PROCEDURAL RESEARCH FOR REPORTING OF MATERIAL TEST DATA USING COMPUTER SYSTEMS

THE MATT SYSTEM

VOLUME 1

USER MANUAL

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The most cumbersome effort during preparation of this manual was the drafting and typing of the various work-test report forms which are presented as exhibits in this manual. Repeated revisions meant "back to the drawing board." The patience of Ms. Debbie Melancon in drafting, and Ms. Helene Melancon and Ms. Marilyn Marlett in typing these various forms is acknowledged and appreciated.

The effort of Messrs. Bob Bisschoff and Barry Nichols during the initial phase of the design and development of the System is gratefully acknowledged.

IMPLEMENTATION

A full-scale implementation of the MATT System went into effect in June 1978. This implementation was accomplished through a four-hour workshop in each of the nine districts and the Central Laboratory. An overview of the system was also presented to FHWA area engineers. The workshops were conducted through visual aids and User Manual.

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LIST OF FIGURES, EXHIBITS AND TABLES (CONTINUED)

+ On-line* data entry
+ On-line error correction
+ On-line inquiry
+ Off-line processing of test data
+ On-line printing of exception and logging reports
+ On-line request for special reports

The above capabilities can be translated in terms of the following benefits the system will provide.

+ A continuous log of major construction materials and tests at a centralized location (computer tapes).

+ Assistance in monitoring construction projects for compliance with specifications.

+ Less duplication of effort and standardized reporting procedure relative to materials and tests.

+ Accelerated preparation of final certification (Form 2059).

+ Data base for review and analysis with respect to:

    * Process variability
    * Sampling and testing frequency
    * Producer profiles
    * Specification revisions and/or updates

Design and Development of the System

The design and development of the MATT System was accomplished through task groups' approach. These task groups (one each for soil and base course, concrete, and hot mix) consisted of personnel from the Construction, Materials, Research and Development, and Data Processing Sections. Their primary function was to define user requirements with respect to input forms, map formats and output reports for various materials. The task group approach

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*On-line signifies that the operation is performed on the terminal at the instant. Off-line, on the other hand, signifies that the operation is performed some time later.

combines user needs and knowledge with data processing expertise to provide an efficient, user-oriented system.

The total MATT System is composed of a number of small subsystems. Figure 1 depicts the compositional make-up of the MATT System. The three subsystems, Project, Specification, and Name, provide support to the total system and are basic to the Material subsystem. In other words, no data can be entered on any of the materials included in the MATT System unless the project information, the specifications governing the materials to be used on that project, and the names of the project engineer, contractors, and material producers are already on file in the computer.

Each of the subsystems defined in Figure 1 is represented on the computer video terminal as a Map. Thus there is a Project Information Map, a Name Map, an Asphalt Cement Test Map, and so on. Furthermore, each map is a replica of the input data form. In other words, when you look at a certain map on the display screen, it will look similar to the input data form. This similarity provides for easy and rapid entry of test data.

As with any new system, there are some changes that the user will have to get accumtomed to. One of the major changes is the input form for recording test data. All forms are combination work-report forms. Data from these forms will

be used as input to the computer through the district display terminals. Other changes are reflected in the size of the forms, which are 8-1/2" by 11", and the presence of grey-black open ended blocks for certain fields or items. Those in black signify mandatory entry. Another change will be the entry of numbered codes for project engineers, contractors, material suppliers, etc. In a majority of cases, form 800 will not be needed for sample identification. These and other changes are geared towards easy and rapid entry of test data with a minimum of transfer or duplication. Above all, the changes will standardize the reporting procedures throughout the state.

This manual discusses, in detail, each of the subsystems shown in Figure 1 with emphasis on how to fill out the input forms, how to access each map on the display terminal, how to enter test data, how to delete or update existing data and, finally, how to inquire upon existing data.

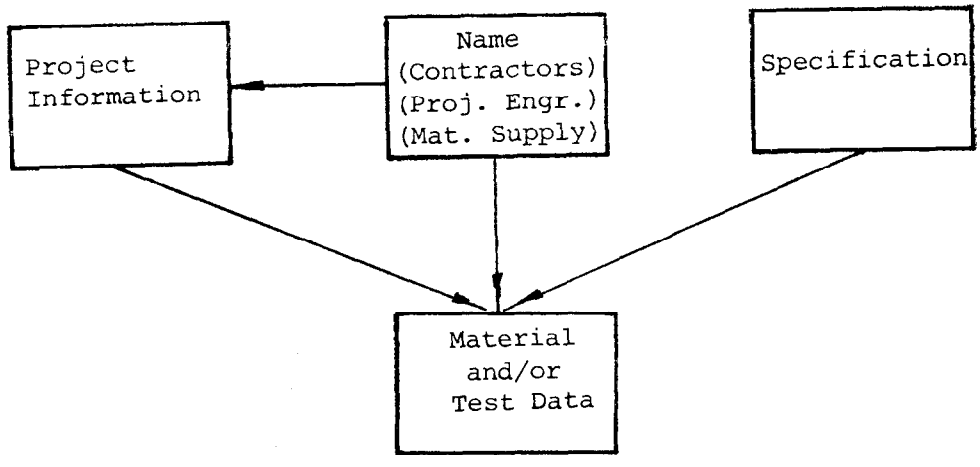


FIGURE 1

1 NAME SUBSYSTEM

As was discussed in the preceding section, there are some subsystems that provide basic support to the entire MATT System. Name is one such subsystem. The Name file contains names of persons responsible for monitoring construction projects (project engineers) and those responsible for providing construction services (contractors) and materials (material producers, suppliers, etc.). This file should be considered basic to the other support subsystem, namely, Project Information. If the names of persons or companies mentioned above are not in this file, you will not be able to enter data on the Project Information (PI) subsystem. This will become obvious later on when we discuss the PI subsystem.

The Name subsystem will let you browse through the existing records and, if need be, add to, inquire upon, update or delete any of these records. The Name file is subdivided into three categories of names, and each category has been assigned a Type Code as follows:

Type Codes
- B = Contractors
- C = Material Suppliers
- D = Submitters

All contractors that provide contracting services for the State's construction program are assigned numeric codes from 0001 through 9999. A complete listing appears in Chapter 6.

The material suppliers are also listed as four-character codes as follows:

The first character stands for type of material, either Aggregate, Bituminous Material, Concrete, Hot Mix, or Reinforcing Steel, and is represented by letter A, B, C, H, or R, respectively. The second character in the four-character code represents the location as follows:

0 - Out-of-State
1 - Hammond District
2 - New Orleans District
3 - Lafayette District
4 - Shreveport District
5 - Monroe District
6 - Baton Rouge District
7 - Lake Charles District
8 - Alexandria District
9 - Chase District

The last two characters are assigned numbers. For suppliers of other materials, the first two characters are either numbers or letter designations and the last two numbers are sequentially assigned numbers. See Chapter 7 for complete listing.

The submitters are those individuals who submit samples for testing. The project engineers, who are principal submitters, are represented by the gang numbers to which they are assigned. Other submitters in this list include consulting engineers, prestress plant inspectors, laboratory engineers, etc. Each submitter is represented by a four-character code. Chapter 8 lists the various submitters.

Depending on whether you want to enter a new record, update or delete an existing record, or inquire upon or browse through existing records, you will need to know a one-letter Action Code as follows:

Action Codes
- N = New Record
- I = Inquiry
- D = Delete
- U = Update
- L = List or Browse

The information that must be entered on the keyboard to bring the Name File to the display station screen varies with the Type Code and Action Code. Therefore, we will discuss each action code separately.

A. New Record (N)

Following is the step-by-step procedure for entering new records:

(1) Key the Transaction Line as follows:

+ For Type Code B, enter MTNM/B/N
+ For Type Code C, enter MTNM/C/N
+ For Type Code D, enter MTNM/D/N

After you have keyed any one of the above transaction lines,

(2) Depress the ENTER Key

(3) When the formatted map appears on the screen, key the following:

+ For Type Code B

  * Name - 70 characters

+ For Type Code C

  * Name - 70 characters
  * Number - First two characters of the four character codes

+ For Type Code D

  * Name - 70 characters
  * Number - All four characters of gang number or sequence number

After you have performed any one of the above operations,

(4) Depress ENTER Key

The map will appear on the screen with name and sequence number assigned for Type Codes B and C. If the entry is error free,

(5) Depress CLEAR Key

B. Inquiry on Name File (I)

Since you want to inquire upon a certain record, you also need to key the sequence number of that record, along with the type and action codes.

(1) Key the Transaction Line as follows:

+ For Type Code B, enter MTNM/B/I/Sequence Number
+ For Type Code C, enter MTNM/C/I/Sequence Number
+ For Type Code D, enter MTNM/D/I/Gang or Sequence Number

(2) Depress the ENTER Key

If the record is found, it will appear on the screen showing the name corresponding to the sequence numbers above. If you desire a copy of this record, depress the PA2 Key.

If the record is missing in the files, a message "RECORD NOT FOUND" will appear on the screen, in which case,

(3) Depress CLEAR Key

C. Update Existing Record (U)

There will be occasions when you may want to update an existing record as when there is a change in the gang assignment of a project engineer or when you want to correct the name of the supplier. This

can be accomplished with the following sequence of operations on the terminal keyboard:

(1) Key the Transaction Line as follows:

+ For Type Code B, enter MTNM/B/U/Sequence Number
+ For Type Code C, enter MTNM/C/U/Sequence Number
+ For Type Code D, enter MTNM/D/U/Gang Number or Sequence Number

(2) Depress ENTER Key

When the formatted map appears on the screen, key the following:

(3) A four digit Security Code

(4) Update the Name

(5) Depress ENTER Key

The update map will appear on the screen.

(6) Depress CLEAR Key

D. Delete Existing Record (D)

The procedure for deletion of existing record is similar to the procedure for updating existing record except that D should be substituted for U for the Action Code and step 4 should be skipped.

E. List or Browse (L)

This Action Code will let you browse through the existing Name list in the computer files.

(1) Key Transaction Line as follows:

+ For Type Code B, enter MTNM/B/L/SEQUENCE NO (optional)
+ For Type Code C, enter MTNM/C/L/SEQUENCE NO (optional)
+ For Type Code D, enter MTNM/D/L/SEQUENCE NO (optional)

(2) Depress the ENTER Key

The data map will appear on the screen beginning with the first sequence number. If the above transaction lines are entered with the entire sequence number, the map will begin at that sequence number and continue till the last name.

(3) Depress the ENTER Key to browse through each successive map.

(4) If a copy of any map is desired, depress the PA2 Key.

Error Messages

For various reasons an error message may appear on the screen. The field in which the error message occurred will be highlighted, and the cursor will be positioned at the location of the first error. Outlined below are the error messages which may appear when you are working with the Name File maps. Listed below each error message is a list of possible causes for the error. The fields in which the error may occur are underlined.

(1) Invalid Type Code

If the type code is not a B, C, or D, this error message will appear on the screen.

(2) Invalid Action Code

If an N, I, D, U, or L is not entered in the action code field, this error message will appear on the screen.

(3) Seq-Number Not Entered

If the action code is either an I, U, or D, then a sequence number must be entered.

(4) That Sequence Code Is Full

Each entry is assigned a sequence number. If the sequence number field is filled to maximum capacity, this error message will appear on the screen.

(5) No Name Entered

If the action code is either an N or a U, then a name must be entered.

(6) Invalid Sequence Number Entered

If the action code is a D, then a four digit numeric sequence number must be entered.

(7) Invalid Two-Character Sequence Identifier Entered

If the type code is a C, then the first two characters of the sequence number must be entered.

(8) Sequence Is Already on File

If the type code is a D and action code is an N and the sequence number entered is already on the file, this message will appear.

2.1 PROJECT INFORMATION

The Project Information (PI) subsystem contains all the information pertinent to the project. This subsystem is a prerequisite for entry of other material test data. The entire MATT System depends on some of the basic data entered in the fields defined in this subsystem. If some of the basic data are not entered in the fields displayed on the terminal screen, then it will not be possible to enter any of the material test data. As an example, suppose you want to enter data on structural concrete cylinder strengths. The first thing you will be required to enter for these tests is the project number. The moment you enter this project number, the MATT System will go to the PI file to check the validity of the project, or, in other words, to see if a construction project bearing this number exists. If this information is missing, you will not be able to enter any strength data until after the PI file contains the necessary information on this project.

In the following paragraphs, the various fields that make up the PI subsystem are discussed in detail with respect to their formats and constraints. All required fields are indicated with an asterisk. The N in parenthesis signifies that the entry is numeric data only and that the terminal keyboard will automatically shift to numeric.

For each project you will have the project information form like the one shown as Exhibit PI-1. This form will be filled out from contract documents. The information on this form will then be used

as input to the PI map on the terminal. Exhibit PI-2 is an example of the map as will be projected on the terminal screen. The dark or black-colored fields in Exhibit PI-1 are required fields and must be recorded.

Project Number*

846-10-06

Although at the present time only nine spaces (maximum) are needed to identify a construction project, the sixteen spaces that are provided for this field are for possible future expansion which the Department is considering. Only numeric data is allowed. The project number that you insert in this field will be the governing project and all future sample identification will have to be identified by this number. This is important for contracts that have dual or triple project numbers.

FAP Number

BRS-624-2(001)

The FAP Number is the Federal Aid Project Number and can be alpha-numeric.

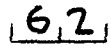
Associated Projects

*Required Entry

Since many contracts have dual or even triple project numbers, the secondary numbers must be entered in the associated projects field. It is important to note that these associated numbers can not be used as lead project numbers on sample identifications.

Route Number

District* (N)

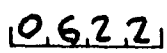


The district number in which the project is located, 02, 03, 04, 05, 07, 08, 58, 61 or 62, must be entered in this field.

Parish* (N)

The parish field must contain a number from 1 to 64.

Project Engineer* (N)



Insert the gang number to which this project is assigned.

(N) - Numeric Key Shift

Contractor* (N)

0177

Insert the contractor's number from the contractor's name list.

Highway Name (From-To)

AMITE RIVER BRIDGES &
APPROACHES (FELIXVILLE)

This field is provided to identify the location of the construction.

Beginning Milepost (N)

002.01

Ending Milepost (N)

002.80

If information on the above two fields is not available, leave it blank and update it after the mile markers are posted.

Beginning Point

ON ROUTE LA 432 APPROX 1.4
MI EAST OF FELIXVILLE

Insert abbreviated description of the beginning point of location of construction. The description should be confined to 52 characters maximum.

Ending Point

AT MILE MARKER 3.0 IN ST. HELENA PARISH

This field should describe, in 52 characters, the ending point of construction.

System Code * (N)

4

One of the following system codes must be entered:

Code	State System	
1	Interstate	Code 1, 2, 3, or 4 should be used when work is performed on any roadway or structure in the state highway system. Color coded maps are available to show the official system designation for all highways. Revised maps will be distributed periodically to show changes in the system.
2	Primary	
3	Secondary	
4	Farm-to-Market	
5	Buildings and Grounds	Code 5 should be used when working on the buildings or grounds of the Department of Transportation and Development, Office of Highways.

Code	State System	
6	Overhead and Undistributed Expense	Code 6 should be used for overhead and undistributed work functions (i.e., leave, material handling, radio communications, administration, etc.)
	Off System	
7 8 9	Parish Road City Street Parking Lot, Driveway, etc.	Code 7, 8, or 9 should be used when work is on a parish road, city street, parking lot, driveway, or any other facility that is not related to the state highway system or on the Department of Transportation and Development's buildings and grounds.

Location* (U or R)

|R|

In the location field, enter a U if the construction is in an urban area or an R if the construction is in a rural location. If the construction is both urban and rural, enter the predominant location.

Work Order Date* (N)

|0,8,-,0,4,-,7,6|

The work order date must be numeric and written as month-day-year.

Bid Cost* (N)

0,0,1,2,8,2,8,5,2,.,2,0

This field defines the total bid cost of the construction. Do not enter commas between numbers.

Acceptance Date (N)

1,1,-,0,8,-,7,7

Since information on this field will not be made available till after the completion of the project, it will have to be entered as an update. The format should be month-day-year.

Final Cost (N)

0,0,1,2,8,0,1,7,7,.,3,0

This field will have to be entered as an update also. No commas between digits are allowed.

Contract Days Allocated* (N)

0,2,7,5

OR 2,7,5,

Contract Days Used (N)

0	2	0	0

OR

2	0	0	

This field will have to be entered upon completion of the project.

Construction Type * (N)

0	9

OR

9		

The construction type codes to be inserted are as follows:

Code	Type of Construction
0	New Construction - Portland Cement Concrete (PCC)
1	New Construction - Hot Mix Asphaltic Concrete (HMAC) with base
2	New Construction - Bridges
3	Reconstruction - HMAC with base
4	Reconstruction - HMAC widening and overlay
5	Reconstruction - HMAC overlay
6	Reconstruction - ACFC overlay
7	Reconstruction - PCC
8	Reconstruction - Asphaltic Surface Treatment
9	Reconstruction - Bridges
10	Rest Areas
11	Safety
12	Signing
13	Drainage related improvements
14	Landscaping
15	Buildings
16	Other

For this field, combinations of the code numbers may also be used. For example, if the contract is for the reconstruction of a bridge with an HMAC overlay, you would use code number 95. If a new bridge is constructed with Portland Cement Concrete, code number 20 would be used.

Number of Lanes (N)

0	2					

OR

2						

If the number of lanes varies over the length of the project, insert typical or predominant value.

One Lane Width, Feet (N)

1	1	.	0			

Enter single lane width in this field. If the width varies over the length of the project, enter predominant or typical value.

Total Project Length, Miles (N)

0	0	0	.	7	9	4

This field defines the total length of the construction project.

Average Daily Traffic (N)

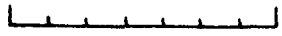
0	0	0	6	2	0	

OR

6	2	0				

Record the average daily traffic in vehicles per day.

Median Type



If data is entered in this field, it must be one of the four types shown on the form. Otherwise leave the field blank.

MTPI/PROJ NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

PROJECT INFORMATION

Project No.* 846-10-06

F. A. P. No.* BRS-624-2(001)

Associated Projects* 1.
2.

Route No.* LA 432

District 62 Parish 46

Project Engineer Leey Mabes Contractor Spohrer Constr. Co.

Project Engineer Code 0622 Contractor Code 0177

Name of Highway (From-To)* AMITE RIVER BRIDGES & APPR OACHES (FKLIXVILLE)

Beginning Milepost 002.01 Ending Milepost 002.80

Beginning Point* ON ROUTE LA 432, APPROX 1.4 MI EAST OF FKLIXVILLE

Ending Point* AT MILE MARKER 3.0 IN ST HELENA PARISH

System Code 4 Location* R (U=Urban, R=Rural)

Work Order Date 08-04-76 Bid Cost 0012828852.20

Acceptance Date 11-08-77 Final Cost 0012801773.30

Contract Days Allocated 275 Contracted Days Used 200

Construction Type Code 9

Number of Lanes 2 One Lane Width, ft. 11.0

Total Project Length, mi. 000.794 Average Daily Traffic 620

Median Type* (Barrier, Sod, Paved, Gravel)

EXHIBIT PI-1

MTPI/

*** PROJECT INFORMATION ***

PROJECT NUMBER :
ASSOC. PROJECTS :
ROUTE NUMBER :
DISTRICT :
PROJECT ENGINEER :
HWY NAME(FROM-TO):
BEGINNING MILEPOST:
BEGINNING POINT :
ENDING POINT :

FAP NUMBER :
:
MAKISM :
CONTRACTOR :
ENDING MILEPOST:

SYSTEM CODE
WORK ORDER DATE :
ACCEPTANCE DATE :
CONT. DAYS ALLOC.:
CONSTRUCTION TYPE:

LOCATION(U OR R) :
BID COST :
FINAL COST :
CONT. DAYS USED :

NUMBER OF LANES :
TOTAL LENGTH :
MEDIAN TYPE :

LANE WIDTH :
AVG DAILY TRAFFIC:

EXHIBIT PI-2

2.2 ROADWAY CROSS SECTION

The Roadway Cross Section subsystem is a continuation of the Project Information subsystem discussed before. The form that will be filled out is shown as Exhibit RC-1. Exhibit RC-2 is the corresponding map as will be seen on the terminal. Following is a discussion of each of the fields shown on the form:

Project Number*

See Section 2.1.

Misc. Info. (Miscellaneous Information)

THE PROJ IS LOCATED IN PARISH 46 & 19; 1.5BC & 1.5WC

Use this field to enter any information that can not be discussed in other fields and yet is important enough to be noted. One use of this field would be to indicate any major changes that may have occurred in personnel relative to the contract. For example, if the contractor changes during the course of the project construction, this field can be used to note such a change.

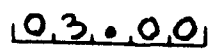
Roadway Surface

HMAC

*Required Entry

This field defines the final roadway surface on which traffic will travel. Use one of the abbreviations listed on the form.

Thickness, Inches (N)



This field is for roadway surface thickness and is recorded in inches. If the thickness varies over the length of the project, enter typical or predominant value.

Joint Interval, Feet (N)

This field will only be filled out if the Roadway Surface entered above was PCCP.

If PCCP

Again, if the Roadway Surface entered was PCCP, enter the letters indicated on the form.

(N) - Numeric Key Shift

Load Transfer Device

[ ]

Enter appropriate abbreviation for either of the load transfer devices used in the PCCP construction.

Construction Type

[O]

Enter the applicable letter for the type of construction.

Existing Surface

[A,S,T, ,]

This field will be entered if an O for overlay was entered in the preceding field. The abbreviations to be used are the same as for Roadway Surface.

Original Surface as Constructed

[A,S,T, ,]

This field will also be filled out if the construction is a second overlay. If so, then we would want to know the original surface before the first overlay was put down. Again, use the same abbreviations as for Roadway Surface.

Base

SC

Enter any one of the listed abbreviations for different types of base courses.

Thickness, Inches (N)

08.50

If the thickness of the base course varies over the length of the project, enter typical or predominant value in inches.

Subbase

If a subbase is constructed, enter any one of the applicable abbreviations listed under Base including Lime.

Thickness, Inches (N)

The thickness in inches should be entered if the above field was entered.

Subgrade Soil Classification

A	2	6		

This field defines the AASHTO soil classification for subgrade.

Shoulder: Surface

O	T	H	E	R

Enter any one of the abbreviations listed under Roadway Surface. If the shoulder is aggregate or sod, enter Other.

Shoulder: Width, Feet (N)

0	6	.	0

If the width varies over the length of the project, enter typical or predominant value.

Shoulder: Base

O	T	H	E	R

Enter any one of the abbreviations listed under Base.

Shoulder: Thickness, Inches (N)

0,4.0,0

The thickness should be the total thickness, in inches, of surface and base. If this thickness varies over the length of the project, enter typical or predominant value.

MTRC/PROJ NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

ROADWAY CROSS-SECTION

Project No.* 846-10-06

Misc. Info.* THE PROJ. IS LOCATED IN PARISH 46 & 10; I-5 BC & I-5 WC

Roadway Surface* HMAC

(AST=Asphaltic Surface Treatment,
CRCP=Continuous Reinforced Concrete Pavement,
HMAC=Hot Mix Asphaltic Concrete,
ACWFC=Asphaltic Concrete with Friction Course
PCCP=Portland Cement Concrete Pavement,
ACFC=Asphaltic Concrete Friction Course
OTHER=Any Material Not Listed)

Thickness,in. 03.0 (for ACWFC enter the Hot Mix Thickness only)

Joint Interval,ft. ____

If PCCP* ____ (R=Reinforced, U=Unreinforced)

Load Transfer Device* ____ (DB=Dowel Bar, SL=Starlug)

Construction Type* 0 (N=New, O=Overlay)

Existing Surface* AST (Same as Roadway Surface above)

Original Surface as Constructed* AST (Same as Roadway Surface above)

Base* SC

Thickness,in. 08.5

(BLACK=Black Base,
GRAN=Granular,
SS= Sand Shell,
STSS=Stab. Sand Shell,
SCG= Sand Clay Gravel,
STSCG=Stab. Sand Clay Gravel,
SC= Soil Cement,
OTHER=Any Material Not Listed)

Subbase* ____

Thickness,in. ____ (Same as Base above plus LIME=Lime Treated)

Subgrade Soil Classification* A2G

Shoulder: Surface* OTHER (Same as Surface above)

Width,ft. 06.0 (Outside Shoulder)

Base* OTHER (Same as Base above)

Thickness,in. 04.00 (Surface + Base)

EXHIBIT RC-1

MIRC/

*** ROADWAY CROSS-SECTION ***

PROJECT NUMBER :

[illegible]

ROADWAY SURFACE
THICKNESS :
IF PCCP :
CONSTRUCTION TYPE:
ORIGINAL SURFACE :

JOINT INTERVAL:
LOAD TRANSFER :
EXISTING SURF.:

BASE :

THICKNESS:

SUBBASE :

THICKNESS:

SUBGRADE SOIL :

SHOULDER: SURFACE:
BASE :

WIDTH :
THICKNESS:

EXHIBIT RC-2

3.1 HEADER INFORMATION

The header fields are those fields, or items, that appear on the top portion of each test report form. These fields are the familiar Form 800 fields. A number of these fields are common to almost all of the test report forms. Therefore, rather than repeat these items each time, we will discuss them individually in this section and refer to them whenever individual forms, in which they appear, are discussed. Exhibit HI-1 is an example of the revised Form 800.

Filling out the various fields properly is of utmost importance. The information provides a direct link between the sample, the test, the purpose of the test and the specification item number for which the sampling and/or testing is performed. This last link determines whether the sampling and testing frequencies for that item are satisfied. This is necessary for final certification of construction projects.

Project Number*

846-10-06

007-05-21

and not 7-05-21

Although at the present time only nine spaces (maximum) are needed to identify a construction project, the sixteen spaces that

* Required entry

3.1 HEADER INFORMATION

The header fields are those fields, or items, that appear on the top portion of each test report form. These fields are the familiar Form 800 fields. A number of these fields are common to almost all of the test report forms. Therefore, rather than repeat these items each time, we will discuss them individually in this section and refer to them whenever individual forms, in which they appear, are discussed. Exhibit HI-1 is an example of the revised Form 800.

Filling out the various fields properly is of utmost importance. The information provides a direct link between the sample, the test, the purpose of the test and the specification item number for which the sampling and/or testing is performed. This last link determines whether the sampling and testing frequencies for that item are satisfied. This is necessary for final certification of construction projects.

Project Number*

8 4 6 - 1 0 - 0 6

0 0 7 - 0 5 - 2 1

and not 7 - 0 5 - 2 1

Although at the present time only nine spaces (maximum) are needed to identify a construction project, the sixteen spaces that

* Required entry

are provided for this field are for future expansion which the Department is considering. The project number "GENERAL" is to be used by the central laboratory only. If the project has dual or triple numbers, enter only the lead project number. This lead project number must be the same as the one that was entered in the PI file. (See Section 2.1)

Material Code* (N)[1]

102

All materials have been assigned numbered codes. For example, Grade A Coarse Aggregate (Gravel) for concrete is represented by the number 102. Class AA Concrete is assigned the number 101, Class A Concrete for minor structures the number 111, and so on. A list of codes for each category of materials appears in the respective material subsection.

If an erroneous code is entered, the computer will either reject the test if the code is not in the specification file, or it will check against the specifications representing the erroneous

[1] The data is considered numeric and the terminal key will automatically shift to numeric mode.

code number. For example, for structural concrete material codes, if you enter 111 (Class A Concrete for minor structures), when in reality you meant to enter 101 (Class AA Concrete), the computer will accept this as a valid number. However, the specification check will be made against 111 and not 101. This would result in an erroneous report.

Laboratory Number*

62-207696

OR 62291SCA

Generally, these numbers are generated by the various districts and the central laboratory. The first two spaces represent the district or section number and the other six spaces after the dash are assigned numbers from 1 to 999999. A dash must be entered after the district number.

In cases where the laboratory number is not assigned, as in field testing, use the first three spaces for gang number and the last five spaces for sample identification. No dash is allowed if this format is used.

Date Sampled* (N)

02-14-77

This field represents the date the sample was taken in the field. It should always be entered as month-day-year.

Submitted By* (N)

0622

This field is also entered as a four-digit numeric code. All project engineers are represented by their gang numbers. Check the submitters list for other codes.

Note: Since projects entered as "GENERAL" may not have a submitter, a dummy code 9999 can be entered.

Quantity (N)

5000

In this field, enter the quantity of material the sample represents. If the quantity to be represented is "AMPLE," leave this field

blank. Decimal is not allowed. Also do not enter units of measurements like C.Y., GAL, LBS., etc., in any of the first six blocks. The three blocks after the six blocks are to be used for units of measurements for miscellaneous materials only (GAL., C.Y., etc.).

Purpose Code* (N)

1

Materials are sampled and/or tested for any one of the following purposes and should be coded accordingly.

Code

1 Project Control - material that is sampled for the purpose of making adjustments in field construction operations such as mixing, proportioning, temperature control, moisture contents, etc.

2 Verification - material that is sampled for the purpose of verifying that correct and accurate procedures and equipment are being used by field personnel and ascertaining whether materials used are of the same quality as the previously tested materials.

3 Acceptance - material that is sampled for the purpose of determining conformance to contract requirements or specifications.

4 Check - if the first material test failed, then another sample must be taken from the same area to determine conformance to contract requirements or specifications.

5 Resample - if an area was reworked after the first test was run, then the material must be resampled for the purpose of determining conformance to contract requirements or specifications.

6 Source Approval - formal approval of a specific source of material. This approval must be obtained at regular intervals.

7 Design - material that is sampled for the purpose of design. This would include samples for mix proportions, etc.

8 Record Test - test for the Federal Highway Administration for approval of projects receiving federal aid.

Code

9 Preliminary Source Test - preliminary test representing a specified quantity of material sampled at the source by the supplier or the Department. This is performed for quality control verification and/or to provide reference data for comparison with a subsequent verification or acceptance test. The preliminary source test does not constitute acceptance of materials.

Source Code*

A.1.3.5

This field represents the source of material, raw or manufactured. A source and supplier list contains a complete list of all sources and suppliers of various materials. If for any reason the source code can not be assigned to a material, enter the dummy code 9999. If a 9999 code is entered it is assumed to be supplied by the contractor. Refer to the Name Subsection (Section 1) for different formats for this field.

Specification Code* (N)

1

The specification code informs the computer which specifications the test should be checked against. The following codes are permitted.

1 - Check against standard specifications.
2 - Check against contract (special provisions) or supplementary specifications.
3 - Do not check against any specifications.
4 - Do not check against any specifications but pass the test.
5 - Do not check against any specifications but fail the test.

If you use a 4 or a 5, you are doing your own checking against any applicable specifications. Code 3 should only be used for verification testing (Purpose Code 2).

P.O. or CDO Number

Date Tested* (N)

02-17-77

The date of the sample test should be entered in this field as month-day-year.

Identification

S-15CA

This field is an important link between the submitted sample and its corresponding test reports. In view of this, samples must be numbered in such a way as to distinguish them from any other sample. This field can not exceed six digits and can be composed of letters and numbers. However, do not insert the character # to signify number.

Item Number*

301(1),805(3),810(1),805(1)...

Probably no field is more critical for data entry than this one. During construction, all materials are sampled and/or tested to satisfy the requirements defined in Standard Specification items. For example, concrete cylinders for acceptance may be tested for items 702, 707, 805, etc. During preparation of Form 2059, all materials and/or tests are compiled according to item numbers for which they were sampled and/or tested. This field will provide a key to preparation of Form 2059. When the material is tested for multiple item numbers, separate each item by a comma.

RUN GRADATION ON STOCKPILE MATERIAL

This field is provided so you may enter information relative to the sample. Sometimes clarification may be necessary or special instructions may be needed with respect to the sample or the test to be performed on that sample. This same field also appears again at the bottom of each material work - test report form. This second field should be considered more critical than the top one as it is geared towards providing a mechanism for explanation of failing samples during compilation of Form 2059. This field is explained in detail under material subsystems.

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SAMPLE IDENTIFICATION

Received 2-15-77

Project No. *846-10-06

Material Grade A Gravel for Conc. 207 Code

Lab No. *62-207696

F.A.P. No. BRS-624-2(001)

Date Sampled 02-14-77

Submitted By Leey Mapes 0622 Code

Address Route La 16, Amite

Quantity 5000 Units (For Misc only)

Purpose Code 1

Material Source Frank Powers, *A135 Code

Address Grangeville, La

Sample Taken From Stockpile

Specification Code 1

P.O. No. *

Date Tested 02-17-77

Ident *S-1SCA

District 62 Hammond

Use Structural Conc. Class A, AA, & R

Remarks *RUN GRADATION ON STOCKPILE MATERIAL @ READY MIX PLANT

Remarks 2 ☐ For Central Lab only

Item No *3.01(1), 8.05(8), 8.10(1), 8.05(1)

(For multiple Item Nos, you must separate each Item No by a comma.
Do not leave any blanks within Item No or between Item Nos.)

PURPOSE CODES

1. Proj. Cont.
2. Verif
3. Acceptance
4. Check
5. Resample
6. Source Appr.
7. Design
8. Rec Test
9. Preliminary Source Test

SPECIFICATION CODES

1. Standard (1977)
2. Sp. Prov., Supplementary, etc
3. None
4. None but pass the test
5. None but fail the test

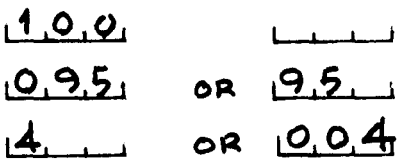
EXHIBIT HI-1
3.1-10

3.2 AGGREGATE

The aggregate test report form is shown as Exhibit AG-1. The form is a combination work-report form. The data will be filled out by either the field or the laboratory personnel. The information on this form will become input to the Aggregate Test Map on the display terminal. (Exhibit AG-2).

For instructions to fill out the header information, refer to Section 3.1. The following paragraphs discuss the formats for sieve analysis and physical tests on aggregate.

Sieve Tests (N)



All fields are to be entered as whole numbers (no decimals) with 100 as the maximum allowable. For values less than 100 either a left justified or right justified is permitted. However, the left justified format is recommended since leading zeros are not required.

Physical Tests (N)

All physical tests appear on the right half of the test form. The tests are self-explanatory except that for Plasticity Index enter zero for non-plastic material. Do not enter NP. Furthermore, since the decimals are pre-positioned, leading zeros will be required in some cases.

Remarks

SEE LAB NO 62-207344 OF 2-7-77 FOR CHECK RESULTS

The field is specifically assigned to note explanations required in Form 2059 for failing samples. For example, if the sample had failed to meet the stated requirements, remarks as to how the sample was disposed of should be made in this field. Such explanation will expedite preparation of the certification document. Remarks such as "This sample conforms to specifications" should not be inserted in this field. The computer will generate such remarks. Occasionally, this field may have to be entered later on as an update. Regardless of when it is entered, any pertinent explanation should be in the record prior to compilation of 2059.

