



**INDIANA DEPARTMENT OF TRANSPORTATION
DIVISION OF MATERIALS AND TESTS**

**MATERIAL CERTIFICATION AND
APPROVED LIST APPLICATION FORMS
ITM No. 804-20**

1.0 SCOPE.

1.1 This procedure covers the forms to be used for various types of material certifications and applications to approved products lists. Included forms that are indicated as Type A, Type B, Type C, Type D certifications are in accordance with the Department's Standard Specifications, Section 916.03. The forms contained herein pertain to specific materials.

1.2 This ITM may involve hazardous materials, operations, and equipment and may not address all of the safety problems associated with the use of the test method. The user of the ITM is responsible for establishing appropriate safety and health practices and determining the applicability of regulatory limitations prior to use.

2.0 TERMINOLOGY. Definitions for terms and abbreviations shall be in accordance with the Department's Standard Specifications, Section 101.

3.0 SIGNIFICANCE AND USE. This ITM provides forms containing required information about materials. Depending on the material, the forms shall be completed and submitted by the Contractor, a manufacturer, a supplier, a fabricator, or other designated companies furnishing the material to a Department contract. The information shall be presented in a format shown in this ITM. The information shall be complete, accurate, pertaining to the materials furnished, and without omissions of required information shown on the forms. Unless shown otherwise, the types of certifications shall be in accordance with the Department's Standard Specifications, Section 916.02.

4.0 MATERIAL CERTIFICATION AND APPROVED LIST APPLICATION FORMS.

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4.1 Compliance for Plants.

CERTIFICATION OF COMPLIANCE FOR PLANTS

I hereby certify that the following listed plants which were supplied to

_____ for contract No. _____

Contractor

comply with Indiana Department of Transportation specifications set out in subsection 914.08.

The number and species of plants supplied shall be listed in this space. The species shall be the exact pay item.

I understand that State and/or Federal funds are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Date)

(Signature of Company Official)

(Date)

(Signature of Contractor)

4.2 Nursery Inspection.

CERTIFICATE OF NURSERY INSPECTION

No. _____ Indianapolis, Indiana, Date _____

This is to certify that the nursery stock grown by _____
located at _____, Indiana, consisting of _____ acres
(_____ hectares), has been inspected by the undersigned or his authorized
representative, on _____, 2 _____ in compliance with Indiana Code 14-24-5,
14-24-9, 14-24-10, and 14-24-11, and has been found apparently free from destructively
injurious
insects and plant diseases.

This certificate covers _____ and is valid, unless
revoked for cause until October 1, 20_____.

Signed: _____
(State Entomologist)

4.3 Welding Electrode.

WELDING ELECTRODE CERTIFICATION

 Manufacturer's Name and Address

Supplied to: _____

Date: _____ Quantity: _____ Order No.: _____ Project: No. _____

This is to certify that _____ ASTM-AWS classification (EXXX) as
 (trade name)
 supplied under the above order number, is of the same classification, manufacturing process, and
 material requirements as the electrodes tested on _____, 2 _____.

All tests required by specification AWS A5.1 or AWS A5.5 were performed in accordance with
 this specification and the above electrode met all the requirements. The electrodes are marked in
 accordance with AWS A5.1 or AWS A5.5.

The chemical and mechanical properties of the deposited weld metal were as follows:

Property	5/32 in.		3/16 in.		1/4 in.	
	DC+	AC	DC+	AC	DC+	AC
Tensile Strength psi						
Yield Strength psi						
Elongation % in 2k						
Charpy V Notch Ft Lbm at ___ °F						
Manganese %						
Silicon %						
Nickel %						
Chromium %						
Molybdenum %						
Vanadium %						
Fillet Tests Position as required						
Radiographic Test						

Fillet Test, Radiograph, Chemistry, and Mechanical Properties are not required for the following
 sizes: _____

Operations supervised by _____

4.4 Fly Ash Source.

FLY ASH SOURCE CERTIFICATION

_____, as contracted by, _____ certifies
(Supplier) (Power Company)

that all class _____ fly ash, produced by the _____
(F or C) (Name and/or Unit No.)

Power Plant of _____,
(Power Company)

located in _____, _____, shipped for
(City) (State)

use on Indiana Department of Transportation projects will be produced under appropriate quality control and will comply with all AASHTO M 295 Specifications and Indiana Department of Transportation Standard Specifications requirements.

_____, as contracted by, _____
(Supplier) (Power Company)

shall comply with the Indiana Department of Transportation Standard Specifications for all quality assurance testing and reporting requirements.

(Date) (Supplier)

(Signature)

_____ agrees that any part of the above named
(Power Company)

power plant associated with the production of such fly ash may be checked by properly identified representatives of the Indiana Department of Transportation.

