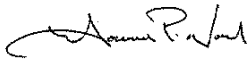


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Responsible Office: Pavement Engineering



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PAVEMENT TYPE SELECTION STANDARD PROCEDURE

PROCEDURAL STATEMENT:

This document details the procedure used by the Ohio Department of Transportation (ODOT) to select pavement in accordance with the Pavement Type Selection Policy 20-006(P). The procedures contained herein are the result of the Pavement Selection Advisory Council Final Report by the Neutral Third Party (NTP) and the facilitated meetings between ODOT and paving industry association representatives that followed.

This procedure provides a data-driven, objective, transparent, and repeatable process to determine pavement type for major projects and largely conforms to the pavement type selection processes of the majority states included in the NTP study.

AUTHORITY:

Ohio Revised Code Sections 5501.02, 5501.03, 5501.11, 5501.14, 5501.31, and 5511.01.

REFERENCES:

Policy 20-006(P)
Final Report, Neutral Third Party Ohio Pavement Selection Process Analysis prepared for
ODOT Pavement Selection Advisory Council, December 12, 2003
Pavement Design & Rehabilitation Manual
Project Development Process Manual

SCOPE:

This procedure is applicable to all Districts, Divisions, and Offices of the Ohio Department of Transportation.

DEFINITIONS:

Analysis Period: The number of years included in a Life-Cycle Cost Analysis.

Differential Costs: Costs which can be reasonably calculated, based on the information available at the time, that are different between the various alternatives in a life-cycle cost analysis.

Life-Cycle Cost Analysis (LCCA): An economic analysis tool to quantify the differential costs of alternative pavement options by analyzing initial costs and discounted future costs over a defined period of time.

PROCEDURE:

I. PAVEMENT ALTERNATIVE DETERMINATION

- A. At the outset of a project, "all" potential pavement types are considered. For pavement to be built on a new location, this includes both rigid and flexible pavement and may include composite pavement if there is a local or district preference to do so. For rehabilitation/replacement of an existing pavement, the alternatives initially considered depend in part on the existing pavement type. Potential pavement alternatives include: new flexible pavement, new rigid pavement, rubblize and roll, unbonded concrete overlay, crack and seat, and whitetopping.
- B. After the potential alternatives are identified, an engineering review and analysis of principal selection factors is conducted to determine the feasible alternatives. Below is a list of principal factors most often considered in the engineering review, however, other factors may be considered at any time. If only one pavement alternative is determined to be feasible, that alternative is automatically selected and an LCCA is not performed.

Principal Factors:

1. **Geotechnical Concerns** - The subgrade conditions may preclude the use of some alternatives.
2. **Amount of Replacement** - The amount of replacement required due to bridges, soil conditions, re-alignment, etc., may become so large as to make it preferable to replace the entire pavement.
3. **Amount of New Pavement** - On projects with lane additions or other widening, the amount of new pavement to be built may become so large as to make it preferable to replace the entire pavement.

4. **Research** - ODOT may wish to perform research on a specific pavement type or treatment including new innovations.
5. **Maintenance of Traffic** - The ability to maintain safe access for the traveling public, according to ODOT policies, may preclude the use of some alternatives.
6. **Adjacent Existing Sections** - When filling in a gap between two similar pavement types, it may be preferable to continue a similar pavement type rather than change from one, to another, then back to the first.
7. **Municipal Preference** - Local government agencies may have a preference for a particular pavement, particularly where they are the maintaining agency.

II. LIFE-CYCLE COST ANALYSIS

- A. When more than one feasible alternative exists, an LCCA is prepared. The analysis period is 35 years. Future maintenance work is determined in accordance with the Pavement Design & Rehabilitation Manual.
- B. The unit prices used in the LCCA are provided by the Office of Estimating. Because the unit prices for the concrete pavement and asphalt pavement used in the initial construction have a significant impact on the LCCA, a data-driven, objective, transparent and repeatable process is used to determine warranty concrete and warranty asphalt prices. The concrete and asphalt prices are updated quarterly.
 1. All the criteria to determine if a unit price data point is to be included are based on individual project reference numbers. Projects with funding splits or a part 1 and a part 2, may have the same item with two or more reference numbers. Reference numbers are not combined at any point in the process. Data to be included is as follows:
 - a) For asphalt pavement, only 7-year warranty asphalt will be included (currently Item 880);
 - b) For concrete pavement, 7-year warranty concrete as well as non-warranty, non-reinforced concrete will be included. This includes but is not limited to Items 452, 884, 888, and 896;
 - c) The minimum time period for both pavements is 2 years;
 - d) It is desired to have a minimum of 15 data points for both pavements;

- e) If there are fewer than 15 data points in 2 years for either pavement, the time period will be expanded by quarter, up to 4 years maximum, until the 15 minimum is met or exceeded;
 - f) The maximum time period for both pavements is 4 years, even if this results in less than 15 data points;
 - g) Between 2 and 4 years, all the projects in the quarter that contains the 15th data point will be included which may result in excess of 15 data points;
 - h) For both pavements, the unit prices used in the analysis will be the average of the "low 3" bidders. "Low 3" are the three responsive and responsible bidders with lowest total bids, typically the awarded bidder and the next two bidders;
 - i) The minimum quantity for asphalt is 15,000 cubic yards; and
 - j) The minimum quantity for concrete is 50,000 square yards.
2. Once the asphalt data is identified, it is placed in a spreadsheet, graphed showing quantity vs. unit price, and a power curve trendline is generated. The equation of the trendline is used to determine the unit price for quantities in the LCCA.
 3. Once the concrete data is identified, all the unit prices of the various thicknesses are adjusted to a unit price for a normalized thickness. The adjustment method is a straight ratio of the normalized thickness divided by the actual thickness, multiplied by the unit price of the actual thickness. The normalized prices are graphed vs. square yard quantity and a power curve trendline is generated. The equation of the trendline is used to determine the normalized unit price for the quantities in the LCCA. The normalized price is then adjusted to the desired thickness, again using a straight ratio.
 4. If there is more than one thickness of concrete for a single alternative, the unit price is calculated using the actual quantity for all thicknesses with quantities 50,000 square yards and greater. For alternatives with thicknesses at quantities both greater than and less than 50,000 square yards, the smallest quantity greater than 50,000 square yards is used to determine the unit price for the thicknesses of quantities less than 50,000 square yards. For an alternative with all thicknesses at quantities less than 50,000 square yards, the largest quantity is used to calculate the price for all thicknesses.

5. All data points are manually filtered for applicability prior to inclusion. Non-applicable data includes ramp pavement when the mainline pavement is of a different type, even if the ramp pavement exceeds the quantity threshold.
- C. The completed, draft pavement selection package is sent to the district for review. At the same time, it is sent to representatives of the paving industries for their review. The purpose of the review is to identify any errors and provide comments when applicable. The Office of Pavement Engineering corrects any errors and submits the comments with the final pavement selection package to the Pavement Selection Committee. If corrections to the draft LCCA switch any alternative(s) from outside the 10 percent range, discussed below, to within 10 percent, the pavement selection package is redistributed to all parties for comment on the Secondary Factors.

III. FINAL PAVEMENT SELECTION

- A. Alternatives not within 10 percent of the life-cycle cost of the lowest cost alternative are eliminated from consideration. If no alternatives are within 10 percent, the lowest cost alternative is automatically selected.
- B. If the life-cycle cost of one or more alternatives is within 10 percent of the lowest cost alternative, the life-cycle cost is considered equal for all alternatives within the 10 percent range and the pavement selection is based on Secondary Factors. The Secondary Factors are listed below. A worksheet used to evaluate the Secondary Factors and a definition of each factor is included in Appendix 1.
 1. Transverse Uniformity of Cross-Section
 2. Longitudinal Uniformity of Cross-Section
 3. Drainage
 4. Recycleability/Re-useability
 5. Risk of Design
 6. Risk of Construction/Constructability
 7. Availability of Local Materials
 8. Stop and Go Trucks

9. User Delay Days
10. Noise
11. Stimulation of Competition
12. District/Local Concerns
13. Other Factors

IV. RECONSIDERATION OF PAVEMENT SELECTIONS

ODOT reserves the right to reconsider pavement selections at any time, however, it is not standard practice to do so. Minor errors and omissions are generally not cause for reconsideration. Changes to the process, such as the design procedures or the unit price determination, are generally not cause for reconsideration either. Significant changes in the project scope or schedule may be causes for reconsideration. Reconsideration of a pavement selection must be weighed against any increased cost and/or time delay required to make plan changes and therefore may not follow this standard procedure in its entirety.

TRAINING:

There is no training mandated for the implementation of this standard procedure. Questions concerning the pavement type selection process may be referred to the Office of Pavement Engineering.

FISCAL ANALYSIS:

It is expected this procedure will save the Department money by standardizing the method by which the pavement type is selected for new pavements and major rehabilitations. By consistently analyzing life-cycle costs, the Department can be assured it is selecting the most cost effective pavement type, not only in the near-term but in the long-term as well.

SECONDARY FACTORS WORKSHEET*

Project:		Selection Date:		PID No.:	
Length: miles		Sale Date:		Program Amount: \$	
	Flexible	Rigid	R/R	UBCO	Other
LCCA					
% Difference From Lowest					
Instructions: If LCCAs are > 10% of lowest, Stop, and select the lowest LCCA. Else, proceed with the LCCA alternatives that are within 10% of the lowest, and the Secondary Considerations that apply to each alternative.					

Secondary Considerations **

Secondary Factors	Significance (High, Med, Low, None)	Narrative (Project Specific Summaries)				
		Flexible	Rigid	R/R	UBCO	Other
Transverse Uniformity of Cross-Section						
Longitudinal Uniformity of Cross-Section						
Drainage						
Recycleability / Re-usability						
Risk of Design						
Risk of Construction / Constructability						
Availability of Local Material						
Stop and Go Trucks						
User Delay Days						
Noise						
Stimulation of Competition						
District/ Local Concerns						
Other Factors						
Pavement Type Selection: _____						

* To be used ONLY if the LCCAs are within 10%.

** If Secondary Considerations do not delineate a clear pavement alternative, the alternative the lowest Initial Cost will be selected.

Secondary Factors

Definitions:

1. **Transverse Uniformity of Cross-Section** refers to variations in the typical section across the width of the roadway. Non-uniform typical sections can result in differential pavement performance and condition across the width of the roadway. Consistent performance across the width of the roadway is preferred. The preferred uniformity is applicable to driving lanes only and not existing shoulders that will remain shoulders. Designs with uniform cross-section across the width of the roadway are preferred. Rubblize designs with near-uniform cross-section across the width of the roadway have a secondary preference.
2. **Longitudinal Uniformity of Cross-Section** refers to variations in the typical section along the length of the roadway and accounts for the possibility of differential performance, similar to Transverse Uniformity of Cross Section. Where the amount of replacement is very low, any differential performance would either affect nearly the entire pavement, or could be easily corrected with spot repairs. As the amount of replacement grows larger, the problems presented by any differential performance grow larger. At some point determining whether to treat the entire pavement or a significant portion thereof may be difficult and at least creates a higher level of uncertainty or risk. Therefore, designs with uniform cross-section along the length of the roadway are preferred.
3. **Drainage** is an important part of any pavement structure. A new pavement allows full access to properly locate and construct the drainage system. When the existing pavement is rehabilitated in place, construction of the drainage system may be more difficult and can undermine the existing pavement if the underdrain trench collapses. Also, the preferred location of the underdrains may have to be adjusted due to the presence of the existing pavement. Designs with new pavement and thus new drainage are preferred.
4. **Recycleability/Re-useability** accounts for the future opportunity to recycle and/or reuse the paving materials used in the initial construction. All paving materials have some ability to be reused or recycled but unbonded concrete overlays, due to the thickness of the pavement section and the "sandwich" effect of concrete-asphalt-concrete, have significantly less potential for recycle-ability. All new pavement and rubblize designs are determined to have greater recycle-ability on whole.
5. **Risk of Design** quantifies the accuracy of the design model and the likelihood of success. New pavements are designed according to AASHTO and have the highest level of accuracy. New pavement presents the greatest likelihood of success due to the opportunity to address all design and construction issues unhindered by constraints of the existing conditions, materials, etc. Rehabilitation designs, such as rubblize and unbonded

concrete overlays, all depend, to one extent or another, on the existing pavement, subgrade, etc. Also, the design model for unbonded concrete overlays depends on the ODOT-developed Dynaflect procedure and an equation from the Army Corps of Engineers and does not have the same level of accuracy as the AASHTO models. Thus, new pavement alternatives are preferred, and rubblize designs have a secondary preference.

6. **Risk of Construction/Constructability** – Risk of Construction accounts for the potential construction difficulties associated with each alternative. Constructability accounts for all other site conditions that may provide an advantage or disadvantage to some alternatives.
7. **Availability of Local Materials** accounts for the parts of the state where quality aggregates are not locally available.
8. **Stop and Go Trucks** cause the highest possibility of rutting and shoving in asphalt. While there are asphalt mixes that may reduce the chances of rutting and these may be included in the analysis, the chance of rutting is always higher with asphalt than concrete. For projects with heavy trucks operating under stop and go conditions, concrete designs are preferred. Ramps are not included in this definition, and neither would a ten-mile project with a single stop condition be included.
9. **User Delay Days** is a comparison of the theoretical time to construct and maintain each alternative based on predetermined production rates. It is not a measure of the actual time needed to construct each alternative as many factors exist which are not considered. Particularly for the initial construction, the pavement may not be the controlling factor.
10. **Noise** has a significant impact on quality of life and can be costly to mitigate after the fact. ODOT has committed to study noise issues and implement valid results. Until such time as we have identified methods to quiet concrete pavements, designs in urban and suburban areas with asphalt surfaces are preferred.
11. **Stimulation of Competition** - ODOT believes that two healthy pavement industries benefit the Ohio taxpayers. As used herein a “monopoly” would constitute one pavement type completely dominating pavement selections. ODOT desires to avoid this type of monopoly situation and believes improvement in products and methods is encouraged through healthy competition among industries involved in the production of paving materials. Where it is felt a near-monopoly situation exists and competition is needed, one paving material will receive a preference over the near-monopoly paving material. ODOT will evaluate each situation on its own merits and consider past pavement selections both locally and on a state-wide basis when determining the potential of a monopoly situation.