MTAG/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
AGGREGATE TEST REPORT

Project No.*	846-10-06	Material Code	119	Lab No.*	62-206931
Date Sampled	01-06-77	Submitted By	0622	Quantity, C.Y.	150
Purpose Code	3	Source Code*	A105	Spec Code	W
P.O. No.*		Date Tested	01-11-77	Ident.*	6-1

PURPOSE CODES
1 Proj. Cont.
2 Verif.
3 Acceptance
4 Check
5 Resample
6 Source Appr.
7 Design
8 Rec Test
9 Preliminary Source Test

Remarks* TO BE USED AS BACKFILL UNDER APPROACH SLABS

Item No.* 813(1)

Tested By [signature] Checked By [signature] Sampled By [signature]

Sieve	Wt. Ret.	% Ret.	% Coarser	% Passing
2 1/2 inch				
2 inch				
1 1/2 inch				100
1 1/4 inch				
1 inch				
3/4 inch				
5/8 inch				
1/2 inch				
3/8 inch				
No. 4				6
Pass No.				
Total				
Wt. before sieving			% Diff	

Sieve	Wt. Ret.	% Ret.	% Coarser	% Passing	
No. 8					
No. 10					
No. 16					
No. 20					
No. 30					
No. 40					ENTER APPROPRIATE DATA HERE
No. 50					
No. 80					
No. 100					
No. 200					
No. 270					
Pass No.					
Decant Loss					
Total					
Wt. before sieving			%Diff		
Dry wt. after washing					

ABSORPTION, %
FINE AGG.
wt. of oven dry sample in air, g
COARSE AGG.
wt. of oven dry sample in air, g
wt. of SSD sample in air, g

SPECIFIC GRAVITY, gm/cc
FINE AGG. (SSD)
wt of pycnometer + H_2O, g
wt of pycnometer + spl. + H_2O, g
COARSE AGG. (SSD) (APP)
wt of sample in air, g
wt of sample in H_2O, g

UNIT WEIGHT, lb/cu. ft., Dry
RODDED WT., lb
Net wt of agg
Factor
LOOSE WT., lb
Net wt of agg
Factor

Absorption, %	
Spec. Grav., gm/cc SSD	
Wt./cu.ft. Dry loose, lb	
Wt./cu.ft. Dry rodded, lb	
Colorimetric test 1= pass 2= fail	
Clay lumps, %	
Deleterious Mat'ls, %	
Decantation Loss, %	3.0
Liquid limit	
Plasticity Index, %	
Foreign Matter	
Sand Equivalent, %	
Glassy Particles, %	
Polish Value	
Alkalinity 1= pass 2= fail	
Spec. Grav., gm/cc APP	
Abrasion, % Loss	
Coating on Particles	
Soundness, % Loss	
Asphalt Content, %	
Percent Crushed	
Soft Fragments	

Remarks* SEE LAB #62-207344 OF 2-17-77 FOR CHECK RESULTS

EXHIBIT AG-1

MTAG *** AGGREGATE TESTS *** ACTION CODE:

PROJECT NO. :	MATERIAL CODE:	LAB NO. :
DATE SAMPLED:	SUBMITTED BY :	QUANTITY :
PURPOSE CODE:	SOURCE :	SPEC CODE:
PO OR CDO NO:	DATE TESTED :	IDENT. :
REMARKS :		
ITEM NUMBER :		

2 1/2":	2" :	1 1/2":	1 1/4":	1" :
3/4" :	5/8" :	1/2" :	3/8" :	NO. 4:
NO. 8:	NO. 10:	NO. 16:	NO. 30:	NO. 40:
NO. 50:	NO. 80:	NO.100:	NO.200:	NO.270:

ABSORPTION, % :	SPECIFIC GRAVITY SSD :
WEIGHT/CU. FT., DRY LOOSE:	WEIGHT/CU. FT., DRY RODDED:
COLORIMETRIC TEST :	CLAY LUMPS, % :
DELETERIOUS MATERIALS, % :	DECANTATION LOSS, % :
LIQUID LIMIT :	PLASTICITY INDEX :
FOREIGN MATTER, % :	SAND EQUIVALENT, % :
GLASSY PARTICLES, % :	POLISH VALUE :
ALKALINITY :	SPECIFIC GRAVITY APP :
ABRASION, % LOSS :	COATING ON PARTICLES, % :
SOUNDNESS, % LOSS :	ASPHALT CONTENT, % :
% CRUSHED :	SOFT FRAGMENTS :

REMARKS:

EXHIBIT AG-2

3.3 ASPHALT CEMENT

The asphalt cement test report form is shown as Exhibit AC-1. Exhibit AC-2 is the map of this form as will be seen on the terminal. The combination work-report form (Exhibit AC-1) will be generated by the district and/or the central laboratory. Discussion of most of the header fields was covered in Section 3.1. Two fields, Unit of Pay and Spec Code, need clarification.

Unit of Pay* (N)

[1]

A 1 in this field will inform the computer that the asphaltic material is used in asphaltic concrete, while a 2 will denote that it is to be paid for as a separate item. This input is vital because of different pay schedules in the specifications. This field will provide appropriate remarks, with respect to this pay schedule, on each test report.

Spec Code* (N)

[2]

You must always enter a 2 whenever the Project Number is GENERAL. The literal "GENERAL" for Project Number is to be used by the central laboratory and only when the sample is a refinery sample.

Test Fields (N)

The various test fields can be filled out either right or left justified. If right justified, then leading zeros will be required. Ductility values in excess of 100 will be entered as 100. However, the printed report will show this value as 100+.

Remarks

See Section 3.2, Aggregate, for explanation of this field.

% Pay (N)

Enter a 100, 99 or a 90 if the asphalt cement is intended for use in asphaltic concrete mixtures. If, on the other hand, the asphalt cement is to be paid for as a separate item, insert appropriate reduction in pay (100, 80, or 50).

MTAC/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

ASPHALT CEMENT TEST REPORT

Project No.* 846-10-06
Material Code 140
Date Sampled 08-08-77
Quantity, Gal 6500
Source Code* 8602
PO or CDO No.*
Ident.* S-3
Remarks* RANDOM SAMPLE APPROVED LAB #22-263348
Item No.* 501(1)

Lab. No.* 22-266925
Submitted By 0622
Purpose Code 3
Spec. Code 1
Date Tested 08-18-77
Unit of Pay 1 (1-Asphaltic Conc. 2-Asphalt Cement)

PURPOSE CODES
1. Proj. Cont.
2. Verif
3. Acceptance
4. Check
5. Resample
6. Source Appr.
7. Design
8. Rec Test
9 Preliminary Source Test

TEST RESULTS

Pen. @ 25C
Determination 1 ____
Determination 2 ____
Determination 3 ____
Total ____

Time S ____ C ____
Time S ____ C ____

Wt of Flask + Sample,gm ____
Wt of Flask,gm ____
Wt of Sample,gm ____
Wt of Cru + Mat After Filtration,gm ____
Wt of Crucible + Material,gm ____
Wt Insoluble,gm ____
Wt Soluble,gm ____

Time S ____ C ____

Specific Gravity @ 60F
Wt of PYC + St ____
Wt of PYC + Water,gm ____
Wt of PYC + St + Asphalt,gm ____
Wt of PYC + St + Asphalt + Water,gm ____

Penetration @ 25C 52
Viscosity @ 135C,SSF 316
Viscosity Kin.@ 135C,CS 671
Visc. ABS. @ 60C Poises 4148
Solubility In Trichlor 99.99
Flash Point C.O.C.,F 680
Res. Visc. @ 60C Poises 5977
Res. Ductility @ 25C 100
Spot Test (Std. Naptha Solvent) 1 (1=Pass 2=Fail)
Specific Gravity @ 60F .

Remarks* RANDOM SAMPLE LAB #62-21262 0

% Pay 100

Tested by [signature]
Checked by [signature]

EXHIBIT AC-1

MTAC ACTION CODE:

********ASPHALT CEMENT********

PROJ.NO: MATERIAL CODE : LAB NUMBER:
DATE SAMPLED : SUBMITTED BY : QUANTITY :
PURPOSE CODE SOURCE CODE : SPEC CODE
PO.OR C.D.O.NO. : DATE TESTED: IDENT CODE :
UNIT OF PAY
REMARKS:
ITEM NO.:

ASPHALT CEMENT TESTS

PENETRATION @ 25C(77F) : VISCOSITY @ 135C(275F),SSF
VISCOSITY KIN. @135C(275F),CS: VISC.ABS.@ 60C(140F),POISES :
SOLUBILITY IN TRICHLOR., % : FLASH POINT, COC, F
RES.VISC. @ 60C(140F),POISES: RES.DUCTILITY @ 25C(77F)
SPOT TEST(STD. NAPTHA SOLVENT) SPECIFIC GRAVITY @ 60F

REMARKS:

PERCENT PAY:

EXHIBIT AC-2

3.4 LIQUID ASPHALT

Exhibit LA-1 is a completed work - test report form. The upper portion of the form is to be filled out in a manner discussed in Section 3.1. This form is to be used for all bituminous materials other than asphalt cements. All cutbacks and emulsion test data will be recorded on this form. The map on the terminal screen will look like Exhibit LA-2.

Unit of Pay* (N)

1

Enter a 1 if the sample represents a refinery sample or a 2 if it represents a destination (transport) sample respectively. Refinery samples will usually have GENERAL in the Project No. field.

Test Field (N)

The test fields are self-explanatory and will not be discussed individually. Refer to the exhibit for entry format.

Remarks

Refer to Section 3.2 for explanation of this field.

MTLA/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVE

LIQUID ASPHALT TEST REPORT

Project No.* GENERAL
Material Code 113
Date Sampled 11-27-77
Quantity, Gal
Source Code* B603
PO or CDO No.*
Ident.* R-1
Remarks*

Lab. No.* 22-27214
Submitted By 9999
Purpose Code 9
Spec. Code 1
Date Tested 11-29-77

PURPOSE CODES
1. Proj. Cont.
2. Verif
3. Acceptance
4. Check
5. Resample
6. Source Appr.
7. Design
8. Rec Test
9. Preliminary Source Test

Item No.*

Unit of Pay 1 (1=Refinery 2=Destination)

Flash Pt. Tag Open Cup 178
Viscosity @ 25C,SSF 125
Viscosity @ 50C,SSF
Viscosity @ 60C,SSF

Gravity,API @ __F
Gravity,API @ 60F
Spec. Grav. @ 60F
Wt of 200 Ml,gm
(S.C. @ 60F x 200)
Wt/Gal @ 60F,lb

Vol of Dist @ 190C
Vol of Dist @ 225C
Vol of Dist @ 260C
Vol of Dist @ 316C
Vol of Dist @ 360C

% Off @ 190C 0.0
% Off @ 225C 0.0
% Off @ 260C 48.9
% Off @ 316C 89.1

Wt of Still + Equip.,gm
Wt of Sample,gm
Wt of Still + Sample,gm
Wt of Still + Equip. + Res.,gm
Wt Loss,gm
Wt of Distillate,ml
Wt of Residue,gm

Residue From Dist.% By Vol. 54.0
Residue By Dist.,% By Wt.
Oil Dist.,% By Vol.

Particle Charge (1=Pos, 2=Neg)

Wt of Sieve + Pan + Res.,gm
Wt of Sieve + Pan,gm
Wt of Residue,gm
Wt of Sieve + Pan + Res.,gm
Wt of Sieve + Pan,gm
Wt of Residue,gm

Sieve Test (Ret. on No. 20)

Cement Mixing,%

	Top of Sample	Bottom of Sample
Wt of Beaker,gm		
Wt of Sample,gm		
Total Wt,gm		
Wt of Beak. + Res.,gm		
Loss,gm		
Wt of Flask + Sample,gm		
Wt of Flask,gm		
Wt of Sample,gm		
Wt of Cru. + Mat. After Filtration,gm		
Wt of Crucible,gm		
Wt Insoluble,gm		
Wt Soluble,gm		

Time S _____ C _____
Percent Pay
Remarks*

Settlement 5 Days

1=Pass 2=Fail
Mixing Property
Setting Property

Penetration @ 25C 187

Res. Sol. In Trichlor,% 99.93

Res. Ductility @ 25C 100

Res. Ductility @ 15.5C

Res. Viscosity @ 135C

Spec. Grav. @ 60F

Tested By Ave Checked By

3.4-2

EXHIBIT LA-1

MTLA

ACTION CODE:

LIQUID ASPHALT TESTS

PROJECT NO: MATERIAL CODE: LAB NUMBER:
DATE SAMPLED : SUBMITTED BY : QUANTITY :
PURPOSE CODE : SOURCE CODE : SPEC CODE :
PO.OR C.D.O. NO.: DATE TESTED : IDENT CODE:
REMARKS:
ITEM NO.: UNIT OF PAY:

FLASH PT.OPEN TAG,F :	VISC.@ 50C(122F),SSF :
VISC @ 25C(77F),SSF :	VISC.@ 60C(140F),SSF :
DIST. % OF TOTAL TO 360C(680F)	% OFF @ 190C(374F):
% OFF @ 225C(437F):	% OFF @ 260C(500F):
% OFF @ 315C(600F):	RESIDUE, % BY VOL.:
RES. BY DIST., % BY WT.:	OIL DIST., % BY VOL. :
PARTICLE CHARGE :	SIEVE TEST (RET. ON NO. 20):
CEMENT MIXING, % :	SETTLEMENT, 5 DAYS, % :
MIXING PROPERTY :	SETTING PROPERTY :
RES. PEN. @ 25C(77F) :	RES. SOL. IN TRICHLOR., % :
RES. DUCT. @ 25C(77F) :	RES. DUCT. @ 15.5C(60F) :
RES. VISC. @ 135C(275F):	SPECIFIC GRAVITY @ 60F :

PERCENT PAY:
REMARKS :

EXHIBIT LA-2

3.5 CEMENT

This report is generated by the Central Laboratory only. Exhibit CT-1 is an example of the combination work-report form. For header information refer to Section 3.1. Data from Exhibit CT-1 will become input to the terminal map shown in Exhibit CT-2.

Physical Tests (N)

These tests are performed by the physical laboratory of the Materials Section. The individual test values should be entered in a manner shown in the exhibit. Where decimals are not shown enter the values left justified.

Chemical Tests (N)

This portion of the testing is performed by the chemical laboratory. The data format is shown by the position of the decimal. Follow the entry format shown in the example.

Remarks

Refer to Section 3.2 for definition of this field.

MTCT/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT

CEMENT REPORT

Project No.* 846-10-06

Material Code 162 | Lab. No.* 22-266196

Date Sampled 07-22-77 | Submitted By 0622

Quantity, lb 357694 | Purpose Code 2

Source Code* 0715 | Spec. Code 1

Date Tested 07-29-77 | Ident* S-1

Remarks*

Item No.* 805(1), 805(3)

PURPOSE CODES
1. Proj. Cont.
2. Verif
3. Acceptance
4. Check
5. Resample
6. Source Appr.
7. Design
8. Rec Test
9 Preliminary Source Test

PHYSICAL TESTS

Time Set hr:min — Vicat Initial 0:45 — Vicat Final 8:00

Gilmore Initial __:__ — Gilmore Final __:__

Heat of Hydration 7 Days ___ — Heat of Hydration 28 Days ___

(R1 ____(-)R2 ____ x 10) — Autoclave Expansion,% 00.09

(Water,ml ____/Cement,grm ____) x 100 — Normal Consistency,% 24.0

Turbidmeter ___

(Fineness,sq cm/gm $\sqrt{T(sec)}$ ____ x F ____) Air Permeability 3656

(100 - w ____ x 0.1105 for 240 ml)

(100 - w ____ x 0.1106 for 242 ml) — Air Content,% 09.2

(100 - w ____ x 0.1108 for 244 ml)

(Wt. of Cement,gm ____/Displaced Vol.,cc) — Specific Gravity,gm/cc ___

(Final Pen. ____/Initial Pen. ____) x 100 — False Set,% ___

(RC ____ = RS ____ x(100 + C ____)) — No. 325 Sieve Passing ___

No. 325 Sieve Retained ___

Compressive Strength, PSI

24 hrs ____ 72 hrs ____ 7 Days ____ 28 Days ____

24 hrs ____ 72 hrs 2620 7 Days 3630 28 Days ____

Tested By ____ Date ____ Checked By ____ Date ____

CHEMICAL TESTS

(W1 ____(-)W2 ____) ÷(WS ____) X 100 — Loss on Ignition,% 0.9

(W(BASO4) ____/WS ____) X 34.3 — Sulphur Trioxide,% 2.4

(W(SIO2) ____/WS ____) X 100) — Silicon Dioxide,% ___

Fe & Al Oxide,% 07.1

(W(CAO) ____/WS ____) X 100) — Calcium Oxide,% ___

(PPM ____ X 6.6316) — Magnesium Oxide,% 03.4

Total Oxides ___

(W ____ ÷ WS ____) X 100) — Insoluble Residue,% 0.31

(Refer to AASHTO M85) — Tricalcium Aluminate,% 08.9

(Refer to AASHTO M85) — Tricalcium Silicate,% ___

(PPM ____ X 0.57188) — Ferric Oxide,% 02.4

(PPM ____ X 0.7558) — Aluminum Oxide,% 04.9

Al Oxide/Fe Oxide 02.0

Alkalies,% ___

Remarks*

Tested By [signature] Date 7/29/77 Checked By [signature] Date 7-29-77

EXHIBIT CT-1

MICT *** CEMENT TESTS *** ACTION CODE

PROJECT NO. : MATERIAL CODE: LAB NUMBER:
DATE SAMPLED: SUBMITTED BY : QUANTITY :
PURPOSE CODE: SOURCE CODE : SPEC. CODE:
DATE TESTED : IDENT - :
REMARKS:
ITEM NO:

TIME OF SET, VICAT INITIAL:	:		TIME OF SET, VICAT FINAL :
GILMORE INITIAL	: :		GILMORE FINAL :
HEAT OF HYDRATION, 7 DAYS	:		HEAT OF HYDRATION 28 DAYS:
AUTOCLAVE EXPANSION	:		NORMAL CONSISTENCY :
TURBIDIMETER	:		AIR PERMEABILITY :
AIR CONTENT	:		SPECIFIC GRAVITY :
FALSE SET	:		NO. 325 SIEVE P: RE:
AVG. COMP. STRENGTH: 24-HRS:		72-HRS:	7-DAYS: 28-DAYS:
LOSS ON IGNITION, %	:		SULPHUR TRIOXIDE, % :
SILICON DIOXIDE, %	:		IRON & ALUMINUM OXIDE :
CALCIUM OXIDE	:		MAGNESIUM OXIDE :
TOTAL OXIDES	:		INSOLUBLE RESIDUE, % :
TRICALCIUM ALUMINATE	:		TRICALCIUM SILICATE :
FERRIC OXIDE, %	:		ALUMINUM OXIDE, % :
AL OXIDE/FE OXIDE			ALKALIES

REMARKS:

EXHIBIT CT-2

3.6 REINFORCING STEEL BAR

The combination work-report form that will be used to record test data on Reinforcing Steel is shown as Exhibit SB-1. This form will be used by the central and district 02 laboratories. Exhibit SB-2 is a form that will be used to report test data on Spiral Reinforcing Steel or, specifically, Cold Drawn Steel Wire for Concrete Reinforcement. This form will be generated by the central laboratory only. Data from these two forms will be entered on the terminal map similar to the one shown as Exhibit SB-3.

The header fields on both the forms have been defined in detail in Section 3.1 and, therefore, will not be repeated here. Likewise, the test fields are self-explanatory, except for the following:

Steel Type

Enter one of the three codes shown on form SB-1. On form SB-2, a 3 is preprinted for you.

Nominal Size

8 OR 0.8

If the steel type entered above was a 1 or a 2 (form SB-1), then this field must have one of the following sizes:

2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 14, & 18

For steel type 3 (Exhibit SB-2) or 4, enter applicable alpha-numeric designations.

Maximum Difference, in.

.0.0.0.1

The first block in this field on form SB-2 is reserved for a minus (-) sign only. If plus, do not enter in this block. Other blocks after the decimal must be numeric.

Remarks

Refer to Section 3.2 for definition of this field.

MTSB/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
PLAIN OR DEFORMED REINFORCING STEEL

Project No.* 826-10-06 Material Code 560

Lab. No.* 22-251695 Date Sampled 12-03-76

Submitted By 0622 Quantity, lb 150000

PURPOSE CODES
1. Proj. Cont. 6. Source Appr.
2. Verif. 7. Design
3. Acceptance 8. Rec Test
4. Check 9 Preliminary
5. Resample Source Test

Purpose Code 3 Source Code* R001

Spec. Code 1 Date Tested 12-12-76

Ident.* S11

Remarks*

Item No.* 806(1)

Steel Type (1=Def. 2=Pl. 4=Hot Rolled Spiral) 1
Nominal Size* (Bar No) 8
Nominal Area, sq.in 0.79
Nominal Wt., lb/ft 02.670

Actual Wt., lb/ft (gr 1808 /in 18.40 X 0.0265) 02.604

Difference from Nominal Wt. 0.066

Percent Under Nominal Wt. (Diff./Nominal Wt.) X 100 2.47

Deformations: Height

Average Deformation Height, in. 0.055
Average Deformation Spacing, in. 0.690

Yield Load, lb. _____ X Act. Wt./Nom. Wt. = _____ (Reduced Spec. Only)

Yield Strength, PSI (Yield Load/Nominal Area) 63600

Method:

Tensile Load, lb. _____ X Act. Wt./Nom. Wt. = _____ (Reduced Spec. Only)

Tensile Strength, PSI (Tensile Load/Nominal Area) 117100

Elongation in 2", % .
Elongation in 8", % 13.0

Position of Fracture:

Cold Bend Code 1 1=Pass, 2=Fail
Phosphorus, % .

Remarks*

Tested By _____ Date _____ Checked By _____ Date _____
Notified By _____ Date _____

EXHIBIT SB-1

MTSB/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SPIRAL REINFORCING STEEL

Project No.* 846-10-06 **Material Code** 082

Lab. No.* 22-250462 **Date Sampled** 11-05-76

Submitted By 0622 Quantity, Lb 300

Purpose Code 3

PURPOSE CODES
1. Proj. Cont. 6. Source Appr.
2. Verif 7. Design
3. Acceptance 8. Rec Test
4. Check 9 Preliminary
5 Resample Source Test

Source Code* R066

Spec. Code 1 **Date Tested** 11-14-76

Ident.* S-6

Remarks* QUANT REPRESENT TURNS & NOT POUNDS; 1B IN CONC PILE BLDUP

Item No.* 804(1)(D)

Steel Type 3
Nominal Size* W-5
Nominal Diameter, in. 0.252
Nominal Area, sq. in. _____

	X-Sect.-1	X-Sect.-2
Measured Diameter, in.		

Actual Diameter, in. (Avg. of 4 measurements) 0.253

Maximum Difference, in. (Actual - Nominal) 0.001

Max. Out of Roundness (Diff. btwn. measured Dia. for a X-Sect.) 0.001

Yield Load, lb.: .005 in./in. EUL _____
Halt of gage _____
Yield Strength, PSI (Yield Load/Nominal Area) 80000

Tensile Load, lb. _____

Tensile Strength, PSI (Tensile Load/Nominal Area) 94000

Reduction of Area: Final Diameter, in. _____
Final Area, in. _____
Diff. (Final-Nom. Area) _____
% Reduction of Area (Diff./Nominal Area X 100) 3.6

Bend Test 1 1=Pass. 2=Fail

Remarks* _____

Tested By _____ Date _____
Checked By _____ Date _____
Notified By _____ Date _____

EXHIBIT SB-2

MTSB

ACTION CODE:

*** STRUCTURAL STEEL BAR ***

PROJECT NO.
MATERIAL CODE:
LAB NUMBER:
DATE SAMPLED:
SUBMITTED BY :
QUANTITY :
PURPOSE CODE:
SOURCE CODE :
SPEC. CODE:
DATE TESTED :
IDENT. :
REMARKS :
ITEM NO. :

STEEL TYPE :
NOMINAL SIZE :
NOMINAL DIAMETER, IN. :
ACTUAL DIAMETER, IN. :
DIFFERENCE (ACT.- NOM.) :
MAX. OUT OF ROUNDNESS :
NOMINAL WEIGHT, LB./FT.:
ACTUAL WEIGHT, LB./FT.:
PERCENT UNDER WEIGHT :
AVG. DEF. HEIGHT, IN. :
AVG. DEF. SPACING, IN. :
YIELD STRENGTH, PSI :
TENSILE STRENGTH, PSI :
ELONGATION IN 2", % :
ELONGATION IN 8", % :
REDUCTION OF AREA, % :
COLD BEND CODE :
PHOSPHORUS,% :

REMARKS:

EXHIBIT SB-3

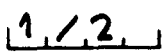
3.7 STEEL WIRE

There are two forms for two wire types. Exhibit SW-1 will be used for Stress Relieved Strand for Prestressed Concrete, and Exhibit SW-2 for Stress Relieved Wire for Prestressed Concrete (post tension wire). The header information is the same as in the previous section, Steel Bar. A detailed discussion of the various fields is contained in Section 3.1. The map projection on the terminal will look like Exhibit SW-3.

Wire Type (N)

This field will always have a 1 on form (exhibit) SW-1 and a 2 on form SW-2. It is preprinted for convenience.

Strand Size



In Exhibit SW-1 the permissible values are 1/4, 5/16, 3/8, 7/16, and 1/2.

Nominal Diameter, in. (N)

0.500

For wire type 1 the permissible values are 0.250, 0.313, 0.375, 0.438, 0.500, and 0.600. For wire type 2 (Exhibit SW-2), the permissible values are 0.192, 0.196, 0.250, and 0.276.

Difference, in. (Actual - Nominal)

0.013

The first block in this field is reserved for a negative (-) sign only. If positive (+), do not enter in this block. Other blocks after the decimal must be numeric.

Difference, in. (Center - Largest Outer)

0.004

This field which appears in Exhibit SW-1 should be entered as discussed above.

Breaking Strength, lb.

390.00 ␣

If the material was not tested to fracture, enter a plus (+) in the disjointed sixth block shown in Exhibit SW-1.

% Elongation in 24"

% Elongation in 10"

04.0 +

The above two fields appear in Exhibit SW-1 and SW-2, respectively. Insert a plus (+) sign in the last disjointed block if the material was not tested to its terminal failure value.

Remarks

This field should be filled in as discussed in Section 3.2.

MTSW/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
STRESS-RELIEVED STRAND FOR PRESTRESSED CONCRETE

Project No.* 031-04-13 Material Code 250

Lab. No.* 22-272800 Date Sampled 11-16-77

Submitted By 0221 Quantity, lb 100000

Purpose Code 3 Source Code* R063

Spec. Code 1 Date Tested 11-18-77

PURPOSE CODES
1. Proj. Cont. 6. Source Appr.
2. Verif 7. Design
3. Acceptance 8. Rec Test
4. Check 9 Preliminary
5. Resample Source Test

Ident.* S-49

Remarks* COIL #S 31, 33, 36, 48 @ PRESS RELEASE PLANT

Item No.* 805(8)

Wire Type 1 Strand Size* 1/2

Number of Wires 7

Pitch 7.75

Nominal Diameter, in. 0.5

Actual Diameter, in. 0.487

Difference, in. (Actual - Nominal) 0.013

Diameter of Center Wire, in. 0.165

Diameter of Outer Wires, in. _____ _____ _____
_____ _____ _____

Diameter of Largest Outer Wire, in. 0.161

Difference, in. (Center-Lrgst Outer) 0.004

Yield Strength, lb. (1% EUL) 35000

Breaking Strength, lb. 39000 *

Elongation:
New Base Length, in _____
Initial Reading _____
Final Reading _____
Difference _____

% Elongation in 24" (Diff/New Length X 100 + 1%) 07.4 *

Position of Fracture:

Remarks* _____

Tested By _____ Date _____
Checked By _____ Date _____

EXHIBIT SW-1

MTSW/PROJ NO/MAT CODE/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
STRESS-RELIEVED WIRE FOR PRESTRESSED CONCRETE

Project No.* 031-04-13 Material Code 421

Lab. No.* 22-27280 9 Date Sampled 11-16-77

Submitted By 0221 Quantity, lb 20000

PURPOSE CODES
1. Proj. Cont. 6. Source Appr.
2. Verif 7. Design
3. Acceptance 8. Rec Test
4 Check 9 Preliminary
5. Resample Source Test

Purpose Code 3 Source Code* R063

Spec. Code 1 Date Tested 11-18-77

Ident* S-53

Remarks* SAMPLED FROM STOCKPILE @ PRESTRESS PLANT

Item No.* 805(8)

Wire Type 2

Nominal Diameter, in. .192

Nominal Area, sq. in. _____

Diameter Measurements

X-Sect.-1	X-Sect.-2
_____	_____
_____	_____

Actual Diameter, in (Avg. of 4 meas.) 0.192

Difference, in. (Actual - Nominal) 0.0

Maximum Out of Roundness, in. 0.001

Yield Load, lb. (1% EUL) _____

Yield Strength, PSI (Yield Load/Nom. Area) 210000

Tensile Load, lb _____

Tensile Strength, PSI (Tensile Load/Nom. Area) 252000

% Elongation in 10", % 04.0 +*

Position of Fracture:

Phosphorus, % 0.040

Sulfur, % 0.050

Remarks* _____

Tested By _____ Date _____

Checked By _____ Date _____

EXHIBIT SW-2

M:SW

ACTION CODE:

*** STRUCTURAL STEEL WIRE ***

PROJECT NO. :	MATERIAL CODE:	LAB NUMBER:
DATE SAMPLED:	SUBMITTED BY :	QUANTITY :
PURPOSE CODE:	SOURCE CODE :	SPEC. CODE:
DATE TESTED :	IDENT :	
REMARKS :		
ITEM NO. :		

WIRE TYPE:		STRAND SIZE:	NUMBER OF WIRES:
PITCH	:	NOMINAL DIAMETER, IN.	:
ACTUAL DIAMETER, IN.	:	DIFFERENCE (ACT. - NOM.)	:
MAX. OUT OF ROUNDNESS	:	DIAMETER OF CENTER WIRE	:
DIA. LARGEST OUTER WIRE:		DIFFERENCE (CENTER - OUTER):	
YIELD STRENGTH, LB.	:	YIELD STRENGTH, PSI	:
BREAKING STRENGTH, LB.	:	TENSILE STRENGTH, PSI	:
ELONGATION IN 10", %	:	ELONGATION IN 24", %	:
PHOSPHORUS, %	:	SULFUR, %	:

REMARKS:

EXHIBIT SW-3

3.8 PORTLAND CEMENT CONCRETE JOB MIX RELEASE

The PCC Job Mix Release form is shown as Exhibit CJ-1. Only approved job mixes will be entered into the system through the map on the terminal (Exhibit CJ-2).

Project No.* 846-10-06

Refer to Section 3.1.

Matt ID*

S

Enter a letter S for structural concrete and P for paving concrete.

Material Code* 101

See Section 3.1.

Minimum Cement Factor* (N)

6.5

Maximum Water-Cement Ratio* (N)

5.0

Admixture: Air

Admixture: Water Reducing

Y

*Required Entry
(N) - Numeric Key Shift

If an air admixture or water reducing admixture is added to the concrete, enter a Y for Yes. If not added, enter an N for No, or leave it blank.

Central Mix Plant

[N]

Enter a Y or an N depending on whether the concrete mix is from a central plant or not from a central plant, respectively.

Intended for Slip Form Paving

[ ]

Once again, enter a Y if the mix is a paving mix and is intended for slip form paving; otherwise leave it blank.

Source Code* [C,1,0,7]

See Section 3.1.

Coarse Aggregate: Type (N)

[1,0,2]

Enter the three-digit material code for coarse aggregate.

Coarse Aggregate: Producer

A,1,3,5

The four-character producer code should be entered in this field. Refer to the list of sources and the suppliers list.

Coarse Aggregate: Specific Gravity (N)

2.53

Coarse Aggregate: Absorption Factor (N)

2.2

Enter the absorption factor of the coarse aggregate.

Fine Aggregate: Type 1,0,1

Fine Aggregate: Producer A,1,3,5

Fine Aggregate: Specific Gravity 2.62

Fine Aggregate: Absorption Factor 0.5

Enter the appropriate codes and/or values as discussed above for coarse aggregate.

Cement: Brand

0716

Refer to the source and suppliers list for the source of cement.

Cement: Type (N)

156

This field is the material code for the type of cement. Refer to the material code listings for various types of cements.

Mixing Water: Source (N)

2

Enter the applicable codes listed on the form (Exhibit CJ-1).

Water Reducing Admixture: Manufacturer

0109

If a water reducing admixture is used in concrete, enter the four-character manufacturer code listed in the sources and suppliers list.

Normal Set [Y]

Set Retarder [ ]

If a normal set or a set retarder water reducing admixture is used, enter a Y for Yes. If not used, either leave the field blank or enter an N for No.

Air Entraining Admixture: Manufacturer

[0,1,1,7]

If used, enter the code for the maufacturer of the air entraining admixture from the list of sources and suppliers.

Mix Proportions* (N)

The next six fields represent quantity of each component material to produce one cubic yard of concrete. Of the six, the first four are required fields. See example in the Exhibit.

Date* (N)

[0,3,-,2,3,-,7,7]

Enter the date the mix design was submitted for approval. Enter it as month-day-year in numeric format.

The three fields listed under "For Departmental Use" are to be filled in by the Department. They represent the computed values of Yield, Cement Factor, and Water-Cement Ratio. All are numeric and required entries.

Approved BY* (N) 0635

Date* (N) 03-28-77

The code for the person approving the job mix release, and the date if approved, should be entered in this field. Refer to the submitters list for appropriate codes.

Remarks

MNF RECOMMENDS MECH AGITATI
ON MONTHLY ON AIR ENT AGENT

MTCJ/PROJ NO/MAT ID/
MAT CODE/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
PORTLAND CEMENT CONCRETE JOB MIX RELEASE

Proj. No* 846-10-06 Matt ID* S Material Code 101

F. A. P. BRS-624-2(001)
Name of Highway Amite River Bridge
Parish Pt. Fel C. St. Helena
Source Fel. Ready Mix
Project Engineer Leey Mapes

Min. Cement Factor 6.5 sacks/cu. yd.
Max. Water-Cement Ratio 5.0 gal./sack
Admixture: Air* Y Water Reducing* Y
Central Plant Mix* N (Y = Yes, N = No)
Intended for Slip Form Paving* ___
Source Code* C107

MATERIALS

Coarse Aggregate: Type 102 Grade A Grvl Producer* A135 Frank Powers
Specific Gravity 2.53 Absorption Factor 2.2
Pit Location Grangeville, La
Fine Aggregate: Type 101 Conc. Sand Producer* A135 Frank Powers
Specific Gravity 2.62 Absorption Factor 0.5
Pit Location Grangeville, La
Cement: Brand* 0716 Louisiana Mill Location N.O., La Type 156
Mixing Water: Source of Supply 2 (1=City, 2=Well, 3=Other)
Water Reducing Admixture: Brand Tricene Mfgr* 0109 Const. Chem.
Normal Set* Y (Y=Yes, N=No) Set Retarder* ___
Air Entraining Admixture: Brand Septair Mfgr* 0117 Const. Chem.

Mix Proportions
For 1 cu. yd. of Concrete

Cement	611	lbs.
Fine Aggregate (SSD)	973	lbs.
Coarse Aggregate (SSD)	1935	lbs.
Water	32.3	gal.
Water Reducing Admixture	16.3	oz.
Air Entraining Admixture	2.7	

Submitted for the Contractor by ___ Date 03-23-77

For Departmental Use

Yield 26.99 cu. ft.
Cement Factor 6.5 sacks/cu. yd.
Water Cement Ratio 5.0 gal./sack

Approved ☑ Disapproved ☐ By 0635 ___

Title ___ Date 03-28-77

Remarks* MNF RECOMMENDS MECH AGITATION ON MONTHLY ON AIR ENT AGENT

EXHIBIT CJ-1

MTCJ ACTION CODE:

*** PORTLAND CEMENT CONCRETE JOB MIX RELEASE ***

PROJECT NUMBER: MATT-ID: MATERIAL CODE :
MINIMUM CEMENT FACTOR: MAX. WATER/CEMENT :
ADDITIVES: AIR: WATER REDUCING: CENTRAL PLANT MIX :
INTENDED FOR SLIP FORM PAVING: SOURCE CODE :

** MATERIALS **

COARSE AGGREGATE: TYPE: PRODUCER:
SPECIFIC GRAVITY: ABSORPTION FACTOR :
FINE AGGREGATE : TYPE: PRODUCER:
SPECIFIC GRAVITY: ABSORPTION FACTOR :
CEMENT BRAND: CEMENT TYPE :
MIXING WATER: SOURCE OF SUPPLY:
WATER REDUCING ADMIXTURE: MANUFACTURER:
NORMAL SET : SET RETARDER :
AIR ENTRAINING ADMIXTURE: MANUFACTURER:

** MIX PROPORTIONS **

CEMENT: FINE AGGREGATE : COARSE AGGREGATE :
WATER : WATER REDUCING ADMIX: AIR ENTRAINING ADMIX:
DATE SUBMITTED :
YIELD : CEMENT FACTOR : WATER-CEMENT RATIO :
APPROVED BY : DATE APPROVED :

REMARKS:

EXHIBIT CJ-2

3.9 MAJOR AND MINOR STRUCTURAL CONCRETE

The form that will be used for data recording is shown as Exhibit SC-1. Part of this form will be filled out by the project engineer's personnel in the field and the remaining part by the laboratory. The project engineer will generally complete the upper portion of the form, which is essentially the existing form 800, and send this completed form, with the cylinders appropriately identified. The laboratory will conduct the required tests on these cylinders and record the test results on the same form. This approach will minimize transfer of information by the laboratory from form 800 to their work card. The recorded data will then be keyed in on the structural concrete map like the one shown in Exhibit SC-2.

