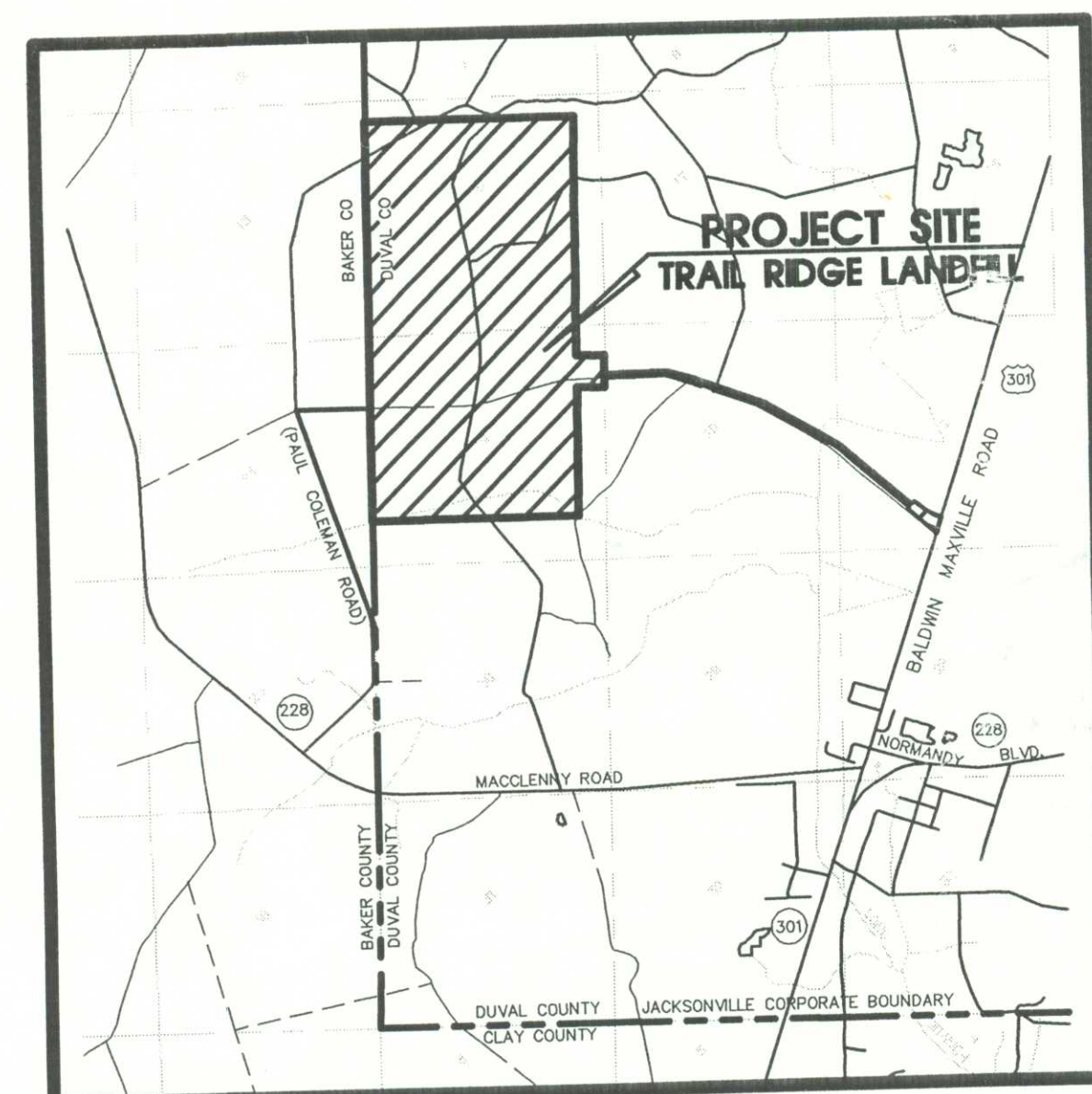
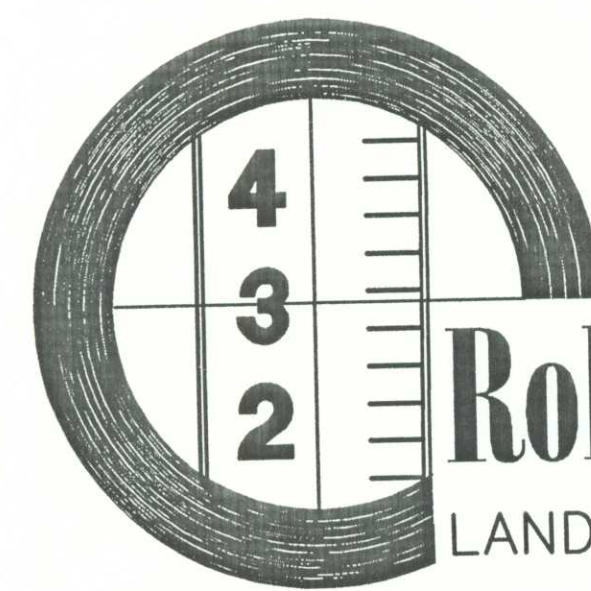