12. **District/Local Concerns** accounts for any other concerns of the ODOT District Office or the local municipality, when applicable, as to the use of a pavement type. These concerns should not duplicate other factors already listed.
13. **Other Factors** – Factors, not included above, that are currently unforeseen and/or project specific.

Pavement types and/or rehabilitation methods not detailed here will be considered on a case-by-case basis.

ITEM 401 ASPHALT CONCRETE PAVEMENTS—GENERAL

401.01 Description

401.02 Mix Design and Quality Control

401.03 Materials

401.04 Reclaimed Asphalt Concrete Pavement

401.05 Mixing Plants

401.06 Weather Limitations

401.07 Notification

401.08 Asphalt Binder Preparation

401.09 Aggregate Preparation

401.10 Mixing

401.11 Hauling

401.12 Spreading Equipment

401.13 Rollers

401.14 Conditioning Existing Surface

401.15 Spreading and Finishing

401.16 Compaction

401.17 Joints

401.18 Asphalt Binder Compatibility

401.19 Spreading and Surface Tolerances

401.20 Asphalt Binder Price Adjustment

401.21 Method of Measurement

401.22 Basis of Payment

401.01 Description. This specification is applicable to all types of asphalt concrete pavements irrespective of gradation of aggregate, kind, and amount of asphalt binder, or pavement use. Deviations from these general requirements are covered in the specific requirements for each type according to the appropriate contract item or items.

Work consists of one or more courses of asphalt concrete constructed on a prepared foundation. The asphalt concrete consists of a mixture of uniformly graded aggregate and specified type and grade of asphalt binder.

The asphalt concrete pavement thickness shown on the plans or stated in the Proposal is for the exclusive use in calculating the weight required to be placed per unit of surface area.

401.02 Mix Design and Quality Control. The quality control and acceptance requirements of Item 403 apply.

If required to perform the mix design or quality control, provide a laboratory and personnel meeting the requirements of Supplement 1041 to perform mix design and quality control tests.

Calibrate asphalt content nuclear gauges according to Supplement 1043 using personnel with a Level 1 rating according to Supplement 1041. Mix and test the calibration verification sample with a Department employee present.

Provide and dispose of the solvent used for cleaning the asphalt content nuclear gauge pans.

401.03 Materials. Furnish materials conforming to:

Asphalt binder (asphalt concrete, <u>401.14</u> , <u>401.15</u>)	<u>702.01</u>
Asphalt material (<u>401.14</u> , <u>401.18</u>)	<u>702.01</u> , <u>702.04</u> , or <u>702.13</u>
Aggregates (base courses)	<u>703.04</u>
Aggregates (intermediate and surface courses)	<u>703.05</u>
Mineral filler	<u>703.07</u>

Sample aggregate, asphalt binder, asphalt material, and mineral filler according to 106.01.

If 100 percent of coarse aggregate in an asphalt mix design is steel slag, the Contractor may include steel slag as a maximum of up to 50 percent of fine aggregate. If a steel slag source causes bulking (expansion resulting in flushing or material loss) in asphalt concrete courses, the Laboratory will place limits on the amount of steel slag allowed in a mix design. Bulking may occur when a large percentage of an asphalt mix design is steel slag aggregate. Bulking may be shown through testing, such as ASTM D 4792, or through field failure such as, but not limited to, flushing on newer pavement or apparent over-asphalting in production. The Department may require the steel slag processor at any time to perform additional testing to verify steel slag properties. Potential pavement performance problems due to poor control of steel slag aggregate include bulking, poor gradation and specific gravity control resulting in highly variable void properties, excess soft pieces resulting in pock marks, flushing, etc.

401.04 Reclaimed Asphalt Concrete Pavement. The Contractor may use a blend of new materials in combination with reclaimed asphalt concrete pavement obtained from either a Department or Ohio Turnpike Commission project. The Contractor may use a maximum of 10 percent of reclaimed asphalt concrete pavement without adjusting the JMF, except for surface courses with polymer modified asphalt binder. This percentage is based on the dry weight of all the materials used. Ensure that the combined mixture falls within the gradation limits of the contract item specified.

For surface courses with polymer modified asphalt binder, the Contractor may use a maximum of 10 percent reclaimed asphalt concrete pavement, if it is included in the JMF. Do not allow the amount of reclaimed asphalt concrete pavement in production to exceed 10 percent of the mix by dry weight.

Identify the reclaimed asphalt concrete pavement as to type, source, gradation, and asphalt binder content. Ensure that the stockpile is free of contamination and uniform in composition. Before stockpiling, clean, grade, and compact the proposed sites for storing the reclaimed asphalt concrete pavement to produce a firm, level base. Stockpiles are subject to approval by the DET before use. Do not add additional reclaimed asphalt concrete pavement to an approved stockpile, except if it is being reclaimed concurrently with the production of the asphalt concrete incorporating it.

Ensure that the reclaimed asphalt concrete pavement is the proper size to allow for complete breakdown in the plant. During production, place a 2-inch (50 mm) screen on the cold feed. If mixing is incomplete, place a smaller screen on the cold feed. Due to variations in the reclaimed asphalt concrete pavement gradation, the Department will tolerate a maximum of 5 percent oversize material in the completed mix, provided the Contractor can incorporate it into the work with satisfactory results. Process the reclaimed asphalt concrete pavement to be used in a surface course to a maximum size of 3/4 inch (19 mm) before incorporating the reclaimed asphalt concrete pavement into the mix.

401.05 Mixing Plants. The Department will approve mixing plants before preparation of the mixtures. General requirements for asphalt concrete mixing plants are specified in Item 402.

Set the asphalt binder controls for the computerized plant at the virgin asphalt binder content of the JMF at all times unless change is authorized by the Laboratory.

401.06 Weather Limitations. Place asphalt concrete only if the surface is dry and if weather conditions are such that proper handling, finishing, and compaction can be accomplished. Never place asphalt concrete if the surface temperature is below the minimum established in Table 401.06-1.

Table 401.06-1

Course Thickness	Minimum Surface Temperature	
3.0 inches (75 mm) and over	36 °F ^[1]	(2 °C ^[1])
1.5 to 2.9 inches (38 to 74 mm)	40 °F	(5 °C)
1.0 to 1.4 inches (25 to 37 mm)	50 °F	(10 °C)
Less than 1.0 inch (25 mm)	60 °F	(16 °C)
Variable Intermediate, 0 to 3.0 inches (0 to 75 mm)	40 °F	(5 °C)

[1] Instead of 36 °F (2 °C), use a minimum air temperature of 40 °F (5 °C) if paving on an aggregate base or subgrade.

In addition to the above surface temperature requirements, do not place surface courses if the air temperature is less than 40 °F (5 °C).

For Type 1H asphalt concrete or any surface course with a polymer modified asphalt binder, ensure that the surface of the existing pavement is at least 50 °F (10 °C) and the air temperature is at least 50 °F (10 °C).

Do not place any Type 1H asphalt concrete or any surface course with a polymer modified asphalt binder after November 1, regardless of pavement or air temperature.

401.07 Notification. Notify the Engineer at least 24 hours before starting paving on a project. After starting paving, if paving operations are stopped for 1 week or more, notify the Engineer at least 24 hours before resuming paving on a project.

401.08 Asphalt Binder Preparation. Heat the asphalt binder and deliver it to the mixer within the temperature range specified in Table 702.00-1. Do not use asphalt binder while it is foaming.

401.09 Aggregate Preparation. Feed aggregates in their proper proportions and at a rate to permit correct and uniform control of heating and drying. Remove all aggregates in the plant that will produce a mix outside the temperature limits or that contain excessive moisture or expanding gases causing foaming in the mixture, and return them to the proper stockpiles.

401.10 Mixing. Maintain the temperature of the mix at the plant within the range set by the Laboratory for the JMF. The Engineer will determine the required temperature of the mixture on arrival at the project site based on the temperature range set for the mix design and heat losses in transit.

For batch plants, after all of the aggregate is in the mixer, add the asphalt binder in an evenly spread sheet over the full length of the mixer. The mixing time is defined as the interval between the start of application of the asphalt binder and the opening of the mixer gate. Discharge all asphalt binder required for one batch in not more than 30 seconds. After the asphalt binder is added, the Laboratory will establish a minimum mixing time, which will not be less than 30 seconds.

401.11 Hauling. Use trucks for hauling asphalt concrete that have tight, clean, smooth metal beds from which the entire quantity of mixture is discharged smoothly into the spreading equipment.

Before loading, apply a thin coating of an approved release agent to the inside surfaces of the truck bed to prevent adhesion of mixture to the bed surfaces. The Laboratory maintains a list of approved release agents. Do not use fuel oil for this purpose. Drain truck beds before loading.

Provide a place off the project for cleaning trucks when hauling polymer modified asphalt binder mixes or when excessive sticking of material in truck beds occurs. If the Contractor does not resolve excessive sticking of material in truck beds in a reasonable time and the sticking is in areas of the truck that would indicate excessive cooling of the mix (front corners, bottom, etc.) due to a long haul, the Engineer will require an insulated bed. The Contractor may only make changes in policy regarding release agents for beds or other procedure changes for better mix handling at the discretion of the Laboratory.

Equip each truck with a securely fastened, waterproof cover of suitable material to adequately protect the mixture from wind and weather. At the request of the Engineer, remove covers before dumping into the paver.

If transporting hot asphalt concrete at prevailing air temperatures below 50 °F (10 °C) or if the length of haul exceeds 20 miles (32 km), insulate all truck beds to maintain workable mix temperature, and ensure that all covers are fastened to exclude the wind. Do not exceed a distance of 50 miles (80 km) from the asphalt concrete plant to the paving site except by specific permission of the Department.

401.12 Spreading Equipment. Use self-contained spreading equipment of sufficient size, power, and stability to receive, distribute, and strike-off the asphalt concrete at rates and widths meeting the typical sections and other details shown on the plans. Use spreading equipment that has automatic control systems that maintain the screed in a constant position relative to profile and cross-slope references. These references shall be such that control of the screed position is reasonably independent of irregularities in the underlying surface and of the spreader operation. The Engineer will base approval of spreading equipment on the demonstrated capability of the equipment to place the mixture to the required cross-section, profile and alignment in an acceptable, finished condition ready for compaction.

Where the use of standard full-scale spreading equipment is impractical due to the size or irregularity of the area to be paved, use specialized equipment or hand methods approved by the Engineer to spread the asphalt concrete.

401.13 Rollers. Use only steel wheel and pneumatic tire types of rollers meeting the minimum requirements of the following tables. Conform to manufacturer's specifications for all ballasting.

Table 401.13-1 ROLLER CAPACITY

Roller Type	Maximum Capacity square yards per hour (m ² /hr)
Tandem	700 (600)
Three-Wheel	700 (600)
Trench	15 per inch width (13 per 25 mm width)
Pneumatic Tire, Type 1	1000 (850)
Pneumatic Tire, Type 2	700 (600)
Vibratory, Vibrating Roll	15 per inch width (13 per 25 mm width)
Vibratory, Static Roll (not vibrating)	3 per inch width (3 per 25 mm width)

Table 401.13-2 STEEL WHEEL ROLLERS

Roller Type	Three- Wheel	Tandem	Vibratory	
			Static	Trench
Total weight, tons (metric tons)	10 (9)	8 to 12 (7 to 11)	8 to 12 (7 to 11)	
Compression rolls, pounds per inch width (kN/m), minimum	300 (53)	200 (35)	120 (21)	300 (53)

Table 401.13-3 PNEUMATIC TIRE ROLLERS

Type I	
Tire size, minimum	9.00 × 20 in (229 × 508)

	mm)
Wheel load, minimum	5000 lb (2250 kg)
Average tire contact pressure, minimum	85 psi (590 kPa)
Type II	
Tire size, minimum	7.50 × 15 in (191 × 381 mm)
Wheel load, minimum	2000 lb (900 kg)
Average tire contact pressure, minimum	55 psi (380 kPa)

For pneumatic tire rollers, use self-propelled, reversible units with vertical oscillation on all wheels on at least one axle. Determine the tire inflation pressure necessary to meet the specified minimum contact area and contact pressure requirements. Furnish the tire manufacturer's charts or tabulations to the Engineer for verification of the required inflation pressure. Check tire inflation pressure as the Engineer directs and maintain it within 5 pounds per square inch (35 kPa) of the required pressure.

Provide rolls and wheels with the necessary accessories to prevent adhesion of the mixture, and keep them properly moistened with water, water containing a detergent, or water containing an approved additive. Do not use excess liquid.

401.14 Conditioning Existing Surface. Clean the surface on which the asphalt concrete is to be placed, and keep it free of accumulations of materials that would, in the judgment of the Engineer, contaminate the mixture, prevent bonding, or interfere with spreading operations. Where approved subgrade or pavement courses previously constructed under the Contract become loosened, rutted, or otherwise defective, correct the deficiency according to the contract item or items involved before the spreading of a subsequent pavement course.

If a quantity of asphalt concrete is specified for use in spot leveling or patching an existing pavement surface, spread and compact the material needed to effect the corrections as directed by the Engineer.

Paint contact surfaces of curbing, gutters, manholes, and other structures with a thin, uniform coating of asphalt material before placing the asphalt concrete against them.

If placing asphalt concrete against the vertical face of an existing pavement structure, clean the vertical face of foreign material and apply asphalt material that results in a coating of approximately 0.25 gallon per square yard (1 L/m²).

Before placing a surface course onto an intermediate course, apply a tack coat to the intermediate course according to 407.06.

In areas where the surface is required to be feathered to meet an adjoining surface, coat the existing surface uniformly with a thin coat of asphalt binder.

401.15 Spreading and Finishing. Spread the mixture at a rate calculated using the specified thickness and the compacted width of the pavement course being placed, and the weight-to-volume conversion factors established in 401.21. Maintain the actual rate of spreading the mixture equal to the required calculated rate within the tolerance specified in 401.19. For pavement courses specified for leveling an existing pavement surface, the actual rate of spreading the mixture may vary from the required calculated rate as approved by the Engineer to accomplish the intended purpose.

