

RIVERSIDE ESTATES

PASCO COUNTY, FLORIDA

SUBDIVISION CONSTRUCTION PLANS

INDEX OF SHEETS

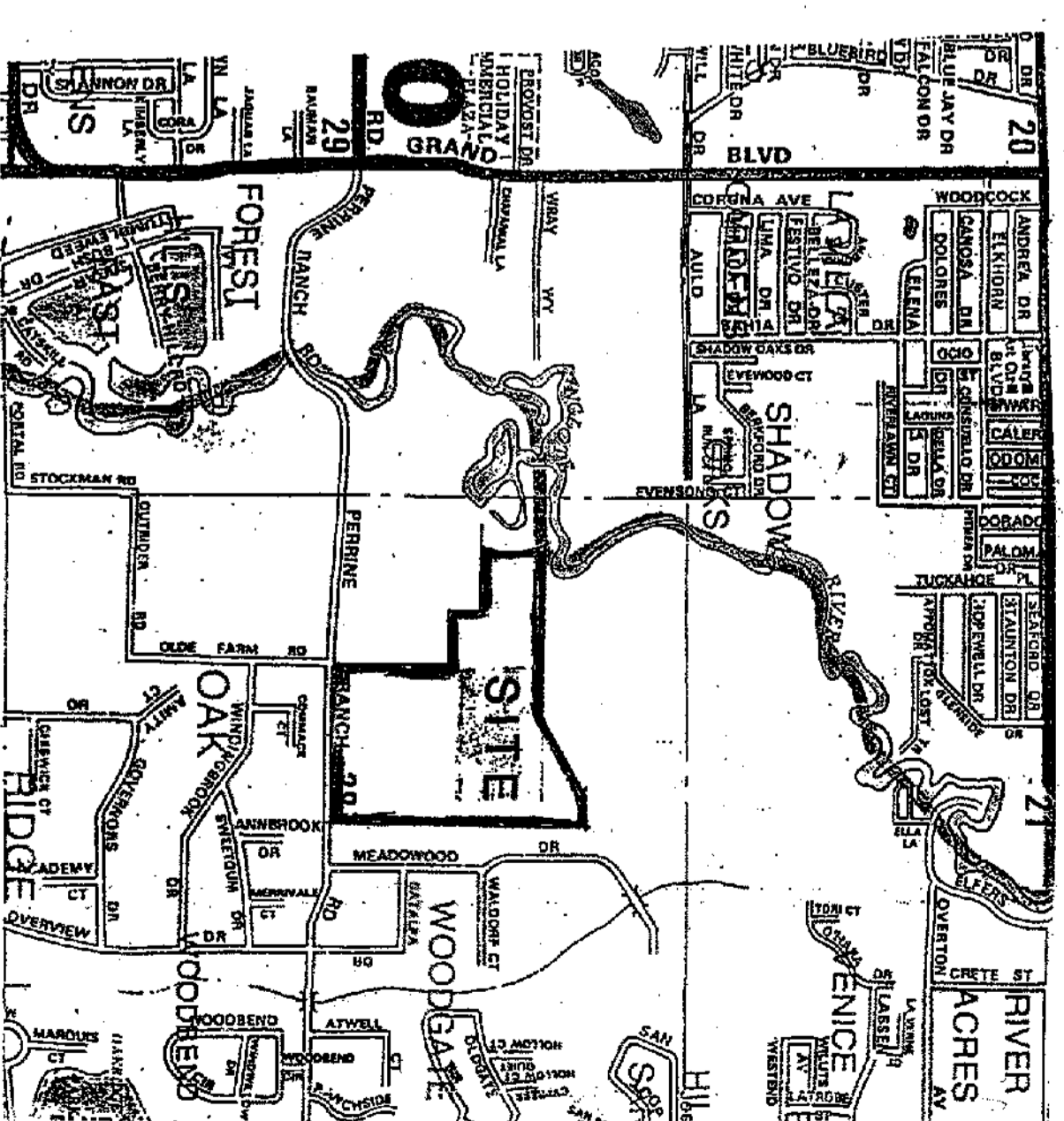
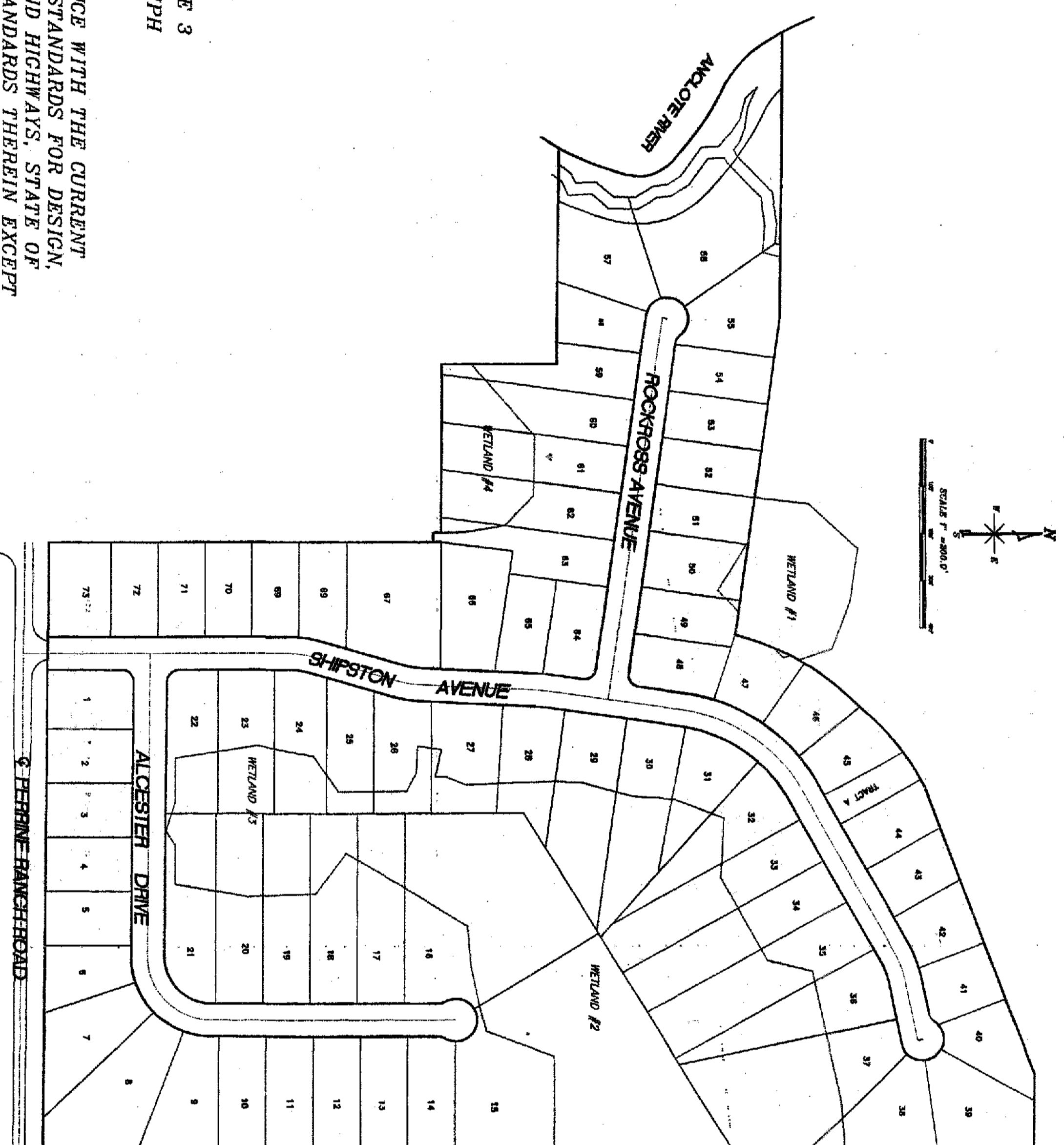
NO.	DESCRIPTION
COVER.	INFORMATION
1.	WETLAND PLAN
2.	WETLAND BUFFER PLAN
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4.	LOT DIMENSION
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14.	PAVING AND DRAINAGE DETAILS
15.	UTILITY DETAILS
16.	DRAINAGE DETAILS
17.	LEFT TURN LANE PLAN, PERRINE RANCH ROAD
17A.	LEFT TURN DETAILS PERRINE RANCH ROAD
18.	LIFT STATION

ROADWAY CLASSIFICATION
 INTERNAL STREETS ----- TYPE 3
 DESIGN/POSTED SPEED IS 20 MPH

THESE PLANS HAVE BEEN PREPARED IN ACCORDANCE WITH THE CURRENT VERSION OF THE "MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN, CONSTRUCTION AND MAINTENANCE FOR STREETS AND HIGHWAYS, STATE OF FLORIDA", AND ARE IN COMPLIANCE WITH THE STANDARDS THEREIN EXCEPT AS NOTED ON PLANS. ANY DEVIATIONS NOTED ON THE PLANS SUBSTANTIALLY COMPLY WITH THE INTENT OF THE STANDARDS.

FLORIDA P.E. NUMBER 9280

DATE: _____



LOCATION MAP

SECTIONS 28, T 26 S, R 16 E

LEGAL DESCRIPTION

A PARCEL OF LAND LYING IN THE NORTHWEST 1/4 OF SECTION 28; TOWNSHIP 26 SOUTH; RANGE 16 EAST; PASCO COUNTY, FLORIDA ALL LYING SOUTH AND EAST OF THE CENTERLINE OF ANCLOTE RIVER EXPLICITLY DESCRIBED AS FOLLOWS:

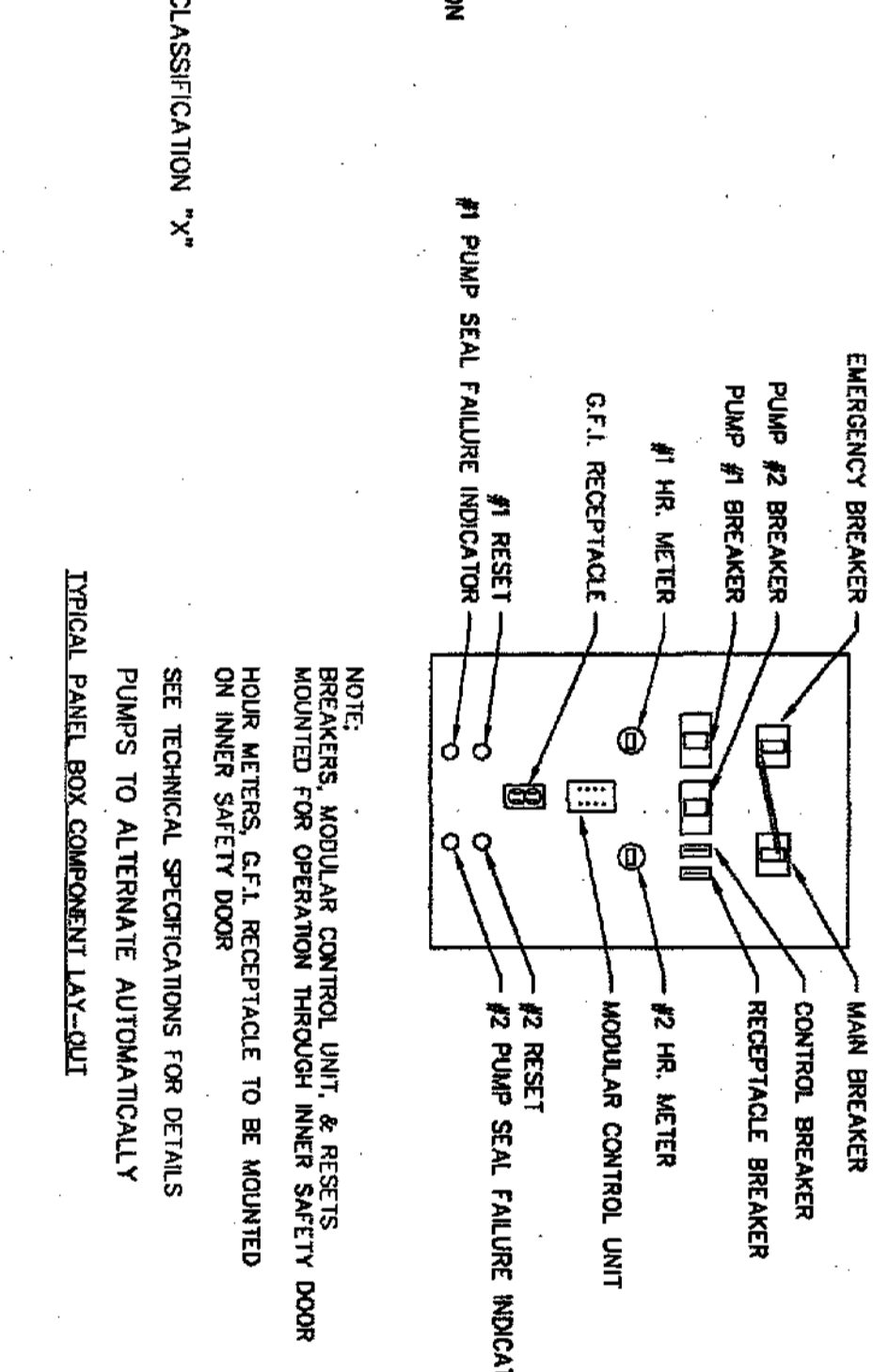
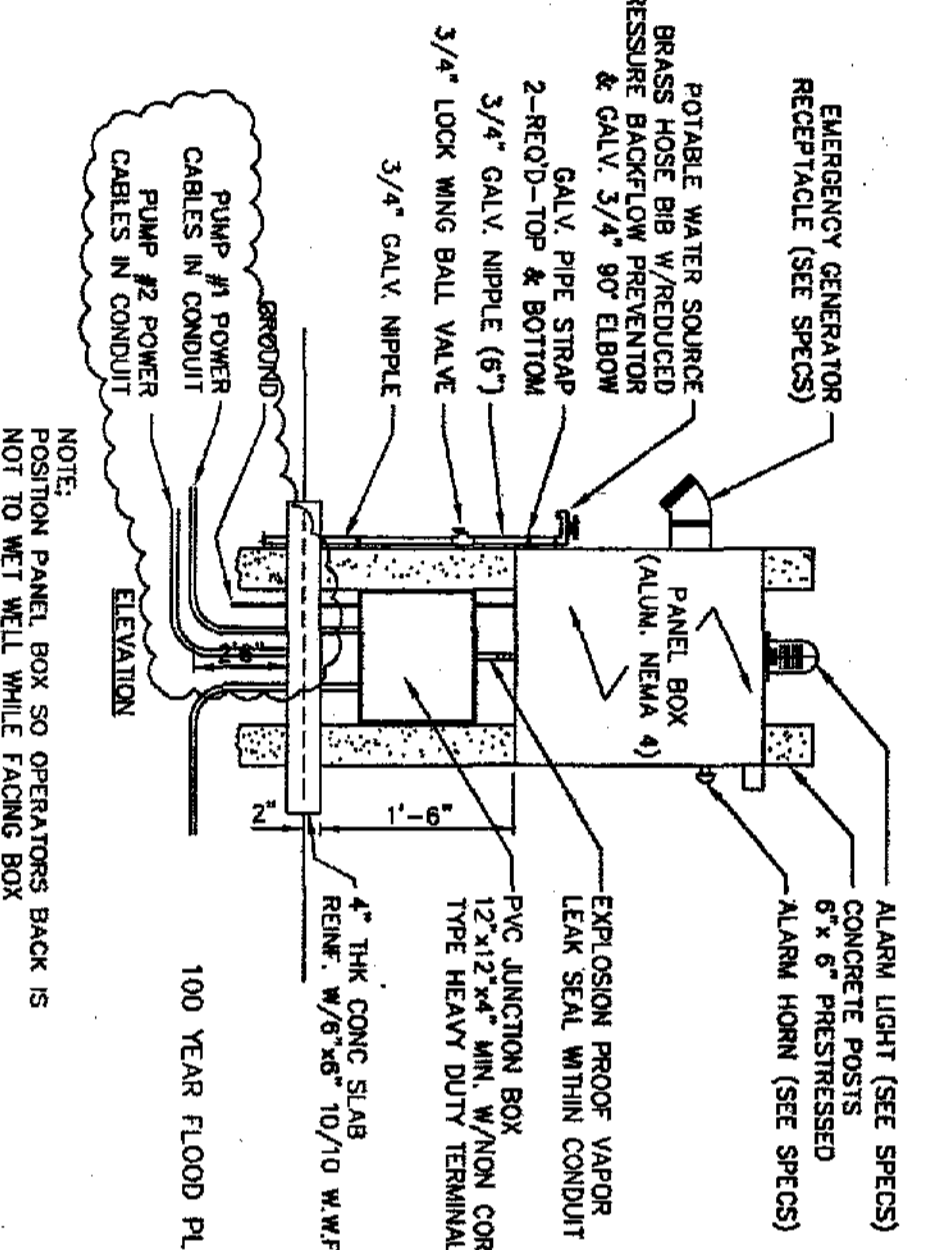
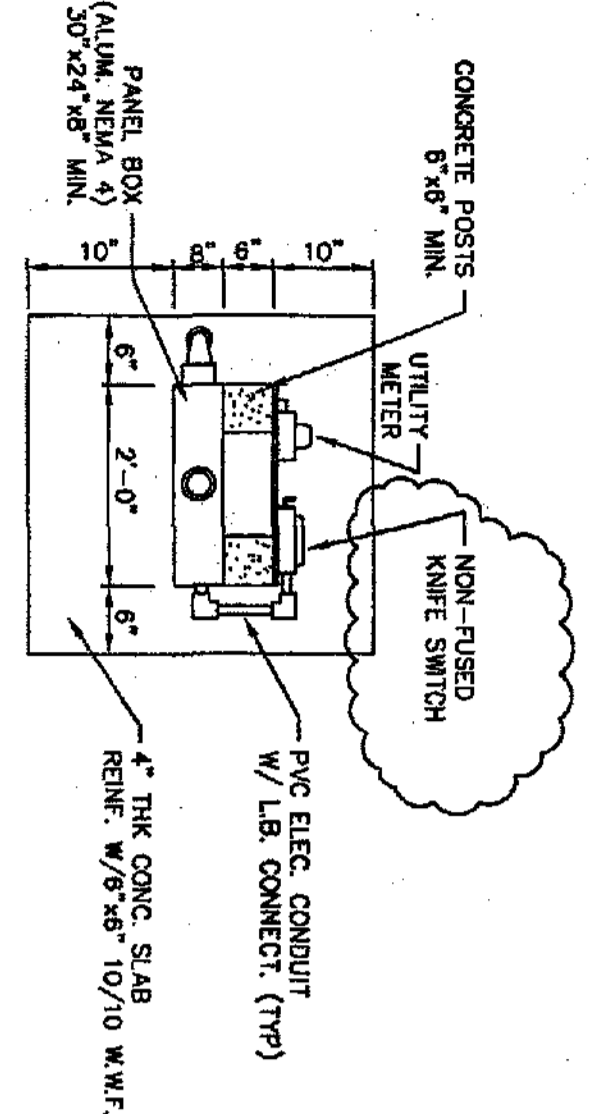
COMMENCE AT THE SOUTHEAST CORNER OF THE NORTHWEST 1/4 OF SAID SECTION 28; THENCE ON THE EAST BOUNDARY THEREOF NORTH 31° 34' 42" WEST A DISTANCE OF 45.00 FEET TO THE NORTH RIGHT-OF-WAY LINE OF PERRINE RANCH ROAD AND THE POINT OF BEGINNING; THENCE DEPARTING SAID EAST BOUNDARY ON SAID NORTH RIGHT-OF-WAY LINE N89°32'23\"/>

DEVELOPER
 BLACKWELL PROPERTIES, INC.
 P.O. BOX 1085
 NEW PORT RICHEY, FLORIDA 34652
 727-842-2571

SURVEYOR
 ELLOTT PRIOR
 METRO SURVEYING, INC.
 24006 STATE ROAD 54
 LUTZ, FLORIDA 33549
 813-949-1075

ENGINEER
 RALPH M. HANSEN, JR., P.E. #9280
 DESIGN SERVICES, INC. #4297
 6636 ROMAN ROAD
 NEW PORT RICHEY, FLORIDA 34653
 727-849-7085

NON-SUBSTANTIAL CHANGE AND 57-58 AND 57 TO BE DEVELOPED PER THESE PLANS.



GENERAL NOTES

FINISH AND INSTALL METERS GRINDER SUBMERSIBLE PUMPS

MODEL	WCSO	3	HP
DESIGN CONDITIONS			
MODEL	60	37	TDI
GPM	230	3	PHASE
VOLTI	2	3.75	IMPELLER
DISCHARGE			

NOTES:

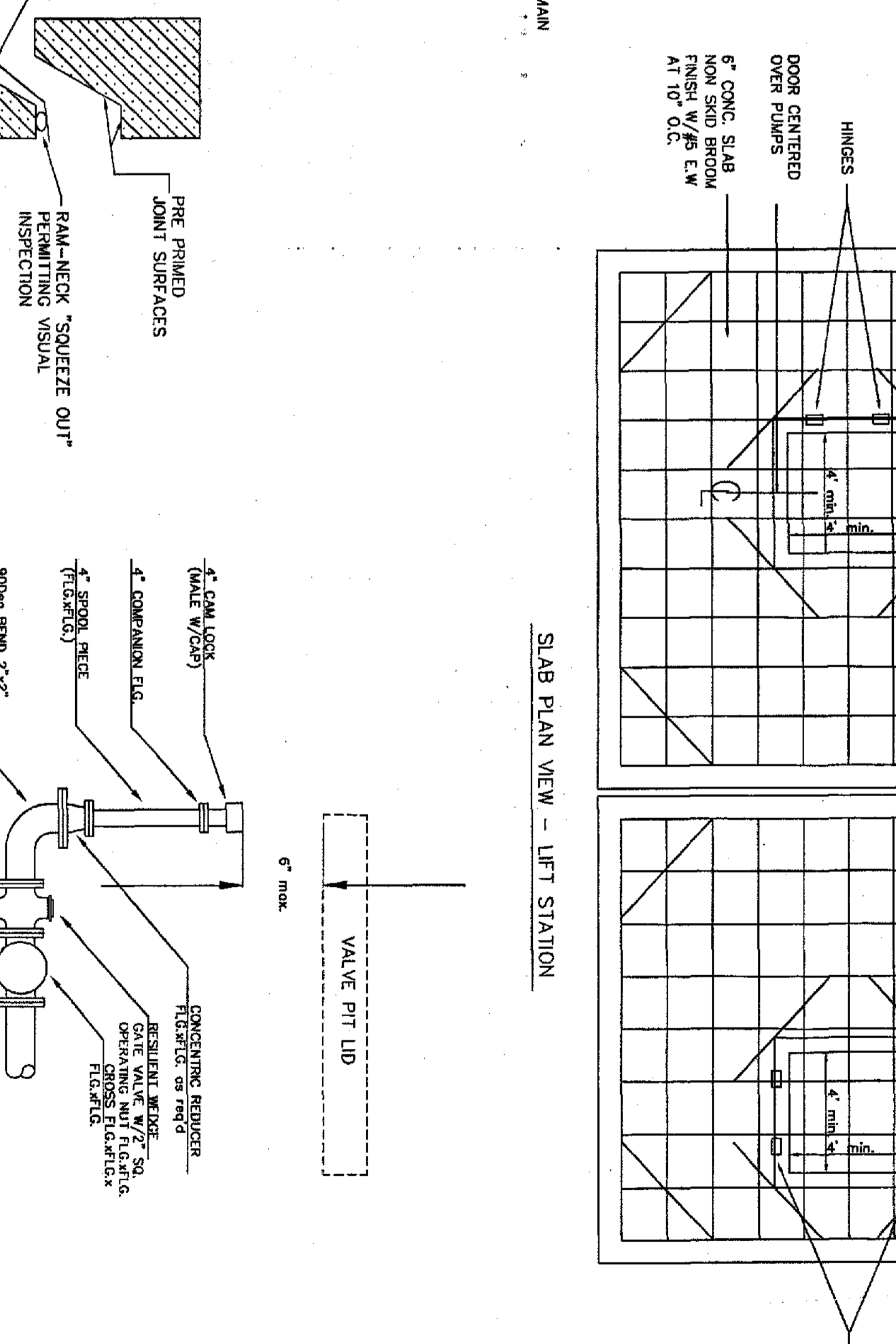
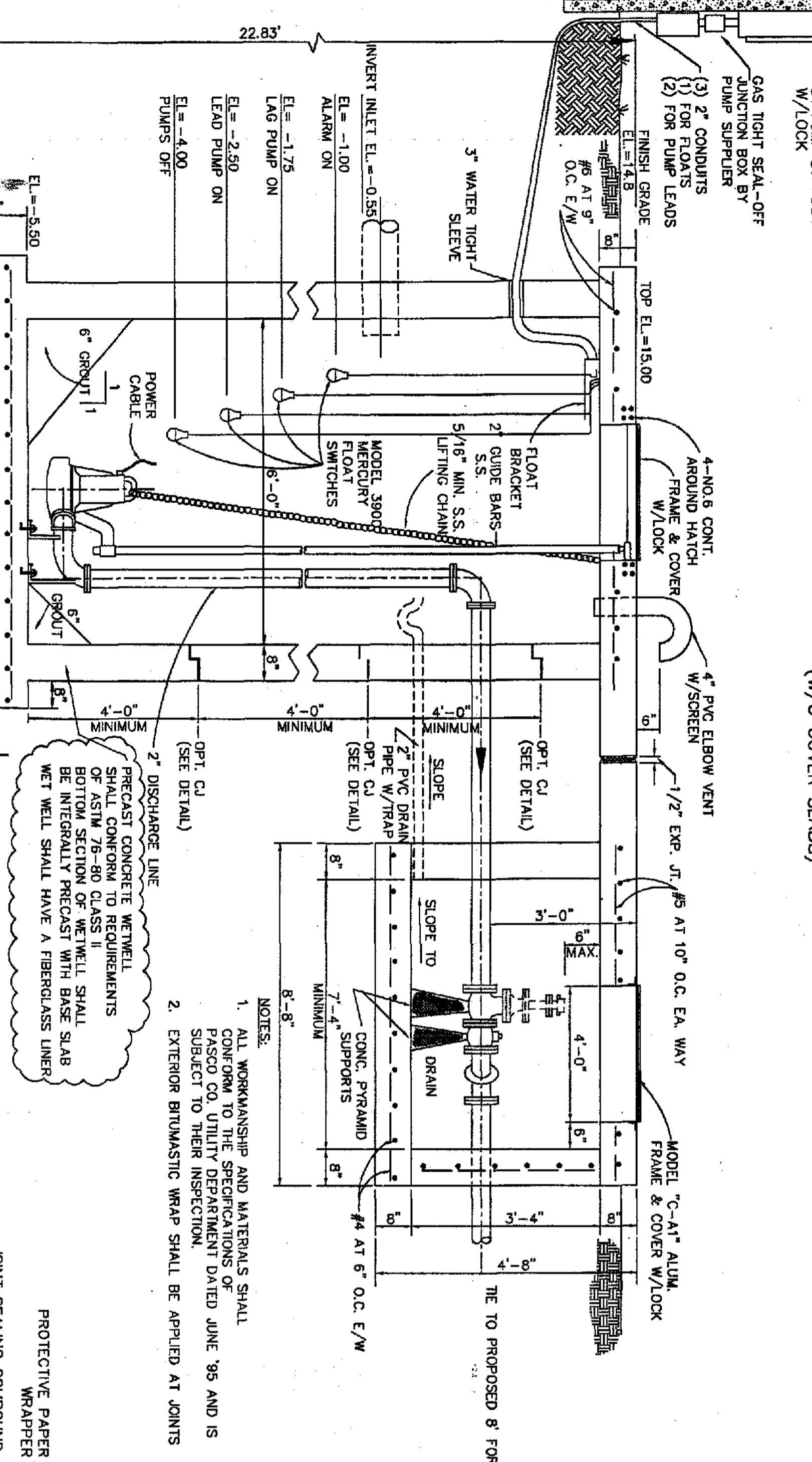
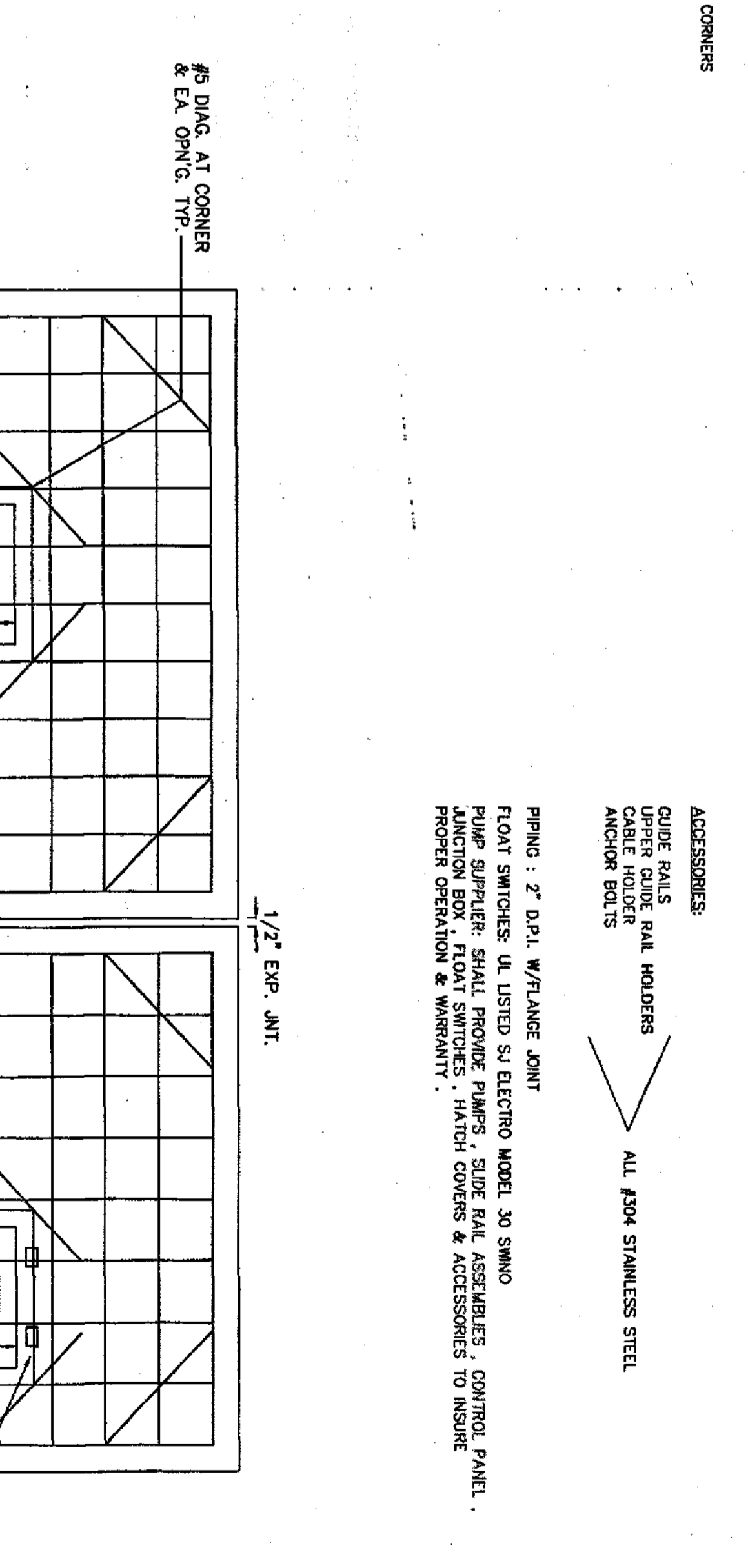
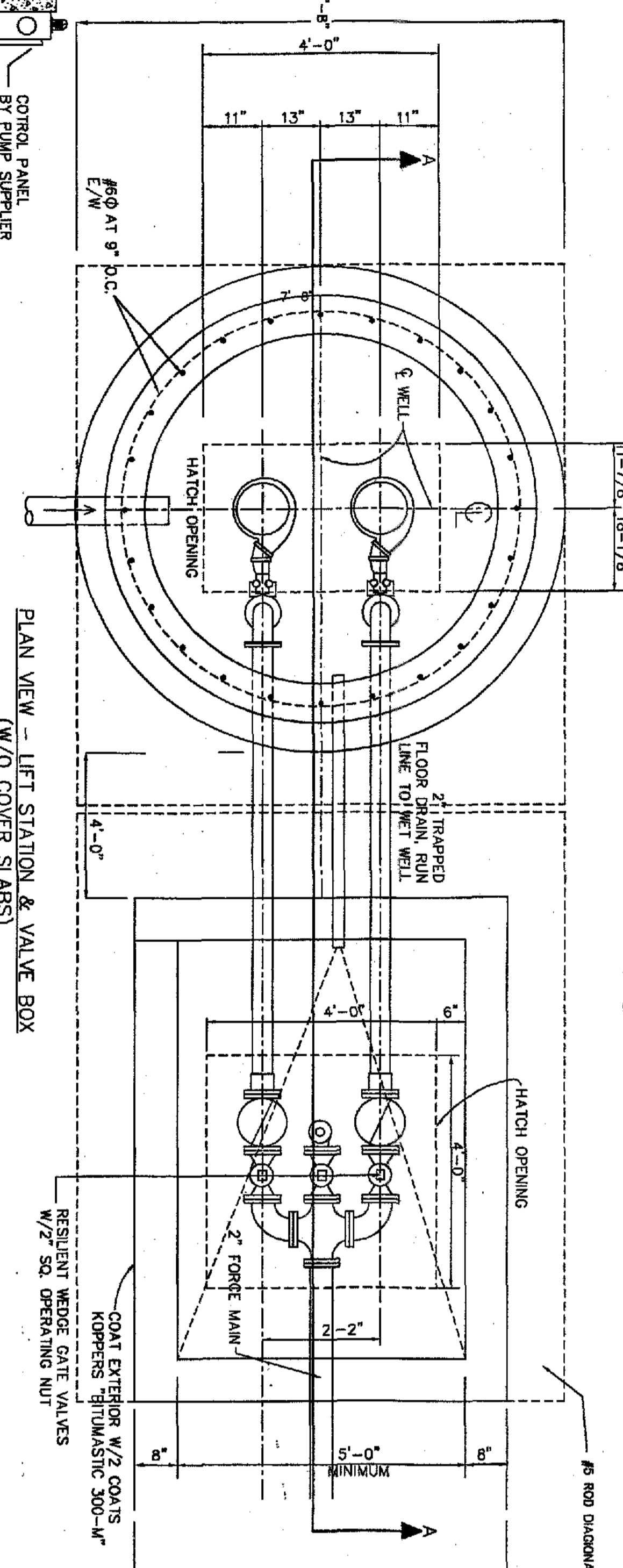
- AIR FLEED MOTOR DESIGNED FOR SEWAGE APPLICATION W/ CLASS "F" INSULATION
- RATED FOR TWENTY (20) STARTS PER HOUR
- HAVE DUAL MECHANICAL SHAFT SEALS (SILICON CARBIDE/SILICON CARBIDE) LOCATED COMPLETELY OUT OF PUMPAGE IN A SEPARATE OIL FILLED CHAMBER THE END AND THE SECOND ON THE MOTOR END-TOTAL OF 4 SEAL SURFACES
- HIGH TEMPERATURE BALL BEARINGS RATED FOR A LIFE EXPECTANCY OF 50,000 HOURS (UPPER BALL BEARING-SINGLE ROW TYPE/LOWER BALL BEARING-DOUBLE ROW TYPE). THE PUMP SHALL BE DESIGNED SO THAT THE PUMP SHAFT HORSEPOWER (BHP) SHALL NOT EXCEED MOTOR RATED HORSE-POWER THROUGHOUT THE ENTIRE OPERATING RANGE OF THE PUMP PERFORMANCE CURVE.