Project Number* 8,4,6,-,1,0,-,0,6

Material Code* (N) 1,0,1

See Section 3.1 for these header items.

Lot No.* (N)

0,2,8

and not 2,8

This is the lot number assigned to the batch (or batches) of concrete.

---

*Required Entry
(N) - Numeric Key Shift

Date Sampled* (N) 04-13-77

Submitted By* (N) 0622

See Section 3.1 for a detailed description of these fields.

Quantity* (N)

0047.4

This field represents the quantity of concrete, in cubic yards, represented by the lot. It should be reported to the nearest tenth of a cubic yard.

Purpose Code* (N) 3

Source Code* C107

Spec. Code* (N) 1

Item No.* 805(2)

See Section 3.1 for discussion on these fields.

Admixture: Air

WR-NS (Water Reducing - Normal Set)

WR-SR (Water Reducing - Set Retarder)

Y

If air entraining or water reducing admixtures are used, enter a Y for YES. If not, then enter an N for NO, or leave it blank.

Remarks

DECK SPAN 118+06-118+56
DIAPH 118+50

Date Tested (N)

05-11-77

Slump, Inches (N)

4.00

Air Content, % (N)

5.5

Sample No.

28A

This field represents the sample ID number generally assigned by the field personnel to each concrete cylinder.

Laboratory No. 62-209432

Refer to Section 3.1.

Condition Code (N)

1

Use any one of the condition codes shown on the test form (Exhibit SC-1).

Break Code (N)

1

Either a 1 or a 2 must be entered in this field to represent the type of break defined in Exhibit SC-1.

Age, Days (N)

28

Strength, psi (N)

4130

OR 04130

If more than three samples are entered, the date tested, slump and air content fields must be entered again for the second batch.

Conforms to* (N)

98 or 098

Enter the percent pay for the lot as defined by specification for lot average.

Remarks

Refer to Section 3.2 for definition of this field.

PAID FOR AT 98% PAY UNDER ITEM 805(2)(Y)

MTSC/PROJ NO/MAT CODE/LOT NO/ACTION CODE

DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
STRUCTURAL CONCRETE TESTS

Project No.* 846-10-06 Material Code 101 Lot No. 028

Date Sampled 04-13-77 Submitted By 0622 Quantity C.Y. 0047.0

Purpose Code 3 (1. Proj. Cont 2. Verif 3. Acceptance 4. Check 5. Resample 6. Source Appr. 7. Design 8. Rec Test 9 Preliminary Source Test)

Source Code* C107 Spec Code

Admixture* Air Y

Remarks* DECK SPAN 118+06 - 118+56; DIAPH 118+50

WR-NS Y (Y= Yes N= No)

Item No.* 805C

WR-SR

Cylinders Made By alc

Date Tested 05-11-77 Slump, in. 4.00 Air Content, % 5.5

Sample No.*	Laboratory No.*	Cond	Break	Age, Days	Diam, in.	Max Load	Strength, PSI	
28-1A	62-209432	1	1	28			4130	
28-1B	62-209433	1	1	28			4290	Critical Strength
28-1C	62-209434	1	1	28			3980	3513
						Average Strength	4133	

Cond Code: 1= Good, 2= Improperly Made, 3= Damaged, 4= Frozen

Date Tested 05-11-77 Slump, in. 3.50 Air Content, % 4.5

Sample No.*	Laboratory No.*	Cond	Break	Age, Days	Diam, in.	Max Load	Strength, PSI	
28-2A	62-209435	1	1	28			4350	
28-2B	62-209436	1	1	28			4290	Critical Strengtn
28-2C	62-209437	1	1	28			4060	3598
						Average Strength	4233	

Break Code: 1= Satisfactory 2= Unsatisfactory

Average Strength for Lot 4183

Conforms to 98 % Pay

Remarks* PAID FOR @ 98% PAY UNDER 805(2)(0)

Tested By [signature] Checked by [signature]

District Lab Engineer [signature]

EXHIBIT SC-1

MTSC

ACTION CODE:

*** STRUCTURAL CONCRETE TESTS ***

PROJECT NUMBER:
DATE SAMPLED :
PURPOSE CODE :

MATERIAL CODE:
SUBMITTED BY :
SOURCE CODE :

LOT NUMBER :
QUANTITY :
SPEC. CODE :
ADMIXTURE: AIR:
WR-NS:
WR-SR:

REMARKS:
ITEM NO:

DATE TESTED:

SAMPLE	LAB NO.	SLUMP: COND	BREAK	AIR CONTENT: AGE	STRENGTH
:	:	:	:	:	:
:	:	:	:	:	:
:	:	:	:	:	:

DATE TESTED:

SAMPLE	LAB NO.	SLUMP: COND	BREAK	AIR CONTENT: AGE	STRENGTH
:	:	:	:	:	:
:	:	:	:	:	:
:	:	:	:	:	:

PERCENT PAY:
REMARKS:

EXHIBIT SC-2

3.10 PAVING CONCRETE

This subsystem will let you enter acceptance data generated on paving concrete. This would include measurements on compressive strength and thickness of hardened concrete. The form for recording such data is shown as Exhibit PC-1. The data will be recorded and entered by the Central Laboratory. The map on the terminal will look like Exhibit PC-2. In Exhibit PC-1, fields in black color are required fields. Definition of each field shown on the form is given below:

Project No.* 208-01-10

Material Code* (N) 101

Refer to Section 3.1 for definition of these fields.

Lot No.* (N)

002 and not 2

Each form will have a unique lot number. The lot numbers are assigned to segments of pavements as defined in Section 601.21 of the Standard or other applicable specifications.

---

*Required Entry
(N) - Numeric Key Shift

Spec. Code* (N) 1

Submitted By* (N) 0329

Refer to Section 3.1 for discussion of these fields.

Plan Thickness, Inches* (N)

08.00

Enter the plan thickness of the pavement. Any thickness between zero and 99.99 inches is allowed. If the thickness varies over the length of the project, enter predominant value. Do not enter the word VARY in the blocks.

Section Length, Feet (N)

1490

Enter the length of the section from which pavement cores are drilled. If data is not available, leave it blank.

Section Width, Feet

12.0

The maximum number allowed is 99.9 feet. If the width varies over the segment length (lot), write the word VARY.

Approximate Area, Square Yard (N)

2000

Enter the area of the segment in square yards. This can be computed from the previous two fields.

From Station* To Station*

0040+12 0055+22

Enter the segment boundaries in terms of stations. The numerical difference between the station boundaries should, in most cases, approximate the section length.

Purpose Code* (N) 3

Refer to Section 3.1 for various codes and their definitions.

Remarks

NO SPECIFIC COMMENTS ON THIS LOT

Any comments for clarification should be handled through this field.

Item No.*

601(1)

Enter the pay item number for which the sampling and testing is performed.

Air*

Enter a Y if an air entraining admixture was added to the concrete. If no air was added, enter an N or leave it blank.

Core Ident.

Enter the core identification number for each core.

Station

This is the station number where the core was drilled.

Position

This field will define the location of the core. Use the following abbreviations for location.

RRRL = Right Roadway Right Lane

RRLL = Right Roadway Left Lane

LRRL = Left Roadway Right Lane

LRLL = Left Roadway Left Lane

RR = Right Roadway

LR = Left Roadway

RPXX = RamP with XX representing numbers or letter designations or combination of both

PLXX = Parking Lot with XX representing same designations as above

Date Poured (N), Date Cored (N), Date Tested (N)

07-26-77 11-01-77 11-04-77

Enter the appropriate dates in the month-day-year numeric format.

Thickness, Inches (N)

08.52

The measured average thickness should be entered as any number between 0 and 99.99.

Strength, PSI (N)

5510 or 05510

Enter the corrected strength of each cylinder between 0 and 99,999 PSI.

Remarks

PAYMENT WAS MADE UNDER 601(1), SURF SMOOTHNESS PASSED.

This field is reserved for comments that may have a direct bearing on the final disposition of the lot. Refer to Section 3.2 for further discussion of this field.

% Pay

100

Enter the percent pay for the lot based on thickness and strength measurements, and as defined in standard or other applicable specifications.

MTPC/PROJ NO/MAT CODE/LOT NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DRILLED PAVING CONCRETE CORES

Project No.* 208-01-10
Material Code 101
Spec. Code 1
Plan Thickness 08.00
Section Width* 12.0
From Station* 0040+12
Purpose Code 2
Remarks* NO SPECIFIC COMMENTS ON TH IS LOT
Item No.* 601(1)

Lot No. 002
Submitted By 0329
Section Length 1490
Approximate Area 2000
To Station* 0055+22
Air Y (Y=Yes N=No)

	Core Ident.*	Station*	Position*	Date Poured
1.	6-C	42+00	RR	07-26-77
2.	7-C	45+00	RR	07-26-77
3.	8-C	48+00	RR	07-26-77
4.	9-C	51+00	RR	07-26-77
5.	10-C	54+00	RR	07-20-77

	Date Cored	Date Tested	Thickness	Strength
1.	11-01-77	11-04-77	08.52	5510
2.	11-01-77	11-04-77	07.70	5960
3.	11-01-77	11-04-77	08.62	5180
4.	11-01-77	11-04-77	07.75	5430
5.	11-01-77	11-04-77	08.12	6690

Thickness, Inches

	1	2	3	4	5	6	7	8	9	Avg.
1.										8.52
2.										7.70
3.										8.62
4.										7.75
5.										8.12

fill in individual thickness measurements

	Total Load	Load, PSI	Capped Length	Correction Factor
1.				
2.				
3.				
4.				
5.				

fill in Strength data

Lot Avg. _____, in. Lot Avg. _____, PSI Corrected Lot Avg. _____, PSI

Remarks*

Percent Pay

EXHIBIT PC-1

MTPC ACTION CODE:

* DRILLED PAVING CONCRETE CORES *

PROJECT NO. : MATERIAL : LOT NO. :
SPEC CODE : SUBMITTER : PLAN THICK.:
SEC. LENGTH : SEC. WIDTH: APPROX.AREA:
FROM STATION: TO STATION: PURPOSE CD :
REMARKS :
ITEM NO. : AIR ENT. ADD:

	CORE IDENT.	STATION	POSITION	DATE POURED
1	:	:	:	:
2	:	:	:	:
3	:	:	:	:
4	:	:	:	:
5	:	:	:	:

	DATE CORED	DATE TESTED	THICKNESS	STRENGTH
1	:	:	:	:
2	:	:	:	:
3	:	:	:	:
4	:	:	:	:
5	:	:	:	:

AVG. THICKNESS: AVG.STRE:

REMARKS:
PERCENT PAY:

EXHIBIT PC-2

3.11 ASPHALTIC CONCRETE JOB MIX RELEASE

This form, which in most cases is filled out by the contractor, is shown as Exhibit HJ-1. Because of the large number of fields appearing on this form, the corresponding projection on the terminal screen has to be broken down into two separate maps. Exhibits HJ-2 and HJ-3 are the two maps. Following is a discussion on the various fields appearing on the form. Once again, the fields shown in black color are required fields.

Project No.

See Section 3.1 for entry format.

Sequence No.* (N)

01

and not 1

If this is the first job mix form submitted by the contractor for the type of mix, place a 1 in this block. All subsequent job mixes should be assigned sequential numbers from here on.

Plant Type* (N)

2

*Required Entry
(N) - Numeric Key Shift

Enter any one of the codes shown on the form for the type of production process used in hot mix production.

Type (N), Source, Percent (N)

For each of the materials listed on the left, enter the type, source, and percent (whichever is applicable) of that material. For HMAC, the code for the type of mix produced should be entered. Thus, if a type 1 wearing course mix is used for type 1 binder course, enter the code 01 (and not 02). Refer to the list of codes below. If the source codes for coarse and fine sands are not readily available, write the source name in the adjacent lines. Note that material type codes are not required for sands, silicon, anti-strip, and other. Although the percentage of material will not be entered in the system, except asphalt cement, it should be indicated on the space provided. Other codes may be found in the material type and sources and suppliers list.

01 = 1WC, 02 = 1BC, 03 = 2WC, 04 = 2BC
05 = 3WC, 06 = 3BC, 07 = 4WC, 08 = 4BC
09 = 5A, 10 = 5B, 11 = Lt Wt FC, 12 = Slag FC
13 = Limestone FC, 14 = Gravel FC

Contractor's and Department's Average Results* (N)

The series of blocked fields under the above titled columns are the average test results on Marshall test properties. The items are required and should be filled out as shown on the form (Exhibit HJ-1).

Recommended Formula and Loose Mix Results (Average) (N)

Fill in the blocks under the titled columns with test values submitted by the contractor and those determined by the Department. Refer to the Exhibit for guidance in filling out these fields.

Submitted for Contractor by* (N)

0,0,6,4

Date* (N)

0,8,-,0,8,-,7,7

If the mix design is submitted by the contractor, enter the contractor code. If the mix is designed and submitted by a private testing lab, enter its code as listed in the contractors list.

The date is the date the mix design was submitted for verification and/or approval. It should be numeric and in the month-day-year format.

Approved for the Laboratory by* (N)

0,6,1,5

Date* (N)

08-10-77

Enter the district laboratory engineer's code and the date of approval.

Remarks

THE MIX WAS APPROVED BY DIS T 61 LAB ENG

Any specific comments pertinent to the mix design may be entered in this 54-character field.

Use

THE MIX IS FOR RDWY 1 IVC WILL BE USED AS 1 BC

Enter where the mix is going to be used (roadway, shoulder, patching, etc.). If the mix is for a miscellaneous purpose, identify the specific miscellaneous use (curb, parking lot, etc.).

MTHJ/PROJ NO/SEQUENCE NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
ASPHALTIC CONCRETE JOB MIX RELEASE

Project No.* 846-10-06 Sequence No. 01
Plant Type 2 (1=Batch Screenless 2=Batch Hot Bin 3=Drier Drum 4=Continuous) Parish St. Helena
F. A. P. No. BRS-624-2(001) Contractor Dunham for Atlas
Name of Hwy. Amite Rvr Bridge Approaches Proj. Engineer Leey Mapes

	TYPE		SOURCE*		PERCENT	SPEC. GRAV.
HMAC	01	IWC for IBC	H.6.0.4	Dunham		
Asphalt	140	AC-20	B.6.0.2	Exxon	05.0	
Coarse Agg.			A.6.1.0	Thomas Sand St. Gravel	Bin 1 43.0	
Coarse Sand			A.6.1.0		" 2 27.0	
Fine Sand			A.6.1.0		" 3 16.8	
					" 4 5.2	
Mineral Filler	146	Silica Dust	1.0.1.2	Winn Ark	03.0	
Silicone						
Anti-Strip						
Other						

CONTRACTOR'S RESULTS Marshall Test Properties

DEPARTMENT VERIFICATION Marshall Test Properties

	Average	1	2	3	4	Average	Design Criteria For Approval of Job Mix Formula
Spec. Grav.	2.34	2.35	2.34	2.33	2.34	2.34	
Th. Gr.	2.44	2.44	2.44	2.44	2.44	2.44	
% Th. Gr.	95.9	96.3	95.9	95.5	95.9	95.9	95-97
% Voids	04.1	3.7	4.1	4.5	4.1	04.1	3-5
% V. F. A.	74.0	75.0	74.0	72.0	74.0	74.0	70-80
Stability Lbs.	1700	1522	1574	1460	1535	1523	1650 min
Flow, 1/100 in.	10	10	12	11	12	11	16 max

RECOMMENDED FORMULA

LOOSE MIX RESULTS

Control Limits

U.S. Sieve		1	2	Average	1 Test	2 Tests
1 1/4 inch						
1 inch					100	100
3/4 inch	100	100	95	98	91-100	94-100
1/2 inch	91	92	83	88	79-100	82-100
3/8 inch		-	-		-	-
No. 4	52	57	53	55	42-62	45-59
No. 10	40	42	43	42	31-49	34-46
No. 40	25	24	29	26	18-32	20-30
No. 80	12	11	14	12	7-17	8-16
No. 200	7	7	8	8	4-10	5-9
Asphalt Cement	05.0	4.9	4.8	04.8	4.4-5.6	4.6-5.4
% Crushed	80	80	84	82	80	80
Mix Temp	325			325	300-350	
Dry Mixing Time, Sec.	3					
Wet Mixing Time, Sec.	35					

Submitted for the contractor by 0064 Date 08-08-77
Approved for the laboratory by 0615 Date 08-10-77

Remarks* THE MIX WAS APPROVED BY DIS T. 61 LAB ENG.

Use* THE MIX IS FOR RDWY IWC WILL BE USED AS IBC.

EXHIBIT HJ-1

MTHJ ACTION CODE: SCREEN NO 1

HOT MIX ASPHALTIC CONCRETE JOB MIX RELEASE

PROJ. NO. SEQUENCE NO.: PLANT TYPE

	TYPE	SOURCE	PERCENT
HMAC			
ASPHALT			
COARSE AGGREGATE			
COARSE SAND			
FINE SAND			
MINERAL FILLER			
SILICONE			
ANTI-STRIP			
OTHER			

	CONTRACTOR'S RESULTS	DEPT. VERIFICATION
	MARSHALL TEST PROPERTIES	
SPECIFIC GRAVITY		
THEORETICAL GRAVITY		
% THEORETICAL GRAVITY		
% VOIDS		
% V. F. A.		
MARSHALL STABILITY LBS.		
FLOW, 1/100 INCH		

EXHIBIT HJ-2

MTHJ

ACTION CODE:

HOT MIX ASPHALTIC CONCRETE JOB MIX RELEASE

SCREEN NO 2

PROJ. NO. :

SEQUENCE NO.:

	RECOMMENDED FORMULA	LOOSE MIX AVG
1 1/4 INCH	:	:
1 INCH	:	:
3/4 INCH	:	:
1/2 INCH	:	:
3/8 INCH	:	:
NO. 4	:	:
NO. 10	:	:
NO. 40	:	:
NO. 80	:	:
NO. 200	:	:
ASPHALT CEMENT	:	:
PERCENT CRUSHED	:	:
MIX TEMPERATURE	:	:

DRY MIXING TIME-SEC:

WET MIXING TIME-SEC:

SUBMITTED FOR:

DATE SUBMITTED:

APPROVED BY :

DATE APPROVED :

REMARKS:

USE :

EXHIBIT HJ-3

3.12 ASPHALTIC CONCRETE PLANT AND ROADWAY INSPECTION REPORT

Exhibit HM-1 is an example of the report form that will be used to report hot mix data generated in the field for each lot. The form is a replacement of Form 2025. The data on this form will be recorded from the Daily Asphalt Plant Inspection Report, Form 2026. The fields shown on this form are the familiar Form 2025 fields, except that their locations have been shifted to conform to their positions on the terminal map which is shown as Exhibit HM-2. The definition and data entry format of each field follows:

Project No.* 8,4,6,-,1,0,-,0,6

See Section 3.1 for entry format.

Lot No.*

0,0,1

and not 1

The lot numbers are assigned by the project engineer's personnel. To standardize the number assigning procedure, the following guidelines should be used:

+ Use only the first three blocks for numbers.
+ The fourth block is reserved for letter designations (A, B, C, etc.). The letter designation may be used when the mix on a job is delivered from two separate plants. In this case the lot number will be the same with a suffix A for one plant and a letter B for the mix from the other plant.
+ Start with a 001 whenever the Mix Use and/or Mix Type changes.

*Required Entry

Mix Use* (N)

1

Enter any one of the designated code numbers corresponding to the mix usage. This information is necessary for checking against corresponding specifications.

Mix Type* (N)

01 As 02 OR 02 As 02

Since substitutions of some mix types are allowed, with or without the approval of the engineer, the two fields will help identify such an occurrence. The above example indicates that the wearing course mix was used as binder course mix. This substitution occurs more frequently than others. If the mixture is used as defined in the contract document, then the first field and the second field will have the same numeric code, as is indicated above on the right. This coding shows that binder course mix was used as binder course. Codes 11 through 14 are assigned to different types of aggregate friction courses.

Date Laid* (N)

08-08-77

(N) - Numeric Key Shift

Enter the date the mix was laid on the road or the date on which the lot was sampled and tested. The date format should be month-day-year and all numeric.

Adjst Period (Adjustment Period)* (N)

2

The specifications allow the contractor two days for adjustment of his process before any reduction in pay applies for deficiency in quality criteria. This field will identify if the adjustment period applies or not. Generally, for a given mix, the first two lots will have a 1 recorded in this field. After the first two days (or two lots), the field should show a 2. Refer to specifications for a definition of adjustment period and when and how it is applied.

Duration, hours* (N)

0.8, .6

In this field enter the number of hours the plant was in operation and supplying the mix on the project. Do not include time during which the plant was in operation but mix was not being laid on that project because of equipment breakdowns or any such reasons. This is a common occurrence for plants supplying mixes on a number of projects. If the construction was halted after only two hours of

operation, for example, enter a 2, since no mix went on that project after the breakdown. The hours entered in this field can be directly correlated with the number of Marshall stabilities and/or gradations tested for the lot.

Source Code*

H,6,0,4

Enter the plant code delivering the hot mix. All plants delivering hot mix have been assigned codes with prefix H.

JMF Seq. No. (Job Mix Formula Sequence No.)* (N)

1

OR 0,1

Enter the job mix formula sequence number applicable to this lot. Each job mix release form is assigned a number. Thus, if the second job mix release issued on the project is applicable to this lot, enter a 2.

From Station	To Station	Location
1,0,7,+,2,5	1,4,8,+,0,0	L,L
1,0,6,+,0,0	1,4,8,+,0,0	R,L

These three fields will identify the length and location of the paving operation for the day. Use abbreviations in the location field as follows:

RL = Right Lane
LL = Left Lane
RRRL = Right Roadway Right Lane
RRLL = Right Roadway Left Lane
LRRL = Left Roadway Right Lane
LRLL = Left Roadway Left Lane

For ramps use RMP and letter or number designation. For turnouts and intersections use acceptable abbreviations within the confines of four blocks.

If the paving operation was at different locations, enter the appropriate station numbers, etc., on the second line, as shown in the example.

Purpose Code* (N)

3

Samples tested at the plant for stability, etc., will generally have a code 3. However, samples submitted to the district laboratory for verification should have a 2 in this block. The lot number, however, should be the same. If the samples are tested for an FHWA Record Test, indicate an 8 in this field with the lot number being the same as the field-assigned number. Refer to Section 3.1 for a detailed definition of each purpose.

Spec Code* (N)

Refer to Section 3.1 for definition of codes.

N Grad (No. of Gradations)* (N)

2

This field defines the number of extraction tests for the lot.

TEST DATA FIELDS (N)

Marshall Tests

Specific Gravity, Stability Corrected, % VFA

2.35 1522 75

Enter the values of these properties in their respective blocks. A maximum of four briquette values and a minimum of one will be entered in this field.

Roadway Tests (N)

Thickness, % Briq Grav

2.00 0987

Record the thickness and percent of briquette gravity (percent compaction) data in the columns indicated on the form. The thickness is to be recorded in hundredths (1.63) and not fractions (1 5/8).

% Pay (N)

1.00

Enter percent pay according to stated requirements for stability and density.

Extracted Gradation (N)

Average

Enter the average of one or two extraction results in the blocks shown under "Average."

Avg Dev (N)

Entries in the blocks in this column will be required for No. 4, 40, and 80 sieves only, and only when the average extraction results discussed above are outside the specified control limits. For computation of this field, refer to Section 501.22 (d) or other applicable specifications.

% Pay (N)

1.00

Enter the percent pay based on the specifications requirement for average deviation for gradation discussed above.

Surface Tolerance (N)

Tolerance

3

Enter a 1, 2, or 3 for 1/8", 3/16" or greater than 3/16" tolerance setting, respectively. Do not enter the fraction 1/8 or 3/16 in the block.

Linear Ft (N)

3128

This is the linear feet of roadway (represented by the lot) tested for surface tolerance. Decimal is not allowed.

Ft Outside Tolerance (N)

4

The number of linear feet (in 3128 feet) outside the set tolerance should be entered in this field.

% Outside (N)

0.13

This field represents the linear feet of roadway outside the tolerance (4 feet), expressed as percent of the total length of the section (3128).

% Pay Tolerance (N)

100

Wt/cu ft (N)

142.3

Enter the average density of roadway cores. This is the specific gravity of the average roadway cores x 62.4.

Square Yards (N)

6530

Enter the square yard of roadway covered by the material represented by the lot. Decimal is not allowed.

Theoretical Yield (N)

Actual Yield (N)

160.1 183.8

Enter the two yields computed using standard acceptable procedure.

Tons Current (N) Pay Item*

600 5011B

the three series of rows provided for the above fields are for reporting breakdown in tonnage in the event the penalty was applicable to portion of the tonnage in that lot. For example, part of the lot (tonnage) may be paid according to density and stability test for that lot and the remaining portion of the total tonnage may be based on surface tolerance parameter. Note that parenthesis in Item No. field is not allowed. For example, Item 501(1)(B) will be written as 5011B, or 5011BX if the item is to be paid for at 95 percent pay. For friction courses, be sure to enter the square yards field since the payment is based on this unit of measurement.

Remarks

SURF. TOL. WAS TESTED @ 1/4 IN

Any pertinent remarks, with respect to the lot, can be made in this 54-character field. Refer to Section 3.2 for further definition of this field.

MTHM/PROJ NO/LOT NO/MIX USE/MIX TYPE/PURP CODE/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
DAILY ASPHALTIC CONCRETE INSPECTION REPORT

Proj. No* 846-10-06 Lot No* 001 Mix Use 1 Mix Type 01 As 02

1-Roadway 2-Patch, 3 Level 4 Widening, 5 Shoulder, 6 Intersect & Turnouts, 7 Airport Runways, 8 Miscellaneous

1 IWC, 2 IBC, 3 ... 7 4WC, 8 4BC, 9 ... 12 Slag FC, 13 ... FC, 14 Gravel FC

Date Laid 08-08-77 Ajst. Period 2 (1 = Yes 2 = No) Duration 08.6 Source Code* 4604 JMF Seq. No. 1

From Station* 0107+45 To Station* 0148+00 Location* LL Purpose Code 3 Spec. Code 1

From Station* 0106+00 To Station* 0148+00 Location* RL N Grad. 2

1. Proj. Cont., 2 Verif., 3 Accept., 8 Rec Test

TEST DATA

Sample ID	MARSHALL TESTS Spec Grav	Stability Corrected	% VFA	ROADWAY TESTS Spec. Grav.	Thick.	% Briquet Gravity
1 -1	2.35	1522	74	2.31	2.00	098.7
1 -2	2.34	1574	75	2.24	1.63	095.7
1 -3	2.33	1232	72	2.28	1.75	097.4
1 -4	2.34	1501	74	2.30	2.00	098.3
1 -5				2.26	1.50	096.6
AVG	2.34	1457	74	2.28		97.3
% Pay		100			100	

Sieve	EXTRACTED GRADATION Test 1	Dev 1	Test 2	Dev 2	Average	Avg Dev	JMF
1 1/4							
1							100
3/4	100		100		100		94-100
1/2	92		89		90		82-100
3/8	-	-	-	-			-
# 4	57		54		56		45-59
# 10	42		40		41		34-46
# 40	24		25		25		20-30
# 80	11		13		12		8-16
# 200	7		7		7		5-9
% A C	4.8		4.9		04.9		4.6-5.4
Prntr	5.0		5.0		05.0		
Crushd	80		80		80		75 min
% Pay					100		

SURFACE TOLERANCE

Tolerance 3 (1 1/8, 2-3/16, 3 G.T. 3/16) Linear Ft 3128

Ft Outside Tolerance 4 % Outside 0.13

% Pay Tolerance 100

Wt/cu ft 142.3 Sq Yds 6530

Theor Yield 160.1 Actual Yield 183.8

Tons Previous	Tons Current	Tons To Date	Pay Item*
0.0	600	600	501 1B

Signature & Title Abc

Signature & Title Xyz

Remarks* SURFACE TOL WAS TESTED @ 1/4 IN

Project Engineer's Signature Defn

EXHIBIT HM-1

MTHM ***ASPHALTIC CONCRETE INSPECTION REPORT*** ACTION CD:

PROJ NO : LOT NO: MIX USE: MIX TYPE: AS:
DATE LAID: ADJST PER: DURATION: SOURCE : JMF NO :
FROM STA : TO STA : LOC: PURPOSE: SPEC CODE:
FROM STA : TO STA : LOC: N GRAD :

*** MARSHALL TESTS ***			*** ROADWAY ***		EXTRACTED GRADATION		
SP.GR.	STAB	VFA	THICK	% BRIQ	SIEVE	AVG	DEV
:	:	:	:	:	1 1/4":	:	:
:	:	:	:	:	1" :	:	:
:	:	:	:	:	3/4" :	:	:
:	:	:	:	:	1/2" :	:	:
			:	:	3/8" :	:	:
					#4 :	:	:
% PAY:			% PAY:		#10 :	:	:
					#40 :	:	:
SURFACE TOLERANCE					#80 :	:	:
TOL :		LN FT :			#200 :	:	:
FT OUTSIDE :		% OUTSIDE :			% AC :	:	:
% PAY TOL :					PRNTR :		
WT/CU FT :		SQ YDS :			CRUSHD:		
THEOR YIELD:		ACTUAL YIELD:			% PAY :		
TONS: ITEM:		TONS: ITEM:			TONS: ITEM:		

REMARKS:

EXHIBIT HM-2

3.13 SOIL ANALYSIS

The data reported on this subsystem is geared towards providing information relative to the suitability of soil for earthwork construction. The form for reporting the data, which is generated by the district laboratory, is shown as Exhibit SA-1. It replaces the currently used work-report card. This revised form does not reflect any changes in test fields except that less information is required for entry of header fields than the other subsystems. The map that will appear on the terminal screen will look like Exhibit SA-2. Once again, only the blocked items or test fields will be entered on the map.

For discussion on header fields refer to Section 3.1 and Exhibit SA-1 The important thing to remember is that all black-colored fields must have values recorded in them.

Test Fields

Refer to the Exhibit for data entry format. All test fields are numeric except the last three items, Soil Group A, Class, and Remarks. Do not put NP for non-plastic material in the Plasticity Index field. If non-plastic, enter zero.

MTSA/PROJ NO/LAB NO/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SOIL ANALYSIS

Project No.* 846-10-06
Lab No.* 62-21392
Submitted By 0622
Spec. Code 3
Ident.* S-4
Sample No.
Pit No.
Depth
Remarks* DETERMINE % CEMENT & OPT MC
Item No.* 301(1)

Date Sampled 06-24-77
Purpose Code 7
Date Tested 07-01-77
Station* 0106+00
Location
Hole No.

PURPOSE CODES
1. Proj. Cont.
2. Verif
3. Acceptance
4. Check
5. Resample
6. Source Appr.
7. Design
8. Rec Test
9. Preliminary Source Test

Dry Wt. of Sample, gm _____ Graduate No. _____

TEMP, F	TIME	ELAPSED TIME	HYDRO. READING	CORRECTION	CORRECTED READING	% FINER

Retained on 40
Wt Cup + Soil
Cup No.
Wt. Cup
Wt. Soil
Retained on 200
Wt. Cup + Soil
Cup No.
Wt. Cup
Wt. Soil

ENTER APPROPRIATE VALUES HERE

SIZE	WEIGHT
Total	
3/4	
# 4	
#10	
# 40	
# 200	
Silt	
% Clay & Colloids	

% Retained 3/4	
% Retained # 4	0.0
% Retained #10	
% Retained #40	22
% Retained #200	54
% Silt	4
% Clay & Colloids	20
% Pass #10	100
% Pass #40	78
% Pass #200	24
% Organic Matter	—

LIQUID LIMIT
No. Blows
Wt. Cup + Wet Soil
Wt. Cup + Dry Soil
Wt. Water
Factor
Wt. Cup + Dry Soil
Cup No.
Wt. Cup
Wt. Dry Soil
% Moisture

PLASTIC LIMIT
Wt. Cup + Wet Soil
Wt. Cup + Dry Soil
Wt. Water
Wt. Cup + Dry Soil
Cup No.
Wt. Cup
Wt. Dry Soil

Liquid Limit
Plasticity Index 0
Natural M. C.,%
Optimum M. C.,% 12.0
Max. Density
% Cement/~~Lime~~ 8
Soil Group A* A-2-4(0)
Class* SNDY-CL-LM
PH
Resistivity

Remarks* STABILIZE WITH 8% CEMENT BY VOL

Tested By _____ Checked By _____

EXHIBIT SA-1

MTSA

ACTION CODE:
SOIL ANALYSIS

PROJECT NO. :
LAB NO. :
SUBMITTED BY:
SPEC CODE :
IDENT :
REMARKS:
ITEM NO:
% RET. NO. 4 :
% SILT :
LIQUID LIMIT :
PLASTICITY INDEX:
OPTIMUM M. C./% :
MAX. DENSITY :
%CEMENT/LIME :
SOIL GROUP A :
CLASS :
REMARKS:

DATE SAMPLED:
PURPOSE CODE:
DATE TESTED :
STATION :

EXHIBIT SA-2

3.14 DENSITY AND MOISTURE

This subsystem is geared towards providing entry, storage and retrieval of data on densities and moisture contents of embankment, base and subbase courses. One of the major changes is reflected in the test data form shown as Exhibit DM-1. The form, as shown, replaces the currently used volumeter, sand cone and nuclear test data forms. The form will be filled out by the field personnel in the appropriate fields for the method used for determination of density. Nonapplicable methods should be crossed out as shown in the Exhibit. The completed form will then be used to enter data in the various fields on the density-moisture map shown as Exhibit DM-2. Only data appearing in the open-ended blocks will be entered through the keyboard terminal. Discussion of each of the fields follows:

Project No.* 8,46,-,1,0,-,0,6

Same format as discussed in Section 3.1 should be used.

Date* (N)

0,7,-,1,8,-,7,7

This is the date the test was performed on the material.

---

*Required Entry
(N) - Numeric Key Shift

Material* (N)

[0,3]

Enter any one of the material codes listed on the form.

1 = Embankment
2 = Select material
3 = Soil-cement
4 = Stabilized sand-clay-gravel
5 = Stabilized sand-shell
6 = Lime stabilized sand-clay-gravel
7 = Sand-clay-gravel
8 = Shell
9 = Sand-shell
10 = Backfill material
11 = Other than those listed above

Purpose Code* (N) [3]

Spec. Code* (N) [1]

Refer to Section 3.1 for various codes on these items.

Item No.* [3,0,1,(,1,)]

See Section 3.1 and Exhibit DM-1.

Station Tested*

[0,1,4,5,+,3,0]

For each test location, record the station number where the test was taken.

Zone and Test No.*

99-007
99-007A
99-007B

Entry in this field should be considered critical since it will provide the only link between passing and failing tests at a given location. The seven-block field is composed of zone number in the first two blocks, a dash in the third block followed by a three-digit test number, and a letter designation in the last block. Explanation of each of these subfields is given below:

Zone No.: Use any letter designation from A to Z or numeric designation from 1 to 99 or a combination of alphabet letter and number. However, consistency should be maintained throughout the project.

Test No.: Use sequential numbering procedure from 1 to 999. The last block is reserved for letter designation only. This letter designation should be used only when the test represents a check or resample of the previous (original) failing test. Thus, in the example shown above, the second and third tests with letter designations A and B, respectively, signify that two check samples were taken to reinforce the finding indicated by the first sample. Notice that the zone number and test number in all three cases remain the same. This procedure will provide an easy system of cross referencing passing and failing locations.

Test Fields (N)

Enter appropriate computed value of each field in the space provided. Only values in the open-ended blocks will be transmitted and stored in the computer system. Notice the three new fields, Optimum Moisture Content, Field Moisture Content at Compaction, and Percent Pulverization, the values for which were not required to be recorded on the old forms.