“AS - BUILTS” OF TRAIL RIDGE LANDFILL PHASES I, II, III A&B, IV A&B AND IIIC FOR TRAIL RIDGE LANDFILL, INC. AND CITY OF JACKSONVILLE, FLORIDA



VICINITY MAP



Robert M. Angas Associates, inc.

LAND SURVEYORS, PLANNERS AND CIVIL ENGINEERS
SINCE 1924

14775 St. Augustine Road, Jacksonville, FL. 32258
Telephone: (904) 642-8550 Fax: (904) 642-4165
Certificate of Authorization No.: LB 3624
(FORMERLY SUNSHINE STATE SURVEYORS)

UPDATED: DECEMBER, 2000
UPDATED: DECEMBER, 1996
UPDATED: SEPTEMBER, 1995
UPDATED: JANUARY, 1993
UPDATED: DECEMBER, 1992
DATE: SEPTEMBER, 1992

INDEX OF DRAWINGS

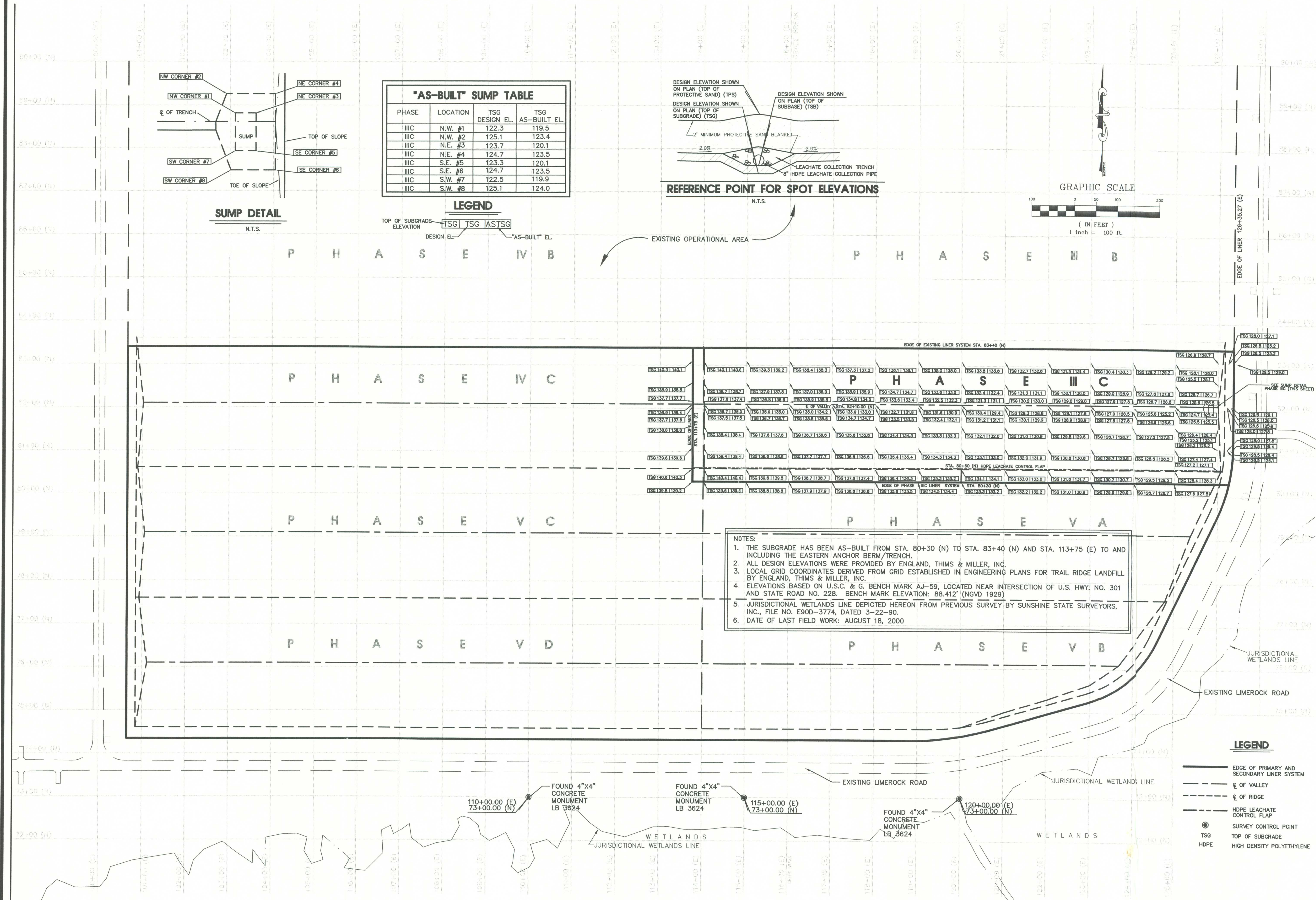
<u>SHEET NO.</u>	<u>DESCRIPTION</u>
COVER SHEET NUMBER 1	COVER SHEET
GROUNDWATER WELLS	
GW-1	GROUNDWATER MONITORING WELLS
LINER SYSTEM	
LS-1	LINER SYSTEM - PHASES I AND II
LS-2	LINER SYSTEM - PHASES I AND II
LS-3	LINER SYSTEM - PHASES I AND II
LS-4	LINER SUBGRADE - PHASES IIIA, IIIB, IVA, IVB
LS-5	LINER SYSTEM - PHASES IIIA, IIIB, IVA, IVB
LS-6	LINER SYSTEM LOCATION - PHASES IIIA, IIIB, IVA, IVB
LS-7	LINER SUBGRADE - PHASE IIIC
LS-8	LINER SYSTEM - PHASE IIIC
LS-9	LINER SYSTEM LOCATION - PHASE IIIC
LEACHATE SYSTEM	
LE-1	LEACHATE FORCE MAIN