For intermediate courses, make the maximum compacted depth of any one layer 3 inches (75 mm).

Spread and finish the mixture using approved equipment or methods such that compaction can follow immediately. Preheat screeds before placing any asphalt concrete. Use side plates sufficient to contain the mixture laterally during spreading. If paving in excess of the nominal paver width, use only a permanent extension or an adjustable extension with full auger extensions when matching a previously placed pavement course. Use extensions that have the ability to heat. The Contractor may use strike-off plates on adjacent berm areas. Perform supplemental hand forming and tamping where irregularities develop and where placing the mixture by hand methods.

Ensure that the mixture as spread and finished is uniform in composition and surface texture. Correct conditions causing objectionable segregation of the mixture components or irregularities in surface texture in a manner satisfactory to the Engineer. Remove and replace, or otherwise correct, any portion of the pavement course found to be defective in surface texture or composition before or after compaction in a manner satisfactory to the Engineer. Coordinate the spreading operation with the rate of production and delivery of the mixture to attain uniform, continuous progress. Avoid erratic spreader operation due to irregular contact with the hauling vehicle, surging in the feed and distribution of the mixture, or other cause. Maintain sufficient control of the spreading equipment with regard to line and grade references so that the pavement course, when compacted as specified, is in reasonable conformance with the Contract Documents.

Do not displace or damage bridge deck waterproofing membranes during spreading operations on the membranes.

Do not allow traffic on the compacted mixture until it has cooled sufficiently to prevent glazing as determined by the Engineer.

After completion of the surface course, seal gutters with asphalt binder as directed by the Engineer. Apply the material at a uniform width of approximately 4 inches (100 mm) and at a rate just sufficient to fill surface voids.

401.16 Compaction. Immediately after spreading the asphalt concrete and adjusting any surface irregularities, compact the mixture uniformly using rollers conforming to 401.13. Do not use a spreading rate that exceeds the total of the specified capacities of the rollers in use; however, if compacting a mixture spread as an intermediate or pre-leveling course less than 1

inch (25 mm) thick, do not use a spreading rate that exceeds twice the total capacity of the rollers in use.

Coordinate the spreading of the mixture with the required roller coverage, considering the rate of cooling of the mixture as affected by lift thickness and environmental conditions. Complete the required roller coverage during the period of time in which the temperature of the mixture is sufficient for the roller coverage to be effective in compacting the mixture.

Compact base mixtures using a combination of both steel and Type I pneumatic tire rollers; however, in small areas, compact these mixtures as approved by the Engineer using any of the rollers specified in 401.13.

Compact intermediate and surface mixtures using a three-wheel roller in the breakdown position (roller immediately behind the paver) of the roller train; however, in small areas, compact these mixtures as approved by the Engineer using any of the roller types specified in 401.13.

Compact variable depth courses using a combination of both steel and pneumatic tire rollers; however, in small areas, compact these mixtures as the Engineer approves using any of the roller types specified in 401.13.

For Type 1H asphalt concrete or mixes using a polymer modified asphalt binder, give a copy of the JMF approval letter containing the design compaction temperature to the Engineer before any mix is placed. Ensure that the mix temperature immediately before rolling is not less than 290 °F (145 °C). Pneumatic tire rollers are not recommended for polymer asphalt concrete because of excessive pick up.

Do not use vibratory rollers on courses with a thickness under 1 1/2 inches (38 mm).

If using vibratory rollers, supplement them with three-wheel or pneumatic tire rollers.

Unless otherwise directed, begin rolling at the sides and proceed longitudinally parallel to the centerline at a slow, uniform speed. After each coverage or complete round trip, move the roller towards the crown of the road to begin its next pass, overlapping the previous pass by at least one-half the width of the previous pass. On superelevated curves, begin rolling at the low side and progress toward the high side. Where a longitudinal joint is being made, roll the joint then follow the applicable rolling procedure.

Continue rolling until full coverage of the course is complete and all roller marks are eliminated. Take care to prevent displacement of the edgeline and grade. Where displacement occurs, correct the area immediately in a manner satisfactory to the Engineer.

Along curbs, headers, walls, and in other areas not accessible to rollers, thoroughly compact the mixture with hot, hand tampers or with mechanical tampers. On depressed areas, the Contractor may use trench rollers or rollers fitted with compression strips.

Replace mixture that becomes loose, broken, contaminated, or otherwise defective with fresh, hot mixture. Compact it to match with the surrounding area.

401.17 Joints. Place the asphalt concrete mixture as continuous as possible. Set up joints at the proper height above the adjacent construction to receive maximum compaction. Where the edge of the new surface has been significantly rounded by the action of traffic, trim it to a vertical face before placing the adjacent pavement. On projects where traffic is allowed to cross the edge of the new pavement lane, complete the longitudinal joint of the adjacent lane or berm within 24 hours.

Form hot longitudinal joints using pavers operating in contiguous lanes, one just ahead of the other. Maintain the distance between pavers in adjacent lanes such that it does not exceed the distance that a normal size load of mixture will cover. Alternate loads of mixture between the pavers. Do not allow rollers performing the initial rolling operation in one lane closer than 12 inches (0.3 m) to the longitudinal joint until the adjacent lane is placed.

Instead of hot joint construction using multiple pavers, the Contractor may use full width construction with a single unit paver.

Compact all cold longitudinal joints on intermediate and surface courses using a three-wheel roller.

For surface courses, form or cut all transverse construction joints to a vertical.

Seal all cold longitudinal and transverse construction joints on surface courses, and any asphalt concrete course that is open to traffic for more than 30 days, by coating the vertical face of the cold joint with asphalt material, applied at a rate of 0.25 gallon per square yard (1 L/m²).

401.18 Asphalt Binder Compatibility. If excess fat spots, regular random areas of flushing, or excess drain down occur on a project that are not attributable to over rolling, plant operation, or mix quality compared to the JMF, the Department will consider the asphalt binder incompatible. The Department will reject any on-hand asphalt binder because of incompatibility. The Department may use its discretion in determining if problem areas can be corrected, but if an unsafe condition exists, remove and replace the area in question. Demonstrate to the Laboratory through reporting actual testing analysis the compatibility of another asphalt binder and that proper equipment is in place in order to be allowed to resume.

401.19 Spreading and Surface Tolerances. If a uniform course is specified, make checks and adjustments to maintain the rate of spreading within a tolerance of ± 5 percent of the required calculated weight per unit of area.

If a variable depth course is specified, place the mixture as shown on the plans.

If a longitudinal profile is specified by elevations on the plans, the longitudinal profile of the completed pavement surface shall not deviate from parallel with the specified profile by more than 7/8 inch in 50 feet (21 mm in 15 m). Before placing the surface course, check the profile of

the preceding course at 50-foot (15 m) intervals along the outside edge of each traffic lane and along any additional line described in superelevation tables, and submit a tabulation of the results to the Engineer for approval. Perform corrective work necessary for compliance with the profile tolerance before placing the surface course. The requirements of this paragraph do not apply to small incidental areas of pavement less than 500 feet (150 m) in length.

Do not vary the transverse slope of the surface of the completed course from the specified slope by more than 3/8 inch in 10 feet (10 mm in 3 m).

Do not vary the surface of each completed intermediate or surface course from the testing edge of a 10-foot (3 m) straightedge by more than 1/4 inch (6 mm). Furnish straightedges and straightedges equipped with levels or other devices satisfactory to the Engineer. The Engineer will check the surface course for variations in slope or surface.

Correct variations in excess of slope or surface tolerance by removing mixture to neat lines and replacing, or by surface grinding in a manner satisfactory to the Engineer.

401.20 Asphalt Binder Price Adjustment. Any contract item specifying asphalt concrete is eligible for a price adjustment, if the Department's asphalt binder index shows the price for asphalt binders has increased or decreased in excess of 5 percent and the adjustment is more than \$100 for any individual item.

If the ratio of the placing index (*PI*) to the bidding index (*BI*) is greater than 1.05 or less than 0.95, the Department will adjust compensation the Contractor receives for work done each month under contract items specifying asphalt concrete. The adjustment will apply to the price for asphalt binder used in those contract items according to the following formula:

Where:

PA = price adjustment

$C = BI \times \text{percent virgin asphalt binder} / 100$

PI = placing index *

Q = quantity of asphalt concrete in tons (metric tons)

BI = bidding index *

* Use the PG Binder grade for the asphalt binder used.

The *P* is the average F.O.B. price for the PG Binder grade specified, as quoted by a majority of Ohio suppliers for the month the asphalt concrete is placed. The Department will secure the prices on the first business day of each month and will post the *P* for each PG Binder grade in the Office of Contracts. The Department will use the Metric Placing Index if the project is in metric units; otherwise, the Department will use the English Placing Index. Only the calculated average prices will be available. If the price is not available from a majority of the Ohio suppliers, then the Director's determination will be final.

The *B* is equal to the *P* for each PG Binder Grade for the month immediately before the month the project is bid. The Department will use the Metric Placing Index if the project is in metric units; otherwise, the Department will use the English Placing Index.

The percent of virgin asphalt binder used to calculate *C* is determined from the approved JMF.

The quantity of asphalt concrete items (*Q*) is the authorized constructed quantity in tons (metric tons) placed in the month being considered. If the contract item is in cubic yards (cubic meters), the Department will convert the volume into tons (metric tons) using the conversion factor established according to 401.21.

If contract items specifying asphalt concrete are placed beyond an approved Contract Completion Date and liquidated damages are applied for completion of the contracts, the Department will base price adjustments on either the *P* for the last month before liquidated damages were applicable or the *P* for the actual month of placing, whichever is less.

At a minimum, the Department will calculate and apply price adjustments at the end of each construction season and as soon as practical after the completion of the project.

401.21 Method of Measurement. The Contractor is responsible for recording the net weight of each truckload of mixture to the nearest 100 pounds (50 kg) in triplicate on plant ticket forms approved by the Department. If the pay quantities are established by platform scales, the Contractor shall provide a tare weight for each truck at the beginning of each day's operation and a minimum of every 4 hours of operation each day. The Engineer may require additional tare weight measurements at any time. The Engineer will have the right to monitor all weighing operations and may require reweighing trucks at any time or location. The Contractor shall correct any discrepancies immediately. Continued non-compliance will result in the Department taking necessary and appropriate action, such as, but not limited to, assigning a Department ticket writer to the plant. The Contractor shall send one copy of the plant ticket with each load delivered to the paver and shall present it to the Engineer.

The Engineer will convert the total of the weights recorded on the plant tickets representing mixture finished according to contract requirements to cubic yards (cubic meters) using a conversion factor established by the Laboratory. The Laboratory will establish this conversion factor from the approved JMF. However, if a mix design is not available, the Laboratory will use the conversion factors in Table 401.21. If a uniform course is specified, the Department will not pay for a number of cubic yards (cubic meters) that exceeds the quantity calculated from plan lines and dimensions.

Table 401.21

Aggregate	lb/yd³	(kg/m³)
Gravel and stone	4000	(2370)
Slag, less than 90 lb/yd ³ (less than 1450 kg/m ³) ^[1]	3600	(2135)
Slag, 90 to 100 lb/yd ³ (1450 to 1600 kg/m ³) ^[1]	4000	(2370)
Slag, more than 100 lb/yd ³ (more than 1600 kg/m ³) ^[1]	4300	(2550)
[1] Based on average dry rodded weight at the Laboratory.		

401.22 Basis of Payment. The Department will pay for all work performed and measured as specified above according to the appropriate contract items for each type.

For asphalt material used to seal the cold longitudinal joint according to 401.17, the Department will pay for accepted quantities at the unit bid price for Item 407 Tack Coat. If the Contract does not include the pay item 407 Tack Coat, the cost of sealing the joints is included in the unit price bid for the asphalt concrete.

The Department will assess all costs against the Contractor that it incurs as a result of taking necessary and appropriate action due to the Contractor's continued non-compliance.

If an unsafe condition exists, the Department will not pay for removing and replacing incompatible asphalt binder areas.

Changes in Construction Materials Prices, 2001-2008 *(August 25, 2008 revisions are in italics)*

Since early 2004, the construction industry has been jolted by a succession of steep price increases affecting a variety of materials. The attached tables document these increases, using producer price indexes (PPIs) from the Bureau of Labor Statistics (BLS) for specific construction segments, inputs and building types. The increases are compared to changes in the consumer price index for all urban consumers (CPI-U) and the PPI for finished goods.

Background on PPIs

Each row shows the BLS series identifier and name for a PPI (or CPI), and two groups of percentage changes. The first group shows the 12-month percentage change for the years ending December 2001-07. The second group shows preliminary price changes in the latest month from 1, 3 and 12 months before, and from December 2003, when construction costs first spiked. Percentages are downloaded for PPIs from BLS' PPI website, www.bls.gov/ppi, at the page for "PPI Databases--One-Screen Data Search." Most of the PPIs are commodity indexes. There are also two types of industry PPIs. One type measures the finished cost of new buildings or subcontractors' work, including labor, overhead and profit, as well as materials. The other measures the cost of inputs for six construction segments.

To provide consistency, "not seasonally adjusted" indexes have been selected for all items. For many items, BLS does not post a seasonally adjusted index, either because the price does not vary consistently by season or there is not enough data available to calculate a seasonal adjustment. However, prices of items such as natural gas do show wide seasonal swings; for these PPIs, a large one- or three-month change may not be unusual. The PPIs shown are available only at a national level.

As the name implies, the PPI for a commodity measures the price charged by a producer of that item or category. The index excludes any costs the buyer incurs beyond the producer's loading dock or other point of sale, such as insurance, freight, storage, fabrication, or installation. Such costs are considerable for many construction inputs and may change at rates different from the PPI, but these rates cannot be estimated from PPI data. There is no PPI for construction labor, and the PPIs for trucking and insurance are not specific enough to indicate the specialized services and products used in construction.

