SECTION 905 -- PROPOSAL (CONTINUED)

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

I (We) enclose a certified check, cashier's check or bid bond for **five percent (5%) of total bid** and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.	**1**	DATED	**11/20/2007**	ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	

Number	Description
1	Replace Table of Contents with same; Replace Notice To Bidders No. 1759 with same; Add Notice To Bidders No. 1772; Delete Special Provision 907-105-3; Replace Special Provision 907-698-1 with same; Revise the project diskette.

TOTAL ADDENDA: **1**
(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

_____
Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President	Address
Secretary	Address
Treasurer	Address

The following is my (our) itemized proposal.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TABLE OF CONTENTS

PROJECT: BWO-6205-24-(001) / 501948301 - Harrison County

(REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET OF SECTION 905 AS ADDENDA)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1759 **CODE: (SP)**

DATE: 11/20/2007

SUBJECT: Lyman Transmitter Building

PROJECT: BWO-6205-24(001) / 501948301 -- Harrison County

Bidders are hereby advised that the following Lyman Transmitter Building Modifications specifications will be required on this project.

Lyman Transmitter Building Modifications

Scope of Work: The Mississippi Department of Transportation desires to construct a 350-foot Antenna Tower and a 10x12 Communications Shelter including but not limited to foundation, power, safety climb devices, beacon mount, lighting system, lightning rod and grounding system. All structures must meet EIA/TIA-222G Standards. The foundation and grounding system must meet Motorola R-56 Standards. The lighting system must be FAA approved. The tower will be constructed at the MDOT Lyman Project Office Complex, 16499 Highway 49, Saucier, MS 39574.

Project Location/Site: There is currently a 285-foot guyed wire antenna tower at the site. This tower will remain. Removing the existing tower is not part of this project. The new tower shall be a 350-foot, three-legged tower with solid rod steel legs and braces. Typical EIA soil conditions for the Mississippi Coast should be used by the Contractor to determine bid estimate for the tower foundation. MDOT will provide boring logs & soil samples to the Contractor as an addendum to the project Bid Package. Based on the Final GeoTechnical Soil Report, provided by MDOT, the Contractor must submit a P.E. Certified foundation design to the Project Engineer.

Contractor will be responsible for any required site clearing to accommodate guyed wire anchors and paths. Fenced anchors will only be required inside the fenced compound. Based on the GeoTechnical report, Dead-Man anchors may be substituted for Drill Shaft anchors. Regardless of the anchor type used, the contractor is responsible for designing all components of the tower and is responsible for specifying the required concrete mix design.

The Fiber Optic cable must be terminated by the Contractor in the tower communications building and the MDOT Utility building. MDOT will provide the fiber termination panels for each location. The fiber optic cable does not have to enter either building through a bore. The fiber optic cable can enter both buildings by open trenched conduit.

A certified erosion control contact is not required on-site for this project.

The Contractor must provide, installed and working on the new tower, the following equipment:

1 - DB224 Antenna 6dB gain Omni Propagation Pattern with 7/8" Heliax @ 350 ft with Standoffs provided by Contractor
1 - DB 212-4 Antenna with 7/8" Heliax @ 340 ft Northern Propagation Pattern (MDOT will provide antenna but contractor must provide mounting bracket)
1 - 20 KW Generator with Transfer Switch; Fuel LP GAS
1 - 250 gal LP Gas Tank
1 - Concrete Pad for Generator per Generator Dimensions
1 - Concrete Pad for LP Tank per Tank Dimensions
1 - 10X12 Concrete Equipment Shelter
1 - Lighting Control Box to be mounted in Shelter
1 - Ice Bridge to be connected to between Tower and Point of Entrance to Shelter Per the written Specifications

Documentation: **The Contractor must provide in their response to this bid a Conceptual Tower Design**. Failure to include the conceptual tower design in the bid package may cause the bid to be considered irregular.

All documents and drawings must be professionally drafted, clear, and legible. Contractor must provide an electronic copy of all documents and drawings.

MDOT reserves the right to accept or reject the proposed Conceptual Design at its sole discretion.

References: The Contractor must be a reputable, established, and financially stable provider of Antenna Towers and provide a minimum of three references for similar projects to the Project Engineer.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1772 **CODE: (SP)**

DATE: 11/14/2007

SUBJECT: Geotechnical Investigation

PROJECT: BWO-6205-24(001) / 501948301 -- Harrison County

Bidders are hereby advised that a geotechnical investigation was performed for the above project at the Lyman Project Office site. Attached is a copy of the report. The report is also available for reviewing at the Lyman Project Office and at the Hattiesburg District Office.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Inter-Departmental Memorandum

TO: Construction Engineer
Mr. Brad Lewis

DATE: November 8, 2007

FROM: Geotechnical Engineer
R. Sean Ferguson

SUBJECT OR PROJECT NO: Geotechnical Report 07-24-24
501948/301000

INFORMATION COPY TO:

COUNTY: HARRISON

Central File (via Sheffield)
Materials Engineer (via O'Brien)
Traffic Engineering Division
Roadway Design Division
Lab File
Project File

This is the submission of our office's investigation of the soil conditions for the proposed antenna tower at the Department's Lyman Project Office.

Site	Description	Approximate Location
07-24-1063	Lyman Tower	N30.52844 W-89.11208

Four rotary wash geotechnical borings were completed on October 30 and 31 in the vicinity of the proposed 350' guyed tower at the Lyman Project Office. One 72-foot boring was completed at the tower location and three 62-foot borings were completed at the proposed anchor locations. These locations were surveyed and staked by Lyman Project Office personnel on October 26, and are indicated on the attached aerial photograph of the site. Soil boring logs and laboratory test data are also included.

Static piezometric levels were not determined. However, the driller indicated that ground water was encountered at depths less than 5 feet at each boring. A shallow water table should be assumed during the foundation design for the proposed tower.

General Site Conditions

Existing ground elevations range from approximately 37.0' at boring number 4 to 43.5' at boring number 2. Borings 1, 2, and 3 were located on flat, firm ground within the fenced property of the Lyman Project Office. Boring 4 was located west of the fenced enclosure in a relatively poorly drained, wooded area. The upper 20' to 25' at each boring consists of wet, loose to medium dense, very fine to fine sands with localized pea gravel. Below a depth of 25' to 30', stiff to hard (upper weathered), clayey silts and silty clays with some very fine to fine sands and sand seams were encountered. These lower clays and silty clays belong to the Pascagoula Formation and are identified as Zone 2 on the logs.

If additional information is required, please advise.

RSF

Pages: 29 (Boring Layout, Boring Logs, Triaxial Results, Gradations)

FED. ROAD REG. NO.	STATE	PROJECT NO.	SHEET NO.
4	MISS.	BWO-6205-24(001)	1

GENERAL INDEX

DESCRIPTION	NUMBER OF SHEETS
TITLE SHEET	1
GENERAL NOTES AND SUMMARY OF QUANTITIES	1
SITE PLAN	1
MISCELLANEOUS DETAILS	1
TOTAL SHEETS	4

STATE OF MISSISSIPPI

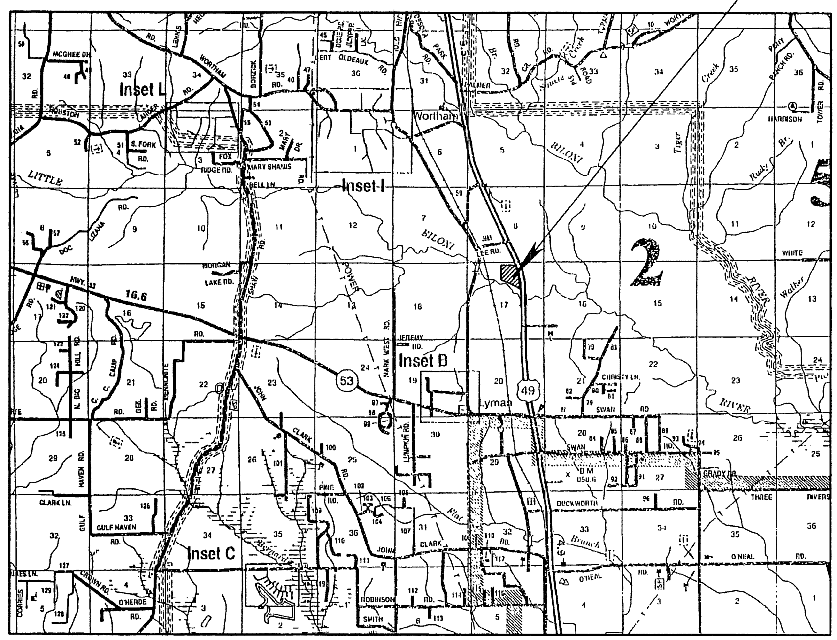
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED
FEDERAL AID PROJECT NO. BWO-6205-24(001)

LYMAN TRANSMITTER BUILDING
(INCLUDES BUILDING & TOWER)
HARRISON COUNTY

FMS CONST. 501948 /301000

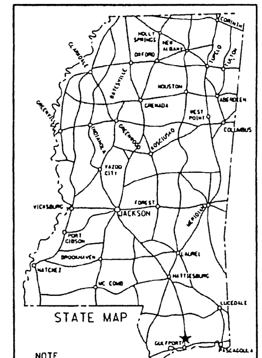
SCALES
PLAN 1 IN.= 40 FT.
LAYOUT 1 IN.= 4,000 FT.



PROJECT SITE

(53) TO POPLARVILLE

TO I-10 TO GULFPORT (49)



NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.
LAT. 30° 31' 43" N LONG. 89° 06' 40" W
(APPROX. MIDDLE OF PROJECT)

PERMITS ACQUIRED BY MDOT

WETLANDS AND WATERS PERMITS
(NECESSARY FOR ULTIMATE IMPROVEMENTS ONLY).

	WATERS	WETLANDS
NATIONWIDE #14	☐	☐
NATIONWIDE (OTHER)*	☐	☐
GENERAL*	☐	☐
INDIVIDUAL (404)*	☐	☐

* ACQUISITION OF PERMITS FOR TEMPORARY IMPACTS DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR

STORMWATER PERMIT ☐

Y REQUIRED, CNOI SUBMITTED BY MDOT (DISTRIBUTED AREA = 5 ACRES +)(NTB 6484)
S REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)(NTB 6483)
N NO STORMWATER PERMIT REQUIRED (<1 ACRE)

APPROVED BY: ________ DATE: ________

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN CORPORATION LINE
SECTION LINE
EXISTING ROAD OR TRAVELED WAY
PROPOSED ROAD OR TRAVELED WAY
RAILROAD
SURVEY LINE
BRIDGES

REVISIONS — DATE — BY

APPROVED:
CHIEF ENGINEER ________ DATE
EXECUTIVE DIRECTOR ________ DATE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
APPROVED:
DIVISION ADMINISTRATOR ________ DATE
FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

TITLE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/24/2007 13:36:23 TITLE.DGN

BWO-6205-24(001) HARRISON COUNTY 1


07-24-1063-2
07-24-1063-1
07-24-1063-3
07-24-1063-4
GEOTECHNICAL BORING LOCATIONS
3 of 29

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE NO.: 07-24-1063	HOLE NO.: 1	FMS P.E. NO.: 501948/301000	REPORT NO: 07-24-24
COUNTY: HARRISON	LATITUDE: N 30.5284°	LONGITUDE: W 89.1121°	COMPLETION DATE: 10/30/07
LOCATION: PROPOSED TOWER (130' S OF EXISTING TOWER): LYMAN PROJECT OFFICE			WATER TABLE ELEVATION: N/A
STATION: N/A	OFFSET: N/A		COMPLETION DEPTH: 72'
BORING TYPE: ROTARY WASH	LOGGED BY: J D PHILLIPS		SURFACE ELEVATION: 39.4'

DEPTH, ft.	SAMPLES	DESCRIPTION OF MATERIAL	ZONE	BLOWS PER FT/ PENETROMETER	UNIT DRY WT. lb/cu ft	ELEVATION, ft.
	S	@ 5' MEDIUM DENSE BROWN TO GRAY FINE TO MEDIUM SAND		20		
10	S			16		29.4
	S			24		
		@ 19' FINE GRAVEL LAYER	1			
20	S	@ 20' LOOSE BROWN TO GRAY MEDIUM TO COARSE SAND WITH GRAY CLAY AT BOTTOM	2A	12		19.4
	T	@ 25' SOFT GRAY FINE SANDY SILT	2B	3.00 ksf	87	
30	T	@ 30' GRAY FINE TO MEDIUM SAND	2C			9.4
	T	@ 35' STIFF GRAY SILTY CLAY WITH INBEDDED SAND LAYER		3.00 ksf	78	
40	T	INBEDDED SAND LAYERS			85	-0.6
	T	@ 45' STIFF GRAY SANDY SILTY CLAY	2B	2.00 ksf	75	
50	T	@ 50' SOFT GRAY VERY FINE SANDY SILT	2C		83	-10.6
	T	@ 55' HARD GRAY SILTY CLAY		7.00 ksf	65	
60	T				71	-20.6
70	T	@ 70' HARD GRAY SILTY CLAY	2D	7.00 ksf	81	-30.6
80						
90						
100						
110						

COHESION, kip/sq ft: 1 2 3 4

PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT: 20 40 60 80

TOTAL DEPTH OF BORING - 72'

DESIGN SOIL STRENGTHS			
ZONE	C (ksf)	ø	γ (pcf)
1	0.00	33°	115 *
2A	0.70	0°	116
2B	2.25	0°	113
2C	0.00	34°	115 *
2D	3.80	0°	109

* ASSIGNED VALUE

NOTICE TO CONTRACTOR:

1. THE BORING INFORMATION SHOWN WITH ITS VARIOUS SOIL ZONE DESCRIPTIONS AND INDICATED BOUNDARIES IS BASED UPON AN ENGINEERING AND GEOLOGICAL INTERPRETATION OF ALL AVAILABLE GEOTECHNICAL INFORMATION BY THE GEOTECHNICAL BRANCH, MDOT AND MAY NOT NECESSARILY REFLECT THE ACTUAL VARIATION IN SUBSURFACE CONDITIONS BETWEEN BORINGS AND SAMPLES.