(Date) (Power Company)

(Signature)

4.5 Cement.

CEMENT CERTIFICATION

The _____
 (Manufacturer and Location)

certifies that type _____ cement in this shipment conforms to the
 (type of cement)

requirements of the Indiana Department of Transportation Standard Specifications; and Source of
 Shipment _____;
 (if other than production location)

Purchaser and/or Consignee _____;

Point of Delivery _____;

Silo Identification _____;

Carrier and Truck Number _____;

Date of Shipment _____;

Quantity of Cement in kilograms (pounds)
 _____;

and Other Information _____

If Portland-Pozzolan cement, type IP or IP-A, is being shipped, the certification shall
 further state:

Class of ASTM C618 Fly Ash _____; and Percentage of Pozzolan
 _____ % based on the mass of the Portland-Pozzolan cement.

 (Date) (Signature)

4.6.1.01 GEOSYNTHETIC MATERIALS, GEOTEXTILES.

(a) CERTIFICATION FOR GEOTEXTILE PROPERTIES FOR RIPRAP AND REVETMENT APPLICATIONS

_____ is a non-woven or woven geotextile consisting of strong, rot resistant, chemically stable long-chain synthetic polymer material dimensionally stable with distinct and measurable openings. The plastic yarn or fibers used in this geotextile consist of a longchain synthetic polymer composed of at least 85 percent by mass of polyolefin, polyesters, or polyamides; and contains stabilizers and inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure. This geotextile is calendered or otherwise finished so that the yarns or fibers will retain their relative position with respect to each other.

All damaged geotextile shall be replaced for the entire width of the roll. The Contractor shall furnish the product labeled that clearly indicates the manufacturer’s or suppliers name, product identification, lot number, manufactured date, roll dimensions. Geotextiles used for Department projects shall be NTPEP listed and shall be in accordance with AASHTO M 288 and the Department’s Approved Materials List.

I hereby certify that the primary sampling units were selected in accordance with ASTM D4354, Type _____, and NTPEP No. _____. The results of testing each primary sampling unit are reported as follows:

Please note that no more than one application per worksheet will be accepted.

Test	Method ASTM	Results
Grab Tensile Strength, min.	D4632	lbs
Grab Elongation	D4632	%
CBR Puncture Strength, min.	D6241	lbs
Trapezoid Tear Strength, min.	D4533	lbs
UV Degradation Resistance 500 hrs, min.	D4355, D6637	%
Apparent Opening Size, AOS, min.	D4751	
Permittivity. min.*	D4491	sec ⁻¹

Note: All values are minimum average roll values (MARV) as determined in accordance with ASTM D4354 in weaker principal direction, except AOS is based on maximum average roll value.

*The nominal coefficient or permeability was determined by multiplying permittivity value by nominal thickness. The nominal thickness is measured under a normal load of 280 psi (1.93 MPa).

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Manufacturer's Name)

(Signature of Manufacturer's Official)

(Date)

(Title of Official)

4.6.1.02 GEOSYNTHETIC MATERIALS, GEOTEXTILES

(b) CERTIFICATION FOR GEOTEXTILE PROPERTIES FOR UNDERDRAINS AND DRAINAGE APPLICATIONS

_____ is a non-woven or woven needle punched or heat bonded geotextile consisting of strong, rot resistant, chemically stable long-chain synthetic polymer materials, dimensionally stable with each other including selvages. The plastic yarn or fibers used in this geotextile consist of at least 85 percent by weight (mass) of polyolefin, polyesters, or polyamides; and contain stabilizers and inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure.

All damaged geotextile shall be replaced for the entire width of the roll. The Contractor shall furnish the product labeled that clearly indicates the manufacturer’s or suppliers name, product identification, lot number, manufactured date, roll dimensions. Geotextiles used for Department projects shall be NTPEP listed and shall be in accordance with AASHTO M 288 and the Department’s Approved Materials List.

I hereby certify that the primary sampling units were selected in accordance with ASTM D4354, Type _____, and NTPEP No. _____. The results of testing each primary sampling unit are reported as follows:

Please note that no more than one application per worksheet will be accepted.

Test	Method ASTM	Results
Grab Tensile Strength, min.	D4632	lbs
Grab Elongation	D4632	%
CBR Puncture Strength, min.	D6241	lbs
UV Degradation Resistance 500 hrs. min.	D4355, D6637	%
Apparent Opening Size, AOS.	D4751	
Permittivity, min.	D4491	sec ⁻¹
Notes: 1. All values are minimum average roll values (MARV) as determined in accordance with ASTM D4354 in weaker principal direction, except AOS size is based on maximum average roll value 2. Type 3 Value is a maximum average roll value (Max ARV) as determined in accordance with ASTM D4354		

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

 (Manufacturer's Name) (Signature of Manufacturer's Official)

 (Date) (Title of Official)

4.6.1.03 GEOSYNTHETIC MATERIALS, GEOTEXTILES.

(c) CERTIFICATION FOR GEOTEXTILE PROPERTIES FOR PAVEMENT OR SUBGRADE STABILIZATIONS

_____ is a non-woven or woven needle punched or heat bonded geotextile consisting of strong, rot resistant, chemically stable long-chain synthetic polymer materials, dimensionally stable with each other including selvages. The plastic yarn or fibers used in this geotextile consist of at least 85 percent by weight (mass) of polyolefin, polyesters, or polyamides; and contain stabilizers and inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure

All damaged geotextile shall be replaced for the entire width of the roll. The Contractor shall furnish the product labeled that clearly indicates the manufacturer’s or suppliers name, product identification, lot number, manufactured date, roll dimensions. Geotextiles used for Department projects shall be NTPEP listed and shall be in accordance with AASHTO M 288 and the Department’s Approved Materials List.

