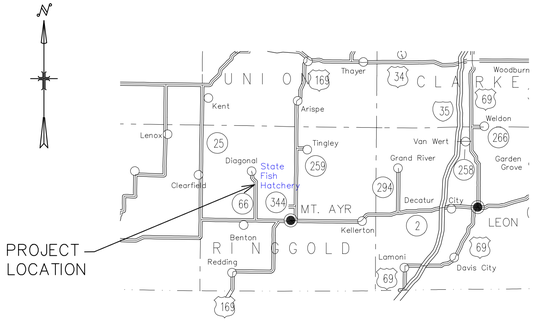


VICINITY MAP

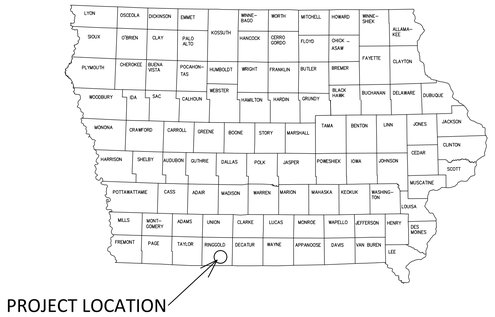
IOWA DEPARTMENT OF NATURAL RESOURCES

CONSTRUCTION PLANS FOR MT AYR FISH HATCHERY

RINGGOLD COUNTY

FISH POND REGRADING

PROJECT NO. 13-04-80-01



LOCATION MAP

DIRECTORY			
PROJECT MANAGER		CONSTRUCTION INSPECTOR	
	IOWA DEPARTMENT OF NATURAL RESOURCES		IOWA DEPARTMENT OF NATURAL RESOURCES
	502 EAST 9TH STREET		502 EAST 9TH STREET
	DES MOINES, IA, 50319		DES MOINES IA, 50319
	MIKE BRODERICK		MARK JOHNSON
	515-281-0873		515-250-3713
	mike.broderick@dnr.iowa.gov		mark.johnson@dnr.iowa.gov

PLANS PREPARED BY IDNR ENGINEERING BUREAU CON AND REC DIVISION

IOWA ONE CALL
800/292-8989
TOLL FREE
CALL - BEFORE - YOU DIG

ESTIMATE OF QUANTITIES		
ITEM NO.	DESCRIPTION	QUANTITY
1	DEMOLITION/REMOVAL OF EXISTING KETTLES & UTILITIES	1 LS
2	EXCAVATON / EARTHWORK	9042 CY
3	FISH KETTLE CONSTRUCTION COMPLETE	2 EA
4	6" DIA. SCHEDULE 40 PVC WATER LINE.	1008 LF
5	6" BUTTERFLY VALVE	2 EA
6	CLASS "E" RIP-RAP	32 TONS
7	8" DIA. SDR 35 PVC DRAIN LINE	169 LF
8	SILT FENCE	980 LF
9	SEED, FERTILIZE, & MULCH	1 LS

GENERAL CONSTRUCTION TO BE GOVERNED BY IOWA DOT SERIES 2012 STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGE CONSTRUCTION. ANY OMISSIONS IN THESE SPECIFICATIONS SHALL BE GOVERNED BY SUDAS.

AUTHORIZATION TO BID

AUTHORIZATION - PARKS | WILDLIFE | FISHERIES | LAW ENFORCEMENT | FORESTRY — DATE

ENGINEERING BUREAU CHIEF — DATE

SHEET INDEX	
SHEET. NO.	SHEET TITLE
1	COVER SHEET
2	EXISTING SITE FEATURES/DEMOLITION PLAN
3	PROPOSED CONTOURS
4	PROPOSED UTILITIES
5	KETTLE PLAN & SECTIONS
6	KETTLE STRUCTURAL
7	KETTLE STRUCTURAL
8	KETTLE STRUCTURAL DETAILS
9	PLUMBING DETAILS

CONSULTANT:

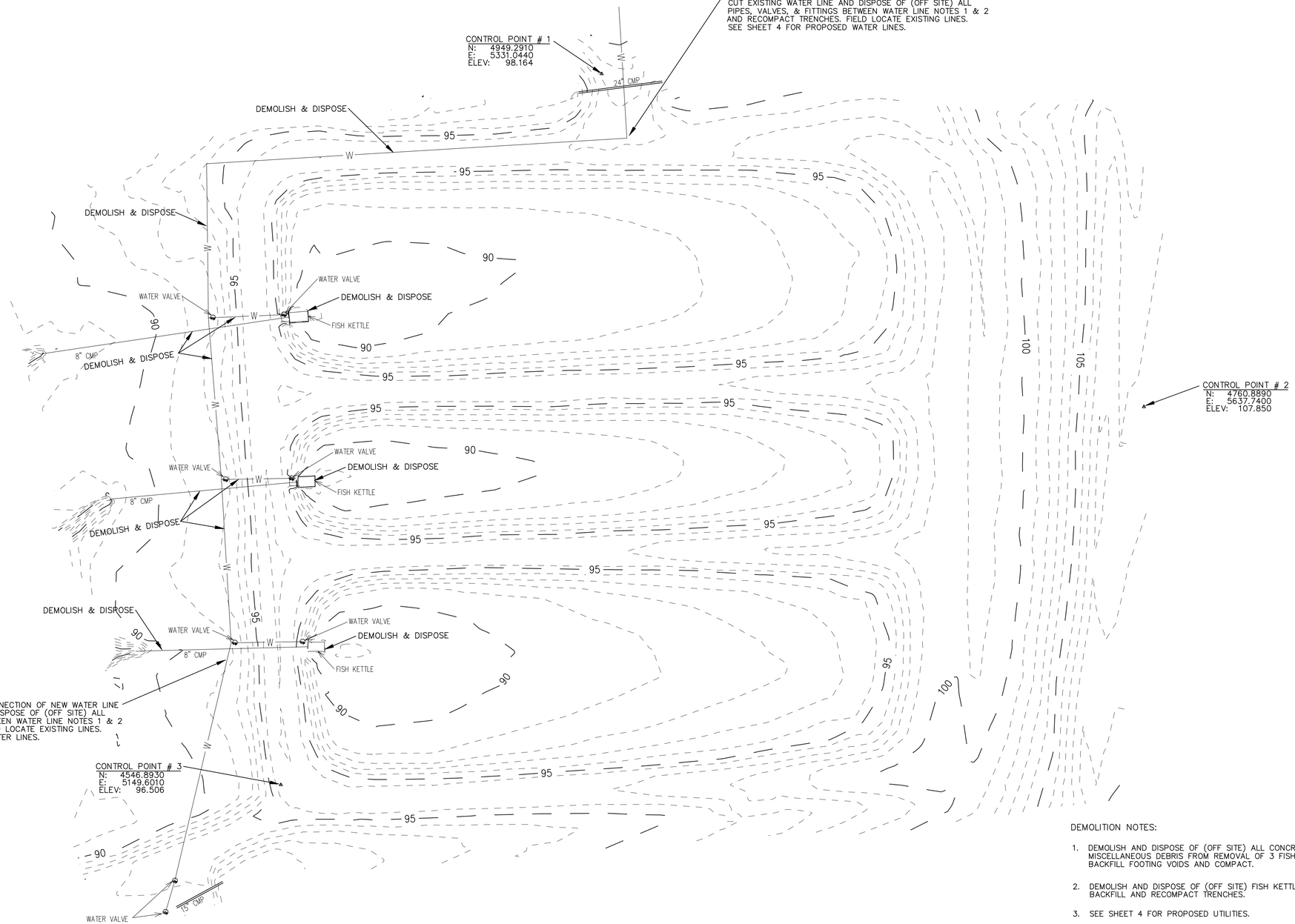
IOWA DEPARTMENT OF NATURAL RESOURCES
ENGINEERING SERVICES - WALLACE BUILING
502 E. 9TH ST., DES MOINES, IA 50319-0034
P: 515.281.5918
F: 515.281.8685