2. SOUND ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED ON THIS SHEET. THIS INFORMATION WAS PREPARED AND IS INTENDED FOR MDOT DESIGN AND ESTIMATE PURPOSES. ITS PRESENTATION ON THE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH ACCESS TO THE SAME INFORMATION AVAILABLE TO THE MDOT. THIS SUBSURFACE INFORMATION INTERPRETATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATIONS OR JUDGEMENT BY OTHERS

ZONE 1 ALLUVIUM

LOOSE TO DENSE, WHITE TO LIGHT GRAYISH BROWN, BEIGE TO LIGHT ORANGE, VERY FINE TO FINE SAND WITH SOME LOCALIZED PEA GRAVEL; CONTAINS LOCALIZED LIGHT BROWN CLAYEY SILT PLUGS

ZONE 2 PASCAGOULA FORMATION

2A ORANGISH BROWN & BEIGE, SLIGHTLY MICACEOUS, WEATHERED, INTERBEDDED CLAY & SLIGHTLY SILTY FINE SAND

2B STIFF TO VERY STIFF, BLUISH GREEN, DARK GREENISH GRAY, INTERMIXED & INTERBEDDED SILTY CLAY, SLIGHTLY CLAYEY, SANDY SILT, & CLAYEY SILT

2C MEDIUM DENSE, LIGHT TO DARK GREENISH GRAY, VERY FINE TO FINE SAND WITH SOME HEAVY MINERALS

2D HARD, DARK GREENISH GRAY, SLIGHTLY SILTY TO SILTY CLAY WITH SOME IRREGULAR, THIN, FINE SAND SEAMS

REV. 9/04 S: Split Spoon, T: Shelby Tube, C: Rock Core, P: Pitcher Sampler

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE NO.: 07-24-1063	HOLE NO.: 2	FMS P.E. NO.: 501948/301000	REPORT NO: 07-24-24
COUNTY: HARRISON	LATITUDE: N 30.5291°	LONGITUDE: W 89.1116°	COMPLETION DATE: 10/30/07
LOCATION: NE ANCHOR (280' NE OF PROPOSED TOWER); LYMAN PROJECT OFFICE			WATER TABLE ELEVATION: N/A
STATION: N/A	OFFSET: N/A		COMPLETION DEPTH: 62'
BORING TYPE: ROTARY WASH	LOGGED BY: J D PHILLIPS		SURFACE ELEVATION: 43.5

DEPTH, ft.	SAMPLES	DESCRIPTION OF MATERIAL	ZONE	BLOWS PER FT/ PENETROMETER	UNIT DRY WT. lb/cu ft	COHESION, kip/sq ft (1 2 3 4) / PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT (20 40 60 80)	ELEVATION, ft.
	T	@ 5' BROWN FINE TO MEDIUM CLAYEY SAND					
-10-	S	@ 10' DENSE TO MEDIUM DENSE BROWN TO GRAY FINE TO MEDIUM SAND		36			33.5
	S			26			
-20-	S	@ 20' MEDIUM DENSE GRAY MEDIUM TO COARSE SAND (WET)		41			23.5
	S	@ 25' LOOSE BROWN GRAY FINE TO MEDIUM SILTY SAND	1	6			
-30-	S			11			13.5
	T	@ 33' ONE INCH GRAVEL LAYER	2C		88	●	
-40-	S	@ 35' VERY FIRM GRAY BROWN CLAYEY SILT INBEDDED SAND LAYERS	2A	18			3.5
	T	@ 40' VERY FIRM GRAY BROWN SILTY CLAY INBEDDED SAND LAYERS	2C	3.50 ksf	86	●	
-50-	T	@ 45' VERY STIFF GRAY CLAYEY SILT	2B	4.50 ksf	76	●	-6.5
	T			5.00 ksf	72	●	
-60-	T		2D	7.00 ksf	72	●	-16.5
		TOTAL DEPTH OF BORING - 62'					

DESIGN SOIL STRENGTHS			
ZONE	C (ksf)	Ø	γ (pcf)
1	0.00	33°	115 *
2A	0.70	0°	116
2B	2.25	0°	113
2C	0.00	34°	115 *
2D	3.80	0°	109

* ASSIGNED VALUE

NOTICE TO CONTRACTOR:

1. THE BORING INFORMATION SHOWN WITH ITS VARIOUS SOIL ZONE DESCRIPTIONS AND INDICATED BOUNDARIES IS BASED UPON AN ENGINEERING AND GEOLOGICAL INTERPRETATION OF ALL AVAILABLE GEOTECHNICAL INFORMATION BY THE GEOTECHNICAL BRANCH, MDOT AND MAY NOT NECESSARILY REFLECT THE ACTUAL VARIATION IN SUBSURFACE CONDITIONS BETWEEN BORINGS AND SAMPLES.
2. SOUND ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED ON THIS SHEET. THIS INFORMATION WAS PREPARED AND IS INTENDED FOR MDOT DESIGN AND ESTIMATE PURPOSES. ITS PRESENTATION OR THE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH ACCESS TO THE SAME INFORMATION AVAILABLE TO THE MDOT. THIS SUBSURFACE INFORMATION INTERPRETATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATIONS OR JUDGEMENT BY OTHERS

ZONE 1 ALLUVIUM

LOOSE TO DENSE, WHITE TO LIGHT GRAYISH BROWN, BEIGE TO LIGHT ORANGE, VERY FINE TO FINE SAND WITH SOME LOCALIZED PEA GRAVEL; CONTAINS LOCALIZED LIGHT BROWN CLAYEY SILT PLUGS

ZONE 2 PASCAGOULA FORMATION

2A ORANGISH BROWN & BEIGE, SLIGHTLY MICACEOUS, WEATHERED, INTERBEDDED CLAY & SLIGHTLY SILTY FINE SAND

2B STIFF TO VERY STIFF, BLUISH GREEN, DARK GREENISH GRAY, INTERMIXED & INTERBEDDED SILTY CLAY, SLIGHTLY CLAYEY, SANDY SILT, & CLAYEY SILT

2C MEDIUM DENSE, LIGHT TO DARK GREENISH GRAY, VERY FINE TO FINE SAND WITH SOME HEAVY MINERALS

2D HARD, DARK GREENISH GRAY, SLIGHTLY SILTY TO SILTY CLAY WITH SOME IRREGULAR, THIN, FINE SAND SEAMS

REV. 9/04 S: Split Spoon, T: Shelby Tube, C: Rock Core, P: Pitcher Sampler

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE NO.: 07-24-1063	HOLE NO.: 3	FMS P.E. NO.: 501948/301000	REPORT NO: 07-24-24
COUNTY: HARRISON	LATITUDE: N 30.5278°	LONGITUDE: W 89.1118°	COMPLETION DATE: 10/30/07
LOCATION: S ANCHOR (272' S OF PROPOSED TOWER); LYMAN PROJECT OFFICE			WATER TABLE ELEVATION: N/A
STATION: N/A	OFFSET: N/A		COMPLETION DEPTH: 62'
BORING TYPE: ROTARY WASH	LOGGED BY: J D PHILLIPS		SURFACE ELEVATION: 38.0'

DEPTH, ft.	SAMPLES	DESCRIPTION OF MATERIAL	ZONE	BLOWS PER FT/ PENETROMETER	UNIT DRY WT. lb/cu ft	ELEVATION, ft.
	S	@ 5' MEDIUN BROWN TO GRAY FINE TO MEDIUM SAND		16		
10	S			17		28.0
	S	@ 15' VERY STIFF PURPLISH GRAY CLAYEY SILT WITH SAND AT THE BOTTOM		26		
20	S	@ 20' LOOSE GRAY FINE TO MEDIUM SAND		12		18.0
	S	@ 25' VERY LOOSE GRAY SILTY SAND WITH BLACK SPECKS	1	3		
30	T	@ 30' HARD TO VERY GRAY SILTY CLAY		5.00 ksf	84	8.0
	T			7.50 ksf	81	
40	T	@ 40' VERY STIFF TO HARD GRAY SILTY CLAY WITH INBEDDED SAND LAYERS		5.50 ksf	80	-2.0
	T			7.50 ksf	76	
50	T		2B		72	-12.0
	T				73	
60	T	@ 60' VERY HARD GRAY SILTY CLAY	2D	8.00 ksf	70	-22.0

TOTAL DEPTH OF BORING - 62'

COHESION, kip/sq ft: 1, 2, 3, 4

PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT: 20, 40, 60, 80

DESIGN SOIL STRENGTHS			
ZONE	C (ksf)	ϕ	γ (pcf)
1	0.00	33°	115 *
2A	0.70	0°	116
2B	2.25	0°	113
2C	0.00	34°	115 *
2D	3.80	0°	109

* ASSIGNED VALUE

NOTICE TO CONTRACTOR:

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ZONE 1 ALLUVIUM

LOOSE TO DENSE, WHITE TO LIGHT GRAYISH BROWN, BEIGE TO LIGHT ORANGE, VERY FINE TO FINE SAND WITH SOME LOCALIZED PEA GRAVEL; CONTAINS LOCALIZED LIGHT BROWN CLAYEY SILT PLUGS

ZONE 2 PASCAGOULA FORMATION

2A ORANGISH BROWN & BEIGE, SLIGHTLY MICACEOUS, WEATHERED, INTERBEDDED CLAY & SLIGHTLY SILTY FINE SAND

2B STIFF TO VERY STIFF, BLUISH GREEN, DARK GREENISH GRAY, INTERMIXED & INTERBEDDED SILTY CLAY, SLIGHTLY CLAYEY, SANDY SILT, & CLAYEY SILT

2C MEDIUM DENSE, LIGHT TO DARK GREENISH GRAY, VERY FINE TO FINE SAND WITH SOME HEAVY MINERALS

2D HARD, DARK GREENISH GRAY, SLIGHTLY SILTY TO SILTY CLAY WITH SOME IRREGULAR, THIN, FINE SAND SEAMS

REV. 9/04 S: Split Spoon, T: Shelby Tube, C: Rock Core, P: Pitcher Sampler

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE NO.: 07-24-1063	HOLE NO.: 4	FMS P.E. NO.: 501948/301000	REPORT NO: 07-24-24
COUNTY: HARRISON	LATITUDE: N 30.5289°	LONGITUDE: W 89.1131°	COMPLETION DATE: 10/31/07
LOCATION: W ANCHOR (300' W OF PROPOSED TOWER): LYMAN PROJECT OFFICE			WATER TABLE ELEVATION: N/A
STATION: N/A	OFFSET: N/A		COMPLETION DEPTH: 62'
BORING TYPE: ROTARY WASH	LOGGED BY: J D PHILLIPS		SURFACE ELEVATION: 36.9

DEPTH, ft.	SAMPLES	DESCRIPTION OF MATERIAL	ZONE	BLOWS PER FT/ PENETROMETER	UNIT DRY WT. lb/cu ft	ELEVATION, ft.
	S	@ 5' MEDIUM DENSE WHITE FINE TO MEDIUM SAND		16		
10	S	@ 10' MEDIUM DENSE WHITE MEDIUM TO COARSE SAND WITH SOME FINE GRAVEL		16		26.9
	S	@ 15' VERY LOOSE WHITE MEDIUM TO VERY COARSE SAND	1	1		
20	S	@ 20' MEDIUM DENSE LIGHT GRAY FINE TO MEDIUM SILTY SAND WITH BLACKS SPECKS	2A	20		16.9
	S	@ 25' FIRM TO STIFF BROWN GRAY CLAYEY SILT		11		
30	T	@ 30' VERY STIFF TO HARD GRAY SLICKENSIDED VERY SILTY CLAY WITH INBEDDED SAND LAYERS		6.00 ksf	93	6.9
	T			4.00 ksf	90	
40	T			5.50 ksf	85	-3.1
	T	@ 45' GRAY MICACEOUS SILTY FINE SAND			91	
50	T	@ 50' VERY STIFF TO HARD GRAY CLAYEY SILT	2B	5.00 ksf	67	-13.1
	T			7.00 ksf	77	
60	T	@ 60' HARD GRAY SILTY CLAY WITH SOME ORGANIC FRAGMENTS	2D		78	-23.1
		TOTAL DEPTH OF BORING - 62'				

COHESION, kip/sq ft: 1 2 3 4

PLASTIC LIMIT — WATER CONTENT, % — LIQUID LIMIT: 20 40 60 80

DESIGN SOIL STRENGTHS			
ZONE	C (ksf)	ø	γ (pcf)
1	0.00	33°	115 *
2A	0.70	0°	116
2B	2.25	0°	113
2C	0.00	34°	115 *
2D	3.80	0°	109

* ASSIGNED VALUE

NOTICE TO CONTRACTOR:

1. THE BORING INFORMATION SHOWN WITH ITS VARIOUS SOIL ZONE DESCRIPTIONS AND INDICATED BOUNDARIES IS BASED UPON AN ENGINEERING AND GEOLOGICAL INTERPRETATION OF ALL AVAILABLE GEOTECHNICAL INFORMATION BY THE GEOTECHNICAL BRANCH, MDOT AND MAY NOT NECESSARILY REFLECT THE ACTUAL VARIATION IN SUBSURFACE CONDITIONS BETWEEN BORINGS AND SAMPLES.
2. SOUND ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED ON THIS SHEET. THIS INFORMATION WAS PREPARED AND IS INTENDED FOR MDOT DESIGN AND ESTIMATE PURPOSES. ITS PRESENTATION ON THE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH ACCESS TO THE SAME INFORMATION AVAILABLE TO THE MDOT. THIS SUBSURFACE INFORMATION INTERPRETATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATIONS OR JUDGEMENT BY OTHERS

ZONE 1 ALLUVIUM

LOOSE TO DENSE, WHITE TO LIGHT GRAYISH BROWN, BEIGE TO LIGHT ORANGE, VERY FINE TO FINE SAND WITH SOME LOCALIZED PEA GRAVEL; CONTAINS LOCALIZED LIGHT BROWN CLAYEY SILT PLUGS

ZONE 2 PASCAGOULA FORMATION

2A ORANGISH BROWN & BEIGE, SLIGHTLY MICACEOUS, WEATHERED, INTERBEDDED CLAY & SLIGHTLY SILTY FINE SAND

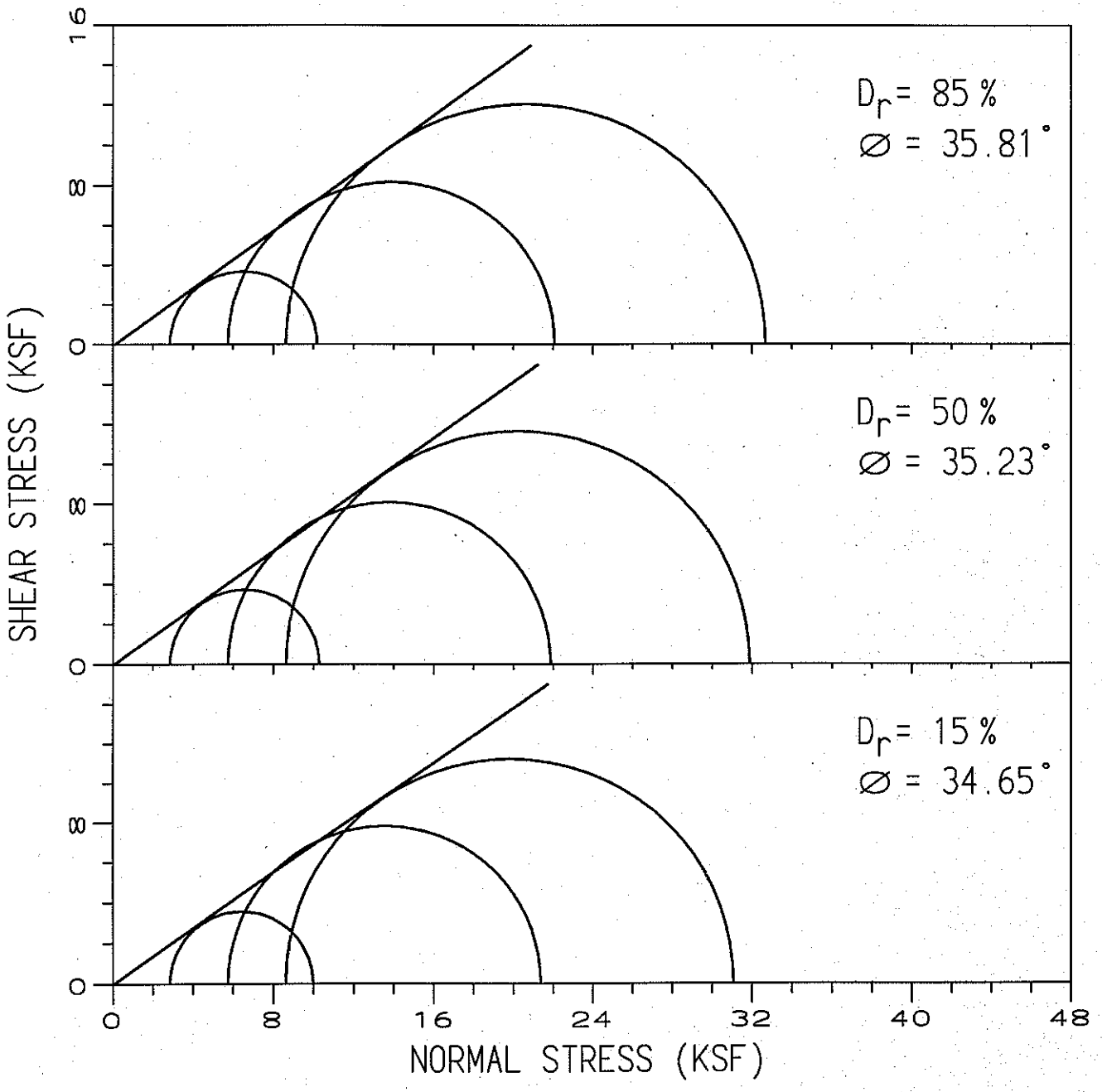
2B STIFF TO VERY STIFF, BLUISH GREEN, DARK GREENISH GRAY, INTERMIXED & INTERBEDDED SILTY CLAY, SLIGHTLY CLAYEY, SANDY SILT, & CLAYEY SILT

