

Special Notice to Contractors - 18

1. SCOPE

1.1 It is the intent of this chapter to provide guidelines to the Contractor or Sub-Contractor, so that they can properly present their materials for inclusion in the construction project.

1.2 The Contractor shall follow the procedures listed below to ensure the proper inspection, sampling, testing, and certification of materials and products incorporated into all construction projects.

1.3 "Prequalification of Bidders" (Standard Specifications, Subsection 102.01) is synonymous with any reference to the CDOT "Pre-Qual List". A Prime Contractor requiring additional information regarding bidding can go to <https://www.codot.gov/business/bidding>.

1.4 The Qualified Manufacturers List (QML) is used for suppliers of Steel Reinforcing Bars & Steel Dowel Bars, Epoxy Coaters for Reinforcing Steel, and Precast Concrete Structures. These products are required to be selected off the QML. All relevant details for the proper submittal of specified Standard Manufactured Materials and Fabricated Structural Materials are found in CDOT's Field Materials Manual under CP 11, Quality Management Plans for the Qualified Manufacturers List or the Approved Products List.

2. PROVIDE NOTIFICATION OF MATERIALS SOURCES AND SUPPLIERS

2.1 In accordance with Subsection 106.01 of the Standard Specifications: The Contractor shall submit a formal list of material sources and suppliers to the Engineer at least two weeks prior to delivery; however, it is preferable that the list be presented at the Pre-Construction Meeting. The Department will sample and test materials proposed by the Contractor to be utilized for Items 203, 206, and 304. If the Department test results indicate the material is not in conformance with the project specifications, the Contractor is directed to Subsection 106.02 regarding Contractor Source materials and additional testing requirements.

2.2 The list shall include: item to be supplied, quantity, a reference to the level of acceptance required by CDOT (per Section 7, Designated Products and Assemblies), company's name and address manufacturing the material or product,

and contact person (if the material is to be pre-inspected or if a problem exists with the material delivered). The submitted list shall indicate, immediately after the item being referenced, the applicable acceptance level required:

- (A) Pre-Inspection (PI)
- (B) Certified Test Report (CTR)
- (C) Certificate of Compliance (COC)
- (D) Pre-Approved (per APL &/or QML)

2.3 All required product or material documentation shall be provided at the point and time of delivery to the construction project. Failure to provide the required documents, such as CTRs and COCs, may result in rejection of the materials. Failure to utilize the QML or APL may result in rejection of the materials.

3. INNOVATIVE CONTRACTING (DESIGN / BUILD PROJECTS, CM/GC PROJECTS, ETC.) - MATERIALS DOCUMENTATION RECORD, CDOT FORM #250

3.1 Two weeks before construction of any element of work the Contractor shall furnish the Engineer a schedule of items, approximate quantities to be incorporated into the project, and a reference to the method of acceptance required by CDOT (per Section 7, Designated Products and Assemblies). This information is to include the item of work with its placement location and dates. The Contractor shall immediately notify the Engineer, in writing, if the items of work or quantities are revised.

3.2 At the completion of the project, the Contractor shall furnish the Engineer with a completed CDOT Form #250 - Materials Documentation Record listing items utilized to construct the project and the approximate quantity of each item.

4. BUY AMERICA REQUIREMENTS

4.1 In accordance with Subsection 106.11 of the Standard Specifications as referenced in 23 CFR Part 635.410:

4.1.A Regulations require the use of domestic steel and iron in Federally funded construction projects. Buy America applies to construction components which are "predominately steel products," defined by CDOT as products which are manufactured with at least 80% steel or iron content when delivered to the job site for

installation. (See “C” below for examples.) CDOT provides waivers for manufactured products and products that are not predominately steel or iron. (See “D” below for examples.) Buy American strictly limits, but does not eliminate, the amount of foreign steel. (See “E” for minimum use & waiver information.)

4.1.B All manufacturing processes are defined as “processes required to change the raw ore or scrap metal into the finished, in-place steel or iron product”. Manufacturing begins with the initial melting and mixing, and continues through the coating stage. Any process which modifies the chemical content, the physical size or shape, or the final finish is considered a manufacturing process.

4.1.C Examples of products that are subject to Buy America requirements include, but are not limited to, the following:

- steel or iron products used in pavements, bridges, tunnels or other structures, which include, but are not limited to, the following: fabricated structural steel, reinforcing steel, piling, high strength bolts, anchor bolts, dowel bars, permanently incorporated sheet piling, bridge bearings, cable wire/strand, pre-stressing / post-tensioning wire, motor/machinery brakes and other equipment for moveable structures;
- guardrail, guardrail posts, end sections, terminals, cable guardrail;
- steel fencing material, fence posts;
- steel or iron pipe, conduit, grates, manhole covers, risers;
- mast arms, poles, standards, trusses, or supporting structural members for signs, luminaires, or traffic control systems; and
- steel or iron components of precast concrete products, such as reinforcing steel, wire mesh and pre-stressing or post-tensioning strands or cables.

4.1.D Examples of products which are exempt from Buy America requirements include, but are not limited to, the following:

- products made of material other than steel or iron (aluminum, copper, brass, nickel, etc.);
- cabinets, covers, shelves;
- clamps, fittings, sleeves;
- washers, bolts, nuts, screws;
- tie wire, spacers;
- chairs;
- lifting hooks;
- faucets; and

- door hinges.

4.1.E Buy America will not prevent a minimal use of foreign steel or iron provided the total project delivery cost of all such steel and iron which includes the cost of delivering the steel and iron to the project, does not exceed one-tenth of one percent of the total contract cost or \$2,500, whichever is greater. With prior concurrence from FHWA Headquarters, the FHWA Division Administrator may grant a waiver of the Buy America requirements for specific projects. When domestic steel products are available, meeting the contractor’s schedule should not be the basis for requesting a Buy America waiver.