COVER SHEET

FISH POND REGRADING
MT AYR FISH HATCHERY
RINGGOLD COUNTY, IOWA
MT AYR

NO.	BY DATE	REVISION

DRAWN BY:
PROJECT NUMBER: 13-04-80-01
CHK'D BY:
DATE: JULY 2013
SHEET No:



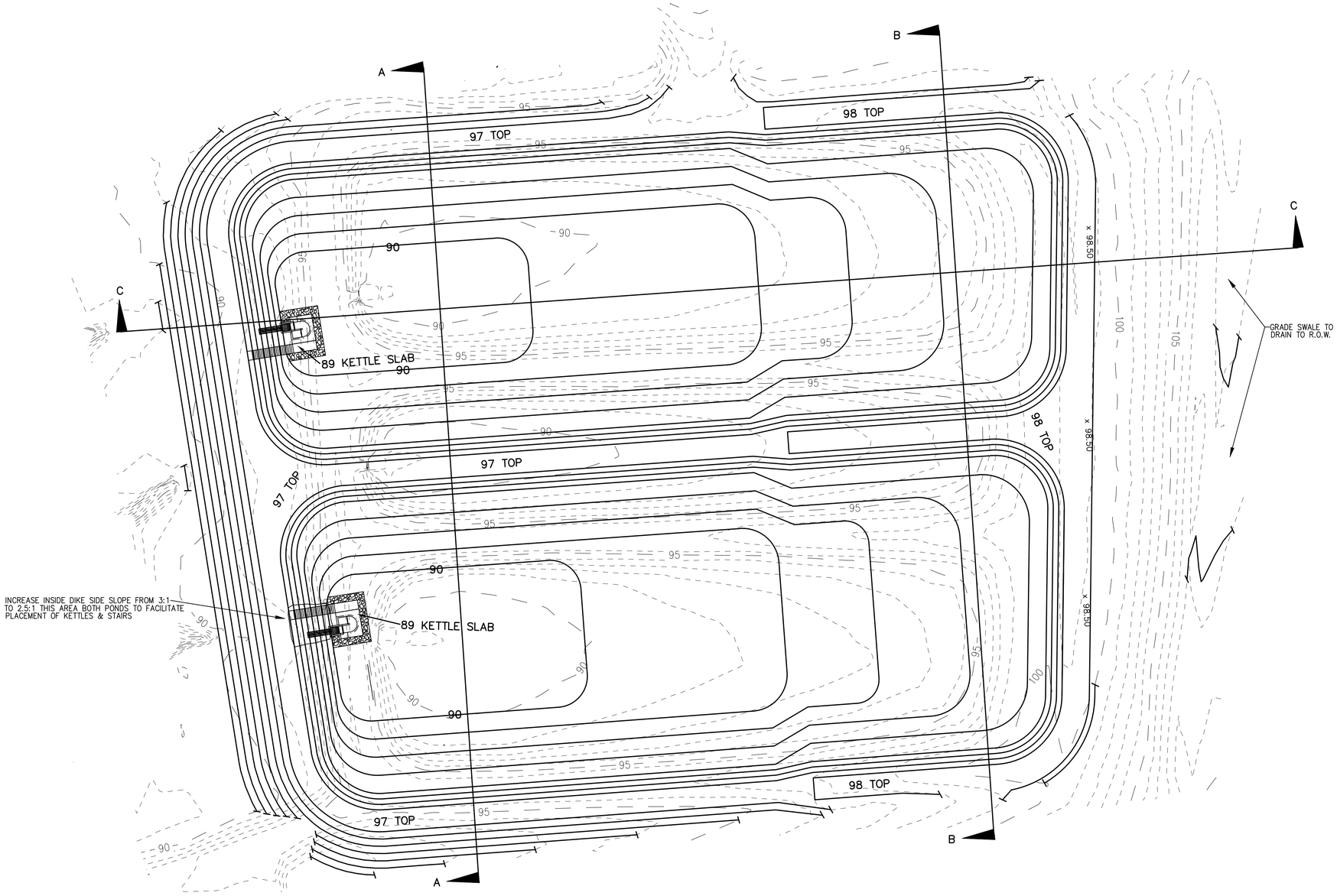
DEMOLITION NOTES:

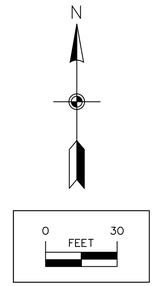
1. DEMOLISH AND DISPOSE OF (OFF SITE) ALL CONCRETE, REBAR, AND MISCELLANEOUS DEBRIS FROM REMOVAL OF 3 FISH KETTLE STRUCTURES. BACKFILL FOOTING VOIDS AND COMPACT.
2. DEMOLISH AND DISPOSE OF (OFF SITE) FISH KETTLE DRAIN PIPES. BACKFILL AND RECOMPACT TRENCHES.
3. SEE SHEET 4 FOR PROPOSED UTILITIES.