2C MEDIUM DENSE, LIGHT TO DARK GREENISH GRAY, VERY FINE TO FINE SAND WITH SOME HEAVY MINERALS

2D HARD, DARK GREENISH GRAY, SLIGHTLY SILTY TO SILTY CLAY WITH SOME IRREGULAR, THIN, FINE SAND SEAMS

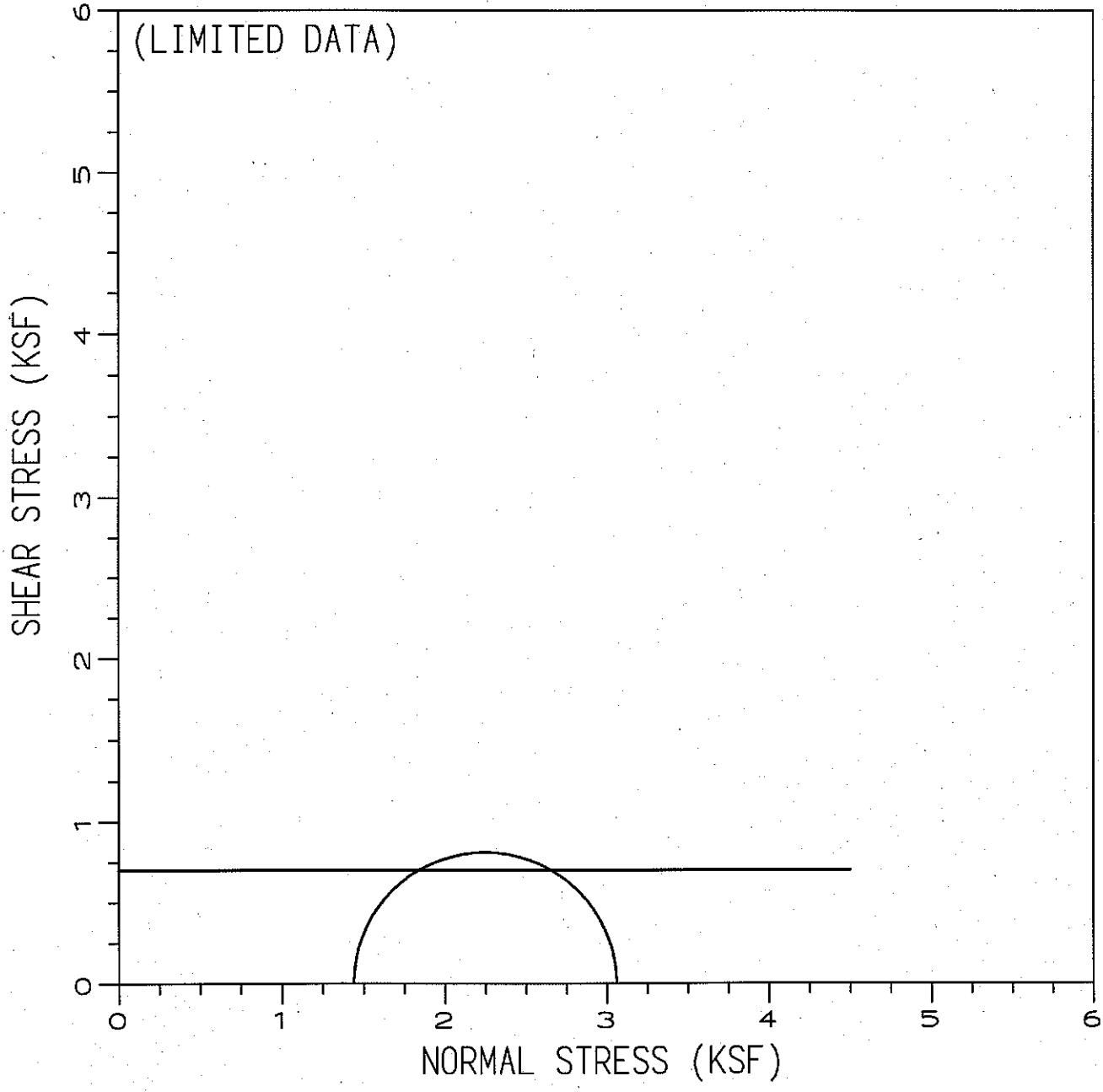
REV. 9/04 S: Split Spoon, T: Shelby Tube, C: Rock Core, P: Pitcher Sampler

SAND TRIAXIAL COMPRESSION TEST RESULTS



STATION: LYMAN TOWER
SITE: 07-24-1063
ZONE: 1

CLAY TRIAXIAL COMPRESSION TEST RESULTS

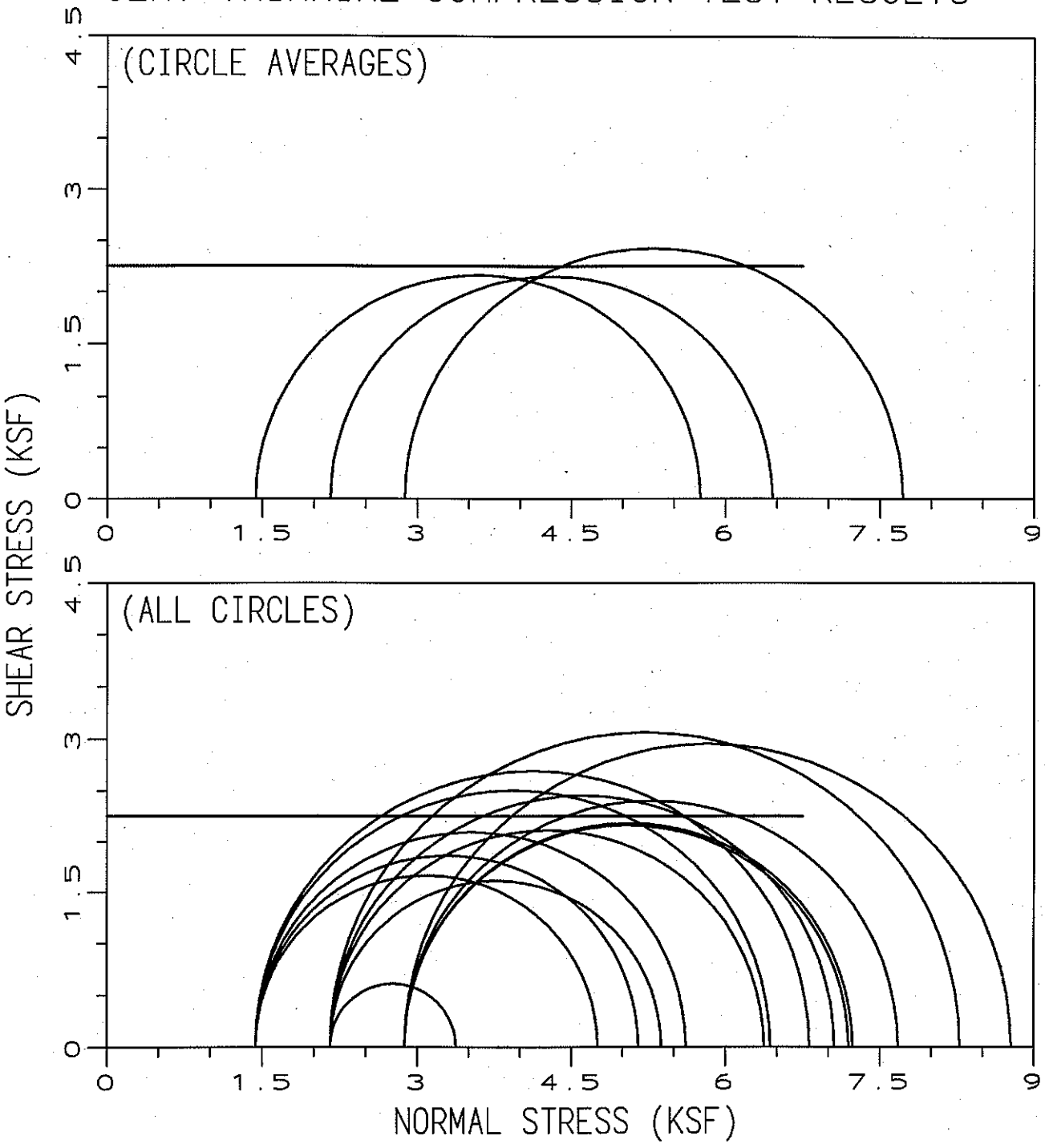


STATION: LYMAN TOWER
SITE: 07-24-1063
ZONE: 2A

COHESION: .7 ksf
PHI ANGLE: 0°
GAMMA: 116 pcf

SOIL DESCRIPTION:
ORANGISH BROWN & BEIGE SL MICACEOUS WEATHERED INTERBEDDED CLAY & SILTY SAND

CLAY TRIAXIAL COMPRESSION TEST RESULTS

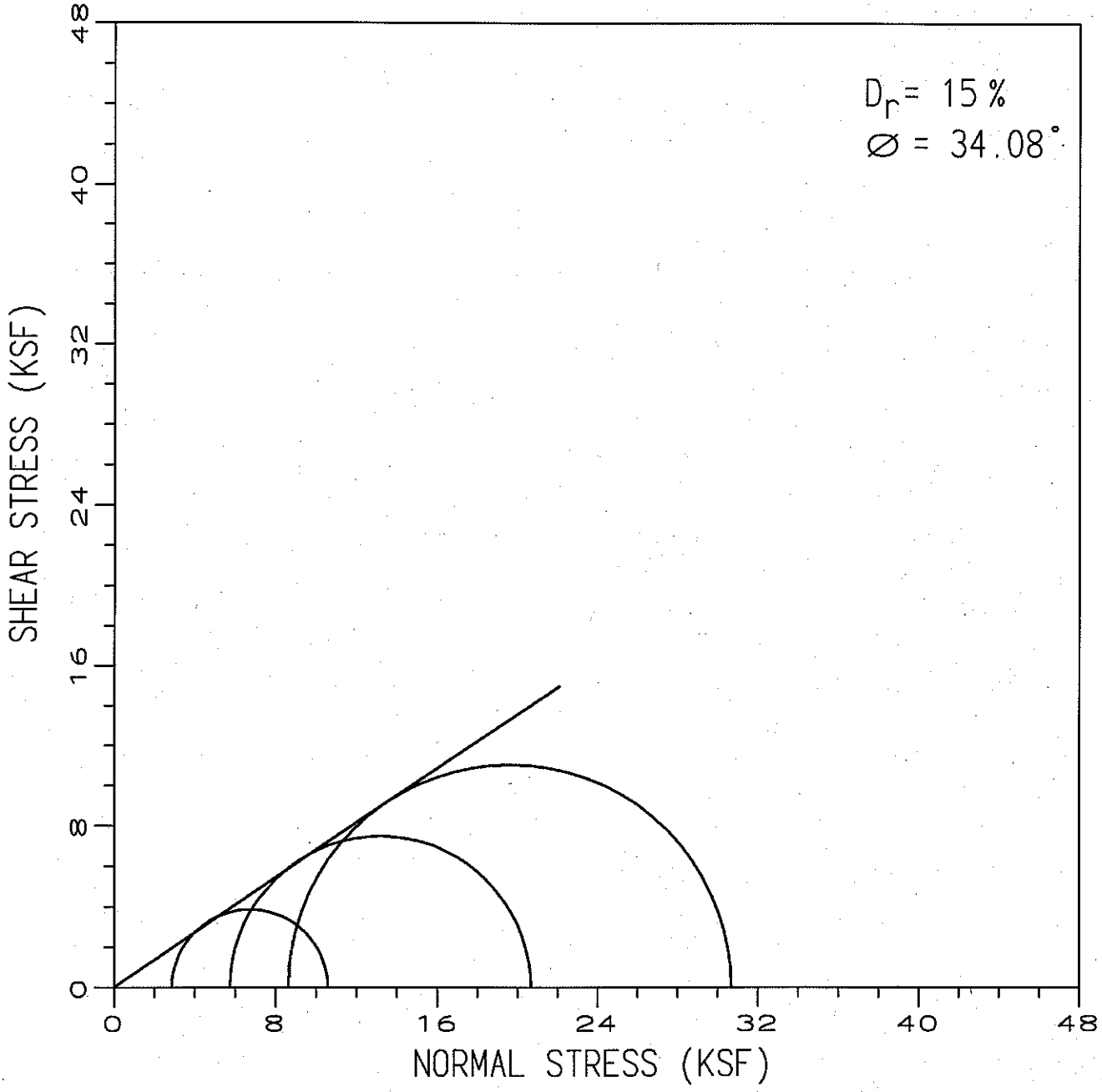


STATION: LYMAN TOWER
SITE: 07-24-1063
ZONE: 2B

COHESION: 2.25 ksf
PHI ANGLE: 0°
GAMMA: 113 pcf

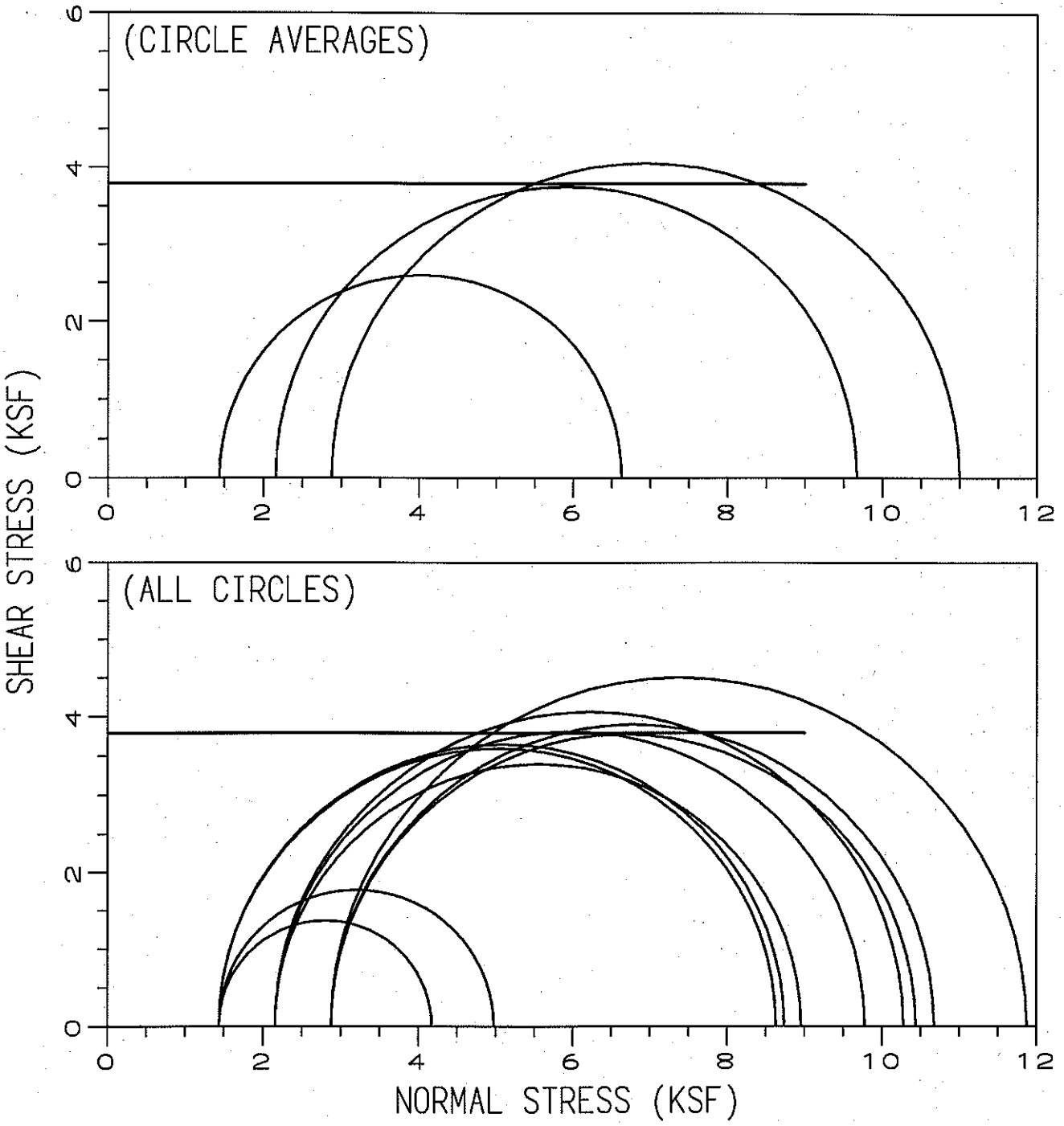
SOIL DESCRIPTION:
STIFF - HARD BLUISH GREEN DK GRAY SILTY CLAY SL CLAYEY SANDY SILT & CL SILT