LE-2	LEACHATE FORCE MAIN - PHASE IIIC
ELECTRICAL SYSTEM	
E-1	ELECTRICAL SYSTEM
E-2	ELECTRICAL SYSTEM
E-3	ELECTRICAL SYSTEM
DRAINAGE PLANS	
D-1	DRAINAGE STRUCTURE AND SPREADER PIPE DATA SHEET
D-2	PHASES I AND II DRAINAGE STRUCTURES
D-3	DETENTION LAKE
D-4	FILTER BED AREA
D-5	DRAINAGE STRUCTURES - PHASES IIIA, IIIB, IVA, IVB
D-6	DRAINAGE STRUCTURE TABLE - PHASES IIIA, IIIB, IVA, IVB
ANCILLARY FACILITIES	
A-1	ANCILLARY AREA FORCE MAIN, WATER MAIN AND STORM DRAINAGE
A-2	ANCILLARY AREA FORCE MAIN, WATER MAIN AND STORM DRAINAGE
ENTRANCE ROAD	
ER-1	ENTRANCE ROAD STORM DRAINAGE
ER-2	ENTRANCE ROAD STORM DRAINAGE
ER-3	ENTRANCE ROAD STORM DRAINAGE
ER-4	ENTRANCE ROAD STORM DRAINAGE
ER-5	ENTRANCE ROAD STORM DRAINAGE
ER-6	ENTRANCE ROAD STORM DRAINAGE
ER-7	ENTRANCE ROAD STORM DRAINAGE
FIRE PUMP	
P-1	CLASS I FIRE PUMP / HYDROTANK STORMWATER
WATER TREATMENT FACILITIES	
WT-1	WATER TREATMENT FACILITY
WT-2	WATER TREATMENT FACILITY
WT-3	WATER TREATMENT FACILITY
WT-4	WATER TREATMENT PLANT
ANCILLARY FACILITIES BUILDINGS	
201-711	ANCILLARY FACILITIES BUILDINGS PROVIDED BY THE HASKELL COMPANY
L-1 THRU L-4	ANCILLARY FACILITIES BUILDINGS PROVIDED BY THE HASKELL COMPANY