4.1.F The Contractor shall maintain the certifications on file at the project that every process, including the application of a coating, performed on steel or iron products either has or has not been carried out in the United States of America. These certifications shall create a chain of custody, and the lack of these certifications will be justification for rejection of the steel or iron product.

4.1.G Prior to the permanent incorporation into the project of any steel or iron product (domestic or foreign), the Contractor shall certify in writing to the Project Engineer that the delivered quantity of each material meets the contract Buy America requirements; that the original Buy America Certification from the Supplier is on file in the Contractor’s project office; and the steel or iron products are in compliance with the plans and specifications for this project.

The Contractor shall maintain a document summarizing the date and quantity of the material utilizing CDOT’s Item Number(s) and Item Description(s) delivered to the project, along with the quantity of material installed during the month. The Contractor shall provide documentation of the project delivered cost of all foreign steel or iron permanently incorporated into the project, if any. This summary shall be delivered to the Project Engineer on a monthly basis as established per the revision of Section 106.11 of the Standard Specifications for Road and Bridge Construction. A monthly summary shall be required even if no steel or iron products are incorporated into the project during the month. [Examples of these requirements are shown on pages 13 thru 15 of this chapter.]

NOTE 1: Section 106.11 of the CDOT Construction Manual contains specific information on Buy America Requirements.

5. GLASS BEADS for PAVEMENT MARKING

5.1 The material shall meet the requirements of Standard Specifications Subsection 106.11, Section 627, and Subsection 713.08.

6. QUALITY MANAGEMENT PLANS FOR THE QUALIFIED MANUFACTURERS LIST OR THE APPROVED PRODUCTS LIST

6.1 CP 11 specifies requirements and procedures for a certification system that shall be applicable to all referenced manufacturers, as well as suppliers and contractors within certain industries. Certifying a Manufacturer's Quality Management Plan is not an automatic acceptance of any particular product, but an acknowledgement that the Manufacturer has taken steps to ensure that their quality controls meet the applicable Industry standards. Manufacturers whose Quality Management Plans are acceptable will be placed on the Qualified Manufacturers List (QML). Only Manufacturers listed on the QML will be eligible to provide the referenced products to a CDOT project.

6.2 The following Standard Manufactured Materials as referenced in CP 11 require an annual submission of a Quality Management Plan along with a sample for evaluation.

- Part I, Standard Manufactured Materials
 - Sub-Part 1. Asphalt Binder
 - Sub-Part 2. Asphalt Emulsion
 - Sub-Part 3. Hydraulic Cement
 - Sub-Part 4. Fly Ash
 - Sub-Part 5. Hydrated Lime

These products are located on the APL.

6.3 The following Fabricated Structural Materials as referenced in CP 11 require an annual submission of a Quality Management Plan.

- Part II, Fabricated Structural Materials
 - Sub-Part 1. Steel Reinforcing Bars & Steel Dowel Bars
 - Sub-Part 2. Epoxy Coaters of Reinforcing Steel
 - Sub-Part 3. Precast Conc. Structures

The QML is located within CDOT's Approved Products List (APL) web site, at www.codot.gov/business/APL. A Notice to Manufacturers is located within the same web site that references specific evaluation protocols including AASHTO's National Transportation Product Evaluation Program (NTPEP).

6.4 The respective QML web site pages are updated regularly. All pages will have at least

one revision referencing acceptability for the new calendar year.

7. DESIGNATED PRODUCTS AND ASSEMBLIES

7.1 The majority of materials submitted for inclusion on CDOT projects will fall within one of four methods of product acceptance for their sampling and testing. CDOT always retains the right through its Quality Assurance (QA) Program to obtain samples for additional testing and require supplemental documentation.

7.2 If the material or product is not referenced within the four methods of product acceptance then the materials or products must be fabricated or supplied in accordance with the requirements of the applicable Colorado Department of Transportation specifications, plans, and standards. An example of processed materials not found in the following four methods are Aggregate Base Course (ABC), Hot Mix Asphalt (HMA), and Concrete (PCCP). An example of a manufactured product treated uniquely is the Dynamic Message Signs (DMS) which are competitively bid on projects or through state awards.

7.3.a. PRE-INSPECTION (PI):

Pre-Inspection is when representatives from the Colorado Department of Transportation visit a manufacturer's facility to perform an initial review of the company's quality control plan and employee certifications, as well as subsequent inspection visitations during the manufacturing of the product. Inspection arrangements shall be made by contacting the CDOT Staff Bridge Fabrication and Construction Inspectors at (303) 757-9339 a minimum of 10 days prior to the beginning of fabrication. Failure to give notification will result in delays to the project and/or rejection of materials or products.

NOTE 2: Bearing Devices and Expansion Devices are inspected randomly at the discretion of the Staff Bridge Fabrication Inspectors.

Products needing Pre-Inspection:

- Bearing Devices (Type III) - Bridge^A
- Expansion Device, Modular - Bridge^A (0-6", through, 0-24")
- Prestressed Concrete Units - Bridge^A
- Structural Steel - Bridge^A

CDOT Form #193 is to be provided with the above referenced products.

7.3.b. CERTIFIED TEST REPORT (CTR):

The Certified Test Report method of acceptance is when a manufacturer is required to submit the actual test results performed on the material being provided. A CTR shall contain the actual results of tests for the chemical analysis, heat treatment, and/or mechanical properties per the drawing and/or specification. The contract will designate products and assemblies that can be incorporated in the work, if accompanied by Certified Test Reports. The word preceding the "Test Report" may vary between different industries, such as Certified, Mill, Metallurgical, Laboratory; however, they are all considered equivalent.