SAND TRIAXIAL COMPRESSION TEST RESULTS



STATION: LYMAN TOWER
SITE: 07-24-1063
ZONE: 2C

CLAY TRIAXIAL COMPRESSION TEST RESULTS



STATION: LYMAN TOWER
SITE: 07-24-1063
ZONE: 2D

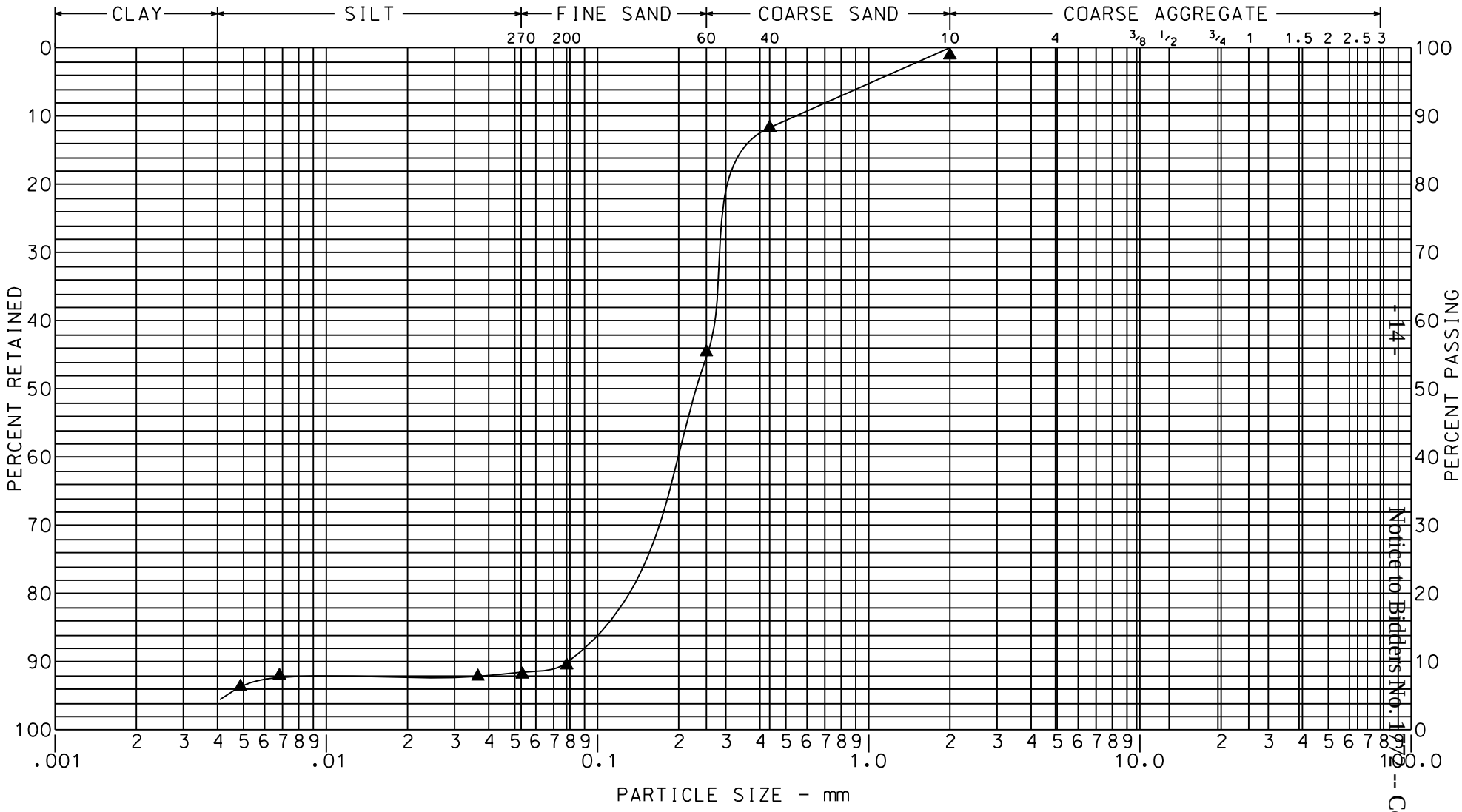
COHESION: 3.8 ksf
PHI ANGLE: 0°
GAMMA: 109 pcf

SOIL DESCRIPTION:
HARD DK GREENISH GRAY SL SILTY TO SILTY CLAY WITH SOME THIN FINE SAND SEAMS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 1-4, 5' - 22'
ZONE: 1

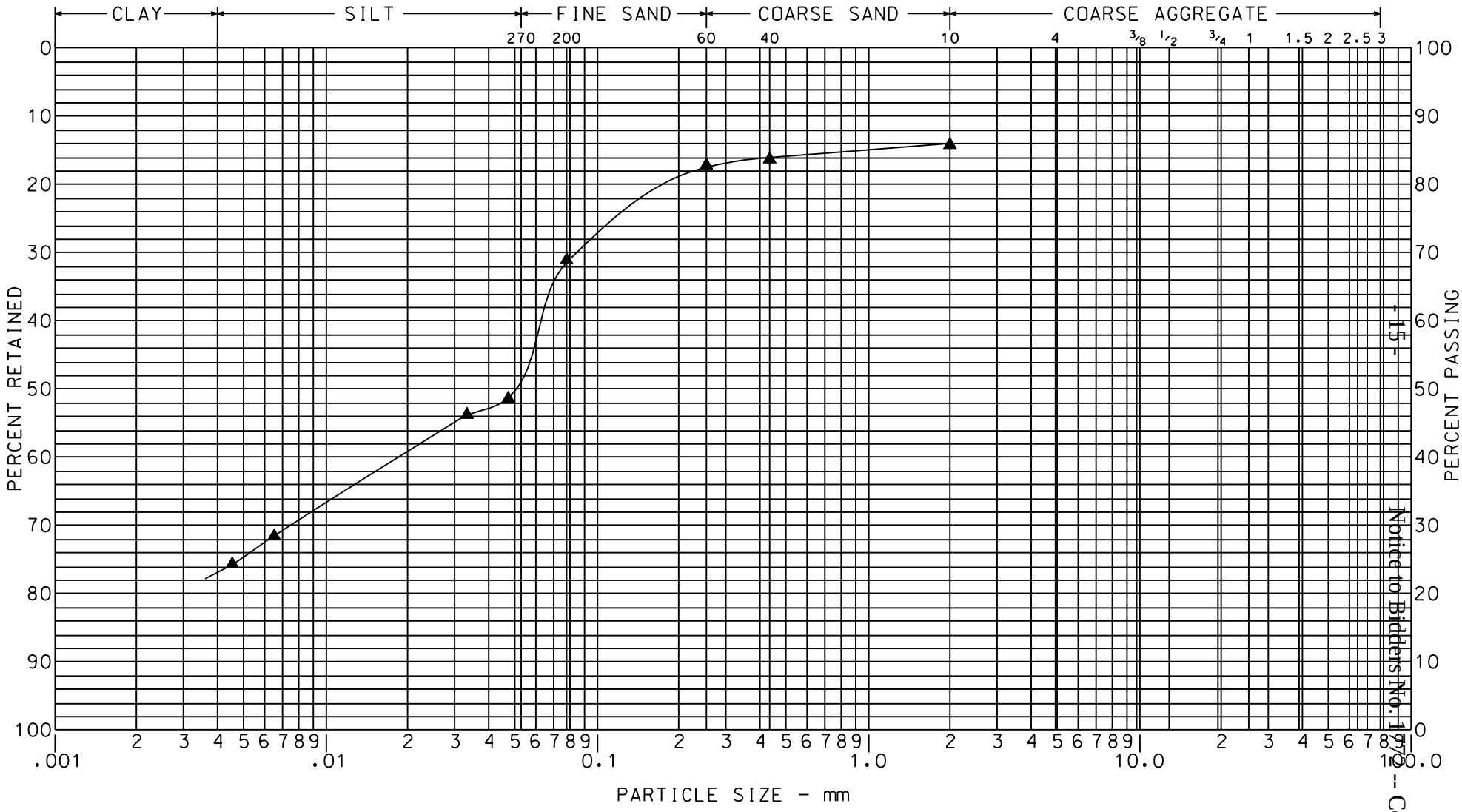
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 1, 26′
ZONE: 2B

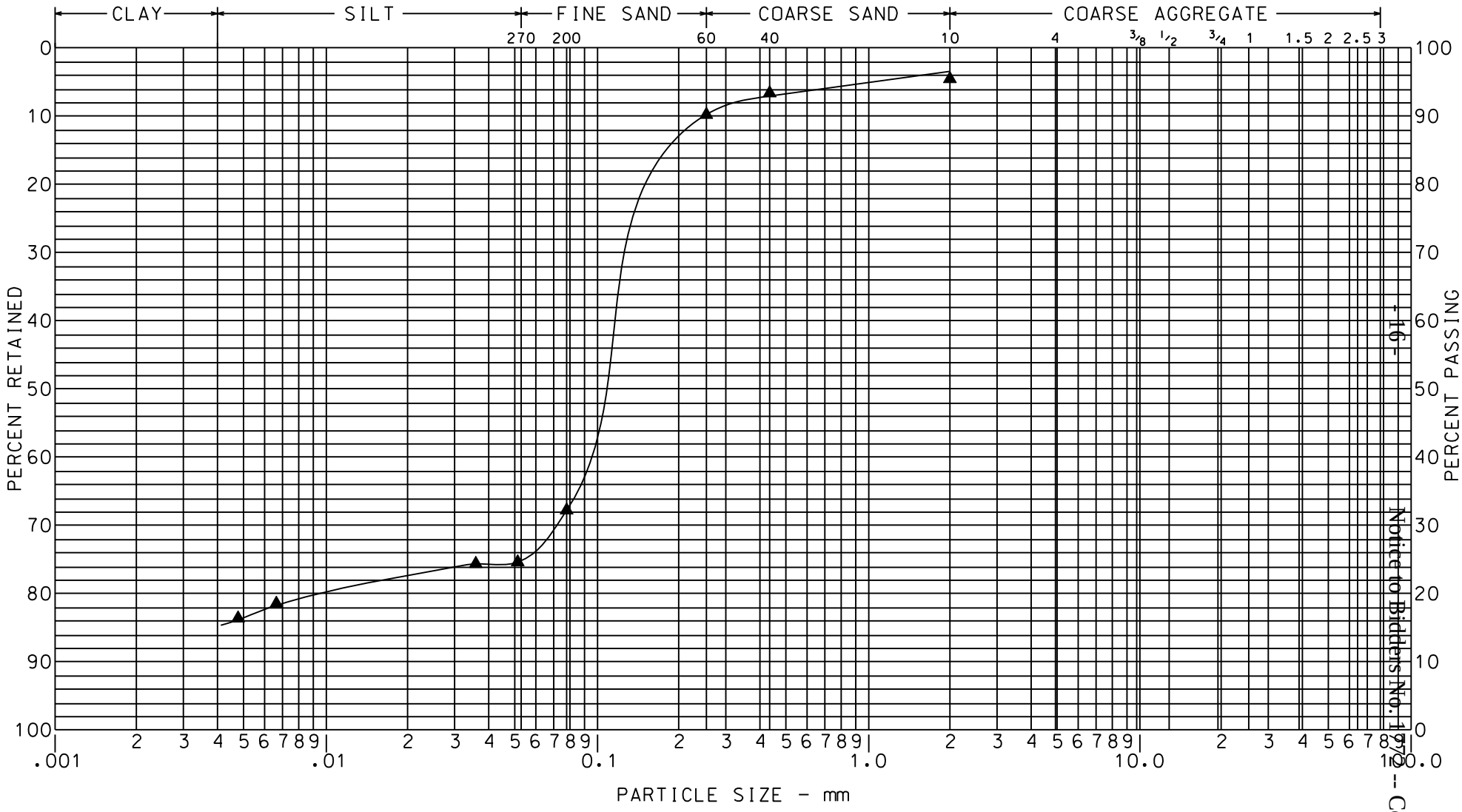
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 1, 36'
ZONE: 2B

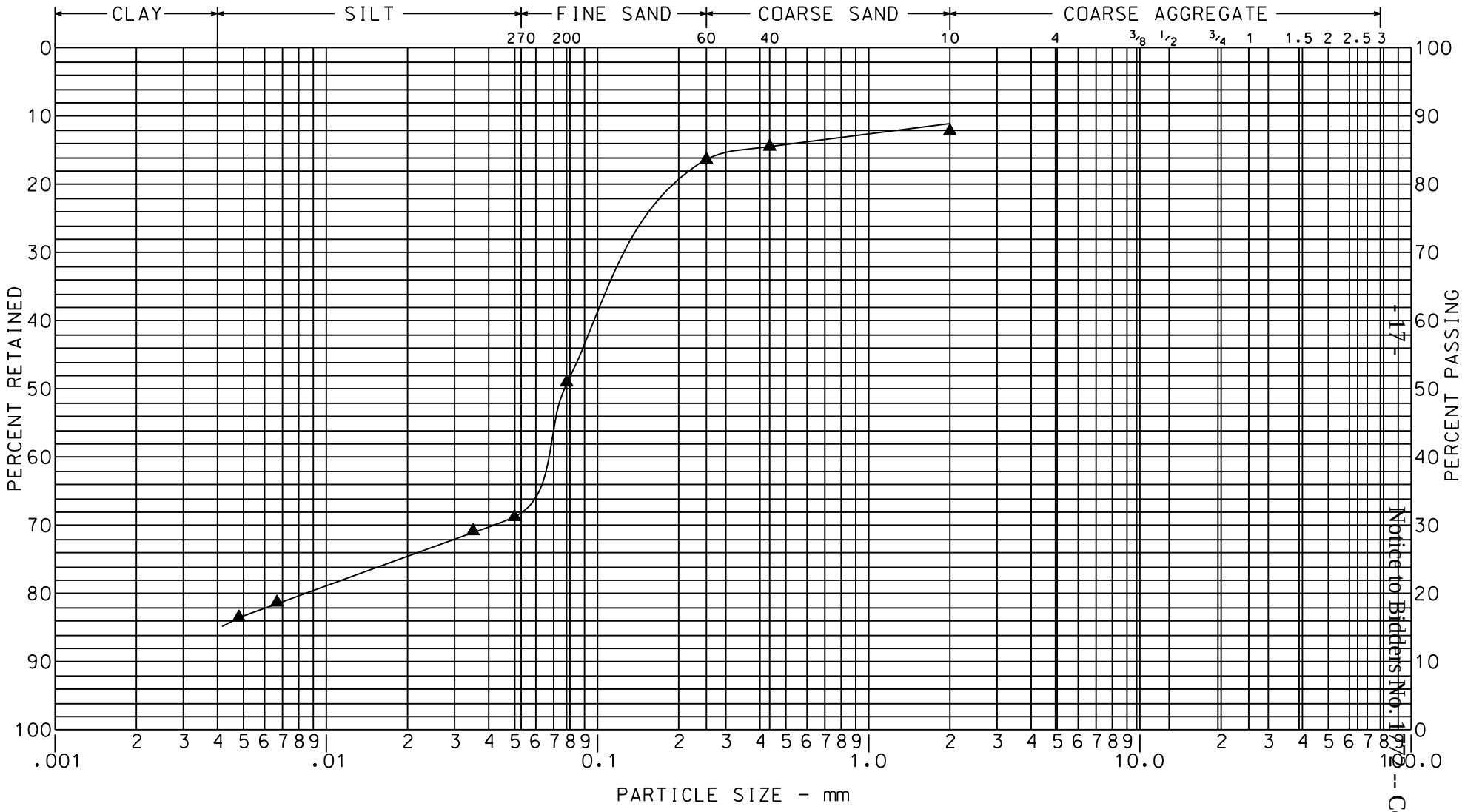
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 1, 46'
ZONE: 2B