I hereby certify that the primary sampling units were selected in accordance with ASTM D4354, Type _____, and NTPEP No. _____. The results of testing each primary sampling unit are reported as follows:

Please note that no more than one application per worksheet will be accepted.

Test	Method ASTM	Results
Grab Tensile Strength, min.	D4632	lbs
Wide Width Tensile, @ 5% Strain	D4595	
Grab Elongation	D4632	%
CBR Puncture Strength, min.	D6241	lbs
Trapezoid Tear Strength, min.	D4533	lbs
UV Degradation Resistance 500 hrs., min.	D4355, D6637	%
Apparent Opening Size, AOS, min.	D4751	
Soil Retention, Pore size O ₅₀ /O ₉₅ min	D6767	
Permittivity, min.	D4491	sec ⁻¹
Note: All values are minimum average roll values (MARV) as determined in accordance with ASTM D4354 in the principal direction, except AOS size is based on maximum average roll value.		

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Manufacturer's Name)

(Signature of Manufacturer's Official)

(Date)

(Title of Official)

4.6.1.04 GEOSYNTHETIC MATERIALS, GEOTEXTILES.

(d) CERTIFICATION FOR GEOTEXTILE PROPERTIES FOR SILT FENCE

_____ is a non-woven or woven needle punched or heat bonded geotextile consisting of strong, rot resistant, chemically stable long-chain synthetic polymer materials, dimensionally stable with each other including selvages. The plastic yarn or fibers used in this geotextile consist of at least 85 percent by weight (mass) of polyolefin, polyesters, or polyamides; and contain stabilizers and inhibitors added to the base plastic to make the filaments resistant to deterioration due to ultraviolet and heat exposure.

All damaged geotextile shall be replaced for the entire width of the roll. The Contractor shall furnish the product labeled that clearly indicates the manufacturer’s or suppliers name, product identification, lot number, manufactured date, roll dimensions. Geotextiles used for Department projects shall be NTPEP listed and shall be in accordance with AASHTO M 288 and the Department’s Approved Materials List.

I hereby certify that the primary sampling units were selected in accordance with ASTM D4354, Type _____, and NTPEP No. _____. The results of testing each primary sampling unit are reported as follows:

Please note that no more than one application per worksheet will be accepted.

Test	Method ASTM	Results
Grab Tensile Strength, min.	D4632	lbs
Grab Elongation	D4632	%
UV Degradation Resistance 500 hrs. min.	D4355	%
Apparent Opening Size, AOS, min.	D4751	
Permittivity. min.*	D4491	sec ⁻¹

Notes:
 (1) The value in weaker principal direction where applicable. All numerical values will represent the minimum average roll value. Test results from a sampled roll in a lot shall be in accordance with or shall exceed the minimum values shown in the above table. The stated value are for non-critical, non-severe conditions. Lots shall be sampled in accordance with ASTM D4354.
 (2) The values reflect the minimum criteria currently used. Performance tests may be used to evaluate silt fence performance if deemed necessary by the Engineer.
 *The nominal coefficient or permeability was determined by multiplying permittivity value by nominal thickness. The nominal thickness is measured under a normal load of 280 psi (1.93 MPa).

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

 (Manufacturer's Name)

 (Signature of Manufacturer's Official)

 (Date)

 (Title of Official)

4.6.2.01 918.05 TYPE IA GEOGRID

CERTIFICATION FOR TYPE IA GEOGRID FOR EMBANKMENT

_____ is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that __ primary sampling units were selected in accordance with ASTM D4354. The material contains a minimum of 97% polypropylene in accordance with ASTM D4101 and a minimum of 0.5% carbon black in accordance with ASTM D1603. The results of testing each primary sampling unit are reported as follows:

Property	Test Method	Unit	Value, min.	Test Results
Aperture Area	Calibered	sq. in	1.3	
Open Area	COE CW02215	percent	> 50.0 ≤ 80.0	
Junction Strength	ASTM D7737	lb/ft	---	
Tensile Modulus				
Machine Direction	ASTM D6637 ^{1,2,3}	lb/ft	10,000	
Cross Machine Direction	ASTM D6637 ^{1,2,3}	lb/ft	10,000	
Ultimate Strength				
Machine Direction	ASTM D6637 ^{2,3}	lb/ft	800	
Cross Machine Direction	ASTM D6637 ^{2,3}	lb/ft	800	
Ultraviolet Stability	ASTM D4355	percent	70% at 500 hrs	
Notes:				
(1) Secant modulus at 5%				
(2) Results for both the machine direction and cross machine directions are required				
(3) Minimum average roll values shall be in accordance with ASTM D4759				

