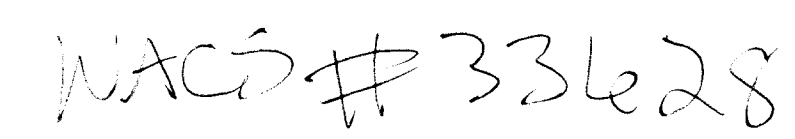


12/20/91 Cu



SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD SOUTH
JACKSONVILLE, FLORIDA 32216
(904) 642-8350

RECEIVED
MAR 04 1933
DER BÜCHERBIBLIOTHEK
D

SHEET NO.

1 GROUNDWATER MONITORING WELLS
2 LINER SYSTEM "AS-BUILTS"
3 LINER SYSTEM "AS-BUILTS"
4 LINER SYSTEM "AS-BUILTS"
5 LEACHATE FORCE MAIN "AS-BUILT"
6 LEACHATE AREA ELECTRICAL "AS-BUILTS"
7 DRAINAGE STRUCTURE AND SPREADER PIPE DATA SHEET
8 PHASE I AND II DRAINAGE STRUCTURE "AS-BUILT"
9 DETENTION LAKE "AS-BUILT"
10 FILTER BED AREA "AS-BUILT"
11 ANCILLARY AREA FORCE MAIN, WATER MAIN AND STORM DRAINAGE "AS-BUILTS"
12 ANCILLARY AREA FORCE MAIN, WATER MAIN AND STORM DRAINAGE "AS-BUILTS"
13 ENTRANCE ROAD STORM DRAINAGE "AS-BUILTS"
14 ENTRANCE ROAD STORM DRAINAGE "AS-BUILTS"
15 ENTRANCE ROAD STORM DRAINAGE "AS-BUILTS"
16 ENTRANCE ROAD STORM DRAINAGE "AS-BUILTS"
17 ENTRANCE ROAD STORM DRAINAGE "AS-BUILTS"
18 ENTRANCE ROAD STORM DRAINAGE "AS-BUILTS"
19 ENTRANCE ROAD STORM DRAINAGE "AS-BUILTS"
20 CLASS I FIRE PUMP / HYDROTANK STORMWATER ASBUILT
WT 1 WATER TREATMENT FACILITY "AS-BUILTS"
WT 2 WATER TREATMENT FACILITY "AS-BUILTS"
WT 3 WATER TREATMENT FACILITY "AS-BUILTS"
WT 4 WATER TREATMENT PLANT "AS-BUILTS"

NORTHEAST DISTRICT
RECEIVED
MAR 04 1993
RECEIVED
DER-JACKSONVILLE

SPECIFIC PURPOSE SURVEY

TO SHOW STATE PLANE AND LOCAL COORDINATES

ON MONITORING WELLS WITHIN TRAIL RIDGE LANDFILL

BEING A PORTION OF SECTION 19, TOWNSHIP 3 SOUTH, RANGE 23 EAST, JACKSONVILLE, DUVAL COUNTY, FLORIDA

CONTROL POINT
LOCAL GRID TR2A
N = 9691.37 Y = 2143938.61
E = 9805.81 X = 324747.11

B-16-S
LOCAL GRID STATE PLANE
N = 10057.47 Y = 2144299.23
E = 10450.25 X = 325394.62
ELEV. = 144.01'

B-17-S
LOCAL GRID STATE PLANE
N = 10057.87 Y = 2144295.29
E = 10961.31 X = 325905.68
ELEV. = 138.31'

B-17-D
LOCAL GRID STATE PLANE
N = 10057.21 Y = 2144294.74
E = 10948.59 X = 325892.95
ELEV. = 138.43'

B-19-S
LOCAL GRID STATE PLANE
N = 10054.93 Y = 2144284.38
E = 11943.97 X = 326888.42
ELEV. = 127.38'

B-19-I
LOCAL GRID STATE PLANE
N = 10054.59 Y = 2144283.60
E = 11949.14 X = 326893.45
ELEV. = 127.94'

B-19-D
LOCAL GRID STATE PLANE
N = 10054.31 Y = 2144283.27
E = 11954.04 X = 326898.35
ELEV. = 128.23'

B-20-S
LOCAL GRID STATE PLANE
N = 9789.54 Y = 2144012.47
E = 12665.88 X = 327707.93
ELEV. = 121.01'

B-7-SR
LOCAL GRID STATE PLANE
N = 9976.23 Y = 2144200.78
E = 12473.94 X = 327417.58
ELEV. = 123.29'

B-7-I
LOCAL GRID STATE PLANE
N = 9971.15 Y = 2144195.61
E = 12481.52 X = 327425.14
ELEV. = 121.53'

B-7-D
LOCAL GRID STATE PLANE
N = 9976.10 Y = 2144200.59
E = 12480.83 X = 327424.47
ELEV. = 121.65'

B-21-S
LOCAL GRID STATE PLANE
N = 9333.51 Y = 2143556.32
E = 12682.39 X = 327620.57
ELEV. = 122.84'

B-12-SR
LOCAL GRID STATE PLANE
N = 9058.61 Y = 2143281.06
E = 12728.40 X = 327662.25
ELEV. = 124.63'

B-12-I
LOCAL GRID STATE PLANE
N = 9050.83 Y = 2143273.26
E = 12728.07 X = 327663.85
ELEV. = 124.62'

B-12-D
LOCAL GRID STATE PLANE
N = 9055.36 Y = 2143277.78
E = 12729.36 X = 327665.18
ELEV. = 124.56'

B-22-SR
LOCAL GRID STATE PLANE
N = 8813.57 Y = 2143035.78
E = 12756.18 X = 327689.95
ELEV. = 126.97'

B-13-SR
LOCAL GRID STATE PLANE
N = 8585.35 Y = 2142807.57
E = 12756.14 X = 327687.97
ELEV. = 126.06'

B-13-IR
LOCAL GRID STATE PLANE
N = 8579.86 Y = 2142802.08
E = 12754.91 X = 327686.70
ELEV. = 125.98'

B-23-S
LOCAL GRID STATE PLANE
N = 8313.33 Y = 2142535.46
E = 12768.92 X = 327698.45
ELEV. = 125.34'

B-32-S
LOCAL GRID STATE PLANE
N = 8281.60 Y = 2142526.80
E = 12768.56 X = 327701.10
ELEV. = 124.98'

B-14-S
LOCAL GRID STATE PLANE
N = 8072.77 Y = 2142295.16
E = 12739.43 X = 327666.93
ELEV. = 126.05'

B-14-I
LOCAL GRID STATE PLANE
N = 8083.50 Y = 2142305.88
E = 12740.07 X = 327667.66
ELEV. = 126.92'

B-14-D
LOCAL GRID STATE PLANE
N = 8078.08 Y = 2142300.45
E = 12740.08 X = 327667.62
ELEV. = 126.87'

B-24-S
LOCAL GRID STATE PLANE
N = 7723.23 Y = 2141948.66
E = 12618.73 X = 327543.28
ELEV. = 126.04'

B-25-S
LOCAL GRID STATE PLANE
N = 7515.28 Y = 2141739.69
E = 12504.83 X = 327427.62
ELEV. = 125.22'

B-25-I
LOCAL GRID STATE PLANE
N = 7521.55 Y = 2141745.63
E = 12519.54 X = 327442.38
ELEV. = 124.03'

B-25-D
LOCAL GRID STATE PLANE
N = 7520.12 Y = 2141744.46
E = 12512.49 X = 327435.33
ELEV. = 124.64'

B-26-S
LOCAL GRID STATE PLANE
N = 7396.46 Y = 2141522.78
E = 12279.48 X = 327201.29
ELEV. = 126.55'

B-27-S
LOCAL GRID STATE PLANE
N = 7335.02 Y = 2141563.57
E = 12018.15 X = 326939.44
ELEV. = 128.42'

B-27-I
LOCAL GRID STATE PLANE
N = 7338.62 Y = 2141567.11
E = 12023.92 X = 326945.24
ELEV. = 128.63'

B-27-D
LOCAL GRID STATE PLANE
N = 7330.95 Y = 2141559.56
E = 12011.05 X = 326932.31
ELEV. = 128.66'

B-28-S
LOCAL GRID STATE PLANE
N = 7313.02 Y = 2141546.46
E = 11441.80 X = 326362.93
ELEV. = 133.73'

B-29-S
LOCAL GRID STATE PLANE
N = 7316.72 Y = 2141554.36
E = 10944.85 X = 325866.04
ELEV. = 138.02'

B-29-I
LOCAL GRID STATE PLANE
N = 7315.95 Y = 2141553.54
E = 10950.24 X = 325871.43
ELEV. = 138.06'

B-29-D
LOCAL GRID STATE PLANE
N = 7317.48 Y = 2141555.03
E = 10955.20 X = 325876.40
ELEV. = 138.18'

B-30-S
LOCAL GRID STATE PLANE
N = 7303.70 Y = 2141545.63
E = 10437.49 X = 325358.61
ELEV. = 142.52'

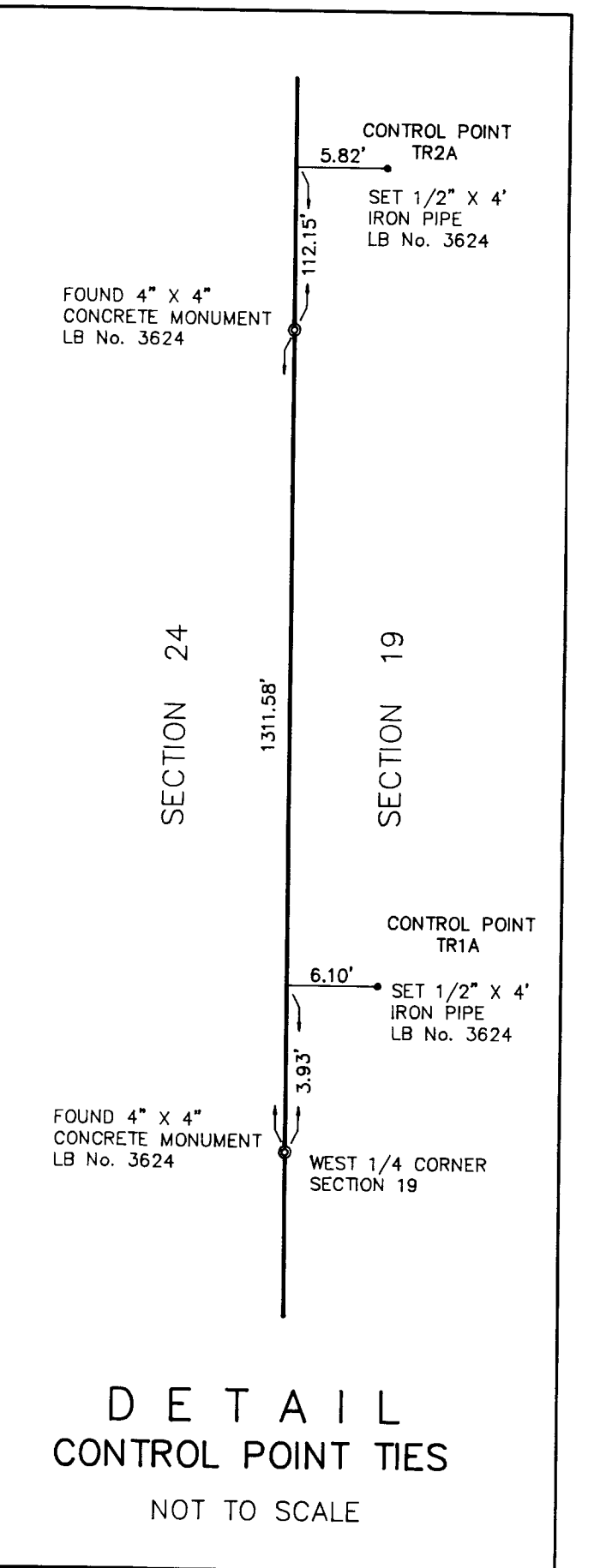
B-2-I
LOCAL GRID STATE PLANE
N = 7136.77 Y = 2141383.31
E = 9892.03 X = 324811.77
ELEV. = 145.73'

B-2-SR
LOCAL GRID STATE PLANE
N = 7138.66 Y = 2141385.08
E = 9906.21 X = 324825.96
ELEV. = 146.64'

B-6-S
LOCAL GRID STATE PLANE
N = 9835.05 Y = 2144037.98
E = 15025.22 X = 329967.56
ELEV. = 100.00'

B-6-I
LOCAL GRID STATE PLANE
N = 9839.72 Y = 2144042.65
E = 15025.00 X = 329967.38
ELEV. = 99.67'

B-6-D
LOCAL GRID STATE PLANE
N = 9839.72 Y = 2144042.65
E = 15025.00 X = 329967.38
ELEV. = 99.67'



- NOTES:
- BOUNDARY INFORMATION SHOWN HEREON TAKEN FROM SURVEY BY SUNSHINE STATE SURVEYORS, INC. DATED 12-10-91, FILE NO. 91E-5135.
 - STATE PLANE COORDINATES REFER TO TRANSVERSE MERCATOR GRID LINES, (FLORIDA EAST 0901) AS PROTRACTED FROM G.P.S. MONUMENTS ESTABLISHED BY KEITH & SCHNARS, INC., APRIL 15, 1992.
 - LOCAL GRID COORDINATES DERIVED FROM GRID ESTABLISHED IN ENGINEERING PLANS FOR TRAIL RIDGE LANDFILL BY ENGLAND, THIMS AND MILLER, INC.
 - ELEVATIONS BASED ON U.S.C. & G. BENCH MARK AJ-59, LOCATED NEAR INTERSECTION OF U.S. HWY. NO. 301 AND STATE RD. NO. 228. BENCH MARK ELEVATION: 88.412'.
 - DATE OF LAST FIELDWORK: JULY 1, 1992.
 - ELEVATIONS SHOWN HEREON ARE ON TOP OF MONITORING WELL UNLESS OTHERWISE NOTED.

REVISED 9-18-92 TO CHANGE ELEVATION OF WELL B-12-I.
REVISED: JULY 15, 1992 TO SHOW ELEVATIONS AND REPLACEMENT WELL B-32-S (FOR B-23-S).

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32216

I HEREBY CERTIFY THAT THE SURVEY REPRESENTED HEREON IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF, AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH IN CHAPTER 21HH-6, F.A.C.

NOTE: NOT VALID WITHOUT RAISED EMBOSSED SEAL

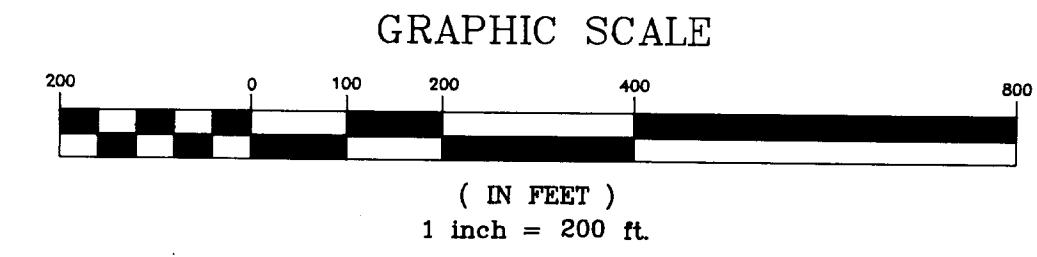
SCALE 1" = 200'

DATE APRIL 23, 1992

REGISTERED SURVEYOR No. 4166, FLORIDA

LEGEND

- CONC. MON. FOUND
- CONC. MON. (SET)
- IRON CORNER (SET)
- FENCE
- CORNER (FOUND)
- CROSS CUT

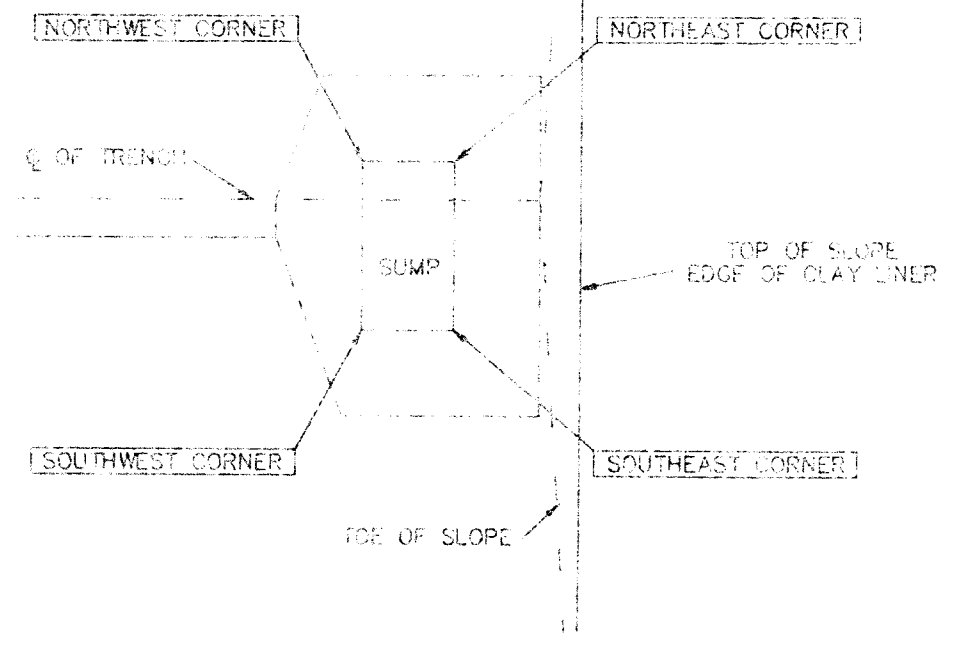
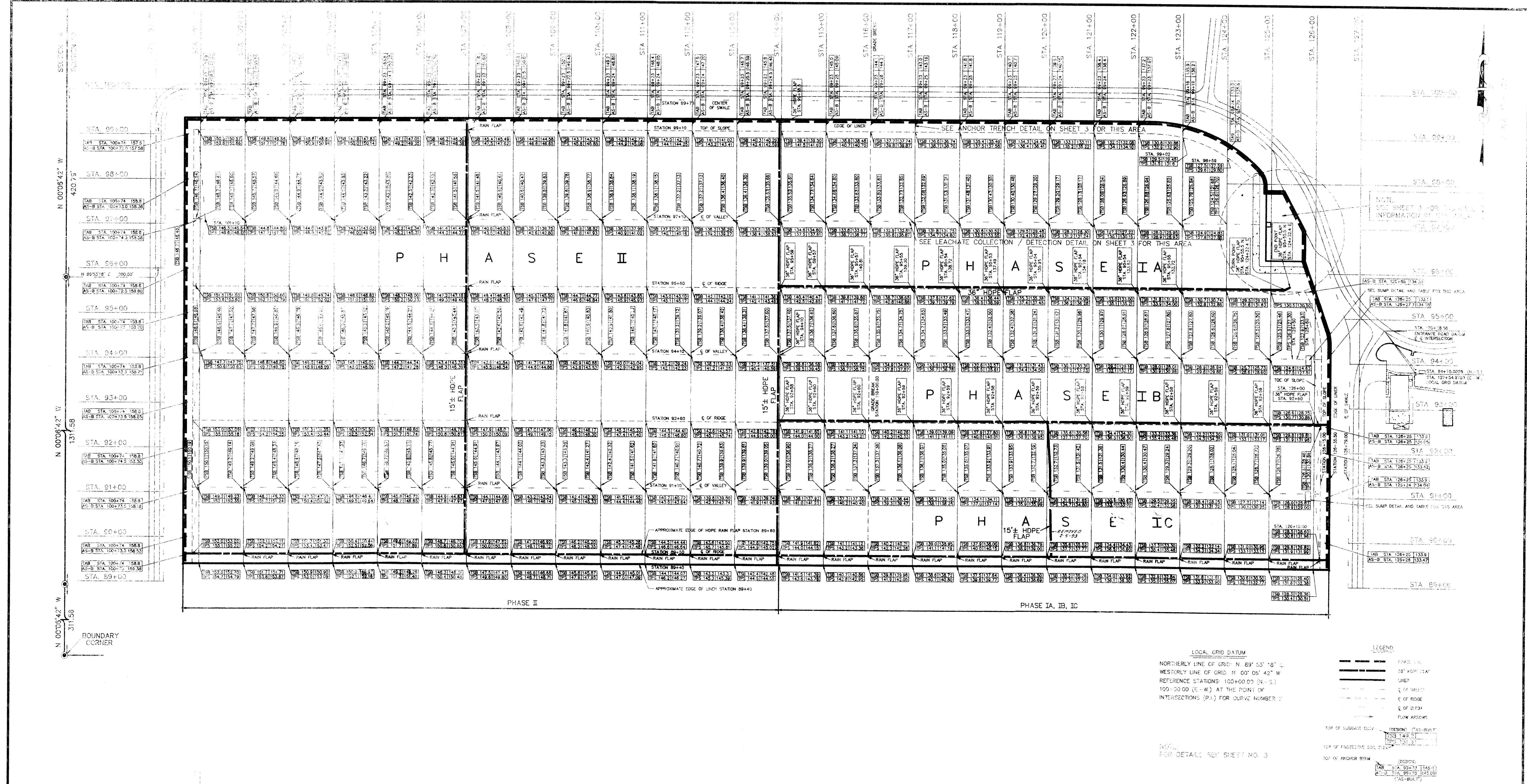


ACAD: \TRAILRID\PIZCOORD.DWG

SHEET 1

FIELD BOOK NO. 339/75-78;363/2-5
DRAWN BY J.L.R.
CHECKED BY R.S.C.

ORDER NO. S92-205
FILE NO. 920-5246



SUMP DETAIL

SLUMP TABLE

PHASE	CORNER	DESIGN ELEV.	AS-BUILT ELEV.
A	NORTHEAST	121.5	121.42
A	NORTHWEST	121.5	121.36
A	SOUTHEAST	121.5	121.24
A	SOUTHWEST	121.5	121.37
B	NORTHEAST	121.4	121.36
B	NORTHWEST	121.4	121.34
B	SOUTHEAST	121.4	121.35
B	SOUTHWEST	121.4	121.36
C	NORTHEAST	122.9	123.04
C	NORTHWEST	122.9	122.95
C	SOUTHEAST	122.9	123.03
C	SOUTHWEST	122.9	123.05

SHEET 2

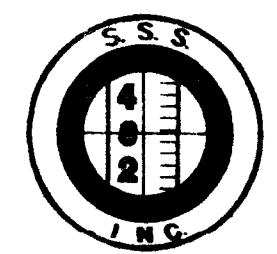
DATE	PHASE
5-12-92	1A
5-13-92	REVISED SPOT ELEV. OF TFS AT STA. 123+00 E AND STA. 99+02 N
6-12-92	1B
1-24-93	ADDED PHASE 1C AND PHASE II
2-5-93	REMOVED RAIN FLAP PHASE 1-C

I HEREBY CERTIFY THAT THE CLAY SUB-BASE, PROTECTIVE SAND, 36" HOPE FLAP, AND THE TOP OF CLAY BERM SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY CHAPTER 473.027 OF THE FLORIDA STATUTES.