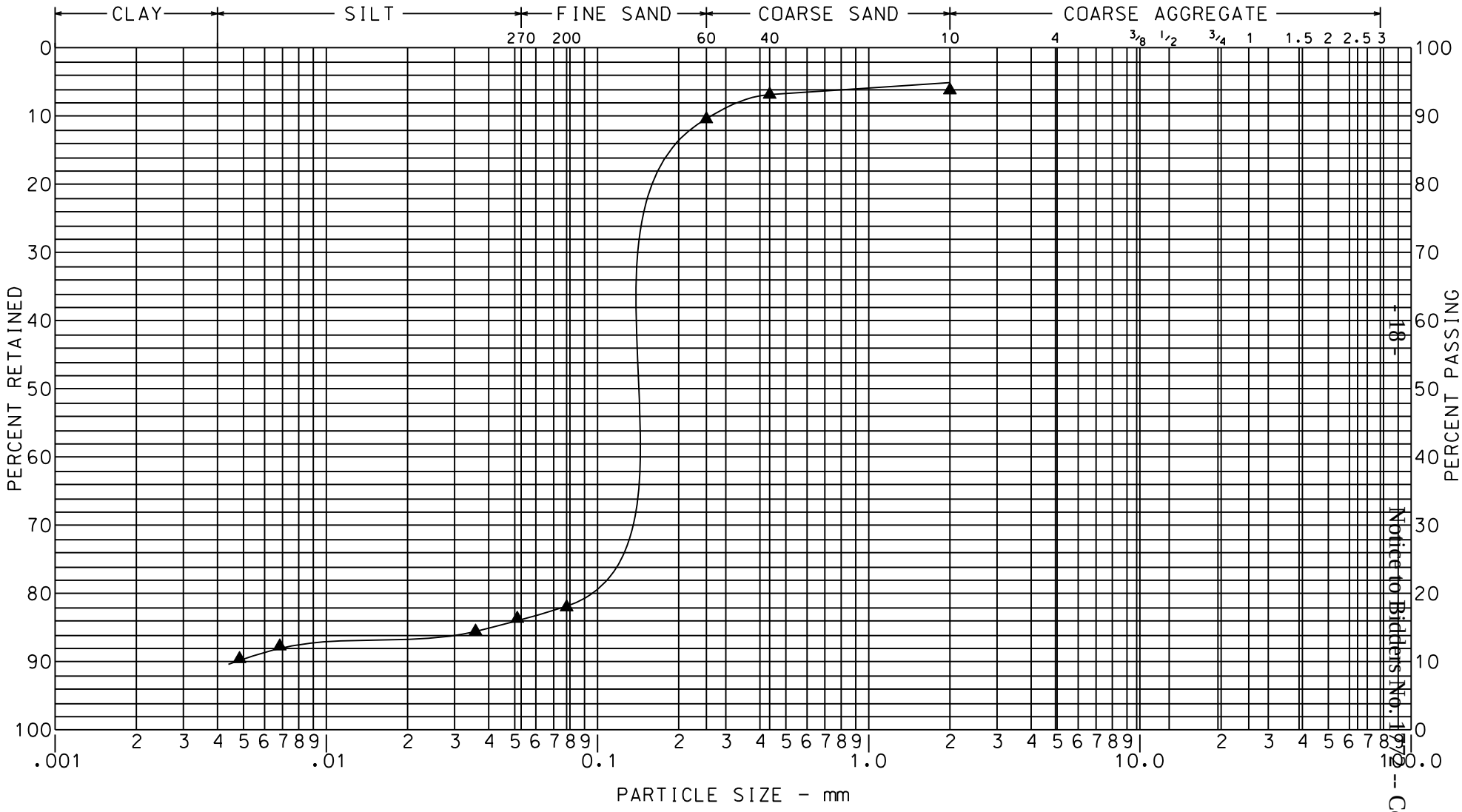
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 1, 41'
ZONE: 2B

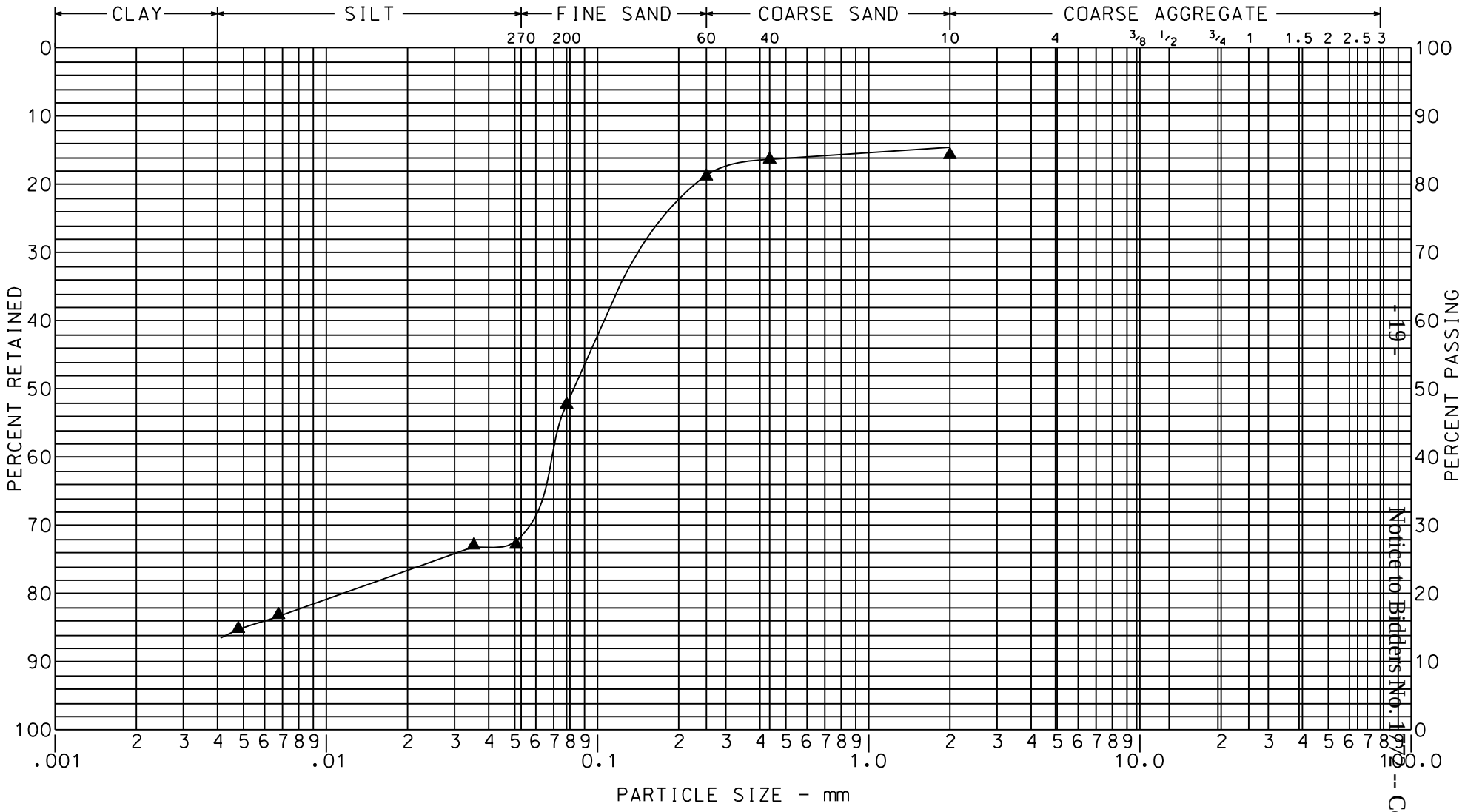
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 2, 51'
ZONE: 2B

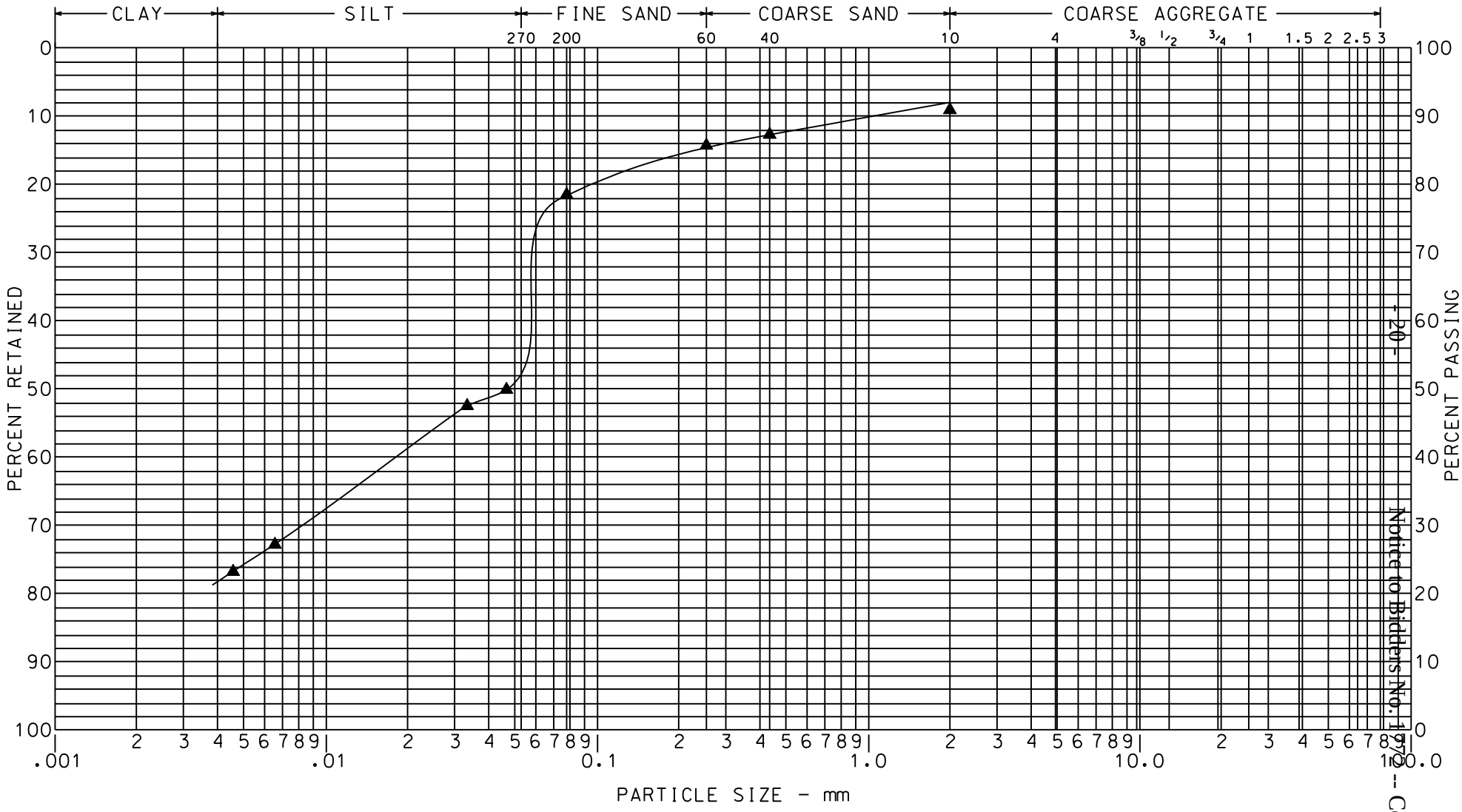
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 3, 31'
ZONE: 2B

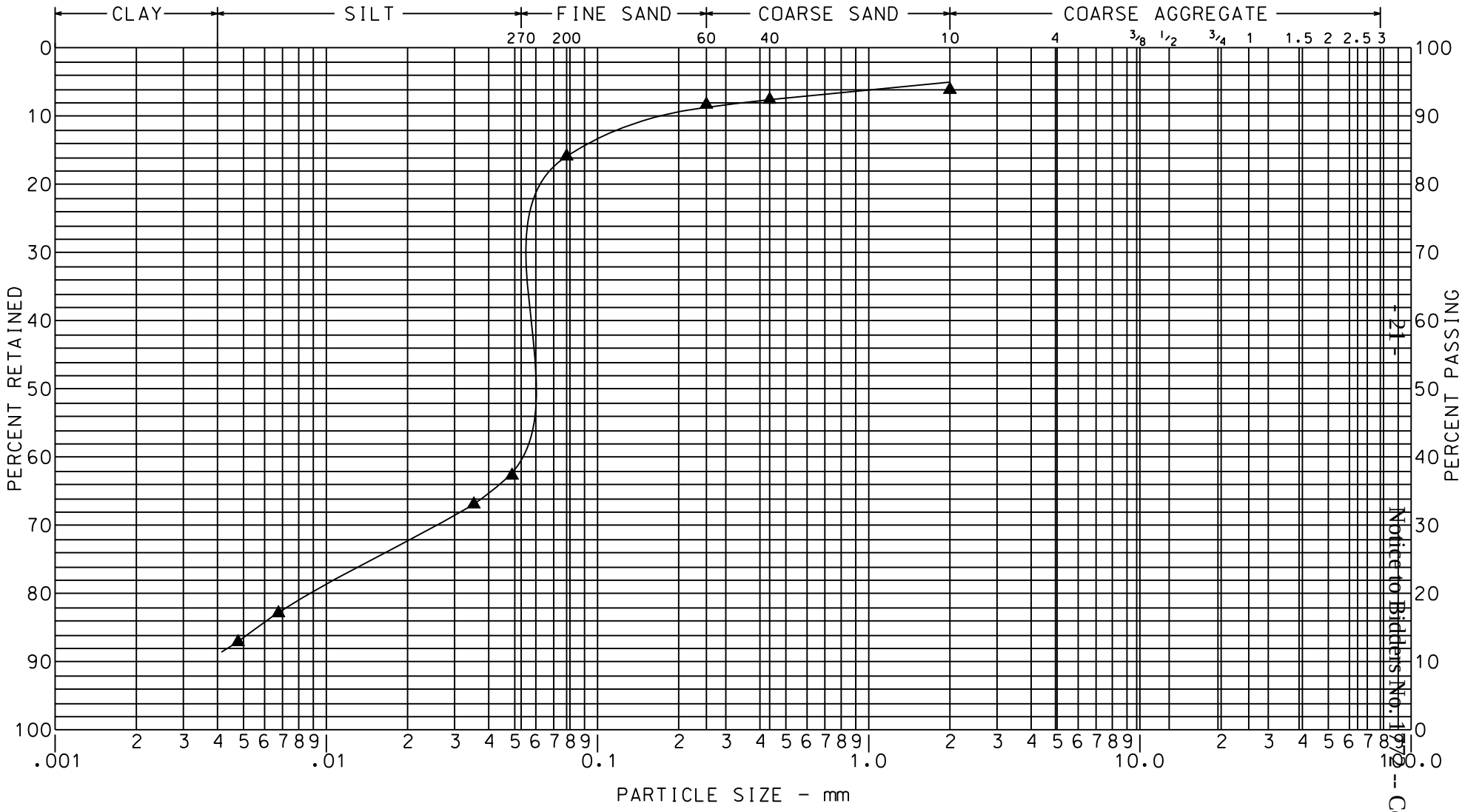
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 4, 31'
ZONE: 2B