In accordance with Subsection 106.13 of the Standard Specifications and the requirements of this document, each CTR shall include:

- 1) Department's project number,
- 2) Manufacturer's name,
- 3) Address of manufacturing facility,
- 4) Laboratory name & address,
- 5) Name of product or assembly,
- 6) Complete description of the material,
- 7) Model, catalog, stock no. (if applicable),
- 8) Lot, heat, or batch number identifying the material delivered,
- 9) Date(s) of the laboratory testing,
- 10) All test results that are required so as to verify that the material furnished conforms to all applicable Department specifications. Test results shall be from tests conducted on samples taken from the same lot, heat, or batch.
- 11) The following certification, signed by a person having legal authority to act for the Contractor: [Example on page 6.]

The Certified Test Report shall be a legible copy or an original document and shall include the Contractor's original signature. The signature (including corporate title) on the Certified Test Report, under penalty of perjury, shall be of a person having legal authority to act for the manufacturer or the independent testing laboratory. It shall state that the test results show that the product or assembly to be incorporated into the project has been sampled and passed all specified tests in conformity to the plans and specifications for this project. One legible copy or original document of the fully signed Certified Test Report shall be furnished to the Engineer prior to installation of the material. Failure to comply may result in delays to the project and/or rejection of the materials.

Each product or assembly delivered to the project must contain the lot, heat, or batch number identical to that on the accompanying Certified Test Report. Products or assemblies furnished on the basis of Certified Test Reports may be sampled and tested by the Department and if determined that the material does not meet the applicable specifications, the material will be rejected or accepted according to Subsection 105.03.

[An example of what is required on a CTR is on page 16 of this chapter.]

Products requiring Certified Test Report (below is an incomplete list):

Bearing Devices (Type III) - Bridge^A
 Bridge Deck Forms, Permanent Steel^A
 Cribbing, Steel
 Geogrid (or COC, per project specs)
 Glass Beads (for pavement marking)
 Mechanical Fasteners (Field)^A
 Overhead Sign Structures^A
 Pedestrian & Bikeway Railing
 Quicklime
 Soil Conditioner
 Structural Plate Structures
 Top Soil
 Traffic Signal Structures^A
 Water, Non-Potable
 Welded Wire Reinforcement

7.3.c. CERTIFICATE OF COMPLIANCE (COC):

The Certificate of Compliance method of acceptance is when a manufacturer is required to submit a document certifying that the material being provided meets all required Department specifications. A COC shall reference the required specifications for the chemical analysis, heat treatment, and/or mechanical properties per the drawing and/or specification, but not the actual test results. The contract will designate products and assemblies that can be incorporated in the work, if accompanied by Certificates of Compliance.

In accordance with Subsection 106.12 of the Standard Specifications and the requirements of this document, the certificate shall include:

- 1) Department's project number,
- 2) Manufacturer's name,
- 3) Address of manufacturing facility,
- 4) Laboratory name & address,
- 5) Name of product or assembly,
- 6) Complete description of the material,
- 7) Model, catalog, stock no.(if applicable),
- 8) Lot, heat, or batch number identifying the material delivered,

- 9) Date(s) of the laboratory testing,
- 10) Listing of all applicable specifications required by the Department for this particular product or assembly. Certificates shall reference the actual tests conducted on samples taken from the same lot, heat, or batch, and shall include a statement that the product or assembly to be incorporated into the project was fabricated in accordance with and meets the applicable specifications.
- 11) The following certification, signed by a person having legal authority to act for the Contractor: [Example on page 6.]

The original Certificate of Compliance shall include the Contractor's original signature. The original signature (including corporate title) on the Certificate of Compliance, under penalty of perjury, shall be of a person having legal authority to act for the manufacturer. It shall state that the product or assembly to be incorporated into the project has been sampled and passed all specified tests in conformity to the plans and specifications for this project. One legible copy of the fully signed Certificate of Compliance shall be furnished to the Engineer prior to installation of material. The original shall be provided to the Engineer before payment for the represented item will be made.

Each product or assembly delivered to the project must contain the lot, heat, or batch number identical to that on the accompanying Certificate of Compliance. Products or assemblies furnished on the basis of Certificates of Compliance may be sampled and tested by the Department and if determined that the material does not meet the applicable specifications, the material will be rejected or accepted according to Subsection 105.03.

[An example of what is required on a COC is on page 17 of this chapter.]

NOTE 3: If the Plans do not specifically reference a Certified Test Report (Mill Test Report) and the product category is not listed on the Approved Products List within the Pre-Approved level of acceptance, then a COC will be required.

Products requiring Certificate of Compliance (below is an incomplete list):

- AEP (Asphalt Emulsion Prime)
- Aggregate Bag (for the bag, CTR for agg.)
- Bearing Devices (Type I, II ^{A,B})
- Bridge Rail, Steel ^A
- Catch Basin Insert

- Cattle Guard Boxes, Pre-Cast
- Concrete Box Culverts, Precast
- Dampproofing, Asphalt
- Delineator Posts, Steel
- Ditch Control (Erosion Log & Silt Dike)
- Dust Palliative, Asphaltic or Magnesium Chloride
- Erosion Bales ^D
- Expansion Joint Material, Preform. Filler
- Fence (Wires & Posts)
- Fertilizer
- Flumes (all types) Gabions and Slope Mattress
- Gaskets
- Geogrid (for Erosion Control)
- Glass Beads (for PMM)
- Guard Rail - End Anchors
- Guard Rail Metal ^A
- Guard Rail Posts - Metal ^A
- Guard Rail - Precast
- Guard Rail Posts - Timber Blocks and Posts ^A
- Hay ^D
- Headgates
- Hydraulic Soil Stabilizers
- Inlets, Grates and Frames (Prefab)
- Interior Insulation
- Irrigation Systems
- Lighting, all items
- Light Standards, High Mast
- Light Standards, Metal
- Luminaires (Inclusive)
- Manholes, Rings and Covers (Prefab)
- MSE Wall - Elements ^{A,C}
- Mulch (Hydraulic or Dry Applied)
- Mulch Tackifier
- Pedestrian Bridge ^A
- Perimeter Control (Silt Fence)
- Piling ^A
- Pipes - all material compositions
- Rest Area Materials (construction of)
- Retaining Wall Blocks
- Seeding (Native), Seed ^C
- Sign Panels
- Sprinkler System(s)
- Steel Chairs
- Steel Sign Posts
- Steel Sheet Piling ^A
- Storm Drain Inlet Protection
- Straw ^D
- Structural Glazed Tile and Ceramic Tile
- Structural Plate Structures ^A
- Structural Steel Galvanized ^A
- Treated Timber
- Vegetation (Sod & Plants)
- Water, Potable
- Water Control Devices
- Water Lines

Welded Wire Mesh

NOTE 4:

- A Mill Test Report shall be included.
- B Certified Test Report(s) on components must accompany the material or product.
- C Certified Test Report shall be included.
- D Contractor may obtain a current list of Weed Free Forage Crop Producers by contacting the Colorado Department of Agriculture at (303) 239-4149.

