

## SECTION 2 – GENERAL INSTRUCTIONS

### 2.1 CONSTRUCTION INSTRUCTIONS *(Rev. 05-03-17)*

These instructions are intended to assist in the interpretation of the contract documents. These instructions do not supersede or amend the contract documents and hold no contractual obligation on the contractor. These instructions are intended as requirements for Department personnel under most circumstances encountered during a project. When the instructions do not accommodate a specific issue or are not followed in a particular instance, the reason for deviating from the instructions should be clearly documented so those who may review or audit the project records can understand the reason for the deviation.

Updating the GIFE is an ongoing process. Sometimes additional or revised instructions will be issued by means of Construction Memorandums. Such memoranda will become as binding on the project personnel as these instructions. A full listing of current Construction Memorandums is available on the Department's website.

These instructions are intended to cover the construction features of the work that have given the greatest trouble in the past, the preparation of forms, reports and records pertaining to the progress, description, and records of work performed.

All questions related to matters pertaining to construction proper, such as alignment, grade or structure changes, interpretations of the specifications, matters pertaining to materials and tests etc., should initially be addressed to the AE.

### 2.2 CONTRACT *(Rev. 07-15-14)*

A copy of the Contract Information Book, CIB, will be furnished to the PE/S. The CIB will include a proposal page and the Schedule of Pay Items for the contract. In addition, the CIB may also include plan sheets, Recurring Plan Details and Special Provisions. Additional information about permits, asbestos investigations, etc. may also be included. It is essential that the CIB be reviewed so that the correct specifications will be used. The PE/S should also be familiar with the hierarchy of contract documents as shown in section 105.04.

The contract may be adjusted as necessary and as approved by the use of a change order.

A set of plans must be marked in red as construction progresses to show all changes that have been made during construction. These plans are to be labeled "As Built" and are to be submitted to the DO with the FCR.

In general, "As Built" plans are to be produced by the PE/S unless a SP requires the contractor to prepare the plans. If this is the case, final payment of the contract will not be made until the "As Built" plans have been submitted to the PE/S.

### 2.3 INITIAL DUTIES OF THE DISTRICT *(Rev. 05-25-18)*

The DO will notify all utilities, governmental units, railroads, and any other organization utilizing the right-of-way, of the planned construction and invite them to the pre-

construction conference.

When the contract is let, the DCD will write a letter to the County Surveyor of the county or counties in which the contract is located. The letter will ask the county official to advise the DO, by letter, of the locations of any established corners and legal drains that fall within the limits of the project. The letter to the County Surveyor will be sent by certified mail with return receipt requested. Transmitted with the letter should be a strip map showing the locations of the project (similar to the detail on the title sheet of the plans). This letter should quote the following from IC 8-23-9-24:

“If in the construction or maintenance of a state highway it is necessary to remove or bury a monument marking or evidencing an established corner, the department shall cause to be set in the pavement or right-of-way at the place where the monument was located a monument capable of activating a metal detection device. The top of the monument must be level with the pavement or the grade of the right-of-way. The department shall cause a memorandum of the monument to be filed in the county surveyor’s office of the county.”

The law requires the construction of a monument wherever it is necessary to remove or bury an established corner. An established corner has been interpreted to mean any land section, 1/2 section corner, etc., or any property corner, provided such corner has been officially established by a person authorized by law. In general, only a County Surveyor or a professional land surveyor has authority to officially establish corners.

A pre-construction conference must be set-up with the contractor for a date prior to the beginning of the first work. The time and place for the meeting should be sent to all parties, on whose part action will be required in the construction of the work. This should be far enough in advance for them to arrange their representation. The following entities should be notified of the pre-construction conference.

1. Contractor
2. District Construction Office staff
3. District and Central Office Production
4. Consultant Designer (if applicable)
5. Project Manager
6. Division of Construction Management
7. CO and District Utility Section
8. All involved utilities
9. CO and District Environmental Services
10. Permit Agencies (e.g. IDEM, USACE, IDNR when applicable)
11. District Office of Materials and Tests
12. District Public Information
13. District Maintenance.
14. District Safety

For some of the above, the notice will be largely informational, permitting them to select the pre-construction conferences at which they wish to be represented. The following must

also be notified when they have involvement in the project:

Local officials should also be invited to INDOT pre-construction conferences if work will have an impact on their community.

1. FHWA (if not exempt from FHWA oversight)
2. County officials
3. Municipal officials
4. Design Consultant
5. District Local Programs Coordinator
6. District Environmental Scientist
7. Railroads
8. Affected industries.

On contracts where the pre-construction conference may be lengthy and the attendance large, the meeting should be scheduled such that matters of interest mainly to the State and contractor may be discussed after other representatives have addressed their concerns for the project and have been given the opportunity to leave the meeting.

At the pre-construction conference, lines of authority for all parties involved in the work should be clearly defined and determinations made as to notifications in emergencies. The contractor should be advised as to the authority of the PE/S on the job, compliance with specifications, and that its cooperation will be expected in these respects. The contractor must be prepared to submit the required project schedule at the meeting. An effort should be made at this time to coordinate the contractor's schedule with utility schedules, permit schedule restrictions and with the interests of others affected by the construction. All problems cannot be resolved or even anticipated at the pre-construction conference, but known problems should be recorded at this time so that work toward early solutions can begin.

On Federal aid projects, the contract EEO requirements should be discussed; calling attention to the required posters, equal opportunity employment practices, payroll requirements, including the three year preservation clause and that subcontractors and temporary plant operations are governed by the same regulations as the prime contractor. On State funded projects, the discussion of the MBE/WBE requirements for the project must take place.

Environmental concerns should also be discussed at the pre-construction conference. INDOT Environmental Services has developed a checklist for the use of the District and PE/S. The checklist is included for informational purposes and is located in 2.5.1. It is primarily the responsibility of the PE/S to ensure that the contractor has properly implemented and maintained the storm water management plan and other requirements of all environmental permits acquired. The PE/S should consider utilizing storm water specialists and environmental managers within the district or INDOT Environmental Services at Central Office for additional information on proper placement, implementation and, maintenance of storm water management features if questions arise. Reference should also be made to 3.1.

If there are any questions or difficulties in the identification of such features for specific projects, Construction Management should be contacted in advance of the pre-construction conference.

Minutes of the pre-conference must be kept and copies provided to all those in attendance within three business days. A copy must also be included as an attachment to SiteManager.

Section 2.4 provides a sample list of topics for the pre-construction conference that should be included on typical contracts. Items may be added and deleted as necessary to address the issues on any individual contract.

## **2.4 LIST OF AGENDA ITEMS FOR PRE-CONSTRUCTION CONFERENCES**

*(Rev. 02-12-18, edited 05-29-18)*

A link to a complete check list of agenda items can be found in [section 90](#) of these instructions or at: [www.in.gov/dot/div/contracts/standards/GIFE/PCCA.pdf](http://www.in.gov/dot/div/contracts/standards/GIFE/PCCA.pdf)

### **2.4.1 General**

1. Introduction period.
2. Attendance roster (names and representation).
3. Authority of state and contractor representatives and chain of command. All parties (including key subcontractors) must disclose levels of authority within their organization both in terms of decision-making authority and monetary authority. Discuss where to go for information as well as for decisions. Also, discuss whether the contractor's superintendent will be a hands-on working superintendent who is part of a field crew or primarily a manager. Review specification requirements for a superintendent.
4. Authority of contractor's personnel signing vouchers and estimates, and contract responsibility for construction operations (Form IC 113 – Signature Affidavit).
5. Establish time frames for making decisions and problem resolution. Identify any areas where prompt decisions are critical to keeping the job on schedule.
6. Both the Department and the contractor should share information about (1) personnel who are in new positions of authority or new to their organization; (2) use of trainees; and (3) use of inexperienced subcontractors.
7. Periodic progress meetings. Determine how often progress meetings should be held, who should participate, who will conduct the meeting, and who will keep minutes. Develop checklist of agenda items that should be covered at each meeting.

8. Discuss special provisions, plans, specifications, and public relations in general.

Review recent specification changes that are applicable to the contract. Discuss unique SP to make sure the intent is clear. Examine any new procedures, methods, or materials that are required by the contract to make sure there is complete understanding of how the procedure is to be performed or the material used.

9. Discuss sampling and testing materials in general; emphasize joint responsibility of state and contractor for timing of delivery and sampling, and that material must be approved prior to use.
10. Discuss contractor's plan, equipment, construction schedule and review time allowed for completion of contract.
11. Construction Engineering. Discuss what work will be performed by the construction-engineering subcontractor, any layout that will be handled by the prime contractor or other subcontractors. Discuss any additional layout that is needed and coordinate on how it will be handled. Discuss whether GPS will be used for construction engineering and how required staking for checking the work will be handled.
12. Contractor's operations with respect to utility installations and utilities plans for cooperation.
13. Traffic control, signs, barricades and information signs need to be discussed.
14. Prime contractor's responsibilities pertaining to subcontractors.
15. No work to be performed prior to award.
16. Railroad agreements and work to be performed by railroad forces. Coordinate with contractor's schedule and vice versa.
17. Storm Water Management, and appropriate features and sequencing. Include identification of the contractor's Storm Water Quality Manager, and a review of the contractor's Storm Water Quality Control Plan (SWQCP) which should include inspection and maintenance of storm water devices, sequencing of E&SC measures, staging of the work, contract commitments, etc. (For more additional detailed information please see 2.5.1, and 3.1).
18. Discussion of all environmental permit requirements including 327 IAC 15-5, U.S. Army Corps of Engineers, IDEM, US Fish and Wildlife and any others. Discuss methods of performing work within or adjacent to regulated resources and within or adjacent to the INDOT project construction limits

while maintaining compliance with the environmental permits. Discuss periods when certain work is not allowed, such as work in a stream, tree clearing, and threatened and endangered species restrictions. All waiver requests such as fish spawning or Indiana Bat tree clearing will need to be requested by the contractor through INDOT Environmental Services. Any revisions the contractor needs to make to the SWQCP will need to be submitted through INDOT ES as well. (For more additional detailed information please see 2.5.1 and 3.1.3).

19. Plan design features involving hydraulics, hazardous materials, and vegetation plantings and establishment timelines.
20. If contract involves demolition work, remind contractor that it cannot enter a parcel without written "Notice to Proceed with Demolition Work," as specified in section 108.03 of the Standard Specifications.
21. Change order, time extension, and progress payment procedures. Make sure all parties understand the change order approval process.
22. Discuss expected quality of the final product.

In addition to the list above, the following items may apply to specific types of contracts.

#### **2.4.2 Bridge Contracts**

1. Bridge Inspection Requirements.
2. Right of way fences.
3. Cofferdams.
4. Railroad force account work.
5. Falsework.
6. Piling and pile driving equipment.
7. Field books (for all field notes).
8. Field book (for cross sections).
9. AWS welding specifications.

#### **2.4.3 Federal Aid Contracts**

1. Discuss how payrolls will be submitted. Discuss numbering of payroll reports and that no report is required for any week that a contractor is not active on the site.
2. Civil Rights Commission Reports.
3. Informational signs.
4. Display board (payrolls, equal rights, environmental permits).
5. FHWA prior approval of Change Orders before performing work.
6. Cooperation with FHWA field engineers and review teams.

**2.5 INITIAL DUTIES OF PE/S** (Rev. 05-25-18)

Listed below are some of the first duties of a PE/S upon being assigned to a project.

- (a) Before entering upon any property, check to see if the right-of-way has been secured and INDOT has a right of entry. The special provisions of the contract should state this information. If right-of-way has not been secured for any parcel, instruct the contractor and assigned project personnel not to enter the parcel.
- (b) Determine from the plans whether or not a detour will be required during the construction of the project. If it is required, check the plans against the standards to ensure that all required route markers, signs, and barricades will be correct and in place before the traffic is detoured.
- (c) If construction engineering is not a part of the contract, run the centerline and set the grade stakes, as specified under Section 3, Grading, of these instructions, as soon as possible after assignment to the project. This is desirable in order to permit the property owners, utilities, etc., as long a time as possible to move their fences, buildings, pole lines, etc. If the contract has not been awarded, stakes can be secured from the DO, a count being kept of the number of each size obtained so that the contractor can “repay” with like number and kind during the life of the contract, as the contractor is required to furnish all necessary stakes.
- (d) Approximately ten days before the monuments are to be set, the County Surveyor is to be contacted by the PE/S and given the opportunity to be present during placement or to check the monument shortly thereafter. The PE/S should document on the daily report details in regards to monuments and with respect to contacts made with the County Surveyor.

The preservation of corners is vital. Failure to take care of this feature of the work is unacceptable.

- (e) Start early to locate all farm drain tiles as this is a slow process and requires perseverance. Contact all property owners and enlist their help in locating farm drain tile on their property.
- (f) Check through the AE to see if there are any utility or railroad agreements pertaining to the project. Keep in close contact with the utilities and railroads so they can be advised at all times of construction progress and plans, and stay ahead of the contractor’s work with their work.
- (g) Note any mailboxes that will need to be replaced either permanently or temporarily due to the project.
- (h) It is essential that the contractor provide a suitable office for the PE/S as soon as possible. The PE/S should review the proposed office location for



safety, security, parking and accessibility prior to approval. The office size should also be reviewed for compliance with contract provisions.

- (i) Other State and Federal agencies have areas of concern that fall within our project limits. This is particularly true where rivers, streams, wetlands, ponds, lakes, floodplains or other drainage features are concerned. By law, these agencies have extensive permit and approval powers over construction wherein hydraulics, the environment, or the ecology is concerned. When designers prepare plans for a contract they, in many cases, included features necessary to secure such permits or agreements. For this reason it is vital that construction of the contract be accomplished in accordance with the plans. To ensure that project personnel are aware of special environmental requirements, IDEM permits, U.S. Army Corps of Engineer permits, and Indiana Department of Natural Resources permits, copies of these documents are available on the Department's website. The PE/S should review all preliminary engineering reports and environmental documents prior to the pre-construction conference. The PE/S should also be familiar with and utilize INDOT's Storm Water Quality Field Guide, and IDEM's Storm Water Quality Manual. In the event the plans have not addressed any conditions of those special documents, or if field conditions appear to have not been properly addressed regarding environmental concerns, the PE/S should contact the AE for guidance on making any necessary changes. The District Storm Water Specialist, District Environmental Scientist, the Division of Construction Management, and the Environmental Services Section can also provide assistance. Changes to the contract work that may violate the environmental requirements are not permitted without submittal and review by INDOT Environmental Services and approval from the appropriate authorities.
- (j) **The contractor shall prepare a Materials Source List for the contract. It shall be submitted at the pre-construction conference.**
- (k) On all contracts involving Federal participation, Forms FHWA 206, FHWA 809 with attached minimum wage rates, EEO Discrimination Poster, and the contractor's EEO Policy are required to be placed and maintained on an all-weather bulletin board. All of the above forms, except the contractor's EEO Policy, will be stocked in the DO for project distribution. The Wage Scale Determination will be supplied in the contract. It is the PE/S's responsibility to see that the contractor is adequately supplied with the required forms and that copies of each plus the contractor's EEO policy are properly posted by the contractor in a conspicuous location on the project.
- (l) The PE/S shall prepare Form IC 662, Report of Crop Damage, when a crop is actually destroyed. This report should be prepared and submitted as soon as practical after a crop has been damaged and it should show sufficient dimensions to compute an exact acreage.



- (m) If an accident occurs on a project the PE/S will contact the police agency involved to obtain an accident report.
- (n) Accident reports need to be reviewed to determine if recurring problems require changes to the current traffic control. The accident reports should be scanned and included with the daily report for the date of the accident.
- (o) The contractor must identify and submit for approval the location of all borrow and waste disposal sites. The PE/S must review the submittal for compliance with the specifications. Form IC 203, Request for Acceptance of Borrow or Disposal Site, is available on the Department's website and must be completed by the contractor for each proposed site. The PE/S must review and sign the form if approved. Questions about borrow or disposal sites should be directed to the AE.

### **2.5.1 PE/S Environmental Services Permit(s) Checklist**

The checklist has been developed to help support project delivery and keep the project in compliance with environmental requirements.

#### Before PRE-CONSTRUCTION CONFERENCE

##### *PE/S initial permit review*

1. Locate project specific permits and commitments online.
2. Print permits and review conditions that must be followed during construction.
3. Note on the plans any identified waterways or areas of special concern and areas with commitments.
4. Note the name of permit applicant (INDOT or LPA for non-INDOT projects) and contact number or email.
5. Contact the permit applicant (INDOT or LPA) with any questions/concerns or proposed revisions to the permits.