ACCESSORIES:

- GUIDE RAILS
- UPPER GUIDE RAIL HOLDERS
- CABLE HOLDER
- ANCHOR BOLTS

PUMPING: 2" D.P.L. W/FLANGE JOINT

NOTE: FLOAT SWITCHES: UL LISTED SJ ELECTRO MODEL 30 SWMO PUMP SUPPLIER SHALL PROVIDE PUMPS, SIZE RAIL, ACCESSORIES, CONTROL PANEL, JUNCTION BOX, FLOAT SWITCHES, HATCH COVERS & ACCESSORIES TO INSURE PROPER OPERATION & WARRANTY.



NOTES:

- ALL WORKMANSHIP AND MATERIALS SHALL CONFORM TO THE SPECIFICATIONS OF PASCO CO. UTILITY DEPARTMENT DATED JUNE '95 AND IS SUBJECT TO THEIR INSPECTION.
- EXTERIOR BITUMASTIC WRAP SHALL BE APPLIED AT JOINTS

PRECAST CONCRETE WELLWELLS:

SHALL CONFORM TO REQUIREMENTS OF PASCO CO. UTILITY DEPARTMENT DATED JUNE '95 AND IS SUBJECT TO THEIR INSPECTION. PRECAST SECTION OF WELL SHALL BE INTEGRALLY PRECAST WITH BASE SLAB. WELLS SHALL HAVE A FIBERGLASS LINER.

JOINT SEALING COMPOUND (OR APPROVED EQUAL) PLACED BEFORE INSTALLATION.

PROTECTIVE PAPER WRAPPER

RAM-NECK "SQUEEZE OUT" REMAINING VISUAL INSPECTION

PRE PRIMED JOINT SURFACES

OPT. C.J. DETAIL

SECTION "A-A"

PLAN VIEW - LIFT STATION & VALVE BOX (W/O COVER SLABS)

SLAB PLAN VIEW - LIFT STATION

AUXILIARY PUMP OUT DETAIL

LIFT STATION

CLIENT: BLACKWELL PROPERTIES, INC. P.O. BOX 1085 NEW PORT RICHEY, FLORIDA 34652 727-842-2571

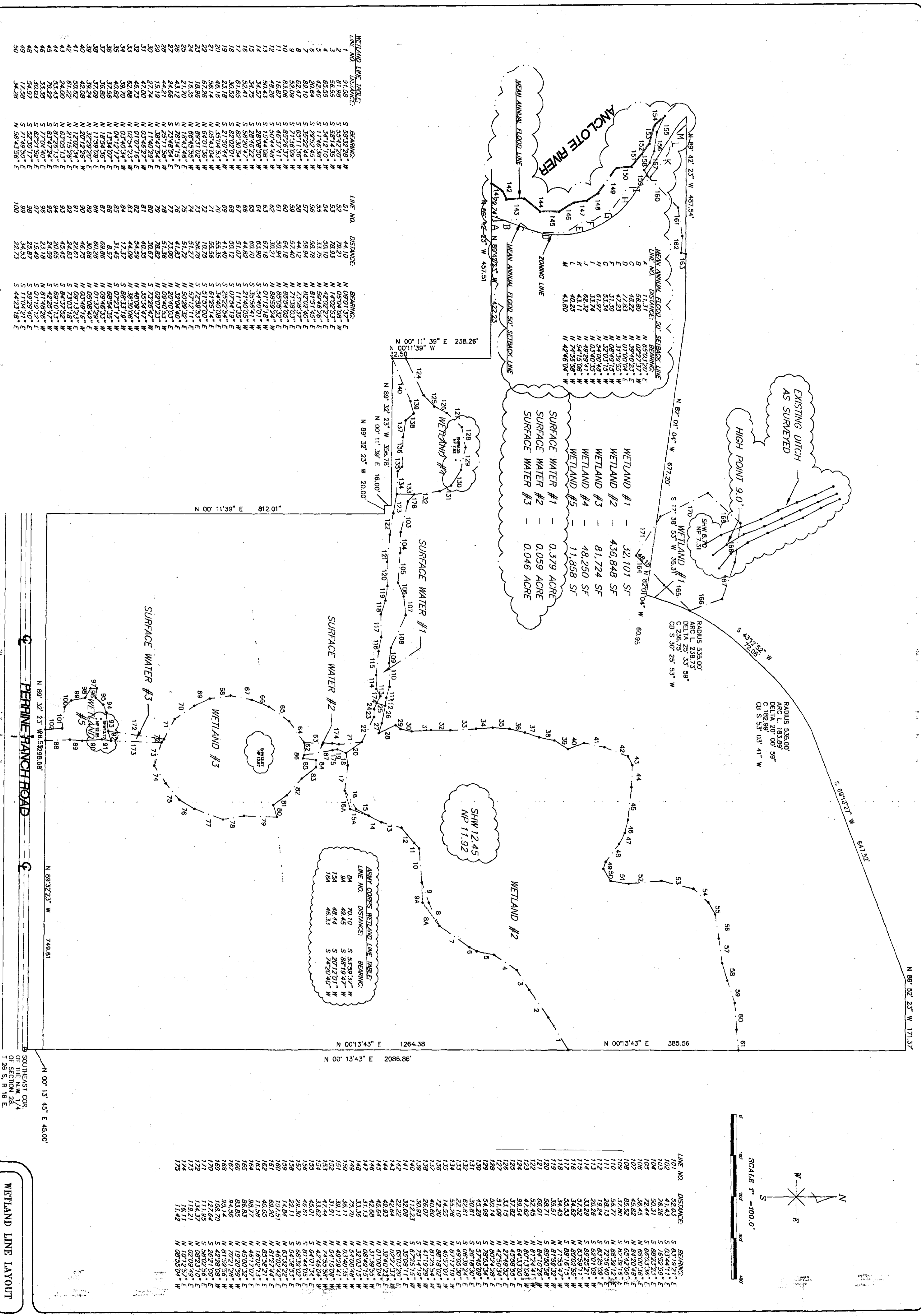
PROJECT: RIVERSIDE ESTATES PERRINE RANCH ROAD PASCO COUNTY, FLORIDA

Design Services, Inc. #4297

RALPH M. HANSEN JR. PE #9280 6636 ROWAN ROAD NEW PORT RICHEY, FL. 34653 (727)849-7065

DATE	REV.	BY
2/99	#1	JBC
4/21/99	#2	TB

DRAWN: RMH JR.
CHECKED: RMH JR.
DATE: 12-2-98
SCALE: 1" = 60'
JOB NO.: 97-013.05
SHEET: Sub.F18
OF 18 SHEETS



WETLAND LINE TABLE:

LINE NO.	DISTANCE	BEARING
1	91.58	S 59°32'28" W
2	81.98	S 55°42'20" W
3	56.55	S 59°14'35" W
4	43.55	S 51°42'53" W
5	35.12	S 41°42'40" W
6	20.64	S 29°32'45" W
7	89.10	S 35°22'44" W
8	62.47	S 69°11'36" W
9	52.09	S 71°36'09" W
10	83.06	S 85°26'37" W
11	16.87	S 46°31'42" W
12	50.43	S 15°44'08" W
13	34.57	S 28°08'50" W
14	34.75	S 28°46'22" W
15	52.41	S 58°20'47" W
16	61.65	S 58°30'54" W
17	17.72	S 82°02'01" W
18	30.52	S 21°54'19" E
19	23.18	S 44°40'54" W
20	44.66	S 23°49'54" W
21	56.14	N 05°43'04" W
22	67.26	N 66°01'36" W
23	18.96	N 89°31'02" E
24	16.35	N 66°45'55" W
25	43.12	N 18°43'16" E
26	21.70	N 78°34'15" E
27	41.72	N 28°14'15" E
28	44.86	S 23°49'54" W
29	15.19	N 38°47'54" E
30	27.74	N 11°40'29" E
31	47.00	N 03°46'27" W
32	46.23	N 01°07'16" E
33	62.88	N 02°54'23" W
34	39.70	N 03°40'54" W
35	40.82	N 04°12'07" W
36	37.58	N 11°54'12" W
37	32.09	N 17°59'09" E
38	39.24	N 32°29'20" E
39	42.08	N 20°12'26" W
40	50.62	N 12°02'34" E
41	61.22	N 21°15'26" E
42	50.62	N 09°13'25" E
43	64.00	S 23°03'18" W
44	54.00	S 65°10'52" W
45	79.22	S 63°47'24" E
46	30.03	S 27°04'40" E
47	30.03	S 62°21'59" E
48	17.36	S 59°29'40" E
49	34.28	S 71°49'21" E
50		N 38°43'58" E

MEAN ANNUAL FLOOD 50' SETBACK LINE:

LINE NO.	DISTANCE	BEARING
51	44.10	N 09°01'37" E
52	79.21	N 05°04'08" E
53	78.93	N 14°02'53" E
54	35.12	N 56°06'56" E
55	35.12	N 81°51'49" E
56	58.78	N 59°59'44" E
57	59.94	N 42°02'40" E
58	44.12	N 73°06'37" E
59	57.40	N 71°39'03" E
60	64.18	N 85°54'05" E
61	30.24	N 89°08'32" E
62	67.18	S 01°12'18" W
63	63.90	S 54°40'01" W
64	60.70	S 54°40'01" W
65	65.65	S 35°56'41" W
66	44.82	S 21°40'05" W
67	51.07	S 11°13'35" W
68	30.12	S 02°54'19" E
69	44.40	S 44°40'54" W
70	44.40	S 23°49'54" W
71	55.56	S 51°57'00" E
72	10.75	S 72°59'53" E
73	58.78	S 57°12'11" E
74	74.73	N 57°12'11" E
75	51.72	N 32°04'40" E
76	41.83	N 32°04'40" E
77	76.76	N 02°40'03" E
78	23.00	N 02°40'03" E
79	28.82	S 73°26'23" E
80	40.55	S 21°46'47" W
81	40.55	N 03°49'16" W
82	54.59	N 48°09'37" W
83	44.09	N 39°30'06" W
84	17.37	S 07°53'12" W
85	34.45	S 07°53'12" W
86	80.86	N 09°46'13" W
87	69.86	N 09°46'13" W
88	30.86	N 01°37'29" W
89	46.75	N 05°08'42" W
90	30.86	N 03°49'16" W
91	46.75	N 09°13'25" E
92	22.61	S 23°03'18" W
93	24.83	S 65°10'52" W
94	70.65	S 63°47'24" E
95	24.59	S 27°04'40" E
96	23.18	S 59°29'40" E
97	15.49	S 71°49'21" E
98	25.87	S 59°29'40" E
99	34.53	S 11°49'21" E
100	22.73	S 44°23'18" E

ANNUAL CORRECTION WETLAND LINE TABLE:

LINE NO.	DISTANCE	BEARING
84	20.10	S 53°39'13" W
85	49.45	S 87°19'47" W
154	48.44	S 20°12'01" W
164	46.33	S 74°20'40" W

PERMITS:

- SHW 12.45 NP 11.92
- SHW 8.70 NP 7.51

WETLAND LINE LAYOUT

CLIENT: BLACKWELL PROPERTIES, INC.
 P.O. BOX 1085
 NEW PORT RICHEY, FLORIDA 34652
 727-842-2571

PROJECT: RIVERSIDE ESTATES
 PERRINE RANCH ROAD
 PASCO COUNTY, FLORIDA

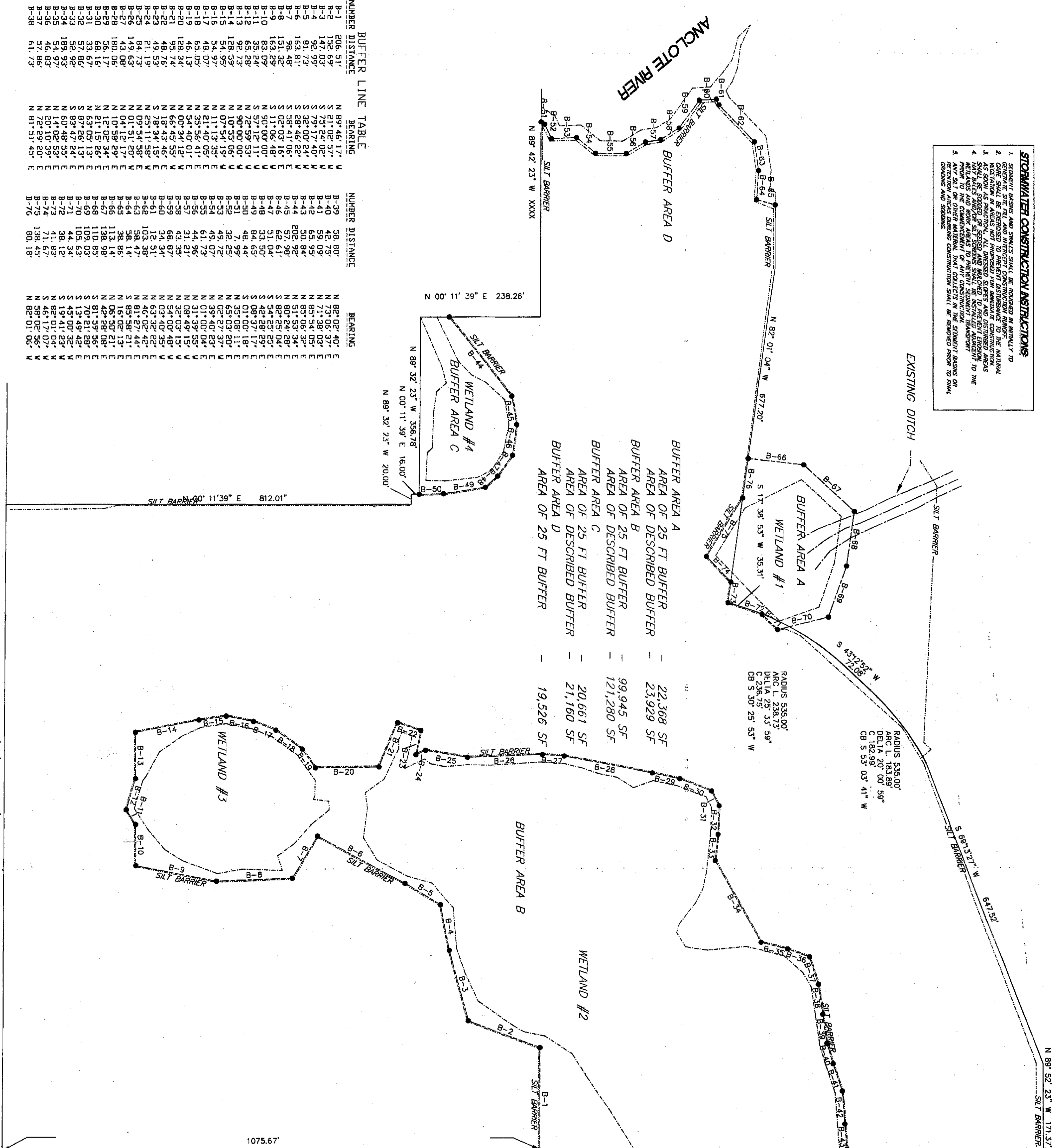
Design Services, Inc. #1297
 RALPH M. HANSEN JR. PE #9280
 6636 ROWAN ROAD
 NEW PORT RICHEY, FL. 34653
 (727)649-7085

DATE	REV.	BY
1/28/99	1	FB
3/17/99	2	FB
4/9/99	3	FB
5/24/99	4	RH
7/8/99	5	RH
12/23/99	6	RH

SCALE 1" = 100.0'

SOUTH EAST CORNER OF SECTION 26, T 28 S, R 16 E

- STORMWATER CONSTRUCTION INSTRUCTIONS**
1. SEDIMENT BASINS AND SWALES SHALL BE REQUIRED IN ACCORDANCE WITH THE FOLLOWING:
 2. SEDIMENT BASINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING:
 3. SWALES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING:
 4. SWALES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE FOLLOWING:
 5. ANY SILT OR OTHER MATERIAL THAT COLLECTS IN THE SEDIMENT BASINS OR SWALES SHALL BE REMOVED PRIOR TO FINAL GRASSING AND STABILIZATION.



BUFFER LINE TABLE

NUMBER	DISTANCE	BEARING	NUMBER	DISTANCE	BEARING
B-1	206.51'	N 89° 46' 17" W	B-39	58.80'	N 89° 02' 40" E
B-2	152.69'	S 21° 02' 57" W	B-40	42.75'	N 73° 05' 37" E
B-3	147.03'	S 79° 24' 02" W	B-41	59.09'	N 71° 38' 03" E
B-4	92.95'	S 79° 17' 40" W	B-42	65.93'	N 83° 54' 05" E
B-5	81.93'	S 56° 40' 55" W	B-43	50.84'	N 89° 06' 32" E
B-6	158.48'	S 58° 41' 06" E	B-44	202.92'	N 51° 53' 34" E
B-7	151.32'	S 02° 03' 16" E	B-45	32.29'	N 80° 54' 28" E
B-8	163.09'	S 11° 06' 48" W	B-46	33.50'	S 54° 55' 25" E
B-9	83.09'	S 90° 00' 00" W	B-47	51.04'	S 42° 28' 29" E
B-10	35.24'	S 57° 12' 11" W	B-48	84.65'	S 08° 37' 17" E
B-11	65.28'	N 72° 59' 53" W	B-49	48.44'	S 01° 00' 18" E
B-12	92.73'	N 90° 00' 00" W	B-50	7.99'	N 35° 08' 11" E
B-13	129.92'	N 00° 00' 00" W	B-51	32.25'	N 65° 03' 20" E
B-14	54.97'	N 11° 13' 35" E	B-52	49.72'	N 39° 27' 37" W
B-15	48.07'	N 21° 40' 09" E	B-53	41.92'	N 81° 40' 23" E
B-16	65.05'	N 39° 56' 41" E	B-54	41.92'	N 81° 40' 23" E
B-17	48.07'	N 54° 40' 01" E	B-55	31.21'	N 08° 49' 15" W
B-18	128.34'	N 00° 34' 12" W	B-56	43.35'	N 32° 03' 15" W
B-19	95.74'	N 66° 45' 55" W	B-57	103.38'	N 63° 32' 22" E
B-20	128.34'	N 18° 43' 46" E	B-58	38.47'	N 81° 02' 42" E
B-21	48.76'	S 28° 34' 15" E	B-59	103.38'	N 81° 02' 42" E
B-22	48.76'	S 28° 34' 15" E	B-60	12.31'	N 63° 32' 22" E
B-23	48.76'	S 28° 34' 15" E	B-61	34.34'	N 03° 40' 35" W
B-24	48.76'	S 28° 34' 15" E	B-62	68.97'	N 54° 00' 48" W
B-25	149.63'	N 03° 51' 58" W	B-63	31.21'	N 32° 03' 15" W
B-26	149.63'	N 03° 51' 58" W	B-64	38.47'	N 81° 02' 42" E
B-27	43.08'	N 04° 12' 17" E	B-65	38.47'	N 81° 02' 42" E
B-28	180.06'	N 10° 58' 29" E	B-66	113.14'	N 06° 50' 21" E
B-29	56.17'	N 12° 02' 34" E	B-67	138.98'	N 42° 28' 08" E
B-30	68.16'	N 21° 15' 26" E	B-68	110.85'	S 81° 59' 56" E
B-31	33.67'	N 63° 05' 13" E	B-69	109.03'	S 70° 21' 28" E
B-32	32.86'	S 87° 26' 13" E	B-70	105.63'	S 13° 49' 42" E
B-33	158.95'	S 87° 26' 13" E	B-71	44.34'	S 45° 00' 32" W
B-34	158.95'	S 87° 26' 13" E	B-72	38.12'	S 19° 41' 23" W
B-35	54.97'	N 14° 02' 53" E	B-73	71.62'	N 02° 01' 07" W
B-36	46.83'	N 20° 10' 39" E	B-74	138.45'	N 58° 02' 56" W
B-37	57.86'	N 29° 29' 20" E	B-75	138.45'	N 58° 02' 56" W
B-38	61.73'	N 81° 51' 45" E	B-76	80.18'	N 82° 01' 06" W

PERRINE RANCH ROAD

WETLAND BUFFER PLAN

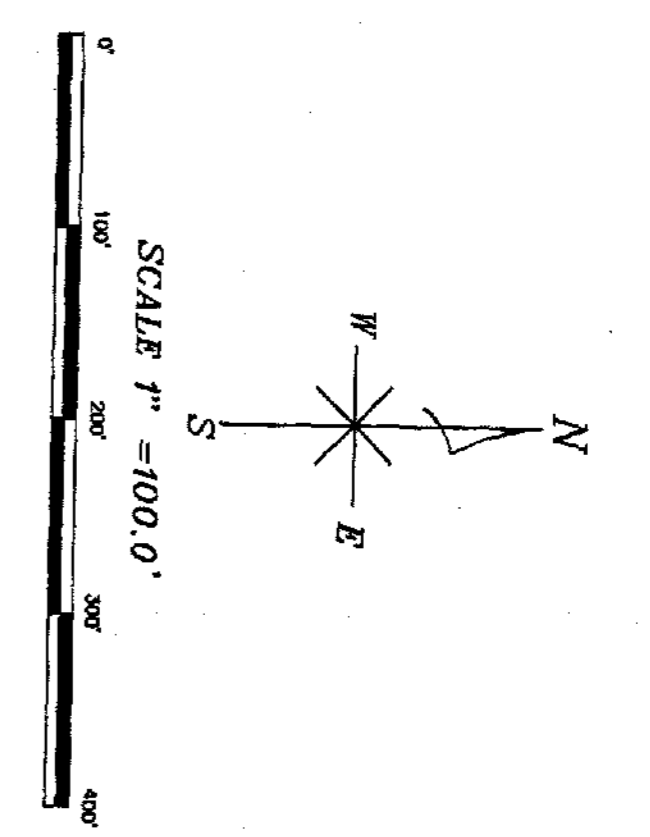
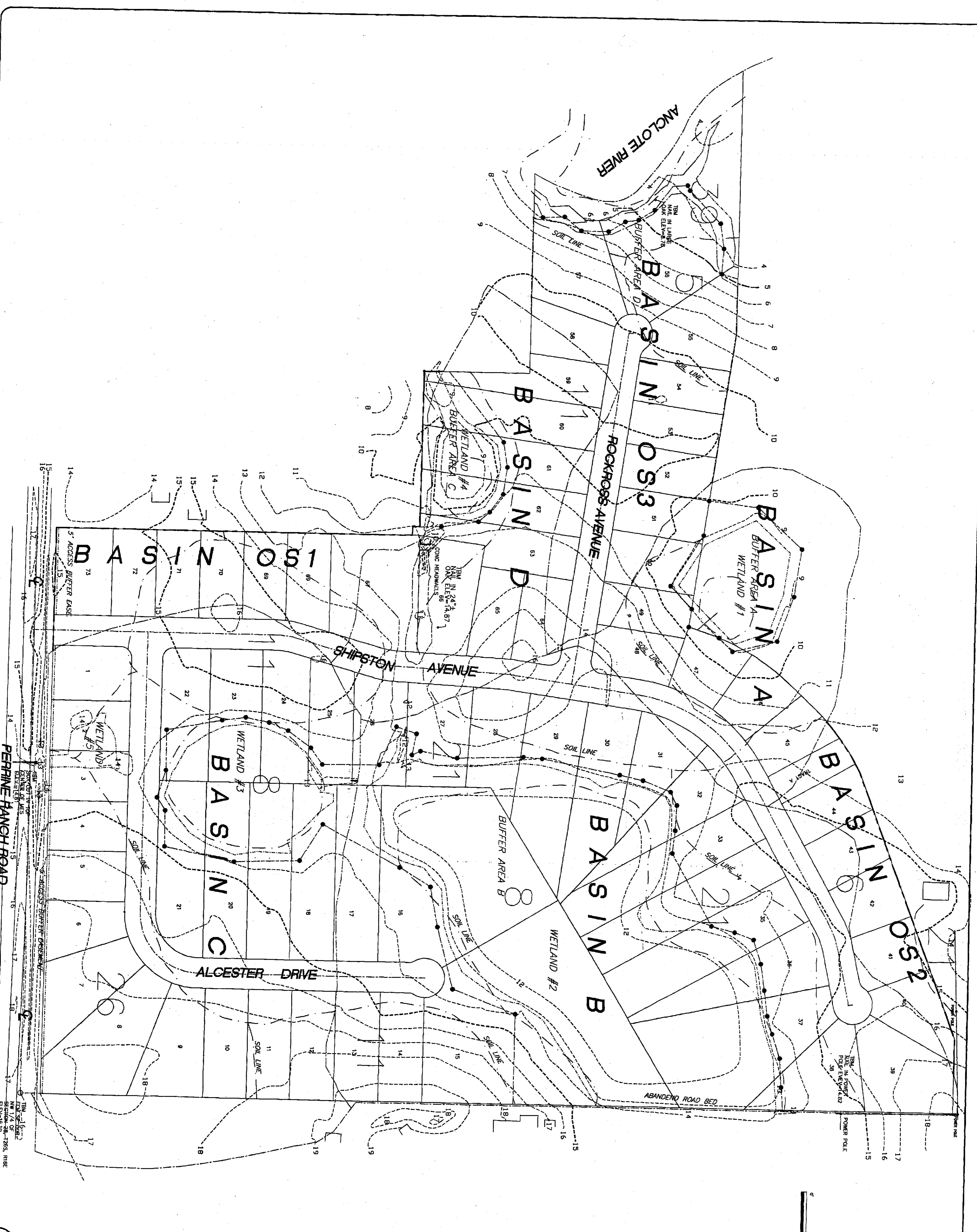
Sub.F02
SHEET
OF 18 SHEETS

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

DATE	REV.	BY
2/24/99	1	JBC
5/17/99	2	FB



LEGEND	
---	EXISTING CONTOUR
---	EASEMENT
---	PREDVELOP. BASIN
---	WETLAND BUFFER
---	SOILS MAP
---	WETLAND LINE

TOPOGRAPHIC, SOIL MAP.
SHEET
SubF03

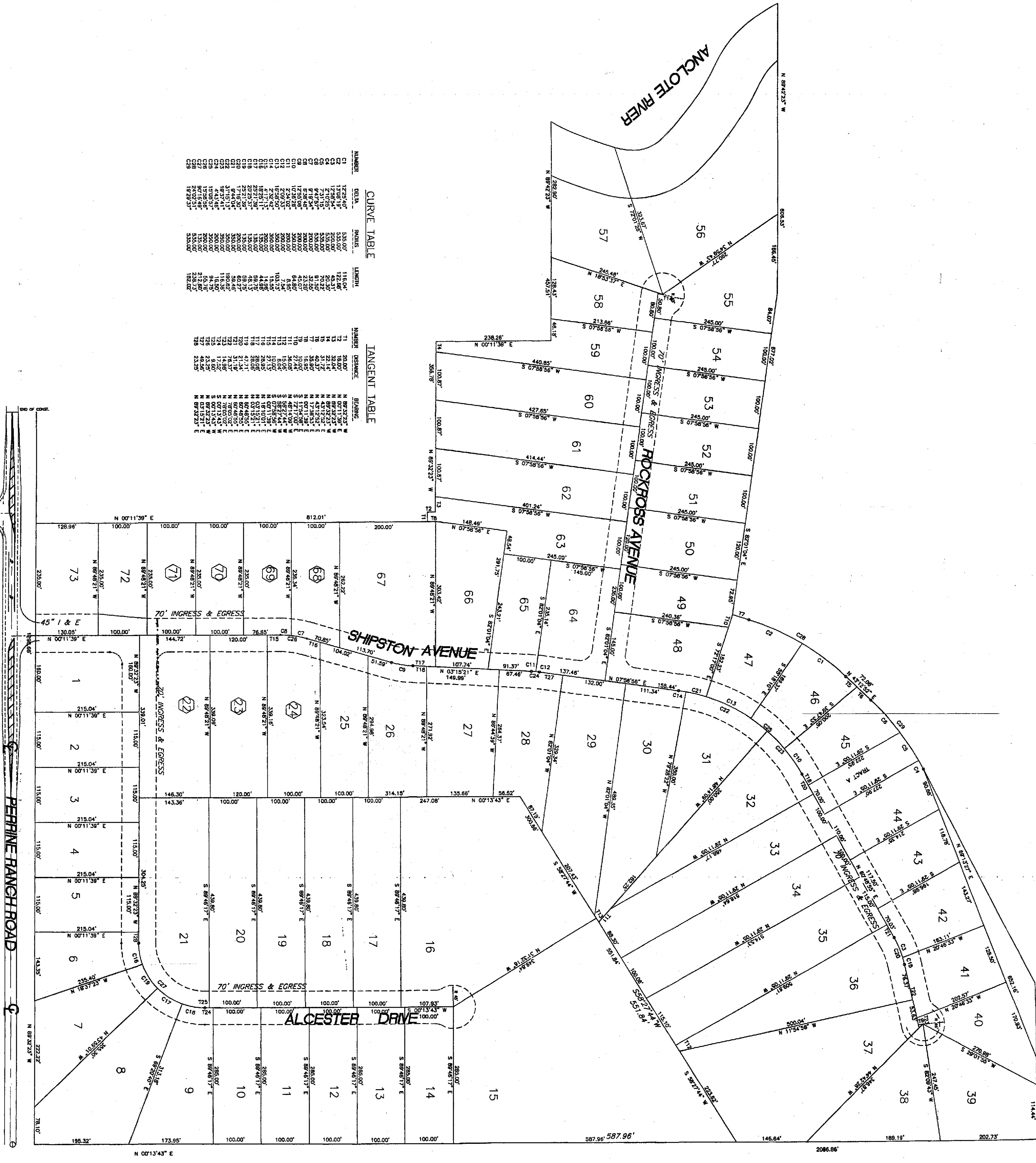
DATE	REV.	BY
2/24/98	1	BC

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Design Services, Inc. #4297
 RALPH M. HANSEN JR. PE #9280
 6636 ROWAN ROAD
 NEW PORT RICHEY, FL. 34653
 (727)849-7085

DRAWN
 RMH JR.
 CHECKED
 RMH JR.
 DATE
 12-2-98
 SCALE
 1" = 100'
 JOB NO.
 97-013.05
 SHEET

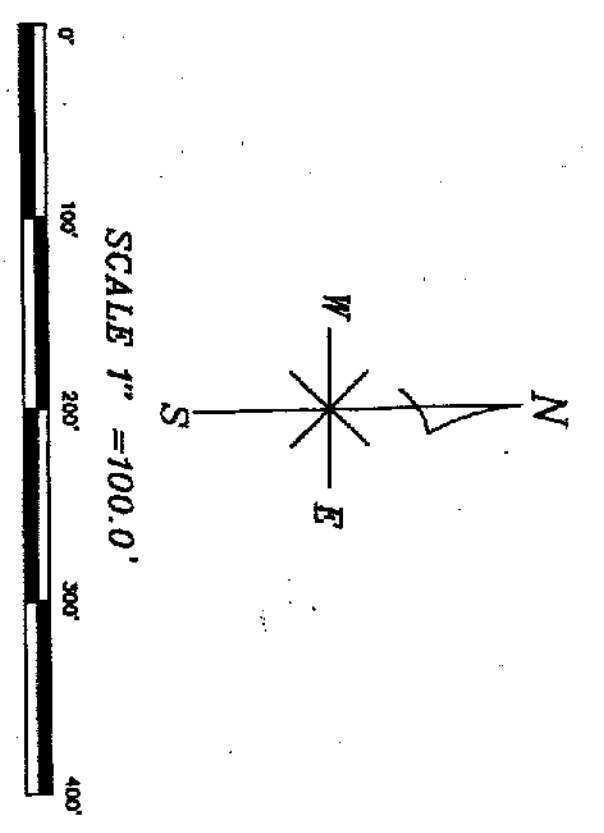


CURVE TABLE

NUMBER	DELTA	POINTS	LENGTH
C1	172.97	535.00	112.00
C2	139.04	535.00	112.00
C3	71.04	535.00	112.00
C4	27.02	535.00	112.00
C5	17.18	535.00	112.00
C6	11.84	535.00	112.00
C7	7.19	535.00	112.00
C8	4.37	535.00	112.00
C9	2.60	535.00	112.00
C10	1.52	535.00	112.00
C11	0.86	535.00	112.00
C12	0.50	535.00	112.00
C13	0.28	535.00	112.00
C14	0.15	535.00	112.00
C15	0.08	535.00	112.00
C16	0.04	535.00	112.00
C17	0.02	535.00	112.00
C18	0.01	535.00	112.00
C19	0.00	535.00	112.00
C20	0.00	535.00	112.00
C21	0.00	535.00	112.00
C22	0.00	535.00	112.00
C23	0.00	535.00	112.00
C24	0.00	535.00	112.00
C25	0.00	535.00	112.00
C26	0.00	535.00	112.00
C27	0.00	535.00	112.00
C28	0.00	535.00	112.00
C29	0.00	535.00	112.00
C30	0.00	535.00	112.00