The PPIs chosen for these tables are believed to be the closest approximation to items actually used or bought for construction. Some PPIs cover a wider range of materials than items used specifically in construction. For instance, steel mill products include steel used in motor vehicles, appliances, equipment, etc., as well as construction. Other PPIs, like those for concrete products, reflect materials used solely in construction. An industry PPI measures the costs of all items used by an industry, including items like diesel fuel that are consumed during construction. Readers are encouraged to scroll through the indexes on the PPI website. BLS has invited users to submit ideas for additional PPIs; send them to simonsonk@agc.org.

Organization of PPI Tables

Table 1 computes the CPI-U with it is for finished goods and for construction inputs (materials that go into every type of residential and nonresidential project, plus items such as diesel fuel that are used up by contractors). The construction input PPIs are separately weighted for inputs used in highway and street, other heavy, nonresidential building, multi- and single-unit new residential construction. Weights are available on request; they differ markedly for different types of construction.

Table 2 shows PPIs for completed new buildings (industrial, warehouse, school and office) and for the prices charged by concrete, roofing, electrical and plumbing contractors for work on new nonresidential buildings. Unlike other PPIs, these indexes include changes in general or specialty contractors' overhead, profit and labor costs as well as material inputs.

Table 3 shows changes in PPIs for specific construction inputs. Items are grouped into petroleum-based products; concrete and brick products; miscellaneous materials; and metal products. Indented index names show that the item is a subset of the last unindented item above it; this relationship is also shown in BLS's numbering system, which assigns one or more extra digits to subcategories. For instance, "WPU1331, concrete block and brick," is indented to show it is included in the index for "WPU133 Concrete products."

Table 4 has indexes covering changes in PPIs for basic inputs--*items used to produce construction inputs*--divided into nonmetals, and metal ores and scrap. Recent changes in these indexes can show up later in price changes for materials made from these items.

Changes in Construction Costs

In general, through 2003 most construction materials show very modest increases and many decreases in price, similar to the CPI, which rose 1.6% in 2001, 2.4% in 2002, and 1.9% in 2003. Beginning in 2004, however, many construction materials had years with double-digit increases, whereas the CPI has continued to rise at a 2.5-5.6% annual rate.

In July, there were extreme increases in asphalt prices and continuing rises in PPIs for steel mill products, diesel fuel and plastics. Gypsum and copper products rose sharply after recent declines. Concrete products rose only 0.1% and lumber and plywood prices reversed earlier gains.

Percentage Changes in Producer Price Indexes (PPIs) for Construction Materials and Components, 2001-2008

BLS Series ID

12 months through December--
2001 2002 2003 2004 2005 2006 2007
to July 2008 since--
6/08 4/08 7/07 12/03

Table 1: Changes in Consumer, Producer & Construction Prices

CUUR0000SA0	Consumer price index (CPI-U)	1.6	2.4	1.9	3.3	3.4	2.5	4.1	0.5	2.4	5.6	19.4
WPUSOP3000	Producer price index (PPI) for finished goods	-1.6	1.2	4.0	4.2	5.4	1.1	6.3	1.4	4.7	9.8	28.0
PCUBCON	PPI for inputs to construction industries	-0.9	0.7	3.0	9.1	8.2	4.6	4.5	2.0	6.6	11.9	44.1
PCUBHWY	PPI for inputs to highway and street construction	-3.6	1.0	2.6	10.8	14.1	6.2	9.6	3.8	11.2	21.4	77.0
PCUBHVV	PPI for inputs to other heavy construction	-2.6	1.0	2.6	13.4	8.8	5.5	6.4	2.1	8.4	17.0	61.4
PCUBBLD	PPI for inputs to nonresidential buildings	-0.5	0.7	2.4	9.3	7.4	4.0	4.6	1.9	6.3	11.8	42.4
PCUBRSM	PPI for inputs to multi-unit residential	-0.1	0.4	2.7	8.9	7.8	4.9	3.7	1.3	4.7	8.5	38.4
PCUBRS1	PPI for inputs to single-unit residential	-0.4	0.6	3.5	7.0	6.9	4.2	2.4	1.4	4.4	7.1	30.9

Table 2: Changes in PPIs for New Buildings and Components

PCU236211	New industrial building construction	not available before 2008; series began 6/07							1.8	1.7	4.3	n.a.		
PCU236221	New warehouse construction	not available before 2005					7.5	8.1	4.4	1.9	2.0	4.4	n.a.	
PCU236222	New school construction	not available; series began 12/05							17.3	2.0	-0.2	1.4	3.2	n.a.
PCU236223	New office construction	not available; series began 6/06							4.8	1.1	1.0	3.7	n.a.	
PCU23811X	Concrete contractors, nonresidential building work	not available; series began 12/07							1.6	1.3	n.a.	n.a.		
PCU23816X	Roofing contractors, nonresidential building work	not available; series began 12/07							1.3	3.5	n.a.	n.a.		
PCU23821X	Electrical contractors, nonresidential building work	not available; series began 12/07							0.6	1.2	n.a.	n.a.		
PCU23822X	Plumbing contractors, nonresidential building work	not available; series began 12/07							1.2	2.5	n.a.	n.a.		

Table 3: Changes in PPIs for Specific Construction Inputs

WPU057303	#2 diesel fuel	-44.7	54.4	13.0	37.9	46.7	2.3	33.9	2.7	18.5	77.6	333.2					
WPU05810112	Asphalt (at refinery)	not available							10.0	18.3	17.8	34.9	5.8	21.3	58.0	78.1	290.9
WPU139401	Asphalt paving mixtures and blocks	0.9	2.0	3.7	4.3	14.3	27.6	1.3	14.4	28.4	34.2	108.0					
WPU136	Asphalt felts and coatings	4.6	-0.6	6.3	4.1	15.3	5.0	-2.5	12.0	22.7	27.9	59.7					
WPU1361	Prepared asphalt & tar roofing & siding products	5.0	-1.7	5.3	4.6	16.2	5.2	-2.4	11.3	22.4	27.4	60.9					
WPU133	Concrete products	2.5	-0.3	1.5	7.6	10.1	8.1	3.3	0.1	0.7	3.8	36.6					
WPU1331	Concrete block and brick	2.3	1.6	3.2	4.7	8.1	6.8	3.2	0.4	1.5	2.8	28.3					
WPU1332	Concrete pipe	4.4	1.7	1.4	5.5	7.5	2.5	1.1	0.6	3.8	13.2	34.0					
WPU1333	Ready-mixed concrete	2.5	-1.1	1.1	8.7	11.3	10.1	3.3	0.0	0.9	2.6	40.1					
WPU1334	Precast concrete products	0.7	0.3	2.5	6.0	6.0	4.7	4.8	0.0	-2.0	4.7	28.9					
WPU1335	Prestressed concrete products	5.3	1.8	-0.2	8.2	14.3	4.9	1.2	1.7	3.3	4.7	37.4					
WPU1342	Brick and structural clay tile	5.3	1.9	0.7	3.0	9.4	6.0	-0.2	0.2	-0.2	-0.7	18.9					
WPU072106	Plastic construction products	-2.7	3.1	3.2	7.2	21.6	-0.7	0.3	1.8	4.0	4.5	35.4					
WPU137	Gypsum products	0.4	3.4	2.8	20.0	18.8	5.5	-22.2	1.3	-0.4	-6.1	18.7					
WPU1392	Insulation materials	0.4	-1.5	2.0	8.6	2.6	2.1	-3.3	-0.3	-0.9	-3.6	7.6					
WPU04011	Lumber and plywood	-2.9	1.4	13.1	5.0	-1.1	-10.8	-1.3	-2.2	2.2	-5.9	-7.7					
WPU062101	Architectural coatings	2.9	0.6	3.9	5.3	9.2	6.3	4.1	0.2	0.3	4.1	32.5					
WPU1017	Steel mill products	-6.1	11.1	1.7	48.8	-3.8	11.6	1.0	1.7	21.8	33.4	125.6					
WPU101704	Hot-rolled bars, plates, & structural shapes	-4.3	2.1	11.3	53.8	-1.0	7.5	8.1	4.3	20.6	33.2	144.8					
WPU101706	Steel pipe and tube	-3.7	9.1	3.3	66.0	1.2	5.5	-1.9	2.9	18.3	34.7	137.5					
WPU102502	Copper and brass mill shapes	-9.5	-1.6	11.6	29.6	31.0	44.4	-3.8	2.8	-0.3	-0.5	172.3					
WPU102501	Aluminum mill shapes	-2.9	-0.9	-0.5	9.9	5.0	12.7	-1.7	0.5	0.4	3.9	37.2					
WPU1073	Sheet metal products	-0.8	2.0	0.6	15.2	0.4	6.5	0.4	1.2	5.0	8.8	196.9					
WPU107405	Fabricated structural metal	-1.3	-2.4	0.1	24.7	2.8	3.6	5.3	1.5	5.3	16.2	60.4					
WPU10740501	Fabricated structural metal for buildings	-1.5	-3.3	-0.1	20.0	3.1	3.3	4.7	0.7	3.9	13.0	49.8					
WPU107408	Architectural and ornamental metalwork	-0.1	3.7	0.7	23.5	3.1	4.9	2.8	2.6	9.1	13.8	54.8					
WPU107409	Fabricated iron & steel pipe, tube, & fittings	0.6	0.1	1.2	32.6	5.5	-2.8	-1.6	0.6	5.9	8.9	44.3					
WPU1076	Fabricated steel plate	0.6	-1.0	0.6	7.6	0.6	8.6	9.9	-0.7	4.9	21.6	45.2					
WPU1079	Prefabricated metal buildings	0.0	4.0	-0.7	35.5	2.0	5.5	1.8	1.5	13.0	25.6	88.0					
WPU112	Construction machinery and equipment	-0.1	1.9	1.3	6.0	4.9	3.6	2.2	0.4	1.1	2.9	20.6					

Table 4: Changes in PPIs for Basic Inputs Important to Construction

WPU056	Crude petroleum (domestic production)	-42.4	60.6	14.3	30.5	49.6	0.1	52.4	6.7	23.8	94.3	367.3	
WPU0553	Industrial natural gas	-36.7	12.2	20.3	20.1	31.5	-13.2	-4.6	7.8	21.7	37.5	82.5	
WPU066	Plastic resins and materials	-9.8	9.2	6.4	28.6	10.8	-7.8	10.0	7.6	11.2	19.2	64.4	
WPU1321	Construction sand/gravel/crushed stone	3.3	2.5	2.4	4.3	7.7	9.3	8.6	0.3	0.7	7.0	39.2	
WPU1322	Cement	1.0	1.3	-1.1	7.9	12.2	10.5	3.5	-0.8	-0.3	0.0	39.5	
WPU1011	Iron ore	1.5	-1.3	1.6	6.7	15.5	7.5	1.3	0.0	0.0	12.0	50.5	
WPU1012	Iron and steel scrap	-5.6	27.8	64.9	50.8	-10.8	2.9	30.4	5.2	15.0	110.5	247.3	
WPU101212	Stainless and alloy steel scrap	no data from 1996 until September 2006							-7.7	4.6	-18.8	-10.7	n.a.
WPU102102	Copper ores	-19.6	3.6	37.4	65.1	39.3	53.1	-0.9	2.5	4.6	0.9	327.4	
WPU102301	Copper base scrap	-17.4	11.2	30.7	34.5	51.9	50.0	1.2	1.8	-2.3	14.1	280.8	

Updated 8/25/08 Source: Bureau of Labor Statistics (BLS): www.bls.gov/cpi for CPI, www.bls.gov/ppi for PPIs

Compiled by Ken Simonson (simonsonk@agc.org), Chief Economist, Associated General Contractors of America, www.agc.org

Project Number: 080507

PID #: 78570

Contract ID: CCLI78570

DBE Goal: 7%

Clinton

SR-73-8.34

(UNION TOWNSHIP)

E050(571)

NEW CONSTRUCTION

Work Type Percentage Performed by Prime: 50

PROPOSAL

STATE OF OHIO

DEPARTMENT OF TRANSPORTATION

James Beasley, P.E., P.S., Director

August 20, 2008

Submitted by _____

Bidder Id _____

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PN 003 - 10/15/2004 - TITLE VI RELATED STATUTES NON-DISCRIMINATION STATEMENT

The Ohio Department of Transportation, under Title VI of the Civil Rights Act and related statutes, ensures that no person in the Department of Transportation, shall on the grounds of race, color, national origin, sex, disability or age be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

PN 006 10/15/2004 - NOTICE TO BIDDERS

Prequalification

Bidders must apply for prequalification with the Department's Office of Contracts, Contractor Qualifications Section, at least 30 days before the date set to open bids.

Certificate of Compliance with Affirmative Action Programs

No contract shall be entered into unless the bidder possesses a valid Certificate of Compliance with Affirmative Action Programs, issued by the State EEO Coordinator, Certification Section, 77 South High Street, 24th Floor, Columbus, Ohio 43215, dated no earlier than 180 days prior to the date fixed for the opening of bids.

PN 019 - 04/15/2005 - PREPARATION OF PROPOSAL

ELECTRONIC BIDDING REQUIREMENTS

The Department uses the Bid Express website (<http://www.bidx.com>) as an official repository for electronic bid submittal. Bidders must prepare their bids electronically using Expedite and submitted via Bid Express.

The Department will not accept handwritten bids or bids generated electronically from software other than that used and supplied by the Department. All handwritten bids and bids generated electronically from software other than that used and supplied by the Department shall be considered non-responsive and ineligible for award. The Department will only accept and consider bids that have been produced using Expedite and submitted via Bid Express.

The Department's Office of Contracts will provide planholders with a proposal, plan set and any required addenda. Most addenda will not be provided by hard copy, but will be available on the Office of Contracts website at: <http://contracts.dot.state.oh.us>. Planholders will be notified of all addenda via email. All proposals, plans, Expedite (EBS) files and addenda are also available on the Office of Contracts web site.

Electronic bids must comply with all special provisions, the Construction and Material Specifications, Supplemental Specifications and the rules and regulations of the Ohio Department of Transportation regarding bid preparation and bid submittal.

