

DEVELOPMENT OF AN AUTOMATED PRE-SAMPLING PLAN  
FOR CONSTRUCTION PROJECTS

FINAL REPORT

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## ACKNOWLEDGMENTS

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## ABSTRACT

The development of an automated pre-sampling plan was undertaken to free the district construction personnel from the cumbersome and time-consuming task of preparing such plans manually. A computer program was written and linked to a data file which contained the information needed by the program to develop such an automated plan.

This report documents the development of the program and the final output of the automated pre-sampling plan.

METRIC CONVERSION FACTORS\*

<u>To Convert from</u>	<u>To</u>	<u>Multiply by</u>
<u>Length</u>		
foot	meter (m)	0.3048
inch	millimeter (mm)	25.4
yard	meter (m)	0.9144
mile (statute)	kilometer (km)	1.609
<u>Area</u>		
square foot	square meter (m <sup>2</sup> )	0.0929
square inch	square centimeter (cm <sup>2</sup> )	6.451
square yard	square meter (m <sup>2</sup> )	0.8361
<u>Volume (Capacity)</u>		
cubic foot	cubic meter (m <sup>3</sup> )	0.02832
gallon (U.S. liquid)**	cubic meter (m <sup>3</sup> )	0.003785
gallon (Can. liquid)**	cubic meter (m <sup>3</sup> )	0.004546
ounce (U.S. liquid)	cubic centimeter (cm <sup>3</sup> )	29.57
<u>Mass</u>		
ounce-mass (avdp)	gram (g)	28.35
pound-mass (avdp)	kilogram (kg)	0.4536
ton (metric)	kilogram (kg)	1000
ton (short, 2000 lbs)	kilogram (kg)	907.2
<u>Mass per Volume</u>		
pound-mass/cubic foot	kilogram/cubic meter (kg/m <sup>3</sup> )	16.02
pound-mass/cubic yard	kilogram/cubic meter (kg/m <sup>3</sup> )	0.5933
pound-mass/gallon (U.S.)**	kilogram/cubic meter (kg/m <sup>3</sup> )	19.8
pound-mass/gallon (Can.)**	kilogram/cubic meter (kg/m <sup>3</sup> )	99.78
<u>Temperature</u>		
deg Celsius (C)	kelvin (K)	$t_k = (t_c + 273.15)$
deg Fahrenheit (F)	kelvin (K)	$t_k = (t_f + 459.67) / 1.8$
deg Fahrenheit (F)	deg Celsius (C)	$t_c = (t_f - 32) / 1.8$

\*The reference source for information on SI units and more exact conversion factors is "Metric Practice Guide" ASTM E 380.

\*\*One U.S. gallon equals 0.8327 Canadian gallon.

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## INTRODUCTION

As a part of the construction process, the district construction personnel are required to prepare a sampling plan upon receipt of plans and contract for a project. This sampling plan is a list of materials to be sampled for a given contract item, and the minimum number of documents or samples required to insure the adequacy of the sampling and testing frequencies and quality control requirements defined by the contract. This plan is presently developed manually by the Project Engineer and the District Laboratory Engineer checking each item in the contract against sampling requirements for that item as listed in the Materials Sampling Manual (1)\*. This manual is a list of each contract item showing all documents and/or tests required to insure adequate quality control of the materials used to construct the item. The time and effort required in the preparation of this plan is directly associated with the length or size of the project. The larger the project in terms of items, the more complex and time-consuming the effort. This report relates the findings of a study to automate the process of developing the sampling plan for quality assurance.

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\*Underlined numbers in parentheses refer to entries in the Bibliography section of this report.

## OBJECTIVE

The major objective of this project was to develop an off-line computer-oriented system that would generate a pre-sampling plan based on contract items.

## SCOPE

The scope of the project involved:

1. Observation of current practices in developing pre-sampling plans.
2. Developing and testing a computer system to create pre-sampling plans.
3. Implementing a computer system.



## METHOD OF PROCEDURE

Before actual work could begin on the automated pre-sampling plan, a guide had to be found by which to create the plan. Representatives of the Data Analysis Unit of La. DOTD went out to the various district offices to obtain examples of sampling plans from their engineers.

All of these plans varied in style and format, but all were basically the same in terms of the general information they contained. The guide which the engineering personnel used to obtain this information was the Materials Sampling Manual.

The Materials Sampling Manual is published by the Department and reflects the schedule of bid items, shown in Appendix A. The schedule contains a list of all sections and items that can be included in a contract (2). The manual contains only those sections and items that are subjected to some type of sampling during the construction life of a project. A list of these is shown in Appendix B.

There are basically six types of samples taken during the construction of a project. These are: (1) acceptance, (2) design, (3) project control, (4) preliminary source test, (5) record test, and (6) verification. Of the six, the most important is the acceptance sampling. It is defined as a "determination of conformance to contract requirements or specifications." (1) It is this type of sampling that determines the percentage pay for a contract item. Because of its importance, acceptance sampling was the initial choice for the sampling in the automated pre-sampling plan. To insure "project control" the project control sampling was also included. Additionally, the district laboratory engineers encouraged the inclusion of the design, record test and verification sampling in the plan. With a guide and a list of what to include, the actual program work could now begin.

The first step was to establish the format of the program and then to develop any needed formulas. This was to be done section by section. Section 501, Asphaltic Concrete Mixtures, was chosen first for two reasons. These reasons are: (1) the section is one of the largest, and (2) it is one of the most widely used.

The formatting was done by the author and is basically the same for all the sections. The formats were designed to be easy to read and to contain all information pertinent to the section.

The formulas that were derived came from several sources. The first of these was a list of sampling plan factors; see Appendix C. The second was dialogue with members of the La. DOTD Bituminous Research Unit. The third source was the Materials Sampling Manual. Section 501 of this manual is shown in Appendix D. The manual dictates the frequency with which the varying materials making up the item are to be sampled. The list of sampling plan factors is used to convert from one unit to another.

When the program was finished, a source for the information the program would require was sought. The program would need the item number, the quantity of the item, the contract and project number of the item, the Federal Aid Project (F.A.P.) number, the funding and the description of the project. La. DOTD has a computer system under the name of the Construction Estimates System which contains all this information.

The program was designed to print out a pre-sampling plan for each new project. When it starts a new project, it prints out the information unique to that project, this information being the contract number, the F.A.P. number, the funding and the project description.

As a verification of the usefulness of the program, nine pre-sampling plans of actual projects were generated. There was one plan for each

of the DOTD districts. These were given to each of the respective district laboratory engineers with the understanding that the engineers were to examine the plans and make comments on changes which they would like. When these comments were received, the finalization of the program was begun.

Originally the program was written in FORTRAN. This was later changed to SAS (4) due to several factors, the main ones being: (1) SAS handles information more efficiently, and (2) changes to the program are simpler in SAS. The use of SAS makes the program very flexible and easy to update whenever it is necessary. This literally makes the program incapable of being outdated if work is maintained on it.

## COMPUTATION OF NUMBER OF SAMPLES FOR AN ITEM

An example of sample computation is asphalt cement (AC). This material is sampled "1/transport" while the quantity of asphaltic concrete is given in tons. From the list of sampling plan factors the conversion of Types 1 and 3 asphaltic concrete to gallons of AC is found. This formula is:

$$13.50 \times (\text{tons of asphaltic concrete}) = \text{gallons of AC}$$

Now the number of gallons which a transport can carry is needed. Consulting the Bituminous Research Unit, it was found that a transport can carry approximately 6500 gallons. From this information came the formula:

$$(\text{gallons of AC})/6500 = \text{number of samples required}$$

A worked example using the quantity of asphaltic concrete from contract number 451-30-06 is shown in Appendix E. (The pre-sampling plan for this contract is shown in Appendix F.)

The entire development of the program used the same three sources: (1) the Materials Sampling Manual, (2) the list of sampling plan factors, and (3) the expertise of personnel within La. DOTD.

The formulas are documented within the program in the form of comment statements. These comments do not show the source of the formulas, but they do explain what the formulas do.

## RESULTS

The automated pre-sampling plan is designed to do several things. It will print out a header sheet for each new project it encounters. On this header sheet are printed the contract number, the project number, the Federal Aid Project (F.A.P.) number, the funding and the description of the project. An example of a header sheet is shown in Figure 1 on page 9.

A typical output is shown in Figure 2 on page 10. The "material" and the "frequency" depend upon the item being sampled. The quantity of the item is printed, as are the units of the quantity. Also printed is the purpose of the testing and the number of samples required or the type of certificates required. The number of samples taken may be determined by the judgment of the engineer. In Appendix F there is a pre-sampling plan for a contract.

The overall automated pre-sampling plan is to deliver the plan to the districts when they receive the contracts on projects within that district. These plans will save the district personnel much time and free them for other duties. A flowchart showing the comparison of how the manual and computer generated plans are developed is shown in Figure 3 on page 11. Comparative evaluation of time for the two plans shows that it requires several hours or even days for the manual plan as compared to several minutes for the computer generated plan.

The plan is basically a simple one. A flowchart which shows the basics of how the program generates the sampling plans is shown in Figure 4 on page 12. This is a generalized plan as the actual program is a lot more detailed.

Copies of the sampling plan program are available in SAS. The program is self-explanatory and contains complete documentation regarding the generation of the plan and the associated formulas

utilized in the computations. Enhancements could be easily made if changes are encountered as a result of revisions in the specifications. Copies of the program are also available in FORTRAN; however, the documentation is not as comprehensive as the SAS program.

THIS IS THE SAMPLING PLAN FOR

CONTRACT NUMBER 451-30-06 AND

PROJECT NUMBER 451-30-06

LOCATED AT

THE F.A.P. NUMBER IS 220-1(073)012 AND

THE FUNDING IS I

*Header Sheet*

*FIGURE 1*

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 701(13) Q REINFORCED CONCRETE PIPE 60" DIA		1242.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC 3	
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD 1 & 7	
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
RUBBER GASKETS			ACCEPTANCE	CA 7	
SEALANTS			ACCEPTANCE	QPL 4	
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

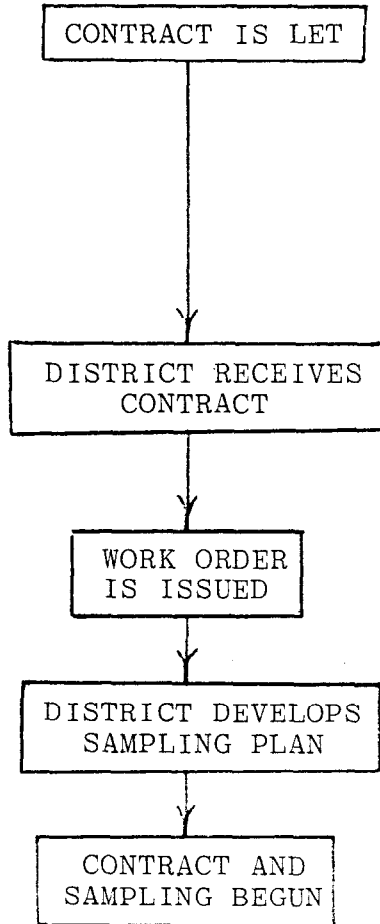
10

Typical Output

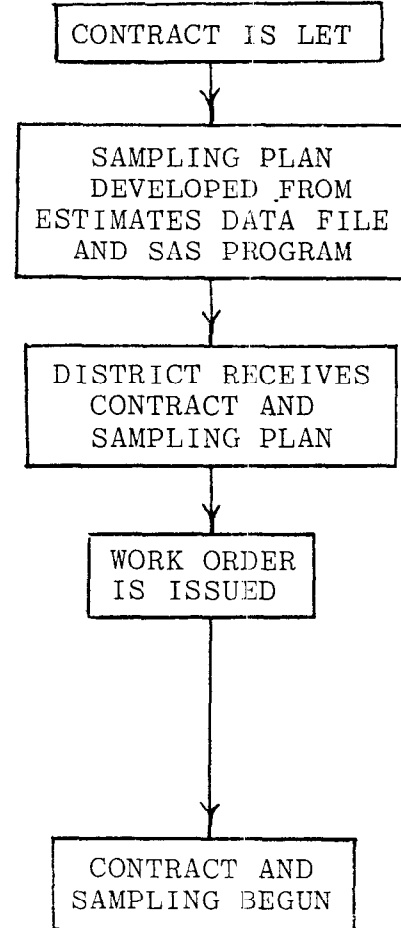
FIGURE 2



MANUAL DEVELOPMENT

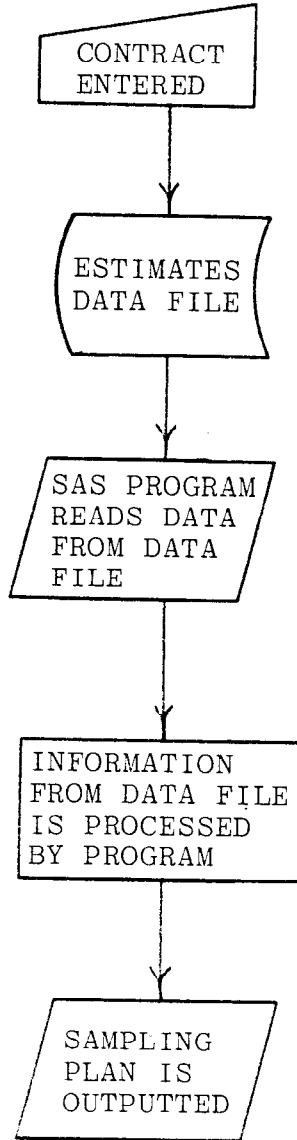


COMPUTER DEVELOPMENT



*Comparison of  
Manual Development to Computer Development  
of a Sampling Plan*

FIGURE 3



*Flowchart of Sampling Plan Procedure*

*FIGURE 4*

## CONCLUSIONS AND RECOMMENDATIONS

An automated pre-sampling plan has been developed into a computer program. This program was developed to free the district construction personnel from developing such plans by hand. The program draws its information from the Construction Estimate computer files of La. DOTD. From this information the program prints out the pre-sampling plan for each project. The entire process takes no more than a couple of minutes.

Due to the time saved in the development of the pre-sampling plan, it is recommended that the program be put into everyday use. The plans should be generated at the start of each project and additional plans generated with each revision to the project. It is further recommended that the plan generation should be the responsibility of the section which first sees the contract.

## BIBLIOGRAPHY

1. Materials Sampling Manual, published by State of Louisiana Department of Transportation and Development, Office of Highways, April, 1982.
2. Highway Specifications Workbook, published by State of Louisiana Department of Transportation and Development, Office of Highways, Baton Rouge, March, 1982.
3. Louisiana Standard Specifications for Roads and Bridges, published by State of Louisiana Department of Transportation and Development, Office of Highways, Baton Rouge, 1977 Edition.
4. SAS User's Guide, published by SAS Institute Inc., Cary, North Carolina, 1979 Edition.

APPENDIX A  
SCHEDULE OF BID ITEMS

SCHEDULE OF BID ITEMS - 1977 STANDARD SPECIFICATIONS

Item No.	Pay Item	Pay Unit	Decimals
----------	----------	----------	----------

SECTION 201 - CLEARING AND GRUBBING

Highways

201(1)	Clearing and Grubbing	Lump Sum	-
201(2)	Selective Clearing and Grubbing	Lump Sum	-

Airports

201(1)	Clearing and Grubbing	Acre	2
201(2)	Selective Clearing and Grubbing	Acre	2
201(3)	Clearing	Acre	2

SECTION 202 - REMOVAL OF STRUCTURES AND OBSTRUCTIONS

202(1)	Removal of Structures and Obstructions	Lump Sum	-
202(2)	Removal of _____	Each, Linear Foot, Lump Sum, Square Yard	-
202(2)(A)	Removal of Bridges	Each	-
202(2)(B)	Removal of Concrete Box Culverts	Each	-
202(2)(C)	Removal of Portland Cement Concrete Pavement	Square Yard	1
202(2)(D)	Removal of Concrete Walks and Drives	Square Yard	1
202(2)(E)	Removal of Concrete Curbs	Linear Foot	1
202(2)(F)	Removal of Concrete Combination Curb and Gutter	Linear Foot	1
202(2)(G)	Removal of Surfacing and Stabilized Base	Square Yard	1
202(2)(H)	Removal of Guard Rail	Linear Foot	0
202(3)	Hauling Salvaged Material	Lump Sum	-

Note: Item 202(1) shall be used on all projects requiring removal of structures and obstructions. Separate items shall be used for removal of sizeable quantities of pavement, curb, etc. Those structures that are to be removed under Item 202(1) shall be so noted on the plans.

SECTION 203 - EXCAVATION AND EMBANKMENT

203(1)	Unclassified Excavation	Cubic Yard	0
203(2)	Drainage Excavation	Cubic Yard	0
203(3)	Muck Excavation	Cubic Yard	0
203(4)	Embankment in Place	Cubic Yard	0
203(5)	Special Embankment (Nonplastic) in Place	Cubic Yard	0
203(6)	Excavation and Embankment	Station, Lump Sum	2 or 0
203(7)	Borrow (Vehicular Measurement)	Cubic Yard	0

Item No.	Pay Item	Pay Unit	Decimals
SECTION 204 - TEMPORARY EROSION CONTROL			
204(1)	Mulching (Temporary)	Square Yard	1
204(2)(A)	Grassing (Temporary)	Pound	0
204(3)	Sandbagging (Temporary)	Cubic Yard	1
204(4)	Baled Hay (Temporary)	Ton	2
204(5)	Slope Drains (Temporary)	Linear Foot	1
204(6)	Sediment Basins	Each	-
204(7)	Sediment Check Dams	Each	-
204(8)	Silt Fencing	Linear Foot	0
SECTION 301 - BASE COURSE			
301(1)	Base Course	Cubic Yard, Square Yard	1
301(2)	Sterilization of Shoulder Base Course	Square Yard	0
SECTION 302 - SCARIFYING AND COMPACTING ROADBED			
<u>Highways</u>			
302(1)	Scarifying and Compacting Roadbed	Mile	3
<u>Airports</u>			
302(1)	Scarifying and Compacting Roadbed	Square Yard	1
SECTION 303 - IN-PLACE CEMENT STABILIZED BASE COURSE			
303(1)	In-Place Cement Stabilized Base Course ( _____ " Thick)	Square Yard	1
SECTION 304 - LIME TREATMENT			
304(1)	Lime	Ton	2
304(2)	Lime Treatment (Type A)( _____ " Thick)	Square Yard	1

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Item No.	Pay Item	Pay Unit	Decimals
SECTION 304 - LIME TREATMENT (Cont'd)			
304(3)	Lime Treatment (Type B)( _____ " Thick)	Square Yard	1
304(4)	Lime Treatment (Type C)( _____ " Thick)	Square Yard	1
304(5)	Lime Treatment (Type D)( _____ " Thick)	Square Yard	1
304(6)	Lime (Type E Treatment)	Ton	2

SECTION 305 - SUBBASE TREATMENT

305(1)	Subbase Treatment ( _____ " Thick)	Square Yard	1
--------	------------------------------------	-------------	---

SECTION 401 - AGGREGATE SURFACE COURSE

401(1)	Aggregate Surface Course (Net Section)	Cubic Yard	1
401(2)	Aggregate Surface Course (Adjusted Vehicular Measurement)	Cubic Yard	0

SECTION 501 - ASPHALTIC CONCRETE MIXTURES

501(1)	Asphaltic Concrete ( _____ Course)	Ton	1
501(2)	Asphaltic Concrete ( _____ Course)	Cubic Yard	1
501(3)	Asphaltic Concrete ( _____ Course)( _____ " Thick)	Square Yard	1
501(4)	Mineral Filler (Commercial Grade)	Ton	1

Letter designation shall be used for the various courses as follows: A - Wearing Course  
B - Binder Course  
C - Base Course