Example of stamp or affixed sticker to be placed on Certified Test Reports (CTRs), per Subsection 7.3 B (11).

I hereby certify under penalty of perjury that the material listed in this Certified Test Report represents _____ (quantity and units)	
of pay item _____	

(pay item # and description) that will be installed in conformance with the plans and specifications on Project Number _____ .	
_____	_____
Contractor Rep. Signature	Date

Example of stamp or affixed sticker to be placed on Certificates of Compliance (COCs), per Subsection 7.3 C (11).

I hereby certify under penalty of perjury that the material listed in this Certificate of Compliance represents _____ (quantity and units)	
of pay item _____	

(pay item # and description) that will be installed in conformance with the plans and specifications on Project Number _____ .	
_____	_____
Contractor Rep. Signature	Date

7.3.d. PRE-APPROVED (APL):

The Pre-Approved method of acceptance is when a manufacturer is required to submit all relevant documentation on their product in advance of any specific project. A primary requirement to be considered for the Approved Products List (APL) is that the material retains a very high level of uniformity and consistency in its production quality (i.e. not project specific).

The submittal of Product literature /Tech Data Sheet (TDS), Certificates of Compliance, Certified Test Reports, Materials Safety Data Sheets (MSDS), etc., as well as product samples for specific categories combine all previous methods of acceptance into one. A Manufacturer whose product is not currently on the APL should read and follow the instructions within the Notice to Manufacturers on the APL web site at www.codot.gov/business/APL .

Product evaluation can take a minimum of four months to in excess of a year for some product categories. If CDOT specifications need to be altered or created for a product's acceptance then it could take even longer.

In accordance with CDOT's Procedural Directive 1401.1, a manufacturer's product is evaluated within CDOT to determine its acceptability on CDOT construction projects, as defined by CDOT specifications, plans and standards. For additional information on the APL or the web site contact the Product Evaluation Coordinator within the Staff Materials & Geotechnical Branch at 303-398-6566.

Locate products on the web site through *APL Search*, and then use the referenced Category, the Manufacturer's name, or the Product name. A category search requires that the drop-down menus be used.

APL User Guidance

1. If three or more products are listed for any applicable category then one of these products shall be selected. If the category is unpopulated a COC will be required for the product actually used. If the category is under-populated a COC will be required for the product actually used if not from the APL. CDOT's Subject Matter Expert (SME) for the applicable category shall be contacted for assistance. A CTR may be requested if the Project Engineer deems it appropriate. Contact the CDOT Product Evaluation Coordinator at 303-398-6566 with any questions.

2. Products that are evaluated on a batch or lot basis and subsequently posted on the APL web site will not be posted indefinitely. They expire two years after their CTR date or they will be removed sooner if informed that the batch or lot is depleted. Specifically this refers to (1) single component, hot-applied, elastomeric membranes for bridge decks, (2) hot poured, joint/crack sealant, and (3) asphalt plug joints.

3. Asphalt Binder and Asphalt Emulsions: Approved asphalt binders and emulsions are valid for the calendar year in which they were tested and approved, as per CP 11. The year is incorporated into the product name. On February 1st of each calendar year all products from two previous years will be automatically removed.

4. Environmental Erosion Control and Sediment / Pollution Control: All questions regarding this category's materials, both the current specifications and the products, should be directed to the CDOT Staff Environmental Branch SME.

5. Traffic Control Pavement Marking Material Sub-Category: All questions regarding pavement marking materials, both the current specifications and the products, should be directed the CDOT Staff Traffic Branch SME.

6. Geosynthetics and Geotextiles: Materials Bulletin (2008 Number 1) dated January 25, 2008 is posted at: <http://www.codot.gov/Business/DesignSupport/Materials%20Bulletins/Materials%20Bulletins.htm>

This Materials Bulletin clarifies the terminology

and application of geosynthetics as specified in the Standard Specifications and the Standard Special Provision (SSP), *Revision of Sections 208, 420, 605, and 712 – Geosynthetics and Geotextiles*. For New York State web site navigation refer to (NYDOT APL Instructions) at www.dot.ny.gov/index?nd=nysdot . (See Item 420 on the OA Schedule.)

7. Concrete Mix Designs:

The APL website contains a folder listing concrete mix designs that have been pre-approved. When a concrete mix is placed on the APL, it meets the most current CDOT Standard Specifications; however, it may not meet a CDOT project's Special Provisions. CP 62 is the procedure for approving all concrete mixes for use on a CDOT project. (see Chapter 600)

8. Warm Mix Asphalt (WMA) Mixes:

The APL website contains a folder listing approved WMA technologies and a folder listing approved contractors for specific WMA technologies that have been pre-approved for use on CDOT Projects. Use of a WMA mix on a Project shall be approved by the Project Engineer with the concurrence of the Region Materials Engineer.

9. Contractors are required to submit a document entitled Contractor's APL-QML Verification along with a copy of the Form #595 to the project engineer documenting the selection of the CDOT APL products and/or QML facility that they wish to include for project incorporation. (Example on Page 18.)