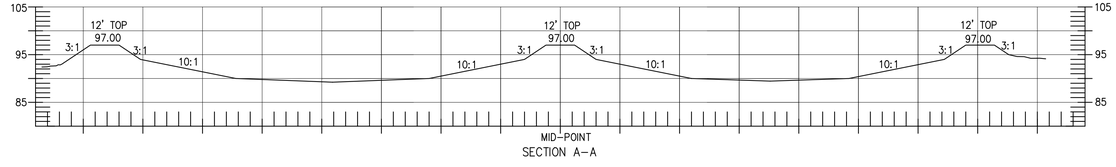
TITLE EXISTING SITE FEATURES / DEMOLITION PLAN DRAWN BY MB DATE JULY 2013

PROJECT MT AYR FISH POND REGRADING COUNTY RINGGOLD PROJ. NO. 13-04-80-01

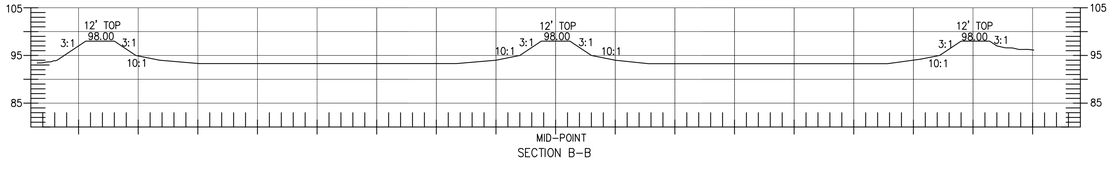
SHEET 2 OF 9



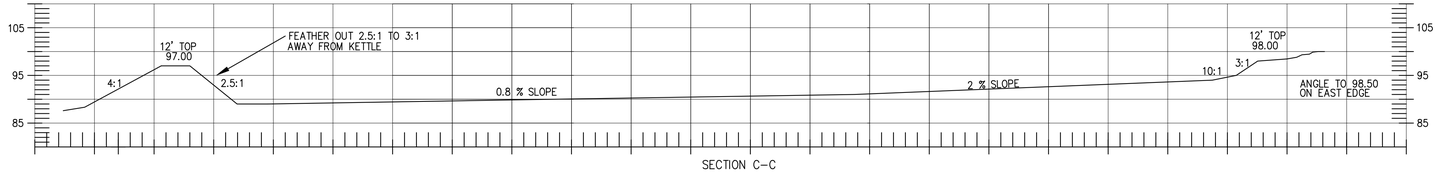




SECTION A–A



SECTION B–B

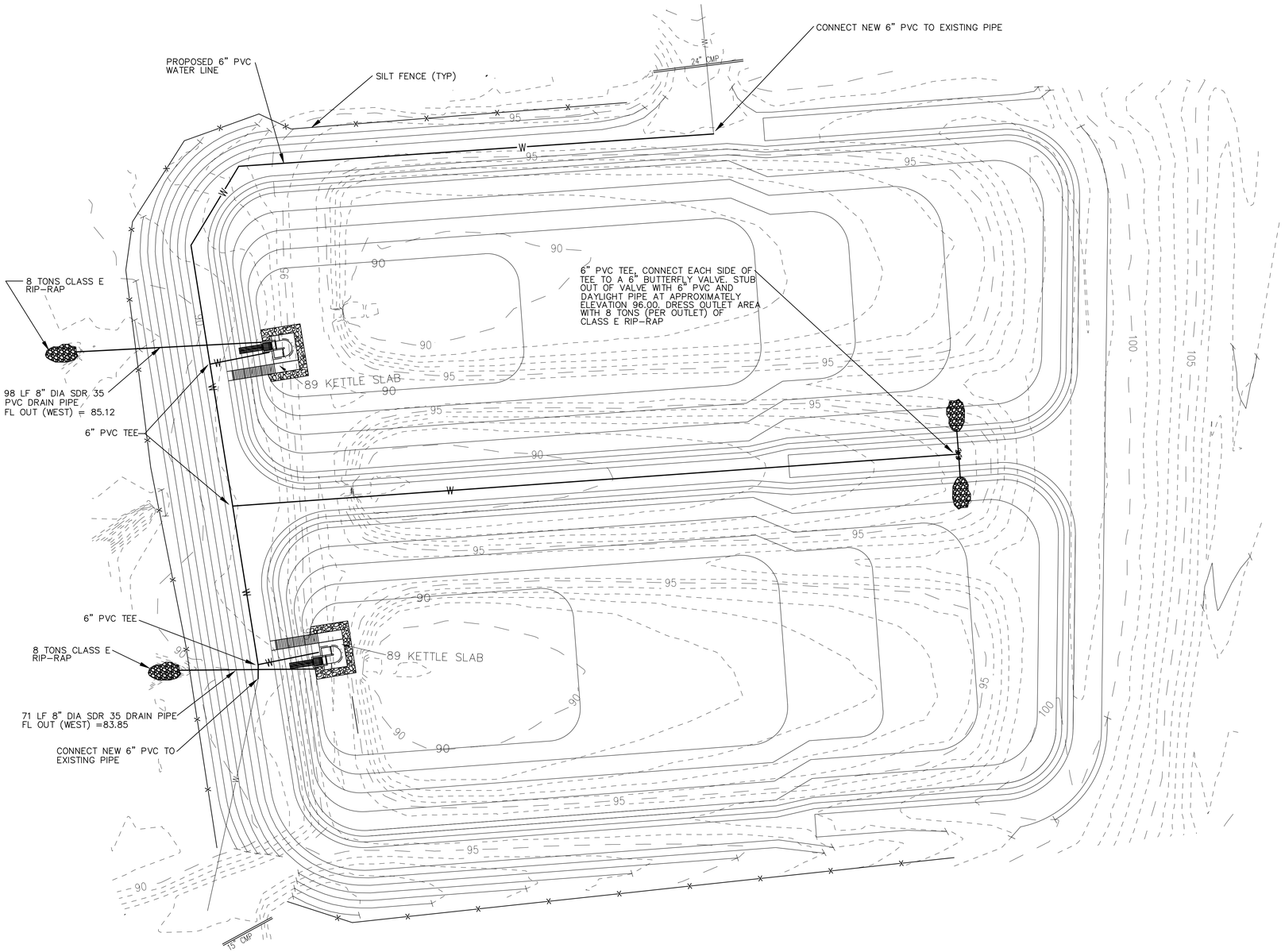


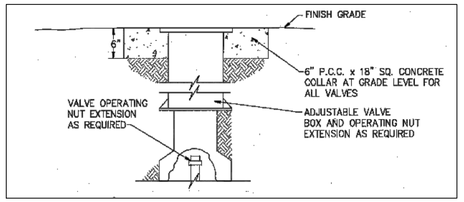
SECTION C–C
LONGITUDINAL

TITLE PROPOSED CONTOURS DRAWN BY MB DATE JULY 2013

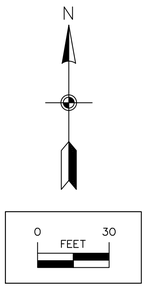
PROJECT MT AYR FISH POND REGRADING COUNTY RINGGOLD PROJ. NO. 13-04-80-01

SHEET 3 OF 9





VALVE BOX RISER DETAIL
NO SCALE



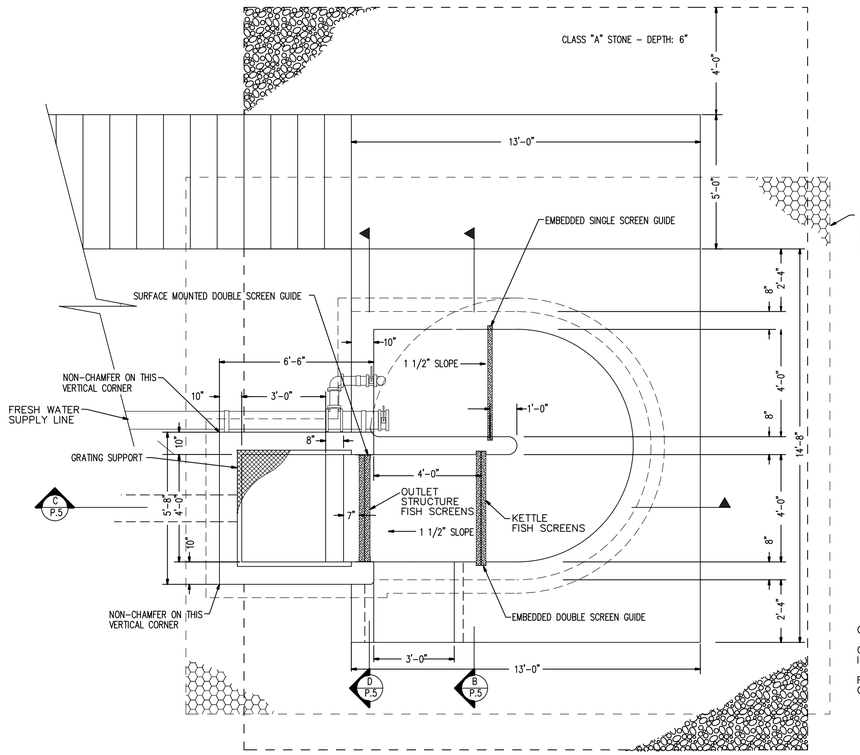
PLAN NOTES:

1. SEED, FERTILIZE, & MULCH PROJECT SITE AT THE CONCLUSION OF CONSTRUCTION. SEED MIX SHALL BE IDOT "PERMANENT SEED MIXTURE, RURAL AREA".