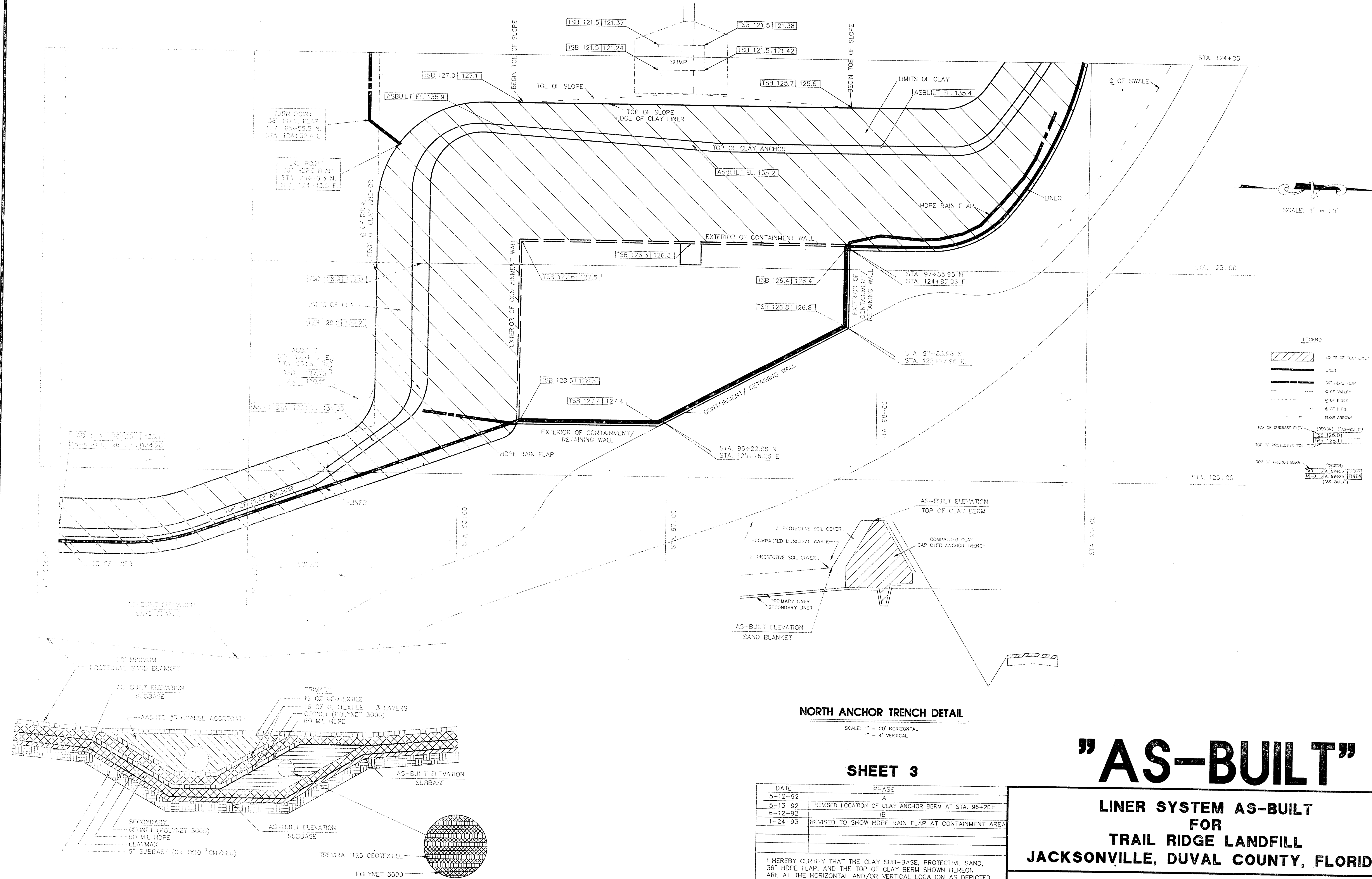
ARTHUR A. MASTRONICOLA, REG. SURVEYOR NO. 4166

"AS-BUILT"

**LINER SYSTEM AS-BUILT
FOR
TRAIL RIDGE LANDFILL
JACKSONVILLE, DUVAL COUNTY, FLORIDA**

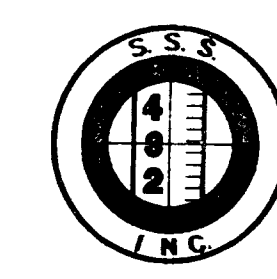


SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32240
(904) 642-8550



"AS-BUILT"

**LINER SYSTEM AS-BUILT
FOR
TRAIL RIDGE LANDFILL
JACKSONVILLE, DUVAL COUNTY, FLORIDA**



SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32243
(904) 642-8650

DATE	PHASE
5-12-92	1A
5-13-92	REVISED LOCATION OF CLAY ANCHOR BERM AT STA. 96+20±
6-12-92	1B
1-24-93	REVISED TO SHOW HDPE RAIN FLAP AT CONTAINMENT AREA

I HEREBY CERTIFY THAT THE CLAY SUB-BASE, PROTECTIVE SAND, 36" HDPE FLAP, AND THE TOP OF CLAY BERM SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY CHAPTER 472.027 OF THE FLORIDA STATUTES.

ARTHUR A. MASTRONICOLA, F.L.S. 4166

"AS-BUILT" BY SUNSHINE STATE SURVEYORS, INC.

PHASE	DATE	LOCATION
I A	3-9-92	STA. 95+60.00 TO STA. 97+86.00 (NORTH) STA. 124+17.60 TO STA. 125+76.00 (EAST)
I A	3-14-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 114+00.00 TO STA. 117+00.00 (EAST)
I A	3-18-92	STA. 97+06.00 TO STA. 99+10.00 (NORTH) STA.114+00.00 TO STA. 118+00.00 (EAST)
I A	3-20-92	STA. 97+05.00 TO STA. 99+10.00 (NORTH) STA. 119+00.00 (EAST)
I A	3-20-92	STA. 97+05.00 TO STA. 97+15.00 (NORTH) STA. 13+80.00 TO STA. 14+00.00 (EAST)
I A	3-21-92	STA. 97+05.00 TO STA. 99+10.00 (NORTH) STA. 120.00 (EAST)
I A	3-25-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 121+00.00 TO STA. 122+00.00 (EAST)
I A	3-25-92	STA. 96+95.00 TO STA. 25.00 (NORTH) STA. 125+00.00 TO STA. 125+50.00 (EAST)
I A	3-31-92	STA. 95+60.00 TO STA. 99+01.68 (NORTH) STA. 122+20.00 TO STA. 123+00.00 (EAST)
I A	4-1-92	STA. 95+60.00 TO STA. 98+59.00 (NORTH) STA. 123+20.00 TO STA. 124+00.00 (EAST)
I B	4-6-92	STA. 92+60.00 TO STA. 95+45.00 (NORTH) STA. 114+00.00 TO STA. 117+00.00 (EAST)
I B	4-10-92	STA. 92+60.00 TO STA. 95+45.00 (NORTH) STA. 118+00.00 TO STA. 122+00.00 (EAST)
I A & I B	4-23-92	STA. 92+60.00 TO STA. 98+00.00 (NORTH) STA. 124+00.00 TO STA. 126+15.00 (EAST)
I C	5-4-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 114+00.00 TO STA. 121+00.00 (EAST)
I C	5-6-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 122+00.00 TO STA. 123+00.00 (EAST)
I C	5-8-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 124+00.00 TO STA. 125+85.00 (EAST)
I A	5-8-92	STA. 95+53.00 TO STA. 99+31.00 (NORTH) STA. 114+00.00 TO STA. 124+00.00 (EAST)
I A	5-11-92	STA. 95+60.00 TO STA. 99+08.00 (NORTH) STA. 114+00.00 TO STA. 123+00.00 (EAST)

(CONTAINMENT AREA)

(CONTAINMENT AREA)

"AS-BUILT" BY SUNSHINE STATE SURVEYORS, INC.

PHASE	DATE	LOCATION
I C	5-11-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 125+90.00 TO STA. 126+15.00 (EAST)
II	5-9-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 100+90.90 TO STA. 103+00.00 (EAST)
II	5-20-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 104+00.00 TO STA. 106+00.00 (EAST)
II	5-27-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 109+00.00 TO STA. 110+00.00 (EAST)
II	5-28-92	STA. 95+60.00 TO STA. 99+10.00 (NORTH) STA. 111+00.00 (EAST)
II	6-2-92	STA. 92+60.00 TO STA. 95+40.00 (NORTH) STA. 100+85.00 TO STA. 103+00.00 (EAST)
I B	6-3-92	STA. 92+60.00 TO STA. 95+85.5 (NORTH) STA. 114+00.00 TO STA. 126+00.00 (EAST)
I B	6-11-92	STA. 92+60.00 TO STA. 95+60.00 (NORTH) STA. 125+50.00 TO STA. 126+27.70 (EAST)
I B	6-12-92	STA. 92+60.00 (NORTH) STA. 126+13.00 TO STA. 126+25.00 (EAST)
II A	6-12-92	STA. 97+06.00 TO STA. 97+14.00 (NORTH) STA. 106+00.00 TO STA. 111+00.00 (EAST)
I B	6-16-92	STA. 92+60.00 (NORTH) STA. 114+00.00 TO STA. 126+10.00 (EAST)
II B	6-17-92	STA. 92+60.00 (NORTH) STA. 104+00.00 TO STA. 106+00.00 (EAST)
II B	6-19-92	STA. 92+60.00 TO 95+35.00 (NORTH) STA. 107+00.00 TO 109+00.00 (EAST)
II B	6-13-92	STA. 94+10.00 (NORTH) STA. 101+03.00 TO 104+00.00 (EAST)
II B	7-9-92	STA. 89+06.00 TO STA. 92+60.00 (NORTH) STA. 126+03.00 TO STA. 126+31.00 (EAST)
II C	7-10-92	STA. 89+40.00 TO STA. 92+55.00 (NORTH) STA. 100+85.00 TO STA. 102+00 (EAST)
I A	7-13-92	STA. 97+85.00 TO STA. 98+60.00 (NORTH) STA. 124+83.00 TO STA. 124+87.00 (EAST)
II C	7-15-92	STA. 89+40.00 TO STA. 92+35.00 (NORTH) STA. 105+00.00 TO STA. 106+00.00 (EAST)
II B	7-17-92	STA. 92+60.00 TO STA. 94+06.00 (NORTH) STA. 112+00.00 TO STA. 114+00.00 (EAST)

(LEACHATE TRENCH)

(CONTAINMENT AREA)

"AS-BUILT" BY SUNSHINE STATE SURVEYORS, INC.

PHASE	DATE	LOCATION
I C	7-20-92	STA. 89+40.00 TO STA. 92+40.00 (NORTH) STA. 115+00.00 TO STA. 126+27.00 (EAST)
II C	7-24-92	STA. 89+40.00 TO STA. 92+40.00 (NORTH) STA. 107+00.00 TO STA. 109+00.00 (EAST)
I C	7-27-92	STA. 89+40.00 TO STA. 91+10.00 (NORTH) STA. 115+00.00 TO STA. 126+00.00 (EAST)
II B	8-13-92	STA. 94+06.00 TO STA. 94+10.00 (NORTH) STA. 111+40.00 TO STA. 112+60.00 (EAST)
II C	8-27-92	STA. 89+40.00 TO STA. 91+13.00 (NORTH) STA. 111+20.00 TO STA. 112+00.00 (EAST)
II C	9-1-92	STA. 89+00.00 TO STA. 91+00.00 (NORTH) STA. 113+00.00 TO 114+00.00 (EAST)
II C	9-2-92	STA. 91+00.00 TO STA. 92+60.00 (NORTH) STA. 112+00.00 TO STA. 113+80.00 (EAST)
II C	9-3-92	STA. 91+06.00 TO STA. 92+60.00 (NORTH) STA. 113+80.00 TO STA. 115+00.00 (EAST)
II C	9-15-92	STA. 95+60.00 TO STA. 99+08.00 (NORTH) STA. 99+91.00 TO STA. 107+00.00 (EAST)
II C	10-12-92	STA. 89+60.00 TO STA. 91+10.00 (NORTH) STA. 100+13.00 TO STA. 107+00.00 (EAST)
II C	10-28-92	STA. 95+00.00 TO STA. 99+10.00 (NORTH) STA. 112+00.00 STA. 113+00.00 (EAST)
II B	11-10-92	STA. 94+00.00 TO STA. 96+00.00 (NORTH) STA. 110+00.00 TO STA. 114+00.00 (EAST)
II A	11-18-92	STA. 95+00.00 TO STA. 97+00.00 (NORTH) STA. 110+00.00 TO STA. 114+00.00 (EAST)
II A	11-30-92	STA. 97+00.00 TO STA. 98+00.00 (NORTH) STA. 110+00.00 TO STA. 114+00.00 (EAST)
II ABC	12-23-92	STA. 89+00.00 TO STA. 98+00.00 (NORTH) STA. 101+00.00 TO STA. 114+00.00 (EAST)
II A	1-8-93	ODD FILL-IN TIE SHOTS
II A	1-19-93	STA. 99+00.00 TO STA. 99+127.00(NORTH) STA. 109+00.00 TO STA. 114+00.00 (EAST)

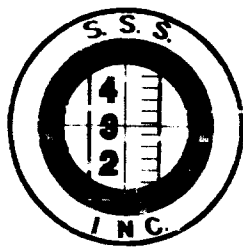
SHEET 4

- SEE FIELD BOOK 339, 359, 362, 363, 376, 383, 386 AND 389.
FOR FIELD DATA;
- LAST DAY OF FIELD WAS 1-19-93
SEE FIELD BOOK 383 AND 386 FOR FIELD NOTES.

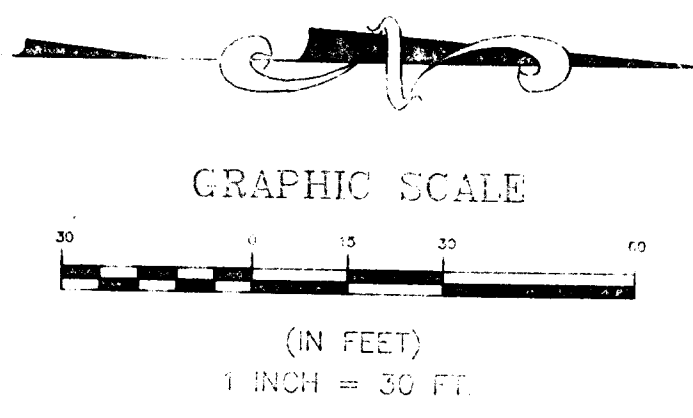
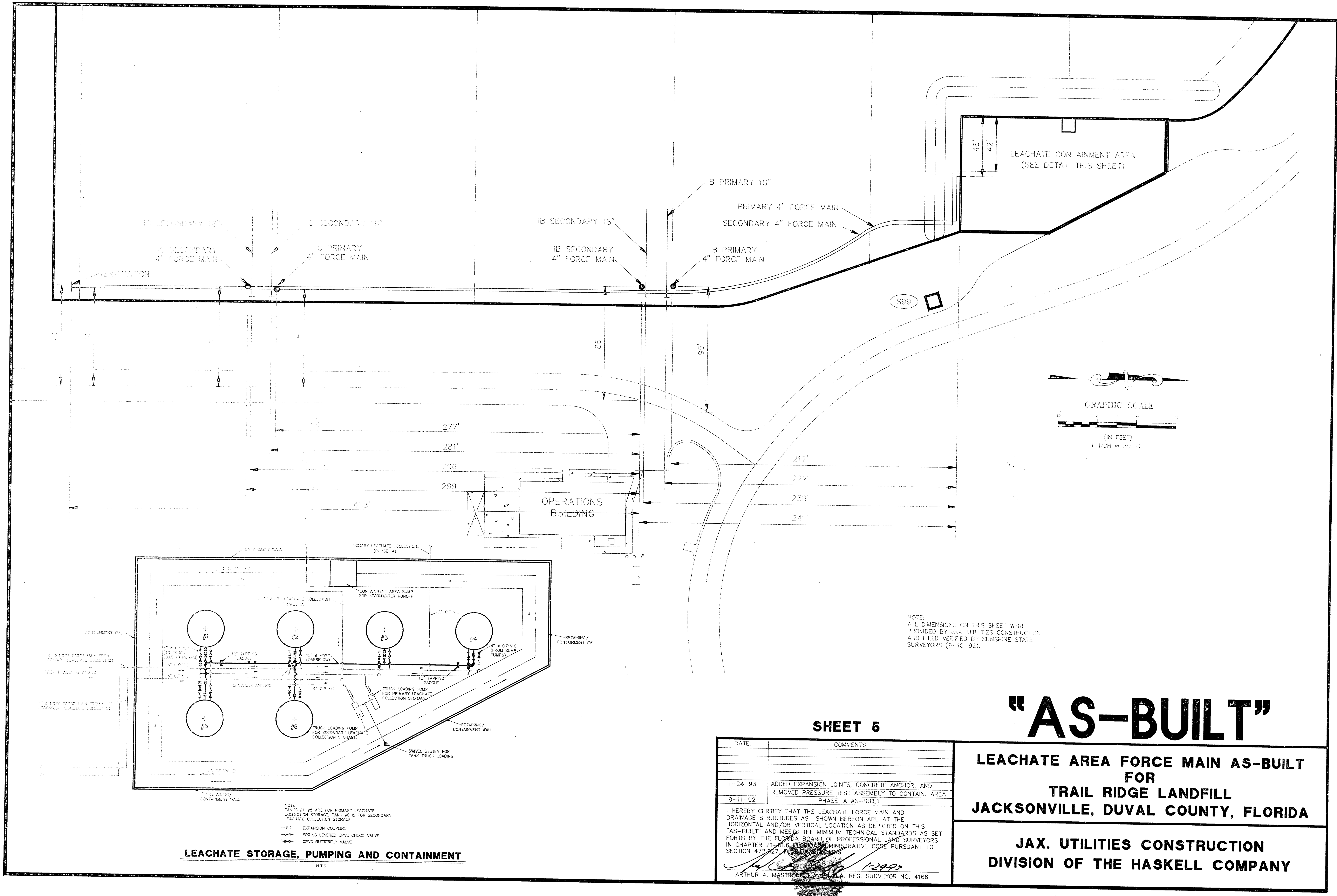
DATE	PHASE
5-12-92	IA
5-13-92	REVISED SPOT EL. OF TIPS AT STA. 123+00 E AND STA. 99+02 N
6-12-92	IB
1-19-93	PHASE IC, IIA, IIB, IIC
I HEREBY CERTIFY THAT THE CLAY SUB-BASE, PROTECTIVE SAND, 36" HDPE FLAP, AND THE TOP OF CLAY BERM SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY CHAPTER 476.027 OF THE FLORIDA STATUTES.	
ARTHUR A. MASTROROLLA, REG. SURVEYOR NO. 4166	

"AS-BUILT"

LINER SYSTEM AS-BUILT
FOR
TRAIL RIDGE LANDFILL
JACKSONVILLE, DUVAL COUNTY, FLORIDA



SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32216
(904) 642-8550



NOTE:
ALL DIMENSIONS ON THIS SHEET WERE
PROVIDED BY JAX UTILITIES CONSTRUCTION
AND FIELD VERIFIED BY SUNSHINE STATE
SURVEYORS (9-10-92).

SHEET 5

"AS-BUILT"

**LEACHATE AREA FORCE MAIN AS-BUILT
FOR
TRAIL RIDGE LANDFILL
JACKSONVILLE, DUVAL COUNTY, FLORIDA**

**JAX. UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY**

DATE:	COMMENTS
1-24-93	ADDED EXPANSION JOINTS, CONCRETE ANCHOR, AND REMOVED PRESSURE TEST ASSEMBLY TO CONTAIN. AREA
9-11-92	PHASE 1A AS-BUILT
I HEREBY CERTIFY THAT THE LEACHATE FORCE MAIN AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21, THE FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.	
ARTHUR A. MASTRONI, REG. SURVEYOR NO. 4166	

LEACHATE STORAGE, PUMPING AND CONTAINMENT

- NOTE:
TANKS #1-#5 ARE FOR PRIMARY LEACHATE
COLLECTION STORAGE, TANK #6 IS FOR SECONDARY
LEACHATE COLLECTION STORAGE.
- (H)— EXPANSION COUPLING
 - (S)— SPRING LEVERED CPVC CHECK VALVE
 - (B)— CPVC BUTTERFLY VALVE

