PART H - STANDARD FORMS

This Part of the Manual shows examples of commonly used forms listed in alphabetical order.

FORM	PAGE IN PART H	SUBSECTION REFERENCE
Bituminous Concrete Nuclear Density Summary Sheet (LB-139)	H-30	E401.11
Checklist for Submission of Final Estimate (CN-28)	H-2	B12.06
Change Order Reason Codes	H-9	B10.10
Change Order Cover Sheet	H-10	B10.10
Change Order Item Remarks Report	H-11	B10.10
Coarse Aggregate Report (LB-31A)	H-35	E300.03
Concrete Compression Test Report (LB-44)	H-40	E501.07, E602.07
Concrete Cylinders Sampling Form (LB-7)	H-38, H-39	E501.07, E602.07
Concrete Cylinders Sampling Tag (LB-66)	H-36	E501.07, E602.07
Contractor's Two Week Schedule (CN-10)	H-5	B5.02
Core Drill Report (LB-75)	H-41, H-42	E501.08
Daily Construction Diary	H-3, H-4	C1.01
Daily Force Account (CN-42)	H-6	B10.09
Daily Quantity Sheet	H-7	C2.04
Federal-Aid Proper Pay Poster	H-19	B14.03
Federal-Aid Wage Information Poster	H-20	B14.03
Field Change Order Form	H-8	B10.10
Field Inspection Document (CN-78)	H-44	E602.04, E603.03
General Contractor's Certification of Payment (CN-91)	H-14	B12.02
Hot Mix Tonnage Needed for Release (CJE-1)	H-31, H-32	E401.11
Hot Mix Yields	H-59, H-60	H-33, H-34
Hot Mix Yield Check (CJE-2)	H-33, H-34	E401.11
Inspector's Daily Report	H-15, H-16	C1.01, E300.07
Material Inspection Report (LB-31)	H-26	C2.03
Materials and Research Sampling Report (LB-8A)	H-45	C2.03
Material Sampling Tag (LB-67)	H-25	C2.03
Monthly Field Estimate Form	H-13	B12.02
Monthly Report Form	H-21	C2.03
PCC & HM Pavement Projects Completion Report – By location (PMT-3)	H-66	
Piezometer Observations	H-46	F202528.01
Pile Driving Record	H-49, H-50	E619.10
Pile Driving Summary (CN-60)	H-51, H-52	E619.08
Portland Cement Concrete Ticket (LB-64)	H-37	E501.07, E602.07
Proposed Borrow Pit (LB-45)	H-27	C2.03
Reinforced Concrete Pipe Report (LB-10)	H-53, H-54	E202.08
Request for Contingency Increase/Decrease	H-17	B10.10
Routine Labor Relations Interview (CN-30)	H-18	B14.04
Seed and Nutrient Checklist (ES2M-1)	H-61 thru H-64	E734.05
Soil Analysis Report (LB-51)	H-28	E300.07
Soil Cement Ticket (LB-02)	H-36	C2.03
Source Document	H-12	C2.04
Source of Supply Form	H-65	
Summary of Field Density Tests (LB-12)	H-29	E300.07
Supplementary Core Drill Report	H-43	E501.18
Temporary Agreement to Trespass	H-22	B3.01
Test Pile Driving Record (CN-59)	H-47, H-48	E619.07
Test Rolling Record (CN-02)	H-55	E202.08
Traffic Control Devices (NDE-6)	H-56	C2.04
Traffic Markings Report (LB-52)	H-57, H-58	C2.03
Weekly Report Form	H-23, H-24	C2.03

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
CONSTRUCTION

CONTRACT NO._____

PROJECT NAME_____

DISTRICT_____

SUBMISSION BY_____

DATE_____

CHECK LIST FOR SUBMISSION OF FINAL ESTIMATE

CHECK ONE BLOCK OPPOSITE EACH ITEM

	SUBMITTED HEREWITH	SUBMITTED PREVIOUSLY	NOT REQUIRED
1. Estimate Form (Prepared as Final)			
2. "Clean Up" Change Order			
3. Estimates Book or Books (Prepared as Final)	RETAINED IN DISTRICT		
4. Construction Diary or Diaries	RETAINED IN DISTRICT		
5. "AS BUILT" Plans			
6. CN-91			
7. CN-102			
8. CN-103			
9. FHWA-47*			
10. Bonding Company Release			
11. Contractor & Subcontractors Payroll Submission Up to Date			

RECEIVED AND UP TO DATE

1.	**Materials Source Approvals**	☐ **Yes**	☐ **No**
2.	**Materials Certifications as Required**	☐ **Yes**	☐ **No**
3.	**Approval of ALL Subcontractors**	☐ **Yes**	☐ **No**

***Required on all Federal-Aid oversight Contracts <u>OVER</u> $1,000,000.00 on NHS roadways except Beautification Contracts.**

PLEASE SUBMIT THIS FORM WITH ALL FINAL ESTIMATES

CN-28 6/99

Revised: January 2004

Daily Construction Diary

DATE	CUMULATIVE DAYS	WEATHER	TEMPERATURE	UNUSUAL WEATHER NOTES
DAY OF WEEK	PREVIOUS		A.M.	
MONTH & DAY	THIS DAY		NOON	
YEAR	TOTAL		P.M.	

HIGHWAY PERSONNEL:

CONTRACTORS PERSONNEL & EQUIPMENT

	SUPT.	OFFICE	FOREMAN	SKILLED	IN-MED.	UNSKILLED			B. DOZERS	TRUCKS	GRADERS	GRADALLS	ROLLERS	PANS	CRANES	B. HOES	F.E. LOADER	PAVERS	TAMPS			PUMPS
LOCATION																						
TOTAL																						

UTILITIES PERSONNEL & EQUIPMENT

MATERIALS RECEIVED:

OFFICIAL INSPECTION & VISITORS:

Revised: January 2004

Daily Construction Diary

LOCATION	DESCRIPTION OF WORK DONE THIS DATE:

REMARKS:

REASON, IF FULL DAY NOT CHARGED:

RECORDED BY: _____ REVIEWED BY: _____
INSPECTOR IN CHARGE

CONTRACTOR'S TWO WEEK SCHEDULE

CONTRACT NUMBER: _____ CONTRACTOR: _____

CONTACT NAME: _____ DATE: _____

FOR WEEK BEGINNING MONDAY: _____ TO MONDAY: _____

ACTIVITY	LOCATION	M	T	W	T	F	S	S	M	T	W	T	F	S	S

REMARKS: _____

CN-10

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

DAILY FORCE ACCOUNT

Division_____ Date_____
Sta._____ Cont. No. & Name_____
Reason & Description of work_____

LABOR

Name of Employee	Class	Hrs.	Rate	Amount
			TOTAL LABOR	

MATERIALS	Quantity	Per Unit	
			TOTAL MATERIALS

EQUIPMENT	Make	Size	Hrs.	Rate	
				TOTAL EQUIPMENT	
				TOTAL FOR DAY	

APPROVED_____ **APPROVED**_____
(FOREMAN) CONTRACTOR **INSPECTOR**

CN-42 6/99

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
DAILY QUANTITY SHEET

CONTRACT NO._____**SHEET NO.**_____

ITEM NO._____

DATE	DESCRIPTION	QUANTITY THIS DATE	QUANTITY TO DATE

STATE OF DELAWARE
DEPARTMENT OF HIGHWAYS AND TRANSPORTATION
DIVISION OF HIGHWAYS

Change Order No.: _____

Contract Name: _____
Revised Plan Sheet: _____
Location Sta. No. _____ To Sta. No. _____
Contractor: _____
Desc. of Change: _____
Reason: _____

Contract No.: _____ Status: _____
Prepared By: _____
Prep. Date: _____
F.A.P. #: _____
Fed. Part. Req.: _____
If Not Give Reason: _____

Item/Suffix	Description	UOM	Proposal	Approved	Over/Under	Extra Work	Unit Price	Amount Inc./Dec.	Reason

Change Order Total _____

Number Days Ext./Red.: _____ Not Considered at This Time: _____

Total Extension: _____ Not Applicable in This Case: _____

Change Order Reason Codes

A	Requested by Safety Section
B	Requested by Stormwater Management
C	Requested by Legislator
D	Requested by External Affairs
E	Requested by District Maintenance
F	Requested by Property Owner
G	Added new item
H	Added quantity to existing item
I	Added quantity due to erosion
J	Replaced with new item
K	Replaced with another existing item
L	Item eliminated
M	Calculation error by designer
N	Overestimated quantity
O	Overestimated quantity on previous change order
P	Missing quantity- item shown on plans
Q	Additional utilities (Public)
R	Needed for utilities (Public)
S	Additional utilities (Private)
T	Needed for utilities (Private)
U	Value Engineering Proposal
V	Price adjustment
W	Other

12/02/98
16:42:29

PROJECT PAYMENT TRACKING
Change Order Header/Worksheet Report

Page: 1
PPTRI04C

Contract Name: BELLEVUE BIKE CONNECTOR & MARSH RD CROSSING, PED/BIKE FACILITIES
Revised Plan Sheet:
Location Sta. No : To Sta. No :
Contractor : EPB ASSOCIATES INC
Desc of Change: QUANTITY CHANGE IN (7) ITEMS, ADD (1) NEW.
Reason : SEE ATTACHMENTS.