Remarks

```
AVG OF TESTS 5, 6, 7, 8, 9 = 94.3
PAID FOR @ 75% UNDER 301 (1) (Y)
```

This field should be used for the purpose discussed in Section 3.2.

MTDM / PROJ NO / MAT CODE / ZONE & TEST NO / ACTION CODE

LA. DEPARTMENT OF TRANSPORTATION & DEVELOPMENT
DENSITY & MOISTURE CONTENT WORK SHEET

Set No. ______

*Project No.** 846-10-06 *Date* 07-18-77
Material (1=Emb, 2=Sel, 3=SC, 4=ST SCG, 5=ST SS, 6=Lime SCG, 7=SCG, 8=Shell, 9=SS, 10=BF, 11=Other) 03
Purpose Code 3 *Spec Code* 1
*Item No.** 301(1)

*Station tested**		0145+30	0146+35	0145+75
Location		Rt 8'	Rt 7'	Rt 8'
Elevation of lift		190.0	190.0	190.0
*Zone & Test Number**		99-007	99-007A	99-007B
SAND METHOD	NUCLEAR METHOD			
SA: Wt. of sand in cylinder	NA: Density Standard			
SB: Vol. of cylinder	NB: Density Test			
SC: Unit wt. of sand (SA/SB)	NC: Count. Ratio (NB/NA)			
SD: Orig. wt. of sand	ND: Lbs. Wet density			
SE: Final wt. of sand	NE: Moisture Standard			
SF: Wt. of sand in cone	NF: Moisture Test			
SG: Orig. wt. of sand	NG: Count. Ratio (NF/NE)			
SH: Final wt. of sand	NH: Lbs. H_2O/cu.ft.			
SI: Wt. of sand in cone & hole	T: Dry wt. density (ND-NH)			
SJ: Wt. of sand in hole (SI-SF)				
V: Vol. of hole (SJ/SC)				
VOLUMETER METHOD				
VA: Volumeter final reading		0.0765		
VB: Volumeter zero reading		0		
V: Volume of hole		0.0765		
A: Wet wt. of material in hole		8.87		
B: Wet wt. of plus no. 4 material		0		
C: Wet wt. of minus no. 4 material		8.87		
D: Weight of wet soil		271.0		
E: Weight of dry soil		246.4		
F: Weight of water	(D-E)	24.0		
G: % Moisture content	(100F/E) or (100NH/T)	10.0		
H: Dry wt. of minus no. 4 material	(100C/100+G)	8.06		
I: Dry wt. of plus no. 4 material		0		
J: TOTAL DRY WT. OF MATERIAL IN HOLE	(H+I)	8.06		
K: % by volume of plus no. 4 material	(100I/160V)			
L: Dry wt. density from curve		113.4		
M: DRY THEORETICAL DENSITY	(160K/100)+(100-K)L/100			
T: DRY WEIGHT DENSITY OF TEST	J/V or (ND-NH)	105.4		
P: PERCENT COMPACTION	(100T/M)	092.9	095.0	093.9
OPTIMUM MOISTURE CONTENT		12.0		
FIELD M.C. AT COMPACTION	G or h	14.3		
PERCENT PULVERIZATION		78		
For Curve Reference, Use Test No.				

ENTER APPROPRIATE VALUES HERE

Station Tested		145+30	145+30		
a: Wt. of mold & soil		13.56	13.48		
b: Wt. of mold		9.20	9.20		
c: Wt. of compacted soil	a-b	4.36	4.28		
d: Wet wt. density	c×30	130.8	128.4		
e: Wt. of wet soil		289.4	288.4		
f: Wt. of dry soil		253.4	252.1		
g: Wt. of water	e-f	36.0	36.3		
h: % Moisture content	(100g/f) or (100NH/T)	14.2	14.4		
i: Dry wt. density	100d/100+h	114.5	112.2		
FAMILY OF CURVES NUMBER*					

ENTER APPROPRIATE VALUES HERE

REMARKS:* AVG OF TESTS 5, 6, 7, 8, 9 = 94.3
PAID FOR @75% UNDER 301(1)(Y)

EXHIBIT DM-1

INSPECTOR [signature]

MTDM ACTION CODE:

DENSITY AND MOISTURE CONTENT

PROJECT NO. : DATE:

MATERIAL TESTED :
PURPOSE CODE : SPEC CODE
ITEM NUMBER :
STATION TESTED :
ZONE AND TEST NO. :
DRY THEORETICAL DENSITY :
DRY WEIGHT DENSITY OF TEST :
PERCENT COMPACTION :
OPTIMUM MOISTURE CONTENT :
FIELD M. C. AT COMPACTION :
PERCENT PULVERIZATION :
FAMILY OF CURVES :

REMARKS :

EXHIBIT DM-2

3.15 THICKNESS AND WIDTH MEASUREMENTS OF BASE, SUBBASE AND AGGREGATE SURFACE COURSES

This subsystem will provide the capability for entry, storage, and retrieval of data on final corrected acceptance measurements of thickness and width of base and subbase courses, and of aggregate surface courses, as defined in test procedure LDOTD 602. The form that will be used for recording these measurements is shown as Exhibit TW-1. This form, which will be generated by the district laboratory, parallels the presently used pre-printed form 4195. The fields that will be entered through the terminal will be recorded in the blocked area. Notice that individual blocks within the blocked area are not shown. This had to be done for lack of sufficient space to include all the items shown. Within the blocked area, you are required to record the values within the constraint shown in parenthesis below each column heading. Thus Section No. cannot exceed 999, Plan Thickness cannot be greater than 99.99 inches, and so on. An example in the exhibit further clarifies this constraint.

Project No.* 846-10-06

See Section 3.1 for definition and data entry format.

---

*Required Entry
(N) - Numeric Key Shift

Material Code* (N)

03

The following materials and their codes are allowed:

1 = Embankment
2 = Select material
3 = Soil-cement
4 = Stabilized sand-clay-gravel
5 = Stabilized sand-shell
6 = Lime stabilized sand-clay-gravel
7 = Sand-clay-gravel
8 = Shell
9 = Sand-shell
10 = Backfill material
11 = Asphaltic concrete
12 = Aggregate surface course
13 = Total
14 = Other

Specification Code* (N) 1

Item No.* 30.1.(1.)

See Section 3.1 for definition of these fields.

Unit of Pay* (N)

1

Enter applicable Unit of Pay codes shown on the form.

Section No. (N)

100

Enter the assigned number to each 3000-foot section. The maximum number you can assign to the section is 999.

Section Length, ft (N)

1,000

Record the length of the section excluding lengths covered by bridges, etc. This length will be used to compute the quantity specified for the pay item.

Plan Thickness, in (N)

8.50

The maximum allowable number in this field can be 99.99. The thickness cannot be carried to more than two decimals.

Average Thickness, in (N)

9.17

This field requires entry of the average thickness for the section. The value, once again, cannot exceed 99.99 inches.

Plan Width, ft (N)

23.0

No more than one decimal place is allowed. The maximum number is 99.9 feet.

Average Width, ft (N)

23.2

Same constraint as above.

Remarks

SEC100-792FT E SEC101-692FT
BRIDGES

Record any remarks you may care to make for clarification of test data. See Section 3.2 for further details on this field.

MTTW/PROJ NO/MAT CODE/ACTION CODE

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
THICKNESS AND WIDTH MEASUREMENTS OF BASE AND SUB-BASE COURSES

Project No. 846-10-06

Material Code (1=Emb,2=Sel,3=SC,4=ST SCG,5=ST SS,6=Lime SCG,7=SCG,8=Shell,
9=SS,10=BF,11=HMAC,12=Agg Surface Course,13=Total,14=Other 03 Spec. Code 1

Item No. 301(1) Unit of Pay 1 (1=Cu Yd 2=Sq Yd 3=Ton)

Section	From Station	To Station	Section Length ft	Thick-1	Thick-2	Thick-3	Plan Thickness 99.99 in	Average Thickness 99.99 in	Least Average	Plan Width 99.9 ft	Average Width 99.9 ft	% Pay
100	106+00	123+92	1000	8.50	9.50	9.50	8.50	9.17		23.0	23.2	
101	123+92	133+92	1000	8.50	7.50	8.00	8.50	7.50		23.0	23.5	
102	133+92	148+00	716	8.00	8.75	8.75	8.50	8.50		23.0	22.8	

3.15-5

Remarks: SEC 100 - 792 FT & SEC 102 - 692 FT
BRIDGES

EXHIBIT TW-1

MTTW ACTION CODE:

THICKNESS AND WIDTH MEASUREMENTS OF BASE AND SUB-BASE COURSES

PROJECT NO.:
ITEM NO.:

MATERIAL CODE:

SPEC CODE
UNIT OF PAY

SECTION	LENGTH	PLAN-T	AVG-T	PLAN-W	AVG-W

REMARKS:

EXHIBIT TW-2

3.16 MISCELLANEOUS MATERIALS

This is probably the most comprehensive of all the subsystems. It is designed to handle more than 70 different miscellaneous materials. The Central Laboratory in Baton Rouge will be the prime user of this subsystem. A complete list of all materials and their respective codes is included in this section. Because of the large number of miscellaneous material forms involved, they are not included in this manual. An example of one of the forms that will be used to record the test data is, however, included as Exhibit MS-1. Exhibit MS-2 is a corresponding map on the terminal screen.

Header Information

The header information will be provided by the submitter, on form 800, with appropriate data (or information) filled in the blocked fields according to requirements specified in Section 3.1. The information on form 800, as received, will be used for entry through the computer terminal. If proper entries are not made on form 800, the laboratory will have to complete these entries, as per requirements in Section 3.1, prior to data entry. This would mean, in some cases, generating new forms through transfer of information.

Test Data

The test data will be recorded on the forms specifically designed as work-test report sheets. As shown in Exhibit MS-1, the laboratory will fill out the data in the open-ended single-blocked areas shown under the column heading TEST RESULTS. No more than 15 characters

(test values, etc.) are allowed in this area. The last block, under the column heading P/F, is reserved for passing or failing comment in terms of P or F, respectively. The comment made in this column will determine the final remarks for disposition of the sample. You may leave any of the blocks blank.

Remarks

This field is reserved for specific comments of the type discussed in Section 3.2. Do not record comments such as: THIS SAMPLE CONFORMS (OR DOES NOT CONFORM) TO SPECIFICATIONS. This field should be used to cross reference failing samples, or the manner in which the failing sample was disposed as shown in the above example.

LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
SAMPLE IDENTIFICATION

Received _____

Project No. *846-10-06

Material Temporary Marking Tape 163 (Code)

Lab No. *22-266973

F.A.P. No. _____

Date Sampled 08-09-77

Submitted By Leey Mapes 0627 (Gang No)

Address _____

Quantity _____ 1000 _____ Units (For Misc only)

Purpose Code 3

Material Source Atlas Cons. Co. *9999 (Code)

Address _____

Sample Taken From Job Site

Specification Code 1

P.O. No. *_____

Date Tested 08-15-77

Ident _____ *TTM1

District _____

Use For Hot Mix Pavement Marking

PURPOSE CODES
1. Proj. Cont.
2. Verif
3. Acceptance
4. Check
5. Resample
6. Source Appr.
7. Design
8. Rec Test
9. Preliminary Source Test

SPECIFICATION CODES
1. Standard (1977)
2. Sp. Prov., Supplementary, etc.
3. None
4. None but pass the test
5. None but fail the test

Remarks* _____

Remarks 2 ☐ For Central Lab only

Item No* 703(2)

(For multiple Item Nos, you must separate each Item No by a comma.
Do not leave any blanks within Item No or between Item Nos.)

EXHIBIT MS-1

PROJECT NO. 846-10-06 DATE TESTED 08-15-77

LAB. NO. 22-266873

TEMPORARY PAVEMENT MARKING TAPE

	TEST RESULTS (Max. of 15 characters)	P/F
COLOR	YELLOW	
WIDTH, IN.	3 7/8	F
THICKNESS, MILS	16.0	P
REFLECTIVITY, AV. CP/FOOT CANDLE/SQ. FT. ($Erd^2 \div EsA$)	0.57	P

Er = Illumination incident upon the specimen
Es = Illumination incident upon the receiver
d = Distance in feet from the specimen to the projecter
A = Area in square feet of the test surface

Er		Es	
d^2		A	
Erd^2		EsA	

REMARKS:

TESTED BY: Abe

CHECKED BY: Lmm

EXHIBIT MS-1

MTMS TITLE: TEMPORARY PAVEMENT MARKING TAPE ACTION CODE

ENTER NEW DATA

PROJECT NO.	: 846-10-06	MATERIAL CODE:	163	LAB NO.	: 62-263112
DATE SAMPLED:		SUBMITTED BY	:	QUANTITY	:
PURPOSE CODE:		SOURCE CODE	:	SPEC CODE:	
PO CDO NO.	:	DATE TESTED	:	IDENT	:

REMARKS1 :

REMARKS2 :

ITEM NO.	TEST RESULTS	PASS/FAIL
COLOR	:	:
WIDTH, IN.	:	:
THICKNESS, MILS	:	:
REFLECTIVITY, CP/FOOTCANDLE/SQ. FT.	:	:
	:	:
	:	:
	:	:
	:	:
	:	:
	:	:
	:	:
	:	:
	:	:
	:	:

EXHIBIT MS-2

4 DATA HANDLING AND ERROR MESSAGES

General

In the preceding sections we had discussed how data is to be entered or recorded on the test report forms. Emphasis was also placed on the definition of different fields appearing on these test reports. This section attempts to discuss the procedure for entry of this recorded data through the district computer terminals. Once the data is entered into the system, how to inquire upon this data and also how to update or delete such existing data is likewise discussed in this section.

As you enter data through the terminal keyboard, edit checks are made to verify that the data as entered conform to the required format. If an error is detected, a message will be flashed on the terminal screen. Furthermore, all fields with error will be highlighted (will appear brighter than the other fields). The types of error messages and how to rectify them are also discussed in this section.

Data Sorting Before Entry

For rapid entry of data, the terminal operator should receive all test reports sorted by gang, projects within gang, and materials within projects. If this sorting is not done, and the different material test reports are intermixed, the operator will have to enter the transaction line numerous times on a given material. On the other hand, if they are sorted by gang, project and materials within project, the operator will have to enter the transaction line only

one time for that material. This will minimize the entry time considerably. The other reason for presorting before entry is that the summary reports you will get the next morning will be printed according to gang, projects within the gang, and materials within the project number. This will provide for easy check if the original test reports were sorted accordingly. The output report format is discussed in detail in the next chapter.

Data Transaction Through the Terminal

To accomplish any data transaction through the terminal, the first step is to key in the transaction line for that material. A transaction line is a composition of some of the key items or fields that are unique to a test report. For example, project number, material code, laboratory number, etc., are uniquely assigned to a given test or sample. On a given test report, one of these key items will be different than on any other test report. The transaction line for each material is preprinted in the upper left corner of that material test report form. Table DE-1 is a list of the transaction lines for each material subsystem we had discussed in the preceding sections. For Name subsystem transaction, refer to Section 2.

In each of the transaction lines listed in the table, and on each test report form, you are required to substitute the actual numbers for all items except the first and the last ones. Furthermore, these values should correspond to the format defined in Section 3.1, Header Information. The Action Code should be any one of the

characters shown in the table. Thus, if you are entering a new test record on a material, the Action Code would be an N. Likewise, you will key in the letter I if you are inquiring upon an existing record, or a U or a D if you are updating or deleting an existing record, respectively. Following is a step-by-step procedure for data entry, inquiry, update, and deletion through the computer terminal.

A. New Record (Action Code N)

1. Key in the transaction line for any of the subsystems listed in Table DE-1.

2. Depress the ENTER key.

   a. If an error message appears on the screen, depress the CLEAR key and re-enter the transaction line. The various error messages are listed at the end of this subsection.

   b. When the transaction line is error free, a formatted map for the subsystem will be projected to you on the terminal. An example of the formatted map for each subsystem listed in Table DE-1 appears in the preceding sections.

3. Key the value of each field from the form, making sure that the required fields (red color) are entered.

4. Depress the ENTER key after all the fields have been entered. If an error occurs, it will be highlighted. Move the cursor to the field of error. Key the corrections and depress ENTER. When the map is error free, a new blank map of the same subsystem will appear on the screen with a message ENTER NEW RECORD at the top of the screen. For some subsystems, instead of the blank map, you may get the map with the data of the previously entered test left in. In such cases enter new data in place of the existing ones (like an update). This capability will prove to be a great time-saver in instances where repetitious information has to be entered on a set of tests for a material.

B. Inquiry (Action Code I)

To inquire upon existing record (test, etc.), the following steps are necessary:

1. Key in the transaction line.

2. Depress the ENTER key.

   a. If an error message appears on the screen, depress the CLEAR key and re-enter the transaction line. A list of error messages appears at the end of this subsection.

   b. When the transaction line is error free, a data map of the inquired record is returned to you. If a copy of this test report is needed, depress the PA-2 key.

C. Update (Action Code U) (Transaction Items Cannot Be Updated)

1. Key in the transaction line.

2. Depress ENTER key.

   a. If an error message appears on the screen, depress the CLEAR key and re-enter the transaction line.

   b. When the transaction line is error free, a data map of the test record will be projected on the screen.

3. Key in the four-digit security code. If the error message INVALID SECURITY CODE appears on the screen, go to step 1 above.

4. Move the cursor to the field(s) to be updated or corrected.

5. Depress the ENTER key. If an error occurs, the error will be highlighted. Move the cursor to the error field, key in the corrections and once again depress the ENTER key. When the message RECORD UPDATED appears on the screen, go to step 6.

6. Depress CLEAR key.

D. Delete (Action Code D)

Follow the same steps listed under item C, Update, except that D should be substituted for U for the Action Code and step 4 should be skipped. Also the message in step 5 would read RECORD DELETED.

Multiple Maps

There are two subsystems, Asphaltic Concrete Job Mix Release and Miscellaneous Materials, that require two maps to complete data entry. The retrieval of the second portion of the map for the above subsystems is accomplished by pressing the ENTER key upon completion of the first portion of the map. When this is done the Asphaltic Concrete Job Mix Release subsystem will project only the remaining portion of the map with the cursor set at the first field, namely, 1 1/4 inch. In the case of Miscellaneous Material, pressing the ENTER key will project the second half of the map for that material including the entire header information that was also on the first portion of the map. However, the cursor will be positioned at the first test field on this second map. No entry will have to be made in the header information.

Miscellaneous Maintenance Map

For miscellaneous subsystem, it is possible for the user to create a map for any new material that may have to be added to the list. For example, if material A has to be added to the existing list shown on page 3.16-7, the terminal operator needs to first enter MTMM/N for transaction line. A blank map with the material code already assigned will appear on the screen. The operator will then enter the name or title of this new material and the test properties applicable to this material. After all the entries are made, the ENTER key is pressed and the new material goes into the system file as material 205. To retrieve this map for actual data entry, the appropriate transaction

line (MTMS..., etc.) is entered with the new material code 205 and the map created previously for this material will appear on the screen for data entry.

TABLE DE-1: LIST OF TRANSACTION LINES FOR VARIOUS MATT SUBSYSTEMS

SUBSYSTEM NAME	MATT ID	TRANSACTION LINE
NAME	....	MTNM/SOURCE TYPE CODE/ACTION CODE (N,I,U,D,L)/SEQUENCE NO
PROJECT INFORMATION	....	MTPI/PROJ NO/ACTION CODE (N,I,U)
ROADWAY XSECTION	....	MTRC/PROJ NO/ACTION CODE (U,I)
AGGREGATE	B	MTAG/PROJ NO/MATERIAL CODE/LAB NO/ACTION CODE (N,I,U,D)
ASPHALT CEMENT	C	MTAC/PROJ NO/MATERIAL CODE/LAB NO/ACTION CODE (N,I,U,D)
LIQUID ASPHALT	D	MTLA/PROJ NO/MATERIAL CODE/LAB NO/ACTION CODE (N,I,U,D)
CEMENT	E	MTCT/PROJ NO/MATERIAL CODE/LAB NO/ACTION CODE (N,I,U,D)
STEEL BAR	F	MTSB/PROJ NO/MATERIAL CODE/LAB NO/ACTION CODE (N,I,U,D)
STEEL WIRE	G	MTSW/PROJ NO/MATERIAL CODE/LAB NO/ACTION CODE (N,I,U,D)
CONCRETE JOBMIX	A,I	MTCU/PROJ NO/MATERIAL ID/MATERIAL CODE/ACTION CODE (N,I,U,D)
STRUCTURAL CONCRETE	A	MTSC/PROJ NO/MATERIAL CODE/LOT NO/ACTION (N,I,U,D)
PAVING CONCRETE	I	MTPC/PROJ NO/MATERIAL CODE/LOT NO/ACTION (N,I,U,D)
ASPHALT CONCRETE JOBMIX	H	MTHJ/PROJ NO/SEQUENCE NO/ACTION CODE (N,I,U,D)
ASPHALT CONCRETE INSPECTION	H	MTHM/PROJ NO/LOT NO/MIX USE/MIX TYPE/PURPOSE CODE/ACTION CODE (N,I,U,D)
SOIL ANALYSIS	L	MTSA/PROJ NO/LAB NO/ACTION CODE (N,I,U,D)
DENSITY/MOISTURE	J	MTDM/PROJ NO/MATERIAL CODE/ZONE & TEST NO/ACTION NO (N,I,U,D)
THICKNESS/WIDTH	K	MTTW/PROJ NO/MATERIAL CODE/ACTION CODE (N,I,U,D)
MISCELLANEOUS DATA ENTRY	M	MTMS/PROJ NO/MATERIAL CODE/LAB NO/ACTION CODE (N,I,U,D)
MISCELLANEOUS MAINTENANCE	....	MTMM/ACTION CODE (N,I,U,D)
REPORT REQUEST	....	MTRR/DISTRICT NO/PROJ NO/REPORT TYPE CODE/OPTION CODE/ACTION CODE (N,I,D)
REPORT RETRIEVAL	....	MTLE/DISTRICT NO/1=LOG, 2=EXCEPTION, 3=2059
NOTE.....	.....	SOURCE TYPE CODES ARE: B=CONTRACTORS,C=MATERIAL PRODUCERS,D=SUBMITTERS REPORT TYPE CODES ARE: 1=COMPLETE LOGGING,2=2059,3=STAX SUMMARY OPTION CODES ARE: 1=ON-LINE,2=OFF-LINE(MAILED) ACTION CODES ARE: N=NEW, I=INQUIRY, U=UPDATE, D=DELETE & L=BROWSE

Error Messages

1. PROJECT NOT ON FILE

   This message will appear when you attempt to enter new record (N) on a project number that is not in Project Information file.

2. RECORD NOT FOUND

   This will happen whenever the action code is an I, U, or D.

3. INVALID PROJECT NO.,

   INVALID MATERIAL CODE,

   INVALID LAB. NO., or

   INVALID.....any one of the key items listed on the transaction lines.

   Check the required format and/or the material codes.

4. INVALID SECURITY CODE

5. REQUIRED FIELD NOT ENTERED

6. NOT ON FILE

   Check the material codes and the source, supplier, and submitter list.

7. INVALID DATA IN ERROR FIELD

   Check the format and other requirements for the error field.

8. PARISH ENTERED IS NOT WITHIN THE DISTRICT ENTERED

   This message will appear when you are entering new data on Project Information map.

5 TEST REPORTS

All data entered through the terminal will be processed that night at the central computer center in Baton Rouge. This processing will involve checking of each material test against its applicable specifications, and creating computer file with a pass/fail key for that material. The next morning you will be able to retrieve the following types of reports:

+ Logging Reports
+ Exception Reports

Logging Reports

The logging reports are the summary type reports consisting of information relative to the project, identification, purpose, material, quantity, item number and pass/fail comment. In some cases (structural concrete, asphaltic concrete, density/moisture tests) critical numerical values of the measured acceptance criteria will also be printed. Exhibit TR-1 is an example of logging report for Soils Analysis Tests and miscellaneous materials for gang 623 on a project. Exhibit TR-2 is similar logging report for hot mix and density/moisture. Notice that values of the measured variables are printed in this report.

Exception Reports

The above logging reports will be supplemented with exception reports on failing materials or tests. In other words, you will not get a

standard report on passing materials or tests.* An example of an exception report is shown as Exhibit TR-3. This sample had appeared as failing sample on the logging report in Exhibit TR-1.

In addition to printing logging reports on materials entered by your district, the system will also provide you with similar reports on materials submitted by your district but tested and transmitted elsewhere. This means that all testing and reporting that is done by the Central Laboratory for your district will be printed on your terminal printer. This will greatly minimize delays associated with mailing of such reports to the various districts.

Special Reports

Special reports are reports other than those listed above. These reports will be issued at the user's request. At the present time three types of special reports will be provided:

+ Complete logging report
+ Partial or final document for project certification (2059)
+ Statistical summary report**

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*The Central Laboratory will get all reports, passing and failing. Furthermore, the districts will also get, at their terminal, reports on failing samples tested by the Central Laboratory.

**Not operational.

Complete Logging Report

This report will be similar to the daily logging report discussed above except that it will be on the entire project. This report will be preliminary to the 2059 report. The major thrust towards issuance of this logging report is to allow the project engineers to ascertain that all test data have been entered into the system and that they are error free. For example, disposition of all failing samples will have to be indicated in the REMARKS field of each test record (see Section 3.2). Furthermore, these logging reports will also be thoroughly reviewed to make sure that the ITEM NO. entry has been made according to the required format.

Document for Certification (2059)

This report should be considered the end result of the MATT System. The report will be issued only after the complete logging report has been retrieved, reviewed and updated.

The basic format of this 2059 report will be similar to the logging report except that it will be item no. oriented. In other words, all materials will be reported under the item no. for which they were sampled and tested. Furthermore, all coded fields will appear decoded in the report.

The 2059 will be composed of three parts. Part one will consist of a listing of all materials and/or tests under their respective item

4. If the transaction line is error-free, you will receive a map, such as the one shown in Exhibit 6, on the terminal screen with all the transaction information filled in appropriate places on the map.

   a. If the section code was 'N', you will receive a message 'REQUEST ACKNOWLEDGED' at the upper left corner of the screen.

   b. If the Action Code was an 'I', you will receive a map of information such as in Exhibit 6. Depressing the ENTER key again will project the next map, and so on. This action code will let you browse through the file. However, this browsing will be effective for that day only.

   c. If the Action Code was a 'D', you will receive the message (in the upper left corner) 'TO DELETE HIT ENTER** TO ABORT HIT CLEAR'. This action code will allow you to delete your request if, for any reason, you do not desire the complete logging or 2059 report. However, you should request this deletion the same day.

5. If a type 3 report is requested, additional information must be entered. This information will be entered on the screen after you have received the message 'ENTER MATT ID AND MATERIAL CODE

6. Next day these reports can be retrieved as discussed in the next subsection.

Retrieval of Test Reports

Following is a step-by-step procedure for retrieving and printing the above test reports on the terminal screen and printer, respectively.

1. Key in any one of the following transaction lines:
   + MTLE/DIST NO/1 - for all Logging Reports
   + MTLE/DIST NO/2 - for Exception Reports
   + MTLE/DIST NO/3 - for 2059

2. Depress ENTER key.
   If any logging or exception reports are ready, the first will appear on the screen.

3. Move the printer paper to the top of a new page.

4. Depress PA2 key to print the map of the report projected on the screen.

5. Depress ENTER key when the above printing is finished. This will project the next map of the report. If this map has the DOTD header, then go to step 3; otherwise, go to step 4.

6. Repeat step 5 for additional reports.

7. When the message NO ADDITIONAL RECORDS FOR THIS DISTRICT appears on the screen, you are through receiving all of your reports.

If you want to look at any gang's reports, you may do so by putting the gang number on the transaction line as follows:

MTLE/DIST NO/1/GANG NO

or MTLE/DIST NO/2/GANG NO

The above option is not available for 2059.

STATE OF LOUISIANA 09-05-78
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
MATERIAL TESTING SYSTEM
LOGGING REPORT FOR
GANG 623

713-40-56 SOILS ANALYSIS TESTS

LAB. NUMBER	DATE SAMPLED	P C	S C	IDENT	STATION	ITEM NUMBER	PI	OPT M.C.	CMT/ LIME	SOIL GROUP
62-221238.	07-31-78	3	1	S-1	264+50	301(1)	07	11.6	10	4(8)
62-221239.	07-31-78	3	1	S-2	273+00	301(1)	08	11.6	10	4(8)
62-221240.	07-31-78	3	1	S-3	284+00	301(1)	03	11.6	10	4(8)
62-221241.	07-31-78	3	1	S-4	291+50	301(1)	03	11.6	10	4(8)
62-221426.	08-07-78	1	1	S-3A	288+80	301(1)	00	21.6	10	4(8)

713-40-56 MISCELLANEOUS MATERIAL TESTS

MAT. CODE	LAB. NUMBER	PURP CODE	SPEC CODE	IDENT	DATE SAMPLED	ITEM NUMBER	QTY	UNIT	PASS FAIL
136	22-282630	3	1	MW-1	05-12-78	705(2)	20	ROL	PASS
106	22-282631	3	1	BW-1	05-12-78	705(2)	40	ROL	FAIL
158	22-282632	3	1	MP-1	05-12-78	705(2)	1000	EA	PASS
155	22-282644	3	1	S-1	05-15-78	705(2)	50	LBS	PASS
140	22-282645	3	1		05-16-78	705(2)			PASS
139	22-282647	3	1	C-1	05-12-78	705(2)	7000	EA	PASS
106	22-283427	3	1	BW2	05-24-78	705(1), 705(2)	40	ROL	PASS
169	22-288328	3	1	W-1	08-07-78	301(1)			PASS
105	22-289283	3	1	AS1	08-17-78	501(1)(A)	7200	LBS	PASS

EXHIBIT TR-1

STATE OF LOUISIANA 09-05-78
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
MATERIAL TESTING SYSTEM
LOGGING REPORT FOR
GANG 623

713-40-56 HOT MIX ASPHALTIC CONCRETE TESTS

LOT NO.	USE	MIX TYPE	AS	PURP CODE	DATE LAID	ADJST PER.	JMF SEQ	ITEMS	TONS		SPEC VALUE	PAY
001	1	01	01	3	08-17-78	1	01	5011A	627	STAB:	1739	100
										COMP:	96.6	100
										TOL :	0.17	100
										GRAD:		100
001	1	01	01	2	08-17-78	1	01	5011A		STAB:	1768	
										COMP:	96.8	
										TOL :		
										GRAD:		
002	1	01	01	3	08-18-78	1	01	5011A	166	STAB:	1801	100
										COMP:	97.4	100
										TOL :	0.32	100
										GRAD:		100
002	1	01	01	2	08-18-78	1	01	5011A		STAB:	1674	
										COMP:	96.0	
										TOL :		
										GRAD:		

713-40-56 DENSITY AND MOISTURE CONTENT TESTS

MAT. CODE	ZONE TEST	PURP CODE	SPEC CODE	DATE TESTED	STATION	ITEM NUMBER	COMP.	M.C.	PASS FAIL
01	01-001	3	1	06-24-78	266+50	203(4)	96.8		PASS
01	02-001	3	1	07-05-78	279+50	203(4)	101.8		PASS
01	03-001	3	1	07-05-78	289+15	203(4)	100.2		PASS
01	04-001	3	1	07-10-78	292+00	203(4)	98.2		PASS
03	01-001	3	1	08-08-78	267+00	301(1)	95.2	11.6	PASS

EXHIBIT TR-2

STATE OF LOUISIANA 09-05-78
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
MATERIAL TESTING SYSTEM
EXCEPTION REPORT FOR THE TEST OF
BARBED WIRE(1061)
DISTRICT 62

PROJECT NUMBER..713-40-56 DATE SAMPLED..05-12-78
LAB NUMBER.....22-282631 DATE TESTED...05-17-78
IDENT.....BW-1 QUANTITY.....40 ROL
PURPOSE..ACCEPTANCE SPEC CODE.....1
SUBMITTED BY..H. P. DENERLEGAND-PROJECT ENGINEER
SOURCE...LA. PAVING CO., INC.
REMARKS..
MTL NOT USED, REPLACED BY LAB NO 22-283427.
ITEM NO..705(2)

TEST PROPERTY	VALUE	REMARKS
SPACING OF BARBS,IN.	5.200	FAIL
NO. OF POINTS PER BARB	4 POINTS	PASS
TYPE OF BARBS	DOUBLE WRAPPED	PASS
GAGE OF BARBS	14	PASS
GAGE OF WIRE	12	PASS
BREAKING STRENGTH,LBF	975	PASS
SPELTER COATING,OZ./SQ. FT.	0.22	FAIL

REMARKS..THE ABOVE TEST RESULTS DO NOT CONFORM TO SPECIFICATIONS

COPIES TO:
H. P. DENERLEGAND-PROJECT ENGINEER
DISTRICT LAB ENGINEER
DISTRICT ENGINEER

HOLLIS B. RUSHING BY ----------
MATERIALS ENGINEER

EXHIBIT TR-3

STATE OF LOUISIANA
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
MATERIAL TESTING SYSTEM
SPECIAL REPORT FOR 2059
PROJECT NO. 276-05-09

ITEM NO. 401(2)
MATERIAL CODE 221 - SHELL FOR SURFACE COURSE

LAB. NUMBER	PURP CODE	SPEC CODE	IDENT	DATE SAMPLED	QTY.	PASS FAIL
62-220432	ACCEPT.	1	3	07-05-78	1000	FAIL
62-220433	ACCEPT.	1	4	07-05-78	1000	FAIL
62-220653	ACCEPT.	1	S-5	07-13-78	1000	PASS
62-220705	ACCEPT.	1	S-6	07-14-78	1000	PASS
62-220706	ACCEPT.	1	S-7	07-14-78	1000	PASS
62-220767	ACCEPT.	1	S-8	07-17-78	1000	FAIL

TOTAL QUANTITY 3000

ITEM NO. 501(1)(A)
MATERIAL CODE 248 - CEMENT STACK DUST MINERAL FILLER

LAB. NUMBER	PURP CODE	SPEC CODE	IDENT	DATE SAMPLED	QTY.	PASS FAIL
62-219590	ACCEPT.	1	S-1	06-05-78	21	PASS
62-220654	ACCEPT.	1	S-2	07-07-78	21	FAIL

TOTAL QUANTITY 21

MATERIAL CODE 259 - SAND EQUIVALENT FOR FINE SAND

62-220346	ACCEPT.	1	S-1	06-27-78		PASS

MATERIAL CODE 230 - ASPHALT CEMENT GRADE AC-30

LAB. NUMBER	PURP CODE	SPEC CODE	IDENT	DATE SAMPLED	QTY.	PAY
22-284404	ACCEPT.	1	S-2	06-01-78	5992	100
62-219587	ACCEPT.	1	S-1	05-30-78	5162	100
62-219589	ACCEPT.	1	S-3	06-05-78	5444	100
62-220509	ACCEPT.	1	S-11	06-30-78	5627	100
62-220510	ACCEPT.	1	S-12	06-30-78	5338	100
62-220511	ACCEPT.	1	S-13	06-30-78	5549	100
62-220622	ACCEPT.	1	S-14	06-30-78	5347	100
62-220623	ACCEPT.	1	S-15	07-07-78	5146	100
62-220625	ACCEPT.	1	S-17	07-08-78	5719	100

