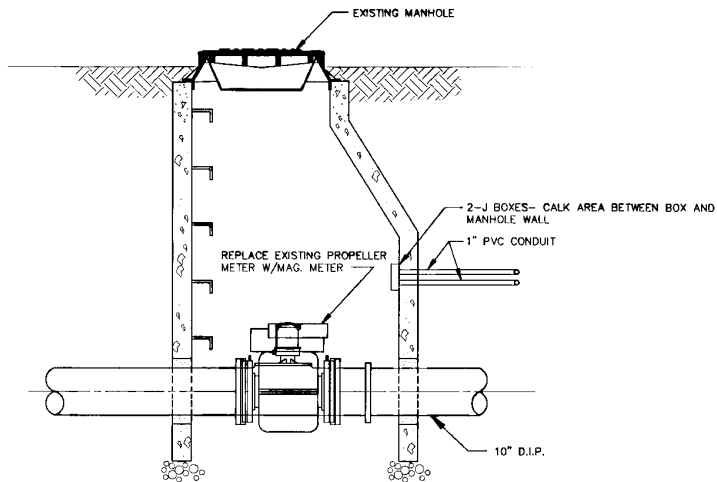
**(A) RESERVOIR INLET**  
SCALE 1/2" = 1'-0"



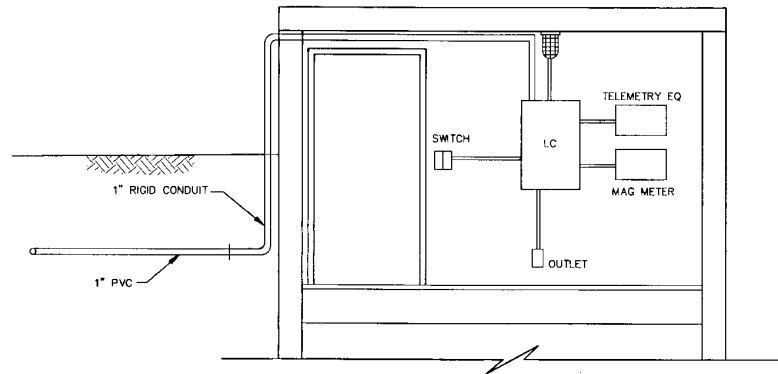
**(B) RESERVOIR OUTLET**  
SCALE 1/2" = 1'-0"



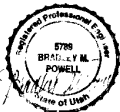
**(C) ELECTRICAL SCHEMATIC**  
N.T.S.



**(D) METER MANHOLE**  
SCALE 1" = 1'-0"



**(E) ELECTRICAL EQUIPMENT LOCATION**  
N.T.S.



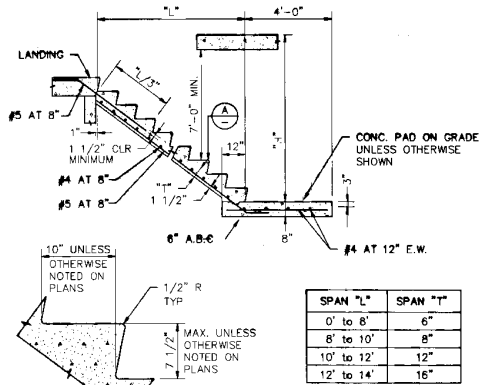
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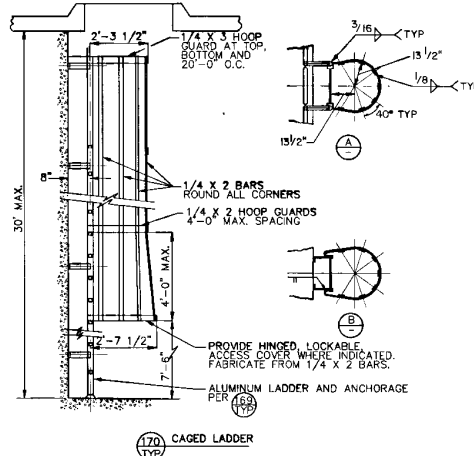
RESERVOIR INLET/OUTLET DETAILS

DESIGNED	CHECKED	DRAWN	DATE
BMP	INT	INT	1/91
APPROVED	DATE	PROJECT NO.	SCALE
		9009-33	AS SHOWN
REVISION	DATE	BY	NO.
	AFRESIO		7 of 9

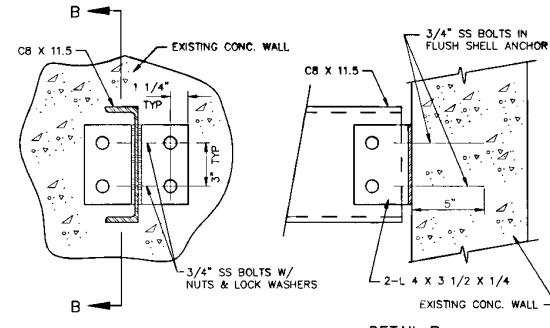


- NOTES:
1. SEE PLANS FOR DIMENSIONS "H", "L" AND STAIR WIDTH ("W")
  2. ALL STAIRS SHALL HAVE HANDRAILS ON EACH SIDE
  3. ANY FASTENERS IN STAIR NOSING SHALL BE TYPE 304 OR TYPE 316 SS.