COVER SHEET NO. 1

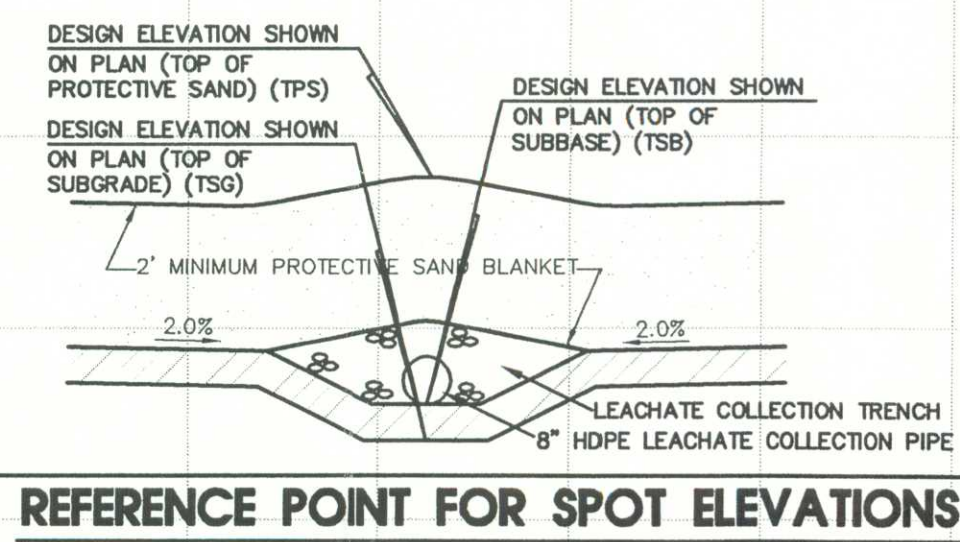
RECEIVED

DEC 08 2000

STATE OF FLORIDA
DEPT. OF ENV. PROTECTION
NORTHEAST DISTRICT-JAX



"AS-BUILT" SUMP TABLE			
PHASE	LOCATION	TSG DESIGN EL.	TSG AS-BUILT EL.
IIIC	N.W. #1	122.3	119.5
IIIC	N.W. #2	125.1	123.4
IIIC	N.E. #3	123.7	120.1
IIIC	N.E. #4	124.7	123.5
IIIC	S.E. #5	123.3	120.1
IIIC	S.E. #6	124.7	123.5
IIIC	S.W. #7	122.5	119.9
IIIC	S.W. #8	125.1	124.0



- NOTES:
1. THE SUBGRADE HAS BEEN AS-BUILT FROM STA. 80+30 (N) TO STA. 83+40 (N) AND STA. 113+75 (E) TO AND INCLUDING THE EASTERN ANCHOR BERM/TRENCH.
 2. ALL DESIGN ELEVATIONS WERE PROVIDED BY ENGLAND, THIMS & MILLER, INC.
 3. LOCAL GRID COORDINATES DERIVED FROM GRID ESTABLISHED IN ENGINEERING PLANS FOR TRAIL RIDGE LANDFILL BY ENGLAND, THIMS & MILLER, INC.
 4. ELEVATIONS BASED ON U.S.C. & G. BENCH MARK AJ-59, LOCATED NEAR INTERSECTION OF U.S. HWY. NO. 301 AND STATE ROAD NO. 228. BENCH MARK ELEVATION: 88.412' (NGVD 1929)
 5. JURISDICTIONAL WETLANDS LINE DEPICTED HEREON FROM PREVIOUS SURVEY BY SUNSHINE STATE SURVEYORS, INC., FILE NO. E90D-3774, DATED 3-22-90.
 6. DATE OF LAST FIELD WORK: AUGUST 18, 2000

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

JOSEPH LESLIE REYNOLDS, II
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA - L.S. No. 5517

LINER SYSTEM - SUBGRADE
PHASE III C
TRAIL RIDGE LANDFILL
FOR TRAIL RIDGE LANDFILL, INC. AND
CITY OF JACKSONVILLE

(FORMERLY) SUNSHINE STATE SURVEYORS)

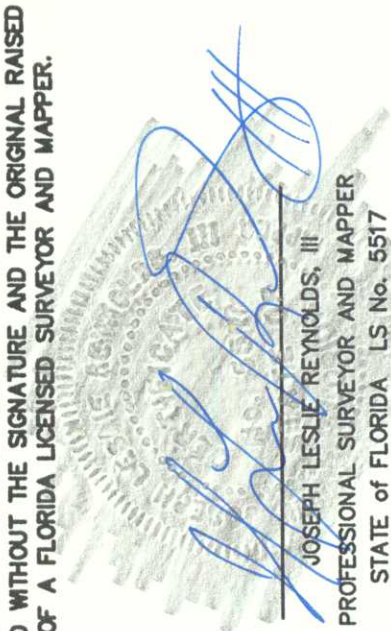
Robert M. Angas Associates, Inc.
LAND SURVEYORS, PLANNERS AND CIVIL ENGINEERS SINCE 1924
14775 St. Augustine Road, Jacksonville, FL 32258
Telephone: (904) 642-8550 Fax: (904) 642-4165
Certificate of Authorization No.: LB 3624