Contract No: 96-200-05
Change Order: 4 Status: INTERIM
Prepared By: CHRIS COSTELLO
Prep Date : 12 / 2 / 98
FA Project Number: ETEA-N999(34)
Fed Participation Req: YES
If Not-Give Reason :

Item/Suffix	UOM	ITEM DESCRIPTION	Proposal Qty	Approved Qty	Under/Over Qty	Extra Work Qty	Unit Price	Amt of Inc/Dec
208000 00	C.Y.	EXCAVATION AND BACKFILL FOR PIPE TRENCHES						
Reason Code: H			578.00	-387.0500	0.4500		6.0000	2.70
210000 00	C.Y.	FURNISHING BORROW TYPE "C" FOR PIPE, UTILITY TRENCH, AND STRUCTURE BACKFILL						
Reason Code: H			246.00	-109.2100	5.3600		15.0000	80.40
401003 00	TON	HOT-MIX, HOT LAID BITUMINOUS CONCRETE PAVEMENT, TYPE C						
Reason Code: H			1621.00	-108.7400	1.3500		40.0000	54.00
401006 00	TON	HOT-MIX, HOT LAID BITUMINOUS CONCRETE PAVEMENT, TYPE C, PATCHING						
Reason Code: H			2.00	5.9600		12.2700	100.0000	1227.00
401502 00	TON	ASPHALT CEMENT COST ADJUSTMENT (NOT A BID ITEM)						
Reason Code: V					1.0000		-2462.5600	-2462.56
733002 00	S.Y.	TOPSOILING, 6" DEPTH						
Reason Code: H			27215.00	5350.0800	274.9200		1.0000	274.92
734017 00	S.Y.	TEMPORARY GRASS SEEDING, DRY GROUND						
Reason Code: H			17695.00	-10737.8900	2.8900		0.2500	0.72
735006 00	S.Y.	MULCHING, STRAW						
Reason Code: O			18421.00	9824.8800	-6682.8800		0.2500	-1670.72
999998 02	L.S.	ADDITIONAL PAVING						
Reason Code: G						1.0000	3193.1000	3193.10

*** Continued on Page 2 ***

12/02/98
16:42:30

PROJECT PAYMENT TRACKING
Change Order Header/Worksheet Report

Page: 2
PPTRI04D

Contract Name: BELLEVUE BIKE CONNECTOR & MARSH RD CROSSING, PED/BIKE FACILITIES
Revised Plan Sheet:
Location Sta. No : To Sta. No :
Contractor : EPB ASSOCIATES INC
Desc of Change: QUANTITY CHANGE IN (7) ITEMS, ADD (1) NEW.
Reason : SEE ATTACHMENTS.

Contract No: 96-200-05
Change Order: 4 Status: INTERIM
Prepared By: CHRIS COSTELLO
Prep Date : 12 / 2 / 98
FA Project Number: ETEA-N999(34)
Fed Participation Req: YES
If Not-Given Reason :

Item/Suffix	UOM	ITEM DESCRIPTION	Proposal Qty	Approved Qty	Under/Over Qty	Extra Work Qty	Unit Price	Amt of Inc/Dec

Correspondence:
ATTA 12 / 02 / 98 CORRESPONDENCE PACKAGE

Remarks:

Total: 699.56

FHWA:
Discussed with FHWA? N
Name:
Action: EXEMPT

No Days Ext/Red: CALENDAR DAYS
Total Extension:
Not Considered at this Time: X
Not Applicable in this Case:

Checked by: DPM 12-2-98

Contingency:	Total Percent	Undr/Over Percent	Extra Wrk Percent	Dollars
Contract Bid Price				646486.84
Change Orders to Date	-9.228 %	-4.377 %	-4.851 %	-59657.94
This Change Order	0.108 %	-0.575 %	0.683 %	699.56
Current Conting. Limit 4.998	-9.120 %	-4.952 %	-4.168 %	-58958.38
Estimated Final Cost				587528.46

Approved: Greg Wright Date: 12/29/98
District Construction Engr/Supv.

Accepted: Jack Bush Date: 12-22-98
Contractor

CHANGE ORDER ITEM REMARKS REPORT

Contract: 96-200-05 Change Order Number: 4
Name: Bellevue Bike Connector Page: 2

Item No: 208000 Description: Excavation and Backfill for Pipes
Quantity Change: + 0.45 cy Reason Code: H
REMARKS:

Final Quantity Adjustment to correct a calculation error.

Item No: 210000 Description: Furnish Borrow, Type C
Quantity Change: + 5.36 cy Reason Code: H
REMARKS:

Final Quantity Adjustment to correct a calculation error.

Item No: 401003 Description: Hot Mix, Type C
Quantity Change: + 1.35 Tons Reason Code: H
REMARKS:

Final Quantity Adjustment to correct a calculation error.

Item No: 401006 Description: Hot Mix, Type C patching
Quantity Change: + 12.27 Tons Reason Code: H
REMARKS:

Added quantity as a field change in order to stabilize the soft subbase in the shoulder of Marsh Road.

Contract No.	Field Measurements And	Source Document #
		By: Date:
Item:	Preliminary Calculations of Quantities	Entered In: Date:

CN-11 6/83

Doc. # 55-04/78/05/09

PAGE _____

CONTRACT # _____ MONTHLY EST. NUMBER _____

SUBMITTED BY _____

CLOSING DATE OF ESTIMATE:								
ITEM #	NAME	UNIT	UNIT PRICE	QUANTITY THIS EST.	DOLLAR AMT. THIS EST.	EST. BK #/PG	FEDERAL	NON-PART

Revised: January 2004

GENERAL CONTRACTOR'S CERTIFICATION OF PAYMENT

TO: _____,_____District Engineer
Department of Transportation

RE: Contract No._____
Contract (Name)

All moneys or funds received by a contractor in connection with the above contract are trust funds which must first be applied to the payment of the full amount (prorata, if applicable) of all moneys due and owing by the contractor to all persons furnishings labor or material for the above contract.

Partial or final payment for the above referenced contract was received by the contractor by means of the State's Estimate No._____on the day of _____199_____.

This is to certify that payment, in an amount equal to the full sum due at the state of the contract, has been made to all persons and/or subcontractors furnishing labor or materials pursuant to the performance of the this contract within Thirty (30) days of the receipt of the above described payments; except any funds legally withheld under the terms of the contract according to the same prorata formula which governs payment to the undersigned.

The undersigned certifies that all of the provisions of Title 17, Chapter 8 of the Delaware Code have been complied with. It is acknowledge that pursuant to 17 Del. C. 805, failure to comply with the aforesaid provisions is unlawful and may be punished by a fine not more than $1,000.00 or improvements not more than three (3) years or both.

Sworn to and Subscribed Before
Me this_____Day of _____, 199_____

_____
General Contractor

_____
Notary Public

_____
(Signature)

My Commission Expires:_____

_____
Title

_____
Date

CN-91 Revised 6/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

_____ DISTRICT
INSPECTORS DAILY REPORT

Contract Number _____ Date _____

Weather & Temp.	A.M.	Noon	P.M.

Personnel and Equipment (Contractors, Subcontractors and Utilities)

Contractor	Supt.	Office	Foreman	Skilled	Intermed.	Unskilled	Flagperson		F.E. Loader	Bulldozer	Trucks	Milling Mach.	Rollers	Broom Trac.	Cranes	Backhoes	Pavers	Grader	Tamps	Excavator	Pick-up		

Location and Description of Work	Section No.	Quantity

Revised: January 2004

Remarks

Sketches

Materials Received

Visitors

Inspector _____

Revised: January 2004

Request for Contingency Increase/Decrease

District Expressways	Date 8/11/98
Contract No. 98-077-01	F.A.P. No. : EIM - N060(5)
Contract Name I-495 & I-95 Joint Repair and Guardrail Replacement	

A review has been made to determine the immediate and projected needs required to complete the project as follows:

Award Value		= $510,936.07	0 %
Approved Change Orders (1&)	None		
Committed Changes:			
1. Adding additional 3000 L.F. Median Guardrail @ $20/L.F. End Treatment 2 @ $2500 each		= $ 60,000.00 = $ 5,000.00	
2. Due to added G/R, and existing slope, need to regrade area and install Maintenance strip @ $18/L.F. For 3200 L.F. (Please see attached E-Mail)		= $57,600.00	
	Subtotal	$122,600.00	24%
Projected Changes:			
	Anticipated Total	$633,536.07	24 %
			VS
	Current contingency Limit		5 %
Reasons: The Median Guardrail is installed on I-495 & I-95 location to prevent vehicular accidents crossing over the Median. There were few Cross-over incidences at locations where the guardrails were installed, and hence it was decided to extend the Median G/R where the Median width is less than 30'.			