DISPOSITION OF FAILING TESTS ON
PROJECT 276-05-09

ITEM NO 401(2)
MATERIAL CODE 221 - SHELL FOR SURFACE COURSE

LAB NO : 62-220432 ID:3
REMARKS: SEE SAMPLE ID 5, LAB NO 62-220653, FOR PASSING RESULTS

LAB NO : 62-220433 ID:4
REMARKS: SEE SAMPLE ID S-8 LAB NO 62-220705, FOR PASSING RESULTS

LAB NO : 62-220767 ID:S-8
REMARKS: NOT USED ON PROJECT

ITEM NO 501(1)(A)
MATERIAL CODE 248 - CEMENT STACK DUST MINERAL FILLER

LAB NO : 62-220654 ID:S-2
REMARKS: SEE ATTACHED LETTER OF 07-28-78 FOR DETAIL EXPLANATION

JOB MIX RELEASES ON PROJECT 276-05-09

JOB MIX RELEASE SEQUENCE NO : 1
MATERIAL CODE 01 - TYPE 1 WEARING COURSE

EXHIBIT TR-4

GANG	CLASS	PROJECT	VARIANCE	NUM	AVG_MEAN	CV
521	A N	4510651	79	74	4943	1.6
521	A N	4510717	93	35	3911	2.4
521	A N	4510722	142	3	4501	3.2
521	A N	8370406	156	8	3892	4.0
522	AA	3310106	108	60	4632	2.3
522	AA	8340803	133	50	4461	3.0
522	A C	3310106	130	39	4811	2.7
522	A C	8340803	126	22	4670	2.7
522	A N	0010940	247	4	4503	5.5
522	A N	0160112	93	5	4260	2.2
522	A N	3150105	33	2	4252	0.8
522	A N	3310106	93	3	4617	2.0
525	AA	0700615	108	89	4527	2.4
525	AA	3140110	109	20	4892	2.2
525	AA	8310716	143	44	4353	3.3
525	A C	0700615	107	32	4598	2.2
525	A C	3140110	71	8	4982	1.4
525	A C	8310716	131	18	4391	3.0
525	A C	8340803	98	2	4298	2.3
525	A N	3140110	50	2	4605	1.1
525	A N	8310716	111	9	4296	2.6
525	R N	0700421	80	4	3923	2.0
525	R N	0700615	95	3	2069	4.6
525	R N	4510529	97	15	2696	3.6
525	R N	8310716	71	2	3157	2.2
527	AA	0160112	146	80	4690	3.1
527	AA	0230619	189	2	4627	4.1
527	AA	3310106	106	4	4585	2.3
527	A C	0150822	189	2	4142	4.6
527	A C	0160112	122	44	4593	2.7
527	A C	0160113	76	10	5325	1.4
527	A C	3310106	139	4	5113	2.7
527	A C	8340803	100	2	4372	2.3
527	A N	0010940	124	1	4047	3.1
527	A N	0160112	148	9	4292	3.5
527	A N	3150105	134	32	3586	3.7
527	A N	315105	83	1	3707	2.2
527	A N	4510639	24	1	4050	0.6
527	R N	0160113	77	2	3397	2.3
528	AA	0230619	108	54	4921	2.2
528	AA	0230626	123	8	4233	2.9
528	AA	0230629	111	10	4743	2.3
528	AA	0670515	132	55	4744	2.8
528	AA	3310106	59	2	4327	1.4
528	A C	0230619	110	57	4466	2.5
528	A C	0230626	177	10	4329	4.1
528	A C	0230629	89	28	4572	1.9
528	A C	0670515	174	59	4454	3.9
528	A C	230619	118	1	4307	2.7
528	A C	3310106	53	2	4622	1.2
528	A N	0230619	107	168	4043	2.6
528	A N	0230629	137	5	4850	2.8
528	A N	0670416	59	1	4420	1.3

EXHIBIT TR-5

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MTRR                          *** MATERIAL TESTING SYSTEM ***
                                   REPORT REQUEST SCREEN
                                   ACTION CODE : D
TO DELETE HIT ENTER**TO ABORT HIT CLEAR

      REQUESTOR DISTRICT          : 22

      PROJECT NUMBER              : 111-11-11

      REPORT TYPE CODE NO.        : 1     (1-COMPLETE LOGGING,2-2059,)
                                          (3-STATISTICAL SUMMARY)
      TRANSMIT OR MAIL (1 OR 2) : 1

                        *** FOR STATISTICAL SUMMARY ONLY ***

      MATT-ID           :

      MATERIAL CODE     :