"AS-BUILT" SUBGRADE LOCATION TABLE		
PHASE	DATE:	LOCATION:
IIIC	07-11-00	STA. 80+60.00 TO STA. 81+60.00 (NORTH) STA. 114+00.00 TO STA. 115+00.00 (EAST)
IIIC	07-17-00	STA. 80+60.00 TO STA. 82+10.00 (NORTH) STA. 115+50.00 TO STA. 121+00.00 (EAST)
IIIC	07-21-00	STA. 80+30.00 TO STA. 82+10.00 (NORTH) STA. 114+00.00 TO STA. 125+50.00 (EAST)
IIIC	07-31-00	STA. 82+02.50 TO STA. 82+17.50 (NORTH) STA. 114+00.00 TO STA. 125+50.00 (EAST)
IIIC	08-01-00	STA. 82+00.50 TO STA. 82+16.50 (NORTH) STA. 114+24.00 TO STA. 125+50.00 (EAST)
IIIC	08-04-00	STA. 82+15.50 TO STA. 83+10.00 (NORTH) STA. 114+00.00 TO STA. 120+00.00 (EAST)
IIIC	08-08-00	STA. 82+15.50 TO STA. 83+39.00 (NORTH) STA. 114+00.00 TO STA. 125+50.00 (EAST)
IIIC	08-10-00	STA. 80+30.00 TO STA. 83+40.00 (NORTH) STA. 113+60.00 TO STA. 126+01.73 (EAST)
IIIC	08-14-00	STA. 80+30.00 TO STA. 83+40.00 (NORTH) STA. 126+00.00 TO STA. 126+40.77 (EAST)
IIIC	08-15-00	STA. 80+30.00 TO STA. 82+60.00 (NORTH) STA. 126+00.00 TO STA. 126+34.77 (EAST)
IIIC	08-18-00	STA. 79+75.00 TO STA. 80+22.00 (NORTH) STA. 119+00.00 TO STA. 123+50.00 (EAST)

"AS-BUILT" SUBBASE LOCATION TABLE		
PHASE	DATE:	LOCATION:
IIIC	08-17-00	STA. 82+06.40 TO STA. 83+40.00 (NORTH) STA. 113+75.00 TO STA. 116+00.00 (EAST)
IIIC	08-18-00	STA. 80+30.00 TO STA. 82+12.50 (NORTH) STA. 113+75.00 TO STA. 116+00.00 (EAST)
IIIC	08-22-00	STA. 80+30.00 TO STA. 83+40.00 (NORTH) STA. 113+75.00 TO STA. 117+00.00 (EAST)
IIIC	08-23-00	STA. 80+30.00 TO STA. 83+40.00 (NORTH) STA. 116+50.00 TO STA. 120+00.00 (EAST)
IIIC	08-25-00	STA. 80+30.00 TO STA. 83+40.00 (NORTH) STA. 120+00.00 TO STA. 121+00.00 (EAST)
IIIC	08-26-00	STA. 80+30.00 TO STA. 83+40.00 (NORTH) STA. 121+50.00 TO STA. 125+00.00 (EAST)
IIIC	09-26-00	STA. 82+06.50 TO STA. 83+40.00 (NORTH) STA. 124+60.00 TO STA. 125+50.00 (EAST)
IIIC	09-27-00	STA. 82+60.00 TO STA. 83+40.00 (NORTH) STA. 126+00.00 TO STA. 126+37.27 (EAST)
IIIC	09-28-00	STA. 80+60.00 TO STA. 82+32.41 (NORTH) STA. 125+62.96 TO STA. 126+34.77(EAST)
IIIC	10-04-00	STA. 80+30.00 TO STA. 81+60.00 (NORTH) STA. 126+04.31 TO STA. 126+35.75 (EAST)
IIIC	11-10-00	STA. 80+60.00 TO STA. 83+40.00 (NORTH) STA. 126+21.00 TO STA. 126+25.00 (EAST)
IIIC	11-28-00	STA. 80+60.00 TO STA. 83+40.00 (NORTH) STA. 126+25.00 TO STA. 126+29.00 (EAST)