**JAX. UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY**

AS-BUILT STORM DRAINAGE DATA PHASE I & PHASE II

SEE SHEET 8, 9 & 10

STRUCTURE NO.	STRUCTURE DESCRIPTION	TOP ELEVATION		SLOT ELEVATION		INVERT ELEVATION		STATION	
		DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT
S 4	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" W)	-	-	-
S 5	MOD. FDOT TYPE 'E' INLET (DETAIL A)	146.50	146.49	143.76 (S)	143.70	141.76 (18" E) 141.30 (42" W)	141.18 (42" CMP) 100+21.00 (E)	93+30.00 (N) 100+19.15 (E)	93+29.30 (N) 100+19.15 (E)
S 6	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	141.30 (42" E)	141.42 (42" CMP) 99+64.50 (E)	93+30.00 (N) 99+67.60 (E)	93+31.11 (N) 99+67.60 (E)
S 7	FDOT TYPE 'E' INLET	145.09	145.09	142.35 (S)	142.32	139.85 (24" N)	139.84 (24" CMP) 99+27.82 (N) 100+21.00 (E)	99+29.09 (N) 100+21.45 (E)	99+29.09 (N) 100+21.45 (E)
S 8	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	139.85 (24" S)	139.85 (24" CMP) 100+31.00 (N) 100+21.00 (E)	100+18.28 (N) 100+21.21 (E)	100+18.28 (N) 100+21.21 (E)
S 9	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	-	-	-
S 10	MOD. FDOT TYPE 'E' INLET (DETAIL A)	138.91	138.90	136.17 (W)	136.15	134.17 (18" S) 134.17 (42" N)	134.20 (42" CMP) 99+79.00 (N) 106+93.00 (E)	99+79.08 (N) 106+93.11 (E)	99+79.08 (N) 106+93.11 (E)
S 11	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	134.17 (42" S)	134.05 (42" CMP) 100+31.00 (N) 106+93.00 (E)	100+31.65 (N) 106+93.06 (E)	100+31.65 (N) 106+93.06 (E)
S 12	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	-	-	-
S 13	MOD. FDOT TYPE 'E' INLET (DETAIL A)	134.91	134.89	132.17 (W)	132.14	130.17 (18" S) 130.17 (42" N)	130.21 (42" CMP) 99+79.00 (N) 111+63.50 (E)	99+79.30 (N) 111+62.70 (E)	99+79.30 (N) 111+62.70 (E)
S 14	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	130.17 (42" S)	130.19 (42" CMP) 100+31.00 (N) 111+63.50 (E)	100+32.00 (N) 111+63.10 (E)	100+32.00 (N) 111+63.10 (E)
S 15	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	146.33 (30" ADS) (TEMP. END OF PIPE)	-	-
S 16	MOD. FDOT TYPE 'E' INLET (DETAIL A)	131.81	131.80	129.07 (W)	129.07	127.07 (18" S) 127.07 (42" N)	127.06 (42" CMP) 99+79.00 (N) 115+26.00 (E)	99+79.40 (N) 115+26.00 (E)	99+79.40 (N) 115+26.00 (E)
S 17	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	127.07 (42" S)	127.28 (42" CMP) 100+31.00 (N) 115+26.00 (E)	100+31.80 (N) 115+26.70 (E)	100+31.80 (N) 115+26.70 (E)
S 18	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" N)	141.28 (30" ADS) (TEMP. END OF PIPE)	-	-
S 19	MOD. FDOT TYPE 'E' INLET (DETAIL A)	126.23	126.05	123.49 (W)	123.35	121.49 (18" S) 121.49 (42" N)	121.35 (42" CMP) 99+79.00 (N) 120+31.50 (E)	99+78.80 (N) 120+31.50 (E)	99+78.80 (N) 120+31.50 (E)
S 20	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	121.49 (42" S)	121.39 (42" CMP) 100+31.00 (N) 120+32.00 (E)	100+31.30 (N) 120+32.00 (E)	100+31.30 (N) 120+32.00 (E)
S 21	FDOT TYPE 'E' INLET	122.65	122.71	119.91 (NW)	119.98	115.45 (24" NE)	115.80 (24" CMP) 98+79.70 (N) 124+85.30 (E)	98+79.70 (N) 124+85.30 (E)	98+79.70 (N) 124+85.30 (E)
S 22	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	115.45 (24" SW)	115.47 (24" CMP) 99+21.80 (N) 125+23.60 (E)	99+22.82 (N) 125+23.60 (E)	99+22.82 (N) 125+23.60 (E)
S 23	EXTEND PIPE THRU BERM	-	-	-	-	265.00 (18" E)	-	-	-
S 24	MOD. FDOT TYPE 'E' INLET (DETAIL B)	121.50	121.53	118.76 (S)	118.76	116.76 (18" W) 116.76 (42" E)	116.72 (42" RCP) 88+80.00 (N) 126+79.00 (E)	88+79.78 (N) 126+79.64 (E)	88+79.78 (N) 126+79.64 (E)
S 25	FDOT TYPE 'E' INLET W/ TYPE J BOTTOM (ALTERNATE A)	121.50	121.37	117.75 (S)	118.66	116.76 (42" W) 113.76 (42" N)	113.42 (42" RCP) 88+80.00 (N) 127+32.50 (E)	88+82.34 (N) 127+31.01 (E)	88+82.34 (N) 127+31.01 (E)
S 73	CONCRETE ENDWALL DOUBLE 48" R.C.P.	-	-	-	-	118.00 (DBL 48" E)	117.57 (N&S) (48" RCP) 100+28.75 (N) 123+23.00 (E)	100+29.40 (N) 123+22.80 (E)	100+29.40 (N) 123+22.80 (E)
S 74	CONCRETE ENDWALL DOUBLE 48" R.C.P.	-	-	-	-	117.16 (DBL 48" W)	117.03 (48" RCP) 117.05 (48" RCP) 100+08.40 (N) 123+90.00 (E)	100+08.90 (N) 123+90.00 (E)	100+08.90 (N) 123+90.00 (E)
S 75	INLET STRUCTURE	115.70	116.58	110.70(NW)	111.31	104.13 (60" S)	104.33 (60" RCP) 95+65.00 (N) 127+24.20 (E)	95+64.03 (N) 127+21.71 (E)	95+64.03 (N) 127+21.71 (E)
S 77	CONCRETE ENDWALL DOUBLE 48" C.M.P.	-	-	-	-	106.40 (DBL 48" E)	106.58 (48" RCP) 106.84 (48" RCP) 106+07.75 (N) 123+36.60 (E)	106+08.70 (N) 123+37.90 (E)	106+08.70 (N) 123+37.90 (E)
S 78	CONCRETE ENDWALL DOUBLE 48" C.M.P.	-	-	-	-	105.48 (DBL 48" W)	105.55 (48" RCP) 105.61 (48" RCP) 106+13.60 (N) 124+00.35 (E)	106+14.10 (N) 124+00.40 (E)	106+14.10 (N) 124+00.40 (E)
S 83	FDOT TYPE 'E' INLET	121.50	121.46	118.76 (S)	118.63	116.76 (24" E)	116.77 (24" RCP) 91+00.00 (N) 126+79.00 (E)	90+99.83 (N) 126+78.16 (E)	90+99.83 (N) 126+78.16 (E)
S 84	FDOT TYPE 'E' INLET W/ TYPE J BOTTOM (ALTERNATE A)	121.50	121.48	117.75 (S)	118.69	116.76 (24" W) 111.56 (42" S) 111.06 (48" N)	116.74 (24" RCP) 111.40 (42" RCP) 110.52 (48" RCP) 91+00.00 (N) 127+32.50 (E)	91+04.04 (N) 127+38.68 (E)	91+04.04 (N) 127+38.68 (E)
S 85	FDOT TYPE 'E' INLET	121.50	121.52	118.76 (N) 118.76 (S)	118.77 118.80	116.76 (24" E)	116.90 (24" RCP) 92+47.60 (N) 126+79.00 (E)	92+47.93 (N) 126+78.45 (E)	92+47.93 (N) 126+78.45 (E)
S 86	JUNCTION BOX	121.50	121.62	117.75 (S)	117.87	100.35 (60" N) 100.35 (60" SE) 116.76 (24" W) 109.01 (48" S)	100.14N(60"RCP) 100.18N(60" RCP) 110.90 (24" RCP) 108.97 (48" RCP) 92+47.60 (N) 127+32.50 (E)	92+48.78 (N) 127+30.36 (E)	92+48.78 (N) 127+30.36 (E)
S 87	FDOT TYPE 'E' INLET	116.65	116.86	115.90 (N) 115.90 (S)	116.13 116.11	114.44 (15" E)	114.65 (15" RCP) 102+90.60 (N) 123+63.80 (E)	102+90.80 (N) 123+65.90 (E)	102+90.80 (N) 123+65.90 (E)
S 88	FDOT TYPE 'E' INLET	116.65	116.78	115.90 (N) 115.90 (S)	116.12 116.06	114.16 (15" W) 114.16 (15" NE)	114.52 (15" RCP) 114.39 (15" RCP) 102+89.40 (N) 123+97.80 (E)	102+89.90 (N) 123+99.90 (E)	102+89.90 (N) 123+99.90 (E)
S 89	FDOT TYPE 'E' INLET	114.65	114.63	113.90 (N) 113.90 (S)	113.91 113.88	112.96 (15" NE)	112.80 (15" CMP) 108+61.60 (N) 123+12.50 (E)	108+61.60 (N) 123+12.50 (E)	108+61.60 (N) 123+12.50 (E)
S 90	FDOT TYPE 'E' INLET	114.65	114.69	113.90 (N) 113.90 (S)	114.00 113.94	112.68 (15" SW) 112.68 (15" N)	112.65 (15" CMP) 112.46 (15" CMP) 108+78.20 (N) 123+42.10 (E)	108+78.20 (N) 123+42.10 (E)	108+78.20 (N) 123+42.10 (E)
S 91	CONST. MITERED END INTO CONC. PAVING	-	-	-	-	111.77 (15" S)	-	-	-
S 92	4:1 MITERED END SECTION	-	110.90	-	-	105.49 (TRIP. 54" NE)	105.49N(54"RCP) 105.41C(54"RCP) 105.28S(54"RCP) 86+24.40 (N) 137+23.45 (E)	86+22.60 (N) 137+21.90 (E)	86+22.60 (N) 137+21.90 (E)
S 93	4:1 MITERED END SECTION	-	110.95	-	-	105.49 (TRIP. 54" SW)	105.44N(54"RCP) 105.42C(54"RCP) 105.50S(54"RCP) 86+68.20 (N) 137+67.35 (E)	86+68.50 (N) 137+67.40 (E)	86+68.50 (N) 137+67.40 (E)
S 94	4:1 MITERED END SECTION	-	116.09	-	-	114.00 (15" SW)	113.86 (15" RCP) 102+99.40 (N) 124+15.10 (E)	102+99.90 (N) 124+16.60 (E)	102+99.90 (N) 124+16.60 (E)
S 95	FDOT TYPE 'E' INLET	116.00	116.32	114.70 (W)	115.00	111.50 (15" E)	111.66 (15" RCP) 103+95.00 (N) 127+25.00 (E)	103+94.60 (N) 127+26.10 (E)	103+94.60 (N) 127+26.10 (E)
S 98	MITERED END SECTION	-	-	-	-	129.00 (36" E)	129.11 (36" CMP) 96+09.00 (N) 125+76.00 (E)	96+09.10 (N) 125+84.53 (E)	96+09.10 (N) 125+84.53 (E)
S 99	FDOT TYPE 'E' INLET	120.00	119.99	-	-	113.67 (36"NE & NW)	113.64 (36" CMP) 96+09.00 (N) 126+28.80 (E)	96+08.59 (N) 126+28.79 (E)	96+08.59 (N) 126+28.79 (E)
S 100	MITERED END SECTION	-	-	-	-	111.5 (36" SW)	112.33 (36" CMP) 96+30.00 (N) 126+90.10 (E)	96+31.12 (N) 126+91.44 (E)	96+31.12 (N) 126+91.44 (E)
S 101	4:1 MITERED END SECTION	-	113.51	-	-	111.00 (15" W)	111.11 (15" RCP) 103+85.00 (N) 127+63.70 (E)	103+85.00 (N) 127+63.90 (E)	103+85.00 (N) 127+63.90 (E)
S 102	4:1 MITERED END SECTION	-	103.56	-	-	97.55 (60" RCP)	97.37 (60" RCP) 91+29.00 (N) 128+62.00 (E)	91+34.20 (N) 128+63.30 (E)	91+34.20 (N) 128+63.30 (E)
S 104	TYPE 'E' INLET	124.15	124.12	-	-	117.15	117.18 (4" PVC) 97+99.81 (N) 125+92.22 (E)	97+99.81 (N) 125+92.22 (E)	97+99.81 (N) 125+92.22 (E)

AS-BUILT SPREADER PIPE DATA

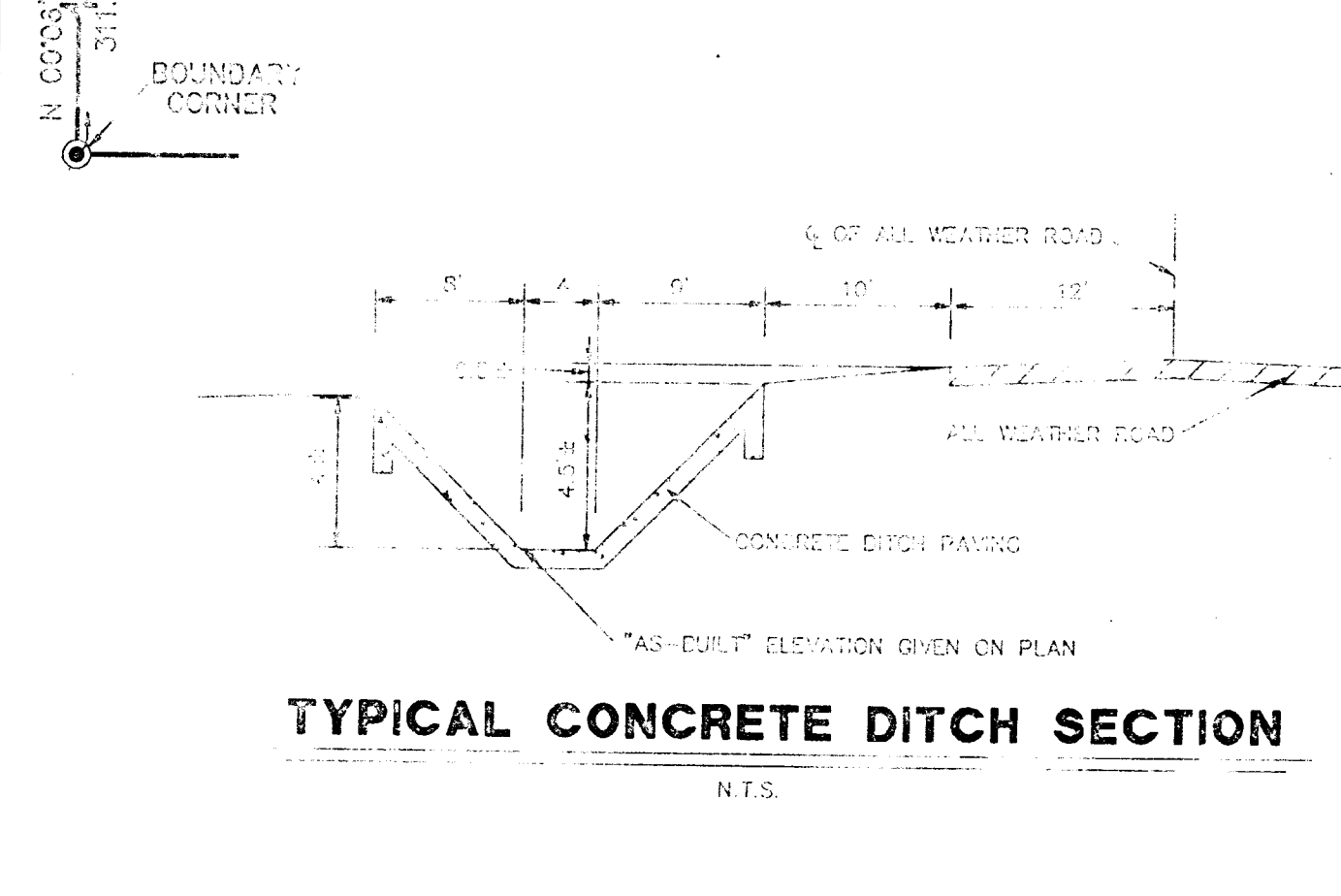
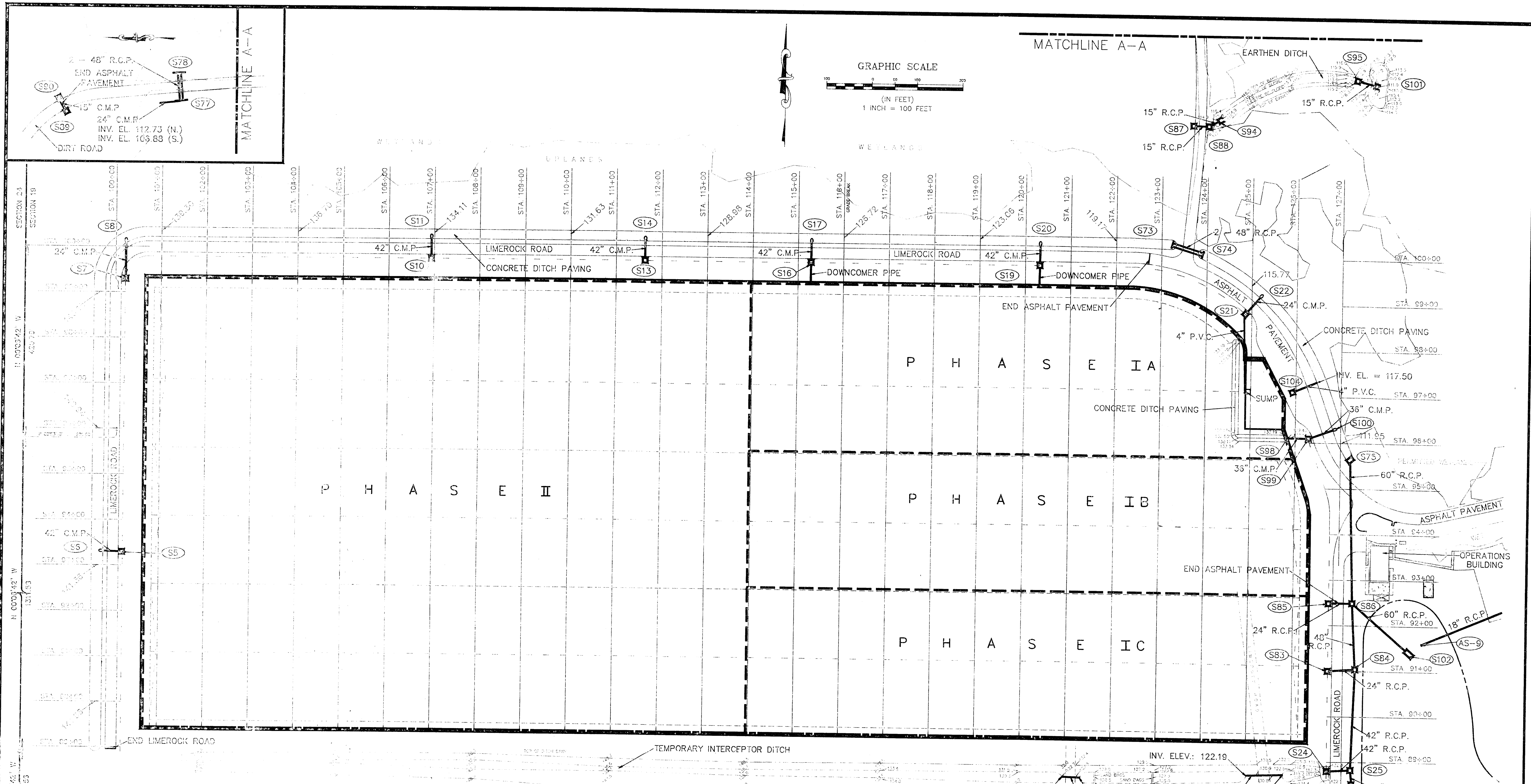
SEE SHEET 9

8" x 2" SADDLE	STATION	DEPTH
SP-1	91+26.21(N)	129+62.18(E) (2.8' BELOW GROUND)
SP-2	90+27.93(N)	129+96.07(E) (2.7' BELOW GROUND)
SP-3	88+31.29(N)	130+07.89(E) (2.6' BELOW GROUND)
SP-4	88+57.76(N)	130+75.70(E) (3.2' BELOW GROUND)
SP-5	88+45.26(N)	131+70.76(E) (2.8' BELOW GROUND)
SP-6	88+05.52(N)	132+62.81(E) (3.0' BELOW GROUND)
SP-7	87+29.09(N)	133+36.52(E) (2.5' BELOW GROUND)
SP-8	85+47.29(N)	137+59.12(E) (2.0' BELOW GROUND)
SP-9	84+52.99(N)	137+73.97(E) (2.7' BELOW GROUND)
SP-10	83+44.94(N)	136+98.14(E) (3.4' BELOW GROUND)
SP-11	82+57.76(N)	136+55.08(E) (3.5' BELOW GROUND)
SP-12	82+23.42(N)	136+25.75(E) (3.8' BELOW GROUND)
SP-13	82+24.12(N)	135+23.08(E) (2.9' BELOW GROUND)
SP-14	82+41.02(N)	134+13.30(E) (3.5' BELOW GROUND)
SP-15	82+55.77(N)	133+23.12(E) (3.0' BELOW GROUND)
SP-16	82+70.27(N)	132+37.86(E) (3.1' BELOW GROUND)
SP-17	82+56.89(N)	131+31.74(E) (2.5' BELOW GROUND)
SP-18	82+19.35(N)	130+39.40(E) (2.5' BELOW GROUND)
SP-19	81+78.85(N)	129+54.12(E) (2.8' BELOW GROUND)
SP-20	81+79.04(N)	128+51.65(E) (3.0' BELOW GROUND)

AS-BUILT STORM DRAINAGE DATA ANCILLARY AREA

SEE SHEET 11 & 12

STRUCTURE NO.	STRUCTURE DESCRIPTION	TOP ELEVATION		SLOT ELEVATION		INVERT ELEVATION		STATION	
		DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT	DESIGN	ASBUILT
AS-1	E DITCH BOTTOM	99.50	99.55	98.50 (W)	98.53	95.50	95.51 (36" RCP)	-	97+57.76 (N) 143+26.88 (E)
AS-2	U TYPE ENDWALL	-	-	-	-	95.40	95.64 (36" RCP)	-	98+32.03 (N) 143+38.39 (E)
AS-3	E DITCH BOTTOM INLET	100.50	100.55	100.00 (E) 100.00 (W)	100.06 (E) 100.00 (W)	97.50 (E) 98.00 (W)	97.47 (18" RCP) 97.93 (18" RCP)	-	97+52.26 (N) 138+15.59 (E)
AS-4	E DITCH BOTTOM INLET	100.50	99.97	100.00 (E) 100.00 (W)	99.50 (E) 99.49 (W)	96.60 (E) 97.10 (W)	96.64 (24" RCP) 97.11 (18" RCP)	-	97+96.78 (N) 140+32.55 (E)
AS-5	U TYPE ENDWALL	-	-	-	-	95.00	94.95 (24" RCP)	-	99+32.91 (N) 142+68.04 (E)
AS-6	C DITCH BOTTOM INLET	111.00	111.07	110.00 (W)	110.05 (W)	106.75	106.86 (15" RCP)	-	94+78.16 (N) 131+51.26 (E)
AS-7	C INLET	112.50	112.47	-	-	106.55 (N) 106.30 (S)	106.59 (15" RCP) 106.53 (18" RCP)	-	94+12.70 (N) 131+71.35 (E)
AS-8	C INLET	113.75	113.99	-	-	106.05 (N) 106.05 (W)	106.54 (18" RCP) 106.24 (18" RCP)	-	93+07.04 (N) 132+29.46 (E)
AS-9	U TYPE ENDWALL	-	-	-	-	103.00	103.34 (18" RCP)	-	91+60.84 (N) 128+83.48 (E)
AS-10	C INLET	107.20	107.25	106.70 (W)	106.80 (W)	104.75	104.58 (15" RCP)	-	95+47.34 (N) 133+09.26 (E)
AS-11	U TYPE ENDWALL	-	-	-	-	104.55	104.62 (15" RCP)	-	95+79.51 (N) 133+82.24 (E)
AS-12	STRAIGHT ENDWALL	-	-	-	-	94.10	-	-	97+47.30 (N) 144+18.88 (E)
AS-13	STRAIGHT ENDWALL	-	-	-	-	94.00	-	-	97+99.11 (N) 144+27.33 (E)
AS-14	C INLET	102.50	102.52	101.50	101.54	100.40	100.41 (18" RCP)	-	97+17.23 (N) 136+52.18 (E)
AS-15	U TYPE ENDWALL	-	-	-	-	100.25	100.09 (36" RCP)	-	96+07.73 (N) 136+82.06 (E)
AS-16	CURB INLET	102.75	GRATE NOT IN PLACE	-	-	97.75 (W) 97.75 (E)	98.05 (36" RCP) 98.03 (36" RCP)	-	96+36.08 (N) 137+95.70 (E)
AS-17	E DITCH BOTTOM INLET	100.50	100.49	-	-	96.25 (W) 96.25 (E) 97.00 (S)	96.22 (36" RCP) 96.17 (36" RCP) 96.88 (15" RCP)	-	96+60.86 (N) 139+78.15 (E)
AS-18	C INLET	100.75	100.70	100.00 (N)	99.93 (N)	95.75 (W) 95.75 (E)	95.67 (36" RCP) 95.65 (36" RCP)	-	97+41.87 (N) 141+99.27 (E)
AS-19	U TYPE ENDWALL	-	-	-	-	99.50	99.34	-	96+11.56 (N) 139+70.76 (E)



"AS-BUILT"

SHEET 8

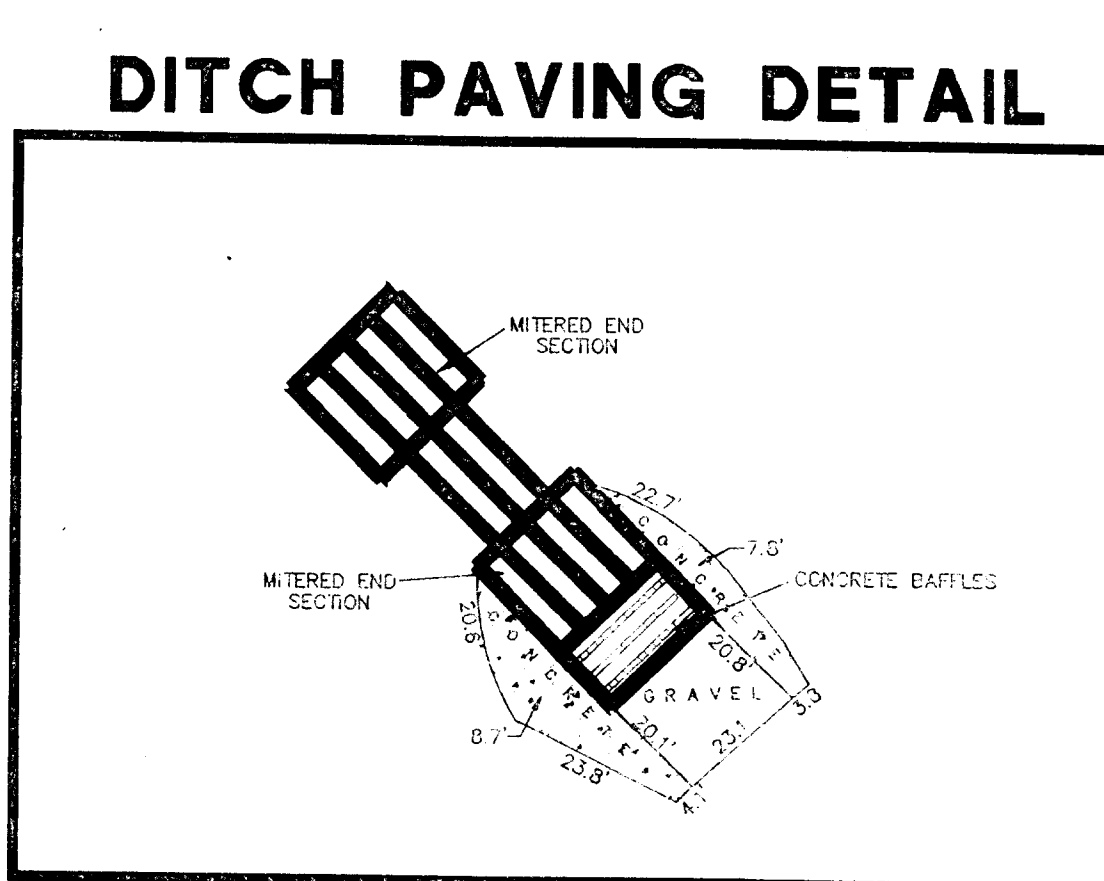
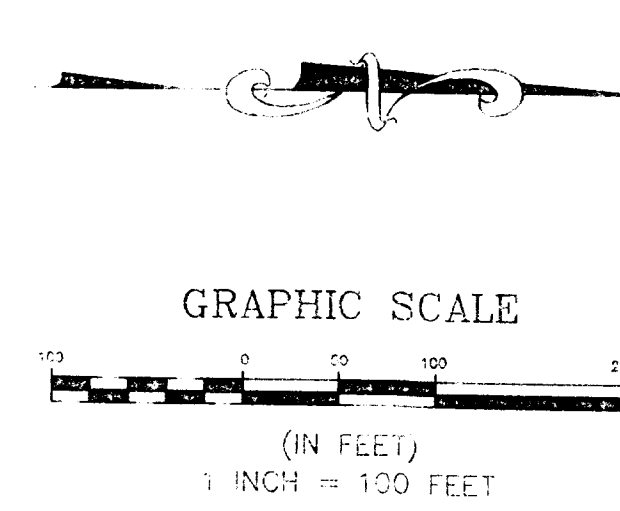
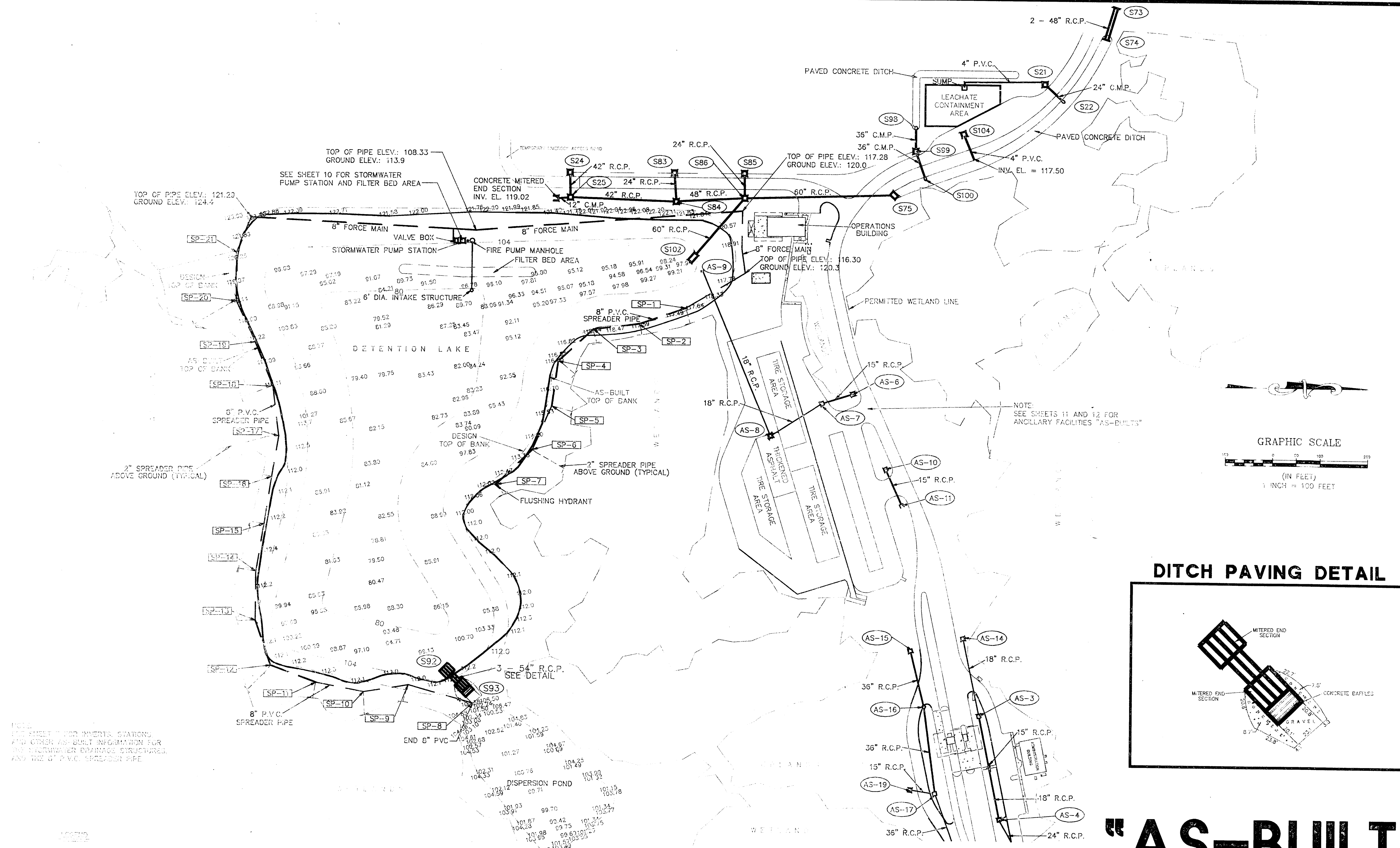
NOTE:
SEE SHEET 7 FOR INVERTS, STATIONS,
AND OTHER AS-BUILT INFORMATION FOR
THE STORMWATER DRAINAGE STRUCTURES.