      REQUESTOR NAME    :
```

EXHIBIT TR-6

6. LIST OF CONTRACTORS

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
A & R FENCE CO.	0694
A T & SANTA FE RR	0442
A.F. BLAIR CO., INC.	0469
AAB ELECTRICAL IND., INC.	0684
ACADIA PARISH POLICE JURY	0517
ACADIAN ENGR CO	0303
ADCO ENGINEERS, INC	0566
ADH SYSTEMS INC.	0567
AILLET FENNER JOLLY & MCCLELLAND INC	0402
AIRTROL ENGR CO INC	0325
ALA. GREAT SOU. RR	0337
ALDER ELECTRIC CO.	0641
ALDRICH, W R & CO	0001
ALEXANDER, EARL	0333
ALEXANDRIA CONST CO	0538
ALLEN BROTHERS, INC.	0003
ALLEN H L & SONS INC	0002
ALLIED CH. LK. FENCE	0006
ALLIED STRUCT. STEEL	0004
ALPHA CONSTR. CO., INC.	0473
AMBERG TRUCKING, INC	0467
AMBERG, J. C.	0008
AMERIC CONSTRUCTORS OF N.O.,INC	0533
AMERICAN BR DIV US ST	0010
AMERICAN CREOSOTE WK	0009
AMERICAN UNITED PRODUCTS CORP.	0659
AMERICAN UNITED PRODUCTS CORPORATION	0658
AMITE SAND & GRAVEL	0011
AMYX GRAVEL CO.	0012
ANDERSON - DUNHAM	0022
ANDERSON GRAVEL CO	0014
ANDERSON STANLEY CTR	0015
ANTHONY J. GENDUSA, JR.	0514
ANTONY J. BERTUCCI CONST. CO., INC.	0607
ARGONAUT INSURANCE CO.	0500
ARK & LA MO. RR	0371
ARNOLD CONSTR CO.	0017
ARNOLD, C. A.	0016
ARROW CONSTR CO INC	0383
ASPHALTIC MATERIALS, INC	0471
ASSOCIATED WATERPROOFING CORP.	0508
ATLAS CONST CO INC & JAHNCKE SERVICE INC	0429
ATLAS CONST. CO., INC & BARBER BROS. CON	0463
ATLAS CONSTR CO.	0005
ATLAS CONSTR. CO AND YATES & PATTERSON A	0455
ATWOOD FENCE CO., KOSCIUSKO, MISS.	0700
ATWOOD FENCE CO.,KOSCIUSKO,MISS	0683
AUCOIN, L J & ASSOC.	0263
AUCOIN, ROY A., INC.	0019
AUCOIN, ROY CTRS INC	0018
AUSTIN BRIDGE CO	0020
AVONDALE SHIPYARDS	0279
AYERS MATERIALS CO	0021
B & T ENGINEERING CO	0281

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
B. F. DIAMOND CONSTRUCTION COMPANY, INC.	0638
BABIN, LOGAN H.	0318
BAGWELL COATINGS	0531
BAGWELL-NEAL, INC	0023
BAILEY, ROY, CONTRACTORS, INC., CREOLE, LA.	0656
BAKER-WISBERLY ASSOC	0205
BAMBER CTRS. INC.	0024
BARBER BROS CTR. CO	0025
BARNARD & BURK	0211
BARNARD, BROUILLETTE & THOMAS	0568
BARRIERE CONST CO INC	0527
BARTLEY, INC.	0494
BATON ROUGE CONSTRUCTORS, INC.	0595
BAUER DREDGING	0026
BD OF COMM PORT NO	0320
BEALL ENGRS., INC.	0374
BEASLEY JOHN F CONST	0027
BEISWENGER, HOCH & ASSOC., INC.	0462
BELL CONSTRUCTION CO.	0696
BENTZ & ELMORE	0192
BERGERON AND LANG	0486
BERNARD BURK HOWARD NEEDLES TAMMEN & BER	0411
BERNSTEIN, ERNEST R.	0331
BERRY BROTHERS GENERAL CONTRACTORS, INC.	0640
BETHLEHEM STEEL CO.	0029
BI-CO PAVERS, INC.	0028
BIENVENU H L	0410
BIENVILLE PH. P JURY	0323
BINDER J H GRAVEL	0403
BLOUNT BROS. CORP.	0030
BOARD OF OPERATORS OF BELLE CHASSE FERRY	0543
BOARD OF OPERATORS POINTE A LA HACHE FY	0440
BOB FINLEY	0534
BOB JONES CONST CO INC	0542
BOGUE CHITTO S/G CO.	0031
BOH BROS CONSTR CO	0032
BOLT, BERANEK & NEWMAN INC	0525
BOSSIER, CITY OF	0344
BOSSIER, L. H. INC.	0033
BOUDREAUX PAUL ASSOC	0282
BOWAY ENGRS, INC.	0510
BRASWELL SAND & GRAVEL CO, INC.	0477
BREIT & GARCIA, NAVAL ARCHITECTS	0535
BREIT ENGINEERING, INC.	0552
BROADMOOR CORPORATION	0642
BROUSSARD, A B	0443
BROWN & BUTLER ENGRS	0198
BROWN & GRUBE CONSTR	0345
BROWN & ROOT, INC.	0035
BROWN F. NELSON & PAMPER CORP., A JOINT	0610
BROWN, L T CTR. INC.	0034
BUCHART-HORN	0430
BUQUET & LEBLANC, INC.	0475
BURK & ASSOC. AND FROMHERZ ENGRS	0482

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
BURK & ASSOC., INC.	0375
BURTON, W. T. CO INC	0036
C. E. EVANS & CO., INC.	0498
C. G. SMITH CO.	0661
C. H. FENSTERMAKER & ASSOC.	0604
C. O. C CONSTR CO	0296
C.G. SMITH CO	0457
C.G. SMITH CO	0472
C.R.I. & P. RR	0291
CADDO PH POLICE JURY	0404
CADDO ROAD CO., INC.	0037
CADDO-BOSSIER COUNCIL OF LOCAL GOVERN.	0553
CAFFERY, D. RALPH	0216
CALCASIEU PARISH POLICE JURY	0594
CALDWELL, E. A. CTR.	0038
CAMPBELL CONSTR. CO.	0039
CANUS ELEC. CO. INC.	0287
CAPITAL REGION PLANNING COMMISSION	0554
CARRERE, E A SONS	0435
CARROLL S/G CO.	0040
CEMENT PRODUCTS SERVICES INC., BR. LA.	0690
CEMENT PRODUCTS SERVICES, INC.	0664
CENLA ASPHALT CORP.	0041
CENTRAL CONSTR. CO	0042
CHANDLER TESTING LABORATORY, INC.	0652
CHANEY FENCE CORP.	0043
CHARLES CARTER & CO.	0330
CHARVET'S GARDEN CENTER, INC	0619
CHEVALIER, W. T.	0274
CHICAGO BR. & IRON	0044
CHISUM, A. B. GRAVEL	0046
CHOCTAW CONSTRUCTION & SUPPLY COMPANY	0511
CIRCLE, INC.	0047
CITY OF EUNICE	0615
CITY OF LAKE CHARLES	0488
CITY OF MONROE	0452
CITY OF SHREVEPORT	0464
CLAIBORNE AVE. DESIGN TEAM	0569
CLAIBORNE PH P. JURY	0305
CLARY AND ASSOCIATES INC	0628
CLEMENT, DONALD M.	0695
CLK, 1ST JUD DIST CT	0316
COAST ELEC POWER	0394
COASTAL CTRS., INC	0048
COASTAL ENVIRONMENTS, INC.	0516
COASTAL INSP & DVG	0322
COASTAL TIMBERS, INC.	0307
COBB, W. P.	0049
COLFAX CREOSOTING CO	0050
COLLIER AUTOMATIC FIRE SYSTEM,INC.	0703
COMMERCIAL & MARINE ELECTRIC CO., INC.	0600
CON-PLEX, INC.	0053
CON-RECO INC	0425
CONCORDIA CONTRACTING CO.,INC	0705

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
COOK CONSTR. CO.	0051
COOK, ROY & SONS	0052
CORE CONTRACTOR, INC	0057
CORE, W. R. INC.	0056
COURTNEY CONSTR. CO.	0054
COURTNEY, E. J.	0055
COUVILLION O L INC	0400
COX, ROSS E. GEN CTR	0270
CRAIG LAIRD PEARSON	0200
CRAIN BROTHERS INC.	0536
CROWN - ZELLERBACH	0319
CRUMP CONSTR. CO.	0381
CUNNINGHAM-MCCULLEN	0058
CURTIS & DAVIS ARCHITECTS & PLANNERS, IN	0570
CYPRESS CONSTR. CO., INC	0465
D & J CONST CO INC	0546
D. A. DALTON CONTRACTORS	0496
DAIGRE L J ASSO	0419
DANEL-RYDER, INC.	0377
DANIEL, J. W.	0059
DAVID H. STIEL, JR.	0470
DAVIS NURSERY	0644
DAWSON ENGINEERS	0551
DEFRAITES ASSOCIATES	0210
DELAUREAL ENGRS., INC	0195
DELTA CONSTRUCTION	0689
DELTA GRAVEL, INC.	0060
DELTA PAVING CO.	0061
DELTA TESTING & INSP	0230
DELTA UTILITY CONSTRUCTION CO., INC.	0596
DEMOPULOS & FERGUSON	0206
DESOTO PH P. JURY	0348
DIPAOLA S G CO. INC.	0062
DIVERSACON INDUSTRIES	0495
DIVISION OF STATE POLICE, STATE OF LA.	0609
DIXIANNA CONTRACTORS	0503
DIXIE CONTR INC	0395
DOLPHIN CONST	0547
DOMINGUE, SZABO	0290
DORNBLATT, B. M.	0365
DRAVO CORPORATION	0063
DUNHAM MILLS., INC.	0064
DURABLE, INC.	0688
DYER & MOODY, INC.	0362
DYNAMIC PAINTING AND DEC. CO.	0698
E.B.R. PARISH	0276
E.C.SCHAFER CONST. CO.	0722
EARL CLAIVIAN CONC. PRODUCTS	0460
EARNEST, L. J.	0278
EAST SIDE GRAVEL CO.	0284
EASTON STEWART & ASSOC	0526
ED'S FENCE CO.,INC.	0603
EDGAR M. WILLIAMS	0602
ELWOOD REAMES & ASSOCIATES	0571

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
ENDICON, DIVISION U. S. INDUSTRIES, INC.	0645
ENOS LANGUE CONSTRUCTION CO	0622
ENVIRONMENTAL PLANNERS & ASSOC., INC.	0616
EQUITABLE EQUIPMENT CO., INC.	0592
EQUITABLE SHIPYARDS , INC.	0691
ERASTE FONTENOT	0537
ERNEST P. BREAUX ELECTRIC, INC.	0648
ERNST & ERNST	0259
ESTAN LEBLANC	0633
EUSTIS ENGR. CO.	0194
EVANS, EDWARD E.	0207
EWIN ENGR. CORP. OF LA, INC.	0481
EWING, J. B. & SONS	0065
EXXON COMPANY, U.S.A.	0528
F. C. BARRON, GENERAL CONTRACTOR	0597
F. G. SULLIVAN	0680
FAIRBANKS MORSE, INC.	0387
FAIRCHILD, W. R.	0066
FALCO, C. S. & CO.	0067
FARMER CONSTR CO, INC	0479
FARNSWORTH, PRATT	0068
FELICIANA S/G CO.	0071
FENET, INC.	0069
FHWA	0603
FINLEY, SAM INC.	0070
FLENNIKEN CONSTR. CO	0072
FORREST HALL ELEC CO	0302
FORTE & TABLADA INC	0418
FOSCO FABRICATORS	0073
FOSTER & CREIGHTON	0074
FOWLER, H B & CO INC	0438
FRANCIS, JOE M.	0257
FRANKLAND & LEIANHARD AND MODJESKI & MASTERS	0572
FRAZIER EUAL L	0412
FRAZIER S/G CO.	0076
FRED H. MORAN CONSTR. CO.	0476
FREEMAN'S SIGN ERECTION & PVT. MARKINGS, BR. LA.	0681
FREMIN-SMITH SERVICE	0075
FRIEDE & GOLDMAN, INC	0573
FRISCHHERTZ ELECTRIC	0280
FROMHERZ ENGRS., C.E.	0251
FRUIN-COLNON CTR. CO	0077
GANDOLFO KUHN & ASSO	0390
GENERAL S/G CO.	0271
GEO CAMPBELL PAINT.	0078
GEORGE CONSOLIDATED	0079
GEORGIA PACIFIC CORP.	0601
GIFFORD HILL CO.	0080
GILLEN ENGINEERING CO., INC	0575
GIROD MOTOR CO., INC	0081
GIROD S/G CO., INC	0082
GORDON WALKER CONTR.	0386
GOSSETT DEMOLISHING	0380
GOURDON, LEROY E. CONSI.CO.,INC.,OAKDALE,LA.	0693

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
GRACE CONSTR. CO.	0083
GRANT PH P. JURY	0343
GRAY, LEON W CTRS INC	0084
GREEN ASSOC OF LA INC	0379
GREEN-SNIDER CONSTR.	0085
GREGG GIBSON & GREGG	0351
GRIFFIN & ZIMMER CONTRACTING CO., INC.	0449
GROOME, T. P. CTR.	0088
GUILLOT, SULLIVAN, VOGT & MORPHY, C.E.	0461
GULF MOBILE OHIO RR	0398
GULF OIL CORP.	0294
GULF SOUTH CONSTR.	0086
GULF STATES UTIL.	0366
GULF-SOUTH RESEARCH INSTITUTE	0576
GURTLER, HERBERT	0087
GUS T. HANDGE & SON PAINTING CO. ST. LOUIS,MO.	0708
H & H CONSTRACTING CO	0232
H & S CONSTRUCTION	0092
H.R. KOONCE & SON	0446
HACKETT & BAILEY	0363
HACKETTE & BAILEY	0013
HALL & RUSSELL	0326
HALL DAVID CONTR	0414
HALL, MELVIN & CUNN. & MCCULLEN	0089
HALMAR, INC.	0717
HAMMOND ASPH CO INC	0090
HAMMOND CONC. BLOCK	0297
HARPER, JACK B.	0091
HARRIS & VARISCO	0612
HARTMAN ENTERPRISES, INC.	0665
HAULING, INC.	0487
HEBERT BROS. LBR. YD	0295
HECK, CARL, ENGRS. INC	0213
HEFT G A & CO	0392
HEIDT, R. E. CONSTR.	0093
HENSLEY - SCHMIDT, INC.	0489
HOLLAND CONSTRUCTION CORPORATION	0601
HOLLAND ENTERPRISES, INC.	0453
HOLLOWAY GRAVEL CO.	0095
HONEY ISLAND S/G	0340
HOOTER BROS.	0356
HORTON, C. O.	0096
HOUMA CITY OF	0409
HOWARD CONSTR. CO.	0098
HOWARD, NEEDLES, TAMMEN & BERGENDOFF	0250
HUEY, S. E. & CO.	0248
HUMBLE OIL & REF. CO	0246
HUNT ENGINE & EQPT CO	0225
HURRICANE FENCE N. O.	0097
HWY. SAFETY DEVICES	0094
HY-CO SAFETY LIGHT	0007
ILLINOIS CENTRAL GULF RAILROAD	0540
ILLINOIS CENTRAL RR	0253
IMPERIAL CALCASIEU REGIONAL PLAN & DEV	0555

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
INDEPENDENCE S/G CO.	0099
INDUST. ENTERPRISES	0100
INDUSTRIAL CONSTR	0335
INTERST SIGN ERECTOR	0101
ISABEL SAND & G CO	0423
J & N INDUSTRIAL PAINTING CO., INC.	0663
J. BRIANT FOURNET & ASSOC.	0515
J. W. FITZGERALD CONST	0105
JACKSON PH P. JURY	0242
JANICAE SERVICE	0102
JANES CORP OF OPELOUSAS	0532
JAMES MONTE CONTRACTOR, INC.	0719
JAMES, J. S. CONSTR.	0103
JAMES, T. L. & CO	0104
JARAIN CONTRACTORS, INC.	0702
JEFFERSON DAVIS COMMUNITY ACTION ASSOC.	0643
JEFFERSON PH P. JURY	0354
JENKINS AND WADDEN ENGINEERING COMPANY	0521
JENKINS CONSTRUCTION CORP	0632
JENKINS, J. H. CTRS.	0106
JESSEN, D A & ASSOC	0364
JIMMIE L. KEPPER CONST., INC	0605
JOFFRION & ASSOC INC	0204
JOHN H. WOLF ASSOC.	0651
JOHNSON GEN PAINTING	0109
JOHNST, DRAKE & PIPER	0108
JOHNSTON, AL CONSTR.	0107
K. & M. CONSTRUCTION COMPANY	0513
K.C.P. CORP.	0110
K.C.S. RR	0261
KADUSH & JONES ELECTRIC CO., INC	0593
KELLEHER NURSERY & LANDSCAPE, INC.	0506
KELLEN & ASSOC, INC.	0321
KENNEDY SAW MILLS	0439
KENTWOOD S & G CO	0407
KERSTENS, J. C.	0239
KEY CONSTRUCTORS INC	0620
KIEWIT, PETER & SONS	0111
KING LBR. INDUSTRIES	0247
KINGSTON CONSTR. CO	0382
KLEINPETER, T. W.	0112
KNOERLE BENDER STONE & ASSOCIATES, INC	0581
KRAMER & MILLER	0272
KREBS, J. J. & SONS	0260
L & A CONTRACTING CO	0624
L & A RR CO.	0197
L & NW RR CO.	0338
L.D. DUGGAN, INC.	0707
LA CONC. PRODUCTS CO	0125
LA METAL CLVT CO.	0123
LA SOU. RR CO.	0266
LA SOUTHERN CONST. CO.	0530
LA WILDLIFE & FISH	0399
LA. DOTD PURCHASE ORDER	0692

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
LA. DOTD, DISTRICT 02, BRIDGE CITY	0672
LA. DOTD, DISTRICT 03, LAFAYETTE	0673
LA. DOTD, DISTRICT 04, BOSSIER CITY	0674
LA. DOTD, DISTRICT 05, MONROE	0675
LA. DOTD, DISTRICT 07, LAKE CHARLES	0677
LA. DOTD, DISTRICT 08, ALEXANDRIA	0678
LA. DOTD, DISTRICT 58, CHASE	0679
LA. DOTD, DISTRICT 61, BATON ROUGE	0676
LA. ELECTRIC CO., INC.	0650
LA. INDUSTRIES	0121
LA. MTLS. CO., INC.	0122
LA. PAVING CO., INC.	0124
LA. POWER & LIGHT CO	0631
LA. SAND AND GRAVEL CO.	0699
LA. STATE UNIVERSITY	0235
LA. TESTING & INSPECTION, INC.	0490
LAFAYETTE MATERIAL	0113
LAFAYETTE REGIONAL PLANNING COMM.	0556
LAFAYETTE, CITY OF	0352
LAFOURCHE PH P. JURY	0311
LAKEVIEW S G CO, INC	0215
LAMAR HANCOCK CONTRACTOR, INC.	0454
LANDCO CONST CO INC	0401
LAMBERT ELECTRIC CO.	0298
LAMBERT GRAVEL CO.	0114
LAMBERT, DONALD G.	0115
LAMBERT, P JOHN, JR.	0116
LAMCO, INC.	0117
LAND ENGR SERVICE	0397
LANDIS CONSTRUCTION	0364
LANDRY PILE DR BR WKS	0229
LANDRY, ROBERT J.	0292
LANE AND CO INC	0529
LANSING INC.	0370
LASALLE BLDG MTLS CO	0313
LASALLE PH P. JURY	0353
LAURENT, ROLAND W.	0222
LEBLANC BROS. & CO.	0118
LEGARDEUR INT., INC	0627
LEWIS- EATON PARTNERSHIP	0626
LINCOLN BUILDERS	0711
LINCOLN BUILDERS INC.	0705
LINCOLN PH P. JURY	0258
LINGREN, ALFRED	0224
LIVE OAK S G CO. INC	0119
LIVINGSTON S G	0120
LOUISIANA DOTD, P. O. BOX 280, HAMMOND	0668
LOUISIANA TECH UNIVERSITY	0564
LOWERY, JOHN L.	0243
LOYD BROTHERS, INC.	0304
LUKE CONSTRUCTION COMPANY, INCORPORATED	0456
LUTESVILLE S/G CO.	0231
M. P. DUHESNIL CONSTRUCTION COMPANY, INC	0637
M.P. RR CO.	0196

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
MACOMB CONT. CORP	0670
MADDEN CONTRACTING	0201
MADDEN J. C.	0128
MADISONVILLE CREOSOT	0383
MANIFEST GRAVEL CO	0406
MANIFEST GRAVEL CO CLAUDE TERRELL	0416
MARBELITO CO. INC & COMPUTER SYSTEMS ENG	0509
MASSMAN CONSTR. CO.	0129
MATLAB - GENERAL SAMPLE	0669
MCCAIN, J T & ASSOC	0433
MCCOLLOUGH, DAVE	0126
MCDONALD, J. W.	0223
MCINNIS BROS. INC.	0350
MCMICHAEL, J. L.	0332
MCRAE A DUANE	0420
MCRAY CONSTR. CO INC	0127
MEADOWS CONC. & GRAVEL CO, INC.	0458
MERRICK CONSTR. CO.	0262
METAIRIE ELEC. CO.	0342
MEYER, MEYERS, FARRAR & LACROIX	0358
MICA CORPORATION	0130
MICHELLI, G T	0617
MID GULF CONSTR. INC	0131
MID-STATE MTLS. INC	0132
MID-STATE PAVING CO	0133
MID-STATE PRSTR CONC	0134
MID-STATE S/G	0135
MILLER, F. & SONS	0218
MILLERVILLE CONSTR.	0141
MINDEN CONSTR. CO.	0388
MINORITY ENGINEERS OF LA, INC.	0561
MISS. STATE HWY DEPT	0424
MISS. VALLEY SILICA	0136
MOHR & ASSOC. INC.	0507
MOJESKI & MASTERS	0193
MONCLA CONSTR. CO., INC.	0493
MONIOTLE BLDRS., INC.	0667
MONIOTTE BUILDERS, INC.	0590
MONROE S/G CO.	0138
MONTGOMERY CONSTR CO	0139
MONTGOMERY, J. T.	0372
MOORE & ASSOCIATES INSPECTION & TESTING CO.	0653
MORGAN CITY, CITY OF	0315
MORRISON ENGR & SONS	0140
MOSES, J. L.	0214
MULLER ELECTRIC CORP.	0447
MUNSON, G K PRATT	0432
MUNSON, G. K. PRATT	0234
MURPHY DREHER	0448
MURPHY ENGINEERING	0562
MURPHY OIL COMPANY	0228
N. O. TERMINAL CO.	0361
N.O. PUBLIC SERVICE	0378
N-Y ASSOC., INC.	0563

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
NASHVILLE BR. CO.	0142
NATCH. PH. P. JURY	0369
NATIONAL ADVERTISING	0143
NETHERTON COMPANY, INC.	0539
NEW ORLEANS, CITY OF	0376
NEWSOME BROTHERS	0144
NICHOLS ST. COLLEGE	0293
NO & LOWER COST RR	0249
NO & NE RR	0385
NOLAN CONTRACTING, INC., SLIDELL, LA.	0715
NOLAN, NORMAN & NOLAN ARCHITECTS	0523
NORTH LA. AND GULF R.R. CO.	0485
O.S. JOHNSON DIRT CONTRACTOR	0652
OGDEN & HALL, C.E.	0199
OLIVER TREATED PRODS	0145
OLIVER, A G LBR & HDW	0300
OOSTERHUIS INDUSTR	0269
ORLEANS ELECTRIC CONSTR. INC.	0504
ORLEANS PARISH	0497
OUACHITA COUNCIL OF GOVERNMENTS	0557
OUACHITA GRAVEL CO.	0146
OUACHITA PH P. JURY	0347
OWEN & WHITE, INC.	0273
PALMER & BAKER	0578
PAMPER CORP & J. A. HARPER	0426
PAMPER CORPORATION	0147
PATRICK CONSTR. CO.	0148
PATTERSON & EDMONSON	0149
PATTERSON, A. H.	0150
PAUL N FONTENOT	0574
PAVEMENT SPECIALISTS	0151
PAVEMENT-MARKINGS CO.	0613
PAVLO, E LICKEL ENGR	0238
PEARSON CONST. CO., INC.	0649
PEARSON CONSTRUCTION COMPANY	0636
PEE WEE S/G CO.	0341
PENS ELECTRIC CO	0368
PEPPER & ASSOC INC & J J KREBS & SONS IN	0434
PEPPER & ASSOCIATES	0208
PERCY J MATHERNE	0620
PERKINS & JAMES ARCHITECTS, INC	0579
PERMA-LINE CORP OF AMERICA	0591
PERRAULT & PERRAULT	0269
PERRIN & ASSOCIATES	0336
PETE ALFORD FENCING CONTRACTOR KENTWOOD, LA.	0721
PHELPS, SPITZ, AMMERMAN, THOMAS, INC	0590
PICCIOLA & ASSO INC	0428
PICOU BROTHERS CONSTR. CO	0545
PITTMAN CONSTRUCTION	0152
PITTS-DESMOINES STL.	0153
PLAISANCE, J. WAYNE	0255
PLAQ. PH. HWY. ENGR & CONSTR AGENCY	0233
PLAQUEMINE, CITY OF	0237
PLATER, RICHARD C.	0263

NAME	CODE
POHLMAN & MILBANKS	0478
PORT CITY CONSTR. CO	0155
POTASHNICK, B. B.	0154
PRAIRIE CONSTR. CO	0309
PRE-STR. CONC PRODS	0156
PRESCOTT, FOLLETT	0221
PRESSURE GREC. PRODS	0263
PRIMO UNIVERSAL CORP.	0614
PROFESSIONAL CONST. SERVICE, INC.	0720
PROFESSIONAL ENGINEERING CONSLT. CORP.	0550
PURKEYS NURSERY & LANDSCAPE CO., INC.	0710
R. C. ASPHALT CO.	0161
R. J. HANSEN ASSOCIATES, INC	0577
R. J. L'HOSTE AND CO., INC.	0686
R.L. REID AND ASSOC., C.E.	0445
R.S.VAUGHANROOFINGCO.	0697
RADCLIFF MATERIALS	0159
RADER & ASSOCIATES	0254
RAGUSA BROS INC	0396
RAPIDES AREA PLANNING COMM.	0558
RAPIDES GRAVEL CO.	0157
RAPIDES PH P. JURY	0355
RASBERRY & CLARKE	0158
RAY S & G CO.	0436
RAYMOND INTERNAT'L	0160
RAYNER & MCKENZIE EASTON STEWART ASSO	0417
REBEL S&G CO., INC.	0277
RED R. PH. P. JURY	0240
REG PLAN COMM JEFF ORL ST BER ST TAM PAR	0559
REYNOLDS & WILLIAMS	0162
RICHARD P. BROWNE ASSOCIATES	0588
RICHARDSON, J. T. CO.	0163
RIMMER & GARRETT	0165
RITTER, L. D., INC.	0166
ROBERT H.GATTI	0709
ROBICHAUX, D J JR.	0437
ROGERS SAND & GRAVEL	0164
ROGERS, J. J. GRAVEL	0167
ROGERS, JESSE GRAVEL	0427
RONALD ADAMS CONTRACTOR, INC	0716
ROY AUCOIN CONTRACTORS, INC. & LUKE CONS	0611
ROY JORGENSEN	0560
RUSHING PA S & G	0405
S.M.K. CONSTR. CO.	0183
S.P. TRANSPORTATION	0328
S.P.R.R.	0202
SACHSE ELEC INC	0413
SAM G. DUPREE	0529
SAMPLE & JENKINS	0367
SAND PRODUCTS CO	0168
SANTEE CONTRACTING CO	0548
SELLERS BARNES ASSO & DUBROC & SELLERS	0431
SELLERS, SCHEXNAIDER	0265
SERVITRON, INC.	0505

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
SEWERAGE & WATER BOARD OF NEW ORLEANS	0569
SHARP ELECTRIC, INC.	0139
SHELLSTONE TESTING & INSPECTION, INC.	0585
SHILOH CONTRACTORS, INC.	0718
SHOCKLEY SHELL YARD	0329
SHREVE AREA COUNCIL OF LOCAL GOVERNMENT	0525
SICILY ISL. GRAVEL	0170
SIGMA SERVICE CORP.	0699
SIMS, O. L. OF LA.	0173
SIMS, ROBBIE A.	0172
SLAY, AR & C TERRELL	0235
SMALLING BROS., INC.	0171
SMITH, T. BAKER & SON	0226
SNOWDEN, J W CONSTR.	0174
SOU RAILWAY SYSTEM	0391
SOU. PAVING & CONSTR	0176
SOUTH CENTRAL BELL	0492
SOUTH END GRAVEL CO.	0178
SOUTH RAPIDES GRAVEL	0560
SOUTHEASTERN, INC.	0044
SOUTHERN BRIDGE CO.	0175
SOUTHERN BUILDERS, INC. & NETHERTON CO.,	0569
SOUTHERN EXCAVATION	0181
SOUTHERN NATURAL GAS	0265
SOUTHEASTERN LABORATORIES OF LOUISIANA, INC.	0134
SPICHT LANDSCAPE CONTRACTORS, INC.	0698
SPOHRER CONSTR. CO.	0177
ST TAMMANY SHELL CO	0404
ST. CATHERINE GRAVEL	0252
ST. HELENA S & G CO.	0212
ST. JOHN PARISH UTILITIES	0516
ST. MARY PH. POLICE JURY	0451
ST. MARY WATER WORKS	0212
ST.LOUIS SOUTHWESTERN RR CO.	0560
STANDARD GRAVEL CO.	0179
STATE CTRS OF ST. HEL	0180
STEIDLE, SCHROEDER, SMALLER & ASSOCIATES	0562
STEPHEN LAMBERT, CONTRACTOR	0704
STL & SW RR	0206
STOCKSTILL, L. S.	0182
SUPERIOR MANUFACTURING	0521
SVERDRUP & PARCEL AND ASSOCIATES, INC	0563
SW ELEC POWER CO	0441
SW LA ELEC. MEMBERSHIP.	0308
SWITZER, ALBERT	0217
SYLVESTERS READY MIX	0256
T & P RR	0203
T. & J. SERVICES, INC.	0847
T. BAKER SMITH & SON AND MODJESKI & MAST	0460
TALBOT, DOUGLAS S.	0220
TALLEY, J. B.	0184
TECHE ELECTRIC COOP.	0317
TELLEPSEN CONSTR. CO.	0491
TENNESSEE ROAD SUPPLIES, INC., KNOXVILLE, TENNESSEE	0712

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
TERREBONNE PARISH	0623
TEX & P-NO PAC RR	0393
TEXAS & PACIFIC RAILWAY CO	0606
THE HAMMET CO., INC.	0685
THE HUDSON MAINT. CORP.	0666
THE HUDSON MAINTENANCE CORPORATION	0634
THERIOT, ALEX JR.	0267
THOMAS CONTRACTORS, MANSFIELD, LA.	0671
THOMAS SAND & GRAVEL	0713
THOMAS SAND & GRAVEL CO INC	0522
THOMAS SAND & GRAVEL NO.1	0714
THOMPSON & STIRLING	0584
THOMPSON, HAROLD L.	0324
TIDELANDS EQUIPMENT	0359
TOBILAR, INC	0660
TOOMER ELECT. CO. INC & BOB FINLEY INC.	0499
TOOMER ELECTRICAL CO	0286
TRANSCONTINENTAL GAS PIPELINE CORP.	0327
TREAS. U. S., BRANCH OF BUDGET & FINANCE	0264
TRI-CITY CONSTR CO	0421
TRINITY CONC PRODUCT	0241
TRIO BUILDING CO	0185
TRIPLE ''H'' CORP	0618
TULANE UNIVERSITY	0585
TYLER, R. B. COMPANY	0166
U.S. DEPT OF INTERIOR GEOLOGICAL SURVEY	0459
U.S. STEEL CORP.	0188
UNION PH P. JURY	0403
UNITED BRIDGE CO., INC.	0549
UNITED CONCO, INC.	0227
UNITED CONTRACTORS CORPORATION	0466
UNITED GAS PIPELINE COMPANY	0518
UNIVERSAL ENGRS.	0373
URBAN TRANSPORTATION & PLANNING ASSOC. I	0484
URS/FOREST AND COTTON, INC	0586
US ENGRS NO DISTRICT	0187
USS ENGRS & CONSULT.	0306
VALLEY SAND & GRAVEL	0137
VANCOUVER PLYWOOD CO., INC.	0468
VERMILON SHELL COMPANY, INC.	0519
VERNON PH P. JURY	0349
VI CON, INC.	0544
VIDALIA DOCK STORAGE	0256
VOLKERT ASSO & DEMOPULOS & FERGUSON	0422
VOLKERT, DAVID	0209
VTN LOUISIANA, INC	0565
W O BERGERON CONST CO	0524
W. E. BLAIN & SONS, INC.	0657
W. E. BLAIN & SONS, INC.	0662
W. E. MC DONALD AND SON, INC.	0687
W. FELIC. PH P. JURY	0299
W. J. RUNYON AND SON, INC.	0512
WALDEMAR, S. NELSON	0339
WALKER & WELLS CONTRACTORS, INC.	0701

LIST OF MATT SYSTEM CONTRACTORS

NAME	CODE
WALL SHIPYARD	0310
WALLACE C. DRENNAN, INC.	0450
WAPCO CONSTRUCTORS, INC.	0474
WASHEY BRIDGES, INC.	0331
WATERWAYS EXPERIMENT STATION	0535
WEBSTER PH P. JURY	0357
WEILL CONSTR. CO., INC.	0502
WHITE, HOWARD C.	0275
WILBUR SMITH & ASSOC.	0483
WILLIAM R. BAKER ASSOCIATES	0587
WILLIAMS BROTHERS CONST CO INC	0541
WILLIAMS-MCWILLIAMS	0190
WILSON, GAINES P.	0189
WINFORD COMPANY	0191
WINN PH P. JURY	0346
WOODLAND, LEON	0219
WTR WKS DIST 1 HOUMA	0334

N=719

7. LIST OF MATERIAL SOURCES AND SUPPLIERS

LIST OF ALL QPL(#2) AGGREGATE SOURCES AND CONC & HOTMIX PRODUCERS

19:32 MONDAY, MAY 14, 1979

LOCATION=DISTRICT 02

NAME		CODE
BOH BROS.	GOLDEN MEADOWS,LA.	C201
BOH BROS.	LULING,LA.	C202
BOH BROS. (BULLARD RD.)	MANCHAC,LA.	C203
BOH BROS.	HOUMA, LOUISIANA	C204
BROWN & ROOT (TLC-II)	MANCHAC,LA.	C205
BROWN & ROOT (LB-18)	MANCHAC,LA.	C206
CARLO DITTA	HARVEY,LA.	C207
CONSOLIDATED MATERIALS	BELLE CHASE,LA.	C208
CONSOLIDATED MATERIALS	NEW ORLEANS,LA.	C209
F & M CONCRETE	LAPLACE,LA.	C210
H CONSTRUCTION SUPPLIES	GRAMERCY,LA.	C211
J. B. TALLEY	HOUMA,LA.	C212
JIMCO	METAIRIE,LA.	C213
LOUISIANA INDUSTRIES	KENNER,LA.	C214
LOUISIANA INDUSTRIES	LULING,LA.	C215
LOUISIANA INDUSTRIES	NEW ORLEANS,LA.	C216
LOUISIANA INDUSTRIES	TAFT,LA.	C217
M & H BUILDING SUPPLIES	VACHERIE,LA.	C218
MARINE CONC.STRUCT. (BELDEN)	METAIRIE,LA.	C219
NAIRN CONCRETE	NAIRN,LA.	C220
QUALITY READY MIX	HOUMA,LA.	C221
STEVENS READY MIX	LULING,LA.	C222
T. L. JAMES	DESTREHAN,LA.	C223
T. L. JAMES	HOUMA,LA.	C224
TERREBONNE LMBR. & SUPPLY	HOUMA,LA.	C225
KEY CONSTRUCTION	RACELAND, LA.	C226
GATOR READY MIX	LAROSE, LA.	C227
HENRY INDUSTRIES	HOUMA, LA	C228
LOUISIANA INDUSTRIES	LAPLACE, LOUISIANA	C229
KING KONCRETE	HOUMA, LOUISIANA	C230
NAIRN CONCRETE PRODUCTS	NAIRN, LOUISIANA	C231
SOUTH LAFOURCHE READY MIX	GALIANO, LOUISIANA	C232
BOH BROS CONSTRUCTION CO.	BELLE CHASSE, LA. CONCRETE	C233
BARRIERE CONST. (HARVEY CANAL)	HARVEY,LA.	H201
BARRIERE CONST. (IND. CANAL)	NEW ORLEANS,LA.	H202
BOH BROS. CONST. (FRANCE RD.)	NEW ORLEANS,LA.	H203
LEBLANC BROS.	SCHRIEVER,LA.	H204
T. L. JAMES	KENNER,LA.	H205
T. L. JAMES	PARADIS,LA.	H206
VICON,INC.	KENNER,LA.	H207

N=40

LOCATION=DISTRICT 03

NAME			CODE
ANGELLE CONCRETE	CROWLEY, LA.		C301
BALAIN READY MIX			C302
BARRY CONCRETE	LAFAYETTE, LA.		C303
BOSTIC CONCRETE CO.	LAFAYETTE, LA.		C304
CALLAHAN CONCRETE	MORGAN CITY, LA.		C305
CHARCHE CONCRETE PLANT	CHURCH POINT, LA.		C306
CHECKMATE CONCRETE	RAYNE, LA.		C307
CONCRETE SERVICE	OPELOUSAS, LA.		C308
DUBOIS CONCRETE CO.	ABBEVILLE, LA.		C309
D. FRUGE & SONS	EUNICE, LA.		C310
FONDREN, BLACKIE CONCRETE	MORGAN CITY, LA.		C311
JANET & TAYLOR	FORT BARRE, LA.		C312
LAFAYETTE CONCRETE			C313
WILLIAMS BROS. PLANT	BERWICK, LA.		C314
ROY YOUNG	ABBEVILLE, LA.		C315
LOUISIANA PAVING CO., INC.	MERYENTAU, LA.	X	C316
BOSTIC CONCRETE CO. #2	NEW IBERIA, LA.		C317
J. B. TALLEY	PATTERSON, LA.	X	C318
J. B. TALLEY	ST. MARTINVILLE, LOUISIANA		C319
BARBER BROS.	LAFAYETTE, LA.		H301
FENET INC.	EUNICE, LA.		H302
H & S CONST. CO.	LAFAYETTE, LA.		H303
LOUISIANA PAVING	BALDWIN, LA.		H304
PELTIER BROS.	ABBEVILLE, LA.		H305
PELTIER BROS.	LAFAYETTE, LA.		H306
PELTIER BROS.	OLIVIER, LA.		H307

N=26

LOCATION=DISTRICT 04

NAME			CODE
BRASWELL SAND & GRAVEL	DIXIE INN	SAND & GRAVEL	A401
BRASWELL SAND & GRAVEL	SIBLEY	SAND & GRAVEL	A402
GIFFORD-HILL & CO.	SIBLEY	SAND & GRAVEL	A403
MADDEN PIT	MINDEN	SAND	A404
TRI-STATE	SIBLEY	SAND & GRAVEL	A405
SOUTHERN EXCAVATION	SIBLEY	SAND	A406
ALLEN BROS.	JUNCTION CITY, ARK.		C401
ARK-LA	SPRINGHILL, LA.		C402
BRASWELL SAND & GRAVEL	BOSSIER CITY, LA.		C403
BRASWELL SAND & GRAVEL	SHREVEPORT, LA.		C404
BUILDERS SUPPLY CO.	SHREVEPORT, LA.		C405
C & S REDI-MIX	SPRINGHILL, LA.		C406
CONCRETE PROD. OF NORTH CADDO	VIVIAN, LA.		C407
COUSHATTA CONCRETE CO.	COUSHATTA, LA.		C408
EXPRESS READY MIX	SHREVEPORT, LA. LINWOOD AVE		C409
GIFFORD-HILL READY MIX	S. SHREVEPORT, LA.		C410
GIFFORD-HILL READY MIX	SHREVEPORT, LA.		C411

LIST OF ALL QPL(#2) AGGREGATE SOURCES AND CONC & HOTMIX PRODUCERS

19:32 MONDAY, MAY 14, 1979

LOCATION=DISTRICT 04

NAME				CODE
LOUISIANA IND.	BOSSIER CITY, LA.			C412
MINDEN CONCRETE PLANT	MINDEN, LA.			C413
VALENTINE READY MIX	MANSFIELD, LA.			C414
C&S REDI-MIX HOMER, LA	X		X	C415
ALLEN BROTHERS, INC	HOMER, LOUISIANA		X	C416
HAYNESVILLE CONC. CO.	HAYNSEVILLE, LA.		X	C417
CENTURY REDI MIX	GIBSLAND, LOUISIANA		X	C418
EXPRESS READY MIX #2	S'PORT LA BROOKS RD		X	C419
HUDNALL & EARNEST, INC.	HOMER, LA.	CONCRETE		C420
JAMES WINFORD	BOSSIER CITY, LA.			H401
MADDEN CONSTRUCTION CO.	MINDEN, LA.			H402
ROY COOK & SONS	SHREVEPORT, LA.			H403
SOUTHERN EXCAVATION	BOSSIER CITY, LA.			H404
MADDEN CONSTRUCTION	READHEIMER,LA			H405
ASPHALT MATERIALS INC.	LEWISVILLE	ARKANSAS		H406

N=32

LOCATION=DISTRICT 05

NAME			CODE
CENTURY READY MIX	MONROE	SAND	A501
LOUISIANA INDUSTRIES	PERRYVILLE	SAND & GRAVEL	A502
MEADOWS CONCRETE & GRAVEL	LAKE PROVIDENCE	SAND & GRAVEL	A503
MONROE SAND & GRAVEL	PERRYVILLE	SAND & GRAVEL	A504
MONROE SAND & GRAVEL	WEST MONROE	SAND & GRAVEL	A505
RUNYON SAND & GRAVEL	MOUND	SAND & GRAVEL	A506
JONES PIT	LUNA	GRAVEL	A507
MATHIS PIT	W. MONROE	SAND & GRAVEL	A508
CENTURY READY MIX	MONROE, LA.,NO.1		C501
CENTURY READY MIX	RUSTON, LA.		C502
CENTURY READY MIX,PORT.	RUSTON, LA.		C503
CENTURY READY MIX	WEST MONROE		C504
JONESBORO CONCRETE CO			C505
LOUISIANA IND.	MONROE, LA.		C506
MONRAY	DELHI, LA.		C507
MONRAY	RAYVILLE, LA.		C508
MONROE CONCRETE CO.	BASTROP		C509
MONROE CONCRETE CO.	FARMERVILLE, LA.		C510
MONROE CONCRETE CO.	MONROE, LA.		C511
MONROE CONCRETE CO.	RUSTON, LA.		C512
MONROE CONCRETE CO.	WEST MONROE, LA.		C513
TRIPLE E CONC.	OAKGROVE, LA.		C514
VICO CONCRETE	TALLULAH, LA.		C515
VICO CONCRETE	VICKSBURG, MISS.		C516
ASPHALT MATERIALS	MONROE, LA.		H501
LOUISIANA IND.	PERRYVILLE, LA.		H502
L. D. RITTER	LAKE PROVIDENCE, LA.		H503
SOUTHERN EXCAVATION	SIMSBORO, LA.		H504

LOCATION=DISTRICT 05

NAME			CODE
W. J. RUNYON	MOUND, LA.		H505
D & J CONST CO.	WEST MONROE, LA	HOT MIX PLANT	H506

N=30

LOCATION=DISTRICT 07

NAME			CODE
GIFFORD-HILL & CO.	INDIAN VILLAGE	SAND & GRAVEL	A701
TRINITY	INDIAN VILLAGE	SAND	A702
TRINITY	LONGVILLE	SAND & GRAVEL	A703
CONCRETE PIPE PRODUCTS	LAKE CHARLES, LA.		C701
DEQUINCY REDI MIX	DEQUINCY, LA.		C702
DEQUINCY REDI MIX	WEST LAKE, LA.		C703
DOISE CONCRETE	KINDER, LA.		C704
DOISE CONCRETE	OAKDALE, LA.		C705
DUNHAM-PRICE, INC. #1	WEST LAKE, LA.		C706
DUNHAM-PRICE, INC. #2	LAKE CHARLES, LA.		C707
DUNHAM-PRICE, INC. #3	LAKE CHARLES, LA.		C708
EVANS CONCRETE	JENNINGS, LA.		C709
SEWELL CONCRETE	DERIDDER, LA.		C710
VORISE CONCRETE	OAKDALE, LA.		C711
DYSON REDI-MIX, INC.	CAMERON, LA	X	C712
BUNKIE READY MIX	VILLE PLATTE, LA		C713
LOUISIANA PAVING, KINDER PLANT	KINDER, LOUISIANA	X	C714
BI-CO PAVERS, INC.	LAKE CHARLES, LA.		C715
JAMES CORP.	LONGVILLE, LA.		H701
RE. HEIDT	INDIAN VILLAGE, LA.		H702
RE. HEIDT	WEST LAKE, LA.		H703