#### During PRE-CONSTRUCTION CONFERENCE

##### *Discuss expectations for permit compliance including*

1. Review permits and commitments with the contractor and document any conflicts with the plans or the contract.
2. Compliance with all permit conditions is required during construction.
3. Offsite movement of sediment violates multiple waterway permit conditions.
4. Permitting procedures for offsite borrow and waste areas; because these are off the R/W, local requirements need to be followed by the contractor.

##### *Discuss issues related to permit modifications/waivers that may be needed including*

1. Communicate any modification/waiver needs to the permit applicant. All modification requests must be made through INDOT ES for INDOT contracts.  
Potential contractor permit modifications/waivers may include: temporary impacts (stream crossings, causeways, pump-arounds), waivers (fish

spawning, Indiana Bat tree clearing restrictions), additional temporary or permanent impacts inside or outside of the construction limits, IDEM Notice of Intent (NOI) amendment, etc.

2. Sequencing project construction phasing with the SWQCP.
3. Documentation and notification requirements of changes in the SWQCP.
4. Allowing time for processing by INDOT ES and regulatory agencies; may take several weeks or longer.

*Discuss utility companies' responsibilities for environmental compliance and permitting impacts related to their work.*

### During CONSTRUCTION

#### *Contractor's Initial operations (clearing/demolition)*

1. Post all permits on the bulletin board prior to the start of construction.
2. Install perimeter control measures prior to land disturbing activities.
3. Install any needed temporary storm water management measures for clearing/demolition.

#### *Non-permitted impacts*

1. Obtain knowledge of all permit conditions and the stream/wetland/pond/lake/floodplain/habitat impacts that are permitted.
2. Do not impact any natural resource not in the permits or exceed impacts to natural resources listed in permits without consultation with INDOT ES.
3. PE/S should spot check off-site borrow/disposal areas for permit compliance.
4. Comply with Indiana Bat tree clearing restrictions IF REQUIRED (no clearing April 1 - September 30).
5. Comply with fish spawning season restrictions IF REQUIRED (no in-stream work April 1 - June 30).
6. Direct questions/concerns during construction to permit applicant (INDOT or LPA).

#### *Storm Water Management*

1. Perimeter control measures should be in place prior to land-disturbing activities.
2. Focus should be on erosion control measures first (these measures are less expensive and more efficient); sediment control measures should be a secondary focus (these measures are expensive to install and are less efficient).
3. PE/S should spot check weekly/rain event inspections reports provided by contractor for accuracy.
4. Properly track slopes per 203.09 of INDOT Standard Specifications.
5. Ensure the storm water management measures used are correctly installed and maintained per INDOT Standard Specifications, and Standard Drawings.

6. Modify the SWQCP as needed to meet field conditions, and, if needed, consult District Storm Water Specialist or Central Office ES Storm Water team for assistance.
7. Review the contractor's schedule for completing earth disturbing activities and establishment of the required 70% permanent vegetation for reasonableness.

*Permit violation response (if necessary)*

1. Coordinate with permit applicant (INDOT or LPA).
2. PE/S and the contractor should prepare a formal response detailing corrective action for all violations (Rule 5, etc.).

*Mitigation site construction*

1. Construct the site as per project plans and communicate any recommended changes to the plans with the permit applicant (INDOT ES or LPA).
2. Direct questions and concerns during construction to INDOT ES for resolution.
3. Contact INDOT ES for plant material concerns or issues.

**PREFINAL**

*Inform District Storm Water Specialist and INDOT ES of Prefinal for discussion of*

1. Construction of the contract according to the plans including all compensatory mitigation or restoration areas.
2. Notice of Termination (NOT) requirements.
3. When site inspection reports should end.
4. Final plant material inspection and acceptance.
5. 70% uniform, permanent vegetation density requirement.
6. Removal of temporary storm water management measures and area stabilization.

**RESOURCES:**

**IDEM Emergency Response**

Phone: (317) 233-7745

Toll Free: (888) 233-7745

[http://www.in.gov/idem/files/er\\_quickref.pdf](http://www.in.gov/idem/files/er_quickref.pdf)

**Indiana Storm Water Quality Manual**

<http://www.in.gov/idem/stormwater/2363.htm>

Chapter 7: Storm Water Quality Measures: Construction and Land-Disturbing Activities.

*Description:* IDEM publication that provides the purpose, specifications, installation guidelines, and maintenance guidelines for storm water management. This chapter also includes information on stabilized construction entrances, secure concrete washouts, and stream crossings.

**USGS Topographic Maps**

[\(http://viewer.nationalmap.gov/viewer/\)](http://viewer.nationalmap.gov/viewer/)

*Description:* USGS maps can be used when evaluating an area for potential streams (solid or dashed blue-lines).

**INDOT Links**

INDOT Request for Acceptance of Borrow or Disposal Site (IC 203).

<http://www.in.gov/indot/2735.htm>

*Description:* The contractor is required to complete this form for any off-site borrow or disposal site. It includes what permits, if any, have been obtained by the contractor and whether or not the site has been cleared of wetlands and archaeological resources.

INDOT, Environmental Services (ES)  
Ecology and Waterway Permitting Office

<http://www.in.gov/indot/2522.htm>

*Description:* The tasks assigned to this section are summarized on this webpage as well as links to Ecology & Waterway Permitting Staff and Permitting Guidance.

**2.6 CONSTRUCTION PROGRESS** (Rev. 09-08-09)

It is the intent to allow a reasonable length of time for completion of all contracts. The Department has a good record for completing contracts within the contract period. As an incentive for reasonable progress on our contracts, the salaries and other expenses of the engineering forces are assumed by the State during the allotted time of construction. If the contractor overruns the completion date, it is charged a flat rate per day as liquidated damages, not as a penalty, as explained in section 108.09 of the Standard Specifications.

The contractor must furnish an acceptable project schedule in accordance with the specifications. The schedule should be discussed at each progress meeting and updated by the contractor as necessary. It is important that the PE/S review the schedule to ensure that it accurately reflects the activities required and the order in which they will be accomplished.

**2.7 SUBCONTRACTS & RENTAL/LEASE AGREEMENTS** (Rev. 05-25-18)**2.7.1 Subcontracts**

A prime contractor may subcontract the work in accordance with current Federal Regulations and SS. Section 108.01 of the SS states that “The contract, contracts, or portions thereof; or the right, title, or interest therein shall not be sublet, sold, transferred, assigned, or otherwise disposed of without written consent.” Approved subcontractors will not be permitted to further subcontract their work.

All subcontract requests must be sent to the DO for approval. To obtain approval of a proposed subcontractor, the contractor must make a request on Form IC-730 (State Form 4351) “Request for Approval of Subcontractor” by submitting an original of the form to the DO. An electronic version of the IC-730 is available on the Department’s website along with instructions for completion of the form.

There must be a written subcontract agreement between the prime contractor and the subcontractor. A copy of the subcontract agreement must be on file in the offices of the prime contractor and the subcontractor. On Federal-Aid contracts, a set of the applicable Federal Wage Stipulations, Notice of Requirement for Affirmative Action, EEO Special Provisions, Form FHWA-1273 (Federal Contract Provisions) and all applicable contract SP pertaining to the subcontractor's operation must be physically attached to and become a part of the agreement. On state-funded contracts, the State Wage Provisions and the applicable contract SP must be part of the agreement. These documents must be made available for review by appropriate INDOT or FHWA personnel upon request.

Subcontracting and the timely submission of requests must be a subject for the pre-construction conference.

### **2.7.2 Field Control of Subcontractors**

A subcontractor should not be allowed to start work on the project until approved by the DO. The PE/S may get verbal approval of the IC-730 from the DO and allow a subcontractor to work prior to the IC-730 approval.

The DO and project personnel are responsible for monitoring the EEO requirements for DBE, MBE and WBE programs. Since the achievement of specific DBE participation on Federal-aid contracts is mandated by Federal Regulation, it is necessary that all persons, at whatever level, become very familiar with these instructions.

Emphasis on the utilization of subcontractors requires that special care be taken by the DO and project personnel to insure that the DBE's are being utilized and are performing as set out in the contractor's proposal. The specific sheets in the proposal are identified as "DBE Affirmative Action Certification." On all Federal-Aid contracts, the prime contractor is required to list in its proposal those DBE's it intends to use to satisfy the DBE Goal stated in the SP of the contract.

The fact that the contractor lists specific DBE's in the proposal obligates it to use the DBE's to the extent the listed items are performed under the contract. **NO CHANGES OR ADJUSTMENTS TO DBE ITEMS ARE PERMITTED UNLESS APPROVED BY THE DO.** At the end of the job, the contractor will be required to certify actual utilization of the DBE's listed in the proposal. If it cannot certify full utilization of DBE's for the items listed, it must provide a satisfactory explanation why its commitment was not reached.

With this in mind, the topic of subcontractors, particularly DBE contractors, must be made an important part of the pre-construction conference. A discussion with the contractor and subcontractor, if possible, must be in sufficient detail so the DO and project personnel know what the DBE will be doing. If the DBE is to do the entire contract item, then the DBE is required to do exactly that with no actual work on the item by the prime contractor or others. If on the other hand, the DBE is going to do only a portion of a contract item, then a detailed discussion must be conducted to explain exactly what portion of the item will be performed by the DBE.

Any deviation from performing the "entire" contract item must be explained on the

“Request for Approval of Subcontractor,” Form IC-730. The explanation may be attached to the IC-730 if necessary. In either case, whether the DBE is doing the entire item or only a portion, no work of any nature on the specific item may be done by anyone, including the prime contractor, prior to subcontract approval by the DO. Since the PE/S will be at the job site to observe the contractor and its approved subcontractors, it is absolutely necessary that he or she knows who is doing what on the contract. If any item is not being performed as set out in the proposal, all work on that item must be stopped, unless there is immediate danger to life or the traveling public, until a proper approval or explanation is received.

All subcontracts must be approved by the DO before the subcontractor can be permitted to start work. Although some verbal approvals may be given for DBE subcontractors, the contractor should be encouraged to submit sublet requests early, especially if the DBE is doing “portions” of an item which will require additional explanation. The PE/S shall not permit any other person, whether it’s the contractor’s people or another subcontractor, to perform an item which has been designated in the proposal for a DBE.

If for any reason the prime contractor finds that a DBE subcontractor will not, or cannot, perform as set out in the proposal, the prime contractor must notify INDOT. Since all subcontracts must be approved by the DO, the contractor cannot arbitrarily delete items from the DBE or switch items to another subcontractor, DBE or not, without first obtaining approval. The approval to change or substitute subcontractors will be processed by the DO. All requests for changes from the original listing in the proposal must be in writing from the contractor.

The contractor shall be responsible for electronically submitting certified payrolls for its employees and any subcontractors to the PE/S on a weekly basis. The filing shall be in a format acceptable to the Department. Failure of the contractor to submit a payroll in a timely manner for its employees or any subcontractors may result in the withholding of progress estimates until the certified payroll is properly submitted.

On all Federal Aid contracts, EEO Attachment CM 32-34 signed by the proposed subcontractor must be submitted with the request to sublet.

The successful prime contractor is required to provide the Director of the Office of Federal Contract Compliance Program (OFCCP) notification in writing, with a copy to the Department, of each subcontract they award in excess of \$10,000.00. This notification shall include the name, address, telephone number, and employer identification number of the subcontractor. It shall also contain contract number, type or nature of work to be subcontracted, the subcontract dollar amount, the geographical area in which the work is to be performed, and the estimated starting and completion dates.

The notice shall be forwarded to the Assistant Regional Administrator, Office of Federal Contract Compliance Programs, U.S. Department of Labor, 429 N Pennsylvania Street, Indianapolis, Indiana 46204, within ten (10) working days of the award of each subcontract by the prime. The contractor, in its letter to OFCCP, may wish to indicate that it has awarded the subcontract subject to the approval of INDOT. The contractor shall submit a copy of the notification with the IC-730, “Request for Approval of Subcontractor,” in

addition to the required Attachment CM 32-34. The Department will not give approval of the IC-730 unless accompanied by the OFCCP notification. No work shall be performed by the proposed subcontractor until the DO has given approval.

The DO will hold the sublet request until the Notice to Proceed is issued.

The DO is to emphasize to the contractor at the pre-construction conference that all sublet requests should be submitted as soon as possible. Also, the contractors are to be reminded that all requests are to be submitted through the DO. Any request received in the CO directly from the contractor will be sent to the DO for approval. All subcontract requests shall be accompanied by a Certification of Unearned Work completed by the subcontractor. To comply, the proposed subcontractor must complete the Certification at the bottom of the back side of the IC-730 Form or the subcontractor may complete a Certification and submit it separately from the IC-730.

When the dollar value of the subcontract request exceeds \$100,000.00 or the unearned work certificate exceeds \$300,000.00, the proposed subcontractor must be pre-qualified with INDOT. Pre-qualification is not required for “hauling” or for “construction engineering”. All subcontractors must be approved even though pre-qualification may not be required.

### **2.7.3 Rental /Lease Agreements**

The purpose of a Rental/Lease Agreement is to allow the contractor to rent or lease a piece of equipment.

All work not performed by an approved subcontractor must be performed by personnel hired by the prime contractor and the certified payroll must reflect that the persons have been paid directly. The contractor or subcontractor is permitted to rent or lease equipment from other contracting firms or rental agencies as long as there is a bona fide rental/lease agreement. The agreement cannot contain any provisions that might cause it to be construed as a subcontract agreement. Such an agreement would be in violation of the contract.

The difference between a subcontract and a rental/lease agreement is that a subcontract will stipulate items of work by unit of measure such as: EACH, TON, CYS, LFT, etc., along with specific quantities and unit prices. A standard rental/lease agreement will stipulate the basis for payment as an hourly, weekly, or monthly rate for the rental of equipment or trucks (with or without operators). If the operator is provided by the prime or subcontractor, the operator must be paid directly by the prime or subcontractor. If the operator is furnished with the equipment, the operator must be paid by the lessor.

The rental/lease agreements could cover such items as traffic control devices, trucks, equipment (with or without operators), etc., and the agreement must be signed by the parties involved and shall contain a statement that this is the only agreement that exists between the parties.

The PE/S will need to secure copies of the rental/lease agreements from the contractor or



subcontractor when a DBE firm is involved (either as a first tier lessee or a lower tier lessee). Times when a rental/lease will be secured would be when a lease is made with a DBE firm either as the lessee or the lessor; a hauling lease with a DBE firm; a situation where a DBE hauling lessor subleases a portion of their hauling to another DBE firm etc. Rental/lease agreements will also need to be secured by the PE/S if a DBE firm leases to a non-DBE firm. Again, any time a DBE is a part of a rental/lease agreement on a project, an agreement must be secured.

If the PE/S suspects a problem on the project because of a rental/lease agreement with any contractor, subcontractor, lessee or lessor, including non-DBE's, the PE/S has the right to request and receive the agreement for review. The PE/S should make the request through the Prime Contractor.

Payrolls will also need to be secured from the Prime Contractor by the PE/S for workers involved with rental/lease agreements when the work is covered by the Davis Bacon Act so that it can be determined that the wage rates meet the predetermined wage rates set out in the contract.

Upon receipt of an agreement, the PE/S is to review same to determine if it is a standard rental/lease agreement and if it is, retain the agreement in the project file. If the agreement contains any provisions that seem beyond the scope of a standard rental/lease agreement, such as labor, then it is to be forwarded to the DO for review and interpretation. When the PE/S becomes aware of an obvious violation, the contractor is to be instructed to stop the operation involved until the violation is corrected.

All contracts contain a Special Provision that requires the contractor to provide the Engineer copies of any lease agreements between DBE trucking subcontractors and any DBE or non-DBE trucking firms or owner/operators that will be used to supplement the DBE trucking subcontractor's trucks for the purpose of meeting the DBE goal. Copies of these lease agreements shall be provided by the time of use of any supplemental trucks on the contract.

Questions that the PE/S may have on the issue of rental/lease agreements or payrolls related to rental/lease agreements should be addressed to the district's EEO Officer. The following chart is being provided for added guidance.