- LEGEND
- 144.65 "AS-BUILT" SPOT ELEVATION
 - PHASE LINE
 - EDGE OF LINER
 - C OF VALLEY
 - C OF RIDGE
 - C OF DITCH
 - "AS-BUILT" STORM STRUCTURE WITH PIPES
 - "AS-BUILT" MITERED END SECTION WITH STORM PIPES
 - STRUCTURE NUMBER

DATE:	COMMENTS:
1-12-93	RESHOT N.W. CONCRETE DITCH PAVING ELEVATIONS DUE TO CONCRETE DITCH REPLACEMENT
9-11-92	PHASE I & II AS-BUILT
I HEREBY CERTIFY THAT THE CONCRETE DITCH PAVING, EARTHEN DITCH, DETENTION POND, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21-1105 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.02, FLORIDA STATUTES.	
ARTHUR A. MASTRONICOLA JR., F.L.A. REG. SURVEYOR NO. 4166	

**DRAINAGE STRUCTURE AS-BUILT
PHASE I AND PHASE II
FOR TRAIL RIDGE LANDFILL
JACKSONVILLE, DUVAL COUNTY, FLORIDA**

SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



NOTE: SEE SHEET 10 FOR STORMWATER PUMP STATION AND FILTER BED AREA. SEE SHEET 11 AND 12 FOR ANCILLARY FACILITIES "AS-BUILTS".

- AS-BUILT SP-1 ELEVATION
- DESIGN CON-CUR
- AS-BUILT TOP OF BANK
- STRUCTURE NUMBER
- AS-BUILT STORM INLET WITH PIPES
- AS-BUILT STORM CULVERT
- SPREADER PIPE NUMBER
- AS-BUILT 6" P.V.C. SPREADER PIPE

SHEET 9

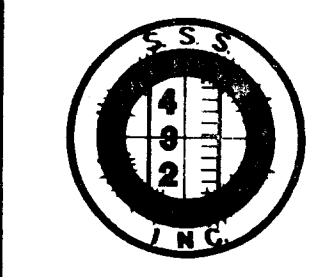
DATE:	COMMENTS:
1-26-93	REVISED TO ADD TIRE STORAGE AREA, BYPASS ROAD AND OPERATIONS BUILDING AS-BUILTS.
12-12-92	REVISE AS-BUILT TOPO ALONG EAST END OF POND
11-24-92	DITCH PAVING AS-BUILT
9-11-92	PHASE 1A AS-BUILT

I HEREBY CERTIFY THAT THE DETENTION POND, DISPERSION POND, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21, 1966 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.

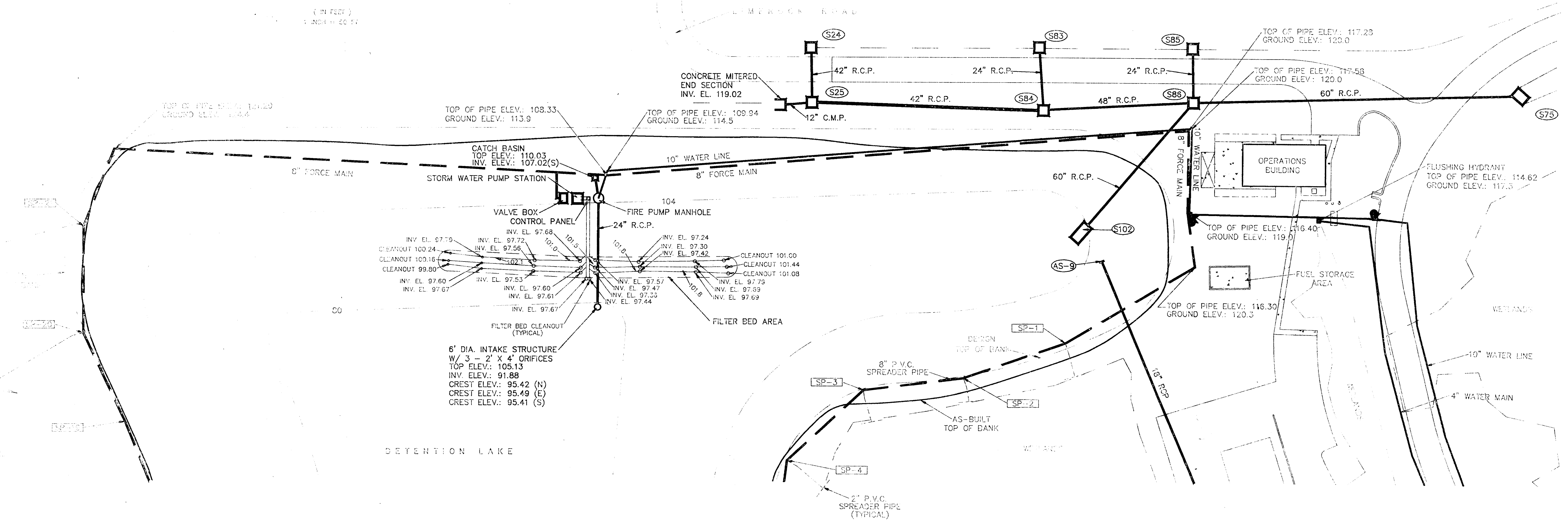
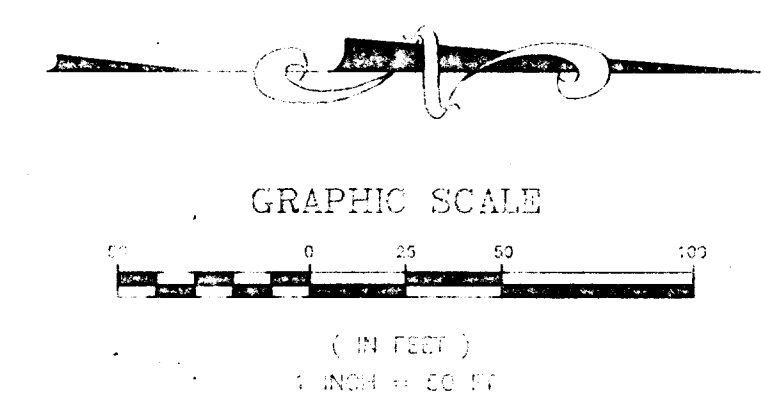
1-29-93
ARTHUR A. MASTRONARDI, SURVEYOR NO. 4166

"AS-BUILT"

DETENTION LAKE AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA



SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



AS-BUILT TABLE

STRUCTURE TYPE	DESIGN	AS-BUILT
STORM WATER PUMP STATION		
TOP EL.	111.0	111.52
BOTTOM EL.	92.40	92.17
INV EL. 12\" P.V.C. (W.)	97.32	97.16 (W.)
INV EL. 12\" P.V.C. (E.)	97.32	97.37 (E.)

- AS-BUILT TOP OF ELEVATION
- DESIGN CONTOUR
- AS-BUILT TOP OF BANK
- STRUCTURE NUMBER
- AS-BUILT STORM INLET WITH PIPES
- AS-BUILT STORM CHURVET
- SP-13 SPREADER PIPE NUMBER
- AS-BUILT 8\" P.V.C. SPREADER PIPE

NOTE:
SEE SHEET 7 FOR INVERTS, STATIONS,
AND OTHER AS-BUILT INFORMATION FOR
THE STORMWATER DRAINAGE STRUCTURES,
AND THE 8\" P.V.C. SPREADER PIPE.

SHEET 10

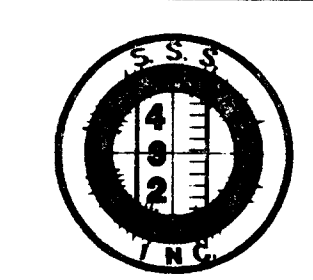
DATE	COMMENTS
1-28-93	REVISED TO SHOW OPERATIONS BUILDING AS-BUILT
9-11-92	PHASE 1A AS-BUILT

I HEREBY CERTIFY THAT THE FILTER BED, PUMP STATION, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATION AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE MINIMUM TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21, THE FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.007, FLORIDA STATUTES.

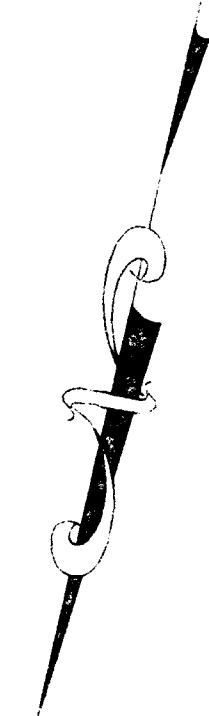
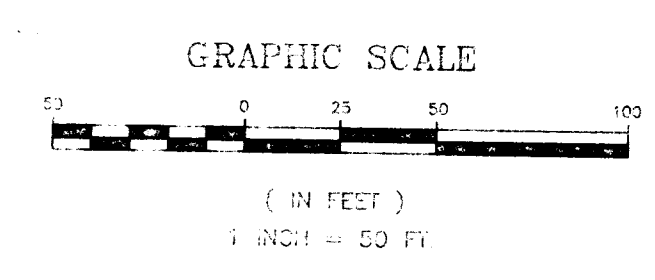
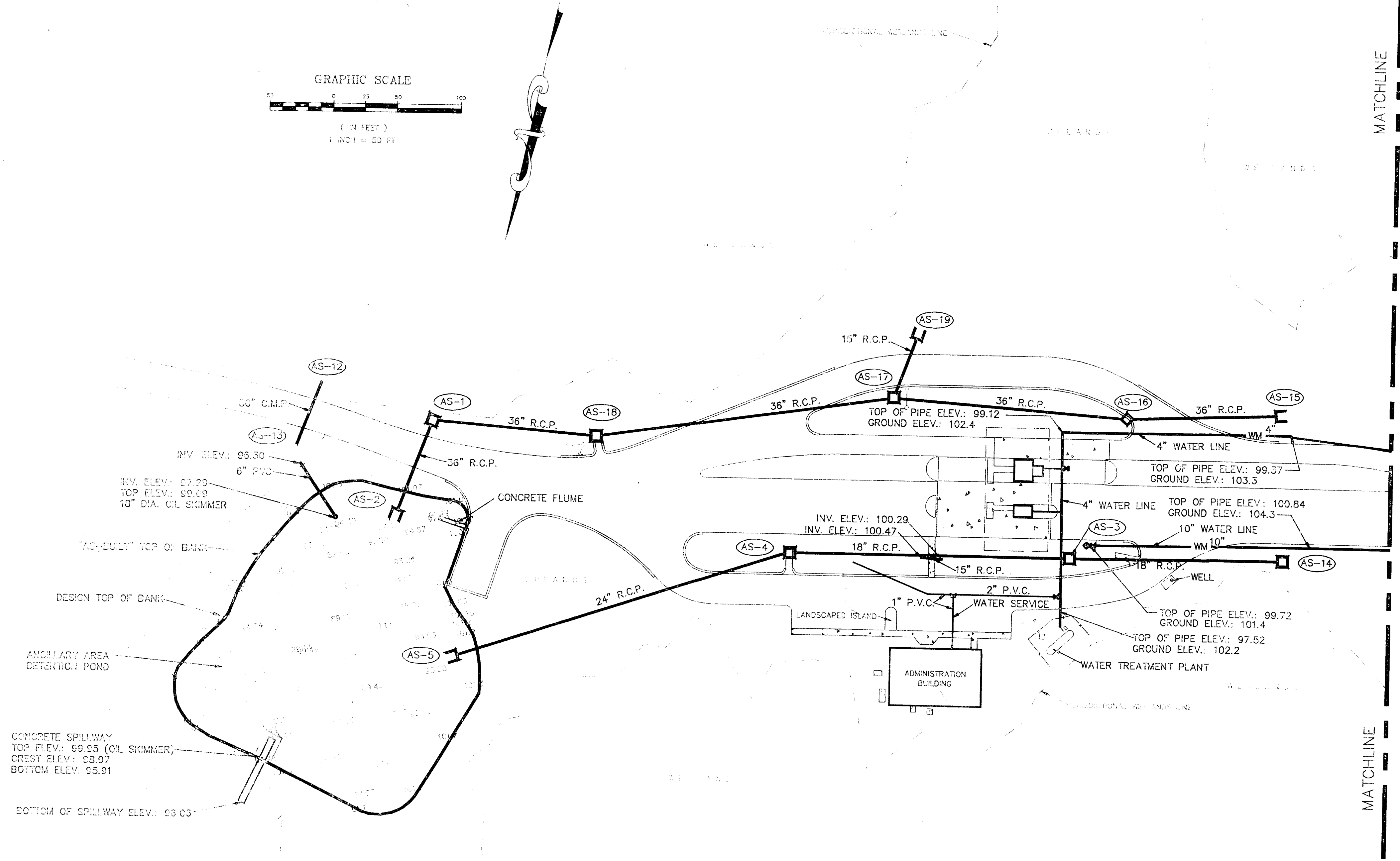
1-28-93
ARTHUR A. MASTROGIACOMO, P.E., REG. SURVEYOR NO. 4166

"AS-BUILT"

FILTER BED AREA DETAIL
FOR
TRAIL RIDGE LANDFILL
JACKSONVILLE, DUVAL COUNTY, FLORIDA



SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHN'S BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



MATCHLINE
SEE SHEET 12
MATCHLINE

- LEGEND**
- (S93) STRUCTURE NUMBER
 - AS-BUILT STORM INLET WITH PIPES
 - AS-BUILT STORM CULVERT
 - AS-BUILT FIRE HYDRANT WITH GATE VALVE
 - AS-BUILT MIRRED END SECTION WITH STORM PIPE
 - WM 10" AS-BUILT 10" WATER MAIN
 - FM 6" AS-BUILT 6" FORCE MAIN

NOTE:
SEE SHEET 7 FOR INVERTS, STATIONS,
AND OTHER AS-BUILT INFORMATION FOR
THE STORMWATER DRAINAGE STRUCTURES.

SHEET 11

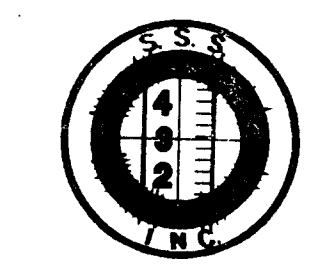
DATE:	COMMENTS:
1-24-93	REVISED TO SHOW BYPASS ROAD AND TO SHOW ADMINISTRATION BUILDING AS-BUILT.
12-14-92	REVISED TO SHOW NEW AS-BUILT TOPO OF POND
10-30-92	REVISED TO SHOW AS-15 THROUGH AS-19
9-11-92	PHASE IA AS-BUILT

I HEREBY CERTIFY THAT THE ANCILLARY POND, DRAINAGE STRUCTURES, AND WATER LINES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL LOCATIONS AS DEPICTED ON THIS "AS-BUILT" AND MEETS THE TECHNICAL STANDARDS AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 472, F.S. FLORIDA LAND SURVEYING CODE PURSUANT TO SECTION 472.027, FLORIDA LAND SURVEYING CODE.

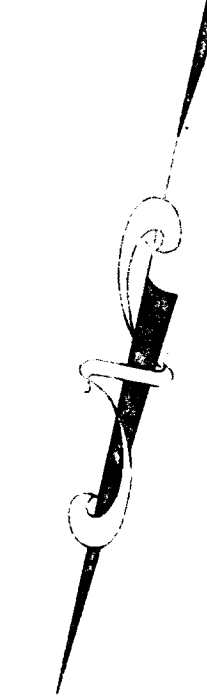
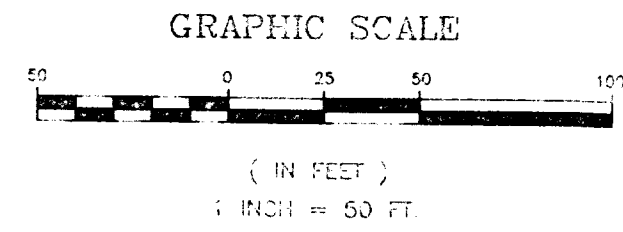
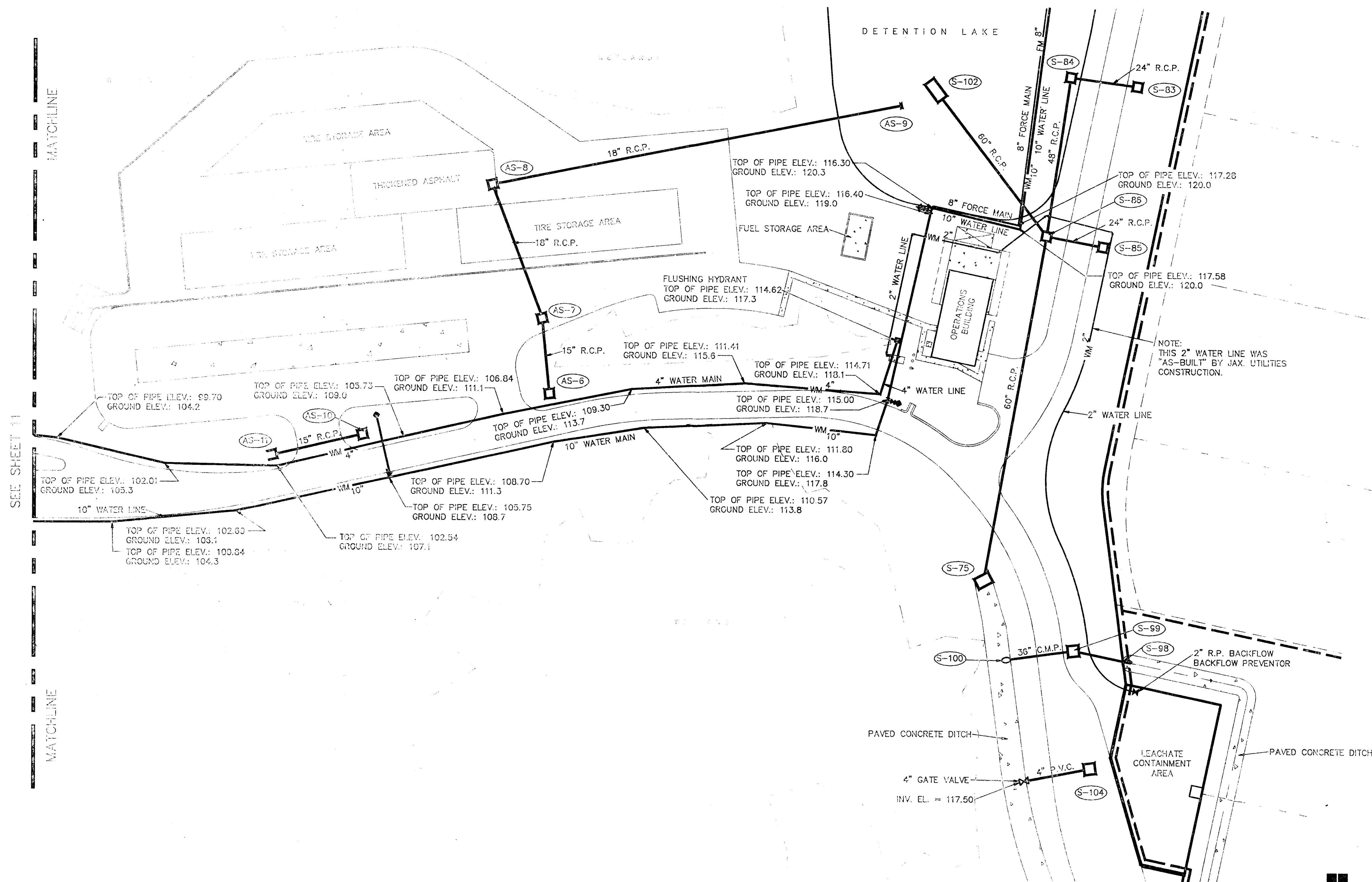
ARTHUR A. MASTRONICOLA, REG. SURVEYOR NO. 4166

"AS-BUILT"

ANCILLARY FACILITIES FORCE MAIN, WATER MAIN, AND DRAINAGE STRUCTURE AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA



SUNSHINE STATE SURVEYORS, INC.
SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
(904) 642-8550



SHEET 12

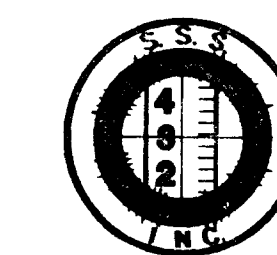
"AS-BUILT"

- LEGEND
- S-93 STRUCTURE PUMPER
 - "AS-BUILT" STORM INLET WITH PIPES
 - "AS-BUILT" STORM CULVERT
 - "AS-BUILT" PIPE HYDRANT WITH GATE VALVE
 - "AS-BUILT" MARKED LND SECTION WITH STORM PIPE
 - "AS-BUILT" 10" WATER MAIN
 - "AS-BUILT" 6" FORCE MAIN

- NOTES:
- SEE SHEET 7 FOR INVERTS, STATIONS, AND OTHER AS-BUILT INFORMATION FOR THE STORMWATER DRAINAGE STRUCTURES.
 - 2" WATER LINE SHOWN ON THIS PLAN WAS LOCATED BY JAX UTILITIES CONSTRUCTION.