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

 (Date) _____
 (Manufacturer Name)

 (Signature of Manufacturer Official) _____
 (Title of Official)

4.6.2.02 918.05 TYPE IB GEOGRID**CERTIFICATION FOR TYPE IB GEOGRID FOR SUBGRADE**

_____ is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D4354. The material contains a minimum of 97% polypropylene in accordance with ASTM D4101 and a minimum of 0.5% carbon black in accordance with ASTM D1603. The results of testing each primary sampling unit are reported as follows:

Property	Test Method	Unit	Value, min.	Test Results
Aperture Area	Calibered	sq. in	1.3	
Open Area	COE CW02215	percent	$> 50.0 \leq 80.0$	
Junction Strength	ASTM D7737	lb/ft	788	
Tensile Modulus				
Machine Direction	ASTM D6637 ^{1,2,3}	lb/ft	10,000	
Cross Machine Direction	ASTM D6637 ^{1,2,3}	lb/ft	10,000	
Ultimate Strength				
Machine Direction	ASTM D6637 ^{2,3}	lb/ft	800	
Cross Machine Direction	ASTM D6637 ^{2,3}	lb/ft	800	
Ultraviolet Stability	ASTM D4355	percent	70% at 500 hrs	
Notes:				
(1) Secant modulus at 5%				
(2) Results for both the machine direction and cross machine directions are required				
(3) Minimum average roll values shall be in accordance with ASTM D4759				

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Date)

(Manufacturer Name)

(Signature of Manufacturer Official)

(Title of Official)

4.6.3 918.05 TYPE II GEOGRID

CERTIFICATION FOR TYPE II GEOGRID USED FOR EMBANKMENT

_____ is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D4354. The results of testing each primary sampling unit are reported as follows:

Property	Test Method	Unit	Test Results
Open Area	COE CW02215	Percent	
Tensile Modulus			
Machine Direction	ASTM D6637 ^{1,2}	lb/ft	
Creep Limited Strength			
Machine Direction at 5 % strain	ASTM D5262 ²	lb/ft	
Ultraviolet Stability	ASTM D4355 ²	percent	
Notes:			
(1) Secant modulus at 2%			
(2) Minimum average roll values shall be in accordance with ASTM D4759			

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

 (Date) _____
 (Manufacturer Name)

 (Signature of Manufacturer Official) _____
 (Title of Official)

4.6.4.04 918.05 TYPE III GEOGRID

CERTIFICATION FOR TYPE III GEOGRID USED FOR MODULAR BLOCK WALL

_____ is a Geogrid consisting of a regular network of connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding material. The geogrid structure shall be dimensionally stable and shall be able to retain its geometry under construction stresses. The geogrid structure shall have resistance to damage during construction, ultraviolet degradation, and all forms of chemical and biological degradation encountered in the soil being stabilized.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D4354. The material shall be high-density polyethylene, HDPE, polypropylene, PP, or polyester, PET, polymers and have the following properties. The results of testing each primary sampling unit are reported as follows:

Property	Test Method	Unit	Results (Min)
Open Area	COE CW 02215	percent	
Ultraviolet Stability	ASTM D4355	percent	
Ultimate Strength, Machine Direction	ASTM D6637	lb/ft	
Long-Term Design Strength, Allowable, LTDS, Machine Direction	GRI-GG4	lb/ft	

1. Geogrid shall have an adequate open aperture to establish proper interlock between geogrid and backfill material.
2. Minimum Average Roll Value, MARV, in accordance with ASTM D4759 shall be calculated as the average minus two standard deviations.
- 3.

$$LTDS = \frac{T_{ult}}{(RF_{CR})(RF_{IR})(RF_D)}$$

Where:

T_{ult} = Ultimate strength

RF_{CR} = Reduction factor for creep

RF_{IR} = Reduction factor for installation damage

RF_D = Reduction factor for durability

4. The minimum reduction factors for design are as follows: RF_{CR} = 2.6 for HDPE, 4.0 for PP, 1.6 for PET

RF_{IR} = 1.10

RF_D = 1.10

Independent-laboratory test results for creep test in accordance with ASTM D 5262 shall be submitted.

CERTIFICATION TYPE III GEOGRID USED FOR MODULAR BLOCK WALL

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Date)

(Manufacturer Name)

(Signature of Manufacturer Official)

(Title of Official)

4.6.2 918.03 CERTIFICATION FOR GEOMEMBRANE

_____ is a geomembrane fabricated from high density polyethylene, HDPE, consisting of strong, rot resistant, chemically stable long-chain synthetic polymer materials, dimensionally stable with distance and measureable openings. The manufacturers shall submit the tests for the intended use to the Department.