TITLE PROPOSED UTILITIES DRAWN BY MB DATE JULY 2013

PROJECT MT AYR FISH POND REGRADING COUNTY RINGGOLD PROJ. NO. 13-04-80-01

SHEET 4 OF 9

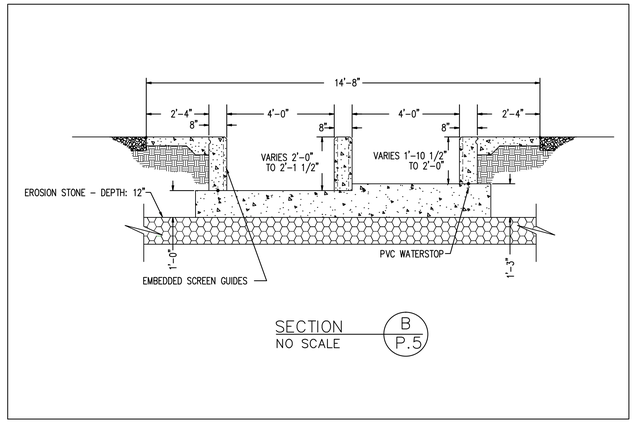


CONSTRUCT SOUTH KETTLE AS SHOWN

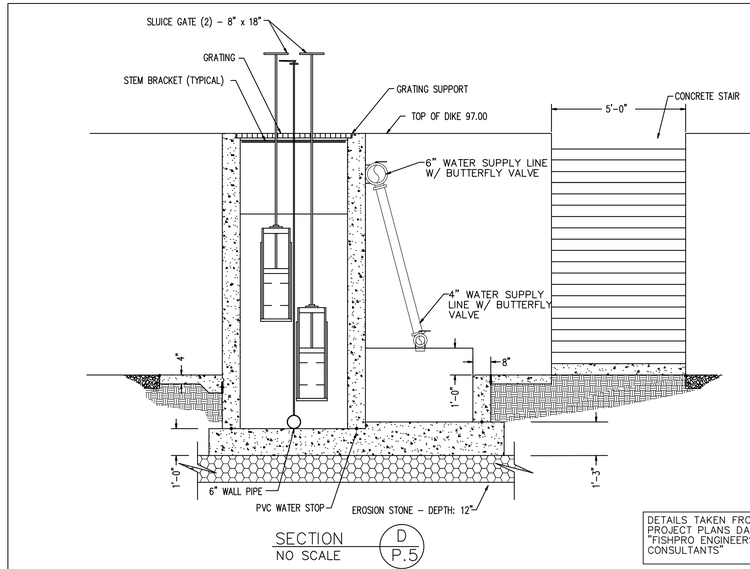
CONSTRUCT NORTH KETTLE AS MIRROR IMAGE

REFER TO KETTLE FOOTPRINTS SHOWN ON SHEETS 3 & 4

HARVEST KETTLE PLAN
NO SCALE

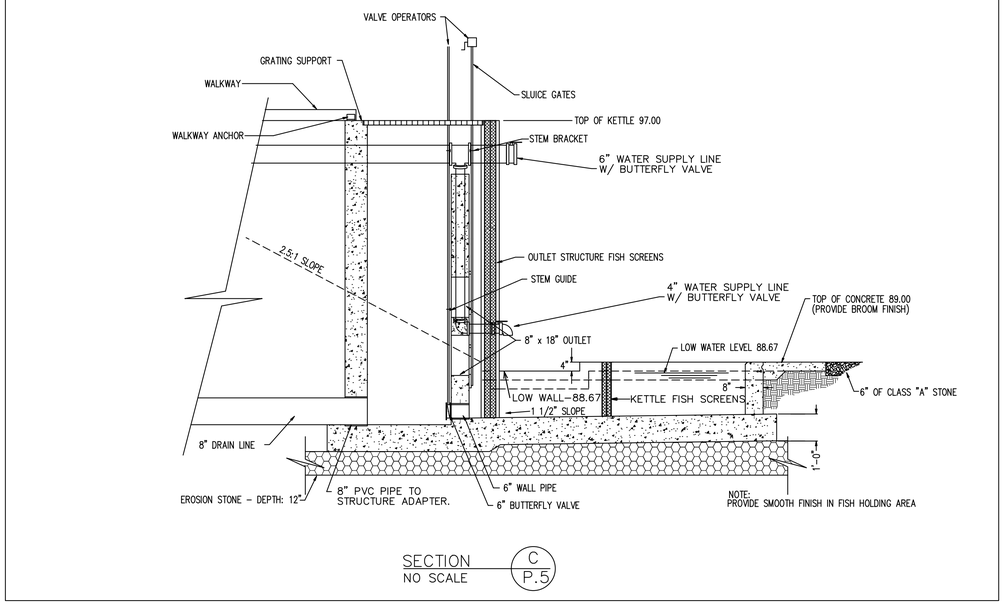


SECTION B P.5
NO SCALE



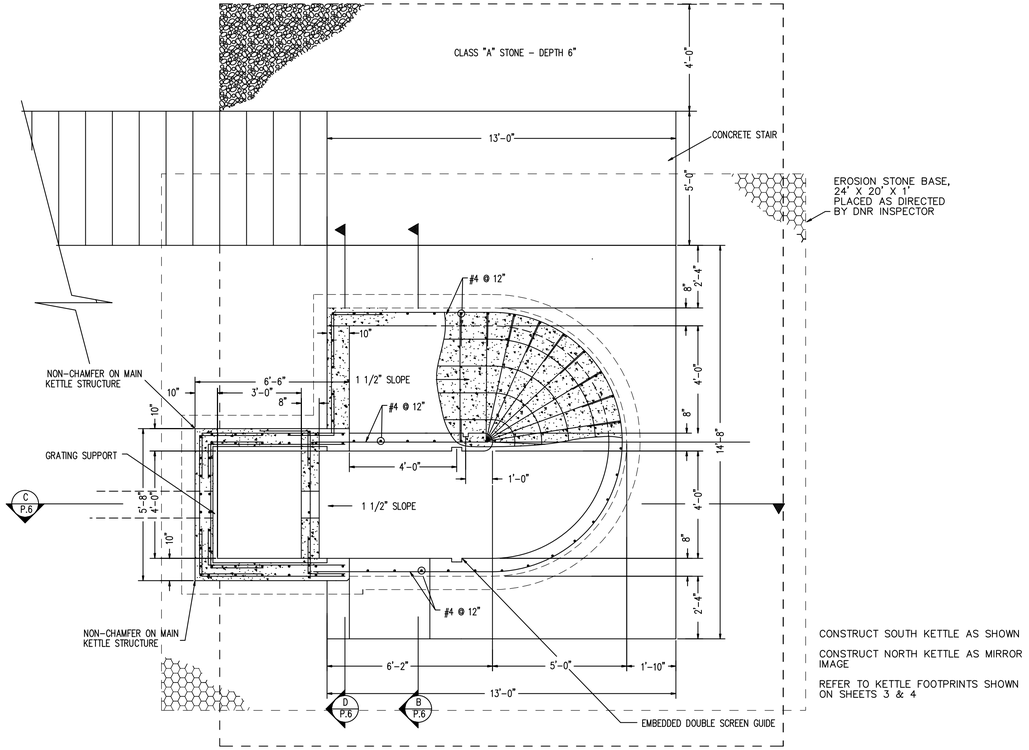
SECTION D P.5