<b>Documents Required Yes/No</b>
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<u>Lease Agreements Between</u>	<u>Lease Agreement</u>	<u>Certified Payrolls Davis-Bacon Act Work</u>	<u>Certified Payrolls Non-Davis-Bacon Act Work</u>
Prime and DBE Lessor	Yes	Yes	No
Prime and Non-DBE Lessor	No	Yes	No
DBE Subcontractor and DBE Lessor	Yes	Yes	No
DBE Subcontractor and Non-DBE Lessor	Yes	Yes	No
Non-DBE Subcontractor and DBE Lessor	Yes	Yes	No
Non-DBE Subcontractor and Non-DBE Lessor	No	Yes	No
DBE Lessor (1) and DBE Lessor (2)	Yes	Yes	No
DBE Lessor (1) and Non-DBE Lessor (2)	Yes	Yes	No
Non-DBE Lessor (1) and DBE Lessor (2)	Yes	Yes	No
Non-DBE Lessor (1) and Non-DBE Lessor (2)	No	Yes	No
Hauling Lease DBE	Yes	Yes	No
Hauling Lease Non-DBE	No	Yes	No

**2.8 MAINTENANCE OF TRAFFIC DEVICES** (Rev. 05-25-18)

The proper and consistent arrangement of all maintenance of traffic devices is very important at all times. Therefore, their arrangement should definitely convey to the traveling public good information for the safe and orderly movement of traffic through the construction project at all times. Poorly constructed, located, or maintained devices are a poor advertisement for the improvement and do not promote good public relations.

The SS and SP indicate under what conditions the various types of devices are to be used. The contract plans indicate the various types of devices that are applicable to the contract

and the planned location of the devices. However, the contractor is responsible for the field layout, placement, operation, and removal of temporary traffic control devices. The contractor's Certified Worksite Traffic Supervisor (CWTS) certified by the American Traffic Safety Service Association (ATSSA), or approved equal certifying organization, must direct all field layout, placement, operation, maintenance, and removal of temporary traffic control devices. The CWTS should attend the pre-construction conference to discuss maintenance of traffic issues. The field layout will be reviewed by the Engineer prior to placement of temporary traffic control devices. A copy of the CWTS certification shall be provided to the Engineer prior to the start of the installation of temporary traffic control devices or if the CWTS changes. For contracts where no plans are furnished, the SS and SP should clearly indicate the requirements for the location of traffic control devices. The procedure prior to start of the work should be the same as previously outlined for contracts where plans are furnished. It is recommended the PE/S jointly inspect the first traffic control devices and setup with the CWTS and document the traffic control features. This documentation should list the type of device, location, date erected, date removed or relocated, contract item number, and other information pertinent to traffic control. A sketch showing the traffic control set up may be necessary to thoroughly explain the traffic control plan used.

Under Section 801.03 of the SS, the CWTS is responsible for completing a traffic control device report whenever devices are installed, removed, relocated, or repaired, or a minimum of once per week. The CWTS is responsible for the completeness and accuracy of the traffic control device report form, but the PE/S should verify that the contractor is making a good faith effort to inspect at least on a weekly basis and in submitting these forms. If the inspections are not being done or the forms are not being submitted damages may be assessed in accordance with 105.14.

Judgment is to be exercised in the placement of advance warning signs to ensure adequate sight distance. Some variation in sign intervals may be required to obtain a safe sight distance. See the current Standards and MUTCD for placement of signs. The intent of requiring a CWTS is to ensure the contractor takes responsibility for proper installation and maintenance of traffic control devices.

Advance warning signs should be clearly visible or completely covered, as conditions require. These signs should be moved when the point of interference with traffic changes.

Warning signs need to be located where they are most effective. It is recognized there will be unique conditions that require special consideration: 1) whether the location is paved or conducive to the use of posts, 2) height of mounting, and 3) lateral distance from the pavement. In general, the mounting height of signs and size of posts should be as shown on the Standards for signs and detours.

Sections 105.13, 105.14, 107.12, and 801.03 of the SS call specific attention to the fact that all signs, barricades, and other protective devices must be maintained in satisfactory condition at all times. Poorly maintained devices or devices that are not readily visible to the traveling public are often ignored or can create a safety risk to both the motorist and the worker. The proper and correct construction, erection, painting, lighting, and

maintenance of all barrels, barricades, sign standards, and any other signs is the sole responsibility of the contractor. It is a responsibility and duty of the PE/S to make random inspections to assure contract requirements are being followed. Furthermore, the PE/S should conduct a nighttime inspection of traffic control devices the first night they are installed. This is especially true at the start of a phase when a lane is being restricted or a road closed. Traffic control devices that seem to be acceptable during daylight hours are often found to have deficiencies at night. The contractor should be contacted in a timely manner so these deficiencies can be corrected prior to the following night. The PE/S should use the ATSSA brochure “Quality Standards for Work Zone Traffic Control Devices” as an inspection tool.

A temporary traffic control device will be deemed to be in non-compliance when considered unacceptable. A type of temporary traffic control device will be deemed to be in non-compliance when 25 percent or more of the individual devices are considered Marginal. Damages may be assessed in accordance with 105.14 for non-compliance.

The contractor will be immediately notified of any defects and advised of the corrective measures to be taken at once. Any deficiencies noted are to be entered on the Daily Report. The time and date the contractor was notified, and when corrective measures were taken should also be entered on this report.

Temporary Worksite Speed Limit Sign Assemblies are used in areas where the contractor’s work causes a potential hazard, especially during lane closures. Enforceable reduced speed limits at worksites can be established without the Official Action process required for other speed zones. The design, placement, location, operation, measurement, and payment of such sign assemblies must be in accordance with the Standards and Specifications. Worksite speed limits are in effect when the lights are flashing. Such speed limits should not be used for the entire contract unless there is work in progress for the entire length. These speed limits are to be in effect only where and while work is in progress and workers are present. They should not be set up at the beginning of the day if work in that area is not going to be performed. The maximum spacing is 2 mi (3.2 km). The CWTS is required to keep a daily record of the total number and location of signs displayed, using the roadway reference system, the area where each worksite speed limit is established, and the times they are established and discontinued.

On the signature sheet of the contract Invoice Voucher and Progress Estimate, a statement is included as to the condition of barricades, signs, detours, etc. If any of these items are not satisfactory, the estimate should be held at the project office until the unsatisfactory conditions have been corrected. A letter should be sent to the contractor setting out the reasons for holding up the Progress Estimate with a copy to the DO and CO.

## **2.9 MAINTENANCE OF TRAFFIC** (Rev. 05-03-17)

The SP for all contracts normally indicate whether the contract is to be closed to traffic, or whether traffic is to be maintained at all times. In some instances, the contractor will be required to construct certain portions while maintaining traffic and other portions while closed to traffic. Upon assignment to the contract and receipt of the contract proposal, the PE/S should discuss thoroughly the requirements regarding traffic with the AE and the

contractor, or an authorized representative. This conference should be well in advance of the start of any construction operations in order for the contractor to have ample time to make all necessary arrangements to erect the required barricades and standards.

When traffic signals are involved, before starting work, the contractor must provide the names of the Level II Traffic Signal Construction Technicians, the Level II Traffic Signal Field Technicians and Work Zone Traffic Safety Specialists, who have been assigned to perform the signal related work, and a photocopy of each person's certification card granted by the International Municipal Signal Association (or an approved equivalent).

When portable signals are used, a technician, certified by the manufacturer, shall be available 24 hours a day to respond within 2 hours for the maintenance of the traffic signal equipment. A copy of the certification shall be provided to the PE/S prior to the placement of the portable signals.

The PE/S should conduct random checks to determine that traffic is moving efficiently and smoothly. There should be a clear understanding with the contractor that its vehicles will strictly observe the movement of one way traffic and not be permitted to drive around a line of waiting cars and potentially into the path of oncoming traffic.

It is the intent of the Department to minimize interference with traffic from construction and maintenance operations during major holidays. In order to comply with the intent of this policy, the DDCM may order, in writing, the suspension of work on individual contracts for specific periods of time.

#### **2.10 MAINTENANCE OF TRAFFIC DURING WINTER MONTHS** *(Rev. 09-08-09)*

Section 104.04(b) of the SS states that unless otherwise expressly provided in the contract, existing state roads and other public roads and streets within the limits of the contract shall be kept open to two-way traffic between the dates of December 1 and April 1. The specifications further state that private drive and mail box approaches which are disturbed by the contractor and on which the surfacing has not been completed, shall be maintained in a condition satisfactory to the Engineer during the time work is suspended.

The PE/S must be thoroughly familiar with requirements outlined in the specifications and SP as they pertain to maintenance of traffic. The contractor's attention should be called to those requirements, pointing out its responsibilities for the maintenance of traffic during winter months. This should be done sufficiently in advance of December 1st to insure adequate time for the proper completion of the surface and the necessary preparation for opening the contract to traffic on the specified date.

#### **2.11 DETOURS** *(Rev. 09-08-09)*

The PE/S should not allow demolition operations to begin on a road until the detour has been established and necessary warning lights, signs, and barricades have been properly placed by the contractor, according to the plans and specifications.

#### **2.12 CONSTRUCTION ENGINEERING BY CONTRACTOR** *(Rev. 05-25-18)*

These instructions are to be used on those contracts, which include the pay item of

Construction Engineering. Construction Engineering is to be accomplished in accordance with specifications covering this specific pay item.

The primary purpose of the item of Construction Engineering is to accomplish the layout and setting of vertical control elevations utilizing the contractor's personnel. The PE/S in charge of the contract will continue to be responsible for: decisions involving engineering judgment, measurement of pay quantities, inspection, serving as the point of contact for the public. The PE/S is responsible for checking the accuracy of the contractor's construction engineering as necessary. The degree of checking will vary from project to project. The construction engineering is to be checked and inspected for quality of workmanship in the same manner as any other item of the contract.

The PE/S must check the original cross sections by plotting the elevations taken by the contractor's crews every 500 ft for complete cross sections and every 100 ft on centerline. Structure locations should be checked after being staked by the contractor. It is good practice for the PE/S to check lead dimensions and bridge grade elevations on all bridge contracts.

As pay items are completed for drainage structures and bridge structures, the quantities should be documented in the project files either in a field book for pay quantities or on standard Department forms and should not be entered in the field book used for staking. An entirely separate field book should be used for measurement of pay quantities such as borrow pits, undercut, and peat excavation. At no time should this book be issued to or used by the contractor.

The staking by contractor personnel is to be performed in accordance with accepted surveying practices. Field notes shall be kept in hard covered bound field note books in a clear, orderly and neat manner consistent with standard engineering practices and in accordance with the Department's prescribed notebook procedure, including titles, number, and indexes. Such note books shall be furnished by the contractor and shall adequately document all survey information. The field books shall become the property of the Department upon completion of the work. The field books may be inspected by the State project personnel at any time and should be regularly checked for completeness including index, dates, party personnel, and closing of level circuits. Copies of field notes shall be furnished to the Engineer upon request during the contract time.

The contractor's work shall include re-establishing original survey points, survey centerlines, referencing necessary control points; running level circuits to check original bench marks and setting additional bench marks; setting stakes for right-of-way, culverts slopes, subbase, subsurface drains, subgrade, paving, bridge footings, piers, and abutments; and any other stakes required for control elevations such as footings, caps, bridge seats, and screed elevations. The contractor's personnel shall be used to locate all farm tile, supervised as necessary by the PE/S.

On road contracts the level circuit to check the plan benchmarks will be run the full length of the contract. On bridge contracts the circuit shall include four plan benchmarks, if available, two on each side of the structure.

After the grade stakes have been set for earthwork, the contractor shall take an elevation on the top of each stake and tie in such elevation to a permanent plan benchmark. At the same time, the contractor shall take a complete cross section at each 500 ft and centerline elevation every 100 ft. Using this information in conjunction with the plans, the contractor shall prepare a grade sheet on the standard forms furnished by the State including necessary information for special ditches.

In the staking of culverts, the contractor shall perform the necessary checking to establish the proper location and grade to best fit the conditions on the site. The PE/S will make a cursory inspection to verify the contractor's decision. Any revision of plan length or size of culverts is to be done by the PE/S and never by the contractor.

The bid price for the item of Construction Engineering is on a lump sum basis. The payment for this item on a Progress Estimate is to be made in proportion to the percent of the contract completed. This may be done by estimating the percent complete and should not require extensions of all pay items for the Progress Estimate being prepared.

It must be stressed that the Department's engineer will make all measurements and surveys that involve the determination of final pay quantities, including original and final cross sections for all earthwork.

The following points should be re-emphasized:

(a) The State personnel will make all measurements and surveys that involve the determination of final pay quantities.

(b) The PE/S is responsible for decisions involving engineering judgment.

The efficiency and satisfactory results from the use of construction engineering will depend largely upon a high degree of cooperation between the State and contractor personnel.

When the contractor elects to use GPS controls for construction engineering and machine controls, it must still provide adequate staking necessary for the PE/S to check the accuracy of the work. The use of GPS should be discussed during the pre-construction conference.

### **2.13 WAGE RATE PROVISIONS ON FEDERAL-AID CONTRACTS** *(Rev. 01-21-14)*

As a condition of Federal participation in highway projects, the Department and its representatives are responsible for the enforcement of the Federal labor standards as set out in the SP. In this respect it is the responsibility of the PE/S to make frequent examinations of the contractor's employment records, which by the terms of the contract are required to be made available at the site of the work during the progress thereof. Such examination shall establish (1) whether the wages being paid to laborers and mechanics are at rates not less than those predetermined by the Secretary of Labor as contained in the contract provisions; (2) whether the work being performed by any specific class of employee, including helpers and apprentices, conforms to the classifications set forth in said contract



provisions for the wage rate they are being paid; and (3) whether the classifications are correct and whether there is evidence of any disproportionate employment of laborers, helpers or apprentices as to indicate avoidance of the minimum wage rate provisions of the contract.

Systematic spot interviews are to be made by the PE/S and/or the DO EEO Officer with the employees of the contractor or subcontractor on the job to establish reasonable assurance that the minimum wage rate provisions are being fully complied with and that there is no misclassification of labor or disproportionate employment of laborers, helpers or apprentices. Employee interviews should be made early in the life of the contract and whenever changing operations bring in an influx of new employees. Most violations in the past have been occasioned by groups coming in from other areas where different wage rates prevail, and their supervisors not informing themselves as to the required scale. Employee interviews should be documented in the records. An easy way is to encircle the employee's name on the State copy of the payroll and note the interviewer name and the results of the interview, i.e., an OK if the employees' rate equals or exceeds the minimum. The responsibility for seeing that sufficient interviews are made to insure that minimum wage scales are being met, rests with the PE/S, but this does not preclude his delegating the duty to a responsible subordinate nor does it preclude such interviews being made by AE's, and they are encouraged to continue interviews where they have been so doing.

The Special Provision for Federal-Aid projects specify that the contractor will submit weekly a certified copy of its and all subcontractors payrolls to the PE/S. Form WH-348, Contractors Weekly Payroll Affidavit is a weekly statement with respect to the payment of wages which must accompany the weekly payroll. Detailed instructions of the contractor's responsibility in regard to payment of fringe benefits are given on the back of Form WH-348. All PE/S or others responsible for checking contractor's payrolls should use these instructions as guidelines when checking payrolls.

The drivers of bona fide independent trucking firms who make deliveries to the construction site for or on behalf of either the contractor or the materials supplier are not subject to the wage requirements provided the source or supplier is an established commercial supplier. A trucking firm does not need to have an established published tariff in order to be considered a "common carrier." The exception set out above is applicable only if the source is a recognized commercial source; and would not apply to temporary sources or production by the contractor or a subcontractor. In view of this interpretation it will be necessary to question the transportation feature when a contractor is purchasing material F.O.B. (Free on Board) supplier's plant or source to determine whether or not the truck drivers are subject to the minimum wage rates. Even though there has been a prior determination by that a source or supplier is considered commercial and the production not subject to the minimum wage rates it will still be necessary in each subsequent instance to determine the purchase arrangements, F.O.B. source or F.O.B. job site, to determine the status of the truck drivers. Anytime that material is purchased F.O.B. a commercial source, it will be necessary to differentiate whether the drivers are employees of the contractor or a bona fide independent trucking firm. An owner-operator or trucks rented by the contractor would not be considered an independent trucking firm. As a guideline, an independent trucking firm would be any company that normally contracts the hauling of

batches or like materials from the prime contractor, and thus assumes the responsibility to perform that particular operation.

#### **2.14 FIELD OFFICE** *(Rev. 05-03-17)*

The purpose for having a field office is to provide the State's personnel a place to work on office details of construction engineering, reports, and required records for the job. Meeting the general public at a field office may be limited, but this purpose should not be forgotten in its maintenance, furnishing, and location. The location of the field office will be approved by the PE/S. The field office and equipment must be complete with fire resistant file cabinets and all other utility and equipment requirements as noted in the latest SS (Section 628).