Example: Item 501(1)(B), Asphaltic Concrete (Binder Course)

SECTION 502 - ASPHALTIC CONCRETE FRICTION COURSE

502(1)(A)	Asphaltic Concrete Friction Course (Exp. Clay, Slag or Stone)	Square Yard	1
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Item No.	Pay Item	Pay Unit	Decimals
SECTION 503 - TACK COAT			
503(1)	Tack Coat	Gallon	0
(This is normally "No Direct Pay" work - do not use this item for routine construction)			
SECTION 504 - PRIME COAT			
504(1)	Prime Coat	Gallon	0
(This is normally "No Direct Pay" work - use this item only with recompacted existing base course)			
SECTION 505 - ASPHALTIC SURFACE TREATMENT			
505(1)	Asphalt	Gallon	0
505(2)	Coarse Aggregate (Size 1)	Cubic Yard	0
505(3)	Fine Aggregate (Size 2)	Cubic Yard	0
505(4)	Seal Coat Aggregate (Size 3)	Cubic Yard	0
SECTION 601 - PORTLAND CEMENT CONCRETE PAVEMENT			
601(1)(A)	Portland Cement Concrete Pavement (6" Thick)	Square Yard	1
601(1)(B)	Portland Cement Concrete Pavement (7" Thick)	Square Yard	1
601(1)(C)	Portland Cement Concrete Pavement (8" Thick)	Square Yard	1
601(1)(D)	Portland Cement Concrete Pavement (9" Thick)	Square Yard	1
601(1)(E)	Portland Cement Concrete Pavement (10" Thick)	Square Yard	1
601(1)( ) (1)	Portland Cement Concrete Pavement ( ___ " Thick) (Turnouts and Crossovers)	Square Yard	1
601(2)	Portland Cement Concrete Pavement ( ___ " Thick) (Continuously Reinforced)	Square Yard	1
601(3)	Wide Flange Installations	Linear Foot	1
601(4)	Bar Reinforcing	Pound	0
601(5)	Fabric Reinforcing	Pound	0

Item No.	Pay Item	Pay Unit	Decimals
SECTION 701 - CULVERTS AND STORM DRAINS			
701(1)	Structural Plate Pipe (Size)	Linear Foot	0
701(2)	Structural Plate Pipe Arch (Size)	Linear Foot	0
701(3)	Corrugated Steel Pipe (Size)	Linear Foot	0
701(4)	Corrugated Steel Pipe Arch (Size)	Linear Foot	0
701(5)	Bituminous Coated Corrugated Steel Pipe (Size)	Linear Foot	0
701(6)	Bituminous Coated Corrugated Steel Pipe Arch (Size)	Linear Foot	0
701(7)	Asbestos Bonded Corrugated Steel Pipe (Size)	Linear Foot	0
701(8)	Asbestos Bonded Corrugated Steel Pipe Arch (Size)	Linear Foot	0
701(9)	Asbestos Bonded Corrugated Steel Pipe (Size)(Smooth Lined)	Linear Foot	0
701(10)	Asbestos Bonded Corrugated Steel Pipe Arch (Size)(Smooth Lined)	Linear Foot	0
701(11)	Corrugated Aluminum Pipe (Size)	Linear Foot	0
701(12)	Corrugated Aluminum Pipe Arch (Size)	Linear Foot	0
701(13)	Reinforced Concrete Pipe (Size)	Linear Foot	0
701(14)	Reinforced Concrete Pipe Arch (Size)	Linear Foot	0
701(15)	Concrete Sewer Pipe (Size)	Linear Foot	0
701(16)	Vitrified Clay Pipe (Size)	Linear Foot	0
701(17)	Asbestos Cement Pipe (Size)	Linear Foot	0
701(18)	Cast Iron Pipe (Size)	Linear Foot	0
701(19)	Culvert Pipe (Size)	Linear Foot	0
701(20)	Pipe Arch (Size)	Linear Foot	0
701(21)	Pipe Conduit (Sizes and Types)	Linear Foot	0
701(22)	Pipe Arch Conduit (Sizes and Types)	Linear Foot	0
701(23)	Corrugated Metal Pipe (Size)	Linear Foot	0
701(24)	Corrugated Metal Pipe Arch (Size)	Linear Foot	0
701(25)	Relaying Conduit	Linear Foot	0
701(26)	Conduit Backfill	Cubic Yard	0
701(27)	Fabricating Conduit Fittings	Each	-
701(28)	Slotted Drain Pipe (Size)	Linear Foot	0

LETTER DESIGNATION SYSTEM FOR NEW PIPE ARCH DIMENSIONS

SECTION 701 - CULVERTS AND STORM DRAINS (Cont'd)

Letter Designations shall be used for the various pipe sizes as follows.

<u>Circular Pipe (Inches)</u>		<u>Arch Pipe (Inches)</u>				<u>Letter Designation</u>				
		<u>Metal (CMPA)</u>		<u>Concrete (RCPA)</u>	<u>Equivalent Diameter</u>					
		<u>1/2" Corr.</u>	<u>1" Corr.</u>							
4.....A	42.....N	17x13	.....	-	.....	18x11	.....	15	.....	A
6.....B	48.....O	21x15	.....	-	.....	22x13	.....	18	.....	B
8.....C	54.....P	24x18	.....	-	.....	26x15	.....	21	.....	C
10....D	60....Q	28x20	.....	-	.....	28x18	.....	24	.....	D
12....E	66....R	35x24	.....	-	.....	36x22	.....	30	.....	E
15....F	72....S	42x29	.....	40x31	.....	43x26	.....	36	.....	F
18....G	78....T	49x33	.....	46x36	.....	51x31	.....	42	.....	G
21....H	84....U	57x38	.....	53x41	.....	58x36	.....	48	.....	H
24....I	90....V	64x43	.....	60x46	.....	65x40	.....	54	.....	I
27....J	96....W	71x47	.....	66x51	.....	73x45	.....	60	.....	J
30....K	102...X	77x52	.....	73x55	.....	-	.....	66	.....	K
33....L	108...Y	83x57	.....	81x59	.....	88x54	.....	72	.....	L
36....M	114...Z	-	.....	87x63	.....	-	.....	78	.....	M
		-	.....	95x67	.....	102x62	.....	84	.....	N
		-	.....	103x71	.....	115x72	.....	90	.....	O
		-	.....	112x75	.....	122x77	.....	96	.....	P
		-	.....	117x79	.....	-	.....	102	.....	Q
		-	.....	128x83	.....	138x87	.....	108	.....	R
		-	.....	137x87	.....	-	.....	114	.....	S
		-	.....	142x91	.....	154x96	.....	120	.....	T

- Examples: Item 701(13)(I), Reinforced Concrete Pipe (24")  
 Item 701(14)(F), Reinforced Concrete Pipe Arch (36" Equiv.)  
 Item 701(20)(B), Pipe Arch (18" Equiv.)  
 Item 701(21)(K-M), Pipe Conduit (30" RCP or 36" CMP)  
 Item 701(22)(D-E), Pipe Arch Conduit (24" Equiv. RCPA or 30" Equiv. CMPA)  
 Item 701(24)(H), Corrugated Metal Pipe Arch (48" Equiv.)

LETTER DESIGNATION SYSTEM FOR OLD PIPE ARCH DIMENSIONS

SECTION 701 - CULVERTS AND STORM DRAINS (Cont'd)

Letter Designations shall be used for the various pipe sizes as follows.

Circular Pipe				Arch Pipe		
4".....A	21"....H	48"....O	84"....U	18"x11"....A	50"x31"....G	91"x64"....M
6".....B	24"....I	54"....P	90"....V	22"x13"....B	58"x36"....H	99"x67"....N
8".....C	27"....J	60"....Q	96"....W	25"x16"....C	65"x40"....I	105"x72"....O
10"....D	30"....K	66"....R	102"....X	29"x18"....D	72"x44"....J	111"x79"....P
12"....E	33"....L	72"....S	108"....Y	36"x22"....E	74"x55"....K	118"x82"....Q
15"....F	36"....M	78"....T	114"....Z	43"x27"....F	83"x60"....L	125"x87"....R
18"....G	42"....N					

Examples: Item 701(13)(I), Reinforced Concrete Pipe (24")  
 Item 701(20)(B), Pipe Arch (22"x13")  
 Item 701(21)(K-M), Pipe Conduit (30" RCP or 36" CMP)  
 Item 701(21)(D-E), Pipe Arch Conduit (29"x18" RCPA or 36"x22" CMPA)

CORRELATION TABLE FOR OLD AND NEW PIPE ARCH DIMENSIONS (INCHES)

Round Equiv.	STEEL PIPE ARCH				ALUMINUM PIPE ARCH	
	2 2/3 x 1/2 Corr.		3 x 1 Corr.		2 2/3 x 1/2 Corr.	
	OLD	NEW	OLD	NEW	OLD	NEW
15	18 x 11	17 x 13			18 x 11	17 x 13
18	22 x 13	21 x 15			22 x 13	21 x 15
21	25 x 16	24 x 18			25 x 16	24 x 18
24	29 x 18	28 x 20			29 x 18	28 x 20
30	36 x 22	35 x 24			36 x 22	35 x 24
36	43 x 27	42 x 29	43 x 27	40 x 31	43 x 27	42 x 29
42	50 x 31	49 x 33	50 x 31	46 x 36	50 x 31	49 x 33
48	58 x 36	57 x 38	58 x 36	53 x 41	58 x 36	57 x 38
54	65 x 40	64 x 43	65 x 40	60 x 46	65 x 40	64 x 43
60	72 x 44	71 x 47	72 x 44	66 x 51	72 x 44	71 x 47
66	79 x 49	77 x 52	73 x 55	73 x 55	- -	- -
72	85 x 54	83 x 57	81 x 59	81 x 59	84 x 56	83 x 57
78			87 x 63	87 x 63		
84			95 x 67	95 x 67		
90			103 x 71	103 x 71		
96			112 x 75	112 x 75		
102			117 x 79	117 x 79		
108			128 x 83	128 x 83		
114			137 x 87	137 x 87		
120			142 x 91	142 x 91		

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Item No.	Pay Item	Pay Unit	Decimals
<b>SECTION 702 - MANHOLES, INLETS AND CATCH BASINS</b>			
702(1)	Junction Boxes	Each	-
702(2)	Manholes	Each	-
702(3)	Inlets	Each	-
702(4)	Catch Basins	Each	-
702(5)	Adjusting _____	Each	-
702(5)(A)	Adjusting Manholes	Each	-
702(5)(B)	Adjusting Catch Basins	Each	-
702(5)(C)	Adjusting Junction Boxes	Each	-
702(5)(D)	Adjusting Inlets	Each	-
<b>SECTION 703 - UNDERDRAINS</b>			
703(1)	Perforated Corrugated Steel Pipe (Size)	Linear Foot	0
703(2)	Perforated Bituminous Coated Corrugated Steel Pipe (Size)	Linear Foot	0
703(3)	Perforated Concrete Pipe (Size)	Linear Foot	0
703(4)	Perforated Asbestos Cement Pipe (Size)	Linear Foot	0
703(5)	Perforated Corrugated Aluminum Pipe (Size)	Linear Foot	0
703(6)	Perforated Bituminized Fiber Pipe (Size)	Linear Foot	0
703(7)	Perforated Clay Pipe (Size)	Linear Foot	0
703(8)	Asbestos Cement Pipe (Size)	Linear Foot	0
703(9)	Bituminized Fiber Pipe (Size)	Linear Foot	0
703(10)	Perforated Plastic Pipe (Size)	Linear Foot	0
703(11)	Perforated Pipe Underdrains (Size)	Linear Foot	0
703(12)	Nonperforated Pipe Underdrains (Size)	Linear Foot	0
<b>SECTION 704 - GUARD RAIL</b>			
704(1)	Guard Rail	Linear Foot	1
704(2)	Guard Rail (Double Faced)	Linear Foot	1
704(3)	Blocked Out Guard Rail	Linear Foot	1
704(4)	Blocked Out Guard Rail (Double Faced)	Linear Foot	1
704(5)	Guard Rail Anchor Sections (BCT)	Linear Foot	1

Item No.	Pay Item	Pay Unit	Decimals
SECTION 704 - GUARD RAIL (Cont'd)			
704(6)	Guard Rail Anchor Sections (Trailing End)	Linear Foot	1
704(7)	Guard Rail Bridge Attachments	Linear Foot	1
704(8)	Guard Rail Transitions	Linear Foot	1
SECTION 705 - FENCES			
705(1)	Barbed Wire Fence	Linear Foot	0
705(2)	Combination Mesh and Barbed Wire Fence	Linear Foot	0
705(3)	Single Swinging Walk Gates	Each	-
705(4)	Single Swinging Driveway Gates	Each	-
705(5)	Double Swinging Driveway Gates	Double Gate	-
705(6)	Chain Link Fence (___-Foot Height)	Linear Foot	0
705(6)(A)	Chain Link Fence (4-Foot Height)	Linear Foot	0
705(6)(B)	Chain Link Fence (5-Foot Height)	Linear Foot	0
705(6)(C)	Chain Link Fence (6-Foot Height)	Linear Foot	0
705(6)(D)	Chain Link Fence (7-Foot Height)	Linear Foot	0
705(7)	___ - Foot Gates for Chain Link Fence (___ - Foot Height)	Each	-
705(7)(B)	3-Foot Gates for Chain Link Fence (5-Foot Height)	Each	-
705(8)	___ - Foot Double Gates for Chain Link Fence (___ - Foot Height)	Double Gate	-
705(9)	Rebuilt Fence	Linear Foot	0
SECTION 706 - CONCRETE WALKS, DRIVES AND INCIDENTAL PAVING			
706(1)	Concrete Walk (___ " Thick)	Square Yard	1
706(2)	Concrete Drive (___ " Thick)	Square Yard	1
706(3)	Incidental Concrete Paving (___ " Thick)	Square Yard	1

Letter Designations for various thicknesses shall be used as follows: 4"...A  
5"...B  
6"...C

(Example) Item 706(2)(C), Concrete Drive (6" Thick)

Item No.	Pay Item	Pay Unit	Decimals
SECTION 707 - CURBS AND GUTTERS			
707(1)	Concrete Curb	Linear Foot	1
707(2)	Concrete Gutter	Linear Foot	1
707(3)	Combination Curb and Gutter	Linear Foot	1
707(4)	Asphaltic Curb	Linear Foot	1
SECTION 708 - RIGHT OF WAY MARKERS			
708(1)	Right-of-Way Marker	Each	-
SECTION 709 - STEEL RAIL CATTLE GUARDS			
709(1)	Steel Rail Cattle Guard	Each	-
SECTION 710 - REMOVING, RELOCATING AND DEMOLISHING STRUCTURES			
710(1)	Removing and Relocating Structures	Unit	-
710(2)	Moving Structures	Structure Foot	0
710(3)	Demolishing Structures	Unit	-
SECTION 711 - RIPRAP			
711(1)	Random Riprap	Cubic Yard	0
711(2)	Riprap for Sinking Mattresses	Ton	2
711(3)	Heavy Deposited Riprap	Ton	2
SECTION 712 - REVETMENTS			
712(1)	Concrete Cast-in-Place Revetment ( ___ " Thick)	Square Yard	0
712(2)	Cellular Concrete Block Revetment	Square Yard	0
712(3)	Sacked Concrete Revetment	Square Yard	0
712(4)	Stone Revetment	Square Yard	0
712(5)	Flexible Revetment	Square Yard	0

Item No.	Pay Item	Pay Unit	Decimals
SECTION 713 - TEMPORARY SIGNS, BARRICADES AND PAVEMENT MARKINGS			
713(1)	Temporary Signs and Barricades	Lump Sum	-
713(2)	Temporary Pavement Markings	Lump Sum	-
SECTION 714 - SLAB SODDING			
714(1)	Slab Sodding	Square Yard	1
714(2)	Water	M Gallons	0
SECTION 715 - TOPSOIL			
715(1)	Topsoil	Cubic Yard	0
SECTION 716 - VEGETATIVE MULCH			
716(1)	Vegetative Mulch	Ton	2
716(2)	Emulsified Asphalt	Gallon	0
SECTION 717 - SEEDING			
717(1)	Seeding	Pound	0
SECTION 718 - FERTILIZER AND AGRICULTURAL LIME			
718(1)	Fertilizer	Pound	0
718(2)	Agricultural Lime	Ton	2
SECTION 719 - LANDSCAPING			
719(1)	Plants (Type, Size)	Each	-
719(2)	Pine Bark Mulch ( _____ " Depth)	Square Yard	1
719(3)	Bed Preparation ( _____ " Depth)	Square Yard	1
SECTION 720 - FIBER GLASS ROVING			
720(1)	Fiber Glass Roving	Pound	0
720(2)	Asphaltic Material	Gallon	0



Item No.	Pay Item	Pay Unit	Decimals
SECTION 721 - ASPHALT MULCH			
721(1)	Asphalt Mulch	Gallon	0
SECTION 722 - FIELD LABORATORIES			
722(1)	Project Site Laboratory	Each	-
SECTION 723 - GRANULAR MATERIAL			
723(1)	Granular Material (Net Section)	Cubic Yard	1
723(2)	Granular Material (Vehicular Measurement)	Cubic Yard	0
SECTION 724 - PATCHING AND WIDENING PAVEMENTS			
724(1)	Pavement Patching	Square Yard	0
724(2)	Pavement Widening	Square Yard	1
SECTION 725 - TEMPORARY DETOUR ROADS AND BRIDGES			
725(1)	Temporary Detour Roads	Linear Foot, Square Yard	1
725(2)	Temporary Detour Bridging	Linear Foot	2
SECTION 726 - BEDDING MATERIAL			
726(1)	Bedding Material	Cubic Yard	1
SECTION 727 - MOBILIZATION			
727(1)	Mobilization	Lump Sum	-
SECTION 728 - JACKED OR BORED PIPE			
728(1)	Jacked or Bored Pipe (size, type, class or thickness)	Linear Foot	0

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Item No.	Pay Item	Pay Unit	Decimals
SECTION 729 - TRAFFIC SIGNS AND DEVICES			
729(1)	Sign (Type A)	Square Foot	1
729(2)	Sign (Type B)	Square Foot	1
729(3)	Sign (Type C)	Square Foot	1
729(4)	Sign (Type D)	Square Foot	1
729(5)	Sign (Type E)	Square Foot	1
729(6)	Sign (Overhead Mounted)	Square Foot	1
729(7)	Mounting (____ Size Post)	Each	-
729(8)	Mounting (Overhead Truss)(Ground Mounted)	Each	-
729(9)	Mounting (Overhead Truss)(Structure Mounted)	Each	-
729(10)	Mounting (Overhead Cantilever)(Ground Mounted)	Each	-
729(11)	Mounting(Overhead Cantilever)(Structure Mounted)	Each	-
729(12)	Delineator Assembly (Ground Mounted)	Each	-
729(13)	Delineator Assembly (Structure Mounted)	Each	-
729(14)	Hazard Marker Assembly	Each	-
729(15)	Milepost Assembly (Ground Mounted)	Each	-
729(16)	Milepost Assembly (Structure Mounted)	Each	-
729(17)(A)	Dead End Road Installation (Type A)	Each	-
729(17)(B)	Dead End Road Installation (Type B)	Each	-
729(17)(C)	Dead End Road Installation (Type C)	Each	-
729(18)	Footings for Overhead Mountings (Type)	Each	-
729(19)	Mounting (Fascia Mounted Sign Bracket)	Each	-
729(20)	Sign Overlay Panels	Square Foot	1
SECTION 731 - RAISED PAVEMENT MARKERS			
731(1)	Nonreflectorized Raised Pavement Markers (Class)	Each	-
731(2)	Reflectorized Raised Pavement Markers (Class)	Each	-
SECTION 732 - THERMOPLASTIC PAVEMENT MARKINGS			
732(1)	Thermoplastic Pavement Striping (____" Width)	Linear Foot	0
732(2)	Thermoplastic Pavement Legends and Symbols	Each	-
732(3)	Skip-Line Thermoplastic Pavement Striping (____" Width)	Mile	3
732(4)	Solid-Line Thermoplastic Pavement Striping (____" Width)	Mile	3