Blank unit prices will be considered an invalid bid EXCEPT in the case of optional designs (projects where the bidder is required to bid on only one design). Unit prices of zero are not permitted at any time.

Addenda and/or amendments must be acknowledged in the Miscellaneous Section of the Expedite (EBS) file in order for your bid to be considered for award of this project. The section contains the certification of receipt of all hard copy proposals, addenda, amendments, plans,

standard specifications and supplemental specifications. Supplemental Questionnaire information regarding the bidder's outstanding ODOT and non-ODOT work, EEO certification (on Federally-funded projects only), and certification against debarment and suspension have also been included in this section. Bid Express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

Each bidder is required to file with his bid a certified check or cashier's check for an amount equal to five percent (5%) of its bid, but in no event more than fifty thousand dollars, or a bid bond for ten percent (10%) of its bid payable to the "Director of Transportation." Electronic bid bonds will be verified upon submission of bids through Bid Express. Bidders must obtain and verify a Bond ID number from the surety. This Bond ID must be entered in the "Bond ID Number" field in the Bid Bond Section of the Expedite file.

If the contractor chooses to submit a certified check to guaranty its bid, the Department's Office of Contracts will accept a check up to 72 hours in advance of the letting. The Office of Contracts must receive the certified check by 10:00 a.m. on the day the project sells. All checks must be sent to ODOT, Office of Contracts, Attention: Letting Manager, First Floor, 1980 W. Broad St., Columbus, Ohio 43223.

The successful bidder must furnish a performance bond and a payment bond in an amount equal to one hundred percent (100%) of the state's estimate. (Ohio Revised Code Section 5525.16)

Any bid received after 10:00 a.m. on the scheduled day of opening will receive no further consideration for award. The Department will not be responsible for a late bid due to failure of the bidder to allow sufficient time for delivery of the bid.

The Department will ensure that this electronic bid depository is available for a two-hour period prior to the deadline for submission of bids. In the case of disruption of national communications or loss of services by <http://www.bidx.com> during this two-hour period, the Department will delay the deadline for bid submissions to ensure the ability of potential bidders to submit bids. If this occurs, instructions will be communicated to potential bidders.

PN 007 - 10/15/2004 - TRUCK LEASING

The Code of Federal Regulations Title 49, Section 26.55(d)(4)(5)(6) governs trucking operations. This section states that the Disadvantaged Business Enterprise (DBE) may lease trucks from another DBE firm, including an owner-operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE provides on the contract. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE will receive credit for only the fee or commission it receives as a result of the lease agreement. The DBE does not receive credit for the total value of the transportation services provided by the lessee, since these services are not provided by a DBE. The law requires that a lease must indicate that the DBE has exclusive use of and control over the truck for credit to be accorded to the DBE. This does not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, so long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the name and identification number of the DBE.

In lieu of a truck owner displaying the name and identification number of the DBE, the truck owner shall be required to furnish a photocopy of the lease agreement. Thereby, fulfilling the rule without causing undue hardship on any entity.

Credit for expenditures with DBEs for materials or supplies toward the DBE goal is described as follows:

1. When the materials or supplies are obtained from a DBE manufacturer the prime contractor may receive credit for 100 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a manufacturer is a firm that operates or maintains a factory or establishment that produces, on the premises, the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.

2. When the materials or supplies are purchased from a DBE regular dealer or supplier the prime contractor may receive credit for 60 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a regular dealer or supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

For subcontract agreement (C-92) purposes the following definitions will be used:

Install - DBE contractor who obtains goods, materials and supplies and fixes in place, for use, the same goods, materials and supplies. (e.g., DBE contractor obtains and fixes in place re-bar on project site). Must spend 20% or more time on project per day. 100% credit toward prime's DBE goal.

Stockpiling - DBE Contractor/Trucker who delivers materials, goods, or supplies to project site. 60% credit toward prime's DBE goal.

Tailgating - DBE Contractor/Trucker who delivers and installs materials, goods, or supplies to project site. Must spend 20% or more time on project per day. 100% credit toward prime's DBE goal.

PN 033 - 04/18/2008 - AS PER PLAN DESIGNATION - PROPOSAL NOTE

For the last several years the "As Per Plan" designation has been added to some item descriptions in the proposal to assist the Contractors to easily identify standard items that have been altered by plan notes.

The "As Per Plan" designation has proven to be a very useful tool for the Contractors. However, its use was never intended to relieve the Contractors of their responsibility to read, bid and construct all items in accordance with all governing plan notes. Therefore, the absence of an "As Per Plan" designation on some item descriptions in the proposal for which there are clear and controlling plan notes does not relieve the Contractors of the responsibility to read, bid and construct those particular items in accordance with the governing plan notes.

Be advised that the item descriptions in the bidding proposal must be read or interpreted with the governing plan notes and the Ohio Department of Transportation Construction and Materials Specifications. A claim based upon an "order of precedence" basis will be denied. In the event that a conflict, either real or perceived, exists between the item description and the governing plan note, the Contractors are to request clarification through the pre-bid process.

PN 014 - 10/15/2004 - DRUG-FREE WORKPLACE

The prime contractor agrees to comply with all applicable state and federal laws regarding drug-free workplace. The prime contractor shall make a good faith effort to ensure that all its employees, while working on an ODOT project, will not purchase, transfer, use or possess illegal drugs or alcohol or abuse prescription drugs in any way.

The prime contractor shall also requires that this contractual obligation be placed in all subcontractor and materialman contracts that it enters into and further requires that all subcontractors and materialmen place the same contractual obligations in each of their lower tier contracts.

PN 038 - 10/15/2004 - UNRESOLVED FINDING FOR RECOVERY

The Contractor affirmatively represents to the Department that it is not subject to a finding for recovery under Ohio Revised Code §9.24, or that it has taken the appropriate remedial steps required under §9.24 or otherwise qualifies under that section. The Contractor agrees that if this representation is deemed to be false, the contract shall be void ab initio as between the parties to this contract, and any funds paid by the state hereunder shall be immediately repaid to the Department, or an action for recovery may be immediately commenced by the Department for recovery of said funds.

PN 039 - 10/15/2004 - ASSIGNMENT OF ANTITRUST CLAIMS IN STATE CONTRACT LANGUAGE

It is the policy of the Ohio Department of Transportation that ODOT and the Contractor recognize that in actual economic practice, overcharges resulting from antitrust violations are usually borne by ODOT. As consideration for the Award of the Contract and intent to be legally bound, the Contractor acting herein by and through the person signing this contract on behalf of the Contractor as a duly authorized agent, hereby assigns, sells, conveys, and transfers to ODOT any and all right, title and interest to any and all claims and causes of action the Contractor now has or hereafter requires under state or federal antitrust laws provided that the claims or causes of action related to the goods or services that are the subject to the contract. In addition, the Contractor warrants and represents that it will require any and all of its subcontractors and first tier suppliers to assign any and all federal and state antitrust claims and causes of action to ODOT. The provisions of this article shall become effective at the time ODOT executes this contract without further acknowledgment by any of the parties.

All contracting entities shall assign their rights and responsibilities to ODOT for all antitrust claims and causes of action regarding subcontractors.

PN 008 - 10/15/2004 - SPECIFICATION AND SUPPLEMENTAL SPECIFICATIONS, POLICIES AND SPECIAL PROVISIONS INCORPORATED BY REFERENCE AS IF REWRITTEN HEREIN

The current version of the following will govern this improvement:

Policies:

Policy 27-003 (P) Partnering On Construction Projects
Policy 27-008 (P) Value Engineering
Policy 27-009 (P) Acceptance of Nonspecification Material on Construction Projects
Policy 27-010 (P) Change Orders
Policy 27-012 (P) Time Extensions and Waiver of Liquidated Damages

Standard Procedures:

510-003 (SP) Standard Procedure for Formal Partnering of Construction Projects
510-004 (SP) Standard Procedure for Preconstruction Conferences & Informal Partnering
510-008 (SP) Standard Procedure for Value Engineering In Construction
510-009 (SP) Acceptance of Nonspecification Material on Construction Projects
510-010 (SP) Processing Change Orders & Determination of Additional Contractor Compensation
519-012 (SP) Time Extensions & Waiver of Liquidated Damages

Copies of the above-referenced Policies, Standard Procedures and Special Provisions policies can be found on our website at

<http://www.dot.state.oh.us/construction/OCA/Policy/default.htm>.

PN 027 - 10/15/2004 - IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this contract, or subcontract, as appropriate, the bidder, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.
2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations and guidelines listed thereunder.
3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.
4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

PN 037 - 04/18/2008 - UTILITY NOTE

The contractor must exercise caution when working in proximity to the existing and /or relocated utility facilities.

Sections 105.07 and 107.16 of the Department of Transportation Construction and Material Specifications require that the contractor cooperate with all utilities located within the limits of this construction project and take responsibility for the protection of the utility property and services.

If the contractor is directed by a utility company to perform any work not specifically contained in this note, the Department will not compensate the contractor for this work unless the Department approves the request in writing before the work begins. If the work is not preapproved by the Department, the contractor will be responsible for obtaining reimbursement for its work from the utility company which directed the contractor to perform the work.

In the event that the contractor requests that additional work, not specifically contained in this note, be performed by a utility company, the contractor will be responsible for reimbursing the utility company for the additional work unless the Department has agreed in writing to pay for the additional work before the work begins.

PN 015 - 10/15/2004 - CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

The required contract provisions for federal-aid construction contracts (contained in Form FHWA 1273 revised April 1993) are hereby incorporated reference as if rewritten herein.

PN 017 - 10/15/2004 - FEDERALLY REQUIRED EEO CERTIFICATION CLAUSE

The Federally Required EEO Certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontractors which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

PN 020 - 04/18/2008 - NOTICE OF REQUIREMENT OF AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY

The Bidder's attention is called to the affirmative action obligations required by the specifications set forth in 23 CFR Part 230, 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of Vietnam Era Veterans' Readjustment Assistance Act (VEVRAA) of 1974.

Utilization goals applicable to the project, expressed in percentages, for minority and female participation for each construction craft can be found on ODOT's website at <http://www.dot.state.oh.us/contract/census.htm>. These goals are based on 2000 census data and represent the area, per craft, minority and female availability pool.

Minority and female utilization obligations by craft per county (applicable to project):
<http://www.dot.state.oh.us/CONTRACT/Census/CountyAvailability-ByTrade.pdf>

Statewide utilization obligations by craft (applicable to the Contractor's statewide workforce):
<http://www.dot.state.oh.us/CONTRACT/Census/StatewideAverages-ByTrade.pdf>

Effective 1/1/08 a new hire is a first time employee with the contractor or a non salaried employee who has a break in service of 60 days or more with the contractor. This definition also applies to employees "rehired" by a contractor after a break in service of 60 days or more.

The Contractor's compliance shall be based on the implementation of affirmative action obligations required by the specifications set forth in 23 CFR Part 230, and its good faith efforts to meet these obligations. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and females on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project

to project for the sole purpose of meeting the affirmative action obligations shall be a violation of the contract and regulations in 23 CFR Part 230. The good faith efforts put forth by the contractor will be measured against the total work hours performed. Under FHWA, ODOT is the authority tasked with ensuring that the contractor adheres to the aforementioned regulations. In addition to complying with the Required Contract Provisions as outlined in the attached subcontract agreement the Contractor shall provide immediate written notification to the ODOT and the Prime Contractor when referral practices of the union or unions with which the Contractor has a collective bargaining agreement impede the company's efforts to meet its equal opportunity obligations.

The Office of Federal Contract Compliance Programs (OFCCP) administers and enforces equal employment opportunity laws that apply to Federal government contractors and subcontractors supplying goods and services, including construction, to the Federal Government under 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of VEVRAA. The OFCCP monitors compliance with these laws primarily through compliance evaluations, during which a compliance officer examines the contractor's affirmative action efforts and employment practices. Under Executive Order 11246, the OFCCP may perform contract compliance reviews on contractors involved with federally funded ODOT projects.

Requirements for affirmative action obligations governing OFCCP contract compliance reviews are those listed in the Federal Register for the Economic Area. <http://www.doi.gov/esa/ofccp/TAguides/consttaq.pdf> page E-32

The Department of Administrative Services (DAS), Equal Opportunity Division, is responsible for ensuring state contractors implement and adhere to the State of Ohio's affirmative action program pursuant to Ohio Administrative Code (OAC) 123:2-3-02. Specifically, this unit's responsibilities includes the issuance of certificates of compliance under ORC 9.47 and 153.08, conducting project site visits and compliance reviews (desk audits) to ensure contractors utilize minorities and women in the construction trades, as well as maintaining a working environment free of discrimination, harassment and intimidation. The DAS may perform contract compliance reviews on contractors involved with state funded ODOT projects. Requirements for affirmative action obligations governing DAS contract compliance reviews are those listed in the O.A.C. for the Metropolitan Statistical Area in which a project is located. http://www.das.ohio.gov/Eod/123_2_3_02.htm

All prime and subcontractors regardless on the number of employees or the state contract amount are required to submit monthly utilization reports (Input Form 29) to Ohio Department of Administrative Services covering the contractor's total workforce within the state of Ohio. The reports must be filed electronically by the 10th of each month, beginning with the contract award and continuing until the contractor or subcontractor completes performance of the state contract. <http://www.das.ohio.gov/Eod/ccinputform29.htm>

The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs, 200 N. High Street, Room 409, Columbus, Ohio 43215, within 10 working days of award of any construction subcontract in excess of \$10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the subcontract is to be performed.

PN 029 – 10/15/2004 – ON THE JOB TRAINING PROVISIONS

The requirements of this Training Special Provision supersede subparagraph 7b of the Special Provision entitled Special Employment Opportunity Responsibilities, and implements 23 U.S.C. 140(a).

The following must be included as part of the Contractor's equal employment opportunity affirmative action training program:

The Contractor must provide on-the-job training aimed at developing full journey persons in the type or job classification in which they work.

The contractor is not required to have a specific number of trainees assigned to this project. The number of trainees will be distributed among the work classifications on the basis of the Contractor's needs and the availability of the journey persons in the various classifications. The Contractor will be credited for each trainee employed by him or her who is currently enrolled or becomes enrolled in an approved program.