All substantial minuses have been submitted or considered above. Based on this review, it is requested that the contingency be changed to: 24%

Recommended	Date			Approved	Date	

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

ROUTINE LABOR RELATIONS INTERVIEW

Project Name

1. Contractor or subcontractor (Employer)

2. Contract Number

Employee Statements

3. Name

4. Address

5.
Work Classification(s) _____
Wage Rate (s) Received _____
(If apprentice, give period of training)

6. Have you seen the posted minimum wage rates for this job? ☐ Yes ☐ No

7. Are you paid your full wages regularly each week without any deductions other than social security, income tax, U.S. Savings Bonds, medical or hospitalization insurance, or regular union initiation fees or membership dues? ☐ Yes ☐ No

8. Have you done work which you believe you should have been paid for at a higher rate i.e., have you been misclassified? ☐ Yes ☐ No

9. Additional Comments

Interviewer's Comments

10. Work employee was performing when interviewed.

11. Were minimum wage rates properly posted? ☐ Yes ☐ No

12. Other pertinent comments.

DATE	TIME	Title of Interviewer	Signature of Interviewer	DISTRICT

For use of Checker

13. Is above information in agreement with payroll data? ☐ Yes ☐ No
14. Is above information in agreement with requirements? ☐ Yes ☐ No

15. Additional Comments

Date of Check	Title	Signature

CN-30-5/74

DOCUMENT NO. 55-04/79/09/05

NOTICE TO ALL EMPLOYEES

Working on Federal or Federally Financed Construction Projects

MINIMUM WAGES

You must be paid not less than the wage rate in the schedule posted with this Notice for the kind of work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 a week. There are some exceptions.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, contact the Contracting Officer listed below:

or you may contact the nearest office of the Wage and Hour Division, U.S. Department of Labor. The Wage and Hour Division has offices in several hundred communities throughout the country. They are listed in the U.S. Government section of most telephone directories under:
U.S. Department of Labor
Employment Standards Administration

WH Publication 1321
Revised January 1986

U.S. Department of Labor
Employment Standards Administration
Wage and Hour Division

Revised: January 2004

U.S. Department of Transportation

Important

U. S. DEPARTMENT OF LABOR

Wage Rate Information
Federal-Aid Highway Project

Construction work on this project is subject to the minimum wage rate provisions of Section 113, Title 23, United States Code and the overtime wage provisions of the Contract Work Hours and Safety Standards Act.

As an employee of the contractor or a subcontractor, you are entitled to be paid not less than the hourly rate for the particular classification of work performed as set forth in the schedule affixed below.

The schedule affixed below contains no minimum wage rates for the following employees:

1. Apprentices properly registered under approved Federal or State apprenticeship programs. Each approved program contains the applicable rates.

2. Persons employed pursuant to apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting equal employment opportunity in connection with Federal-aid highway construction programs. Programs thus certified will set forth the rates applicable.

Call any failure to receive the required rates to the attention of the representative of the contracting agency shown below or the nearest representative of the Federal Highway Administration.

(State highway department representative)

Additional information may be obtained from the Federal Highway Administration, Washington, D.C. 20590.

Any communication should list the name, location, and type of project, the name of the contractor and his address, your name and address, and a statement of what you do, what rate you are paid, and what rate you think you should be paid.

(Attach Secretary of Labor minimum wage rate schedule)

Form FHWA-1495 (5-81)

PREVIOUS EDITIONS ARE OBSOLETE

Revised: January 2004

BofC/DIST	INSPECTOR	AWARD DATE	FIRST CHARG./DY.	TIME PROP.	TIME EXTENDED
		TIME CONSUMED	ACTION CO.	TARGET DATE	% PREVIOUS
					% COMPLETE

ACTIVITIES FOR THE MONTH OF

Revised: January 2004

TEMPORARY AGREEMENT TO TRESPASS

The Division of Highways requests your permission to trespass upon your property in order to perform work that is necessary under Contract No._____as described below:____

_____

_____

_____

_____

_____

This does not imply conveyance of any of your land. All work will be done at the expense of the State unless otherwise specified above.

DelDOT shall cause its Contractor to indemnify, defend and hold harmless owner and its agents from and against any costs or damage of any kind, including attorney fees arising out of the Contractors entry upon lands of owner. DelDOT shall cause its Contractor to leave property in pre-entry condition.

This Agreement shall terminate upon completion of the work. If the foregoing meets with your approval, please signify by signing this agreement.

_____	_____	_____
Property Owner' Name	Recommended By (Project Engineer/Supervisor)	Date
_____	_____	_____
Owner's Address	Approved (District Engineer/Assistant District Engineer)	Date
_____	_____	
Signature of Owner	Date	

cc: District Office
Right of Way Office
Project Engineer/Supervisor

Revised: January 2004

REPORT OF ACTIVE CONTRACTORS

CONTRACT NO. _____ WEEK ENDING _____

	PRIME CONTRACTOR												
	MONDAY												
	TUESDAY												
	WEDNESDAY												
	THURSDAY												
	FRIDAY												
	SATURDAY												
	SUNDAY												

DAILY TIME CHARGES

_____

		PREVIOUS TOTAL		
WEEKDAY	DATE	PORTION OF WORKING DAY	TOTAL TO DATE	COMMENTS
MONDAY				
TUESDAY				
WEDNESDAY				
THURSDAY				
FRIDAY				
SATURDAY				
SUNDAY				

PROJECT INSPECTOR _____

CONTRACTOR REPRESENTATIVE _____

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
_____ DISTRICT CONSTRUCTION

CONTRACT NO. _____ WEEKLY REPORT ENDING _____

CONTRACT NAME _____

CONTRACTOR _____

PROJ. INSPECTOR _____ % COMPLETE _____

PERTINENT ACTIVITIES:

PERSONNEL ASSIGNED TO PROJECT

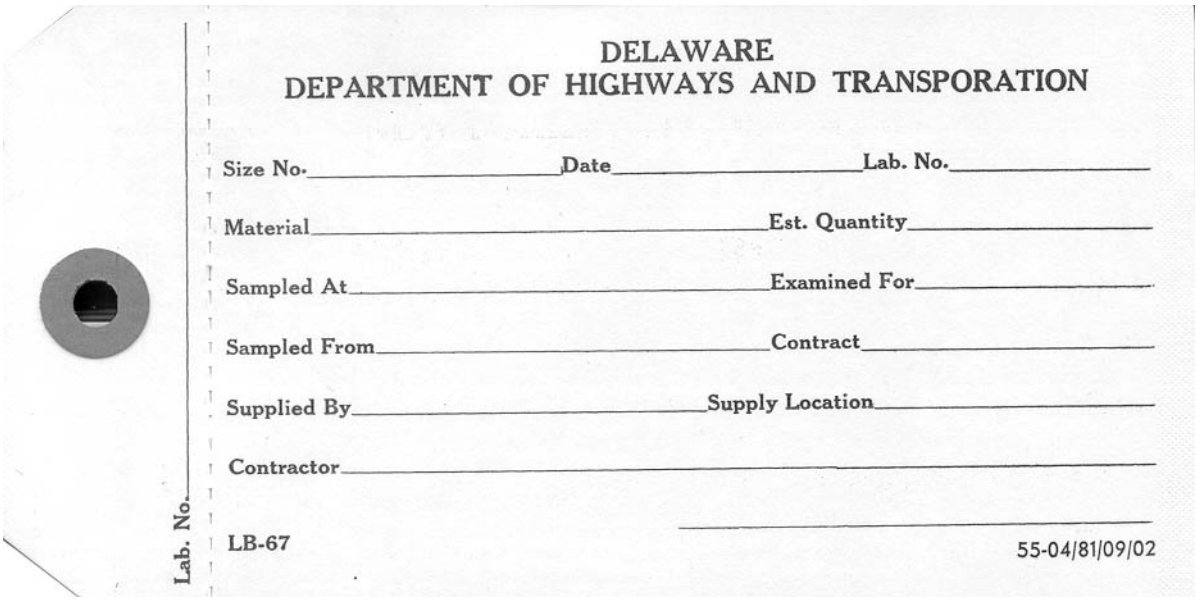
REMARKS:

PROJECT INSPECTOR _____

PROJECT MANAGER _____

CN-1(C)
55-04/96/02/13

Revised: January 2004



DELAWARE
DEPARTMENT OF HIGHWAYS AND TRANSPORATION

Size No._____ Date_____ Lab. No._____

Material_____ Est. Quantity_____

Sampled At_____ Examined For_____

Sampled From_____ Contract_____

Supplied By_____ Supply Location_____

Contractor_____

Lab. No._____

LB-67

55-04/81/09/02

Note: Originals of this tag, available in the field, are green.