Due to the possibility of vandalism or loss by fire, for whatever reason, one of the first considerations in the location of the office should be safety from these hazards. Generally a populated area, lighted area, or patrolled area will be safer than one in which none of these conditions exist. For these reasons consideration must be given to locating the office in a village or town as compared to a more remote area along the highway. Convenience to a job and safety to the traveling public must be considered. The office and a logical parking space should be located so that neither is on public right of way and within 30 ft of the edge of pavement lanes open to traffic.

Cleanliness and orderliness should be kept in line with the purpose of conducting the business of the State. A clean and neat office is conducive to a business-like atmosphere; and creates a lasting impression in the mind of everyone having occasion to enter. Wall decorations, which would be considered in poor taste in any public building, reflect poor taste of a PE/S when found in a field office and are not permitted.

The equipment furnished in the field office is for State business only. If the field office is used to supervise more than one contract, terms shall be agreed upon prior to use for additional contracts.

Payment for the field office should be continuous from the start of the contract until the work is completed. This would include the months that the contract may be suspended over the months. The exception to this procedure is stated in Section 108 of the SS.

#### **2.15 PARTIAL PAYMENT FOR STOCKPILED MATERIALS** *(Rev. 01-21-14)*

Items listed in Section 111 of the SS or in the SP can be considered for partial payment for certain stockpiled materials.

The PE/S is to substantially verify the quantity of materials reported by the contractor, and document same in a field book (measurements and computations). This quantity of materials should be reported in the same units as shown in the Proposal, when practical; i.e., subbase in cubic yards, base seal in tons, and dowel bar assemblies in ft.

A Change Order will need to be processed to establish an item for each stockpiled material. Payment would be authorized up to the verified amount. The unit cost should not exceed the maximum amount listed in the contract provisions. The PE/S should note below the

write-in item, "Authority provided under Partial Payments Provision." Lump Sum items would be paid as a percentage of the contract item (see contract provisions).

Stockpiled materials must be kept separate from other production materials and be identified and marked for use only on the specific contract. When payment is authorized for stockpiled material, such material shall not be used for any other item except their intended item. The PE/S and/or the plant inspector shall make frequent inspections of the stockpile to assure the materials are not being used for other work unless authorized in writing by the DDCM. If stockpiled materials are used without prior authorization, progress payment amount will be deleted from the next Estimate.

### **2.16 EQUAL EMPLOYMENT OPPORTUNITY** *(Rev. 01-21-14)*

All Federal-Aid contracts contain some type of EEO requirements. These requirements differ from contract to contract; therefore, it is essential that the PE/S carefully examine the provisions of the contract and know which requirements are applicable. It is the PE/S's responsibility to maintain a complete and accurate file of all EEO documentation required for the contract.

The following is a list of various types of EEO documentation; some or all of which may be required on a specific contract:

1. Minutes of pre-construction conference and/or EEO conference if held separately.
2. Record of visits of the contractor's Equal Employment Opportunity Officer on the project to review Equal Employment Opportunity compliance posture.
3. Records of meetings of the contractor's supervisory personnel.
4. Copy of the contractor's and all active subcontractor's Equal Employment Opportunity Policy Statement with EEO officer appointment letters.
5. Copy of the Equal Employment Opportunity Bulletin Board form listing the required posters for the project.
6. Statement by the contractor that the notation "An Equal Opportunity Employer" will be used in all advertisement for employees.
7. A list prepared by the contractor of the area minority group organizations which it will contact as a potential source likely to yield minorities for referral to the project for employment, as the need for personnel arises and when it does not violate a bargaining agreement.
8. Records of payroll.
9. Records of complaints of discrimination and if so what actions taken.

10. Statement by the contractor indicating if pre-apprenticeship, and on-the-job training are being used on the project.
11. Statement by the contractor that it is reviewing at a minimum of every six months all employees for training and promotion on project.
12. Records indicating minority contractor and/or organizations contacted that might yield potential minority subcontractors in the prime contractors efforts to utilize minority subcontractors. This is not required if there are no subcontractors.
13. List of all unions, which furnish employees for the project.
14. Name of unions, which do not have EEO clauses in their agreements with the contractor or its representative.
15. Copies of letters to unions informing them of company Equal Employment Opportunity policies and the goals of the contractor to include minority and majority persons in the performance of his contract.
16. List of name, address, and telephone number of Equal Employment Opportunity Officer of prime contractor and all subcontractors (should know them if possible).
17. Statement by contractor indicating whether it is under Part I (signatory to Hometown Plan) or Part II (abiding by the affirmative actions and goals of minority manpower utilization) of the Hometown Plan Bid-Conditions (Applicable under Hometown Plan Provisions only).
18. Copies of "Optional Form 66" (Manpower Utilization Report) or all applicable contractors and if all minority utilization goals are not being met, a copy of the explanation as to why the contractor is not meeting the goals should be provided for each applicable craft. (Applicable under Hometown Plan Provisions only).
19. Federal-Aid Highway Construction Contractors Annual EEO Report Form PR-1391 (Required on all Federal-Aid contracts).

It is the responsibility of each prime contractor to insure subcontractor compliance with all the previous mentioned minimum documentation requirements for Equal Employment Opportunity.

Affirmative action by DO personnel in the specified contract requirements is essential in order to accomplish the goals of Equal Employment Opportunity.

It is believed that the outlined Equal Employment Opportunity documentation

requirements will meet current FHWA Equal Employment Opportunity Provision Requirements for Federal-Aid Highway contracts.

### **2.17 CONTRACT REQUIRED INSURANCE** *(Rev. 01-21-14)*

Prior to commencing work, the contractor must furnish evidence of insurance as required by the Special Provisions and Sections 103.04 SS. The Division of Contract Administration will administer the insurance filings and maintain the files. The DO shall be responsible for monitoring insurance expiration for contracts within their DO and notification to contractors. The PE/S will enforce Section 103.04 of the SS. When the contractor fails to submit the insurance documents in a reasonable time after the award of the contract, a Notice to Proceed may be issued accompanied with a letter advising the DO that no physical work at the job site is to be permitted until the contractor furnishes the required insurance documents. In this instance contract time (workdays or calendar days) shall be assessed, in accordance with the provisions of the contract, the same as would normally be assessed if the contractor could proceed. The DO will be advised by CO when the insurance documents have been filed and work may begin.

Approximately every 10-14 days, the DO will receive a computer listing of active contracts within their DO. The first part of the listing will show those contracts on which insurance will expire within a few weeks. The second part of the listing will show all active contracts, for information only.

The DO shall review the listing of contracts on which insurance expiration is near and determine whether renewal is necessary. For example, if the contract has been completed, or will be completed, prior to the expiration date, usually renewal is not necessary. NOTE: Contracts remain on the listing until the Final Acceptance Letter is issued.

If the DO determines that renewal of insurance is necessary, the DO shall send a letter of notification to the PE/S. The letter shall specifically state that the insurance documents must be sent directly to the Contract Management Supervisor in the Division of Contract Administration, and that if evidence of renewal is not received prior to the expiration date, work on the contract shall be suspended in accordance with Section 103.04 of the SS. Section 103.04 requires that no work shall be performed by the contractor without insurance except that necessary for traffic maintenance and the protection of life. It is the DO's responsibility to see that this specification is strictly enforced.

When Railroad Protective insurance expires, no work shall be performed by the contractor on, over, or under the railroad's property, or within fifty (50) feet of the railroad's tracks until this insurance is renewed. Work may continue on the contract in other areas provided all other insurance is in force.

As soon as the PE/S is made aware of the pending expiration, he or she should inform the contractor's project manager that all work will be suspended after the expiration date until notification of renewal is received. Contract time shall continue to be assessed in accordance with the contract. Suspension of work, notification of renewal and resumption of work shall be noted on the Daily Reports.

The DO may verify the status of any contract insurance via the DO computer terminal (DOT/CICS). The computer files will be updated daily and may be inquired upon by the DO. It shall be the DO's responsibility to use this capability to monitor contract insurance and inform the PE/S when the insurance filing or renewal has been made. No other notification will be sent to the DO of filings and renewals. The DO shall notify the PE/S verbally as soon as possible, and follow up with written notification. The written notification should state the date on which verbal notification was made.

If the contractor asserts that the insurance filing or renewal has been made, but the DO is unable to verify this fact through the computer terminal, the DO may contact the Contract Management Supervisor in the Division of Contract Administration for verification and assistance.

### **2.18 CONTRACT TIME ADJUSTMENTS AND TIME WAIVERS** *(Rev. 05-03-17)*

The primary difference between a contract time adjustment and a time waiver is that a contract time adjustment is associated with changes in the physical work performed on the contract and a time waiver is not. Physical work is work performed by the contractor, a subcontractor or a third party such as a utility or railroad. A contract time adjustment is typically used when necessary to revise the contract time up until substantial completion. A time waiver is typically used to eliminate liquidated damages for delays that are not the fault of the contractor after substantial completion.

The following guidance should be followed for all contract time adjustments and time waivers. This guidance is in addition to the requirements of the Department's policy for time extensions and is not intended to supersede any part of the policy.

#### **2.18.1 Contract Time Adjustments**

A contract time adjustment is used when it is necessary, as defined in the contract documents, to modify a contract's original completion date for specified contract work. Contract time adjustments also apply to all types of intermediate contract dates, such as intermediate completion dates, closure periods, mowing cycles, and any other date or time specified in the contract, either original or by change order. Intermediate contract dates are referenced as Milestones within SiteManager.

For an intermediate contract date, completion of the work means that the portion of work specified in the contract for that date or period has been completed and can be used for its intended purpose as defined in the contract. This is typically the date that the portion of work is opened to traffic or is otherwise placed into service for its intended purpose.

An intermediate contract date is to be documented within the Milestone module of SiteManager. The following Milestone information is recorded:

- Description of intermediate contract date
- Type of time charged
- Rate of time charged
- Bid time (if applicable)
- Time charged (if applicable)



- Time remaining (if applicable)
- Incentive/Disincentive rate amount (if applicable)
- Intermediate contract start date
- Original intermediate contract completion date
- Adjusted intermediate contract completion date
- Actual intermediate contract completion date.

The initial Milestone information is usually uploaded at the beginning of the contract. If not, the PE/S will need to create a new Milestone for the intermediate contract date and follow the prompts accordingly. To verify if intermediate contract dates are applicable to the contract, refer to the contract information book under “Contract Completion Information”. Milestones should be monitored and completed as the event occurs and not entered at the end of the contract. Consult the SiteManager User Reference Manual for further information and definitions.

For a contract completion date or time, completion is defined as the last day of work. However, when the work is substantially complete in accordance with 101.59 and the contractor and Department agree that the project is ready for pre-final inspection, additional time is given in accordance with 108.09 for punchlist work and removal of signs, which generally constitutes the last day of work. Time given for punchlist work and removal of signs should be addressed by a time waiver and not a contract time adjustment.

A contract time adjustment is to be documented on an approved change order and is to be made as soon as the adjustment is agreed to by the contractor and the Department. When a change order is generated to add new work or significantly change the quantities of existing work, the time associated with the work should be addressed in the same change order if possible.

In cases where the time associated with the change cannot be determined, an exception may be made to address the time on a future change order. One of the following statements must be included in the explanation portion of each change order:

- TA - A contract time adjustment is required for this change and has been addressed herein.
- TAP - A contract time adjustment is potentially required for this change, but cannot be quantified at this date. Any contract time adjustment required for this change will be addressed by change order at a future date.
- TAN - A contract time adjustment is not required for this change.

When a contract time adjustment is not made at the same time as the change order revising the work, the future change order that addresses the time must include a reference in the explanation to the original change order that revised the associated work.

### **2.18.2 Time Waivers** *(Rev. 11-05-15)*

Time Waivers are used to excuse liquidated damages between the All Contract Work Complete date and Final Acceptance date, and should be used in the following two instances. The first instance occurs between All Contract Work Complete and Last Day of



Work. In order to justify days that are to be waived, the PE/S is to document, in the diary section on the Last Day of Work, the types of operations that took place during this time period. The documentation should indicate how much of this time period is due to waiting on sod maintenance to expire or obtaining NOT. Because extra work that is added at the pre-final inspection falls within this time period, a change order to adjust contract time is not necessary. Additional time to complete extra work should be agreed to at the pre-final inspection and documented in the diary on the Last Day of Work. This work should not be included with the 5 days allotted to perform corrective or cleanup work for the final inspection per Standard Specification 108.09.

Unlike the first instance where the appropriate time waiver is automatically captured in the IC-632, in the second instance, which falls between Last Day of Work and Final Acceptance, a Time Waiver Change Order is required. This change order will be of the Type "Time Waiver". The amount of days granted by the time waiver will be entered on the Time Adjustment Tab. This Change Order will not affect any milestone or the Adjusted Contract Completion Date, but will excuse the desired number of liquidated damage days that would have been assessed between Last Day of Work and Final Acceptance.

One example of when to use a "Time Waiver" Change Order is as follows:

A contract may have conducted an HMA mix design review for HMA placed on that contract.

- The contractor had completed their work and punchlist on 9/30/14 and INDOT issued the IC-686 after the final inspection.
- The contractor removed their signs on 10/01/14 and this day has been entered into *SiteManager* as The Last Day of Work. INDOT was currently reviewing the HMA mix designs on this contract which was beyond the contractor's control or responsibility.
- The HMA mix design review was completed and with no issues on 4/15/15; INDOT has issued the final acceptance letter and this date was entered into *SiteManager* as Final Acceptance.

If the contractor had no responsibility with the HMA review, the Contractor will be excused of the liquidated damages after their Last Day of Work and the Final Acceptance. Therefore, a time waiver shall be created between 04/15/15 (Final Acceptance) and 10/01/14 (Last Day of Work). The difference in these 2 dates would be 196 days and should be entered on the Time Adjustment Tab (*SiteManager*) on the corresponding "Time Waiver" change order.

A "Time Waiver" change order would not be used for operations such as NOT or sod maintenance. NOT and sod maintenance must undergo final inspection before the contract can be accepted. On the day NOT or sod maintenance has been obtained on a contract where the signs have already been removed, an IC-686 will be issued and will be marked as the Last Day of Work. The IC-632 will already capture this waiver period according to section 108.09 of the Standard Specifications, the waiver period allowed for pre-final inspection, punchlist, final inspection and signs removal.

Questions about the use and documentation of contract time adjustments and time waivers should be addressed to the appropriate Division of Construction Management Field Engineer.

### **2.19 CHANGE ORDERS** *(Rev. 02-25-15)*

A Change Order is a written agreement executed by the Department and the Contractor that modifies an existing contract.

In order to allow the Department to manage Change Orders, each Change Order must accurately identify the reason for the contract modification for future reference.

#### **2.19.1 Contract Modifications**

A Change Order must be executed to document any of the following changes to a contract:

- Monetary Adjustment
- Time Adjustment
- Scope or Design Change.

Monetary adjustments may result in additional compensation for the contractor or a credit to the Department. They may result from changes in quantities associated with existing contract pay items or the addition of new pay items to the contract.

Time adjustments may result in either increased or reduced contract time to perform work associated with closure periods, intermediate completion dates, or the contract completion date. Once the time adjustment change order for an intermediate contract date is approved in SiteManager, the time adjustment will be conveyed to the appropriate Milestone.

One form of scope and design change is a Construction Change. Construction changes occur when issues are found after the letting which require that change in the scope or design. Construction changes typically include revised plan sheets or specifications related to revised design or a changed condition. Construction changes for contracts can be found on INDOT's website, where they are posted for viewing or download. These scope or design changes may result in monetary or time adjustments or both.

#### **2.19.2 Procedure for Documenting Non-Participation Pay Items**

Prior to executing change orders that add new pay items to the contract, the PE/S should check the list of non-participating work categories, provided below, to verify whether any of the pay items included in the change order require the "non-participating" designation. In situations where the "non-participating" designation is required, it is necessary to designate the affected pay items as "non-participating" and purchase orders utilizing 100% State or 100% LPA funds must be utilized to pay for these "non-participating" items.

"Non-participating" means that a pay item is not eligible for federal funding and "participating" means that an item is eligible for federal funding. Federal regulations prohibit the use of federal funds for payment of some pay items.