All damaged geomembrane shall be replaced for the entire width of the roll. The Contractor shall furnish the product labeled that clearly indicates the manufacturers or suppliers name, product identification, lot number, manufactured date, roll dimensions. Testing results must meet or exceed the requirements listed. Geomembranes used for Department projects shall be tested by a NTPEP approved laboratory.

The geomembrane shall meet the following requirements per 918.03.

I hereby certify that primary sampling units were selected in accordance with ASTM D4354. The results of testing each primary sampling unit are reported as follows:

Please note that no more than one application per worksheet will be accepted.

Test	Method ASTM	Results
Density, min.	D1505	pcf
Sheet Thickness	D5199	mils
Tear Resistance	D1004	lbs
Resistance Soil Burial	D3083	% retained
pH	AASHTO T 289	
Roll Width	Calibered	ft
All values are minimum average roll values (MARV) as determined in accordance with ASTM D4354		

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Date)

(Manufacturer Name)

(Signature of Manufacturer Official)

(Title of Official)

4.6.3 918.04 CERTIFICATION FOR GEOCELL CONFINEMENT SYSTEM

_____ is a Geocell Confinement System that is a lightweight, flexible mat that consists of high density polyethylene strips. The mat shall be perforated and the strips shall be ultrasonic bonded together to form a strong configuration. Cell seam strength shall be uniform over full depth.

All damaged Geocell Confinement Systems shall be replaced for the entire width of the roll. The Contractor shall furnish the product labeled that clearly indicates the manufacturers or suppliers name, product identification, lot number, manufactured date, roll dimensions. Testing results must meet or exceed the requirements listed. Geocells used for Department projects shall be tested by a NTPEP approved laboratory. The Geocell shall be from the Department’s Approved Materials List.

The Geocell Confinement System shall meet the following requirements per 918.04.

I hereby certify that _____ primary sampling units were selected in accordance with ASTM D 4354. The results of testing each primary sampling unit are reported as follows:

Please note that no more than one application per worksheet will be accepted.

Test	Method ASTM	Results
Sheet Thickness	D5199	mils
Environmental Stress Crack Reduction, min.	D1693	hours
Short-Term Seam Peel Strength for 4 in. depth	D6392	lbs/ft
Percent Open Area	COE 02215	%
Nominal Expanded Cell Size	Calibered	in.
Note: 1. Carbon Black shall be minimum 1.5% by weight in accordance with ASTM 5199.		

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentation on my part constitutes fraud.

(Manufacturer’s Name)

(Signature of Manufacturer’s Official)

(Date)

(Title of Official)

4.8 Ground Granulated Blast Furnace Slag Source.

GROUND GRANULATED BLAST FURNACE SLAG SOURCE CERTIFICATION

This is to certify that all grade _____, ground granulated blast furnace slag (GGBFS),
(100 or 120)

produced by _____
(Manufacturer's Name)

from granulated blast furnace slag from

(Steel Company)

located in _____, _____
(City) (State)

manufactured at _____
(Location of Manufacturing Plant)

using _____
(Type of Manufacturing Facility)

and shipped for use on Indiana Department of Transportation projects will be produced under appropriate quality control. The GGBFS will comply with all ASTM C989 Specification and Indiana Department of Transportation Standard Specifications requirements.

_____ also agrees that any part of the
(Manufacturer's Name)

above named steel company and its manufacturing plant associated with the production of such ground granulated blast furnace slag may be checked at regular intervals by properly identified representatives of the Indiana Department of Transportation.

As an approved source of ground granulated blast furnace slag,
_____ shall be in accordance with the
(Manufacturer's Name)

Indiana Department of Transportation Standard Specifications for all quality assurance testing and report requirements.

(Date) (Manufacturer's Name)

(Signature)

4.9 Silica Fume.

SILICA FUME CERTIFICATION

This is to certify that all silica fume produced by _____
(Supplier's Name)

from _____
(Manufacturer's Name)

located in _____, _____
(City) (State)

manufactured at _____
(Location of Manufacturing Plant)

using _____
(Type of Manufacturing Facility)

and shipped for use on Indiana Department of Transportation projects shall be produced under appropriate quality control. The silica fume may be checked at regular intervals by properly identified representatives of the Department.

As an approved supplier of silica fume _____
(Supplier's Name)
shall be in accordance with all quality assurance testing and reporting requirements.

(Date) (Supplier's Name)

(Signature)

4.10 Type A - Epoxy Coated Reinforcing and Dowel Bars.

EPOXY COATED REINFORCING AND DOWEL BARS TYPE A CERTIFICATION

Contract Number _____

Contractor Name _____

Steel Manufacturer Name _____

B/L, Invoice or Weigh Ticket Number _____

Material Destination (other than contract location) _____

This is to certify that the materials furnished by the coater for epoxy coated steel for the contract described above comply and are in accordance with the specification limits.