DATE:	COMMENTS:
1-24-93	REVISED TO SHOW TIRE STORAGE AREA AND TO ADD ADMINISTRATION BUILDING AS-BUILT.
9-11-92	PHASE 1A AS-BUILT
I HEREBY CERTIFY THAT THE WATER MAINS, FORCE MAINS, AND DRAINAGE STRUCTURES AS SHOWN HEREON ARE AT THE HORIZONTAL AND/OR VERTICAL CORRECTION AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL LAND SURVEYORS IN CHAPTER 21-H16 FLORIDA ADMINISTRATIVE CODE PURSUANT TO SECTION 472.027, FLORIDA STATUTES.	
ARTHUR A. MASTRONICOLA, JR., P.L.A., REG. SURVEYOR NO. 4166	

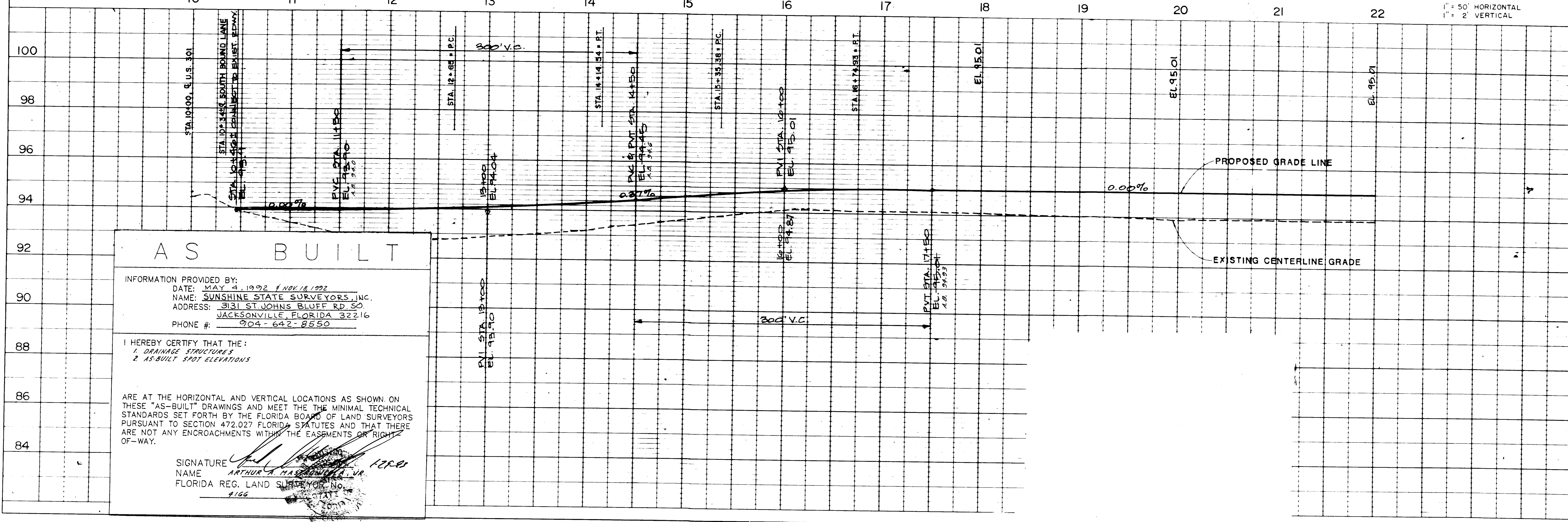
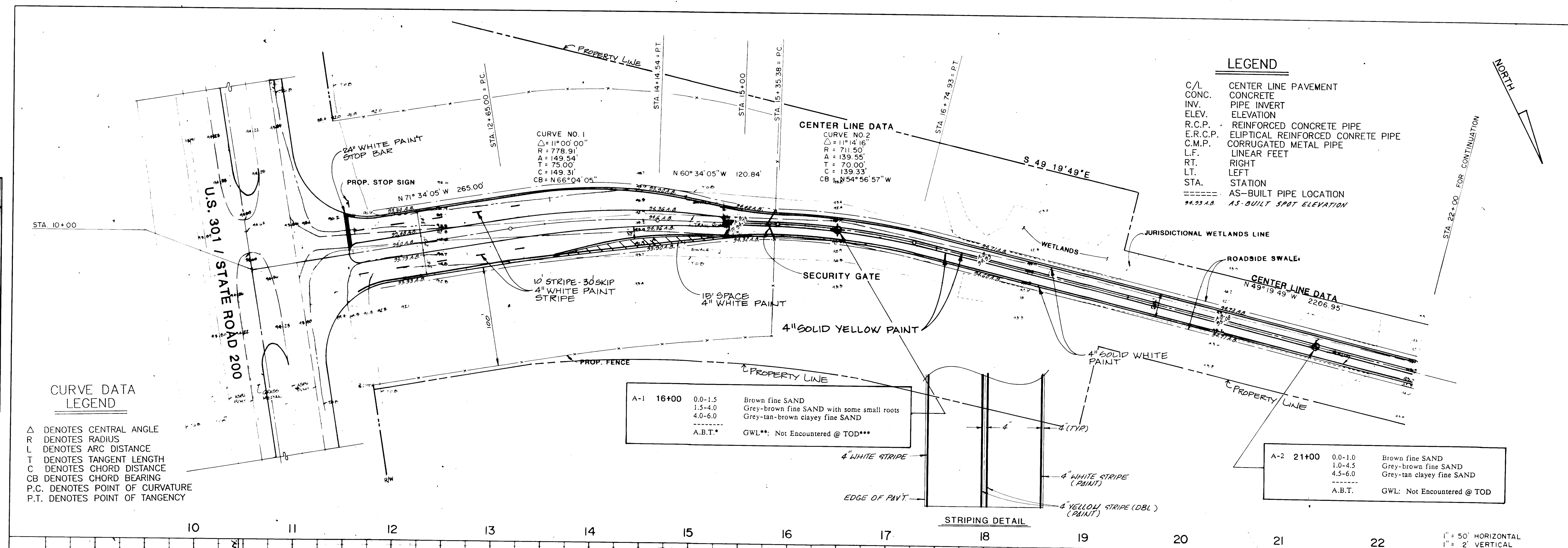
ANCILLARY FACILITIES FORCE MAIN, WATER MAIN, AND DRAINAGE STRUCTURE AS-BUILT FOR TRAIL RIDGE LANDFILL JACKSONVILLE, DUVAL COUNTY, FLORIDA



SUNSHINE STATE SURVEYORS, INC.
 SURVEYORS & LAND PLANNERS 3131 ST. JOHNS BLUFF RD. SOUTH, JACKSONVILLE, FLORIDA 32246
 (904) 642-5350

PLAN	DATE
SURVEYED	
NOTED	
NOTE BOOK	
NO.	

PROFILE	DATE
SURVEYED	
NOTED	
NOTE BOOK	
NO.	



16/92 RELEASED FOR CONSTRUCTION

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH
JACKSONVILLE, FLORIDA 32216

SCALE: 1" = 50'
WORK ORDER NO. 592-61
DRAWN BY: J.L.R.
CHECKED BY: R.S.C.

STORM DRAINAGE
(STA. 10+00 - STA. 22+00)

TRAIL RIDGE LANDFILL
(PLAN A)

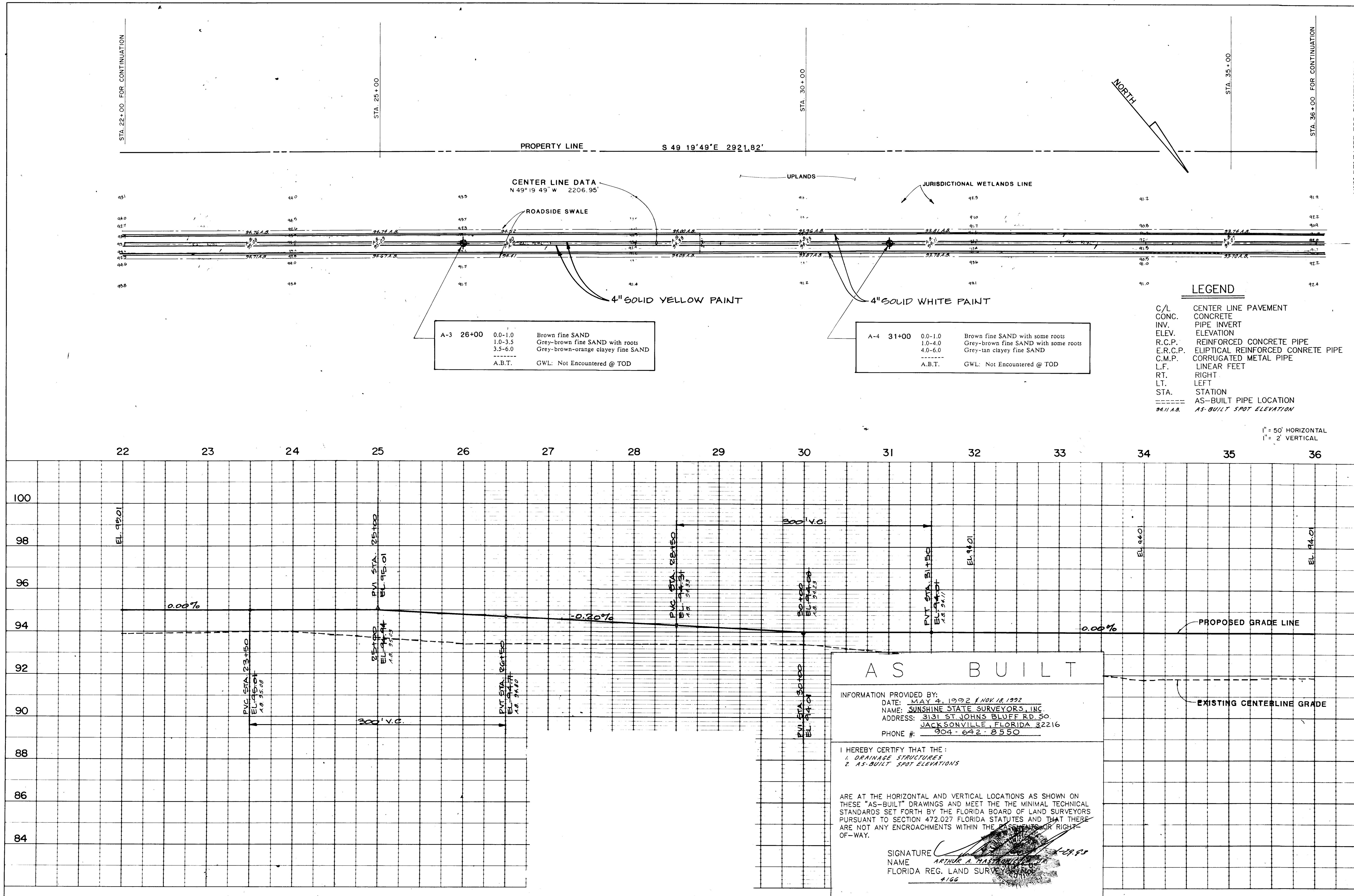
AS-BUILT

SHEET

13

PLAN	DATE	BY
	SURVEYED	
	NOTED	
	NOTED	

PROFILE	DATE	BY
	SURVEYED	
	NOTED	
	NOTED	



1692 RELEASED FOR CONSTRUCTION

SUNSHINE STATE SURVEYORS, INC.

ENGINEERS, SURVEYORS & LAND PLANNERS

3131 ST. JOHNS BLUFF RD. SOUTH,

JACKSONVILLE, FLORIDA 32216

SCALE: 1" = 50'

WORK ORDER No. 592-61

DRAWN BY: J.L.B.

CHECKED BY: R.S.C.

STORM DRAINAGE

(STA. 22+00 - STA. 36+00)

TRAIL RIDGE LANDFILL

(PLAN A)

AS-BUILT

SHEET 14

PLAN	DATE
SURVEYED	
NOTED	
ALIGNED	
CHECKED	
BY	
DATE	

PROFILE	DATE
SURVEYED	
NOTED	
GRADES CHECKED	
BY	
DATE	

**CURVE DATA
LEGEND**

Δ DENOTES CENTRAL ANGLE
R DENOTES RADIUS
L DENOTES ARC DISTANCE
T DENOTES TANGENT LENGTH
C DENOTES CHORD DISTANCE
CB DENOTES CHORD BEARING
P.C. DENOTES POINT OF CURVATURE
P.T. DENOTES POINT OF TANGENCY

CENTER LINE DATA
CURVE NO. 3
Δ = 10° 05' 12"
R = 2152.97'
T = 379.02'
C = 190.00'
CB = N54° 22' 45" W

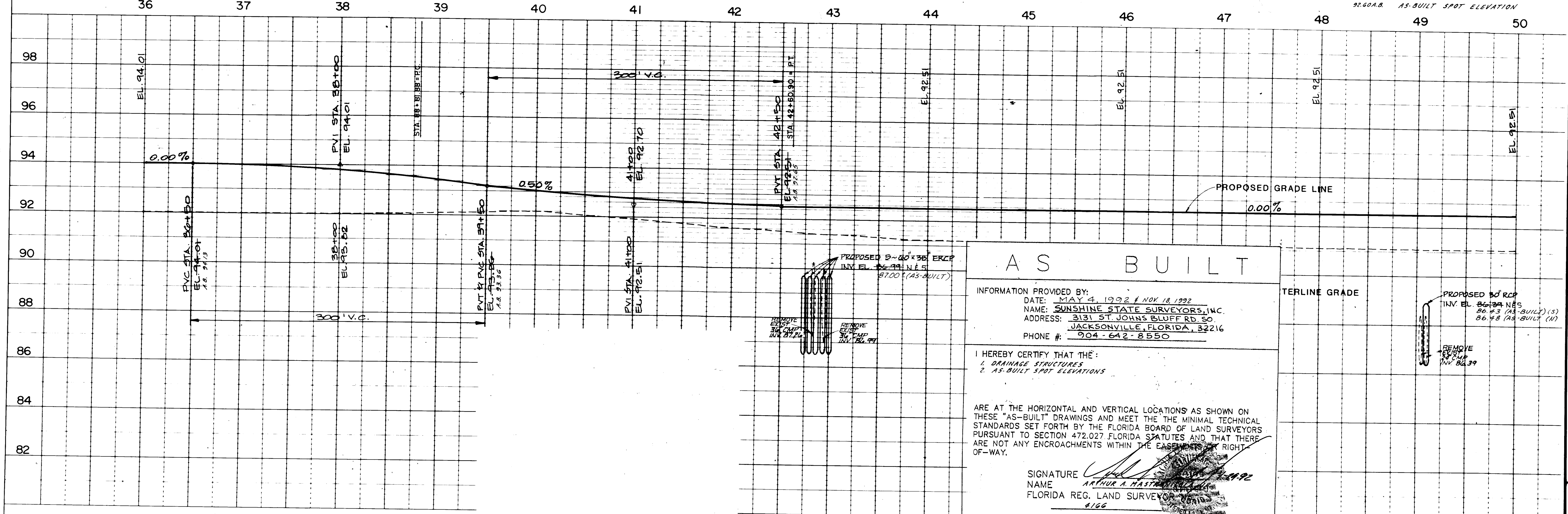
A-5 36+00 0.0-1.0 Brown fine SAND
1.0-4.0 Grey-brown fine SAND
4.0-6.0 Grey-brown clayey fine SAND
A.B.T. GWL: Not Encountered @ TOD

A-6 41+00 0.0-1.1 Grey-brown fine SAND
1.1-3.5 Grey-brown fine SAND
3.5-6.0 Grey-orange-red clayey fine SAND
A.B.T. GWL: 2.7 Feet @ TOD

A-7 46+00 0.0-1.0 Grey-brown fine SAND
1.0-3.0 Dark grey-brown fine SAND
3.0-6.0 Light brown fine SAND
A.B.T. GWL: 3.7 Feet @ TOD

LEGEND

C/L CONCRETE
INV. PIPE INVERT
ELEV. ELEVATION
R.C.P. REINFORCED CONCRETE PIPE
E.R.C.P. ELLIPTICAL REINFORCED CONCRETE PIPE
C.M.P. CORRUGATED METAL PIPE
AS-BUILT PIPE LOCATION
L.F. LINEAR FEET
RT. RIGHT
LT. LEFT
STA. STATION
92.60 A.B. AS-BUILT SPOT ELEVATION



AS BUILT

INFORMATION PROVIDED BY:
DATE: MAY 4, 1992 / NOV 18, 1992
NAME: SUNSHINE STATE SURVEYORS, INC.
ADDRESS: 3131 ST. JOHNS BLUFF RD. SO.
JACKSONVILLE, FLORIDA, 32216
PHONE #: 904-642-8550

I HEREBY CERTIFY THAT THE:
1. DRAINAGE STRUCTURES
2. AS-BUILT SPOT ELEVATIONS

ARE AT THE HORIZONTAL AND VERTICAL LOCATIONS AS SHOWN ON THESE "AS-BUILT" DRAWINGS AND MEET THE MINIMAL TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS PURSUANT TO SECTION 472.027 FLORIDA STATUTES AND THAT THERE ARE NOT ANY ENCROACHMENTS WITHIN THE EASEMENT OR RIGHT-OF-WAY.

SIGNATURE: *Arthur A. Masterson*
NAME: ARTHUR A. MASTERSON
FLORIDA REG. LAND SURVEYOR
4166

AS-BUILT

1/692 RELEASED FOR CONSTRUCTION

**SUNSHINE STATE
SURVEYORS, INC.**
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH,
JACKSONVILLE, FLORIDA 32216

STORM DRAINAGE
(STA. 36+00 - STA. 50+00)

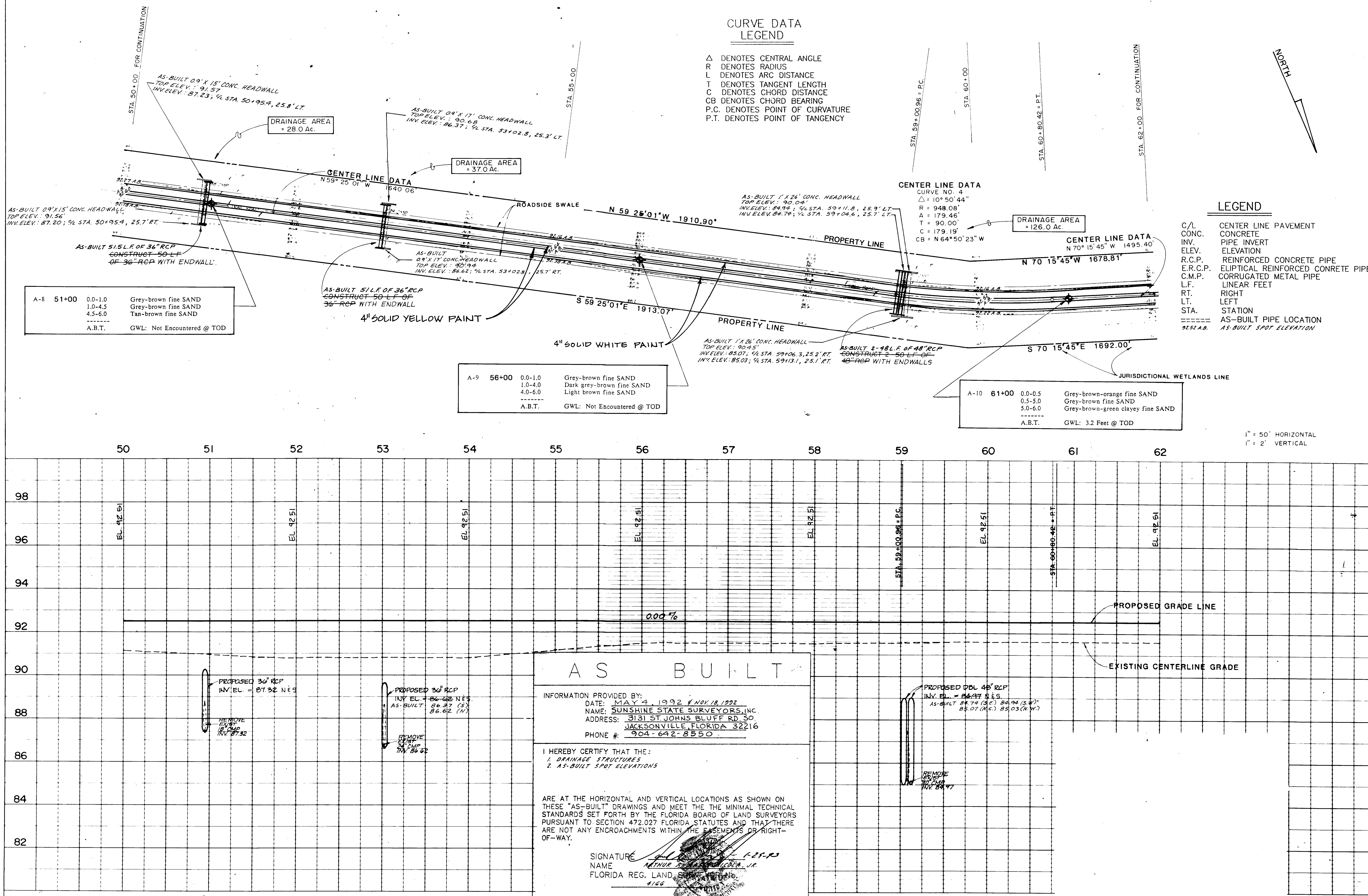
TRAIL RIDGE LANDFILL
(PLAN A)

SHEET
15

DATE OF LAST FIELDWORK: 11-18-92
FIELD BOOK 336/30-34
386/31-38
FILE No. 92D-5190

PLAN	DATE	BY	CHKD	DATE	BY	CHKD
NO.						

PROFILE	DATE	BY	CHKD	DATE	BY	CHKD
NO.						



1/6/92 RELEASED FOR CONSTRUCTION

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. 30, SOUTH JACKSONVILLE, FLORIDA 32216

SCALE: 1" = 50'

WORK ORDER NO. 592-61

DRAWN BY: J.L.R.

CHECKED BY: R.S.C.

STORM DRAINAGE
(STA. 50+00 - STA. 62+00)

TRAIL RIDGE LANDFILL
(PLAN A)

AS-BUILT

SHEET

16

PLAN	NOTE BOOK
NO.	NO.

PROFILE	NOTE BOOK
NO.	NO.

STA 62+00 FOR CONTINUATION

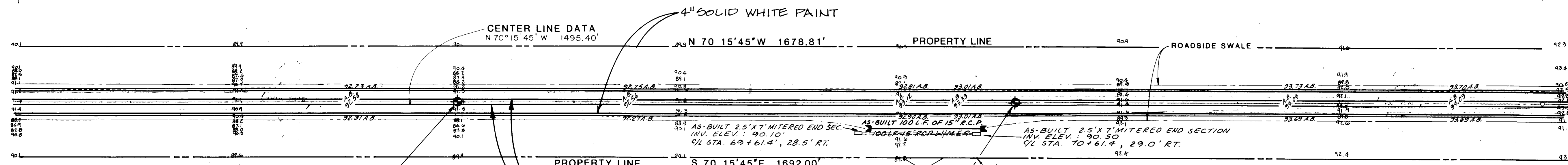
STA 65+00

STA 70+00

STA 75+00

STA 75+75.82 = P.C.