TANGENT TABLE

NUMBER	DISTANCE	BEARING
T1	20.00	N 89°23'23" W
T2	18.00	N 00°11'39" E
T3	14.00	N 89°48'21" W
T4	11.00	N 00°11'39" E
T5	8.00	N 89°48'21" W
T6	6.00	N 00°11'39" E
T7	4.00	N 89°48'21" W
T8	3.00	N 00°11'39" E
T9	2.00	N 89°48'21" W
T10	1.50	N 00°11'39" E
T11	1.00	N 89°48'21" W
T12	0.75	N 00°11'39" E
T13	0.50	N 89°48'21" W
T14	0.38	N 00°11'39" E
T15	0.28	N 89°48'21" W
T16	0.20	N 00°11'39" E
T17	0.15	N 89°48'21" W
T18	0.11	N 00°11'39" E
T19	0.08	N 89°48'21" W
T20	0.06	N 00°11'39" E
T21	0.04	N 89°48'21" W
T22	0.03	N 00°11'39" E
T23	0.02	N 89°48'21" W
T24	0.01	N 00°11'39" E
T25	0.01	N 89°48'21" W



LEGEND

Ⓜ MODEL LOT

LOT DIMENSION

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

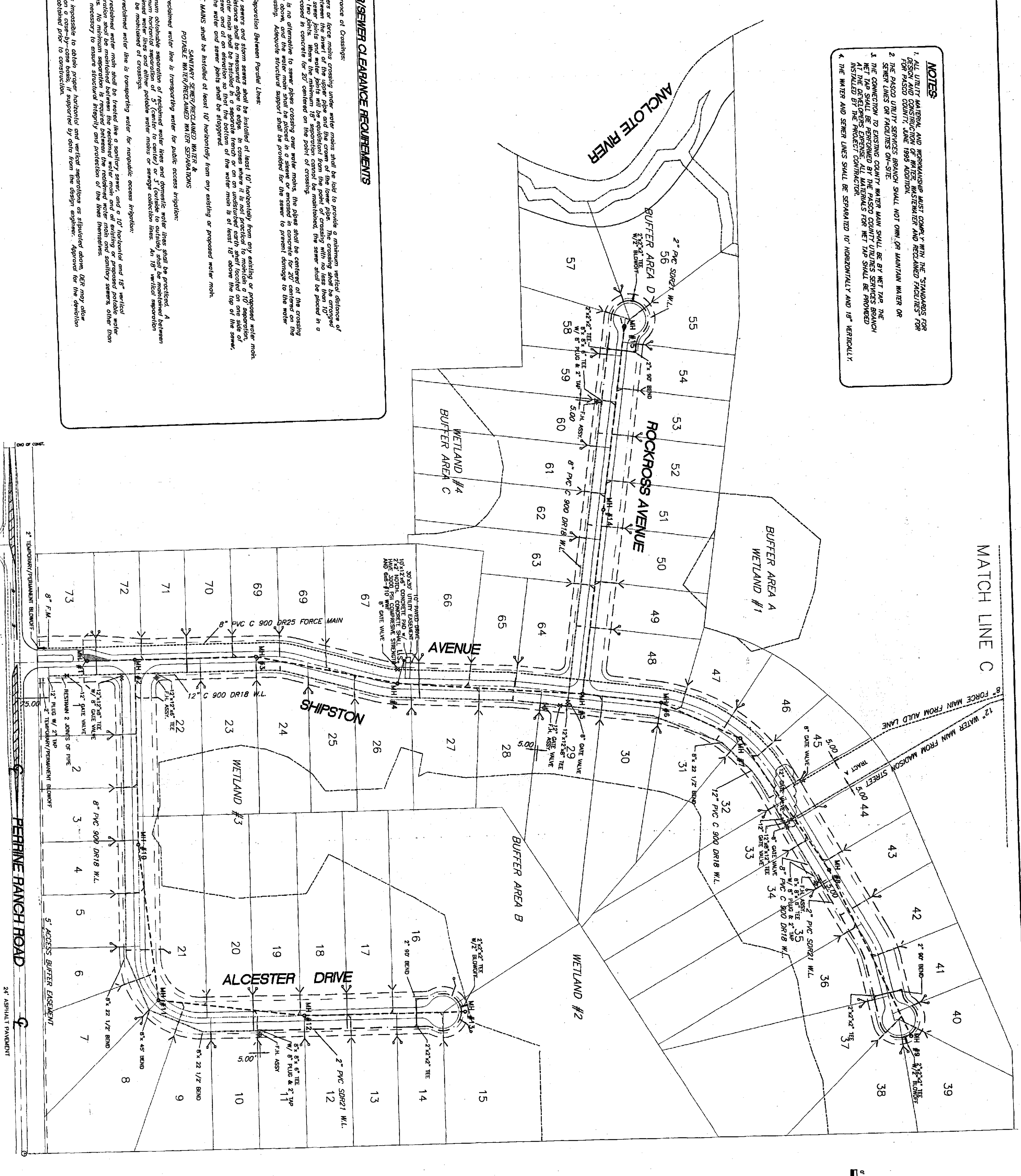
Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

DATE	REV.	BY
2/24/99	1	JBC
4/27/99	2	FB

DRAWN: RMH JR.
CHECKED: RMH JR.
DATE: 12-2-98
SCALE: 1" = 100'
JOB NO.: 97-013.05
SHEET: Sub. F04 OF 18 SHEETS

- NOTES:**
1. ALL UTILITY MATERIAL AND WORKMANSHIP MUST COMPLY WITH THE STANDARDS FOR DESIGN AND CONSTRUCTION, 1995 EDITION, FOR PASCO COUNTY, FLORIDA.
 2. THE PASCO COUNTY UTILITY SERVICES BRANCH SHALL NOT OWN OR MAINTAIN WATER OR SEWER LINES OR FACILITIES ON-SITE.
 3. THE CONNECTION TO EXISTING COUNTY WATER MAIN SHALL BE BY WET TAP. THE WET TAP SHALL BE PROVIDED BY THE PASCO COUNTY UTILITIES SERVICES BRANCH AS SHOWN ON THE PROJECT CONTRACTOR.
 4. THE WATER AND SEWER LINES SHALL BE SEPARATED 10' HORIZONTALLY AND 18" VERTICALLY.

MATCH LINE C

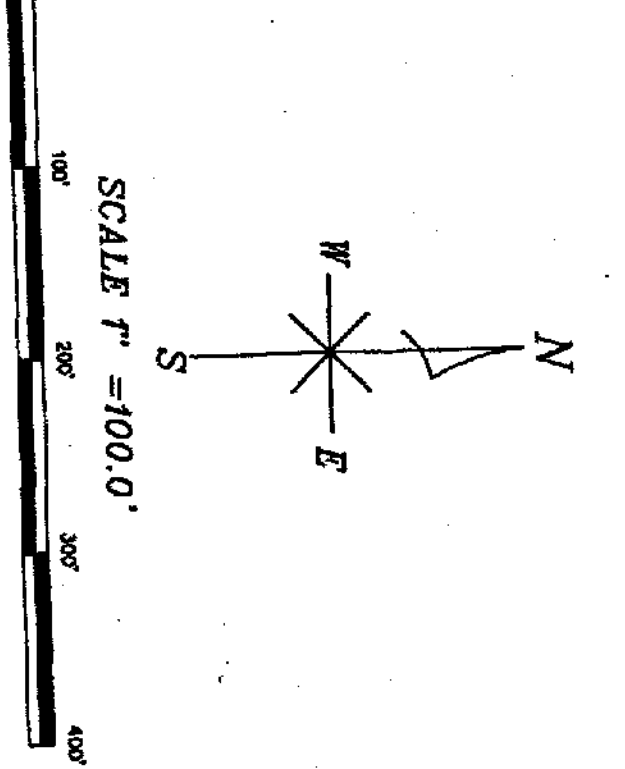


WATER/SEWER CLEARANCE REQUIREMENTS

Vertical Clearance of Crossings:
 Gently sloping force mains crossing under water mains shall be laid to provide a minimum vertical clearance of 18 inches between the top of the water main and the bottom of the force main. The crossing shall be arranged so that the water main and sewer pipes will be equidistant from the point of crossing with no more than 18 inches from any two points. Where the minimum 18" separation cannot be maintained, the sewer shall be placed in a sleeve or encased in concrete for 20' centered on the point of crossing.
 Where there is no alternative to sewer pipes crossing over water mains, the slope shall be confined to the sewer as indicated above, and the water main shall be placed in a sleeve or encased in concrete for 20' centered on the point of crossing. Adequate structural support shall be provided for the sewer to prevent damage to the water main.

Horizontal Separation Between Parallel Lines:
 A. Gently sloping force mains shall be installed at least 10' horizontally from any existing or proposed water main. The water main shall be installed in a separate trench or on an unobstructed surface on one side of the water main and the water and sewer pipes shall be staggered.
 B. FORCE MAINS shall be installed at least 10' horizontally from any existing or proposed water main.
 C. SANITARY SEWERS/RECLAIMED WATER & PORTABLE WATER/RECLAIMED WATER SEPARATIONS:
 When the reclaimed water line is transporting water for public access irrigation:
 Minimum allowable separation of reclaimed water lines and domestic water lines shall be maintained. A minimum horizontal separation of 5' (center to center) and vertical separation of 18" shall be maintained between reclaimed water lines and other potable water mains or sewage collection lines. An 18" vertical separation shall be maintained at crossings.
 When the reclaimed water line is transporting water for municipal access irrigation:
 The reclaimed water main shall be treated like a sanitary sewer, and a 10' horizontal and 18" vertical separation shall be maintained between the reclaimed water main and sanitary sewers, other than those necessary to ensure structural integrity and protection of the lines themselves.

NOTES:
 When it is impossible to obtain proper horizontal and vertical separations as stipulated above, DER may allow deviation on a case-by-case basis. Approval for the deviation must be obtained prior to construction.



LEGEND

--- (dashed line)	EASEMENT
--- (dashed line)	SANITARY SEWER
--- (dashed line)	WETLAND BUFFER
--- (dashed line)	DUAL SEWER SERVICE
--- (dashed line)	SINGLE SEWER SERVICE
--- (dashed line)	DUAL WATER SERVICE
--- (dashed line)	SINGLE WATER SERVICE
--- (dashed line)	VALVE
--- (dashed line)	FIRE HYDRANT
--- (dashed line)	8" CL800 DR18 WL
--- (dashed line)	12" CL800 DR18 WL
--- (dashed line)	2" CL800 DR18 WL
--- (dashed line)	8" FORCE MAIN

UTILITY PLAN

DATE	REV.	BY
2/99	1	JHC
4/23/99	2	FB

Design Services, Inc. #4297
 RALPH M. HANSEN JR. PE #9280
 6636 ROWAN ROAD
 NEW PORT RICHEY, FL. 34653
 (727)849-7085

PROJECT:
RIVERSIDE ESTATES
 PERRINE RANCH ROAD
 PASCO COUNTY, FLORIDA

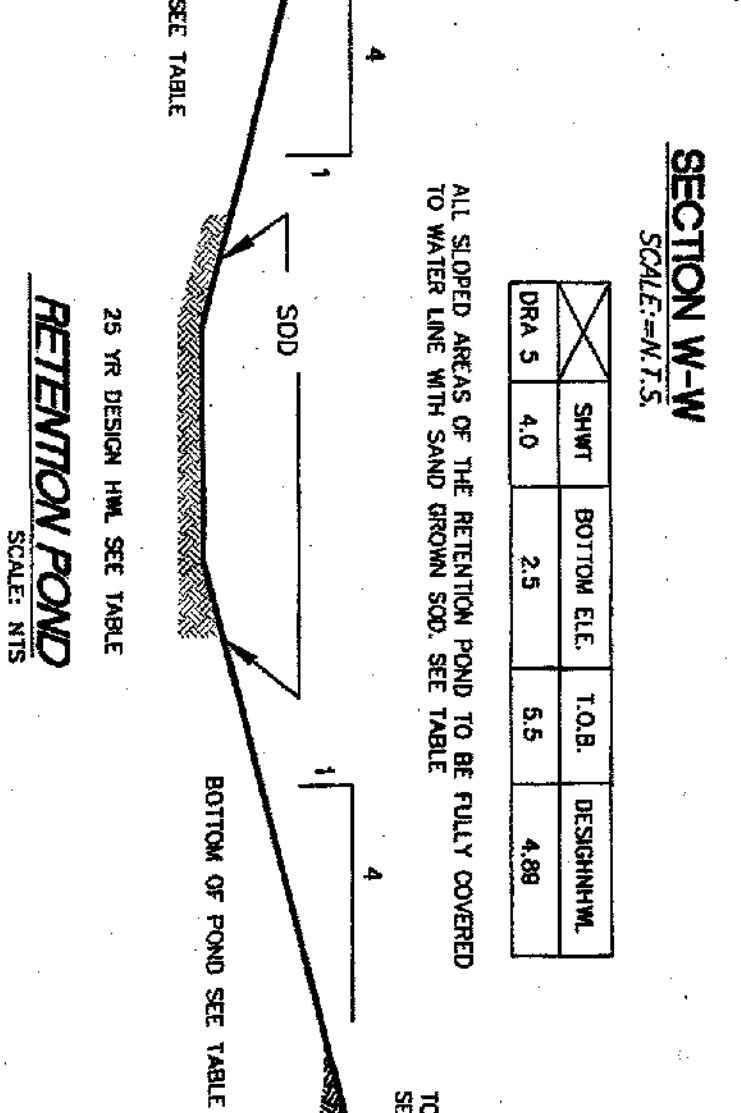
CLIENT:
BLACKWELL PROPERTIES, INC.
 P.O. BOX 1085
 NEW PORT RICHEY, FLORIDA 34652
 727-842-2571

DRAWN: RMH JR.
CHECKED: RMH JR.
DATE: 12-2-98
SCALE: 1" = 100'
JOB NO.: 97-013-05
SHEET: Sub J.F05
OF 18 SHEETS

- ### STORMWATER CONSTRUCTION INSTRUCTIONS
1. DETENTION AREAS, SEDIMENT BASINS, AND SWALES SHALL BE ROUGHED IN ACCORDANCE WITH THE FOLLOWING:
 2. AT LEAST 10% OF THE DETENTION AREA SHALL BE ROUGHED IN ACCORDANCE WITH THE FOLLOWING:
 3. AS SOON AS PRACTICAL, ALL PROPOSED SLOPES AND DISTURBED AREAS SHALL BE SEeded OR Silt SOreMS SHALL BE INSTALLED ADJACENT TO THE WETLANDS AND WORN AREAS TO PREVENT EROSION AND TO MAINTAIN THE DETENTION AREA'S FUNCTION.
 4. ANY Silt OR OTHER MATERIAL THAT COLLECTS IN THE SEDIMENT BASIN DURING CONSTRUCTION SHALL BE REMOVED PRIOR TO FINAL GRADING AND SOODING.
 5. ALL EROSION CONTROL DEVICES SHALL BE INSPECTED TWICE WEEKLY BY THE SITE FOREMAN. ANY STRUCTURES THAT ARE DAMAGED OR INOPERATIVE WILL BE IMMEDIATELY REPAIRED OR REPLACED AND ANY Silt IN WETLANDS REMOVED.
 6. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

NOTE: WEIR 9 SPECIFICATIONS, SEE SHEET SUB/09 FOR DETAILS.

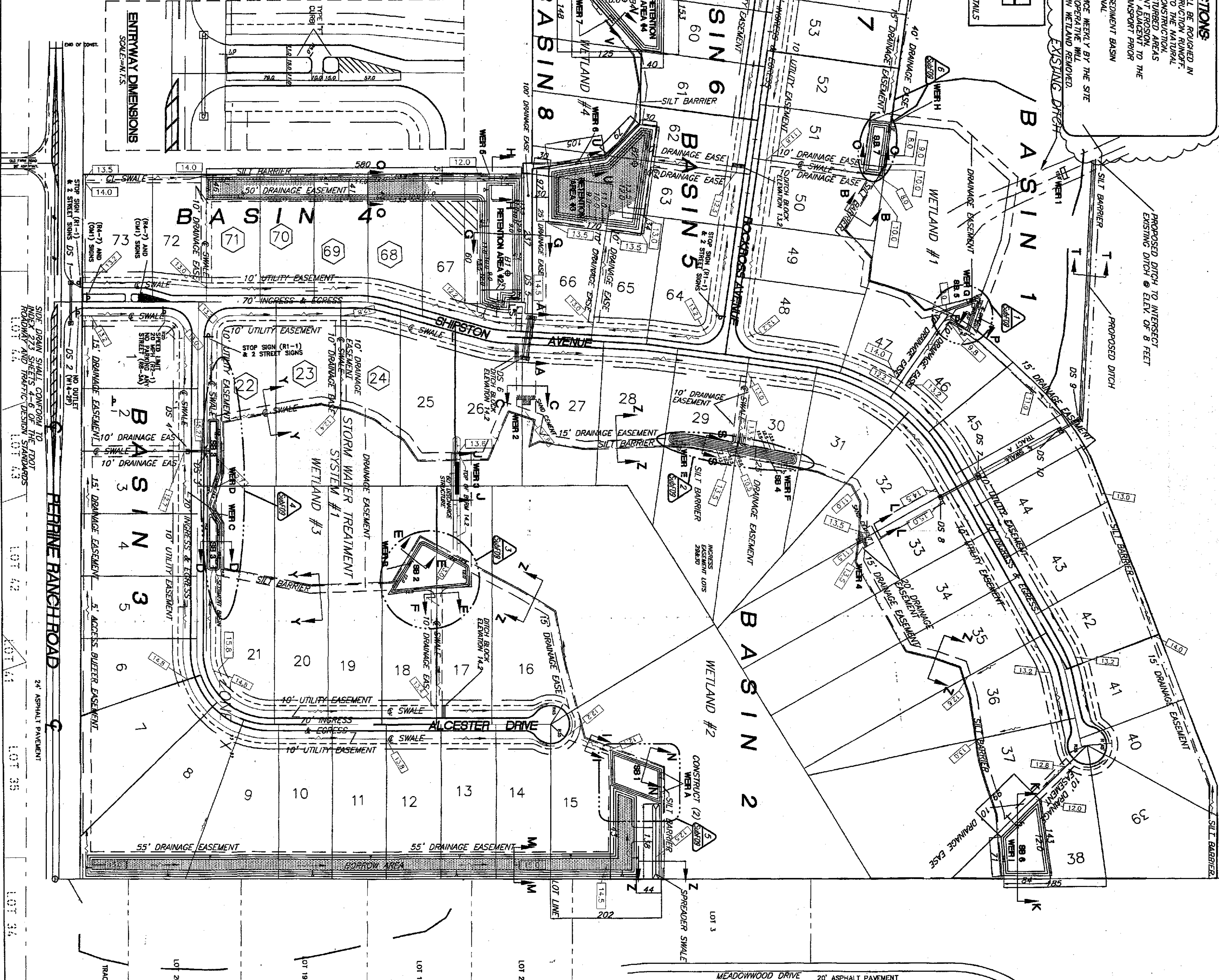
WEIR 9	A	B	C	D	E	F	G
	4.1	5.5	21.0	4.6	20.0	1.29	4.0



DRAINAGE STRUCTURE AND PEE MEENTS

STRUCTURE NO.	LENGTH FEET	INLET	OUTLET	STRUCTURE TYPE
DS1	40.00	14.00'	12.00'	MES
DS2	12.00	12.00	12.00	MES
DS3	80.00	(2) 24" S&P ENP	11.20	MES
DS4	40.00	24" S&P ENP	9.00	MES
DS5	40.00	24" S&P ENP	9.00	MES
DS6	40.00	24" S&P ENP	9.00	MES
DS7	40.00	24" S&P ENP	9.00	MES
DS8	40.00	24" S&P ENP	9.00	MES
DS9	40.00	24" S&P ENP	9.00	MES
DS10	40.00	24" S&P ENP	9.00	MES

- ### MAINTENANCE AND OPERATION INSTRUCTIONS FOR ON-SITE STORM WATER FACILITIES
1. CUT AND REMOVE GRASS CLIPPINGS FROM THE RETENTION POND SOE SLOPES ON A PERIODIC BASIS IN NO CASE, HOWEVER, ALLOW THE GRASS COVER TO BE MORE THAN SIX (6) INCHES IN HEIGHT. DEBRIS WHICH HAS ACCUMULATED IN THE RETENTION POND SHALL BE REMOVED IMMEDIATELY.
 2. INSPECT RETENTION AREAS AFTER EACH MAJOR STORM EVENT FOR EROSION AND REPAIR AS NEEDED.
 3. MAINTAIN THE BOTTOM ELEVATION OF RETENTION POND, IF RETENTION POND OR SEDIMENT BASIN HAVE ACCUMULATED MORE THAN FOUR (4) INCHES OF MATERIAL, THEN REMOVE EXCESS MATERIAL.
 4. DETERMINE THE BOTTOM ELEVATION OF RETENTION POND, IF RETENTION POND OR SEDIMENT BASIN HAVE ACCUMULATED MORE THAN FOUR (4) INCHES OF MATERIAL, THEN REMOVE EXCESS MATERIAL.
 5. DETERMINE THE BOTTOM ELEVATION OF RETENTION POND, IF RETENTION POND OR SEDIMENT BASIN HAVE ACCUMULATED MORE THAN FOUR (4) INCHES OF MATERIAL, THEN REMOVE EXCESS MATERIAL.
 6. EROSION OF SIDE BANKS.



LEGEND

[Symbol]	PROPOSED GRADE
[Symbol]	DRAINAGE EASEMENT
[Symbol]	SILT BARRIER
[Symbol]	DIRECTION OF FLOW
[Symbol]	POSTDEVELOP. BASIN
[Symbol]	WETLAND BUFFER
[Symbol]	WETLAND LINE
[Symbol]	UTILITY EASEMENT
[Symbol]	STREET SIGN
[Symbol]	HAND AUGER BORING
[Symbol]	PROPOSED CONTOURS
[Symbol]	MITIGATION VOLUME
[Symbol]	100 YEAR FLOOD
[Symbol]	PLAIN FILL

- NOTE: ALL TECHNICAL SPECIFICATIONS SHALL COMPLY WITH FDOT STANDARD SPECIFICATIONS, LATEST EDITION.
- NOTE: SPECIFICATIONS FOR DESIGN AND INSTALLATION BY CONTRACTOR OF TRAFFIC CONTROL DEVICES ON COUNTY ROADS
1. These specifications have been developed to provide engineers with a uniform system of design and construction for traffic control devices on all roads within the State of Florida. The design and construction shall be in accordance with the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, latest edition, as published by the Department of the project.
 2. The design and construction shall be in accordance with the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, latest edition, as published by the Department of the project.
 3. Payment for the design and construction of traffic control devices shall be in accordance with the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, latest edition, as published by the Department of the project.
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 10. The design and construction of traffic control devices shall be in accordance with the Florida Department of Transportation (FDOT) Standard Specifications for Road and Bridge Construction, latest edition, as published by the Department of the project.

- ### PAVING, DRAINAGE AND SIGNAGE PLAN
1. PAVING SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS, LATEST EDITION.
 2. DRAINAGE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS, LATEST EDITION.
 3. SIGNAGE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS, LATEST EDITION.
 4. THE DESIGN AND CONSTRUCTION OF PAVING, DRAINAGE AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS, LATEST EDITION.
 5. THE DESIGN AND CONSTRUCTION OF PAVING, DRAINAGE AND SIGNAGE SHALL BE IN ACCORDANCE WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATIONS, LATEST EDITION.
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DATE	REV.	BY
2/24/99	1	BC
5/25/99	2	JBC
4/9/99	3	FB
5/24/99	4	FB
6/21/99	5	PH
8/25/99	6	PH
2/20/00	7	PH

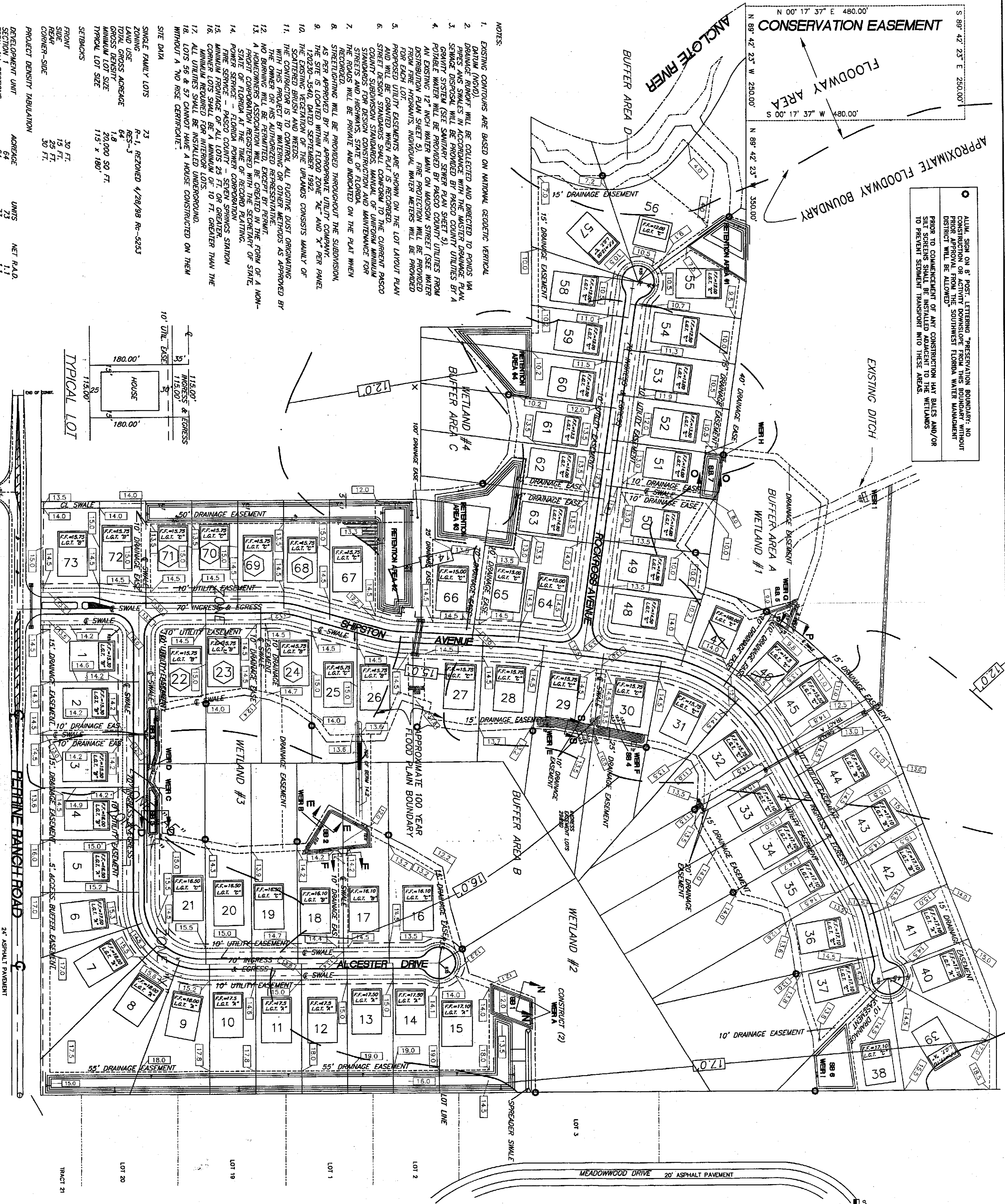
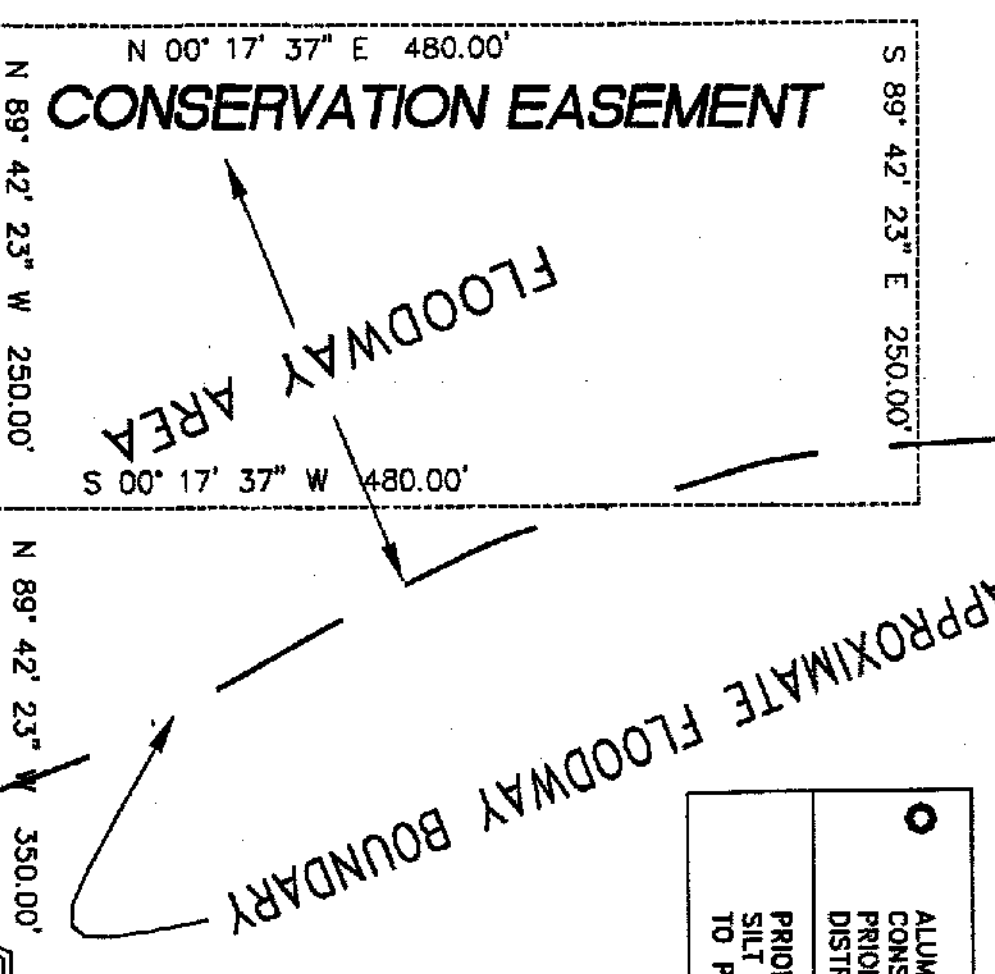
CLIENT:	BLACKWELL PROPERTIES, INC.
P.O. BOX 1085	NEW PORT RICHEY, FLORIDA 34652
727-842-2571	

PROJECT:	RIVERSIDE ESTATES
PERRINE RANCH ROAD	PASCO COUNTY, FLORIDA

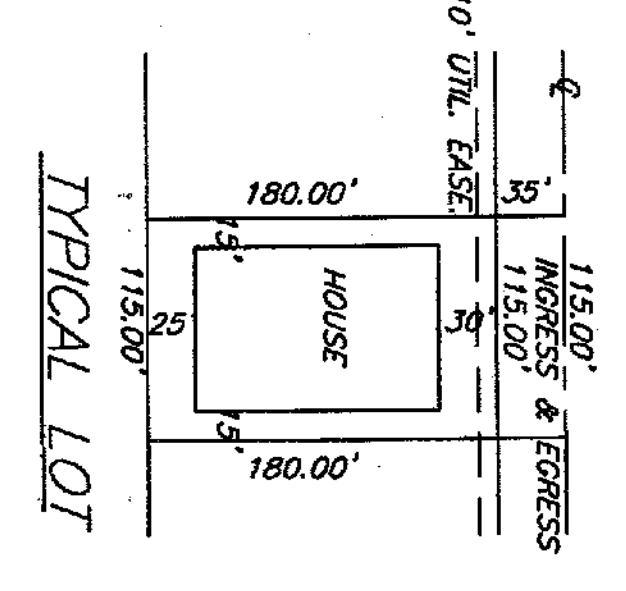
Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

DRAWN:	BMH JR.
CHECKED:	CHMKD
DATE:	12-2-98
SCALE:	1" = 100'
JOB NO.:	97-013.05
SHEET:	Sub.F06
OF 18 SHEETS	

ALUM SIGN ON 8' POST, LETTERING "PRESERVATION BOUNDARY. NO CONSTRUCTION OR ACTIVITY DOWNSTREAM FROM THIS BOUNDARY WITHOUT PRIOR APPROVAL FROM THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT WILL BE ALLOWED."
 PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION MAY BATES AND/OR SILT SCREENS SHALL BE INSTALLED ADJACENT TO THE WETLANDS TO PREVENT SEDIMENT TRANSPORT INTO THESE AREAS.