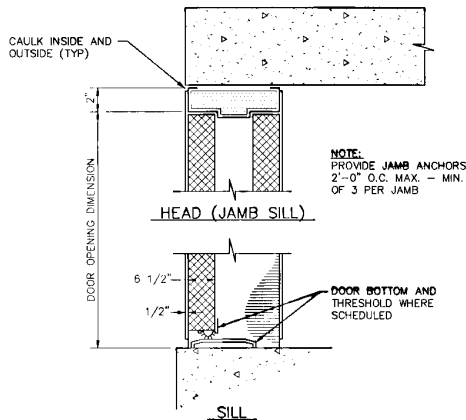
43 CONCRETE STAIR DETAIL  
TYP



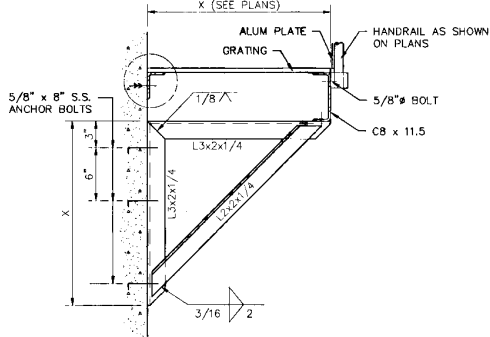
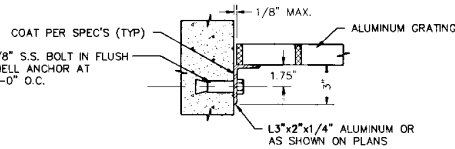
170 CAGED LADDER  
TYP