STA 76+00 FOR CONTINUATION



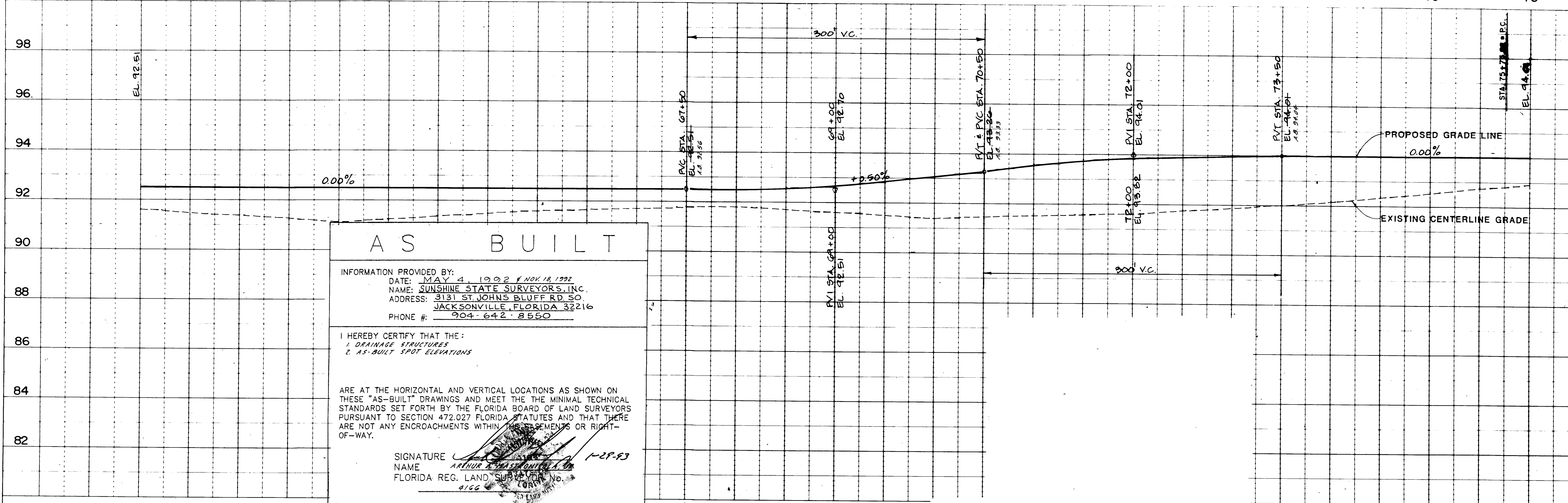
A-11	66+00	0.0-2.0	Grey-brown fine SAND
		2.0-4.5	Dark grey-brown silty fine SAND with some organics
		4.5-6.0	Dark grey-brown sandy silty CLAY
A.B.T.			GWL: 2.6 Feet @ TOD

A-12	71+00	0.0-1.0	Grey-brown fine SAND
		1.0-4.5	Brown fine SAND
		4.5-6.0	Grey-brown clayey fine SAND
A.B.T.			GWL: 3.2 Feet @ TOD

LEGEND

C/L	CENTER LINE PAVEMENT
CONC.	CONCRETE
INV.	PIPE INVERT
ELEV.	ELEVATION
R.C.P.	REINFORCED CONCRETE PIPE
E.R.C.P.	ELLIPTICAL REINFORCED CONCRETE PIPE
C.M.P.	CORRUGATED METAL PIPE
L.F.	LINEAR FEET
RT.	RIGHT
LT.	LEFT
STA.	STATION
=====	AS-BUILT PIPE LOCATION
34.09 A.B.	AS-BUILT SPOT ELEVATION
1" = 50' HORIZONTAL	
1" = 2' VERTICAL	

62 63 64 65 66 67 68 69 70 71 72 73 74 75 76



AS BUILT

INFORMATION PROVIDED BY:
 DATE: MAY 4, 1992 & NOV 18, 1992
 NAME: SUNSHINE STATE SURVEYORS, INC.
 ADDRESS: 3131 ST. JOHNS BLUFF RD. SO.
 JACKSONVILLE, FLORIDA 32216
 PHONE #: 904-642-8550

I HEREBY CERTIFY THAT THE:
 1. DRAINAGE STRUCTURES
 2. AS-BUILT SPOT ELEVATIONS

ARE AT THE HORIZONTAL AND VERTICAL LOCATIONS AS SHOWN ON THESE "AS-BUILT" DRAWINGS AND MEET THE MINIMAL TECHNICAL STANDARDS SET FORTH BY THE FLORIDA BOARD OF LAND SURVEYORS PURSUANT TO SECTION 472.027 FLORIDA STATUTES AND THAT THERE ARE NOT ANY ENCROACHMENTS WITHIN ENCLOSURES OR RIGHT-OF-WAY.

SIGNATURE: *Arthur K. Washington*
 NAME: ARTHUR K. WASHINGTON
 FLORIDA REG. LAND SURVEYOR No. 4166

PLATE 1 PLAN/PROFILE D.P.R. & R.E. STANDARD
 DETZEN CORPORATION
 PRINTED IN U.S.A.

DATE OF LAST FIELDWORK: 11-18-92

FIELD BOOK 336/30-34
 336/31-38

FILE No. 92D-5190

1/692 RELEASED FOR CONSTRUCTION

SUNSHINE STATE
 SURVEYORS, INC.

ENGINEERS, SURVEYORS & LAND PLANNERS
 3131 ST. JOHNS BLUFF RD. SOUTH,
 JACKSONVILLE, FLORIDA 32216

SCALE: 1" = 50'
 WORK ORDER NO.:
 592-61

DRAWN BY:
 J.L.R.
 CHECKED BY:
 R.S.C.

STORM DRAINAGE
 (STA. 62+00 - STA. 76+00)

TRAIL RIDGE LANDFILL
 (PLAN A)

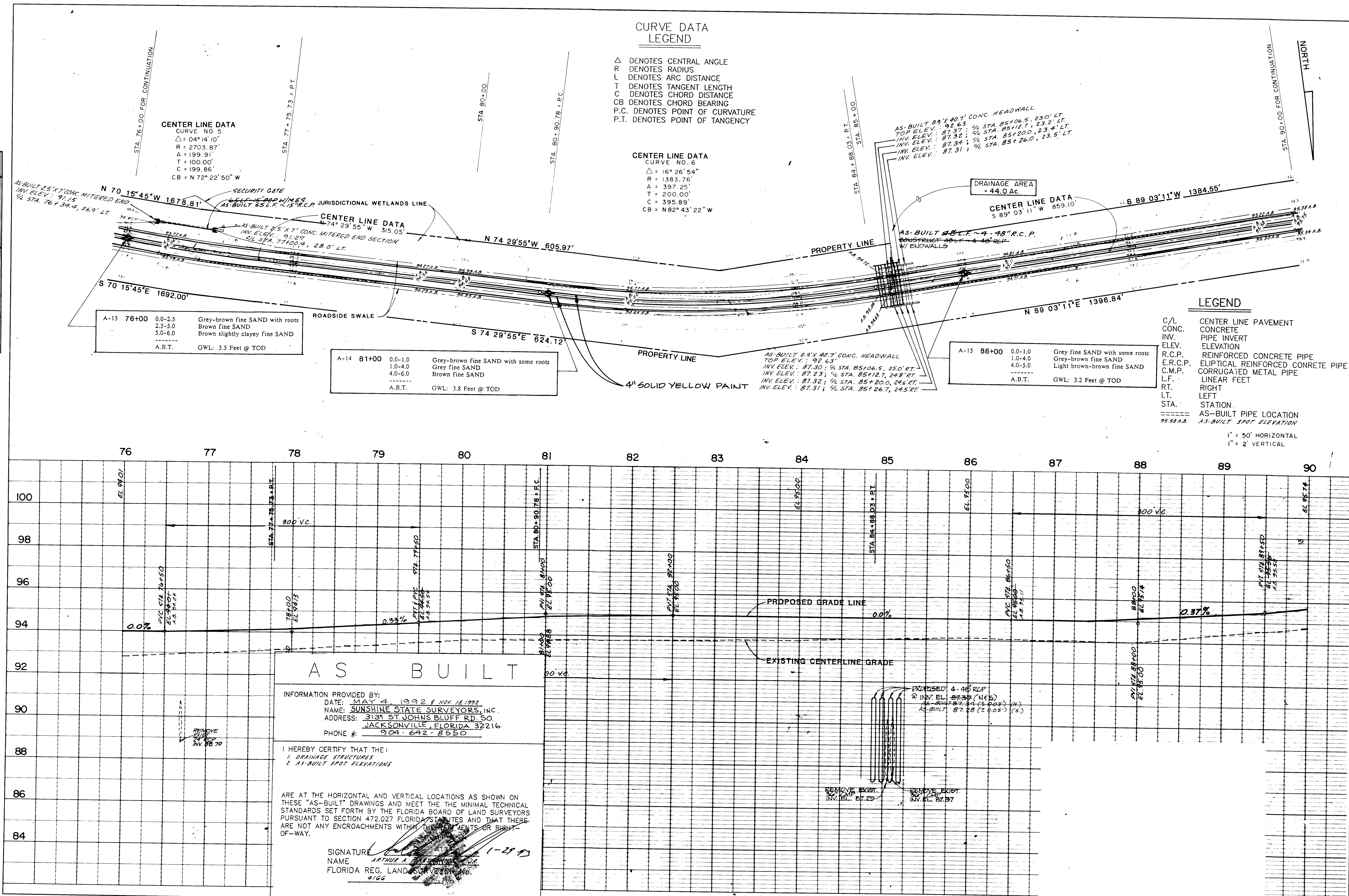
AS-BUILT

SHEET

17

PLAN	DATE	BY	NO.
SURVEYED			
NOTED			
ALIGNED			
CHECKED			
BY			
NO.			

PROFILE	DATE	BY	NO.
SURVEYED			
NOTED			
ALIGNED			
CHECKED			
BY			
NO.			



SUNSHINE STATE SURVEYORS, INC.
 ENGINEERS, SURVEYORS & LAND PLANNERS
 3131 ST. JOHNS BLUFF RD. SOUTH,
 JACKSONVILLE, FLORIDA 32216

16/92 RELEASED FOR CONSTRUCTION

SCALE: 1" = 50'

WORK ORDER NO. 592-61

DRAWN BY: J.L.R.

CHECKED BY: R.S.C.

STORM DRAINAGE
 (STA. 76+00 TO STA. 90+00)

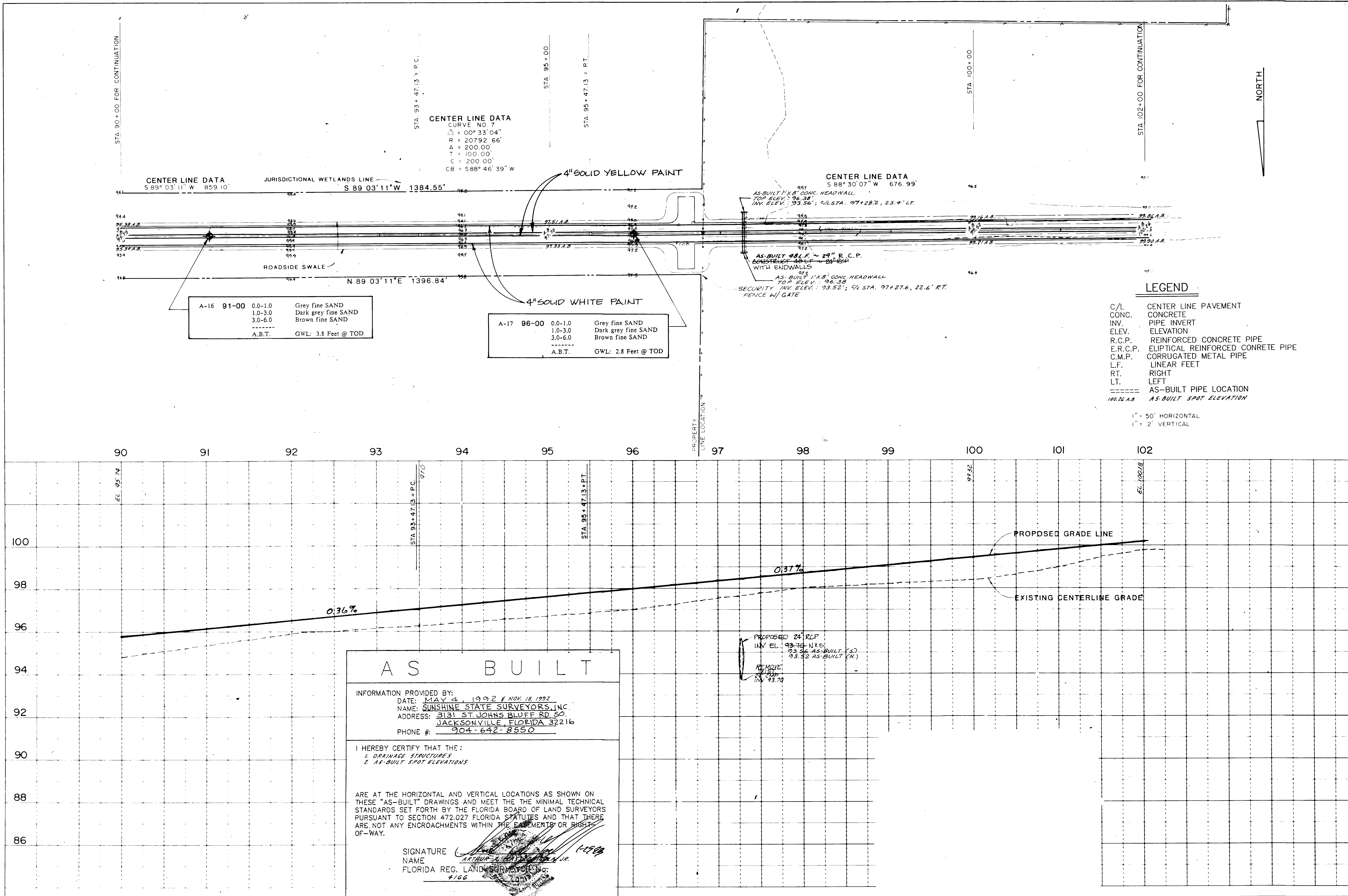
TRAIL RIDGE LANDFILL
 (PLAN A)

AS-BUILT

SHEET 18

PLAN	DATE	11-18-92
	BY	AS-BUILT
NOTE BOOK	NO. 1	11-18-92
	NO. 2	11-18-92

PROFILE	DATE	11-18-92
	BY	AS-BUILT
NOTE BOOK	NO. 1	11-18-92
	NO. 2	11-18-92



1/6/92 RELEASED FOR CONSTRUCTION

SUNSHINE STATE SURVEYORS, INC.
ENGINEERS, SURVEYORS & LAND PLANNERS
3131 ST. JOHNS BLUFF RD. SOUTH,
JACKSONVILLE, FLORIDA 32216

1/6/92 RELEASED FOR CONSTRUCTION

SCALE: 1" = 50'

WORK ORDER NO. 592-61

DRAWN BY: J.L.R.

CHECKED BY: R.S.C.

STORM DRAINAGE (STA. 90+00 - 102+24.12)

TRAIL RIDGE LANDFILL (PLAN A)

SHEET

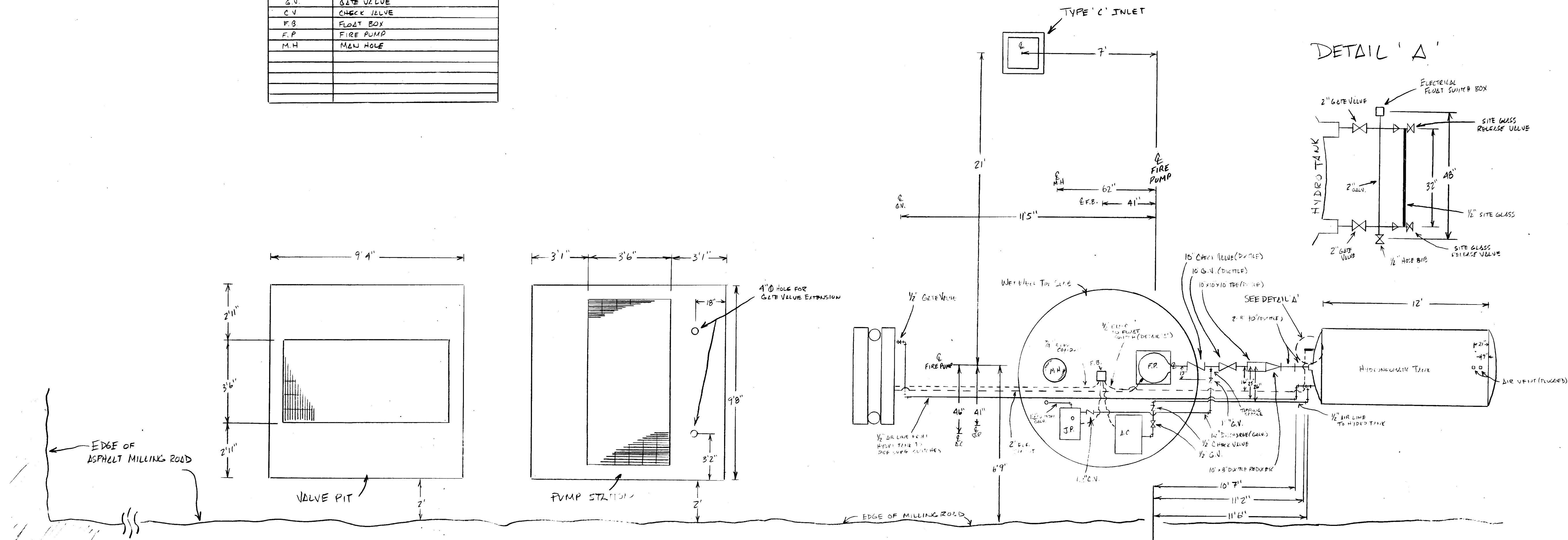
19

DATE OF LAST FIELDWORK: 11-18-92

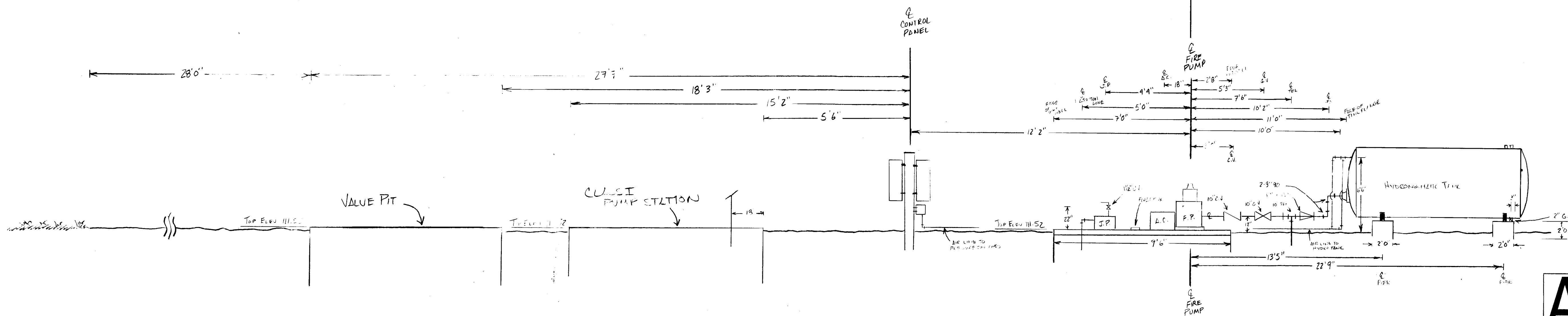
FIELD BOOK 336/30-34
386/31-38

FILE NO. 92D-5190

FIRE PUMP/HYDRO TANK LEGEND	
INITIAL	DESCRIPTION
C.L.	CENTER LINE
A.C.	AIR COMPRESSOR
J.P.	JOCKEY PUMP
G.V.	GATE VALVE
C.V.	CHECK VALVE
F.B.	FLOAT BOX
F.P.	FIRE PUMP
M.H.	MAN HOLE



CLASS I FIRE PUMP/HYDRO TANK-STORMWATER
ASBUILT - 'PLAN VIEW' N.T.S.



CLASS I FIRE PUMP/HYDRO TANK-STORMWATER
ASBUILT - 'ELEVATION VIEW' N.T.S.

SHEET 20

AS-BUILT

I hereby certify that the materials used in the construction of:

- Pavement
- Curb & Gutter
- Storm Drainage
- Water Main
- Sanitary Gravity Sewer
- Force Main
- Lift Station

are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.

Name: **BUCKLEY K. WILLIAMS** Date: **12-23-12**

Signature: _____

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

DATE: 12-22-12

CLASS I FIRE PUMP/HYDRO TANK - STORMWATER ASBUILT

TRAIL RIDGE LANDFILL

THE HASKELL COMPANY
ARCHITECTS/ENGINEERS/CONTRACTORS



AS-BUILT

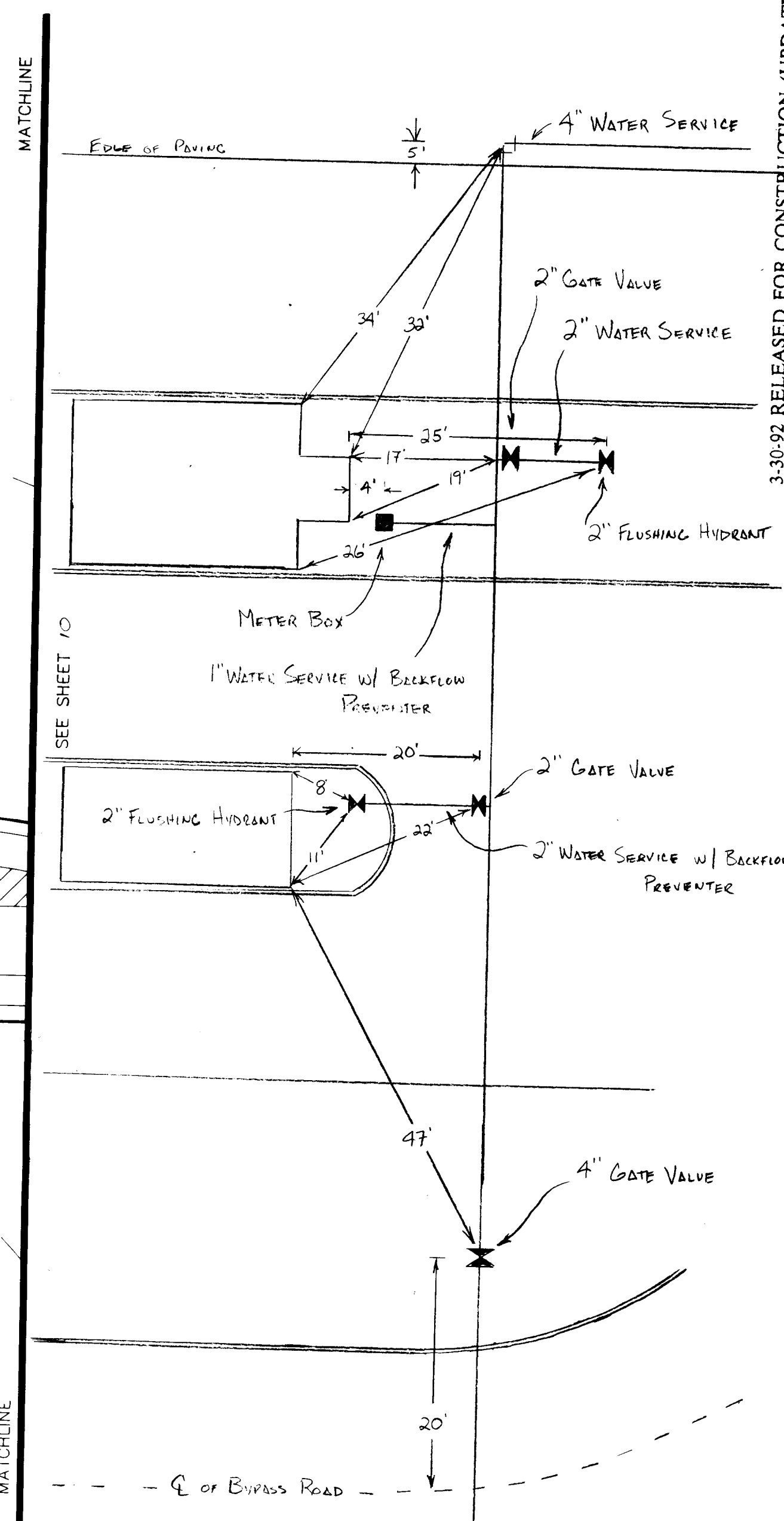
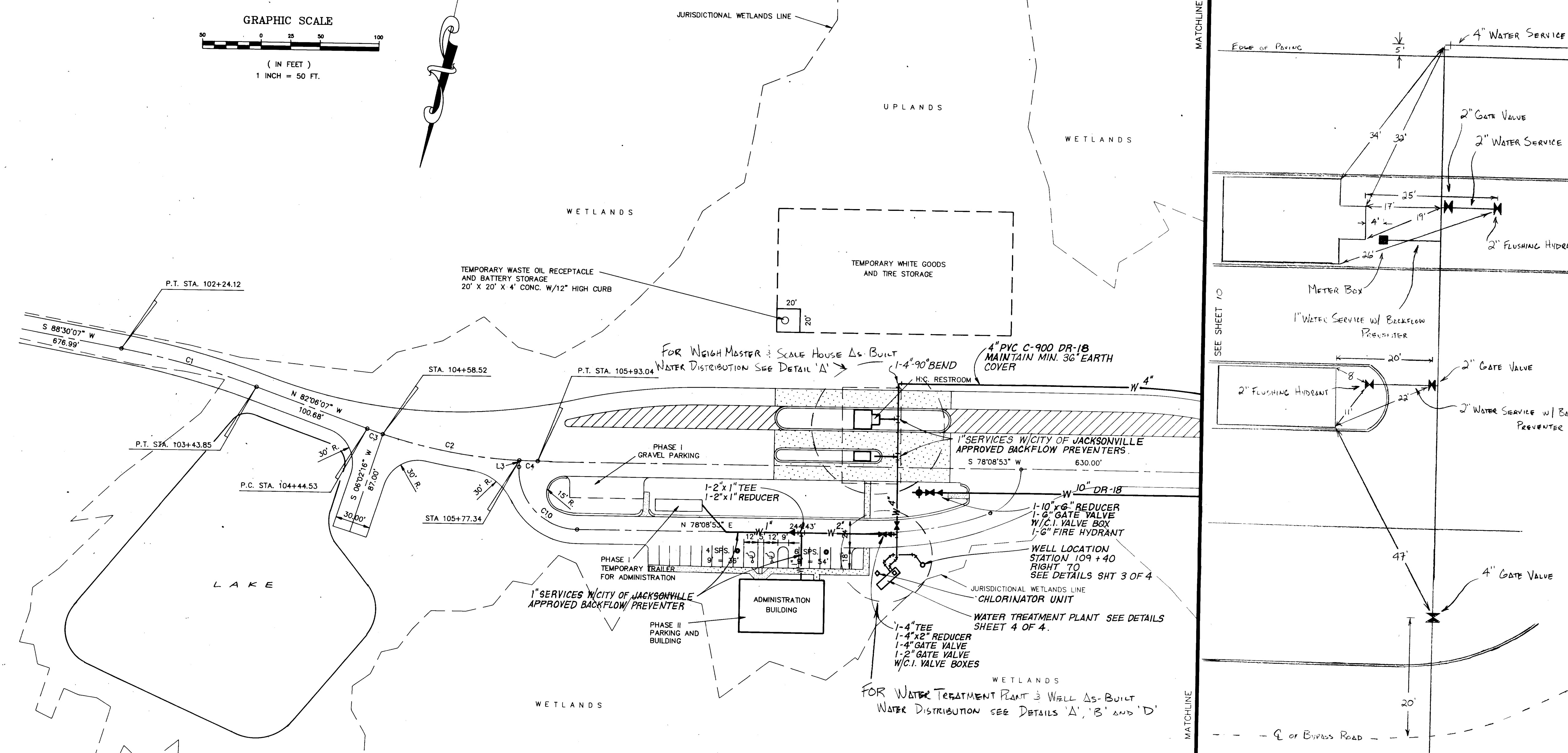
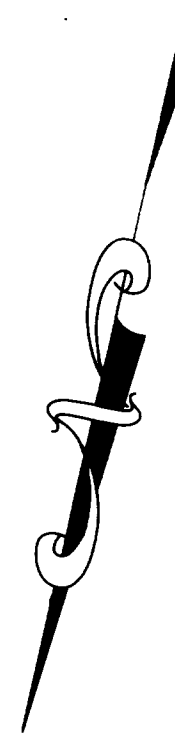
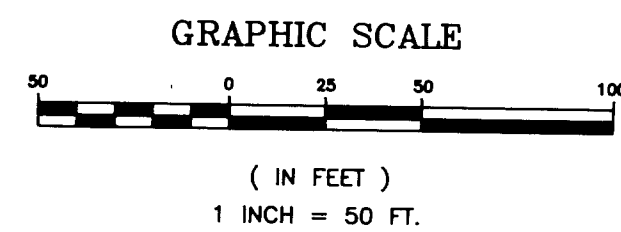
In accordance with Chapter 471, Florida Statutes, I hereby certify that the
Pavement Water Main
Curb & Gutter Sanitary Gravity Sewer
Storm Drainage Force Main
Lift Station
are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings,
and that these improvements are within the easements or right-of-way.
Name: James H. Haskell Date: 7-1-91
Signature: [Signature] FL Prof. Eng. No. 10101

