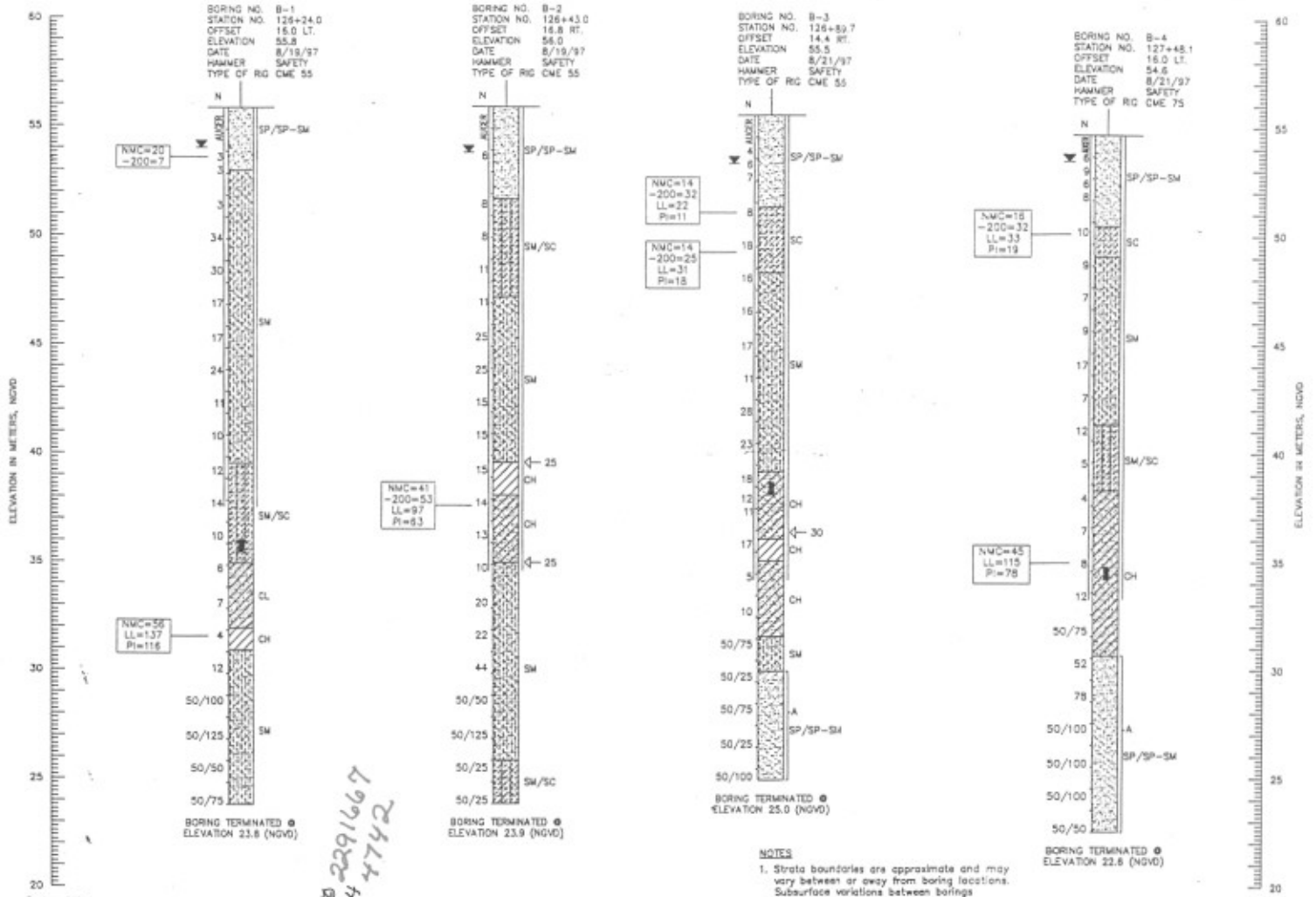


LEGEND

- (SP/SP-SM), GRAY TO BROWN FINE SAND WITH SILT
- (SM), LIGHT GRAY TO BROWN SILTY FINE SAND
- (SM/SC), LIGHT GRAY TO GREENISH-GRAY SILTY TO CLAYEY FINE SAND
- (SC/CH), ORANGISH-BROWN TO GREENISH-GRAY CLAYEY SAND TO SANDY CLAY
- (CH), ORANGISH-BROWN TO GRAY CLAY
- (SC), LIGHT GRAY CLAYEY FINE SAND
- A WITH LIME SILTS

NOTES:

- WATER TABLE
- N STANDARD PENETRATION RESISTANCE IN BLOWS PER 305mm (455mm SPOON ASTM D-1586) USING A 63.5 kg SAFETY HAMMER ON A CME 55 DRILL RIG UNLESS OTHERWISE NOTED
- CASING USED
- SHELBY TUBE SAMPLE LOCATION
- WR FELL UNDER WEIGHT OF ROD
- LOSS OF CIRCULATION (%)
- -200 FINES PASSING NO. 200 SIEVE (%)
- NMC NATURAL MOISTURE CONTENT (%)
- LL LIQUID LIMIT (%)
- PI PLASTICITY INDEX (%)

ENVIRONMENTAL CLASSIFICATION

SUBSTRUCTURE: EXTREMELY AGGRESSIVE - STEEL
MODERATELY AGGRESSIVE - CONCRETE (pH = 5.81)
SUPERSTRUCTURE: SLIGHTLY AGGRESSIVE

SOIL

RESISTIVITY: 1,800-15,000 OHMS-CM
CHLORIDES: 15-30 PPM
SULFATES: <3-16 PPM
pH: 5.81-7.73

GRANULAR MATERIALS-RELATIVE DENSITY	SPT (BLOWS/300mm)
VERY LOOSE	LESS THAN 4
LOOSE	4-10
MEDIUM	10-30
DENSE	30-50
VERY DENSE	GREATER THAN 50
SILTS AND CLAYS CONSISTENCY	**SPT (BLOWS/300mm)**
VERY SOFT	LESS THAN 2
SOFT	2-4
FIRM	4-8
STIFF	8-15
VERY STIFF	15-30
HARD	GREATER THAN 30

NOTES

1. Strata boundaries are approximate and may vary between or away from boring locations. Subsurface variations between borings should be anticipated as indicated in Section 2-4 of the Standard Specifications.
2. Based on a review of the Water Management District Potentiometric map of the upper Floridan Aquifer for the Project Area, the maximum potential Artesian Head Elevation in the Floridan Aquifer is estimated to be +24 to +27 meters, NGVD. The contractor shall be prepared to handle artesian water levels from the Floridan Aquifer up to elevation +27 feet, NGVD.

164506 28-81-2291667 SG-904-4742

REVISIONS								
Date	By	Description	Date	By	Description		Name	Date
						Drawn by	DJW	5/99
						Checked by	KH	5/99
						Designed by		
						Checked by		
						Approved by	LARRY P. MOORE, P.E.	

ENGINEER OF RECORD: PROFESSIONAL SERVICE INDUSTRIES, INC.

LOGO: PSI ENVIRONMENTAL GEOTECHNICAL CONSTRUCTION

SEAL:

FLORIDA DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN OFFICE

ROAD NO.	COUNTY	PROJECT NO.
—	POLK	16000-1502

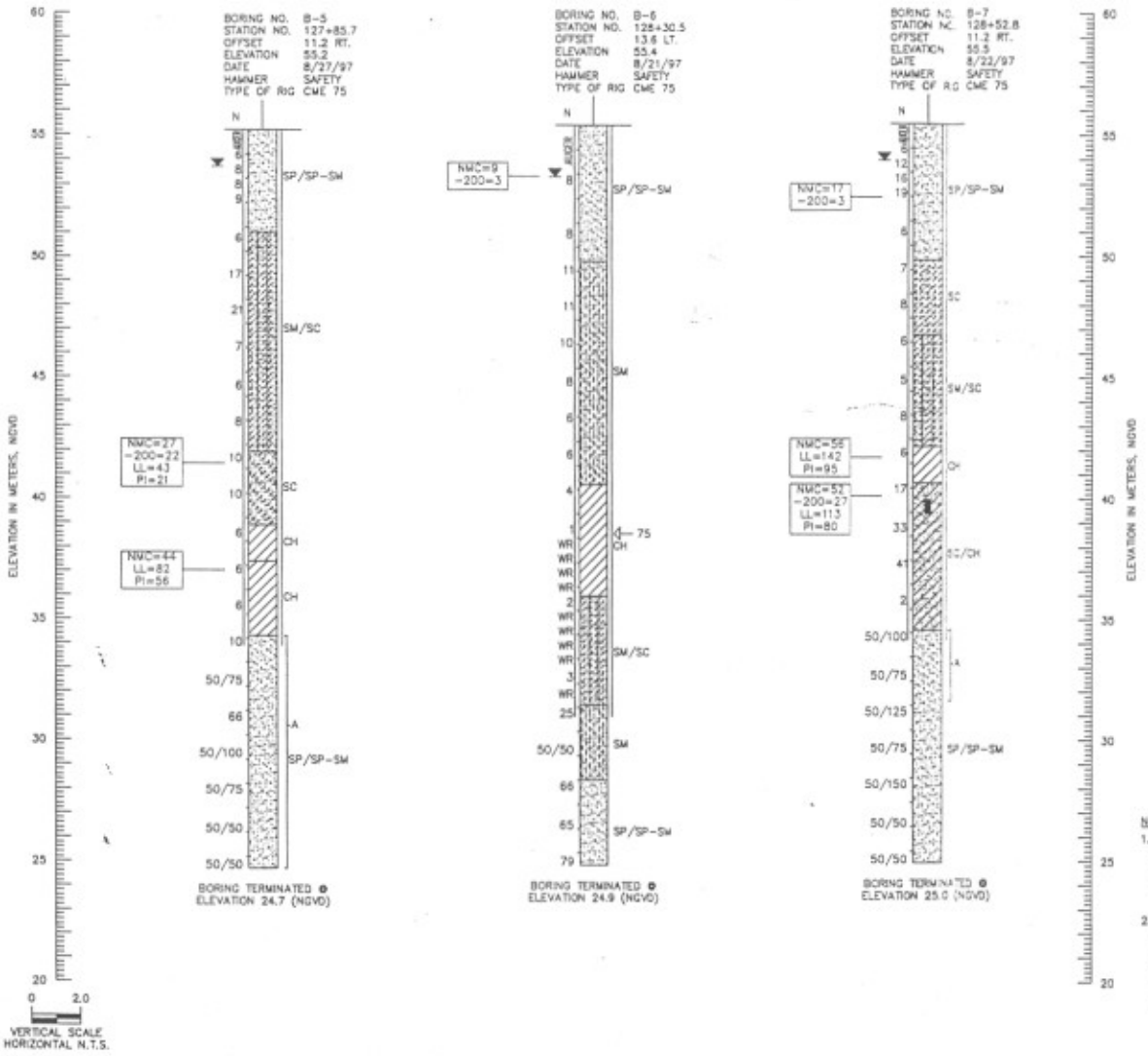
SHEET TITLE: REPORT OF CORE BORINGS

PROJECT NAME: LAKELAND IN-TOWN BY-PASS

Drawing No.

Index No.

PSI PROJECT No. 757-7517
SHEET



LEGEND

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(SM), LIGHT GRAY TO BROWN SILTY FINE SAND

(SM/SC), LIGHT GRAY TO GREENISH-GRAY SILTY TO CLAYEY FINE SAND

(SC/CH), ORANGISH-BROWN TO GREENISH-GRAY CLAYEY SAND TO SANDY CLAY

(CH), ORANGISH-BROWN TO GRAY CLAY

(SC), LIGHT GRAY CLAYEY FINE SAND

A WITH LIMESTONE SILTS

NOTES:

WATER TABLE

N STANDARD PENETRATION RESISTANCE IN BLOWS PER FOOT 305mm (455mm SPOON ASTM D-1586) USING A 63.5 kg SAFETY HAMMER ON A CME 55 DRILL RIG UNLESS OTHERWISE NOTED

CASING USED

SHELBY TUBE SAMPLE LOCATION

WR FELL UNDER WEIGHT OF ROD

⇦ LOSS OF CIRCULATION (%)

-200 FINES PASSING NO. 200 SIEVE (%)

NMC NATURAL MOISTURE CONTENT (%)

LL LIQUID LIMIT (%)

PI PLASTICITY INDEX (%)

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MODERATELY AGGRESSIVE – CONCRETE (pH = 5.81)

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SOIL

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SULFATES: <3–18 PPM
pH: 5.81–7.73

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LOOSE	4–10
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DENSE	30–50
VERY DENSE	GREATER THAN 50

SILTS AND CLAYS CONSISTENCY	SPT (BLOWS/300mm)
VERY SOFT	LESS THAN 2
SOFT	2–4
FIRM	4–8
STIFF	8–15
VERY STIFF	15–30
HARD	GREATER THAN 30

REVISIONS

Date	By	Description	Date	By	Description

	Name	Date
Drawn by	DJW	5/99
Checked by	KH	5/99
Designed by		
Checked by		
Approved by	LARRY P. MOORE, P.E.	

ENGINEER OF RECORD: PROFESSIONAL SERVICE INDUSTRIES, INC.

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ROAD NO.	COUNTY	PROJECT NO.
—	POLK	16000-1502

SHEET TITLE: REPORT OF CORE BORINGS

PROJECT NAME: LAKELAND IN-TOWN BY-PASS

Drawing No.

Index No.

PSI PROJECT No. 757-75

SHEET