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

MATERIAL INSPECTION REPORT

INSPECTION OF_____ DATE_____

CONTRACT_____

FURNISHED BY_____

FURNISHED FOR_____

___ The following material was inspected and accepted as of this date.

___ The following material was shipped from state inspected and approved stock.

REMARKS:

REPORTED BY _____

_____
ASST. CHIEF, MATERIALS AND RESEARCH

LB-31 6/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH
PROPOSED BORROW PIT

Owner_____
Pit Number_____
Contract_____
District_____

PIT DATE

Date Tested_____ Number of Test Holes_____
Ground Water At _____ Average Depth_____
Locations_____

REMARKS AND RECOMMENDATIONS

DATE_____ _____
SOILS ENGINEER

LB-45 6/99

Revised: January 2004

BUREAU OF
MATERIALS & RESEARCH

DELAWARE DEPARTMENT OF TRANSPORTATION

SOIL ANALYSIS REPORT

TEST NO._____

REPORTED BY:_____

_____

REVIEWED BY:._____

_____

Contract_____F.A. Project_____

Contractor_____Road_____

Location_____Depth _____

Elev. _____Source_____

Type & Use of Material_____

Method Placed_____Type of Sample_____

REMARKS_____

_____Date Sampled_____

Sampled by:

FOR LABORATORY USE ONLY-Location of Lab._____

Date Received_____Date Tested_____Test No. _____

PHYSICAL TEST CONSTANTS				
DATE:	**LIQUID LIMIT**	**PLASTIC LIMIT**	**MOISTURE**	**ORGANIC**
BOTTLE NO.:				
WT. WET SOIL & BOTTLE:				
WT. DRY SOIL & BOTTLE:				
WT. OF WATER LOST:				
WT. OF BOTTLE:				
WT. OF DRY SOIL:				
PERCENT OF WATER:				
BLOWS REQUIRED FOR CLOSURE:				
CORRECTED LIQUID LIMIT %:				

WT. PASSING NO. 10 SIEVE: (GRADATION)

		WT. OF WASH SAMPLE			
SIEVE	RT. WT.	RT. WT	TOTAL % RET	CORR % RET.	% PASSING
2 1/2" (63.5MM)					
2" (50 MM)					
1 1/2 (37.5 MM)					
1" (25.0 MM)					
1/4" (19.0 MM)					
1/2" (12.5 MM)					
3/8" (9.52 MM)					
No. 4 (4.75 MM)					
No. 10 (2.00 MM)					
No. 16 (1.18 MM)					
No. 40 (0.425 MM)					
No. 50 (0.300 MM)					
No. 60 (0.250 MM)					
No.100 (0.150 MM)					
No.200 (0.075 MM)					

SUMMARY

LIQUID LIMIT:

PLASTIC LIMIT:

PLASTICITY INDEX:

% SAND & GRAVEL:

% SILT:

% CLAY:

CLASSIFICATION:

SELECT GRADING (A to F):

C.B.R.

This sample _____conforms with the requirements of the specifications.
Materials represented by this sample has been _____for use.

REMARKS: _____
COMPARISON:_____

RANDOM SUPERVISOR:_____ _____
SOILS ENGINEER

JOB CONTROL SUPERVISOR:_____
(FOR RANDOM EVALUATION)

LB-51 6/99

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

SUMMARY OF FIELD DENSITY TESTS

Date_____

Contract_____ F.A. Project_____ Contractor_____

Testing Agency_____ Date Tested_____ Source of material_____

Type & Use of Material_____

Moisture-Density Relationship & Designation Method_____ Family of Curves Used_____

Test Hole Depth_____ Type of Test_____ Witnessed By & Division_____

Tested By Reviewed By

Location	Density Number	Elevation	Moisture Content	Optimum Moisture	% of Optimum Moisture	Dry Density of Total Material	Maximum Dry Density	% Gravel	Corrected Maximum Dry Density	Moisture Density Points		% Compaction	% Compaction Required	Base and Subbase Fin. Thickness	
										Dry Density	% Moisture			Obs'd	Req'd

REMARKS:

_____
Soils Engineer

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

BITUMINOUS CONCRETE
NUCLEAR DENSITY SUMMARY SHEET

CONTRACT NO._____ DATE _____

PLANT_____ TYPE OF MIX _____

C.A. SOURCE _____ F.A. SOURCE _____

SAND SOURCE_____ ASPHALT SOURCE_____

OPERATOR_____ AIR TEMP._____

PLANT MARSHALL_____ CORRECTION FACTOR_____

SER. NO. GAUGE_____ AVG. STANDARD COUNT_____ THICKNESS_____

Date Tested	Test No.	Location	% Compaction	% Compaction Required

REMARKS:

Reported By_____

_____
Soils Engineer

LB-139 6/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

HOT MIX TONNAGE
NEEDED FOR RELEASE
(ENGLISH)

Contract #_____ Date:_____

Location:_____

STA. _____ to STA._____

---

(1) Total surface Area to be Paved _____sq. yards
(Do calculations on back of this form)

(2) Thickness_____in

(3) Type of Hot Mix_____

(4) Conversion Factor_____sq. yards/U.S. Ton

(5) Hot Mix Tonnage Released = $\frac{(1)}{(4)}$ =_____U.S. Tons

Actual Tonnage Placed =_____Tons (total tickets)

Deviation:_____%

Comments:

DELDOT Inspector:_____

Contractor Representative_____

CJE-1 3/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

HOT MIX TONNAGE
NEEDED FOR RELEASE
(METRIC)

Contract #_____ Date:_____

Location:_____

STA. _____ to STA._____

---

(1) Total surface Area to be Paved _____m^2
(Do calculations on back of this form)

(2) Thickness_____mm

(4) Type of Hot Mix_____

(4) Conversion Factor_____m^2/metric ton

(5) Hot Mix Tonnage Released = $\frac{(1)}{(4)}$ x 1.1023 =_____U.S. Tons

Actual Tonnage Placed =_____Tons (total tickets)

Deviation:_____%

Comments:

DELDOT Inspector:_____

Contractor Representative_____

CJE-1 3/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

HOT MIX YIELD CHECK
(ENGLISH)

Contract #_____ Date:_____

Location:_____

Hot Mix Type:_____

(1) Conversion Factor:_____sq. yards/U.S. Ton (from H-59)

(2) Lane width_____yards

(3) ___(1)____sq. yards/U.S. Ton =_____linear yards / U.S. Ton
(2) yards

LOAD #	WT. (LBS)	WT. (US TONS)

U.S. Tons x _____(3)____linear yards/U.S. Ton = _____yards

Actual Length_____yards

% Deviation _____

Comments:

Inspector_____

CJE-2 3/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

HOT MIX YIELD CHECK
(METRIC)

Contract #_____ Date:_____

Location:_____

Hot Mix Type:_____

(1) Conversion Factor:_____m^2/metric ton (from H-60)

(2) Lane width_____m

(3) ___(1)___m^2 /metric tons_____linear meters / metric tons
(2) m

LOAD #	WT. (LBS)	WT. (US Tons)	x 0.907 = Metric Tons

metric tons x__(1/3)____ linear meters/ metric ton = _____meters

Actual Length_____meters

% Deviation _____

Comments:

Inspector_____

CJE-2 3/99

Revised: January 2004

DELAWARE DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

COARSE AGGREGATE REPORT

Date Received_____

Date Tested_____

Tested By_____

Job Control Supv._____

Ass't. M & R Eng._____

Size No._____Date_____Lab No._____

Material_____Est. Quantity_____

Sampled At_____Examined For_____

Sampled From_____Contract_____

Supplied By_____Supply Location_____

Contractor_____

Sieve Size	Lab # Weight Passing	% Retained	% Passing	Lab # Weight Retained	% Retained	% Passing
Pan						
Total						
Sieve Size	Lab # Weight Passing	% Retained	% Passing	Lab # Weight Retained	% Retained	% Passing
Pan						
Total						

Random Evaluation Comparison_____

_____Random Supv._____

Remarks:_____

_____

This sample_____conforms with the requirements of the specifications. Material represented by this sample has been _____for use.

LB-31A 6/99

DELAWARE
DEPARTMENT OF HIGHWAYS AND TRANSPORTATION
CONCRETE CYLINDERS

Date.....Section.....Lab No.....
Furnished By.....Location.....
Station Location.....
Type Mix.....Slump.....
Cement.....Water.....
F.A.....C.A.....
Admixture.....% Air.....
Contract.....Contractor.....
Received.....# Sacks.....

.....
LB-66 Inspector

SOIL CEMENT TICKET
DELAWARE DEPT. OF TRANS.
Materials & Research

Date _____
Contract _____
Contractor _____

Plant Inspector _____
Percent Cement _____
Borrow Source _____
Time Mixed _____

Job Inspector _____
Location _____
Time Placed _____

Air Temp _____
Weight _____
Truck No. _____

LB-02 55-04-92-03-02

Revised: January 2004

English

P.C. CONCRETE TICKET

Plant_____ Date _____

Contract No. _____

Contractor_____

Cu. Yds._____ Sect. Or Class_____ Truck No._____

Brand ADMIX. _____ Amount _____ oz/sk.

Brand ADMIX. _____ Amount _____ oz/sk.

Brand AEA _____ Amount _____ oz/sk.

Time Plant
Mixer Charged _____m. Inspector _____

Time Construction
Concrete Placed_____m. Inspector _____

Elapsed Time _____ St.# _____

Air Temp. ____Conc.Temp.____Slump in._____Air %____

Tot. Water at Plant _____ gal X 8.33 = A_____ lbs

Tot. Cement at Plant = B_____ lbs

Water Cement Ratio at Plant = A / B = _____

Water added at Job_____ gal X 8.33 = C_____ lbs

Water Cement Ratio on Job= A + (C / B) = _____

LB-64 (Revised 84)

Metric

P.C. CONCRETE TICKET

Plant_____ Date _____

Contract No. _____

Contractor_____

Cu. Meters._____ Sect. Or Class_____ Truck No._____

Brand ADMIX. _____ Amount _____ mL/sk.