Training and upgrading of minorities and women toward journey person status is a primary objective of this Training Special Provision. Accordingly, the Contractor must make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. This training commitment is not intended, and will not be used, to discriminate against any applicant for training, regardless of whether the applicant is a member of a minority group or not.

No employee will be employed as a trainee in any classification in which he or she has successfully completed a training course leading to journey person status or in which he or she has been employed as a journey person. The Contractor must satisfy this requirement by including appropriate questions in the employee's application or by other suitable means. Regardless of the method used, the Contractor's records must document the findings in each case.

The minimum length and type of training for each classification will be established in the training program selected by the Contractor.

No payment by ODOT will be made to the Contractor for providing this training. However, if the Contractor fails to provide adequate training and cannot show good faith efforts on its part to provide adequate training, it will be subject to a formal compliance review to determine the Contractor's efforts in meeting the EEO laws and regulations.

The Contractor must provide the following reports:

1. CR1 Report
 - A. To be completed on each trainee
 - B. To be filled out at the start of training and finish of training or at the end of the year, whichever comes first
 - C. To be submitted to the District in which the Contractor's home office is located.
2. Tracking will be on an annual basis. The Contractor must submit the subsequent CR1 to the District in which the Contractors home office is located.

The prime or subcontractor conducting the training must be involved in at least one Federal project per calendar year in order to get FHWA training credit. Participation in the OJT Program is not project or contract specific.

All Contractors are encouraged to participate in the OJT program. Such a program will be considered when examining the contractor's Good Faith Efforts toward meeting its contractual affirmative action obligations.

All Contractors shall submit their own Training Program or Apprenticeship Certificate, for approval, to the District in which the company's home office is located.

All OJT Trainees must have the appropriate certification. Apprenticeship Certificates can be obtained from the State of Ohio, Bureau of Apprenticeship and Training. The union apprenticeship agreement is not acceptable verification of an apprentice's enrollment in a union sponsored training program. A copy of the Apprenticeship Certificate along with a statement indicating the number of months/years the employee has been in the apprenticeship program must be submitted to the EEO Coordinator in the company's home district and to the prevailing wage coordinator in the district responsible for the project within 90 days of the apprentice beginning work on the project.

PN 035 - 10/15/2004 - SPECIAL PROVISIONS OF FEDERAL-AID HIGHWAY PROGRAM OF MANUAL 6-4-1-2 SPECIFIC EQUAL EMPLOYMENT OPPORTUNITY RESPONSIBILITIES

1. GENERAL

a. Equal employment opportunity requirements not to discriminate and to take affirmative action to assure equal employment opportunity as required by Executive Order 11246 and Executive Order 11375 are set forth in Required Contract Provisions (Form PR- 1273 or 1316, as appropriate) and these Special Provisions which are imposed pursuant to Section 140 of Title 23, U.S.C., as established by Section 22 of the Federal-Aid Highway Act of 1968. The requirements set forth in these Special Provisions shall constitute the specific affirmative action requirements for project activities under this contract and supplement the equal employment opportunity requirements set forth in the Required Contract Provisions.

b. The contractor will work with the State Highway Agencies and the Federal Government in carrying out equal employment opportunity obligations and in their review of his/her activities under the contract.

c. The contractor and all his/her subcontractors holding subcontracts not including material suppliers, of \$10,000 or more, will comply with the following minimum specific requirement activities of equal employment opportunity: (The equal Employment Opportunity requirements of Executive Order 11246, as set forth in Volume 6, Chapter 4, Section 1, Subsection 1 of the Federal-Aid Highway Program Manual, are applicable to material suppliers as well as contractors and subcontractors.) The contractor will include these requirements in every subcontract of \$10,000 or more with such modification of language as is necessary to make them binding on the subcontractor.

2. EQUAL EMPLOYMENT OPPORTUNITY POLICY

The contractor will accept as his operating policy the following statement which is designed to further the provision of equal employment opportunity to all persons without regard to their race, color, religion, sex, or national origin, and to promote the full realization of equal employment opportunity through a positive continuing program:

It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, or national origin. Such action shall include: employment, upgrading, demotion, or transfer recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training including apprenticeship, pre-apprenticeship, and/or on-the-job training.

3. EQUAL EMPLOYMENT OPPORTUNITY OFFICE

The contractor will designate and make known to the State Highway Agency contracting officers an equal employment opportunity officer (hereinafter referred to as the EEO Officer) who will have the responsibility for and must be capable to effectively administering and promoting an active contractor program of equal employment opportunity and who must be assigned adequate authority and responsibility to do so.

4. DISSEMINATION OF POLICY

a. All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's equal employment opportunity policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

(1) Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's equal employment opportunity policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

(2) All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer or other knowledgeable company official covering all major aspects of the contractor's equal employment opportunity obligations within thirty days following their reporting for duty with the contractor.

(3) All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer or appropriate company official in the contractor's procedures for locating and hiring minority group employees.

b. In order to make the contractor's equal employment opportunity policy known to all employees, prospective employees and potential sources of employees, i.e., schools, employment agencies, labor unions (where appropriate), college placement officers, etc., the contractor will take the following actions:

(1) Notices and posters setting forth the contractor's equal employment opportunity policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

(2) The contractor's equal employment opportunity policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

5. RECRUITMENT

a. When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Employment Opportunity Employer." All such advertisements will be published in newspapers or other publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

b. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to

yield qualified minority group applicants, including, but not limited to, State employment agencies, schools, colleges and minority group organizations. To meet this requirement, the contractor will, through his EEO Officer, identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the contractor for employment consideration.

In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to extent that the systems permits the contractor's compliance with equal employment opportunity contract provisions. (The U.S. Department of Labor has held that where implementation of such agreements have the effect of discriminating against minorities or women or obligates the contractor to do the same, such implementation violates Executive Order 1 1246, as amended.)

c. The contractor will encourage his present employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all such employees. In addition, information and procedures with regard to referring minority group applicants will be discussed with employees.

6. PERSONNEL ACTIONS

Wages, working conditions and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, or national origin. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with his obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of his avenues of appeal.

7. TRAINING AND PROMOTION

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event the "Training Special Provisions" are

included in this bid proposal, this subparagraph will be superseded as indicated in said provisions.

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

8. UNIONS

If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the contractor either directly or through a contractor's association acting as agent will include the procedures set forth below:

a. The contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The contractor will use best efforts to incorporate an equal employment opportunity clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, or national origin.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the State Highway Department and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex or national origin, making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The U.S. Department of Labor has held that it shall be no excuse that the union with which the contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the State highway agency.

9. SUBCONTRACTING

a. The contractor will use his best efforts to solicit bids from and to utilize minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of minority-owned construction firms from State Highway Agency personnel.

b. The contractor will use his best efforts to ensure subcontractor compliance with their equal employment opportunity obligations.

10. RECORDS AND REPORTS

a. The contractor will-keep such records as are necessary to determine compliance with the contractor's equal employment opportunity obligations. The records kept by the contractor will be designed to indicate:

(1) the number of minority and non-minority group members and women employed in each work classification on the project,

(2) the progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and women (applicable only to contractors who rely in whole or in part on unions as a source of their work force),

(3) the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees, and

(4) the progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. All such records must be retained for a period of three years following completion of the contract work and shall be available at reasonable times and places for inspection by authorized representatives of the State Highway Agency and the Federal Highway Administration.

c. The contractors will submit to the State Highway Agency a monthly report for the first three months after construction begins and every month of July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form PR 139 1. If on-the-job training is being required by "Training Special Provisions," the contractor will be required to furnish Form FHWA 1409.

PN 026 - 10/15/2004 - CERTIFICATION OF NONSEGREGATED FACILITIES

(a) A Certification of Nonsegregated Facilities, as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities (is included in the proposal and must be submitted prior to the award of a Federal-aid highway construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause).

(b) Bidders are cautioned as follows: By signing this bid, the bidder will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in this proposal. This certification provides that the bidder does not maintain or provide for his employees facilities which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the bidder will not maintain such segregated facilities.

(c) Bidders receiving Federal-aid highway construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, will be required to provide for the forwarding of the following notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

"Notice to Prospective Subcontractors and Material Suppliers of Requirement for Certification of Nonsegregated Facilities"-

(a) A Certification of Nonsegregated Facilities as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, which is included in the proposal, or attached hereto, must be submitted by each subcontractor and material supplier prior to the award of the subcontract or consummation of a material supply agreement if such subcontract or agreement exceeds \$10,000 and is not exempt from the provisions of the Equal Opportunity clause.

(b) Subcontractors and material suppliers are cautioned as follows: By signing the subcontract or entering into a material supply agreement, the subcontractor or material supplier will be deemed to have signed and agreed to the provisions of the "Certification of Nonsegregated Facilities" in the subcontract or material supply agreement. This certification provides that the subcontractor or material supplier does not maintain or provide for his employees facilities which are segregated on the basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the subcontractor or material supplier will not maintain such segregated facilities.

(c) Subcontractors or material suppliers receiving subcontract awards or material supply agreements exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

PN 031 - 10/15/2004 - AFFIDAVIT OF SUBCONTRACTOR PAYMENT

The Code of Federal Regulations 49, 26.37(b), requires the Ohio Department of Transportation (ODOT) to monitor and verify that work committed to Disadvantaged Business Enterprise (DBE) firms at contract award is actually performed by the DBE's. Additionally, ODOT is required to report the DBE participation on each project, including all work, materials or service sublets. Therefore, it is ODOT's responsibility to discern whether payments are made to DBE firms. An affidavit is to be completed and signed by the contractor within 15 days of the completion of the project. The affidavit seeks to verify actual payments made to DBE firms on the project. Each DBE firm must verify the actual payment amount.

The blank spaces in the affidavit must be filled in correctly, where indicated. The affidavit must be signed by the prime contractor and subcontractor, or by the subcontractor and DBE subcontractor, if applicable. By signing the affidavit, the noted firm agrees that the payment amount recorded is true and accurate as of the payment time period.

Completed and signed affidavit shall be mailed to the Ohio Department of Transportation, Office of Contracts, DBE Services section, 1980 West Broad Street, Columbus, Ohio 43223.

PN 046 - 10/15/2004 - SUBCONTRACT AGREEMENTS

Prime contractors will not be required to submit executed C-92s with their subcontract agreements for Disadvantaged Business Enterprises (DBE) subcontractors prior to the execution of the prime contract with ODOT. The prime contractor must only furnish to the Department subcontract agreements from the DBE subcontractors with whom they propose to utilize to fulfill the project goal. Again, this requirement is at the time of contract execution with ODOT.

However, the prime contractor must submit C-92s prior to the DBE commencing work. At the time of submission of the C-92 the DBE subcontractor must have sufficient dollar and work type qualifications to perform the work. The prime contractor will be held accountable to meet the project goal.

PN 013 - 10/15/2004 - DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS

It is the policy of the Ohio Department of Transportation that Disadvantaged Business Enterprises (DBEs) shall have equal opportunity to compete for and perform subcontracts which the Contractor enters into pursuant to this contract. The Contractor must use its best efforts to solicit bids from and to utilize DBE subcontractors with meaningful minority groups and female representation among their employees. Consequently, the requirements of Title 49 CFR Part 26 and Ohio Revised Code §5525.011 apply to this contract. The Contractor must ensure that the DBE subcontractor(s) is performing a "commercially useful function" as defined in CFR 26.55.

The percentage indicated on the front cover of this bid is the percent of the awarded Contractor's bid which must be subcontract to certified ODOT DBE firms.

In order to be assured that the Contractor complies with this contract requirement the Contractor shall provide certified payrolls from its DBE subcontractors where appropriate. When the Contractor utilizes a service, for example trucking, to satisfy a part or its entire contractual goal, the Contractor, when requested, must provide a copy of each canceled check issued to the DBE service provider until the goal amount is reached. The Department shall total the amounts of the canceled checks and compare that total to the subcontract agreement by the parties and the C-92 issued to the Contractor for the work to be performed by the DBE subcontractor.

WAIVER PROCESS FOR DBE GOAL

The Contractor must document the progress and efforts being made in securing the services of DBE subcontractors. In the event the Contractor is unable to meet the DBE Goal placed on this project, a request for a waiver of all or part of the goal may be made to the Office of Contracts. The written request must indicate a good faith effort was made to meet the goal and be sent to the Administrator, Office of Contracts, 1980 West Broad Street, Columbus, Ohio, 43223. There will be no extension of time for the project granted if the Contractor wishes to avail himself of this process. If an item of work subcontracted to a DBE firm is non-performed by the Department or the subject of an approved VECP, the Contractor may request a waiver for the portion of work excluded.

The Contractor must provide the following information and documentation when requesting DBE goal waiver:

1. Dollar value and % of DBE goal. Dollar value and % of waiver request.
2. Signed copy of each subcontract or purchase order agreement between the prime and DBE subcontractor utilized in meeting the contract goal.
3. Copy of dated written communication, fax confirmation, personal contact, follow up and negotiation with the DBE's.
4. Copy of dated written communication and/or fax confirmation that bidder solicited and provided DBE's with adequate information about the plans, specifications and requirements of the contract in a timely manner to assist them in responding to a solicitation.
5. Copy of dated written communication and/ or fax confirmation of each noncompetitive DBE quote that includes the dollar value of each reference item and work type.
6. Copy of dated written communication and/ or dated fax confirmation of DBE's that were not interested in providing a quote for the project.

7. Documentation of all negotiating efforts and reason for rejecting bids.
8. Documentation of good faith efforts (GFE) to meet the DBE subcontract goal, by looking beyond the items typically subcontract or consideration of subcontracting items normally performed by the prime as a way to meet the DBE goal.

The Administrator will review the submitted documentation and issue a written decision within ten (10) business days. The Contractor may request administrative reconsideration within 14 days of being informed that it did not perform a GFE. The Contractor must make this request in writing to the following official:

Ohio Department of Transportation
Attention: Deputy Director, Division of Contract Administration
1980 West Broad Street
Columbus, Ohio 43223

The reconsideration official will not have played any role in the original determination that the contractor did not document sufficient good faith effort.