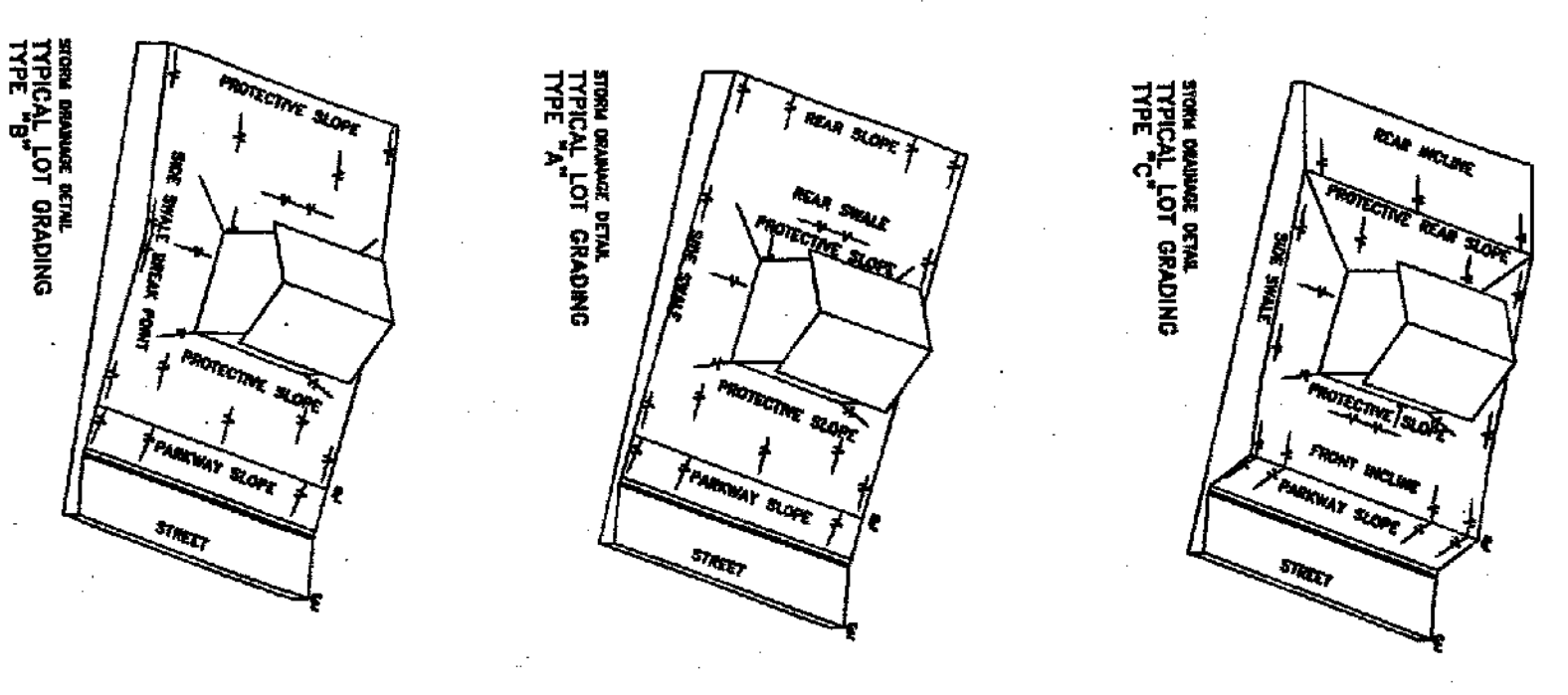
- NOTES:
- EXISTING CONTOURS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM (NGVD).
 - DRAINAGE ROWS WILL BE COLLECTED AND DIRECTED TO PONDS VIA SWALE DISSECTA IN CONFORMANCE WITH THE MASTER DRAINAGE PLAN. GRANTY SYSTEM (SEE SHADY SOWER PLAN SHEET 5).
 - POTABLE WATER WILL BE PROVIDED BY PASCO COUNTY UTILITIES FROM AN EXISTING 12" HIGH WATER MAIN ON MADISON STREET (SEE WATER DISTRIBUTION PLAN SHEET 5). FIRE PROTECTION WILL BE PROVIDED FROM FIRE HYDRANTS, INDIVIDUAL WATER METERS WILL BE PROVIDED FOR EACH LOT.
 - PROPOSED UTILITY EASEMENTS ARE SHOWN ON THE LOT LAYOUT PLAN AND WILL BE GRANTED WHEN PLAT IS RECORDED.
 - STREET DESIGN STANDARDS SHALL CONFORM TO THE CURRENT PASCO COUNTY SUBDIVISION STANDARDS, MANUAL OF UNIFORM MINIMUM STANDARDS FOR DESIGN CONSTRUCTION AND MAINTENANCE FOR THE SEALS WILL BE PRIVATE AND INDICATED ON THE PLAT WHEN RECORDED.
 - STREETLIGHTING WILL BE PROVIDED THROUGHOUT THE SUBDIVISION, AS PER APPROVED BY THE APPROPRIATE UTILITY COMPANY.
 - THE SITE IS LOCATED WITHIN FLOOD ZONE "X" AND "Y" PER PANEL 120230-354D, DATED SEPTEMBER 1992.
 - THE EXISTING VEGETATION OF THE UPLANDS CONSISTS MAINLY OF SCATTERED BRUSH AND WEEDS.
 - THE CONTRACTOR IS TO CONTROL ALL DUST ORIGINATING WITH THIS PROJECT BY IMPLEMENTING PROCEDURES AS APPROVED BY THE HOMEOWNERS ASSOCIATION WILL BE CREATED IN THE FORM OF A NON-PROFIT CORPORATION REGISTERED WITH THE SECRETARY OF STATE.
 - STATE OF FLORIDA AT THE TIME OF RECORD PLATING.
 - POWER SERVICE - FLORIDA POWER CORPORATION.
 - FIRE SERVICE - PASCO COUNTY - SEVEN SPRINGS STATION.
 - MINIMUM FRONTAGE OF ALL LOTS 23 FT. OR GREATER.
 - MINIMUM FRONTAGE OF ALL LOTS 23 FT. OR GREATER.
 - MINIMUM FRONTAGE OF ALL LOTS 23 FT. OR GREATER.
 - ALL UTILITIES SHALL BE INSTALLED UNDERGROUND.
 - LOTS 56 & 57 CANNOT HAVE A HOUSE CONSTRUCTED ON THEM WITHOUT A "NO RISE" CERTIFICATE.
 - SITE DATA
 - SINGLE FAMILY LOTS
 - ZONING R-1, REZONED 4/28/98 RB-5233
 - LAND USE RES-3
 - TOTAL GROSS ACREAGE 64
 - GROSS DENSITY 1.8
 - MINIMUM LOT SIZE 20,000 SQ. FT.
 - TYPICAL LOT SIZE 115' x 180'
 - SETBACKS
 - FRONT 30 FT.
 - REAR 15 FT.
 - CORNER-SIDE 25 FT.
 - 30 FT.
 - PROJECT DENSITY TABULATION
 - PERCENTAGE UNIT 64
 - SECTIONAL SECTIONS 23
 - TOTAL ACRES 47.8
 - UNITS NET P.L.D. 1.1
 - 23 1.1
 - 73 1.5



SCALE 1" = 100.0'

LEGEND

- PROPOSED GRADE
- UTILITY EASEMENT
- DRAINAGE EASEMENT
- 100 YEAR FLOOD PLAIN
- WETLAND BUFFER
- FF = FINISHED FLOOR ELEVATION
- LOT - LOT GRADING TYPE



LOT GRADING PLAN

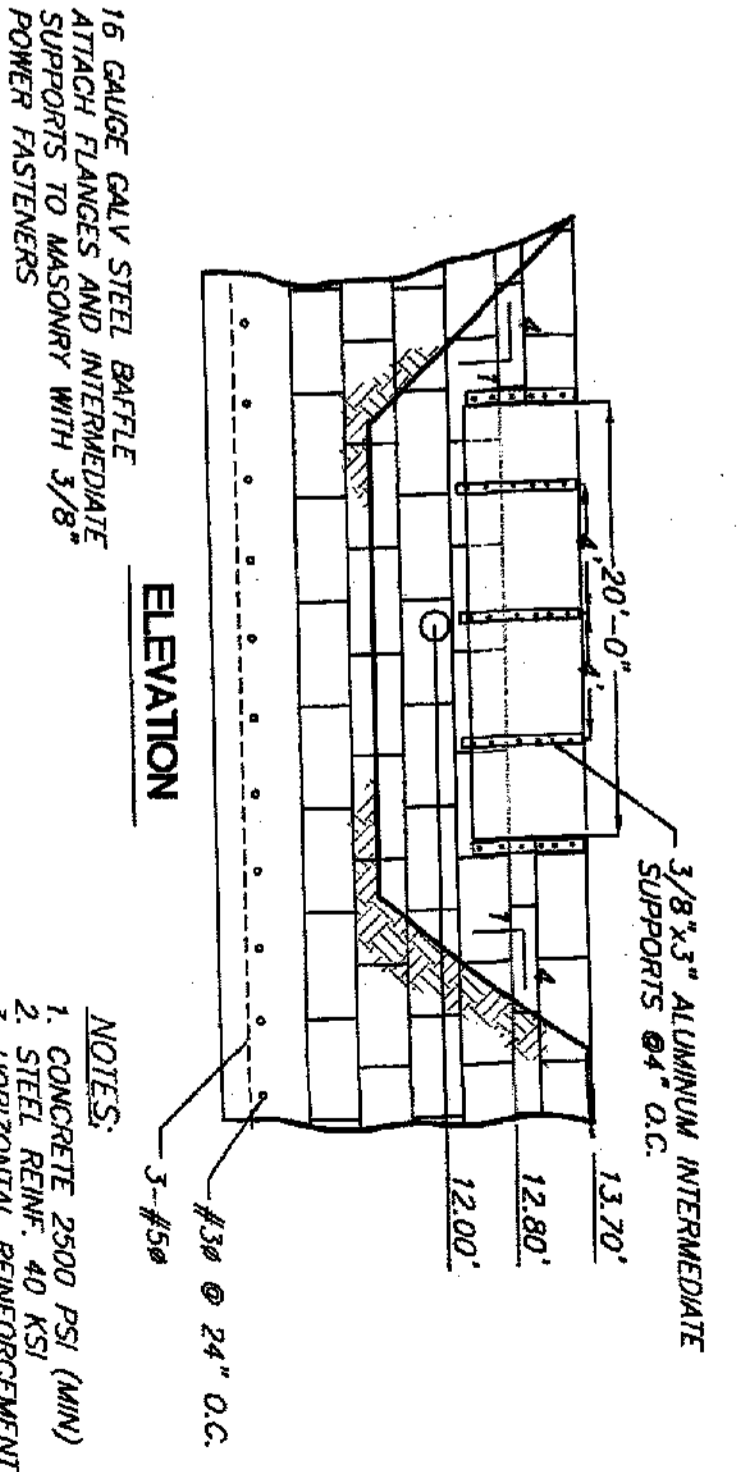
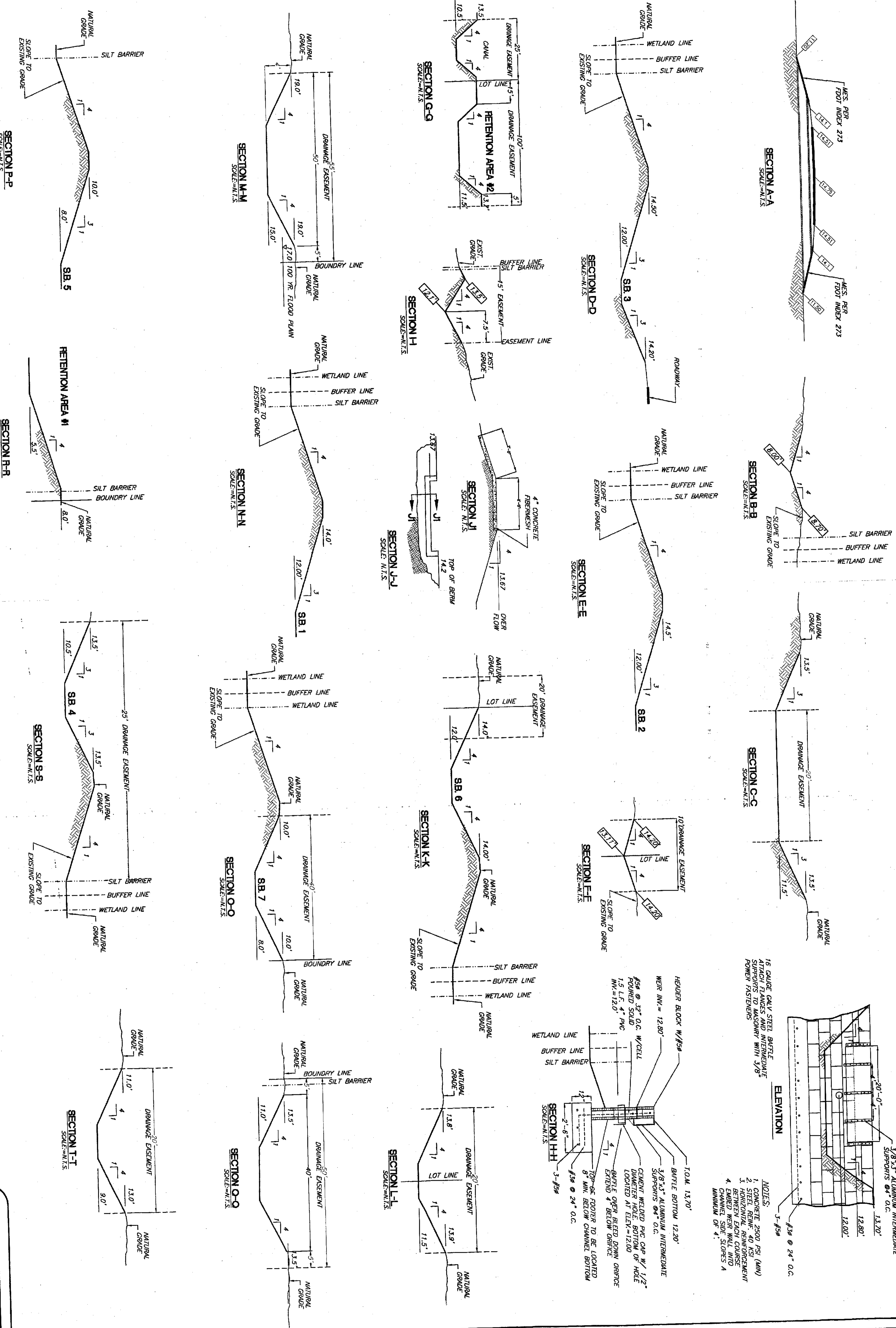
DATE	REV.	BY
2/99	#1	JBC
3/25/99	#2	JBC
4/27/99	#3	FB
2/20/00	#4	RH

DRAWN: RMH JR.
 CHECKED: RMH JR.
 DATE: 12-2-98
 SCALE: 1" = 100'
 JOB NO.: 97-015.05
 SHEET: Sub.F07
 OF: 16 SHEETS

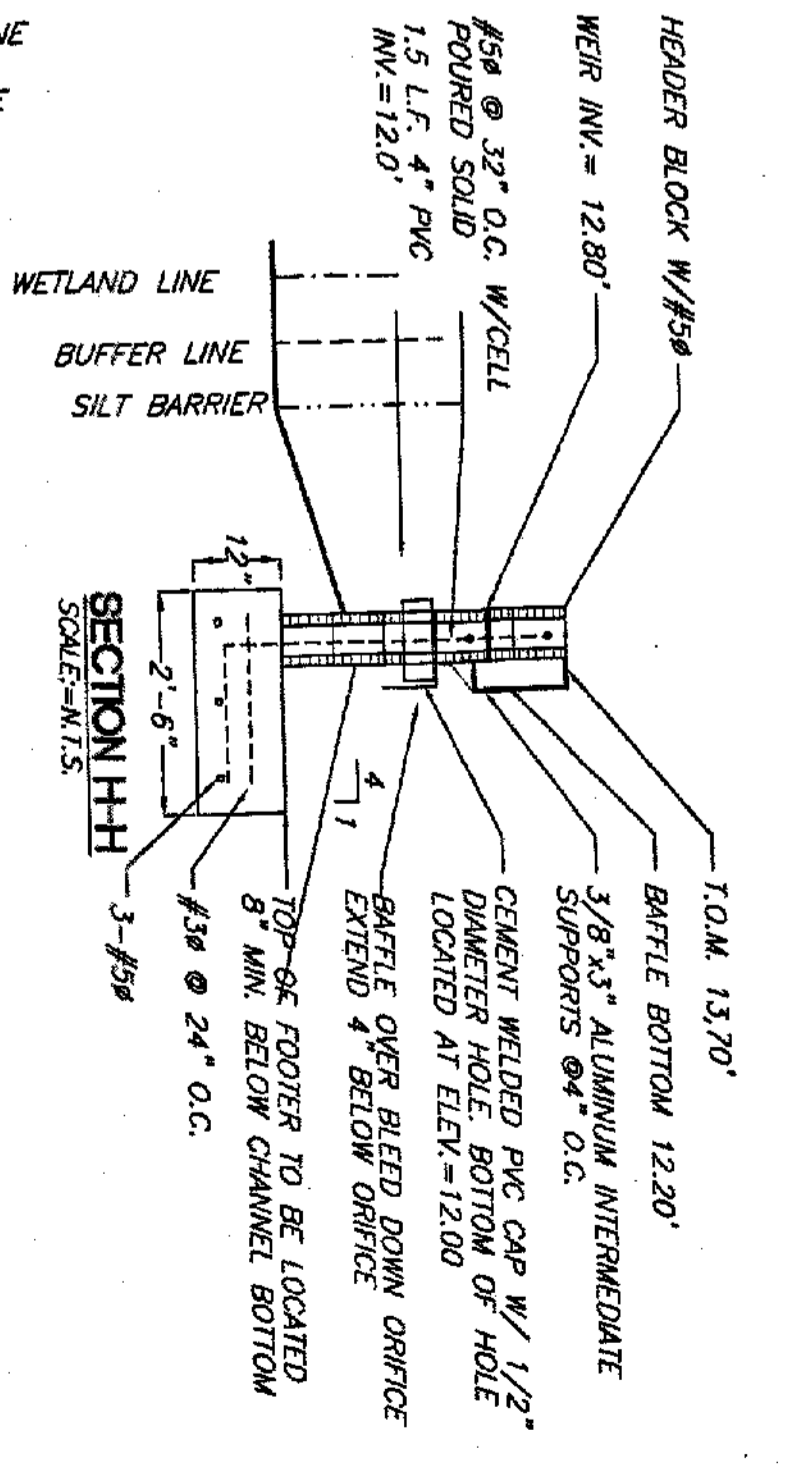
CLIENT: BLACKWELL PROPERTIES, INC.
 P.O. BOX 1085
 NEW PORT RICHEY, FLORIDA 34652
 813-842-2571

PROJECT: RIVERSIDE ESTATES
 PERRINE RANCH ROAD
 PASCO COUNTY, FLORIDA

Design Services, Inc. #4297
 RALPH M. HANSEN JR. PE #9280
 6636 ROWAN ROAD
 NEW PORT RICHEY, FL. 34653
 (727)849-7085



- NOTES:
1. CONCRETE 2500 PSI (MIN)
 2. STEEL REINFC. 40 KSI
 3. HORIZONTAL REINFORCEMENT BETWEEN EACH COLUMN
 4. EMBED IN SLOPE SLOPES A MINIMUM OF 4'



16 GAUGE GALV STEEL BATTLE STIFFENERS TO MASONRY WITH 3/8" POWER FASTENERS

3/8" x 3" ALUMINUM INTERMEDIATE SUPPORTS @ 4' O.C.

1.0 M. 13.70'

BAFFLE BOTTOM 12.20'

3/8" x 3" ALUMINUM INTERMEDIATE SUPPORTS @ 4' O.C.

CEMENT WELDED PVC CAP W/ 1/2" DIAMETER HOLE BOTTOM OF HOLE LOCATED AT ELEV=12.00

BAFFLE OVER BUILT DOWN ORifice EXTEND 4' BELOW CHANNEL BOTTOM

TOP OF FOOTER TO BE LOCATED 8 MIN. BELOW CHANNEL BOTTOM

#5 @ 32" O.C. W/ CELL

POURED SOLID

1.5 L.F. 4" PVC

INV.=12.0'

WEIR INV.= 12.80'

HEADER BLOCK W/ #5

CLIENT:
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 727-842-2571

PROJECT:
RIVERSIDE ESTATES
 PERRINE RANCH ROAD
 PASCO COUNTY, FLORIDA

DATE REV. BY
 3/25/99 #1 RCH
 6/21/99 #2 RH
 18 SHEETS

Design Services, Inc. #4297
 RALPH M. HANSEN JR. PE #9280
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 (727)849-7085

DATE REV. BY
 3/25/99 #1 RCH
 6/21/99 #2 RH
 18 SHEETS

PAVING, GRADING AND DRAINAGE DETAILS

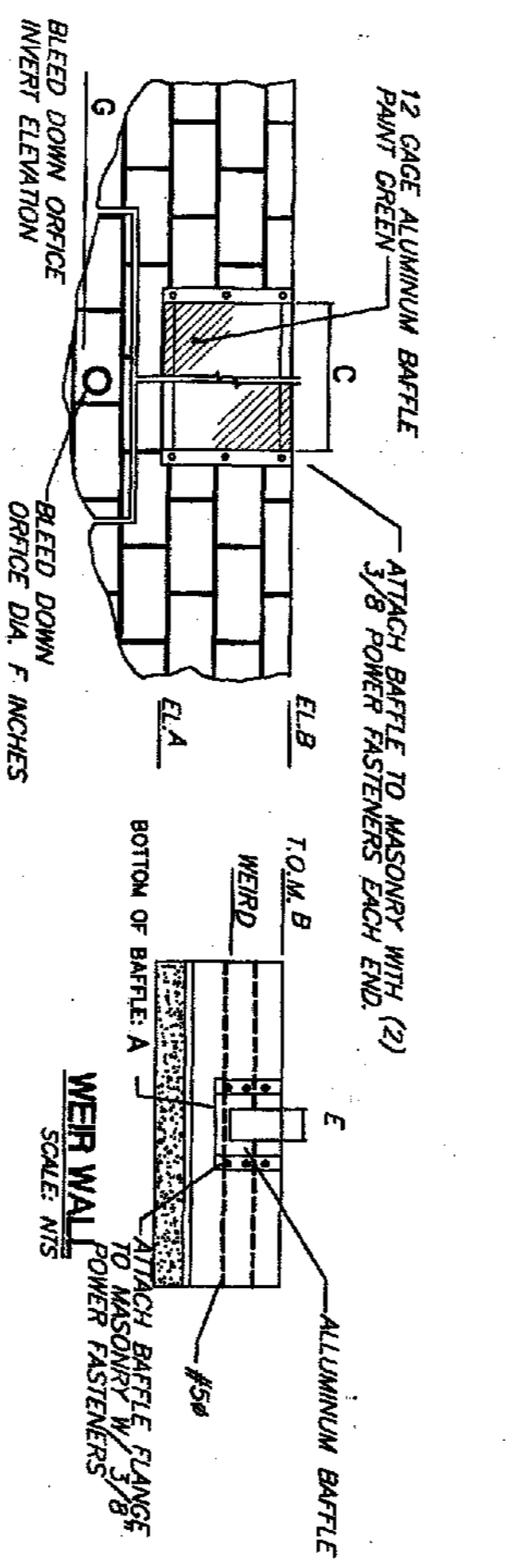
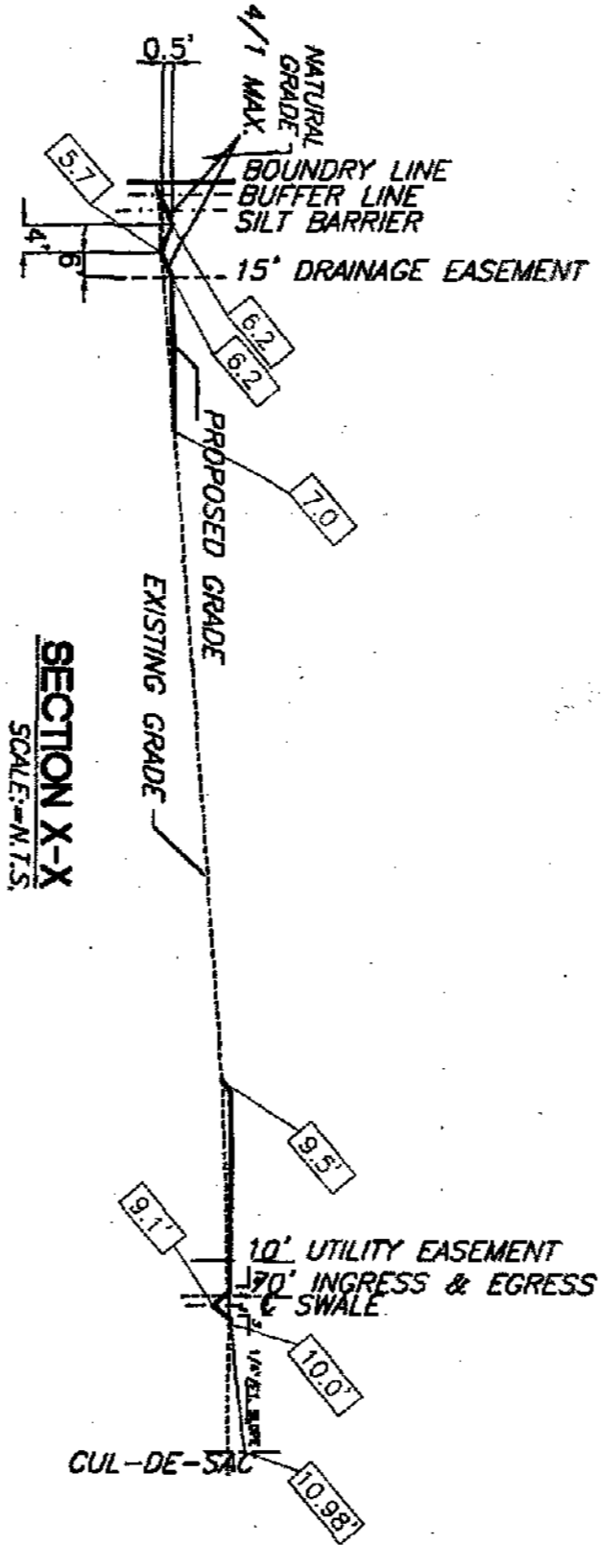
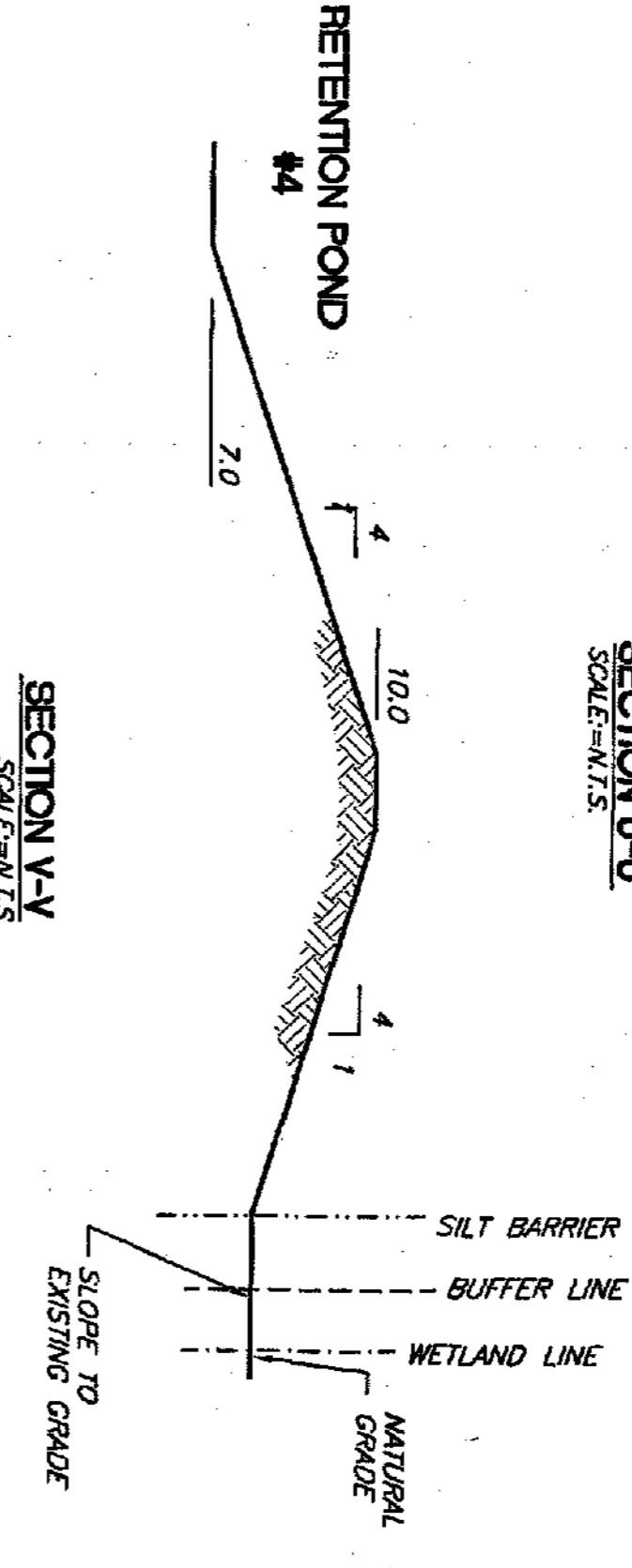
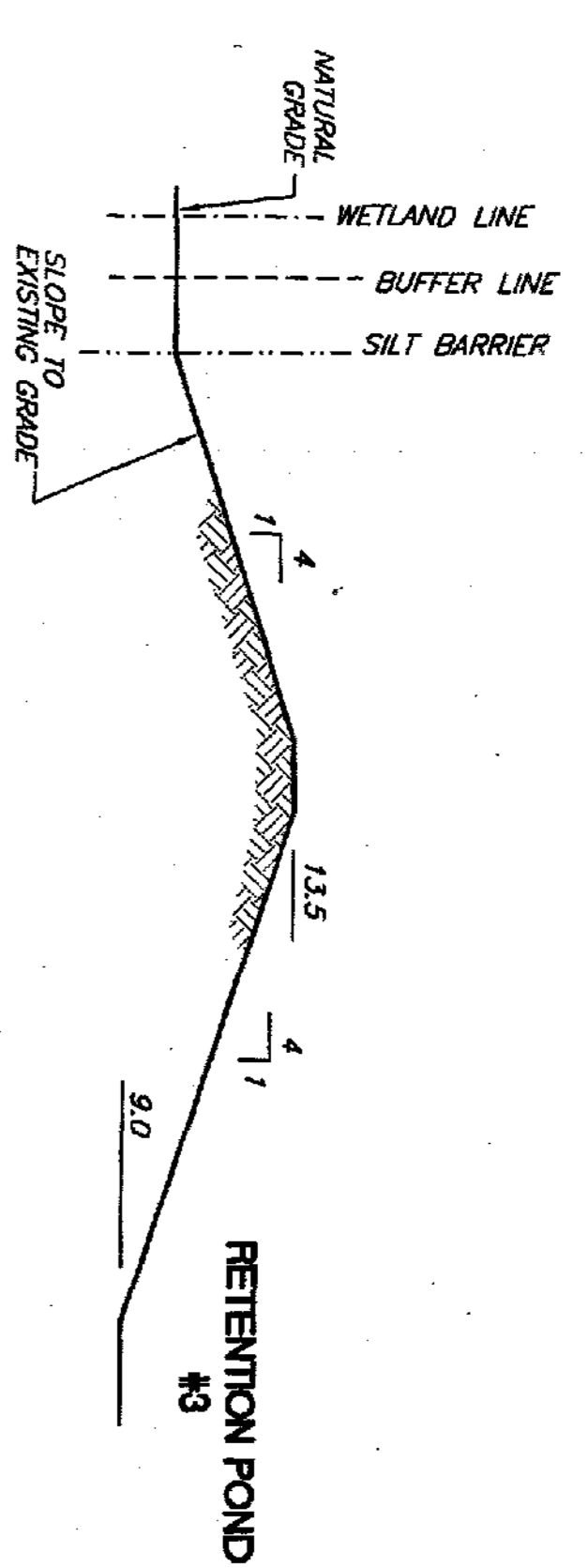
Sub. F08
 SHEET
 OF 18 SHEETS

CLIENT:
BLACKWELL PROPERTIES, INC.
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 NEW PORT RICHEY, FLORIDA 34652
 727-842-2571

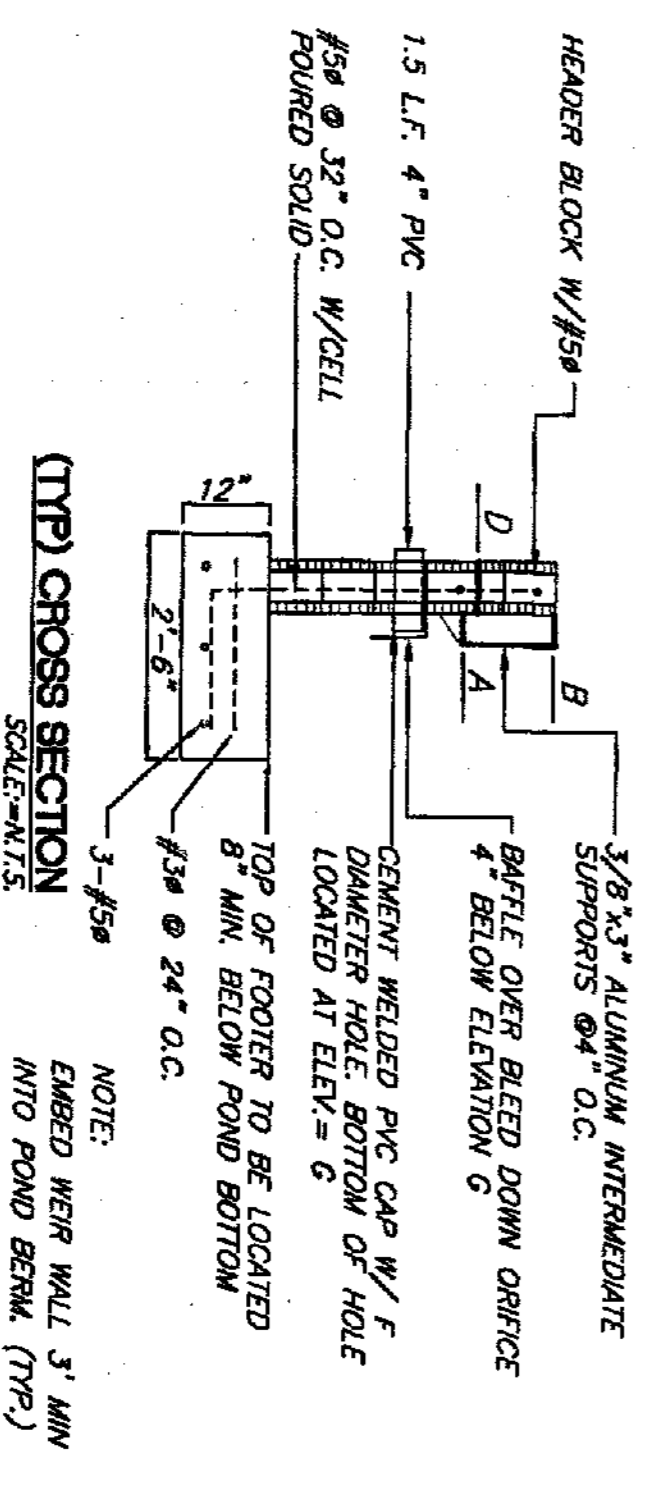
PROJECT:
RIVERSIDE ESTATES
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 PASCO COUNTY, FLORIDA