10. APL Quality Assurance Program:

Upon selecting the sub-category or base-category the Product ID (PID), Product Name, Manufacturer, and Comments will be displayed.

(a) By clicking on the PID / Form #595 the Pre-Approved Product Evaluation Request & Summary will be displayed. This will provide the customer with both a mini product data sheet and the information necessary for additional product analysis for specific utilization.

(b) If a product fails to perform within minimum quality expectations contact the CDOT Product Evaluation Coordinator immediately via e-mail as listed in the APL web site.

DISCLAIMER: The Colorado Department of Transportation (CDOT) is not obligated to any manufacturer to use any of their products listed in the Approved Products List (APL). The APL simply documents that the listed products have been reviewed, tested, and evaluated against CDOT standards, and were found to be acceptable to be used in CDOT projects. Acceptance is based on product quality; however, price or availability may be the determining factor by a contractor or sub-contractor on the CDOT project.

The product shall be removed from the APL if Product Performance comments indicate that field performance is unacceptable to CDOT quality standards or if the product varies from the data as originally submitted. Additional disclaimer information can be found within the APL web site.

<u>APL Category</u>	<u>APL Sub-Category</u>	<u>APL Base Category</u>	<u>Material Code</u>
Adhesive:	Anchoring, Lateral:	Acrylic	712.10.02.00
		Cementitious	712.10.02.00
		Epoxy	712.10.02.00
	Anchoring, Overhead: Bonding:	Polyester	712.10.02.00
		N/A	712.10.02.00
		Epoxy	712.10.01.00

Asphalt:	Asphalt Release Agent:	Truck Bed Only	401.09.01.00
		Truck & Equipment	401.09.01.00
	Binder:	PG 58-28	702.01.01.01
		PG 58-34	702.01.01.02
		PG 64-22	702.01.01.03
		PG 64-28	702.01.01.04
		PG 70-28	702.01.01.05
		PG 76-28	702.01.01.06
	Emulsion:	CSS-1	702.03.18.00
		CSS-1h	702.03.19.00
		CRS-2	702.03.15.00
		CRS-2P	702.03.21.00
		CRS-2R	702.03.23.00
		CQS-1h	702.03.20.00
		HFMS-2	702.03.08.00
		HFMS-2s	702.03.10.00
		HFMS-2P	702.03.25.00
		HFMS-2sP	702.03.26.00
		HFMS-2h	702.03.09.00
		HFRS-2P	702.03.24.00
		SS-1	702.03.11.00
	SS-1h	702.03.12.00	
	ARA-1P	702.04.02.00	
Hydrated Lime: Roadway Patching:	N/A	712.03.01.00	
	Pre-Mixed [Bagged]	401.02.01.00	

Bridge Structures:	Geocomposite Drain:	N/A	712.08.01.01
		Thin Bonded Overlay:	Epoxy
	Structural Wrapping Repair	Non-Epoxy	519.01.00.00
		N/A	601.09.02.00

Concrete:	Admixture:	Air Entraining	711.02.01.00
		Water-Reducing	711.02.01.00
		Retarding	711.02.01.00
		Accelerating	711.02.01.00
		Water-Reducing & Retarding	711.02.01.00
		Water-Reducing & Accelerating	711.02.01.00
		Water-Reducing, High Range	711.02.01.00
		Water-Reducing, HR & Retard.	711.02.01.00

<u>APL Category</u>	<u>APL Sub-Category</u>	<u>APL Base Category</u>	<u>Material Code</u>	
Concrete	Admixture	Extended Set-Control	711.02.01.00	
		Specific Performance	711.02.01.00	
		(Concrete) Corrosion Inhibitor	711.02.01.00	
		Pigments, Integrally Colored	711.02.01.00	
		Miscellaneous	711.02.01.00	
		Curing Compound:	Type 1 [Clear, Wax Based]	711.01.01.00
	Type 1 [Clear, Resin Based]		711.01.01.00	
	Type 2 [White Pigmented, Wax Based]		711.01.01.00	
	Type 2 [White Pigmented, Resin Based]		711.01.01.00	
	Cement:		Portland Cement, ASTM C 150	701.01.01.00
		Blended Cement, ASTM C 595	701.01.02.00	
		Hydraulic Cement, ASTM C 1157	701.01.03.00	
	Pozzolan:	Fly Ash, Class C	701.02.01.00	
		Fly Ash, Class F	701.02.02.00	
		High Reactivity	701.02.04.00	
		Silica Fume	701.03.01.00	
	Concrete:	Fiber:	Macro Fiber	709.04.02.00
			Micro Fiber	709.04.02.00
		Grout:	General Purpose [Non-Shrink]	601.02.14.00
			Post-Tensioned Cable	618.02.01.00
Repair/Patching:		Rapid Set, Horizontal	601.09.01.00	
		Rapid Set, Vertical & Overhead	601.09.01.00	
-----	Drainage:	Culvert Lining [Repair]	707.12.01.00	
		Open-Cut/Direct-Bury	712.13.02.00	
	Manholes & Inlets:	Manhole Riser	604.04.01.00	
		Trench Drain	712.14.01.00	
		Plastic Drains	712.14.01.00	
Environmental:	Sound Wall:	Absorptive	607.02.02.00	
		Reflective	607.02.02.00	
Erosion Control:	Soil Retention Rolled:	SRB [Biodegradable Class 1]	216.02.02.00	
		SRB [Photodegradable Class 1]	216.02.02.00	
		SRB [Biodegradable Class 2]	216.02.02.00	
		SRB [Photodegradable Class 2]	216.02.02.00	
Erosion Control:	Soil Retention Rolled:	TRM [Class1]	216.02.03.00	
		TRM [Class 2]	216.02.03.00	
		TRM [Class 3]	216.02.03.00	
		TRM [Class 4 / woven]	216.02.03.00	
Erosion Control:	Ditch Control:	Silt Berm	208.02.02.00	
		Sediment/Pollution Ctrl: Construction Inlet Protect.:	Storm Drain Inlet Protect. (Type 1)	208.02.08.01
Storm Drain Inlet Protect. (Type 2)	208.02.08.01			
Storm Drain Inlet Protect. (Type 3)	208.02.08.01			
Sediment/Pollution Ctrl:	Concrete Washout Structure:	Pre-Fabricated [Above Ground]	208.02.14.00	
		Vehicle Tracking Control:	Pre-Fabricated	208.02.15.01