JAMES CORP.,PLANT NO 2	LONGVILLE, LA	X	H704

N=22

LOCATION=DISTRICT 08

NAME			CODE
ARNOLD'S GRAVEL	MERRYVILLE	SAND & GRAVEL	A801
BARTLETT PIT(JAMES CORP.)	FOREST HILL	SAND & GRAVEL	A802
GIFFORD-HILL & CO.	GLENMORA	SAND & GRAVEL	A803
GRAVEL PRODUCTS(JOSHLIN PIT#2)	MERRYVILLE	SAND & GRAVEL	A804
LIBUSE GRAVEL CO.	LIBUSE	SAND & GRAVEL	A805
LOUISIANA INDUSTRIES	FISHVILLE	SAND & GRAVEL	A806
LOUISIANA INDUSTRIES(DYSON PIT)	PROSPECT	GRAVEL	A807
LOUISIANA INDUSTRIES	PARADISE	SAND	A808
LUTESVILLE SAND & GRAVEL	BENTLEY-WALLACE RI.	SAND & GRAVEL	A809
LUTESVILLE SAND & GRAVEL	COLFAX	SAND & GRAVEL	A810
L. H. BOSSIER	GARDNER	SAND & GRAVEL	A811

LIST OF ALL QPL(#2) AGGREGATE SOURCES AND CONC & HOTMIX PRODUCERS

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LOCATION=DISTRICT 08

NAME			CODE
L. H. BOSSIER	WOODWORTH	SAND & GRAVEL	A812
SEWELL'S PIT	DERIDDER	SAND & GRAVEL	A813
WESTERN GRAVEL CO.	ROSEPINE	SAND & GRAVEL	A814
D. PRUDE SAND & GRAVEL CO.	GLENMORA	SAND & GRAVEL	A815
ACME CEMENT PRODUCTS CO. INC.	NATCHITOCHES, LA.		C801
ALEXANDRIA CONCRETE	ALEXANDRIA, LA.		C802
ALEXANDRIA CONCRETE	LEESVILLE, LA.		C803
ALLEN BROS. CONSTRUCTION CO.	JUNCTION CITY, LA.		C804
DIXIE READY-MIX INC.	WINNFIELD, LA.		C805
LEESVILLE CONCRETE	LEESVILLE, LA.		C806
LOUISIANA IND.(PLANT #1)	ALEXANDRIA, LA.		C807
LOUISIANA IND.(PLANT #5)	ALEXANDRIA, LA.		C808
LUTESVILLE SAND & GRAVEL CO.	COLFAX, LA.		C809
MARKSVILLE READY-MIX	MARKSVILLE, LA.		C810
MID-STATE PRESSTRESSED CONCRETE	ALEXANDRIA, LA.		C811
MOREAUVILLE CONCRETE WORKS	MOREAUVILLE, LA.		C812
VALENTINE READY-MIX	MANY, LA.		C813
A & A CONCRETE PRODUCTS INC.	NATCHITOCHES	LA.	C814
LOUISIANA IND. (PLANT NO. 4)	PINEVILLE, LA.		C815
H. C. BARNHILL PLANT	MANY, LA.		H801
K. & M. CONSTRUCTION PLANT	NATCHITOCHES, LA.		H802
L. H. BOSSIER PLANT	WOODWORTH, LA.		H803
L. H. BOSSIER PLANT	WILDA, LA.		H804
LOUISIANA IND. PLANT	FISHVILLE, LA.		H805
LOUISIANA PAVING CO. PLANT	CLARENCE, LA.		H806
LUTESVILLE SAND & GRAVEL PLANT	COLFAX, LA.		H807

N=37

LOCATION=DISTRICT 58

NAME			CODE
AMYX SAND & GRAVEL	JENA	SAND & GRAVEL	A901
CHISIUM SAND & GRAVEL	SICILY ISLAND	SAND & GRAVEL	A902
SICILY ISLAND SAND & GRAVEL	SICILY ISLAND	SAND & GRAVEL	A903
AMYX SAND & GRAVEL	GRAYSON, LA.		C901
AMYX SAND & GRAVEL	JENA, LA.		C902
HATFIELD HARDWARE & LUMBER CO.	WINNSBORO, LA.		C903
HEAD'S READY MIX	WISNER, LA.		C904
MACK & ANDERS CULVERTS	FERRIDAY, LA.		C905
MACK & ANDERS CULVERTS	JONESVILLE, LA.		C906
LOUISIANA PAVING INC.	AIMWELL, LA.		H901
LOUISIANA PAVING INC.	GILBERT, LA.		H902
L.D. RITTER INC.	SICILY ISLAND, LA.		H903
T. L. JAMES INC.	WASHINGTON, MISS.		H904

N=13

LOCATION=DISTRICT 61

NAME			CODE
ACE SAND & GRAVEL	BAYWOOD	SAND & GRAVEL	A601
ACME GRAVEL PRODUCTS	BAYWOOD	SAND & GRAVEL	A602
ALF'S GRAVEL	BLUFF CREEK	GRAVEL	A603
B & B GRAVEL CO.	BLUFF CREEK	SAND & GRAVEL	A604
DIXIE SAND & GRAVEL	STARHILL	SAND & GRAVEL	A605
LAMBERT SAND & GRAVEL	ST. FRANCISVILLE	SAND & GRAVEL	A606
RED STICK NO. 1	BAYWOOD	SAND & GRAVEL	A607
RED STICK NO. 2	BAYWOOD	SAND & GRAVEL	A609
RESOURCE MATERIAL CO.	BLUFF CREEK	SAND & GRAVEL	A609
THOMAS SAND & GRAVEL NO. 1	BAYWOOD	SAND & GRAVEL	A610
THOMAS SAND & GRAVEL NO. 2	BAYWOOD	SAND & GRAVEL	A611
TIFFIN SAND & GRAVEL	BLUFF CREEK	SAND & GRAVEL	A612
PLAQUEMINE SAND & GRAVEL	BLUFF CREEK	SAND & GRAVEL	A613
BIG RIVER INDUSTRIES, INC.	ERWINVILLE	EXPANDED CLAY LT.WT	A614
LOUISIANA LIMESTONE AGGREGATES	BATON ROUGE	STONE (LIMESTONE)	A615
ALTEX READY MIX	BATON ROUGE, LA.		C601
CLEGG CONCRETE	BATON ROUGE, LA.		C602
DOLESE	BATON ROUGE, LA.		C603
ELRAY KOCHE SERVICE INC.	DONALDSONVILLE, LA.		C604
FELICIANA REDI-MIX	JACKSON, LA.		C605
GONZALES CONCRETE WORKS	GONZALES, LA.		C606
LA. CONC. PRODUCTS	BATON ROUGE, LA.		C607
LAMBERT REDI-MIX	ST. FRANCISVILLE,LA		C608
SORRENTO LUMBER CO.	SORRENTO, LA.		C609
STEVENS	BATON ROUGE, LA.		C610
ALEXANDRIA CONSTRUCTION CO.	LETTSWORTH, LA.		H601
BARBER BROS.	BATON ROUGE, LA.		H602
W. E. BLAIN & SONS	BURNSIDE, LA.		H603
DUNHAM	BATON ROUGE, LA.		H604
LEBLANC BROS.	ST. GABRIEL, LA.		H605
STEVENS ASPHALT	BATON ROUGE, LA.		H606

N=31

LOCATION=DISTRICT 62

NAME			CODE
A-1 SAND & GRAVEL CO.	MAGNOLIA BEACH	SAND	A101
ADDISON'S PIT	WATSON	SAND & GRAVEL	A102
ALESSI PIT	INDEPENDENCE	S & G (INACTIVE)	A103
AMITE SAND & GRAVEL	DENNIS MILLS	SAND & GRAVEL	A104
LOUISIANA PAVING	SHILOH	SAND & GRAVEL	A105
B. B. DEVELOPMENT	PEARL RIVER	SAND & GRAVEL	A106
A & R AGG..INC.(FORMERLY BDT)	SUN	SAND & GRAVEL	A107
BOGALUSA MATERIALS(C.Z. PIT)	ANGIE	SAND & GRAVEL	A108
BOGALUSA MATERIALS(LAKEVIEW)	BOGALUSA	SAND & GRAVEL	A109
BOGALUSA MATERIALS(PIGOTT)	BOGALUSA	SAND & GRAVEL	A110
MCKAY SAND & GRAVEL	INDEPENDENCE	SAND & GRAVEL	A111
OWENS SAND & GRAVEL	INDEPENDENCE	SAND & GRAVEL	A112

LIST OF ALL QPL(#2) AGGREGATE SOURCES AND CONC & HOTMIX PRODUCERS

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LOCATION=DISTRICT 62

NAME			CODE
CORE CONTRACTING	HICKORY	SAND & GRAVEL	A114
CORE CONTRACTING	ISABEL	GRAVEL	A115
W. R. CORE(PIERCE)	SUN	SAND (INACTIVE)	A116
CROW SAND & GRAVEL	ENON	GRAVEL	A117
CROW SAND & GRAVEL	ISABEL	S & G (INACTIVE)	A118
DIAL SAND & GRAVEL	ISABEL	SAND & GRAVEL	A119
LUKE DUNAWAY GRAVEL	CLIFTON	SAND & GRAVEL	A120
FRAZIER SAND & GRAVEL	DARLINGTON	SAND & GRAVEL	A121
GIFFORD-HILL & CO.	ARCOLA	SAND & GRAVEL	A122
GIFFORD-HILL & CO.	FLUKER-TANGIPAHOA	SAND & GRAVEL	A123
PEARL RIVER SAND & GRAVEL	PEARL RIVER	SAND & GRAVEL	A124
HORNSBY SAND & GRAVEL	GRANGEVILLE	SAND & GRAVEL	A125
HOWARD CONSTRUCTION	INDEPENDENCE	S & G (INACTIVE)	A126
I.C. SAND & GRAVEL	TYNES ISLAND	SAND & GRAVEL	A127
J&J SAND & GRAVEL	VARNADO	SAND & GRAVEL	A128
FRANK JONES ENTERPRISE, INC.	VARNADO	S & G (INACTIVE)	A129
LA 37 SAND & GRAVEL	ROSELAND	SAND & GRAVEL	A131
LOUISIANA INDUSTRIES	ISABEL	SAND & GRAVEL	A132
LOUISIANA SAND & GRAVEL	DENNIS MILLS	SAND & GRAVEL	A133
MAGNOLIA SAND & GRAVEL	GRANGEVILLE	SAND & GRAVEL	A134
MEARS SAND & GRAVEL	DENNIS MILLS	SAND & GRAVEL	A135
MISSISSIPPI VALLEY SILICA CO.	SUN	S & G (INACTIVE)	A136
MURPHY MATERIALS	PEARL RIVER	SAND & GRAVEL	A137
P & D SAND & GRAVEL	WATSON	SAND & GRAVEL	A138
POWERS SAND & GRAVEL	GRANGEVILLE	SAND & GRAVEL	A139
REBEL SAND & GRAVEL	DENNIS MILLS	SAND & GRAVEL	A140
JESSE ROGERS GRAVEL PRODUCTS	ARCOLA	SAND & GRAVEL	A141
SMALL GRAVEL(PIERCE & LEBLANC)	GRANGEVILLE	SAND & GRAVEL	A142
SMITH SAND & GRAVEL PIT NO. 2	MT. HERMAN	SAND & GRAVEL	A143
SPELL SAND & GRAVEL	FRANKLINTON	SAND & GRAVEL	A144
STANDARD GRAVEL	CLIFTON	SAND & GRAVEL	A145
STANDARD GRAVEL	PEARL RIVER	SAND & GRAVEL	A146
STRAIN SAND & GRAVEL	WARNERTON	GRAVEL (INACTIVE)	A147
3D SAND & GRAVEL	ANGIE	S & G (INACTIVE)	A149
VICKS SAND & GRAVEL	INDEPENDENCE	SAND & GRAVEL	A150
STANDARD MATERIALS, INC	ENON	SAND & GRAVEL	A151
LA. PAVING	HONEY ISLAND, LA	SAND & GRAVEL	A152
SANDY HOOK GRAVEL CO.	ANGIE, LA.		A153
B. F. DIAMOND CONST. CO	MANCHAC, LA.		C101
B & G CONCRETE	KENTWOOD, LA.		C102
BROWN & ROOT	MANCHAC, LA.		C103
BROWN & ROOT	MANCHAC, LA.		C104
COAST MATERIALS CO.	BILOXI, MISS.		C105
ENDICON	MANCHAC, LA.		C106
FELICIANA READY MIX	MCMANUS, LA.		C107
GULF COAST PRESSTRESSED	PASS CHRISTIAN,MISS		C108
GULF COAST PRESSTRESSED	PASS CHRISTIAN,MISS		C109
LAKEVIEW CONCRETE	BOGALUSA, LA.		C110
MARINE CONC. STRUCTURES	PEARLINGTON, MISS.		C111
MISSISSIPPI MATERIALS	JACKSON, MISS.		C112
PRESTRESSED CONC. PROD.	MANDEVILLE, LA.		C113

LOCATION DISTRICT 02

NAME			CODE
STANDARD MATERIALS	SLIDELL, LA.		C114
STANDARD MATERIALS	SLIDELL, LA.		C115
TANGI READY MIX	HAMMOND, LA.		C116
TIGER READY MIX	HAMMOND, LA.		C117
PARISH CONCRETE INC. COVINGTON, LA.		X	C118
THIGPEN CONCRETE PRODUCTS CO..	FRANKLINTON, LA.	X	C119
HAMMOND READY MIX HAMMOND, LA.	X	X	C120
ATLAS CONSTRUCTION	ROBERT, LA.		H101
ATLAS CONSTRUCTION	HONEY ISLAND, LA.		H102
ALEXANDRIA CONSTRUCTION CO.	GOODBEE, LA.		H103
VICON	CROSSROADS, MISS.		H104
LA. PAVING CO. AMITE, LA.	X	X	H105

N=75

LOCATION=OUT-OF-STATE

NAME			CODE
AMERICAN SAND & GRAVEL	HATTIESBURG, MISS.,	GRAVEL	A001
ANCIENT RIVERS MINING CO.	POPLARVILLE, MISS.,	GRAVEL & SAND	A002
ATLAS PIT (MIKE'S ISLAND)	HANCOCK COUNTY, MISS	GRAVEL	A003
BRASWELL INDUSTRIES	WILTON, ARKANSAS	GRAVEL	A004
ROY COOK & SONS	FOURKE, ARKANSAS	GRAVEL & SAND	A005
DELIGHT GRAVEL CO.	WHELEN SPRINGS, ARK.	GRAVEL (INACTIVE)	A006
FAIRCHILD PIT	BEARDEN, ARKANSAS	GRAVEL	A007
GARNER PIT	BEARDEN, ARKANSAS	GRAVEL (INACTIVE)	A008
GIFFORD-HILL & CO.	MILLVILLE, ARK.	GRAVEL	A009
GIFFORD-HILL & CO.(HOT PLANT)	TEXARKANA, ARK.	SAND & GRAVEL	A010
GREEN BROS. SAND & GRAVEL	CRYSTAL SPRINGS, MS.	SAND & GRAVEL	A011
HORTON & HORTON	VICTORIA, TEXAS	SAND & GRAVEL	A012
IDEAL BASIC INDUSTRIES-ARENAL	GARWOOD, TEXAS	SAND	A013
L&H SAND & GRAVEL	CROSSROADS, MISS.	S & G (INACTIVE)	A014
LONE STAR IND-BLUE ROAN BEND	GARWOOD, TEXAS	SAND & GRAVEL	A015
LONE STAR IND.	ROBERT, TEXAS	SAND	A016
MADDEN CONTRACTING CO.	DELIGHT, ARK.	S & G (INACTIVE)	A017
PERKINSTON SAND & GRAVEL	PERKINSTON, MISS.	SAND	A018
PRESCOTT SAND & GRAVEL	DELIGHT, ARK.	GRAVEL	A019
RUNYON PIT	BEECHWOOD, MISS.	SAND & GRAVEL	A020
ST. CATHERINE GRAVEL CO.	NATCHEZ, MISS.	SAND & GRAVEL	A021
ST. FRANCIS MATERIALS	HARRELL, ARK.	SAND & GRAVEL	A022
SAMCO	HAMPTON, ARK.	GRAVEL	A023
SOUTHERN EXCAVATION	DELIGHT, ARK.	GRAVEL	A024
TRAXLER SAND & GRAVEL	CRYSTAL SPRINGS, MS.	SAND & GRAVEL	A025
TRIANGLE GRAVEL CO.	CAMDEN, ARK.	GRAVEL	A026
JOHNNY WALTER GRAVEL CO.	PRESCOTT, ARK.	GRAVEL	A027
ARBY INDUSTRIAL MINERALS CORP.	LITTLE ROCK, ARK.	STONE(TRIPOLITE)	A028
ARBY INDUSTRIAL MINERALS CORP.	LITTLE ROCK, ARK.	STONE(NOVACULITE)	A029
GIFFORD-HILL & CO., INC.	LONE STAR, TEXAS	SLAG	A031
GIFFORD-HILL & CO., INC.	ALLAMOORE, TEXAS	STONE(RHYOLITE)	A032

LIST OF ALL QPL(#2) AGGREGATE SOURCES AND CONC & HOTMIX PRODUCERS

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LOCATION=OUT-OF-STATE

NAME			CODE
GRANITE MOUNTAIN QUARRIES	SWEET HOME ARK.	STONE(SYENITE)	A033
MCDONOUGH BROTHERS, INC.	SAN ANTONIO, TEXAS	STONE(LIMESTONE)	A035
MURRAY QUARRY	ARKADELPHIA, ARK.	STONE(SANDSTONE)	A036
REED CRUSHED STONE CO.	GILBERTSVILLE, KY.	STONE(LIMESTONE)	A037
SOUTHERN STONE CO., INC.	BIRMINGHAM, ALA.	SLAG(GODWIN, TENN.)	A038
SOUTHERN STONE CO., INC.	BIRMINGHAM, ALA.	SLAG(SIGLO, TENN.)	A039
THREE RIVERS ROCK CO.	SMITHLAND, KY.	STONE(LIMESTONE)	A040
VULCAN MATERIALS CO.	BIRMINGHAM, ALA.	SLAG(ENSLEY PLANT)	A041
VULCAN MATERIALS CO.	CALERA, ALA.	STONE(LIMESTONE)	A042
WEST LAKE QUARRY & MATERIALS	ILLMO, MISSOURI	STONE,NEELYS LANDING	A043
WEST LAKE QUARRY & MATERIALS	ILLMO, MISSOURI	STONE(GRAY'S POINT)	A044
ARKADELPHIA SAND & GRAVEL	ARKADELPHIA, ARK.	GRAVEL	A045
SANDY HOOK GRAVEL CO.	SANDY HOOK, MISS.	SAND & GRAVEL	A046
E. L. SMITH SAND & GRAVEL	HAMPTON, ARK.	GRAVEL	A048
H.M.B. CONSTRUCTION CO.	DEQUEEN, ARK.		A049
STANDARD GRAVEL CO.	HARRELL, ARK.	GRAVEL	A050

N=47

QPL_NO=01 MAT_NAME=ADMIXTURES FOR PCC

NAME			CODE
CONCRETE CONTROLS INC.	NEW ORLEANS	AIR	0118
CONCRETE CONTROLS INC.	NEW ORLEANS	WRSR	0101
CONSTRUCTIONAL CHEMICALS	AUSTIN,TX.	AIR	0117
CONSTRUCTIONAL CHEMICALS	AUSTIN,TX.	WRNR	0109
CONSTRUCTIONAL CHEMICALS	AUSTIN,TX.	WRSR	0103
EUCLID CHEMICAL CO.	CLEVELAND, OHIO	AIR	0120
EUCLID CHEMICAL CO.	CLEVELAND, OHIO	WRNS	0111
GIFFORD-HILL & CO.	DALLAS, TX.	AIR	0121
GIFFORD-HILL & CO.	DALLAS, TX.	WRNS	0112
GIFFORD-HILL & CO.	DALLAS, TX.	WRSR	0104
HUNT PROCESS CORP.	RIDGELAND, MISS.	AIR	0119
HUNT PROCESS CORP.	RIDGELAND, MISS.	WRNS	0110
HUNT PROCESS CORP.	RIDGELAND, MISS.	WRSR	0102
MASTER BUILDERS	CLEVELAND, OHIO	AIR	0123
MASTER BUILDERS	CLEVELAND, OHIO	WRNS	0114
MASTER BUILDERS	CLEVELAND, OHIO	WRSR	0106
PROTEX INDUSTRIES INC.	DENVER, CO.	AIR	0124
PROTEX INDUSTRIES INC.	DENVER, CO.	WRNS	0115
PROTEX INDUSTRIES INC.	DENVER, CO.	WRSR	0107
SIKA CHEMICAL CORP.	LYNDHURST, N.J.	AIR	0125
SIKA CHEMICAL CORP.	LYNDHURST, N.J.	WRNS	0116
SIKA CHEMICAL CORP.	LYNDHURST, N.J.	WRSR	0108
W. R. GRACE & CO.	HOUSTON, TX.	AIR	0122
W. R. GRACE & CO.	HOUSTON, TX.	WRNS	0113
W. R. GRACE & CO.	HOUSTON, TX.	WRSR	0105

N=25

QPL_NO=03 MAT_NAME=NEOPRENE BRIDGE-BEARING PADS

NAME		CODE
ACME-HAMILTON MFG. CORP.	TRENTON, N.J.	0301
ANCHOR PACKING CO	METAIRIE, LA.	0302
B. U. RUBBER PRODUCTS	LOS ANGELES, CALIF.	0303
FEL-PRO BUILDING PRODUCTS	SKOKIE, ILL.	0304
FIRESTONE INDUSTRIAL	NOBLESVILLE, IND.	0305
GENERAL TIRE & RUBBER CO.	WABASH, IND.	0306
HUNTINGTON RUBBER CO.	PORTLAND, ORE.	0308
OIL STATES RUBBER CO.	ARLINGTON, TEX.	0309
W. R. GRACE & COMPANY	CHICAGO, ILL.	0307

N=9

QPL_NO=04 MAT_NAME=FLEXIBLE PLASTIC GASKETS

NAME		CODE
HAMILTON KENT MFG. CO.	KENT, OHIO	0401
K. T. SNYDER COMPANY INC.	HOUSTON, TEX.	0402

N=2

QPL_NO=05 MAT_NAME=POLYURITHANE POURD JT-SEALERS

NAME		CODE
EDOCO TECHNICAL PROD. INC.	LONG BEACH, CALIF.	0501
SPECIALTY PRODUCTS DIST. CO.	GLENDALE, CALIF.	0502

N=2

QPL_NO=06 MAT_NAME=PREFORMED ELAST COMP JT SEALS

NAME		CODE
ACME HIGHWAY PROD. CORP	BUFFALO, N.Y.	0601
D. S. BROWN CO.	N. BALTIMORE,OHIO	0602
W. R. GRACE & CO.	CHICAGO, ILL.	0603
WATSON-BOWMAN ASSOC.	BUFFALO, N.Y.	0604

N=4

QPL_NO=07 MAT_NAME=PORTLAND CEMENT & POZZ CEMENT

NAME			CODE
ALPHA PORTLAND CEMENT CO.	BIRMINGHAM, ALA.	CEMENT	0725
ALPHA PORTLAND CEMENT CO.	ORANGE, TEX.	CEMENT	0701
ARKANSAS CEMENT CORP.	FOREMAN,ARK.	CEMENT	0702
BAHAMA CEMENT CO.	FREEPORT,GR.BAHAMA	CEMENT	0726
BLUE CIRCLE GROUP	NORTHFLEET,ENGLAND	CEMENT	0703
CEMENTOS ANAHUAC DEL GOLFO	TAMUIN,S.L.P.,MEX.	CEMENT	0720
CITADEL CEMENT CORP.	DEMOPOLIS, ALA.	CEMENT	0723
DUNDEE CEMENT CO.	CLARKSVILLE, MO.	CEMENT	0704
DUNDEE CEMENT CO.	CLARKSVILLE, MO.	POZZOLAN CEMENT	0721
GENERAL PORTLAND INC.	FORT WORTH, TEX.	CEMENT	0706
GENERAL PORTLAND INC.	HOUSTON, TEX.	CEMENT	0705
GENERAL PORTLAND INC.	TAMPA, FLORDIA	CEMENT	0727
GIFFORD-HILL PORTLAND CEMENT	MIDLOTHIAN, TEX.	CEMENT	0707
IDEAL BASIC INDUSTRIES, INC.	ADA, OKLAHOMA	CEMENT	0711
IDEAL BASIC INDUSTRIES, INC.	FLORENCE, COL.	CEMENT	0710
IDEAL BASIC INDUSTRIES, INC.	GALENA PARK, TEX.	CEMENT	0713
IDEAL BASIC INDUSTRIES, INC.	KNOXVILLE, TENN.	CEMENT	0712
IDEAL BASIC INDUSTRIES, INC.	MOBILE, ALA.	CEMENT	0708
IDEAL BASIC INDUSTRIES, INC.	SARATOGA, ARK.	CEMENT	0709
LONE STAR INDUSTRIES, INC.	HOUSTON, TEX.	CEMENT	0714
LONE STAR INDUSTRIES, INC.	NEW ORLEANS, LA.	CEMENT	0715
LOUISIANA CEMENT CO.	NEW ORLEANS, LA.	CEMENT	0716
MISSOURI PORTLAND CEMENT CO.	JOPPA, ILLINOIS	CEMENT	0724
RIVER CEMENT CO.	FESTUS, MO.	CEMENT	0717
TEXAS INDUSTRIES, INC.	MIDLOTHIAN, TEX.	CEMENT	0718
TEXAS INDUSTRIES, INC.	MIDLOTHIAN, TEX.	POZZOLAN CEMENT	0722
UNITED CEMENT CO. (TXI)	ARTESIA, MISS.	CEMENT	0719

N=27

QPL_NO=08 MAT_NAME=LUBRICANT ADHES FOR BR SEALS

NAME		CODE
ACME HIGHWAY PROD. CORP.	BUFFALO, N.Y.	0801
D. S. BROAN CO.	N. BALTIMORE, OHIO	0802
ROBSON CORPORATION	OXFORD, MD.	0803

N=3

QPL_NO=09 MAT_NAME=RAISED TRAFFIC MARKERS

NAME		CODE
AMERACE CORP.	NILES, ILL.	0901
GULF INDUSTRIES, INC.	METAIRIE, LA.	0902
INTERNATIONAL PLASTICS INC.	COLWICH, KANSAS	0903
RAY-O-LITE INC.	HUNTINGTON BCH, CALIF.	0904

N=4

QPL_NO=10 MAT_NAME=MINERAL FILLER FOR ASPH CONC

NAME		CODE
ARKANSAS LIME CO.	BATESVILLE, ARK.	1001
CALCITE INC.	BERWICK, LA.	1002
DOLCITE QUARRY CO.	BIRMINGHAM, ALA.	1003
DRESSER MINERALS DIVISION	HOUSTON, TEX.	1004
GEORGIA MARBLE CO.	ATLANTA, GA.	1005
GIFFORD-HILL & CO., INC.	CASON, TEX.	1014
IDEAL CEMENT CO.	SARATOGA, ARK.	1006
LONE STAR INDUSTRIES, INC.	NEW ORLEANS, LA.	1007
LOUISIANA CEMENT CO.	NEW ORLEANS, LA.	1008
NATIONAL CEMENT CO., INC.	RAGLAND, ALA.	1009
TEXAS INDUSTRIES, INC.	ARLINGTON, TEX.	1010
TEXAS LIME CO.	CLEBURNE, TEX.	1011
TRINITY MATERIALS INC.	HATTIESBURG, MISS.	1013
WINN ROCK	WINNFIELD, LA.	1012

N=14

QPL_NO=11 MAT_NAME=PAINT-INORG ZINC PRIMERS & TC

NAME		CODE
AMERON CORROSION CONTROL DIV.	BREA, CALF	1103
BYWATER SALES & SERVICE CO INC	BELLE CHASSE, LA.	1106
EXXON CHEMICAL CO.	BATON ROUGE, LA.	1101
IMPERIAL PROFESSIONAL COATINGS	NEW ORLEANS, LA.	1104
MOBIL CHEMICAL CO.	BEAUMONT, TEX.	1105

QPL_NO=11 MAT_NAME=PAINT-INORG ZINC PRIMERS & TC

NAME		CODE
SIGMA COATINGS, INC.	HARVEY, LA.	1107

I=6

QPL_NO=12 MAT_NAME=PAINT-ORG ZINC PRIMERS & TC

NAME		CODE
ADMIRAL PAINT CO.	LAKE CHARLES, LA.	1201
AMERON CORROSION CONTROL DIV.	BREA, CALIF.	1202
EXXON CHEMICAL CO	BATON ROUGE, LA.	1203
FARBOIL COMPANY	BALTIMORE, MD.	1211
GROW CHEMICAL CO.	BATON ROUGE, LA.	1204
IMPERIAL PROFESSIONAL COATINGS	NEW ORLEANS, LA.	1209
MOBIL CHEMICAL CO.	BEAUMONT, TEX.	1205
NAPKO CORP.	HOUSTON, TEX.	1206
OFFSHORE COATINGS CORP.	NEW ORLEANS, LA.	1207
RELIANCE UNIVERSAL, INC.	HOUSTON, TEX.	1212
SIGMA COATINGS, INC.	HARVEY, LA.	1210

N=11

QPL_NO=13 MAT_NAME=REFLECTIVE SHEETING

NAME		CODE
SEIBU POLYMER CHEMICAL CO.	TOKYO, JAPAN	1302
3M CO.	ST. PAUL,MINN.	1301

N=2

QPL_NO=14 MAT_NAME=SPECIAL CONC MASONRY FINISHES

NAME		CODE
CHEMREX SPECIALTY COATINGS INC.	EL PASO, TEX.	1401
KENITEX CHEMICALS INC.	TORRANCE, CALIF	1403
NAPKO CORP.	HOUSTON, TEX.	1404
RUSSO PAINT MFG. CO.	BEAUMONT, TEX.	1405
SONNEBORN BUILDING PRODUCTS	HOUSTON, TEX.	1406
STANDARD DRY WALL PRODUCTS INC.	MIAMI, FLA.	1407
STANDARD T CHEMICAL CO.	DALLAS, TEX.	1408
TEXTURED COATINGS OF AMERICA	LOS ANGELES, CALIF.	1409
W. R. GRACE & CO.	HOUSTON, TEX.	1402

N=9

QPL_NO=15 MAT_NAME=SPARLUGS-LOAD TRANS DEVICES

NAME		CODE
TEXAS FOUNDRIES	LUFKIN, TEX.	1501

N=1

QPL_NO=16 MAT_NAME=BARRICADE WARNING LITES

NAME		CODE
ELECTRADE CORP.	KANSAS CITY, MO.	1602
EMPCO-LITE	ELGIN, ILL.	1603
PROTECTION SERVICE INC.	HARRISBURG, PA.	1604
R.E. DIETZ CO.	SYRACUSE, N.Y.	1601
ROYAL INDUSTRIES	SOUTH HOLLAND, ILL.	1605

N=5

QPL_NO=17 MAT_NAME=PLASTIC FILTER CLOTH

NAME		CODE
CARTHAGE MILLS INC.	CINCINNATI, OHIO	1701
UNITED STATES TEXTURE SALES	BATON ROUGE, LA.	1702

N=2

QPL_NO=18 MAT_NAME=PREFORM CLSD CELL POLY JT SEAL

NAME		CODE
DOW CHEMICAL, USA	MIDLAND, MICH.	1804
SAF-T-GRIP	FARMINGDALE N. Y.	1803
W. R. GRACE & CO.	CHICAGO, ILL.	1801
W. R. MEADOWS INC.	ELGIN, ILL.	1802

N=4

QPL_NO=19 MAT_NAME=ANTISTRIPPING ADDITIVES

NAME		CODE
ARMAK CO.	CHICAGO, ILL.	1901
CINCINNATI MILACRON CHEMICALS	READING, OHIO	1902
DASCH OIL & CHEMICAL CO.	SHREVEPORT, LA.	1903
LANCASTER CHEMICAL CO.	NEWARK, N.J.	1904
NATIONAL RESEARCH & CHEMICAL	HAWTHORNE, CALIF.	1905
WESTVACO	NORTH CHARLESTON, S.C.	1906

N=6

QPL_NO=20 MAT_NAME=SELF LEVELING LEVELS

NAME		CODE
KEUFFEL & ESSER CO.	MORRISTOWN, N.J.	2001
TELEDYNE GURLEY	TROY, N.Y.	2002
WILD HEEPBRUGG INSTRUMENTS	FARMINGDALE, N.Y.	2003

N=3

QPL_NO=21 MAT_NAME=METALLIC DETECTION TAPE & WIRE

NAME		CODE
		210
ALLEN SYSTEMS INC.	WHEATON, ILL.	2101
COMPLETE READING ELECTRIC CO.	HOUSTON, TEX.	2103
GRIFFOLYN CO. INC.	HOUSTON, TEX.	2102

N=4

QPL_NO=22 MAT_NAME=SILICON ADDITIVES FOR ASP CEM

NAM		CODE
DOW CORNING CORP.	DALLAS, TEX.	2201

N=1

QPL_NO=23 MAT_NAME=COLD GALVANIZING REPAIR COMPDS

NAME		CODE
BASF WYANDOTTE CORP.	CARLSTADT, N.J.	2303
BOWMAN PRODUCTS DIV.	CLEVELAND OHIO	2302
CRC CHEMICALS	WARMINISTER, PA.	2304
CROWN MFG. CO.	HEBRON, ILL.	2301
RUST OLEUM CORP.	EVANSTON, ILL.	2305

N=5

QPL_NO=24 MAT_NAME=RAPID SET PATCH MAT FOR CONC

NAME		CODE
A.C. HORN, INC.	NORTH BERGEN, N.J.	2402
GARON PRODUCTS, INC	EDISON, N.J.	2401
HURON CEMENT DIV.	ALPENA, MICH.	2406
LONE STAR LAFARGE CO.	NORFOLK, VA.	2407
MASTER BUILDERS	CLEVELAND, OHIO	2403
SOUTHERN QUIKRETE PRODUCTS	HARAHAN, LA.	2404
THE UPCO COMPANY	CLEVELAND, OHIO	2405

QPL_NO=24 MAT_NAME=RAPID SET PATCH MAT FOR CONC

NAME		CODE
UNITED STATES GYPSUM CO.	CHICAGO, ILL.	2408

N=8

QPL_NO=25 MAT_NAME=ASPHALT MIX RELEASE AGENTS

NAME		CODE
DUBOIS CHEMICALS	CINCINNATI, OHIO	2501
GLOBE CHEMICALS, INC.	TOLEDO, OHIO	2505
HUNTINGTON LABORATORIES INC.	HUNTINGTON, IND.	2503
JADCO INC.	GREENVILLE, S.C.	2502
UNITECH CHEMICAL INC.	CHICAGO, ILL.	2504

N=5

QPL_NO=26 MAT_NAME=MANHOLE STEPS

NAME		CODE
ALUMINUM CO. OF AMERICA	PITTSBURGH, PA.	2601
CONSTRUCTION PRODUCTS CORP.	INDIANAPOLIS, IND.	2602
DELTA PIPE PRODUCTS	ATLANTA, GA.	2603
M. A. IND. INC.	PEACHTREE CITY, GA.	2604
UTILITY PRODUCTS INC.	SAN ANTONIO, TEX.	2605

N=5

QPL_NO=27 MAT_NAME=PAINT-ACTIVATED EPOXY PRIM &TC

NAME		CODE
FAREOIL COMPANY	BALTIMORE, MD.	2701
RELIANCE UNIVERSAL INC.	HOUSTON, TEX.	2702
SIGMA COATINGS, INC.	HARVEY, LA.	2703

N=3

QPL_NO=28 MAT_NAME=SOIL STERILANTS

NAME		CODE
CIBA-GEIGY CORPORATION	ARDSLEY, N.Y.	2801
E.I. DUPONT DE NEMOURS & CO.	WILMINGTON, DEL.	2802

N=2

QPL_NO=29 MAT_NAME=FORM RELEASE AGENTS

NAME		CODE
CITIES SERVICE OIL CO.	TULSA, OK.	2901
EXXON CO. U.S.A.	HOUSTON, TEX.	2902
FORRER CHEMICAL	MILWAUKEE, WIS.	2903
HUNT PROCESS CORP.-SOUTHERN	RIDGELAND, MISS.	2904
L & M CONSTRUCTION CHEMICALS	OMAHA, NEB.	2905
LOUISIANA CONCRETE PRODUCTS	BATON ROUGE, LA.	2906
NOX-CRETE CHEMICALS INC.	OMAHA, NEB.	2907
STUTTON NORTH CORPORATION	HARAHAN, LA.	2908

N=8

QPL_NO=30 MAT_NAME=ALL PURPOSE BLASTING SAND

NAME		CODE
COBB INDUSTRIAL CORPORATION	COUSHATTA, LA.	3001
JAHNCKE SERVICE INC.	NEW ORLEANS, LA.	3002
LONE STAR INDUSTRIES INC.	HOUSTON, TEX.	3003
SOUTHERN SILICA OF LA.	ALEXANDRIA, LA.	3004

N=4

QPL_NO=31 MAT_NAME=PAINT-HIGH BUILD WATRBRNE TRAF

NAME		CODE
SIGMA COATINGS, INC.	HARVEY,LA.	3101
WILLIAM ARMSTRONG SMITH	EAST POINT, GA.	3102

N=2

QPL_NO=32 MAT_NAME=EPOXY RESIN SYSTEMS FOR CONC

NAME		CODE
DURAL INTERNATIONAL CORP.	DEER PARK, N.Y.	3205
HUNT PROCESS CORP.-SOUTHERN	RIDGELAND, MISS.	3201
SIKA CHEMICAL CORP.	LYNDHURST, N.J.	3202
SINMAST OF AMERICA, INC.	ELK GROVE VILL.,IL.	3203
TOCH DIV., CARBOLINE CO.	ST. LOUIS, MO.	3204

N=5

QPL_NO=33 MAT_NAME=PVC EXTENDED COAL TAR JT SEALS

NAME		CODE
SUPERIOR PROD. CO. INC.,	SPARKS NEVADA	3301

N=1

QPL_NO=34 MAT_NAME=HYDRATED & QUICK LIME

NAME			CODE
ARKANSAS LIME COMPANY	BATESVILLE, ARK.	HYDRATED LIME	3401
AUSTIN WHITE LIME CO.	AUSTIN, TX.	HYDRATED LIME	3402
CHEMICAL LIME, INC..	CLIFTON, TX	HYDRATED LIME	3403
DRAVO LIME CO.	MAYSVILLE, KY.	QUICKLIME	3409
MISSISSIPPI LIME CO.	ALTON, ILL.	QUICKLIME	3410
MISSISSIPPI LIME CO.	ST. GENEVIEVE, MO.	HYDRATED LIME	3413
PELICAN STATE LIME	MORGAN CITY, LA.	HYDRATED LIME	3404
PELICAN STATE LIME	MORGAN CITY, LA.	QUICKLIME	3411
ROUND ROCK LIME CO.	BLUM, TX.	HYDRATED LIME	3405
TEXAS LIME CO.	CLEBURNE, TX.	HYDRATED LIME	3406
UNITED STATES GYPSUM CO.	NEW BRAUNFELS, TX.	HYDRATED LIME	3408
UNITED STATES GYPSUM CO.	NEW ORLEANS, LA.	HYDRATED LIME	3407
UNITED STATES GYPSUM CO.	NEW ORLEANS, LA.	QUICKLIME	3412

N=13

QPL_NO=35 MAT_NAME=ELASTOMERIC RR GRADE XINGS

NAME		CODE
STRUCTURAL RUBBER PROD. CO.	SPRINGFIELD, ILL.	3503
THE GENERAL TIRE & RUBBER CO.	WABASH, IND.	3501
THE GOODYEAR TIRE & RUBBER CO.	ST. MARYS, OHIO	3502

N=3

QPL_NO=99 MAT_NAME=

NAME	CODE
	9999

N=1

MAT_NAME=AGGREGATE NON QPL

NAME			CODE
BADALAMENTI PIT	BELLE CHASSE, LA. (SAND) (02)		AG18
BELL PIT, INDIAN VILLAGE, LA (07),FINE SAND			AG02
BURMASTER FINE SAND	WESTWEGO, LA. (02)		AG14
BURNETT PIT, LONGVILLE, LA (07), FINE SAND			AG01
COLLETTA PENERSON	LAKE CHARLES	(SAND)	AG24
DELONAY PIT	LAKE PROVIDENCE	FINE SAND	AG21
E. A. GRAVOIS & SON	VACHERIE, LA. (SAND) (02)		AG19
GIFFORD-HILL & CO., INC.	BRIDGEPORT, TX.	LIMESTONE	AG22
HIGGINBOTHAM INC.	BATON ROUGE, LA.		AG25
J. B. TALLEY	PARKS, LOUISIANA		AG37
J. C. GEORGE	WEST MONROE	S/C GRAVEL	AG39
J.P. MESSINA	PLAQUEMINE, LA.		AG26
JAMES WINFORD CO.	MINDEN, LA.	SAND CLAY GRAVEL	AG28
JOE WITHROW PIT	SHREVEPORT	FINE SAND FOR HOTMIX	AG08
JOGS, INC.	PEARL RIVER, LOUISIANA		AG34
KENNER LANDING	KENNER, LOUISIANA		AG23
KINCHEN PIT	METAIRIE,	LA.	AG36
LAKE CHARLES DREDGING CO.,LAKE	CHARLES, LA (07), SHELL		AG03
LAMAR HADDOX CONTRACTING INC	RUSTON, LA.	SAND CLAY GRAVEL	AG31
LEON GRAY	MINDEN	S/C GRAVEL	AG07
LOUISIANA MATERIALS	NEW ORLEANS, LA.	(SHELLS) (02)	AG16
LOUISIANA PAVING	KILLONA, LA. (02)	(FINE SAND)	AG15
MADDEN CONTRACTING	MINDEN, LA.	SAND CLAY GRAVEL	AG29
P. J. RUDOLPH	BELLE CHASSE, LA.	CLAM SHELLS	AG38
P. R. RUDOLPH & SONS	BELLE CHASSE, LOUISIANA		AG27
PELICAN LIME CO.	MORGAN CITY, LA.	(HYDRATED LIME)	AG17
PHILLIPS BROS.	WAGGAMAN, LA.		AG40
PONTCHARTRAIN MATERIALS	NEW ORLEANS, LA. (SHELLS) (02)		AG10
RADCLIFF MATERIALS	NEW ORLEANS, LA. (SHELLS) (02)		AG11
RODOSTA BROS.		FINE SAND (HOT MIX)	AG33
ROY COOK & SONS	BOSSIER CITY, LA	SAND CLAY GRAVEL	AG32
ROY SHARP, TURKEY CREEK (07),	HMAC SAND		AG05
SOUTHERN EXCAVATION	BOSSIER CITY, LA.	SAND CLAY GRAVEL	AG30
SPILLWAY FINE SAND	NORCO, LA. (02)		AG13
TEMPLETON PIT	RAYVILLE	FINE SAND,HOT MIX	AG06
THIBOUT PIT-SMOKE BEND	DONALDSONVILLE, LA. (FINE SAND) (02)		AG12
TRIANGLE SHELL,MERMENTAU, LA (03)			AG04
VICON, INC.	NAIRN, LOUISIANA		AG35
W. T. BURTON	WESTLAKE, LA.		AG20

N=39

MAT_NAME=BITUMINOUS MATERIALS

NAME			CODE
BERRY PRODUCTS CO.	STEVENS ARK,	LIQUID ASPHALT	B001
BERRY REFINING CO.	STEVENS,AR,	ASPHALT CEMENT	B002
BITUCOTE PRODUCTS CO,	ELDORADO,AR,	LIQUID ASPHALT	B003
BITUCOTE PRODUCTS CO.	LAKE CHARLES,	LIQUID ASPHALT	B701
CALUMET REFINING CO,	PRINCETON,	ASPHALT CEMENT	B401
CHEVRON ASPHALT CO,	BATON ROUGE,	LIQUID ASPHALT	B601
CHEVRON ASPHALT CO,	PRINCETON(CALUMET),	LIQUID ASPHALT	B402
DIXIE MATERIALS INC.	PORT NECHES,TX,	LIQUID ASPHALT	B004
EXXON OIL & REFINING CO,	BATON ROUGE,	ASPHALT CEMENT	B602
EXXON OIL & REFINING CO,	BATON ROUGE,	LIQUID ASPHALT	B603
GLOBE ASPHALT CO,	YAZOO CITY,MS,	LIQUID ASPHALT	B005
GULF STATES ASPHALT CO OF LA,	WESTWEGO,	LIQUID ASPHALT	B201
LION OIL CO.	ELDORADO,AR,	LIQUID ASPHALT	B013
LION OIL CO,	ELDORADO,AR,	ASPHALT CEMENT	B006
MCMILLAN RING FREE OIL CO.	NORPHLET,AR,	ASPHALT CEMENT	B007
MCMILLAN RING FREE OIL CO,	NORPHLET,AR,	LIQUID ASPHALT	B008
ROADWAYS INTERNATIONAL CORP.	BATON ROUGE	LIQUID ASPHALT	B604
SHELL OIL CO,	NORCO,	ASPHALT CEMENT	B202
SHELL OIL CO,	NORCO,	LIQUID ASPHALT	B203
SOUTHLAND OIL CO,	SANDERSVILLE,MS	LIQUID ASPHALT	B010
SOUTHLAND OIL CO,	YAZOO CITY,MS,	ASPHALT CEMENT	B009
TEXACO OIL & REFINING CO,	PORT NECHES,TX,	ASPHALT CEMENT	B011
TEXACO OIL & REFINING CO,	PORT NECHES,TX,	LIQUID ASPHALT	B012

N=23

MAT_NAME=CATTLE GUARDS

NAME		CODE
CARBO FOUNDRY	ALEXANDRIA, LA.	CG01
CHACHERE CONST. CORP.	CHURCH POINT, LA.	CG02
FLYNN MFG., CO.	ALEXANDRIA, LA	CG03
L.H. BOSSIER, CO	ALEXANDRIA, LA.	CG04

N=4

MAT_NAME=CONCR & CLAY PIPE & CONC BLKS

NAME		CODE
ANDERSON DUNHAM COMPANY	BATON ROUGE, LA.	CP21
BARRY CONCRETE PIPE CO.	LAFAYETTE, LA.	CP01
BOSTIC CONCRETE PIPE CO.	LAFAYETTE, LA.	CP02
BRASWELL CONCRETE CO	SHREVEPORT, LA.	CP03
CASHIO CONCRETE PRODUCTS	BATON ROUGE, LA.	CP04
CONCRETE PIPE PRODUCTS	LAKE CHARLES, LA.	CP05
CONCRETE PRODUCTS	ST. MARTINVILLE, LA.	CP06
CONSOLIDATED MATERIALS	NEW ORLEANS, LA.	CP07
DICKEY CLAY PIPE CO.	BESSEMER, ALA.	CP24

MAT_NAME=CONCR & CLAY PIPE & CONC BLKS

NAME		CODE
DICKEY CLAY PIPE CO.	MERIDIAN, MISS.	CP25
DICKEY CLAY PIPE CO.	TEXARKANA, TEX.	CP26
DOLESE CONCRETE COMPANY	BATON ROUGE, LA.	CP08
DUNHAM PRICE COMPANY	LAKE CHARLES, LA.	CP09
DURACRETE, INC.	MAGNOLIA, ARK.	CP10
GIFFORD HILL PIPE CO.	LONGVIEW, TEXAS	CP11
GIFFORD HILL PIPE CO.	MINDEN, LA.	CP12
LOUISIANA CONCRETE PRODUCTS	BATON ROUGE, LA.	CP27
LOUISIANA CONCRETE PRODUCTS	LAKE CHARLES, LA.	CP28
LOUISIANA CONCRETE PRODUCTS	NEW ORLEANS, LA.	CP29
LOUISIANA INDUSTRIES, INC.	ALEXANDRIA, LA.	CP22
LOUISIANA INDUSTRIES, INC.	BOSSIER CITY, LA.	CP13
LOUISIANA INDUSTRIES, INC.	MONROE, LA.	CP14
LOUISIANA INDUSTRIES, INC.	NEW ORLEANS, LA.	CP15
LOUISIANA SALES & MFG. CO.	ALEXANDRIA, LA.	CP16
MACK & ANDERS CONCRETE CO.	FERRIDAY, LA.	CP23
MID-STATE PRESTRESS CO.	WOODWORTH, LA.	CP17
NEW ORLEANS CEMENT PRODUCTS	NEW ORLEANS, LA.	CP18
PRESTRESSED CONCRETE PRODUCTS	MANDEVILLE, LA.	CP19
STEVENS CONCRETE PIPE PRODS.	BATON ROUGE, LA.	CP20