An item should only be checked as “non-participating” if it is an item that is being added to the contract that is one that FHWA would not normally agree to participate in the funding. To make a pay item “non-participating”, assure the check box inside the “Change Order Items” tab is selected, within the “Change Orders” window of SiteManager.

Below is a list of frequent federal non-participating categories:

- Work outside the highway right-of-way without permits, etc.
- Work outside the limits of the project (unless necessary to implement project; traffic control, etc.) Work performed outside the NEPA limits of the project may jeopardize federal funding for the project.
- Work not necessitated by the highway project (i.e. fence upgrades, utility upgrades, etc.).
- Adjustment of private facilities (signs, fences, lawn sprinklers, etc., unless covered as a part of a right-of-way agreement or permit).
- Storm and sanitary sewer work and other drainage or utility work that is not a result or purpose of the road or bridge work. Example: replacing sewer leads that were not in conflict with the construction activity proposed.
- Excessively expensive treatments that do not appear to be in the public interest. This could include expediting the project for a questionable purpose, or proposing the use of *very* extravagant roadway treatments or street side appurtenances.
- *Significant* hauling or transportation charges of salvaged items to INDOT’s or agency garages or storage sites for future use on non-federal projects. Hauling for less than 5 miles from the project site has been used by some state transportation department’s construction engineers as a reasonable distance to haul material.
- Non-conforming work such as substandard details, designs determined undesirable or discontinued because of poor performance. Example: A588 guardrail, salt susceptible roadside plantings, etc.
- Payment for items that are the responsibility of others. Such as relocation of utilities located within the right-of-way, relocation of public facilities outside their corporate limits, accident damage that is the responsibility of others (driver, owner, insurance company, etc.).
- Payment for work done by an unapproved subcontractor.
- Payment for betterments that are not currently part of the project. Example: payment for excess sizing of sanitary sewer adjustment for future development. The additional cost over replacement-in-kind should be borne by the owner of the facility being adjusted.

- Payment for work that should typically be considered maintenance work by the owner agency. Examples: graffiti removal, snow plowing, trash removal, moving roadsides, etc.
- Payment for rework (including incorporated materials, etc).
- Payment of work and materials not meeting specifications that are incorporated into the project.
- Contact claim awards if state transportation department is determined to be negligent. Example: utility and right-of-way claims.
- Administrative settlements not adequately supported and justified.
- Specifying use of proprietary items, (i.e. specific brand name or single manufacturer items such as *Eagle* controllers, *3M* sign sheeting, *Caterpillar* diesel, *Hewlett Packard* computer) unless:
  - Suitable number of other proprietary items or generic items is allowed.
  - INDOT certifies (via public information finding) proprietary item is essential for synchronization with existing highway facilities or that no equally suitable alternate exists.
  - Proprietary item is used for experimental purposes.
  - FHWA finds it is in the public interest to use a proprietary item.

The PE/S will need to work with District personnel to either add the required funds to an existing 100% State funded or 100% LPA funded purchase order as appropriate or to establish new 100% State funded or 100% LPA funded purchase orders to facilitate payment for the “non-participating” work.

An item on a change order is “non-participating” does not mean that the entire change order itself will be non-participating. If you have both “participating” and “non-participating” items on the same change order make sure that the amounts get split up when adding the funds to purchase orders.

Once the “non-participating” item is added to the contract an “\*” will be included with the item on the estimate. Please note that it is not necessary to designate the item as “non-participating” in the item name but it should be explained that the item is non-participating when the change order explanation is prepared in SiteManager.

### **2.19.3 Procedure for Documenting Non-Participation in Time Extensions**

When FHWA determines they will not participate in state-approved time extensions, the non-participation time period and costs will be documented through the use of the field office pay item and payroll records for construction inspection. During the timeframe for a standard contract from beginning of construction until the final construction record (FCR) is complete, the contract is kept open and the field office and administrative costs of the

inspection staff are compensated. This procedure will extract only the portion of the non-participating time out of the standard process.

**For example:**

A contract is to be completed on November 15. Time extensions totaling 45 days are granted to the contractor for reasons that the state has determined are outside of the contractor's control. Fifteen of the 45 days are granted from November 16 to November 30 and the remaining 30 days extend into the following construction season from April 1 to April 30. Therefore the contract completion date is extended to April 30. FHWA agrees to participate in only 30 days of the state-approved, 45-day extension. Therefore, 15 days of the state-approved time extension need to be paid for by a non-participating item and employee time charged to a state funded labor code.

**Suggestion:**

1. **Place non-participating time at the end of the state-approved time extension period.** For time period, April 16 - April 30 (the final 15 days of the time extension) the field office will be paid for by a non-participating item and employees will charge time to a state funded labor code so no federal reimbursement will be sought. Beginning May 1, the field office will be paid again through the original item and employees will revert to charging time to the federal project number. The non-participating time is clearly separated in this option. The pay items are on record and a note can be included in the project files and FCR showing the times charged to a separate time and labor code.
2. **Place non-participating time at the end of the contract.** If there are 15 non-participation days, then continue to charge for the field office using the participating item until the last month the field office is used, and then create a new non-participating item. Likewise, continue charging time to the federal project number and switch to the state labor code during the last month. This scenario could be more difficult to determine exactly when to switch the pay item and labor codes. This time period will be after construction is complete and during the time the staff is working on the final. This could be particularly difficult if the non-participating time period is large.

Essentially, we will not charge FHWA for the construction inspection costs for the non-participating timeframe by adding the field office as a non-participating item by change order and using this item for the time of the non-participating delay. The non-participating costs will be based on construction inspection costs alone and will not include, or be based upon, the value of the Liquidated Damages amount waived. This process will not be utilized when the time extension is for an intermediate completion date, as the inspection costs would still be incurred beyond that time regardless. Furthermore, if the contractor substantially completes the work prior to the adjusted non-participating time extension date, we would stop using the state-only code and the non-participating field office item at that date and go back to charging our time to the project, using the participating field office item until the completion of the final.

#### 2.19.4 Extent of Work Covered by Change Order

In order to facilitate management of Change Orders, it is necessary to limit pay items included in a Change Order to those required to mitigate a specific event or reason for the change. It is possible for a Change Order to include monetary adjustments, time adjustments, and Scope or Design changes as long as each Change Order component is related to the mitigation of the same event.

For example, if an unknown existing utility facility is found to be in conflict with a planned storm sewer trunk line and it is determined that the appropriate mitigation for the conflict is to split the trunk line into two smaller pipes that are installed around the utility, it is acceptable for all of the following to be included in the same Change Order:

- Monetary adjustments resulting from quantity changes for existing pay items and the addition of new pay items required to construct the revised storm sewer structures around the utility facility.
- Time adjustments to closure periods, intermediate completion dates, and the contract completion date as required for construction of the revised storm sewer facilities.
- Scope or Design changes consisting of revised plans and new specifications required to construct the revised storm sewer.

It would not be acceptable to include a monetary adjustment associated with changing the pavement marking material throughout the contract area from paint to thermoplastic on the above noted Change Order. The type of pavement marking materials is not affected by the revised storm sewer layout, so a separate Change Order would be required to document the change in pavement marking material.

#### 2.19.5 Reason Codes

Reason codes are used to categorize Change Orders so that the Department can track the cause of changes, assess the extent and source of accountability and work to minimize similar changes on future contracts.

Each Change Order requires selection of a reason code from the drop down menu within the SiteManager Change Order module. Only one reason code may be selected per Change Order. The AE and the Division of Construction Management Field Engineer assigned to the District are available for guidance regarding selection of the proper reason code for individual Change Orders.

Below is a list of the available reason codes:

#### **Errors and Omissions**

Design/Plan Related  
 Specification Related  
 Special Provision Related  
 Environmental Related  
 Item Related  
 Permits Related  
 Quantity Related, Minor

	Quantity Related, Major R/W Related Geotechnical Related Traffic Control Related Utility Related Railroad Related Constructability Related
<b>Scope Changes</b>	Work Outside Construction Limits Work On Private Facilities Project Acceleration Project Upgrades Material Related Added Quantities/Items Deleted Quantities/Items
<b>Changed Conditions</b>	Constructability Related Permits Related Environmental Related Materials Related R/W Related Geotechnical Related Utility Related Railroad Related Weather Related Quantity Related
<b>Payment Adjustments</b>	Quality Related Material Related Contract Liens Related
<b>Incentive/Disincentive</b>	Contract Completion Intermediate Completion Closure Times Cost Reduction Incentive A+B Contract A+B+C Contract
<b>Standards/Specifications Change</b>	Time Related Monetary Related Time and Monetary Related Specification Change Only
<b>Final Quantity Adjustment</b>	
<b>Damage to State Property</b>	



## Contract Renewal

## Maint. Of Traffic Safety Improvements

## Emergency Work

- **Errors and Omissions** - Change Orders are often required because contract documents include information which is incorrect or omits an element required to construct the overall contract in accordance with its original scope. The contractor is entitled to consideration of monetary and time adjustments in situations involving errors and omissions. The INDOT Project Manager needs to be informed when errors or omissions are found in a contract so that the PM can help with the resolution of the issue and so that they can involve the Designer early on in the project. In this way the Designer may be held accountable for extra costs or damages that may be involved on the project if the errors or omissions arise from the Designer's negligence. The key to using the reason codes in Errors and Omissions is that the situations giving rise to the reason for the extra costs arising from the Designer's negligent errors or omissions should have been caught before the contract was let. If the problems could not have been known ahead of time through reasonable due diligence then the reason codes that should be used most likely will be in the section for Changed Conditions.

**Design/Plan Related:** This reason code is used when there is a problem with the design/plans on the project. Examples of this may be that the wrong size drain pipe was called for on the project and it has to be changed to a new size pipe which could require new items for pipes and potentially inlets and manholes.

**Specification Related:** This reason code is used when the contract specifications did not adequately cover a need on the project. An example of this would be where there is an item in the itemized proposal and there is not an item in the specifications that matches or describes this item.

**Special Provision Related:** This reason code is used when the special provision of the contract does not adequately cover the work in the contract for which it is meant to cover. An example of this could be that a special provision specifies that the only products that you can use to build the work are found to not meet the requirements of Buy America and because of this extra costs were incurred and/or not participated in by FHWA.

**Environmental Related:** This reason code is used when an issue involves things that are environmental in nature that were overlooked in the contract documents. For example an underground storage tank is found on newly purchased property and the designer should have been able to tell that it was there utilizing reasonable due diligence but did not show it in the contract documents or give a way to handle its removal. Evidence of this could be that there are visible signs at ground level that the tank exists beneath

the surface. In this case, one might also consider the Design/Plan Related reason code because it was left off the plans. Such a situation should be viewed in a manner that the reason code that best represents the situation should be used. In this case, it is an omission from the plans, but because it is environmental in nature, this reason code is more exact in description and should be used. As additional information, this situation would merit a reason code of Changed Condition Environmental Related if a tank was found, but there was no means to tell that it existed other than discovering it during excavation. Another example would be if there was a storm water management plan shown in the plans but no items were placed in the itemized proposal to cover the work.

**Item Related:** This reason code should be used for items that are missing from the contract and the design would dictate that they be in the Itemized Proposal. For example this reason code could be used if an HMA overlay was being placed that required that the existing surface be milled first and there was no item in the contract to cover the work.

**Permits Related:** This reason code should be used when extra costs are incurred because a permit was not obtained for the contract either by the Design Consultant or by INDOT.

**Quantity Related, Minor:** This reason code should be used when there is a quantity increase or decrease that is caused by a mistake made by the designer of the contract and the result was less than 5% of the original contract award amount or \$250,000.00 whichever is less. An example of this would be where the item for HMA surface overran on a project because the designer did not add in the quantities for the S-lines on the project.

**Quantity Related, Major:** This reason code should be used when there is a quantity increase or decrease that is caused by a mistake made by the designer of the contract and the result was more than 5% of the original award amount or \$250,000.00 whichever is less. An example for this could be the same as above in minor.

**Right-of-Way Related:** This reason code should be used when extra costs are incurred because of right-of-way problems. An example of this could be when there was only enough right-of-way purchased for the building of the face panels for an MSE retaining wall but the amount of right-of-way did not allow for the placement of the straps behind the wall.

**Geotechnical Related:** This reason code should be used when extra costs are incurred which are related to soils information on the project. An example of this is when the geotechnical report for the project says that the project will need to be undercut by 2 feet and the material replaced with aggregate 53 and the designer had this information during design but did

not take this into account in the plans and then the costs for the undercut and aggregate had to be added by change order.

**Traffic Control Related:** This reason code should be used when extra costs are incurred related to problems with traffic control on the project. An example of this could be when a contract requires lane shifts and lane closures and no items were included in the contract to cover temporary pavement markings.

**Utility Related:** This reason code should be used when extra costs are incurred related to problems with utilities that should have been foreseen by the designer using reasonable due diligence in preparing the plans. An example of this would be where there is a conflict between an existing water line and a new sewer line to be installed where the water valve present in the area can be seen and there was no prior coordination done with the water line owner to move the line. If the water line existed in the area and could not be seen and is only found after installation of the water line has started, the reason code for a changed condition should be used.

**Railroad Related:** This reason code should be used when extra costs are incurred related to problems with railroad concerns that should have been able to be foreseen by the designer. An example of this would be if the plans show constructing a temporary railroad bridge and shifting train traffic to the new bridge that will require that there can be no train traffic for 2 weeks while the tie-ins are completed, but the railroad determines that they cannot allow a 2-week shutdown of train traffic at that time. This situation should have been coordinated prior to letting and should have been resolved. This will now cause a delay for the contractor and extra costs to be incurred. In addition, note that these extra costs and the corresponding time extension may potentially be non-participating by FHWA.

**Constructability Related:** This reason code should be used when the plans did not take into account an obvious physical condition that exists on a project and then the condition requires extra costs to be incurred to remedy the situation. An example of this would be where the plans call for common excavation be used to build the required embankments for phase 1 of a project but the common excavation exists under the roadway which will be used to maintain traffic during phase 1 and because of this it is a requirement to pay to bring in borrow on the project and then to remove and waste the common after phase 1 is complete.

- **Scope Changes** - Scope changes are situations where the Department determines that it is necessary to either add items unrelated to the current scope to the contract, delete items related to a portion of the current scope of the contract, or increase or decrease the area over which the current contract scope will be constructed. Scope changes are the responsibility of the Department and consideration of monetary and time adjustments is warranted. Scope changes may not be implemented without the

approval of the PM. Approval from the PM must be included on the allotted section of the Change Order Form. Scanned e-mail or other documentation from the PM is also acceptable.

**Work Outside Construction Limits:** This reason code should be used when work is performed outside of the construction limits of the contract. Outside of the construction limits should be taken to mean off the right-of-way or beyond the station limits of the work area in the contract. Note that traffic control items that are needed for pre-warning are not a part of the discussion under this reason code. This is important because when work beyond the construction limits of the contract is undertaken, this work is outside of what has been approved in the NEPA documents. An example of this would be if concrete patching is required to be added to the contract that is a mile from the end of the contract. Another example would be where the HMA overlay on the project was to be stopped before entering an intersection and it was decided to continue the HMA through the intersection because the pavement was rough. In both of these cases this work should not take place unless approved by the Project Manager.

**Work On Private Facilities:** This reason code should be used when work is performed for items that are not owned by INDOT or the LPA and are not a part of the original contract. An example of this might be where a utility line running through the project is in the way of the work that is needed to be performed but it is decided not to wait for the utility to move the facility, so a decision is made to move it for them (with their permission).

**Project Acceleration:** This reason code should be used when a decision has been made to make up lost time on a project, which could be caused by issues that delayed the project. One example of this would be if a very rainy construction season occurred and a time extension is warranted that would move the completion of the project into the spring but commitments have been made to have the work completed before the end of the year.

**Project Upgrades:** This item code should be used when a decision has been made to add an element to a project or enhance an existing element on a project. An example of this would be to add a conduit to the project in order to place communication cable through it at a later date. Another situation would be if lighting items already exist in the contract but a decision was made to make the light poles decorative in design. It is important for the PM to be involved in project upgrades to ensure that the costs for the upgrades are accepted by the responsible entity.

**Material Related:** This item code should be used when a decision has been made to change a type of material that is being used to construct the contract. An example would be if the road was designed to use an HMA pavement and a decision was made to change the road to PCCP.