<u>APL Category</u>	<u>APL Sub-Category</u>	<u>APL Base Category</u>	<u>Material Code</u>	
Maintenance	Deicing, Liquid	Magnesium Chloride (Cat. 1)	712.04.01.00	
Maintenance	Deicing, Granular	Brining Salt, Dry, Std (Cat. 8A-B)	712.04.02.00	
		Road Salt, Dry, Std (Cat. 8A-R)	712.04.02.00	
		Wet Salt, Std (Cat. 8B)	712.04.02.00	
		Brining Salt, Dry, Fine (Cat. 8C)	712.04.02.00	
		Road Salt, Dry, Fine (Cat. 8C-R)	712.04.02.00	
Maintenance	Inhibitor / Enhancer	Corrosion Inhib, NaCl (Cat. A-1)	712.04.02.01	
Maintenance	Alternate Traction Device	Corrosion Inhib, NaCl (Cat. A-3)	712.04.02.01	
		Textile Traction Device		

Paint / Coating:	Anti-Graffiti:	N/A	708.02.01.00	
	Concrete Corrosion Inhibitor:	N/A	708.08.01.00	
	Epoxy Coating:	N/A	708.03.03.00	
	Structural Concrete Coating:	N/A	708.08.01.00	
	Structural Steel Paint:	N/A	708.03.02.00	
	Wire Coating:	N/A		

Pedestrian Safety:	ADA Truncated Dome:	Embedded	608.02.03.00	
		Retrofit	608.02.03.00	
	Joint System	N/A	705.01.03.00	

Right-of-Way Structure:	Mailbox Support System:	N/A	210.13.01.00	
	Utility Enclosure:	N/A	604.04.02.00	
	Fence, Non-Standard Coating	N/A	710.03.01.00	
	Pole Base Hardware:	N/A	713.05.01.00	

Roadway Safety:	Cable Barrier:	NCHRP 350 TL-3	606.02.06.00	
		NCHRP 350 TL-4	606.02.06.00	
	Guardrail W-Beam:	Guardrail End Treatment	606.02.03.00	
		Guardrail End Treat., Spec. App.	606.02.03.00	
		Guardrail Synthetic Blockout	606.02.04.00	
		Crash Cushion:	Sand Barrel Array	614.07.02.00
		Guardrail Median Terminal	606.02.02.00	
		Barrier End Treatment (Terminal)	606.02.02.00	
		Impact Attenuator, Std, Perm.	614.07.02.00	
		Impact Attenuator, Wide, Perm.	614.07.02.00	
		Impact Atten., Lo-Maint, Perm.	614.07.02.00	
		Impact Atten., Spec-App, Perm.	614.07.02.00	
	Roadway Safety:	Railing	Pedestrian & Bicycle	514.05.01.00
Vehicle			606.02.05.00	

Sealant [Joint & Crack]:	Asphaltic Plug Joint:	Hot Poured, Joint/Crack:	N/A	
			ASTM D 6690, Type II	518.03.01.00
			ASTM D 6690, Type IV	702.06.01.00
			ASTM D 5078	702.06.02.00
	Mastic:	Under Development	702.06.03.00	

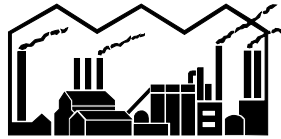
Sealant [Joint & Crack]:	Silicone, Joint:	Non-Sag	705.01.01.00	
		Self-Leveling	705.01.01.00	
	Pre-Formed Joint Filler:	Loop Detector Slot:	N/A	705.01.02.00
			One Component	705.01.01.00
			Two Component	705.01.01.00

Soil / Geotechnical:	Stabilization:	Chemical, Liquid	308.03.02.01	
	Void Elimination:	Polyurethane Foam, Hi Density	308.03.02.01	

<u>APL Category</u>	<u>APL Sub-Category</u>	<u>APL Base Category</u>	<u>Material Code</u>
Traffic Control:	Portable Changeable Message:	Trailer Mount	630.03.01.00
		Vehicle Mount	630.03.01.00
	Arrow Board:	Type A	630.03.01.00
		Type B	630.03.01.00
		Type C	630.03.01.00
		Type D	630.03.01.00
	Speed Notification:	Radar/Message Trailer	630.03.01.00
		Speed Display Trailer	630.03.01.00
		Speed Display Device	630.03.01.00
	Traffic Control Enhancement:	AFAD	630.04.01.00
		Flashing Beacon	614.06.01.00
		Warning Light	630.08.02.00
		Raised Island, Temporary	630.08.02.00
		Rumble Strip, Temporary	630.08.02.00
		Glare Screen	630.08.01.00
	Channelizing Device:	Cone	630.05.01.00
		Tubular Marker	630.05.02.00
		Vertical Panel	630.06.01.00
		Drum	630.06.02.00
		Barricade, Type 1	630.06.02.00
		Barricade, Type 2	630.06.02.00
		Barricade, Type 3	630.06.02.00
	Channelizing Device:	Direction Indicator Barricade	630.02.02.00
		Longitudinal Channelizing Device	630.06.04.00
		Opposing Traffic Lane Divider	630.06.03.00
	Delineator:	Flexible Post	612.02.02.00
		Flexible, Multiple Hit Post	612.02.02.00
		Guardrail Mount	612.02.02.00
	Reflective Element:	Barrier (Solid Wall) Marker	612.02.04.00
		Guardrail & Post Marker	612.02.04.00
		Delineator Post Marker	612.02.04.00
		Linear Reflector Strip	612.02.05.00
	Post Anchoring:	Mechanical System	612.05.01.00
		Polyurethane Foam, Backfill	614.02.03.00
	Traffic Barrier, Temporary:	Barrier, Non-Concrete	630.07.01.00
		Barrier Gate	630.07.01.00
	Crash Cushion, Temporary:	Impact Attenuator, Temporary	630.08.04.00
		Truck Mounted Attenuator (TMA)	630.08.03.00
		Trailer Mounted Attenuator	630.08.03.00
Traffic Control:	Sign Stand:	N/A	630.02.01.00
Traffic Control:	Pave. Marking Material:	Preformed Plastic Tape, Type I, Perm.	713.13.01.00
		Preformed Plastic Tape, Type II, Perm.	713.13.01.00
		Preformed Plastic Tape, Type III Perm.	713.13.01.00
		Thermoplastic, Hot Applied	713.12.01.00
		Thermoplastic, Preformed, Preheat	713.14.01.00
		Thermoplastic, Preformed, No-Preheat	713.14.01.00
		Epoxy Paint, Standard	713.17.01.01
		Epoxy Paint, Modified	713.17.01.02
		Polyurea	713.17.02.00
		Methyl Methacrylate	713.19.01.00
		Recessed Pavement Marker	713.18.02.00
		Raised Flexible Marker (Temp.)	713.18.01.00
		Temp. / Construction, Tape	713.16.01.00
		Temp. / Construction, Paint	713.16.02.00
Traffic Control:	Sign Sheeting:	ASTM D 4956, Type IV	713.04.01.00
		ASTM D 4956, Type V	713.04.01.00
		ASTM D 4956, Type VI	713.04.01.00