Item No.	Pay Item	Pay Unit	Decimals
SECTION 733 - MEDIAN ROADWAY BARRIERS			
733(1)	Median Roadway Barrier (Type)	Linear Foot	1
SECTION 734 - BREAKING AND SEATING PAVEMENT			
734(1)	Rolling and Seating Pavement	Square Yard	0
734(2)	Breaking Pavement	Hour	0
SECTION 735 - UNDERSEALING PAVEMENT			
735(1)	Undersealing Pavement	CWT	1
735(2)	Holes for Underseal	Each	-
SECTION 802 - STRUCTURAL EXCAVATION AND BACKFILL			
802(1)	Structural Excavation	Cubic Yard	1
802(2)	Structural Excavation for Intermediate Bents	Cubic Yard	1
802(3)	Structural Excavation for Piers (Dry)	Cubic Yard	1
802(4)	Structural Excavation for Piers (Wet)	Cubic Yard	1
SECTION 803 - SHEET PILES			
803(1)	Untreated Timber Sheet Pile Wall	Square Foot	1
803(2)(A)	Treated Timber Sheet Pile Wall (Noncoastal Treatment)	Square Foot	1
803(2)(B)	Treated Timber Sheet Pile Wall (Coastal Treatment)	Square Foot	1
803(3)	Concrete Sheet Pile Wall	Square Foot	1
803(4)	Steel Sheet Pile Wall	Square Foot	1
SECTION 804 - BEARING PILES			
804(1)(A)	Precast Concrete Piles (12")	Linear Foot	0
804(1)(B)	Precast Concrete Piles (14")	Linear Foot	0
804(1)(C)	Precast Concrete Piles (16")	Linear Foot	0
804(1)(D)	Precast Concrete Piles (18")	Linear Foot	0
804(1)(E)	Precast Concrete Piles (20")	Linear Foot	0

Item No.	Pay Item	Pay Unit	Decimals
SECTION 804 - BEARING PILES (Cont'd)			
804(1)(F)	Precast Concrete Piles (24")	Linear Foot	0
804(1)(G)	Precast Concrete Piles (30")	Linear Foot	0
804(1)(H)	Precast Concrete Piles (36")	Linear Foot	0
804(1)(I)	Precast Concrete Piles (54")	Linear Foot	0
804(2)	Untreated Timber Piles	Linear Foot	0
804(3)(A)	Treated Timber Piles (Noncoastal Treatment)	Linear Foot	0
804(3)(B)	Treated Timber Piles (Coastal Treatment)	Linear Foot	0
804(4)(A)	Steel Bearing Piles (HP 8x36)	Linear Foot	0
804(4)(B)	Steel Bearing Piles (HP 10x42)	Linear Foot	0
804(4)(C)	Steel Bearing Piles (HP 10x57)	Linear Foot	0
804(4)(D)	Steel Bearing Piles (HP 12x53)	Linear Foot	0
804(4)(E)	Steel Bearing Piles (HP 12x74)	Linear Foot	0
804(4)(F)	Steel Bearing Piles (HP 14x73)	Linear Foot	0
804(4)(G)	Steel Bearing Piles (HP 14x89)	Linear Foot	0
804(4)(H)	Steel Bearing Piles (HP 14x102)	Linear Foot	0
804(4)(I)	Steel Bearing Piles (HP 14x117)	Linear Foot	0
804(5)	Cast-in-Place Concrete Piles (Size)	Linear Foot	0
Note: See "Precast Concrete Piles" for letter designations to be used. Example: Item 804(5)(D), Cast-in-Place Concrete Piles (18")			
804(6)	Concrete Piles (Size)	Linear Foot	0
Note: See "Precast Concrete Piles" for letter designations to be used. Example: Item 804(6)(B), Concrete Piles (14")			
804(7)	Precast Concrete Test Piles	Each	-
804(8)	Timber Test Piles	Each	-
804(9)	Steel Bearing Test Piles	Each	-
804(10)	Cast-in-Place Concrete Test Piles	Each	-
804(11)	Concrete Test Piles	Each	-
804(12)	Loading Test Piles	Each	-
804(13)	Reloading Test Piles	Each	-
804(14)	Redriving Test Piles	Each	-
804(15)	Loading Permanent Piles	Each	-

Item No.	Pay Item	Pay Unit	Decimals
SECTION 805 - STRUCTURAL CONCRETE			
805(1)	Class A Concrete	Cubic Yard	2
805(1)(A)	Class A Concrete (Pipe Headwalls)	Cubic Yard	2
805(1)(B)	Class A Concrete (Box Culverts)	Cubic Yard	2
805(1)(C)	Class A Concrete (Retaining Walls)	Cubic Yard	2
805(1)(D)	Class A Concrete (Footings)	Cubic Yard	2
805(1)(E)	Class A Concrete (Piers)	Cubic Yard	2
805(1)(F)	Class A Concrete (Bents)	Cubic Yard	2
805(1)(G)	Class A Concrete (Box Girders)	Cubic Yard	2
805(1)(H)	Class A Concrete (Counterweights)	Cubic Yard	2
805(2)	Class A(M) Concrete	Cubic Yard	2

Note: See "Class A Concrete" for letter designations to be used.  
Example: 805(2)(E), Class A(M) Concrete (Piers)

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805(3)	Class AA Concrete	Cubic Yard	2
805(4)	Class AA(M) Concrete	Cubic Yard	2
805(5)	Class D Concrete	Cubic Yard	2
805(6)	Class R Concrete	Cubic Yard	2
805(7)	Class S Concrete	Cubic Yard	2
805(8)(A)	Precast-Prestressed Concrete Girders (Type I)	Linear Foot	1
805(8)(B)	Precast-Prestressed Concrete Girders (Type II)	Linear Foot	1
805(8)(C)	Precast-Prestressed Concrete Girders (Type III)	Linear Foot	1
805(8)(D)	Precast-Prestressed Concrete Girders (Type IV)	Linear Foot	1
805(8)(E)	Precast-Prestressed Concrete Girders (Type V)	Linear Foot	1
805(8)(F)	Precast-Prestressed Concrete Girders (Type VI)	Linear Foot	1
805(9)	Expansion Joint Seal	Linear Foot	1
805(10)	Steel Reinforced Elastomeric Expansion Joint Seal (Size)	Linear Foot	1

SECTION 806 - REINFORCEMENT

806(1)	Deformed Reinforcing Steel	Pound	0
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SECTION 807 - STRUCTURAL METALS

807(1)	Steel (A 36)	Pound	0
807(2)	Steel (A 440)	Pound	0
807(3)	Steel (A 441)	Pound	0
807(4)	Steel (A 572)	Pound	0
807(5)	Steel (A 588)	Pound	0
807(6)	Structural Metalwork	Lump Sum	-

Item No.	Pay Item	Pay Unit	Decimals
SECTION 808 - STEEL GRID FLOORING			
808(1)	Steel Grid Flooring	Square Foot	1
SECTION 809 - MOVABLE BRIDGES			
809(1)	Movable Bridge Machinery	Lump Sum	-
809(2)	Traffic Barriers	Lump Sum	-
809(3)	Power Plant	Lump Sum	-
809(4)	Operating House	Lump Sum	-
809(5)	Machinery Houses	Lump Sum	-
SECTION 810 - BRIDGE RAILINGS AND BARRIERS			
810(1)	Concrete Railing (Type)	Linear Foot	2
810(2)	Steel Railing	Linear Foot	2
810(3)	Steel Channel Railing	Linear Foot	2
810(4)	Pipe Railing	Linear Foot	2
810(5)	Steel and Concrete Railing	Linear Foot	2
810(6)	Pipe and Concrete Railing	Linear Foot	2
SECTION 812 - UNTREATED AND TREATED TIMBER			
812(1)	Untreated Timber	MFBM	3
812(2)(A)	Treated Timber (Noncoastal Treatment)	MFBM	3
812(2)(B)	Treated Timber (Coastal Treatment)	MFBM	3
SECTION 813 - CONCRETE APPROACH SLABS			
813(1)	Concrete Approach Slabs	Square Yard	2
813(2)	Concrete Approach Slabs (Pile Supported)	Square Yard	2
SECTION 814 - DRILLED SHAFT FOUNDATIONS			
814(1)	Drilled Shaft (Diameter)	Linear Foot	1
814(2)	Bell Footing	Cubic Yard	2
814(3)	Test Hole (Diameter)	Linear Foot	1
814(4)	Test Bell (Diameter)	Each	-

Item No.	Pay Item	Pay Unit	Decimals
SPECIAL ITEMS			
TP-100	Trainee Reimbursement	Trainee Hour	0
Numbering System: Road and Airport special items should start with Item No. S-1. Bridge special items should start with Item No. S-101.			
	Adjusting Gas Lines (Size)	Linear Foot	0
	Adjusting Sanitary Sewer House Connections	Each	-
	Adjusting Sanitary Sewer Service Lines	Linear Foot	0
	Adjusting Water House Connections	Each	-
	Adjusting Water House Service Lines	Linear Foot	0
	Adjusting Water Lines (Size)	Linear Foot	0
	Aircraft Tiedowns	Each	-
	Asphalt Treated Drainage Blanket	Ton	1
	Bridge Ballast	Cubic Yard	1
	Bridge Superstructure and Substructure	Span	-
	Cable Guard Barrier	Linear Foot	1
	Chain Fence	Linear Foot	0
	Cleaning and Painting (Bridge Repair Projects)	Lump Sum	-
	Cleaning and Replacing Joints	Ton	1
	Clearance Gages	Each	-
	Cold Planing Asphaltic Pavement	Square Yard	0
	Construction Layout	Lump Sum	-
	Deck Drainage System	Lump Sum	-
	Drilled Wells (size, depth)	Linear Foot	0
	Driving Shoes	Each	-
	Dug Wells (size, depth)	Linear Foot	0
	Expanded Metal Glare Screen	Linear Foot	1
	Handrail (Deep Beam)	Linear Foot	1
	Headlands	Station	2

Schedule of Bid Items  
 1977 Standard Specifications

Item No.	Pay Item	Pay Unit	Decimals
	SPECIAL ITEMS		
	Impact Attenuators (Hi-Dro Cell)	Each	-
	Impact Attenuators (Inertial Barrier)	Each	-
	Irrigation Canals	Station	2
	Mucking Existing Ditches	Station	2
	Paved Drives	Ton	1
	Planing and Recycling Pavement:		
	Cold Planing Asphaltic Pavement	Square Yard	0
	Asphalt Cement (AC-30)	Ton	0
	New Aggregate Material	Ton	0
	Recycled Asphaltic Concrete	Ton	1
	Plastic Filter Cloth	Square Yard	0
	Precast Concrete Curb	Linear Foot	1
	Railroad Grade Crossings	Square Foot	1
	Raised Asphaltic Concrete Median (___" Thick)	Square Yard	1
	Reusing Existing Guard Rail	Linear Foot	1
	Rice Levees	Station	2
	Scarifying, Shaping & Compacting Roadbed	Mile	3
	Shaping Roadway	Mile	3
	Shoulder Drains:		
	Shoulder Drainage System	Linear Foot	0
	Outlet Drainage System	Each	-
	Signing	Each	-
	Subbase Treatment (RR-Highway Grade Crossings)	Square Yard, Cubic Yard	1
	Traffic Maintenance Aggregate (Vehicular Measurement)	Cubic Yard	0
	Wood Fencing	Linear Foot	0



APPENDIX B

LIST OF SECTIONS SAMPLED

LIST OF SAMPLED SECTIONS

SECTION	DESCRIPTION
203	Excavation and Embankment
204	Temporary Erosion Control
301	Base Course
302	Scarifying and Compacting Roadbed
303	In-place Cement Stablized Base Course
304	Lime Treatment
305	Subbase Treatment
401	Aggregate Surface Course
501	Asphaltic Concrete Mixtures
502	Asphaltic Concrete Friction Course
503	Tack Coat
504	Prime Coat
505	Asphaltic Surface Treatment
601	Portland Cement Concrete Pavement
701	Culverts and Storm Drains
702	Manholes, Inlets, and Catch Basins
703	Underdrains
704	Guard Rail
705	Fences
706	Concrete Walks, Drives and Incidental Paving
707	Curbs and Gutters
708	Right-of-Way Markers
709	Steel Rail Cattle Guards
711	Riprap
712	Revetments
713	Temporary Signs, Barricades and Pavement Markings
714	Slab Sodding
715	Topsoil
716	Vegetative Mulch
717	Seeding
718	Fertilizer and Agricultural Lime
719	Landscaping
720	Fiberglass Roving
721	Asphalt Mulch
723	Granular Material

LIST OF SAMPLED SECTIONS

SECTION	DESCRIPTION
724	Patching and Widening Pavement
725	Temporary Detour Roads and Bridges
726	Bedding Material
728	Jacked or Bored Pipe
729	Traffic Signs and Devices
731	Raised Pavement Markers
732	Thermoplastic Pavement Markings
733	Median Roadway Barriers
734	Breaking and Seating Pavement
735	Undersealing Pavement
802	Structural Excavation and Backfill
803	Sheet Piles
804	Bearing Piles
805	Structural Concrete
806	Reinforcement
807	Structural Metals
808	Steel Grid Flooring
809	Movable Bridges
810	Bridge Railings and Barriers
812	Untreated and Treated Timber
813	Concrete Approach Slabs
814	Drilled Shaft Foundations

APPENDIX C

LIST OF SAMPLING PLAN FACTORS

SAMPLING PLAN FACTORS

TYPE OF MIX (ITEM 501)	MINIMUM % A.C.	$\frac{(2000 \times \% \text{ A.C.})}{7.85} = \text{FACTOR}$
TYPE 1 W.C. (shoulder mix, curbs, & medians	5.3%	13.50 X Tons = Gallons of AC
TYPE 1 W.C.	5.3%	13.50 X Tons = "
TYPE 3 W.C.	5.3%	13.50 X Tons = "
TYPE 1 B.C. & TYPE 3 B.C.	4.7%	11.97 X Tons = "
TYPE 4 W.C. & TYPE 4 B.C.	6.5%	16.56 X Tons = "
5A BASE & 5B BASE	4.7%	11.97 X Tons = "
PLANT MIX SEAL (5/8" Thick) (ITEM 502) (65 lbs/sq. yd.)	6.0%	.0325 X Sq.Yds. = TONS
		15.29 X Tons = Gallons of A.C.
		.000952 X TONS = # SAMPLES AGGREGATE
ANTI-STRIPPING		.005 X Gals A.C. = Gallons Anti-Stri
HOT MIX (1" Thick = 110 lbs/sq.yd.		
PORTLAND CEMENT (94 lbs/cu.ft.) (2538 lbs/cu.yd.)		
Type B Concrete	5.8 Sacks	545.2 X CU. YDS. = LBS of CEMENT
Class A	6.0 Sacks	564 X CU. YDS. = "
Class A(A)	6.5 Sacks	611 X CU. YDS. = "
SIDEWALK (ITEM 706)	(4" Thick)	SQ. YDS. X .111 = CU. YDS.
	(6" Thick)	SQ. YDS. X .1667 = "

SAMPLING PLAN FACTORS

(ITEM 601) PORTLAND CEMENT CONCRETE PAVEMENT	8" Thick	.222 X Sq.Yds. = CU.YDS.
	9" Thick	.250 X Sq.Yds. = CU.YDS.
	10" Thick	.278 X Sq.Yds. = CU.YDS.
		$\frac{(\text{Sq.Yds}) \times (9)}{100} = \text{Gallons Curing Compound}$
(ITEM 804) CAST-IN-PLACE CONCRETE PILES (Thin Shell)	12"	.0291 X Lin.Ft. = CU.YDS
	14"	.0396 X Lin.Ft. = CU.YDS.
	16"	.0517 X Lin.Ft. = CU.YDS.
	24"	.1164 X Lin.Ft. = CU.YDS.
(ITEM 707) CURB & GUTTER (ITEM 810) CONCRETE RAILING	$\frac{(\text{End Area in Sq.In.}) \div (144) \div (27) = \text{CU.YDS/LIN.FT.}}$	
Cu.Yds of Concrete	$(\text{Cu.Yds./Lin.FT.}) \times (\text{Linear Feet}) = \text{CU.YDS.}$	
ITEM 704(3) BLOCKED OUT GUARD RAIL Posts & Spacer Blocks on 6' 3" Centers	Lin. Ft. $\div$ 6.25	= #Posts, Blocks
ITEM 704(8) GUARD RAIL TRANSITION (25' PAY LENGTH) Posts on 3' 1½" Centers EACH UNIT	LIN.FT. $\div$ 25'	= # of Units (25' $\div$ 3.125) = 7 Posts, 7 Blocks
ITEM 704(5) GUARD RAIL ANCHOR SECTION (BCT) (12½' PAY LENGTH) Each Unit requires: 3 Posts, 1 Spacer Block 2 24" Diameter Footings (Approx. .5 Cu.Yds. Concrete) 1 Certification for BREAKAWAY CABLE TERMINAL	LIN.FT. $\div$ 12½'	= # of Units

APPENDIX D

SECTION 501 OF THE MATERIALS SAMPLING MANUAL

SECTION 501 ASPHALTIC CONCRETE MIXTURES

ITEM 501 (1-4)

MATERIAL		REFERENCE	PURPOSE	SAMPLED BY	MINIMUM FREQUENCY	MIN. QUANTITY	CERT.	REMARKS
		TESTED BY		METHOD		CONTAINER	DISTR.	
ADDITIVES	Anti-Stripping	501.03 Mat. Lab	Accept.	PE S 601	1/batch or shipment	1 pt. Friction top can		(QPL 19)
	Silicone	501.03 PE	Accept.					(QPL 22) PE to verify that viscosity indicated on container conforms to QPL requirements.
AGGREGATES (Coarse)	Expanded Clay	1003.07 PE	Accept.					(QPL 2) Visual inspection by PE.
	Gravel	1003.07 PE or Dist. Lab	Accept.	PE* S 101	1/source	1 full sample sack		(QPL 2) Visual inspection by PE. *Sample when used for screenings.
	Shell	1003.07 (b) Dist. Lab	Accept.	PE S 101	1/source	1 full sample sack		
	Slag	1003.07(a)(3) Dist. Lab	Accept.	PE S 101	1/source	1 full sample sack		(QPL 2)
	Stone	1003.07 Mat. Lab	Accept.	PE S 101	1/source	1 full sample sack		(QPL 2)
AGGREGATES (General)	Crushed Gravel	1003.07(a)(1) Dist. Lab	Accept.	PE S 101	1/source	1 full sample sack		(QPL 2) For 1/2 crushed. Sample if questionable.
	Fine Sand	1003.07(a)(4) Dist. Lab	Accept.	PE S 101	1/source	1 full sample sack		Check for PI.



SECTION 501 ASPHALTIC CONCRETE MIXTURES

ITEM 501 (1-4) CONT'D.