NO SCALE

DETAILS TAKEN FROM PHASE 3 RESEARCH POND PROJECT PLANS DATED DECEMBER 19, 1997 BY "FISHPRO ENGINEERS AND ENVIRONMENTAL CONSULTANTS"

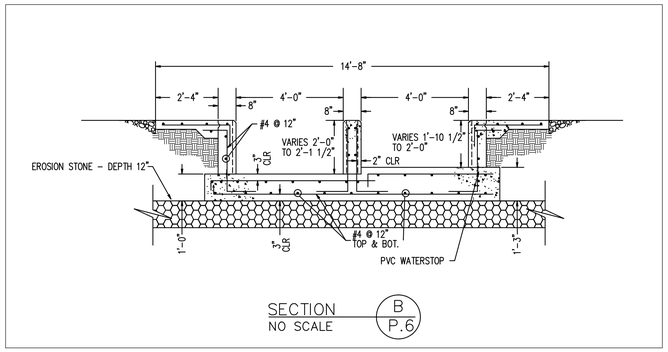


SECTION C P.5
NO SCALE

TITLE KETTLE PLAN & SECTIONS – KETTLE STRUCTURAL
DRAWN BY MB
DATE JULY 2013
PROJECT FISH POND REGRADING
COUNTY RINGGOLD
PROJ. NO. 13-04-80-01
SHEET 5 OF 9



HARVEST KETTLE PLAN
NO SCALE



SECTION B P.6
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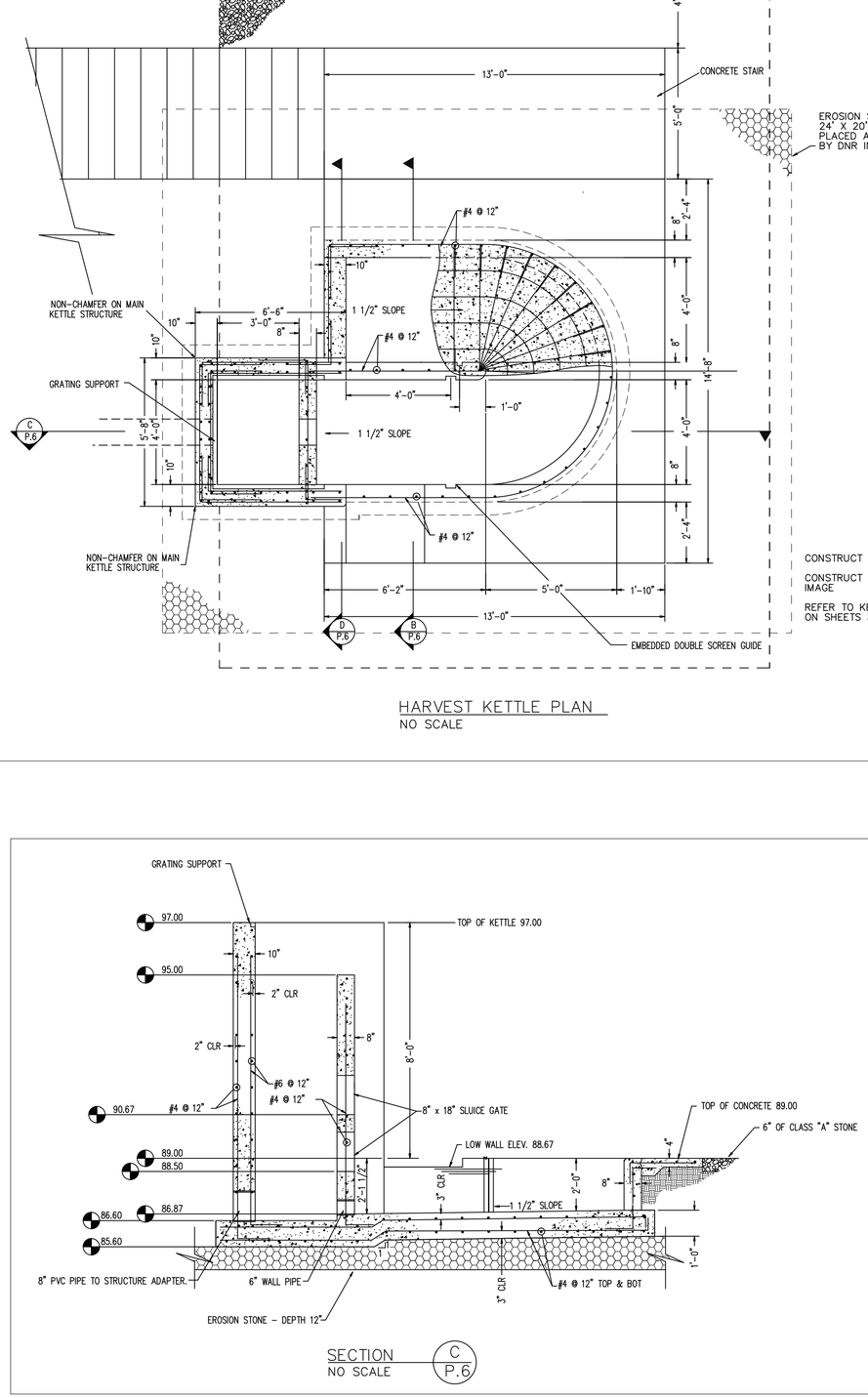