"AS-BUILT" SAND BLANKET LOCATION TABLE		
PHASE	DATE:	LOCATION:
IIIC	11-13-00	STA. 81+10.00 TO STA. 83+40.00 (NORTH) STA. 115+00.00 TO STA. 117+50.00 (EAST)
IIIC	11-14-00	STA. 80+45.00 TO STA. 83+40.00 (NORTH) STA. 118+00.00 TO STA. 123+50.00 (EAST)
IIIC	11-15-00	STA. 80+45.00 TO STA. 83+40.00 (NORTH) STA. 124+00.00 TO STA. 125+50.00 (EAST)
IIIC	11-20-00	STA. 80+68.00 TO STA. 83+40.00 (NORTH) STA. 114+00.00 (EAST)
IIIC	12-01-00	STA. 80+05.00 TO STA. 82+15.00 (NORTH) STA. 114+00.00 (EAST)

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.



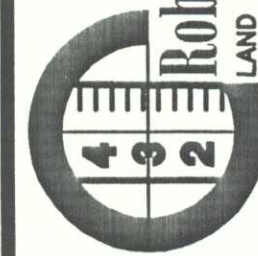
JOSEPH LESLIE REYNOLDS III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA LS No. 5917

REVISIONS:

AS-BUILT LOCATION TABLE
PHASE IIIC

TRAIL RIDGE LANDFILL
FOR TRAIL RIDGE LANDFILL, INC. AND
CITY OF JACKSONVILLE

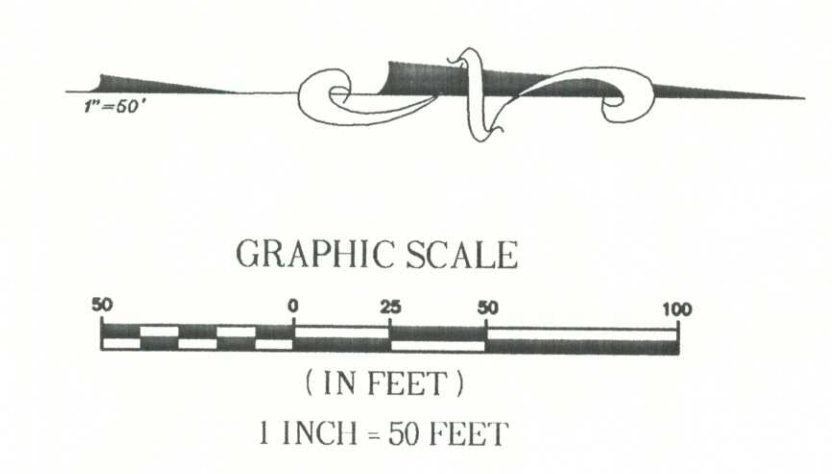
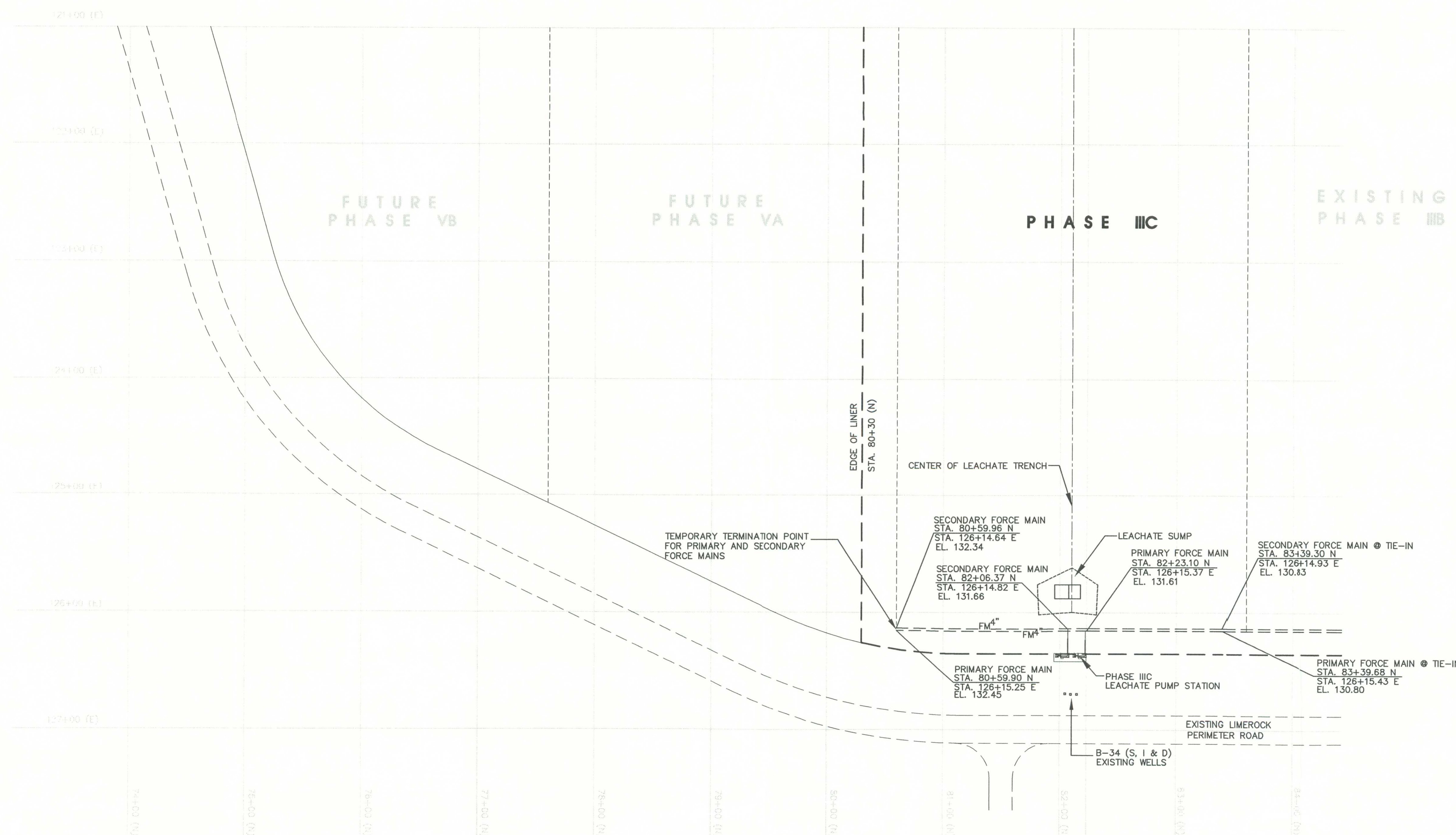
(FORMERLY SUNSHINE STATE SURVEYORS)