MATERIAL		REFERENCE	PURPOSE	SAMPLED BY	MINIMUM FREQUENCY	MIN. QUANTITY	CERT.	REMARKS
		TESTED BY		METHOD		CONTAINER		
ASPHALT MIX RELEASE AGENT		501.07 PE	Accept.					(QPL 25) Visual inspection by PE.
BITUMINOUS MIXTURE	Job Mix Release Form	501.04 Contractor			1/mix type/ source			Contractor shall submit for approval by the PE, the standard job mix release form indicating his intended source of all materials and his mix design prior to starting work. Final approval is by the Dist. Lab Engineer.
	Loose Mixture	501.04 501.23 Contractor	Project Control & Accept.	Contractor S 203 & S 605	1/half day's plant oper.	2 gal. Suitable sampling bucket		DOTD will use contractor's project control test results for gradation acceptance.
		501.04 501.23 Dist. Lab	Verif.	Contractor S 203 & S 605	1/day	1 gal. Friction top can		Representative portion of the first loose mix sample obtained for project control and acceptance by the contractor.
		501.23 Dist. Lab	Record Test	Dist. Lab S 203				See Record Test Program S 701. Whenever possible, sample at same time acceptance sampling is done.
	Briquettes	501.22 (a) PE	Accept.	PE S 203 & S 605	2/half day's plant oper..			
		501.22 (a) Dist. Lab	Verif.	PE S 203 & S 605	1/half day's plant oper.	Suitably wrapped		Shall be a companion sample of an acceptance sample representing each half day's plant operation. (Submit the second briquette.)

SECTION 501 ASPHALTIC CONCRETE MIXTURES  
ITEM 501 (I-4) CONT'D.

MATERIAL		REFERENCE	PURPOSE	SAMPLED BY	MINIMUM FREQUENCY	MIN. QUANTITY	CERT.	REMARKS
		TESTED BY		METHOD		CONTAINER	DISTR.	
BITUMINOUS MIXTURE (cont'd.)	Thickness	Supp. Spec. 501.22 (e) Dist. Lab	Accept.	Dist. Lab TR 602				Applies to mixtures specified for payment on a cubic yard or square yard basis.
	Thickness	Supp. Spec. 501.22 (e) PE	Verif.	PE S 203 & S 605	S/lot	4 in. x 4 in. sq. or 4 in. diam. core		Applies to mixtures specified for payment on a cubic yard or square yard basis. The thickness of the lot will be the average of the 5 thicknesses of roadway density samples for the lot.
	Width	501.22(e)(2) Dist. Lab	Accept.	Dist. Lab TR 602				Applies to mixtures specified for payment on a cubic yard or square yard basis.
PRIME COAT	Cutback (Medium curing)	1002.04 Mat. Lab	Prelim. Source Test	Refinery S 201	1/storage tank	1 qt. Screw top can		
		PE	Accept.				CD 1 & 7	
TACK COAT	Cutback (Rapid curing)	1002.04 Mat. Lab	Prelim. Source Test	Supplier S 201	1/storage tank	1 qt. Screw top can		
		PE	Accept.				CD 1 & 7	
	Emulsified Asphalt (Anionic)	1002.03 Mat. Lab	Prelim. Source Test	Supplier S 201	1/storage tank	1 gal. Plastic bottle		
		PE	Accept.				CD 1 & 7	

APPENDIX E

WORKED EXAMPLE

QUANTITY OF ASPHALTIC CONCRETE = 5681.8 TONS

COMPUTATION OF GALLONS OF ASPHALTIC CEMENT

$$13.5 \times 5681.8 = 76704.3 \text{ gallons of AC}$$

COMPUTATION OF NUMBER OF SAMPLES USING AN ESTIMATE OF 6500 GALLONS PER TRANSPORT

$$76704.3 / 6500 = 11.80 \text{ samples}$$

.8 samples cannot be taken so the number is rounded up.

TOTAL NUMBER OF SAMPLES = 12

APPENDIX F

PRE-SAMPLING PLAN FOR CONTRACT 451-30-06

THIS IS THE SAMPLING PLAN FOR

CONTRACT NUMBER 451-30-06 AND

PROJECT NUMBER 451-30-06

LOCATED AT

THE F.A.P. NUMBER IS 220-1(073)012

AND

THE FUNDING IS I

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 203(04) EMBANKMENT IN PLACE	444314.00 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
AGGREGATES				
GRAVEL, SAND, SHELL	1 / 1000 CUBIC YARDS 1 / 1000 LIN FT / RDWY	ACCEPTANCE PROJ. CONT.	445	
EMBANKMENT				
DENSITY	1 / LIFT / RDWY IN EACH 1000 FT ZONE	ACCEPTANCE		
LIME (HYDRATED AND QUICKLIME)				
TYPE E TREATMENT	1 / LOAD 1 / SOURCE / PROJECT	ACCEPTANCE VERIFICATION	CC 1 & 7 QPL 34	
SOILS (SELECT)				
IN-PLACE ON ROADWAY	1 / 1000 LIN FT / RDWY OR 1 / 2000 LIN FT / SH	ACCEPTANCE		
SOILS (USABLE)				
BORROW PIT (NON-HYDRAULIC)	1 / BORING / ACRE	ACCEPTANCE		
HYDRAULIC	1 / 8 HR SHIFT	ACCEPTANCE		
REQUIRED (COMMON) EXCAVATION	AS REQUIRED			

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 204(O1) A MULCHING (TEMPORARY) 128.46 SQ YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ARTIFICAL COVERINGS	VISUAL INSPECTION BY PE	ACCEPTANCE		
FERTILIZER	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 1	
GRASS	VISUAL INSPECTION BY PE	ACCEPTANCE		
MULCHES	VISUAL INPSECTION BY PE	ACCEPTANCE		
SILT FENCING	VISUAL INSPECTION BY PE	ACCEPTANCE		
SLOPE DRAINS	VISUAL INSPECTION BY PE	ACCEPTANCE		



MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 204(O2) A		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
GRASSING (TEMPORARY)	386.00 SQ YDS				3
ARTIFICIAL COVERINGS		VISUAL INSPECTION BY PE	ACCEPTANCE		
FERTILIZER		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 1	
GRASS		VISUAL INSPECTION BY PE	ACCEPTANCE		
MULCHES		VISUAL INSPECTION BY PE	ACCEPTANCE		
SILT FENCING		VISUAL INSPECTION BY PE	ACCEPTANCE		
SLOPE DRAINS		VISUAL INSPECTION BY PE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 204(05)					4
SLOPE DRAINS (TEMPORARY)	1900.00 LIN FT				
-----					
ARTIFICIAL COVERINGS					
FERTILIZER				CA 1	
GRASS					
MULCHES					
SILT FENCING					
SLOPE DRAINS					

NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 204(OG) SEDIMENT BASINS	1.00			5
NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR				
ARTIFICIAL COVERINGS		VISUAL INSPECTION BY PE	ACCEPTANCE	
FERTILIZER		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 1
GRASS		VISUAL INSPECTION BY PE	ACCEPTANCE	
MULCHES		VISUAL INPSECTION BY PE	ACCEPTANCE	
SILT FENCING		VISUAL INSPECTION BY PE	ACCEPTANCE	
SLOPE DRAINS		VISUAL INSPECTION BY PE	ACCEPTANCE	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 204(07) SEDIMENT CHECK DAMS 488.00	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ARTIFICIAL COVERINGS	VISUAL INSPECTION BY PE	ACCEPTANCE		
FERTILIZER	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 1	
GRASS	VISUAL INSPECTION BY PE	ACCEPTANCE		
MULCHES	VISUAL INPSECTION BY PE	ACCEPTANCE		
SILT FENCING	VISUAL INSPECTION BY PE	ACCEPTANCE		
SLOPE DRAINS	VISUAL INSPECTION BY PE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
=====					7
ITEM 204(08)		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
SILT FENCING	1125.00 LIN FT				
=====					
ARTIFICIAL COVERINGS		VISUAL INSPECTION BY PE	ACCEPTANCE		
FERTILIZER		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 1	
GRASS		VISUAL INSPECTION BY PE	ACCEPTANCE		
MULCHES		VISUAL INPSECTION BY PE	ACCEPTANCE		
SILT FENCING		VISUAL INSPECTION BY PE	ACCEPTANCE		
SLOPE DRAINS		VISUAL INSPECTION BY PE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 301(01) BASE COURSE		7421.10 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
AGGREGATE BASES					
BINDER OR SAND		1 / 1000 CUBIC YARDS	ACCEPTANCE	8	
CRUSHED STONE GRAVEL		1 / 1000 CUBIC YARDS	ACCEPTANCE	8	
SAND CLAY GRAVEL (NATURAL OR ARTIFICIAL MIX)		1 / 1000 LINEAR FEET / 2 LANES OF ROADWAY	ACCEPTANCE	13	
SHELL		1 / 4000 CUBIC YARDS	ACCEPTANCE	2	
ASPHALTIC CONCRETE		SEE ITEM 501(1-4)			
CEMENT (PORTLAND)					
TYPES I, I(B), II		1 / LOAD 1 / SOURCE / PROJECT	ACCEPTANCE VERIFICATION	QPL 7 CC 1 & 7	
CONCRETE-FRESH (MINOR STRUCTURE)					
CLASS R		DETERMINED BY PE	ACCEPTANCE		
CURING MEMBRANE (ASPHALT)					
CUTBACK ASPHALT (MEDIUM CURING)			ACCEPTANCE		
EMULSIFIED ASPHALT (ANIONIC & CATIONIC)			ACCEPTANCE		
LIME (HYDRATED AND QUICKLIME)		1 / LOAD 1 / SOURCE / PROJECT	ACCEPTANCE VERIFICATION	CD 1 & 7 QPL 34	
MIXTURE ON ROADWAY					
DENSITY		1 / 1000 LIN FT / RWY OR 1 / 2000 LIN FT / SH	ACCEPTANCE	9	
MOISTURE CONTENT		SAME AS DENSITY	PROJ. CONT.	9	
PULVERIZATION		SAME AS DENSITY	PROJ. CONT.	9	
THICKNESS & WIDTH			ACCEPTANCE		
SOILS					
IN-PLACE ON ROADWAY		SAME AS DENSITY	ACCEPTANCE	9	
STOCKPILE		1 / 1000 CUBIC YARDS	ACCEPTANCE	8	
STERILANT (SHOULDER BASE)		1 / SHIPMENT	ACCEPTANCE		
WATER		1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 301(01) PUGMILL MIXING OF BASE	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			9
AGGREGATE	2 / DAY	PROJ. CONT.		
CEMENT (PORTLAND)	2 / DAY	PROJ. CONT.		
LIME (HYDRATED)	2 / DAY	PROJ. CONT.		
MIXTURE PRIOR TO PLACING ON ROADWAY	2 / DAY	PROJ. CONT.		
SOILS	2 / DAY	PROJ. CONT.		

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 301(O2) STERILIZATION OF SHOULDER BASE COURSE 4490.00 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
AGGREGATE BASES				
BINDER OR SAND	1 / 1000 CUBIC YARDS	ACCEPTANCE	5	
CRUSHED STONE GRAVEL	1 / 1000 CUBIC YARDS	ACCEPTANCE	5	
SAND CLAY GRAVEL (NATURAL OR ARTIFICIAL MIX)	1 / 1000 LINEAR FEET / 2 LANES OF ROADWAY	ACCEPTANCE	8	
SHELL	1 / 4000 CUBIC YARDS	ACCEPTANCE	2	
ASPHALTIC CONCRETE	SEE ITEM 501(1-4)			
CEMENT (PORTLAND)				
TYPES I,I(B),II	1 / LOAD 1 / SOURCE / PROJECT	ACCEPTANCE VERIFICATION	QPL 7 CC 1 & 7	
CONCRETE FRESH (MINOR STRUCTURE)				
CLASS R	DETERMINED BY PE	ACCEPTANCE		
CURING MEMBRANE (ASPHALT)				
CUTBACK ASPHALT (MEDIUM CURING)	ACCEPTANCE			
EMULSIFIED ASPHALT (ANIONIC & CATIONIC)	ACCEPTANCE			
LIME (HYDRATED AND QUICKLIME)	1 / LOAD 1 / SOURCE / PROJECT	ACCEPTANCE VERIFICATION	CD 1 & 7 QPL 34	
MIXTURE ON ROADWAY				
DENSITY	1 / 1000 LIN FT / RWY OR 1 / 2000 LIN FT / SH	ACCEPTANCE	6	
MOISTURE CONTENT	SAME AS DENSITY	PROJ. CONT.	6	
PULVERIZATION	SAME AS DENSITY	PROJ. CONT.	6	
THICKNESS & WIDTH	ACCEPTANCE			
SOILS				
IN-PLACE ON ROADWAY	SAME AS DENSITY	ACCEPTANCE	6	
STOCKPILE	1 / 1000 CUBIC YARDS	ACCEPTANCE	5	
STERILANT (SHOULDER BASE)	1 / SHIPMENT	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		



MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 301(02)	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
PUGMILL MIXING OF BASE				
AGGREGATE	2 / DAY	PROJ. CONT.		
CEMENT (PORTLAND)	2 / DAY	PROJ. CONT.		
LIME (HYDRATED)	2 / DAY	PROJ. CONT.		
MIXTURE PRIOR TO PLACING ON ROADWAY	2 / DAY	PROJ. CONT.		
SOILS	2 / DAY	PROJ. CONT.		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 501(01) A ASPHALTIC CONCRETE (WEARING COURSE) 5681.80 TONS		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ADDITIVES					
ANTI-STRIPPING		1 / BATCH OR SHIPMENT	ACCEPTANCE	QPL 19	
SILICONE			ACCEPTANCE	QPL 22	
AGGREGATES (COARSE)					
EXPANDED CLAY		VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 2	
GRAVEL		1 / SOURCE	ACCEPTANCE	QPL 2	
SHELL		1 / SOURCE	ACCEPTANCE		
SLAG		1 / SOURCE	ACCEPTANCE	QPL 2	
STONE		1 / SOURCE	ACCEPTANCE	QPL 2	
AGGREGATES (GENERAL)					
CRUSHED GRAVEL		1 / SOURCE	ACCEPTANCE	QPL 2	
FINE SAND		1 / SOURCE	ACCEPTANCE		
MINERAL FILLER		SEE ITEM 501(04)			
PLANT BINS OR COLD FEED		DET. BY DIST. LAB.	PROJ. CONT		
SCREENINGS		1 / SOURCE	ACCEPTANCE	QPL 2	
ASPHALT CEMENT		1 / TRANSPORT OR PLANT STORAGE TANK	ACCEPTANCE	CD 1 & 7 12	
ASPHALT MIX RELEASE AGENT		VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 25	
BITUMINOUS MIXTURE					
JOB MIX RELEASE FORM		1 / MIX TYPE / SOURCE			
LOOSE MIXTURE		1 / HALF DAY 1 / DAY	ACCEPTANCE VERIFICATION	14 7	
BRIQUETTES		2 / HALF DAY 1 / HALF DAY	ACCEPTANCE VERIFICATION	27 14	
ROADWAY		5 / LOT 2 / LOT	ACCEPTANCE VERIFICATION	34 14	
SURFACE TOLERANCE		EACH LOT EACH LOT	ACCEPTANCE VERIFICATION	7 7	
THICKNESS & WIDTH		ONLY IF PAID BY CUBIC OR SQUARE YDS.	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 501(O1) A				13
PRIME COAT				
CUTBACK (MEDIUM CURING)		ACCEPTANCE	CD 1 & 7	
TACK COAT				
CUTBACK (RAPID CURING)		ACCEPTANCE	CD 1 & 7	
EMULSIFIED ASPHALT (ANIONIC)		ACCEPTANCE	CD 1 & 7	

NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 501(01) B ASPHALTIC CONCRETE (BINDER COURSE) 2188.20 TONS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ADDITIVES				
ANTI-STRIPPING	1 / BATCH OR SHIPMENT	ACCEPTANCE	QPL 19	
SILICONE		ACCEPTANCE	QPL 22	
AGGREGATES (COARSE)				
EXPANDED CLAY	VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 2	
GRAVEL	1 / SOURCE	ACCEPTANCE	QPL 2	
SHELL	1 / SOURCE	ACCEPTANCE		
SLAG	1 / SOURCE	ACCEPTANCE	QPL 2	
STONE	1 / SOURCE	ACCEPTANCE	QPL 2	
AGGREGATES (GENERAL)				
CRUSHED GRAVEL	1 / SOURCE	ACCEPTANCE	QPL 2	
FINE SAND	1 / SOURCE	ACCEPTANCE		
MINERAL FILLER	SEE ITEM 501(04)			
PLANT BINS OR COLD FEED	DET. BY DIST. LAB.	PROJ. CONT.		
SCREENINGS	1 / SOURCE	ACCEPTANCE	QPL 2	
ASPHALT CEMENT	1 / TRANSPORT OR PLANT STORAGE TANK	ACCEPTANCE	CD 1 & 7 5	
ASPHALT MIX RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 25	
BITUMINOUS MIXTURE				
JOB MIX RELEASE FORM	1 / MIX TYPE / SOURCE			
LOOSE MIXTURE	1 / HALF DAY 1 / DAY	ACCEPTANCE VERIFICATION	6 3	
BRIQUETTES	2 / HALF DAY 1 / HALF DAY	ACCEPTANCE VERIFICATION	11 6	
ROADWAY	5 / LOT 2 / LOT	ACCEPTANCE VERIFICATION	13 6	
SURFACE TOLERANCE	EACH LOT EACH LOT	ACCEPTANCE VERIFICATION	3 3	
THICKNESS & WIDTH	ONLY IF PAID BY CUBIC OR SQUARE YDS.	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 501(01) B	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			15
PRIME COAT				
CUIBACK (MEDIUM CURING)		ACCEPTANCE	CD 1 & 7	
TACK COAT				
CUIBACK (RAPID CURING)		ACCEPTANCE	CD 1 & 7	
EMULSIFIED ASPHALT (ANIONIC)		ACCEPTANCE	CD 1 & 7	

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 16	
				REQUIRED	TAKEN
ITEM 501(02) C ASPHALTIC CONCRETE (BASE COURSE) 14866.40 CU YDS		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ADDITIVES					
ANTI-STRIPPING		1 / BATCH OR SHIPMENT	ACCEPTANCE	QPL 19	
SILICONE			ACCEPTANCE	QPL 22	
AGGREGATES (COARSE)					
EXPANDED CLAY		VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 2	
GRAVEL		1 / SOURCE	ACCEPTANCE	QPL 2	
SHELL		1 / SOURCE	ACCEPTANCE		
SLAG		1 / SOURCE	ACCEPTANCE	QPL 2	
STONE		1 / SOURCE	ACCEPTANCE	QPL 2	
AGGREGATES (GENERAL)					
CRUSHED GRAVEL		1 / SOURCE	ACCEPTANCE	QPL 2	
FINE SAND		1 / SOURCE	ACCEPTANCE		
MINERAL FILLER		SEE ITEM 501(04)			
PLANT BINS OR COLD FEED		DET. BY DIST. LAB.	PROJ. CONT		
SCREENINGS		1 / SOURCE	ACCEPTANCE	QPL 2	
ASPHALT CEMENT		1 / TRANSPORT OR PLANT STORAGE TANK	ACCEPTANCE	CD 1 & 7	
ASPHALT MIX RELEASE AGENT		VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 25	
BITUMINOUS MIXTURE					
JOB MIX RELEASE FORM		1 / MIX TYPE / SOURCE			
LOOSE MIXTURE		1 / HALF DAY 1 / DAY	ACCEPTANCE VERIFICATION		
BRIQUETTES		2 / HALF DAY 1 / HALF DAY	ACCEPTANCE VERIFICATION		
ROADWAY		5 / LOT 2 / LOT	ACCEPTANCE VERIFICATION		
SURFACE TOLERANCE		EACH LOT EACH LOT	ACCEPTANCE VERIFICATION		
THICKNESS & WIDTH		ONLY IF PAID BY CUBIC OR SQUARE YDS	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
=====				17
ITEM 501(O2) C	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
PRIME COAT				
CUTBACK (MEDIUM CURING)		ACCEPTANCE	CD 1 & 7	
TACK COAT				
CUTBACK (RAPID CURING)		ACCEPTANCE	CD 1 & 7	
EMULSIFIED ASPHALT (ANIONIC)		ACCEPTANCE	CD 1 & 7	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
=====					18
ITEM 501(O4)		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
MINERAL FILLER (COMMERICAL GRADE)	314.80 TONS				
=====					
MINERAL FILLER		1 / 100 TONS	ACCEPTANCE	4	



MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	TAKEN
-----				
ITEM 601(O1) C PORTLAND CEMENT CONCRETE PAVEMENT	3391.60 SQ YDS 8.00" THICK	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
-----				
AD MIXTURES (AIR-ENTRAINING, WATER REDUCING (NORMAL & RETARDING)	1 / MFR. LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)	1 / DAY FOR MOISTURE 2 / DAY FOR GRADATION 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKING MATERIALS FOR JOINT SEALS	1 / SHIPMENT	ACCEPTANCE	QPL 5	
UPHOLSTERY ROVING CORD	VISUAL INSPECTION BY PE	ACCEPTANCE		
CEMENT (PORTLAND) - TYPES I(B) & II	1 / LOAD 1 / SOURCE / PROJ.	ACCEPTANCE VERIFICATION	QPL 7 CC 1 & 7 QPL 7 CC 1 & 7	
CONCRETE-FRESH (PAVEMENT)				
MIX RELEASE	1 / MIX TYPE / SOURCE			
AIR	1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
FLEXURE AND COMPRESSION	WHEN SPECIFIED	VERIFICATION		
SLUMP	1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
UNIT WEIGHT		PROJ. CONT.		
CONCRETE-CURED (PAVEMENT)				
CORES	5 / LOT	ACCEPTANCE	24	
SURFACE TEST	EACH LOT	ACCEPTANCE	5	
SURFACE TEXTURE	2 / LOT	PROJ. CONT.	10	
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATER PROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUNDS	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPOXY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
JOINT FILLERS				

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
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ITEM 601(O1) C	NO OF SAMPLES MAY BE	CHANGED ON THE	JUDGEMENT OF THE	ENGR
CELLULAR POLYSTYRENE	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED CLOSED CELL POLYETHYLENE	1 / 5000 LIN FT	ACCEPTANCE	QPL 18	
PREFORMED NON-BITUMINOUS CELLULAR	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED POLYVINYL CHLORIDE	1 / 5000 LIN FT	ACCEPTANCE	CA 3	
SELF EXPANDING CORK	1 / 5000 LIN FT	ACCEPTANCE		
SPONGE RUBBER	1 / 5000 LIN FT	ACCEPTANCE		
WOOD	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL				
ELASTIC	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3	
PVC EXTENDED COAL TAR	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (LIQUID POURED) - POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT		CA 3 QPL 5	
77 JOINT SEAL (PREFORMED) - ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / SEAL / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / ADHESIVE LOT	ACCEPTANCE	QPL 18	
PRIMER		ACCEPTANCE	QPL 5	
REINFORCEMENT				
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
WIRE FABRIC	1 / SHIPMENT	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 601(01) C PORTLAND CEMENT CONCRETE PAVEMENT 625.00 SQ YDS 8.00" THICK		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ADMIXTURES (AIR-ENTRAINING, WATER REDUCING (NORMAL & RETARDING))		1 / MFR. LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / DAY FOR MOISTURE 2 / DAY FOR GRADATION 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKING MATERIALS FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
UPHOLSTERY ROVING CORD		VISUAL INSPECTION BY PE	ACCEPTANCE		
CEMENT (PORTLAND) - TYPES I(B) & II		1 / LOAD		QPL 7	
		1 / SOURCE / PROJ.	ACCEPTANCE VERIFICATION	CC 1 & 7 QPL 7 CC 1 & 7	
CONCRETE-FRESH (PAVEMENT)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
FLEXURE AND COMPRESSION		WHEN SPECIFIED	VERIFICATION		
SLUMP		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
UNIT WEIGHT			PROJ. CONT.		
CONCRETE-CURED (PAVEMENT)					
CORES		5 / LOT	ACCEPTANCE	5	
SURFACE TEST		EACH LOT	ACCEPTANCE	1	
SURFACE TEXTURE		2 / LOT	PROJ. CONT.	2	
CURING MATERIALS					
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATER PROOF PAPER, WHITE POLYETHYLENE SHEETING		1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUNDS		1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS					
EPOXY		1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE		1 / MIX DESIGN	ACCEPTANCE		
JOINT FILLERS					

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
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ITEM 601(01) C		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
CELLULAR POLYSTYRENE		1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED CLOSED CELL POLYETHYLENE		1 / 5000 LIN FT	ACCEPTANCE	QPL 18	
PREFORMED NON-BITUMINOUS CELLULAR		1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED POLYVINYL CHLORIDE		1 / 5000 LIN FT	ACCEPTANCE	CA 3	
SELF EXPANDING CORK		1 / 5000 LIN FT	ACCEPTANCE		
SPONGE RUBBER		1 / 5000 LIN FT	ACCEPTANCE		
WOOD		1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL					
ELASTIC		1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3	
PVC EXTENDED COAL TAR		1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (LIQUID POURED) - POLYURETHANE POLYMER		1 / BATCH OR SHIPMENT		CA 3 QPL 5	
JOINT SEAL (PREFORMED) - ELASTOMERIC COMPRESSION		1 / 6000 LIN FT / SEAL / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE		1 / ADHESIVE LOT	ACCEPTANCE	QPL 18	
PRIMER			ACCEPTANCE	QPL 5	
REINFORCEMENT					
LOAD TRANSMISSION DEVICES		1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	
TIE BARS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
WIRE FABRIC		1 / SHIPMENT	ACCEPTANCE		
WATER		1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 601(01) D PORTLAND CEMENT CONCRETE PAVEMENT 17640.80 SQ YDS 9.00" THICK		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ADMIXTURES (AIR-ENTRAINING, WATER REDUCING (NORMAL & RETARDING))		1 / MFR. LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / DAY FOR MOISTURE 2 / DAY FOR GRADATION 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKING MATERIALS FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
UPHOLSTERY ROVING CORD		VISUAL INSPECTION BY PE	ACCEPTANCE		
CEMENT (PORTLAND) - TYPES I(B) & II		1 / LOAD		QPL 7	
		1 / SOURCE / PROJ.	ACCEPTANCE VERIFICATION	CC 1 & 7 QPL 7 CC 1 & 7	
CONCRETE-FRESH (PAVEMENT)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
FLEXURE AND COMPRESSION		WHEN SPECIFIED	VERIFICATION		
SLUMP		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
UNIT WEIGHT			PROJ. CONT.		
CONCRETE-CURED (PAVEMENT)					
CORES		5 / LOT	ACCEPTANCE	123	
SURFACE TEST		EACH LOT	ACCEPTANCE	25	
SURFACE TEXTURE		2 / LOT	PROJ. CONT.	50	
CURING MATERIALS					
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATER PROOF PAPER, WHITE POLYETHYLENE SHEETING		1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUNDS		1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS					
EPOXY		1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE		1 / MIX DESIGN	ACCEPTANCE		
JOINT FILLERS					

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 601(01) D	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			24
CELLULAR POLYSTYRENE	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED CLOSED CELL POLYETHYLENE	1 / 5000 LIN FT	ACCEPTANCE	QPL 18	
PREFORMED NON-BITUMINOUS CELLULAR	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED POLYVINYL CHLORIDE	1 / 5000 LIN FT	ACCEPTANCE	CA 3	
SELF EXPANDING CORK	1 / 5000 LIN FT	ACCEPTANCE		
SPONGE RUBBER	1 / 5000 LIN FT	ACCEPTANCE		
WOOD	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL				
ELASTIC	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3	
PVC EXTENDED COAL TAR	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (LIQUID POURED) - POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT		CA 3 QPL 5	
JOINT SEAL (PREFORMED) - ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / SEAL / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / ADHESIVE LOT	ACCEPTANCE	QPL 18	
PRIMER		ACCEPTANCE	QPL 5	
REINFORCEMENT				
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
WIRE FABRIC	1 / SHIPMENT	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 601(01) E PORTLAND CEMENT CONCRETE PAVEMENT		45128.10 SQ YDS 10.00" THICK	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ADMIXTURES (AIR-ENTRAINING, WATER REDUCING (NORMAL & RETARDING))		1 / MFR. LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / DAY FOR MOISTURE 2 / DAY FOR GRADATION 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKING MATERIALS FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
UPHOLSTERY ROVING CORD		VISUAL INSPECTION BY PE	ACCEPTANCE		
CEMENT (PORTLAND) - TYPES I(B) & II		1 / LOAD 1 / SOURCE / PROJ.	ACCEPTANCE VERIFICATION	QPL 7 CC 1 & 7 QPL 7 CC 1 & 7	
CONCRETE-FRESH (PAVEMENT)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
FLEXURE AND COMPRESSION		WHEN SPECIFIED	VERIFICATION		
SLUMP		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
UNIT WEIGHT			PROJ. CONT.		
CONCRETE-CURED (PAVEMENT)					
CORES		5 / LOT	ACCEPTANCE	314	
SURFACE TEST		EACH LOT	ACCEPTANCE	63	
SURFACE TEXTURE		2 / LOT	PROJ. CONT.	126	
CURING MATERIALS					
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATER PROOF PAPER, WHITE POLYETHYLENE SHEETING		1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUNDS		1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS					
EPOXY		1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE		1 / MIX DESIGN	ACCEPTANCE		
JOINT FILLERS					

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 601(01) E	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
CELLULAR POLYSTYRENE	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED CLOSED CELL POLYETHYLENE	1 / 5000 LIN FT	ACCEPTANCE	QPL 18	
PREFORMED NON-BITUMINOUS CELLULAR	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED POLYVINYL CHLORIDE	1 / 5000 LIN FT	ACCEPTANCE	CA 3	
SELF EXPANDING CORK	1 / 5000 LIN FT	ACCEPTANCE		
SPONGE RUBBER	1 / 5000 LIN FT	ACCEPTANCE		
WOOD	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL				
ELASTIC	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3	
PVC EXTENDED COAL TAR	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (LIQUID POURED) - POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT		CA 3 QPL 5	
JOINT SEAL (PREFORMED) - ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / SEAL / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / ADHESIVE LOT	ACCEPTANCE	QPL 18	
PRIMER		ACCEPTANCE	QPL 5	
REINFORCEMENT				
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
WIRE FABRIC	1 / SHIPMENT	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		



MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 27	
				REQUIRED	TAKEN
ITEM 601(O1) E PORTLAND CEMENT CONCRETE PAVEMENT		872.60 SQ YDS 10.00" THICK	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ADMIXTURES (AIR-ENTRAINING, WATER REDUCING (NORMAL & RETARDING)		1 / MFR. LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / DAY FOR MOISTURE 2 / DAY FOR GRADATION 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKING MATERIALS FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
UPHOLSTERY ROVING CORD		VISUAL INSPECTION BY PE	ACCEPTANCE		
CEMENT (PORTLAND) - TYPES I(B) & II		1 / LOAD 1 / SOURCE / PROJ.	ACCEPTANCE VERIFICATION	QPL 7 CC 1 & 7 QPL 7 CC 1 & 7	
CONCRETE-FRESH (PAVEMENT)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
FLEXURE AND COMPRESSION		WHEN SPECIFIED	VERIFICATION		
SLUMP		1 / HALF DAY 2 / HALF DAY	VERIFICATION PROJ. CONT.		
UNIT WEIGHT			PROJ. CONT.		
CONCRETE-CURED (PAVEMENT)					
CORES		5 / LOT	ACCEPTANCE	7	
SURFACE TEST		EACH LOT	ACCEPTANCE	2	
SURFACE TEXTURE		2 / LOT	PROJ. CONT.	3	
CURING MATERIALS					
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATER PROOF PAPER, WHITE POLYETHYLENE SHEETING		1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUNDS		1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS					
EPOXY		1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE		1 / MIX DESIGN	ACCEPTANCE		
JOINT FILLERS					

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
=====				28
ITEM 601(01) E	NO OF SAMPLES MAY BE CHANGED ON THE	JUDGEMENT OF THE	ENGR	
CELLULAR POLYSTYRENE	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED CLOSED CELL POLYETHYLENE	1 / 5000 LIN FT	ACCEPTANCE	QPL 18	
PREFORMED NON-BITUMINOUS CELLULAR	1 / 5000 LIN FT	ACCEPTANCE		
PREFORMED POLYVINYL CHLORIDE	1 / 5000 LIN FT	ACCEPTANCE	CA 3	
SELF EXPANDING CORK	1 / 5000 LIN FT	ACCEPTANCE		
SPONGE RUBBER	1 / 5000 LIN FT	ACCEPTANCE		
WOOD	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL				
ELASTIC	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3	
PVC EXTENDED COAL TAR	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (LIQUID POURED) - POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT		CA 3 QPL 5	
JOINT SEAL (PREFORMED) - ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / SEAL / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / ADHESIVE LOT	ACCEPTANCE	QPL 18	
PRIMER		ACCEPTANCE	QPL 5	
REINFORCEMENT				
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
WIRE FABRIC	1 / SHIPMENT	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		

FREQUENCY PURPOSE REQUIRED OF THE ENGR

MATERIAL AND QUANTITY

FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
136.00 LIN FT			
VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
SEE ITEM 723(2)			
VISUAL INSPECTION BY PE	ACCEPTANCE		
VISUAL INSPECTION BY PE		CC 3	
VISUAL INSPECTION BY PE		CD 1 & 7	
VISUAL INSPECTION BY PE	ACCEPTANCE		
VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 4	
		CA 7	
		QPL 4	
VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 30	
				REQUIRED	TAKEN
ITEM 701(07) I ASBESTOS BONDED CORRUGATED STEEL PIPE 24" DIA 71.00 LIN FT		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC	3
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC	3
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD	1 & 7
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL	4
RUBBER GASKETS			ACCEPTANCE	CA	7
SEALANTS			ACCEPTANCE	QPL	4
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD	1 & 7
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 701(13) F REINFORCED CONCRETE PIPE 15" DIA		334.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC 3	
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD 1 & 7	
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
RUBBER GASKETS			ACCEPTANCE	CA 7	
SEALANTS			ACCEPTANCE	QPL 4	
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 32	
				REQUIRED	TAKEN
ITEM 701(13) G REINFORCED CONCRETE PIPE 18" DIA		978.00 LIN FT			
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ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC 3	
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD 1 & 7	
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
RUBBER GASKETS			ACCEPTANCE	CA 7	
SEALANTS			ACCEPTANCE	QPL 4	
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 701(13) I REINFORCED CONCRETE PIPE 24" DIA		174.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC 3	
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD 1 & 7	
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
RUBBER GASKETS			ACCEPTANCE	CA 7	
SEALANTS			ACCEPTANCE	QPL 4	
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 34	
				REQUIRED	TAKEN
ITEM 701(13) K REINFORCED CONCRETE PIPE 30" DIA		551.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC	3
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC	3
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD	1 & 7
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL	4
RUBBER GASKETS			ACCEPTANCE	CA	7
SEALANTS			ACCEPTANCE	QPL	4
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD	1 & 7
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		



MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 701(13) M REINFORCED CONCRETE PIPE 36" Dia		104.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC 3	
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD 1 & 7	
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
RUBBER GASKETS			ACCEPTANCE	CA 7	
SEALANTS			ACCEPTANCE	QPL 4	
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 36	
				REQUIRED	TAKEN
ITEM 701(13) P REINFORCED CONCRETE PIPE 54" DIA 1152.00 LIN FT		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC	3
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC	3
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD	1 & 7
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL	4
RUBBER GASKETS			ACCEPTANCE	CA	7
SEALANTS			ACCEPTANCE	QPL	4
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD	1 & 7
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD	1 & 7
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 701(13) Q REINFORCED CONCRETE PIPE 60" DIA 820.00 LIN FT		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC 3	
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD 1 & 7	
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
RUBBER GASKETS			ACCEPTANCE	CA 7	
SEALANTS			ACCEPTANCE	QPL 4	
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 701(13) Q REINFORCED CONCRETE PIPE 60" DIA		1242.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ASBESTOS CEMENT PIPE		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	
BACKFILL (SOIL)		SEE ITEM 723(2)			
BEDDING MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CAST IRON PIPE		VISUAL INSPECTION BY PE		CC 3	
CONCRETE PIPE					
NONREINFORCED, REINFORCED, REINFORCED ARCH		VISUAL INSPECTION BY PE		CD 1 & 7	
CONDUIT PLUG		VISUAL INSPECTION BY PE	ACCEPTANCE		
GASKET MATERIAL (FOR PIPE)					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
RUBBER GASKETS			ACCEPTANCE	CA 7	
SEALANTS			ACCEPTANCE	QPL 4	
METAL PIPE					
ASBESTOS BONDED CORRUG. STEEL PIPE & PIPE ARCH		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
BITUMINOUS COATED CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. ALUMINUM PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
CORRUG. STEEL PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
SLOTTED DRAIN PIPE		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
STRUCTURAL PLATE PIPE & PIPE ARCH		SAME AS ABOVE	ACCEPTANCE	CD 1 & 7	
VITRIFIED CLAY PIPE		SAME AS ABOVE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY

FREQUENCY

PURPOSE

REQUIRED

TAKEN

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 702(04) A CATCH BASINS 14.00	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ASPHALTIC VARNISH	1 / SHIPMENT	ACCEPTANCE		
BACKFILL (SOIL)	SEE ITEM 723(02)			
BRICK	1 / 25,000 / TYPE	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)				
MIX RELEASE	1 / MIX TYPE / SOURCE			
	NOT REQUIRED IF QUAN PER CLASS LESS THAN 50 CU YDS			
COMPRESSIVE STRENGTH	3 CYL / 50 CU YDS	ACCEPTANCE		
COVERS, FRAMES, GRATES		ACCEPTANCE	CA 6	
GASKET MATERIALS				
FLEXIBLE PLASTIC GASKET		ACCEPTANCE	QPL 4	
MANHOLE STEPS	1 / TYPE	ACCEPTANCE	QPL 26	
MORTAR				
CEMENT, SAND, & WATER	VISUAL INSPECTION BY PE ACCEPTANCE			
PRECAST REINFORCED CONCRETE UNITS	VISUAL INSPECTION BY PE CD 1 & 7			
REINFORCEMENT				
BARS	1 / SIZE / TYPE / SHIPMENT			
	OF NOT MORE THAN 50 TONS ACCEPTANCE			
CHAIRS	1 / TYPE	ACCEPTANCE		
TIE BARS	1 / SIZE / TYPE / SHIPMENT			
	OF NOT MORE THAN 50 TONS			

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 702(O4) B CATCH BASINS 4.00		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ASPHALTIC VARNISH		1 / SHIPMENT	ACCEPTANCE		
BACKFILL (SOIL)		SEE ITEM 723(O2)			
BRICK		1 / 25,000 / TYPE	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX TYPE / SOURCE NOT REQUIRED IF QUAN PER CLASS LESS THAN 50 CU YDS			
COMPRESSIVE STRENGTH		3 CYL / 50 CU YDS	ACCEPTANCE		
COVERS, FRAMES, GRATES			ACCEPTANCE	CA 6	
GASKET MATERIALS					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
MANHOLE STEPS		1 / TYPE	ACCEPTANCE	QPL 26	
MORTAR					
CEMENT, SAND, & WATER		VISUAL INSPECTION BY PE ACCEPTANCE			
PRECAST REINFORCED CONCRETE UNITS		VISUAL INSPECTION BY PE CD 1 & 7			
REINFORCEMENT					
BARS		1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS ACCEPTANCE			
CHAIRS		1 / TYPE	ACCEPTANCE		
TIE BARS		1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS			