Brand ADMIX. _____ Amount _____ mL/sk.

Brand AEA _____ Amount _____ mL/sk.

Time Plant
Mixer Charged _____m. Inspector _____

Time Construction
Concrete Placed_____m. Inspector _____

Elapsed Time _____ St.# _____

Air Temp. ____Conc.Temp.____Slump mm._____Air %____

Tot. Water at Plant _____ L = A_____ kg

Tot. Cement at Plant = B_____ kg

Water Cement Ratio at Plant = A / B = _____

Water added at Job_____ L = C_____ kg

Water Cement Ratio on Job= A + (C / B) = _____

LB-64 (Revised 84)

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS AND RESEARCH
(ENGLISH)

Contract No. _____ Plant _____ Date _____

Source of Materials: Cement _____ 50/65% Sand _____

GGBFS _____ 50/35% Course Agg _____

Brand AEA _____ Corr. Factor -.3 _____

Time Charged	Time Cyls. Made	Trk #	Class & Section No.	Location Station Lane No. C/L	Slump In.	% Air	AEA Amt/ Oz/Sk	Conc. Temp.	Air Temp.	Oz/Sk	Admixtures

Circle Size

No. Cyls. Made _____ Break Request Hours/Days _____ 4 in. x 8 in. _____ 6 in. x 12 in _____

REMARKS: _____

_____

Contractor _____

Sub-Contractor _____

NOTE: Ground Granulated Blast - Furnace Slag Sampled By _____

LB-7 (Revised 3/02)

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS AND RESEARCH
(METRIC)

Contract No. _____ Plant _____ Date _____

Source of Materials: Cement _____ 50/65% Sand _____

GGBFS _____ 50/35% Course Agg _____

Brand AEA _____ Corr. Factor -.3 _____

Time Charged	Time Cyls. Made	Trk #	Class & Section No.	Location Station Lane No. C/L	Slump mm.	% Air	AEA Amt/ mL/Sk	Conc. Temp.	Air Temp.	mL/Sk	Admixtures

Circle Size

No. Cyls. Made _____ Break Request Hours/Days _____ 100 mm x 200 mm. _____ 150 mm x 300 mm _____

REMARKS: _____

_____

Contractor _____

Sub-Contractor _____

NOTE: Ground Granulated Blast - Furnace Slag Sampled By _____

LB-7M(Revised 3/02)

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

COMPRESSION TEST REPORT (AASHTO T-22)(ASTM C-39/39M) (ASTM C-1231)

TEST NO.....
CONTRACT NO.....
CONTRACTOR.....
CONCRETE SUPPLIER.....
SECTION NO.....
CLASS.....
CEMENT (SKS/CY).....

MATERIALS USED
CEMENT.....
FINE AGG.....
COARSE AGG.....
ADMIX 1.....
ADMIX 2.....
A.E.A.....
WATER.....

DATE MADE .....
DATE REC 7 & 28.....
DATE EARLY REC.....
STATION.....
MADE BY.....
SLUMP.....
% AIR.....
AIR TEMP.....
CONCRETE TEMP.....
CEMENT2.....

DATE TESTED	CYLINDER AGE	PSI	MPA
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8

TYPE OF BREAK

1	2	3	4	5	6	7	8

REMARKS .....

REPORTED BY: _____

REVIEWED BY: _____

DATE: _____

COMPARISON: _____

RANDOM SUPERVISOR: _____

CONCRETE SUPERVISOR: _____

MATERIALS ENGINEER: _____

LB 44 (REVISED 7/30/95)

DELDOT MATERIALS & RESEARCH

Revised: January 2004

DELAWARE DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH
CORE DRILL REPORT
(ENGLISH)

DATE: _____

CONTRACT: _____ F.A. PROJECT: _____

LOCATION: _____

CONTRACTOR: _____

DATE DRILLED: _____

CORE NO.	STATION NO.	DISTANCE From Center Line (in)	REQUIRED DEPTH (in)	ACTUAL DEPTH (in)	REMARKS

REMARKS: _____

_____

_____

DRILLED BY: _____

_____
MATERIALS & RESEARCH ENGINEER

cc:

LB-75
DELAWARE DEPARTMENT OF TRANSPORTATION

Revised: January 2004

MATERIALS & RESEARCH
CORE DRILL REPORT
(METRIC)

DATE: _____

CONTRACT: _____ F.A. PROJECT: _____

LOCATION: _____

CONTRACTOR: _____

DATE DRILLED: _____

CORE NO.	STATION NO.	DISTANCE From Center Line (mm)	REQUIRED DEPTH (mm)	ACTUAL DEPTH (mm)	REMARKS

REMARKS: _____

_____

_____

DRILLED BY: _____

_____
MATERIALS & RESEARCH ENGINEER

cc:

LB-75

Revised: January 2004

DEPARTMENT OF TRANSPORTATION
MATERIALS AND RESEARCH
SUPPLEMENTARY CORE DRILL REPORT
(DEFICIENT THICKNESS)

DATE: _____
CONTRACT: _____ SECTION NO: _____
CONTRACTOR: _____
DATE DRILLED: ROUTINE CORE _____ CHECK CORE _____
DRILLED BY: ROUTINE CORE _____ CHECK CORE _____
MEASURED BY: ROUTINE CORE _____ CHECK CORE _____
MEASUREMENTS CHECK BY _____

SUMMARY

CORE #	STATION	DIST.C.L.	REQUIRED DEPTH	ACTUAL DEPTH	AVERAGE DEPTH	REMARKS
				TOTAL OF ROUTINE CORE & 2 CHECK CORES		
				AVERAGE THICKNESS		

MEASUREMENTS INDICATE A DEDUCTION IN CONTRACT UNIT PRICE _____
BE REQUIRED FOR THE UNIT REPRESENTED BY THE ROUTINE CORE TAKEN AT
STATION _____

BEGINNING OF UNIT -STATION:..... _____
END OF UNIT –STATION:..... _____
WIDTH OF UNIT:..... _____
AREA OF CONCRETE REPRESENTED: ..... _____ (A)
PROPORTIONAL PART OF CONTRACT UNIT PRICE
ALLOWED FOR PAYMENT:..... _____ (B)
CONTRACT UNIT PRICE:..... _____ (C)
DEDUCTION = (AxC – BxAxC) =..... _____

REMARKS: _____
_____

_____
MATERIALS & RESEARCH ENGINEER

LB-75A

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

FIELD INSPECTION DOCUMENT
(For Estimated Fixed Quantity Items)

Contract #: _____
Date: _____

This documents to the record that the following inspection was performed in a sound engineering manner to the extent which my judgment deemed necessary:

☐ Forms for P.C.C. Masonry

☐ Rebars for P.C. C. Masonry

☐ _____

(Mark one)

☐ Estimated fixed quantity item

☐ _____

Location and/or description of inspected work

_____

_____

(Mark one)

☐ The work reasonably conformed to the plans, specifications or applicable approved changes.

☐ _____

Signed _____

CN-78 6/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

Test No._____ **Contract**_____
Sample of_____ **Date sampled** _____
Sampled by_____ **Date received** _____
Contractor_____ **Date tested**_____
Manufacturer_____ **Quantity represented**_____
Supply Location _____ **Examined for** _____

REMARKS:

This sample_____conform with the requirements of the specifications.
Material represented by this sample has been_____.

Tested By_____

Reported By_____

_____
Laboratory Manager

LB-8A 6/99

Revised: January 2004

DELAWARE DEPARTMENT OF TRANSPORTATION

_____ DISTRICT SHEET NO. _____

CONTRACT NO. _____ DATE _____

PIEZOMETER OBSERVATIONS

PIEZ. NO.	PIEZ. GROUP TYPE	TIME OF DAY	ELEV. TOP OF RISER	W.L. ABOVE RISER	TUBE LENGTH ABOVE RISER	SOUNDER READING W.L. (Below top of Tube)	W.L. ELEV.

TIDE WATER READINGS TIME	ELEV.