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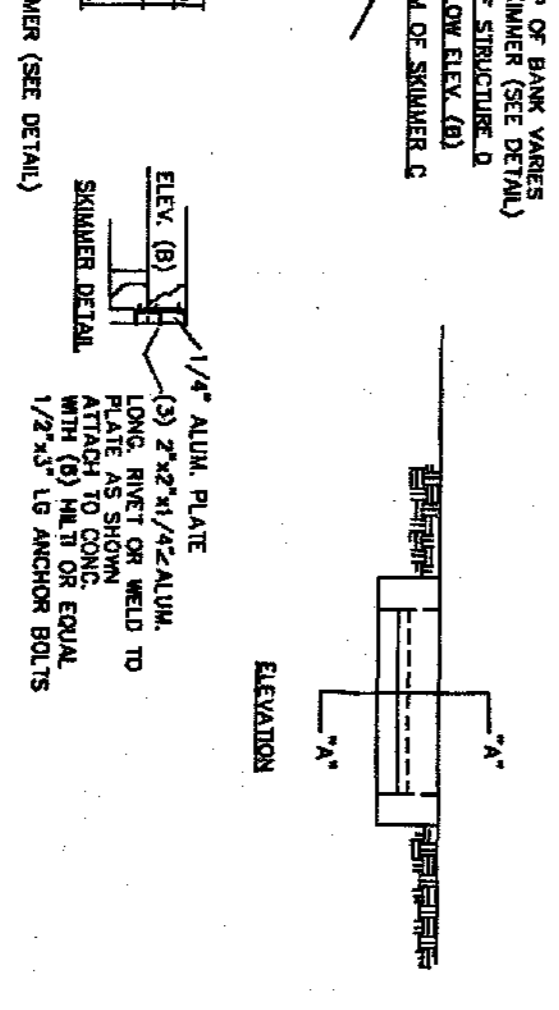
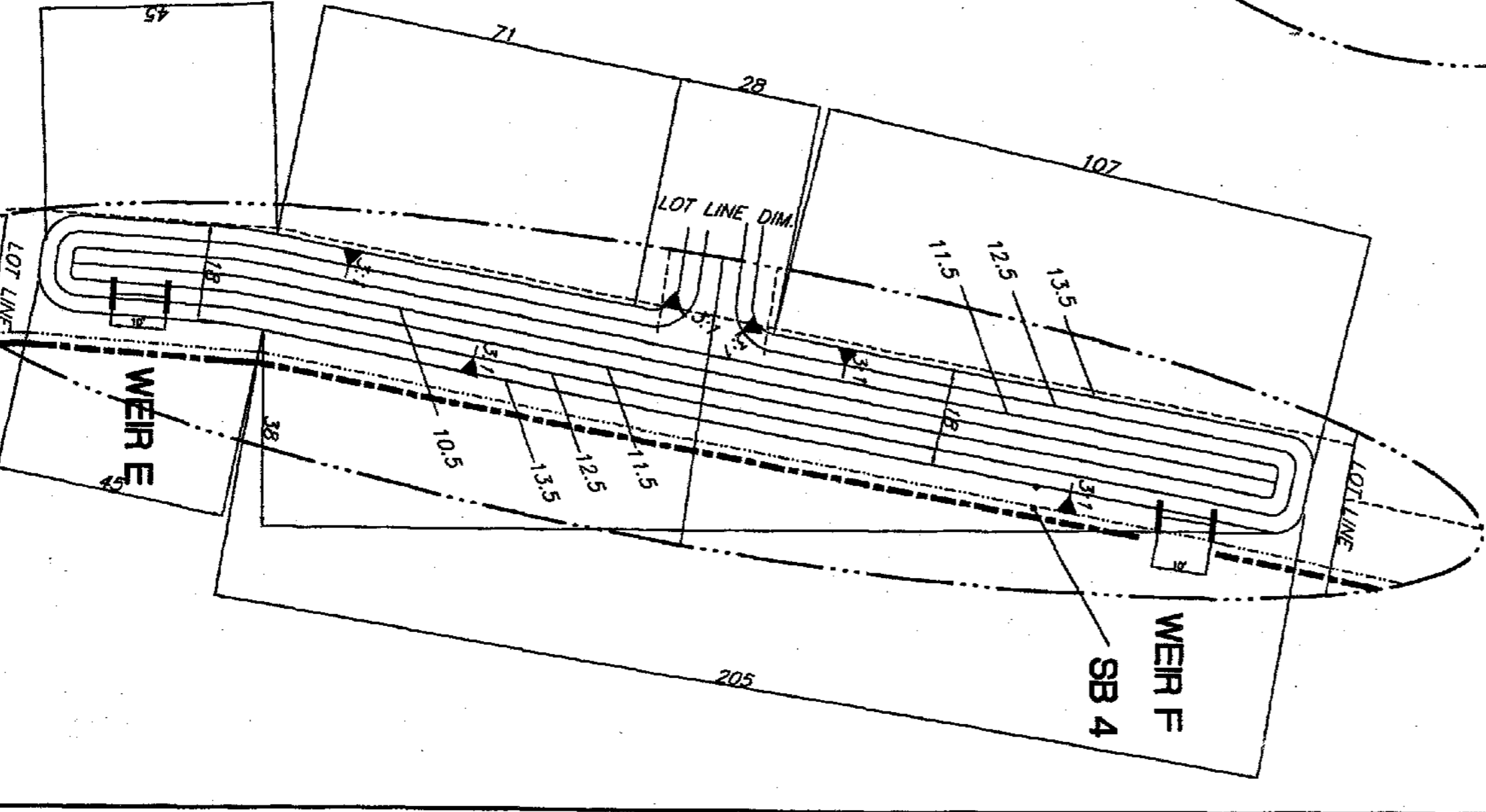
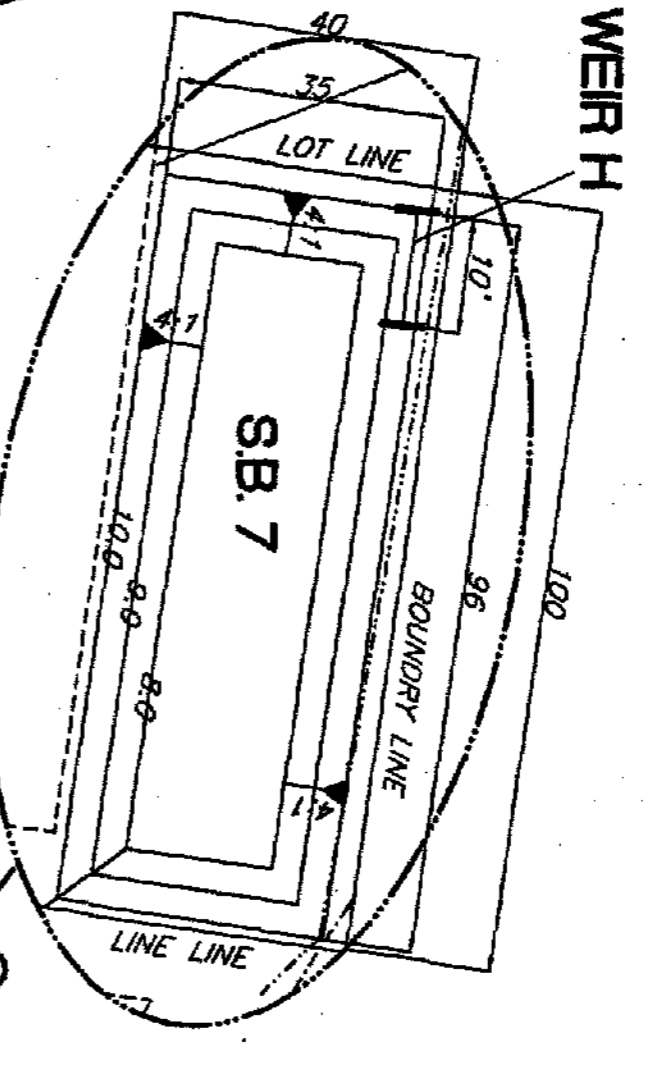
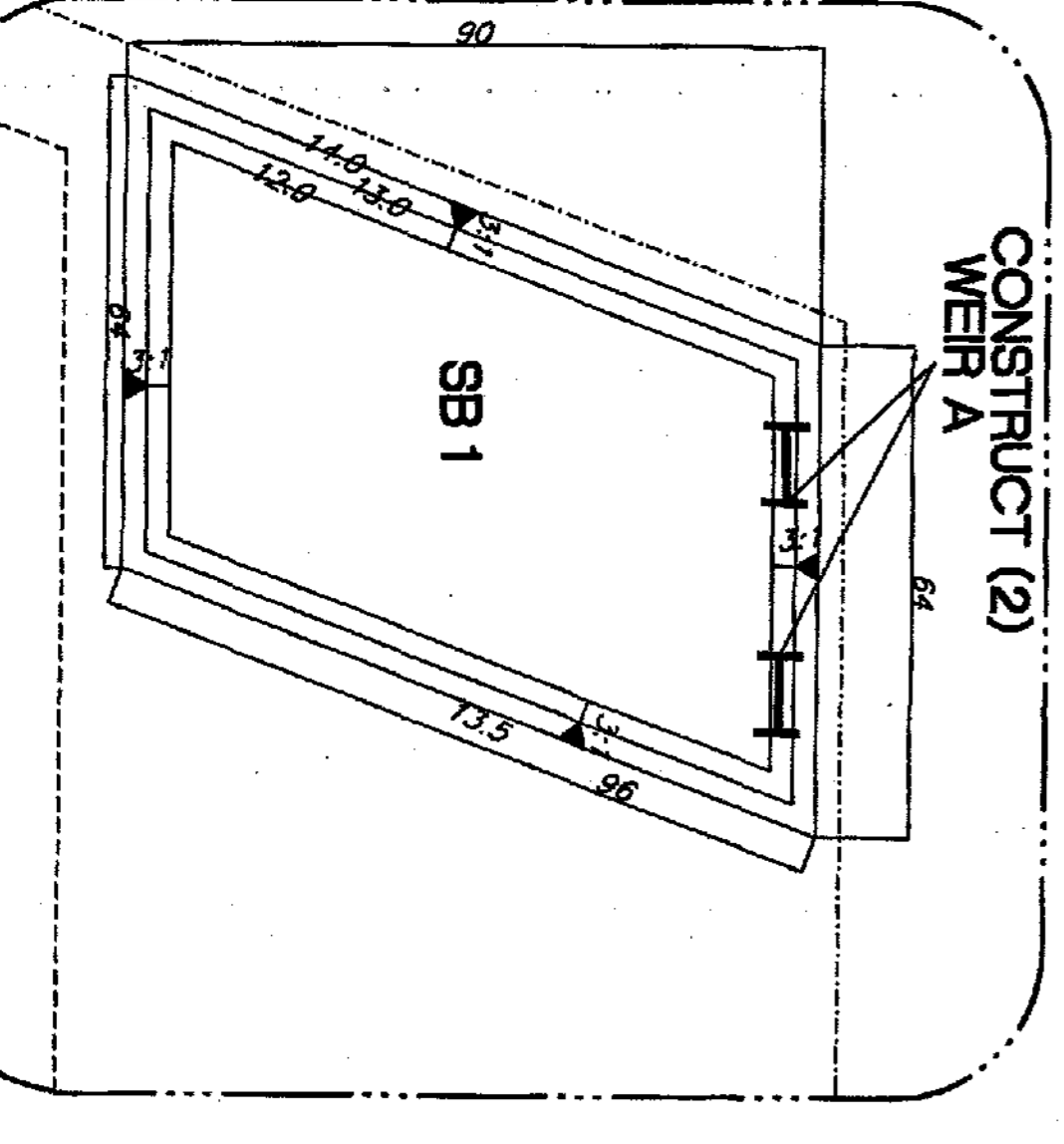
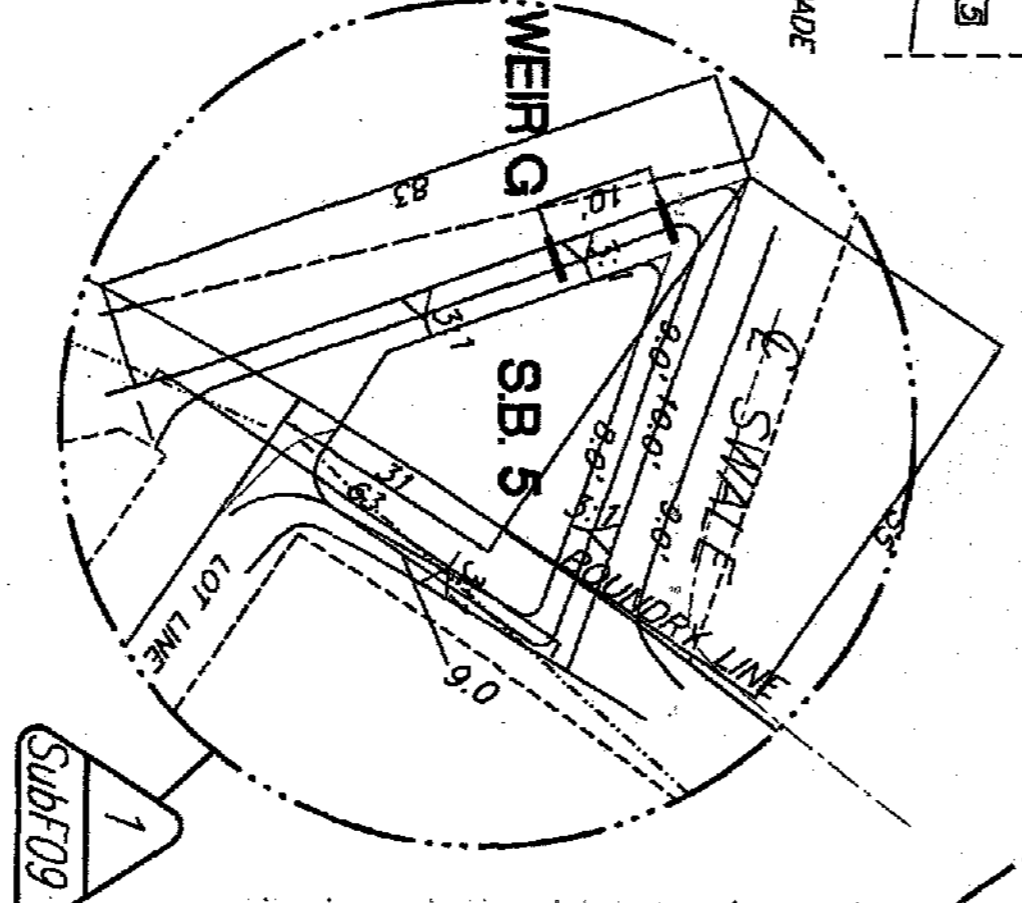
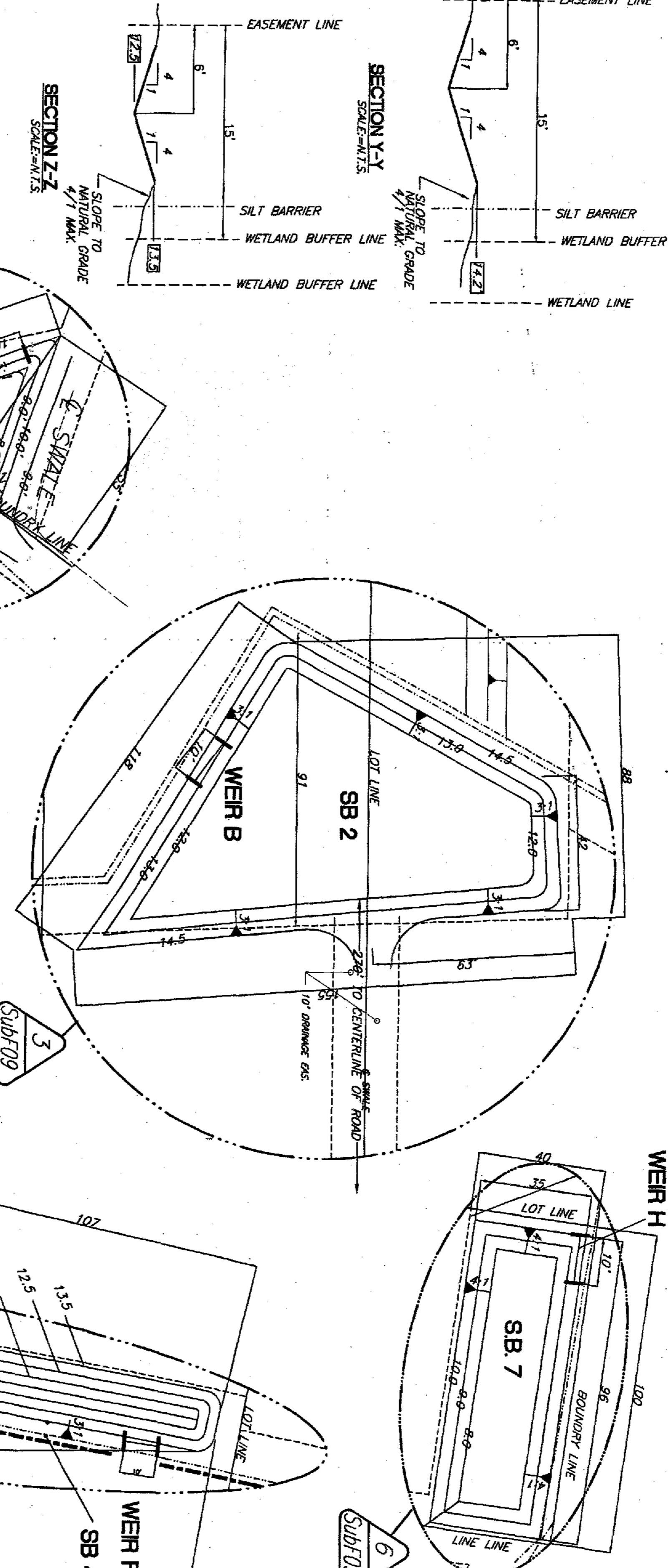
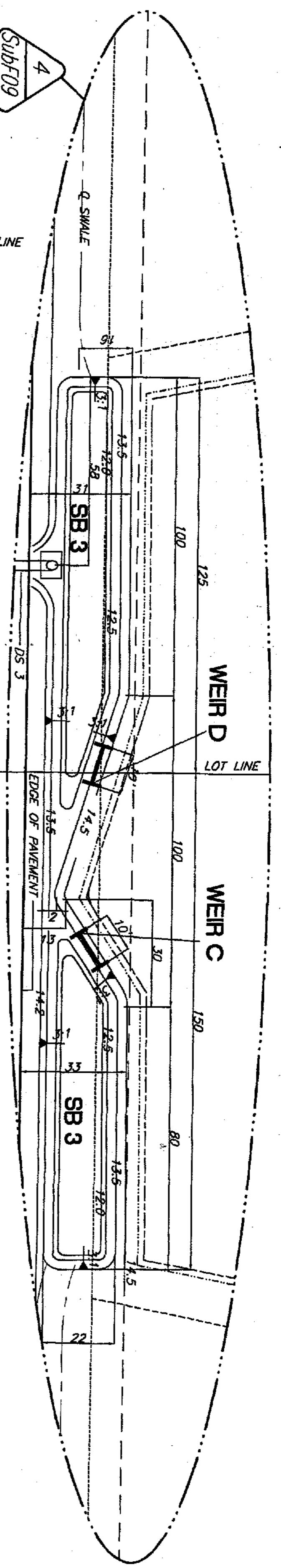


NOTE:
 1. CONCRETE 3000 PSI (MIN)
 2. STEEL REINFORCED 40 KSI
 3. HORIZONTAL REINFORCEMENT
 BETWEEN EACH COURSE



	A	B	C	D	E	F	G	H
WEIR 1	8.4	10.0	13.0	8.90	12.0	2.1	8.04	28.0
WEIR 2	-	-	-	-	-	-	-	-
WEIR 3	-	-	-	-	-	-	-	-
WEIR 4	-	-	-	-	-	-	-	-
WEIR 5	11.9	13.5	11.0	12.40	10.0	1.5	12.0	32.0
WEIR 6	12.1	13.5	11.0	12.60	10.0	1.5	12.0	46.0
WEIR 7	8.9	10.2	21.0	9.45	20.0	1.0	9.0	44.0
WEIR 8	6.9	8.0	21.0	7.40	20.0	1.0	7.5	40.0

KEY:
 A BOTTOM OF BAFFLE
 B TOP OF STRUCTURE
 C WIDTH OF BAFFLE
 D OVERFLOW ELEVATION
 E WEIR OPENING
 F ORIFICE DIAMETER
 G BLEED DOWN INVERT
 H OVERALL STRUCTURE LENGTH



CRITICAL DETAIL WEIR/WALL
 SCALE: 1/8"=1'-0"

H	WEIR	A	B	C	D
WEIR A	10.0	13.0	12.0	14.0	
WEIR B	10.0	13.0	12.0	14.5	
WEIR C	10.0	13.0	12.0	14.5	
WEIR D	10.0	13.0	12.0	14.5	
WEIR E	10.0	13.0	12.5	13.5	
WEIR F	10.0	13.0	12.5	13.5	
WEIR G	10.0	9.0	8.5	10.0	
WEIR H	10.0	9.0	8.5	10.0	
WEIR I	12.0	13.0	12.0	14.0	

POND DIMENSIONING

DATE	REV.	BY
2/99	#1	BC
3/25/99	#2	BC
5/2/99	#3	RH
8/25/98	#4	RH
2/20/00	#5	RH

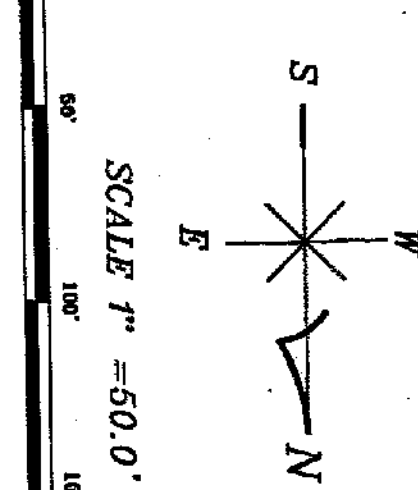
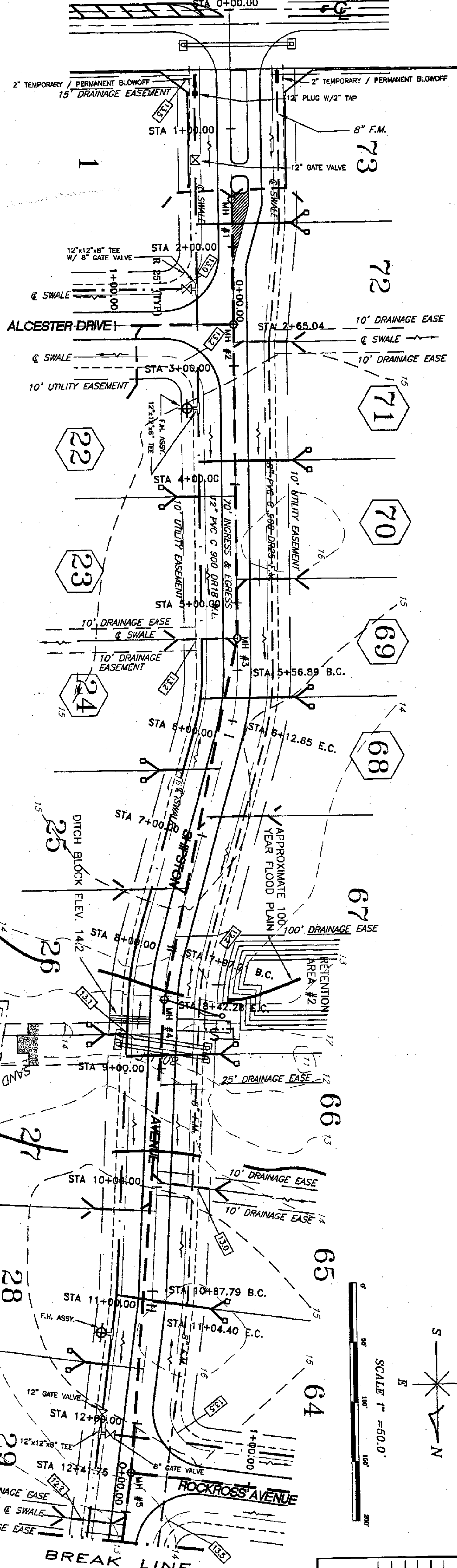
Design Services, Inc. #4297
 RALPH M. HANSEN JR. PE #9280
 6636 ROWAN ROAD
 NEW PORT RICHEY, FL. 34653
 (727)849-7085

PROJECT:
RIVERSIDE ESTATES
 PERRINE RANCH ROAD
 PASCO COUNTY, FLORIDA

CLIENT:
 BLACKWELL PROPERTIES, INC.
 P.O. BOX 1085
 NEW PORT RICHEY, FLORIDA 34652
 727-842-2571

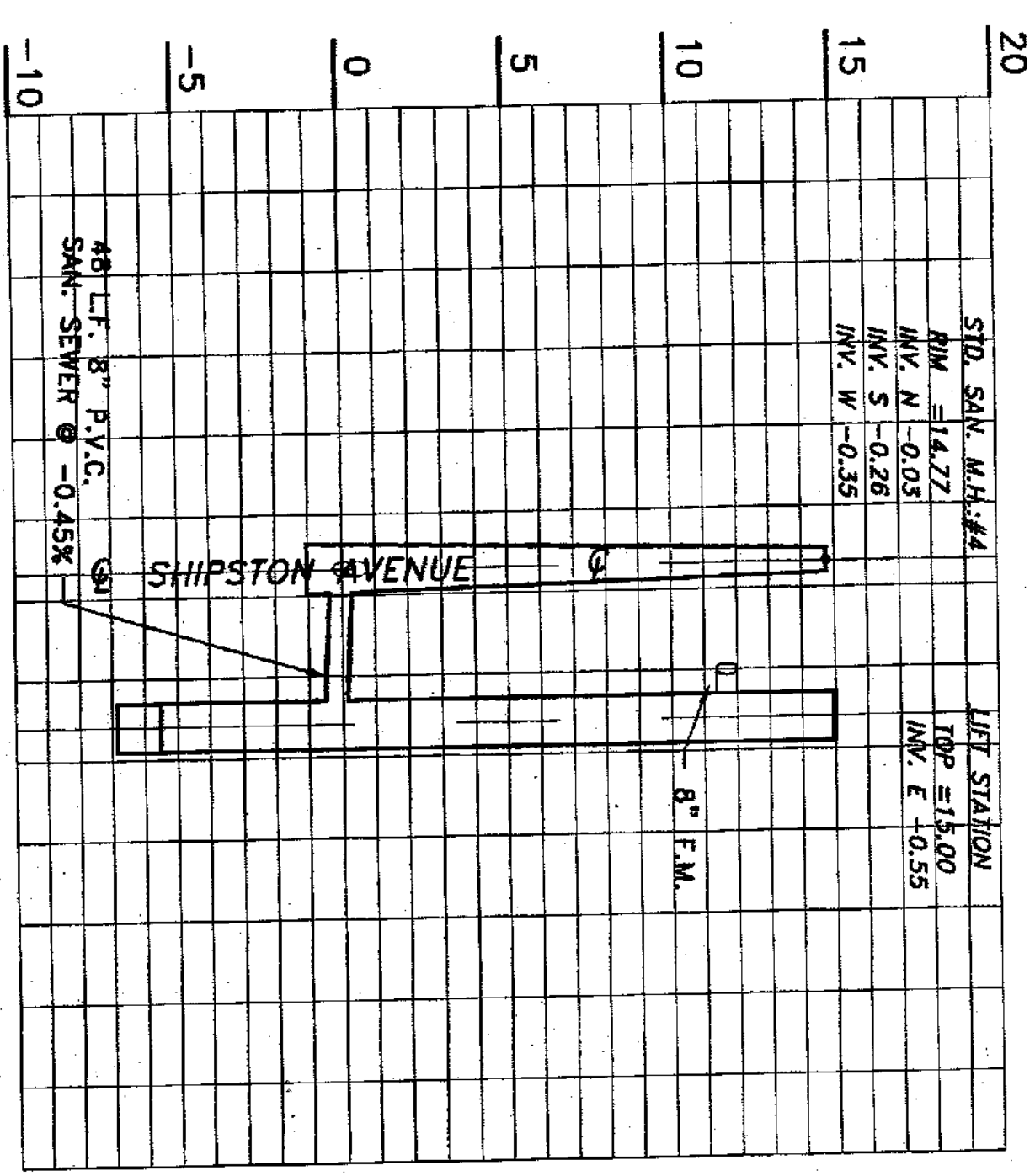
Sub.F09
 SHEET
 OF 18 SHEETS

PERRINE RANCH ROAD

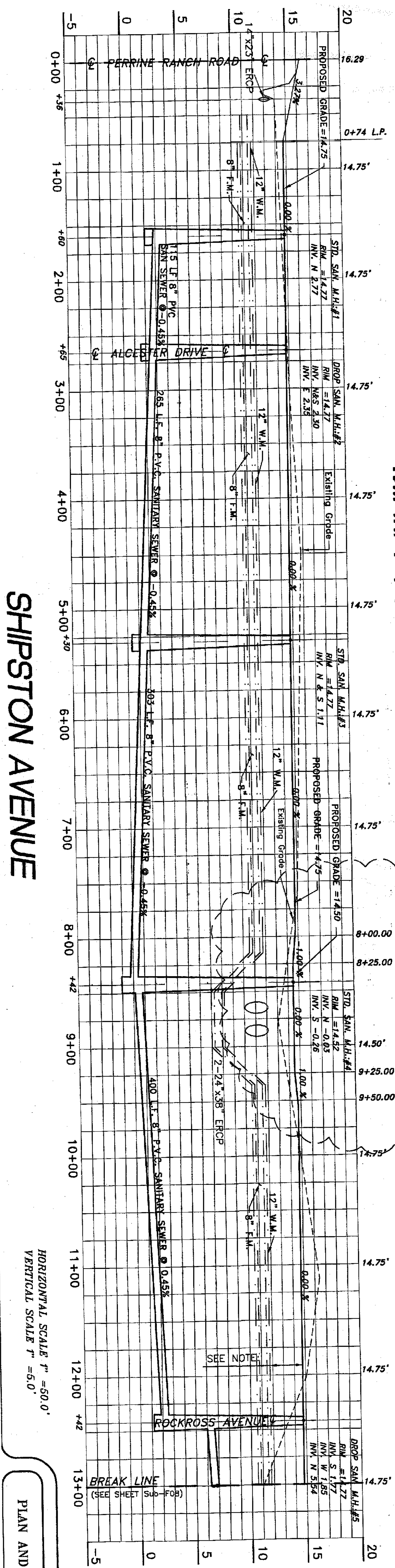


LEGEND

- Existing Grade
- PROPOSED ROADWAY
- PROPOSED C/L GRADE
- WATER LINE
- CENTERLINE
- PROPOSED SWALE
- PROPOSED GRADE
- FIRE HYDRANT



M.H.#4 TO L.S.