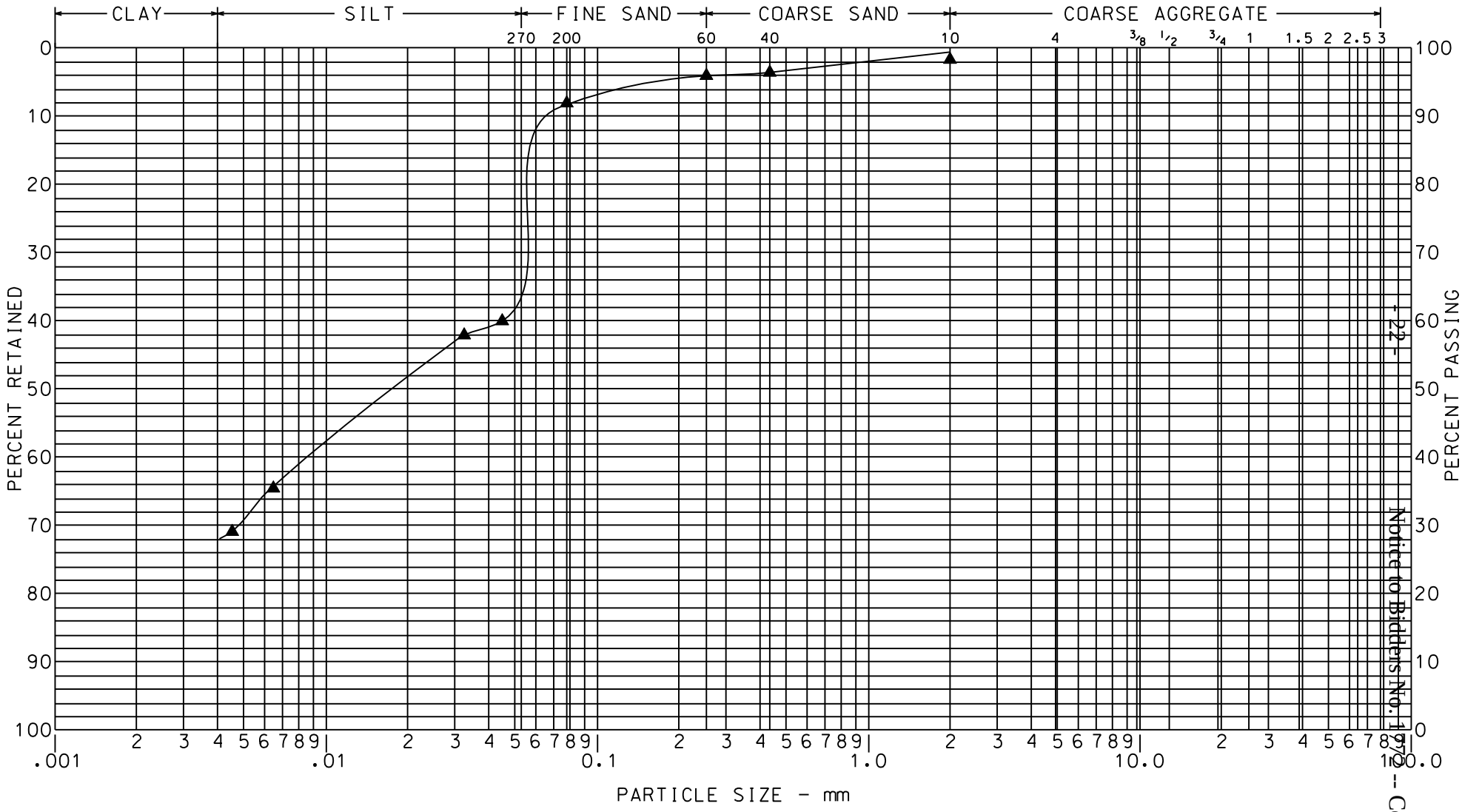
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 3, 36'
ZONE: 2B

GRAIN SIZE ACCUMULATION CURVE

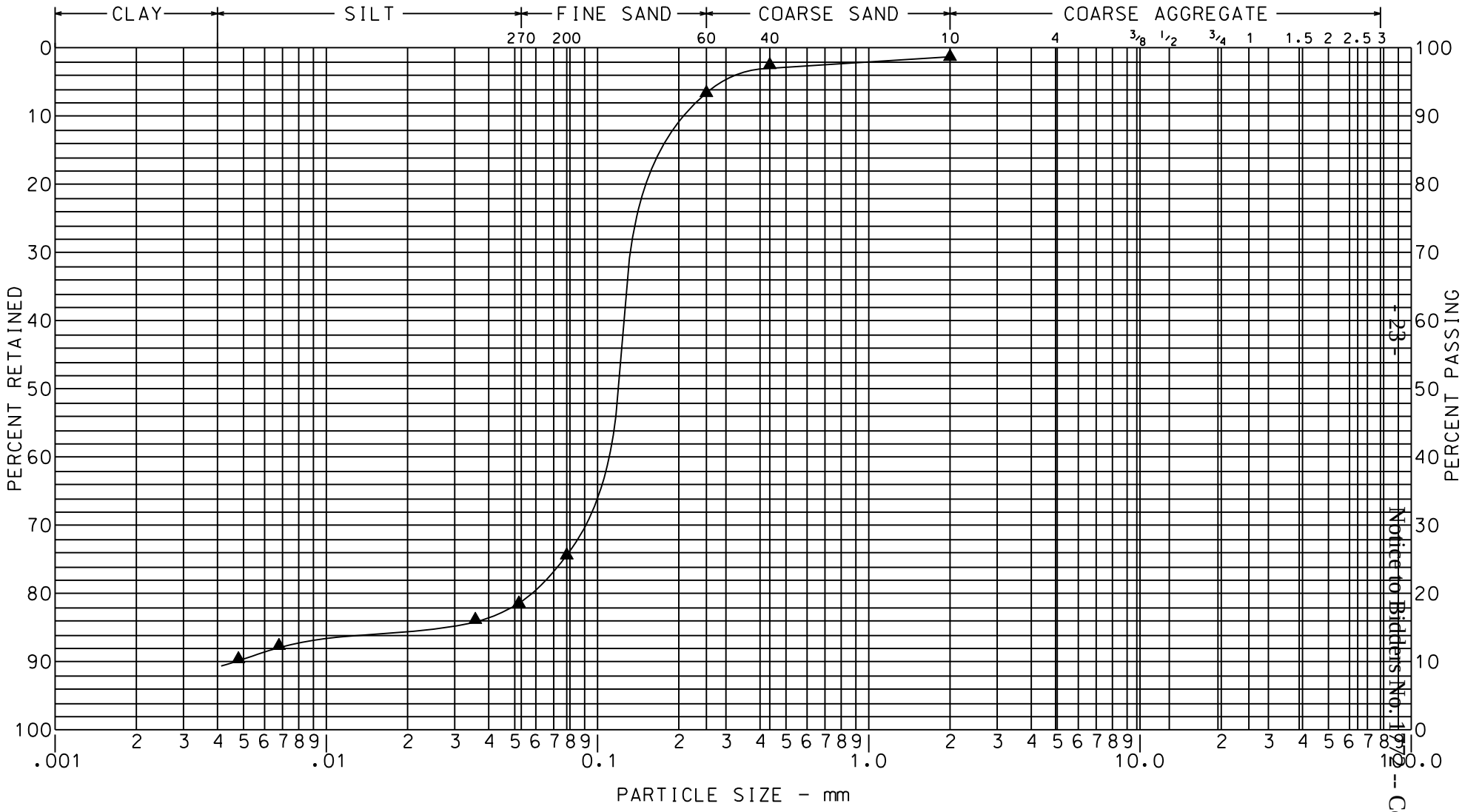


Notice to Bidders No. 1 (2) -- Cont'd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 3, 41'
ZONE: 2B

GRAIN SIZE ACCUMULATION CURVE

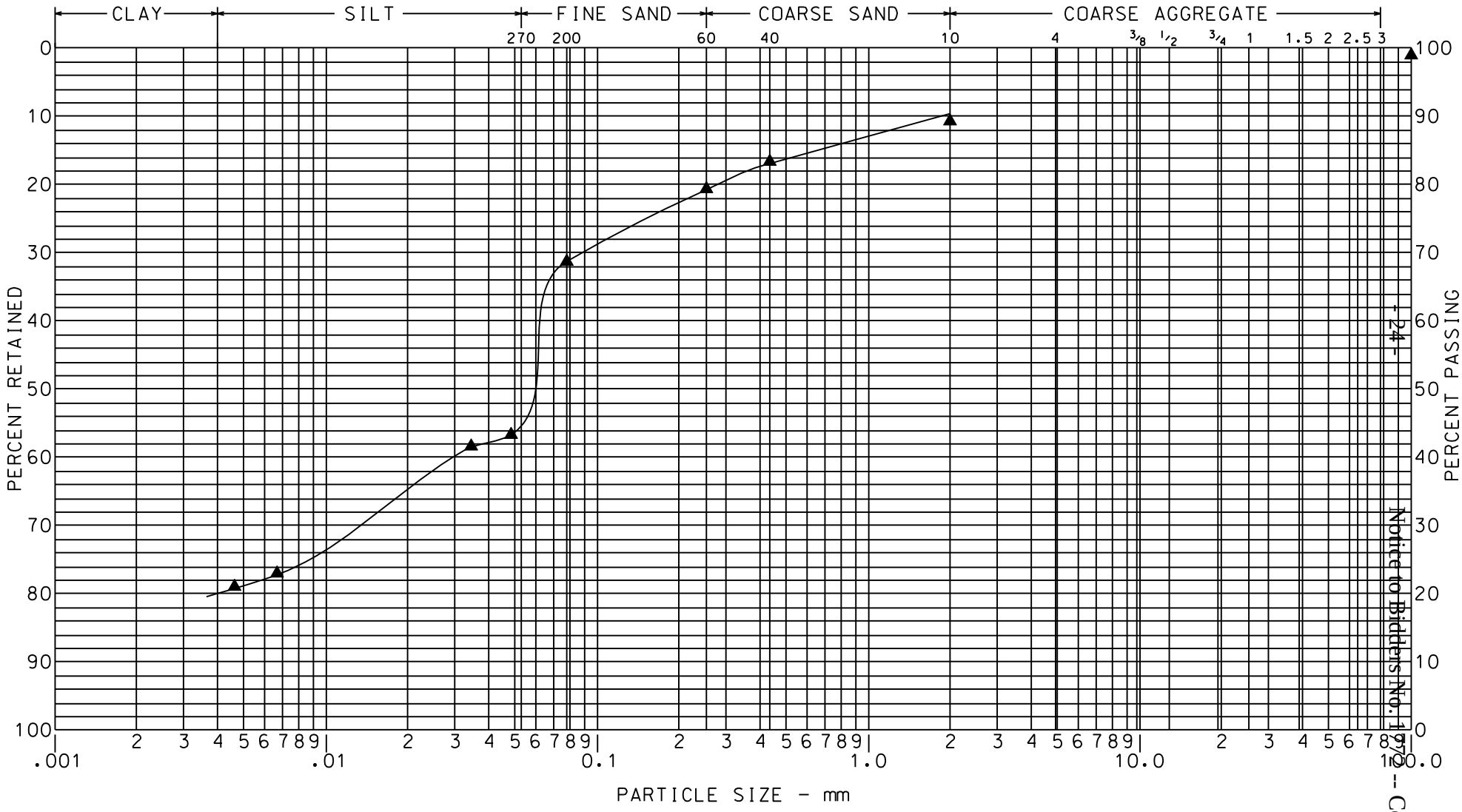


Notice to Bidders No. 1572 -- Cont'd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 3, 46'
ZONE: 2B

GRAIN SIZE ACCUMULATION CURVE

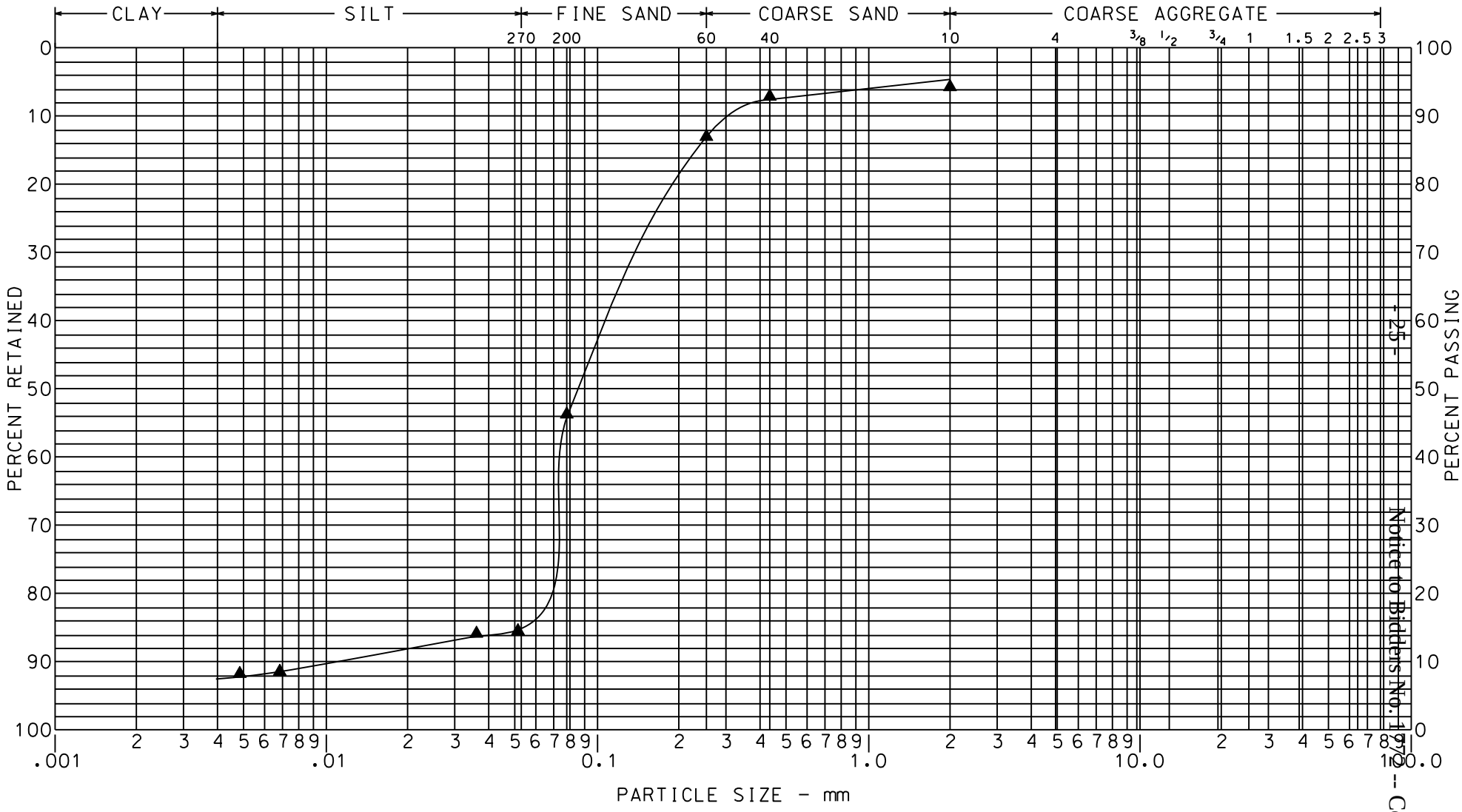


Notice to Bidders No. 1572 -- Cont'd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 3, 51'
ZONE: 2B