<u>APL Category</u>	<u>APL Sub-Category</u>	<u>APL Base Category</u>	<u>Material Code</u>
		ASTM D 4956, Type VI	713.04.01.00
		[Roll-up & Cone Collar]	713.04.01.00
		ASTM D 4956, Type VIII	713.04.01.00
		ASTM D 4956, Type VIII, Fluorescent	713.04.01.00
		ASTM D 4956, Type IX	713.04.01.00
		ASTM D 4956, Type IX, Fluorescent	713.04.01.00
		ASTM D 4956, Type XI	713.04.01.00
		ASTM D 4956, Type XI, Fluorescent	713.04.01.00
		Films / Miscellaneous	713.04.01.00

Waterproofing:	Concrete Sealer:	Alkyl-alkoxy Silane	515.03.01.00
		Non-Alkyl-alkoxy Silane	515.03.01.00
		Penetrating Epoxy	515.03.01.00
		Micro-Subsurface Repair	515.03.01.00
	Elastomeric Membrane:	Single Component, Hot Applied	705.09.01.00
		Non-Asphaltic	705.08.01.00



Kryptonite Construction Inc.

13369 W. Rocky Rd. Smallville, Colorado 91130

Phone 999-123-4567

Attn: Project Engineer

Date: July 10, 2016

Re: CDOT Contract ID: 53124

Re: CDOT Project No. CC 00-0000-00

Subject: Buy America Certification

Kryptonite Construction hereby certifies that the materials and quantities represented below, to be incorporated into the project, meet the contract Buy America requirements. We also certify that the Buy America paperwork and certifications required by Section 106.11 are on file at the project.

- 1.) 550 LF of 24" culvert pipe for bid item 603-01180

Respectfully,

 Clark Kent
 Construction Manager
 Kryptonite Construction Inc.

<p><i>EXAMPLE</i></p> <p><u>Buy America Requirements</u></p> <p>(Per requirements of Subsection 4.1) (Original Signatures Required, No Facsimiles Accepted)</p>
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Note 1: The Buy America Certification is to always be received by the Project Engineer prior to the steel or iron being incorporated into the project.

Note 2: The delivery date and/or the incorporation date may be included in the letter.



Kryptonite Construction Inc.

Summary of Buy America Certifications Received for Installed Steel / Iron Products

CDOT Project No.: CC000-000-00
 CDOT Contract ID: 53124
 Summary for the Period Ending: October 2016

Item	Item Description	Quantity Delivered to Project	Unit	Delivered Cost*	Delivery Date	Installed Quantity	Unit	Installation Month	BUY AMERICA CERTIFICATION Date	BUY AMERICA CERTIFICATION Quantity
603-01180	24" culvert pipe	550	LF		11-Jul-16	300	LF	Aug-16	10-Jul-16	550 LF
						250	LF	Oct-16	10-Jul-16	550 LF
Total	603-01180 24" culvert pipe	550	LF			550	LF			

Prepared by: _____ Title: _____ Date: _____

* If there is any foreign steel or iron permanently incorporated into the project the Contractor shall provide documentation of the project delivered cost of that foreign steel or iron.

EXAMPLE

Suggested format for the reconciliation of the Buy America Certification quantities with Installed Quantities. The Contractor shall submit this summary to the Project Engineer.

Subsection 4.1.G "The Contractor shall maintain a document summarizing the date and quantity of the material utilizing CDOT Item Number(s) and Item Description(s) delivered to the project, along with the quantity of material installed during the month."

CLARIFICATION: This Summary example indicates that the Period ended in October. The Buy America Certification date is from July 10th and the Delivery Date is from July 11th. This example document summarizes the quantity delivered along with the quantity installed.



Kryptonite Construction Inc.

**13369 W. Rocky Rd. Smallville, Colorado 91130
Phone 999-123-4567**

Attn: Project Engineer

Date: November 28, 2016

Re: CDOT Contract ID: 53124

Re: CDOT Project No. CC 00-0000-00

Subject: Buy America Exception for Foreign Steel

Kryptonite Construction Inc. hereby certifies that throughout the entirety of the above referenced project there was one acquisition of steel / iron from a non-American source. The Minor Exception documentation is on file at the project's Contractor's trailer as required by Section 106.11 of the contract.