SECTION C P.6
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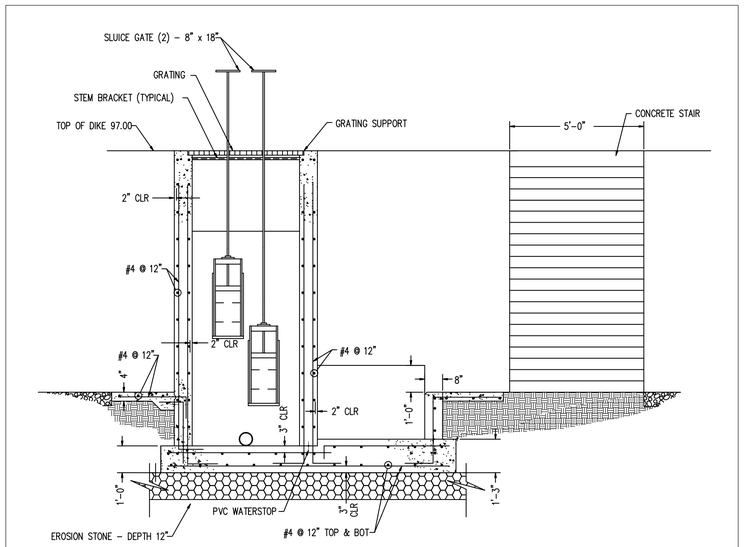
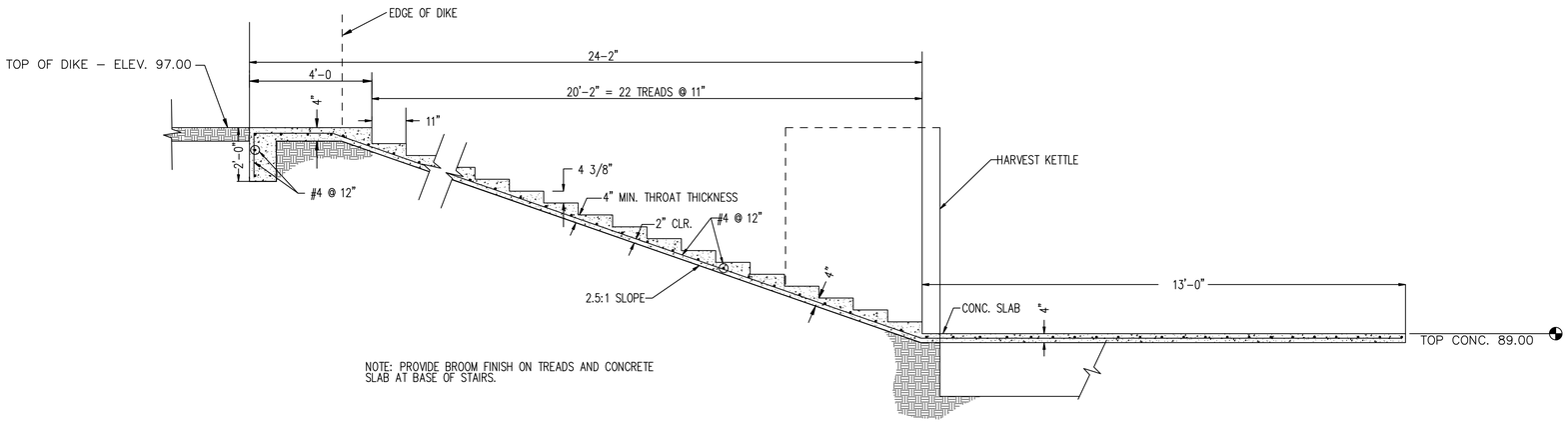
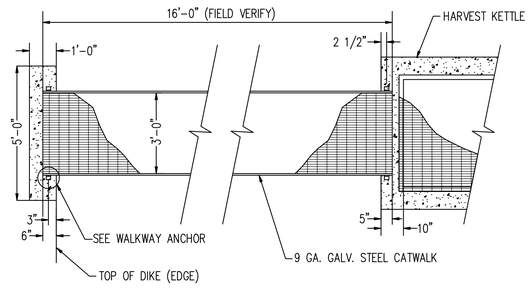


SECTION D P.6
NO SCALE

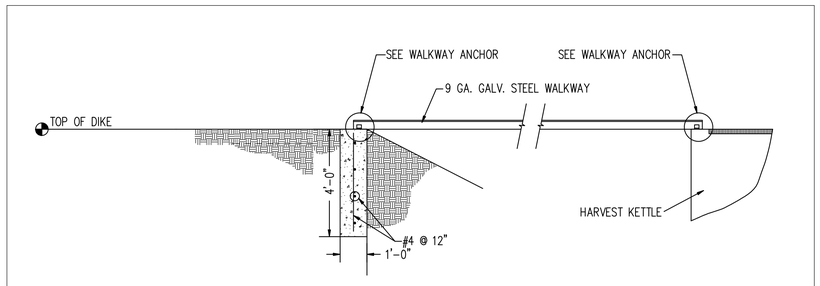
TITLE KETTLE STRUCTURAL
DRAWN BY MB
DATE JULY 2013
PROJECT FISH POND REGRADING
COUNTY RINGGOLD
PROJ. NO. 13-04-80-01
SHEET 6 OF 9