**Added Quantities:** This item code should be used when a decision has been made to add additional quantities of an item that would utilize the item in a way or in an area in which it was not approved for use in the original scope of the project. An example of this would be if the original scope of the project included sidewalk on only one side of road and it was then decided after the letting to add sidewalk to the other side of the road as well. This may make sense from a cost standpoint since the Contactor is already in the area and it would not be a challenge to add the additional quantity. However, it should be noted that because the scope of the original project included sidewalk on only one side of the road, adding this would be a scope change and may not get approval from FHWA for participation.

**Deleted Quantities:** This item code should be used when a decision has been made to delete quantities of an item and thus construct a project that does not fulfill the original scope of the contract. An example of this could be when the original project scope included sidewalk on both sides of the road and because of other overruns on the contract it was decided to delete the sidewalk from one side because there is not enough money left to complete the work. However, it should be noted that if the sidewalk is not built on both sides as originally approved, FHWA could consider not funding the entire project since the original scope is not being fulfilled.

- **Changed Conditions** - Changed conditions are defined in Section 104.02 of the Standard Specifications. They include differing site conditions, suspension of work by the Department, and significant changes in the character of the work. Differing site conditions are the most common type of changed conditions encountered in the field. In most situations, it is the contractor that discovers a potential differing site condition and is required to provide notice prior to performing any work at the affected location. It is the Department's responsibility to verify whether the situation represents a differing site condition and if so, to determine the required work to mitigate the problem. Examples of differing site conditions include the presence of an underground storage tank that is not indicated on the plans, discovery of a peat deposit at a location where peat is not anticipated, and discovery of an existing concrete base under the asphalt pavement on a contract that includes no pay item for pavement removal.

Suspensions of work included in 104.02 are related to suspensions directed by the Department for the benefit of the Department or the motoring public. Examples of these suspensions include those for holidays or community festivals not noted in the contract documents. Suspensions of work related to poor workmanship, contract breaches by the contractor, or operational problems of the contractor are not covered by 104.02.

The most common occurrence of significant changes in the character of the work is related to a major pay item that has its quantity increase or decrease by more than

25%. Typically, increases in quantities usually justify a lower unit price and reductions in quantities normally justify a higher unit price. Consideration for monetary and time adjustments is usually required when changed conditions are encountered on a contract.

**Constructability Related:** This reason code should be used when there is an issue that changes how the project is to be constructed. An example of this would be where the contractor bid to build a bridge with the road closed to traffic and it was determined after letting that the contractor would need to build the bridge under traffic.

**Permits Related:** This reason code should be used when the cause of the changed condition and extra costs are permit related. An example would be if the contract stated that the permit would be obtained so that the contractor could start work on August 1<sup>st</sup> but it was not obtained until December 1<sup>st</sup>. This could potentially cause a project delay and extra costs if the work is a controlling item.

**Environmental Related:** This reason code should be used when the reason is environmental in nature. Examples would be finding an underground storage tank, historic artifact, asbestos, contaminated soil or an endangered species, any of which were not known to exist at the time of letting.

**Material Related:** An example would be encountering a different material that anticipated in the plan documents such as rock at an elevation where soil was expected. This would require a change to incorporate rock excavation.

**Right-of-Way Related:** This reason code should be used when the issue is related to the availability of right-of-way on the project. An example of this is when the right-of-way is supposed to be already cleared so that the contractor can access it to work and it is found that it is not cleared and causes a delay or extra cost. It should be noted that delays in availability of right-of-way may not be reimbursable by the FHWA.

**Geotechnical Related:** This reason code should be used when there is an unforeseen geotechnical issue found on the project. An example would be where the soils report and borings do not show peat in an area but it is in found where the end of a tie back is to go and will no longer work and causes delay or extra costs.

**Utility Related:** This reason code should be used when there is a changed condition caused by a utility related issue. For example the contract book states that a utility will be relocated 30 days after the right-of-way is staked and cleared but it takes the utility 100 days which causes extra cost and/or extra time to be needed on the contract.



**Railroad Related:** This reason code is used when extra costs are incurred related to railroad work on a contract where it is a changed condition to the contract but that could not have been foreseen beforehand by the designer under normal due diligence. An example of this would be where the contractor tried to get railroad flagmen as required by the contract but the railroad for whatever reason would not supply them which causes a delay to the contract and thus extra costs.

**Weather Related:** This reason code should be used when the above normal inclement weather days for the year exceed the yearly allotted number days in the Standard Specifications. This would normally be needed for time extension purposes only as weather is normally non-compensable. However, there could be times where the contract may be written that would allow compensation.

**Quantity Related:** This reason code should be used when there is a large change in the quantity of either a major or minor item due to unforeseen circumstances that would allow by specification a change in the unit price for the item. An example of this would be that during a resurface contract it is required to remove the overlay and perform pavement patching and when the overlay is removed, the pavement is in worse shape than the pavement cores led the designers to believe and additional patching work is required.

- **Payment Adjustments** - The reason codes for Payment Adjustments are used when there are credits to the contract or extra payments to the contractor which are either overruns to the \$1 items usually found in the beginning of the itemized proposal, with the exception of Liquidated Damages which is a part of Incentive/Disincentive and are self explanatory, Quality Adjustments for HMA, Quality Adjustments for Storm Water Management, Quality Adjustments for Temporary Traffic Control, Quality Adjustments for Failed Materials, Binder Adjustments or Liens, etc. Payment Adjustments will all fall into one of the following reason codes:

**Quality Related:** Examples include HMA Adjustments, Storm Water Management Adjustments, Temporary Traffic Control Adjustments, Failed Materials, For example if there are adjustments that need to be made to the payment to the contractor after the pay factors are reviewed in accordance with 401.19 for HMA then this reason code will be used. This would be the same for concrete pavements in accordance with 501.28. Other examples of when this reason code will be used are when either storm water management devices, or traffic control devices do not meet the quality standards within the specifications. The cost associated with this work can be tracked and therefore not counted against the "On Budget" metrics.

**Material Related:** An example is Binder Adjustments which are used when the contractor accepts this contract provision at letting time and then the



price for HMA binder goes up or down by enough that the provision is invoked.

**Contract Liens Related:** This reason code is to be used when the item for contract liens is utilized. This item is used when INDOT is required to hold or payout money when there is a lien brought against a contractor because they are not making payments. The non-payment could be to sub-contractors, suppliers or others. When this occurs, this code will be used.

- **Incentive/Disincentive** - Incentive and Disincentive language is included in contracts to provide a financial motivation to a contractor to complete work associated with a closure period, an intermediate completion date, or an early contract completion date. If such language is included in a contract, a Change Order is required to incorporate the additional compensation earned by the contractor due to early completion of the required work or a credit to the Department, in the form of Liquidated Damages, resulting from late completion of the required work. In addition, this reason code is also used for Change Orders which are necessary to incorporate a contractor submitted Cost Reduction Incentive, CRI, into a contract as per 109.04 of the Standard Specifications.

**Contract Completion:** This reason code is used when the incentive payment or liquidated damage credit is a result of either completing the contract work before or after the contract completion date shown on the proposal page.

**Intermediate Completion:** This reason code is used when the incentive payment or liquidated damage credit is a result of either completing the contract work required before or after an intermediate completion date as shown on the proposal page of the contract.

**Closure Times:** This reason code is used when the incentive payment or liquidated damage credit is a result of either completing the contract work before or after the allotted number of days for a closure as shown on the proposal page.

**Cost Reduction Incentive:** This reason code is used when an incentive payment is made to the contractor for a percentage of a cost savings to the contract for an idea presented by the contractor. It is made in accordance with 109.04. An example of this would be where a 3 span bridge is to be constructed and the contractor presents a new design for the bridge that uses post tensioning elements and is only 2 spans and results in a savings of \$500,000.00. If the redesign is approved then the Contractor and INDOT split the savings and the contractor is paid on a change order using this reason code.

**A+B Contract:** This reason code is used when the incentive payment or liquidated damage credit is a result of either completing the contract work

required on an A + B Contract. The cost associated with this work can be tracked and therefore not counted against the "On Budget" metrics.

**A+B+C Contract:** This reason code is used when the incentive payment or liquidated damage credit is as a result of either completing the contract work required on an A+B+C Contract. The cost associated with this work can be tracked and therefore not counted against the "On Budget" metrics.

- **Standards/Specifications Change** - The Department may elect to incorporate a new standard detail or specifications change into a contract after it is let. In these situations, a Change Order is required to modify the contract to add the new standard detail or specification. There may be monetary or time adjustments associated with these types of Change Orders. This reason code should only be used when the directive for this change comes from Central Office normally as part of a Construction Memorandum. If a change is being made to a specification, special provision or standard by any other means then it would be a changed condition to the contract and fall under another reason code.
- **Final Quantity Adjustment** - This reason code is used on Change Orders which are required when the overruns or underruns for individual pay items result in monetary adjustments that exceed the thresholds included in the Change Order Policy. These are sometimes referred to as balancing Change Orders.
- **Damage to State Property** - This reason code is used on Change Orders that are a result of payments made to the contractor for repairs that are made to State property, normally as a result of a traffic accident. The cost associated with this work can be tracked and therefore not counted against the "On Budget" metrics.
- **Contract Renewal** - This reason code is used when the change order is for the renewal of the contract as allowed in the special provisions. Contract renewals are generally for an additional 365 days at a time for the number of renewals as allowed in the contract. These contracts are usually for mowing and traffic signal and lighting maintenance but could be for other types as well.
- **Maint. Of Traffic Safety Improvements** - This reason code is used for improvements made to the Maintenance of Traffic for the safety of the traveling public and field personnel. The cost associated with this work can be tracked and therefore not counted against the "On Budget" metrics.
- **Emergency Work** - This reason code is used for any repair work that requires immediate attention. This reason code will track costs and should not be considered towards the On Budget metric. The cost associated with this work can be tracked and therefore not counted against the "On Budget" metrics.

#### 2.19.6 Recoverable and Non-Recoverable Change Orders and Delta Costs

The PE/S is required to document and classify all errors and omissions, E&O, change orders as either having recoverable or non-recoverable costs. The recoverable/non-

recoverable record entry in SiteManager can be found in the Generic Field under the change order Header Tab. The determination of the additional costs should be made prior to generating the change order.

INDOT Project Managers, PM, should be notified of all E&O change orders to help with resolution and to determine if the Designer/Consultant ["Designer"] may be held accountable for extra costs arising from the E&O. The PM, PE/S, and Designer may jointly collaborate to review and mitigate potential additional costs. If the PM decides the Designer is responsible for the additional costs caused by E&O (also known as the delta or premium costs), these costs are considered to be recoverable and the PM may decide if INDOT will move forward with the collection of those costs from the Designer.

One example of how to figure the delta or premium cost is as follows:

The Designer incorrectly calculated the amount of QC/QA-HMA, 3, 70, Surface, 9.5 required to build the project. It used an incorrect lay rate of 65 pounds per square yard instead of the required 165 pounds per square yard. Because of this mistake, the Designer listed a quantity of 5,910 tons of material needed when in reality the quantity needed/listed in the contract should have been 15,000 tons. The contractor bid \$85.00 per ton for the 5,910 tons shown. After a review of this contractor's bid history for this item, it was found that if the correct quantity of 15,000 tons had been in the contract at time of letting, INDOT should have gotten a bid price of \$80.00 per ton for this item. Therefore, the difference in cost of construction of the project is the following:  $(15,000 \text{ tons} \times \$85.00 \text{ per ton}) - (15,000 \text{ tons} \times \$80.00 \text{ per ton}) = \$75,000.00 = \text{delta or premium cost}$ .

The delta or premium cost of \$75,000.00 in this case is the potential amount that INDOT could recover from the Designer for its E&O. If this quantity change qualifies under Standard Specification 104.02(c)2 or 109.03 and the price is renegotiated with the contractor, the renegotiated price would need to be reflected in the delta or premium cost to be collected from the Designer.

The cost to add the extra 9,090 tons at the contract unit price, \$772,650.00, would need to be placed on a change order with a reason code for E&O, Quantity Related, Major. The change order should be eligible for FHWA participation as long as this extra cost was not caused by "gross negligence". The change order, along with the information on the \$75,000.00 delta or premium cost, should be passed on to the PM for consideration as part of the E&O Process.

Another example of how to figure the delta or premium cost is as follows:

The Designer did not properly coordinate the removal of the utilities present at the project site. The Designer did not take into account that there was a large fiber optic duct bank running where the new drainage system had to go on the project. (In this case it should be noted that it is being assumed that the Designer is the one who did the utility coordination on the project.) Because of the Designer's lack of coordination/lack of due diligence, the contractor was delayed in starting the project by more than 6 months. As a result, the contractor incurred a substantial increase in its project overhead costs and incurred

escalated labor, equipment and material costs in the completion of the project. The documented additional costs that were incurred amount to \$2,000,000.00.

The PM should have involved the Designer early on to see if there was a way to mitigate the problem by possibly redesigning the drainage system or by some other method. In this example, it is assumed that this was done and that the extra costs were unavoidable.

In this case, the calculation is straight forward and the entire \$2,000,000.00 is an extra cost to the contract that could have been avoided if the Designer had performed the utility coordination as expected before the letting. Therefore, the entire \$2,000,000.00 is the delta or premium cost that INDOT could recover from the Designer for E&O regarding the utility coordination.

This extra cost would need to be placed on a change order with a reason code for E&O, Utility Related, and would be marked as recoverable. In this case, the extra cost would not be considered eligible for FHWA participation.

It should also be noted again that the assumption is being made that, in this example, the Designer is the one who performed the utility coordination for this project. On other projects, the utility coordination could be done by another consultant/coordinator or could be done “in house”. Therefore, it is extremely important to involve the PM early in the process. The PM will know who is performing this function on the contract and the amount and level of coordination that was required under the contract.

If the PE/S is unsure if an E&O is potentially recoverable or if the PE/S is unsure of how to figure the delta or premium costs incurred because of an E&O, the issues may be discussed with the PM, the Area Engineer, the Central Office Field Engineer for the District and/or INDOT’s litigation attorneys.

### **2.19.7 Change Order Approval Authority**

The Change Order Policy assigns Department approval authority based on the magnitude of the overall monetary or time adjustment involved. If a Change Order includes both monetary and time adjustments, the approval authority is the higher authority required for approval of the monetary adjustment or time adjustment if considered separately.

The approval authority for a Change Order is based on the monetary adjustment and time adjustment associated with that document. The Change Order approval authority is based on the adjustments of each individual Change Order and is not cumulative throughout the Contract. It is possible for Change Order No. 1 to require State Construction Engineer approval while it would be appropriate to approve Change Order No. 2 at the PE/S level.

However, in order to meet INDOT goals, once Change Order dollar amounts for a contract cumulatively reach the 4% overrun level, or where time adjustments cumulatively reach the 25 day overrun level, the PE/S will need to forward a draft of the Change Order to the District Construction Director, the Director Division of Construction Management and the Director of Capital Program Management, at the same time that it is sent to the PM. This is done as a way to address the cause of the cost or time overrun and to see if measures can

be taken to correct and adjust as necessary in order to make proper decisions as contracts proceed to completion.

Work associated with a Change Order cannot begin until documented approval is provided by the approval authority and has been coordinated with the PM. In addition to the Department approval authority, LPA documented approval is required for LPA contracts and FHWA documented approval is required on contracts specifying FHWA change order approval.

Where the Change Order document cannot be completed prior to work being performed, a work order and written documentation from the approval authority is required prior to work commencing. When Major Changes are involved, Prior Approval will be required as discussed in 2.19.8.

There are three situations which require the documented approval of the Director, Division of Construction Management in addition to the approval authority based on the magnitude of the monetary or time adjustment. The situations are described below:

- Change Orders which involve work on property, equipment, buildings or other items owned by the State of Indiana and not included in the original or modified contract.
- Change Orders which involve the purchase of equipment that will remain the property of the Department after completion of the contract.
- Change Orders which establish or delete intermediate completion dates, closure periods, etc.

### **2.19.8 Major Change Order Prior Approval**

Prior Approval is required before work can start on changes which are considered Major Changes. Major Changes are significant changes to the cost, character, or scope of a project which require a determination of whether or not the change would benefit from being competitively bid. These are defined as:

- Cost increase of 5% of the contract award amount or \$250,000.00, whichever is less
- Time extensions due to scope changes, or
- Changes in scope as given below:
  - Changes in project termini
  - Scope revisions due to a Cost Reduction Incentive proposal
  - Alterations to the intent or scope of the Contract or character of the work
  - Revisions to the geometric design of the mainline roadway, ramps, frontage roads or crossroads

- Revisions to the structural section of the pavement, including, but not limited to subgrade, subbase, performance graded binder grade, pavement type, pavement depth, individual pavement courses and aggregate designations, type or quality of materials to be furnished, such as changing the individual aggregate base to an asphalt concrete material
- Additions, deletions, changes or relocations to bridges or structures that affect the functional scope and intent of the approved design
- Revisions that result in new environmental impacts, changes in previously permitted activities or reductions in environmental mitigation measures provided for in the Contract
- Changes to limited access control lines.