SHIPSTON AVENUE

HORIZONTAL SCALE 1" = 50.0'
VERTICAL SCALE 1" = 5.0'

PLAN AND PROFILE

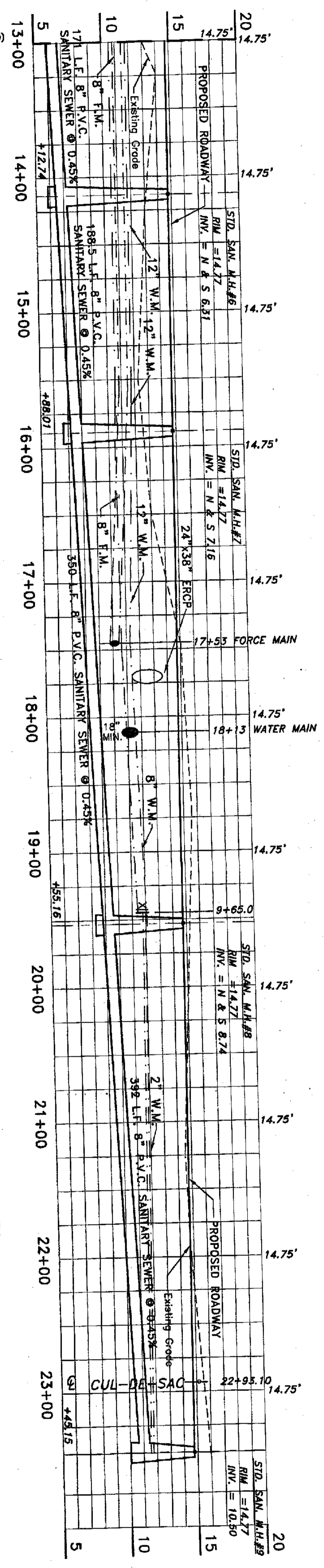
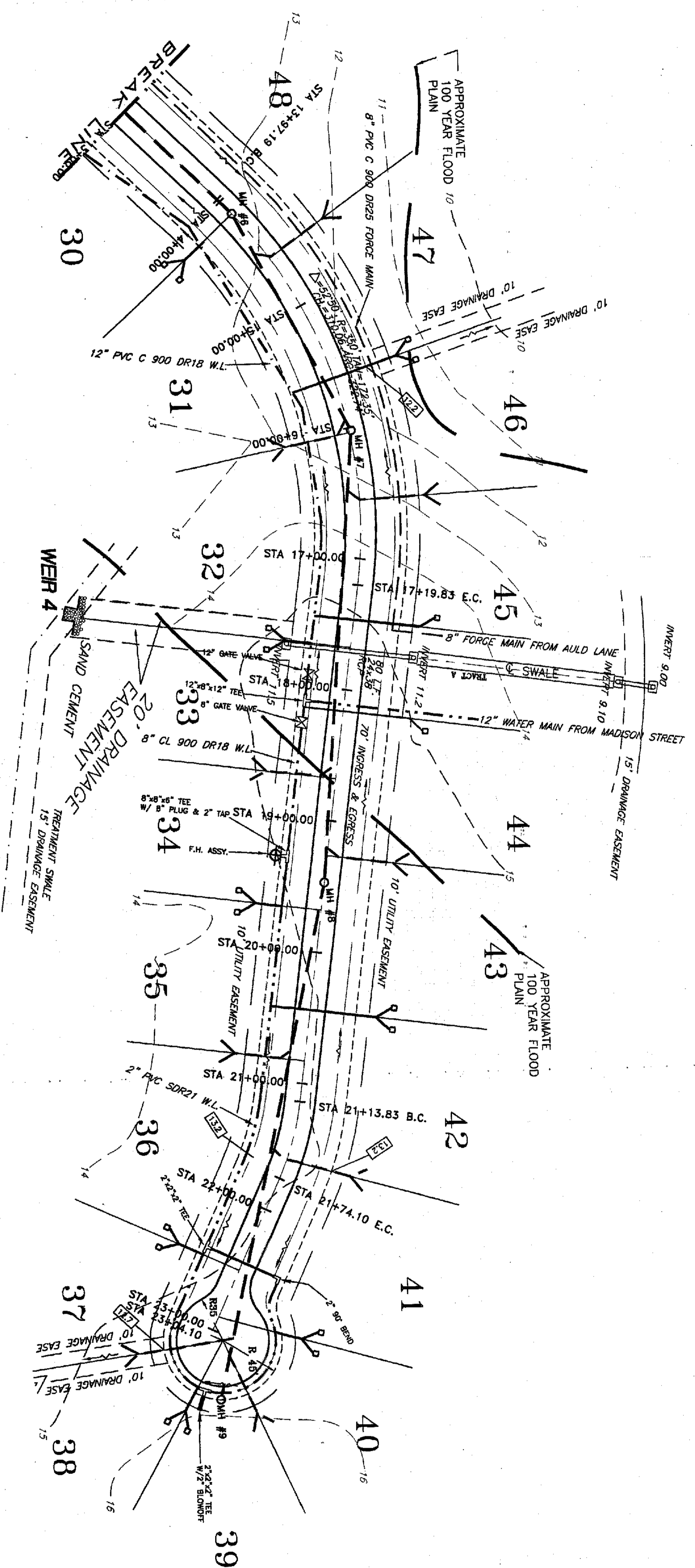
DRAWN: JAJ
CHECKED: RMH JR.
DATE: 12-2-98
SCALE: 1" = 50'
JOB NO.: 97-013.05

CLIENT: BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

PROJECT: RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7065

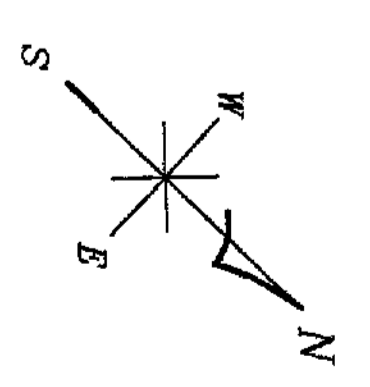
DATE	REV.	BY
2/99	1	JBC
4/27/99	2	FB
5/26/99	3	FB



(SEE SHEET Sub-F10)
BREAK LINE

SHIPSTON AVENUE

HORIZONTAL SCALE 1" = 50.0'
VERTICAL SCALE 1" = 5.0'



SCALE 1" = 50.0'

LEGEND	
	Existing Grade
	PROPOSED ROADWAY
	PROPOSED C/L GRADE
	WATER LINE
	CENTERLINE
	PROPOSED GRADE
	FIRE HYDRANT

PLAN AND PROFILE

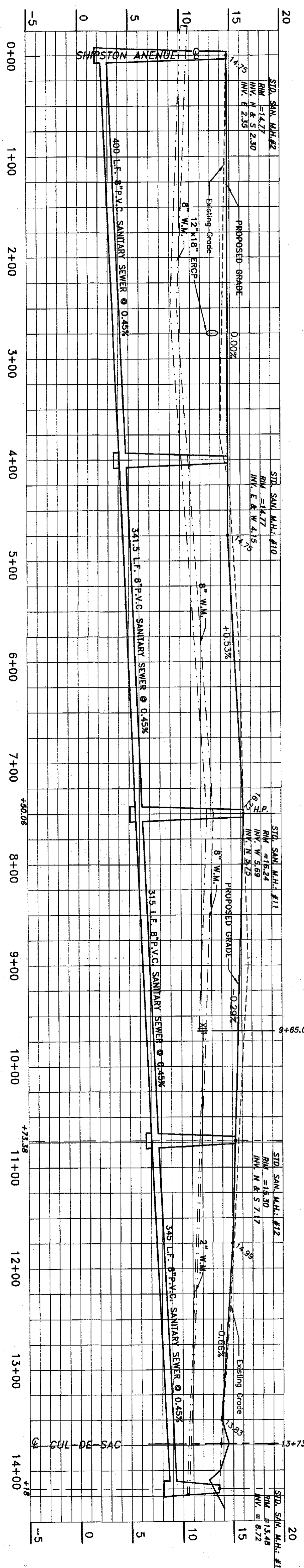
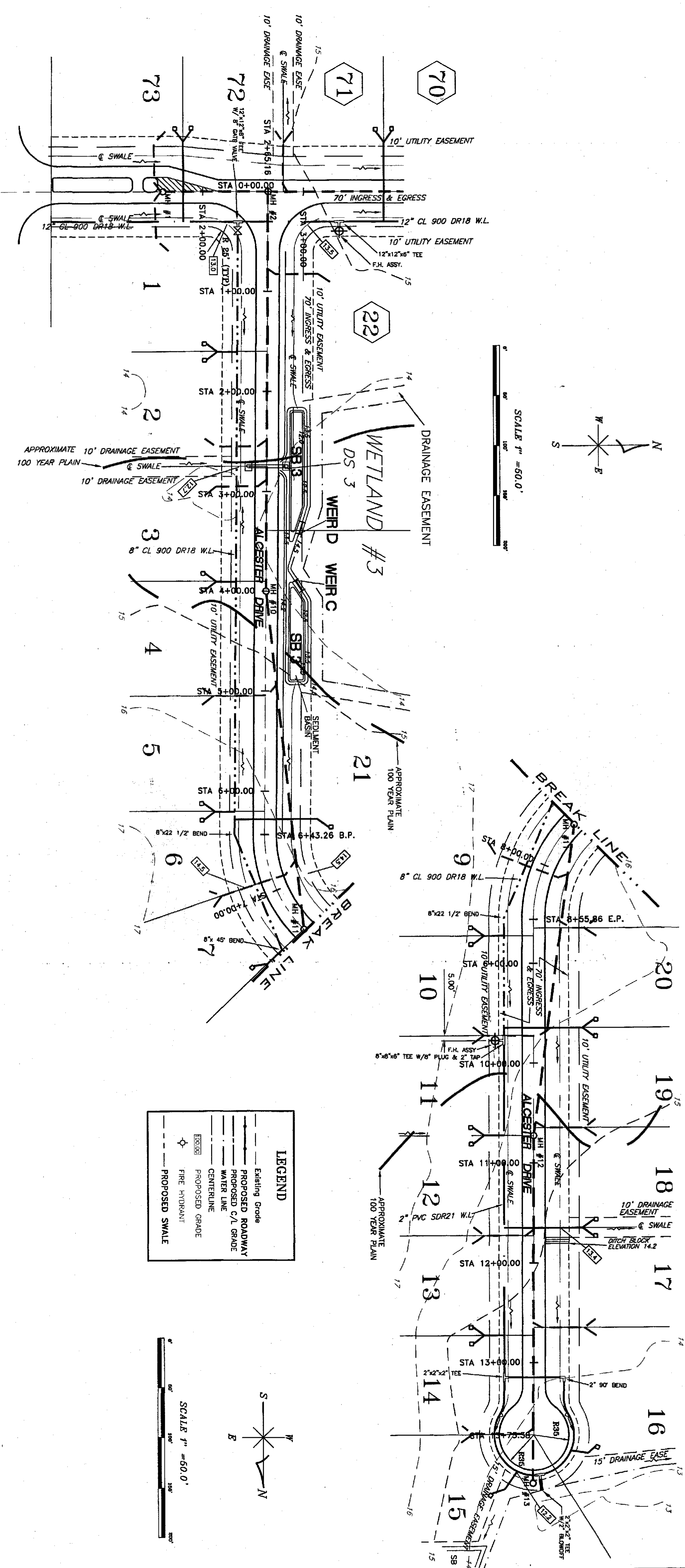
DATE	REV.	BY
2/99	#1	JBC
4/27/99	2	FB

Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

DRAWN: JAJ
CHECKED: RMH JR.
DATE: 12-2-98
SCALE: 1" = 50'
JOB NO: 97-013.05
SHEET: Sub.F11
OF 18 SHEETS



ALCESTER DRIVE

PLAN AND PROFILE

HORIZONTAL SCALE 1" = 50.0'
VERTICAL SCALE 1" = 5.0'

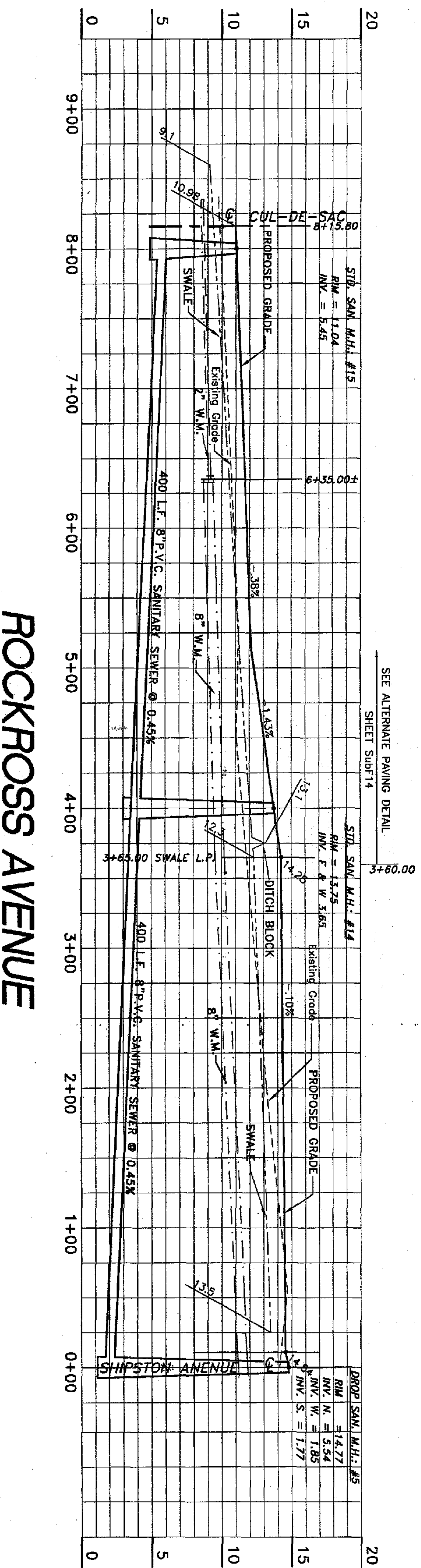
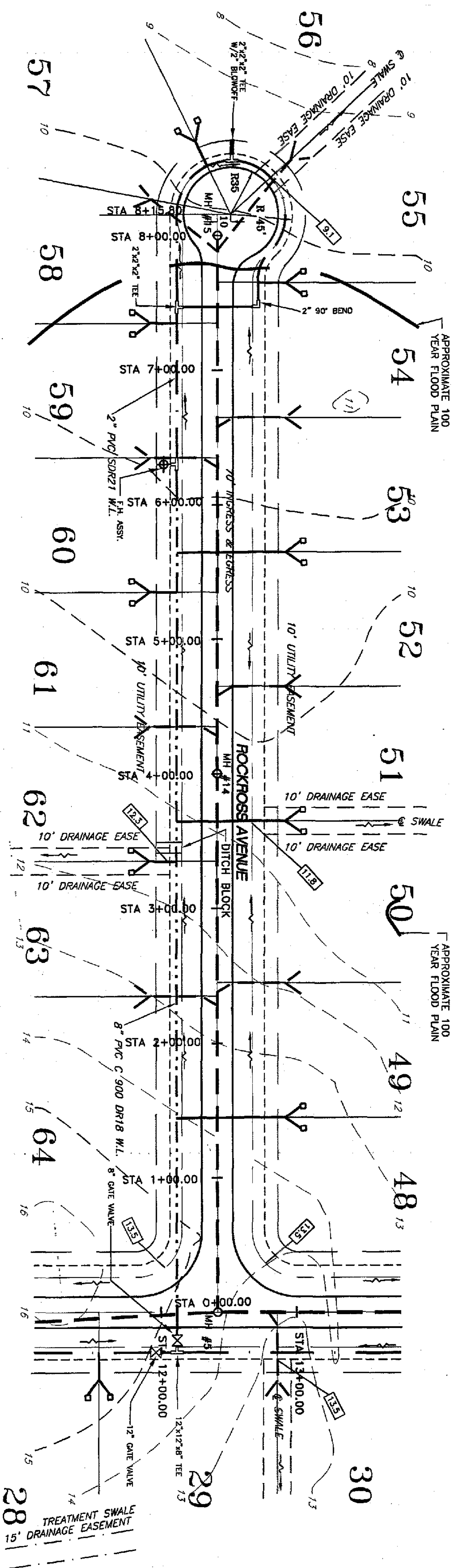
SHEET Sub.F12 OF 18 SHEETS	DRAWN	JAJ
	CHECKED	RMH JR.
	DATE	12-2-98
	SCALE	1" = 50'
JOB NO.		97-013.05

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
813-842-2571

PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

DATE	REV.	BY
2/99	#1	BC
3/25/99	#2	BC



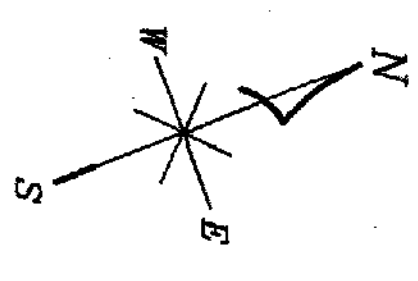
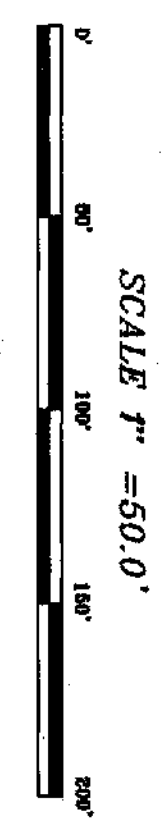
ROCKCROSS AVENUE

HORIZONTAL SCALE 1" = 50.0'
VERTICAL SCALE 1" = 6.0'

PLAN AND PROFILE

LEGEND

- PROPOSED SWALE
- - - - - Existing Grade
- — — — PROPOSED ROADWAY
- — — — PROPOSED C/L GRADE
- — — — WATER LINE
- — — — CENTERLINE
- — — — PROPOSED GRADE
- ◆ FIRE HYDRANT



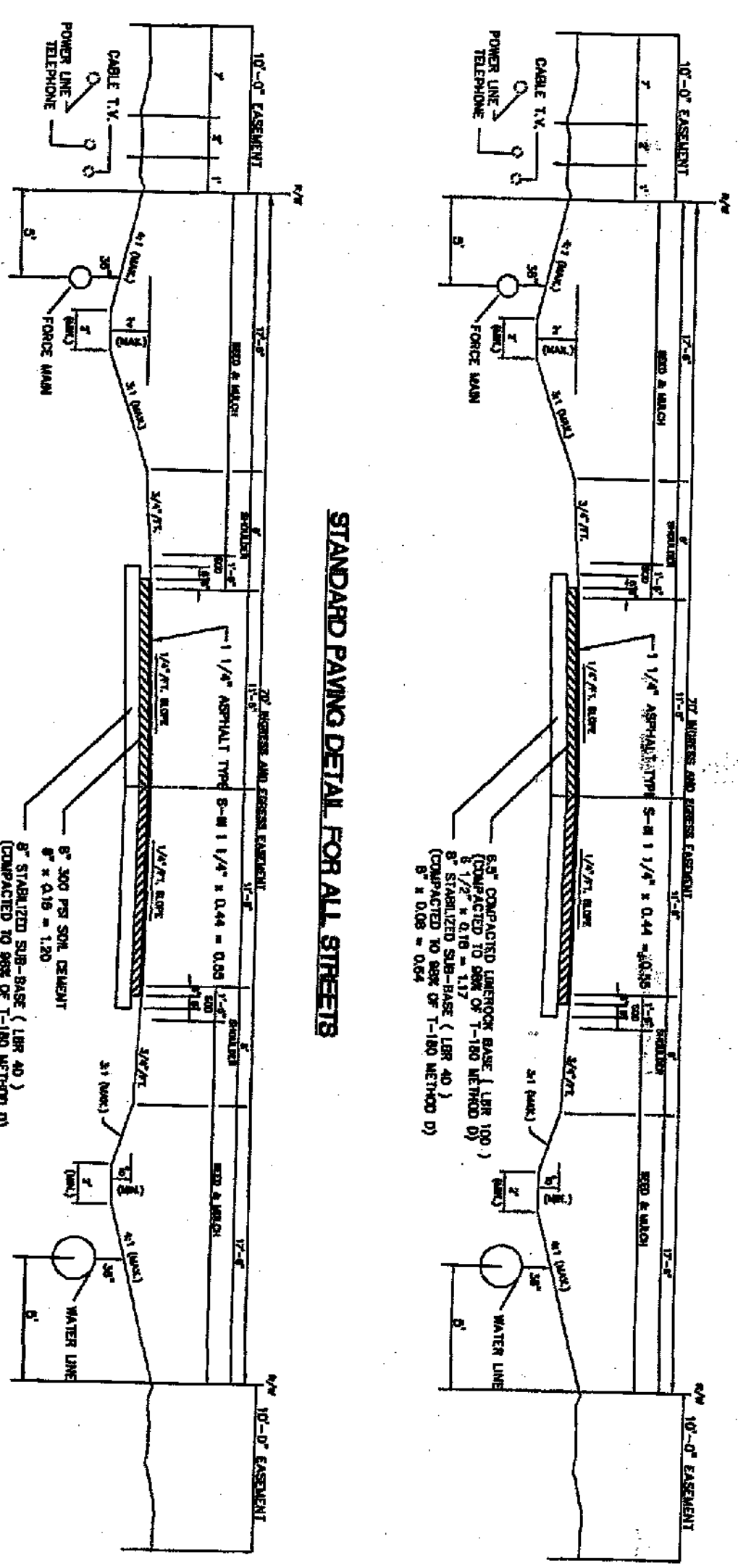
DATE	REV.	BY
2/99	#1	JBC
SHEET		
Sub.F13		
OF 18 SHEETS		

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

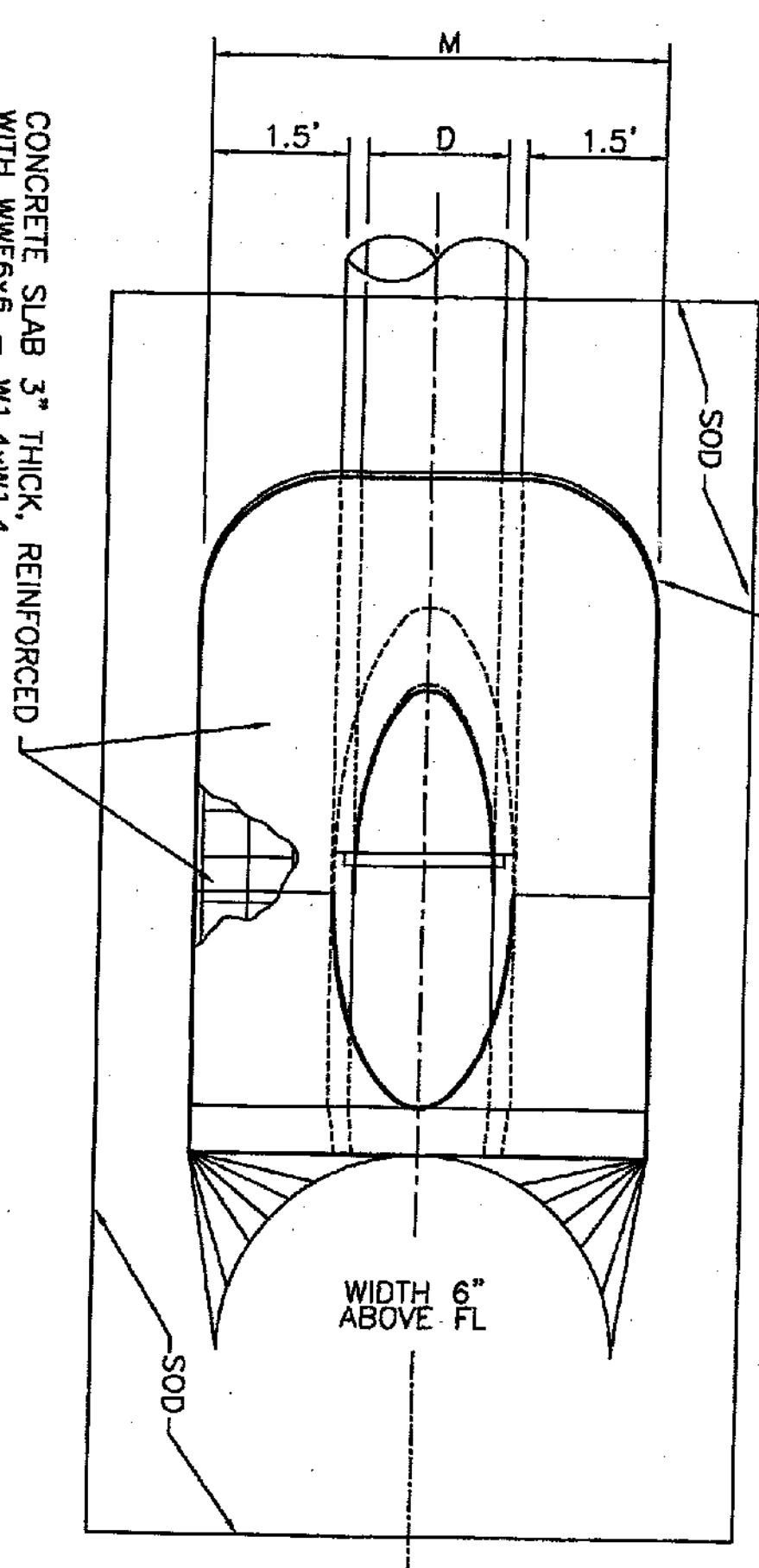
PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

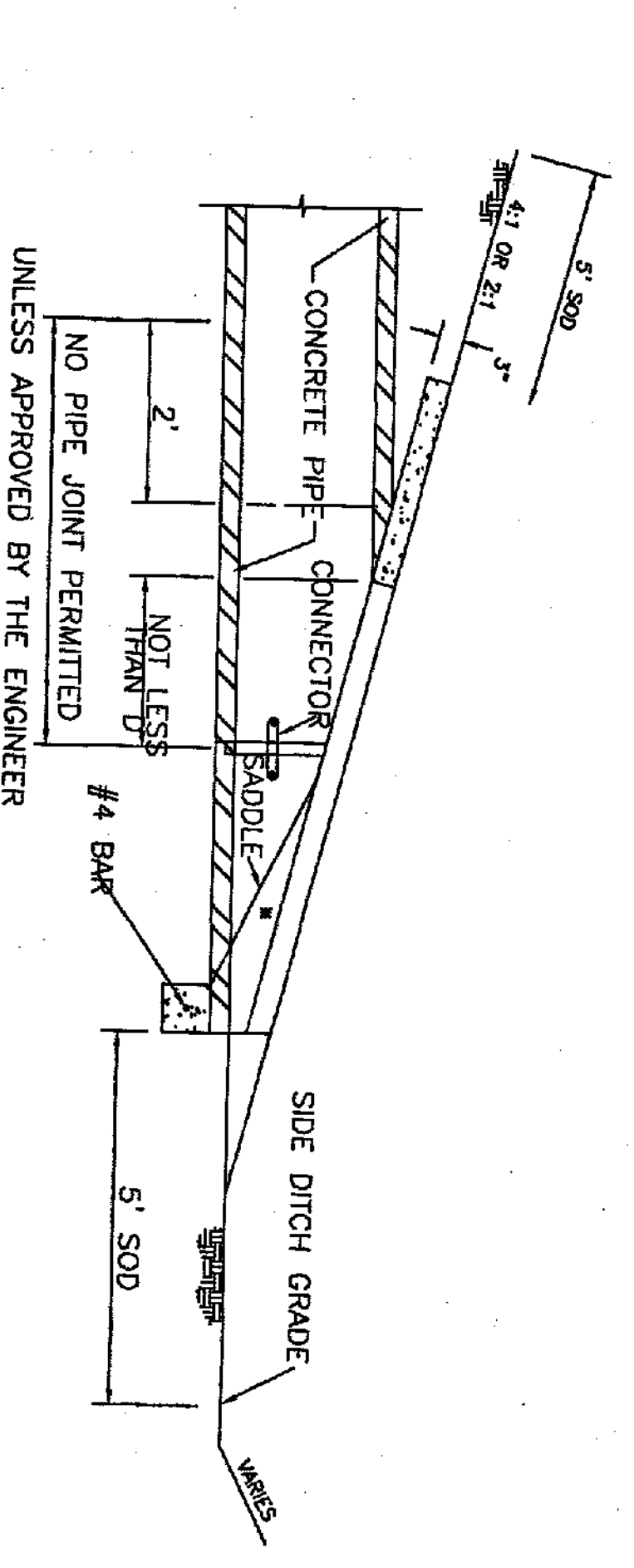
DATE	REV.	BY
2/99	#1	JBC



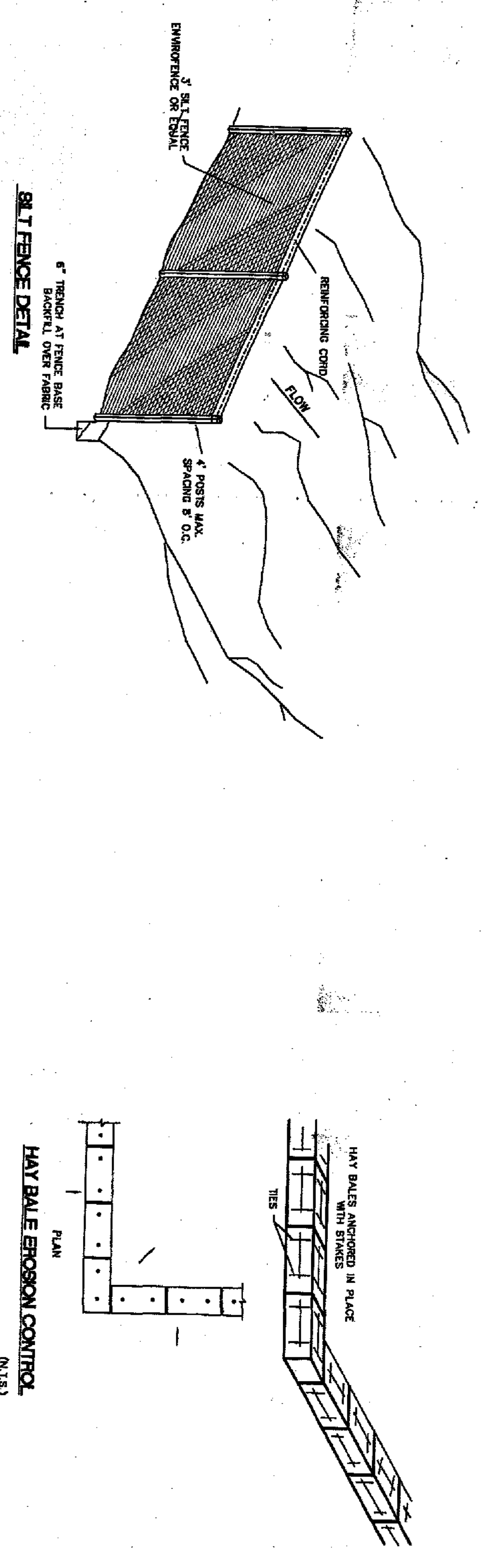
PAVING DETAIL FOR ROCKROSS AVE
SIA 316000 TO 316000



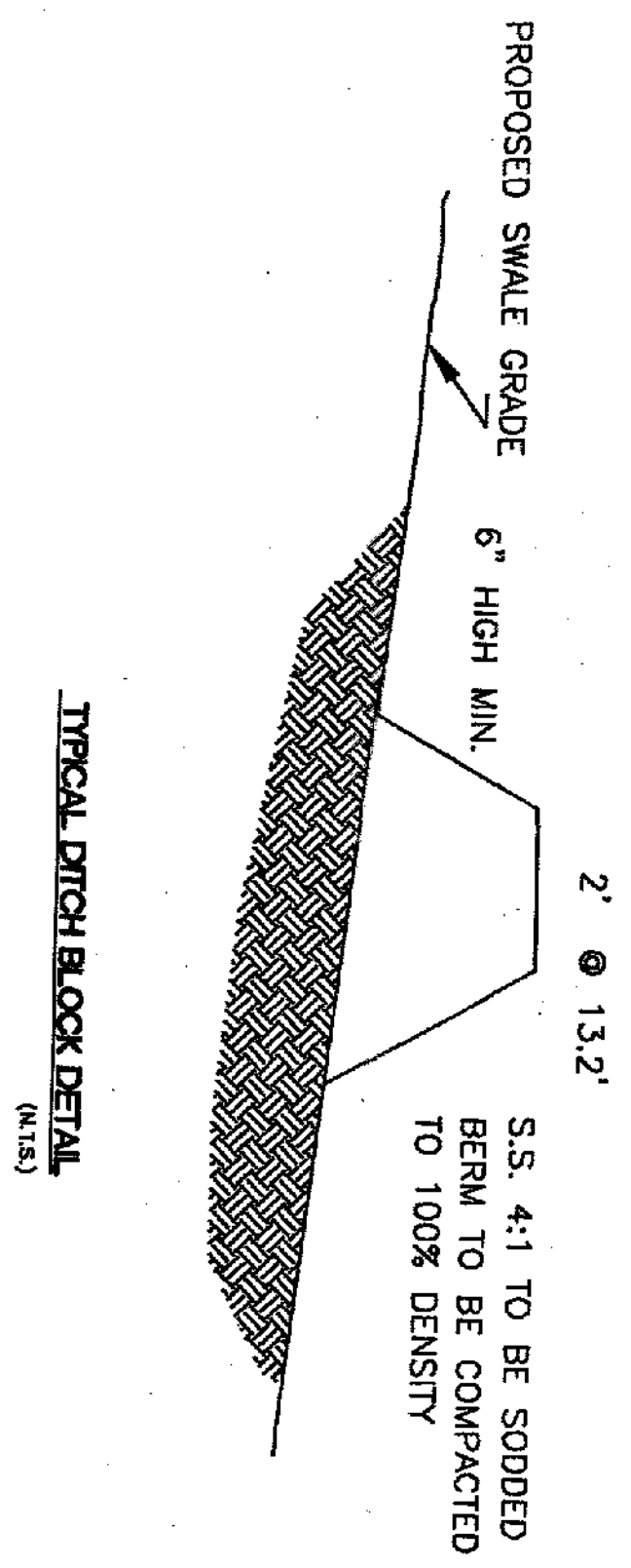
PLAN VIEW - SINGLE PIPE



ELEVATION VIEW - SECTION THROUGH PIPE



SILT FENCE DETAIL



TYPICAL DITCH BLOCK DETAIL

- NOTE: ALL STORM WATER INLETS TYPE STANDARD
- STORM WATER CONSTRUCTION INSTRUCTIONS:**
1. DETENTION AREAS AND SWALES SHALL BE ROUGHED IN INITIALLY TO GENERATE SITE FILL AND INTERCEPT CONSTRUCTION RUNOFF.
 2. CARE SHALL BE EXERCISED TO PREVENT DISTURBANCE OF THE NATURAL VEGETATION IN AREAS NOT PROPOSED FOR IMMEDIATE CONSTRUCTION.
 3. AS SOON AS PRACTICAL, ALL DRESSED SLOPES AND DISTURBED AREAS SHALL BE SODED OR SEDED AND MULCHED TO PREVENT EROSION.
 4. WETLANDS AND/OR SILT SCREENS SHALL BE INSTALLED ADJACENT TO THE WETLANDS AND/OR SEDIMENT TRANSPORT INTO THESE AREAS.
 5. ANY SILT OR OTHER MATERIALS ACCUMULATED IN THE POND BOTTOM DURING CONSTRUCTION SHALL BE REMOVED PRIOR TO FINAL GRADING AND SODDING.