Test	Method	Specification Limits	Range of Test Results
Epoxy Thickness	ASTM A775		
Coating Flexibility	ASTM A775		

 (Date) (Coater Company Name)

 (Signature of Coater Company Official)

 (Title)

4.11 Type B - Reinforcing and Dowel Bars.

REINFORCING AND DOWEL BARS TYPE B CERTIFICATION

Contract Number _____

Contractor Name _____

Steel Manufacturer Name _____

B/L, Invoice or Weigh Ticket Number _____

Material Destination (other than contract location) _____

This is to certify that for the contract described above, the materials furnished are as follows:

Bar Designation, Grade & Heat Number	Quantity

The materials comply and are in accordance with the specification limits.

Test	Method	Specification Limits	Range of Test Results
Tensile Strength	ASTM A615		
Yield Strength	ASTM A615		
Elongation	ASTM A615		
Unit Weight	ASTM A615		
Deformation Height (reinforcing bars)	ASTM A615		

All Chemical analysis requirements are in accordance with ASTM specifications.

**** This certification shall be prepared and signed by the steel supplier**

_____ (Date) _____ (Steel Supplier Company Name)

_____ (Signature of Steel Company Official) _____ (Title)

4.12 Non-Epoxy PCC Sealer.

NON-EPOXY PCC SEALER CERTIFICATION

The PCC sealer, _____,
(Sealer Name)

manufactured by _____
(Manufacturer Name)

is a _____
(Sealer Type)

based PCC sealer in accordance with NCHRP 244, Series IV, southern climate weathering test.

The percentage of active ingredients is _____.

The recommended application rate is _____.

The recommended application method is _____.

(Date) (Signature of Manufacturer Official)

(Title of Official)

4.13 Neutralized Vinsol Resin Air Entraining Admixtures.

NEUTRALIZED VINSOL RESIN AIR ENTRAINING ADMIXTURE CERTIFICATION

_____, manufactured by _____
(Admixture Name) (Manufacturer Name)

is an aqueous solution of vinsol resin that has been neutralized with sodium hydroxide.

The ratio of sodium hydroxide to vinsol resin is one part of sodium hydroxide to _____
parts of vinsol resin, by weight (mass).

The percentage of solids based on residue at 221°F is _____.

No other additive of chemical agent is present in this solution.

The recommended dosage is _____.

(Date) (Signature of Manufacturer Official)

(Title of Official)

4.14 Air Entraining Admixture Manufactured In Proportions Other Than AASHTO T 157 And Type A, B, C, D, E, F, and G Admixtures.

AIR ENTRAINING ADMIXTURE MANUFACTURED IN PROPORTIONS OTHER THAN AASHTO T 157 AND TYPE A, B, C, D, E, F, AND G ADMIXTURES CERTIFICATION

_____, manufactured by _____
(Admixture Name) (Manufacturer Name)

is in accordance with 912.03 for type _____,
(Admixture Name)

The ion content of _____ is _____.

Chloride is not added as an ingredient of manufacture.

The recommended admixture dosage is _____.

Attached herewith are dated test reports substantiating full compliance with the specifications. If irregularities are found in the test results, copies of the original data shall be submitted prior to reconsideration of the certification.

(Date) (Signature of Manufacturer Official)

(Title of Official)

4.15 Rapid Setting Patch Materials

RAPID SETTING PATCH MATERIALS CERTIFICATION

_____, manufactured by _____
(Rapid Setting Patch Material Name) (Manufacturer Name)

is a single packaged dry mix rapid setting patch material for use on bridge decks, highways and similar applications.

_____ requires only water just prior to mixing, does not
(Rapid Setting Patch Material Name)

contain soluble chlorides as an ingredient of manufacture, and does not require chemical additives.

_____ is packaged in _____ bags.
(Rapid Setting Patch Material Name) lb

The neat yield is _____ yd³ and shall allow a _____ percent extension, by weight, with a _____ in. (mm) round aggregate.

The shelf life of _____ is _____ months.
(Rapid Setting Patch Material Name)

The repair depth range is from _____ in to _____ in.

_____ does not require curing material, nor a bonding agent
(Rapid Setting Patch Material Name)

and may be sealed with an epoxy sealer.

_____ is _____ color.
(Rapid Setting Patch Material Name)

_____ will be mixed using _____.

_____ is in accordance with ASTM C928.
(Rapid Setting Patch Material Name)

(Date) (Signature of Manufacturer Official)

(Title of Official)

4.20 Compliance for Coating Formulation

COATING FORMULATION CERTIFICATION

This certifies the coating formulation _____
(Formulation or Product Identification)

of _____ manufactured by _____
(Type of Coating) (Manufacturer Name)

at _____
(Plant Location, City & State)

is in accordance with the Indiana Department of Transportation Standard Specifications.