All other changes that do not fall under the above categories are processed as minor changes and do not require Prior Approval.

**Prior Approval Procedure.** The PE/S should forward information related to the required Change Order work; the recommended monetary adjustment amount including all affected pay items, quantities, and unit prices; and the recommended time adjustment to the AE and PM via e-mail.

Include information related to how the recommended monetary and time adjustments were determined to be appropriate for the proposed scope of work - i.e. review of bid history, schedule information, backup information provided, etc.

Attach backup documentation provided by the contractor to the e-mail so it can be referenced by the approval authority. If the approval authority is above the AE level, the AE will review the packet prior to sending it to the DCD, and the process will be repeated by the Department approval chain of command until reaching the approval authority. Each individual in the approval chain of command should indicate his or her concurrence with the recommendations until it reaches the final approval authority. This will ensure that everyone who will be involved in the Change Order approval process is informed regarding the situation and supports the recommended solution.

The Department approval authority will review the forwarded packet. If it is acceptable, the approval authority will provide the PE/S with documented approval of the Change Order via e-mail. After receiving Department as well as LPA and FHWA approval via e-mail, if applicable, direct the contractor in writing via a Work Order to begin Change Order work. If additional information is required prior to Change Order approval, the approval authority will notify the PE/S and copy all in the approval chain via e-mail of the desired additional information. Provide the desired information to the approval authority via e-mail and copy all in the chain of command below the approval authority.

If anyone in the approval chain of command does not agree with the recommended Change Order, it will be necessary to notify all individuals who have previously concurred with the recommendation and the PM of the denial and to determine the appropriate course of action. The individual who denied the recommendation may provide an alternate solution or reject the Change Order altogether. It will be necessary to work with the PM to seek the input of the appropriate individuals to verify the adequacy of the alternate solution or whether it will be necessary to perform this work on a future contract.

After all required Department and outside agency documented approvals are obtained, the Work Order sent to the contractor should include the following information:

1. Date
2. Change Order Work Elements
3. Affected Existing Pay Items and Estimated Quantities
4. New Pay Items Established, Associated Quantities, and Unit Prices
5. Estimated Monetary Adjustment
6. Contract Time Adjustments to Affected Closure Periods, Intermediate Completion Dates, and Contract Completion Dates (if applicable)
7. Date Work is Expected to Begin.

A sample Work Order is provided in section 2.19.13.

**Verbal Prior Approval** on Major Changes may be obtained if an emergency or unusual condition exists. This verbal Prior Approval will be memorialized and documented by the PE/S with an email.

#### **2.19.9 Existing Contract Pay Item Overruns and Underruns**

The Change Order Policy allows for individual existing contract pay items to overrun or underrun without processing a Change Order if both of the following conditions are met:

- The overrun or underrun of the pay item does not result from a change in scope of the contract.
- The monetary adjustment associated with the overrun or underrun of the existing contract pay item is less than \$20,000.00.

If either of the above conditions is not met, it is necessary to execute a Change Order to document the monetary adjustment associated with the overrun or underrun of the existing contract pay item.

Once a Change Order is executed to document a monetary adjustment related to the overrun or underrun of an existing contract pay item, a subsequent Change Order is not required until an additional monetary adjustment of \$20,000.00 related to overruns or underruns of the pay item is achieved unless it is due to a change in contract scope.

#### **2.19.10 Contract Scope/Design Element Change Orders**

The Change Order Policy requires that Change Orders involving changes to the scope or design elements of a contract are coordinated with the PM and receive approval from the



party responsible for the design element involved in addition to the Change Order's required approval authority. This is necessary to ensure that contract specific design criteria or Department commitments made prior to construction are not changed without the input of personnel familiar with these issues. The Change Order Policy lists several such items which are considered changes in scope or design elements.

#### **2.19.11 Determination of Required Change Order Work/Work Order Issuance** (Rev. 11-28-17)

For situations involving a changed condition (104.02), extra work (104.03), or any other change to the work initially involved in the original contract, it is the Department's responsibility to grant approval to the Contractor before additional work associated with a change order is performed. A Department signed Work Order is the proper method to authorize a Contractor to perform the work prior to full execution of the official change order document. A sample copy of the Department's Work Order can be found at the end of this section.

In order to begin the process of generating a change order with correct documentation, and prior to issuing a Work Order, the following steps are required:

- **Notify AE of Need for Change Order** - The AE needs to be notified of situations that could require a change order. Discuss the situation with the AE to determine if additional work and a change order would be necessary. The AE can provide assistance and direction with the change order process and can help determine what documentation will be necessary. They can also provide guidance on proper notification and communication with the PM for the particular situation.
- **Notify PM of Need for Change Order** - In order to properly manage the project, the PM must be notified when change order situations occur. The notification should include the results of the discussions with the AE regarding the work associated with the change order. The PM should be kept informed as the change order work plan is developed and finalized.

In situations where a change order is necessary due to a design error or omission made by a designer, the PM will initiate contact with the designer for input regarding the required change order work. It is important that the PM is notified by the PE/S promptly of the error and omissions situation. The PM will then contact the designer to involve them in developing possible solutions to mitigate the design error or omission condition. The Department's ability to potentially seek reimbursement from the designer for the additional costs incurred due to the error or omission is based on timely notification of the PM, and the PM making timely contact with that designer.

**Obtain a Change Order Request Form** – Direct the Contractor to complete and submit a Change Order Request form, available from the Department's website. The completed form should identify unique circumstances, possible mitigating options, and provide an initial summary of the associated costs.

- **Determine the Work Elements for the Change Order** – The change order work element details and associated pay items should be determined based on the PE/S's understanding of the particular situation, discussions with the AE, PM, Designer, and the information provided within the Contractor's submitted Change Order Request form. When available, information from other individuals or parties involved in the extra work should also be utilized in determining work elements and pay items.
- **Determine the Change Order Monetary and Time Adjustments** - Once the change order work is determined and all required Contractor submittals are received, it is necessary to establish the monetary and time adjustments associated with the work. For work covered by existing contract pay items, the monetary adjustment is based on the estimated quantities and the existing contract unit prices. For work involving new pay items, the monetary adjustment is based on the estimated quantities and agreed upon unit prices. The copy of the *Change Order Process* available at:  
[www.in.gov/dot/div/contracts/standards/GIFE/Change Order Process.pdf](http://www.in.gov/dot/div/contracts/standards/GIFE/Change%20Order%20Process.pdf)

If the Contractor's proposed time adjustments apply to closure periods, intermediate completion dates, incentive/disincentive dates, etc. as well as the contract completion date, for approval purposes the requested time adjustment is the maximum duration. For example, if a contractor requests time adjustments of 10 days to Intermediate Completion Date 1, 15 days to Intermediate Completion Date 2, 15 days to Intermediate Completion Date 3, and 15 days to the Contract Completion Date, the magnitude of the time extension request is 15 days.

For situations where a time adjustment is necessary to mitigate a delay which is the Department's responsibility and the mitigation results in application of a portion of the adjustment prior to December 1 and the remainder is applied after March 31 in accordance with the Standard Specifications, the magnitude of the time adjustment is the number of calendar days that the intermediate completion or contract completion date was shifted, including the period starting December 1 and ending March 31. For example, if a thirty day Department responsible delay was experienced on a contract with an intermediate completion date of November 15 and the Standard Specifications permit the exclusion of the period beginning on December 1 and ending on March 31, the remaining fifteen days of the adjustment would be applied from April 1 to April 15. In this situation, the time adjustment requiring approval would be 151 calendar days, or 152 calendar days if a leap year is involved.

- **Perform a Cost Analysis for New Items** – A cost analysis must be performed by the Department on all new items of extra work in accordance with Federal Code of Regulations, 23 CFR 635.120(e). The Department's Item Bid History spreadsheet should be the first step for the cost analysis process. The spreadsheet can be accessed through the SiteManager Reports page.

- a) **Item Bid History** – The Department’s Item Bid History spreadsheet utilizes a data base of winning contract bids for all Department contract items over a span of several years. The Item Bid History’s spreadsheet process and associated filters can be used to obtain a meaningful representation of item unit prices based on particular contract situations. The filtered results can be compared to the Contractor’s submitted price. The process begins by checking the Item Bid History spreadsheet to determine if:
1. There is bidding history for the item. If no bidding history exists, use one of the processes described under “Cost Analysis” explained below.
  2. If there is bidding history, then filter the data for contract conditions.
  3. If  $N < 30$  (where N is the number of data lines returned for a filtered search), the information may not be statistically significant. In this situation, the data should be used as informational. It may be better to use one of the processes described under “Cost Analysis” explained below.
  4. If  $N \geq 30$ , (after filtering) the Item Bid History spreadsheet has enough data returns to be statistically significant and can be utilized for cost verification.

An item would compare favorably if the Contractor’s requested unit price indicated on their Change Order Request form is less than or equal to the highest indicated unit price of either the 95% confidence interval, or the forecasted cost. Both values are obtained from the Department’s Item Bid History spreadsheet. Requested unit prices meeting this criteria require no further price justification. Filtered item summary information obtained from the spreadsheet is presented in graphical form on the Summary tab of the spreadsheet and can be saved for easy reference and change order documentation. The PE/S must attach a copy of the Department’s Item’s Bid History summary page to the change order as price verification documentation.

- b) **Cost Analysis** – If the Department’s Bid Item History shows limited ( $N < 30$ ) or no bid history, data obtained from the spreadsheet should be used as informational and one of the following cost analysis methods should be utilized for cost verification of requested prices.

***1. Estimated Item Cost Less Than or Equal to \$20,000***

When verifying costs for new items of approved extra work with estimated item costs of less than \$20,000 and having insufficient bid history, the Contractor’s submitted Change Order Request form should be reviewed for acceptance by the PE/S and, as needed, the AE. The Change Order Request form should be reviewed for extra work identification and description, mitigating options, and cost accuracy.

**2. *Estimated Item Cost Greater Than \$20,000 but Less Than or Equal to \$50,000***

When verifying costs for new items of approved extra work with estimated item cost greater than \$20,000 but less than or equal to \$50,000 and having insufficient bid history, the PE/S and, as needed, the AE will perform a cost analysis of the work for comparison with the Contractor's Change Order Request price. The Department's cost analysis will be documented on the Change Order Cost Analysis worksheet, available on the Department's website, and should include consideration and analysis of any unique circumstances of the proposed work. The categories of labor, equipment, and materials should be analyzed and calculated on the worksheet.

**3. *Estimated Item Cost is Greater Than \$50,000***

When verifying costs for new items of approved extra work with estimated item cost greater than \$50,000 and having insufficient bid history, the PE/S, AE, Field Engineer, and the Engineer of Record will work together to provide relevant information in the development of the cost analysis for the Department. All cost analysis input will be documented on the Department's [Change Order Cost Analysis worksheet](#). The combined cost analysis information will be used to compare with the Contractor's submitted price.

For any of the cost verification methods described above, if the comparison is not acceptable, the PE/S should direct the Contractor to amend the [Change Order Request form](#) to provide additional detail on the uniqueness of the proposed work and the associated justification for the requested item price.

The accepted Contractor's Change Order Request form along with the Department's cost analysis should be attached to the official change order as new item price verification documentation.

- **Use of Force Account** - If prices for extra work cannot be agreed upon, change order work can be performed as a force account. The force account option should only be used as a last option to pay for approved extra work. Estimate the monetary adjustment in accordance with force account procedures outlined within the Specifications. When utilizing the force account option, there are discussions with the Contractor that are required to occur prior to the agreement and authorization to perform the extra work. These discussions should establish the specifics on issues such as, but not limited to:

1. Specific individuals that will perform the extra work.
2. Hourly rates of pay, including fringes and benefits.

3. Estimated time to complete the extra work including hourly work week and crew size.
4. Specific bond and insurance premium costs for the extra work.
5. Estimated quantity and cost of materials to be utilized, including transportation costs.
6. Individual pieces of equipment to be used for the extra work.
7. Agreement on the specific equipment rates to be paid.
8. Appropriate sub-contracting administrative costs, as per the Specifications, for force account work.
9. Appropriate mark-ups, as per Specifications, for force account work.

If the actual force account costs exceed the initial estimate, a subsequent Change Order can be processed to cover the excess costs.

- **Obtain Documented Approval** - After the monetary and time adjustments for the Change Order are determined, refer to the Change Order Policy to determine the required approval authority for the Department. In addition, obtain documented approval from representatives of the LPA or FHWA, if applicable, prior to issuing the Work Order directing the contractor to perform the Change Order work.
- **Other Change Order Issues** - After documented approval of the Change Order work is obtained, forward information regarding the Change Order scope, affected pay items and quantities, and the unit prices to the District EEO Officer and to the PM.

### 2.19.12 Execution of Change Order Document

After issuance of the Work Order, it is important to execute the Change Order document as quickly as possible. Since contractors cannot be paid for work associated with new pay items included in a Change Order until the document is fully executed, completing the Change Order approval process must be a top priority. In addition, while the Change Order is being processed, verify that the purchase orders associated with the work have sufficient funds to allow for payment of the Change Order work. If insufficient funds remain in the purchase orders, initiate the process to add the necessary funds.

The following instructions are intended to provide points of emphasis regarding the Change Order execution process (*See SiteManager Training Document for more detail*):

- **Initiate SiteManager Change Order Module Data Entry** - The first step in the execution process is the entry of the necessary data within the Change Order module within SiteManager. The data associated with pay items and quantities must

- be entered in accordance with the PCNs under which the work will be performed. Time adjustment data is entered on a contract basis, but separate entries are required for each closure period, intermediate completion date, contract completion date, etc. Complete SiteManager Change Order header data entry and place the Change Order in “Draft” status within two business days of issuance of the Work Order.
- **Assign Appropriate Reason Code** - In order to identify recurring Change Order patterns, it is necessary for the correct reason code to be identified on the Change Order. Criteria for determining reason code categories appear earlier in this document. Within these categories, select the most appropriate subcategory to describe the situation related to the Change Order. All possible reason codes appear on a drop down menu within the Change Order module of SiteManager.
  - **Scan Appropriate Change Order Attachments into SiteManager** - The documented approvals received from the Department approval authority, PM, FHWA, or the LPA should be scanned into SiteManager as attachments to the Change Order. In addition, documented approvals required from the Director, Division of Construction Management for the special situations listed in the Change Order Policy should be scanned into SiteManager.
  - **Document Cost Analysis Process for Change Orders with New Pay Items**- Change Orders which include new pay items are required by the Federal Code of Regulations, 23 CFR 635.120 to have a cost analysis performed. In order to document that this requirement has been met, a statement should be included in the Explanation Section of the Change Order that indicates that the unit prices for all new pay items have been deemed reasonable based on a review of documents included in the cost analysis file located in the field office. Scan the cost analysis file for new pay items into the header tab of SiteManager.
  - **Document Force Account Process for Change Orders** - If force account is utilized, a valid reason must be given for performing the work under force account. A template has been added to SiteManager Explanation tab to provide the reason and can be found by right clicking on the “Pick Std Exp. ID or Enter Text Below” and then search or type in the acronym. The template’s acronyms and statement read, “*FA – Because the Contractor and INDOT could not reach an agreement with respect to the price for the work described in this change order, it shall be performed via FORCE ACCOUNT in accordance with 109.05(b)*” and “*FAE – Because the extent of work could not be determined to establish a unit price, it shall be performed via FORCE ACCOUNT in accordance with 109.05(b)*” Any additional reasons can be added to the general explanation of the change order. Scan all documents required by Standard Specification 109.05(b) for force account into the header tab of SiteManager.
  - **Document Time Adjustments for Change Orders** – Contract time must be mentioned on the explanation tab on any change order using one of the three responses detailed in section 2.18.1. The three responses have been added as



templates in the SiteManager Explanation tab. The templates can be found by right clicking on the “Pick Std Exp. ID or Enter Text Below” and then search or type in the acronym. Any time adjustment must be analyzed against the approved schedule and explain how the critical path was delayed. Scan the approved project schedule and any other correspondence into the header tab of SiteManager.