STAIR SECTION
NO SCALE



WALKWAY PLAN
NO SCALE

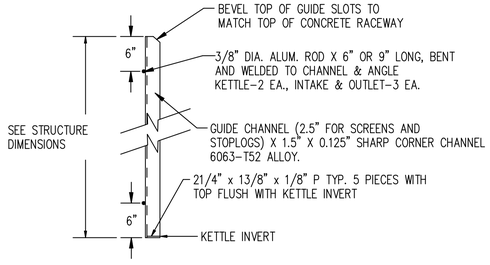


WALKWAY SECTION
NO SCALE

TITLE KETTLE STRUCTURAL DRAWN BY MB DATE JULY 2013

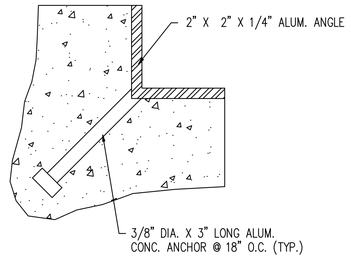
PROJECT FISH POND REGRADING COUNTY RINGGOLD PROJ. NO. 13–04–80–01

SHEET 7 OF 9



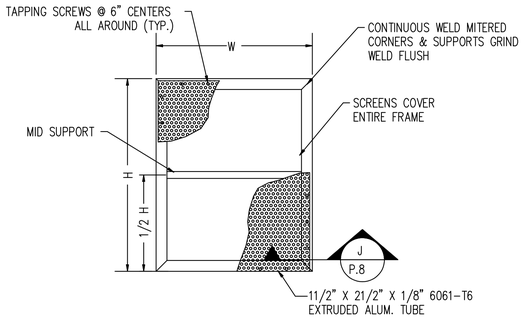
EMBEDDED SCREEN GUIDE CHANNEL

NO SCALE



GRATING SUPPORT

NO SCALE

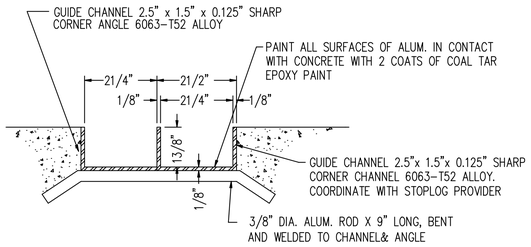


SCREENS AND SCREEN FRAMES

NO SCALE

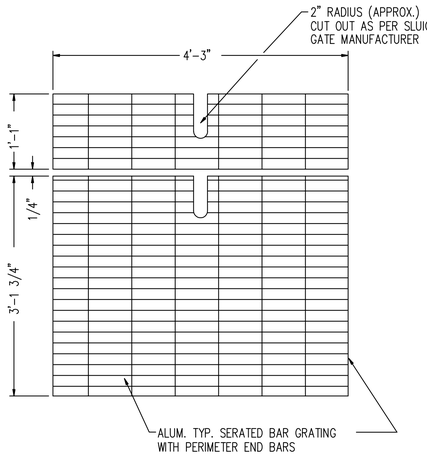
SCREEN AND SCREEN FRAME SCHEDULE				
STRUCTURE	FRAME SIZE* W X H	MID SUPPORT	SCREEN DESCRIPTION	TOTAL FRAMES REQUIRED
HARVEST KETTLE	4'–2 1/4" X 2'–1 1/2"	NO	3/16" DIA. HOLES, STAGGERED,1/4" CENTERS 51% OPEN	3
OUTLET STRUCTURE	3'–11 "X 10'–0"	YES	3/16" DIA. HOLES, STAGGERED,1/4" CENTERS 51% OPEN	2

*VERIFY WITH ACTUAL GUIDE DIMENSIONS.



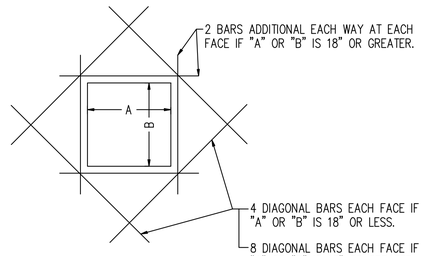
EMBEDDED DOUBLE SCREEN GUIDE

NO SCALE



GRATING DETAIL

NO SCALE

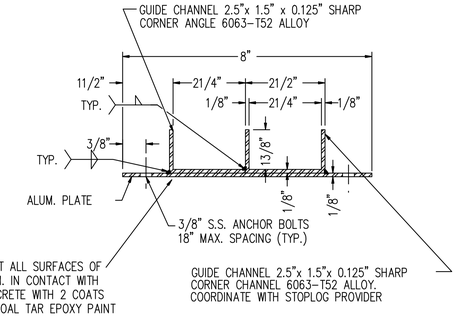


BARS MUST EXTEND BEYOND OPENING BY THE A OR B AND BE THE SAME SIZE AS OTHER BARS IN WALL OR SLAB.

BAR NO.	d	TOTAL LENGTH
4	1'–3"	A OR B + 2d
5	2'–0"	"
6	2'–6"	"
7	3'–6"	"
8	4'–6"	"
9	6'–0"	"

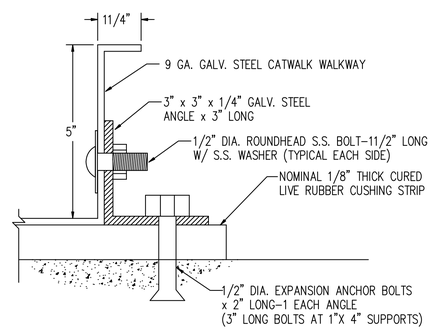
CAST–IN–PLACE CONCRETE SLAB OR WALL OPENING REINFORCEMENT DETAIL

NOT TO SCALE



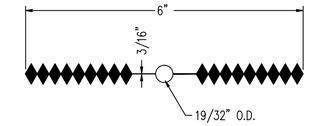
SURFACE MOUNTED DOUBLE SCREEN GUIDE

NOT TO SCALE



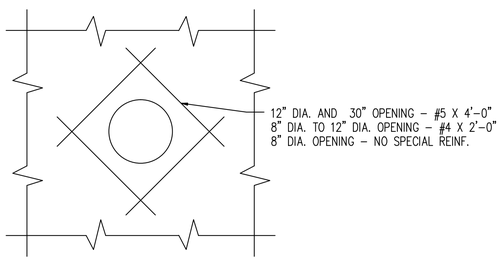
WALKWAY ANCHOR DETAIL

NO SCALE



TYPICAL PVC WATERSTOP

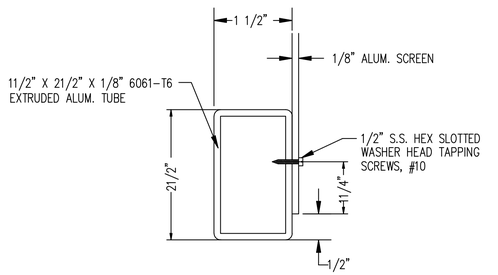
NO SCALE



TYPICAL PIPE OPENING

NO SCALE

DETAILS TAKEN FROM PHASE 3 RESEARCH POND PROJECT PLANS DATED DECEMBER 19, 1997 BY "FISHPRO ENGINEERS AND ENVIRONMENTAL CONSULTANTS"