GRAIN SIZE ACCUMULATION CURVE



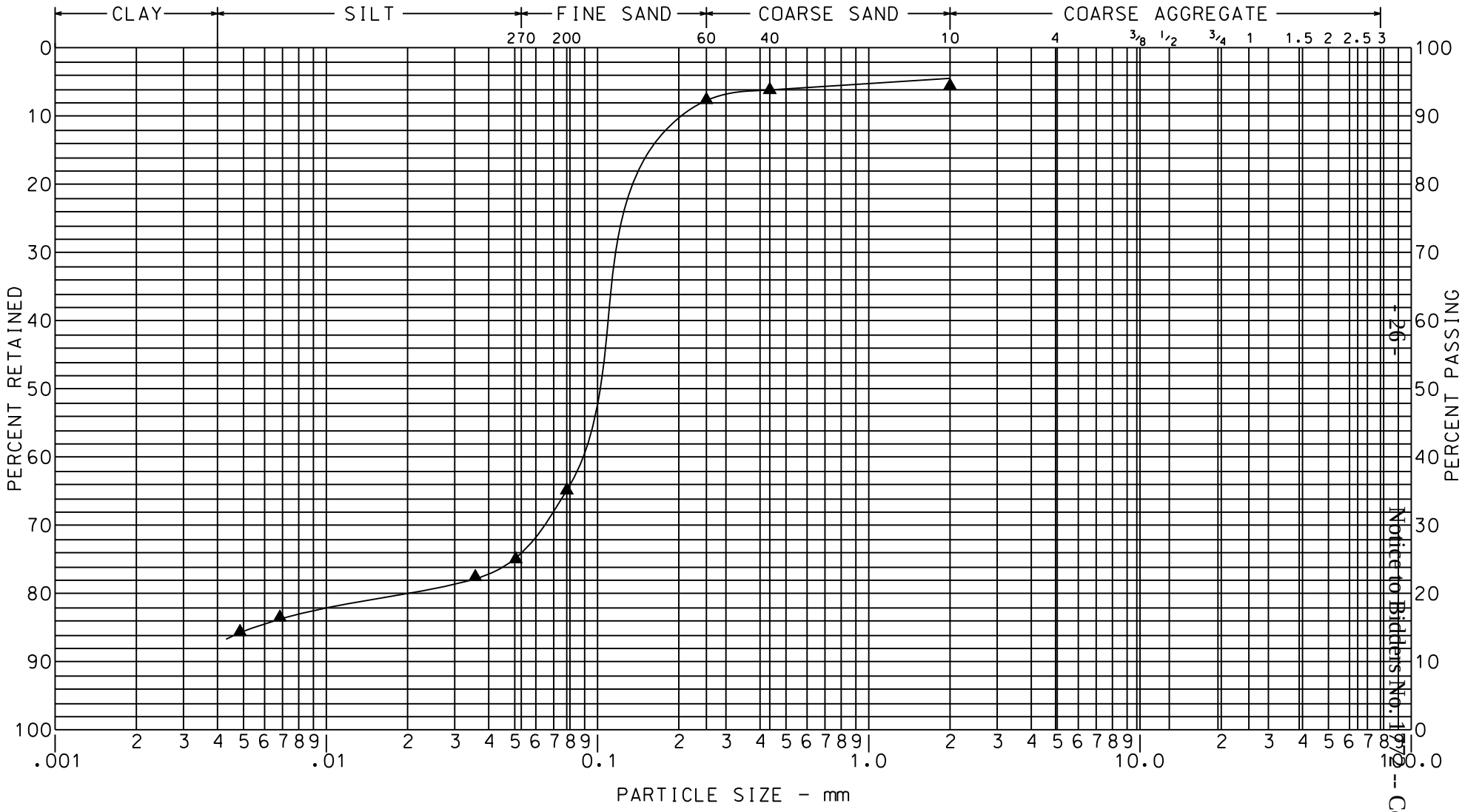
- 25 -

Notice to Bidders No. 1572 -- Cont'd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 4, 36'
ZONE: 2B

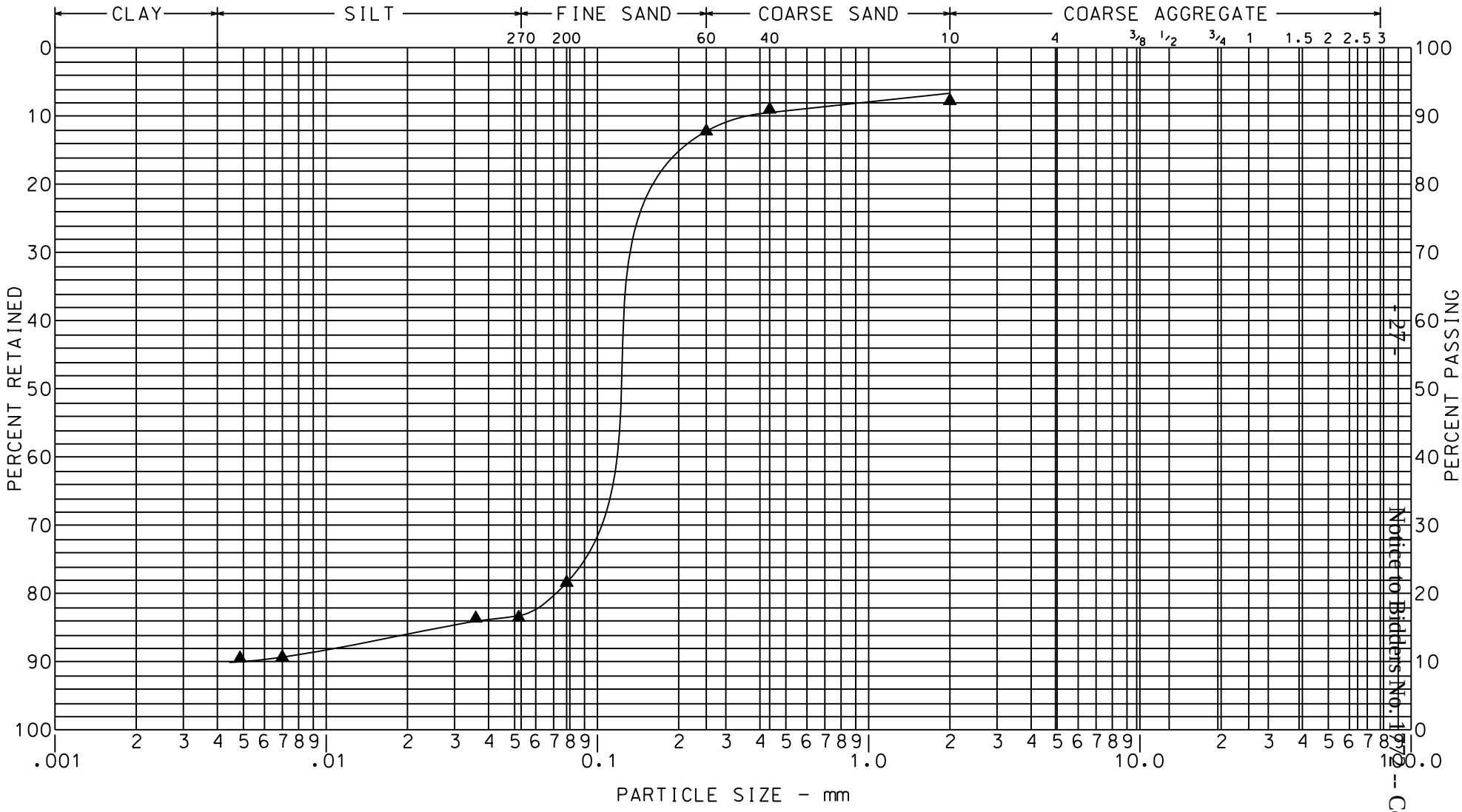
GRAIN SIZE ACCUMULATION CURVE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 4, 46'
ZONE: 2B

GRAIN SIZE ACCUMULATION CURVE

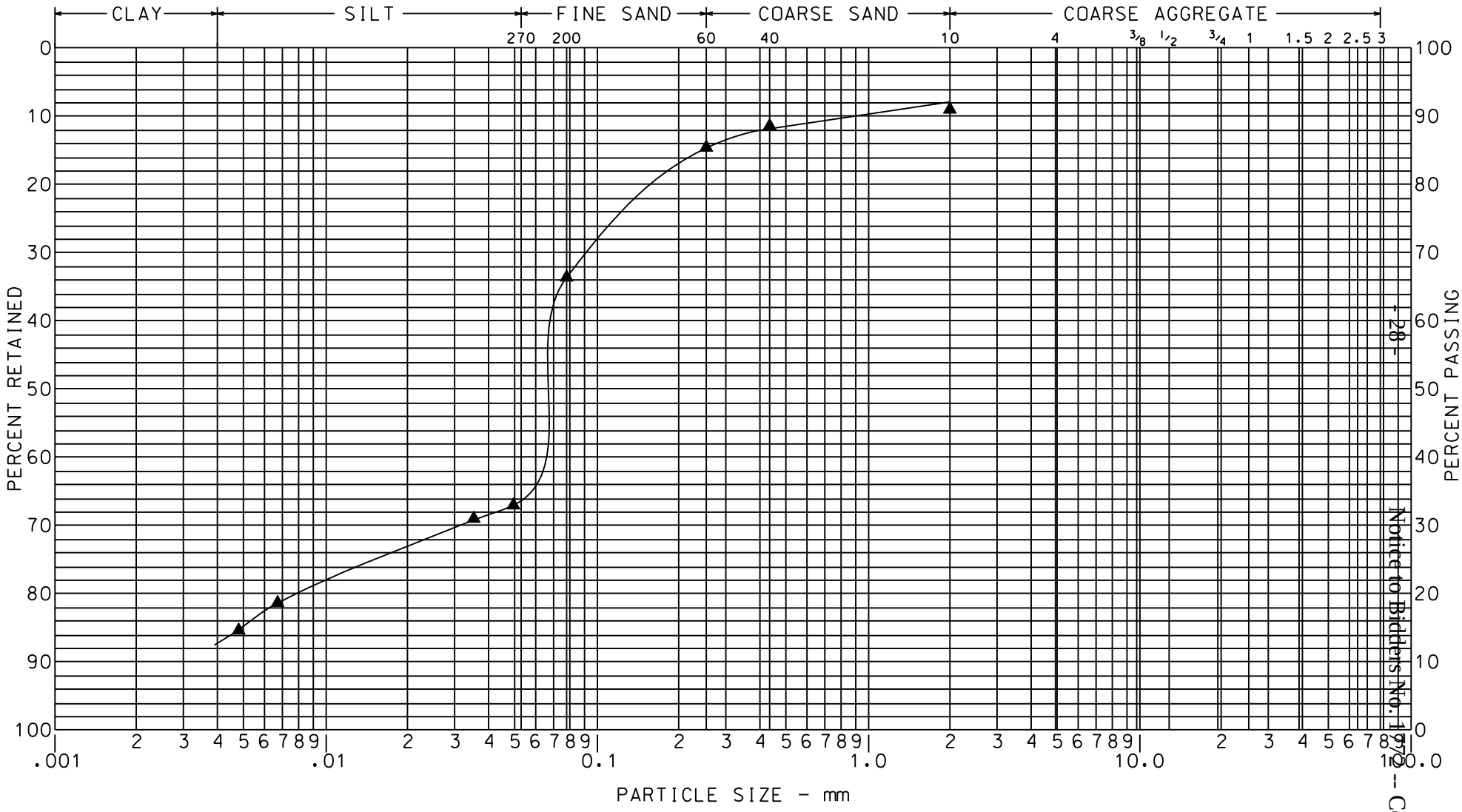


Notice to Bidders No. 1572 -- Cont'd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 4, 41'
ZONE: 2B

GRAIN SIZE ACCUMULATION CURVE

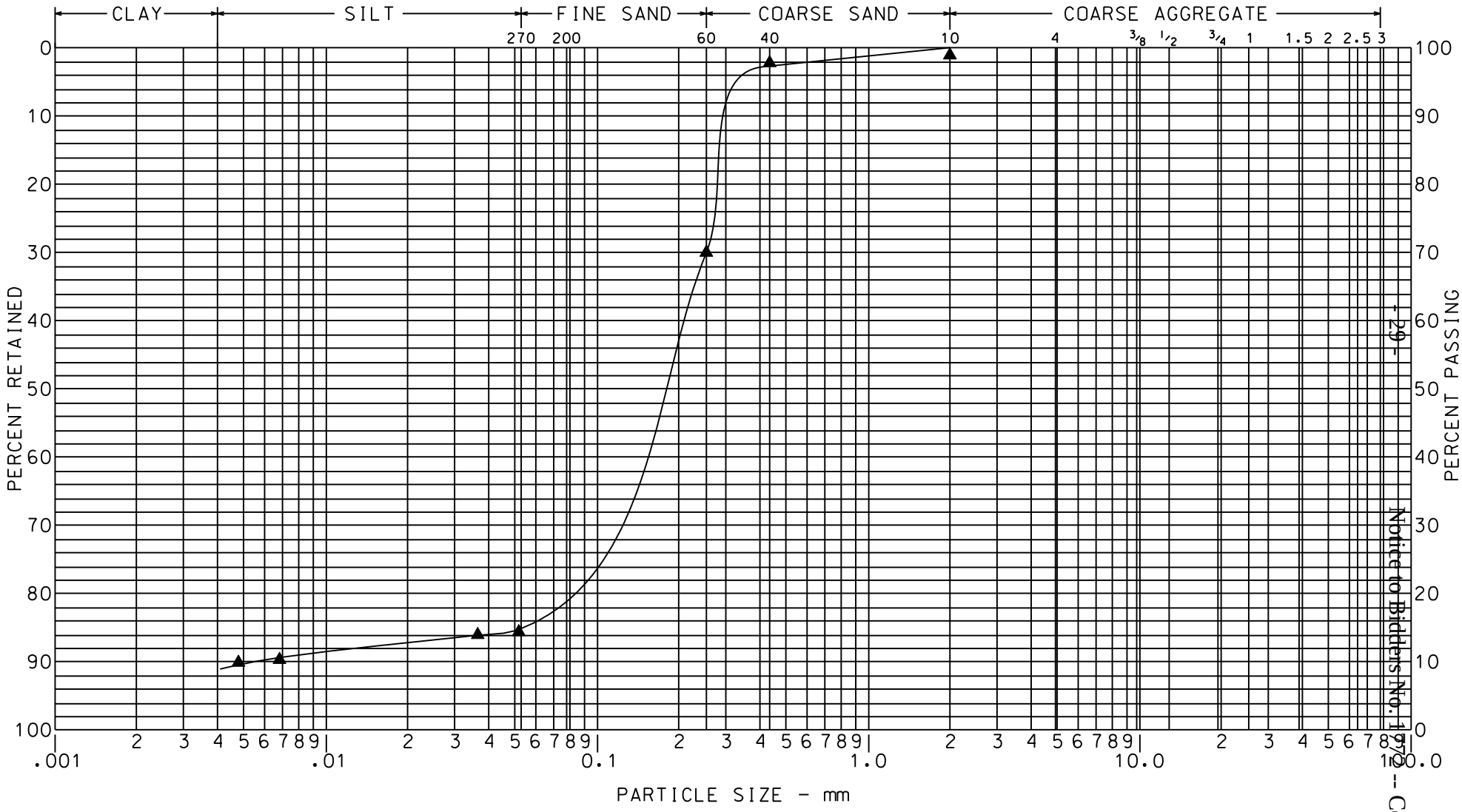


Notice to Bidders No. 1572 -- Cont'd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 2, 31'
ZONE: 2C