As part of this reconsideration, the contractor will have the opportunity to provide written documentation or an argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. ODOT will send the contractor a written decision on reconsideration explaining the basis for finding that the contractor did or did not meet the goal or make adequate good faith efforts. The result of the reconsideration process is not administratively appealable to the US Department of Transportation. However, it is appealable to the Franklin County Court of Common Pleas.

SANCTIONS

The Ohio Department of Transportation will issue sanctions if the Contractor chooses not to request a waiver, the Contractor fails to comply with the contract requirements and/or fails to demonstrate the necessary good faith effort.

The Ohio Department of Transportation may impose any of the following sanctions:

- 1) letter of reprimand;
- 2) liquidated damages computed up to the amount of goal dollars not met;
- 3) cross-withhold from future projects;
- 4) contract termination and/or
- 5) other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions include, but are not limited to:

- 1) the magnitude and the type of offense;
- 2) the degree of the Contractor's culpability;
- 3) any steps taken to rectify the situation;
- 4) the Contractor's record of performance on other projects including, but not limited to:
 - a. annual DBE participation over DBE goals;
 - b. annual DBE participation on projects without goals;
 - c. number of complaints the Ohio Department of Transportation has received from DBEs regarding the Contractor; and
 - d. the number of times the Contractor has been previously sanctioned by the Department of Transportation; and
- 5) whether the Contractor falsified, misrepresented, or withheld information.

PN 034 - 04/18/2008 - Drug Free Workplace Program Participation

During the life of this project, the Contractor and all its Subcontractors, that provide labor on the Project site, must be enrolled in and remain in good standing in the Ohio Bureau of Worker's Compensation ("OBWC") Drug-Free Workplace Program ("DFWP") or a comparable program approved by the OBWC.

In addition to being enrolled in and in good standing in an OBWC-approved DFWP or a comparable program approved by the OBWC, the Department requires each Contractor and Subcontractor that provides labor, to subject its employees who perform labor on the project site to random drug testing of 5 percent of its employees. The random drug testing percentage must also include the on-site supervisors of the Contractors and Subcontractors. Upon request, the Contractor and Subcontractor shall provide evidence of required testing to the Department.

Each Subcontractor shall require all lower-tier Subcontractors that provides labor on the project site with whom the Subcontractor is in contract for the Work to be enrolled in and be in good standing in the OBWC DFWP or an OBWC-approved DFWP prior to a lower-tier Subcontractor providing labor at the Site.

The Department will declare a bid non-responsive and ineligible for award if the Contractor is not enrolled and in good standing in the Ohio Bureau of Workers' Compensation's Drug-Free Workplace (DFWP) Discount Program or a similar program approved by the Bureau of Workers' Compensation within 8 days of the bid opening. Furthermore, the Department will deny all requests to sublet when the subcontractor does not comply with the provisions of this proposal note.

Failure of the Contractor to require a Subcontractor to be enrolled in and be in good standing in the OBWC DFWP or an OBWC-approved DFWP prior to the time that the Subcontractor provides labor at the Site, shall result in the Contractor being found in breach of the Contract and that breach shall be used in the responsibility analysis of that Contractor or the Subcontractor who was not enrolled in a program for future contracts with the State for five years after the date of the breach.

PN 090 - 4/18/2008 - WORK TYPE CODES AND DESCRIPTIONS

The Department will indicate the work type required for each pay item. If the line item does not have a corresponding work type, NR will be shown in the work type column. This proposal note will govern the assignment of work types to pay items.

However, the Contractor may perform incidental work items for which it does not hold the required work type provided the cost of the work does not exceed 5% of the total bid. The Contractor may also perform Work Type 26 (Structural steel painting) without holding the required work type provided the total area to be painted does not exceed 400 SF.

Listed below are the work types for this proposal. In accordance with Ohio law, a bidder must possess work types, and perform work equal to the percentage included on the front cover of this proposal. This is a percentage of the total amount of the submitted bid price. The Director may, by insertion of a contract provision, reduce the fifty percent amount.

Work Type Code	Work Type Description	Work Type Code	Work Type Description
1	Clearing & Grubbing	29	Structure Repairs
2	Building Removal	30	Hydrodemolition
3	Gas, Oil, Water Well Abandonments	31	Structural Steel Repairs
4	Roadway Excavation & Embankment	32	Heat Straightening

	Construction		
5	Major Roadway Excavations	33	Tieback Installation
6	Incidental Grading	34	Earth Retaining Structures
7	Soil Stabilization	35	Drainage (Culverts, Misc.)
8	Temporary Soil Erosion & Sediment Control	36	Guardrail / Attenuators
9	Aggregate Bases	37	Fence
10	Flexible Paving	38	Misc. Concrete
11	Apply Bituminous Treatments	39	Maintenance of Traffic
12	Rigid Paving	40	Waterproofing
13	Pavement Planning, Milling, Scarification	41	Raised Pavement Markers
14	Concrete Texturing	42	Signing
15	Sawing	43	Highway Lighting
16	Flexible Replacement	44	Traffic Signals - Standard
17	Rigid Pavement Replacement	45	Pavement Markings
18	Pavement Rubblizing, Breaking, Pulverizing	46	Landscaping
19	Structure Removal	47	Mowing
20	Level 1 Bridge	48	Trucking
21	Level 2 Bridge	49	Herbicidal Spraying
22	Level 3 Bridge	50	Railroad Track Construction
23	Reinforcing Steel	51	Micro Tunneling
24	Structural Steel Erection	52	Tunneling
25	Stud Welding	53	Piling
26	Structural Steel Painting	54	Post-Tensioning Bridge Members
27	Expansion & Contraction Joints, Joint sealers, Bearing Devices	55	Fiber Optic Cable Installation, Splicing, Termination and Testing – Traffic Signal System
28	Caissons / Drilled Shafts	56	Fiber Optic Cable Installation, Splicing, Termination and Testing – Intelligent Transportation System

PN 059 - 10/15/2004 - WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- an existing published wage determination
- a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response for this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determination
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D. C. 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (see 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U. S Department of Labor
200 Constitution Avenue, N.W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requester considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4.) All decisions by the Administrative Review Board are final.

PN 061 - 04/18/2008 -WAGE SCALE ON ALL FEDERAL-AID PROJECTS

The wage rates for this project were determined by the Secretary of Labor in accordance with Federal-Aid requirements.

Contractors shall use only the classifications and wage rates set forth in the United States Department of Labor (USDOL) wage decision found at the website noted below on payrolls submitted to the District Office. Additionally, please note that the wage modification in effect at the time of the project sale date, shall be used by all contractors.

This USDOL wage decision may be viewed, by accessing the United States Department of Labor (USDOL) website at:

<http://www.wdol.gov/dba.aspx#3>

This contract requires the payment of the total of the basic hourly rates plus the fringe benefits payments for each classification in accordance with the following regulations which by reference are made part of this contract:

1) The U.S. Department of Labor Regulations, Title 29, Subtitle A, Part 5, Sections 5.5, 5.31, and 5.32, most recent revision at contract execution.

Form FHWA-1273 (most recent revision at contract execution) Part IV. Payment of Predetermined Minimum Wage and Part V. Statements and Payrolls.

The failure to pay prevailing wages to all laborers and mechanics employed on this project, shall be considered a breach of contract. Such a failure may result in the termination of the contract and debarment.

The Contractor and all subcontractors shall pay all wages and fringe benefits by company check. All payroll records and canceled pay checks shall be maintained for at least three years after final

acceptance as defined in section 109.12 of the Ohio Department of Transportation Construction and Materials Specifications. The Contractor's and all subcontractors' payroll records and canceled pay checks shall be made available for inspection by the Department and the U.S. Department of Labor, upon request, anytime during the life of the contract, and for three years thereafter by the U.S. Department of Labor. Additionally, the Contractor and all subcontractors shall permit such representatives to interview any employees during working hours while the employee is on the job.

The wage and fringe rates determined for this project shall be posted by the Contractor in a prominent and accessible place on the project, field office, or equipment yard where they can be easily read by the workers.

The Contractor and all subcontractors shall submit to the District Construction Office, certified payrolls each week beginning three weeks after the start of work. These payrolls shall be on a Form WH-347 or equivalent and shall show the following:

Employee name, address, social security number, classification, and hours worked.

2. The basic hourly and overtime rate paid, total pay, and the manner in which fringe benefit payments have been irrevocably made.
3. The project number and pay week dates.
4. Original signature of a company officer on the certification statement.

Additionally, a copy of the "Apprentice Certification" obtained from the Ohio State Apprenticeship Council, must accompany all certified payrolls submitted for all apprentices working on this project.

Please be aware that it is ultimately the responsibility of the Contractor to ensure that all laws relating to prevailing wages in the USDOL Regulations, Title 29, parts 1 and 5, are strictly adhered to by all subcontractors on the project.

If the Contractor or any subcontractor fails to comply with any of the provisions contained in this proposal note, the Department may terminate the contract, debar the Contractor or Subcontractor and/or withhold or suspend pay estimates after written notice and a reasonable opportunity to comply has been provided.

PN 050 - 10/15/2004 - LIMITATION ON USE OF CONTRACT FUNDS FOR LOBBYING

1. The prospective bidder certifies, by signing and submitting this bid proposal, to the best of his or her knowledge and belief, that:
 - a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
 - b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative

agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. This certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.
3. The prospective bidder also agrees by submitting his or her bid proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such sub-recipients shall certify and disclose accordingly.

PN 045 - 10/15/2004 - NON - COLLUSION AFFIDAVIT

In accordance with Title 23 United States Code, Section 112 and Ohio Revised Code, Chapter 1331 et. seq; and Sections 2921.11 and 2921.13, the bidder hereby states, under penalty of perjury and under other such penalties as the law provides, that he or his agents or employees have not entered either directly or indirectly into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal. Execution of this proposal on the signature portion thereof shall constitute also signature of this Non-Collusion Affidavit as permitted by title 28 United States Code, Section 1746.

REPORTING BID RIGGING

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (DOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the DOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

PN 104 - 01/07/1998 - VALUE ENGINEERING CHANGE PROPOSAL CONSTRUCTION COSTS & TIME

The Department will consider the Contractor's submission of a Value Engineering Change Proposal (VECP) which will reduce project costs and/or construction time. The purpose of this provision is to encourage the use of the ingenuity and expertise of the Contractor in arriving at alternate plans, specifications or other requirements of the contract. Any savings will be shared equally between the Contractor and the Department. The Contractor's costs for development, design and implementation of the VECP are not eligible for reimbursement. The VECP must not impair any of the essential functions and characteristics of the project such as service life, reliability, economy of operation, ease of maintenance, safety and necessary standardized features. The submission of the value engineering change proposal shall conform with the current Guidelines on Value Engineering Change Proposals adopted by the Director. Acceptance of a VECP is at the sole discretion of the Director.

PN 107 - 04/18/2008 - CRITICAL PATH METHOD PROGRESS SCHEDULE

A. General. The progress schedule required for this project is the critical path method schedule (CPM schedule). The Contractor shall designate a Schedule Representative who shall be responsible for coordinating with the Engineer during the preparation and maintenance of the schedule. The requirements of this note replace the progress schedule requirements in 108.02.B of the Construction & Material Specifications. The contractor shall submit an interim schedule followed by a baseline schedule, or only a baseline schedule, depending on when the contractor starts work as described below.

B. Interim Schedule. If the Contractor starts work within 60 days of execution of the contract, they shall submit an interim schedule. The interim schedule can be in bar chart format or CPM schedule format. The interim schedule shall include detailed activities for the work to be accomplished during the first 90 days of the Contract, and summary activities for the balance of the work.

C. Baseline Schedule. The Contractor shall submit a baseline schedule within 60 days of the execution of the Contract. The baseline schedule will be in CPM schedule format and as described below. The Engineer will review the baseline schedule and will either "approve", "approve as noted" or "reject" the schedule within 21 days of receipt. If the Engineer does not provide written notification regarding the disposition of the baseline schedule within 21 days, the submission will be considered approved.

For baseline schedules that are "approved as noted", the Contractor shall make the necessary revisions and resubmit the revised schedule within 14 days. The Engineer will only reject baseline schedules that are not in compliance with contract requirements.

For baseline schedules that are "rejected", the Engineer shall indicate in writing all portions of the schedule that are not in compliance with the contract requirements. The Project Engineer shall conduct a mandatory meeting with the Contractor and the Contractor's Schedule Representative within 14 days of the Engineer's written notice. The purpose of this meeting is to resolve all issues with the baseline schedule. At this meeting the Contractor shall provide clarification and all additional information necessary for the Engineer to "approve" the baseline schedule.

In the event the baseline schedule is not "approved" within 120 days of execution of the contract, all work shall cease on the project until the baseline schedule is "approved".

Approval of the baseline schedule does not revise the Contract Documents. The baseline schedule must be "approved" or "approved as noted" by the Engineer prior to the Engineer evaluating any contractor claims associated with time impacts.

Schedule Requirements. Generate the baseline schedule using either SureTrak Project Manager or P3 Project Planner by Primavera Systems Inc., Bala Cynwyd, PA.

Provide a working day schedule that shows the various activities of work in sufficient detail to demonstrate a reasonable and workable plan to complete the Project by the Original Contract Completion Date. Show the order and interdependence of activities and the sequence for accomplishing the work. Describe all activities in sufficient detail so that the Engineer can readily identify the work and measure the progress of each activity. The baseline schedule must reflect the scope of work, required phasing, maintenance of traffic requirements, interim completion dates, the Completion Date, and other project milestones established in the Contract Documents. Include activities for submittals, working drawings, shop drawing preparation, submittal review time for the Department shop drawings, material procurement and fabrication, and the delivery of materials, plant, and equipment, and other similar activities.

The Contractor shall be responsible for assuring all work, including all subcontractor work, is included in the schedule. The Contractor shall be responsible for assuring that all work sequences are logical and that the schedule indicates a coordinated plan.