WEATHER CONDITION ON DAY OF OBSERVATION

_____

_____

OBSERVATIONS MADE BY

_____

Revised: January 2004

DELAWARE DEPARTMENT OF TRANSPORTATION
TEST PILE DRIVING RECORD
(ENGLISH)

DATE_____ SHEET _____ OF _____

		DEPTH OF TIP (ft)	NO. OF BLOWS PER METER	HAMMER INFORMATION	COMPUTED BEARING (US TONS)	REMARK: (Splice, pre-drill auger, obstruction breakdown, jetting, refusal, etc.)
PROJECT	NUMBER_____ DIVISION_____ LOCATION_____ _____ CONTRACTOR_____					
	Reference Point Elevation:					
HAMMER	TYPE_____ MAKE & MODEL_____ WEIGHT OF STRIKING PARTS:_____ _____ lb RATED ENERGY: _____ lbf-ft @ _____ blows / min _____ lbf-ft per blow @ _____ ft					
PILES	TYPE _____ NUMBER_____ STRUCTURAL UNIT_____ TIP DIA. _____ BUTT DIA. _____ in GAGE NO. _____ in REQUIRED BEARING _____US ton REQUIRED PENETR. _____ ft PLAN LENGTH _____ ft LENGTH IN LEADS 1) _____ ft 2) _____ ft TOTAL _____ft GROUND ELEVATION _____ ft TIP ELEVATION _____ ft CUT -OFF LENGTH _____ ft FINAL PILE LENGTH _____ ft TOTAL DRIVING TIME _____ min					
INSTRUCTIONS	HAMMER INFORMATION to be with each blow count: 1. Single-acting and gravity: Average fall of hammer 2. Double-acting and differential-acting: Blows per minute 3. Enclosed-ram diesel hammer: record bounce chamber pressure indication under remarks:					
	Inspector in charge: _____ Recorder: _____ Distribution Instructions: Original - Bridge Engineer 1 copy - Division Engineer 1 copy - Construction Engineer 2 copies - Project Field Office					

CN-59 Revised 3/02 Use additional sheets as required

Revised: January 2004

DELAWARE DEPARTMENT OF TRANSPORTATION
TEST PILE DRIVING RECORD
(METRIC)

DATE_____ SHEET _____ OF _____

PROJECT	DEPTH OF TIP (m)	NO. OF BLOWS PER METER	HAMMER INFORMATION	COMPUTED BEARING (METRIC TONS)	REMARK: (Splice, pre-drill auger, obstruction breakdown, jetting, refusal, etc.)
NUMBER_____ DIVISION_____ LOCATION_____ _____ CONTRACTOR_____ Reference Point Elevation:					
HAMMER TYPE_____ MAKE & MODEL_____ WEIGHT OF STRIKING PARTS:_____ _____ kg RATED ENERGY: _____ kJ @ _____ blows / min _____ kJ per blow @ _____ m					
PILES TYPE _____ NUMBER_____ STRUCTURAL UNIT_____ TIP DIA. _____ BUTT DIA. _____ mm GAGE NO. _____ mm REQUIRED BEARING _____metric ton REQUIRED PENETR. _____ m PLAN LENGTH _____ m LENGTH IN LEADS 1) _____ m 2) _____ m TOTAL _____m GROUND ELEVATION _____ m TIP ELEVATION _____ m CUT -OFF LENGTH _____ m FINAL PILE LENGTH _____ m TOTAL DRIVING TIME _____ min					
INSTRUCTIONS HAMMER INFORMATION to be with each blow count: 1. Single-acting and gravity: Average fall of hammer 2. Double-acting and differential-acting: Blows per minute 3. Enclosed-ram diesel hammer: record bounce chamber pressure indication under remarks:					
Inspector in charge: _____ Recorder: _____ Distribution Instructions: Original - Bridge Engineer 1 copy - Division Engineer 1 copy - Construction Engineer 2 copies - Project Field Office					

CN-59 Revised 3/02 Use additional sheets as required

DELAWARE STATE HIGHWAY DEPARTMENT

DATE _____

BRIDGE SECTION
(ENGLISH)

PILE DRIVING RECORD

FOUNDATION FOR_____

CONTRACTOR_____ TYPE OF PILE_____

FOOTING NO._____ TIP DIAM. _____ BUTT DIAM._____

PILE NO. _____ LENGTH OF PILE AS DRIVEN _____

DRIVING RIG NO. _____ ELEVATION OF GROUND _____

TYPE OF HAMMER _____ ELEVATION OF CUT-OFF _____

ENERGY:_____LB-F-FT @_____BLOWS/MIN_____ ELEVATION OF TIP _____

AVERAGE BLOWS PER MIN. _____ PAY LENGTH: PILE_____CUT-OFF_____

ft OF PENETR'N	BLOWS PER ft	ft OF PENETR'N	BLOWS PER ft	ft OF PENETR'N	BLOWS PER ft	ft OF PENETR'N	BLOWS PER ft	REMARKS
1		26		51		76		
2		27		52		77		
3		28		53		78		
4		29		54		79		
5		30		55		80		
6		31		56		81		
7		32		57		82		
8		33		58		83		
9		34		59		84		
10		35		60		85		
11		36		61		86		
12		37		62		87		
13		38		63		88		
14		39		64		89		
15		40		65		90		
16		41		66		91		
17		42		67		92		
18		43		68		93		
19		44		69		94		
20		45		70		95		
21		46		71		96		
22		47		72		97		
23		48		73		98		
24		49		74		99		
25		50		75		100		

PILE DRIVING INSPECTOR_____

CONSTRUCTION SUPERVISOR_____

Revised: January 2004

DELAWARE STATE HIGHWAY DEPARTMENT

BRIDGE SECTION

DATE _____

(METRIC)

PILE DRIVING RECORD

FOUNDATION FOR _____

CONTRACTOR _____ TYPE OF PILE _____

FOOTING NO. _____ TIP DIAM. _____ BUTT DIAM. _____

PILE NO. _____ LENGTH OF PILE AS DRIVEN _____

DRIVING RIG NO. _____ ELEVATION OF GROUND _____

TYPE OF HAMMER _____ ELEVATION OF CUT-OFF _____

ENERGY: _____ kJ @ _____ BLOW/MIN. _____ ELEVATION OF TIP _____

AVERAGE BLOWS PER MIN. _____ PAY LENGTH: PILE _____ CUT-OFF _____

m OF PENETR'N	BLOWS PER m	m OF PENETR'N	BLOWS PER m	m OF PENETR'N	BLOWS PER m	m OF PENETR'N	BLOWS PER m	REMARKS
1		26		51		76		
2		27		52		77		
3		28		53		78		
4		29		54		79		
5		30		55		80		
6		31		56		81		
7		32		57		82		
8		33		58		83		
9		34		59		84		
10		35		60		85		
11		36		61		86		
12		37		62		87		
13		38		63		88		
14		39		64		89		
15		40		65		90		
16		41		66		91		
17		42		67		92		
18		43		68		93		
19		44		69		94		
20		45		70		95		
21		46		71		96		
22		47		72		97		
23		48		73		98		
24		49		74		99		
25		50		75		100		

PILE DRIVING INSPECTOR _____

CONSTRUCTION SUPERVISOR _____

Revised: January 2004

DELAWARE STATE HIGHWAY DEPARTMENT

PILE DRIVING SUMMARY

(ENGLISH)

DATE:_____ SHEET _____ OF _____

PROJECT	Number:_____ Division:_____ Location:_____ _____ Contractor:_____				HAMMER	Type_____ Make/Model_____ Rate Energy_____ _____					PILES	Type:_____ Structural Unit: _____ NOTE: Place Lay-Out sketch on back of sheet - indicate test piles							
DRIVING DATA *	Calculated Bearing (TONS)															*Usually last 6 in or indicate refusal **For double acting hammer substitute (ft-lbs/blow) for average fall of hammer		
	Bearing P/U																	
	Average Penetration (in/blow)																	
	Batter Pile Factor (U)																	
PILE DATA RECORDS	LENGTH (ft) For Pay																	
	LENGTH (ft) Cut-Off																	
	LENGTH (ft) In Leads																	
	ELEVATION (ft) Splice															Total this sheet	Total this unit	Average this unit
	ELEVATION (ft) Tip																	
	ELEVATION (ft) Cut-Off																	
	ELEVATION (ft) Grade																	
	SIZE (in) Tip															Inspector in Charge Recorder:		
	SIZE (in) Butt																	
	Pile No.																	
NOTES	Date Driven																	
	DISTRIBUTION INSTRUCTIONS Original - Bridge Engineer 1 copy - Division Engineer 1 copy - Construction Engineer 2 copies - Project Field Office																	

CN-60 Revised 3/02

Use additional sheets as required

DELAWARE STATE HIGHWAY DEPARTMENT

PILE DRIVING SUMMARY

(METRIC)

DATE: _____ SHEET _____ OF _____

PROJECT	Number: _____ Division: _____ Location: _____ Contractor: _____															HAMMER	Type _____ Make/Model _____ Rate Energy _____					PILES	Type: _____ Structural Unit: _____ NOTE: Place Lay-Out sketch on back of sheet - indicate test piles				
DRIVING DATA*	Calculated Bearing (METERIC TONS)																										
	Bearing P/U																										
	Average Penetration (mm/blow)																										
	Batter Pile Factor (U)																										
PILE DATA RECORDS	LENGTH (m)	For Pay																									
		Cut-Off																									
		In Leads																									
	ELEVATION (m)	Splice																									
		Tip																									
		Cut-Off																									
		Grade																									
	SIZE (mm)	Tip																									
		Butt																									
	Pile No.																										
	Date Driven																										

*Usually last 150 mm or indicate refusal

**For double acting hammer subsitute (kJ /blow) for ave. fall of hammer

Total this sheet | Total this unit | Average this unit

Inspector in Charge

Recorder:

NOTES

DISTRIBUTION INSTRUCTIONS
- Original - Bridge Engineer
- 1 copy - Division Engineer
- 1 copy - Construction Engineer
- 2 copies - Project Field Office

CN-60 Revised 7/92

Use additional sheets as required

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH
(ENGLISH)