GRAIN SIZE ACCUMULATION CURVE

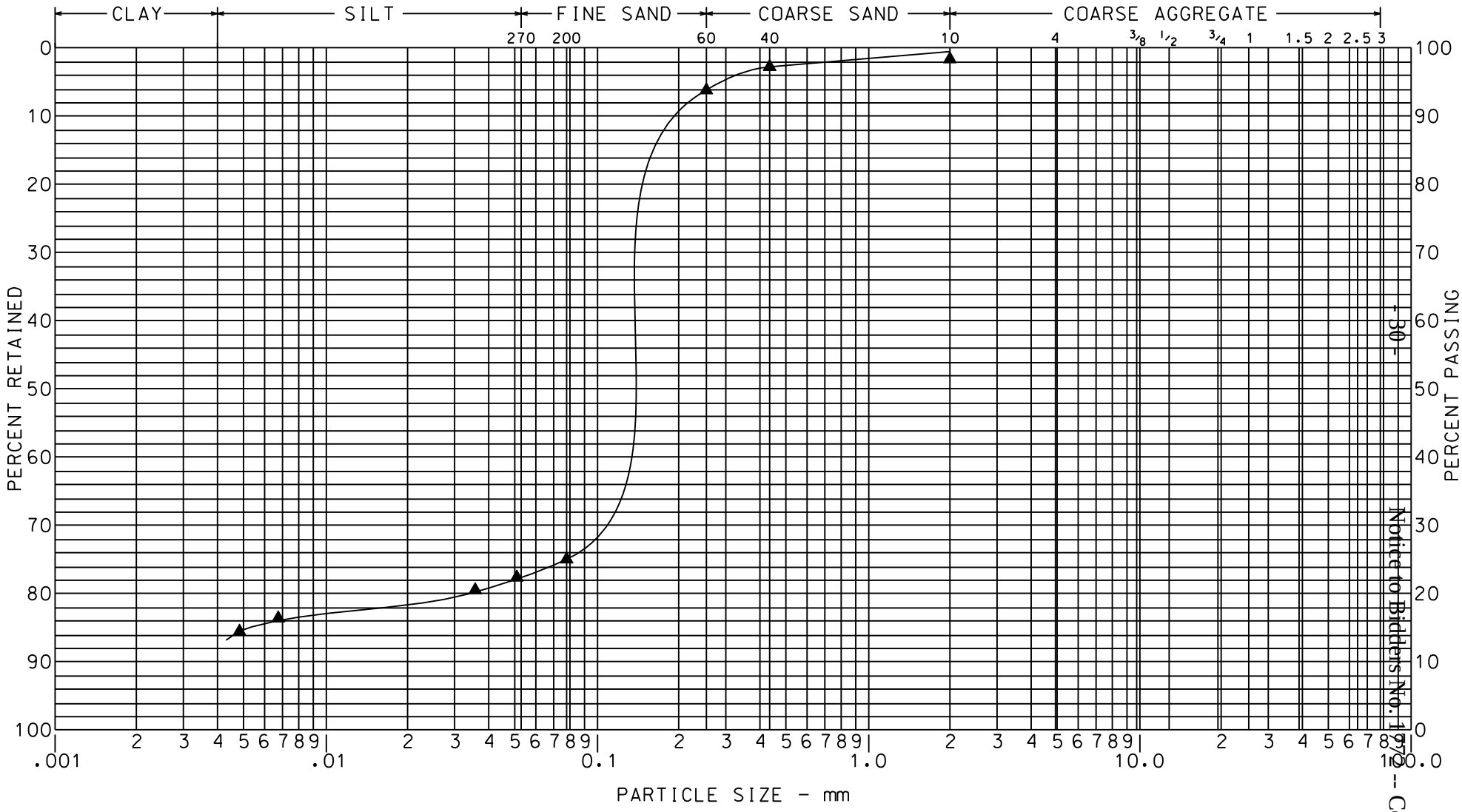


Notice to Bidders No. 1672 -- Cont'd.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SITE: 07-24-1063
BORING, DEPTH: 2, 46'
ZONE: 2C

GRAIN SIZE ACCUMULATION CURVE



Notice to Bidders No. 1572 -- Cont'd. - 30 -

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-698-1 **CODE: (SP)**

DATE: 11/20/2007

SUBJECT: Antenna Tower

PROJECT: BWO-6205-24(001) / 501948301 -- Harrison County

Section 907-698, Antenna Tower, is hereby added to and becomes part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-698--ANTENNA TOWER

907-698.01--Description. This special provision describes the specifications and minimum requirements for a total turn-key Antenna Tower solution. The physical location, site descriptions, dimensions, existing load requirements and future load requirements will be provided in a detailed Notice to Bidders.

The Contractor shall be responsible for the complete design, manufacture, assembly, hardware and installation of the steel tower structure including but not limited to the foundation, power, communications building, anchor bolts and templates, one integral welded waveguide ladder, cable safety climb devices, beacon mount, three torque arms, lightning rod, EIA grounding , attachments and other components necessary to form a complete tower to support the radio antennas and related equipment.

The tower shall have demonstrated long-term durability to withstand extreme temperatures, weather conditions and REV “G” wind loading.

Tower must be a Structure Class 3, Exposure Category C, and a Topographic Category 1.

Each tower shall be warranted fully as a complete assembly by the manufacturer for a period of 10 years

907-698.02--Materials. The Contractor is responsible for the complete tower and foundation design and shall meet the following minimum design criteria:

1) Tower drawings & foundation design must be P.E. Certified.
2) The tower shall meet all requirements listed in the latest revision of the Electronics Industry Association Structural Standards for Steel Antenna Tower and Supporting Structures (EIA/TIA-222G).
3) Tower must have solid rod steel for legs and bracing.
4) All tower materials will be hot dipped galvanized as outlined in ASTM A-153 & A-123.
5) The tower structure shall be designed to support the following existing and future loads:

a) At a minimum the structure shall be capable of supporting the following antennas:

Quantity	Antenna	Elevation	Line Size
1	db-224	350'	7/8"
9	1x8 Panel	350'	1 5/8"
1	db-212-4	340'	7/8"
9	1x8 Panel	340'	1 5/8"
9	1x8 Panel	330'	1 5/8"
1	6' MicroWave – 6Ghz w/Radome	320'	1 5/8"
1	6' MicroWave – 6Ghz w/Radome	310'	1 5/8"
1	6' MicroWave – 6Ghz w/Radome	300'	1 5/8"
1	6' MicroWave – 6Ghz w/Radome	290'	1 5/8"
1	6' MicroWave – 6Ghz w/Radome	280'	1 5/8"
1	6' MicroWave – 6Ghz w/Radome	270'	1 5/8"

b) In addition, the structure shall be able to support an additional 30 square feet of equal type wind loading to be distributed along the upper ½ of the structure.

c) Appropriate cable types and weights shall be assumed for each of the items listed above.

d) The design shall be a "worst case" scenario where each of the antennas above is installed as near the top of the structure as possible.

6) The structure shall be designed for wind velocity of 140 mph (3 second gust speed), 30 mph ¼" radial ice, and applicable gust factors in accordance with the EIA/TIA-222G.

907-698.02.1--General Requirements. The antenna tower system shall meet the following general requirements:

1) A microwave antenna transmits its signal within a limited beam width. This width is a characteristic of the antenna size and the signal frequency. Excessive movement in the tower may result in signal loss. Therefore, the structure shall be designed to provide the stability recommended by the wireless antenna manufacturer submitted by the Contractor for clear reception and transmission of the wireless video and data that is being transmitted. Design calculations shall evaluate both twist and sway to ensure they meet the microwave system's manufacturers recommendations
2) The structure shall include an integral welded climbing ladder designed in an appropriate location and configuration for the structure.
3) A Fall Restraint System shall be provided as part of the structure in accordance with OSHA Standard 1926.502, and shall include all attachments, hardware, and all items necessary for a complete system.
4) Vertical waveguide cable supports shall be provided on the outside face of the structural members. Cable supports shall be sized to sufficiently handle at least the minimum amount of cable needed for this project.

5) The Contractor shall provide and install a shielding apparatus for the purposes of supporting and protecting the coaxial/waveguide between the points where the coaxial/waveguide exit the tower and enter the communications shelter. There shall be a separation of 4' to 6' between the end of the cable ladder and ice shield, and the tower, to allow for expansion and contraction of the length of the cable ladder and ice shield as temperatures changes. The cable bridge shall be capable of supporting at a minimum the coax/wave guide runs for the minimum antenna configuration listed in section 5.a of these specifications. The supporting posts shall all be capped/sealed as to prevent entry of water/moisture into the pipe.
6) The structure shall be grounded in accordance with Motorola R56 standards.
7) The structure shall include all hardware, mounting devices, brackets, bolts and assemblies necessary to mount the antennas.
8) The structure shall be galvanized in accordance with ASTM A153 to protect the entire structure from rust and corrosion.

The Contractor shall provide the Engineer four sets of calculations and shop drawings for all items associated with the manufacturing, construction and installation of the tower structure and foundation. All structural plans, calculations and materials shall be approved by the Engineer and MDOT Bridge Division. Each design and shop drawing must be stamped by a registered professional Engineer.

Shop drawings must be approved prior to fabrication, and it is expressly understood and agreed upon that said approval does not relieve the Contractor of its responsibility for the proper design, fabrication and erection of the structure.

907-698.02.2--Foundation Requirements. The antenna tower shall meet the following foundation requirements:

1) Foundation design must be P.E. certified and based on normal soil conditions and EIA standards.
2) Custom foundation drawings must be provided to the Project Engineer upon completion of the GeoTechnical Soil Report.
3) MDOT will provide the GeoTechnical Soil Report.
4) Foundation design should be drilled shaft or driven pile and should account for uplift conditions. Foundations shall conform to Section 803 of the 2004 Standard Specifications.

907-698.02.3-Antenna Tower Grounding Requirements. Tower and ice shield bridge grounding must meet all Motorola R-56 Standards.

907-698.02.4-Antenna Tower Lighting Requirements. The antenna tower lighting shall meet the following requirements:

1) The installed lighting system shall be a Dual Lighting system consisting of Strobe Medium Intensity Flashing white system for daytime and twilight, and red obstruction

light system for nighttime. The lighting system shall meet FAA Advisory Circular AC-70/7460-1K "Obstruction Marking & Lighting" Guidelines.

2) The beacon(s) shall have a flash rate which meets FAA requirements and shall not be affected by changes in line voltage or frequency.
3) The control unit/power supply shall be solid state design and is to be mounted in the communications shelter. The lighting system shall operate on 120 volt AC 60 Hz single phase power.
4) There shall be a minimum of three (3) alarm outputs provided as listed below. These alarm outputs shall be dry contact closures.
   a) Top beacon strobe problem which includes failure and/or out of tolerance flash rate.
   b) Top beacon red light problem which includes a failure and/or out of tolerance flash rate.
   c) Red light side light problem.
5) There shall be a minimum of two (2) status outputs provided as listed below. These status outputs shall be dry contact closures.
   a) Day time strobe functioning.
   b) Night time red lights functioning.
6) These dry contacts shall monitor the state of the controller. Designs which monitor the photocell to determine day/night status shall not be allowed.
7) The unit shall be equipped with lighting arrestor and transient surge suppression on all electronics.
8) One (1) hardcopy written manual and one (1) electronic copy of the manual shall be provided for the lighting system. The technical manual shall accurately describe service procedures, with module description circuit diagrams, replacement parts list, installation procedures, mechanical details, and termination points for equipment exactly as purchased.
9) There shall be no interference generated by the lighting system that could possibly interfere with the radio systems on the tower. If there is, Contractor will correct at his own expense to the satisfaction of the Project Engineer.
10) Obstruction light mounts properly sized for the legs shall be provided. Obstruction light fixtures shall be constructed of a corrosion resistant metal. Non-metallic fixtures will not be accepted.

907-698.02.5--Tower Communications Shelter Requirements. The equipment building shall be of a modular, prefabricated type construction. The walls shall be concrete with reinforcing steel, polypropylene fiber reinforced, 4,000 PSI minimum at 28 days compressive strength. The building size shall be a minimum of 10' x 12' x 8'6" for the outside dimensions.

Minimum design loads shall be:

- Seismic load performance category "C", Exposure Group III
- Standard Live Roof Load – 60 PSF
- Standard Floor Load – 250 PSF
- Standard Wind Loading – 130 MPH

The roof panel shall slope 1" from center to sides. The roof shall extend a minimum of 1½"

beyond the wall panel on each side.

Roof, floor, and wall panels must each be produced as single component monolithic panels. No roof, floor, or vertical wall joints will be allowed except at corners. Wall panels shall set on top of floor panel. The tower communications building foundation shall meet Rev "G" wind loading specifications. No pre-fabricated concrete or aggregate slabs will be allowed.

Included in the building are:

- 3'0" x 7'0" x 1¾" galvanized steel door and frame with dead bolt lock, door knob and three (3) keys,
- The entry door shall be in the 10'wall opposite the 10' wall with the coax entry port.
- Distribution panel board, 120/240 VAC interior, single phase, three wire, 125 amp main including breakers, (with 40-circuit minimum load panel)
- 4-foot fluorescent ceiling mount fixture with two 40-watt cool white lamps,
- HPS exterior light with photocell, 120 VAC,
- HVAC unit shall have 5-ton cooling units and 5 kw heating units.
- Minimum of three 120 VAC grounded duplex receptacles and all conduit and wiring,
- Finished walls and ceiling with insulation and vinyl floor tiles,
- Exposed aggregate finish or comparable finish as directed by Engineer,
- 12 port coax entry port located in the 10' wall closest to the tower.
- 10" x 20" opening in the floor for conduit risers, location to be determined by Engineer; and,
- Halo ground system.

As part of site preparation, the area surrounding the tower communications building shall be leveled and prepared with a layer of Geotextile (Type III Erosion Control) and then a 5" thick layer of Mineral Aggregate (size 57), in addition to a 5' x 3' concrete pad (5" thick) shall be installed in front of the door. The cost of the items shall be included in the lump sum price bid for the Tower Communications Hut.

907-698.03--Construction Requirements.

907-698.03.1--Installation Requirements. Installation of the antenna tower system shall be as follows:

1) Contractor must receive confirmation from the FAA (form 7460-1) for final tower height and the approved lighting system, and comply.
2) Security Requirements/;
   a) Field Employees of Contractor & all sub-contractors must be CPR and First Aid certified (CFR 1926.23).
   b) All climbing employees must be trained and equipped for fall protection and rescue (CFR 1926 Subpart M) and meet all OSHA requirements.
   c) Contractor must have in place and enforce a Safety Program and provide a written copy to the Engineer through MDOT's normal submittal process.

d) The Contractor must have a Work Comp Mod Index of 1.0 or less for the previous three years.
e) The Contractor must have all the necessary insurance policies that name MDOT as an additional insured.

3) All exterior electrical wiring shall be installed in liquid proof conduit with appropriate fittings
4) All interior electrical wiring shall be installed in thin-wall metal conduit with appropriate fittings.
5) Holes through walls shall be sealed around, on both sides, using white, 30 year, paintable, silicone caulk. Large voids or any damage to masonry shall be repaired with quick-setting cement such as rockite or equal, followed by caulking, if needed.
6) Exterior conduits shall be buried along paths between building and generator set per project plans
7) The vendor/contractor is responsible for site clean-up. All trash, discarded, expendable, and unused materials shall be removed from the site immediately after completion of installation. Spilled concrete, paint, sealants and similar materials shall be cleaned up in all areas.
8) The vendor/contractor shall be held liable for damage caused by negligent contractor's actions to any and all existing buildings, towers, cables, wiring lighting, HVAC systems, radio equipment, and all other State property at the site during the installation work and subsequent system testing if any damage occurs.
9) The vendor/contractor shall be responsible for security of all supplied equipment and materials left at the work site during installation.

907-698.03.2--Blank.

907-698.03.3--Testing Requirements. The following are the requirements for testing the antenna tower system.

1) Construction of tower, attachments, and communications shelter are all subject to inspection from an independent inspector contracted by MDOT.
2) Tightness on 10% of the overall tower bolts should be checked, including 10% of the bolts in each section of tower.
3) The tower must be plum with no twist in the tower.
4) All Guy wires must have proper tension per manufacturer's specifications.
5) The Engineer shall have the option to witness all tests.
6) Grounding System must meet all Motorola R-56 testing guidelines.

907-698.04--Method of Measurement. Antenna Tower and Tower Communication Hut, complete in place, will be measured per lump sum, inclusive of all wiring, hardware, and incidentals necessary to complete the work.

Antenna Tower will each be paid on a lump sum basis as follows:

- 20% of the contract unit price upon complete installation of foundations.
- 50% of the contract unit price upon delivery of the complete structure to the site.

- 30% of the contract unit price upon complete installation and Project Release for Maintenance of the structure.

The Tower Communications Hut will each be paid on a lump sum basis as follows:

- 35% of the contract unit price upon on-site delivery of the Hut building.
- 55% of the contract unit price for complete installation of hub building, electrical system and service feed, HVAC system, interior grounding, exterior grounding, ground testing, site preparation and cleanup, fencing, and all interior equipment and materials.
- 10% of the contract unit price upon Project Release for Maintenance of the Tower Communications Hut.

907-698.05--Basis of Payment. Antenna Tower and Tower Communication Hut, measured as prescribed above, will be paid for at the contract unit price lump sum, which price shall be full compensation for furnishing all materials, construction installation, connecting, testing, for all equipment, tools, labor, and incidentals required to complete the work.

907-698-A: Antenna Tower - lump sum

907-698-B: Antenna Tower Communications Hut - lump sum