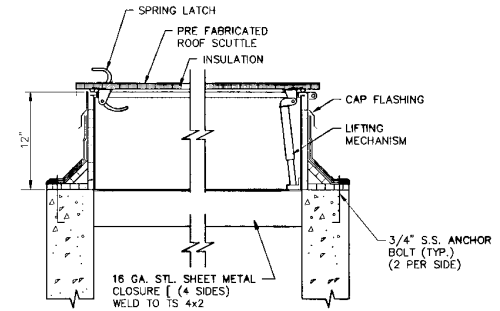
132A BOLTED CONNECTION  
TYP



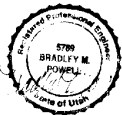
77 DOOR DETAIL  
TYP



121A GRATING SUPPORT ALUMINUM  
TYP



147 ROOF SCUTTLE  
TYP



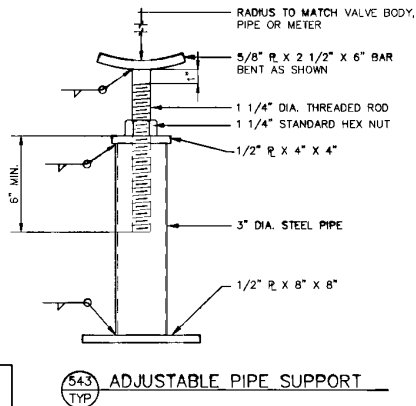
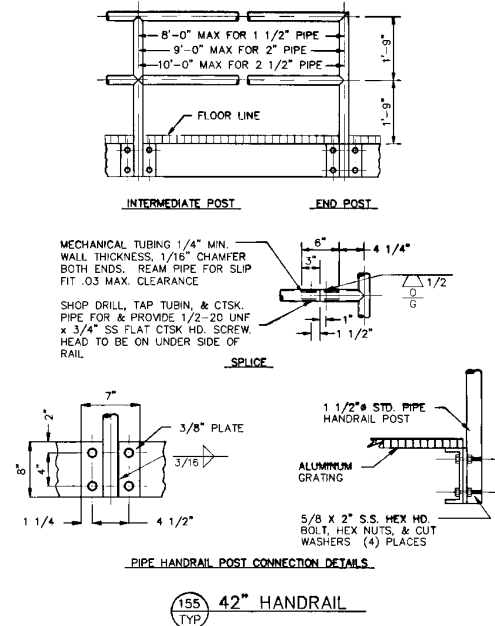
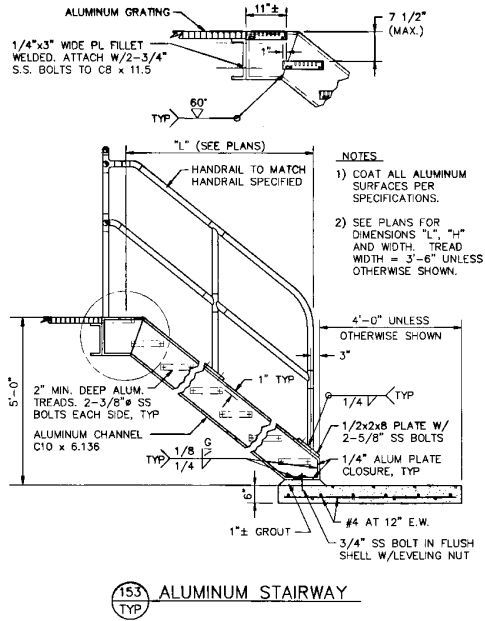
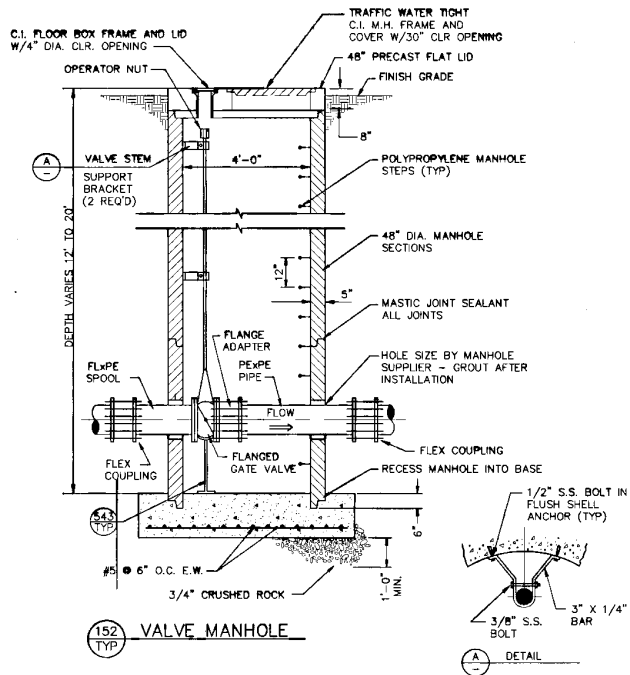
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AMERICAN FORK CITY  
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TYPICAL DETAIL SHEET

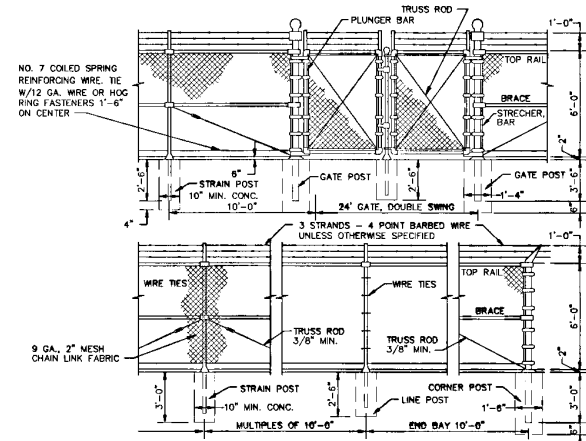
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BMP	BMP	JKP	1/91
APPROVED	DATE	PROJECT NO.	SCALE
		9009-33	NONE
REVISIONS	DATE	SHEET NO.	
		8 of 9	





MEMBER	SIZE	WT. PER L.F.
1 CORNER POST	2 1/2" I.D. STD. PIPE SCHEDULE 40	5.79
2 LINE POST	1 1/2" I.D. STD. PIPE SCHEDULE 40	2.72
3 STRAIN POST	2 1/2" I.D. STD. PIPE SCHEDULE 40	5.79
4 BRACE	1 1/2" I.D. STD. PIPE SCHEDULE 40	2.27
5 STRETCH BAR	1/4" x 3/4" FLAT	
6 GATE POST	3 1/2" I.D. STD. PIPE SCHEDULE 40	9.0
7 TOP RAIL	1 1/2" I.D. STD. PIPE SCHEDULE 40	2.27

ALL CONCRETE SHALL BE CLASS C. FITTINGS NOT SPECIFICALLY DETAILED SHALL BE OF APPROVED HEAVY DUTY DESIGN. STRAIN POSTS SHALL BE SPACED AT 30" MAXIMUM INTERVALS AND BOTH CORNER AND STRAIN POSTS SHALL HAVE STRAIN PANELS EACH SIDE. ALL PIPE POSTS SHALL BE CAPPED.



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TYPICAL DETAIL SHEET

DESIGNED	CHECKED	DRAWN	DATE
BMP	BMP	JKP	1/91
APPROVED	DATE	PROJECT NO.	SCALE
		9009-33	NONE
REVISIONS	DATE	DESCRIPTION	BY
		DETAIL 2	

9 of 9