- **Place Change Order in Pending Status** - Prior to beginning the actual approval process, it is necessary to revise the Change Order status to “Pending”. Verify that the noted Department approval authority level is correct. If it is not, contact the District SiteManager trainer for additional guidance. Once it has been determined that the Department approval chain of command is correct, select the appropriate individuals for the AE, DCD, SCE, and DDCM menus as appropriate.
- **Produce Change Order Hard Copy for Contractor Signature** - Since contractors do not have access to SiteManager, it is necessary to produce a hard copy of the Change Order and scanned documented approvals so that the contractor’s approval can be noted by signature. *Do not share any bid history data or operation production data from the cost analysis file with the contractor.*
- **Document Contractor Approval in SiteManager Change Order Module** - Upon receipt of the contractor signed Change Order hard copy, indicate the contractor approval of the Change Order within SiteManager. Scan the contractor signed Change Order hard copy into SiteManager. If no LPA approval is required, maintain the contractor signed hard copy in a project file in the field office.
- **Forward Contractor Signed Change Order Hard Copy to LPA, if Applicable** LPAs do not have SiteManager access, so forward the contractor signed hard copy to the LPA for signature by the official representatives on LPA contracts.
- **Document LPA Approval in SiteManager Change Order Module, if Applicable** - Upon receipt of the LPA signed Change Order hard copy, if applicable, indicate LPA approval of the Change Order within SiteManager. Scan the LPA signed hard copy into SiteManager and maintain the hard copy in a project file in the field office.
- **Obtain Department Approval** - If the PE/S is the approval authority, approve the Change Order within SiteManager. If the contract has FHWA oversight, notify FHWA that the Change Order is available within SiteManager for FHWA approval via e-mail. If the contract does not have FHWA oversight, the Change Order approval process is complete.

If the approval authority is at the AE level or above, notify the AE via e-mail that the Change Order is ready for approval. If the AE is the Department approval authority, the approval process is complete once AE approval is granted unless the contract has FHWA oversight. For FHWA oversight contracts, the AE notifies FHWA that the Change Order is available for approval within SiteManager via e-mail.



For Change Orders with an approval authority above the AE level, each individual within the approval chain of command will recommend the Change Order for approval and forward it to the next level until the Change Order is approved by the approval authority. Once the Change Order is approved by the approval authority, the Change Order approval process is complete unless the contract has FHWA oversight. If the contract has FHWA oversight, the approval authority needs to notify FHWA that the Change Order is ready for approval within SiteManager.

If anyone in the approval chain requires additional information prior to approving the Change Order, the PE/S will be contacted and notified of the required additional information. While preparing the requested additional information, modify the SiteManager Change Order status to "Draft". Once the requested additional information is forwarded to the individual that requested it, change the status of the Change Order back to "Pending" and notify the AE that the Change Order and additional information is ready for the approval process.

- **Distribute Copies of Executed Change Order to All Signatories** - After all required approvals have been obtained, supplement the Change Order/attachment hard copy that includes the Contactor signature and LPA signature, if applicable, with a SiteManager generated Department and FHWA approval page to serve as the original Change Order document. Maintain this document and attachments in a project file at the field office. From this original document, produce hard copies of the Change Order and all attachments for distribution to:
  1. Contractor
  2. LPA, if applicable
  3. FHWA, if contract has FHWA oversight
  4. District Office file
  5. Project Manager

### **2.19.13 Documentation Requirements**

Change Order related correspondence which is exchanged between the Department and the contractor should be entered into the SiteManager Correspondence Log. It is acceptable to scan these documents into SiteManager or maintain them in project files in the field office as long as the document location is noted on the Correspondence Log. Following are examples of documents related to Change Orders which should be entered into the Correspondence Log as applicable:

- a. Contractor Notice of Changed Condition
- b. Department Issued Concurrence or Denial of Changed Condition
- c. Correspondence Related to Required Change Order Work
- d. Contractor Supplied Extra Work Quotes
- e. Department Request for New Pay Item Unit Price or Time Adjustment Backup Documentation
- f. Contractor Supplied Backup Documentation
- g. Department Issued Work Order

- h. Department Issued Executed Change Order Hard Copies to Contractor, LPA, and FHWA
  - i. Change Order Signature Page
-

**WORK ORDER**

July 1, 2015

Mr. Joseph Contractor  
Highway Construction Co., Inc.  
1234 Main Street  
Anytown, IN 46199

RE: Contract R-39999, Change Order No. 21 Work Order

Dear Mr. Contractor:

Highway Construction Co., Inc. is directed to perform all work as described below:

- **Scope of Work** - Undercut soft subgrade soil material between STA 181+00 "A" and STA 185+50 "A" and backfill excavated area with B Borrow.
- **Affected Existing Pay Items** - CLN 32, Common Excavation - 800 cys; CLN 38, B Borrow - 800 cys.
- **New Pay Items** - None
- **Total Monetary Adjustment** - \$24,000.00
- **Total Contract Time Adjustment** - Intermediate Completion Date No. 1 - Ten Calendar Days; Contract Completion Date - Ten Calendar Days
- **Date Work Expected to Begin** - July 1, 2015

Change Order No. 21 will be forthcoming to modify Contract R-39999 in accordance with the above.

If you have any questions regarding this Work Order, please do not hesitate to contact me.

Sincerely,

Thomas Allen  
Project Supervisor

Cc: John Adams, P.E., Area Engineer  
William Roberts, Project Manager  
File

**2.20 CLAIMS** *(Rev. 01-21-14)*

Situations which result in contractor claims for additional compensation or contract time can be very complicated. It is not possible to provide clear instructions for handling every situation that can potentially result in a claim. Therefore, the following discussion will be limited to certain concepts that are common to situations related to claims.

**2.20.1 Changed Conditions**

Contractor claims will only be considered when they are related to a changed condition as defined by Section 104.02 of the Standard Specifications. There are three types of changed conditions:

- Differing Site Conditions as described by Section 104.02(a).
- Suspension of Work Ordered by the Engineer as described by Section 104.02(b).
- Significant Changes in the Character of the Work as described by Section 104.02(c).

In most cases, when there is a potential changed condition situation on the contract, it is discovered by the contractor. Therefore, the contractor will be responsible for providing written notice of a changed condition in accordance with Section 105.16(a).

Upon receipt of the contractor's notice of changed condition, investigate the situation to determine whether any of the provisions of Section 104.02 apply. If necessary, direct the contractor to stop work in the area of the possible changed condition to allow for the investigation. Refer to Section 104.02(d) for timeframe requirements for response to the contractor. If the situation is complex and it is not possible to respond within the stated timeframe, work with the contractor to agree on an acceptable extended deadline.

If it is determined that the situation does not meet the Section 104.02 requirements for a changed condition, notify the contractor of that determination and direct the contractor to proceed with work in accordance with the current contract requirements. This notification should be in writing and e-mail is acceptable.

If it is determined that the situation meets the Section 104.02 requirements for a changed condition, it is also necessary to determine the scope of the work required to mitigate the changed condition. If necessary, contact the AE or PM and request that the appropriate INDOT or consultant personnel are contacted for assistance in developing the required scope of work. Once the scope of work is determined, notify the contractor in writing that the situation is a changed condition and the scope of work required to mitigate the problem. An e-mail is an acceptable form of written communication for this notification.

If the contractor accepts the ruling made by the PE/S, prepare and execute a Change Order in accordance with the Change Order Policy for incorporation of the following:

- Addition of new pay items related to the mitigation scope of work to the contract.
- Adjustment of quantities associated existing pay items.
- Time adjustments associated with the performance of the mitigation work.

### **2.20.2 Contractor Notice of Intent to File Claim**

If the contractor disagrees with any portion of the determination of a changed condition or the mitigation scope of work, a notice of intent to file a claim must be submitted in accordance with Section 105.16(b) of the Standard Specifications. This notice needs to describe the extent of the disagreement with the changed conditions finding so that tracking of the disputed costs and time can be performed. If there is no mention of the extent of the dispute in the contractor notice, request that it be provided as soon as possible.

Once the intent notice is filed and the extent of the dispute defined, the contractor is required by Section 104.02(d) to submit weekly reports while the disputed work is being performed to document the additional costs and time associated with the performance of this work. While this disputed work is ongoing, it will be necessary to track the labor, equipment, and materials used and document this information in the SiteManager diary on a daily basis. On a weekly basis, meet with the contractor to compare the SiteManager diary records to those included on the contractor's weekly report. At the conclusion of the meeting, note all agreements and disagreements on the contractor report and maintain the report with comments in a file in the field office. If the contractor submits written notice of disagreement with the SiteManager diary entries in accordance with Section 105.16(d), maintain this information in the same file in the field office. The importance of documentation and organization cannot be overstated. "If it is not written down, it did not happen" is a common statement made by individuals experienced in claim review.

Once the disputed work is completed, the contractor must submit its claim within the timeframe included in Section 105.16(b). Review the claim against the documentation requirements of Section 105.16(b) and provide the contractor with written acknowledgement of receipt of the claim. An e-mail is sufficient for this notification and any deficiencies in claim documentation should be noted.

### **2.20.3 Project Level Review**

Perform the project level review in accordance with Section 105.16(c). While performing this review, keep the following in mind:

- Perform the review absent of emotion. The claim is to be evaluated on its contractual merits.
- LPA contracts require involvement by a representative of the LPA and possibly an MPO in the claim review process.
- FHWA oversight contracts require FHWA representative participation in the claim review process.
- The burden of proof for additional compensation or contract time is on the contractor. This concept applies to providing contractual justification for entitlement as well as documentation of the magnitude of the additional compensation or contract time to which entitlement is demonstrated.
- Claims may ultimately result in litigation. It is important that the claim review process is performed in accordance with contract requirements and in a professional manner. All claim reviewers may be asked to testify under oath in a deposition or at trial.

- The AE and Division of Construction Management Field Engineer assigned to the District are available resources for the claim review. Complex situations may require the involvement of the Division of Construction Management Claims Administrator.
- The review should focus on the following:
  - a. Entitlement - Is the contractor contractually entitled to monetary or time adjustments for performance of the disputed work? If there is no contractual entitlement, it is not necessary to evaluate the impact or cost aspect of the disputed work.
  - b. Impact - Did the event that necessitated the disputed work impact the contractor's controlling operation or critical path?
  - c. Costs - What is the magnitude of additional costs and time incurred by the contractor due to performance of the disputed work?

Upon conclusion of the project level review, prepare a written ruling and forward it to the contractor. The ruling should include contractual justification for the ruling, if possible. For situations where the contractor does not demonstrate contractual entitlement, it is acceptable to cite this as justification for denial.

If the project level ruling indicates that the contractor is entitled to a portion of the monetary or time adjustments being sought, prepare and execute a Change Order in accordance with the Change Order Policy to settle as much of the claim as possible. If the contractor's representative will not sign the Change Order because the contractor intends to pursue the denied portion of the claim, notify the AE for guidance.

#### **2.20.4 District and Central Office Reviews, Mediation, and Litigation**

Section 105.16(c) of the Standard Specifications also includes detailed requirements for the contractor and Department for reviews above the project level. There are situations where all higher level reviews are performed in the District Office and there are others where Central Office review is required.

If the contractor provides notice that a District Office review is desired, forward the claim originally submitted by the contractor and the project level ruling to the District Office. While the District or Central Office review is ongoing, provide any additional information requested.

If the claim or any portion is resolved at any of these levels, prepare and execute a Change Order in accordance with the Change Order Policy to facilitate payment of the monetary adjustment or modify the contract time in accordance with the time adjustment.

#### **2.20.5 SiteManager Documentation Requirements**

SiteManager includes a Claims/Liens module which allows for tracking the status of claims. When a contractor claim document is submitted, input the required information regarding the claim into the module. Contractor submittals of Notice of Changed Condition, Notice of Intent to File a Claim, or submittal of weekly claim forms do not warrant data entry into the Claims/Liens module. SiteManager automatically numbers each

claim as it is initially entered into the module. No additional information is required to be input until the claim is resolved. At the time that the claim is resolved, input information related to the settlement amount and settlement date into the module.

When executing a Change Order that incorporates the claim settlement into the contract, the Change Order Header includes a data entry blank to associate the Change Order with a claim. Input the claim number into this Header data entry blank when inputting data into the Change Order header.

There may be situations where claims are partially resolved at various steps in the claims resolution process. When partial resolutions are reached, prepare and execute Change Orders to incorporate the partial settlement into the contract. Input the claim number in the appropriate Change Order Header data entry blank to associate the Change Order to the claim. It is necessary to keep track of the monetary and time adjustments associated with each partial resolution outside of SiteManager until the claim is totally resolved. At that time, input the sums of all monetary and time adjustments into the SiteManager Claims/Liens module to complete the data entry associated with the claim settlement.

### **2.21 COST REDUCTION INCENTIVES** *(Rev. 04-07-16)*

Contractors may propose to modify contract documents to reduce construction costs without impairing essential functions, characteristics, and timing of the project. A contractor's proposal must be in accordance with the Specifications.

There are 3 components of payment for a CRI that has been accepted by the department.

1. Contractor's Reasonable Design Cost for the CRI proposal
2. Cost of the work
3. Fifty percent of the department's net saving, as defined in standard spec 109.04:

$$\mathbf{TNS = OCW - RCW - CRDC - DC}$$

Where:

- TNS** = Total Net Savings  
**OCW** = Original Cost of the Work required by the original contract  
**RCW** = Revised Cost of the Work  
**CRDC** = Contractor's Reasonable Design Cost for the CRI proposal  
**DC** = Department's Cost for investigating, evaluating, and implementing the CRI proposal.

### **EXAMPLE:**

The Original Cost of the Work (**OCW**) required by the original contract is: \$200,000.

The Revised Cost of the Work (**RCW**) is: \$100,000.

The Contractor's Reasonable Design Cost (**CRDC**) for the CRI proposal is: \$20,000.

The Department's Cost (**DC**) for investigating, evaluating, and implementing the CRI proposal is: \$10,000.



The PE/S would make a payment for the CRDC of \$20,000 after approving the formal proposal.

Total Net Savings (TNS):  $\$200,000 - \$100,000 - \$20,000 - \$10,000 = \$70,000$ .

The Contractor's 50 percent share of the net savings:  $\$70,000/2 = \$35,000$ .

Total CRI Payment to the contractor:  $\$20,000 + \$35,000 = \$55,000$ .

The contractor's reasonable design cost for the CRI proposal, as well as the costs incurred by the department in evaluation and modification of the plans and contract, will be deducted from the total estimated savings of an accepted proposal. The PE/S should work with the Project Manager and the designer to determine the Department's Cost, as well as determining if the contractor's Design Cost is reasonable. The resulting net savings is split equally between the contractor and the department. Time savings resulting from the CRI should not be included in the calculation of net savings.

The intent of the CRI specification is that the PE/S writes a change order to compensate for contractor's reasonable design costs just after approving the formal proposal. In cases when the department has not initially paid the contractor for development costs, or when the timeframe between the development and completion of work is very short, the design cost and savings payment can be performed under one single change order. It is important that all costs are carefully documented on the change order. Whether done under separate change orders or one change order, the development costs and the payment for 50% of department savings to the contractor should be paid using the pay items in 109.04. The change order should adjust contract time and/or interim completion dates, if necessary.

## **2.22 DEMOLITION WORK** *(Rev. 09-08-09)*

If the contract involves demolition work, the PE/S must give the contractor written notification when parcels become available for demolition. This information will be furnished to the DO by the Land Acquisition Division. The contractor should be assessed liquidated damages when they do not commence demolition work within 5 calendar days and complete it within 60 calendar days, in accordance with Section 108.07 of the SS. Inspection and testing for asbestos presence, or filing a notification with the IDEM will be considered as part of the work. Copies of these (dated) filings must be included in the Final Construction Record. The contractors "Notice to Proceed with Demolition Work" should be like the following:

NOTICE TO PROCEED WITH DEMOLITION WORK

Contract # \_\_\_\_\_

District # \_\_\_\_\_

Contractor \_\_\_\_\_

Gentlemen:

This is to inform you that the demolition on parcel(s) \_\_\_\_\_ can begin on \_\_\_\_\_. This date constitutes your official written notification in accordance with the standard specifications. Work is to commence within 5 calendar days after the date specified above. Liquidated damages will be assessed beginning on the 6th day.

\_\_\_\_\_  
Project Engineer/Supervisor

cc: District Construction Engineer  
Final Construction Record  
File