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 41	
				REQUIRED	TAKEN
ITEM 702(O4) C CATCH BASINS 8.00		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ASPHALTIC VARNISH		1 / SHIPMENT	ACCEPTANCE		
BACKFILL (SOIL)		SEE ITEM 723(O2)			
BRICK		1 / 25,000 / TYPE	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX TYPE / SOURCE NOT REQUIRED IF QUAN PER CLASS LESS THAN 50 CU YDS			
COMPRESSIVE STRENGTH		3 CYL / 50 CU YDS	ACCEPTANCE		
COVERS, FRAMES, GRATES			ACCEPTANCE	CA 6	
GASKET MATERIALS					
FLEXIBLE PLASTIC GASKET			ACCEPTANCE	QPL 4	
MANHOLE STEPS		1 / TYPE	ACCEPTANCE	QPL 26	
MORTAR					
CEMENT, SAND, & WATER		VISUAL INSPECTION BY PE ACCEPTANCE			
PRECAST REINFORCED CONCRETE UNITS		VISUAL INSPECTION BY PE			
REINFORCEMENT				CD 1 & 7	
BARS		1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS ACCEPTANCE			
CHAIRS		1 / TYPE	ACCEPTANCE		
TIE BARS		1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS			

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 702(04) D CATCH BASINS 1.00	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ASPHALTIC VARNISH	1 / SHIPMENT	ACCEPTANCE		
BACKFILL (SOIL)	SEE ITEM 723(02)			
BRICK	1 / 25,000 / TYPE	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)				
MIX RELEASE	1 / MIX TYPE / SOURCE			
COMPRESSIVE STRENGTH	3 CYL / 50 CU YDS	ACCEPTANCE		
COVERS, FRAMES, GRATES		ACCEPTANCE	CA 6	
GASKET MATERIALS				
FLEXIBLE PLASTIC GASKET		ACCEPTANCE	QPL 4	
MANHOLE STEPS	1 / TYPE	ACCEPTANCE	QPL 26	
MORTAR				
CEMENT, SAND, & WATER	VISUAL INSPECTION BY PE	ACCEPTANCE		
PRECAST REINFORCED CONCRETE UNITS	VISUAL INSPECTION BY PE		CD 1 & 7	
REINFORCEMENT				
BARS	1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
TIE BARS	1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS			

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 702(04) E CATCH BASINS ASPHALTIC VARNISH	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
	7.00			
BACKFILL (SOIL)	1 / SHIPMENT	ACCEPTANCE		
BRICK	SEE ITEM 723(O2)			
CONCRETE - FRESH (MINOR STRUCTURE)	1 / 25,000 / TYPE	ACCEPTANCE		
MIX RELEASE	1 / MIX TYPE / SOURCE NOT REQUIRED IF QUAN PER CLASS LESS THAN 50 CU YDS			
COMPRESSIVE STRENGTH	3 CYL / 50 CU YDS	ACCEPTANCE		
COVERS, FRAMES, GRATES		ACCEPTANCE	CA 6	
GASKET MATERIALS				
FLEXIBLE PLASTIC GASKET		ACCEPTANCE	QPL 4	
MANHOLE STEPS	1 / TYPE	ACCEPTANCE	QPL 26	
MORTAR				
CEMENT, SAND, & WATER	VISUAL INSPECTION BY PE	ACCEPTANCE		
PRECAST REINFORCED CONCRETE UNITS	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
REINFORCEMENT				
BAR	1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
TIE BARS	1 / SIZE / TYPE / SHIPMENT OF NOT MORE THAN 50 TONS			

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 704(O3) BLOCKED OUT GUARD RAIL		2262.50 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
CONCRETE-FRESH (MINOR STRUCTURE)		SEE ITEM 805(1-8)	ACCEPTANCE		
GALVANIZING REPAIR COMPOUND		1 / TYPE	ACCEPTANCE		
HARDWARE					
ACCESSORIES, BOLTS, END ANCHOR RODS, FITTINGS, NUTS, AND WASHERS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
METAL BEAM RAIL			ACCEPTANCE	CA 3	
POSTS AND SPACER BLOCKS					
CONCRETE		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
STEEL		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	
WOOD		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
TIMBER RAIL		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
WIRE ROPE AND FITTINGS		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 704(O5) GUARD RAIL ANCHOR SECTIONS (BCT) CONCRETE-FRESH (MINOR STRUCTURE)	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
112.50 LIN FT	SEE ITEM 805(1-8)	ACCEPTANCE		
GALVANIZING REPAIR COMPOUND	1 / TYPE VISUAL INSPECTION BY PE	ACCEPTANCE		
HARDWARE				
ACCESSORIES, BOLTS, END ANCHOR RODS, FITTINGS, NUTS, AND WASHERS	1 / SIZE / TYPE / SHIPMENT ACCEPTANCE	ACCEPTANCE		
METAL BEAM RAIL		ACCEPTANCE	CA 3	
POSTS AND SPACER BLOCKS				
CONCRETE	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
STEEL	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	
WOOD	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
LIMBER RAIL	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
WIRE ROPE AND FITTINGS	VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 46	
				REQUIRED	TAKEN
=====					
ITEM 704(06)					
GUARD RAIL ANCHOR SECTIONS (TRAILING END)	6.20 LIN FT				
=====					
CONCRETE-FRESH (MINOR STRUCTURE)		SEE ITEM 805(1-8)	ACCEPTANCE		
GALVANIZING REPAIR COMPOUND		1 / TYPE	ACCEPTANCE		
		VISUAL INSPECTION BY PE			
HARDWARE					
ACCESSORIES, BOLTS, END ANCHOR RODS,					
FITTINGS, NUTS, AND WASHERS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
METAL BEAM RAIL			ACCEPTANCE	CA 3	
POSTS AND SPACER BLOCKS					
CONCRETE		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
STEEL		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	
WOOD		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
TIMBER RAIL		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
WIRE ROPE AND FITTINGS		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	

NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 704(07) GUARD RAIL BRIDGE ATTACHMENTS 37.50 LIN FT				47
	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
CONCRETE-FRESH (MINOR STRUCTURE)	SEE ITEM 805(1-8)	ACCEPTANCE		
GALVANIZING REPAIR COMPOUND	1 / TYPE VISUAL INSPECTION BY PE	ACCEPTANCE		
HARDWARE				
ACCESSORIES, BOLTS, END ANCHOR RODS, FITTINGS, NUTS, AND WASHERS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
METAL BEAM RAIL		ACCEPTANCE	CA 3	
POSTS AND SPACER BLOCKS				
CONCRETE	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
STEEL	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	
WOOD	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
TIMBER RAIL	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
WIRE ROPE AND FITTINGS	VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
=====		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ITEM 704(08)					
GUARD RAIL TRANSITIONS	450.00 LIN FT				
=====					
CONCRETE-FRESH (MINOR STRUCTURE)		SEE ITEM 805(1-8)	ACCEPTANCE		
GALVANIZING REPAIR COMPOUND		1 / TYPE	ACCEPTANCE		
		VISUAL INSPECTION BY PE			
HARDWARE					
ACCESSORIES, BOLTS, END ANCHOR RODS,					
FITTINGS, NUTS, AND WASHERS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
METAL BEAM RAIL			ACCEPTANCE	CA 3	
POSTS AND SPACER BLOCKS					
CONCRETE		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
STEEL		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	
WOOD		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
TIMBER RAIL		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
WIRE ROPE AND FITTINGS		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 3	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 705(06) B CHAIN LINK FENCE (____-FOOT HEIGHT) 14265.00 LIN FT		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
CHAIN LINK FENCE AND GATES					
FABRIC		1 / LOT OR SHIPMENT	ACCEPTANCE		
FITTINGS AND MISC HARDWARE		1 / TYPE / SIZE	ACCEPTANCE		
GATES FRAMES, POSTS, RAILS		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
HOG RINGS, TENSION WIRE, WIRE FABRIC TIES, WIRE TIES		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)		VISUAL INSPECTION BY PE	ACCEPTANCE		
FIELD & LINE TYPE FENCE					
BARBED WIRE		1 / LOT OR SHIPMENT	ACCEPTANCE		
GATES		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 1	
GATE HARDWARE		1 / TYPE	ACCEPTANCE		
MESH (WOVEN) WIRE		1 / LOT OR SHIPMENT	ACCEPTANCE		
METAL FASTENERS		1 / TYPE / SHIPMENT	ACCEPTANCE		
STEEL: BRACES, GATE POSTS, GATE STOPS, POSTS WITH ANCHOR PLATES		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
WOOD: BRACES, GATE POSTS, GATE STOPS POSTS, STOP POSTS		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
GALVANIZING REPAIR COMPOUND		VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 23	
GROUND ROD ASSEMBLY					
GROUND ROD, WIRE & CLAMP		1 / ITEM	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 50	
				REQUIRED	TAKEN
ITEM 705(06) C CHAIN LINK FENCE (____-FOOT HEIGHT)		700.80 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
CHAIN LINK FENCE AND GATES					
FABRIC		1 / LOT OR SHIPMENT	ACCEPTANCE		
FITTINGS AND MISC. HARDWARE		1 / TYPE / SIZE	ACCEPTANCE		
GATES FRAMES, POSTS, RAILS		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
HOG RINGS, TENSION WIRE, WIRE FABRIC TIES, WIRE TIES		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)		VISUAL INSPECTION BY PE	ACCEPTANCE		
FIELD & LINE TYPE FENCE					
BARBED WIRE		1 / LOT OR SHIPMENT	ACCEPTANCE		
GATES		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 1	
GATE HARDWARE		1 / TYPE	ACCEPTANCE		
MESH (WOVEN) WIRE		1 / LOT OR SHIPMENT	ACCEPTANCE		
METAL FASTENERS		1 / TYPE / SHIPMENT	ACCEPTANCE		
STEEL: BRACES, GATE POSTS, GATE STOPS, POSTS WITH ANCHOR PLATES		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
WOOD: BRACES, GATE POSTS, GATE STOPS POSTS, STOP POSTS		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
GALVANIZING REPAIR COMPOUND		VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 23	
GROUND ROD ASSEMBLY					
GROUND ROD, WIRE & CLAMP		1 / ITEM	ACCEPTANCE		



MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 705(OB)		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
-FOOT DOUBLE GATES FOR CHAIN LINK FENCE		4.00			
( -FOOT HEIGHT)					
CHAIN LINK FENCE AND GATES					
FABRIC		1 / LOT OR SHIPMENT	ACCEPTANCE		
FITTINGS AND MISC. HARDWARE		1 / TYPE / SIZE	ACCEPTANCE		
GATES FRAMES, POSTS, RAILS		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
HOG RINGS, TENSION WIRE, WIRE FABRIC TIES, WIRE TIES		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)		VISUAL INSPECTION BY PE	ACCEPTANCE		
FIELD & LINE TYPE FENCE					
BARBED WIRE		1 / LOT OR SHIPMENT	ACCEPTANCE		
GATES		VISUAL INSPECTION BY PE	ACCEPTANCE	CC 1	
GATE HARDWARE		1 / TYPE	ACCEPTANCE		
MESH (WOVEN) WIRE		1 / LOT OR SHIPMENT	ACCEPTANCE		
METAL FASTENERS		1 / TYPE / SHIPMENT	ACCEPTANCE		
STEEL: BRACES, GATE POSTS, GATE STOPS, POSTS WITH ANCHOR PLATES		1 / TYPE / LOT OR SHIPMENT	ACCEPTANCE		
WOOD: BRACES, GATE POSTS, GATE STOPS POSTS, STOP POSTS		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
GALVANIZING REPAIR COMPOUND		VISUAL INSPECTION BY PE	ACCEPTANCE	QPL 23	
GROUND ROD ASSEMBLY					
GROUND ROD, WIRE & CLAMP		1 / ITEM	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 706(01) A CONCRETE WALK ( 4" THICK)	1205.10 SQ YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
CONCRETE-FRESH (MINOR STRUCTURE)	SEE ITEM 805(1-8)	ACCEPTANCE		
CURING MATERIALS	SEE ITEM 601(01)	ACCEPTANCE		
JOINT FILLER				
PREFORMED EXPANSION TYPE	1 / 5000 LIN FT	ACCEPTANCE		
REINFORCEMENT	SEE ITEM 601(01) AND 601(02)			

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 706(O2) C CONCRETE DRIVE ( 6" THICK)	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
881.80 SQ YDS				
CONCRETE-FRESH (MINOR STRUCTURE)	SEE ITEM 805(1-8)	ACCEPTANCE		
CURING MATERIALS	SEE ITEM 601(O1)	ACCEPTANCE		
JOINT FILLER				
PREFORMED EXPANSION TYPE	1 / 5000 LIN FT	ACCEPTANCE		
REINFORCEMENT	SEE ITEM 601(O1) AND 601(O2)			

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 706(O3) A INCIDENTAL CONCRETE PAVING ( 4" THICK) 3572.00 SQ YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			54
CONCRETE-FRESH (MINOR STRUCTURE)	SEE ITEM 805(1-8)	ACCEPTANCE		
CURING MATERIALS	SEE ITEM 601(O1)	ACCEPTANCE		
JOINT FILLER				
PREFORMED EXPANSION TYPE	1 / 5000 LIN FT	ACCEPTANCE		
REINFORCEMENT	SEE ITEM 601(O1) AND 601(O2)			

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 55	
				REQUIRED	TAKEN
=====					
ITEM 707(01)					
CONCRETE CURB	6149.10 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
=====					
BACKFILL		VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)		SEE ITEM 805(1-8)	ACCEPTANCE		
CURING MATERIALS		SEE ITEM 601(01)	ACCEPTANCE		
JOINT FILLER		SEE ITEM 601(1-2)	ACCEPTANCE		
JOINT SEALS (PERFORMED)					
ELASTOMERIC COMPRESSION		1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
STEEL REINFORCED ELASTOMERIC			ACCEPTANCE	CC & CA 3	
LUBRICANT ADHESIVE		1 / ADHESIVE LOT	ACCEPTANCE		
REINFORCEMENT					
DOWEL BARS AND ASSEMBLIES		1 / SHIPMENT / JOINT TYPE	ACCEPTANCE		
SEALANT		1 / BATCH OR SHIPMENT	ACCEPTANCE	CA	

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
=====					
ITEM 707(03)					
COMBINATION CURB AND GUTTER	1165.00 LIN FT				
=====					
BACKFILL			VISUAL INSPECTION BY PE		
			ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)			SEE ITEM 805(1-8)		
			ACCEPTANCE		
CURING MATERIALS			SEE ITEM 601(01)		
			ACCEPTANCE		
JOINT FILLER			SEE ITEM 601(1-2)		
			ACCEPTANCE		
JOINT SEALS (PERFORMED)					
ELASTOMERIC COMPRESSION		1 / 6000 LIN FT / LOT /		CA	
		SIZE / TYPE	ACCEPTANCE	QPL 6	
STEEL REINFORCED ELASTOMERIC			ACCEPTANCE	CC & CA 3	
LUBRICANT ADHESIVE		1 / ADHESIVE LOT	ACCEPTANCE		
REINFORCEMENT					
DOWEL BARS AND ASSEMBLIES		1 / SHIPMENT / JOINT TYPE	ACCEPTANCE		
SEALANT		1 / BATCH OR SHIPMENT	ACCEPTANCE	CA	
=====					
RIGHT-OF-WAY MARKER	77.00				
=====					
RIGHT-OF-WAY MARKERS			VISUAL INSPECTION BY PE		
			ACCEPTANCE	CD 1 & 7	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 57	
				REQUIRED	TAKEN
ITEM 712(01) CONCRETE CAST-IN-PLACE REVETMENT 6528.00 SQ YDS		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
CELLULAR CONCRETE BLOCKS		1 / 50,000 / TYPE	ACCEPTANCE	CD 1 & 7	
CELLULAR CONCRETE BLOCK MATTRESS		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
CAST-IN-PLACE (CLASS R) OR SACKED (CLASS R OR OTHER)		3 CYL / MIX	ACCEPTANCE		
JOINT FILLER		1 / 5000 LIN FT / TYPE			
PLASTIC FILTER CLOTH		1 / TYPE	ACCEPTANCE	QPL 17	
SACKS		1 / TYPE / SOURCE	ACCEPTANCE		
STONE		DOCUMENTED VISUAL INSPECTION AND/OR GRADATION CHECK	ACCEPTANCE	QPL 2	

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
=====					58
ITEM 713(O1)					
TEMPORARY SIGNS AND BARRICADES	1.00				
=====					
ALIGNMENT DELINEATORS			VISUAL INSPECTION BY PE		
			ACCEPTANCE		
BARRICADE WARNING LIGHTS		1 / TYPE		CC 1	
			ACCEPTANCE	QPL 16	
DRUMS			VISUAL INSPECTION BY PE		
			ACCEPTANCE		
PORTABLE FLASHER SUPPORTS			VISUAL INSPECTION BY PE		
			ACCEPTANCE		
TEMPORARY PAVEMENT MARKINGS					
STRIPING TAPE		1 / SHIPMENT			
			ACCEPTANCE		
TEMPORARY SIGNS & BARRICADES					
BACKING MATERIALS			VISUAL INSPECTION BY PE		
			ACCEPTANCE		
BARRICADES			VISUAL INSPECTION BY PE		
			ACCEPTANCE		
SHEETING MATERIAL			VISUAL INSPECTION BY PE		
			ACCEPTANCE		



MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 713(C2) TEMPORARY PAVEMENT MARKINGS		1.00	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ALIGNMENT DELINEATORS			VISUAL INSPECTION BY PE	ACCEPTANCE	
BARRICADE WARNING LIGHTS			1 / TYPE	ACCEPTANCE	CC 1 QPL 16
DRUMS			VISUAL INSPECTION BY PE	ACCEPTANCE	
PORTABLE FLASHER SUPPORTS			VISUAL INSPECTION BY PE	ACCEPTANCE	
TEMPORARY PAVEMENT MARKINGS					
STRIPING TAPE			1 / SHIPMENT	ACCEPTANCE	
TEMPORARY SIGNS & BARRICADES					
BACKING MATERIALS			VISUAL INSPECTION BY PE	ACCEPTANCE	
BARRICADES			VISUAL INSPECTION BY PE	ACCEPTANCE	
SHEETING MATERIAL			VISUAL INSPECTION BY PE	ACCEPTANCE	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 714(O2) WATER	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
889.00 M GALS	VISUAL INSPECTION BY PE OR ROADWAY DEVELOPMENT PERSONNEL			
SOD	1 / SOURCE IF QUESTIONABLE	ACCEPTANCE		
WATER				

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 716(O1)					61
VEGETATIVE MULCH	171.28 GAL	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE			ENGR
EMULSIFIED ASPHALT					
ANIONIC & CATIONIC			ACCEPTANCE	CD 1 & 7	
VEGETATIVE MULCH		VISUAL INSPECTION BY PE OR ROADSIDE DEVELOPMENT PERSONNEL	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
=====					62
ITEM 716(O2)					
EMULSIFIED ASHPLAT	25650.00 GAL				
=====					
EMULSIFIED ASPHALT					
ANIONIC & CATIONIC			ACCEPTANCE	CD 1 & 7	
VEGATIVE MULCH		VISUAL INSPECTION BY PE OR ROADSIDE DEVELOPMENT PERSONNEL	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 717(O1)					63
SEEDING	2672.00 LBS				
NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR					
SEED			ANALYSIS TAG FROM LA DEPT OF AGRICULTURE	ACCEPTANCE	
WATER			1 / SOURCE IF QUESTIONABLE	ACCEPTANCE	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 718(O1) FERTILIZER	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
89051.00 TONS	VISUAL INSPECTION BY PE PE TO RECIEVE CA	ACCEPTANCE	CA 1	
FERTILIZER	1 / SOURCE / SHIPMENT	ACCEPTANCE		
LIME, AGRICULTURAL				