No changes have been made to the formulation or to the production process for this coating. The QCP and SDS for this coating has been provided to the Division of Materials and Tests and is current.

(Date) (Signature of Manufacturer Representative)

(Title)

4.21 Compliance for Structural Steel Coating Systems

STRUCTURAL STEEL COATING SYSTEMS CERTIFICATION

This certifies the structural steel coating system consisting of

_____, _____
(Primer Identification) (Intermediate Coating Identification)

and _____ manufactured by
(Finish Coat Identification)

(Manufacturer Name)

at _____
(Plant Location City & State)

is in accordance with INDOT Standard Specifications. No changes have been made to the formulations or the production process of these coatings. The QCP and SDS for these coatings have been provided to the Division of Materials and Tests and are current.

(Date) (Signature of Manufacturer Representative)

(Title)

4.22 Annual Certification Letter for Reflective Sheeting

REFLECTIVE SHEETING ANNUAL CERTIFICATION LETTER

This certifies the reflective sheeting types listed below are in accordance with INDOT Standard Specifications. No changes have been made to the production process. The material is the same material as the material that was furnished for the evaluation sample and was subsequently placed on the Indiana Department of Transportation list of approved materials for Reflective Sheeting. The Manufacturer is:

_____ (Manufacturer Name)

at _____ (Manufacturer Address)

and the list of products are:

Product Name/Number	AASHTO Type	Adhesive Class	Color

_____ (Date)

_____ (Signature of Manufacturer Representative)

_____ (Title)

4.23 Profile Wall HDPE Liner Pipe Certification.

CERTIFICATION FOR PROFILE WALL HDPE LINER PIPE

This certifies the Profile Wall HDPE Liner Pipe

_____ ,
 (Product Trade Name)
 of _____ nominal diameter, manufactured by _____
 (size) (Manufacturer Name)
 at _____
 (Plant location, City & State)

is in accordance with the Indiana Department of Transportation Standard Specifications and ASTM F894. This material is to be used for and by the following and is substantiated by the test results included herein.

Contract Number _____ Contractor Name _____
 Identifying Print Line Information _____
 or Lot Number _____
 Material Destination (if other than contract location) _____

Test	Method	Specification Limits	Test Results
Resin Density	ASTM D3350	0.940, minimum	
Resin Melt Index	ASTM D3350 Condition (190, 2.16)	0.4, maximum	
RSC*	ASTM F894 @ 3% Deflection	160 minimum for circular installations, 250 minimum for deformed installations	
ID	ASTM F894	**	
Wall Thickness (Pipe)	ASTM F894	**	
Wall Thickness (Bell)	ASTM F894	**	
Wall Thickness (Spigot)	ASTM F894	**	
Flattening	ASTM F894 (after 40% Compression)	No Defects per F894 on any of the three test specimens	
Length	ASTM F894	± 2 in. of specified or nominal length	

*In lieu of RSC, the PS (in accordance with ASTM F894, X1) may be reported, provided the adjustment factor C, in accordance with ASTM D2412, and the mean diameter D, are also reported. **These values vary depending on the pipe size. Contractor shall include the appropriate value from ASTM.

Joint Type (Circle one): Bell/Spigot Screw Type Grooved Press-On Butt Fused Ext. Welded
 Other (specify) _____

 (Date) (Signature of Manufacturer’s Representative) (Title)

4.24 Solid Wall HDPE Liner Pipe Certification.
CERTIFICATION FOR SOLID WALL HDPE LINER PIPE

This certifies the Solid Wall HDPE Liner Pipe, _____ ,
 (Product Trade Name)
 of _____ nominal diameter, manufactured by _____
 (size) (Manufacturer Name)
 at _____
 (Plant location, City & State)

is in accordance with the Indiana Department of Transportation Standard Specifications and AASHTO M 326 or ASTM F714. This material is to be used for and by the following and is substantiated by the test results included herein.

Contract Number _____ Contractor Name _____
 Identifying Print Line Information _____
 or Lot Number _____
 Material Destination (if other than contract location) _____

Test	Method	Specification Limits	Test Results
Resin Density	ASTM D3350	0.940 – 0.955	
Resin Melt Index	ASTM D3350 Condition (190, 2.16)	0.15, maximum	
Liner OD	AASHTO M 326	*	
Liner Wall Thickness or ID	AASHTO M 326	Nominal OD, in in., divided by 32.5, minimum (For 12 in. use 12.750 in. and for 13 in., use 13.375 in.) Given ID, subtract from OD provided and divide by 2 to determine wall thickness, then use spec above	
Liner DR (Actual Calculated)	AASHTO M 326	30.0, minimum	
Length	AASHTO M 326	Minimum of 99% of specified length, or 1/2 in. less than specified length, whichever is shorter	

* These values vary depending on the pipe size. Contractor shall include the appropriate value from AASHTO.