D	X	A	B	C	E	F	G	DIMENSIONS AND QUANTITIES					
								M	N	CONCRETE (CU YDS)	SODDING (CSO YDS)		
								STANDARD	TRIPLE	BLAD	TRIPLE	BLAD	
1	1	1	1	1	1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9	9	9	9	9	9
10	10	10	10	10	10	10	10	10	10	10	10	10	10

MITERED END SECTION

NOTE: REFER TO FOOT INDEX #272 FOR FURTHER DETAILS.

PAVING AND DRAINAGE DETAILS

SHEET Sub.F14

DATE 12-2-88

SCALE AS SHOWN

JOB NO. 97-013.05

CHECKED RMH JR.

DESIGNED RMH JR.

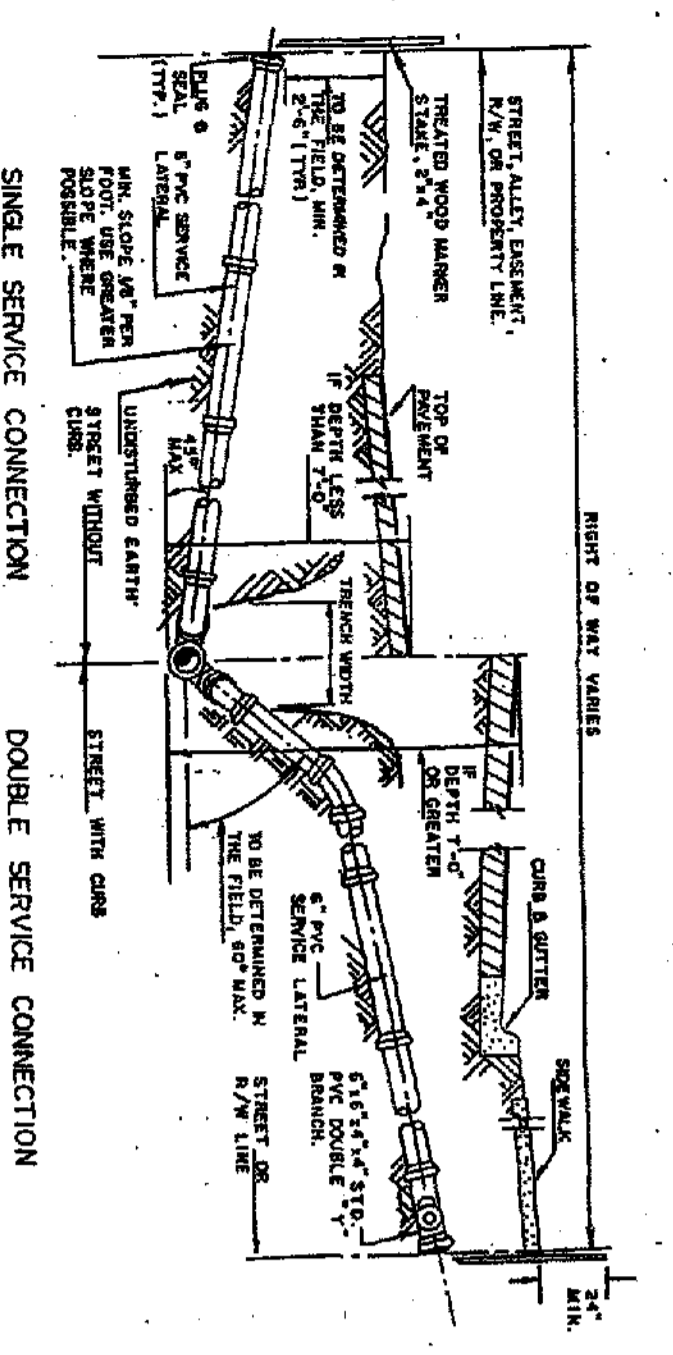
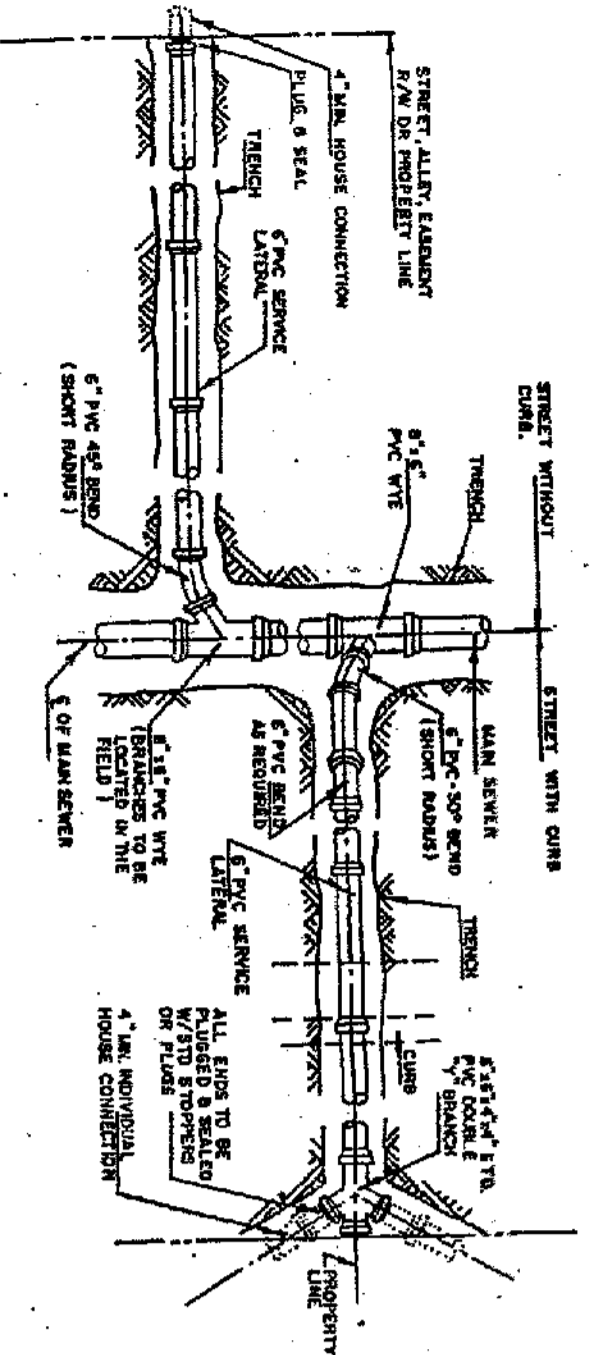
CLIENT: BLACKWELL PROPERTIES, INC. P.O. BOX 1085 NEW PORT RICHEY, FLORIDA 34652 727-842-2571

PROJECT: RIVERSIDE ESTATES PERRINE RANCH ROAD PASCO COUNTY, FLORIDA

Design Services, Inc. #4297

RALPH M. HANSEN JR. PE #9280 6636 ROWAN ROAD NEW PORT RICHEY, FL. 34653 (727)849-7085

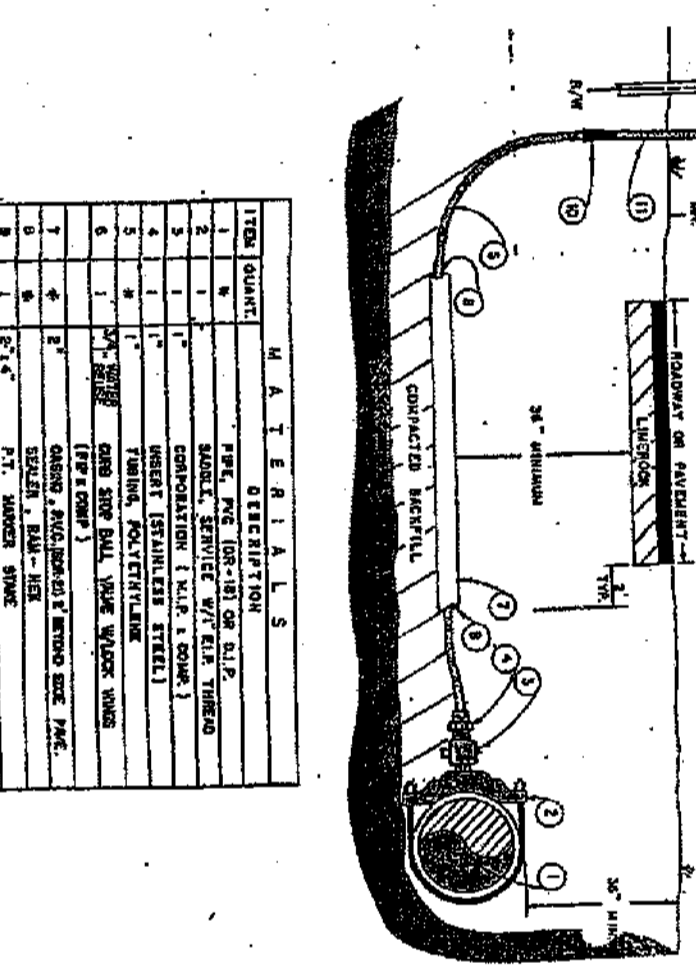
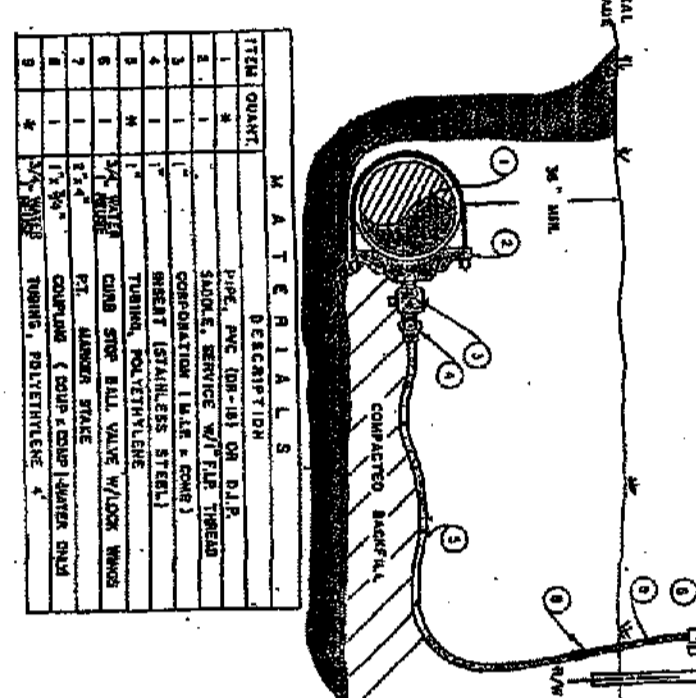
DATE	REV.	BY
2/25/98	1	FB



Notes:

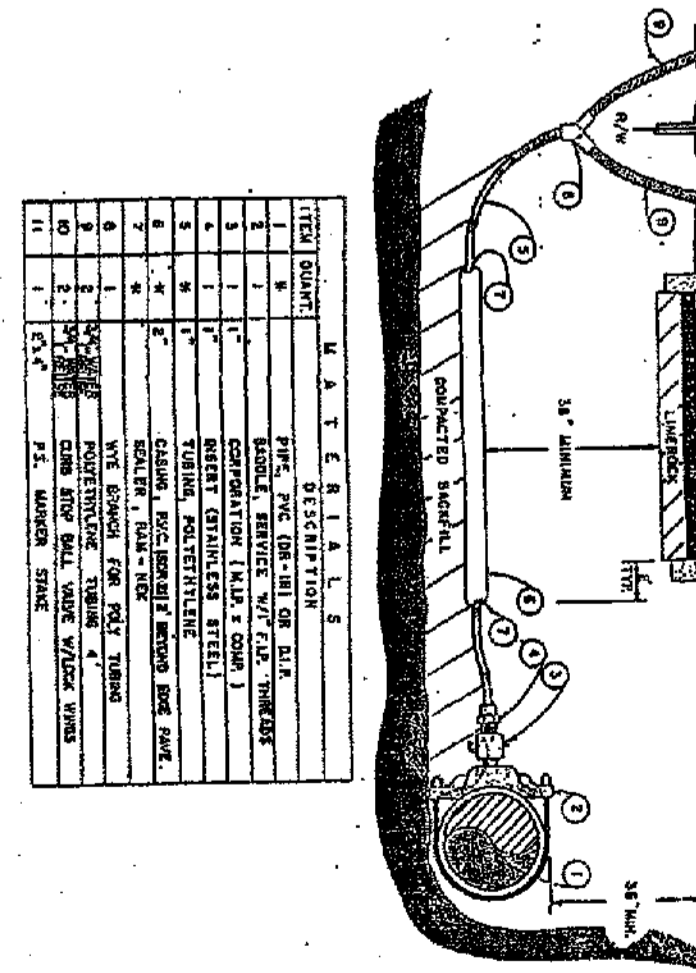
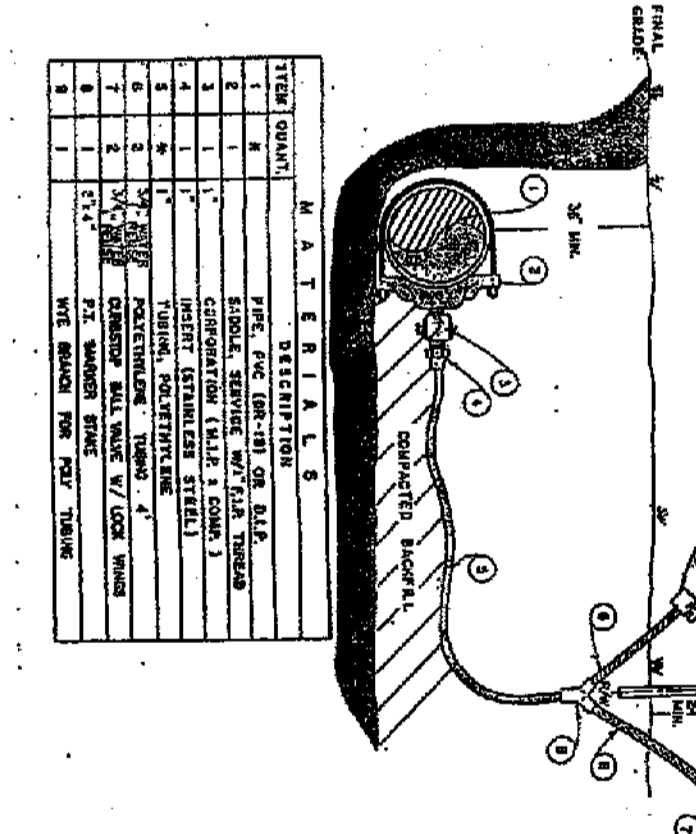
- Contractor shall make a clean set of plans, the final stationing or distance and direction from manhole of each service lateral and then give to engineer for record purposes.
- Provide 2" x 4" pressure treated wood marker stakes at all sanitary service (include in pipe price) top of stake to be painted with green paint.
- The minimum diameter of all service laterals shall be 6 inches.

TYPICAL SEWER LATERAL



NOTE: ALL FITTINGS FOR NON-FERROUS TRUNK AND BRANCH CONNECTIONS SHALL BE AS SPECIFIED BY THE CONTRACTOR.

NOTE: ALL FITTINGS FOR NON-FERROUS TRUNK AND BRANCH CONNECTIONS SHALL BE AS SPECIFIED BY THE CONTRACTOR.

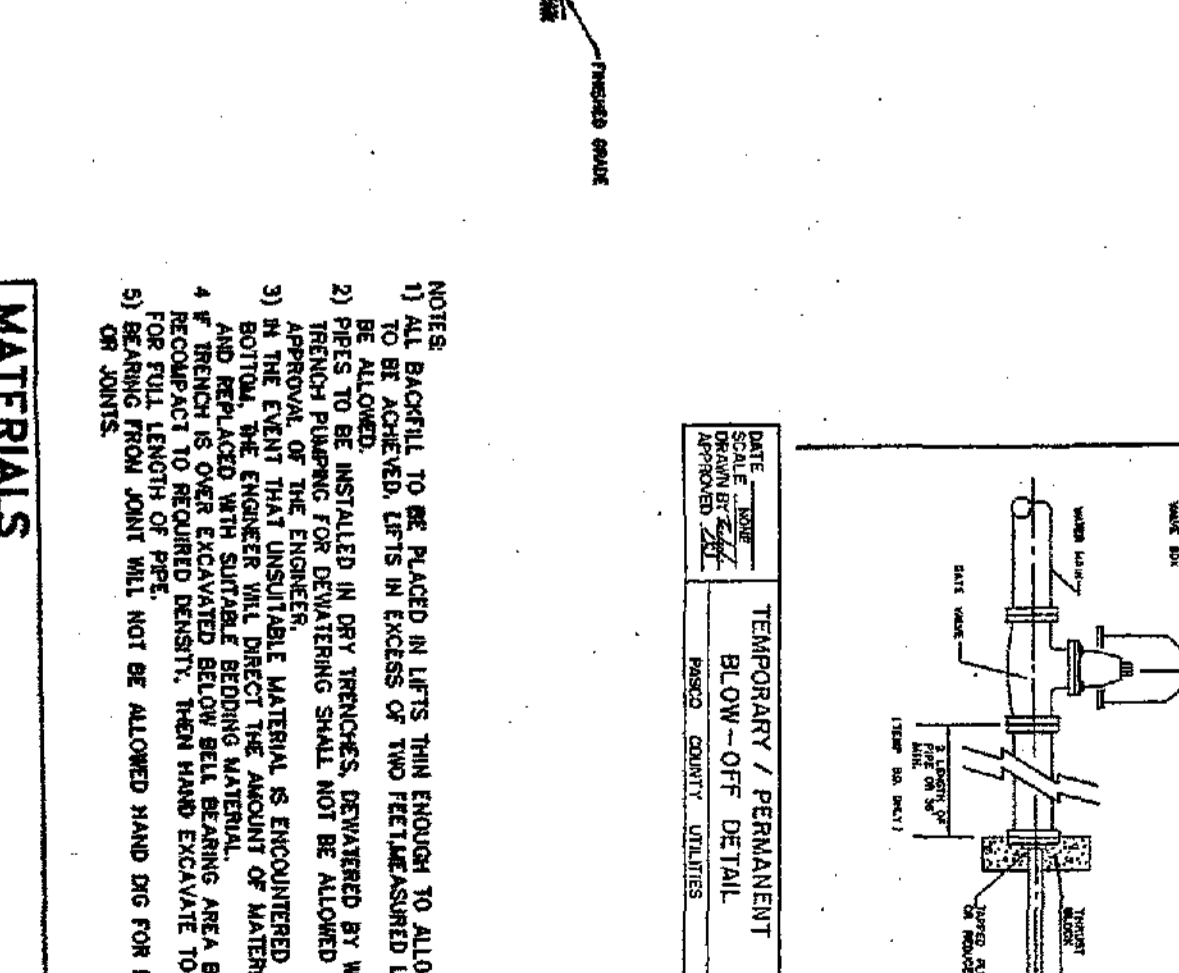
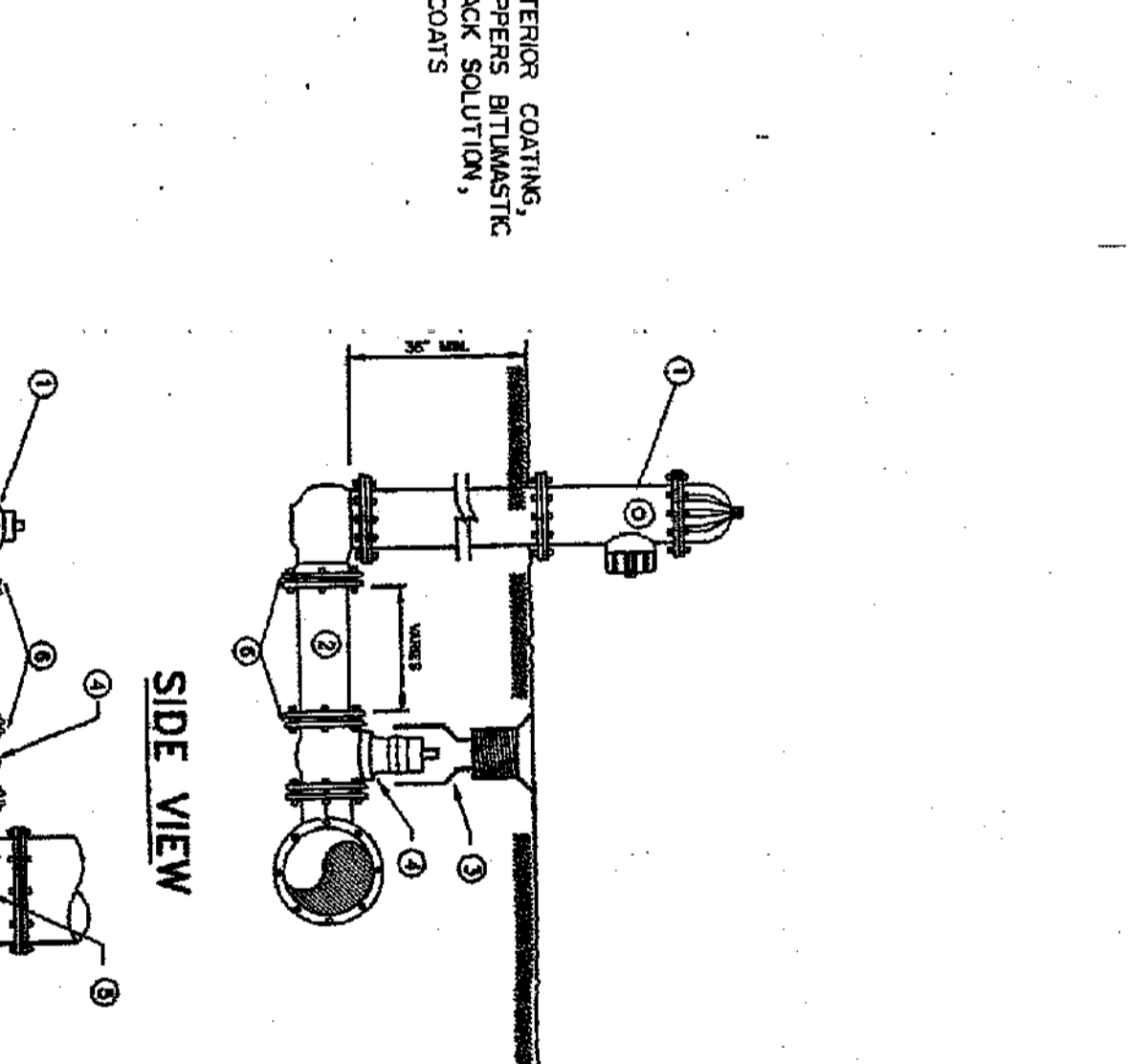
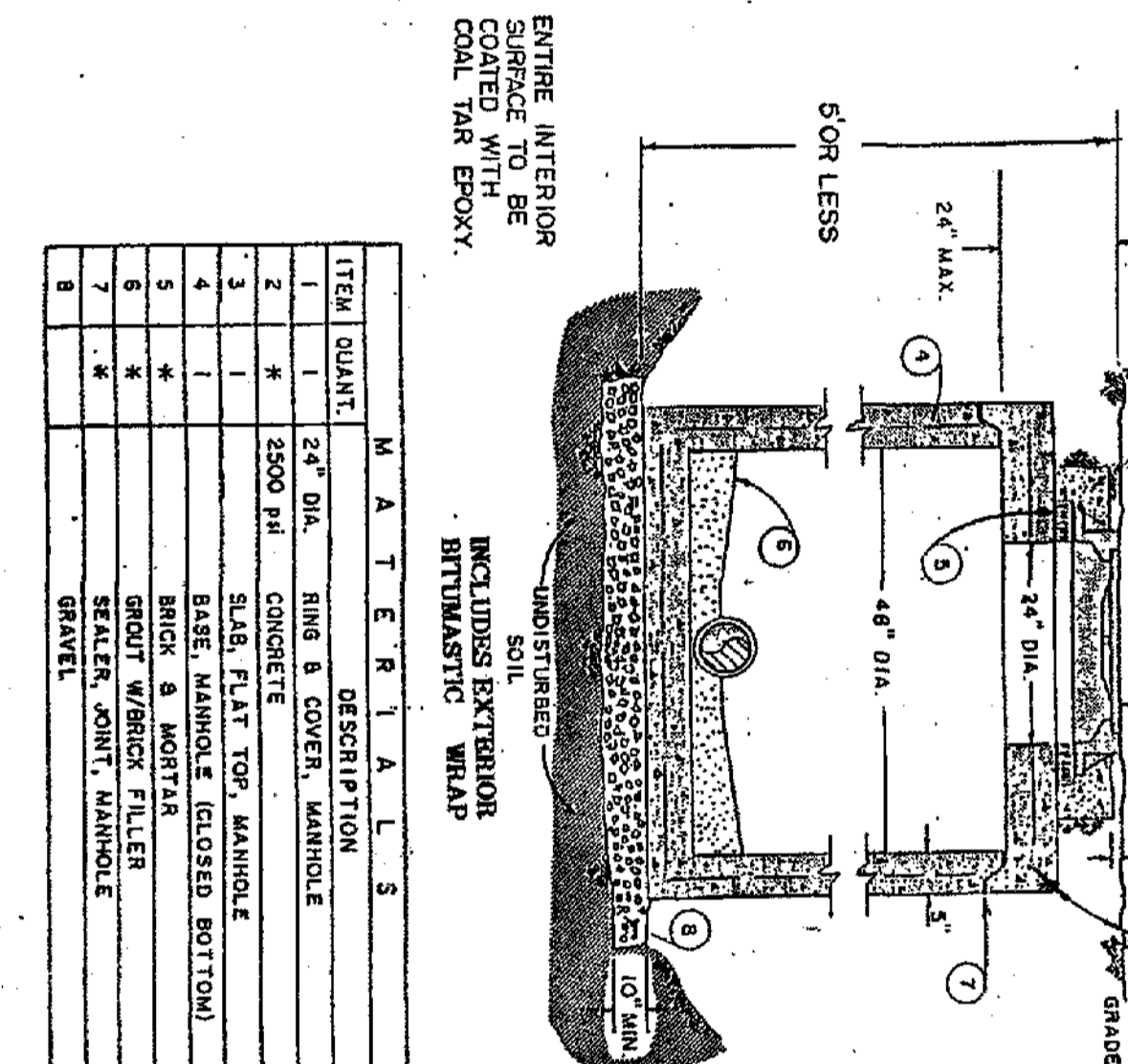
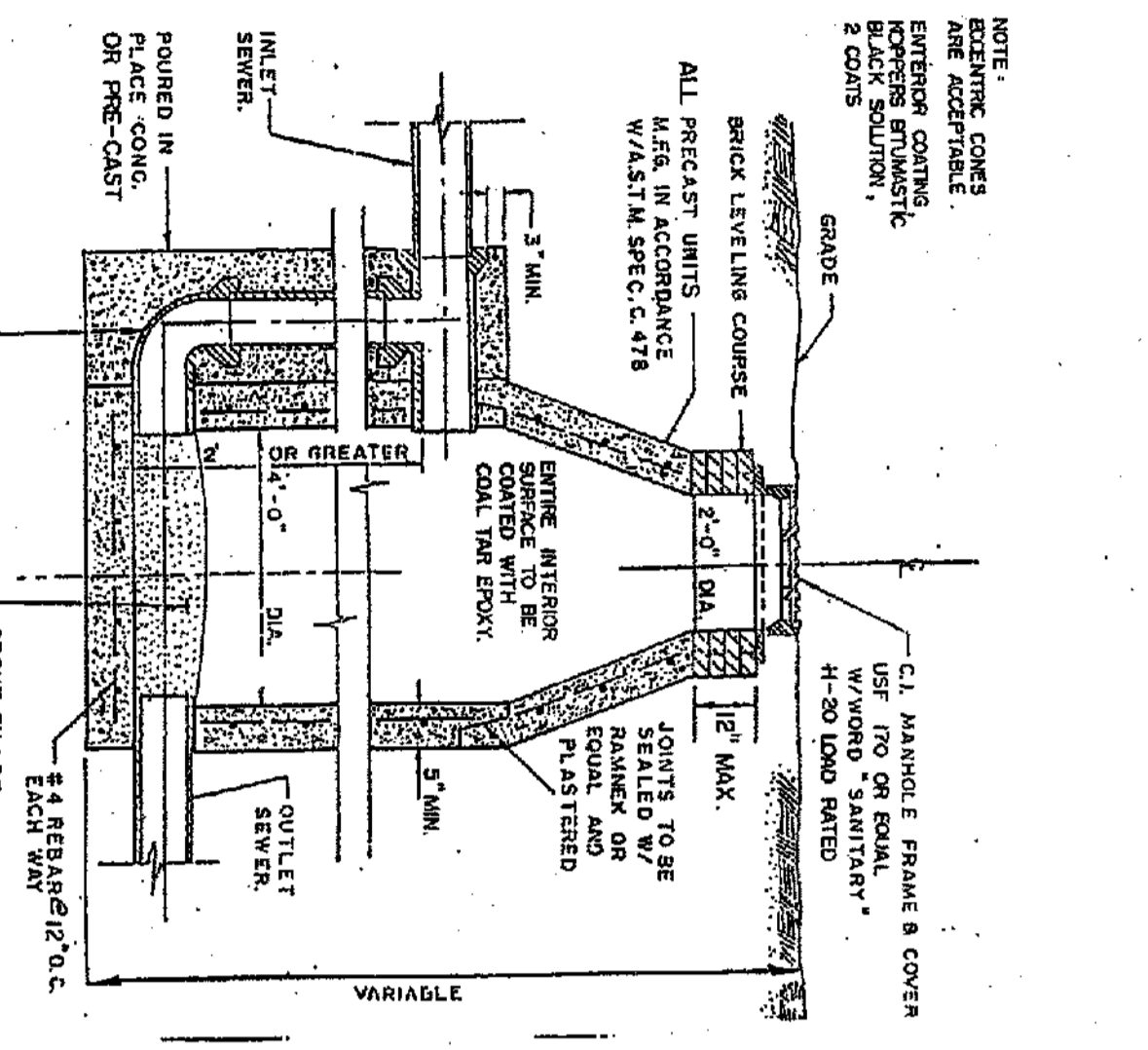
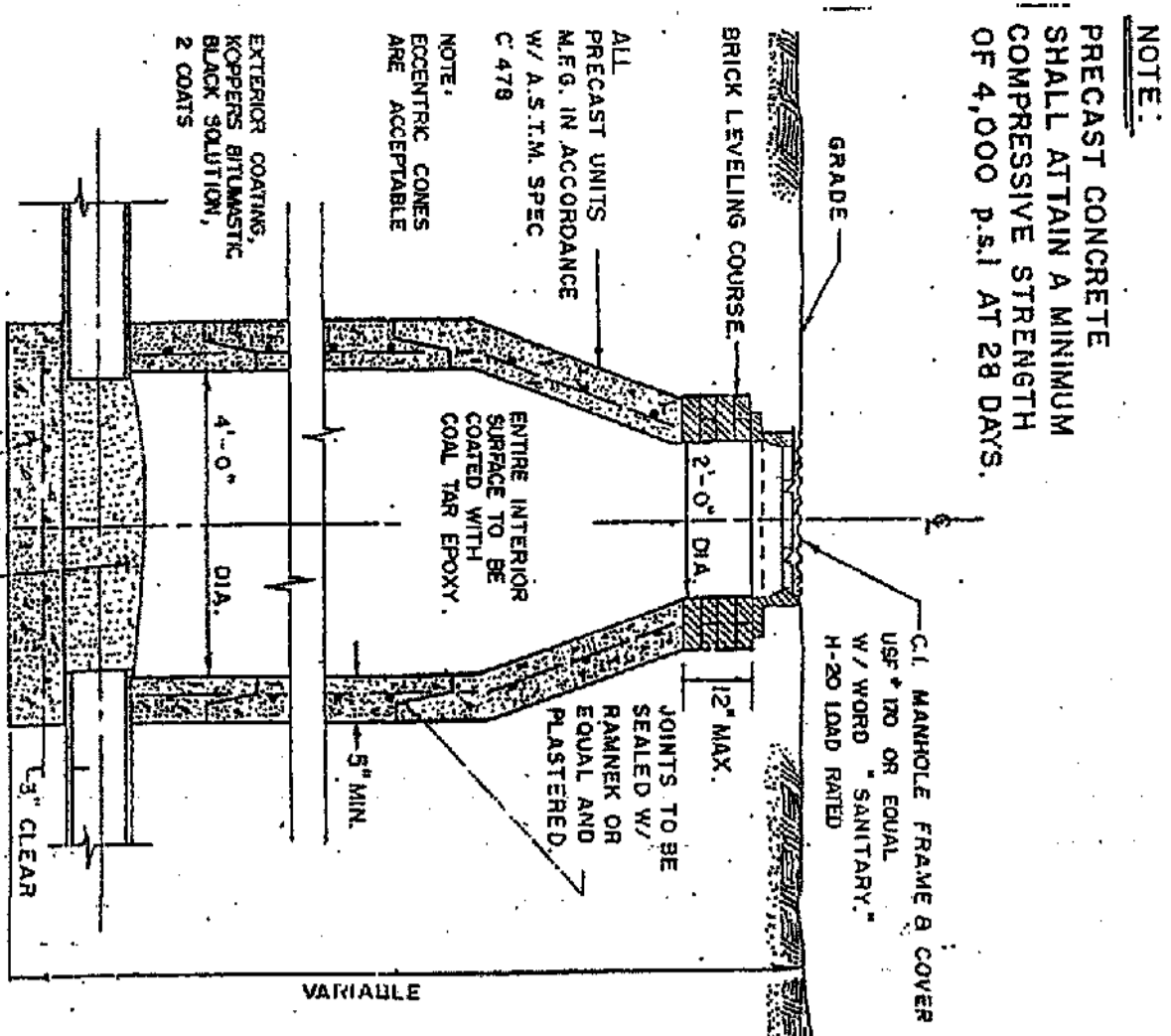


NOTE: ALL FITTINGS FOR NON-FERROUS TRUNK AND BRANCH CONNECTIONS SHALL BE AS SPECIFIED BY THE CONTRACTOR.