REINFORCED CONCRETE PIPE REPORT

TEST NO._____ CONTRACT NO._____ F.A. PROJ. NO._____

DATE OF INSPECTION_____ DATE MANUFACTURED_____

LOCATION OF PLANT_____ NAME OF MANUFACTURER_____

CONTRACTOR_____

PIPE	SIZE_____ CLASS_____ WALL_____	WALL THICKNESS REQUIRED_____ ACTUAL_____		CAST ☐ ELLIPTICAL ☐ MACHINED ☐ CIRCULAR ☐		
MIX	CEMENT F.A. C.A. 106A ☐ 107 ☐ PEA GRAVEL ☐					
REINFORCEMENT	TYPE CAGE	CIRC. ELLIP	SPACING IN. (FEET)	DIAMETER IN (INCHES)	STEEL AREA REQUIRED	STEEL AREA ACTUAL
	SINGLE OR INSIDE					
	OUTSIDE					
THREE-EDGE BEARING	TYPE FAILURE	REQUIRED LOAD TOTAL (LBS)	PER LIN. FT (LBS/FT)	ACTUAL LOAD TOTAL (LBS)	PER LIN. FT (LBS/FT)	
	0.1 in CRACK					
	ULTIMATE					

PERCENT ABSORPTION_____ LINEAR FEET_____

NUMBER OF PIECES ACCEPTED _____

REMARKS:

_____
INSPECTOR

_____
MATERIALS ENGINEER

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH
(METRIC)

REINFORCED CONCRETE PIPE REPORT

TEST NO._____ CONTRACT NO._____ F.A. PROJ. NO._____

DATE OF INSPECTION_____ DATE MANUFACTURED_____

LOCATION OF PLANT_____ NAME OF MANUFACTURER_____

CONTRACTOR_____

PIPE	SIZE_____ CLASS_____ WALL_____	WALL THICKNESS REQUIRED_____ ACTUAL_____			CAST ☐ ELLIPTICAL ☐ MACHINED ☐ CIRCULAR ☐	
MIX	CEMENT F.A. C.A.	106A ☐		107 ☐	PEA GRAVEL ☐	
REINFORCEMENT	TYPE CAGE	CIRC. ELLIP	SPACING IN (M)	DIAMETER IN (MM)	STEEL AREA REQUIRED	STEEL AREA ACTUAL
	SINGLE OR INSIDE					
	OUTSIDE					
THREE-EDGE BEARING	TYPE FAILURE	REQUIRED LOAD TOTAL KG	PER LIN. M (KG./M)	ACTUAL LOAD TOTAL KG	PER LIN. M (KG./M)	
	0.3 mm CRACK					
	ULTIMATE					

PERCENT ABSORPTION_____ LINEAR METERS_____

NUMBER OF PIECES ACCEPTED _____

REMARKS:

_____
INSPECTOR

_____
MATERIALS ENGINEER

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION

TEST ROLLING RECORD		
CONTRACT	**ROAD**	**TYPE**
DATE		
METHOD		
LOCATION:		
PASSED:		
REJECTED:		
RECOMMENDATIONS:		
ACTION*		
_____ **Signature of District Representative**	_____ **Signature of Job controller**	
***TO BE FILLED IN BY THE DISTRICT REPRESENTATIVE**		

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
TRAFFIC CONTROL DEVICES

CONTRACT NO._____ SOURCE DOCUMENT NO. _____

_____
CONTRACT NAME

BY: _____ DATE: _____
ENTERED IN: _____ DATE: _____

FIELD MEASUREMENT AND PRELIMINARY CALCULATIONS OF QUANTITIES

LOCATION	TYPE A LIGHT	TYPE B LIGHT	TYPE C LIGHT	TYPE II BARRICADE	TYPE III BARRICADE	ARROW BOARDS				
TOTAL THIS DAY										

I CERTIFY THAT THE ABOVE IS IN ACCORDANCE WITH THE REQUIREMENTS
SET FORTH IN THE CONTRACT SPECIALS PROVISION

CONTRACTOR SAFETY COORDINATOR _____ DATE _____

INSPECTOR: _____ DATE: _____ ACCEPTED ☐ VERTIFIED ☐

NDE-6 Revised 6/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

Traffic Markings Report

(ENGLISH)

Test No._____ **Contract**_____
Sample of_____ **Date Sampled**_____
Sampled by_____ **Date Received**_____
Contractor_____ **Date Tested**_____
Manufacturer_____ **Quantity**_____
Supply Location_____ **Code**_____ **Batch No.**_____

TEST	**RESULTS**	**SPECIFICATION**
Wgt of a gal. @ 77 ºF	_____	_____ ±0.25
Consistency @ 77 ºF, (Krebs Units)	_____	_____ ±5
Drying Time @ _____mils, (mins.)	_____	_____
Non-Volatile Content, %	_____	_____ ±2%
Pigment Content, %	_____	_____ ±2%
Non-Volatile in Vehicle, %	_____	_____ ±2%

Reference to Pennsylvania Traffic Markings Performance Program.

Remarks:

Material represented by this sample has been _____

Tested by _____
Reported by_____

_____
Laboratory Manager

LB-52 6/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

Traffic Markings Report

(METRIC)

Test No._____ **Contract**_____
Sample of_____ **Date Sampled**_____
Sampled by_____ **Date Received**_____
Contractor_____ **Date Tested**_____
Manufacturer_____ **Quantity**_____
Supply Location_____ **Code**_____ **Batch No.**_____

TEST	**RESULTS**	**SPECIFICATION**
Wgt of a liter @ 25 ºC, kg	_____	_____ ±0.10
Consistency @ 25 ºC, (Krebs Units)	_____	_____ ±5
Drying Time @ _____mm, (mins.)	_____	_____
Non-Volatile Content, %	_____	_____ ±2%
Pigment Content, %	_____	_____ ±2%
Non-Volatile in Vehicle, %	_____	_____ ±2%

Reference to Pennsylvania Traffic Markings Performance Program.

Remarks:

Material represented by this sample has been _____

Tested by _____
Reported by_____

_____
Laboratory Manager

LB-52 6/99

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

Hot Mix Yields

(ENGLISH)

	SQUARE YARD/TON				
DEPTH (in)	**DEEP LIFT**	**TYPE B**	**TYPE C**	**OPEN-GRADE**	**SMA**
0.50	~~	~~	35.56	~~	~~
0.75	~~	~~	23.70	~~	~~
1.00	17.90	18.14	17.78	20.51	~~
1.25	14.32	14.51	14.22	~~	~~
1.50	11.93	12.09	11.85	~~	11.47
1.75	10.23	10.37	10.16	~~	~~
2.00	8.95	9.07	8.89	~~	8.60
2.25	7.95	8.06	~~	~~	~~
2.50	7.16	7.26	~~	~~	~~
3.00	5.97	6.05	~~	~~	~~
3.50	5.11	5.18	~~	~~	~~
4.00	4.47	4.54	~~	~~	~~
4.50	3.98	4.03	~~	~~	~~
5.00	3.58	3.63	~~	~~	~~
5.50	3.25	3.30	~~	~~	~~
6.00	2.98	3.02	~~	~~	~~
6.50	2.75	2.79	~~	~~	~~
7.00	2.56	2.59	~~	~~	~~
7.50	2.39	2.42	~~	~~	~~
8.00	2.24	2.27	~~	~~	~~
8.50	2.11	2.13	~~	~~	~~

NOTE: Square yard coverage is based upon voidless density and minimum compaction requirements for Superpave.

Sample Calculation:

The design is for a 1 mile long pavement, 24 feet wide, and 2 inches of Type C Hot-Mix.

[(5280 ft) x (24 ft)] / 9 ft^2 per yd^2 = 14080 yd^2

Using the above chart, for Type C Hot-Mix @ 2 inches, the value is 8.89 yd^2 per ton.

14080 yd^2 / 8.89 yd^2 per ton = 1584 tons of Type C Hot-Mix

Revised: January 2004

STATE OF DELAWARE
DEPARTMENT OF TRANSPORTATION
MATERIALS & RESEARCH

Hot Mix Yields

(Metric)

	SQUARE METER/METRIC TON				
DEPTH (mm)	**DEEP LIFT**	**TYPE B**	**TYPE C**	**OPEN-GRADE**	**SMA**
25	~~	~~	16.65	19.21	16.43
30	~~	~~	13.87	~~	13.69
35	11.97	12.13	11.89	~~	11.73
40	10.47	10.62	10.40	~~	10.27
45	9.31	9.44	9.25	~~	9.13
50	8.38	8.49	8.32	~~	8.21
55	7.62	7.72	7.57	~~	~~
60	6.98	7.08	6.94	~~	~~
65	6.45	6.53	6.40	~~	~~
70	5.99	6.07	5.95	~~	~~
75	5.59	5.66	5.55	~~	~~
80	5.24	5.31	~~	~~	~~
85	4.93	5.00	~~	~~	~~
90	4.66	4.72	~~	~~	~~
95	4.41	4.47	~~	~~	~~
100	4.19	4.25	~~	~~	~~
125	3.35	3.40	~~	~~	~~
150	2.79	2.83	~~	~~	~~
180	2.33	2.36	~~	~~	~~
205	2.04	2.07	~~	~~	~~

NOTE: Square meter coverage is based upon voidless density and minimum compaction requirements for Superpave.

Sample Calculation:

The design is for a 1 km long pavement, 10 meters wide, and 50 mm deep of Type C Hot-Mix.