FRAME & SCREEN DETAIL (J P.8)

NOT TO SCALE

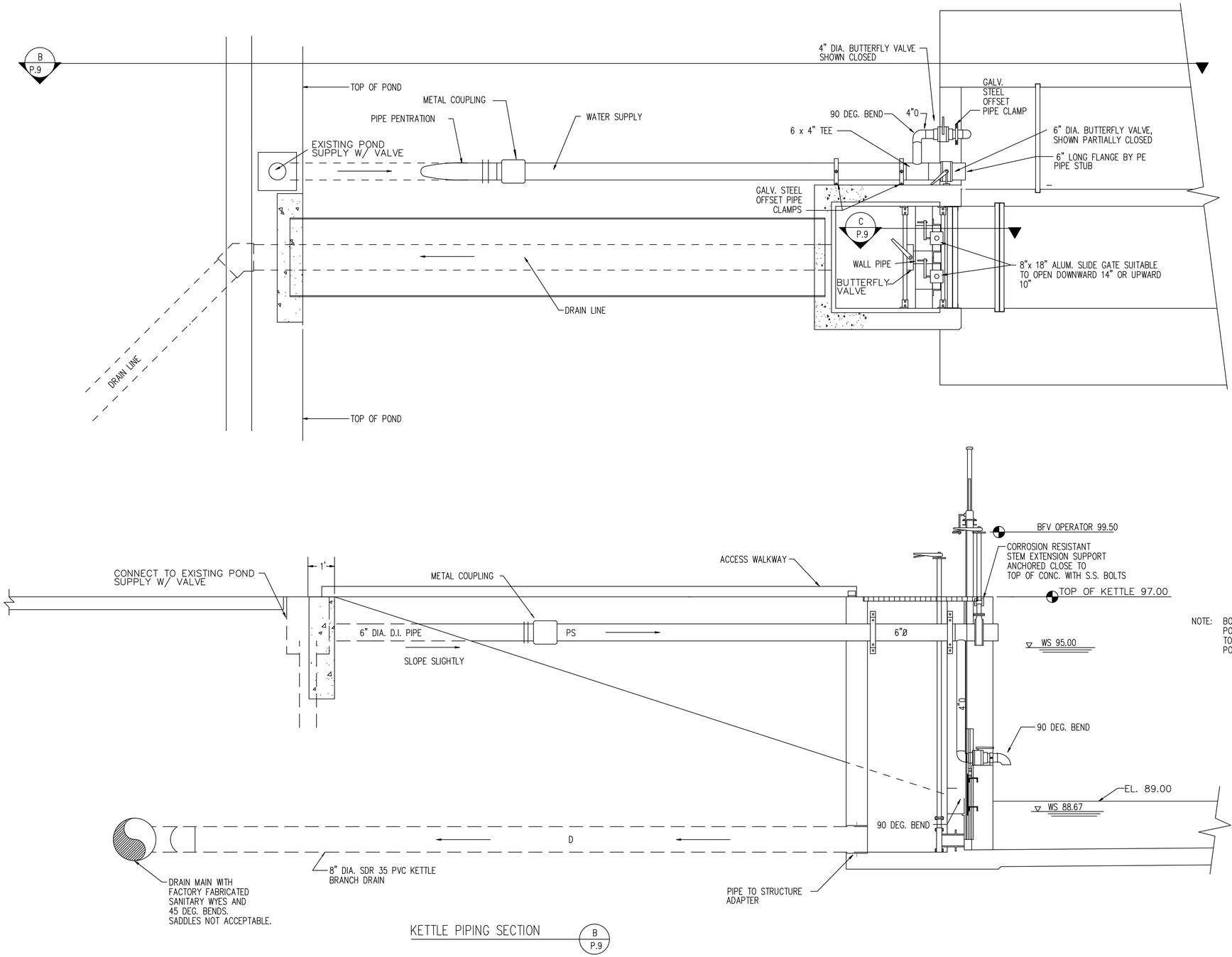
TITLE KETTLE STRUCTURAL DETAILS

DRAWN BY MB DATE JULY 2013

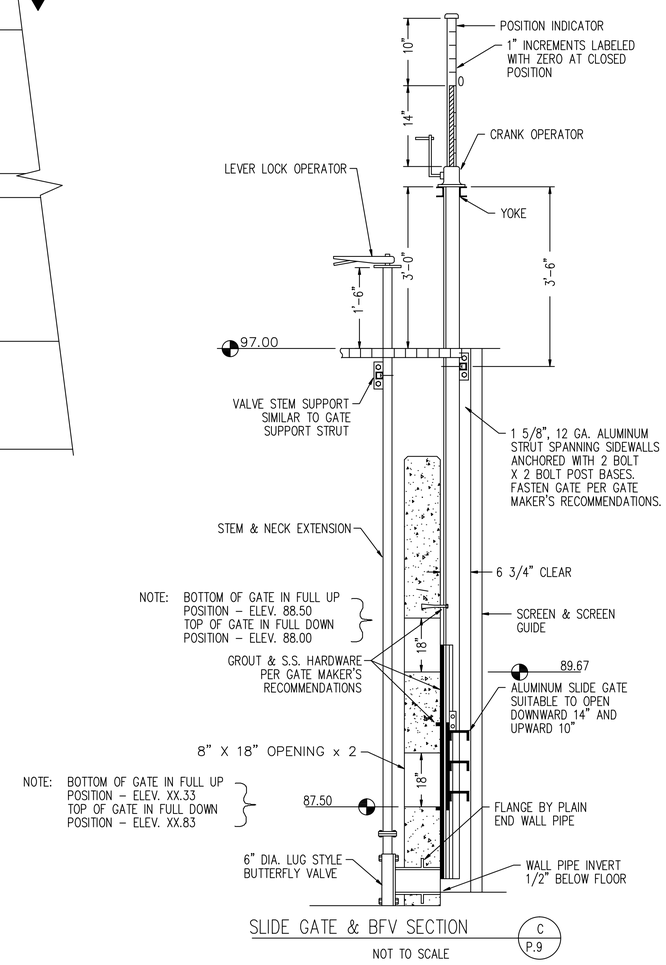
PROJECT FISH POND REGRADING

COUNTY RINGGOLD PROJ. NO. 13–04–80–01

SHEET 8 OF 9



KETTLE PIPING SECTION (B P.9)



SLIDE GATE & BFV SECTION (C P.9)

NOT TO SCALE

DETAILS TAKEN FROM PHASE 3 RESEARCH POND PROJECT PLANS DATED DECEMBER 19, 1997 BY "FISHPRO ENGINEERS AND CONSULTANTS"

TITLE PLUMBING DETAILS DRAWN BY MB DATE JULY 2013

PROJECT FISH POND REGRADING COUNTY RINGGOLD PROJ. NO. 13-04-80-01

SHEET 9 OF 9