- No Exception
- Minor Exceptions: Value less than 1/10 of 1% of the total contract cost or \$ 2,500.00 whichever is greater. Documentation is in our Project Files.

1.) 16 panels of ADA Truncated Domes which were imported from China were incorporated into the project. The total contract cost to date of imported steel or iron is \$1,831.66.

Respectfully,

Clark Kent
Construction Manager
Kryptonite Construction Inc.

EXAMPLE
Buy America Requirements
 (Per requirements of Subsection 4.1)
 (Original Signatures Required, No Facsimiles Accepted)

American Glass Bead Inc.

Desert Ray, Tx. 76660

Phone: (254)562-2541

Fax: (254)562-2542

www.agbi.com

CERTIFIED TEST REPORT

Colorado Department of Transportation (CDOT) project number: MTCE 03-022

Name of Product: AASHTO M 247 Type 1 Colorado Spec Glass Beads

*Product Code: AGBI- 0123

Product Batch Number: 021805

*Product date of manufacturing: April 25, 2017

*Quantity Shipped: 44000 Pounds

* Date of Shipment: TBA

Laboratory Information:

*AGBI Inc.: HWY 40 & FCR 145

*Testing Date: 2/18/05

* Samples Tested: Samples are from Batch # 021805

AASHTO Designation M 247

*AASHTO M 247 Type 1 Colorado Spec

Test Results: Gradation (ASTM Standard D 1214)

Sieve Designation	Specification for AASHTO M 247 Mass Percent Passing (Type 1)	Test Result
No. 20 (0.850 mm)	100	100
No. 30 (0.600 mm)	75-95	86.9
No. 40 (0.425 mm)	-	-
No. 50 (0.300 mm)	15-35	24.2
No. 80 (0.180 mm)	-	-
No. 100 (0.150 mm)	0-5	.7

AASHTO M 247 Type 1

Test Results: Other Properties

Element / Method	Specification for AASHTO M 247 Specification Limit	Test Result
Roundness/ASTM D 1155	70% min	71.4%
Crushing Resistance ASTM D 1213	Retained 0.425-mm (No. 40) sieve 133N (30 lbs.) min.	Passing
Refractive Index (Ref: TTB1325C Section 4.3.3)	1.50 min	1.52
Moisture Resistance	Non-Moisture absorption & Free flowing	Passing
Flotation	90% of all beads shall float in xylene	n/a

Certification of Material: The referenced material meets or complies with the AASHTO M 247 Type 1 Colorado Specification.

Billy Gibbons

18 May, 2017

Billy Gibbons / Quality Control

Date

EXAMPLE-CTR

**[Per requirements of Section 7]
(Original Signatures Required,
Legible copy Accepted)**

I hereby certify under penalty of perjury that the material listed in this Certified Test Report represents _____ (quantity and units) of pay item _____ (pay item # and description) that will be installed in conformance with the plans and specifications on Project No. _____.

Contractor

Date

North-By-Northwest, North-By-Northwest, Inc.

9876 S. Eva-Marie Blvd.
Grant, South Dakota 54321
Phone 999-123-4567

Certificate of Compliance

Product Name: Universal Bridge Deck Expansion Joint
Model: .UBDEJ-101
Lot: 135-02

Description: Pre-formed Silicone gland, that can be bonded directly to an Elastomeric concrete joint interface with a single component silicone-locking adhesive.

Material Testing Specifications:

<u>Property</u>	<u>Test Method</u>	<u>Mean Value</u>
Durometer (Shore A)	ASTM D 2240	55
Tensile (psi)	ASTM D 412	650 psi
Elongation (%)	ASTM D 412	382 %
Tear (die B ppi)	ASTM D 624	88 ppi
Compression Set At 350°F 22 hrs.	ASTM D 395	30 %
Operating Temperature Range		-60° F to 450° F
Specific Gravity		1.51

State Specification Reference:

Colorado DOT Standard Specifications for Road and Bridge Construction, Section 412.13 (c). Project plans as required.

CDOT Project Number NH 0507-123

The above referenced tests were performed within our laboratory on May 10th 2017. All tests passed and the minimum required values were exceeded. Applicable laboratory test reports are available upon your request.

North-By-Northwest, Inc.

John Doe

John Doe
Manager, Quality Assurance

Date: 12 May 2017

I hereby certify under penalty of perjury that the material listed in this Certificate of Compliance represents _____ (quantity and units) of pay item _____ (pay item # and description) that will be installed in conformance with plans and specification on Project Number _____.

Contractor

Date

EXAMPLE-COC
[Per requirements of Section 7]
(Original Signatures Required,
Legible copy Accepted)



Kryptonite Construction Inc.

13369 W. Rocky Rd. Smallville, Colorado 91130
Phone 999-123-4567

CONTRACTOR'S APL - QML VERIFICATION

Date: _____

CDOT Contract ID _____

CDOT Project No.: _____

CDOT Project Location: _____

The following material was selected from the CDOT Approved Products List or the facility was selected from the CDOT Qualified Manufacturers List in accordance with the project plans, the 2011 Standard Specifications for Road and Bridge Construction, and the 2018 Field Materials Manual. Include CDOT Form #595 with this letter if selecting from the APL.

QML Part/Sub-Part (per CP 11): _____

APL Category: _____

APL Sub-Category: _____

APL Base Category: _____

APL Reference No.: _____

Product / Facility Name: _____

Manufacturer: _____

Date of Web Site Review & Selection: _____

Kryptonite Construction Inc.

Veronica Dee

Veronica Dee
Construction Manager

I hereby certify under penalty of perjury that the material listed in this Certificate of Compliance represents _____ (quantity and units) of pay item _____ (pay item # and description) that will be installed in conformance with plans and specification on Project Number _____ .

Contractor

Date

EXAMPLE
(Per requirements of Subsection 7.3.d)
(Original Signatures Required, No Facsimiles Accepted)