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4830

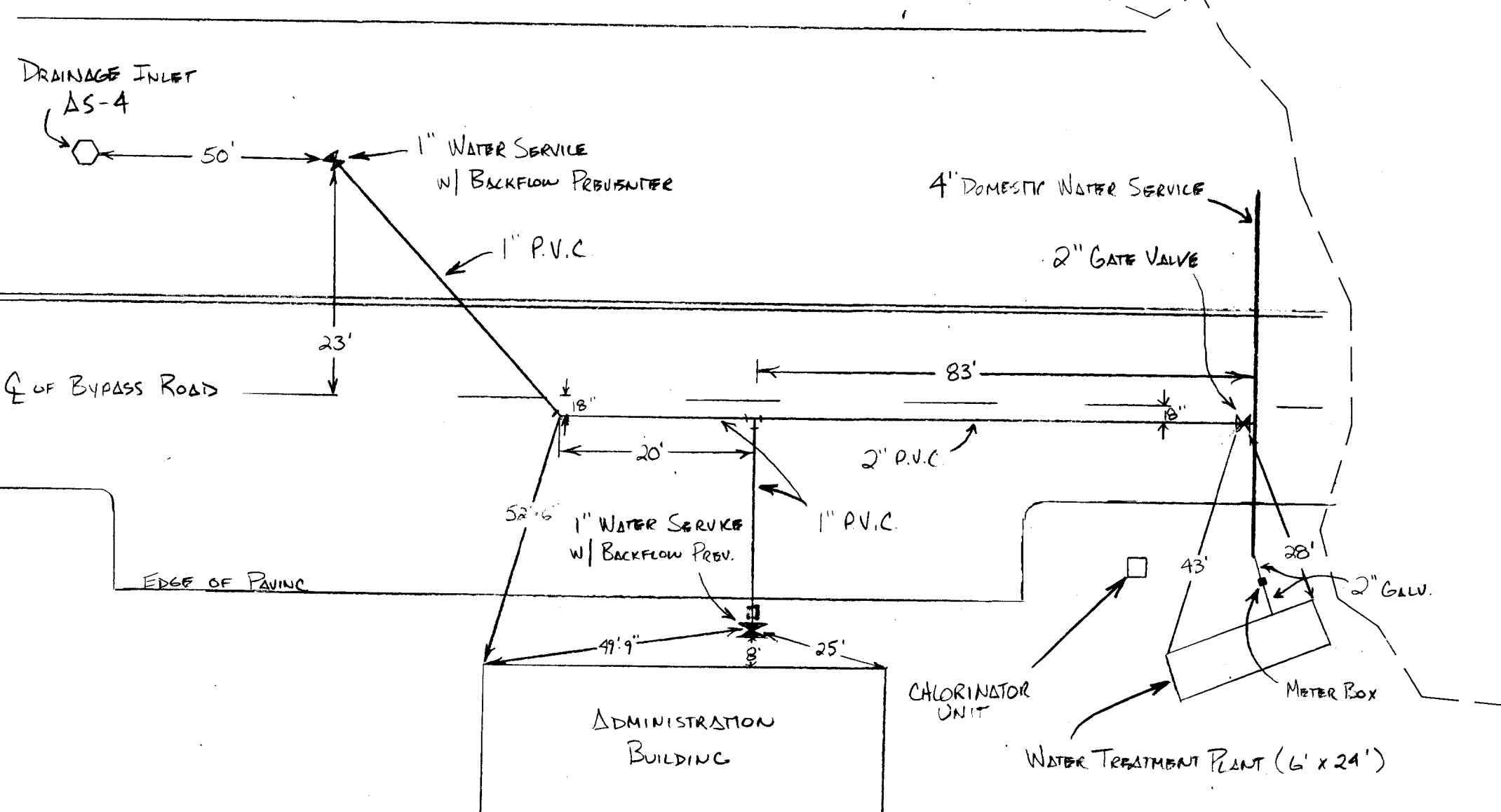
AS-BUILT

I hereby certify that the materials used in the construction of:
Pavement Water Main
Curb & Gutter Sanitary Gravity Sewer
Storm Drainage Force Main
Lift Station
are in accordance with the approved plans and city specifications, unless otherwise
approved by the city engineer.
Name: James H. Haskell Date: 7-1-91
Signature: [Signature]

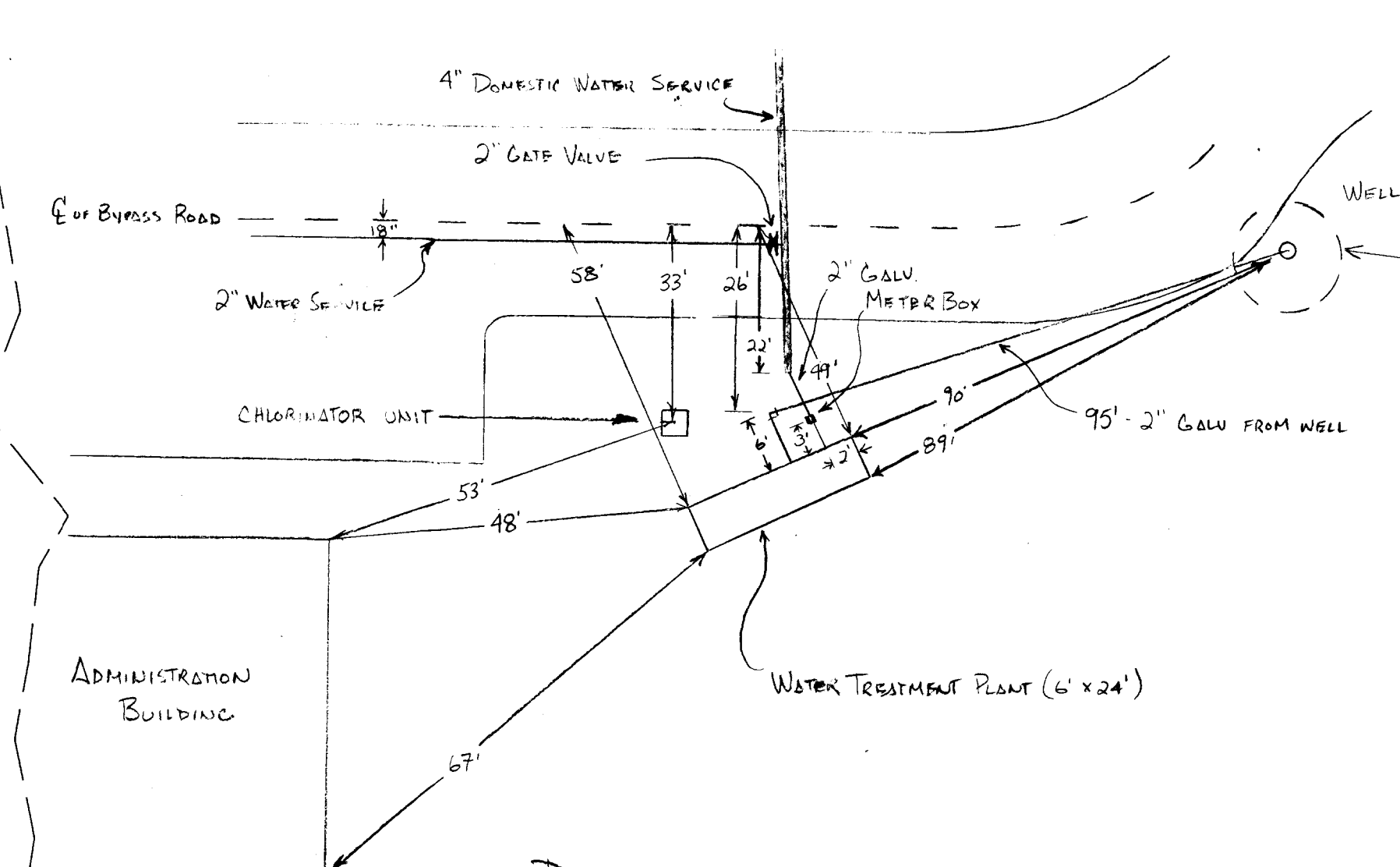
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4830



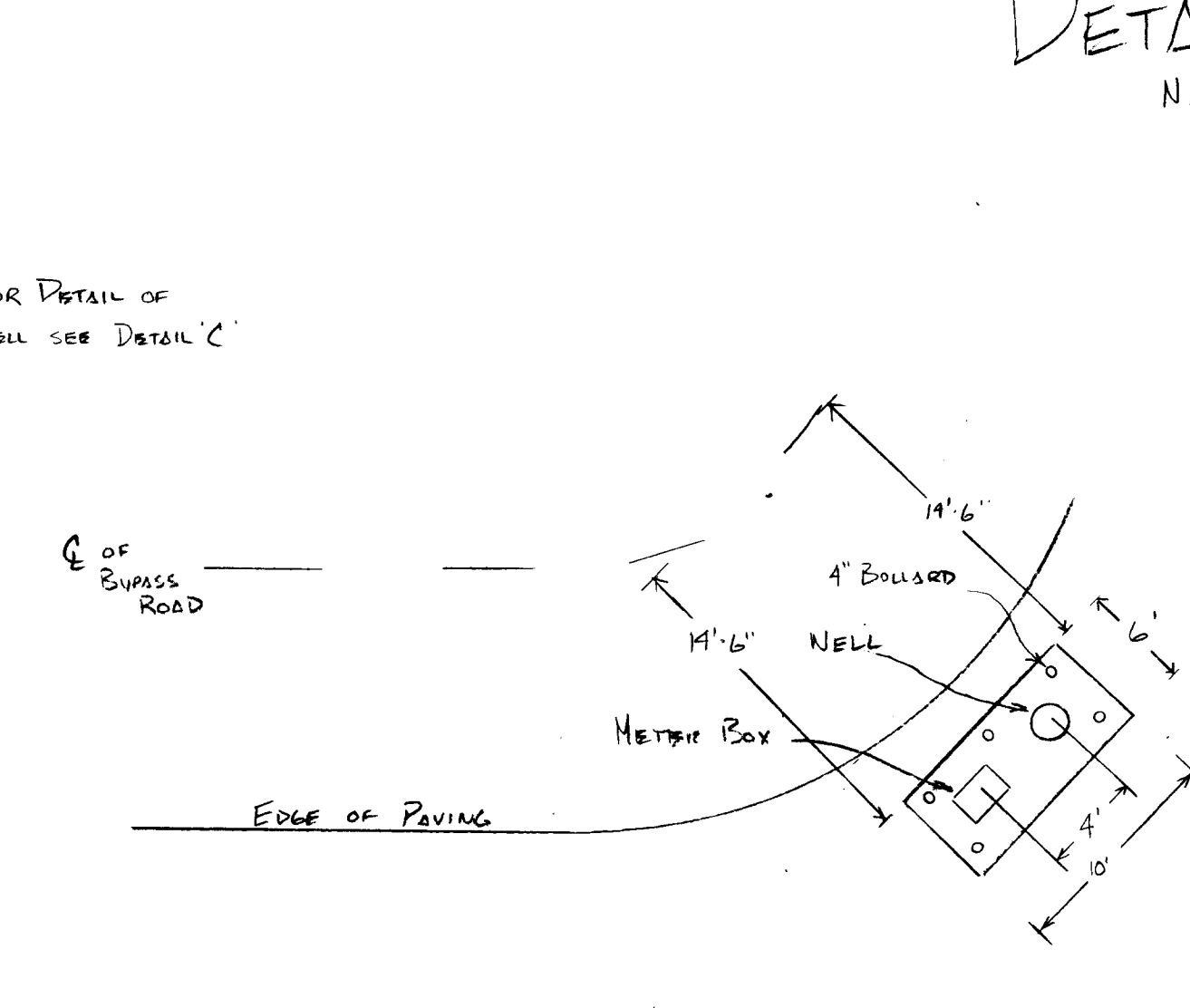
DETAIL 'A'
N.T.S.



DETAIL 'D'
N.T.S.



DETAIL 'B'
N.T.S.



DETAIL 'C'
N.T.S.

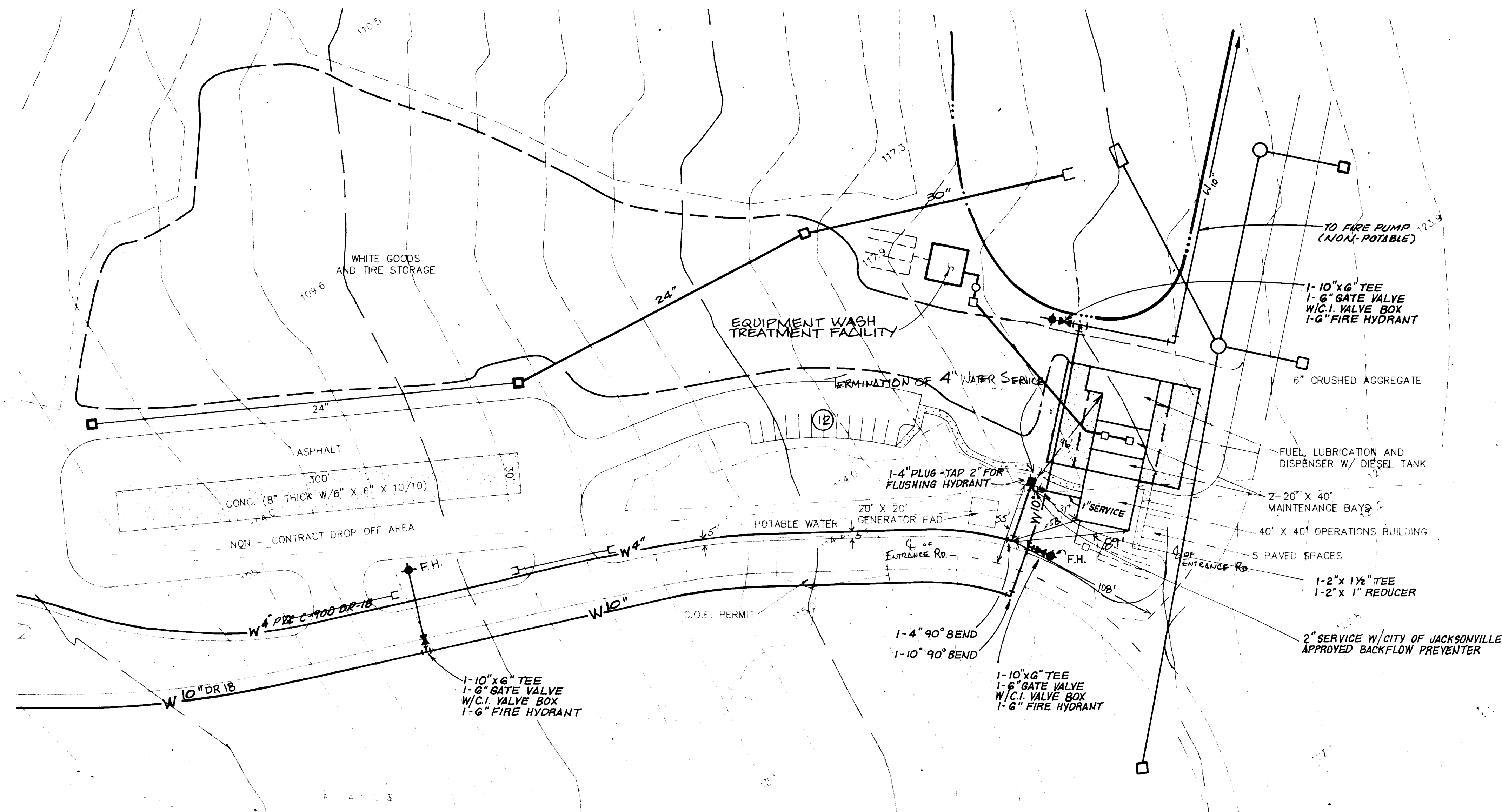
3-30-92 RELEASED FOR CONSTRUCTION (UPDATED)
1/6/92 RELEASED FOR CONSTRUCTION

REV.	NO.	DATE	BY	CHKD.
1	1	09-11-91	S.J.L.	J.T.

WATER TREATMENT FACILITY
TRAILRIDGE LANDFILL

JACKSONVILLE, FLORIDA

DRAWING NO.
WT 1



AS-BUILT

I hereby certify that the materials used in the construction of:
Pavement _____ Water Main _____
Curb & Gutter _____ Sanitary Gravity Sewer _____
Storm Drainage _____ Force Main _____
Lift Station _____
are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.
Name _____ Date 1/24/92
Signature _____
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

AS-BUILT

In accordance with Chapter 471, Florida Statutes, I hereby certify that the:
Pavement _____ Water Main _____
Curb & Gutter _____ Sanitary Gravity Sewer _____
Storm Drainage _____ Force Main _____
Lift Station _____
are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings, and that these improvements are within the easements or right-of-way.
Name _____ Date 1/24/92
Signature _____ FL Prof. Eng. No. 24000
JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

NOTE: REFER TO SHEET A3 FOR LIMITS OF PHASE I AND PHASE II CONSTRUCTION

3-30-92 RELEASED FOR CONSTRUCTION (UPDATED)

REVISIONS

PROJ. NO. E-91-126-2

DRAWN BY: C.D.T.

CHECKED BY: J.M.

DATE: JAN. 1992

WATER TREATMENT FACILITY

TRAIL RIDGE LANDFILL

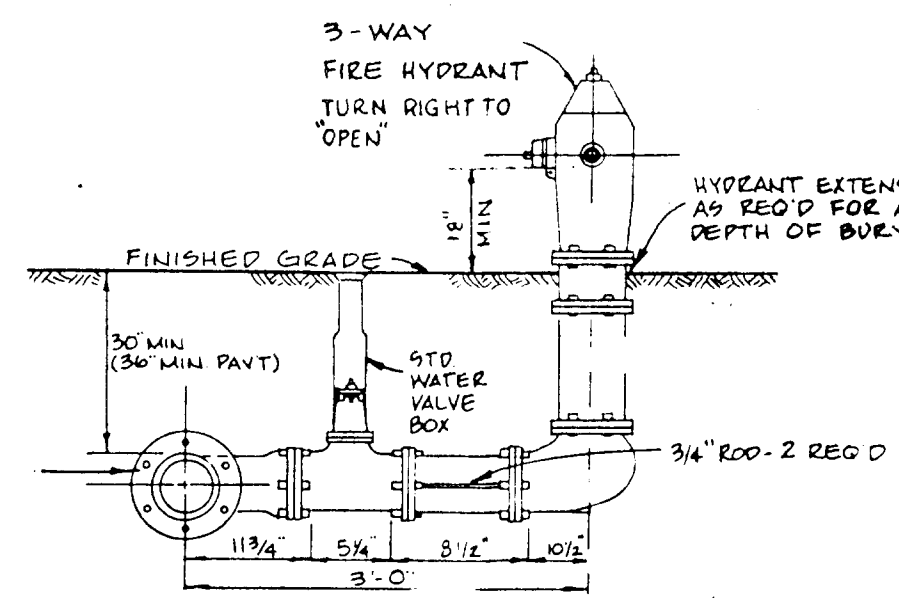
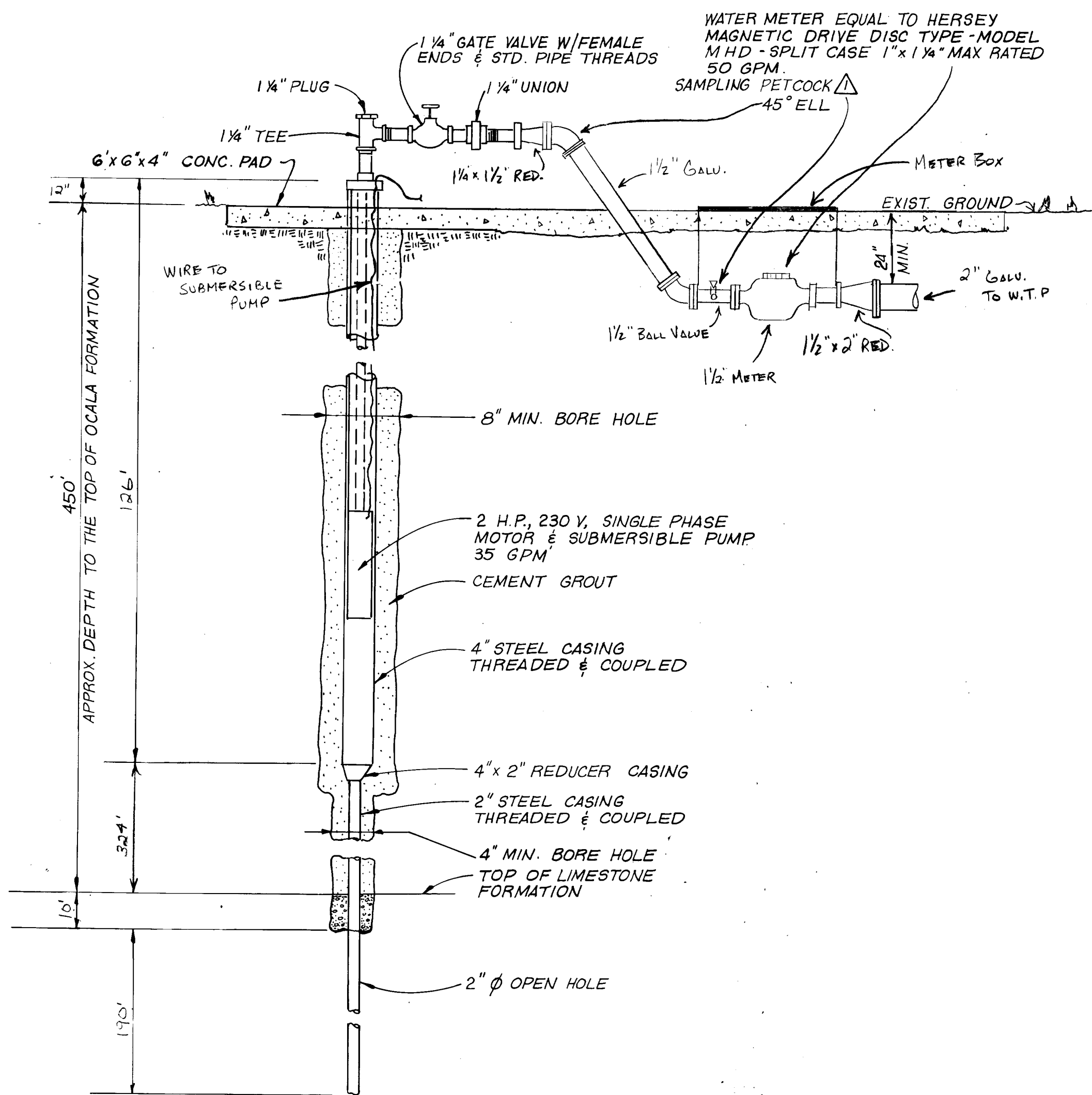
JACKSONVILLE, FLORIDA

JACKSONVILLE, FLORIDA

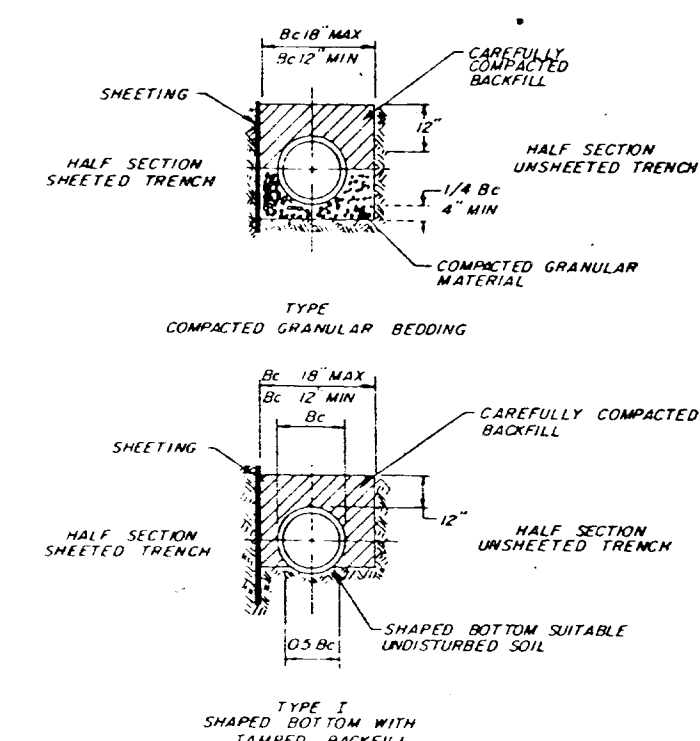
DRAWING NO.