[1000 m x 10 m] = 10000 m^2

Using the above chart, for Type C Hot-Mix @ 50 mm, the value is 8.32 m^2 per metric ton.

10000 m^2 / 8.32 m^2 per metric ton = 1202 metric tons of Type C Hot Mix.

Revised: January 2004

Delaware Department of Transportation

DelDOT Seed and Nutrient Checklist, Section 734 – English Units

Project & Cont. #: _____ **Date:** _____
Location: _____ **Weather:** _____
DelDOT Inspector:_____ **Contractor Rep.** _____

Note: Use back page to calculate area to be seeded and/or fertilized

Circle Type of Seed Mix Used	Seeds and Rates ***Circle Additional*** Needed **by Season and by District** **(col. 2)**	Surface Area **(ac)** **(col. 3)**	Amount of Seeds to be Used **(col. 2 x col. 3)**
Permanent Grass Seeding, Dry Ground – Item 734 013	Hard Fescue Blend 100 lb/ac Perennial Ryegrass 10 lb/ac **Circle Additional for Seeding Periods** 4/16 to 8/15 Lespedeza 4 lb/ac 8/16 to 4/15 Redtop 5 lb/ac 10/15 to 3/1 Winter Rye 65 lb/ac **Circle Additional Weeping Lovegrass** for South and Central Districts Slopes 3:1 or steeper And Embankments higher than 10 inches 3 lb/ac Period 4/16 to 8/15 3 lb/ac		
Permanent Grass Seeding, Wet Ground – Item 734 015	Redtop 40 lb/ac Creeping Bentgrass 25 lb/ac Sheep Fescue 35 lb/ac Rough Stalked-Bluegrass 25 lb/ac **Circle Additional for Seeding Period** 10/15 to 3/1 Winter Rye 65 lb/ac		
Permanent Grass Seeding, Subdivision – Item 734 016	Hard Fescue Blend 100 lb/ac Perennial Ryegrass 10 lb/ac **Circle Additional for North District only** Kentucky Bluegrass 50 lb/ac		
Temporary Grass Seeding, Dry Ground – Item 734 017	Annual Ryegrass 40 lb/ac **Circle Additional for Seeding Period** 10/15 to 3/1 Winter Rye 65 lb/ac		
Temporary Grass Seeding, Wet Ground – Item 734 018	Annual Barnyard Grass/Duck Millet 40 lb/ac **Circle Additional for Seeding Period** 10/15 to 3/1 Winter Rye 65 lb/ac		
Total Seed Quantity for Mix Selected (Circled)	_____ **lb/ac**		

Circle Products to be Used	***Products Application Rate (col. 2)***	***Total Surface Area (ft^2) (col. 3)***	***Amount of Products to be Used (col. 2 x col. 3)***
10-6-4* Fertilizer	0.016 lb/ft^2		
No. of 50-lb bags of 10-6-4 fertilizer	0.00032 bags/ft^2		
Liquid Lime	0.00014 gal/ft^2		
Granular Lime	0.069 lb/ft^2		

*For 20-12-8 Fertilizer, figure out quantity for 10-6-4 and divide by 2

Form ES_2M-1, April 2002

Calculation of Area To be Seeded and Fertilized

Surface Area 1: _____ = _____ ft^2 (square feet)
Surface Area 2: _____ = _____ ft^2 (square feet)
Surface Area 3: _____ = _____ ft^2 (square feet)
Surface Area 4: _____ = _____ ft^2 (square feet)
Surface Area 5: _____ = _____ ft^2 (square feet)
Surface Area 6: _____ = _____ ft^2 (square feet)

Total Surface Area:_____= _____ ft^2 (square feet)
Square feet Divided by 9 = _____ y^2 (square yards)
Square feet Divided by 43 560 = _____ ac (acres)

Sketch of Area to be Seeded and Fertilized

Revised: January 2004

Delaware Department of Transportation

DelDOT Seed and Nutrient Checklist, Section 734 – Metric Units

Project & Cont. #: _____ **Date:** _____
Location: _____ **Weather:** _____
DelDOT Inspector:_____ **Contractor Rep.** _____

Note: Use back page to calculate area to be seeded and/or fertilized

Circle Type of Seed Mix Used	Seeds and Rates ***Circle Additional*** Needed **by Season and by District** **(col. 2)**	Surface Area **(ac)** **(col. 3)**	Amount of Seeds to be Used **(col. 2 x col. 3)**
Permanent Grass Seeding, Dry Ground – Item 734 013	Hard Fescue Blend 113 kg/ha Perennial Ryegrass 12 kg/ha **Circle Additional for Seeding Periods** 4/16 to 8/15 Lespedeza 5 kg/ha 8/16 to 4/15 Redtop 6 kg/ha 10/15 to 3/1 Winter Rye 73 kg/ha **Circle Additional Weeping Lovegrass** for South and Central Districts Slopes 3:1 or steeper And Embankments higher than 250 millimeters 4 kg/ha Period 4/16 to 8/15 4 kg/ha		
Permanent Grass Seeding, Wet Ground – Item 734 015	Redtop 45 kg/ha Creeping Bentgrass 28 kg/ha Sheep Fescue 40 kg/ha Rough Stalked-Bluegrass 28 kg/ha **Circle Additional for Seeding Period** 10/15 to 3/1 Winter Rye 73 kg/ha		
Permanent Grass Seeding, Subdivision – Item 734 016	Hard Fescue Blend 113 kg/ha Perennial Ryegrass 12 kg/ha **Circle Additional for North District only** Kentucky Bluegrass 56 kg/ha		
Temporary Grass Seeding, Dry Ground – Item 734 017	Annual Ryegrass 45 kg/ha **Circle Additional for Seeding Period** 10/15 to 3/1 Winter Rye 73 kg/ha		
Temporary Grass Seeding, Wet Ground – Item 734 018	Annual Barnyard Grass/Duck Millet 45 kg/ha **Circle Additional for Seeding Period** 10/15 to 3/1 Winter Rye 73 kg/ha		
Total Seed Quantity for Mix Selected (Circled)	_____ **kg/ha**		

Circle Products to be Used	***Products Application Rate (col. 2)***	***Total Surface Area (m^2) (col. 3)***	***Amount of Products to be Used (col. 2 x col. 3)***
10-6-4* Fertilizer	0.078 kg/m^2		
No. of 22.6 kg bag of 10-6-4 Fertilizer	0.00345 bags/m^2		
Liquid Lime	0.0056 l/m^2		
Granular Lime	0.335 kg/m^2		

*For 20-12-8 Fertilizer, figure out quantity for 10-6-4 and divide by 2

Form ES_2M-1, April 2002

Calculation of Area To be Seeded and Fertilized

Surface Area 1: _____ = _____ m^2 (square meters)
Surface Area 2: _____ = _____ m^2 (square meters)
Surface Area 3: _____ = _____ m^2 (square meters)
Surface Area 4: _____ = _____ m^2 (square meters)
Surface Area 5: _____ = _____ m^2 (square meters)
Surface Area 6: _____ = _____ m^2 (square meters)

Total Surface Area:_____= _____ m^2 (square meters)
Square meters Divided by 10,000 = _____ ha (hectares)

Sketch of Area to be Seeded and Fertilized

Contract No:
Title of Contract:

Source of Supply
Materials & Research
Delaware Department of Transportation

District: _____

Contractor: _____
Sub-Contractor: _____
Date: _____

Specfication #	Item Description	Material	Supplier	Manufacturer	Address & Contact #	Alternate Manufacturer

TO BE COMPLETED WHEN LOCATION IS FINALIZED

ID # _____

PCC & HM PAVEMENT PROJECTS COMPLETION REPORT - BY LOCATION

RD#	LIMITS (Intersection to Intersection)*	CONTRACT#	COMPLETION DATE OF LOCATION	TOTAL COST OF LOCATION

*Please give milepoints if shown on plans.

Please give total tons of all hot mix used at this location (mark English) _____

EXISTING ROADWAY INFORMATION		
WIDTH	LENGTH	# LANES **

EXISTING SHOULDERS	
WIDTH	THICKNESS

** If more than 2 lanes, please give direction.

RESURFACING COMPLETED				SHOULDERS DONE	
WIDTH	THICKNESS & SURF. MATERIAL TYPE	LENGTH	# LANES	WIDTH	THICKNESS

PATCHING		WIDENING		MILLING	
YES/NO	% Patching (also provide SY and Type - PCC/HM)	WIDTH	DEPTH	YES/NO	DEPTH

Please sketch a typical section of thie resurfacing/rehabilitation completed on this project.
Also, identify any widening - showing width and depth.

MATERIAL	DEPTH
Wearing Surface	
Top	
Base	
Subgrade	

NOTES: 1. Did project include safety improvements such as guardrail, drainage, intersection improvements, and/or turn lanes? (Note any **major** construction, widening, etc. Also note any *significant* changes in guardrail, curbing or drainage improvements.) Continue on back if necessary.

CIRCLE DISTRICT: N C S

Inspector's Signature: _____

Date: _____

Shaded information is mandatory!

Please contact the PMT office at 760-2070 if you need help completing this form.

PMT-3 (Rev.-1997)

NOTES

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Revised: January 2004

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