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SINCE 1924
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Certificate of Authorization No.: LS 3624

"AS-BUILT"

SHEET LS-9



- NOTES:
- HORIZONTAL SEPARATION BETWEEN THE PRIMARY FORCE MAIN AND SECONDARY FORCE MAIN HAS BEEN EXAGGERATED FOR CLARITY PURPOSES ONLY. (NOT TO SCALE)
 - 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' (NGVD 1929)
 - DATE OF LAST FIELD WORK: NOVEMBER 16, 2000

LEGEND	
== FM 4" ==	LEACHATE FORCE MAIN
---	LIMITS OF LINER SYSTEM
---	OF VALLEY
---	OF RIDGE

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

JOSEPH LESLIE REYNOLDS, III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA L.S. No. 5517

REVISIONS:

**LEACHATE FORCE MAIN
PRIMARY AND SECONDARY**

**TRAIL RIDGE LANDFILL
FOR TRAIL RIDGE LANDFILL, INC. AND
CITY OF JACKSONVILLE, FLORIDA**

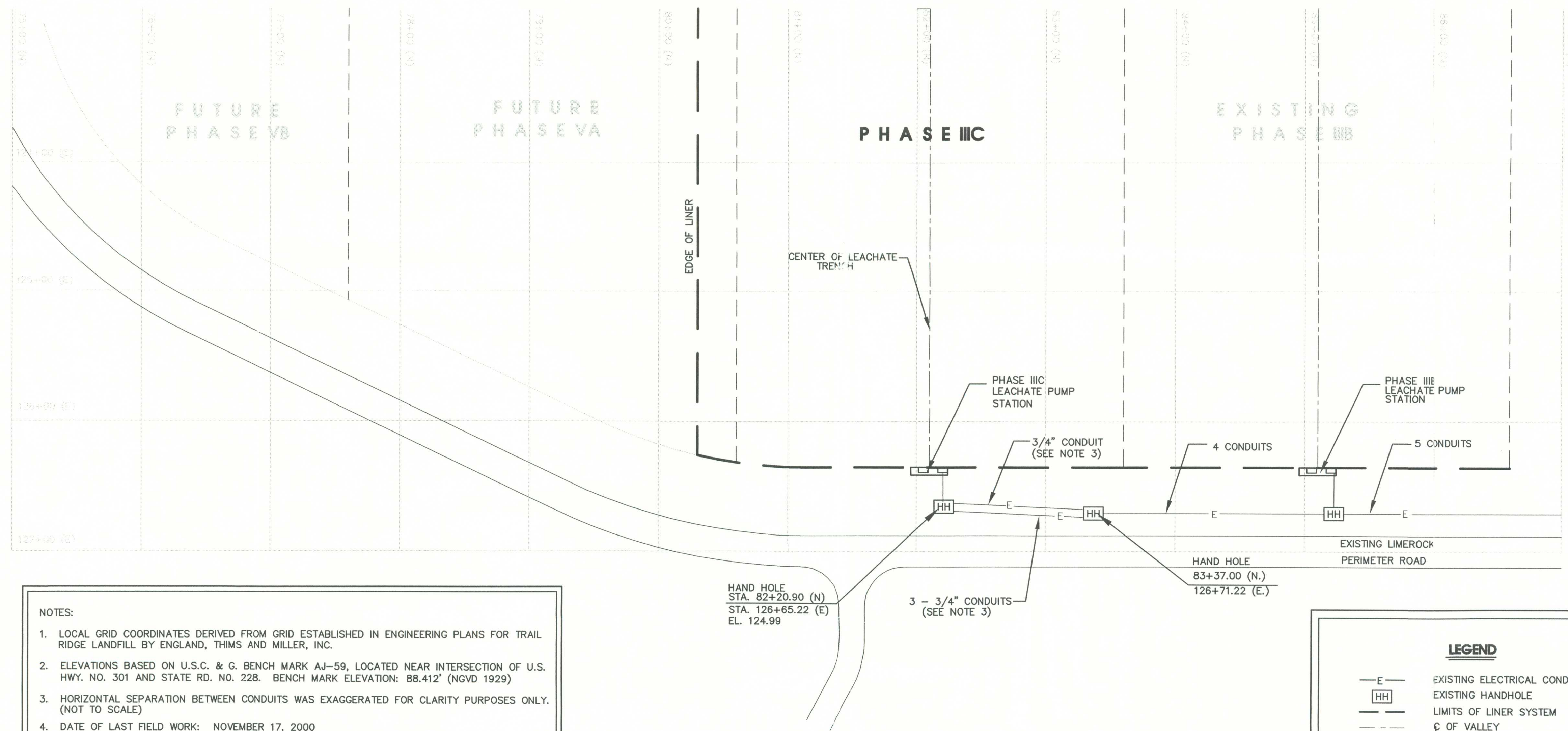
(FORMERLY SUNSHINE STATE SURVEYORS)

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SINCE 1924

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Certificate of Authorization No. LD 3024

"AS-BUILT"

SHEET LE-2

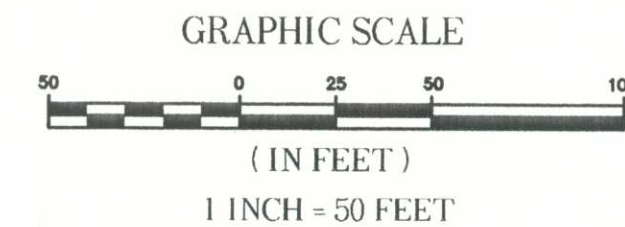


NOTES:

1. LOCAL GRID COORDINATES DERIVED FROM GRID ESTABLISHED IN ENGINEERING PLANS FOR TRAIL RIDGE LANDFILL BY ENGLAND, THIMS AND MILLER, INC.
2. 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' (NGVD 1929)
3. HORIZONTAL SEPARATION BETWEEN CONDUITS WAS EXAGGERATED FOR CLARITY PURPOSES ONLY. (NOT TO SCALE)
4. DATE OF LAST FIELD WORK: NOVEMBER 17, 2000

LEGEND

- E — EXISTING ELECTRICAL CONDUIT
- [HH] EXISTING HANDHOLE
- LIMITS OF LINER SYSTEM
- - - C OF VALLEY
- C OF RIDGE



REVISIONS:

ELECTRICAL - PHASE III C

FOR TRAIL RIDGE LANDFILL, INC. AND
CITY OF JACKSONVILLE

(FORMERLY SUNSHINE STATE SURVEYORS)



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JOSEPH LESLIE BERNHARDT, III
PROFESSIONAL SURVEYOR AND MAPPER
STATE OF FLORIDA, LS No. 5517

"AS-BUILT"

SHEET E-3