TEXARKANA CONCRETE PRODUCTS	TEXARKANA, TEX.	CP30

N=30

MAT_NAME=CURING COMPOUNDS

NAME		CODE
CHEMREX	EL PASO, TX.	CC04
CROWN-PACIFIC CHEMICAL CO.	DALLAS, TX.	CC02
HUNT PROCESS CORP.	RIDGELAND, MISS.	CC01
NOX-CRETE CHEMICALS, INC.	OMAHA, NEB.	CC05
OFFSHORE COATINGS	NEW ORLEANS, LA.	CC03

N=5

MAT_NAME=FENCING MATERIALS

NAME		CODE
ACADIAN FENCE CO.	LAFAYETTE, LA	FM01
ALLIED TUBE & CONDUIT CORP.	HARVEY, IL	FM02
ALLSTATE FENCE CO.	HAMMOND, LA	FM03
AMERICAN WHOLESALE FENCE CO.	NEW ORLEANS, LA	FM04
ANCHOR POST FENCE PRODUCTS	HOUSTON, TX	FM05
ATLANTIC STEEL CO.	ATLANTA, GA	FM06
BEAN SUPPLY CO., INC	BATON ROUGE, LA	FM07
BEKAMAN BARBED WIRE	VAN BUREN, AK	FM08
DAIRYMAN INC.	LAFAYETTE, LA	FM09
EAST FELICIANA CO-OP	SLAUGHTER, LA	FM10

MAT_NAME=FENCING MATERIALS

NAME		CODE
ED'S FENCE CO.	ALEXANDRIA, LA	FM11
EVANGELINE BROKERAGE	CHURCH POINT, LA	FM12
FARMER'S CO-OP	FARMERVILLE, LA	FM13
FELICIANA FARMER'S CO-OP	CLINTON, LA	FM14
FELTUS BROS.	NATCHEZ, MS	FM15
HALCO	JACKSON, MS	FM16
HEARNE STEEL CO.	HEARNE, TX	FM17
HOLMES & BARNES	BATON ROUGE, LA	FM18
HURRICANE STEEL	HOUSTON, TX	FM19
KENTWOOD CO-OP	KENTWOOD, LA	FM20
LAFAYETTE FENCE CO.	LAFAYETTE, LA	FM21
LAWSON BROS.	MIDLOTHIAN, TX	FM22
MACK & ANDERS	FERRIDAY, LA	FM23
MISSOURI ROLLING MILL	ST. LOUIS, MO	FM24
ATIONAL FENCE CORP.	NEW ORLEANS, LA	FM25
GILCIE HOWE	SHREVEPORT, LA	FM26
ROBINSON FENCE CO.	BATON ROUGE, LA	FM27
ROYAL FEED & SEED	MONROE, LA	FM28
SCOTT FENCE CO.	NEW ORLEANS, LA	FM29
SOUTHERN STEEL & ALUM. CO.	METARIE, LA	FM30
SOUTHWESTERN CO-OP, INC.	BROUSSARD, LA	FM31
STANDARD SUPPLY CO.	LAKE CHARLES, LA	FM32
TITAN FENCE CO	HOUSTON, TX	FM33
TRI-PARISH CO-OP	SLAUGHTER, LA	FM34
U.S. STEEL CORP.	PITTSBURGH, PA	FM36
UNITED FENCE CO	BEAUMONT, TX	FM35

N=36

MAT_NAME=HERBICIDES

NAME		CODE
AMCHEM CO.	AMBLER, PA	HE01
CHEVRON CORP.	SAN FRANSISCO, CA	HE02
CIBA-GEIGY CORP	GREENSBORO, NC	HE03
CRYSTAL CORP.	HOUSTON, TX	HE04
DIAMOND SHAMROCK	HOUSTON, TX	HE05
DOW CHEMICAL CO	MIDLAND, MICH.	HE06
DUPONT CHEMICAL CO	WILMINGTON, DEL.	HE07
HERCULES, INC.	WILMINGTON, DEL	HE08
MONSANTO CHEM CO.	ST. LOUIS, MO	HE09
NALCO CHEM. CO.	CHICAGO, IL	HE10
RHODIA CORP.	SUMMERSET, NJ	HE11
SELLERS CHEM. CO.	NEW ORLEANS, LA	HE12
THOMPSON-HAYWARD	KANSAS CITY, MO	HE13
U.S. BORAX	LOS ANGELES CA	HE14
VELSICOL CHEM. CORP.	CHICAGO, IL	HE15
VINELAND CORP.	VINELAND, NJ	HE16

N=16

MAT_NAME=METAL PIPE

NAME		CODE
ANDERSON DUNHAM, INC.	BATON ROUGE, LA.	MP01
BAYOU CULVERT	CROWLEY, LA.	MP02
CALDWELL CULVERT	GREENVILLE, MISS.	MP03
CALDWELL CULVERT	JACKSON, MISS.	MP04
COASTAL CULVERT & SUPPLY	EUNICE, LA.	MP05
LOUISIANA INDUSTRIES	ALEXANDRIA, LA.	MP06
LOUISIANA METAL CULVERT(ARMCO)	BATON ROUGE, LA.	MP07
MACK & ANDERS CULVERTS	FERRIDAY, LA.	MP08

N=8

MAT_NAME=NON-QPL PAINTS

NAME		CODE
ADMIRAL PAINT CO., INC.	LAKE CHARLES, LA.	PA06
BALTIMORE PAINT & VARNISH CORP	BALTIMORE,MD	PA01
BYWATER SALES & SERVICE CO.	BELLE CHASSE, LA.	PA07
CATAPHOTE CORP.	JACKSON,MS	PA02
COATINGS DIV. OF PORTER PAINT CO.	BATON ROUGE, LA.	PA08
FARBOIL CO.	NEW ORLEANS, LA.	PA09
GLIDDEN-DURKEE	BATON ROUGE, LA.	PA10
IMPERIAL PROF. COATINGS CORP.	NEW ORLEANS, LA.	PA17
MATCOTE COMPANY, INC.	BATON ROUGE, LA.	PA03
MOBIL PAINT MFG. CO. INC.	THEODORE, AL.	PA11
NAPKO CORP.	NEW ORLEANS, LA.	PA12
OFFSHORE COATINGS CORP.	NEW ORLEANS, LA.	PA13
PPG INDUSTRIES, INC.	BATON ROUGE, LA.	PA14
PRISMO UNIVERSAL CORP.	PARISPPANY, NJ	PA04
SHERWIN-WILLIAMS CO.	BATON ROUGE, LA.	PA15
SIGMA COATINGS, INC.	HARVEY, LA.	PA18
SOUTHERN COATINGS & CHEMICAL	SLIDELL, LA.	PA16
WILLIAM ARMSTRONG SMITH	EAST POINT, GA	PA05

N=18

MAT_NAME=PAPER PRODUCTS

NAME		CODE
AMERICAN CAN CO.	GREENWICH, CONN.	PR01
BROWN COMPANY	BERLIN, N.H.	PR02
CAROLINA PAPER MILLS	ROCKINGHAM, N.C.	PR09
CLEVELAND COTTON CO.	CLEVELAND, OHIO	PR03
CROWN ZELLERBACH CORP.	SAN FRANCISCO, CALIF	PR04
ERVING PAPER MILLS	ERVING, MAINE	PR10
FORT HOWARD PAPER CO.	GREEN BAY, WISC.	PR05
GEORGIA PACIFIC PAPER CO.	STANFORD, CONN.	PR06
KIMBERLY CLARK CORP.	NEENAH, WISC.	PR07
SCOTT PAPER CO.	PHILADELPHIA, PENN.	PR08

MAT_NAME=PAPER PRODUCTS

NAME		CODE
THE KENDALL COMPANY	BOSTON, MASS.	PR11

N=11

MAT_NAME=PETROLEUM PRODUCTS

NAME		CODE
EXXON COMPANY	BATON ROUGE, LA.	PP01

N=1

MAT_NAME=PLASTIC PIPE

NAME		CODE
ADVANCED DRAINAGE SYSTEMS	ENNIS,TX	PL01
HANCOR,INC.	FINDLAY,OH	PL02

N=2

MAT_NAME=REINF & STRUCT STEEL & CASTING

NAME			CODE
ALABAMA STEEL CO.	BIRMINGHAM, ALA.		R001
ALEXANDRIA IRON WORKS	BIRMINGHAM ALA.		R002
ARMCO STEEL	CINCINNATI, OHIO		R004
ARMCO STEEL	KANSAS CITY, MO.		R003
ARMCO STEEL CORP.	HOUSTON, TX		R019
ATLANTIC STEEL	ATLANTA, GEORGIA		R022
ATLANTIC STEEL	X	X	R001
ATLANTIC STEEL	X	X	R002
ATLANTIC STEEL	X	X	R003
B. R. STEEL	SEATTLE, WASH.		R008
BETHLEHEM STEEL	BETHLEHEM, PA.		R005
BETHLEHEM STEEL	LOS ANGELES, CALIF.		R006
BETHLEHEM STEEL	SEATTLE, WASH.		R007
C F & I	PUEBLO, COLO.		R009
CAPITOL STEEL	PUEBLO, COLO.		R010
CARBO FOUNDRY	ALEXANDRIA, LA.	(CASTINGS)	R801
CHAPARRAL STEEL	MIDLOTHIAN, TX.		R011
CONFASCO. PO BOX 3098	NEW ORLEANS, LA		R201
DIBERT, BANCROFT & ROSS CO.	AMITE, LA.		R102
FLORIDA STEEL	TAMPA, FLORIDA		R021
GEORGETOWN STEEL	GEORGETOWN, S. C.		R012
HARPER FOUNDRY	JACKSON, MISS.	(CASTINGS)	R018
KAWATETSU WIRE PRODUCTS CO.	CHIBA, JAPAN		R020
LACLEDE STEEL SERVICE	ST. LOUIS, MO.		R013

MAT_NAME=REINF & STRUCT STEEL & CASTING

NAME		CODE
LAFAYETTE STEEL SERVICE	ST. LOUIS, MO.	R014
LULICH STEEL CORP.	NEW ORLEANS, LA.	R203
MISSISSIPPI STEEL	JACKSON, MISS.	R015
NORTHWESTERN STEEL & WIRE CO.	STERLING, ILLINOIS	R023
NORTHWESTERN STEEL AND WIRE CO.	STERLING, ILLINOISX	R004
SOUTHEAST STEEL AND WIRE CO.	JEFFERSON, LOUISIANA	R202
SOUTHERN INDUSTRIAL FAB.	JACKSON, MISS.	R017
SOUTHERN INDUSTRIAL STEEL	JACKSON, MISS.	R016
VULCAN FOUNDRY	DENHAM SPRINGS,LA. (CASTINGS)	R101

N=33

MAT_NAME=RUBBER GASKETS

NAME		CODE
BLUE RIDGE RUBBER CO.	HENDERSONVILLE, N. C.	RG01
HAMILTON KENT OF GEORGIA	STONE MOUNTAIN, GA.	RG02
OLIVER TIRE & RUBBER CO.	OAKLAND, CALIF.	RG03
SHELLER-GLOBE CORP.	DORAVILLE, GA.	RG04

N=4

MAT_NAME=TIMBER PLANTS

NAME		CODE
A & M WOOD TREATING	GREENWOOD, LA.	TP21
AMERICAN CREOSOTING WORKS	LOUISVILLE, MISS.	TP01
BENTON CREOSOTING WORKS	BENTON, LA.	TP02
COLFAX CREOSOTING	PINEVILLE, LA.	TP03
COLFAX LUMBER	COLFAX, LA.	TP20
DELTA TREATING CO.	GAUTIER, MISS.	TP04
DICKSON TREATING COMPANY	WINNFIELD, LA.	TP05
ELCO FOREST PRODUCTS	OPELOUSAS, LA.	TP18
EVR-WOOD CREOSOTING	JENNINGS, LA.	TP06
FERNWOOD INDUSTRIES	FERNWOOD, MISS.	TP07
HOLLAND WOOD PRESERVERS	LEARNED, MISS.	TP08
INTERNATIONAL PAPER CO.	DERIDDER, LA.	TP09
INTERNATIONAL PAPER CO.	WIGGINS, MISS.	TP22
JASPER CREOSOTING CO.	JASPER,TEXAS	TP10
KOPPERS COMPANY	GRENADA, MISS.	TP11
MADISONVILLE CREOSOTING WORKS	MADISONVILLE, LA.	TP12
MARION PRESSURE TREATING CO.	MARION, LA.	TP13
MAURIN LUMBER COMPANY	HAMMOND, LA.	TP14
MISSISSIPPI WOOD PRESERVING	BROOKHAVEN, MISS.	TP15
OLIVER TREATING COMPANY	HAMMOND, LA.	TP16
R & K CREOSOTE	NATALBANY, LA.	TP23
REDDELL CREOSOTED PRODUCTS	REDDELL, LA.	TP17
TEXARKANA WOOD PRESERVERS	TEXARKANA, TEX.	TP24

MAT_NAME=TIMBER PLANTS

NAME		CODE
WOOD TREATING INC.	PICAYUNE, MISS.	TP19

N=24

MAT_NAME=TRAFFIC CONES

NAME		CODE
A & B REFLECTORIZING CO.	ONTARIO, CALIF.	TC01
AMERICAN MOLDED PRODUCTS	SAUSALITO, CALIF.	TC02
CARSON MFG. CO.	SAUSALITO, CALIF.	TC08
EECOLITE DIVISION OF DPS, INC.	FOUNTAIN VALLEY, CALIF.	TC03
INTERSTATE DIV. ROYAL IND.	LOS ANGELES, CALIF.	TC04
RADIATOR SPECIALTY CO.	CHARLOTTE, N. C.	TC05
RICE MANUFACTURING CO.	VAN NUYS, CALIF.	TC06
TRI-TIX DIV. OF KELCH CORP	MEQUON, WISC.	TC07
WORK AREA PROTECTION CORP.	ADDISON, ILL.	TC09

N=9

8. LIST OF SUBMITTERS

CODE	NAME
0001	ADCO ENGRS. & PLANNERS
0002	AUCOIN, LINDSEY J. & ASSOCIATES
0003	BAKER-WIBBERLY & ASSOCIATES
0004	BARNARD, BURK, INC.
0005	BARNARD & BURK, HOWARD, NEEDLES, TAMMEN & BERGENDOFF
0006	BARNARD & THOMAS ENGINEERING, INC.
0007	BARRY, SIMMONS J.
0008	BEISWENGER, HOCH & ASSOCIATES, INC.
0009	BERGEON & LANG
0010	BREIT & GRACIA
0011	BROWN & BUTLER
0012	BOUDREAUX, PAUL C. & ASSOCIATES
0013	BUCKHART, HORN
0014	BURK & ASSOCIATES, INC.
0015	BURK & ASSOCIATES, INC & FROMHERZ ENGINEERS
0016	W. T. BURT III, ASST. MATERIALS ENGINEER
0017	CAFFERY, D. RALPH OR ASSOCIATES, INC.
0018	MATLAB INSPECTION UNIT - L. L. CAMARDELLE
0019	DAIGRE, LOUISE J. & ASSOCIATES OR DAIGRE, MEYERS & WATTS
0020	DAWSONS ENGINEERS, INC.
0021	DELAUREAL ENGINEERS, INC.
0022	DEMOPULOS-FERGUSON
0023	MATLAB INSPECTION UNIT - S. DICKSON
0024	DOMINGUE, SZABO & ASSOCIATES, INC.
0025	DORNBLATT, B. M. & ASSOCIATES, INC.
0026	EUSTIS ENGINEERING COMPANY
0027	EVANS, E. E. & ASSOCIATES, INC.
0028	FORTE & TABALADA
0029	FENSTEMAKER, C. H. & ASSOCIATES
0030	FOURNET, J. BRIANT & ASSOCIATES
0031	FRANKLIN & LIENHARD & MODJESKI & MASTERS
0032	FRANTZ, W. K. JR.
0033	FRIEDE & GOLDEN, INC.
0034	FROMHERZ, ENGINEERS
0035	GANDOLFO, KUHN & ASSOCIATES
0036	GODEAUX, MORGAN & ASSOCIATES
0037	GULF SOUTHERN ENGINEERS, INC.
0038	HACKETT & BAILEY
0039	MATLAB INSPECTION UNIT - H. HARVEY
0040	HARRIS & VARISCO
0041	MATLAB INSPECTION UNIT - L. J. TULLIER
0042	HECK, CARL ENGINEERS, INC.
0043	HEFT, G. A. & COMPANY
0044	MATLAB INSPECTION UNIT - ROY HICKS
0045	CHARLES M. HIGGINS, CONSTRUCTION MATERIALS ENGINEER
0046	HOWARD, NEEDLES, TAMMEN & BERGENDOFF
0047	JOFFRION & ASSOCIATES
0048	KERSTENS, J. C. & ASSOCIATES
0049	KREBS, J. J. & SONS, INC.
0050	LOWERY, JOHN L. & ASSOCIATES
0051	LYONS, J. W., RESEARCH & DEVELOPMENT ENGINEER
0052	MCCAIN, JOHN I. & ASSOCIATES
0053	MATLAB INSPECTION UNIT - A. MILLER, JR.
0054	MILLER, THOMAS & MILLER, INC.

CODE	NAME
0055	MINORITY ENGINEER OF LA., INC
0056	MODJESKI & MASTERS
0057	MOHR & ASSOCIATES
0058	MUNSON, G. K. PRATT
0059	N-Y ASSOCIATES
0060	NELSON, WALDEMAR S. & CO., INC.
0061	PALMER & BAKER ENGINEERS, INC.
0062	PAVLO, E. LIONEL ENGINEER CO.
0063	PEPPER & ASSOCIATES, INC.
0064	PERRAULT & PERRAULT, INC.
0065	PERRIN & ASSOCIATES, INC.
0066	PICCIOLA & ASOCIATES
0067	PLAISANCE, J. WAYNE, INC.
0068	PROFESSIONAL ENGINEERING CONSULTANTS CORPORATION
0069	REAMES, ELDWOOD & ASSOCIATES
0070	REID, R. L. & ASSOCIATES
0071	RUSHING, H. B., MATERIALS ENGINEER
0072	SELLERS, DUBROC & ASSOCIATES, INC.
0073	SMITH, T. BAKER & SONS, INC.
0074	STEWART, EASTON & ASSOCIATES
0075	SWITZER, ALBERT & ASSOCIATES
0076	TALBOT, DOUGLAS S.
0077	THERIOT, ALEX JR.
0078	THOMPSON & STIRLING
0079	VOLKERT, DAVID & ASSOCIATES
0080	THERIOT, HARRY, PROJECT ENGINEER
0081	MATLAB INSPECTION UNIT - ROBERT GUIN
0082	MATLAB INSPECTION UNIT - W. O. BLOCKER
0083	MATLAB INSPECTION UNIT - PHILLIP LOBELL
0084	MATLAB INSPECTION UNIT - WILLIAM DRAKE
0085	MATLAB INSPECTION UNIT - BILLY LAIRD
0086	MATLAB INSPECTION UNIT - LAWRENCE LAMBERT
0087	MATLAB INSPECTION UNIT - BEN MOULARD
0088	MATLAB INSPECTION UNIT - H. B. DUNCAN, JR.
0089	CENTRAL WAREHOUSE, BATON ROUGE
0090	TRAFFIC SERVICES, BATON ROUGE
0091	CENTRAL PURCHASING, BATON ROUGE
0100	LDOTD RES. INSP., C/O BELDEN CONC. PROD. CO., BARGE PLANT,METARIE,LA.
0101	LDOTD RES. INSP., C/O BELDEN CONC. PROD. CO., MAIN PLANT, METARIE, LA.
0102	LDOTD RES. INSP., C/O CONC. PIPE PROD. CO., LAKE CHARLES, LA.
0103	LDOTD RES. INSP., C/O CON-PLEX, INC., JACKSON, MISS.
0104	LDOTD RES. INSP , C/O DIAMOND CONSTRUCTION CO.
0105	LDOTD RES. INSP., C/O DUNHAM PRICE, INC., LAKE CHARLES, LA.
0106	LDOTD RES. INSP., C/O F & S PRESTRESS, INC., HAMPTON, ARK.
0107	LDOTD RES. INSP., C/O F & S PRESTRESS, INC., HATTIESBURG, MISS.
0108	LDOTD RES. INSP., C/O F & S PRESTRESS, INC., PRINCETON, LA.
0109	LDOTD RES. INSP., C/O F & S PRESTRESS, INC., SHREVEPORT, LA.
0110	LDOTD RES. INSP., C/O GULF COAST PRESTRESS, PASS CHRISTIAN, MISS.
0111	LDOTD RES. INSP., C/O LA. CONC. PROD. CO., PERKINS RD.,BATON ROUGE,LA.
0112	LDOTD RES. INSP., C/O LA. CONC. PROD. CO., PORT ALLEN, BATON ROUGE,LA.
0113	LDOTD RES. INSP., C/O LA. INDS. PRESTRESS PLANT, HARAHAN, LA.
0114	LDOTD RES. INSP., C/O LA. INDS., SHREVEPORT, LA.
0115	LDOTD RES. INSP., C/O MID-STATE PRESTRESS, WOODWORTH, LA.
0116	LDOTD RES. INSP., C/O PRESTRESSED CONC. PROD. CO., MANDEVILLE, LA.

CODE	NAME
0117	LDOTD RES. INSP., C/O J. T. RICHARDSON CO., RUSTON, LA.
0118	LDOTD RES. INSP., C/O BILOXI PRESTRESS CORP., BILOXI, MISS.
0119	LDOTD RES. INSP., C/O BOBBITT CORP., MANCHAC, LA.
0120	LDOTD RES. INSP., C/O MARINE CONCRETE STRUCT.,INC.,PORT BIENVILLE,MISS
0121	LDOTD RES. INSP., C/O WASKEY BRIDGES, INC., BATON ROUGE, LA.
0122	LDOTD RES. INSP., C/O HELDENFELS BROS., CORPUS CHRISTI, TEXAS
0123	LDOTD RES. INSP., C/O LA. PAVING CO., MANCHAC, LA.
0200	J. C. MCGREW, DISTRICT ENGINEER
0202	WILLIE T. TAYLOR, JR., ASST. DISTRICT ENGINEER (CONSTRUCTION)
0203	NATHAN M. CHILDS, ASST. DISTRICT ENGINEER (MAINTENANCE)
0204	L. A. TROCQUET, JR., ASST. MAINTENANCE ENGINEER (DISTRICT)
0205	JARVIS J. POCHE, DISTRICT LAB ENGINEER
0206	DISTRICT 02, FHWA AREA ENGINEER
0207	DISTRICT 02 BUSINESS MANAGER
0220	ROBERT ROTH-PROJECT ENGINEER
0222	JARVIS J. POCHE, DISTRICT LABORATORY ENGINEER
0223	STUART MCCARDLE-PROJECT ENGINEER
0224	ROBERT E. GUNTER-PROJECT ENGINEER
0225	RICHARD ROOD-PROJECT ENGINEER
0226	R. KENT DOYLE-RESIDENT CONSTRUCTION ENGINEER
0227	STUART MCCARDLE-PROJECT ENGINEER
0229	BOBBY HEBERT-RESIDENT CONSTRUCTION ENGINEER
0231	HERIBERTO RIVERA-PROJECT ENGINEER
0232	A. V. FLOTTE-RESIDENT CONSTRUCTION ENGINEER
0233	CITY OF NEW ORLEANS
0234	BEALL ENGINEERS
0300	W. C. VINCENT, DISTRICT ENGINEER
0301	JAMES R. NEEF, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0302	ALEX F. WATKINS, ASST. DISTRICT ENGINEER (MAINTENANCE)
0303	FRANCIS H. WYBLE, ASST. MAINTENANCE ENGINEER (DISTRICT)
0304	F. S. MOORE, DISTRICT LAB ENGINEER
0305	DISTRICT 03, FHWA AREA ENGINEER
0306	DISTRICT 03 BUSINESS MANAGER
0321	JOHN LEBLANC-RESIDENT CONSTRUCTION ENGINEER
0322	ALFRED FUSELIER-RESIDENT CONSTRUCTION ENGINEER
0323	MAGEE J. MOSS-RESIDENT CONSTRUCTION ENGINEER
0324	IRVIN L. DERANGER-RESIDENT CONSTRUCTION ENGINEER
0325	JOHN LEBLANC-RESIDENT CONSTRUCTION ENGINEER
0326	ANDREW G. QUIRK-PROJECT ENGINEER
0328	TEDDY J. BABIN-PROJECT ENGINEER
0329	JOHN W. ANDRUS-RESIDENT CONSTRUCTION ENGINEER
0374	BEALL ENGINEERS
0400	ROY E. MITCHELL, DISTRICT ENGINEER
0401	R. E. DILLON, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0402	WAYNE YATES, ASST. DISTRICT ENGINEER (MAINTENANCE)
0403	A. G. GARRETT, ASST. MAINTENANCEENGINEER (DISTRICT)
0404	CHARLES ADCOX, DISTRICT LAB ENGINEER
0405	DISTRICT 04, FHWA AREA ENGINEER
0406	DISTRICT 04 BUSINESS MANAGER
0420	HARRISON HANNON PROJECT ENGINEER
0421	JERRY BLACKBURN-RESIDENT CONSTRUCTION ENGINEER
0422	OLIVER BUHLS-RESIDENT CONSTRUCTION ENGINEER
0423	WARREN S BAUGH-ASSISTANT CONSTRUCTION ENGINEER
0424	OLIVER BUHLS-PROJECT ENGINEER

CODE	NAME
0425	HARRISON HANNON PROJECT ENGINEER
0428	JERRY BLACKBURN-RESIDENT CONSTRUCTION ENGINEER
0500	VAN WESTBROOK, DISTRICT ENGINEER
0501	LEWIS B. HOWE, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0502	R. K. MCKNEELY, ASST. DISTRICT ENGINEER (MAINTENANCE)
0503	ASST. MAINTENANCE ENGINEER (DISTRICT)
0504	DONALD L. TOLAR, DISTRICT LAB ENGINEER
0505	DISTRICT 05, FHWA AREA ENGINEER
0506	DISTRICT 05 BUSINESS MANAGER
0521	JAMES HOOGLAND-RESIDENT CONSTRUCTION ENGINEER
0522	RICHARD B PAULUS-RESIDENT CONSTRUCTION ENGINEER
0524	E. E. HALE, JR.,-RESIDENT CONSTRUCTION ENGINEER,OAK GROVE
0525	JIMMY C. WILLIAMSON-RESIDENT CONSTRUCTION ENGINEER
0527	E. E. HALE JR.-RESIDENT CONSTRUCTION ENGINEER
0529	E. E. HALE, JR.,-RESIDENT CONSTRUCTION ENGINEER,TALLULAH
0581	SAM D. COLE, III - PROJECT ENGINEER
0582	W. T. KAUFMAN-PROJECT ENGINEER
0584	PERRY APLIN, JR.-PROJECT ENGINEER
0585	PERRY APLIN, JR.-PROJECT ENGINEER
0590	EDGAR MITCHELL, DISTRICT ENGINEER
0591	HOUSTON CHAMPLIN, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0592	BILLY C. SHARP,ASST. DISTRICT ENGINEER (MAINTENANCE)
0593	C. N. WEST, DIST. LAB. ENGINEER IN TRAINING
0594	DISTRICT 58, FHWA AREA ENGINEER
0595	DISTRICT 58 BUSINESS MANAGER
0603	JOHN W. STARRING-RESIDENT CONSTRUCTION ENGINEER
0604	FREDRICK G. LANDRY-PROJECT ENGINEER
0605	FREDRICK G. LANDRY-PROJECT ENGINEER
0607	SYLVESTER ARNOLD-PROJECT ENGINEER
0608	FREDRICK G. LANDRY-PROJECT ENGINEER
0609	ROY J. DEJEAN, JR., PROJECT ENGINEER
0610	CARLISLE S. RICHARD, DISTRICT ENGINEER
0611	C. O. BEZARD, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0612	ROBERT MORALES, ASST. DISTRICT ENGINEER (MAINTENANCE)
0613	LOUIS WITTIE, ASST. MAINTENANCE ENGINEER (DISTRICT)
0614	EVERETT L. AUSTIN-PROJECT ENGINEER
0615	CECIL M. WATSON, DISTRICT LAB ENGINEER
0616	W. L. LANDON, JR.,-RESIDENT CONSTRUCTION ENGINEER
0617	H. W. BIGGS-PROJECT ENGINEER
0618	DISTRICT 61 BUSINESS MANAGER
0619	EVERETT L. AUSTIN-RESIDENT CONSTRUCTION ENGINEER
0620	GERALD FUSSELL-PROJECT ENGINEER
0621	JAMES A LITTLE - PROJECT ENGINEER
0622	LEEY MAPES-PROJECT ENGINEER
0623	H. P. DEKERLEGAND-PROJECT ENGINEER
0625	DAVID LANIER-PROJECT ENGINEER
0627	GERALD FUSSELL-RESIDENT CONSTRUCTION ENGINEER
0630	WALLCE L. ADAMS-RESIDENT CONSTRUCTION ENGINEER
0631	JAMES C. MOORE, DISTRICT ENGINEER
0632	ROBERT COOPER, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0633	MARION K. JOHNSTON, ASST. DISTRICT ENGINEER (MAINTENANCE)
0634	MAURICE JORDAN, ASST. MAINTENANCE ENGINEER (DISTRICT)
0635	EARLE F. WILSON, DISTRICT LAB ENGINEER
0636	DISTRICT 62, FHWA AREA ENGINEER

CODE	NAME
0637	DISTRICT 62 BUSINESS MANAGER
0700	OLIVIER BROUSSARD III, DISTRICT ENGINEER
0701	F. L. COX, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0702	GEORGE W. BASS, ASST. DISTRICT ENGINEER (MAINTENANCE)
0703	M. M. CRYER, ACTING DISTRICT LAB ENGINEER
0704	DISTRICT 07, FHWA AREA ENGINEER
0705	DISTRICT 07 BUSINESS MANAGER
0706	B J LANDRY, DISTRICT PUBLIC WORKS ENGINEER
0722	FITZHUGH L COX, RESIDENT CONSTRUCTION ENGINEER
0724	FITZHUGH L COX, RESIDENT CONSTRUCTION ENGINEER
0725	BURTON A. PLATT-PROJECT ENGINEER
0726	WILLIAM FONTENOT, JR., PROJECT ENGINEER
0728	LESTER J. LEBLANC, PROJ. ENGR.
0800	W. M. BYLES, DISTRICT ENGINEER
0801	BILLY C. DANIELS, ASST. DISTRICT ENGINEER (CONSTRUCTION)
0802	MELVEN JACKSON, ASST. DISTRICT ENGINEER (MAINTENANCE)
0803	WILLIE E. PUGH, JR., ASST. MAINTENANCE ENGINEER (DISTRICT)
0804	KENNETH J. ROY, DISTRICT LAB ENGINEER
0805	DISTRICT 08, FHWA AREA ENGINEER
0806	DISTRICT 08 BUSINESS MANAGER
0820	CLAYTON C. WEBB-PROJECT ENGINEER
0821	WAYNE MARCHAND-PROJECT ENGINEER
0822	DANIEL W. BRADFORD-PROJECT ENGINEER
0826	JESSIE LACHNEY - PROJECT ENGINEER
0827	T. G. WATTS-PROJECT ENGINEER
0828	BERNARD L. MAYEAUX, JR.,-PROJECT ENGINEER
0903	WILLIAM L HAYMON, SRD PROJECT DIRECTOR
9999	

N=244

9. LIST OF MATERIAL CODES

TABLE R-1: AGGREGATE CODES

NAME	CODE
FINE AGGREGATE FOR CONCRETE	201
GRADE A COARSE AGGREGATE(GRAVEL) FOR CONCRETE	202
GRADE A COARSE AGGREGATE (CRUSHED STONE) FOR CONCRETE	203
GRADE A COARSE AGGREGATE (CRUSHED SLAG) FOR CONCRETE	204
GRADE B COARSE AGGREGATE (GRAVEL) FOR CONCRETE	205
GRADE B COARSE AGGREGATE (CRUSHED STONE) FOR CONCRETE	206
GRADE B COARSE AGGREGATE (CRUSHED SLAG) FOR CONCRETE	207
GRADE D COARSE AGGREGATE (GRAVEL) FOR CONCRETE	208
GRADE D COARSE AGGREGATE (CRUSHED STONE) FOR CONCRETE	209
GRADE D COARSE AGGREGATE (CRUSHED SLAG) FOR CONCRETE	210
GRADE E COARSE AGGREGATE (GRAVEL) FOR CONCRETE	211
GRADE E COARSE AGGREGATE (CRUSHED STONE) FOR CONCRETE	212
GRADE Y LIGHTWEIGHT AGGREGATE FOR CONCRETE	213
SAND CLAY GRAVEL FOR BASE COURSE	214
SAND CLAY GRAVEL FOR BASE COURSE WITH CEMENT STABILIZATION	215
SAND CLAY GRAVEL BASE COURSE WITH LIME TREATMENT	216
SHELL FOR BASE COURSE	217
BINDER FOR SHELL BASE COURSE	218
WASHED GRAVEL FOR SURFACE COURSE	219
CRUSHED STONE FOR SURFACE COURSE	220
SAND CLAY GRAVEL FOR SURFACE COURSE	221
SHELL FOR SURFACE COURSE	222
BINDER FOR SHELL SURFACE COURSE	223
BINDER FOR GRAVEL OR CRUSHED STONE SURFACE COURSE	224
SIZE 1 CRUSHED GRAVEL FOR SURFACE TREATMENT	225
SIZE 1 CRUSHED STONE FOR SURFACE TREATMENT	226
SIZE 1 CRUSHED SLAG FOR SURFACE TREATMENT	227
SIZE 1 UNCRUSHED GRAVEL FOR SURFACE TREATMENT	228
SIZE 1 EXPANDED CLAY FOR SURFACE TREATMENT	229
SIZE 2 CRUSHED GRAVEL FOR SURFACE TREATMENT	230
SIZE 2 CRUSHED STONE FOR SURFACE TREATMENT	231
SIZE 2 CRUSHED SLAG FOR SURFACE TREATMENT	232
SIZE 2 UNCRUSHED GRAVEL FOR SURFACE TREATMENT	233
SIZE 2 EXPANDED CLAY FOR SURFACE TREATMENT	234
SIZE 3 CRUSHED GRAVEL FOR SURFACE TREATMENT	235
SIZE 3 CRUSHED STONE FOR SURFACE TREATMENT	236
SIZE 3 CRUSHED SLAG FOR SURFACE TREATMENT	237
SIZE 3 UNCRUSHED GRAVEL FOR SURFACE TREATMENT	238
SIZE 3 EXPANDED CLAY FOR SURFACE TREATMENT	239
SIZE 2 CRUSHED GRAVEL FOR SHOULDERS	240
SIZE 2 CRUSHED STONE FOR SHOULDERS	241
SIZE 2 CRUSHED SLAG FOR SHOULDERS	242
SIZE 2 UNCRUSHED GRAVEL FOR SHOULDERS	243
SIZE 2 EXPANDED CLAY FOR SHOULDERS	244
LIMESTONE DUST MINERAL FILLER	245
SILICA DUST MINERAL FILLER	246
SHELL DUST MINERAL FILLER	247
CEMENT STACK DUST MINERAL FILLER	248
SAND FOR MORTAR	249
GRANULAR MATERIAL	250
COARSE AGGREGATE (CRUSHED GRAVEL) FOR ASPHALTIC CONCRETE MIX	251
COARSE AGGREGATE (CRUSHED STONE) FOR ASPHALTIC CONCRETE MIX	252
COARSE AGGREGATE (CRUSHED SLAG) FOR ASPHALTIC CONCRETE MIX	253
CRUSHED CLAM SHELL FOR ASPHALTIC CONCRETE MIX	254

NAME	CODE
CRUSHED REEF SHELL FOR ASPHALTIC CONCRETE MIX	255
CRUSHED CLAM & REEF FOR ASPHALTIC CONCRETE MIX	256
EXPANDED CLAY FOR ASPHALTIC CONCRETE MIX	257
SCREENINGS FOR TYPE 3 WEARING COURSE	258
SAND EQUIVALENT FOR FINE SAND	259
SAND FOR SPECIAL EMBANKMENT	260
SHELL FOR SPECIAL EMBANKMENT	261
GRAVEL FOR SPECIAL EMBANKMENT	262
BIN NO. 1 FOR ASPHALTIC CONCRETE	263
BIN NO. 2 FOR ASPHALTIC CONCRETE	264
BIN NO. 3 FOR ASPHALTIC CONCRETE	265
BIN NO. 4 FOR ASPHALTIC CONCRETE	266
PEA GRAVEL FOR BACKFILL	267
BAG HOUSE DUST MINERAL FILLER	268
COARSE AGGREGATE FOR CLASS P MODIFIED CONCRETE FOR COMPOSITE DECK UNITS	269
FLY ASH MINERAL FILLER	270

TABLE R-2: ASPHALT CEMENT AND LIQUID ASPHALT CODES

MAT_NAME=ASPHALT CEMENT

NAME	CODE
ASPHALT CEMENT GRADE AC-5	205
ASPHALT CEMENT GRADE AC-20	220
ASPHALT CEMENT GRADE AC-30	230
ASPHALT CEMENT GRADE AC-40	240

MAT_NAME=LIQUID ASPHALT

NAME	CODE
RC-70 CUTBACK LIQUID ASPHALT	201
RC-250 CUTBACK LIQUID ASPHALT	202
RC-800 CUTBACK LIQUID ASPHALT	203
MC-30 CUTBACK LIQUID ASPHALT	211
MC-70 CUTBACK LIQUID ASPHALT	212
MC-250 CUTBACK LIQUID ASPHALT	213
SS-1 ANIONIC EMULSIFIED LIQUID ASPHALT	221
SS-1H ANIONIC EMULSIFIED LIQUID ASPHALT	222
CRS-2 CATIONIC EMULSIFIED LIQUID ASPHALT	231
CQS-1H CATIONIC EMULSIFIED LIQUID ASPHALT	241
CSS-1H CATIONIC EMULSIFIED LIQUID ASPHALT	251
CMS-2 CATIONIC EMULSIFIED LIQUID ASPHALT	261

TABLE R-3: CEMENT, STEEL BAR AND STEEL WIRE CODES

MAT_NAME=CEMENT

NAME	CODE
TYPE I PORTLAND CEMENT(MORE THAN 1 SAMPLE)	056
TYPE II PORTLAND CEMENT(MORE THAN 1 SAMPLE)	057
TYPE III PORTLAND CEMENT	058
TYPE IV PORTLAND CEMENT(MORE THAN 1 SAMPLE)	059
TYPE V PORTLAND CEMENT(MORE THAN 1 SAMPLE)	060
MASONRY CEMENT	061
TYPE IB PORTLAND CEMENT(MORE THAN 1 SAMPLE)	062
TYPE IP PORTLAND-POZZOLAN CEMENT(MORE THAN 1 SAMPLE)	063
TYPE I PORTLAND CEMENT(1 SAMPLE)	156
TYPE II PORTLAND CEMENT(1 SAMPLE)	157
TYPE IV PORTLAND CEMENT(1 SAMPLE)	159
TYPE V PORTLAND CEMENT(1 SAMPLE)	161
TYPE IB PORTLAND CEMENT(1 SAMPLE)	162
TYPE IP PORTLAND-POZZOLAN CEMENT(1 SAMPLE)	163

MAT_NAME=STEEL BAR

NAME	CODE
COLD DRAWN STEEL WIRE FOR CONCRETE REINFORCEMENT	082
GRADE 40 STEEL BAR FOR CONCRETE REINFORCEMENT	540
GRADE 60 STEEL BAR FOR CONCRETE REINFORCEMENT	560
GRADE 50 RAIL-STEEL BAR FOR CONCRETE REINFORCEMENT	650
GRADE 60 RAIL-STEEL BAR FOR CONCRETE REINFORCEMENT	660
GRADE 40 AXLE-STEEL BAR FOR CONCRETE REINFORCEMENT	740
GRADE 60 AXLE-STEEL BAR FOR CONCRETE REINFORCEMENT	760

MAT_NAME=STEEL WIRE

NAME	CODE
GRADE 250 SEVEN-WIRE STRAND FOR PRESTRESSED CONCRETE	250
GRADE 270 SEVEN-WIRE FOR PRESTRESSED CONCRETE	270
STRESS-RELIEVED WIRE PRESTRESSED CONCRETE	421

TABLE R-4: STRUCTURAL AND PAVING CONCRETE CODES

MAT_NAME=PAVING CONCRETE

NAME	CODE
TYPE B PAVING CONCRETE	101
CLASS A STRUCTURAL CONCRETE FOR PAVING	102
TYPE C PAVING CONCRETE	103
TYPE D PAVING CONCRETE	104
TYPE E PAVING CONCRETE	105
CLASS A MINOR CONCRETE FOR PAVING	111

MAT_NAME=STRUCTURAL CONCRETE

NAME	CODE
COMPRESSIVE STRENGTH FOR CLASS 'AA'	201
COMPRESSIVE STRENGTH FOR CLASS 'A'	202
COMPRESSIVE STRENGTH FOR CLASS 'D'	203
COMPRESSIVE STRENGTH FOR CLASS 'P'	204
COMPRESSIVE STRENGTH FOR CLASS 'R'	205
COMPRESSIVE STRENGTH FOR CLASS 'S'	206
COMPRESSIVE STRENGTH FOR CLASS 'W'	207
COMPRESSIVE STRENGTH FOR CLASS 'X'	208
COMPRESSIVE STRENGTH FOR CLASS 'Y'	209
COMPRESSIVE STRENGTH FOR CLASS 'AA'(MINOR)	210
COMPRESSIVE STRENGTH FOR CLASS 'A'(MINOR)	211
COMPRESSIVE STRENGTH FOR CLASS 'D'(MINOR)	212
COMPRESSIVE STRENGTH FOR CLASS 'P'(MINOR)	213
COMPRESSIVE STRENGTH FOR CLASS 'R'(MINOR)	214
COMPRESSIVE STRENGTH FOR CLASS 'S'(MINOR)	215
COMPRESSIVE STRENGTH FOR CLASS 'W'(MINOR)	216
COMPRESSIVE STRENGTH FOR CLASS 'X'(MINOR)	217
COMPRESSIVE STRENGTH FOR CLASS 'Y'(MINOR	218
COMPRESSIVE STRENGTH FOR CLASS 'A'(APPROACH SLAB)	219
COMPRESSIVE STRENGTH FOR CLASS 'AA(M)'	221
COMPRESSIVE STRENGTH FOR CLASS 'A(M)'	222

TABLE R-5: MISCELLANEOUS MATERIAL CODES

NAME	CODE
ADMIXTURES FOR CONCRETE	101
ALUMINIUM	102
ALUMINUM PASTE	103
ALUMINUM VEHICLE	104
ANTI-STRIPPING ADDITIVE	105
ASPHALT JOINT SEALER WITH MINERAL FILLER	181
ASPHALT RELEASE AGENT	176
BARBED WIRE	106
BARBED WIRE ARM	107
BITUMINOUS PIPE COATING	108
BLOCKS & BRICKS	109
BOLTS	110
BRUSH	200
CANTILEVER LOAD TRANSMISSION DEVICE	111
CAST IRON BAR	112
CATALYTICALLY BLOWN ASPHALT SEALER	182
CATTLE GUARD	202
CHAIN LINK FABRIC	113
CHAIR/BOLSTER	114
CLEANING COMPOUND	194
CLOTH	115
CONCRETE COMPRESSION TEST	193
CONCRETE CYLINDER MOLDS	116
CONCRETE PIPE	195
CREOSOTE	183
CURING COMPOUND	117
DEFORMED WELDED WIRE FABRIC	118
DIESEL FUEL	174
DOWEL BAR	175
DOWEL RACK ASSEMBLY	119
ELASTOMERIC BRIDGE BEARING PAD	120
ELASTOMERIC COMPRESSION JOINT SEAL	121
EPOXY	122
EPOXY ADHESIVE FOR PAVEMENT MARKERS	123
EXPANDED METAL (CARBON STEEL)	184
FABRIC BAND	124
FENCE POST	125
FENCE POST CAP	126
FERTILIZER	127
FIBERGLASS ROVING	128
FLEXIBLE PLASTIC GASKET	129
FORM RELEASE AGENT	203
FUEL OIL	179
GREASE	185
GROUND ROD ASSEMBLY	177
HERBICIDES - BRUSH AND WEED KILLER	178
HOT POURED ELASTICTYPE JOINT SEALER	130
HYDRAULIC JACK CALIBRATION	131
INDUSTRIAL WIPER	186
JOINT FILLER	132
LIME	133
LUBRICANT ADHESIVE	134
MANHOLE STEPS	135
MECHANICAL BUTT SPLICE-REBAR	187

NAME	CODE
MESH WIRE FOR FENCING	136
METAL PIPE	137
MINERAL FILLER	138
MISCELLANEOUS FENCE PARTS	139
MISCELLANOUS HARDWARE	198
NAILS	140
NUTS	141
OIL	188
PAINTS	142
PAPER TOWEL	180
PLAIN WELDED WIRE FABRIC	143
PLASTIC PIPE	196
PLASTIC PIPE	199
POLYETHELENE FILM	144
POLYETHELENE STRIP	145
POLYURETHANE JOINT SEALANT	189
PREFABRICATED MASONRY PADS	146
PREFORMED POLYETHELENE JOINT FILLER	147
PVC-COAL TAR ELASTIC TYPE JOINT SEALER	148
RAIL SLEEVE COUPLING	149
RAISED PAVEMENT MARKERS	150
ROOFING FELT	151
RUBBER GASKET	152
SIGNING MATERIAL	153
SILICONE ADDITIVE	173
SOLVENT	190
SPECIAL CONCRETE MASONRY FINISH	154
STAPLES	155
STARLUG ASSEMBLY	156
STEEL	157
STEEL FENCE POST	158
STEEL PIPE	159
STEEL SHEETING	160
STEEL SIGN POST	161
STRETCHER BAR	162
TEMPORARY PAVEMENT MARKING TAPE	163
TENSION WIRE	164
TOILET TISSUE	191
TOP RAIL	165
TORQUE WRENCH CALIBRATION	166
TOTAL ASH CONTENT	172
TRAFFIC CONES	192
TRAFFIC PAINT	197
UNDERSEALING ASPHALT	167
VITRIFIED CLAY PIPE	201
WASHERS	168
WATER	169
WIRE ROPE	170
WIRE TIES	171
ZINC COATED STEEL WIRE STRAND	204