Failure by the Contractor to include any element of work required for performance of the Contract shall not excuse the Contractor from completing all work within the required time. The Engineer's review of the baseline schedule will be for compliance with the specifications and contract requirements. Approval by the Engineer will not relieve the Contractor of any of their responsibilities for the accuracy or feasibility of the schedule. Omissions and errors will be corrected as described in Section F or H in this note and will not affect contract time.

A. Administrative Identifier Information:

- i. Project Number
- ii. County
- iii. Route Number
- iv. FHWA Number
- v. PID Number
- vi. Contract Signed Date
- vii. Completion Date
- viii. Contractor's Name
- ix. Contractor's Dated Signature
- x. ODOT's Dated Approval Signature

B. Project Activities:

- i. Activity Identification (ID). Assign each activity a unique identification number. Activity ID length shall not exceed 10 characters. Once accepted, the Activity ID shall be used for the duration of the project.
- ii. Activity Description. Each activity shall have a narrative description consisting of a verb or work function (e.g.; form, pour, excavate) and an object (e.g.; slab, footing, underdrain).
- iii. Activity Original Duration. Assign a planned duration in working days for each activity. Do not exceed a duration of 20 working days for any construction activity unless approved by the Engineer. Do not represent the maintenance of traffic, erosion control, and other similar items as single activities extending to the Completion Date. Break these Contract Items into component activities in order to meet the duration requirements of this paragraph.
- iv. Activity Relationships:
 - All activities, except the first activity, shall have a predecessor(s). All activities, except the final activity, shall have a successor(s).
 - Use only finish-to-start relationships with no leads or lags to link activities, or use start-to-start relationships with lags no greater than the predecessor duration to link activities.
 - Use of finish-to-finish relationship is permitted when both activities are already linked with a start-to-start relationship.

C. Project Milestones:

- i. Start Project: The Contractor shall include as the first milestone in the schedule, a milestone named "Start Project". The date used for this milestone is the date the contract is executed and signed by the Department.

- ii. End Project Milestone: The Contractor shall include as the last activity in the project schedule, a milestone named "End Project". The date used for this milestone is considered the project completion date.
 - iii. Start Phase Milestone: The Contractor shall include as the first activity for a project phase, an activity named "Start Phase X", where "X" identifies the phase of work. The Contractor may include additional milestones but, as a minimum, must include all contractual milestones.
 - iv. End Phase Milestone: The Contractor shall include as the last activity in a project phase, an activity named "End Phase X" where "X" identifies the phase of work. The Contractor may include additional milestones, but at a minimum contractual milestones.
- D. Hammock:
- E. Use hammers to show the duration of specified contract work periods, phases and road closures. The hammock activity type is allowed to have a start-to-start relationship with the first activity in a series of activities and a finish-to-finish relationship with the last activity in a series of activities.
- F. Constraints:
- G. Use constraints sparingly in the schedule. If constraints are used, use only Early Constraints or Late Constraints.
- H. Seasonal Weather Conditions:
- I. The winter shutdown periods shall be shown using non-work calendars. The activity can be assigned to a calendar indicating time periods of non-work. These custom calendars can be created to show days, weeks, or months of non-work. Seasonal weather conditions shall be considered and included in the planning and scheduling of all work.
- J. Linking Projects:
- K. Independent projects shall not be linked using Primavera's Interproject Relationship Manager Application.
- L. Activity Codes:
- M. The Contractor shall, at a minimum, include codes for Area, Phase, and Responsibility for each activity.
- N. Schedule Options:
- O. The schedule may only be calculated using retained logic. Show open ends as non-critical. Schedule durations are to be contiguous. Total float shall be calculated as finish float.
2. Submission Requirements. Submit all schedules within the time frames specified. Submit the schedule and information in electronic file format via email, on diskette or compact disc (CD) compatible with the Engineer's computer. Submit the following information along with the electronic baseline schedule:
- a. A baseline schedule in a bar chart format including the Administrative Identifier Information discussed in Section C.1.a on the first page of the schedule. For each activity on the chart, indicate the Activity ID, Activity Description, Original Duration, Remaining Duration, Total Float, Early Start Date, Early Finish Date, and Calendar ID. Use arrows to show the relationships among activities.
 - b. A baseline schedule in a bar chart format, on paper. Identify the critical path of the project on the bar chart in red. The critical path is defined as; the longest path of activities

in the project that determines the project completion date. The activities that make-up the critical path of activities are the "Critical Activities."

- c. A Six Week Look Ahead Schedule in bar chart format. This schedule will have all the requirements of the baseline schedule in bar chart format except that it shall be limited to those activities that have an early start or early finish within a six week period of the data date.
- d. A Scheduling Statistics Report. Submit a report of baseline schedule statistics, including number of activities, number of activities on the longest path, number of started activities, number of completed activities, number of relationships, percent complete, and number and type of constraints.
- e. A Logic Diagram (If requested by the Engineer). Submit a diagram in PERT chart format showing the logic of the baseline schedule.
- f. An Activity ID Sort. Submit a listing of all activities included in the baseline schedule sorted by ascending Activity Identification Number.
- g. A Total Float Sort. Submit a listing of all activities included in the baseline schedule sorted by increasing total float and by early start date.
- h. A Detailed Predecessor/Successor Sort. Submit a listing of all activities included in the baseline schedule indicating the activities that immediately precede and immediately succeed that activity in the schedule logic.

D. Float. Use of float suppression techniques, such as; preferential sequencing (arranging critical path through activities more susceptible to Department caused delay), lag logic restraints, zero total or free float constraints, extending activity times, or imposing constraint dates other than as required by the contract, shall be cause for rejection of the project schedule or its updates.

1. Definitions of Float: Total Float is the length of time along a given network path that the actual start and finish of activity(s) can be delayed without delaying the project completion date. Project Float is the length of time between the End Project Milestone and the Contract Completion Date.
2. Ownership of Float: Float available in the schedule, at any time shall not be considered for the exclusive use of either the Department or the Contractor. During the course of contract execution, any float generated due to the efficiencies of either party is not for the sole use of the party generating the float; rather it is a shared commodity to be reasonably used by either party. Efficiencies gained as a result of favorable weather within a calendar month, where the number of days of normally anticipated weather is less than expected, will also contribute to the Project Float. A schedule showing work completing in less time than the contract time, and accepted by the Department, will be considered to have Project Float. Project Float will be a resource available to both the Department and the Contractor. No time extensions will be granted nor delay damages paid unless a delay occurs which impacts the project's critical path, consumes all available float and extends the work beyond the Contract Completion Date.
3. Negative Float: Negative float will not be a basis for requesting time extensions. Any extension of time will be addressed in accordance with the Section F. Scheduled completion date(s) that extend beyond the contract (or phase) completion date(s) may be used in computations for assessment of liquidated damages. The use of this

computation is not to be construed as an order by the Department to accelerate the project.

E. Monthly Update Schedule. A monthly update schedule is a schedule in which only progress is updated from the prior data date to the current data date. Work added and/or excusable delays encountered since the prior data date must be represented as a schedule revision as described in Section E.

1. Update Requirements. On the tenth day of the current month, during the life of the Project, submit an updated schedule and all required information with a data date of the last day of the preceding month. The date for submission and data date may be adjusted to accommodate regularly scheduled progress meetings. Submit the monthly updated bar chart on paper and a copy of the updated schedule in electronic format in Section C.2. The Engineer shall "approve" or "reject" the schedule update within 5 days of receipt of the updated CPM schedule. The Engineer may withhold estimates if the updated schedule is not submitted as required by this section. For each updated schedule, identify the actual start and finish dates for all completed activities and the actual start date and remaining duration for all activities in progress. Provide a written narrative that identifies any changes or shifts in the critical path and submit reasons for the changes or shifts in the critical path. Correct out-of-sequence progress listings generated by the Scheduling Statistics Report as directed by the Engineer. The project schedule shall be reviewed at each monthly progress meeting. Any corrections shall be made prior to the next monthly progress meeting.

Submit the following with each updated schedule:

- i. CPM Schedule in Bar Chart Format
- ii. Six Week Look Ahead CPM Schedule in Bar Chart Format
- iii. Logic Diagram (If requested by the Engineer)
- iv. Activity ID Sort (If requested by the Engineer)
- v. Total Float Sort (If requested by the Engineer)
- vi. Detailed Predecessor/Successor Sort (If requested by the Engineer)
- vii. Schedule Statistics Report
- viii. Electronic files (formatted as described above)

The Contractor may submit a statement that there were no changes in the schedule logic, activity durations, or calendars since the previous update in lieu of submission of items iii, iv, v and vi. .

2. Early Completion Monthly Update Schedule. An Early Completion Monthly Update Schedule is defined as a monthly update schedule submitted by the Contractor in which the Finish Date precedes the Contract Completion Date. If after incorporating necessary revisions in accordance with Section E, the Finish Date precedes the Contract Completion Date by at least the number of days shown Table A the Engineer will initiate a change order amending the Contract Completion Date to the Early Completion Date shown on the accepted Early Completion Monthly Update. The amended Completion Date will be effective upon execution of that change order and all contract provisions concerning the Completion Date such as incentives, disincentives, excusable delays, compensable delays, and liquidated damages will be measured against the amended

Completion Date. The Contractor may elect not to execute the change order amending the Completion Date; however, in so doing, the Contractor waives its rights to delay damages in meeting the projected early Completion Date and the time between the Early Completion Date and the Contract Completion Date is used as Project Float.

Table A

<u>Original Project Duration</u>	<u># days prior to Contract Completion Date</u>
one year or less	30
one year to two years	60
two years or more	90

3. Late Completion Monthly Update Schedule. A Late Completion Monthly Update Schedule is defined as a monthly update schedule submitted by the Contractor in which the Finish Date exceeds the Contract Completion Date. In the event the Finish Date is more than 14 days beyond the current contract completion date and a schedule revision is not warranted, the contractor must proceed in accordance with Section H.

F. Revisions. The Work may require and/or the Contractor may make revisions to the CPM schedule. Addition of new activities or new calendars or changes to existing activities, calendars or logic constitute a revision. All revisions must be reported in narrative form on a cover sheet accompanying the monthly update schedule. Any revision which modifies the critical path or impacts an interim date or project completion date must be represented on a companion schedule submitted with the monthly update schedule or as a fragnet within the monthly update schedule. A fragnet is defined as the sequence of new activities that are proposed to be added to the existing schedule. The fragnet shall identify the predecessors to the new activities and demonstrate the impacts to successor activities. If submitted as a fragnet, the Contractor shall compute two Finish Dates. The first Finish Date shall be computed without consideration of any impact by the fragnet. The second Finish Date shall be computed with consideration of any impact by the fragnet. The Contractor shall also submit a written narrative stating the reason for the proposed revisions. The Engineer shall "approve" or "reject" proposed revisions within ten days of receipt of appropriate schedules and narrative. All approved revisions will be incorporated into the Monthly Update Schedule which will become the Revised Monthly Update Schedule.

G. Time Extensions. The Work may require and/or the Contractor may request an extension of the Completion Date. Perform the following analysis to compute the duration of the time extension. Submit two paper copies and two electronic copies of each analysis performed.

Determine project progress prior to circumstance(s) necessitating the time extension. Unless the Engineer requests an interim schedule updated to the date of the circumstance alleging to have caused delay, the previous accepted monthly update shall be used to display the prior progress of the project. This schedule is referred to as the Un-impacted Schedule

Prepare a fragmentary network (fragnet) depicting the circumstance that is believed to have delayed the project.

Insert the fragnet into the Un-impacted Schedule, run the schedule calculations and determine the finish date. This schedule is referred to as the Impacted Schedule.

Compare the Impacted Schedule finish date with the Un-impacted Schedule finish date in order to determine the duration of any warranted time extension.

Submit the impacted schedule with the request for time extension. Include a narrative report describing the effects of new activities and relationships to interim and contract completion dates.

All approved time extensions will be incorporated into the monthly update with the fragnet used to determine impacts incorporated into the schedule.

H. Recovery Schedule. If the Monthly Update Schedule or Revised Monthly Update Schedule projects a finish date for the Project more than 14 calendar days later than the current Completion Date, submit a recovery schedule showing a plan to finish by the current Completion Date if requested by the Engineer. The Department will withhold Estimates until the Engineer approves the recovery schedule. The Engineer will use the schedule to evaluate time extensions and associated costs requested by the Contractor. In the event the current Completion Date is in dispute, the recovery schedule will need to be submitted once the dispute has been resolved.

I. Basis of Payment. The Department will make partial payments according to 109.09 and as modified by the following schedule:

The Department will release 60 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after the Engineer has approved the CPM Baseline schedule submission.

The Department will release an additional 30 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after 50 percent of the original contract amount is complete.

The Department will release the remaining 10 percent of the lump sum amount bid for CPM Progress Schedule to the Contractor with the first regular estimate payable after 90 percent of the original contract amount is complete.

The Department will pay for the accepted quantities at the contract price as follows:

Item	Unit	Description
108E10000	Lump Sum	CPM Progress Schedule

PN 109 - 04/18/2008 - DISPUTE RESOLUTION AND ADMINISTRATIVE CLAIM PROCESS

The Department's Dispute Resolution and Administrative Claim Process is premised on the partnering approach to construction administration and must be adhered to by the Contractor in order to resolve disputes on the project and in order to seek additional compensation or contract time from the Department in the form of an Administrative Claim.

Disputes and Claims

Disputes include disagreements, matters in question, and differences of opinion between the Department's personnel and the Contractor. Claims are disputes that are not settled through Steps 1 and 2 of the Dispute Resolution and Administrative Claim Process and for which the Contractor has documented costs or time incurred as a result of such disputes.

Disputes and claims by subcontractors and suppliers may be pursued by the Contractor on behalf of subcontractors or suppliers. Disputes and claims of subcontractors and suppliers against the Contractor will not be reviewed by the Department. Disputes and claims by subcontractors and suppliers against the Department but not supported by the Contractor will not be reviewed by the Department.

Disputes and claims subject to review by the Department include:

1. Interpretation of specifications, standard drawings, plans, proposal, working drawings, change orders, and orders by Department personnel having authority over the project.