Joint Type (Circle one): Bell/Spigot Screw Type Grooved Press-On Butt Fused Ext. Welded
 Other (specify)

 (Date) (Signature of Manufacturer’s Representative) (Title)

4.25 Asphalt Emulsion

TYPE A CERTIFICATION FOR ASPHALT EMULSION

Emulsion Supplier: _____ and _____
Name Source Number

Sample Identification: _____

Represented Quantity: _____ Sample Date: _____
Gallons

Test Method	Asphalt Emulsion		
	Property	*Limits	Results
AASHTO T 59	Viscosity, Saybolt Furol		
AASHTO T 59	Demulsibility		
AASHTO T 59	Oil Distillate by Distillation		
AASHTO T 59	Residue by Distillation		
AASHTO T 59	Sieve Test		
AASHTO T 49	Penetration @ 25°C		
AASHTO T 50	Float Test @ 60°C		
AASHTO T 301	Elastic Recovery @ 4°C (if applicable)		

*Standard Specification section 902.01(b)

The represented quantity (gallons) noted for this asphalt emulsion conform to Standard Specification section 902.01(b).

This material has been sampled and tested within the last 14 calendar days.

Certification is valid for 14 days after date of signature.

Signature: _____
Representative

Date: _____

4.26 Annual Certification for Delineators.

ANNUAL CERTIFICATION FOR DELINEATORS

Delineator Manufacturer: _____
Name

Manufacturer Address: _____
Address

Model Number	Description	Approval Number

This certifies the delineators listed above are in accordance with INDOT Standard Specifications. No changes have been made to the production process. The material is the same material as the material that was furnished for the evaluation sample and was subsequently placed on the Indiana Department of Transportation list of approved materials for Delineators.

The represented delineator(s) conform to Standard Specification section 926.02

Signature: _____
Representative

Date: _____

4.27 Cold In-Place Recycling and Cold Central Plant Recycling

INDIANA DEPARTMENT OF TRANSPORTATION

**TYPE D CERTIFICATION FOR
CIR AND CCPR RECYCLING TREATMENTS**

Contractor/Subcontractor: _____
Name

Sample Identification: _____

Represented Quantity: _____
SYS

Sample Date: _____

RECYCLING TREATMENT (circle one)	CIR	CCPR
TEST	*Number of Tests Completed	
Depth of Pulverization		N/A
Pulverized Material Gradation		
Asphalt Emulsion Content		
Water Content		
Compacted In-Place Field Density		
Field Moisture Content for Curing		
Optimum Field Density		
Depth of Laydown	N/A	
Pulverized Material Moisture Content	N/A	

*Frequency per Standard Specification section 416.03 for CIR or 417.03 for CCPR

This Certification represents 1 day of production.

This certifies the Quality Control testing was completed and is in accordance with the Indiana Department of Transportation Standard Specifications.

Signature: _____

Date: _____

Representative

4.28 Full Depth Reclamation

**INDIANA DEPARTMENT OF TRANSPORTATION
TYPE D CERTIFICATION FOR
CEMENT AND ASPHALT EMULSION STABILIZED FDR**

Contractor/Subcontractor: _____
Name

Sample Identification: _____

Represented Quantity: _____
SYS

Sample Date: _____

RECYCLING TREATMENT (circle one)	CEMENT	ASPHALT EMULSION
TEST	*Number of Tests Completed	
Depth of Pulverization		
Pulverized Material Gradation		
In-place Moisture of Pulverized Material		
Compacted In-Place Field Density		
Proofrolling of Entire RBC		
Cement Application Rate		N/A
Maximum Density and Moisture Content of Stabilized Material		N/A
Asphalt Emulsion Content	N/A	
Maximum Density and Moisture Content of Injected Material	N/A	
Field Moisture Content for Curing	N/A	

*Frequency per Standard Specification section 307.03 for Cement FDR or 308.03 for Asphalt Emulsion FDR

This Certification represents 1 day of production.

This certifies the Quality Control testing was completed and is in accordance with the Indiana Department of Transportation Standard Specifications.

Signature: _____
Representative

Date: _____

4.29 Pre-Compressed Foam Joint, PCF

PRE-COMPRESSED FOAM JOINT, PCF, TYPE A CERT.

_____ manufactured by _____

Name or model No. of product

Manuf. Name/Location

Is a pre-compressed, self-expanding foam joint capable of accommodating a movement range of no less than +50% to -50% of the nominal material size. The top surface is coated with a highway grade silicon that can accommodate a minimum elongation of 1200%. The joint system includes the foam joint seal, a field applied epoxy adhesive and a field applied silicone sealant. Note that no more than one application per worksheet will be accepted.

Test	Method ASTM	Results
Temperature Service Range	C711	Deg. F
UV Resistance	C793 or G155	

I understand that State and/or Federal funds and/or services are involved in the work in which this material will be used and that any misrepresentations on my part constitutes fraud.

Manufacturer's Name

Signature of Manufacturer's Official

Date

Title of Official