WT 2

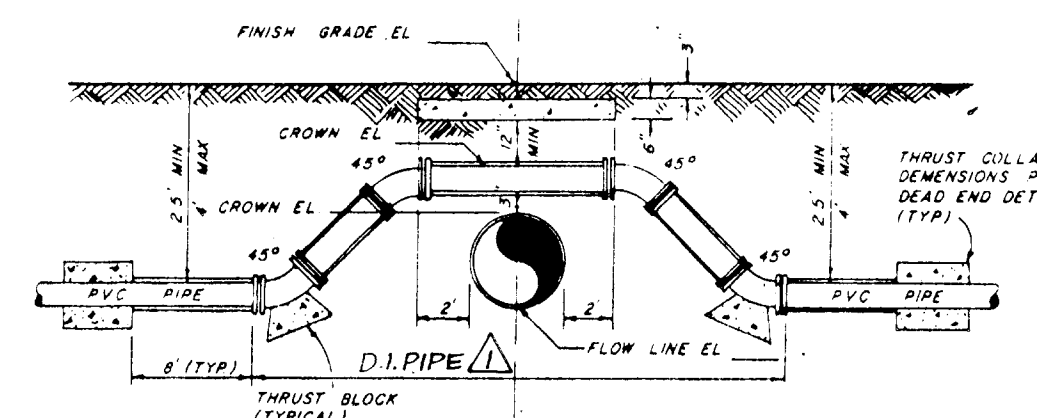
FOR CONSTRUCTION BY



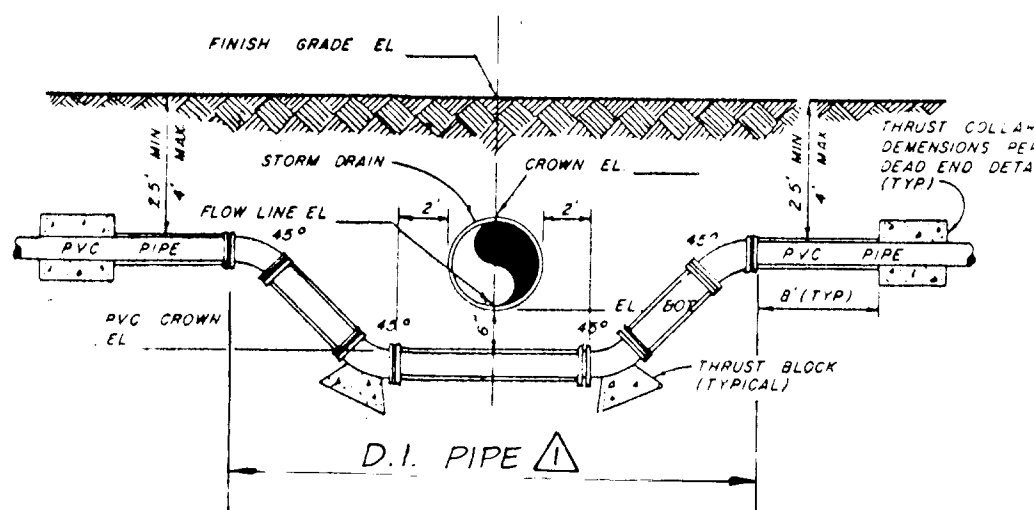
**HYDRANT INSTALLATION WITH TIE RODS
USING MECHANICAL JOINT FITTINGS**



BEDDING DETAILS CLASS "B"



WATER CROSSING OVER STORM



WATER CROSSING UNDER STORM

WATER NOTES

- TEN FEET HORIZONTAL AND 18" VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN ALL WATER LINES AND SANITARY SEWER LINES AND SERVICES (MINIMUM).
- ALL UNDERGROUND VALVES SHALL BE INSTALLED WITH AN ADJUSTABLE CAST IRON VALVE BOX TO GRADE.
- ALL WATER LINES SHALL HAVE A MINIMUM OF 30" COVER FROM FINISH GRADE IN UNPAVED AREAS AND 36" COVER IN PAVED AREAS.
- PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION OF WATER FACILITIES WITH ALL OTHER CONSTRUCTION AND SHALL BE RESPONSIBLE FOR LOCATION OF AND PROTECTION OF ALL EXISTING UNDERGROUND UTILITIES DURING CONSTRUCTION.
- WATER LINES ARE DESIGNED TO FINISH GRADE AND SHALL BE PROTECTED FROM DAMAGE UNTIL ALL WORK IS COMPLETED.
- UNUSABLE MATERIALS UNDER WATER PIPE OR STRUCTURES SHALL BE REMOVED AND REPLACED WITH SELECTED BACKFILL, PROPERLY COMPACTED PER CITY OF JACKSONVILLE STANDARDS. ALL UNSUITABLE MATERIAL IS TO BE HAULED OFF-SITE.
- FOR WATER DETAILS SEE DRAWING NO. 3.
- THE CONTRACTOR SHALL INDICATE THE LOCATION OF THE TERMINATION OF EACH WATER LINE WITH A STAKE OR MARKER SUITABLE TO THE OWNER OR ENGINEER.
- NO CONNECTION TO EXISTING POTABLE WATER SYSTEM SHALL BE ALLOWED UNTIL ALL PROPOSED WATER LINES HAVE BEEN PRESSURE TESTED, DISINFECTED, AND CLEARED FOR SERVICE.
- THRUST BLOCKING IS REQUIRED WHERE WATER MAINS ARE TERMINATED AND AT ALL BENDS.
- ALL PVC WATER MAIN MATERIALS SHALL BE AS FOLLOWS:
 - SIZES 4" AND UP, INCLUDING 8" IN DIAMETER - DR 18.
 - SIZES SMALLER THAN 4" SHALL BE SCH. 40 - N.S.F. APPROVED.
- ALL GATE VALVES SHALL BE RESILIENT SEAT TYPE OR DOUBLE WEDGE TYPE VALVES SHALL BE MECHANICAL JOINT, CAST IRON, BRONZE FITTED. ALL VALVES SHALL OPEN BY TURNING TO THE RIGHT. VALVES SHALL BE RATED AT 200 PSI WORKING PRESSURE AND 400 PSI TEST PRESSURE.
- FIRE HYDRANTS SHALL BE CITY OF JACKSONVILLE STANDARD.
- ALL WATER MAINS SHALL BE PRESSURE TESTED AT 150 PSI FOR 2 HOURS IN ACCORDANCE WITH AWWA STANDARDS AND CITY OF JACKSONVILLE STANDARD REQUIREMENTS.
- ALL WORK AND MATERIALS SHALL COMPLY WITH THE LATEST CITY OF JACKSONVILLE STANDARDS AND SPECIFICATIONS.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ALL REQUIRED PERMITS.
- THESE ENGINEERING DRAWINGS MAY NOT SHOW ALL THE CITY STANDARD DETAILS REQUIRED TO COMPLETE CONSTRUCTION OF THIS PROJECT. IT IS THE CONTRACTOR'S RESPONSIBILITY THAT THE CONSTRUCTION BE IN ACCORDANCE WITH ALL CURRENT CITY STANDARD DETAILS AND SPECIFICATIONS. THE CONTRACTOR SHALL OBTAIN A COPY OF THE CITY OF JACKSONVILLE STANDARD DETAILS AND SPECIFICATIONS FROM THE DEPARTMENT OF PUBLIC WORKS PRIOR TO BEGINNING CONSTRUCTION.
- "AS-BUILT"

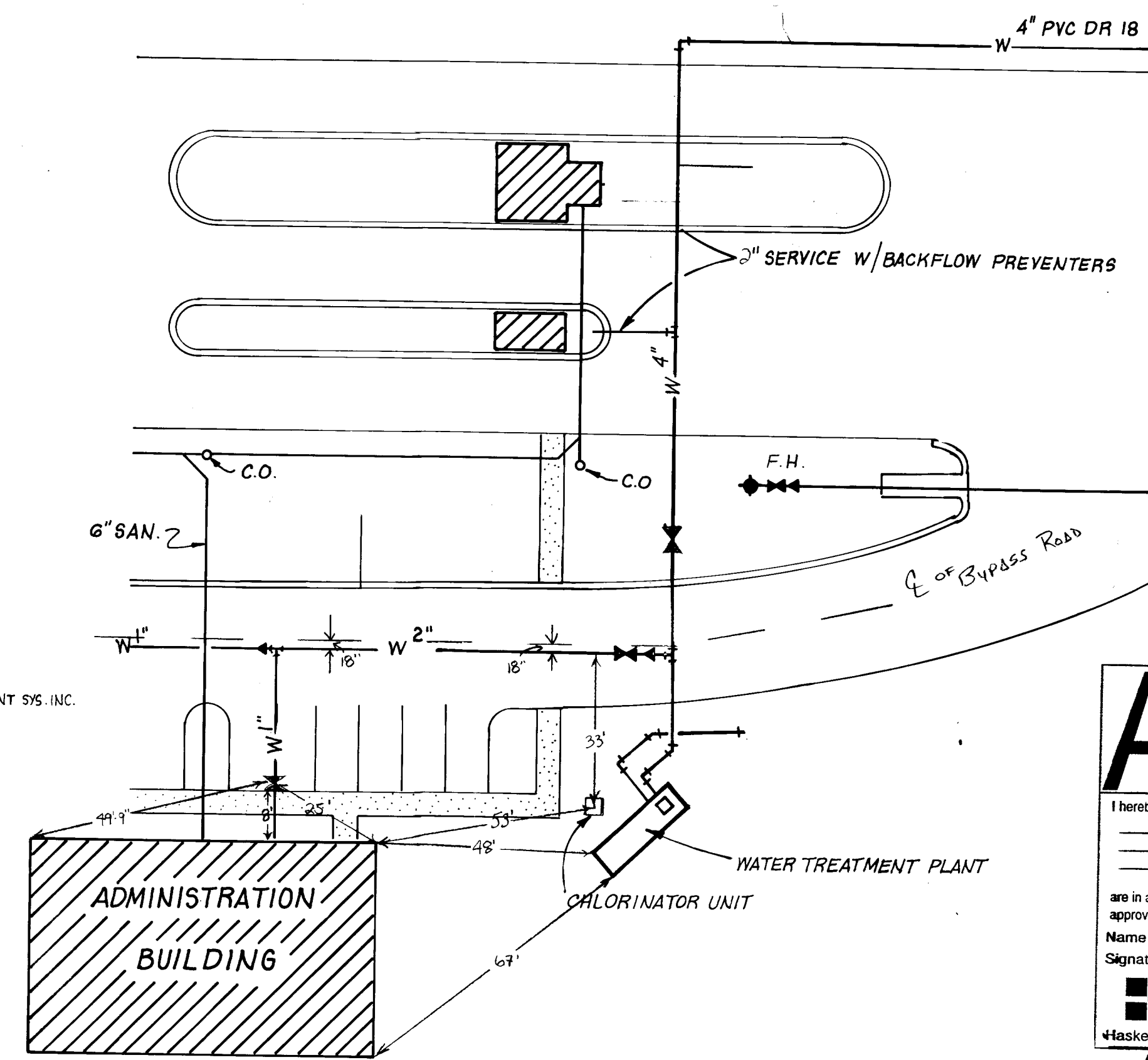
AS-BUILTS ARE REQUIRED TO BE SIGNED AND SEALED BY A FLORIDA REGISTERED LAND SURVEYOR THEREFORE: IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTRACT WITH A LAND SURVEYOR REGISTERED IN THE STATE OF FLORIDA FOR THE PREPARATION, FIELD LOCATIONS, CERTIFICATION AND SUBMITTAL OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH CURRENT CITY OF JACKSONVILLE STANDARDS AND SPECIFICATIONS. THE COST OF AS-BUILT SERVICES SHALL BE REFLECTED AS PART OF THE CONSTRUCTION COSTS FOR THE WATER DISTRIBUTION SYSTEM. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROCESS THE AS-BUILT DRAWINGS FOR APPROVAL BY THE OWNER.

WATER TREATMENT PLANT SPECIFICATIONS

THE CONTRACTOR SHALL FURNISH AND INSTALL COMPLETE AND READY FOR SERVICE ONE (1) PACKAGED STEEL WATER TREATMENT PLANT WITH A CAPACITY OF 10,000 GALLONS PER DAY.

THE PLANT SHALL BE SIMILAR AND EQUAL THAT MANUFACTURED BY WETHERELL TREATMENT SYS. INC. HAVING THE FOLLOWING COMPONENTS:

- | | |
|---|------------------|
| STORAGE TANK VOLUME: | 2,660 GAL. MIN. |
| HYDRO PNEUMATIC TANK VOLUME: | 1050 GAL. MIN. |
| AERATOR - 4 TRAY | 19.3 SQ. FT. |
| 2-HIGH SERVICE PUMPS | 70 GPM @140 TDH |
| GAS CHLORINATION SYSTEM | 0-25 LB/DAY MIN. |
| AIR COMPRESSOR | 2 CFM @70 P.S.I. |
| ELECTRICAL CONTROL PANEL AND PUMP CONTROLLER SYSTEM | |



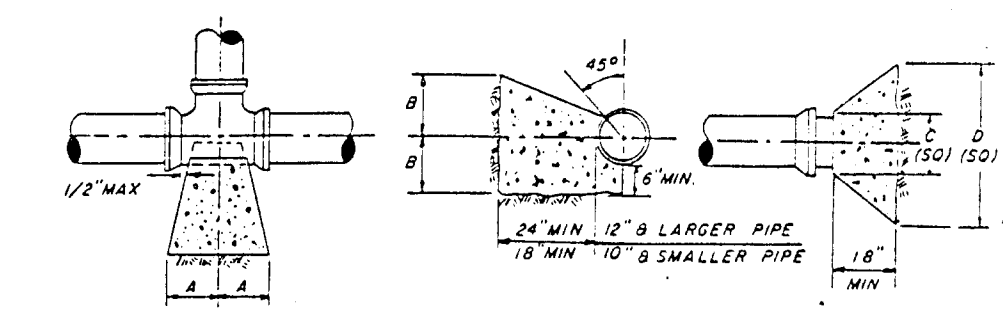
WATER TREATMENT PLANT SITE

N.T.S.

FOR AS-BUILT ON WATER TREATMENT PLANT SITE
SEE PLAN AND DETAILS ON SHEET WT1

THrust Blocks

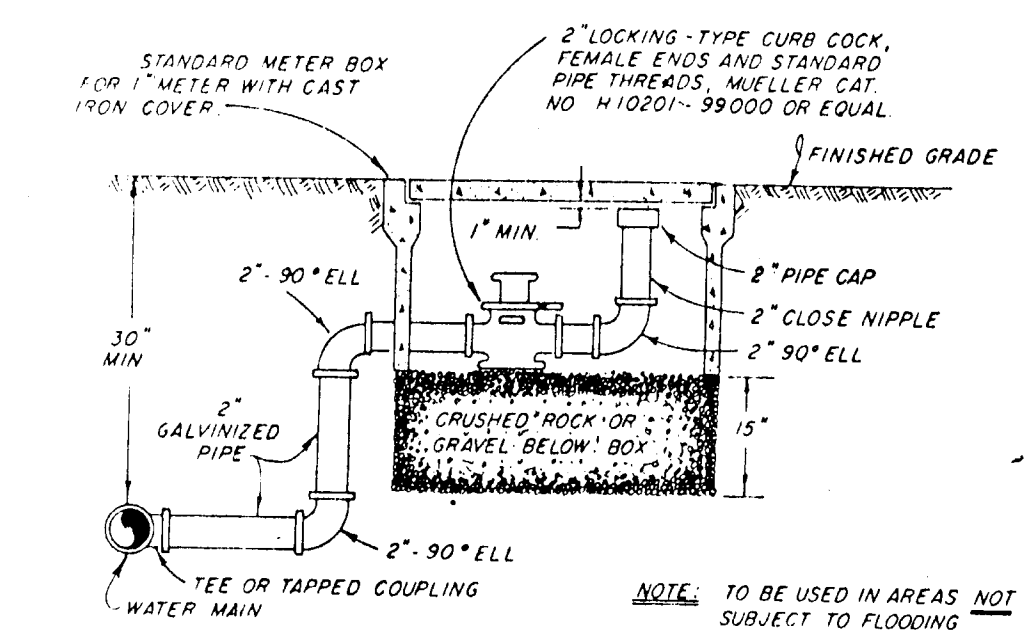
SIZE	TEE	CONC.	SIZE	TEE	CONC.
6"	10"	12"	3.5	6"	10"
8"	12"	16"	5.4	8"	12"
10"	16"	20"	9.4	10"	16"
12"	18"	24"	16.6	12"	18"
14"	22"	28"	23.2	14"	22"
16"	24"	30"	28.6	16"	24"
20"				20"	



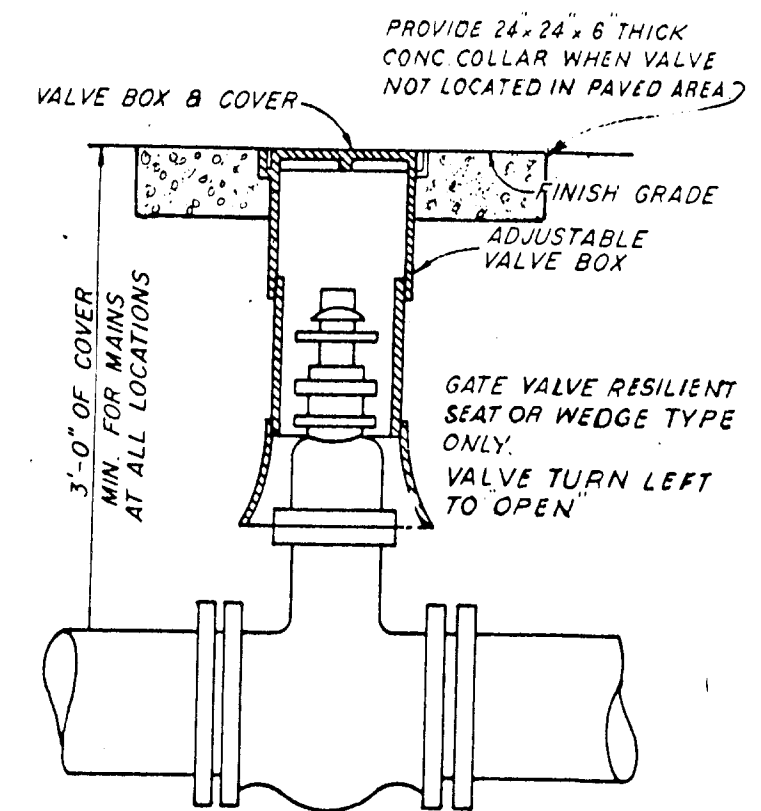
Notes

- ALL BEARING SURFACES TO BE CARRIED TO UNDISTURBED SOIL.
- THESE TABLES SHOW MINIMUM SIZE THRUST BLOCKS FOR 4000 SOIL (A1 THRU A3, CLEAN SAND AND GRAVELS).
- POOR SOIL (A4 THRU A8, SILTY SOILS, CLAYS, MUCK AND PEATWILL REQUIRE LARGER THRUST BLOCKS.

THRUST BLOCKS



FLUSHING VALVE BELOW GRADE TYPE



TYPICAL DETAIL GATE VALVE AND BOX

AS-BUILT

I hereby certify that the materials used in the construction of:

- Pavement
- Curb & Gutter
- Storm Drainage
- Sanitary Gravity Sewer
- Force Main
- Lift Station

are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.

Name _____ Date _____

Signature _____

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

AS-BUILT

In accordance with Chapter 471, Florida Statutes, I hereby certify that the:

- Pavement
- Curb & Gutter
- Storm Drainage
- Water Main
- Sanitary Gravity Sewer
- Force Main
- Lift Station

are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings, and that these improvements are within the easements or right-of-way.

Name _____ Date _____

Signature _____

JAX UTILITIES CONSTRUCTION
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

3-30-02 RELEASED FOR CONSTRUCTION (UPDATED)

REVISIONS
 ENG. PROJ. NO. E-41-126-2
 DRAWN BY C.D.T.
 CHECKED BY J.M.
 DATE JAN 1992

WATER TREATMENT FACILITY
TRAIL RIDGE LANDFILL
JACKSONVILLE, FLORIDA

JACKSONVILLE, FLORIDA

DRAWING NO. **WT 3**



I hereby certify that the materials used in the construction of:

Pavement	Water Main <u>PLANT</u>
Curb & Gutter	Sanitary Gravity Sewer
Storm Drainage	Force Main
	Lift Station

are in accordance with the approved plans and city specifications, unless otherwise approved by the city engineer.

Name Barbara K. Williams Date 7/5/93

Signature Barbara K. Williams

 **JAX UTILITIES CONSTRUCTION**
DIVISION OF THE HASKELL COMPANY

Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

In accordance with Chapter 471, Florida Statutes, I hereby certify that the

☐ Pavement	☒ Water Main
☐ Curb & Gutter	☒ Sanitary Gravity Sewer
☐ Storm Drainage	☐ Force Main
	☐ Lift Station

are at the horizontal and vertical locations as shown on these "AS-BUILT" drawings, and that these improvements are within the easements or right-of-way.

Name James E. Smith Date 7/14/09

Signature [Signature] FL Prof. Eng. No. 202609

 **JAX UTILITIES CONSTRUCTION**
DIVISION OF THE HASKELL COMPANY
Haskell Building • Jacksonville, Florida 32231-4100 • 904/791-4630

10,000 G.P.D.
WATER TREATMENT PLANT
"AS BUILT"

Glenn Wetherell

WETHERELL TREATMENT SYSTEMS, INC.
ORMOND BEACH, FLORIDA

SCALE AS SHOWN	APPROVED BY	DRAWN BY S. R. J.
DATE 6 / 8 / 92	<i>SDW</i>	REVISED 8-7-92

TRAIL RIDGE

WT 4