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 720(01) FIBER GLASS ROVING ASPHALT CEMENT	14541.00 LBS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR	CD 1 & 7	65
EMULSIFIED ASPHALT		ACCEPTANCE	CD 1 & 7	
ANIONIC AND CATIONIC		ACCEPTANCE	CD 1 & 7	
FIBER GLASS ROVING	1 / LOT OR SHIPMENT	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
===== ITEM 720(O2) ASPHALTIC MATERIAL 14541.00 GAL =====	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			66
ASPHALT CEMENT		ACCEPTANCE	CD 1 & 7	
EMULSIFIED ASPHALT				
ANIONIC AND CATIONIC		ACCEPTANCE	CD 1 & 7	
FIBER GLASS ROVING	1 / LOT OR SHIPMENT	ACCEPTANCE		



MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 725(O1) TEMPORARY DETOUR BRIDGES	1158.30			67
BASE COURSE (ROADWAY)		MATERIAL SHALL CONFORM TO SPECIFICATION REQUIREMENTS FOR TYPE BASE USED		
SURFACE COURSE (ROADWAY)		MATERIAL SHALL CONFORM TO SPECIFICATION REQUIREMENTS FOR TYPE SURFACE USED		
TEMPORARY PAVEMENT MARKINGS	1 / SHIPMENT	ACCEPTANCE		

NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 728(O1) JACKED OR BORED PIPE		71.00 LIN FT			68
MORTAR					
CEMENT, SAND AND WATER			VISUAL INSPECTION BY PE		
PIPE			SEE ITEM 701(1-28)		
			NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 729(14) HAZARD MARKER ASSEMBLY 34.00 SQ FT		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
BACKFILL (SOIL)		VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
COMPRESSIVE STRENGTH		3 CYL / 50 CU YDS	ACCEPTANCE		
DELINEATORS		1 / TYPE / SHIPMENT	ACCEPTANCE		
GALVANIZING REPAIR COMPOUND		1 / TYPE	ACCEPTANCE		
GROUND ROD ASSEMBLY (GROUND ROD, WIRE & CLAMP)		1 / ITEM	ACCEPTANCE		
GUARD RAIL & DEAD END ROAD INSTALLATION					
CONCRETE POSTS & SPACER BLOCKS		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
HARDWARE		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
METAL BEAM RAIL		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	
STEEL POSTS		VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	
TIMBER		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
WOOD POSTS & SPACE BLOCKS		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
HARDWARE (BOLTS, FASTENERS, FITTINGS, NUTS, WASHERS & MISC.)		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
HAZARD MARKERS		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 6	
MILEPOST MARKERS		1 / SHIPMENT	ACCEPTANCE	CC 1	
MOUNTING (OVERHEAD)		INSPECTED PRIOR TO USE	ACCEPTANCE		
PAINT (FIELD & SHOP)		1 / BATCH OR 500 GALS	ACCEPTANCE	QPL 12 QPL 37	
PILING (TIMBER)		VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7	
REINFORCEMENT					
BARS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS		1 / TYPE	ACCEPTANCE		
STIRRUPS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
----- ITEM 729(14)				70
SIGN LIGHTING MATERIALS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR SEE SECTION 730	ACCEPTANCE		
STEEL POSTS (SIGN, MARKER & DELINEATOR)	1 / SHIPMENT	ACCEPTANCE		
TRAFFIC SIGNS				
ALUMINUM PANELS	1 / THICKNESS / HEAT	ACCEPTANCE	CA 6	
SIGN & MARKER SHEETING	INSPECTED PRIOR TO USE	ACCEPTANCE	CA 6 QPL 13	
STEEL PANELS	1 / THICKNESS / HEAT		CA 6	
STRUCTURAL ALUM. & STEEL	INSPECTED PRIOR TO USE 1 / GRADE	ACCEPTANCE VERIFICATION	CA 6	
WELDING (FIELD & SHOP)	INSPECTED PRIOR TO USE 1 / WELDING PROCESS	ACCEPTANCE VERIFICATION		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 729(17) B DEAD END ROAD INSTALLATIONS		1.00	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
BACKFILL (SOIL)			VISUAL INSPECTION BY PE	ACCEPTANCE	
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE			1 / MIX TYPE / SOURCE		
COMPRESSIVE STRENGTH			3 CYL / 50 CU YDS	ACCEPTANCE	
DELINEATORS			1 / TYPE / SHIPMENT	ACCEPTANCE	
GALVANIZING REPAIR COMPOUND			1 / TYPE	ACCEPTANCE	
GROUND ROD ASSEMBLY (GROUND ROD, WIRE & CLAMP)			1 / ITEM	ACCEPTANCE	
GUARD RAIL & DEAD END ROAD INSTALLATION					
CONCRETE POSTS & SPACER BLOCKS			VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7
HARDWARE			1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	
METAL BEAM RAIL			VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3
STEEL POSTS			VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3
TIMBER			VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7
WOOD POSTS & SPACE BLOCKS			VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7
HARDWARE (BOLTS, FASTENERS, FITTINGS, NUTS, WASHERS & MISC.)			1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	
HAZARD MARKERS			VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 6
MILEPOST MARKERS			1 / SHIPMENT	ACCEPTANCE	CC 1
MOUNTING (OVERHEAD)			INSPECTED PRIOR TO USE	ACCEPTANCE	
PAINT (FIELD & SHOP)			1 / BATCH OR 500 GALS	ACCEPTANCE	QPL 12 QPL 37
PILING (TIMBER)			VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1 & 7
REINFORCEMENT					
BARS			1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	
CHAIRS			1 / TYPE	ACCEPTANCE	
STIRRUPS			1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES 72	
			REQUIRED	TAKEN
=====				
ITEM 729(17) B	NO OF SAMPLES MAY BE CHANGED ON THE	JUDGEMENT OF THE ENGR		
SIGN LIGHTING MATERIALS	SEE SECTION 730	ACCEPTANCE		
STEEL POSTS (SIGN, MARKER & DELINEATOR)	1 / SHIPMENT	ACCEPTANCE		
TRAFFIC SIGNS				
ALUMINUM PANELS	1 / THICKNESS / HEAT	ACCEPTANCE	CA 6	
SIGN & MARKER SHEETING	INSPECTED PRIOR TO USE	ACCEPTANCE	CA 6 QPL 13	
STEEL PANELS	1 / THICKNESS / HEAT		CA 6	
STRUCTURAL ALUM. & STEEL	INSPECTED PRIOR TO USE	ACCEPTANCE	CA 6	
	1 / GRADE	VERIFICATION		
WELDING (FIELD & SHOP)	INSPECTED PRIOR TO USE	ACCEPTANCE		
	1 / WELDING PROCESS	VERIFICATION		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 733(01) A MEDIAN ROADWAY BARRIER	661.30 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
BARRIER (PRECAST)	VISUAL INSPECTION BY PE	ACCEPTANCE	CD	1
CONCRETE-FRESH (MINOR STRUCTURE)	SEE ITEM 805(1-8)	ACCEPTANCE		
CURING MATERIALS	SEE ITEM 805(1-8)	ACCEPTANCE		
JUITH MATERIALS	SEE ITEMS 601(1) AND 805(1-8)	ACCEPTANCE		
REINFORCEMENT				
DEFORMED STEEL BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPECIAL SURFACE FINISH				
MASONRY FINISH	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL	14

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 733(O1) B MEDIAN ROADWAY BARRIER 222.50 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
BARRIER (PRECAST)	VISUAL INSPECTION BY PE	ACCEPTANCE	CD 1	
CONCRETE-FRESH (MINOR STRUCTURE)	SEE ITEM 805(1-8)	ACCEPTANCE		
CURING MATERIALS	SEE ITEM 805(1-8)	ACCEPTANCE		
JOINT MATERIALS	SEE ITEMS 601(1) AND 805(1-8)	ACCEPTANCE		
REINFORCEMENT				
DEFORMED STEEL BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPECIAL SURFACE FINISH				
MASONRY FINISH	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	



MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 802(01) STRUCTURAL EXCAVATION BACKFILL	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			75
	477.00 CU YDS			
DENSITY	1 / TOP LAYER / LOCATION ACCEPTANCE			
SOIL	1 / 1000 CU YDS	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 805(01) CLASS A CONCRETE		15.97 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ADMIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))		1 / ADMIXTURE / LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / LOT 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKFILL		VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
BEARING AND EXPANSION PLATES (BRONZE & ROLLED COPPER-ALLOY)			ACCEPTANCE	CA 2 OR 4	
BEARING PADS					
ELASTOMERIC		1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA 5 QPL 3	
MASONRY		1 / TYPE / SIZE	ACCEPTANCE	CA 5	
CEMENT (HYDRAULIC)					
TYPES I(B), II, IP (STRUCTURAL) I, I(B), II, IP (PRECAST)		1 / LOAD 1 / SOURCE / PROJ	ACCEPTANCE VERIFICATION	CC 1 & 7 QPL 7	
TYPE III (PRECAST)		1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	1 1	
SLUMP		1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	1 1	
FLEXURE		WHEN SPECIFIED	VERIFICATION		
TEMPERATURE			PROJ. CONT.		
COMPRESSIVE STRENGTH		3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE	1	
CONCRETE-CURED (STRUCTURAL)					
SURFACE TEST		EACH DECK	PROJ. CONT.		
SURFACE TEXTURE		2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX / SOURCE			
COMPRESSIVE STRENGTH		3 CYL / MIX	ACCEPTANCE		

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FREQUENCY PURPOSE REQUIRED

NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR

MATERIAL AND CONTRACT QUANTITY

ITEM 805(01)

CURING MATERIALS

BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE,  
WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING

LIQUID MEMBRANE FORMING COMPOUND

EPHOXY RESIN SYSTEMS

EPHOXY

EPHOXY CONCRETE

FORM RELEASE AGENT

GIRDERS (CONCRETE)

JOINT FILLERS

PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR,  
PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS

JOINT SEAL (LIQUID POURED)

POLYURETHANE POLYMER

JOINT SEAL (PERFORMED)

ELASTOMERIC COMPRESSION

LUBRICANT ADHESIVE

PRECAST PRESTRESSED FORMS

BEARING STRIPS & ADHESIVE

CONCRETE FORMS

PRIMER

REINFORCEMENT

BAR MATS

BARS

CHAIRS

LOAD TRANSMISSION DEVICES

1 / SHIPMENT ACCEPTANCE

1 / BATCH ACCEPTANCE

1 / LOT OR SHIPMENT ACCEPTANCE QPL 32

1 / MIX DESIGN ACCEPTANCE

VISUAL INSPECTION BY PE ACCEPTANCE

INSPECTED PRIOR TO USE ACCEPTANCE CD 1 & 6

1 / 5000 LIN FT ACCEPTANCE

1 / BATCH OR SHIPMENT ACCEPTANCE CA 3 QPL 5

1 / 6000 LIN FT / LOT / SIZE / TYPE ACCEPTANCE CA QPL 6

1 / LOT ACCEPTANCE QPL 8

VISUAL INSPECTION BY PE ACCEPTANCE

INSPECTED PRIOR TO USE ACCEPTANCE CD 1 & 6

ACCEPTANCE

1 / SHIPMENT ACCEPTANCE

1 / SIZE / TYPE / SHIPMENT ACCEPTANCE

1 / TYPE ACCEPTANCE

1 / SHIPMENT / JOINT TYPE ACCEPTANCE QPL 15

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(01) TIE BARS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR 1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		78
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(01) B CLASS A CONCRETE BOX CULVERTS 751.91 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
AD MIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))	1 / ADMIXTURE / LOT	ACCEPTANCE	QPL	1
AGGREGATES (FINE & COARSE)	1 / LOT 1 / DAY	PROJ. CONT. VERIFICATION	QPL	2 2
BACKFILL	VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS	1 / SHIPMENT	ACCEPTANCE	QPL	5
BEARING AND EXPANSION PLATES (BRONZE & ROLLED COPPER-ALLOY)		ACCEPTANCE	CA	2 DR 4
BEARING PADS				
ELASTOMERIC	1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA QPL	5 3
MASONRY	1 / TYPE / SIZE	ACCEPTANCE	CA	5
CEMENT (HYDRAULIC)				
TYPES I(B), II, IP (STRUCTURAL)	1 / LOAD	ACCEPTANCE	CC	1 & 7
I, I(B), II, IP (PRECAST)	1 / SOURCE / PROJ	VERIFICATION	QPL	7
TYPE III (PRECAST)	1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)				
MIX RELEASE	1 / MIX TYPE / SOURCE			
AIR	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.		4 8
SLUMP	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.		4 8
FLEXURE	WHEN SPECIFIED	VERIFICATION		
TEMPERATURE		PROJ. CONT.		
COMPRESSIVE STRENGTH	3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE		23
CONCRETE-CURED (STRUCTURAL)				
SURFACE TEST	EACH DECK	PROJ. CONT.		
SURFACE TEXTURE	2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STRUCTURE)				
MIX RELEASE	1 / MIX / SOURCE			

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(01) B COMPRESSIVE STRENGTH	NO OF SAMPLES MAY BE 3 CYL / MIX	CHANGED ON THE JUDGEMENT OF THE ACCEPTANCE		80
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUND	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPXOY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPXOY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
FORM RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE		
GIRDERS (CONCRETE)	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
JOINT FILLERS				
PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR, PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL (LIQUID POURED)				
POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (PREFORMED)				
ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / LOT	ACCEPTANCE	QPL 8	
PRECAST PRESTRESSED FORMS				
BEARING STRIPS & ADHESIVE	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE FORMS	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
PRIMER		ACCEPTANCE		
REINFORCEMENT				
BAR MATS	1 / SHIPMENT	ACCEPTANCE		
BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 805(G) B	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			81
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(01) F CLASS A CONCRETE BENTS 2283.90 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ADMIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))	1 / ADMIXTURE / LOT	ACCEPTANCE	QPL	1
AGGREGATES (FINE & COARSE)	1 / LOT 1 / DAY	PROJ. CONT. VERIFICATION	QPL	2 2
BACKFILL	VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS	1 / SHIPMENT	ACCEPTANCE	QPL	5
BEARING AND EXPANSION PLATES (BRONZE & ROLLED COPPER-ALLOY)		ACCEPTANCE	CA	2 OR 4
BEARING PADS				
ELASTOMERIC	1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA QPL	5 3
MASONRY	1 / TYPE / SIZE	ACCEPTANCE	CA	5
CEMENT (HYDRAULIC)				
TYPES I(B), II, IP (STRUCTURAL) I, I(B), II, IP (PRECAST)	1 / LOAD 1 / SOURCE / PROJ	ACCEPTANCE VERIFICATION	CC QPL	1 & 7 7
TYPE III (PRECAST)	1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)				
MIX RELEASE	1 / MIX TYPE / SOURCE			
AIR	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.		12 23
SLUMP	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.		12 23
FLEXURE	WHEN SPECIFIED	VERIFICATION		
TEMPERATURE		PROJ. CONT.		
COMPRESSIVE STRENGTH	3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE		69
CONCRETE-CURED (STRUCTURAL)				
SURFACE TEST	EACH DECK	PROJ. CONT.		
SURFACE TEXTURE	2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STRUCTURE)				
MIX RELEASE	1 / MIX / SOURCE			

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MATERIAL AND QUANTITY	FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 805(O1) F COMPRESSIVE STRENGTH	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR 3 CYL / MIX	ACCEPTANCE		
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUND	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPOXY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
FORM RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE		
GIRDERS (CONCRETE)	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
JOINT FILLERS				
PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR, PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL (LIQUID POURED)				
POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (PREFORMED)				
ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / LOT	ACCEPTANCE	QPL 8	
PRECAST PRESTRESSED FORMS				
BEARING STRIPS & ADHESIVE	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE FORMS	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
PRIMER		ACCEPTANCE		
REINFORCEMENT				
BAR MATS	1 / SHIPMENT	ACCEPTANCE		
BARMS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
=====				84
ITEM 805(01) F	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(03) CLASS AA CONCRETE	3065 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
AD MIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))	1 / ADMIXTURE / LOT	ACCEPTANCE	QPL	1
AGGREGATES (FINE & COARSE)	1 / LOT 1 / DAY	PROJ. CONT. VERIFICATION	QPL	2 2
BACKFILL	VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS	1 / SHIPMENT	ACCEPTANCE	QPL	5
BEARING AND EXPANSION PLATES (BRONZE & ROLLED COPPER-ALLOY)		ACCEPTANCE	CA	2 OR 4
BEARING PADS				
ELASTOMERIC	1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA	5 QPL 3
MASONRY	1 / TYPE / SIZE	ACCEPTANCE	CA	5
CEMENT (HYDRAULIC)				
TYPES I(B), II, IP (STRUCTURAL)	1 / LOAD	ACCEPTANCE	CC	1 & 7
I, I(B), II, IP (PRECAST)	1 / SOURCE / PROJ	VERIFICATION	QPL	7
TYPE III (PRECAST)	1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)				
MIX RELEASE	1 / MIX TYPE / SOURCE			
AIR	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.		16 31
SLUMP	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.		16 31
FLEXURE	WHEN SPECIFIED	VERIFICATION		
TEMPERATURE		PROJ. CONT.		
COMPRESSIVE STRENGTH	3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE		92
CONCRETE-CURED (STRUCTURAL)				
SURFACE TEST	EACH DECK	PROJ. CONT.		
SURFACE TEXTURE	2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STRUCTURE)				
MIX RELEASE	1 / MIX / SOURCE			
COMPRESSIVE STRENGTH	3 CYL / MIX	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(03)	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUND	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPXOY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPXOY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
FORM RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE		
GIRDERS (CONCRETE)	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
JOINT FILLERS				
PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR, PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL (LIQUID POURED)				
POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (PREFORMED)				
ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / LOT	ACCEPTANCE	QPL 8	
PRECAST PRESTRESSED FORMS				
BEARING STRIPS & ADHESIVE	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE FORMS	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
PRIMER		ACCEPTANCE		
REINFORCEMENT				
BAR MATS	1 / SHIPMENT	ACCEPTANCE		
BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(03) TIE BARS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR 1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		87
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 88	
				REQUIRED	TAKEN
ITEM 805(04) CLASS AA(M) CONCRETE		1064 CU YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ADMIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))		1 / ADMIXTURE / LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / LOT 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKFILL		VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
BEARING AND EXPANSION PLATES (BRONZE & ROLLED COPPER-ALLOY)			ACCEPTANCE	CA 2 OR 4	
BEARING PADS					
ELASTOMERIC		1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA 5 QPL 3	
MASONRY		1 / TYPE / SIZE	ACCEPTANCE	CA 5	
CEMENT (HYDRAULIC)					
TYPES I(B), II, IP (STRUCTURAL)		1 / LOAD	ACCEPTANCE	CC 1 & 7	
I, I(B), II, IP (PRECAST)		1 / SOURCE / PROJ	VERIFICATION	QPL 7	
TYPE III (PRECAST)		1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	6 11	
SLUMP		1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	6 11	
FLEXURE		WHEN SPECIFIED	VERIFICATION		
TEMPERATURE			PROJ. CONT.		
COMPRESSIVE STRENGTH		3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE	32	
CONCRETE-CURED (STRUCTURAL)					
SURFACE TEST		EACH DECK	PROJ. CONT.		
SURFACE TEXTURE		2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX / SOURCE			
COMPRESSIVE STRENGTH		3 CYL / MIX	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(04)	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUND	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPOXY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
FORM RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE		
GIRDERS (CONCRETE)	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
JOINT FILLERS				
PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR, PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL (LIQUID Poured)				
POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (PREFORMED)				
ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / LOT	ACCEPTANCE	QPL 8	
PRECAST PRESTRESSED FORMS				
BEARING STRIPS & ADHESIVE	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE FORMS	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
PRIMER		ACCEPTANCE		
REINFORCEMENT				
BAR MATS	1 / SHIPMENT	ACCEPTANCE		
BARs	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
=====				90
ITEM 805(O4) TIE BARS	NO OF SAMPLES MAY BE 1 / SIZE / TYPE / SHIPMENT	CHANGED ON THE JUDGEMENT OF THE ENGR ACCEPTANCE		
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	



MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 805(08) B PRECAST-PRESTRESSED CONCRETE GIRDERS TYPE I 1389.10 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
ADMIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))	1 / ADMIXTURE / LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)	1 / LOT 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKFILL	VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS	1 / SHIPMENT	ACCEPTANCE	QPL 5	
BEARING AND EXPANSION PLATES (BRONZE & ROLLED COPPER-ALLOY)		ACCEPTANCE	CA 2 OR 4	
BEARING PADS				
ELASTOMERIC	1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA 5 QPL 3	
MASONRY	1 / TYPE / SIZE	ACCEPTANCE	CA 5	
CEMENT (HYDRAULIC)				
TYPES I(B), II, IP (STRUCTURAL)	1 / LOAD	ACCEPTANCE	CC 1 & 7	
I, I(B), II, IP (PRECAST)	1 / SOURCE / PROJ	VERIFICATION	QPL 7	
TYPE III (PRECAST)	1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)				
MIX RELEASE	1 / MIX TYPE / SOURCE			
AIR	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	7 14	
SLUMP	1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	7 14	
FLEXURE	WHEN SPECIFIED	VERIFICATION		
TEMPERATURE		PROJ. CONT.		
COMPRESSIVE STRENGTH	3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE	42	
CONCRETE-CURED (STRUCTURAL)				
SURFACE TEST	EACH DECK	PROJ. CONT.		
SURFACE TEXTURE	2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STUCTURE)				
MIX RELEASE	1 / MIX / SOURCE			

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(08) B COMPRESSIVE STRENGTH	NO OF SAMPLES MAY BE 3 CYL / MIX	CHANGED ON THE JUDGEMENT OF THE ACCEPTANCE		92
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUND	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPXOY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPXOY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
FORM RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE		
GIRDERS (CONCRETE)	INSPECTED PRIOR TO USE	ACCEPTANCE		CD 1 & 6
JOINT FILLERS				
PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR, PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL (LIQUID POURED)				
POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (PREFORMED)				
ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / LOT	ACCEPTANCE	QPL 8	
PRECAST PRESTRESSED FORMS				
BEARING STRIPS & ADHESIVE	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE FORMS	INSPECTED PRIOR TO USE	ACCEPTANCE		CD 1 & 6
PRIMER		ACCEPTANCE		
REINFORCEMENT				
BAR MATS	1 / SHIPMENT	ACCEPTANCE		
BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(08) B	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
=====					94
ITEM 805(08) C		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
PRECAST-PRESTRESSED CONCRETE GIRDERS	2578.80 LIN FT				
TYPE I					
=====					
ADMIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))		1 / ADMIXTURE / LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / LOT	PROJ. CONT.	QPL 2	
		1 / DAY	VERIFICATION	QPL 2	
BACKFILL		VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
BEARING AND EXPANSION PLATES (BRONZE & ROLLED COPPER-ALLOY)			ACCEPTANCE	CA 2 OR 4	
BEARING PADS					
ELASTOMERIC		1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA 5 QPL 3	
MASONRY		1 / TYPE / SIZE	ACCEPTANCE	CA 5	
CEMENT (HYDRAULIC)					
TYPES I(B), II, IP (STRUCTURAL)		1 / LOAD	ACCEPTANCE	CC 1 & 7	
I, I(B), II, IP (PRECAST)		1 / SOURCE / PROJ	VERIFICATION	QPL 7	
TYPE III (PRECAST)		1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / LOT	VERIFICATION	13	
		2 / LOT	PROJ. CONT.	26	
SLUMP		1 / LOT	VERIFICATION	13	
		2 / LOT	PROJ. CONT.	26	
FLEXURE		WHEN SPECIFIED	VERIFICATION		
TEMPERATURE			PROJ. CONT.		
COMPRESSIVE STRENGTH		3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE	78	
CONCRETE-CURED (STRUCTURAL)					
SURFACE TEST		EACH DECK	PROJ. CONT.		
SURFACE TEXTURE		2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX / SOURCE			

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 805(OB) C COMPRESSIVE STRENGTH	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR 3 CYL / MIX	ACCEPTANCE		
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUND	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPOXY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPOXY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
FORM RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE		
GIRDERS (CONCRETE)	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
JOINT FILLERS				
PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR, PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL (LIQUID Poured)				
POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (PREFORMED)				
ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / LOT	ACCEPTANCE	QPL 8	
PRECAST PRESTRESSED FORMS				
BEARING STRIPS & ADHESIVE	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE FORMS	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
PRIMER		ACCEPTANCE		
REINFORCEMENT				
BAR MATS	1 / SHIPMENT	ACCEPTANCE		
BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 805(08) C	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	REQUIRED	TAKEN
ITEM 805(08) D PRECAST PRESTRESSED CONCRETE GIRDERS TYPE I		5977.80 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ADMIXTURES (AIR-ENTRAINING, WATER-REDUCING (NORMAL & RETARDING))		1 / ADMIXTURE / LOT	ACCEPTANCE	QPL 1	
AGGREGATES (FINE & COARSE)		1 / LOT 1 / DAY	PROJ. CONT. VERIFICATION	QPL 2 QPL 2	
BACKFILL		VISUAL INSPECTION BY PE	ACCEPTANCE		
BACKING MATERIAL FOR JOINT SEALS		1 / SHIPMENT	ACCEPTANCE	QPL 5	
BEARING AND EXPANSION PLATES (BRUNZE & ROLLED COPPER-ALLOY)			ACCEPTANCE	CA 2 OR 4	
BEARING PADS					
ELASTOMERIC		1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA 5 QPL 3	
MASONRY		1 / TYPE / SIZE	ACCEPTANCE	CA 5	
CEMENT (HYDRAULIC)					
TYPES I(B), II, IP (STRUCTURAL)		1 / LOAD	ACCEPTANCE	CC 1 & 7	
I, I(B), II, IP (PRECAST)		1 / SOURCE / PROJ	VERIFICATION	QPL 7	
TYPE III (PRECAST)		1 / SHIPMENT	ACCEPTANCE		
CONCRETE-FRESH (STRUCTURAL)					
MIX RELEASE		1 / MIX TYPE / SOURCE			
AIR		1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	30 60	
SLUMP		1 / LOT 2 / LOT	VERIFICATION PROJ. CONT.	30 60	
FLEXURE		WHEN SPECIFIED	VERIFICATION		
TEMPERATURE			PROJ. CONT.		
COMPRESSIVE STRENGTH		3 CYL / BATCH 2 BATCHES / LOT	ACCEPTANCE	180	
CONCRETE-CURED (STRUCTURAL)					
SURFACE TEST		EACH DECK	PROJ. CONT.		
SURFACE TEXTURE		2 / LOT	PROJ. CONT.		
CONCRETE-FRESH (MINOR STRUCTURE)					
MIX RELEASE		1 / MIX / SOURCE			

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(08) D COMPRESSIVE STRENGTH	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR 3 CYL / MIX	ACCEPTANCE		
CURING MATERIALS				
BURLAP CLOTH, BURLAP & WHITE POLYETHYLENE, WATERPROOF PAPER, WHITE POLYETHYLENE SHEETING	1 / SHIPMENT	ACCEPTANCE		
LIQUID MEMBRANE FORMING COMPOUND	1 / BATCH	ACCEPTANCE		
EPOXY RESIN SYSTEMS				
EPXOY	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 32	
EPXOY CONCRETE	1 / MIX DESIGN	ACCEPTANCE		
FORM RELEASE AGENT	VISUAL INSPECTION BY PE	ACCEPTANCE		
GIRDERS (CONCRETE)	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
JOINT FILLERS				
PREFORMED BITUMINOUS & NON-BITUMINOUS CELLULAR, PREFORMED RESILIENT BITUMINOUS & NON-BITUMINOUS	1 / 5000 LIN FT	ACCEPTANCE		
JOINT SEAL (LIQUID POURED)				
POLYURETHANE POLYMER	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA 3 QPL 5	
JOINT SEAL (PREFORMED)				
ELASTOMERIC COMPRESSION	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	CA QPL 6	
LUBRICANT ADHESIVE	1 / LOT	ACCEPTANCE	QPL 8	
PRECAST PRESTRESSED FORMS				
BEARING STRIPS & ADHESIVE	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE FORMS	INSPECTED PRIOR TO USE	ACCEPTANCE	CD 1 & 6	
PRIMER		ACCEPTANCE		
REINFORCEMENT				
BAR MATS	1 / SHIPMENT	ACCEPTANCE		
BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
LOAD TRANSMISSION DEVICES	1 / SHIPMENT / JOINT TYPE	ACCEPTANCE	QPL 15	

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	REQUIRED	SAMPLES TAKEN
ITEM 805(08) D	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
TIE BARS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPECIAL SURFACE FINISH (MASONRY)	1 / LOT OR SHIPMENT	ACCEPTANCE	OPL 14	
STEEL JOINT	INSPECTED PRIOR TO USE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		
WATER STOPS				
COPPER & RUBBER	1 / LOT OR SHIPMENT	ACCEPTANCE		
POLYVINYL CHLORIDE	VISUAL INSPECTION BY PE	ACCEPTANCE	CA 3	

MATERIAL AND CONTRACT QUANTITY

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ITEM 805(09)  
 EXPANSION JOINT SEAL 1227.10 LIN FT

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FOR DETAILS SEE ITEM 601(1)

FREQUENCY	PURPOSE	SAMPLES	
		REQUIRED	TAKEN
NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			100

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
=====				101
ITEM 805(10) A	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
STEEL REINFORCED ELASTOMERIC				
EXPANSION JOINT SEAL				
=====				
26.70 LIN FT				
=====				
JOINT SEAL				
STEEL REINFORCED ELASTOMERIC		ACCEPTANCE	CC & CA	3
SEALANT	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA	

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 805(10) B STEEL REINFORCED ELASTOMERIC EXPANSION JOINT SEAL 199.40 LIN FT	ND OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
JOINT SEAL				
STEEL REINFORCED ELASTOMERIC		ACCEPTANCE	CC & CA 3	
SEALANT	1 / BATCH OR SHIPMENT	ACCEPTANCE	CA	

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 806(01) DEFORMED REINFORCING STEEL		1527224.00 LBS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
REINFORCEMENT					
BARS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS		1 / TYPE	ACCEPTANCE		
STIRRUPS, TIE BARS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPLICING					
MECHANICAL AND THERMIT BUTT SPLICE		1 / SIZE / 25 SPLICES	ACCEPTANCE		
WELDED BUTT SPLICE		INSPECTED PRIOR TO USE	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
===== ITEM 806(01) X DEFORMED REINFORCING STEEL 1.00 LBS ===== REINFORCEMENT		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
BARS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS		1 / TYPE	ACCEPTANCE		
STIRRUPS, TIE BARS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
SPLICING					
MECHANICAL AND THERMIT BUTT SPLICE		1 / SIZE / 25 SPLICES	ACCEPTANCE		
WELDED BUTT SPLICE		INSPECTED PRIOR TO USE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 807(06) STRUCTURAL METALWORK	1.00			105
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NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR				
-----				
BEARING & EXPANSION PLATES				
BRONZE OR COPPER-ALLOY (ROLLED)		ACCEPTANCE	CA 2 OR 4	
BEARING PLATES				
ELASTOMERIC	1 / 100 PADS / TYPE / LOT	ACCEPTANCE	CA 5 QPL 3	
MASONRY	1 / TYPE / SIZE	ACCEPTANCE	CA 5	
CANVAS	1 / SHIPMENT	ACCEPTANCE		
CASTINGS				
DUCTILE & GRAAY IRON, MALLEABLE, STEEL		ACCEPTANCE	CA 4	
CONCRETE ANCHOR STUDS		ACCEPTANCE	CA 4	
FASTENERS (SHOP FABRICATION)				
BOLTS, NUTS, AND WASHERS	1 / SIZE / SHIPMENT	ACCEPTANCE	CC 6	
HIGH STRENGTH BOLTS, NUTS, AND WASHERS	1 / LOT	ACCEPTANCE	CC 6	
RIVETS	1 / LOT	ACCEPTANCE	CC 6	
STEEL LOCKPINS AND COLLARS	1 / LOT	ACCEPTANCE	CC 6	
FASTENERS (FIELD FABRICATTION)				
BOLTS, NUTS AND WASHERS	1 / LOT OR SHIPMENT	ACCEPTANCE	CC 2	
HIGH STRENGTH BOLTS, NUTS AND WASHERS	1 / LOT	ACCEPTANCE	CC 2	
RIVETS	1 / LOT	ACCEPTANCE	CC 2	
STEEL LOCKPINS AND COLLARS	1 / LOT	ACCEPTANCE	CC 2	
PAINT (FIELD OR SHOP)	1 / BATCH OR 500 GALS	ACCEPTANCE	QPL 12 QPL 37	
SHEAR CONNECTORS		ACCEPTANCE	CA 4	
STEEL FORGINGS AND SHAFTING		ACCEPTANCE	CA 6	
STRUCTURAL STEEL	1 / GRADE	ACCEPTANCE VERIFICATION	CA 6	
TORQUE WRENCH	CAL. BY MAT. LAB.	ACCEPTANCE		
WELDING (FIELD OR SHOP)	INPSECTED PRIOR TO USE 1 / WELDING PROCESS	ACCEPTANCE VERIFICATION		

MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 810(O1) CONCRETE RAILING		5576.08 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
CONCRETE		SEE ITEM 805(1-8)			
GALVANIZING REPAIR COMPOUND		1 / TYPE	ACCEPTANCE		
HARDWARE (ALUMINUM AND GALVANIZED)		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
METAL CASTINGS, FITTINGS, POSTS & RAILINGS					
STEEL, STEEL CHANNEL, ALUMINUM AND GALVINIZED PIPE		INSPECTED PRIOR TO USE	ACCEPTANCE	CA 6	
PAINT (FIELD & SHOP)		1 / BATCH OR 500 GALS	ACCEPTANCE	QPL 12 QPL 37	
REINFORCEMENT (DEFORMED STEEL BARS)		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
WELDING (FIELD & SHOP)		INSPECTED PRIOR TO USE 1 / WELDING PROCESS	ACCEPTANCE VERIFICATION		



MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES 107	
				REQUIRED	TAKEN
ITEM 810(O4)		NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
PIPE RAILING	0.00 LIN FT				
CONCRETE		SEE ITEM 805(1-8)			
GALVANIZING REPAIR COMPOUND		1 / TYPE	ACCEPTANCE		
HARDWARE (ALUMINUM AND GALVANIZED)		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
METAL CASTINGS, FITTINGS, POSTS & RAILINGS					
STEEL, STEEL CHANNEL, ALUMINUM AND GALVANIZED PIPE		INSPECTED PRIOR TO USE	ACCEPTANCE	CA 6	
PAINT (FIELD & SHOP)		1 / BATCH OR 500 GALS	ACCEPTANCE	QPL 12	QPL 37
REINFORCEMENT (DEFORMED STEEL BARS)		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
WELDING (FIELD & SHOP)		INSPECTED PRIOR TO USE	ACCEPTANCE		
		1 / WELDING PROCESS	VERIFICATION		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 813(01) CONCRETE APPROACH SLABS	1914.52 SQ YDS	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
ADMIXTURES	SEE ITEM 601(1)	ACCEPTANCE		
AGGREGATE (CONCRETE) (FINE & COARSE)	SEE ITEM 805(1-8)			
AGGREGATE (SUBGRADE) (CLAM SHELL, CRUSHED STONE, WASHED GRAVEL)	1 / 1000 CU YDS	ACCEPTANCE		
BEARING PILE		ACCEPTANCE		
CEMENT (PORTLAND)	SEE ITEM 601(1)			
CONCRETE (STRUCTURAL & MINOR STRUCTURE)	SEE ITEM 805(1-8)	ACCEPTANCE		
CONCRETE-CURED				
SURFACE TEST	EACH SLAB	PROJ. CONT.		
SURFACE TEXTURE	2 / LOT	PROJ. CONT.		
CURING MATERIALS	SEE ITEM 601(1)			
JOINT FILLER				
PERFORMED CLOSED CELL POLYETHYLENE	1 / 5000 LIN FT / TH	ACCEPTANCE	QPL 18	
PERFORMED URETHANE FOAM	1 / 5000 LIN FT / TH	ACCPE TANCE		
JOINT SEAL (PERFORMED) (ELASTOMERIC COMPRESSION)	1 / 6000 LIN FT / LOT / SIZE / TYPE	ACCEPTANCE	QPL 6	
LUBRICANT ADHESIVE	1 / LOT OR SHIPMENT	ACCEPTANCE	QPL 18 QPL 8	
POLYETHYLENE FILM	1 / LOT OR SHIPMENT	ACCEPTANCE		
REINFORCEMENT	SEE ITEM 601(1-2)	ACCEPTANCE		
TAR PAPER	VISUAL INSPECTION BY PE	ACCEPTANCE		
WATER	1 / SOURCE IF NOT DRINKABLE	ACCEPTANCE		

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MATERIAL AND CONTRACT QUANTITY		FREQUENCY	PURPOSE	SAMPLES	
				REQUIRED	TAKEN
ITEM 814(O1) A DRILLED SHAFT " DIA		2270.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR		
BACKFILL MATERIAL					
PEA GRAVEL OR GRANULAR MATERIAL			VISUAL INSPECTION BY PE	ACCEPTANCE	
CONCRETE (STRUCTURAL) (CLASS D)			SFF ITEM 805(1-8)	ACCEPTANCE	
REINFORCEMENT					
BARS AND/OR SPIRAL HOOPING			1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	
CHAIRS			1 / TYPE	ACCEPTANCE	
DOWELS			1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 814(01) B DRILLED SHAFT " DIA 1215.80 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
BACKFILL MATERIAL				
PEA GRAVEL OR GRANULAR MATERIAL	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE (STRUCTURAL) (CLASS D)	SEE ITEM 805(1-8)	ACCEPTANCE		
REINFORCEMENT				
BARS AND/OR SPIRAL HOOPING	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
DOWELS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 814(O1) C DRILLED SHAFT " DIA 932.50 LIN FT				111
NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR				
BACKFILL MATERIAL				
PEA GRAVEL OR GRANULAR MATERIAL		VISUAL INSPECTION BY PE	ACCEPTANCE	
CONCRETE (STRUCTURAL) (CLASS D)		SEE ITEM 805(1-8)	ACCEPTANCE	
REINFORCEMENT				
BARS AND/OR SPIRAL HOOPING		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	
CHAIRS		1 / TYPE	ACCEPTANCE	
DOWELS		1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE	

MATERIAL AND CONTRACT QUANTITY	FREQUENCY	PURPOSE	SAMPLES	
			REQUIRED	TAKEN
ITEM 814(01) D DRILLED SHAFT " DIA 256.00 LIN FT	NO OF SAMPLES MAY BE CHANGED ON THE JUDGEMENT OF THE ENGR			
BACKFILL MATERIAL				
PEA GRAVEL OR GRANULAR MATERIAL	VISUAL INSPECTION BY PE	ACCEPTANCE		
CONCRETE (STRUCTURAL) (CLASS D)	SEE ITEM 805(1-8)	ACCEPTANCE		
REINFORCEMENT				
BARS AND/OR SPIRAL HOOPING	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		
CHAIRS	1 / TYPE	ACCEPTANCE		
DOWELS	1 / SIZE / TYPE / SHIPMENT	ACCEPTANCE		