NOTE: ALL FITTINGS FOR NON-FERROUS TRUNK AND BRANCH CONNECTIONS SHALL BE AS SPECIFIED BY THE CONTRACTOR.

SINGLE SERVICE

DOUBLE SERVICE



NOTE:

- ALL MATERIALS TO BE PLACED IN LOTS WITH PROOF TO ALLOW COMPARISON.
- ALL MATERIALS TO BE PLACED IN LOTS WITH PROOF TO ALLOW COMPARISON.
- ALL MATERIALS TO BE PLACED IN LOTS WITH PROOF TO ALLOW COMPARISON.
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- ALL MATERIALS TO BE PLACED IN LOTS WITH PROOF TO ALLOW COMPARISON.
- ALL MATERIALS TO BE PLACED IN LOTS WITH PROOF TO ALLOW COMPARISON.

MATERIALS

ITEM	QUANTITY	DESCRIPTION
1	1	HYDRANT FIRE 4 1/2" VALVE WITH 3"
2	1	HYDRANT FIRE 4 1/2" VALVE WITH 3"
3	1	HYDRANT FIRE 4 1/2" VALVE WITH 3"
4	1	HYDRANT FIRE 4 1/2" VALVE WITH 3"
5	1	HYDRANT FIRE 4 1/2" VALVE WITH 3"

SECTIONAL ELEVATION

SECTIONAL ELEVATION

SHALLOW MANHOLE DETAIL

TYPICAL FIRE HYDRANT SETTING

UTILITY DETAILS

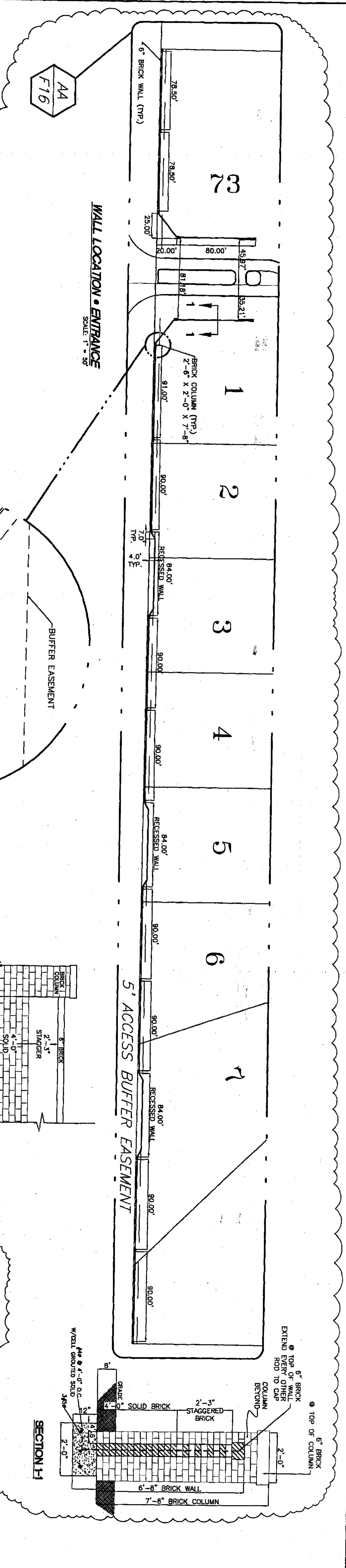
DATE	REV.	BY
2/99	#1	JBC
4/27/99	2	JBC

Design Services, Inc.
6636 ROWAN ROAD
NEW PORT RICHEY, FL 34653
(727)849-7085

PROJECT
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

CLIENT:
BLACKWELL PROPERTIES, INC
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

DRAWN: RWH JR.
CHECKED: RWH JR.
DATE: 12-2-98
SCALE: AS SHOWN
JOB NO.: 97-018.05
SHEET: Sub. F15
OF 18 SHEETS

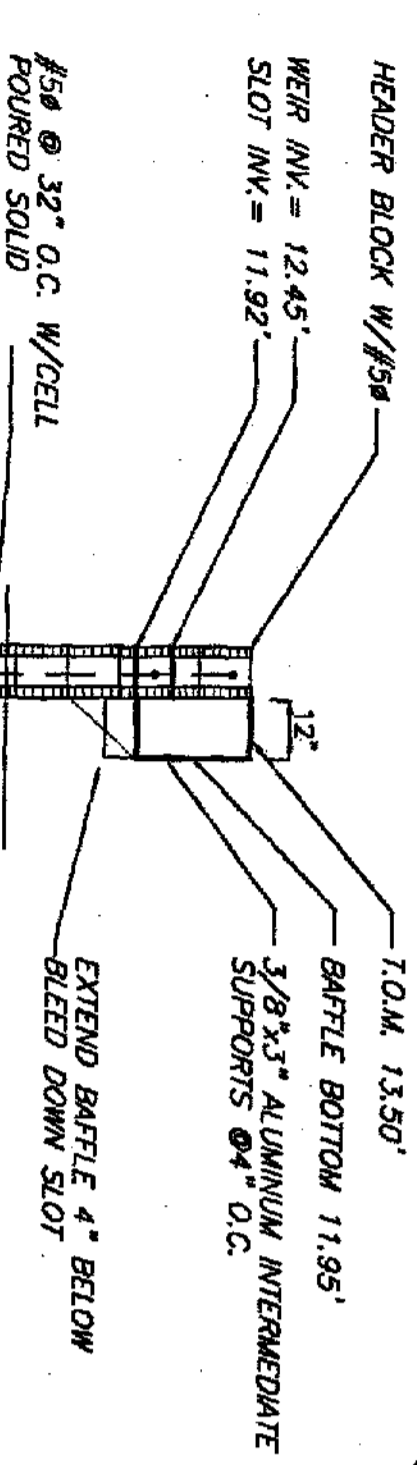


WALL LOCATION - ENTRANCE
SCALE 1" = 30'

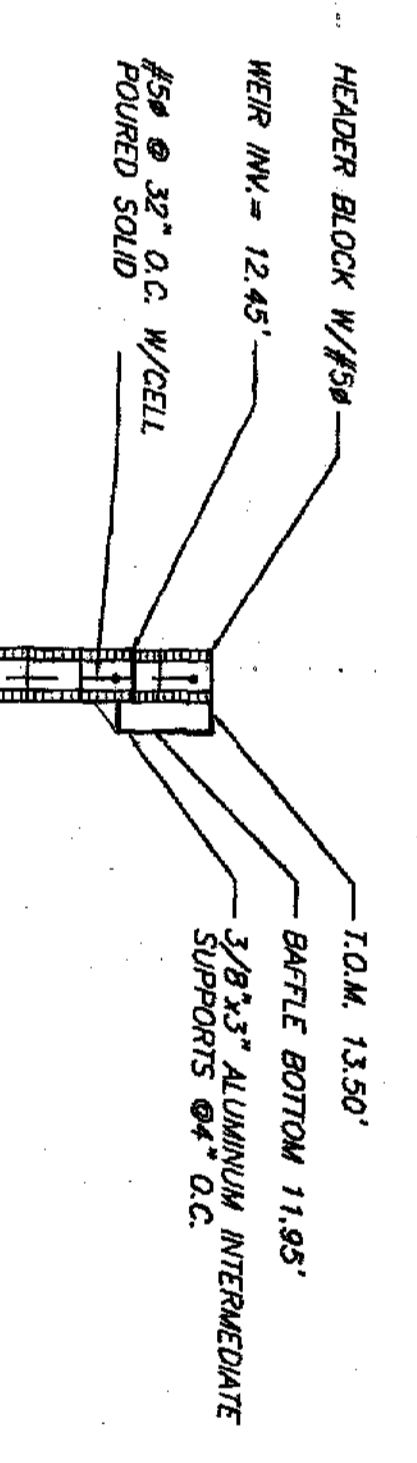
TYPICAL ELEVATION
SCALE NTS

SECTION H1

2.



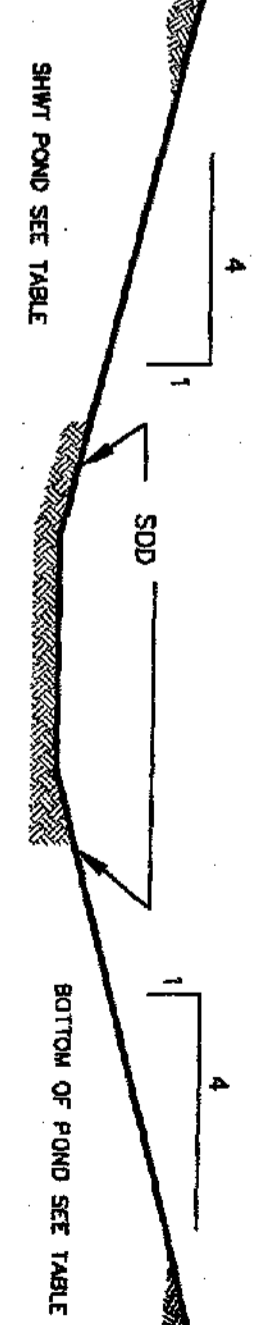
SECTION B



SECTION A

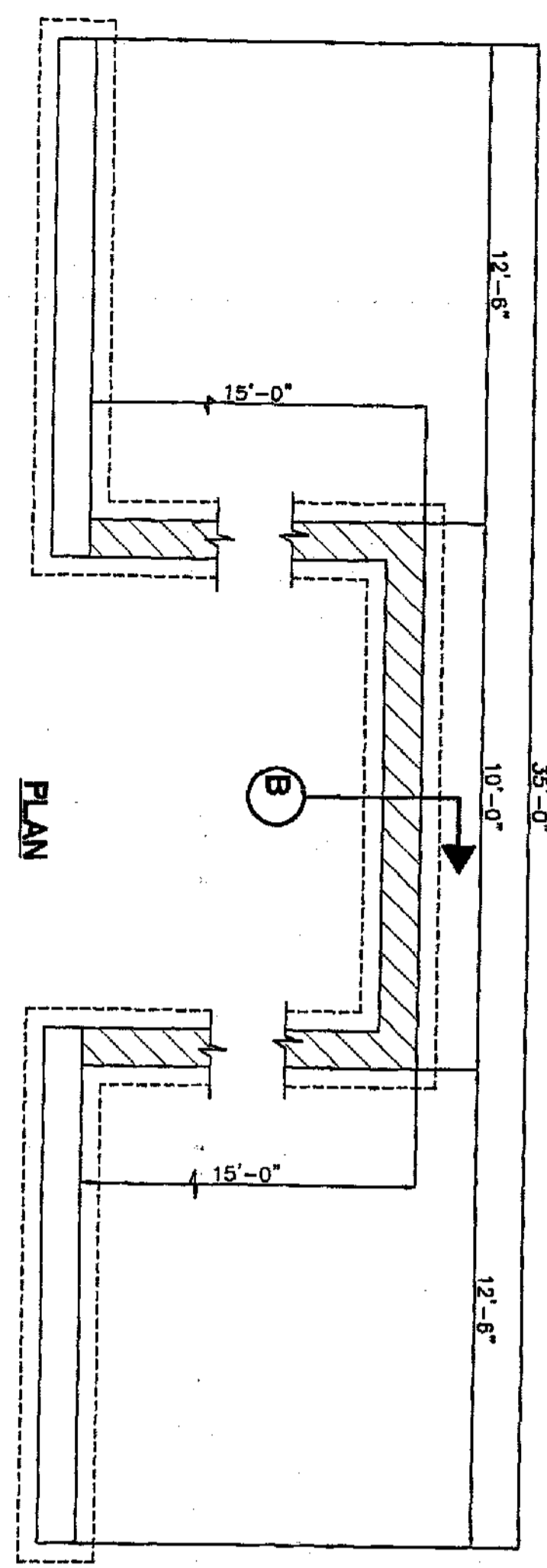
SWMT	BOTTOM ELE.	T.O.B.	DESIGNING
DRA 1	7.4	8.0	7.89
DRA 2	12.48	9.0	13.05
DRA 3	12.6	9.0	13.12
DRA 4	8.45	7.0	9.89
DRA 5	4.8	2.5	4.89

ALL STAGED AREAS OF THE RETENTION POND TO BE FULLY CONCRETE TO WATER LINE WITH SAND DRAIN. SEE TABLE.

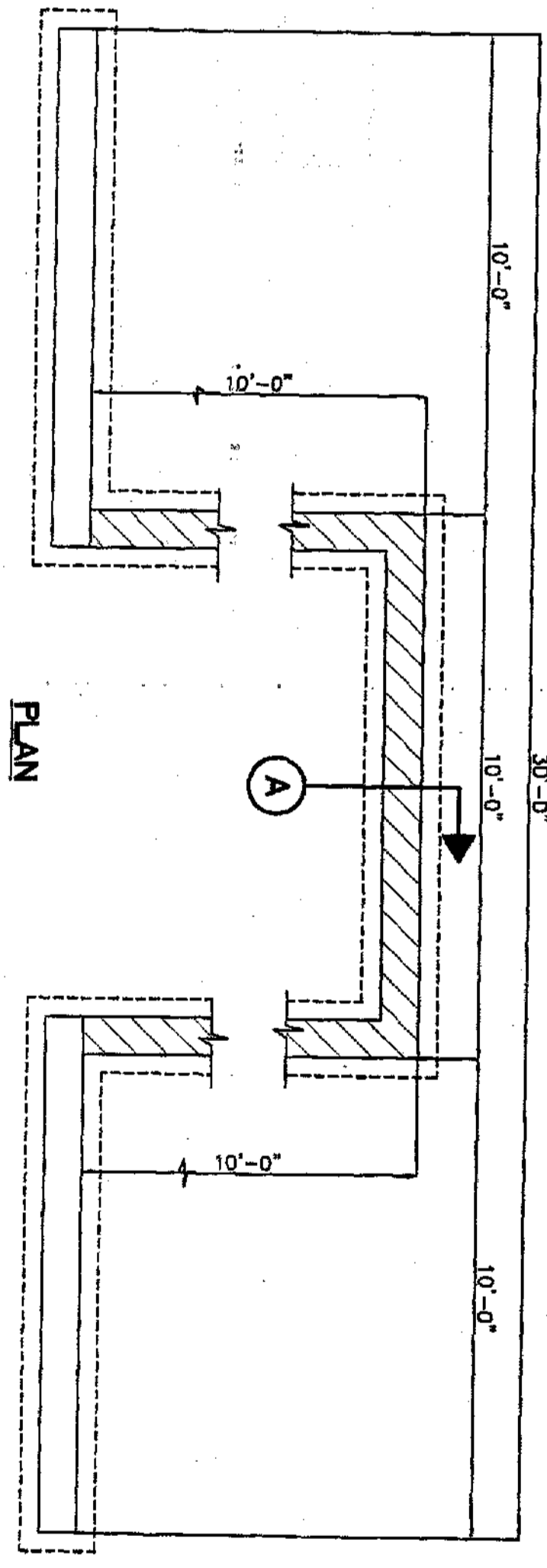


RETENTION POND
SCALE NTS

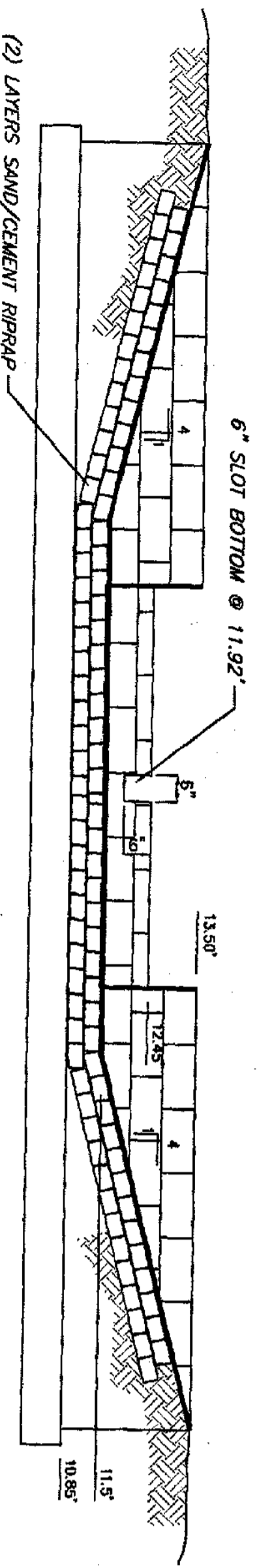
25 YR DESIGN HWL SEE TABLE



PLAN

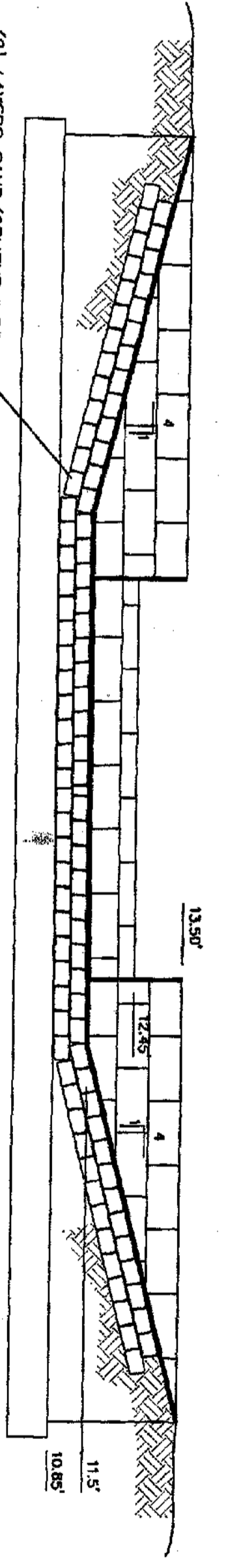


PLAN



ELEVATION

WEIR 2



ELEVATION

WEIR 4

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

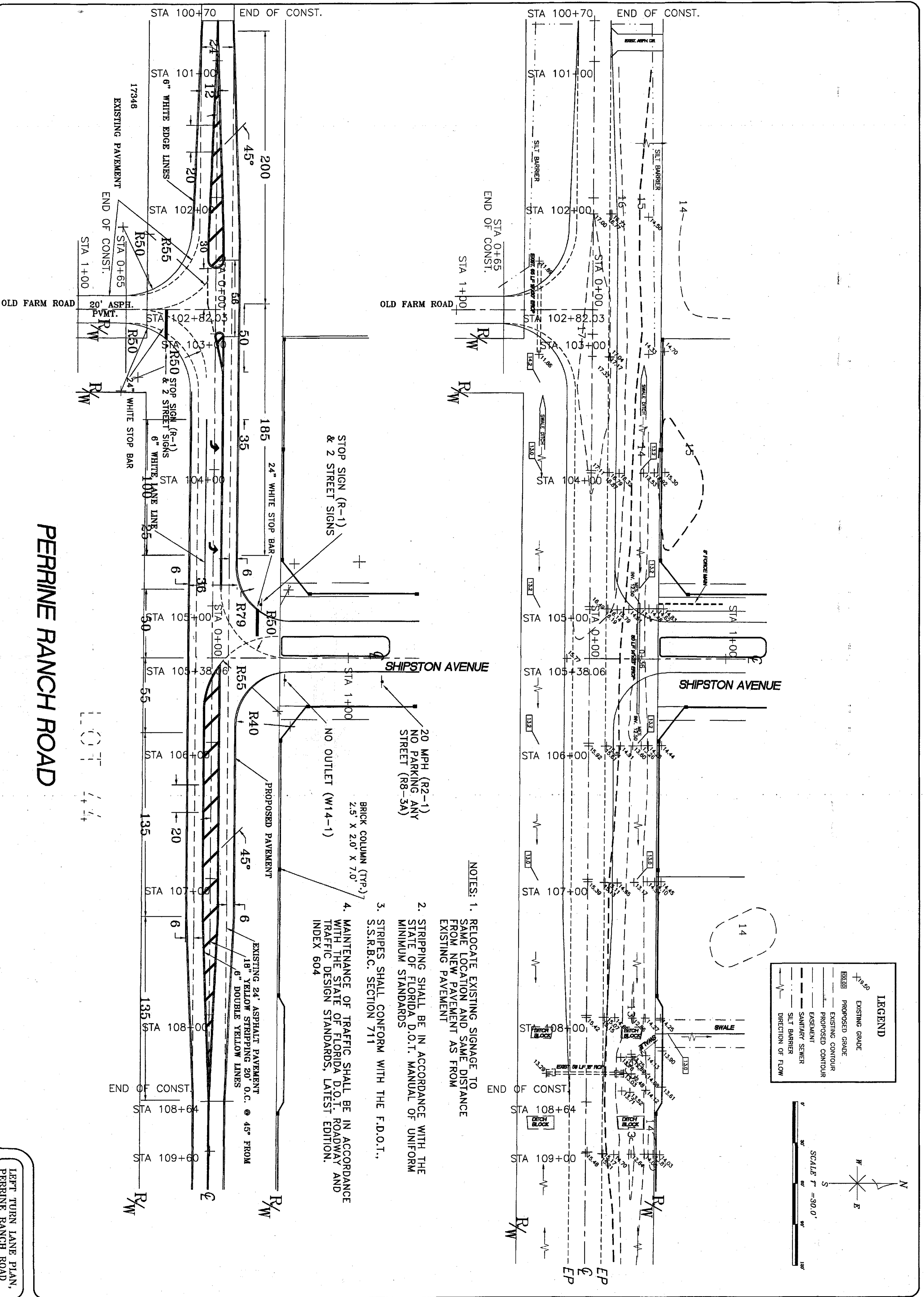
Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6836 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

DATE	REV.	BY
3/25/99	1	FU
4/17/00	2	KC

DRAWN: JAJ
CHECKED: RMH JR.
DATE: 12-2-98
SCALE: 1" = 100'
JOB NO.: 98-013.05
SHEET: Sub.F16

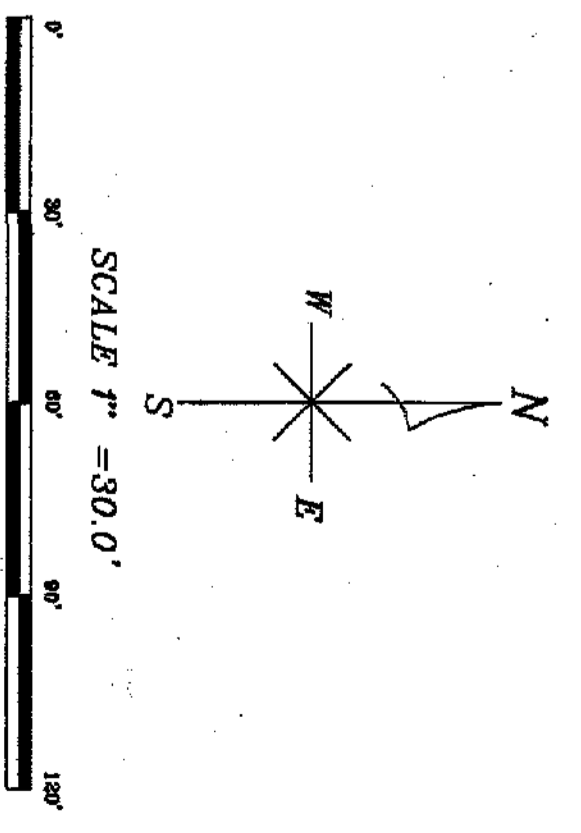
DETAILS

PERRINE RANCH ROAD



- NOTES:
1. RELOCATE EXISTING SIGNAGE TO SAME LOCATION AND SAME DISTANCE FROM NEW PAVEMENT AS FROM EXISTING PAVEMENT
 2. STRIPING SHALL BE IN ACCORDANCE WITH THE STATE OF FLORIDA D.O.T. MANUAL OF UNIFORM MINIMUM STANDARDS
 3. STRIPES SHALL CONFORM WITH THE F.D.O.T., S.S.R.B.C. SECTION 711
 4. MAINTENANCE OF TRAFFIC SHALL BE IN ACCORDANCE WITH THE STATE OF FLORIDA D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, LATEST EDITION. INDEX 604

LEGEND	
	EXISTING GRADE
	PROPOSED GRADE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EASEMENT
	SANITARY SEWER
	SILT BARRIER
	DIRECTION OF FLOW



LEFT TURN LANE PLAN,
PERRINE RANCH ROAD

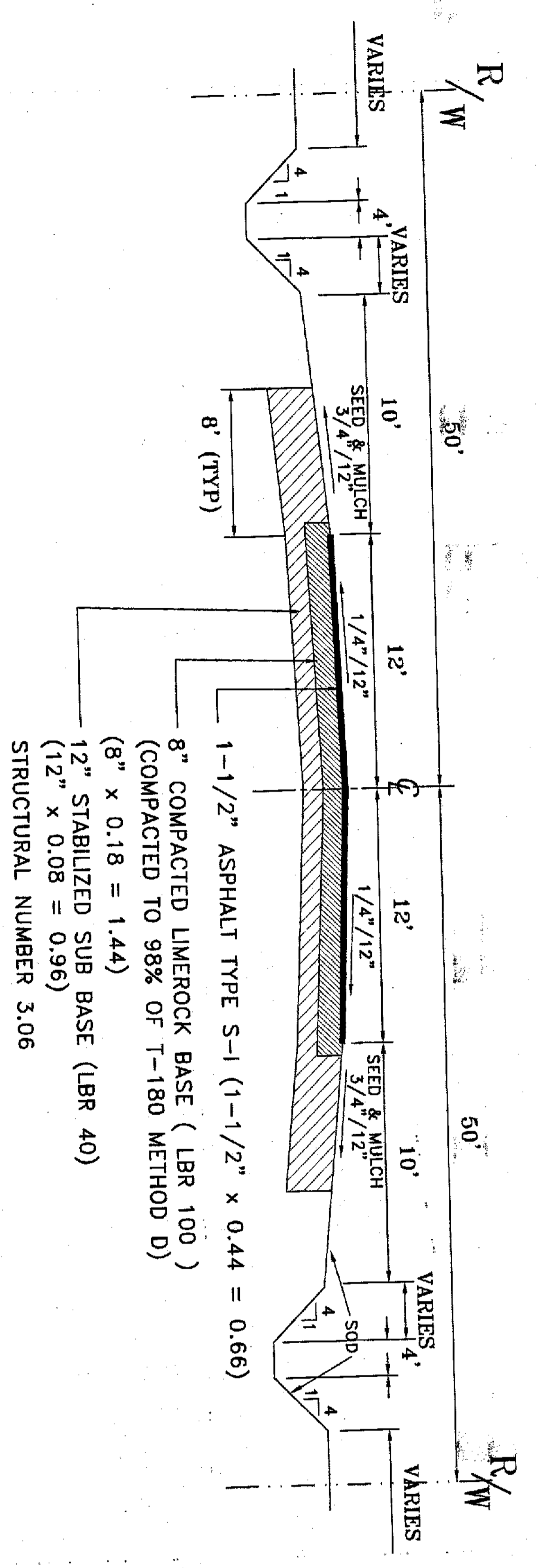
Sub.F17
OF 18 SHEETS

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34852
727-842-2571

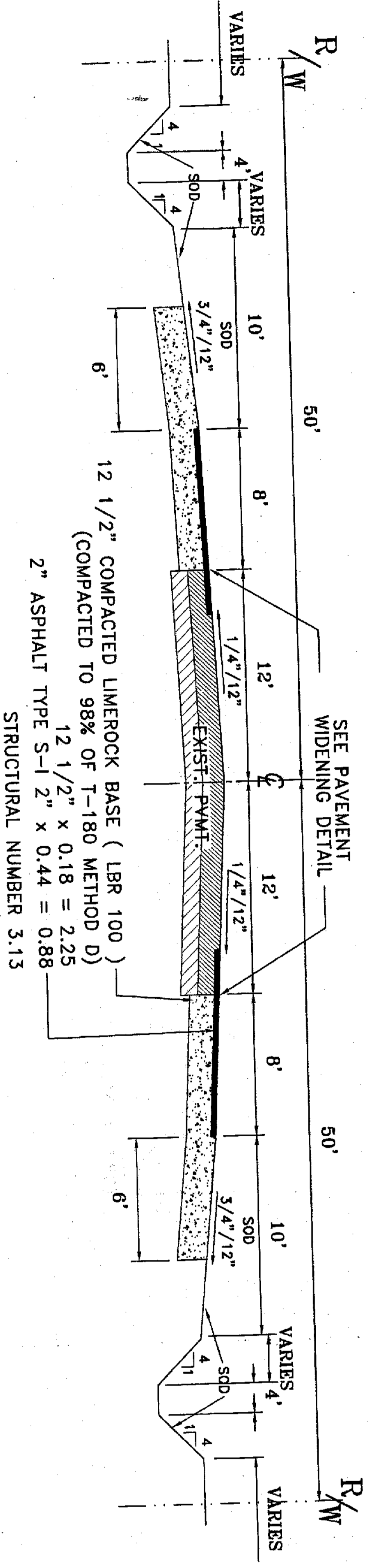
PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6836 ROWAN ROAD
NEW PORT RICHEY, FL. 34853
(727)849-7085

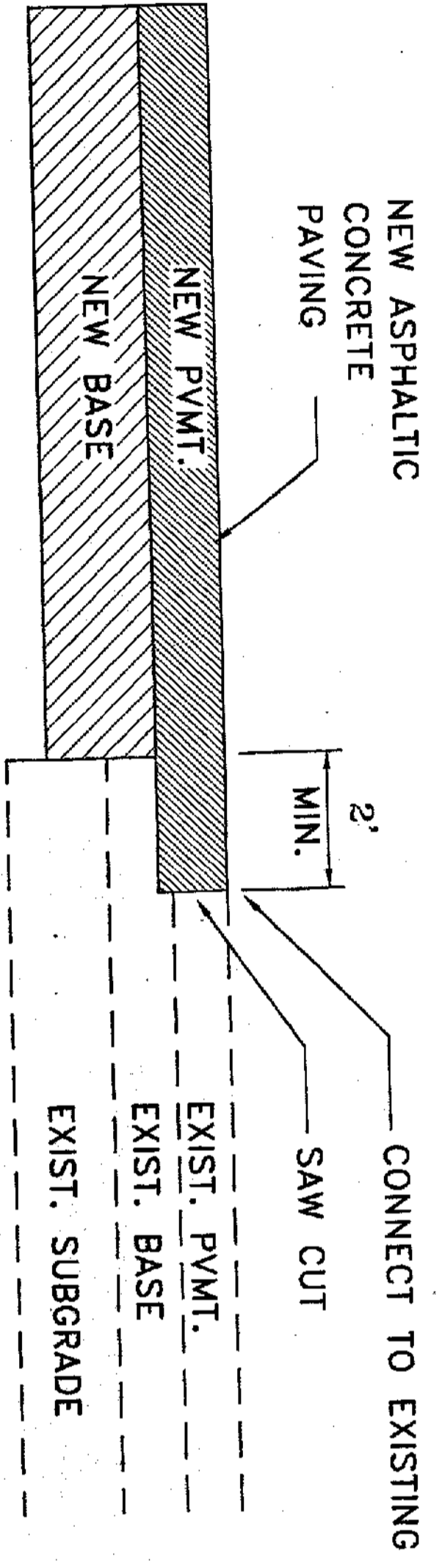
DATE	REV.	BY
2/99	#1	JBC
4/28/99	2	FB
6/8/99	3	RH
11/30/99	4	RH



EXISTING SECTION
SCALE: NTS



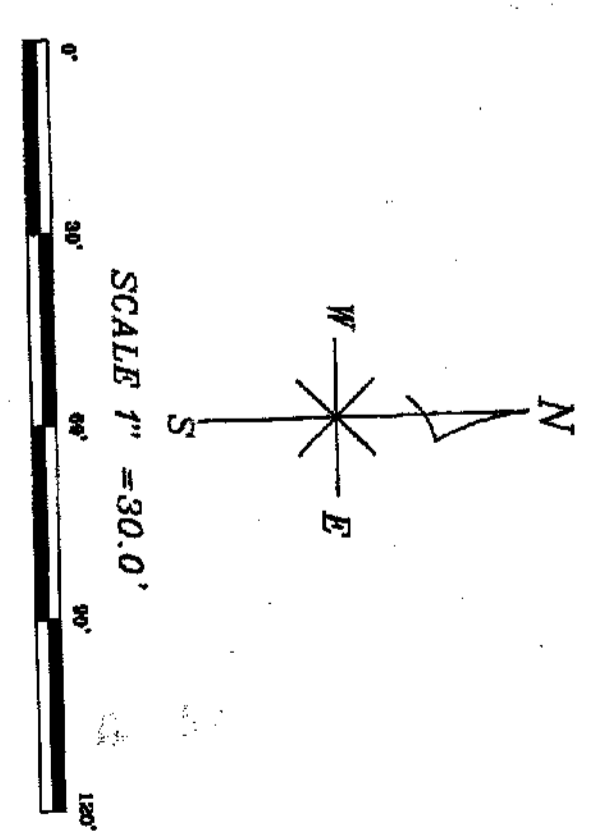
PROPOSED SECTION
SCALE: NTS



WIDENING DETAIL
SCALE: NTS

LEGEND

	EXISTING GRADE
	PROPOSED GRADE
	EXISTING CONTOUR
	PROPOSED CONTOUR
	EASEMENT
	SANITARY SEWER
	SILT BARRIER
	DIRECTION OF FLOW



DATE	REV.	BY

Design Services, Inc. #4297
RALPH M. HANSEN JR. PE #9280
6636 ROWAN ROAD
NEW PORT RICHEY, FL. 34653
(727)849-7085

PROJECT:
RIVERSIDE ESTATES
PERRINE RANCH ROAD
PASCO COUNTY, FLORIDA

CLIENT:
BLACKWELL PROPERTIES, INC.
P.O. BOX 1085
NEW PORT RICHEY, FLORIDA 34652
727-842-2571

DRAWN: RB
CHECKED: RMH
DATE: 4-27-99
SCALE: 1" = 30'
JOB NO.: 97-013.05
SHEET: Sub. F17A
OF 18 SHEETS

LEFT TURN DETAILS
PERRINE RANCH ROAD